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FRANZ KIELHORN
KLEINE SCHRIFTEN
TEIL 2

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KLEINE SCHRIFTEN
MIT EINER AUSWAHL DER EPIGRAPHISCHEN AUFSÄTZE

HERAUSGEGEBEN VON
WILHELM RAU

TEIL 2



FRANZ STEINER VERLAG GMBH · WIESBADEN
1969



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A NOTE ON THE SAPTARSHI ERA.

BY PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

IN the Chambers Collection of MSS. of the Berlin Library¹ is a worm-eaten roll of paper, about 9' 3" long by 6½" broad, which contains a calendar for the time from Wednesday, the 13th March, A. D. 1793, to Monday, the 31st March, A. D. 1794; or, to use the terms of the original, from *Chaitra-śuti*² *pra. Vu.*, i.e., Budhavāra, the first of the bright half of Chaitra, to *Chaitra-vati am. Cham.*, i.e., Chandravāra, the new-moon day of the dark half of Chaitra, — of a year which will be described below. The characters employed in this MS. calendar are the peculiar Nāgarī of some of the MSS. purchased by Professor Bühler on his Kāśmīr tour, and shew therefore that the calendar was written in the very north of India, if not actually in Kāśmīr.

From the last day of the year, the new-moon day in the dark half of the month Chaitra, it will be seen that the year of this calendar is a so-called northern year, with the *pūrṇimānta* scheme of the months. As in ordinary Pañchāngas, the year is divided into lunar fortnights which here follow each other from the top to the bottom of the roll. And since, in the specified period, Vaiśākha was an intercalary month, we have here altogether 26 lunar fortnights, headed —

Chaitra-śuti, i. e., Chaitra-śukla-pakṣhaḥ ;

Vai vati, i. e., Vaiśākha-kṛishṇa-pakṣhaḥ ;

Dvi³ Vai śuti, i. e., dvitīya-Vaiśākha-śukla-pakṣhaḥ ;

Dvi Vai vati, i. e., dvitīya-Vaiśākha-kṛishṇa-pakṣhaḥ ;

Vai śuti, i. e., Vaiśākha-śukla-pakṣhaḥ ;

Jyê vati ; Jyê śuti ; Āshâdha-vati ; Āshâdha-śuti ; Śrâ vati ; Śrâ śuti ; Bhâ vati ; Bhâ śuti ;

and so on up to —

Chaitra-vati, i. e., Chaitra-kṛishṇa-pakṣhaḥ.

Under each lunar fortnight, we have from the left to the right four principal columns.⁴ The first column gives the name of the weekday (Ā., Cham., Bhan., etc.) and the *nakshatra* (Ā., Bha., Kri., Rô., etc.); the second the number of the day in the lunar half (*pra.*, *dvi.*, *tri.*, *cha.*, etc., up to either *pū.* or *am.*); the third the *yōga* (Vi., Pri., Ā., San., etc.); and the last contains remarks about festivals, etc. But, besides, the calendar also gives, before the first column of the lunar fortnight, the number of each day according to the Muhammadan calendar, sometimes preceded by the name of the Muhammadan month. Thus, in a line with Vai. śuti Ā. *dvi.* (i. e., Sunday, the 2nd of the bright half of Vaiśākha, corresponding to the 12th May, A. D. 1793) we have *Samvâl* 1; before Āshâdha-śuti *Vu. dvi.* (i. e., Wednesday, the 2nd of the bright half of Āshâdha, corresponding to the 10th July, A. D. 1793), *Jyêl hijya* 1; before Śrâ. śuti *Su tri.* (i. e., Friday, the 3rd of the bright half of Śrāvāṇa, corresponding to the 9th August,

¹ See Professor Weber's *Catalogue*, Vol. I. No. 846.

² From the above it will be seen that in this calendar the *śukla-pakṣha* or bright fortnight and the *kṛishṇa-pakṣha* or dark fortnight of a month are throughout denoted by the terms *śuti* and *vati*. On this usage, which is quite common in Śāradā MSS., see *ante*, Vol. XIX, p. 217.

³ It will be observed that of the intercalary month Vaiśākha the first and last of the four fortnights are called simply *Vaiśākha*, while the second and third fortnights are described as *dvitīya-Vaiśākha*, 'the second Vaiśākha.' In a MS. calendar of the Berlin Library for the expired northern Vikrama year 1883, in which Bhādrapada was intercalary, and in another MS. calendar of the same Library for the expired northern Vikrama year 1885, in which Śrāvāṇa was intercalary, the first and last fortnights of the intercalary months are likewise called simply *Bhādrapada* and *Śrāvāṇa*, but the second and third fortnights are described as *adhika-Bhādrapada* and *adhika-Śrāvāṇa*. And in a MS. calendar of the same Library, for the expired northern Vikrama year 1882 in which Bhādrapada was intercalary, the first and last fortnights are called *śuddha-Bhādra*, and the second and third *adhika-Bhādra*.

⁴ It may be of some interest to state here that the results (as regards *śukla*, *nakṣatras*, and *yōgas*), obtained from Professor Jacobi's Tables in Vol. XVII. of this Journal, for the large number of days for which I have made the necessary calculations, entirely agree with the actual statements of this calendar.

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A. D. 1793), *Mahram* 1; and before Bhā ūti Ā. tṛi. (i. e., Sunday, the 3rd of the bright half of Bhādrapada, corresponding to the 8th September, A. D. 1793), *Saphar* 1.⁵

In the introductory remarks at the top of the roll, the year for which this calendar is intended is described thus:—

Sri-Saptarshi-chār-ānumatēna saṁvat 4869 tathā cha saṁvat 69 Chaitra-ūti 1 śri Sakāḥ 1715 karaṇa-gat-āvdā(bdā)ḥ 1128 dina-gaṇaḥ 412 010 śri-Vikramāditya-saṁvat 1850 Kalpa-gat-āvdā(bdā)ḥ 1 972 948 894⁶ śēsh-āvdā(bdā)ḥ 2 347 051 106 Kalē-gata-varahāpi 4894 śēsha-varahāpi 427 106.

Accordingly, the year with which we are here concerned is the luni-solar year 4894 of the Kaliyuga, distinctly described as an expired year, and, consequently, the expired northern Vikrama year 1850 and the expired Saka year 1715, called simply the Vikrama year 1850 and the Saka year 1715, respectively. The number of years, elapsed since the epoch of the Karaṇa up to the commencement of the calendar-year, is stated to be 1128, which for the epoch of the Karaṇa gives us Saka 587 expired, the epoch-year of the *Khaṇḍakhādya*. And the number of days, elapsed since the same epoch, is put down as 412 010. By Dr. Schram's Tables the luni-solar Saka year 1715 current, ended on the day of the Julian period 2376 011, and Saka 587 current ended on the day of the Julian period 1964 001; and deducting the latter set of figures from the former, we obtain a remainder of 412 010, being the number of days of the 1128 luni-solar years elapsed since the epoch of the Karaṇa, exactly as given in the calendar. But for my present purpose the interesting part of the introductory statement is this, that the year of the calendar is primarily described as "the year 4869, in agreement with the course of the Saptarshayah, and therefore the year 69," as I take it, of ordinary usage. For this shews us that our calendar, in the first instance, was intended for people who followed the Saptarshi era.⁷

The Saptarshi era has been treated of by Sir A. Cunningham in the *Book of Indian Eras*, and its epoch has been incidentally discussed by Professor Bühler in his *Kaśmīr Report*⁸ and by Professor Bhāḍṛakar in his *Report on Sanskrit MSS.* for 1883-84.⁹ But little attention has as yet been paid to dates recorded in that era. Starting from the data which are furnished by the calendar described above, I propose therefore to collect here those Saptarshi dates of inscriptions and MSS. which have come hitherto under my observation. The number of these dates is small, and all belong to comparatively modern times. But I hope that, by publishing what has been ready for some time, I may induce scholars in India to make known other Saptarshi dates, or to furnish me with reliable materials for enlarging this list.

From our calendar, which makes the Saptarshi year 4869 equivalent to Kaliyuga 4894 expired, it is clear that, assuming the Saptarshi years to be current years, and to commence with the month Chaitra, Saptarshi 0 = Kaliyuga 25 expired, Saptarshi 1 current = Kaliyuga 26 expired, Saptarshi 2 current = Kaliyuga 27 expired, and so on; and generally, that by the addition of 25 a current Saptarshi year is converted into the corresponding expired year of the Kaliyuga. Thus the current Saptarshi year 4300 would be the expired year 4325 of

⁵ According to Wüstenfeld's *Vergleichungs-Tabellen der Muhammed. und Christl. Zeitrechnung*, these equivalents are correct.

⁶ The original has 1972948 at the end of one line, and at the commencement of the next line 994, i. e. 19729 488 894, clearly a mistake of the writer.

⁷ Long after the above was first written, I received, through the kindness of Dr. Stein, from Paṇḍit Gōvinda Kaul a MS. Paśchāṅga (or Nakshatrapatra) for the year which ended on the 30th March, A. D. 1890, which is very similar to the calendar of the Berlin Library, but gives also (often wrongly) the days of the European calendar. In this calendar the year treated of is described thus:—Śri-Saptarshi-chār-ānumatēna saṁvat 1965 (clearly a mistake for 4865) śri-rājādirāja-Pratāpasimha-rājyābhishēkāt-saṁvat 3 tathā cha sphuṭa-prakārtya śri-śubha-saṁvat 66 Chaitra-ūti 1 śri-Sakāḥ 1811 karaṇa-gat-āvdāḥ 1234 dina-gaṇaḥ 447 063 (according to my calculations a mistake for 447 062) śri-Vikramāditya-saṁvat 1946 Kalpa-gat-āvdāḥ 1973 948 990 śēsh-āvdāḥ 2347 051 011 (wrongly for 2347 051 010) Kalē-gata-varahāpi 4991 (wrongly for 4990) śēsha-varahāpi 427 010.

⁸ Page 60.

⁹ Page 84.

the Kaliyuga, and Saptarshi 4951 current would be Kaliyuga 4976 expired. So far, matters would be simple enough. But writers who, in recording their dates, follow the Saptarshi era, generally omit the hundreds from the years of the date, and put down only the years within the century.¹⁰ To make up for this deficiency, they sometimes add the corresponding year of some other well-known era; but sometimes they neglect doing so. However this may be, it follows from the above, that, disregarding the hundreds, we must add to the Saptarshi year of a date—

25, to find the corresponding expired year within one of the centuries of the Kaliyuga;

46, to find similarly the corresponding expired Saka year;

81, to find the corresponding expired northern Vikrama year; and

24/25, to find the corresponding year of one of the centuries of our own era.

Thus, a current Saptarshi year 36 would, disregarding the hundreds, correspond to an expired year (36 + 25 =) 61 of the Kaliyuga; to an expired Saka year (36 + 46 =) 82; to an expired northern Vikrama year (36 + 81 = 117 =) 17; and to a year (36 + 24/25 =) 60/61 of our own era.

All this is well known; and using the several equations for verifying individual dates, we obtain the following results:—

1. — Dr. Stein has informed me that a much damaged Bhūjapetra MS. written in Śārada characters, — apparently the oldest MS. of the kind hitherto discovered, — is dated —

Saṁvat 4300 Āśva-vati 13 Śanau tra śē 6 44 cha śē 11 53 pra 11 3 . . . 11

Referring the year of this date to the Saptarshi era, we find that the corresponding date, for Kaliyuga (4300 + 25 =) 4325 expired and the *amānta* Āśvina, is **Saturday**, the 12th October, A. D. 1224, when the 13th *tithi* of the dark half ended 8 h. 55 m. after mean sunrise (for Ujjain).

2. — The Deccan College MS. of the *Dhvanydōka* is dated —

Saptarshih-saṁvat¹² 4951 Āśva[yu*]ja-kṛishṇa-saptami Maṅgalaḥ vāsaram.¹³

The corresponding date, for Kaliyuga (4951 + 25 =) 4976 expired and the *pūrṇimānta* Āśvina, is **Tuesday**, the 21st September, A. D. 1875, when the 7th *tithi* of the dark half ended 21 h. 14 m. after mean sunrise.

3. — According to Dr. Hultzsch in *Zeitschrift Deutsch. Morg. Ges.*, Vol. XL. p. 9, a MS. of his collection is dated —

Saṁvat 24 Kārtika-vati trayōdaśyām Bṛudhē || Śri-Sakāḥ 1570 ||

Here a Saptarshi year 24 is put down as equivalent to a Saka year (24 + 46 =) 70; and the corresponding date, for Saka 1570 expired and the *pūrṇimānta* Kārtika, is **Wednesday**, the 4th October, A. D. 1648, when the 13th *tithi* of the dark half ended 16 h. 43 m. after mean sunrise.

4. — A Deccan College MS. of the *Kātantra-vṛitti Bālabōdhini* is dated—

Śri-Sakāḥ 1591 saṁvatsaraḥ 45 Bhādrapada-māsah pakshas-sitētarah tithir-dvādaśī vārō(rah) Kavyasy=ṣṭi ||

Here a Saptarshi year 45 is put down as equivalent to a Saka year (45 + 46 =) 91; and the corresponding date, for Saka 1591 expired and the *pūrṇimānta* Bhādrapada, is **Friday**, the

¹⁰ As regards centenary years, I am informed by Paṇḍit Gōvinda Kaul that, at the present day, some people would simply say *śaḥ* 100, but that it is more common to say *saṁvat* 4900, *saṁvat* 4900, etc.

¹¹ The reading of the above date has been carefully verified, and there can be no doubt as to its correctness. But I have not been able to obtain a satisfactory explanation of the terms *tra śē 6 44 cha śē 11 53 pra 11 3*, which follow the word *Śanau*.

¹² Read *Saptarshi-saṁvat*.

¹³ Read *Maṅgala-vāsarā*.

13th August, A. D. 1669, when the 12th *tithi* of the dark half ended 5 h. 15 m. after mean sunrise.

5. — The Deccan College Sārada MS. of the *Kāśikā-Vṛitti* is dated—

Sri-nripa-Vikramāditya-rājyasya gat-ābdāḥ 1717 sri-Saptarshi-matē saṁvat 36 Pau [va]ti 3 Ravau Tishya-nakshatrē.

Here a Saptarshi year 36 is put down as equivalent to an expired Vikrama year ($36 + 81 = 117 =$) 17; and the corresponding date, for Vikrama 1717 expired and the *pūrṇimānta* Pausa, is Sunday, the 9th December, A.D. 1660, when the third *tithi* of the dark half ended 16 h. 52 m., and the *nakshatra* was Tishya up to 17 h. 44 m. after mean sunrise.

6. — The Chambā stone inscription, mentioned in *Archæol. Surv. of India*, Vol. XXI. p. 136, bears the date—

Sriman-nripati-Vikramāditya-saṁvatsarē 1717 sri-Sālivāhana-sakē 1582 sri-Sāstra-saṁvatsarē 36 Vaiśāḥa(kha)-vadi trayōdaśyām Vu(bu)dha-vasarē | Mēshē-rka-saṁkr[ā]-ntau . . .

The Saptarshi year (which in this date and in the dates under 8, below, is described as the *Sāstra*-year) 36 is here put down as equivalent to a Vikrama year ($36 + 81 = 117 =$) 17, and to a Saka year ($36 + 46 =$) 82. And the corresponding date, for the expired northern Vikrama year 1717, or the expired Saka year 1582, and the *pūrṇimānta* Vaiśāḥa, is Wednesday, the 28th March, A. D. 1660, when the 13th *tithi* of the dark half ended 21 h. 37 m., and the *Mēsha-saṁkrānti* took place 13 h. 1 m. after mean sunrise.

7. — According to a communication received from Professor Bühler, the Sārada MS. of the *Karmākāṇḍa* (or *Ricchaka*) of the Vienna Library is dated —

Sri-Vikramādi[tya*]-sā[kā]ḥ 1732 srimach-Chhālivāhana-sakāḥ 1597 śrīmad-Araṅga-śāḥa-śākāḥ¹⁴ 18 sri-Saptarshi-ohāra-matēna Saṁvat 51 Vai śūti 10 Sanau.

Here a Saptarshi year 51 is put down as equivalent to a Vikrama year ($51 + 81 = 132 =$) 32, and to a Saka year ($51 + 46 =$) 97; and the corresponding date, for the expired northern Vikrama year 1732, or the expired Saka year 1597, is Saturday, the 24th April, A. D. 1675, when the 10th *tithi* of the bright half ended 21 h. after mean sunrise.

8. — In connection with the preceding dates I may be permitted to give here also the dates contained in the Chambā copper-plate inscription which is mentioned in *Archæol. Surv. of India*, Vol. XXI. pp. 136 and 137, and of which Sir A. Cunningham's rubbings have been sent to me by Mr. Fleet. In that inscription we read: —

(L. 1) . . . śrīmad-Vikramā[rka]-saṁvatsarē 191[5] sri-Sāstra-saṁvatsarē 34;

(L. 7) . . . śrīmad-Vikramāditya-saṁvatsarē 1917 Sāstra-saṁvatsarē 36;

(L. 8) . . . Vikramāditya-saṁvat 1915 sri-Sāstra-saṁvat 34;

(L. 18) . . . Vikramāditya-saṁvat 1917 Sāstra-saṁvat 36.

These dates, of course, do not admit of verification, but, disregarding the hundreds, the difference between the Saptarshi years and the corresponding Vikrama years is again, what we have found it to be elsewhere, 81.

In the case of Saptarshi dates, from which the corresponding years of other eras as well as the hundreds of the Saptarshi years have been omitted, extraneous circumstances may sometimes enable us to calculate the proper European equivalents with certainty; in the absence of such circumstances to guide us, we must rest satisfied with a greater or less degree of probability. This may be seen from the two following dates: —

¹⁴ Aurangzib caused himself to be proclaimed emperor on the 20th August, A. D. 1658. See Elphinstone's *History of India*, ed. Cowell, p. 699.

9. — In *Zeitschrift Deutsch. Morg. Ges.*, Vol. XL. p. 9, Dr. Hultzsch informs us that at Hariparvat there is an inscription, dated —

Saṁ 60 Śrā vati pra Śukrē | Mahammada-sāha-rājyē |
i. e., 'in the year 60, on the first of the dark half of Śrāvāṇa, on a Friday; in the reign of Muhammad Shāh.'

According to Dr. Hultzsch, Muhammad Shāh is said to have ruled from A. D. 1487 to 1537. Assuming this to be approximately correct, the Saptarshi year 60 of this date should correspond to A. D. 1484-85, or Saka 1406 expired, and the presumption is that Saka 1406 is really the year of the date, and that Muhammad Shāh reigned a few years before A. D. 1487. And calculating for Saka 1406 expired, we find that the first of the dark half of the *pūrṇimānta* Śrāvāṇa of that year corresponds to the 9th July, A. D. 1484, which was a Friday,¹⁵ as required, and is undoubtedly the proper equivalent of the date of the inscription.

10. — Dr. Stein has kindly informed me that a Sārada MS. of the *Ratnāvalī-nāṭikā* is dated —

Saṁvat 69, Chaitra-vati ēkādaśyām Chandra-vāsarē Śrāvāṇa-nakshatrē —
i. e., 'in the year 69, on the eleventh (tuesar day) of the dark half of Chaitra, on a Monday, (the moon being) in the *nakshatra* Śrāvāṇa.'

A Saptarshi year 69 should correspond to an expired Saka year ($69 + 46 = 115 =$) 15, and, the MS. being apparently an old one, we shall probably find the proper equivalent of the date in one of the expired Saka years 1615, 1515, or 1415. Calculations for 1615 and 1515 yield no satisfactory results; but in Saka 1415 expired the 11th of the dark half of the *pūrṇimānta* Chaitra fell on Monday, the 3rd March, A. D. 1494, when the 11th *tithi* of the dark half ended 19 h. 33 m., and when the moon was in the *nakshatra* Śrāvāṇa from 5 h. 16 m. after mean sunrise. Here it is highly probable that Monday, the 3rd March, A. D. 1494, is the proper equivalent of the date. But, if the MS. were unusually old, an equally good result would be obtained for Saka 1215 expired. For in that year the 11th of the dark half of the *pūrṇimānta* Chaitra fell on Monday, the 22nd February, A. D. 1294, when the 11th *tithi* of the dark half ended 9 h. 13 m., and when the moon also was in the *nakshatra* Śrāvāṇa from 7 h. 53 m. after mean sunrise. — I am indebted to Dr. Stein for several other dates of this description, which it would serve no purpose to examine here.

It is clear, then, that all the above dates work out satisfactorily with the equations with which we have started. Besides, the dates prove that, since Saptarshi 4300 = A. D. 1224, the Saptarshi year has always, like the Saka year, commenced with the month Chaitra. And from the dates 2, 3, 4, 5, 6, and 9, which fall within about the last four hundred years, we see that the scheme of the lunar months during that time has been invariably the *pūrṇimānta* scheme. On the other hand, the date 1, which falls in A. D. 1224, works out properly only with the *amānta* scheme; and further research must show whether this is a solitary instance of the employment of the *amānta* scheme, or whether that arrangement of the lunar fortnights was followed generally in more remote times.

We have assumed above that the Saptarshi or, as they are more commonly called, *laukika* years¹⁶ are current years. To us it would indeed seem only natural that in a popular mode of reckoning this should be so; but we are not left altogether to our own guidance. Professor Bhāṅḍārkar¹⁷ has drawn attention to certain passages in a Sanskrit work connected with the *Khaṇḍakhāḍya*, in which a rule and examples are given for converting *laukika* into Saka years. The main part of the rule is, that 47 should be taken as a constant, to which the number of passed *laukika* years should be added, to find the Saka year corresponding to the

¹⁵ On that day, the first *tithi* of the dark half ended 11 h. 50 m. after mean sunrise.

¹⁶ See also the *Rijatarāṅgīnī*, I. 52, and *ante*, Vol. XVII. p. 213.

¹⁷ Report on Sanskrit MSS. for 1883-84, pp. 83 and 369.

laukika year current. And one of the examples is, that, by putting down Saka 1547 and adding 17, the number of passed *laukika* years, we obtain Saka 1564, as the equivalent of the current *laukika* year 18. Here the writer distinctly intimates that in his time the *laukika* years were really regarded as current years; and, as the Saka year spoken of by him must in accordance with ordinary usage be an expired year, his rule is equivalent to our own, by which we take 46 as a constant and add the number of the current *laukika* year.

At the same time, I am not prepared to maintain *a priori* that, for a Hindu writer to quote a passed *laukika* year in a date, would be an utter impossibility. And in connection with this question I would draw attention to the following verse¹⁸ which occurs at the end of Kayyāta's commentary on the *Dēvīātaka* :—

Vasu-muni-gagan-ādadhī-sama-kālē yātō Kalēs=tathā lōkē |
dvāpañchāsē varshē rachit-ēyam Bhīmagupta-nripē ||

The author here tells us that he composed his commentary under the king Bhīmagupta, in Kaliyuga 4078 expired, *tathā lōkē dvāpañchāsē varshē*. Now Kaliyuga 4078 expired should correspond to a *laukika* year 53 current, and, assuming the statement contained in the verse to be correct, we cannot, it would seem, help assuming that the 52nd *laukika* year has really been quoted by the author as an expired year. Here, too, we want other old dates to show us what the practice may have been in earlier times.

I have omitted from the above the difficult date of the first Baijnāth Prāsasti, which has been already commented on by Professor Bühler in *Epigraphia Indica*, Vol. I. p. 103. In my opinion, the most important question to be answered in connection with that date is, whether the first figure of the Saka year in the date of the second Prāsasti is 7 or not. Sir A. Cunningham and Professor Bühler say that it is; and if they are right, the *laukika* year 80 of the date of the first Prāsasti should, according to what we know at present of the Saptarsi era, no doubt correspond to Saka 726 expired. But the first of the bright half of Jyāishtha did not fall on a Sunday, the week-day given in the date, in Saka 726 expired,¹⁹ nor in fact in any of the eight years from Saka 722 to 729 expired.²⁰ If, on the other hand, we were not restricted by the date of the second Prāsasti to any particular century of the Saka era, I would say that the *laukika* year 80 of the first Prāsasti must correspond to Saka 1126 expired, because, of all the expired 26th years of the centuries of the Saka era from Saka 626 to Saka 1426, only the year 1126 yields the desired Sunday (the 2nd May, A.D. 1204). And I should not be prevented by anything in the contents of the inscription and the language of the author, or in the alphabet employed, from assigning the inscription to so late a period.

¹⁸ This verse first became known to me through an extract from the work sent to me by Dr. Stein; it is published in the *Kavyamālā*, in the note on the heading of the *Vikrāntīpañchāsikā*.

¹⁹ In Saka 726 expired the first of the bright half of Vaiśākha did fall on a Sunday (the 14th April, A. D. 804), but there is no reason to assume that the writer put down a wrong month in the date.

²⁰ In Saka 730 expired the first of the bright half of Jyāishtha was a Sunday, — the 30th April, A. D. 808.

MISCELLANEA.

SOME NAMES AND DATES FROM
UNPUBLISHED INSCRIPTIONS.

Mr. Fleet has placed at my disposal several bundles of rough rubbings of inscriptions, which were handed over to him by Sir Alexander Cunningham. From the materials thus supplied to me, I have already edited in this Journal seventeen inscriptions, and have got ready for publication two others which, with Mr. Fleet's permission, will appear in the *Epigraphia Indica*. I shall now give a short account of some other inscriptions from the same collection, which the imperfect state of the rubbings prevents me from editing in full. The characters of all these inscriptions are Nāgarī, and the language of all is Sanskrit.

1. — An apparently well preserved inscription inside the east entrance of the great temple of Udaypur in Gwālior. Six lines. The writing covers a space of 1' 6½" broad by 11" high, and the size of the letters is 1½".

- L. 1. Svasti || Eka-chchhatrām karōtu
kshām=Udayāditya-bhūpatiḥ |
2. ity-ādyañ siddhi-danī vēdañ śamsāmaḥ
sarvatō nripa ||
5. pañdita-sri-Mahipālaya || Samvat 1137
Vaisa(sā)kha-sudi 7

This inscription gives us for Udayāditya of Mālava the date Vikrama 1137 = A. D. 1080.¹

2. — Another inscription inside the east entrance of the great temple of Udaypur in

Gwālior. Fourteen lines. The writing covers a space of 1' 3" broad by 1' 8" high, and the size of the letters is about 1½". The rubbing is throughout exceedingly indistinct.

- L. 1. [Om] samvat 1286 varshē Kārtti-
[ka*]-sudi
2. . . Su(su)krē dēva-srī(sri)-[U]da[lē]-
sva(śva)ra².
3. [sañnidhan]
6. śrī-Dēvapāla(dēva)-kalyā-
7. pa-vijayarājyē

3. — Another inscription inside the east entrance of the great temple of Udaypur in Gwālior. Fifteen lines. The writing covers a space of 1' broad by 1' 7" high, and the size of the letters is about 1".

- L. 1. * Om samvat 128[9?] varshē
2. Mārga-vadi 3 Gurau a[dy-ē]-
3. [ha U]dayapurē samasta-rājā-
4. vall-mā[l-ālakrī]ta-pa[ramabha]-
5. [tāra]ka-mahārājādhirā-
6. ja-śrī-Dēvapāladēva-

The Dēvapāladēva of this inscription and of the preceding one, is clearly the Dēvapāladēva of Dhārā, whom from the Harsaudā (or Chārwā) inscription we know to have ruled in the Vikrama year 1275. See *ante*, Vol. XIX. p. 24, No. 11.

4. — An inscription inside the fort of Bahat-gadh in the Central Provinces (*Archæol. Survey*

¹ See Sir A. Cunningham in *Archæol. Survey of India*, Vol. IX. p. 109.

² See *ante*, Vol. XVIII. p. 342, note 4.

of India, Vol. X. p. 31). Fourteen lines. The writing apparently is very rudely engraved, and covers a space of 2' broad by 1' 9" high. The size of the letters is about 1".

- L. 1. Om siddhiḥ || Samvat 1312 varshē Bhādrapada-su 7 [80]ma .
2. śrīmad-Dhārāyām mahārājādhīrāja-śrīmaḥ-Jaya[śimḥ?]-
3. [ha]dēva-vijayarājyē Upa[ra ?]hādā-maṇḍalē

This inscription tells us that in the Vikrama year 1312 the *Mahārājādhīrāja*, ruling at Dhārā, was *Jaya[śimḥ]hadēva*.³ The exact date corresponds to Monday, the 28th August, A. D. 1256.

5. — An inscription inside the east entrance of the great temple of Udaypur in Gwālior. Nine lines. The writing covers a space of 1' 1" broad by 1' ½" high, and the size of the letters is about 1".

- L. 1. [Om sam] 1366 Brāvaṇa-vadi 12 [Bukrē?]
2. Udayapu[rē] samasta-rājāvali
3. mahārājādhīrāja-śrī-Jaya-
4. śiṅghadēva-rājyē

This inscription, therefore, apparently is of the reign of another *Mahārājādhīrāja* *Jayasimhadēva*, who was ruling over Udayapura (and probably Dhārā) in the Vikrama year 1366.

6. — Another (fragmentary) inscription inside the east entrance of the great temple of Udaypur in Gwālior. Portions of four lines. The writing covers a space of 9½" broad by 5½" high, and the size of the letters is about 1".

- L. 1. [Sam]vat 1360 [rā?]-śrī-Harirāja-[dēva?] . . .

It is impossible to say whether the *Hari-rāja[dēva?]* of this inscription was a royal personage, or a private individual.

7. — A fragmentary and apparently much damaged inscription, stated to be from *Kugda* near *Bachhaudgaḥ* (*Archæol. Survey of India*, Vol. VII. p. 211). Portions of twenty-five lines. The existing writing covers a space of about 2' broad by 2' high, and the size of the letters is about ½". The inscription is in verse and has reference to the *Kalachuri* rulers of *Ratnapur*.

³ Since editing the three inscriptions from Udaypur (*ante*, Vol. XVIII. p. 341), it has occurred to me that the unpublished Udaypur inscription of *Jayasimha*, referred to in my introductory remarks (*ib.* p. 341), may really belong to the *Jayasimhadēva* of Dhārā of the *Rāhatgaḥ* inscription. The date of the Udaypur

It is particularly interesting for the concluding words —

- Kalachuri-samvatsarē* 898 *rāja-srīmat-Prithvidēva-[rājyē?]* — which, for *Prithvidēva* II. of *Ratnapur*, give us the new date *Kalachuri* 893 = A. D. 1141-42 (see *ante*, Vol. XVII. p. 138). Besides, I notice in the body of the inscription the following names: —
- L. 1. *Kalachuri*—
 2. *Lāchhalladēvi mahishi babhūva* ;
 3. *śrī-Ra[tnadēvaḥ?]*
 7. *Vallabharāja-nāmā*

8. — Another fragmentary inscription, stated to be from *Akaltārā* (*Archæol. Survey of India*, Vol. VII. p. 211). Portions of twenty-six lines. The existing writing covers a space of from 10" to 1' 5" broad by 2' high, and the whole breadth of the inscribed surface must have been about 3'. The size of the letters is between ¾" and 1". Like the preceding, the inscription is in verse and has reference to the *Kalachuri* rulers of *Ratnapur*. I notice the following names: —

- L. 4. [Ra*]tnadēvas=tataḥ ||
6. *Harigaṇa iti nāmnā tasya sūnur-babhūva* ||
14. *Kṛishnaṁ Yaśōd-ēva Guham Siv-ēva Lāchchhalladēvi* . . .
16. *Vallabharāja-nirmmitam=idam* . . .
20. *śrī-Ratnadēva-dharanipatayē* . . .
21. [Ra*]tnadēva-nṛipatiḥ . . .
23. *Jayasimhadēvaḥ* . . .

The inscription was composed by *Dēvapāṇi* (line 25) and engraved by *Pālhūka* (line 26).

9. — An inscription stated to be from *Muhamadpur*. Twenty-seven lines. The writing covers a space of about 2' 1" broad by 1' 5" high; the upper portion of it appears to have greatly suffered, but the lower (apparently historical) part seems to be fairly well preserved. The size of the letters is about ¾". This inscription also is in verse and has reference to the *Kalachuri* rulers of *Ratnapur*. The rubbing is so very indistinct that I can only here and there make out a few names.

inscription, unfortunately, is very indistinct in the rubbing, but it may have to be read —

Sam 1311 varshē || Māgha-vadi 13 Su(śu)krē || —, which, by the *pūrṇimānta* reckoning, would correspond to Friday, 8th January, A. D. 1255.

- L. 17. Āśi(śi)t-Tu[nimā]ṇa-dēśē *Kalachuri-tīlakō rāja-Jālladēvas=tasmāj=jātaḥ pratāpāḥ sa taranir-aparō Ratnadēvō narēndrah* ; *Prithvidēvas=tatō Sbhād=* . . .

19. *śrīmān=Vallabharājāḥ* *Prithvidēva* . . .

10. — A fragment of an inscription from *Tēwar*, measuring about 10" broad by 7" high, and containing portions of eleven lines in characters of about the 12th century, has in —

- L. 4. mahā-samudrāt=sārdham *Sriyā sama-bhavād=bhuvī Bhitapālaḥ* |
7. *Tripuriya-chatuhpathē* | . . .
8. *nivāsān śrī-Simhapuryān* . . .

11. — An inscription stated to be at *Chandrehe* on the *Sān* river, *Rewa* (*Archæol. Survey of India*, Vol. XIII. p. 8). The rubbing is in two parts, and looks as if the inscription were on two separate slabs of stone. The writing of either part covers a space of 3' 2" broad by about 1' 4" high. The first part contains fourteen, the second part thirteen lines. The size of the letters is about ¾". The inscription ends with a date which by *Mr. Beglar* was read 'Samvat 324 Phālguna-sudi 6,' and the year of which was altered by him to *Samvat* 1324. I read the date —

Samvat 724 Phālguna-sudi 5 —

and, referring it to the *Kalachuri* era, make the year equivalent to A. D. 972-3. The writing, in my opinion, undoubtedly belongs to the 10th or 11th century A. D.

The inscription is in verse. It apparently is of no historical importance, but refers to a line of sages which is mentioned also in the large *Bilhari* inscription of the rulers of *Chēdi*, and a fuller account of some members of which is furnished by an inscription at *Banōd* (or *Narōd*) which has been edited in the *Journal Beng. As. Soc.*, Vol. XVI. pp. 1080-88, and will be re-edited by myself in the *Epigraphia Indica*. So far as I can make out, the inscription records the building of a tank by a sage *Prasāntasiva*, and its restoration by a disciple of the sage. In the rubbing before me, I notice the following names: —

- L. 5. *Srīman-Mattamayāra-santatir-iyān* *Purandara* . . .
6. *Sikhāsivāḥ* *Tasmān=Madhumati-patēḥ* . . .
7. *Pra[śhāva]siva* . . .
8. *Prasāntasiva* . . .
9. *Sōṇa-Nada-saṅgamē* . . .

The inscription was composed by the poet *Dhārisaṭa*, the son of *Jēika* and *Amarikā*, and grandson of *Mēhuka* (lines 24 and 25); and engraved by *Dāmōdara*, the son of *Lakshmīdhara* and younger brother of *Vāsudēva*.

I may as well draw attention here to a note on page 5 of *Archæol. Survey of India*, Vol. XIII, according to which there is in the Asiatic Society's collection a rubbing of an inscription from *Makundpur*, which is near *Chandrehe*, dated in (apparently *Chēdi*) *Samvat* 772. *Göttingen*. F. KIELHOEN.

AN HISTORICAL ALLUSION IN THE BHAGALPUR PLATE OF NARAYANAPALA.

Mr. Fleet has presented me with an excellent impression of the Bhāgalpur plate of Nārāyaṇapāla, an examination of which has shewn me, what indeed did not require such proof, how well that inscription has been edited by Dr. Hultzsch, *ante*, Vol. XV. p. 305. There is in fact, in the poetical portion of the inscription, only a single verse for which the impression suggests a better reading than the published one; and my reason for writing of this publicly is this, that the same verse contains an historical allusion, hitherto overlooked, to which attention should be drawn. In the published version the third verse, in lines 7-8, together with Dr. Hultzsch's translation, reads thus:—

Jitv=Endrarāja-prabhṛitn=arātīn=
upārjīta yēna mahōdaya-śrīh |
dattā punaḥ sā valin=ārthayitrē
Chakrāyudhāy=ānati-vāmanāya ||

"This mighty one (*balin*) again gave the sovereignty, which he had acquired by defeating Indrarāja and other enemies, to the begging Chakrāyudha, who resembled a dwarf in bowing, — just as formerly Bali had given the sovereignty (*of the three worlds*), which he had acquired by defeating Indra and his other enemies (the gods), to the begging Chakrāyudha (Vishṇu), who had descended to earth as a dwarf."

I believe that most Sanskrit scholars who may read this verse will be puzzled by the compound *anati-vāmanāya*, with which the verse ends. For, admitting that this expression may convey the meaning 'who resembled a dwarf in bowing,' they will probably be slow to adopt the suggestion that the poet, in applying the compound to Vishṇu, should have taken the liberty of using the word *anati*, the meaning of which is at once clear and transparent, in the sense of *avatāra* which means quite a different thing. And referring to the impression, I find that the difficulty is removed in a much simpler way. For the impression shews that the sign for the vowel *i* of the word *anati* has been struck out in the original, and that the intended reading therefore is *anata-vāmanāya*.

Referred to the king Chakrāyudha, this would mean (as a Bahuvrīhi) 'who bowed down to (or worshipped) Vāmana, i.e. Vishṇu; referred to the god Vishṇu, (as a Karmadhāraya) 'Vāmana, who bowed down to (Bali).'

The verse eulogizes the king Dharmapāla, and has been rightly understood to mean that the king conquered Indrarāja and other enemies, but gave back the sovereignty which he had thus acquired to a certain Chakrāyudha. But the verse tells more than this. It states distinctly that the sovereignty which Dharmapāla gained for himself by defeating Indrarāja and which he afterwards returned to Chakrāyudha, was the rule over Mahōdaya or Kanauj; for there can be no doubt that the word *mahōdaya-śrīh*, like the rest of the verse, has two senses, and that, with reference to Dharmapāla, it must be translated by 'the sovereignty over Mahōdaya.'

I know neither a king Indrarāja or Indra nor a king Chakrāyudha of Kānyakubja, and can only form certain conjectures to which I would not attach too much value myself. Bali took the sovereignty of the three worlds from Indra, and gave it to that god's younger brother Vishṇu (Upēndra). Similarly Dharmapāla may have given to the younger brother (Chakrāyudha) what he had taken from his predecessor, the elder brother (Indrarāja). Chakrāyudha is only another name of Vishṇu; and a third name of Vishṇu is Ādivarāha. And Ādivarāha is, as Dr. Hultzsch has shewn, another name of Bhōjadēva of Kanauj. For Bhōjadēva we have the dates A. D. 862, 876, and 882; and, according to Sir A. Cunningham's account, Dharmapāla would have ruled from about A. D. 830 to 860. Bhōjadēva and Dharmapāla may thus have been contemporaries, and it is at least possible that the former may have owed his elevation to the throne to the latter. Other inscriptions may shew all this to be untenable, but it is curious that Bhōjadēva's successors (Mahēndrapāla, Kshitipāla, and Dēvapāla) all should append to their names the word *Pāla*, which would seem to connect them somehow or other with Dharmapāla and his family.

F. KIELHOEN.

Göttingen.

THE MEANINGS OF VYATIPATA.

While discussing certain dates which contain the term *vyatipāta*, and which do not appear to work out satisfactorily, Mr. Fleet suggested¹ that *vyatipāta*, in addition to being a name for one of the *yōgas*, may perhaps indicate also other astrological conditions which the writers of the dates in question probably were referring to. The suggestion thus thrown out by Mr. Fleet induces me to draw attention to some passages in Hēmādri's *Chaturvarga-chintāmaṇi* and Mādhava's commentary on the *Parāśara-smṛiti*, in which the term *vyatipāta* has been fully explained,² and from which it becomes quite clear that *vyatipāta* does indeed denote several astrological conditions other than the well-known *yōga* Vyatipāta.

Both writers, in commenting on the verse I. 218 of the *Yājñavalkya-dharmasūtra*, in which the *vyatipāta* is enumerated among the times prescribed for the performance of a *Śrāddha*, are agreed that *vyatipāta* in the first instance is the *yōga* Vyatipāta (*yōga-viśēṣah*, or *Vishkambh-ādīṣhu yōgēṣhu saptadaśo yōgah*). But Mādhava adds that *vyatipāta* may also denote a *mahā-vyatipāta*, and he quotes two verses which explain this term in two different ways. And Hēmādri similarly cites three verses from different works, one of which adds one more meaning of *vyatipāta* to the meanings given by Mādhava. The result of the discussions of the two scholars is as follows:—Vyatipāta has three meanings, in addition to denoting the *yōga* Vyatipāta.

1.—According to Vṛiddha-Manu, as quoted by Hēmādri,—

Śravaṇ-āśvi-dhanishṭh-ārdrā-nāgadaivata-
mastakō |
yady-amā Ravi-vārēṇa vyatipātaḥ sa
uchyatē ||

To this verse Hēmādri appends the notes, that *nāga-daivata* = *Āślēṣhā*; that *ma taka*, 'the head, beginning,' must be construed with each of the preceding words, but that others take it to be equivalent to *Mṛigaśīrah*; and that *amā* = *amā-śayā*, 'the new-moon *tithi*.' Mādhava quotes the same verse, but reads *mastakāḥ*, and explains the word only by *Mṛigaśīrah*. The meaning of the verse accordingly is:—

'When the new-moon *tithi*, at the commencement of (one of the *nakshatra*) Śravaṇā, Āśvini,

Dhanishṭhā, Ārdrā or Āślēṣhā, [or, under (one of the *nakshatras*) Śravaṇā, Āśvini, Dhanishṭhā, Ārdrā, Āślēṣhā or Mṛigaśīrah,] is joined with a Sunday, this (combination) is called *vyatipāta*.'

2.—From another *Sāstra* Hēmādri quotes the verses—

Pañchānana-sthau Guru-Bhūmiputrau
Mēshē raviḥ syād-yadi śukla-pakṣhē |
pās-ābhidhānā Karabhēṇa yuktā
tithir-vyatipāta it-iha yōgah ||
Asmin=hi gō-bhūmi-hiranya-vastra-
dānēna sarvaṁ parihāya pāpam |
śratvam=Indratvam=anāmayatvaṁ
marty-ādhipatyam labhāt manushyaḥ ||

Here Hēmādri adds that *pañchānana* = *sinha*, and *Guru-Bhūmiputrau* = *Bṛhaspaty-Angārakau*, 'Jupiter and Mars,' and that *pās-ābhidhānā* is the 12th *tithi*, and *karabhā* the *nakshatra* Hasta. Mādhava, on the other hand, quotes from Vṛiddha-Manu a verse of the same import with Hēmādri's first verse, but worded thus:—

Sinha-sthau Guru-Bhāumau chēn=Mēsha-
sthē cha ravau hi vā
dvādaśi Hasta-samyuktā vyatipātō mahān=
hi saḥ ||

With Hēmādri's wording of the definition, its meaning would be:—

'When in the bright half of the month the 12th *tithi* is joined with the *nakshatra* Hasta, while Jupiter and Mars stand in the sign of the Lion and the Sun in Aries, the combination is termed *vyatipāta*.'

3.—Finally, Hēmādri quotes from Bhṛigu the verse —

Krāntisāmāya-samayaḥ samiritaḥ
sūryaparva-sadrīṣo mun-iśvaraiḥ |
tatra datta-huta-japta-pūjanam
yāga-kōti-guṇam-āha Bhārgavaḥ ||;

to which he adds the following explanation:—*Sūrya-ehandramasōḥ krānti-sāmāyē* punyakāla-dvayam bhavati | *śkō* vyatipāt-ākhyah | *aparō vaidhṛity-ākhyah* | Tatra *krāntisāmāya-lakshanasāya vyatipātasāya* Gaṇḍ-ōttarārdhād-ārabhya *kramāt=sārdhēṣhu pañcha-yōgēṣhu sambhavō=sti* | *vaidhṛiti-samjñāsāya tu* Śukla-yōgād-ārabhya *kramāt=sārdhēṣhu pañcha-yōgēṣhu sambhavah* | Tatra *parva-kāla-samkhyā* cha *daśa-gaṇṭhikābhyah samārabhy=aikasaptatyadhikaśata-paryanta* in *sambhāvya*tē | Tathā cha *vēdāngē* Jyōtiṣhē |

Gaṇḍ-ōttarārdhād-vyatipāta-sambhavah
sūkl-āditō vaidhriti-samjñakō bhavēt |
sārdhēshu pañchasa parēshu tath-ēshyatō sa
evam dvayam tat-sukrit-aika-sādhakam ||

It is clear that the *vyatipāta* here described by Hémādri (together with *vaidhriti*, with which we have no concern) is the same *vyatipāta* which in the *Sārya-Siddhānta* XI. 2, is defined thus:—

'When the moon and the sun are upon opposite sides of either solstice, and their minutes of declination are the same, it is *vyatipāta*, the sum of their longitudes being a half-circle.'

Vyatipāta, then, is here the time at which the sun and the moon, standing in different *ayanas*, have the same declination (*krānti-sāmya*). It would be easy to shew that, were it not for certain attending circumstances, the sum of the longitudes of the sun and the moon at that time would be 180°.

¹ *ante*, Vol. XVIII. pp. 128 and 272.

² *Chaturv. Parīśekhahandē Brāddhakalpa*, pp. 241.244; and *Parāśaramādhava*, p. 656.

³ The verse was well-known to Colebrooke; see *Misc. Essays*, Vol. II. p. 284. It also occurs in the *Nirṇayasindhū*, p. 37.

and the *yōga* Harshaṇa (No. 14); but I am not myself sufficiently versed in astronomy to pursue this matter further.* According to Hémādri, it is possible that in reality the *yōga* at the time may be any one from the second half of Gaṇḍa (No. 10) up to Vajra (No. 15); but it can never be the *yōga* Vyatipāta (No. 17).

If I may venture a remark about the two dates which have induced me to write these lines, I would say that the date given *ante*, Vol. XVIII. p. 127, may perhaps, to a certain extent, furnish an example for *vyatipāta* in the first sense here explained, and the date *ib.* p. 274 an example for *vyatipāta* used in the third sense. But this I leave Mr. Fleet to settle.

Göttingen.

F. KIELHOEN.

THE DATE OF ONE OF THE KANHERI INSCRIPTIONS OF AMOGHAVARSHA I.

At the time when I edited the Kanheri inscription of the Rāshtrakūṭa Amoghavarsha I., which is published *ante*, Vol. XIII. p. 134, I was not able to calculate Indian dates for myself; and I now find that the European equivalent for the date of the inscription referred to, which I have given, *ib.* note 9, is altogether wrong.

The inscription is dated, in words, and again partly in figures, in the Saka year 775, and the Prajāpati saṁvatsara, on the second lunar day of the dark half of Āśvina, on Budha-dina or Wednesday. By the Southern System of the cycle the Prajāpati saṁvatsara coincided with Saka 773 expired; and by the Northern System it commenced, according to the Sārya-Siddhānta rule without *ḍḍja*, in Saka 772 expired, on the 26th November, A. D. 850, and ended in Saka 773 expired, on the 22nd November, A. D. 851. And accordingly, either the year 775 has been put wrongly in the date for 773, or the saṁvatsara Prajāpati has been quoted incorrectly. Calcula-

tion shews that we have to decide in favour of the former alternative. For, the second of the dark half of Āśvina, *pūrṇimānta* or *amānta*, did not fall on a Wednesday in either Saka 775 current or Saka 775 expired; but by the *amānta* scheme it did fall on a Wednesday, — the 16th September A. D. 851,¹ — in Saka 773 expired. And Wednesday, the 16th September A. D. 851, is therefore the proper equivalent of the date, and this date fell in the Prajāpati saṁvatsara by both the Southern and the Northern Systems of the Cycle.²

Dates in which the year of the Cycle is quoted correctly, and the Saka year incorrectly, are not uncommon.

Thus, the Añjanēri stone inscription of Sēṇa-dēva, *ante*, Vol. XII. p. 126, is dated in the Saka year 1063, and the Dundubhi saṁvatsara, on the 15th lunar day of the bright half of Jyēshṭha, on Sōma or Monday, under the *nakshatra* Anurādhā and the *yōga* Siddha. By the Southern System of the Cycle the Dundubhi saṁvatsara coincided with Saka 1064 expired, not with Saka

1063; and calculation shews that the year of the date was really Saka 1064 expired. For, the date corresponds, for Saka 1064 expired, to Monday, the 11th May A. D. 1142, when the 15th *tithi* of the bright half ended 13 h. 32 m., and when the *nakshatra* was Anurādhā up to 13 h. 47 m., and the *yōga* Siddha commenced 2 h. 38 m., after mean sunrise.

Again, to quote only one other example, the Pāṭṇā stone inscription of the Yādava Siṁghanta and his feudatories Sōidēva and Hémāḍidēva, which I have re-edited in *Epigraphia Indica*, is dated in the Saka year 1128 and the Prabhava saṁvatsara, on the full-moon *tithi* of Śrāvana, at

the time of a lunar eclipse. By the Southern System of the Cycle the Prabhava saṁvatsara coincided with Saka 1129 expired, not with Saka 1128; and besides, if the year of the date were really Saka 1128 expired, the corresponding date would fall in A. D. 1206, and in that year there was no lunar eclipse at all. On the other hand, taking the year of the date to be Saka 1129 expired, which was the Prabhava saṁvatsara, the corresponding date will be the 9th August A. D. 1207, when there was a lunar eclipse which would have been just visible in Khândés.

Göttingen.

F. KIELHOEN.

MISCELLANEA.

MISCELLANEOUS DATES FROM INSCRIPTIONS AND MSS.

1.—Mr. Fleet's examinations of Hindu dates have led to the conclusion¹ that "even in Southern India, or at least in some parts of it, the *amānta* southern arrangement of the lunar fortnights was not coupled with the Saka years until a comparatively late period," in fact, not before A. D. 804. Compared with this, it may be interesting to learn from some dates in M. A. Barth's *Inscriptions Sanscrites du Cambodge*, that, in Cambodia, the *amānta* scheme was used in connection with the Saka era at least as early as A. D. 626.

On p. 41 of M. Barth's volume is a date of a stone inscription from Vat Chakret, the chief items of which are—

Piṇḍibhūtē śak-ābdē vasu-jaladhi-sarair-
vvasarē Mādhav-āda kumudavana-

patau Tāvurē Kṛittikāyam | ; i. e., in the Saka year 548, on the first day of Vaiśākha, the moon being in (the sign) Taurus (and) in (the *nakshatra*) Kṛittikā.

This date does not furnish sufficient particulars for exact identification, but the fact that the moon is stated to have been in the *nakshatra* Kṛittikā (No. 3) proves all the same that the first of Vaiśākha spoken of was the first of the bright half, and the month therefore the *amānta* Vaiśākha. For had it been the first of the dark half, or, in other words, the first of the *pūrṇimānta* Vaiśākha, which follows immediately upon the full-moon day of Chaitra, the moon would have been in Chitrā (No. 14) or Svāti (No. 15). And the possible equivalents of Vaiśākha-śudi 1, i. e., the first of the *amānta* Vaiśākha, actually are:—

for Saka 548 current, the 13th April, A. D. 625, when the first *tithi* of the bright half ended 16 h.

¹ See *Gupta Inscriptions*, Introduction, p. 79, note 2; and *ante*, Vol. XVII. pp. 141 and 142.

² I quote the words, as corrected by the Editor.

18 m., and the moon was in Kṛittikā up to about 23 h. after mean sunrise; and —

for Śaka 548 expired, the 3rd April, A. D. 626, when the first tithi of the bright half ended 4 h. 45 m., and the moon entered Kṛittikā about 6 h. 34 m. after mean sunrise.

In a short inscription from Vat Prey Vier, on p. 74 of the same volume, we find an even more interesting date, of which it will be sufficient to quote the words —

Yātē kālē Sakānām nava-tanu-vishayair =
Mmādhavē śhōdas-āhē Jivas-ohāpē-ja-sūryyō
maitram-indur;
i. e., when the Śaka year 589 had expired, on the sixteenth day of Vaiśākha, Jupiter being in (the sign) Chāpa (or Dhanuḥ), the sun in Mēsha, and the moon in (the nakshatra) Anurādhā.

Here again the Vaiśākha of the date was clearly the *amānta* Vaiśākha, and the 16th day, spoken of, was Vaiśākha-badi 1, and the true equivalent of the date undoubtedly is the 15th April, A. D. 667, as may be seen from the following *data*. The new-moon which introduced the bright half of Vaiśākha of Śaka 589 expired was 9 h. after mean sunrise of the 30th March, A. D. 667. Counted from that day, the 16th day was the 15th April, A. D. 667, when the first tithi of the dark half (of the *amānta* Vaiśākha) ended 4 h. 28 m., and when the moon was in Anurādhā up to about 22 h. 20 m. after mean sunrise. On the same 15th April the sun was in the sign Mēsha, which it had entered on the 20th March; and Jupiter, as required, was in Dhanuḥ, having entered that sign, by the Sūryasiddhānta rule without *bīja*, on the 20th January, A. D. 667, and remaining in it till the 16th January, A. D. 668.

The statement that Jupiter was in (the 9th sign) Dhanuḥ in this case is really equivalent to saying that the current Jovian year was Krōdhana, the (12 + 12 + 9 =) 33rd year, counted from Vijaya as the first; and the special interest of this date lies in this that, while the scheme of its lunar month is the *amānta*, so-called southern scheme, the system followed in regard to the Jovian year is the northern mean-sign system.

On p. 68 of M. Barth's volume the 10th day of Vaiśākha of the same Śaka year 589 is mentioned with, amongst others, the remark that the moon had reached the middle of the sign Śiṃha. This date would correspond to the 9th April, A. D.

* From the copy which I owe to the kindness of Professor Kern I see that the inscription was originally edited by him in the *Bijdragen tot de Taal-, Land- en Volkskunde van Nederlandisch-Indië*, 4e volgr. Dl. X.

667, when the 10th tithi of the bright half ended about 17 h. 26 m. after mean sunrise, and when, at sunrise, the moon was in the eleventh degree of Śiṃha.

2. — On p. 54 of the late Dr. Burnell's *Elements of South-Indian Palaeography* we find the remark that the Javanese Śaka era begins in A. D. 74; and this remark has *ante*, Vol. X. p. 214, note 7, been quoted by another distinguished scholar, apparently in support of the statement that "in ancient times the initial dates from which the different Indian eras were counted were subject to fluctuations of several years." Whatever may be the practice of quite modern times, it is certain that down to nearly the end of the 14th century A. D. the Śaka reckoning in Java did not differ from the customary Indian reckoning. This may be seen from the following Javanese Śaka dates, which all work out properly with the ordinary epoch A. D. 77-78.

Professor Kern has published* a Sanskrit inscription from Java of the Śaka year 654, the date of which he reads thus: —

Sākēndrē-tigatē śrut-Indriya-rasair = aṅgi-
(āki)kṛitē vatsarē

vār = āndau dīvala-trayōdasi-tithau Bha-
drōttarē Kārttikē; i. e., in the Śaka year 654,
expired, on Monday, the 13th lunar day of the
bright half of Kārttika, the moon being in (the
nakshatra) Uttarabhadrapadā. — The corres-
ponding day, for Śaka 654 expired, and with the
ordinary epoch of the Śaka era, is Monday, the
6th October, A. D. 732, when the 13th tithi of
the bright half ended 18 h. 17 m., and the moon
was in Uttarabhadrapadā up to about 15 h.
6 m. after mean sunrise.

And in a paper† of Professor Kern's "over een
Oudjavaansche Oorkonde van Śaka 782" there
are two other Javanese dates, one of which is —

Sakavarshatita 782, Kārttikamāsa, tithi trayō-
dasi śuklapaksha, . . . Vri-vāra, . . . Asvini
nakshatra, . . . Vyatipātayōga, . . .
Taithilakarāṇa; i. e., Śaka 782, Brihaspati-vāra
or Thursday, the 13th lunar day of the bright
half of Kārttika, the nakshatra Asvini, the yōga
Vyatipāta, and the karaṇa Taitila; and the
other —

Sakavarshatita 1295, Asujimāsa, tithi trayōdasi
krishṇapaksha, . . . Su-vāra . . .; i. e.,
Śaka 1295, Sukra-vāra or Friday, the 13th lunar
day of the dark half of Āshvina.

† In *Verlagen en Mededeelingen der Kon. Akad. van Wetenschappen*, Letterkunde, 2 R., 10 D., Amsterdam 1881, pp. 94 and 102.

Here the proper equivalents, with the ordinary epoch of the Śaka era, are: — for the first date, and Śaka 782 expired, Thursday, the 31st October, A. D. 860, when the 13th tithi of the bright half and the karaṇa Taitila ended 10 h. 29 m., and when the nakshatra was Asvini up to 11 h. 10 m., and the yōga Vyatipāta up to 5 h. 16 m. after mean sunrise; and for the second date, and the *amānta* Āshvina of Śaka 1295 expired, Friday, the 14th October, A. D. 1373, when the 13th tithi of the dark half ended 20 h. 49 m. after mean sunrise.

3. — *Ante*, Vol. XVIII. p. 162, and Vol. XIX. pp. 129 and 426, Mr. Fleet has treated of some Śaka dates which, instead of quoting a lunar month, give us the sign of the zodiac in which the sun happened to be on the day intended by the date. An early Vikrama date, which is very similar to Mr. Fleet's Śaka date in Vol. XIX. p. 129, occurs in line 32 of the Shēkhavati (or Harsha) stone inscription of the reign of the Chāhamāna Vighararāja, first published in the *Journal Beng. As. Soc.*, Vol. IV. pp. 370-384. According to the rubbings and impressions supplied to me by Mr. Fleet and Dr. Burgess, the date, which is given incorrectly in the published version, runs really thus: —

Jātē-vdā(bdā)nān sahasrē triguṇa-nava-yutē
Śiṃha-rāsau gatē-rkkē
śuklā y-āsīt-tri[ti*][yā] Subha-Kara-sahitā
Sōma-vārēṇa tasyām; |

i. e., when 1027 years were completed, and when the sun was in the sign Śiṃha, on the third bright lunar day which was attended by (the nakshatra) Kara (or Hasta) and (the yōga) Subha, on a Monday. — In northern V. 1027 expired the sun entered the sign Śiṃha 9 h. 49.8 m. after mean sunrise of the 26th July, A. D. 970, which was the 6th of the dark half of the *pūrṇimānta* Bhādrapadā. The third of the following bright half of the same Bhādrapadā was Monday, the 8th August, A. D. 970, when the third tithi of the bright half ended 4 h. 15 m., and when the nakshatra was Hasta up to 12 h. 29 m. and the yōga Subha up to 13 h. 26 m. after mean sunrise.

Dates of this kind are common enough in Bengāl MSS.* And some of these dates again are peculiar in specifying the degree in which the sun happened to be on the day of the date. Thus, according to the late Dr. Rājēndralāl Mitra's *Notices*, Vol. VI. p. 238, a MS. of the *Saṅskṛta-paddhati-rahasya*, which is written in Bengāl characters, is dated —

Sākē vāp-āchala-tithi-mitē bhāskarē Karkāṭa-
sthē

vimsaty-amsē Vidhusuta-dinē śukla-pakshē
cha shashṭhyām; |

i. e., in Śaka 1575, when the sun was in the sign Karkāṭa, in the 20th degree, on Wednesday, the sixth lunar day of the bright half. — In Śaka 1575 expired the Karkāṭa-saṅkrānti took place 16 h. 52 m. after mean sunrise of the 30th June, A. D. 1653; and the sun entered the 20th degree of the sign some time on Wednesday, the 20th July, A. D. 1653. This Wednesday was the 6th of the bright half of Śrāvṇa, for the 6th tithi of the bright half ended on it, about 15 h. 18 m. after mean sunrise.

These are clearly luni-solar dates. But in some Bengāl MSS. we also find purely solar dates. Thus, according to Professor Eggeling's *Catalogue*, p. 211, a MS. of the *Sarasvatī Prakriyā* is dated —

Sākē sapta-dvi-sapt-aika-saṅkhyē Mēsham-itē
ravau |

Tritiyē-hni Ravār-vārē lipyā pūrtim-agād-
iyam || Śak-ābdāḥ 1727 ||;

i. e., in Śaka 1727, when the sun had entered the sign Mēsha, on the third day, a Sunday. — The Mēsha-saṅkrānti at the end of Śaka 1727 current took place 1 h. 29 m. after mean sunrise of Thursday, the 11th April, A. D. 1805; and the day of the date is clearly Sunday, the 14th April, A. D. 1805, which by the lunar calendar was the first of the dark half of the *amānta* Chaitra.

And according to the same *Catalogue*, p. 35, a Bengāl MS. of Surēśvarāchārya's *Bṛihadāranya-ka-bhāshyavarttika* is dated —

navanavaty-adhika-chaturdaśa-śata-mita-sakābdē
Chaitrasya dvādas-amsē Su(su)kravārē;

i. e., in the Śaka year 1499, in the 12th degree of Chaitra, on Friday. — By the result of my calculations the year of this date is the current solar year Śaka 1499. In that year, the solar month Chaitra commenced 17 h. 25.6 m. after mean sunrise of Monday, the 25th February, A. D. 1577, and the sun was in the 12th degree from some time on Friday, the 8th March, A. D. 1577, which was the 4th of the dark half of the *pūrṇimānta* Chaitra of Śaka 1499, current.

4.—Dates are sometimes recorded in days of the Kaliyuga. A very interesting date of this description is contained in the following

* Compare e.g. Dr. Rājēndralāl Mitra's *Notices*, Vol. II. p. 310; Vol. III. p. 171; etc.

verses of Shadguruśishya's *Vēdārthadīpikā*,⁶ in which the author tells us that he completed his work, when the number of days of the Kaliyuga was 1 565 132 :—

Kha-gō-tyā-umē-shu-mā-y=ēti⁷ Kaly-abar-gaṇanē sati |

Sarvānukramāni-vṛttir-jāta Vēdārthadīpikāll
Lakshāni pañchadaśa vai pañchashashtī-
sahasrakam |

Sa-dvāstrīnāśch-ohhataim ch=ēti dina-vāky-
ārtha iritah ||

Expressed in the days of the Julian period, the epoch of the Kaliyuga is—

588 465 75 days;
+ 1565 132 days;

sum 2153 597 75 days of the Julian period
= the 24th March, A. D. 1184, 18 h. after mean sunrise.

Accordingly, the day actually given us by Shadguruśishya would correspond to the 24th March, A. D. 1184. But since this is the day of the *Mēsha-saṅkhrānti*⁸ at the end of the solar year Kaliyuga 4285 = Śaka 1106 current, it appears highly probable that, what Shadguruśishya meant to intimate, is merely, that he finished his work in Kaliyuga 4285 = Śaka 1106 expired, and that he has simply copied the number of days, given by him, from the calendar.

That the day put down in the date was the day of the *Mēsha-saṅkhrānti*, Shadguruśishya indeed has plainly suggested himself. For there can be no doubt whatever that the true reading of the first half of the first of the above verses is—

Kha-gō-ntyān=Mēsham=ap=ēti⁹ kaly-ahar-gaṇanē sati. — i. e., 'when the number of days of the Kaliyuga was the number denoted by *khagō=ntyān=Mēsham=āpa* "the sun passed from the last sign on to the sign Mēsha;" (kh=2, g=3, y=1, m=5, sh=6, m=5, and p=1).

5.—In the Verāval inscription of the reign of the Vāghēla Arjunadēva, the Mahāmāda samvat or Hijra year 662 is put down along with the Vikrama, Valabhi, and Simha years to which the day of the date belonged. And in MSS. I have sometimes found Hijra years quoted by the side of the corresponding Śaka years. The Hijra year, described as the Yāvana year,

⁶ See Professor Macdonell's Edition, p. 168; *Indische Studien*, Vol. VIII. p. 160; and Professor Aufrecht's *Oxford Catalogue*, p. 878.

⁷ Such is the reading of the published texts, but it yields no sense. I shall show presently what I consider to be the right reading.

is quoted alone in the following date of a MS. of a commentary on the *Sūryasiddhānta*, written in Maithili characters (apparently) in Oudh :¹⁰—

Turaga-nava-himānēu-ksham-ānikitē Yāvan=bdē

charama - Suchi - chaturthyām kṛishṇa-
pakshē=hnī Jaivē ;

i. e., in the Yāvana or Hijra year 1197, on the fourth lunar day of the dark half of the second summer-month (Āshāḍha), on Thursday. — As the Hijra year 1197 commenced on the 7th December, A. D. 1782, the date should fall in A. D. 1783 or Śaka 1705 expired. And for Śaka 1705 expired the 4th of the dark half of the *amānta* Āshāḍha corresponds to Thursday, the 17th July, A. D. 1788, when the fourth *tithi* of the dark half ended 21 h. 10 m. after mean sunrise.

6. — *Ante*, Vol. XIX. p. 6, I have attempted to prove that the Lakshmanasēna era commenced in A. D. 1119, and I have shown that, assuming my epoch to be correct, the difference between a year of that era and the corresponding expired Śaka year must always be 1040, or 1041, or 1042. In support of my views, I would now draw attention to two dates in the late Dr. Rājēndralāl Mitra's *Notices*, which I had formerly overlooked.

According to Vol. VII. p. 169, a MS. of Bhavadatta's commentary on the *Śiṣupalavadha* is dated La-sam 512 | Sakābdā 1552 |. Here the difference between the two years is 1040; and, in accordance with what I have previously stated, the Lakshmanasēna year must have been the current year 512, and the date written in one of the months from Kārttika to Phālguna.

According to Vol. V. p. 84, a MS. of Madhusūdana's *Kaṅṭakōddhāra* which is written in Maithili characters, contains the lines —

chakrē Rāmakanīyasō Svanipatēh ātānū-
nand-āmbudhāv=

anikē Phālguna-saptami-Ravidinē Gaṅgā-
Gaṇēś-ārchakāh,—

which give us for calculation the (Lakshmanasēna) year 491, and the seventh lunar day (of either the bright or the dark half) of Phālguna, joined with a Sunday. Here, the month being Phālguna, the date should fall either in Śaka (491 + 1040 =) 1531 expired, or in Śaka (491 + 1041 =) 1532 expired; but calculations for Śaka 1531 yield no

⁸ It took place 8 h. 58' 6 m. after mean sunrise.

⁹ Three of Professor Macdonell's MSS. actually read *mēsham* (not *mēshum*), and they have the sign of anusvara above the *akshara* preceding *tyā*.

¹⁰ Dr. Rājēndralāl Mitra's *Notices*, Vol. V. p. 149.

sati factory result. In Śaka 1532 expired, the seventh *tithi* of the bright half of Phālguna ended about 18 h. after mean sunrise of Saturday, the 9th February, A. D. 1611, which also does not suit the requirements of the case. On the other hand, in the dark half of the *amānta* Phālguna of Śaka 1532 expired —

the 6th *tithi* ended 1 h. 38 m. before mean sunrise of Saturday, 23 February, A. D. 1611;

the 7th *tithi* ended 0 h. 17 m. before mean sunrise of Sunday, 24 February, A. D. 1611; and

the 8th *tithi* ended 1 h. 25 m. after mean sunrise of Monday, 25 February, A. D. 1611.

It is true that by this result no *tithi* would have ended on the Sunday, and that the Sunday would have been put down in the calendar, like the Monday, as the 8th. But the *tithis* have here been calculated according to Ujjain time, and considering that the date undoubtedly was written far to the east of Ujjain, the seventh *tithi* would for the writer of the date really have ended some time after sunrise of the Sunday;¹¹ and Sunday, the 24th February A. D. 1611, therefore is the proper equivalent of the date, — deduced from the epoch of the Lakshmanasēna era A. D. 1118-19.

7. — A date of the Āshāḍhādi Vikrama year 1574, which does not admit of verification, is given in Professor Macdonell's edition of Kātyāyana's *Sarvānukramānī*, preface, p. xiii. And another Āshāḍhādi date, according to Professor Eggeling's *Catalogue*, p. 409, occurs in a MS. of part of Hémādri's *Chaturvarga-chintāmani*, written in We ten India, and is worded thus :—

Samvat 15 Āshāḍhādi 81 varshē 5 Srāvāṇa-
sūdī pañchamī aparām shashtī Budhē.

As might have been expected, the date falls in the northern Vikrama year 1581, expired, and the corresponding date, for that year, is Wednesday, the 6th July, A. D. 1524, when the fifth *tithi* of the bright half ended 1 h. 25 m. after mean sunrise.

In addition to quoting the 5th *tithi* which ended on the Wednesday, and from which the Wednesday received its number 5, this date also quotes the following sixth *tithi*, and it is in this respect similar¹² to No. 49 of my Vikrama dates, *ante*, Vol. XIX. p. 33; but what makes this Āshāḍhādi date more interesting, is the fact that the 6th *tithi* also ended on the Wednesday, 1 h. 17 m.

¹¹ I now find that by Prof. Jacobi's Special Tables for the *Sūryasiddhānta* with *bija*, published in *Epigraphia Indica*, Pt. VIII., the seventh *tithi*, even at Ujjain, ended 3 *ghāṭikas* after mean sunrise of this Sunday.

¹² Another date of this description occurs in a MS.

before sunrise of the Thursday, and was therefore, in fact, a *kshaya-tithi*.

8. — In dates like the preceding the ordinals *pañchamī*, *shashtī*, etc., clearly denote the time occupied by the *tithi* itself, not the civil day on which the *tithi* ended; and those dates thus help to explain other dates in which the writers undoubtedly have quoted actually current *tithis*, with the week days on which they commenced.

According to my *Report on Sanskrit MSS.* for 1880-81, p. 22, a palm-leaf MS. of Amarasinhā's *Nāmalingānuśāsana* is dated :—

Srīmad-Rāmachandradēva - v i j a y a r ā j y ē
Kumkupa-vishayē gata-Kali 4398
Hēmalambba-samvatsarē Jyēshtha-vadi
ashtāmyāyām¹³ Vṛhaspati-dinē |

By the southern luni-solar system the year Hēmalamba corresponds to Kaliyuga 4398 expired, and the 8th *tithi* of the dark half of the *amānta* Jyēshtha of that year commenced on Thursday, the 18th June, A. D. 1297, 1 h. 37 m. after mean sunrise, and ended at mean sunrise of the following day. Here the Thursday, quoted in the date, was civilly *badī* 7, and the 8th *tithi* was either a *kshaya-tithi* or ended after true sunrise of the Friday. And the meaning of the date clearly is, that the writing was finished on the Thursday, during the 8th *tithi*.

In Professor Bhāṅḍārkar's *Report* for 1883-84, p. 357, the date of the composition of Mahēśvara's commentary on Purushōttama's *Vishṇubhakti-kalpalatā* is given thus :—

Srīmad-bhūvalayānuraṃjana-lasat-kīrtē r =
nripād=Vikramāj=

jātē=śch(śv)-āmbudhi-rāga-bhūmi-gaṇitē=
bdē Mārgasīrshē=rjunē |

pakshē mukhyajayā-tithau Suraguru-
(rōr)=vārē Virūpāksha-bhūr=
nirmāti sma Mahēśvarō guru-kṛipash-
ṭikām-imām sūndarām ||

Here, again, the third (or *mukhyajayā*) *tithi* of the bright half of Mārgasīrsha of V. 1647 expired commenced on Thursday, the 19th November, A. D. 1590, 1 h. 38 m. after mean sunrise, and ended 0 h. 51 m. after mean sunrise of the following day.

And according to Professor Bendall's *Catalogue*,

of the *Saptapadārthi*, of which a page is photographed in Dr. Rājēndralāl Mitra's *Notices*, Vol. II. : *Samvat* 1458 *varshē Māgha-vadi 6 anantāra[ni] saptamīyām tithau Guṛujdinē*; corresponding, for the *pārmīamānta* Māgha of V. 1458, current, to Thursday, the 6th January, A. D. 1401. ¹³ Read *ashtāmyāyām*.

p. 32, a palm-leaf MS. of Chandragômin's *Sishyalâkha-dharmakavya* is dated:—

Samvat 200. 4. Vaisâkha-sukl-Ashtamyâm | Sôma-dinâ.

And here, again, the 8th *tithi* of the bright half of Vaisâkha of the expired Nêwâr year 204 commenced on Monday, the 15th April,

A. D. 1084, 8 h. 43 m. after mean sunrise, and ended 9 h. 59 m. after mean sunrise of the following day; and I here, too, take the meaning of the date to be, that the writer finished his work on the Monday, after the commencement of the 8th *tithi*.

Göttingen.

F. KIELHOEN.

APRIL, 1893.]

MISCELLANEA.

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MISCELLANEA.

MISCELLANEOUS DATES FROM INSCRIPTIONS AND MSS.

1.—*Ante*, Vol. XIX. p. 6, I have attempted to prove that the Lakshmanasêna era commenced in A. D. 1119, that the years of the era were *Kârttikâdi* years, and that, accordingly, to convert a Lakshmanasêna year into the corresponding year of the Saka era, we must add 1041, when the date falls in one of the months from *Kârttika* to *Phâlguna*, and 1042, when the date falls in one of the months from *Chaitra* to *Âsvina*. To the six dates of the era which were then known to me I have added another date, *ante*, Vol. XXI. p. 50; and I would now draw attention to one more Lakshmanasêna date, which also works out correctly with my epoch.

According to the late Pandit Bhagvânâlâ Indrajî, the Buddha-Gayâ inscription of Asôkavalla, published by him in the *Journal Bo. As. Soc.*, Vol. XVI. p. 358, is dated in line 11:—

Bṛimal-Lakshmanasênasy-âtita-râjyê sam 51 Bhâdra di 8 râ 29.

Judging from the editor's own translation—

Samvat 51 of the reign of the illustrious Lakshmanasêna having elapsed, the 8th day of the dark half of Bhâdrapada, the 29th solar day—it may be suspected that the original inscription has *Bhâdra-vadi* instead of the *Bhâdra di* of the printed text. However this may be, there can be no doubt that the inscription is dated the 8th of either of the lunar halves (probably, of the dark half) of the month Bhâdrapada, being the 29th

day of the solar month, of the Lakshmanasêna year 51.

The date falling in the month Bhâdrapada, the year of the date, supposing it to be the expired year 51, should correspond to Saka (51 + 1042 =) 1093 expired; and the details of the date prove that such is actually the case. For in Saka 1093 expired the 8th *tithi* of the dark half of the *amânta* Bhâdrapada ended about 19 h. after mean sunrise of the 25th August, A. D. 1171, causing that day to be Bhâdra-vadi 8; and the same 25th August also was the 29th day of the solar month Bhâdrapada, the *Simha-sankrânti* having taken place, by the *Sûrya-siddhânta*, 10 h. 4 m. or, by the *Ârya-siddhânta*, 8 h. 17 m. after mean sunrise of the 28th July.

The fact that the above date, in addition to the lunar day, also gives us the day of the solar month, induces me to mention here that, similarly to what I have shown to be a common practice in Bengâlî MSS.,* inscriptions also from Eastern India are sometimes dated according to the solar calendar. A clear and instructive example of this is furnished by the Tipura copper-plate, published by Colebrooke in the *Asiatic Researches*, Vol. IX. p. 403. That inscription is dated in Saka 1141 expired, according to Colebrooke *sûryya-gatyâ tuladinâ* 26, in reality *sûryya-gatyâ Phâlguna-dinâ* 26. The 26th day of the solar Phâlguna of Saka 1141 expired corresponds to the 19th February, A. D. 1220, the *Kumbha-sankrânti* having taken place 13 h. 3 m. after

menement of the reign, (now) passed, of the illustrious Lakshmanasêna.* See *ante*, Vol. XXI. p. 49.

The real meaning is—'the year 51 since the (com.

mean sunrise of the 24th January. Now on the 19th February, A. D. 1220, the day of the date, the full-moon *tithi* commenced about one hour after mean sunrise, and there can hardly be a doubt that the donation recorded in the copper-plate was made on account of the full-moon. But although thus there was apparently every reason to expect to be the first day of the year, the first day of the bright half of the month *Âshâdha*. According to the late Dr. Râjêndralâl Mitra's *Notices*, Vol. V. p. 236, a MS. of the *Garga-paddhati* is dated:—

And this date again leads me to draw attention to the date of the *Âmgâchhî* copper-plate of *Vigrahapâladêva* III., of which I have given an account, *ante*, Vol. XXI. pp. 97-101. The grant recorded in that inscription was made on the occasion of a lunar eclipse, *i. e.*, on the full-moon *tithi*; and the inscription is dated in the 12th or 13th year of *Vigrahapâladêva's* reign, *Chaitra-dinâ* 9. We know that the inscription is later than A. D. 1053,³ and, taking the expression *Chaitra-dinâ* 9 to refer to solar time, and comparing the date of the Tipura grant, I would suggest Monday, the 2nd March, A. D. 1086, as an equivalent of the date which, perhaps might be considered to satisfy the requirements of the case. Monday, the 2nd March A. D. 1086, was the 9th day of the solar *Chaitra*; on that day the full-moon *tithi* commenced about 5 h. after mean sunrise, and there was a lunar eclipse on that particular full-moon. The eclipse was not visible in India; but we now have several other dates that record invisible eclipses. Should this suggestion be approved of, *Vigrahapâladêva* III. must be taken to have begun to reign about A. D. 1074.

Similar to the date of the *Âmgâchhî* plate is the date of the *Balasoore* copper-plate grant of *Purushôttamadêva*, the king of Orissa, published *ante*, Vol. I. p. 355. According to Mr. Beames, *Purushôttamadêva* ascended the throne in A. D. 1478, and his grant is dated in the fifth year of his reign, on Monday, the 10th day of the month of *Mêsha*, *i. e.* *Vaisâkha*, at the time of an eclipse. If the year of the accession of the king is correctly given, the date of the grant can only be Monday, the 7th April A. D. 1483, when there was an invisible eclipse of the sun; but by my calculations that day was the 11th (not the 10th) day of the solar *Vaisâkha*, the *Mêsha-sankrânti* having taken place 17 h. 49 m. after mean sunrise of the 27th March, A. D. 1483.⁴

³ See *ib.* p. 99.

⁴ Monday, the 5th April A. D. 1456, was the 10th of

2.—*Ante*, Vol. XVIII. pp. 251-252, I have treated of four dates of the *Âshâdhadî Vikrama* years 1534, 1555, [15]83, and 1699; and Vol. XXI. p. 51, I have given two more such dates of the years 1574 and 1581. I can now draw attention to another date, of the *Âshâdhadî* year 1713, which is particularly interesting, because it quotes, what we should expect to be the first day of the year, the first day of the bright half of the month *Âshâdha*. According to the late Dr. Râjêndralâl Mitra's *Notices*, Vol. V. p. 236, a MS. of the *Garga-paddhati* is dated:—

Samvat *Âshâdhadî* 1713 *Âshâdha-masê* *âkhlê* *pakshê* *pratipach-Chhukravâsarâ*.

This date works out properly only for the *Chaitradî* Vikrama year 1713 expired, for which the equivalent of the date is Friday, the 13th June A. D. 1656; and it thus proves distinctly that the *Âshâdhadî* year really commences with the first day of the bright half of *Âshâdha*, and not (as has been suggested) with a later day of the same month. For, did the *Âshâdhadî* year commence after the first of the bright half of *Âshâdha*, the year 1713 of the date (for purposes of calculation) would have been the *Kârttikâdi* Vikrama year 1713, and the date would have fallen in A. D. 1657.

3.—I know only three dates which are expressly referred to the *Simha* era, and have given them already in my list of Vikrama dates (*ante*, Vol. XIX. pp. 24, 175, and 180; Nos. 9, 108, and 129), because they are all referred to the Vikrama era as well. About the European equivalents of two of these dates there is no doubt whatever; it is mainly in order to determine the proper equivalent of the third date, that I here put the three dates together.

(1). A copper-plate inscription of the Chau-lukya Bhimadêva II. is dated—

âri-Vikrama-samvat 1266 varshê sri-Simha-samvat 96 varshê . . . Mârgga-sudi 14 Gurau—

and the equivalent of this date, for Vikrama 1266 expired, is Thursday, the 12th November A. D. 1209. The difference between the *Simha* year and the Christian year is here 1113; between the *Simha* year and the expired (*Chaitradî*, or *Âshâdhadî*, or *Kârttikâdi*) Vikrama year, 1170.

(2). A *Verâval* stone inscription of the reign of the *Vâghêla* Arjunadêva is dated—

âri-nripa-Vikrama-sam 1320

the solar *Vaisâkha*, and on that day there also was a solar eclipse.

tathā sri-Simha-sam 151 varshē Āshāḍha-vadi 13 Ravau—,

and the equivalent of this date, for the expired *Kārttikādi* Vikrama year 1320, is Sunday, the 25th May A. D. 1264. Here the difference between the Simha year and the Christian year is again 1113. The difference between the Simha year and the Vikrama year put down in the date is only 1169; but as the Vikrama year of the date is the expired *Kārttikādi* year 1320, which for the month of Āshāḍha is equivalent to the *Chaitrādi* or *Āshāḍhādi* year 1321, we may say that here too, the difference between the Simha year and the expired *Chaitrādi* or *Āshāḍhādi* Vikrama year is 1170. Compared with the first date, the date apparently proves that the Simha year was not a *Kārttikādi* year, but began either with Chaitra or with Āshāḍha.

(3). A stone inscription at Māngrol in Kāthiā-vād, of the reign of the Chalukya Kumārāpāla, is dated—

śrīmad-Vikrama-samvat 1202 tathā sri-Simha-samvat 32 Āsīna-vadi 13 Sōmē.

Here the difference between the Simha year and the Vikrama year put down in the date is again 1170, and, judging from the preceding dates, the Vikrama year 1202 should be the expired *Chaitrādi* or *Āshāḍhādi* Vikrama year 1202. The preceding dates shew besides that the corresponding European date should fall in A. D. (32 + 1113 =) 1145. When treating of this date before, I indicated that, taking the date purely as a Vikrama date, the choice, as regards its European equivalent, would lie between Monday, the 28th August A. D. 1144, when the 13th *tithi* of the dark half ended 16 h. 30 m. after mean sunrise, and Monday, the 15th October A. D. 1145, when the same *tithi* commenced 3 h. 58 m. after mean sunrise. Irrespectively of any considerations connected with the Simha era, the first of these two possible equivalents seemed objectionable because it would necessitate the assumption that the Vikrama year of the date had been quoted as a current year. Now a comparison of the two other Simha dates will shew that we must definitely decide in favour of Monday, the 15th October A. D. 1145, as the proper equivalent of this date, notwithstanding the fact that the *tithi* of the date did not end, but commenced on that day.

The three dates shew that the Simha year was not a *Kārttikādi* year, but they leave it uncertain whether it began with Chaitra or Āshāḍha. The question would have to be decided in favour of the *Āshāḍhādi* year, if the following date could be referred with confidence to the Simha era.

According to the *List of Antiquarian Remains Bo. Pres.* p. 312 (and *Archaeol. Survey of West. India*, No. 2, p. 33), a short inscription at Girnār is dated—

Sam 53 varshē Chaitra-vadi 2 Sōmē.

Excepting, of course, dates of the Saptarshi era, I have not hitherto met with a single date from which the figures for the centuries of the year of the date have been purposely omitted; and therefore it does not seem to me at all improbable that the year 58 of this date may have to be referred to the Simha era. Now assuming the date to be a Simha date, the only possible equivalent of it would be Monday, the 13th March A. D. 1172, which was almost completely filled by the second *tithi* of the dark half of the *amānta* Chaitra. Monday, the 13th March A. D. 1172, however, belongs to the month Chaitra of either the *Āshāḍhādi* or the *Kārttikādi* (but not the *Chaitrādi*) Vikrama year (58 + 1170 =) 1228 expired; and, since we already have seen that the Simha year was not a *Kārttikādi* year, it would, with necessity, follow from this date that the Simha year commenced with the month *Āshāḍha*, (and was perhaps the original *Āshāḍhādi* year).

4.—Of the Chālukya Vikrama Varsha or era of the Western Chālukya king, Vikramāditya VI, Dr. Fleet has treated *ante*, Vol. VIII. pp. 187-193. My examination of a large number of dates of this era has yielded the results that, whatever may have been the day of the coronation of Vikramāditya VI, the years of the dates and the Jovian years quoted with them coincide with the lunar Saka years, beginning with Chaitra-śudi 1 and ending with Phālguna-vadi 15; and that a Chālukya Vikrama year may be converted into the corresponding expired Saka year by the simple addition of 997. This may be seen from the following regular dates:—

(1). The Yēwār tablet (*ante*, Vol. VIII. p. 20) is dated: . . . Chālukya-Vikrama-varshada 2neya Piṅgala-samvatsarada Śrāvāṇa-paurṇamāsī Āditya-vāra sōmagrahaṇa-mahāparvvanimittadin. The corresponding date, for Saka (2+997=) 999 expired, which by the southern lunisolar system was the year Piṅgala, is Sunday, the 6th August A. D. 1077, when there was a lunar eclipse 21 h. 22 m. after mean sunrise.

(2). A stone-tablet at Kurtakōṭi (*ante*, Vol. VIII. p. 190, No. 9) is dated: . . . Chā.-Vi.-varsha[da*] 7neya Dumdubhi-samvatsarada Pushya-śuddha-tadige Ādityavaram-uttarāyana-samkrānti-vyatipād-andu. In Saka (7+997=) 1004 expired, the year Dumdubhi, the 3rd *tithi* of the bright half of Pausha ended

4 h. 24 m. after mean sunrise of Sunday, the 25th December A. D. 1082, and the Uttarāyana-samkrānti took place on the preceding day, 13 h. 43 m. after mean sunrise.

(3). According to Dr. Fleet (*ante*, Vol. VIII. p. 22) a stone-tablet at Ālūr records grants made 'at the time of the sun's commencing his progress to the north, on Thursday, the twelfth day of the bright fortnight of the month Pushya of the Prajāpati samvatsara, which was the sixteenth of the years of the glorious Chālukya king Vikrama.' In Saka (16+997=) 1013 expired, the year Prajāpati, the 12th *tithi* of the bright half of Pausha ended 12 h. 24 m. after mean sunrise of Thursday, the 25th December A. D. 1091, and the Uttarāyana-samkrānti took place on the preceding day, 21 h. 36 m. after mean sunrise.

(4). A stone-tablet at Kiruvatti (*ante*, Vol. VIII. p. 191, No. 20) is dated: Chā.-Vi.-varshada 24neya Pramāthi-samvatsarada Jyēṣṭha-śuddha-paurṇamāsī Āditya-vārasōmagrahaṇad-andu. The corresponding date, for Saka (24+997=) 1021 expired, the year Pramāthin, is Sunday, the 5th June A. D. 1099, when there was a lunar eclipse 16 h. 55 m. after mean sunrise.

(5). A stone-tablet at Kargudari (*ante*, Vol. X. p. 252) is dated: . . . Chā.-Vi.-varshada 33neya Sarvadhāri-samvatsarada Herjuggiya (i.e., Āsīna) puṇamī Sōmavārad-andina. The corresponding date, for Saka (33+997=) 1030 expired, the year Sarvadhārin, is Monday, the 21st September A. D. 1108, when the full-moon *tithi* ended 21 h. 36 m. after mean sunrise.

The two following dates, taken together, prove that the Jovian years quoted in them commenced on the first day of the bright half of the lunar Chaitra, not at the time of the Mēsha-samkrānti, nor on the 5th day of the bright half of Phālguna, the anniversary of the accession of the founder of the era.

(6). An inscription at Kaṭṭagēri (*ante*, Vol. VI. p. 138) is dated: . . . Chā.-Vi.-varshada 21neya Dhātu-samvatsarada Chaitra su (śuddha) 5 Ādit-yavārad-andu. The corresponding date, for Saka (21+997=) 1018 expired, is Sunday, the 2nd March A. D. 1086, when the 5th *tithi* of the bright half ended 1 h. 12 m. after mean sunrise. As the Mēsha-samkrānti did not take place till the 23rd March, A. D. 1086, the date shows that the Jovian year Dhātu to which the date belonged commenced before the beginning of the solar Saka year 1018 expired, and did not coincide with the solar year.

(7). A stone-tablet of Baḷagāṁve (*ante*, Vol. V. p. 344) is dated 'on the occasion of an eclipse of

the sun on Sunday, the day of the new-moon of (the month) Phālguna of the Śrīmukha samvatsara which was the 13th of the years of the glorious Chālukya Vikrama.' The corresponding date, for the *amānta* Phālguna of Saka (18+997=) 1015 expired, is Sunday, the 19th March A. D. 1094, when there was a solar eclipse, which was visible in India, at 5 h. 8 m. after mean sunrise. The fact that this day belonged to the Jovian year Śrīmukha shews that that year did not commence (or end) on the 5th of the bright half of Phālguna; for, had such been the case, the year Śrīmukha would have ended already on the 22nd February A. D. 1094, and the Jovian year of the date would have been Bhāva.

The following are some of the dates which do not work out satisfactorily:—

(8). An inscribed pillar at Araḷēswar (*ante*, Vol. VIII. p. 190, No. 4) is dated: . . . Chā.-Vi.-kālada Ineya Naḷa-samvatsarada Chaitra-bahula-panchami-Maṅgalavāra-Mēshasamkrānti-vyatipād-andu. The year of the date should be Saka (1+997=) 998 expired, but the date does not work out properly either for that year or for the immediately preceding and following years. The 5th *tithi* of the dark half of the *amānta* Chaitra of Saka 998 expired ended on Monday, the 23rd March A. D. 1076, and the nearest Mēsha-samkrānti took place on Wednesday, the 23rd March A. D. 1076. For Saka 997 expired the corresponding dates are Wednesday, the 8th April, and Tuesday, the 24th March, A. D. 1075; and for Saka 999 expired, Friday, the 17th March, and Thursday, the 23rd March, A. D. 1077.

(9). A stone-tablet at Wadagēri (*ib.* No. 5) is dated (on the anniversary of Vikramāditya's coronation): . . . Chā.-Vi.-varsha-prathama-Nala-samvatsarada Phālguna-śuddha-panchami-Bri-(bri)haspativārad-andu. The year of the date should again be Saka (1+997=) 998 expired; but the equivalents of the date both for that year and for the immediately preceding and following years are Tuesday, the 31st January A. D. 1077; Friday, the 12th February A. D. 1076; and Monday, the 19th February A. D. 1078.

(10). The Tiḡgundi copper-plate grant of Vikramāditya VI. (*ante*, Vol. I. p. 81) is dated: śrī-Vikrama-kāla-samvatsarēshu shatsū atitēshu saptamē Dumdubhi-samvatsarē pravarttamānē tasya Kārttika-su(śuddha)-pratipad-Ādivarē. Here the year of the date should be Saka (7+997=) 1004 expired, as in the date No. 2, above; but the equivalents of the date both for that year and for the immediately preceding and following years are Tuesday, the 25th October A. D. 1082

Wednesday, the 6th October A. D. 1081; and Saturday, the 14th October A. D. 1083.

(11). A stone-tablet at Saundatti (*Jour. Bo. As. Soc.*, Vol. X. p. 202), is dated in the 21st year, the Dhātu *samvatsara*, on Sunday, the 13th of the dark half of Pūshya, and the moment when the sun was commencing his progress to the north. Here the year of the date should be Saka (21+997=) 1018 expired, as in the date No. 6, above; but in Saka 1018 expired the 13th *tithi* of the dark half of the *amānta* Pūshya ended on Wednesday, the 14th January A. D. 1097, and the Uttarāyana-samkrānti took place on Wednesday, the 24th December A. D. 1096.

The Chālukya Vikrama era offers a comparatively far greater number of irregular dates than any other Hindu era. Here I will give only one more date which is of special interest on account of the doubtful meaning of the word employed to denote the week-day.

(12). According to Dr. Fleet (*Jour. Bo. As. Soc.*, Vol. X. p. 297) a stone-tablet at Konūr is dated 'in the 12th year of the era of the prosperous Chālukya Vikrama, being the Prabhava *samvatsara*, at the moment of the sun's commencement of his progress to the north, on Vaḍḍavāra, the fourteenth day of the dark fortnight of Pūshya.' The year of this date is Saka (12+997=) 1009 expired, which was the year Prabhava; and in that year the 14th *tithi* of the dark half of the *amānta* Pūshya commenced 5 h. 6 m. before and ended 18 h. 29 m. after mean sunrise of Sunday, the 26th December A. D. 1087, and the Uttarāyana-samkrānti took place 1 h. 47 m. before mean sunrise of Saturday, the 25th December A. D. 1087. Now, that this is the Uttarāyana-samkrānti spoken of in the date, there can be no doubt; but according to ordinary rules the *tithi* that should have been joined with the Samkrānti is the 13th, during which the Samkrānti itself took place and which occupied about nineteen hours of Saturday, the 25th December, not the 14th which is actually put down in the date. There is the further difficulty that we do not know what day of the week is meant by the word Vaḍḍavāra of the date. Judging from the

* In the *Jour. Beng. As. Soc.*, Vol. VII. p. 901, this is translated by 'Sunday.'

† See *Journal, Bo. As. Soc.*, Vol. X. p. 46.

‡ In addition to the above, I find in P⁴4, *Sanskrit and Old-Canarese Inscriptions* the following dates containing the word Vaḍḍavāra:—

No. 37.—'Saka 1156, the Jaya *samvatsara*, "Vaḍḍavāra," the day of the full-moon of . . . Vaiśākha.' The corresponding date would be Saturday, the 15th April, A. D. 1234.

No. 38.—'Saka 1066, the Rudhirōdgāsi *samvatsara*, "Vaḍḍavāra," the fourteenth day of the dark fortnight

remarks of Mr. L. Rice on the word *vaḍḍa*, *ante*, Vol. VIII. p. 90, one would feel inclined to regard that word as a synonym of *mukhya* or *dāi*, and to take Vaḍḍavāra as a name of Sunday. And in favour of this it might be urged, not only, that in the date under discussion the 14th *tithi* put down in the date did end on a Sunday, but also, that the date of the Anamkoṇḍ inscription of Rudradēva (*ante*, Vol. XI. p. 12)—Saka-varshamulu 1084 vuneṅti Chitrabhānu-samvatsara Māgha śu 13 Vaḍḍavāramunāṃḍu²—undoubtedly corresponds to Sunday, the 20th January, A. D. 1163. On the other hand, it might very properly be suggested that in the date under discussion the 14th *tithi* had been wrongly quoted instead of the 13th,—a suggestion which would render it necessary to assign to Vaḍḍavāra the meaning of Saturday; and in support of this interpretation, again, one might adduce the date of the Toragal inscription, published *ante*, Vol. XII. p. 97,—Sa(śa)ka-varshaṃ 1110 neya Plavaṅga-samvatsarada Puśya(śhya) bahula 10 Vaḍḍavārav-uttarāyana-samkramana-vyatipādadalu—, the proper equivalent of which without any doubt is Saturday, the 26th December, A. D. 1187. That Vaḍḍavāra must be either Saturday or Sunday (not, as was suggested by the late Dr. Bhāu Dājī,³ Wednesday or Thursday) is certain, and in my opinion the chances are in favour of Sunday; but the dates known to me are not sufficient to settle the question definitely.⁷

5.—*Ante*, Vol. XIX. p. 24, I have shewn that the word *saka* is occasionally employed in dates of the Vikrama era in the general sense of 'year.' A clear instance of this usage occurs in the following verse which is found in a MS. of Gaṅgādhara Sarasvatī's *Svārājyasiddhi*:—

Vasv-abdhi-muny-avani-māna-saké Vṛi-
shākhya-
varshasya Māgha-sita-Vakpati-yukta-
shaashthyām |
Gaṅgādharaśmendra-yatinā Sivayōḥ padābjé
bhakty-ā[r]pitā sukritir-astu satām
śivāya ||

The year of this date is the Vikrama year (not, as has been assumed, the Saka year) 1748 expired,

of Māgha.' Here the corresponding dates would be, for S. 1066 current = Rudhirōdgārin, Friday, the 4th February, A. D. 1144; and for S. 1066 expired, Tuesday, the 23rd January, A. D. 1145.

No. 235, of the time of the Yādava Rāmasohandra.—'The twelfth year of his reign, the Svabhānu *samvatsara* (Saka 1205), "Vaḍḍavāra," the fifth day of the bright fortnight of Phālguna.' Here the corresponding date, for S. 1205 expired = Svabhānu, would be Wednesday the 23rd February, A. D. 1284; but for S. 1206 expire = Tāraṇa, Sunday, the 11th February, A. D. 1285.

and the corresponding date is Thursday, the 14th January, A. D. 1692. The Jovian year Vṛiṣha which is quoted in the date ended, by the Strya-

siddhānta rule without bija, on the 24th January, A. D. 1692.
Göttingen.
F. KIELHORN.

Jacobis Tafeln zur Berechnung Indischer Daten und Mādhavāchārya's Kālanirnaya.

Von

F. Kielhorn.

Die von Professor Jacobi in *Epigraphia Indica*, Band I., veröffentlichten Tafeln zur Berechnung indischer Daten haben mich bewogen, das Kapitel über Schaltmonate und ausfallende Monate des indischen lunaren Jahres in Mādhavāchārya's *Kālanirnaya* da-

mit zu prüfen; und ich theile einige meiner Resultate mit, nicht nur, um auf Jacobis vortreffliche Arbeit in Deutschland aufmerksam zu machen, sondern auch, weil ein paar Stellen des *Kālanirnaya* vielleicht von allgemeinerem Interesse sind, und um beiläufig zu zeigen, daß die Calcuttaer Ausgabe dieses Werkes mit Vorsicht zu gebrauchen ist.

Der indische lunare Kalender des täglichen Lebens beruht auf dem solaren Kalender: das lunare Jahr und die lunaren Monate werden vom solaren Jahre und von den solaren Monaten reguliert. Das lunare Jahr fängt mit dem Neumonde an, der dem Anfange des solaren Jahres unmittelbar vorausgeht. Der lunare Monat erhält den Namen des solaren Monats, in den der die helle Hälfte des lunaren Monats einführende Neumond fällt. Fallen zwei Neumonde in einen solaren Monat, was in Zwischenräumen von etwa 30 Monaten geschieht, so erhalten wir zwei lunare Monate, die dem solaren Monate homonym sind, und von denen der erste als Schaltmonat betrachtet wird. Fällt kein Neumond in einen solaren Monat, so wird der Name dieses solaren Monats im lunaren Kalender gestrichen. Wo dies der Fall ist, sind die Verhältnisse der Art, daß sich sowohl kurz vor der Stelle wo der gestrichene Monat zu erwarten gewesen wäre, wie kurz nach derselben, ein Schaltmonat einstellt. Wir erhalten demnach bisweilen ein lunares Jahr, in dem der Name eines Monats fehlt, dafür aber die Namen zweier Monate zweimal erscheinen. Solche Jahre sollen in Zwischenräumen von 141 oder 19 Jahren wiederkehren. — Da der solare Monat mit der Saṃkrānti, d. i. dem Eintritte der Sonne in ein Sternbild, anfängt und endigt, so dürfen wir das eben erklärte auch so ausdrücken: ein lunarer Monat, in dem keine Saṃkrānti stattfindet, ist ein Schaltmonat; fallen zwei Saṃkrāntis in einen lunaren Monat, so fällt der Name des von den beiden Saṃkrāntis eingeschlossenen solaren Monats im lunaren Kalender aus. Der Schaltmonat ist *asamkrānta*; der lunare Monat, nach welchem der Name eines andern Monats ausfällt, ist *divisamkrānta*. Ein lunares Jahr, in dem der Name eines Monats ausfällt, die Namen zweier Monate aber zweimal erscheinen, ist ein Jahr mit einem *divisamkrānta* und zwei *asamkrānta* lunaren Monaten.

Als Beispiel eines solchen Jahres wird auf S. 74 des *Kālanirnaya* das Jupiterjahr Bhāva, welches dem Śaka Jahre¹⁾ 1256 (= A. D. 1334—35) entspricht, angeführt. Damit stimmen die ge-

1) Mit Śaka 1256 bezeichne ich nach der Weise der Inder dasjenige Jahr, welches eintritt, wenn 1256 Jahre der Śaka Aera verflossen sind, also das laufende Jahr 1257. Siehe unten.

wöhnlichen Tafeln durchaus nicht überein. Nach Sir A. Cunningham's *Book of Indian Eras* war in Śaka 1256 nur Āśvina ein Schaltmonat; nach Dr. Schrams Tafeln nur Bhādrapada; nach R. Sewells Tafeln war Kārttika ein Schaltmonat, während Mārgasira ausfiel. Rechnen wir dagegen mit Professor Jacobis Tafeln für Sūrya-siddhānta, so erhalten wir folgendes Resultat: —

Solare Monate.	Saṃkrānti.	Entfernung ☾ — ☉.	Lunare Monate.
(12). Chaitra	Mīna	217° 18' 32"	
Ś. 1255.	Ś. 1255.		● Chaitra (1).
	Mesha	235° 52' 1"	● Ś. 1256.
(1). Vaiśākha	Ś. 1256.		● Vaiśākha (2).
Ś. 1256.	Vṛisha	255° 17' 0"	●
(2). Jyaiṣṭha	Mithuna	283° 0' 57"	● Jyaiṣṭha (3).
			●
(3). Āshāḍha	Karkāṭa	314° 12' 53"	● Āshāḍha (4).
			●
(4). Śrāvaṇa	Siṃha	339° 49' 12"	● Śrāvaṇa (5).
			●
(5). Bhādra	Kanyā	355° 59' 42"	● Bhādra (6).
			●
(6). Āśvina	Tulā	3° 50' 0"	● Āśvina I. (7).
			●
(7). Kārttika	Vṛiśchika	5° 21' 52"	● Āśvina II. (8).
			●
(8). Mārga	Dhanuḥ	2° 43' 11"	● Kārttika (9).
			●
(9). Pauṣha	Makara	358° 41' 25"	● Mārga (10).
			●
(10). Māgha	Kumbha	357° 12' 46"	● Māgha (11).
			●
(11). Phālguna	Mīna	1° 49' 44"	● Phālguna I. (12).
			●
(12). Chaitra	Mesha	14° 50' 17"	● Phālguna II. (13).
	Ś. 1257.		

Die dritte Columne dieser Tafel giebt die Entfernung des Mondes von der Sonne zur Zeit der Saṁkrānti, d. h., am Anfange der solaren Monate. Am Anfange des solaren Chaitra des Śaka Jahres 1255 war die Entfernung des Mondes von der Sonne $217^{\circ}18'32''$. Während des solaren Chaitra näherte sich der Mond der Sonne von $217^{\circ}18'32''$ bis zu $360^{\circ} = 0^{\circ} =$ Neumond, und entfernte sich dann wieder bis zu $235^{\circ}52'1''$. Der innerhalb des solaren Chaitra fallende Neumond bezeichnete den Anfang eines lunaren Monats, der, gerade weil der Neumond im solaren Chaitra stattfand, selbst Chaitra genannt wird; und der der erste Monat des lunaren Jahres ist, weil besagter Neumond unmittelbar vor dem Anfange des solaren Jahres stattfand. In gleicher Weise erhalten wir in regelmäßiger Folge die lunaren Monate Vaiśākha, Jyaishṭha, Āshāḍha, Śrāvaṇa, und Bhādrapada.

Am Anfange des solaren Āśvina, zur Zeit der Kanyā-saṁkrānti, war die Entfernung $\epsilon - \odot 355^{\circ}59'42''$; es fehlten etwa 4^o (oder 8 Stunden) bis zum nächsten Neumonde. Am Ende desselben Monats, zur Zeit der Tulā-saṁkrānti, war die Entfernung $3^{\circ}50'$, d. h., etwa 8 Stunden vor Ende des solaren Āśvina war wieder Neumond gewesen. Da mithin zwei Neumonde in den solaren Āśvina fielen, so erhalten auch die beiden mit diesen Neumonden anfangenden lunaren Monate den Namen Āśvina, und der erste derselben muß, weil er ganz innerhalb des solaren Monats verlief, oder weil während seiner Dauer keine Saṁkrānti stattfand, als der Schaltmonat Āśvina bezeichnet werden. Dem zweiten lunaren Āśvina folgt in regelmäßiger Weise, entsprechend dem solaren Kārttika, der lunare Monat Kārttika.

Auf Kārttika folgt ein lunarer Monat, der, wie die Tafel zeigt, vor der Dhanuḥ-saṁkrānti, also noch während des solaren Monats Mārgaśira anfang und deshalb selbst Mārgaśira zu benennen ist, der aber erst nach der Makara-saṁkrānti, d. i. nach Ablauf des solaren Pausha, aufhörte. Während des solaren Pausha war kein Neumond¹⁾, und wir erhalten deshalb auch keinen lunaren Monat Pausha, sondern müssen den auf den lunaren Mārgaśira folgenden lunaren Monat Māgha nennen, weil der Neumond am Anfange dieses Monats in den solaren Māgha fällt. Nach Ablauf des lunaren Māgha wiederholt sich was wir bei Āśvina gesehen haben. In den solaren Phālguna fielen zwei Neumonde, und wir erhalten so

1) Der solare Pausha dauerte 29 Tage 8 Stunden 21.2 Minuten; der lunare Mārgaśira, gerechnet von Neumond bis Neumond, dauerte 29 Tage 16 Stunden 17.2 Minuten, und fing 5 Stunden 21.2 Minuten vor Anfang des solaren Pausha an.

am Schlusse des lunaren Jahres zwei lunare Monate Phālguna, von denen der erste natürlich wieder als Schaltmonat zu betrachten ist.

Berechnet nach Professor Jacobis Tafeln hatte das Śaka Jahr 1256 also wirklich zwei Schaltmonate, Āśvina und Phālguna, und keinen Monat Pausha; oder, mit andern Worten, es enthielt zwei *asamkrānta* lunare Monate, Āśvina I und Phālguna I, und einen *divisamkrānta* Monat, Mārgaśira. Und das obige nach den Tafeln berechnete Schema des Jahres stimmt (was ich hier nicht näher auszuführen brauche) in allen Einzelheiten genau mit dem überein was im *Kālanirṇaya* über das Śaka Jahr 1256 gelehrt wird.

Mehrere Beispiele für Jahre mit einem Schaltmonate werden S. 70 u. 71 des *Kālanirṇaya* gegeben. Das erste derselben lautet:—
 aṣṭapañchāśad-yukta-śatadvay-ādhikē Sakavarshāpāṁ sahasrē gatē sati samanantara-bhāvī yō 'yam = Īśvara-saṁvatsaras-tasmiñ-Śrāvaṇa-māsō 'dhikaḥ | tataḥ pūrva-bhāvī yō Bhāva-saṁvatsaras-tasmin-Phālguna-māsō 'dhikaḥ |

„In diesem Jahre Īśvara, welches nach Alauf von 1258 Śaka Jahren eintritt, ist Śrāvaṇa ein Schaltmonat; in dem ihm vorausgehenden Jahre Bhāva Phālguna.“

Ueber die Facta liegt hier kein Zweifel vor. Daß im Jahre Bhāva Phālguna ein Schaltmonat war, haben wir oben gesehen; und ebenso war Śrāvaṇa ein Schaltmonat in dem späteren Jahre Īśvara. Aber ich werde unten zeigen müssen, wie der Verfasser dazu gekommen sein mag, das Jahr Īśvara, das nach einer allgemeinen Regel dem Śaka Jahre 1259 entspricht, dem Śaka Jahre 1258 gleichzusetzen. Und ich möchte hier besonders auf das dem Worte *Īśvara* vorausgehende *ayam*, „dies Jahr Īśvara“, aufmerksam machen, welches meines Erachtens nur den Sinn haben kann, daß Mādhavāchārya in diesem Jahre Īśvara schrieb, daß der Kālanirṇaya also in Śaka 1259 = A. D. 1337—38 verfaßt ist.

Das nächste Beispiel lautet im gedruckten Texte:—

yathōkt-Īśvarasaṁvatsar-ōttarabhāvini Chitrabhānu-saṁvatsarē Vaiśākha-māsō 'dhikaḥ | tata uttarabhāvini Tāraṇasaṁvatsara-vyavahitē Pārthiva-saṁvatsarē Bhādrapada-māsō 'dhikaḥ |

„in dem auf das genannte Jahr Īśvara folgenden Jahre Chitrabhānu ist Vaiśākha ein Schaltmonat; in dem späteren durch das Jahr Tāraṇa von Chitrabhānu getrennten Jahre Pārthiva Bhādrapada.“

Daß in diesem Texte ein Fehler steckt, ist ohne Weiteres klar. Zwischen Chitrabhānu und Pārthiva liegen zwei Jahre, Subhānu und Tāraṇa. Außerdem soll, wie der Verfasser selbst sagt, der Monat Bhādrapada des Jahres Pārthiva, vom Monate Vaiśākha des Jahres Chitrabhānu an gezählt, der 29te Monat sein, ist aber in Wirklichkeit der 41te.

In zwei HSS. des India Office, die ich verglichen habe, lautet der Text so: —

yathōkt - Êśvarasamvatsar - ôttarabhāvini Chitrabhānu-samvatsarē Vaiśākha-māsô 'dhikah | tata uttarabhāvini Tāraṇa-samvatsarē Bhādrapada-māsô 'dhikah |

„in dem auf das genannte Jahr Íšvara folgenden Jahre Chitrabhānu ist Vaiśākha ein Schaltmonat; in dem späteren Jahre Tāraṇa Bhādrapada“.

Bei dieser Lesart wäre Bhādrapada allerdings, von Vaiśākha an gerechnet, der 29te Monat; aber auch dieser Text ist falsch. Denn das Jahr Chitrabhānu entspricht dem Śaka Jahre 1264, und Tāraṇa dem Śaka Jahre 1266, und keins dieser Jahre enthält einen Schaltmonat.

Es bleibt nur übrig den Calcuttaer Text zu acceptieren, darin aber für *Chitrabhānu Subhānu* zu substituieren. Nur so erhalten wir einen correcten Text, und es ist leicht zu sehen wie daraus, sobald sich einmal die falsche Lesart *Chitrabhānu* eingeschlichen hatte, der von den beiden verglichenen HSS. gegebene Text entstehen konnte. Die weiteren Beispiele des *Kālanirṇaya*, die ich hier nicht zu behandeln brauche, zeigen, daß die Worte *Tāraṇa-samvatsaravyavahitē* oder eine ähnliche Wendung nicht fehlen dürfen. — Der Verfasser sagt also, daß im Jahre Subhānu = Śaka 1265 Vaiśākha ein Schaltmonat ist, und im Jahre Pārthiva = Śaka 1267 Bhādrapada. Dasselbe lehren Sir A. Cunninghams Tafeln; nach Dr. Schrams Tafeln war in Śaka 1265 Chaitra ein Schaltmonat, und in Śaka 1267 Śrāvaṇa; nach R. Sewells Tafeln in Śaka 1265 Vaiśākha, und in Śaka 1267 Ásvina.

Rechnen wir auch hier mit Professor Jacobis Tafeln für Sūrya-siddhānta, so erhalten wir folgende Resultate: —

In Śaka 1265 = Subhānu war die Entfernung ☾—☉ am Anfange des solaren Vaiśākha 357°39'8", am Ende desselben solaren Monats 18°29'44"; d. h., der lunare Vaiśākha war ein Schaltmonat.

In Śaka 1267 = Pārthiva war die Entfernung ☾—☉ am Anfange des solaren Bhādrapada 356°8'7", am Ende desselben solaren Monats 17°2'13"; d. h., auch hier war, wie unser Text verlangt, Bhādrapada ein Schaltmonat.

Noch bleibt die Frage, wie der Verfasser des *Kālanirṇaya* dazu gekommen ist, das Jupiterjahr Íšvara, in dem er schrieb, dem Śaka Jahre 1258 gleichzusetzen.

Von allen Seiten häufen sich die Beweise dafür, daß man in Indien stets und bei allen Aeren gewöhnlich nicht nach laufenden, sondern nach abgelaufenen oder verflossenen Jahren gezählt hat. Wie der 15. Januar 1892 nach indischer Weise als der 15. Januar (nach Ablauf) des Jahres 1891 zu bezeichnen wäre, so bedeutet Śaka 1258 im Allgemeinen nicht das laufende Śaka Jahr 1258, sondern das auf das abgelaufene Jahr 1258 folgende laufende Jahr 1259. Das laufende Jahr 1259 wird bezeichnet als das Jahr nach Ablauf von 1258 Jahren, oder als das abgelaufene oder verflossene Jahr 1258, oder geradezu als das Jahr 1258. Nur die Jahre des Jupitercyclus sind laufende Jahre; und die Regel des südlichen luni-solaren Systems, die hier in Betracht kommt, lehrt, daß, wenn wir zum Śaka Jahre eines Datums 12 addieren, und die Summe durch 60 dividieren, der Rest, gezählt vom Jupiterjahre Prabhava = 1, das dem Śaka Jahre (d. i., dem auf das genannte Śaka Jahr folgenden laufenden Jahre) entsprechende Jupiterjahr anzeigt. Nach dieser Regel aber würde das im *Kālanirṇaya* genannte Jahr 1258 dem Jupiterjahre Bahudhānya (10), nicht dem Jahre Íšvara (11) entsprechen; und da der Verfasser zweifellos vom Jahre Íšvara spricht, so hätte er dies Jahr dem (abgelaufenen) Śaka Jahre 1259 gleichsetzen müssen.

Dafür, daß die Regel des südlichen luni-solaren Systems der Jupiterjahre richtig ist, könnte ich Beispiele in Menge anführen. Ich begnüge mich mit dreien¹⁾.

Eine Kupferplatte des Yādava Königs Krishṇa (Kanhara) von Dēvagiri enthält das Datum²⁾: Êkasaptaty-uttara-śat-ādhikasahasrasamkhyēshu Śakābdēshv-atītēshu pravartamānē Saumya-samvatsarē tadantargat-Āshāḍha-paurṇamāsyām Śanaishchara-vārē Pūrvāshāḍhā-nakshatrē Vaidhṛiti-yōgē; d. i., als 1171 Śaka Jahre verflossen waren, im laufenden Jupiterjahre Saumya, während der Vollmond-tithi des Monats Āshāḍha, Sonnabend, unter dem nakshatra Pūrvāshāḍhā und dem yōga Vaidhṛiti. Das correspondierende Datum, welches alle diese Bedingungen erfüllt, ist, für Śaka 1171 = Saumya (43), Sonnabend, der 26. Juni, 1249.

Das Datum einer andern Kupferplatte desselben Königs lau-

1) Absichtlich habe ich alle folgenden Daten den Inschriften ein und derselben Familie entnommen.

2) *Indian Antiquary* VII, 304.

tet¹⁾: śrī-Śaka-saṁvatsarasya śat-ādhika-sahasr-aik-ādhika-saptatyāśch-ānantarē Saumyē-bdē Śrāvaṇē māsi sita-pakshē dvādaśyām Guru-vārē; d. i., im Jupiterjahre Saumya, das unmittelbar auf das Śaka Jahr 1171 folgt, am 12ten lunaren Tage der hellen Hälfte des Śrāvaṇa, Donnerstag. Das correspondierende Datum, wiederum für Śaka 1171 = Saumya (43), ist Donnerstag, der 22. Juli, 1249.

Eine Kupferplatte des Yādava Rāmachandra ist datiert²⁾: Śakē cha ēkādaśasu trinavaty-adhikēshv-atītēshu 1193 vartamāna-Prajāpati-saṁvatsar-āntargata-Māgha-śuddha-dvādaśyām Budhē; d. i., als 1193 Śaka Jahre verflossen waren, im laufenden Jupiterjahre Prajāpati, am 12ten lunaren Tage der hellen Hälfte des Māgha, Mittwoch. Hier ist das correspondierende Datum, wieder, wie die Regel verlangt, für Śaka 1193 = Prajāpati (5), Mittwoch, der 13. Januar, 1272.

Wie bei andern Aeren, so wird bisweilen auch in Daten der Śaka Aera ausnahmsweise³⁾ nicht das abgelaufene, sondern das wirklich laufende Śaka Jahr genannt. Einige sichere Beispiele hierfür hat J. F. Fleet im *Indian Antiquary* gegeben, und die Sache ist an sich verständlich genug. Ganz anders ist es, wenn der Schreiber eines Datums weder das laufende noch das abgelaufene, sondern das dem abgelaufenen Śaka Jahre vorhergehende Jahr mit dem gerade laufenden Jupiterjahre in Verbindung bringt.

Eine Inschrift des Yādava Sēṇadēva enthält das Datum⁴⁾: śrī-Śaka-saṁvat 1063 Dundubhi-saṁvatsar-āntargata-Jyēshṭhasudi-pāñchadaśyām Sômē Anurādhā-nakshatrē Siddha-yôgē; d. i., im Śaka Jahre 1063, am 15ten lunaren Tage der hellen Hälfte des Jyēshṭha des Jupiterjahres Dundubhi, Montag, unter dem *nakshatra* Anurādhā und dem *yôga* Siddha. Der Regel nach ist Dundubhi (56) gleich dem (abgelaufenen) Śaka Jahre 1064 (nicht 1063); und daß das Datum wirklich in Śaka 1064 (d. i. in das laufende Jahr 1065) fiel, wird durch das correspondierende Datum, — Montag, der 11. Mai, 1142, — erwiesen, das alle Bedingungen erfüllt.

1) *Ib.* XIV, 69.

2) *Ib.* XIV, 317.

3) Der Wortlaut eines Datums, d. h., ob das Jahr ausdrücklich als laufendes oder abgelaufenes bezeichnet wird, ist von keiner Bedeutung. Nur die Berechnung oder Verifizierung des Datums kann zeigen, mit welcher Art von Jahr wir es in jedem einzelnen Falle zu thun haben.

4) *Ib.* XII, 126.

Eine Inschrift aus der Zeit des Yādava Simghana ist datiert¹⁾: śrī-Śakē 1128 Prabhava-saṁvatsarē Śrāvaṇa-māsē paurṇamāsyām chandra-grahaṇa-samayē; d. i., im Śaka Jahre 1128, im Jupiterjahre Prabhava, während der Vollmond-*tithi* des Monats Śrāvaṇa, zur Zeit einer Mondfinsternis. Der Regel nach ist das Jupiterjahr Prabhava (1) gleich dem (abgelaufenen) Śaka Jahre 1129 (nicht 1128). Nähmen wir aber an, die Jahreszahl 1128 des Datums wäre richtig, so müßte das Datum in das Jahr 1206 n. Chr. fallen, was ganz unmöglich ist, weil im Jahre 1206 n. Chr. überhaupt keine Mondfinsternis stattfand. Auch hier hat der Schreiber fälschlich 1128 für 1129 gesetzt, und für dieses Jahr 1129, das in der That dem Jupiterjahre Prabhava entspricht, ist das correspondierende Datum der 9. August, 1207, an dem wirklich eine in Indien sichtbare Mondfinsternis stattfand.

Meine Erklärung für die falschen Zahlen solcher Daten ist die, daß die Verfasser der Inschriften die Jahre der regelmäßigen Daten, die uns in Wirklichkeit abgelaufene Jahre geben, als laufende Jahre betrachteten, und daß sie, in der Absicht selbst abgelaufene Jahre zu geben, die Zahl des wirklich abgelaufenen, für die Verfasser die Zahl des laufenden Jahres, um 1 verminderten. Daß ein derartiger Fehler überhaupt möglich war, wird durch die Annahme erklärlich, daß man im gewöhnlichen Leben, gerade wie dies im *Kālanirṇaya* geschieht, die Jahre mit den Namen der Jahre des Jupitercyclus und nicht mit Zahlen bezeichnete.

Denselben Fehler nun, den wir in den beiden zuletzt gegebenen Daten bemerken, macht auch der Verfasser des *Kālanirṇaya*, wenn er das Jupiterjahr *Īśvara* nach Ablauf von 1258 Śaka Jahren eintreten läßt. In Wahrheit ist *Īśvara*, darüber kann kein Zweifel obwalten, das laufende Śaka Jahr 1260, oder das Jahr, welches unmittelbar auf das abgelaufene Jahr 1259 folgt.

1) *Epigraphia Indica* I, 343.

Kleine Mittheilungen.

A note on Professor BÜHLER's paper on the Origin of the Gupta-Valabhi Era. — I have read with the greatest possible interest Professor BÜHLER's paper on the origin of the Gupta-Valabhi era, published *ante*, Vol. v, p. 215 ff., and I confidently accept as correct the conclusions arrived at by my learned friend. My object in writing these lines is, to support his arguments, if such support should be deemed at all necessary, in regard to two minor questions, treated by him.

1. I have never doubted that the term *Gupta-prakāla* of the Girnār Prasasti is equivalent to *Gupta-kāla*, 'the time or era of the Guptas', and that, as suggested by Professor BÜHLER, the poet has employed the word *prakāla*, because the simple *kāla* would not have suited the metre. And as an exactly analogous case I have noted in my list of dates the following line from Divākara's *Vṛittaratnākara-darśa* (EGGELING's *Catalogue*, p. 304), in which the word *pravarsha* is used in the sense of the simple *varsha*, 'year', just as *sat-Kārttika* is simply equivalent to *Kārttika*, and *viśuddha-paksha* to *suddha-paksha*: —

Pārṇ-ābdhi-sapt-aika-mitē pravarsḥē sat-Kārttikē māsi viśuddha-pakshē.

2. In a paper on the Verāval image inscription of *Valabhī-samvat* 927, which was sent to Bombay in July 1890, but kept back because there was some hope of securing a good estampage of the inscription, — a hope which, owing to Mr. FLEET's exertions, has actually been fulfilled lately, — I expressed the opinion that during the Middle Ages the people of *Kāthiāwāḍ* possessed no exact knowledge of the epoch of the so-called Gupta-Valabhī era. 'What people

knew or believed', I then wrote, 'was, that Valabhī had been destroyed 375 years after the commencement of the Vikrama era, and that an era had once been in use, which was supposed to have dated from that event.' What people did, when they wished to put down a Valabhī year in a date, was, to deduct 375 from the year of the well-known Vikrama era. And, accordingly, the *Valabhī-samvat* 927 of the date of the Verāval image inscription, which does not work out properly as a Gupta date, is really the expired Vikrama year $927 + 375 = 1302$, in which year the week-day of the date was, what it should be, a Monday.

Göttingen.

F. KIELHORN.

MISCELLANEA.

DATES FROM SOUTH-INDIAN INSCRIPTIONS.

Ante, Vol. XXI. p. 49, I have treated of some dates which, instead of quoting a lunar month, give us the sign of the zodiac in which the sun happened to be on the day intended by the date. I now find that this is a common practice in Southern India¹; and to show this, I propose here to treat briefly of the dates of the inscriptions, edited by Dr. Hultzsch in *South-Indian Inscriptions*, Vol. I. I shall begin with the regular dates, and shall first take those which leave no doubt whatever that the months, referred to in the dates, are the solar months.

1.—On p. 111, an inscription on the east wall of the Sōmansthésvara temple at Padavāḍu is dated:—'On the day of (*thenakshatra*) Uttirādam (i. e., Uttarāshāḍhā), which corresponds to the yōga Āyushmat and to Saturday, the thirteenth lunar day of the former half of the month of Sīṃha of the Sūkla year, which was current after the Saka year 1371 (*had passed*).'

By the southern luni-solar system the year Sūkla is Saka 1371 expired, as stated in the date. In that year the Sīṃha-saṃkrānti took place, and the solar month Bhādrapada began, 8 h. 30 m. after mean sunrise of the 30th July A.D. 1449. And the European equivalent of the date is Saturday, the 2nd August A. D. 1449, when the 13th *tithi* of the bright half ended 8 h. 43 m., and when the *nakshatra* was Uttarāshāḍhā for 10 h. 30 m., and the yōga Āyushmat for 4 h. 54 m. after mean sunrise. By the lunar calendar

this day was the 13th of the bright half of Srāvana, and therefore the month of Sīṃha, i. e. Bhādrapada, quoted in the date, must be the solar month Bhādrapada.

2.—On p. 70, an inscription on a stone at Aṛappakkam is dated:—'On Wednesday, the twelfth lunar day of the latter half of the month of Kumbha of the Akshaya-samvatsara, which was current after the Saka year 1488 (*had passed*).'

By the southern luni-solar system the year Akshaya (or Kshaya) is Saka 1488 expired, as stated in the date. In that year the Kumbha-saṃkrānti took place, and the solar month Phālguna began, 7 h. 58 m. after mean sunrise of the 27th January A.D. 1567. And the European equivalent of the date is Wednesday, the 5th February A. D. 1567, when the 12th *tithi* of the dark half ended 20 h. 54 m. after mean sunrise. By the lunar calendar this was the 12th of the dark half of the *amānta* Māgha.

3.—On p. 85, an inscription on a stone, built into the floor of the court-yard of the Viriñchipuram temple, is dated:—'On Thursday, the day of (*the nakshatra*) Punarvasu, which corresponds to the seventh lunar day of the former half of the month of Mēsha of the Saumya year, which was current after the Sālivāha-Saka year 1471 (*had passed*).'

By the southern luni-solar system the year Saumya is Saka 1471 expired, as stated in the date. In that year the Mēsha-saṃkrānti took

¹ The same practice is still followed in Orissa. See *ante*, Vol. I. p. 64.

place, and the solar month Vaiśākha began, 19 h. 41 m. after mean sunrise of the 27th March A. D. 1549. And the European equivalent of the date is Thursday, the 4th April A. D. 1549, when the 7th *tithi* of the bright half ended 14 h. 44 m. and when the *nakshatra* was Punarvasu for about 17 h. 44 m. after mean sunrise. By the lunar calendar this was the 7th of the bright half of Vaiśākha, and the day thus belonged to both the solar and the lunar Vaiśākha.

4.—On p. 78, an inscription on the north wall of the Perumāḷ temple at Gānganūr near Vēlūr is dated:—‘On the day of (*the nakshatra*) Rōhini, which corresponds to Monday, the first lunar day of the former half of the month of Rishabhā of the *Pramāthin* year, (*which was*) the 17th year of (*the reign of*) Sakalalōkachakravartin.’

According to Dr. Hultsch, the year *Pramāthin* must here be Saka 1261 expired. In that year the *Vriṣhabha-samkrānti* took place, and the solar month *Jyāishṭha* began, 9 h. 46 m. after mean sunrise of the 26th April A. D. 1339. And the European equivalent of the date is Monday, the 10th May A. D. 1339, when the first *tithi* of the bright half ended 11 h. 33 m., and when the *nakshatra* was Rōhini for 7 h. 53 m. after mean sunrise. By the lunar calendar the day was the first of the bright half of *Jyāishṭha*, and it therefore belonged to both the solar and the lunar *Jyāishṭha*.

5.—On p. 104, an inscription on the south wall of a *Maṇḍapa* at the base of the Tirumalai rock is dated:—‘On the day of (*the nakshatra*) Uttirattādi (*i.e.*, *Uttarabhadrapada*), which corresponds to Monday, the eighth lunar day of the former half of the month of *Dhanu* of the *Ananda* year, which was current after the Saka year 1296 (*had passed*).’

By the southern luni-solar system the year *Ananda* is Saka 1296 expired, as stated in the date. In that year the *Dhanu-samkrānti* took place, and the solar month *Pausha* began, 20 h. 21 m. after mean sunrise of the 27th November A. D. 1374. And the European equivalent of the date is Monday, the 11th December A. D. 1374, when the 8th *tithi* of the bright half commenced 3 h. 41 m., and when the moon entered the *nakshatra* *Uttarabhadrapada* 3 h. 17 m. after mean sunrise. By the lunar calendar this day fell in the bright half of *Pausha*, and it therefore belonged to both the solar and the lunar *Pausha*.

The four following dates (Nos. 6—9) do not work out properly.

6.—On p. 74, an inscription on a stone at *Sattu-vaḥobēri* near Vēlūr is dated:—‘On Wednesday,

the thirteenth lunar day of the dark half of the month of *Makara* of the *Yuva-samvatsara*, which was current after the Saka year 1497 (*had passed*).’

By the southern luni-solar system the year *Yuva* is Saka 1497 expired, as stated in the date. And in that year the sun was in the sign *Makara*, or, in other words, the solar month *Māgha* lasted, from 4 h. 57 m. after mean sunrise of the 29th December A. D. 1575 to 15 h. 51 m. after mean sunrise of the 27th January A. D. 1576. During this time there was only one 13th *tithi* of the dark half, and this *tithi* lasted from shortly after sunrise of Thursday, the 29th December, to about the end of the same day, and it cannot in any way be joined with a Wednesday.—In my opinion, the word *Makara* of the date is probably an error for *Dhanu*; for the *Dhanu-samkrānti* of the same year took place 20 h. 36 m. after mean sunrise of Tuesday, the 29th November A. D. 1575, and a 13th *tithi* of the dark half ended on the following day, Wednesday, the 30th November, 5 h. 15 m. after mean sunrise. This day would belong to the solar *Pausha*, and by the lunar calendar to the *amānta* *Mārgaśīraha*.

7.—On p. 80, an inscription on the base of the *Īvara* temple at *Tēlūr* near Vēlūr is dated:—‘On the day of (*the nakshatra*) *Tiruvōṅam* (*i.e.*, *Bravāṇa*), which corresponds to Monday, the fifth lunar day of the former half of the month of *Karkāṭaka* of the *Sādhāraṇa* year (*and*) the Saka year 1353.’

By the southern luni-solar system the year *Sādhāraṇa* is Saka 1352 expired (or 1353 current). And in that year the sun was in the sign *Karkāṭaka*, or, in other words, the solar month *Śrāvāṇa* lasted, from 23 h. 13 m. after mean sunrise of the 28th June to 10 h. 30 m. after mean sunrise of the 30th July A. D. 1430. During this time there was only one 5th *tithi* of the bright half, and this ended 17 h. 34 m. after mean sunrise of Tuesday, the 25th July, when the moon was in *Hasta* (13), not in *Śrāvāṇa* (22), and which therefore clearly is not the day of the date.—In Saka 1352 expired, the year of this date, the only fifth of the bright half on which the moon was in *Bravāṇa* was Monday, the 20th November A. D. 1430, which by the northern calendar was *Mārgaśūdi* 5, and which also was the 22nd day of the solar *Mārgaśīraha*. Now, as the solar *Mārgaśīraha* of the north would in the south be called the month of *Kārttigai*, I am inclined to think that Monday, the 20th November A. D. 1430, is really the day of the date, and that in the date the word *Karkāṭaka* has been erroneously put for *Kārttigai*.

8.—On p. 108, an inscription at the *Ammaiap-pēvara* temple at *Paḍavēdu* is dated:—‘To-day,

which is (*the day of the nakshatra*) *Rāvati* and Monday, the seventh lunar day of the former half of the month of *Karkāṭaka*, which was current after the Saka year one thousand one hundred and eighty (*had passed*).’

In Saka 1180 expired the sun was in the sign *Karkāṭaka*, or, in other words, the solar *Śrāvāṇa* lasted, from 11 h. 5 m. after mean sunrise of the 27th June to 22 h. 21 m. after mean sunrise of the 28th July A. D. 1258. During this time there was one 7th *tithi* of the bright half, which commenced 3 h. 58 m. after mean sunrise of Monday, the 8th July, and ended 1 h. 46 m. after mean sunrise of Tuesday, the 9th July. Here we might feel inclined to assume that the *tithi* had been joined with the day on which it commenced; but on Monday, the 8th July, the moon was in *Hasta* (13) and *Chitrā* (14), not in *Rāvati* (27).—Under any circumstances the date appears to contain an error, but what the exact error may be I am unable to decide. If the word *Karkāṭaka* of the date were a mistake for *Kārttigai*, the 7th *tithi* of the bright half would end on a Monday,—the 4th November A. D. 1258, which, by the northern calendar, was *Mārgaśūdi* 7 and also the 7th day of the solar *Mārgaśīraha*; but on that Monday the *nakshatra* was *Śrāvishṭhā* (23), not *Rāvati* (27). Again, if in Saka 1180 expired we were to search for a Monday on which the moon was in *Rāvati* and on which also a 7th *tithi* ended, we should find this to have been the case on Monday, the 24th June A. D. 1258; but that Monday was the 7th of the dark half, and on it the sun was in the sign *Mithuna*.

9.—On p. 125, an inscription on a pillar in the *Maṇḍapa* in front of the *Rājasimhavarmēvara* shrine at *Kāñchipuram* is dated:—‘On the day of (*the nakshatra*) *Tēr* (*i.e.*, *Rōhini*), which corresponds to Tuesday, the seventh lunar day of the latter half of the month of *Makara* of the *Kīlaka* year, which was current (*during the reign*) of *Kambanna-uḍaiyar*.’

According to Dr. Hultsch, the *Kīlaka* year must here be Saka 1291 (current, or 1290 expired). In that year the sun was in *Makara*, or, in other words, the solar *Māgha* lasted, from 15 h. 27 m. after mean sunrise of the 26th December A. D. 1368 to 2 h. 21 m. after mean sunrise of the 25th January A. D. 1369. And during this time the 7th *tithi* of the dark half ended 7 h. 5 m. after mean sunrise of Monday, the 1st January A. D. 1369, when the moon was in *Chitrā* (14), not in *Rōhini* (4), and which clearly is not the day of the date.—I am unable to suggest any correction of this date, and can only say that during the solar

Māgha of Saka 1290 expired the moon was in *Rōhini* at sunrise of Thursday, the 18th January A. D. 1369, which was the 10th of the bright half of the lunar *Māgha*; and that the whole year Saka 1290 expired contains no Tuesday, either in the bright or in the dark half of a lunar month, on which the moon was in *Rōhini*.

10.—Differing from the above, a date on p. 94, from an inscription inside the front *Gōpura* of the *Vīrūchipuram* temple, gives us the solar month, and both the day of that solar month and the lunar day, without stating, however, whether the lunar day belonged to the bright or to the dark half. Dr. Hultsch translates the date thus:—‘On the day of (*the nakshatra*) *Anusham* (*i.e.*, *Anurādhā*), which corresponds to Wednesday, the sixth lunar day, the 3rd (*solar day*), of the month of *Paṅḡuṅi* (*i.e.*, *Phalguni*) of the *Viśvōvasu* year, which was current after the Saka year 1347 (*had passed*).’

By the southern luni-solar system the year *Viśvōvasu* is Saka 1347 expired, as stated in the date. The month of *Paṅḡuṅi* is the solar *Chaitra* of the northern calendar; and the *nakshatra* *Anurādhā*, joined, in or near *Phālguna*, with the sixth lunar day, shows that this sixth lunar day belonged to the dark half of the lunar month. In Saka 1347 expired the *Mina-samkrānti* took place, and the solar *Chaitra* began, 15 h. 42 m. after mean sunrise of the 24th February A. D. 1426; and the European equivalent of the date is Wednesday, the 27th February A. D. 1426, when the 6th *tithi* of the dark half (of the *amānta* *Phālguna*) ended 20 h. 30 m., and when the moon was in *Anurādhā* for about 23 h. after mean sunrise.

Another date in Dr. Hultsch’s volume (p. 60, verse 21), which also, like the dates 1—9, quotes a sign of the zodiac, may be omitted here, because it has been already treated by Dr. Fleet, *ante*, Vol. XIX. p. 426. But I would take this opportunity to say a few words about the date of the copper-plate in the possession of the Syrian Christians at *Koṭṭayam* which was first given in this *Journal* (Vol. I. p. 229) by the late Dr. Burnell, and which has again been drawn attention to by Dr. Hultsch, *ante*, Vol. XX. pp. 287 and 289. According to Dr. Hultsch’s translation the date is this:—‘On the day of (*the nakshatra*) *Rōhini*, Saturday, the twenty-first of the month of *Mina* (*of the year in which*) Jupiter (*was*) in *Makara* (*within the time*) during which the sacred rule of the illustrious *Vira-Rāghava-chakravartin* . . . was current.’

Dr. Burnell, when writing about this date,

* The name of the Jovian year has evidently been omitted from this date through an oversight.

mentioned that he had shown it to the ablest native astronomer (K. Kṛishṇa Josiyār) in Southern India. and that in two days he received from him the calculation worked out, proving that the year of the date was A. D. 774, and that this was the only possible year. Now I am sure that the calculation which Dr. Burnell received from the native astronomer was correct, though Dr. Burnell, instead of saying A. D. 774, should have said A. D. 774-775; but A. D. 774-775 is not the only possible year. For I can myself point out two days either of which would suit the astronomical requirements of the date,—Saturday, the 10th March A. D. 680, and Saturday, the 11th March A. D. 775.

In Kaliyuga 3780 expired the *Mina-samkrānti* took place, and the solar Chaitra began, 14 h. 55 m. after mean sunrise of the 18th February, A. D. 680; and, accordingly, the 21st day of the month of Mina (or Chaitra) was Saturday, the 10th March A. D. 680. On that day the moon

entered *Rōhīṇī* about 6 h. after mean sunrise, and on the same day Jupiter was in the sign *Makara*, which it had entered on the 26th November A. D. 679.

Again, in Kaliyuga 3875 expired the *Mina-samkrānti* took place, and the solar Chaitra began, 4 h. 53 m. after mean sunrise of the 19th February A. D. 775, and, accordingly, the 21st day of the month of Mina (or Chaitra) was Saturday, the 11th March A. D. 775. On that day the moon was in *Rōhīṇī* for about 17 h. after mean sunrise, and Jupiter was in the sign *Makara* which it had entered on the 17th October A. D. 774.

Perhaps there may be other days which also would suit the date. But even if this should not be the case, I know too little of the history of Southern India to be able to say, which of the two possible equivalents of the date, given above, would be preferable.

Göttingen.

F. KIELHOEN.

Die Epoche der Cedi-Aera.

Vor etwa fünf Jahren hatten meine Berechnungen das Resultat ergeben, dass der erste Tag der Cedi-Aera entweder der 28. Juli (= Bhādrapada-çudi 1) oder der 26. August (= Āçvina-çudi 1) 249 n. Chr. gewesen sein und das Cedi-Jahr demgemäss entweder mit dem Monate Bhādrapada oder mit Āçvina angefangen haben müsse. Ich entschied mich für den 28. Juli 249, weil Albêrûni wirklich von einem mit Bhādrapada anfangenden Jahre berichtet, ein mit Āçvina anfangendes Jahr dagegen mir unbekannt war. Seitdem hat mir die Berechnung fast aller Daten der veröffentlichten oder mir sonst zugänglichen indischen Inschriften gezeigt, dass gegen die früher von mir angenommene Epoche sich ein Einwurf erhebt, an den ich damals nicht gedacht hatte. Mit jener Epoche war ich genötigt, die Jahre von elf Cedi-Daten als laufende und das Jahr eines Datums als ein abgelaufenes Jahr zu betrachten; aber ich weiss jetzt, dass ein solches Verhältnis das gerade Gegenteil von dem sein würde, was andere Aeren, über deren Epochen kein Zweifel mehr besteht, in dieser Beziehung lehren. Ich kann jetzt beweisen, was sonst mit grösserer oder geringerer Entschiedenheit behauptet, aber auch bestritten worden ist, dass die Inder in ihren Daten fast stets die Zahl der abgelaufenen Jahre und nur ausnahmsweise das laufende Jahr citieren. Für die Mālava-Vikrama-Aera habe ich gezeigt, dass z. B. von den Jahren von 26 Daten aus der hellen Hälfte der Monate von Kārttika bis Phālguna nicht weniger als 25 abgelaufene Jahre sind. Von 29 Daten der Çaka-Aera, bis zu Çaka 1000, geben 27 abgelaufene Jahre, ein Datum giebt das laufende Jahr, und das Jahr eines Datums könnte sowohl als abgelaufenes wie als laufendes Jahr betrachtet werden. Von 26 Daten der Newar-Aera geben 24 abgelaufene Jahre, von 8 Daten der Lakshmaṇasena-Aera 7.¹ Solche Thatsachen nötigen uns, auch die Epoche der Cedi-Aera in der Weise zu bestimmen, dass die Jahre der 12 berechenbaren Daten alle oder doch der grossen Mehrzahl nach als abgelaufene betrachtet werden können. Was ferner den Anfang des Jahres betrifft, so möchte ich jetzt darauf aufmerksam machen, dass Colebrooke in einem am 30. Oktober 1799 in Nāgpur geschriebenen Briefe berichtet,² dass das Jahr in Nāgpur

¹ Nach der Aera des Kaliyuga wird äusserst selten datiert. Gupta-Valabhi-Daten, die sich mit Sicherheit berechnen lassen, haben wir überhaupt nur sechs oder sieben, und wirklich echte (nicht von der Vikrama-Aera beeinflusste) Gupta-Daten nur drei. Daten der Çrī-Harsha-Aera, die sich berechnen lassen, kenne ich nur zwei, und sie genügen nicht, die Epoche genau zu bestimmen. Die Çālukya-Vikrama- und Çrī-Simha-Aeren, die letztere mit überhaupt nur drei oder vielleicht vier Daten, sind sozusagen Unterabteilungen der Çaka- und [Āshādhādi-Vikrama-Aeren, und für die Frage, ob laufende Jahre in Daten citiert werden, von keiner Bedeutung.

² Sir T. E. Colebrooke's Life of H. T. Colebrooke p. 163: "The new year begins here with the light fortnight of *Āçvina*, but opening in the midst of Durgā's festival, New Year's Day is only celebrated on the 10th lunar day." — Das Fest der Durgā dauert vom 1. bis zum 9. Tage der hellen Hälfte des *Āçvina* (*Devi-navarātra*).

zu jener Zeit mit der hellen Hälfte des Āçvina angefangen habe. Hier hätten wir also ein *Āçvinādi*-Jahr in dem Teile Indiens, der einst den Cedi-Königen unterthan war; und wenn ein solches Jahr auch sonst annehmbar wäre, so würde der von Colebrooke erwähnte Gebrauch Centralindiens ein gewichtiger Grund sein, sich endgültig für Āçvina als den ersten Monat des Cedi-Jahres zu entscheiden.

Es ist nun unzweifelhaft, dass mit Āçvina als erstem Monate des Jahres alle 12 Cedi-Daten sich in einheitlicher Weise erklären lassen, entweder alle als Daten mit laufenden Jahren, wenn man den 26. August (= Āçvina-çudi 1) 249, oder alle als Daten mit abgelaufenen Jahren, wenn man den 5. September (= Āçvina-çudi 1) 248 als ersten Tag der Aera annimmt. Und da der übereinstimmende Gebrauch anderer Aeren entschieden die zweite Alternative empfiehlt, so zögere ich nicht, den 5. September 248 n. Chr. definitiv als den Anfang der Cedi-Aera zu bezeichnen. Beachtet man, dass die Monate mit dem Vollmonde anfangen, so lassen sich die bekannten Daten leicht mit Prof. Jacobis Tafeln berechnen, indem man, um das entsprechende Jahr des Kaliyuga zu gewinnen, dem gegebenen Cedi-Jahre 3349 hinzuzählt, wenn das Datum in die helle Hälfte des Āçvina oder in einen der Monate von Kārttika bis Phālguna fällt, und 3350 in allen anderen Fällen.

Früher war der Text der Hälfte der 12 berechenbaren Cedi-Daten zweifelhaft. Jetzt ist mir der genaue Wortlaut von wenigstens 11 Daten durch gute Facsimiles der verschiedenen Inschriften bekannt geworden. Ich gebe im folgenden meine Classification dieser Daten, deren Jahre bei meiner jetzigen Annahme ohne Ausnahme abgelaufene Jahre¹ sind, und die entsprechenden europäischen Daten.

A. Daten, in denen der Wochentag mit der im Laufe desselben endenden *tithi* verbunden ist.

1. Die Benares-Kupferplatte des Karṇadeva, die selbst verschwunden ist, von der ich aber Sir A. Cunningham und Dr. F. E. Hall das einzige vorhandene Facsimile verdanke, ist datiert: *Samvat 793 Phālguna-vadi 9 Some*. Das entsprechende Datum (für Kaliyuga 793 + 3349 = 4142) ist Montag, der 18. Januar 1042.

2. Eine Ratnapur-Steinschrift des Jājalladeva I. (Epigraphia Ind. I, 34) ist datiert: *Samvat 866 Mārga-sudi 9 Ravau*. Das entsprechende Datum (für Kaliyuga 866 + 3349 = 4215) ist Sonntag, der 8. November 1114.

3. Eine Rājim-Steinschrift des Jagapāla (Indian Antiquary XVII, 139) ist datiert: *Kulacuri-samvatsare 896 Māghe māsi su(çu)kla-pakshe rathāshṭamyāṇ Vu(bu)dha-dine*. Das entsprechende Datum (für Kaliyuga 896 + 3349 = 4245) ist Mittwoch, der 3. Januar 1145.

4. Eine Inschrift in Seorinārāyan, von der ich ein Facsimile besitze, ist datiert: *Kalacuri-samvatsare² 898 | Asvina-sudi 2 Soma-dine*. Das entsprechende Datum (für Kaliyuga 898 + 3349 = 4247) ist Montag, der 9. September 1146.

5. Eine Tewar-Steinschrift des Gayākarṇadeva (Indian Antiquary XVIII, 210) enthält das Datum: *Nava-sa(ç)āta-yugat-ā[bd]-ādhiḱya-ge Cedi-dish[ie] ja[na*]-padam avat=imam çri-Gayākarṇadeve | prati-padi Çuci-māsa-cveta-pakshe=ekka-*

¹ Die für das Jahr gegebene Zahl ist im folgenden stets als die Zahl der abgelaufenen (oder verflössenen) Jahre zu betrachten.

² Lies: -samvatsare 898 Āçvina-.

vāre, d. h. Sonntag, Āshāḍha-çudi 1 des Cedi-Jahres 902. Das entsprechende Datum (für Kaliyuga 902 + 3350 = 4252) ist Sonntag, der 17. Juni 1151.

6. Die Lāl-Pahāḍ-Felseninschrift des Narasiṃhadeva (Indian Antiquary XVIII, 212) ist datiert: *Sa[mi]vat 909 Srā(çrā)vaṇa-sudi 5 Vuddh[ie]*.¹ Das entsprechende Datum (für Kaliyuga 909 + 3350 = 4259) ist Mittwoch, der 2. Juli 1158.

7. Nach einer Mitteilung Sir A. Cunninghams (Archaeological Survey of India IX, 111) enthält eine Bhera-Ghāt-Inschrift das Datum 928, *Māgha-badi 10*, Montag. Das entsprechende Datum (für Kaliyuga 928 + 3349 = 4277) ist Montag, der 27. Dezember 1176.

8. Eine Tewar-Steinschrift des Jayasiṃhadeva (Epigraphia Ind. II, 18) ist datiert: *Samvat² 928 Çrāvaṇa-sudi 6 Ravau Hastē*. Das entsprechende Datum (für Kaliyuga 928 + 3350 = 4278) ist Sonntag, der 3. Juli 1177. An diesem Tage war der Mond im Nakshatra Hasta etwa 16 Stunden nach Sonnenaufgang.

9. Eine Inschrift in Sahaspur, von der ich ein Facsimile besitze, ist datiert: *Samvat² 934 Kārttika-sudi 15 Vu(bu)dhe*. Das entsprechende Datum (für Kaliyuga 934 + 3349 = 4283) ist Mittwoch, der 13. Oktober 1182.

B. Daten, in denen der Wochentag mit der im Laufe desselben anfangenden *tithi* verbunden ist.

10. Die Bhera-Ghāt-Steinschrift der Königin Alhaṇadevi (Epigraphia Ind. II, 10) ist datiert: *Samvat 907 Mārgga-sudi 11 Ravau*. Das entsprechende Datum (für Kaliyuga 907 + 3349 = 4256) ist Sonntag, der 6. November 1155, an dem die 11. *tithi* der hellen Hälfte des Mārgaṣṛsha 2 Stunden 12 Minuten nach Sonnenaufgang anfangt. Da im folgenden Jahre (Kaliyuga 4257) dieselbe *tithi* an einem Sonntage endete, so könnte man zunächst versucht sein, diesen Sonntag, den 25. November 1156, als das richtige Äquivalent des indischen Datums zu betrachten. Einerseits jedoch würde eine solche Annahme uns zwingen, gegen den allgemeinen Gebrauch anderer Aeren die Jahre der Daten 1-9 für laufende zu erklären; andererseits hat die Berechnung vieler Daten gezeigt, dass auch sonst eine *tithi* oft genug — ich könnte ein Dutzend sichere Beispiele anführen — mit dem Wochentage verbunden wird, an dem sie anfing, nicht nur, wenn sie durch Ordinalia wie *saptami*, *ashṭami* bezeichnet wird, sondern auch dann, wenn zu ihrer Bezeichnung Abkürzungen wie *çudi 7*, *vadi 8* gebraucht werden.

11. Die Rewah-Kupferplatte des Kirtivarman (Indian Antiquary XVII, 226) ist datiert: *Samvat 926 Bhādrapada-māse çukla-pakshe caturthyāṇ tithau Guru-dine*; und hier ist das entsprechende Datum (für Kaliyuga 926 + 3350 = 4276) zweifellos Donnerstag, der 21. August 1175, an dem die 4. *tithi* der hellen Hälfte des Bhādrapada 8 Stunden 7 Minuten nach Sonnenaufgang anfangt, denn dieselbe *tithi* kann weder in dem vorangehenden noch in dem folgenden Jahre auf irgend eine Weise mit dem im Datum genannten Wochentage in Verbindung gebracht werden. Der Sinn des Datums ist, dass die in der Urkunde erwähnte fromme Handlung an jenem Donnerstage, dem 21. August 1175, nach Anfang der 4. *tithi* vollzogen wurde.

¹ Lies *Budhe*.

² Lies *Samvat*.

Ausser obigen elf Daten mit Wochentagen haben wir — 12. — das Datum einer Steininschrift in Besāni, von der ich ein Facsimile besitze: *Samvat 958 prathama-Āshāḍha-sudi 3*. Der Ausdruck »erster Āshāḍha« dieses Datums zeigt, dass im Cedi-Jahre 958 Āshāḍha ein Schaltmonat war; und dies war wirklich der Fall in Kaliyuga 958 + 3350 = 4308 (Mai—Juli 1207).

Alle zwölf Daten stimmen so vollständig mit einander überein, dass ein Irrtum in Betreff der angenommenen Epoche oder mindestens des Jahresanfangs ausgeschlossen zu sein scheint; und ich hege keinen Zweifel darüber, dass der noch zu Colebrookes Zeit in Centralindien übliche Gebrauch, das Jahr mit Āṣvina anzufangen, ein Überbleibsel des alten Cedi-Kalenders war. Auf keinen Fall aber würde man die Daten der Cedi-Aera als Beweis dafür anführen dürfen, dass es in manchen Gegenden Indiens Regel gewesen sei, in Daten laufende Jahre zu citieren; und ich habe es für nötig gehalten, ein altes Thema noch einmal kurz zu behandeln, weil mein früherer Aufsatz über denselben Gegenstand zu irrthümlichen Ansichten über die allgemeinere Frage Veranlassung gegeben hat.

Franz Kielhorn.

ON THE DATES OF THE SAKA ERA IN INSCRIPTIONS,

BY PROFESSOR F. KIELHORN, C. I. E.; GÖTTINGEN.

THE number of dates of the Saka era which I have collected from the texts of inscriptions, or from accounts of inscriptions published by other scholars, especially by Dr. Fleet, amounts to about 370. Of these, about 100 dates contain no details for calculation or verification, and in rather more than thirty others the wording of some of the details is doubtful. Of the rest, the calculation of about 140 dates has yielded results which theoretically satisfy the requirements of the cases, while that of about seventy has proved unsatisfactory; and in the case of about twenty dates my examination has shewn, either, how a particular term of the original date ought to be understood, or in what manner the wording of the date should be amended. In the following I give a list of what may be called regular dates.¹ These will be followed by a list of irregular dates, and by such remarks as have suggested themselves to me regarding the practice of dating followed in connection with the Saka era. For obvious reasons, I shall include in my lists the dates which have been already treated of by Dr. Fleet,² and feel sure that he will approve of my doing so.

I. — REGULAR DATES.

A. — DATES IN LUNAR MONTHS.

1. — Dates in Expired Years.

(a). — Dates in Bright Fortnights.

1. — S. 654. — *Ante*, Vol. XXI. p. 48. Date in a stone inscription from Java :—

(L. 1). — Sākēndrē-tigatē śrnt-Indriya-rasair=āṅgikṛitē vatsarē
vār-ēndau dhavala-trayōdaśi-tithau Bhadrōttarē Kārttikē.

S. 654 expired: Monday, 6th October, A. D. 732; the 13th *tithi* of the bright half ended 18 h. 17 m., and the *nakshatra* was Uttara-bhadrapadā up to 15 h. 6 m. after mean sunrise.

2. — S. 679. — *Jour. Bo. As. Soc.* Vol. XVI. p. 106; *ante*, Vol. XVIII. p. 55. Āntrōli-Chhārōli copper-plate inscription of a Rāshtrakūṭa king Kakka of Gujārāt :—

(L. 29). — vishuva-saṅkrāntau . . .

(L. 36). — 'Sakanpīpa-kāl-ātīta-saṁvatsara-śata-shaṭkē ēkōnāśīty-adhikē Āśvayuja-śuddhā-(ddhē=i)katē(tō)=pi saṁ 600 70 9 tithi 7.

In S. 679 expired the Vishuva(Tulā)-saṅkrānti took place 18 h. 53 m. after mean sunrise of the 23rd September, A. D. 757, during the 6th *tithi*; and the 7th *tithi* of the bright half of Āśvina ended 22 h. 1 m. after mean sunrise of the 24th September, A. D. 757.

3. — S. 765. — *Notulen Bataviaasch Genootschap*, Vol. XXVI. p. 21. Date in a stone inscription from Java :—

Svasti Sakavarsh-ātīta 765 Chaitra-māsa tithi pañchadaśi chandragrahaṇa Sōmavāra . .

S. 765 expired: A lunar eclipse, visible in Java, 18 h. 50 m. after 6 a. m. (local time) of Monday, 19th March, A. D. 843.

4. — S. 782. — *Jour. Bo. As. Soc.* Vol. IX. p. 219, and Vol. XII. p. 329; *ante*, Vol. III. p. 320, and Vol. XVIII. p. 94. Date of the Kalyāṇ Ambarnāth temple inscription of the Mahāmaṇḍalāśvara Māmvānirājādēva, as read by Dr. Bhāu Dāji and Dr. Fleet:—

(L. 1). — Saka-saṁvat 782 Jyēshṭha-śuddha 9 Su(ṣu)krē.

¹ Those dates in which a *tithi* is joined with the week-day on which it commenced I shall give, under a separate heading, in the list of irregular dates, but by doing so I do not wish to intimate that those dates are incorrect. Under irregular dates will also be given several regular dates from (apparently) spurious documents.

² The regular dates which have been already examined by Dr. Fleet are Nos. 2, 4, 6, 13, 25, 27, 28, 32, 35, 55, 59, 60, 62, 64, 65, 69, 74, 85, 98, 102, 106, 108-112.

S. 782 expired: Friday, 3rd May, A. D. 860; the 9th *tithi* of the bright half ended 7 h. 43 m. after mean sunrise.

5. — **S. 782.** — *Ante*, Vol. XXI. p. 48. Date in an inscription from Java:—

Sakavarshatita 782, Kārtikamāsa, tithi trayōdaśī śukla-pakṣha, . . . **Vṛi-vāra** (i. e. **Bṛihaspati-vāra**), . . . **Abvini-nakshatra**, . . . **Vyatipāta-yōga**, . . . **Taithila-karaṇa**.

S. 782 expired: Thursday, 31st October, A. D. 860; the 13th *tithi* of the bright half and the *karaṇa* **Taitila** ended 10 h. 29 m., and the *nakshatra* was **Abvini** up to 11 h. 10 m., and the *yōga* **Vyatipāta** up to 5 h. 16 m. after mean sunrise.

6. — **S. 836.** — *Ante*, Vol. XII. p. 194, and Vol. XVIII. p. 90. Haḍḍālā copper-plate inscription of the Chāpa **Mahāsāmantādhipati** Dharaṇivarāha, the feudatory of a king Mahipālādēva:—

(Plate ii. l. 12). — **prāpt-ōdagayana-mahāparvvaṇi** . . .

(L. 21). — **Saka-samvat 836 Pausha-sudi 4 uttarāyaṇē**.

In **S. 836 expired** the **Uttarāyaṇa-samkrānti** took place 4 h. 2 m. after mean sunrise of the 23rd December, A. D. 914, during the 4th *tithi* of the bright half which ended 15 h. after mean sunrise of the same day.

7. — **S. 851.** — *Ante*, Vol. XII. p. 211, No. 48. Kaṣa inscription of the Rāshtrakūṭa Gōvinda IV.:—

Saka-varsha 851neya **Vikṛita-samvatsarada** Māghada puṇṇamey=**Ādityavāram-Āślēsha-śhā**)-nakshatrado(?)[(?) **sōmagrahaṇam samanise** tulā-pu[rusham=i(?)]du tatsamayadol.

S. 851 expired: A lunar eclipse, visible in India, 12 h. 12 m. after mean sunrise of Sunday, 17th January, A. D. 930, when the *nakshatra* was **Āślēshā** up to 19 h. 42 m. after mean sunrise. By the mean-sign system the year **Vikṛita** lasted from the 27th December, A. D. 928, to the 23rd December, A. D. 929, and was therefore current at the commencement of S. 851 expired, but not on the day of the date. [By the southern luni-solar system **Vikṛita** would be S. 852 expired.]

8. — **S. 855.** — *Ante*, Vol. XII. p. 251. Sāṅglī copper-plate inscription of the Rāshtrakūṭa Gōvinda IV.:—

(L. 44). — **Sakanripa-kāl-ātita-samvatsara-śatēshv-ashtasu pañchapañchāśad-adhikēshv=amkātō=pi samvatsarāṅām 855 pravarttamāna-Vijaya-samvatsar-āntarggata-Srāvāṇa-paurṇṇamāsyām vārē Gurōḥ Pūrvvā-Bhadrapadā-nakshatrē**.

In **S. 855 expired**, which by the southern luni-solar system was **Vijaya**, Srāvāṇa was intercalary, and the full-moon *tithi* of the second Srāvāṇa ended on Thursday, 8th August, A. D. 933, 8 h. 9 m. after mean sunrise. On the same day the moon entered **Pūrva-bhadrapadā**, by the Brahma-siddhānta, 9 h. 51 m. after mean sunrise, and later by other systems. [By the mean-sign system **Vijaya** had ended on the 10th December, A. D. 932, before the commencement of S. 855 expired.]

9. — **S. 873.** — *Ante*, Vol. XII. p. 257. Soraṭūr stone inscription of the Rāshtrakūṭa Kṛishṇa III.:—

(L. 4). — **Sa(śa)kanripa-kāl-ākṛānta-samvatsara-sa(śa)taṅga[!]* 873 Virōdhi³-samvatsarada Mārggāsira-māsada puṇṇameyum=Ādityavāramum Rōhini(pi)-nakshatramum Sō(sō)magrahaṇad-andu**.

S. 873 expired, which by the southern luni-solar system was **Virōdhakṛit**: A lunar eclipse, visible in India, 10 h. 22 m. after mean sunrise of Sunday, 16th November, A. D. 951, when the *nakshatra* was **Rōhini** up to 12 h. 29 m. after mean sunrise. [By the mean-sign system **Virōdhakṛit** had ended on the 26th September, A. D. 950, before the commencement of S. 873 expired.]

* Clearly only an error of the writer or engraver for **Virōdhakṛit**.

10. — **S. 894.** — *Ante*, Vol. XII. p. 266. Kardā copper-plate inscription of the Rāshtrakūṭa Kakkala (Karka II.):—

(L. 47). — **'Sakanripa-kāl-ātita-sam(sam)vatsara-śatēshv-ashtasu chaturṇṇa(rṇna)vaty-adhikēshv=amkātah sam(sam)vat 894 Āngirā(rah)-sam(sam)vatsar-āntarggata(-)Āśvayuja-paurṇṇamāsyām Vu(bu)dha-dinē sōmagrahaṇa-mahāparvvaṇi**.

S. 894 expired, which by the southern luni-solar system was **Āngiras**: A lunar eclipse, visible in India, on Wednesday, 25th September, A. D. 972, 16 h. 56 m. after mean sunrise. [By the mean-sign system **Āngiras** had ended on the 29th June, A. D. 971, before the commencement of S. 894 expired.]

11. — **S. 939.** — *As. Res.* Vol. I. p. 363. Ṭhīṇā copper-plate inscription of the 'Silāhāra Arikēsarin:—

'On the fifteenth of the bright moon of *Cārtica*, in the middle of the year **Pīngala**, when nine hundred and forty years, save one, are reckoned as past from the time of King Saca, or, in figures, the year 939, of the bright moon of *Cārtica* 15 the moon being then full and eclipsed' . . .

S. 939 expired, which by the southern luni-solar system was **Pīngala**: A lunar eclipse, visible in India, on the 6th November, A. D. 1017, 19 h. 23 m. after mean sunrise.

12. — **S. 946.** — *Ante*, Vol. VIII. p. 18. Miraj copper-plate inscription of the Western Chālukya Jayasīṃha III.:—

Sakanripa-kāl-ātita-samvatsara-śatēshu navasu shatchatvārīmśad-adhikēshv=amkātah samvat 946 **Baktākshi-samvatsar-āntarggata-Vaiśākha-paurṇṇamāsyām=Ādityavārē**.

S. 946 expired, which by the southern luni-solar system was **Baktāksha**: Sunday, 26th April, A. D. 1024; the full-moon *tithi* ended 15 h. 31 m. after mean sunrise.

13. — **S. 950.** — *Ante*, Vol. IV. p. 278, and Vol. XVIII. p. 379. Tālgund stone inscription of the Western Chālukya Jayasīṃha III.:—

(L. 8). — **'Saka-varsha 950neya Vibhava-samvatsarada Pushya-śuddha 5 Sōmavārad-uttarāyaṇa-samkrānty-andu**.

In **S. 950 expired**, which by the southern luni-solar system was **Vibhava**, the **Uttarāyaṇa-samkrānti** took place 16 h. after mean sunrise of Monday, 23rd December, A. D. 1028, during the 5th *tithi* of the bright half which commenced 0 h. 47 m. before mean sunrise of the same day and ended 1 h. after mean sunrise of Tuesday, 24th December, A. D. 1028.

14. — **S. 980.** — *Jour. Roy. As. Soc.*, O. S., Vol. IV. p. 281, and *Cave-Temples of Western India*, p. 104. Copper-plate inscription of the 'Silāhāra Mūrasīṃha:—

(L. 44). — **Sa(śa)kanripa-kāl-ātita-samvatsara-śatēshu | aśi(śi)ty-adhika-uava-śatēshv=amkēshu | pravarttatayiti Viṣāmbi-samvatsarē | Pausha-māsasya śuddha-pakṣhē | saptamyaṇi Bṛihaspativārē | udagayana-parvvaṇi |**

In **S. 980 expired**, which by the southern luni-solar system was **Vilamba**, the **Uttarāyaṇa-samkrānti** took place 10 h. 18 m. after mean sunrise of Thursday, 24th December, A. D. 1058, during the 7th *tithi* of the bright half which ended 17 h. after mean sunrise of the same day.

15. — **S. 996.** — *Ante*, Vol. X. p. 127. Bijāpur stone inscription of the Western Chālukya Sōmēśvara II.:—

(L. 10). — **Sa(śa)ka-varshaṇ 996neya Ānanda-samvatsarada Puśya(śhya)-su(śu)dhadha-(ddha) 5 Bṛi(bṛi)haspativārad-āndin=uttarāyaṇa-samkrānti-parvva-nimittam**.

In **S. 996 expired**, which by the southern luni-solar system was **Ānanda**, the **Uttarāyaṇa-samkrānti** took place 12 h. 3 m. after mean sunrise of the 24th December, A. D. 1074,

before the commencement of the 5th *tithi*; and the 5th *tithi* of the bright half ended on **Thursday**, 25th December, A. D. 1074, 15 h. 18 m. after mean sunrise.

16. — **S. 999.** — *Ante*, Vol. XII. p. 209, No. 17. Hulgūr inscription of the Western Chālukya Vikramāditya VI. and Jayasimha IV.: —

Sa(śa)kaṇṇipa-kāl-ātita-saṁvatsara-sa(śa)taṁgalu 999neya Piṅgala-saṁvatsarada Āshāḍa-(dha)-su(śu)ddha 2 Ādityavāra saṁkrānti-pavitrārōhanad-amdu.

In **S. 999** expired, which by the southern luni-solar system was Piṅgala, the Dakṣiṇāyana-saṁkrānti took place 15 h. 2 m., and the second *tithi* of the bright half ended 3 h. 37 m. after mean sunrise of **Sunday**, 25th June, A. D. 1077.

17. — **S. 1037.** — *Inscr. at Sravaṇa Belgoḷa*, No. 47, p. 26. Date of the death of Mēghachandra-traividya-dēva: —

Sa(śa)ka-varshaṁ 1037neya Manmatha-saṁvatsarada Mārggaśira-su(śu)ddha 14 Brihavāraṁ . . .

S. 1037 expired, which by the southern luni-solar system was Manmatha: **Thursday**, 2nd December, A. D. 1115; the 14th *tithi* of the bright half ended 14 h. 53 m. after mean sunrise.

18. — **S. 1039.** — *Inscr. at Sravaṇa Belgoḷa*, No. 59, p. 57. A grant by the Daṇḍavāyaka Gaiga-Rāja, confirmed by the Daṇḍavāyaka Ēchi-Rāja: —

Sa(śa)ka-varshaṁ 1039neya Hēmanambi-saṁvatsarada Phālgua-śuddha 5 Sōmavārad-andu.

S. 1039 expired, which by the southern luni-solar system was Hēmalamba: **Monday**, 28th January, A. D. 1118; the 5th *tithi* of the bright half ended 20 h. 11 m. after mean sunrise.

19. — **S. 1045.** — *Ante*, Vol. XIV. p. 18. Date in an Old-Kanarese inscription at Tērdāl:— (L. 49).— Sa(śa)ka-va[r*]sha 1045neya Subhakri(kṛi)t-saṁvatsarada Vaiśākhada puṇṇami Bra(bri)haspativāredala.

S. 1045 expired, which by the southern luni-solar system was Sōbhakṛit (Sōbhana): **Thursday**, 12th April, A. D. 1123; the full-moon *tithi* ended 13 h. 23 m. after mean sunrise.

20. — **S. 1045.** — *Inscr. at Sravaṇa Belgoḷa*, No. 43, p. 18. Date of the death of Subhachandra: —

Bāḡ-āmbhōdhi-nabhaś-śaśūka-tulitē jātē Sak-ābdē tatō
varshē Sōbhakṛit(d)-āhvayē vyupanatē māśē punāś Srāvāṇē |
pakshē kṛiṣṇa-vipaksha-varttini Sitē vārē daśamyām tithau.

S. 1045 expired, which by the southern luni-solar system was Sōbhakṛit (Sōbhana): **Friday**, 3rd August, A. D. 1123; the 10th *tithi* of the bright half ended 17 h. 12 m. after mean sunrise.

21. — **S. 1078.** — *Ante*, Vol. XII. p. 209, No. 18. Hulgūr inscription of the Western Chālukya Taila III.: —

Sakanṇipa-kāl-ātita-śataṁgalu 1076neya Bhāva-saṁvatsarada Āśā(śhā)ḍa(dha)-su(śu)ddha 5 Brihaspativārad-amdu.

S. 1078 expired, which by the southern luni-solar system was Bhāva: **Thursday**, 17th June, A. D. 1154; the 5th *tithi* of the bright half ended 23 h. after mean sunrise.

22. — **S. 1078.** — *Ante*, Vol. XII. p. 209, No. 24. Stone inscription of the Silāhāra Mallikārjuna, now in the Hall of the Bombay As. Soc.: —

* This is clearly an error for Sōbhakṛit.

Sakanṇipa-kāl-ātita-saṁvatsara-śatēshu daśa[su*] aṣṭasaptaty-adhikēshu Saka-saṁvat 1078 Dhātā-saṁvatsarē Vaiśākha-śuddha-akṣha[ya*]-tṛitīyāyām yugādi-parvvaṇi Bhauma-dinē Mṛigaśira-nakshatrē.

S. 1078 expired, which by the southern luni-solar system was Dhātṛi: **Tuesday**, 24th April, A. D. 1156; the third *tithi* of the bright half ended 13 h. 58 m., and the *nakshatra* was Mṛigaśirsha up to 13 h. 47 m. after mean sunrise.

23. — **S. 1081.** — *Inscr. at Sravaṇa Belgoḷa*, No. 138, p. 108. A grant by the Hoysaḷa Narasiṁha I.: —

Ēkāśīty-uttara-sahasra-Saka-varshēshu gatēshu Pramādi(thi)-saṁvatsarasya Pushya-māsa-śuddha-Sukravāra-chaturdaśyām uttarāyāḍa-saṁkrāntau.

In **S. 1081** expired, which by the southern luni-solar system was Pramāthin, the Uttarāyāna-saṁkrānti took place 13 h. 31 m. after mean sunrise of **Friday**, 25th December, A. D. 1159, during the 14th *tithi* of the bright half which ended 16 h. 48 m. after mean sunrise of the same day.

24. — **S. 1085.** — *Inscr. at Sravaṇa Belgoḷa*, No. 39, p. 8. Date of the death of Dēvakṛti:—

Saka-varsha śāsirada embhatt-aidaneya ||
varshē khyāta-Subhānu-nāmani sitē pakshē tad-Āshāḍhakē
māśē tan-navami-tithau Budha-yutē vārē dinēś-ōdayē |

S. 1085 expired, which by the southern luni-solar system was Subhānu: **Wednesday**, 12th June, A. D. 1163; the 9th *tithi* of the bright half ended 18 h. after mean sunrise.

25. — **S. 1096.** — *Ante*, Vol. XVIII. p. 127. Hulgūr stone inscription of the Kalachuri Sōmēśvara: —

(L. 35). — Saka-varshada 1096neya Jaya-saṁvatsarada Mārggaśirada puṇṇami Ādityavāra sōmagrahanad-andu.

S. 1096 expired, which by the southern luni-solar system was Jaya: A lunar eclipse visible in India, on **Sunday**, 10th November, A. D. 1174, 16 h. 14 m. after mean sunrise.

26. — **S. 1114.** — *Ante*, Vol. II. p. 301. Gadag stone inscription of the Hoysaḷa Viraballāla:—

(L. 43). — Sakanṇipa-kāl-ātita-saṁvatsara-śatēshu chaturdaś-ādihikēshv-ēkādaśasu amkāto=pi 1114 varttamāna-Paridhāvi-saṁvatsar-āntarggata-Mārggaśi(śi)rsha-paurṇamāsyām Sanś-(nai)charavārē sōmagrahanē.

S. 1114 expired, which by the southern luni-solar system was Paridhāvin: A lunar eclipse, visible in India, on **Saturday**, 21st November, A. D. 1192, 0 h. 56 m. after mean sunrise.

27. — **S. 1121.** — *Ante*, Vol. XIX. p. 155. Gadag stone inscription of the Hoysaḷa Viraballāla: —

(L. 31). — Sakanṇipa-kāl-ātita-saṁvatsara-śataṁgalu 1121neya Siddhārthi-saṁvatsarada pratham-Āshāḍa(dha)-śukla-paksh-āṣṭami-Brihaspativāra-Bya(vya)tipāta-punya-dinadō = ā Bya(vya)tipāta-nimittam.

In **S. 1121** expired, which by the southern luni-solar system was Siddhārthin, Āshāḍha was intercalary by the Ārya-siddhānta; and the 8th *tithi* of the bright half of the first Āshāḍha ended 23 h. 32 m. after mean sunrise of **Thursday**, 3rd June, A. D. 1199, when the *yuga* was Vyatipāta for about 14 h. after mean sunrise.

28. — **S. 1145.** — *Ante*, Vol. XIX. p. 157. Kōlār stone inscription of the Dēvagiri-Yādava Siṅghana II.: —

(L. 9). — Saka-varṣaśaś 1145 de(da)neya Svabhānu-saṁvachcharada⁶ dvitīya-Bhādra-pada-suddha⁷ 5 Su(su)kravārad-amdu.

⁶ Read varshada.

⁷ Read saṁvatsarada.

⁸ Read śuddha.

In S. 1145 expired, which by the southern luni-solar system was Subhānu, Bhādrapada was intercalary; and the 5th *tithi* of the bright half of the second Bhādrapada ended 7 h. 14 m. after mean sunrise of Friday, 1st September, A. D. 1223.

29. — S. 1156. — *Pāli, Skr. and Old-Kan. Inscr.* No. 87. Bijāpur inscription of the Dēvagiri-Yādava Śiṅgha II. :—

‘Saka 1156 (in figures, l. 5), the *Jaya saivatsara*; *Vaḍḍavāra*, the day of the full-moon of the bright fortnight of Vaiśākha.’

S. 1156 expired, which by the southern luni-solar system was *Jaya* : Saturday, 15th April, A. D. 1234; the full-moon *tithi* ended 12 h. 24 m. after mean sunrise.

30. — S. 1156. — *Cave-Temples of West. India*, p. 99. Image inscription at Ēlūrā :—

(L. 1). — Svasti śrī Sākē 1156 *Jaya-savachharē* [Phālguṇa-sudha-tritīā *Budhē*].

(L. 3). — Phālguṇa tritīyām *Vu(bu)dhē*.

S. 1156 expired, which by the southern luni-solar system was *Jaya* : Wednesday, 21st February, A. D. 1235; the third *tithi* of the bright half ended 21 h. 36 m. after mean sunrise.

31. — S. 1158. — From Dr. Fleet's impression (Graham's *Kolhapoor*, p. 426, No. 13). Kōlhāpur stone inscription of the Dēvagiri-Yādava Śiṅgha II. :—

(L. 1). — Svasti śrī Saka 1158 varshē *Durmmukha-saivatsarē* Māgha-śuddha-pūrṇamāsyaṁ tithau *Sōma-dinē* |

(L. 14). — . . . *sōmē-pavi[ddhē p]* . . .

S. 1158 expired, which by the southern luni-solar system was *Durmmukha* : A lunar eclipse, visible in India, 21 h. 14 m. after mean sunrise of Monday, 12th January, A. D. 1237.

32. — S. 1171. — *Ante*, Vol. VII. p. 304, and Vol. XIX. p. 441. Chikka-Bāgīwādī copper-plate inscription of the Dēvagiri-Yādava Kṛishṇa :—

(L. 19). — Ēkasaptaty-ntara-sat-ādhē(dhi)ka-sahasra-saṁkhyēshu Sak-āvdē(bdē)shv-antitēshu pravarttamānē *Saum(sau)mya-saivatsarē* tad-ām̐ta[r*]gat-Āshāḍha-paurṇamāsyaṁ *Sanaischaravārē* Pūrvāshāḍh[ā*]-nakshatrē *Vaidhriti-yōgē* itthamhūta-puṁ(pu)nyakālē.

S. 1171 expired, which by the southern luni-solar system was *Saumya* : Saturday, 26th June, A. D. 1249; the full-moon *tithi* ended 11 h. 33 m., and the *nakshatra* was *Pūrvāshāḍhā* up to 6 h. 34 m., and the *yōga* *Vaidhriti* up to 13 h. 26 m. after mean sunrise.

33. — S. 1171. — *Ante*, Vol. XIV. p. 69. Beṇḍigēri copper-plate inscription of the Dēvagiri-Yādava Kṛishṇa :—

(L. 22). — Svasti śrī-Saka-saivatsarasya sat-ādhika-sahasra-aikādhika-saptatyās-ch=ānamtarē *Saumyē*-bdē Srāvṇē māsi sita-pakshē dvādaśyaṁ *Guruvārē*.

S. 1171 expired, which by the southern luni-solar system was *Saumya* : Thursday, 22nd July, A. D. 1249; the 12th *tithi* of the bright half ended 23 h. 5 m. after mean sunrise.

34. — S. 1187. — From Dr. Fleet's impression. Kōlhāpur pillar inscription of the Dēvagiri-Yādava Mahādēva :—

(L. 6). — Saka-varshē 1187 varttamāna-Krōdhana-saivatsarē Māgha-māsa-pūrṇimāyāni *Sakra-dinē*.

S. 1187 expired, which by the southern luni-solar system was *Krōdhana* : Friday, 22nd January, A. D. 1266; the full-moon *tithi* ended 14 h. 12 m. after mean sunrise.

35. — S. 1193. — *Ante*, Vol. XIV. p. 317, and Vol. XIX. p. 442. Paiṭhan copper plate inscription of the Dēvagiri-Yādava Rāmachandra :—

(L. 62). — Sa(śa)kē cha ēkādaśasu trinavaty-adhikēshv-atitēshu 1193 varttamāna-Prajāpati-saivatsar-ām̐targata-Māgha-śuddha-dvādaśyaṁ *Vu(bu)dhē*.

S. 1193 expired, which by the southern luni-solar system was *Prajāpati* : Wednesday, 13th January, A. D. 1272; the 12th *tithi* of the bright half ended 14 h. 48 m. after mean sunrise.

36. — S. 1194. — From Dr. Fleet's impression (Graham's *Kolhapoor*, p. 437, No. 15). Kōlhāpur stone inscription of the Dēvagiri-Yādava Rāmachandra :—

(L. 23). — ‘Saka-varshēshu 1194 vēd-ām̐ka-Rudra-pramitēshu vyatitēshu varttamāna-*Āngirah*-[sam]vatsara-Māgha-pūrṇimāyāni *sōmagrahaṇa-parvaṇi*.

S. 1194 expired, which by the southern luni-solar system was *Āngiras* : A lunar eclipse, visible in India, 13 h. 27 m. after mean sunrise of the 3rd February, A. D. 1273.

37. — S. 1200. — *Inscr. at Sravaṇa Belgōla*, No. 137, p. 105. Date of a private inscription :—

Svasti śrī-vijayābhudaya-Sālivāhana-śaka-varshaṁ 1200neya *Bahudhānya-saivatsarada* Chaitra-śuddha 1 *Sukravāra*.

S. 1200 expired, which by the southern luni-solar system was *Bahudhānya* : Friday, 25th March, A. D. 1278; the first *tithi* of the bright half ended 20 h. 24 m. after mean sunrise. [This was the day of the Mēsha-saṁkrānti which took place, by the Sūrya-siddhānta 16 h. 44 m., and by the Ārya-siddhānta 14 h. 45 m. after mean sunrise.]

38. — S. 1227. — From Dr. Fleet's impression. Vēlāpur stone inscription of the Dēvagiri-Yādava Rāmachandra :—

(L. 1). — Svasti śrī Saku 1227 | *Viśvāvasu-saivachchha(tsa)rē* | Mārga-su(śu)dha(ddha) 5 *Sōmē*.

S. 1227 expired, which by the southern luni-solar system was *Viśvāvasu* : Monday, 22nd November, A. D. 1305; the 5th *tithi* of the bright half ended 3 h. 16 m. after mean sunrise.

39. — S. 1301. — *Jour. Bo. As. Soc.* Vol. XII. p. 356. Ḍamhaḷ copper-plate inscription of Harihara II. of Vijayanagara :—

Sak-ābdē Sālivāhasya sahasrēṇa tribhiḥ śataiḥ |

ēk-ādhikais=cha gaṇitē *Siddhārthē*-bdē śubbē dinē ||

Jyē(jya)shṭhyām *Bhaumē* nīśanāth-ōparāgē . . .

S. 1301 expired, which by the southern luni-solar system was *Siddhārthin* : A lunar eclipse, visible in India, on Tuesday, 31st May, A. D. 1379, 20 h. 52 m. after mean sunrise.

40. — S. 1301. — *Pāli, Skr. and Old-Kan. Inscr.* No. 126; *ante*, Vol. XII. p. 214, No. 87. Harihar stone inscription of Harihara II. of Vijayanagara :—

‘Sasi-kha-śikhi-chandra-samitē Sākē *Siddhā(ddha)rtthi(rtthi)*-samjñitē ch=ābdē [1*] *Kārttika-māsasya* sita-dvādaśyaṁ *Bhaskarē* vārē [11*].

S. 1301 expired, which by the southern luni-solar system was *Siddhārthin* : Sunday, 23rd October, A. D. 1379; the 12th *tithi* of the bright half ended 9 h. 23 m. after mean sunrise.

41. — S. 1332. — *Pāli, Skr. and Old-Kan. Inscr.* No. 127; *ante*, Vol. XII. p. 214, No. 88. Harihar stone inscription of Dēvārāya I. of Vijayanagara :—

‘Sākē nētr-āgni-vahn-īndu-saṁkhyē *Vikru(kri)ti-nāmakē* [1*]

varushē *Nabhasya-dvādaśyaṁ* śuklāyāni *Sōmavārakē* [11*]

S. 1332 expired, which by the southern luni-solar system was *Vikṛita* : Monday, 11th August, A. D. 1410; the 12th *tithi* of the bright half ended 21 h. 36 m. after mean sunrise.

42. — S. 1353. — *Ante*, Vol. II. p. 353. Date on the colossal Jain statue at Kārkaḷa, in the South Kanara District :—

(L. 5). — Svasti śrī-Sakabhūpati-tri-śara-vahn-īndau Virōdhyaḍikrīd⁹-varshē Phālguna-Saunvavāra-dhavalā-śrī-dvādaśī-tithau . . .

(L. 14). — 'Saka-varsha 1353 . . .

S. 1353 expired, which by the southern luni-solar system was Virōdhakṛit : Wednesday, 13th February, A. D. 1432; the 12th *tithi* of the bright half ended 6 h. after mean sunrise.

43. — **S. 1436.** — *As. Res.* Vol. XX. pp. 22 and 37. Kṛishṇāpura stone inscription of Kṛishṇarāya of Vijayanagara : —

Śālivāhana-śaka 1436 . . . Bhāva-saunvatsara, Phālguna-śuddha 3, Sukravāra.

S. 1436 expired, which by the southern luni-solar system was Bhāva : Friday, 16th February, A. D. 1515; the third *tithi* of the bright half ended 22 h. after mean sunrise.

44. — **S. 1450.** — *Ep. Ind.* Vol. I. p. 401. Kṛishṇāpura stone inscription of Kṛishṇarāya of Vijayanagara : —

(L. 41). — 'Sākē sārdaihś=chaturbhīr⁹=daśabhir=api śataih sammitē Sarvadāriṇy-abdhē¹⁰ Chaitr-ākhyā-māsē sita-Madana-tithau Jivavārē-ryamarkshē |

S. 1450 expired, which by the southern luni-solar system was Sarvadhārin : Thursday, 2nd April, A. D. 1528; the 13th (Madana) *tithi* of the bright half ended 16 h. 13 m., and the *nakshatra* was Uttara-phalguni (the Aryamarksha) up to 12 h. 29 m. after mean sunrise.

45. — **S. 1451.** — *Ep. Ind.* Vol. I. p. 399. Kṛishṇāpura stone inscription of Kṛishṇarāya of Vijayanagara : —

(L. 1). — Svasti śrī-jayābhūdaya-Śālivāhanaśaka-varushaṅgaṇ 1451neya Virōdhisamvatsarada Vaiśākha-śuda(ḍḍha) 15 Sudalū (i. e. Sukravāradalū) . . .

(L. 22). — Virōdhi-samvatsarada Vaiśākha śu 15 Sudalū sōmagrā(gra)haṇa-puṇyākāladalū . . .

S. 1451 expired, which by the southern luni-solar system was Virōdhi : A lunar eclipse, visible in India, on Friday, 23rd April, A. D. 1529, 14 h. 22 m. after mean sunrise.

46. — **S. 1460.** — *Ante*, Vol. IV. p. 332, and Vol. XII. p. 214, No. 96. Harihar stone inscription of Achyutarāya of Vijayanagara : —

(L. 15). — 'Śālivāhana-nirṇīta-śaka-varuśa(rsha)-kram-āgatē |
vyōma-tarkka-chatus-chandra-saṅkhyayā cha samanvitē ||
Viḷāmbi-nāmakē varshē māśē Kārttika-nāmani |
paurṇamāsyāyām sitē pakshē vārē Sāsīsutasya cha ||
Sōmōparāga-samayē . . .

S. 1460 expired, which by the southern luni-solar system was Vilamba : A lunar eclipse, visible in India, on Wednesday, 6th November, A. D. 1533, 15 h. 19 m. after mean sunrise.

47. — **S. 1476.** — *Pāli, Skr. and Old-Kan. Inscr.* No. 133; *Mysore Inscr.* No. 17, p. 25. Harihar inscription of Sadāśivadēva of Vidyānagarī (Vijayanagara) : —

'Śālivāhana-Saka 1476 (in figures, l. 4); Monday, the fourteenth day of the bright fortnight of Vaiśākha.'

S. 1476 expired, which by the southern luni-solar system was Ānanda : Monday, 16th April, A. D. 1554; the 14th *tithi* of the bright half ended 17 h. 36 m. after mean sunrise.

⁹ Read Virōdhakṛīd.

⁹ Read sārdaihś=chaturbhīr.

¹⁰ Read dhāriṇy-abdhē.

48. — **S. 1506.** — *Pāli, Skr. and Old-Kan. Inscr.* No. 28; *ante*, Vol. XII. p. 213, No. 74. Dēvanhalli copper-plate inscription of Raṅgarāya of Vijayanagara : —

(L. 114). — Khyāt-āṅg-āmbara-bāṅ-ēndu-gaṇitē Saka-vatsarē |
vatsarē Tāraṇ-ābhikhyē māsi Kārttika-nāmani ||
Pakshē valakshē puṇyāyām paurṇimāyām mahātithau |
sōmōparāga-samayē . . .

S. 1506 expired, which by the southern luni-solar system was Tāraṇa : A lunar eclipse, visible in India, on the 7th November, A. D. 1584, 23 h. 2 m. after mean sunrise.

49. — **S. 1543.** — *Pāli, Skr. and Old-Kan. Inscr.* No. 29; *Mysore Inscr.* No. 136, p. 248. Śimoggā copper-plate inscription of Rāmadēva of Vijayanagara : —

'Saka 1543 (in words; l. 18 of the first side; *vēda*, 3; *ambudhi*, 4; *śara*, 5; and *keḥōṣā*, 1), the Durmati samvatsara; Saturday, the third day of the bright fortnight of Vaiśākha.'

S. 1543 expired, which by the southern luni-solar system was Durmati : Saturday, 14th April, A. D. 1621; the third *tithi* of the bright half ended 19 h. 12 m. after mean sunrise.

50. — **S. 1556.** — *Inscr. at Sravaṇa Belgōla*, No. 84, p. 66 (and No. 140, p. 111). Stone inscription of Chāma Rāja Vaḍeyar of Maisūr : —

Śrī-Śālivāhana-śaka-varusha 1556neya Bhāva-samvatsarada Āśhāḍa(ḍha)-śu 13 Sthiravāra-Brahmayōga-dalu.

S. 1556 expired, which by the southern luni-solar system was Bhāva : Saturday, 28th June, A. D. 1634; the 13th *tithi* of the bright half ended 22 h., and the *yōga* was Brahman from 1 h. 13 m. after mean sunrise.

51. — **S. 1644.** — *Mysore Inscr.* No. 168, p. 316. Tonnur copper-plate inscription of Kṛishṇarāja of Maisūr : —

'The Śālivāhana Saka year reckoned as *vēda*, *aṇava*, *ṛitu*, *keḥiti* (1644) having passed, the year Subhakṛit being current, in the month Mārgaśira, full moon, Tuesday, Brahma *yōga*, Ārdra *nakshatra*, Bālava *karāṇa*, . . . the moon being eclipsed in the constellation under which Rāmānuja was born' . . .

S. 1644 expired, which by the southern luni-solar system was Subhakṛit : A lunar eclipse, visible in India, 16 h. 33 m. after mean sunrise of Tuesday, 11th December, A. D. 1722, when the *nakshatra* was Ārdra from 5 h. 55 m., the *yōga* Brahman from 10 h. 23 m., and the *karāṇa* Bālava from 16 h. 33 m. after mean sunrise.

52. — **S. 1650.** — *Coorg Inscr.* No. 13, p. 20. Abbimāṭha copper-plate inscription; date of a grant of the Coorg Rāja Doḍḍa Virappa Vaḍeyar : —

'Śālivāhana-śaka-varusha 1650ne Kilaka-samvatsarada Kārttika-śuddha 2 Budhavāradallu.

S. 1650 expired, which by the southern luni-solar system was Kilaka : Wednesday, 23rd October, A. D. 1728; the second *tithi* of the bright half ended 17 h. 12 m. after mean sunrise.

53. — **S. 1683.** — *Pāli, Skr. and Old-Kan. Inscr.* No. 37. Date in copper-plates from Maisūr : —

'Śālivāhana-Saka 1683 (in figures; l. 1 of the first side), the Vishu samvatsara; Monday the first day of the bright fortnight of Chaitra.'

S. 1683 expired, which by the southern luni-solar system was Vishu : Monday, 6th April, N. S., A. D. 1761; the first *tithi* of the bright half ended 6 h. after mean sunrise. [The Mēsha-saṅkrānti took place on the 9th April, A. D. 1761.]

54. — **S. 1718.** — *Coorg Inscr.* No. 13, p. 20 (and No. 14, p. 22). Abbimathā (and Malādhēvapura) copper-plate inscription of the Coorg Rāja Vira Rājendra Vaḍeyar : —

Śvasti śrī-vijābhayudaya-Sālivāhana-śaka-varuṣha 1718ne varttamānakē salluva Nala-saivatsarada Chaitra-śu 1 Bhārgavāra-dallu.

S. 1718 expired, which by the southern luni-solar system was **Nala : Friday**, 8th April. N. S., A. D. 1796 ; the first *tithi* of the bright half ended 21 h. 10 m. after mean sunrise. [The Mōsha-saṁkrānti took place on the 9th April, A. D. 1796.]

(b). — Dates in Dark Fortnights.

[1.] — Pūrṇimānta Dates.¹¹

55. — **S. 726.** — *Ante*, Vol. XI. p. 126, and Vol. XVII. p. 141. Kanarese country copper-plate inscription of the Rāshtrakūṭa Gōvinda III. : —

(L. 1). — Sakanripa-kāl-ātita-saṁvatsaraṅga-ēlnūṛ-i(i)rpatt-āraneyā Subhānu embhā-(mbi) varshadā Vaiśākha-māsa-kṛishṇa-paksha-pañchamē(mi)-Brihaspati(ti)vāraṁ.

S. 726 expired : Thursday, 4th April, A. D. 804 ; the 5th *tithi* of the dark half of the *pūrṇimānta* Vaiśākha ended 7 h. 43 m. after mean sunrise. By the **mean-sign system** the 4th April, A. D. 804, fell in the year Subhānu which lasted from the 17th June, A. D. 803, to the 12th June, A. D. 804. [The 5th *tithi* of the dark half of the *amānta* Vaiśākha ended 20 h. 41 m. after mean sunrise of Friday, 3rd May, A. D. 804 ; and by the southern luni-solar system **S. 726** expired would be Tāraṇa.]

56. — **S. 976.** — *Pāli, Skr., and Old-Kan. Inscr.* No. 158. Baḷagāṁve stone inscription of the Western Chālukya Sōmēśvara I. : —

‘Saka 976 (in figures, 1. 15), the **Jaya saivatsara** ; Sunday, the day of the new-moon of the dark fortnight of Vaiśākha.’

S. 976 expired, which by the southern luni-solar system was **Jaya : Sunday**, 10th April, A. D. 1054 ; the 15th *tithi* of the dark half of the *pūrṇimānta* Vaiśākha ended 19 h. 37 m. after mean sunrise. [The 15th *tithi* of the dark half of the *amānta* Vaiśākha ended 6 h. 12 m. after mean sunrise of Tuesday, 10th May, A. D. 1054. Compare below, No. 150.]

57. — **S. 1313.** — *Jour. Bo. As. Soc.* Vol. IV. p. 115. Copper-plate inscription of Harihara II. of Vijayanagara : —

Sakē trayōdaśādihā-trisatōttara-sahasrē gatē vartamāna-Prajāpati-saivatsarē Vaiśākha māśē kṛishṇa-pakshē amāvāsyaśūm Saumya-dinē sūryōparāga-punya-kālē.

S. 1313 expired, which by the southern luni-solar system was **Prajāpati** : A solar eclipse, visible in India, 5 h. 49 m. after mean sunrise of Wednesday, 5th April, A. D. 1391, which was the 15th of the dark half of the *pūrṇimānta* Vaiśākha.

[2.] — Amānta Dates.

58. — **S. 589.** — *Inscr. Sanscrites du Cambodge*, p. 74 ; *ante*, Vol. XXI. p. 48. Stone inscription at Vat Prey Vier¹² : —

Yātē kālē Sakānām nava-tanu-vishayair-Mmādhavē shōḍaś-āhē
Jivas-chāpē-ja-sūryyō maitram-indur . . .

S. 589 expired : The 16th day of the lunar Mādhava (Vaiśākha) was the 15th April, A. D. 667, when the first *tithi* of the dark half of the *amānta* Vaiśākha ended 4 h. 28 m., and

¹¹ The dates given under this heading will be specially considered below.

¹² For the full wording of this date and an exact calculation of all its details see now M. A. Barth in *Inscr. Sanscrites de Campé et du Cambodge*, p. 592. I give the date here, merely, because it is the earliest available Śaka date in a dark fortnight which shows the *amānta* scheme of the lunar month and admits of verification. For an even earlier *amānta* date from Cambodia (of Śaka 548), see *ante*, Vol. XXI. p. 47.

when the moon was in Anurādhā (the Maitra *nakshatra*) up to about 22 h. 20 m. after mean sunrise. On the same day the sun was in the sign Aja (Mōsha), which it had entered on the 20th March, and Jupiter was in Chāpa (Dhanuḥ), having entered that sign on the 20th January, A. D. 667.

59. — **S. 788.** — *Ante*, Vol. XII. p. 219, and Vol. XVII. p. 142. Sirūr stone inscription of the Rāshtrakūṭa Amōghavarsha (Sarva) : —

(L. 15). — Sakanripa-kāl-ātita-saṁvatsaraṅga-ēlnūṛ-ēnbhatt-ēṇtaneya Vyayam emba saṁvatsaram pravarttise śrīmad-Amōghavarsha-Nripatuṅga-nām-śūkitanā vijaya-raḷḷa-pravardhamāna-saṁvatsaraṅga-avyatt-erāḍum uttar-ōttaram rājy-ābhivṛiddhi salutt-iro Jyēshṭha-māsad-amāseyum Ādityavāram āge sūryyagrahaṇad-andu.

S. 788 expired : A solar eclipse, visible in India, 9 h. 4 m. after mean sunrise of Sunday, 16th June, A. D. 866. This day fell in the year Vyaya by both systems ; for by the mean-sign system Vyaya lasted from the 23rd September, A. D. 865, to the 19th September, A. D. 866 ; and by the southern luni-solar system Vyaya was **S. 788** expired.

60. — **S. 810.** — *Ante*, Vol. XIII. p. 69, and Vol. XVIII. p. 90. Bagumrā copper-plate inscription of the Rāshtrakūṭa Mahāsāmāntādhipati Kṛishṇarāja II. of Gujārāt : —

(Plate ii. b. l. 11). — Sakanripa-kāl-ātita-saṁvatsara-śatēshv-ashtasu daś-ōttarēshu Chaitrē-māvāsya[yaṁ] sūryyagrahaṇa-parvaṇi.

S. 810 expired : A solar eclipse, visible in India, 2 h. 40 m. after mean sunrise of the 15th April, A. D. 888.

61. — **S. 867.** — *Ante*, Vol. I. p. 209. Sālōṭgi stone inscription of the reign of the Rāshtrakūṭa Kṛishṇa III. : —

(L. 3). — Saka-kālād-gat-āvdā(bdā)uām sasaptādhikashashṭishu
śatēshv-ashtasu tāvatsu samānām-āṅkatō-pi cha
varttamānē Plavaṅg-āvdē(bdē) . . .

(L. 45). — Pūrvvōktē varttamān-āvdē(bdē) māśē Bhādrapadē-mōhitē
pitṛi-parvvaṇi tasy-aiva Kujavārēna saṁyutē
sūryyagrahaṇa-kālē tu madhyagē cha divākarē.

S. 867 expired : A solar eclipse, visible in India, 6 h. 18 m. after mean sunrise of Tuesday, 9th September, A. D. 945. The year Plavaṅga, by the **mean-sign system**, did not commence till the 17th October, A. D. 945, and it is therefore clear that the donation, to which the date in line 45 refers, was made some time before the date, referred to in line 3, when the inscription was put up. [By the southern luni-solar system Plavaṅga would be **S. 869** expired.]

62. — **S. 867.** — *Ante*, Vol. VII. p. 16, and Vol. XIX. p. 102. Date of the accession of the Eastern Chalukya Amma II., from a copper-plate inscription of his : —

(L. 31). — Giri-rasa-vasu-saṁkhy-ābdē Saka-samayē Mārggaśirsha-māśē-smin [*]
kṛishṇa-trayōdaśa-dinē Bhṛiguvārē Maitra-nakshatrē ||
Dhanushi ravau ghaṭa-lagnē dvādaśa-varshā(rshē) tu janmanāḥ

S. 867 expired : Friday, 5th December, A. D. 945 ; the 13th *tithi* of the dark half ended 10 h. 8 m., and the *nakshatra* was Anurādhā (the Maitra *nakshatra*) up to 7 h. 53 m. after mean sunrise ; and the sun was in the sign Dhanuḥ which it had entered on the 23rd November, A. D. 945.

63. — **S. 893.** — *Ante*, Vol. XII. p. 256. Adaraguñchi stone inscription of the Rāshtrakūṭa Koṭṭiga (Khotika) : —

(L. 7). — Sa(śa)kanripa-kāl-ātita-saṁvachchha(tsa)ra-sa(śa)taṅga-ēṇṭu nūṛa tombhatta-mūranaya Prajāpati-sa[ṁ]vachchha(tsa)raṁ saluttam-ire tad(d-)va(-va)rsh-ābhya(bhṛa)-ntarad-Āshva(śva)ḷḷad-amavāśe Ādityavāra sūryyagrahaṇa.

S. 893 expired, which by the southern luni-solar system was Prajapati: A solar eclipse, visible in India, 2 h. 49 m. after mean sunrise of Sunday, 22nd October, A. D. 971. [By the mean-sign system Prajapati had ended on the 3rd July, A. D. 970, before the commencement of S. 893 expired.]

64. — **S. 904.** — *Inscr. at Sravaṇa Belgola*, No. 57, p. 55; *ante*, Vol. XX. p. 35. Date of the death of the Rāshtrakūta Indrarāja:—

Vanadhi-nabhō-nidhi-pramita-saṅkhyē(khya-)Sak-āvanipāla-kālamam
nēnyise Chitrabhānu parivarttise Chaitra-sitētar-ashṭamī-
dina-yuta-Sōmavāradol

S. 904 expired, which by the southern luni-solar system was Chitrabhānu: Monday, 20th March, A. D. 982; the 8th *tithi* of the dark half ended 22 h. 58 m. after mean sunrise. [By the mean-sign system Chitrabhānu had ended on the 18th May, A. D. 981, before the commencement of S. 904 expired.—The Mēsha-saṅkrānti took place on the 23rd March, A. D. 982.]

65. — **S. 972.** — *Ante*, Vol. XII. p. 202, and Vol. XVIII. p. 91. Sarat copper-plate inscription of the Chaulukya Trilōchanapāla of Lāṭadēsa:—

(Plate iii, l. 3). — Sākē nava-sa(sa)tair-yuktē dvisaptaty-adhikē tathā [*]
Vikritē vatsarē Pausṣhē māśē pakshē cha tāmā(ma)sē ||
Amāvāsya-tithau sūrya-parvvaṇy-aṅgārāvārakē [*]

S. 972 expired, which by the southern luni-solar system was Vikrita: A solar eclipse, visible in India, 10 h. 11 m. after mean sunrise of Tuesday, 15th January, A. D. 1051.

66. — **S. 991.** — *Ep. Ind.* Vol. II. p. 227. Vāghlī stone inscription of the reign of the Yādava Sēunachandra II.:—

(L. 9). — Rūpa-Naimd-āmka-tulyē tu 991 'Saka-kālasya bhūpatau [*]
Saumya-saṁvatsar-Āshāḍha-ravigrāhaṇa-parvvaṇi ||

S. 991 expired, which by the southern luni-solar system was Saumya: A solar eclipse, visible in India, 0 h. 31 m. after mean sunrise of the 21st July, A. D. 1069.

67. — **S. 1047.** — *Ante*, Vol. XII. p. 212, No. 56. Narēndra inscription of the Western Chālukya Vikramāditya VI.:—

Saka-varsham 1047neya Visvā(svā)vasu-saṁvatsarada [Bhā]drapada-ba 13 Sukravāra mahātithi-yugādiy-amdu.

S. 1047 expired, which by the southern luni-solar system was Visvāvasu: Friday, 28th August, A. D. 1125; the 13th *tithi* of the dark half ended 16 h. 9 m. after mean sunrise.

68. — **S. 1050.** — *Inscr. at Sravaṇa Belgola*, No. 54, p. 47. Date of the death of Mallishēna:—

Sākē sūnya-sar-āmbar-āvani-mitē saṁvatsarē Kllakē
māsē Phālgunikē tṛtīya-divasē vārē 'sitē Bhāskarē |
Svātau madhyāhnē

S. 1050 expired, which by the southern luni-solar system was Kllaka: Sunday, 10th March, A. D. 1129; the third *tithi* of the dark half ended 21 h. 16 m., and the *nakshatra* was Svātī up to 15 h. 46 m. after mean sunrise.

69. — **S. 1096.** — *Ante*, Vol. XVIII. p. 127. Hulgūr stone inscription of the Kalachuri Sōmēśvara:—

(L. 40). — 'Saka-varshada 1096neya Jaya-saṁvatsarada Mārgasīra-bahula-d-ama(mā)vāsye Maṅgalavāra sūryagrahaṇad-andu.

S. 1096 expired, which by the southern luni-solar system was Jaya: A solar eclipse, visible in India, 6 h. after mean sunrise of Tuesday, 26th November, A. D. 1174.

70. — **S. 1112.** — *Ante*, Vol. XII. p. 209, No. 25. A Kōlhāpur inscription of the 'Silāhāra Bhōja II.:—

(L. 2). — 'Sakanripa-kālād-ārabhya varshēshu dvādasōttara-satādhika-sahasrēshu nivṛttēshu varttamāna-Sādharāṇa-saṁvatsar-āntargata-Pushya-bahula-dvādasāyām Bhaumavārē bhānōr-uttarāyāṇa-saṅkrāmaṇa-parvvaṇi.

In **S. 1112** expired, which by the southern luni-solar system was Sādharāṇa, the Uttarāyāṇa-saṅkrānti took place 14 h. 2 m. after mean sunrise of Tuesday, 25th December, A. D. 1190, during the 12th *tithi* of the dark half which ended 19 h. 7 m. after mean sunrise of the same day. [For another, irregular date in the same inscription see below, No. 191.]

71. — **S. 1113.** — From Dr. Fleet's impression. Gadag stone inscription of the Dēvagiri-Yādava Bhillama:—

(L. 13). — 'Sakanripa-kāl-ātita-saṁvatsara-satēshu trayōdasādhikēshv-ēkādasasu varttamāna-Virōdhakṛit-saṁvatsar-āntargata-Jyēshṭh-āmāvāsya-yām-Ādityavārē sūryagrahaṇē.

S. 1113 expired, which by the southern luni-solar system was Virōdhakṛit: A solar eclipse, visible in India, 10 h. 29 m. after mean sunrise of Sunday, 23rd Jnne, A. D. 1191.

72. — **S. 1113.** — *Pāli, Skr. and Old-Kan. Inscr.* No. 109. Chaudādāmpur inscription of the Great Chieftain Vira-Vikramāditya of the lineage of Chaudragupta, and his *Nāyaka* Khaṇḍāya-Kāra-Kāmēyanāyaka:—

'Saka 1113 (in figures, l. 72), the Virōdhikṛit saṁvatsara; the day of the new-moon of Mārgasīrṣa; at the time of an eclipse of the sun.'

S. 1113 expired, which by the southern luni-solar system was Virōdhakṛit: A solar eclipse, visible in India, 5 h. 59 m. after mean sunrise of the 18th December, A. D. 1191.

73. — **S. 1137.** — *Pāli, Skr. and Old-Kan. Inscr.* No. 201. Baḷagāmve stone inscription of the Dēvagiri-Yādava Siṅghaṇa II.:—

'Saka 1137 (in figures, l. 23), the Yuva saṁvatsara, Thursday, the day of the new-moon of Bhādrapada.'

S. 1137 expired, which by the southern luni-solar system was Yuvan: Thursday, 24th September, A. D. 1215; the 15th *tithi* of the dark half ended 21 h. 36 m. after mean sunrise.

74. — **S. 1189.** — *Ante*, Vol. XVIII. p. 128. Hulgūr stone inscription of the Dēvagiri-Yādava Mahādēva:—

(L. 15). — 'Saka-varshada 1189neya Prabhava-saṁvatsarada Jyēshṭha-ba 30 Budhavāra sūryagrahaṇad-andu.

In **S. 1189** expired, which by the southern luni-solar system was Prabhava, Jyaishṭha was intercalary; and there was a solar eclipse, visible in India, 8 h. 35 m. after mean sunrise of Wednesday, 25th May, A. D. 1267, which was the 15th of the dark half of the first Jyaishṭha.

75. — **S. 1235.** — *Inscr. at Sravaṇa Belgola*, No. 41, p. 11. Date of the death of 'Subha-chandra:—

Pañchatrimsat-saṁyuta-satadvay-ādhika-sahasra-nuta-varshēshu |
vṛttēshu 'Saka-nripasya tu kālē vistirṇṇa-vilasad-arṇṇavanēmau ||
Pramādi-vatsarē māśē Srāvaṇē tanum atyajat |
Vakrē kṛishṇa-chaturdāsāyām 'Subhachandrō mahāyatīḥ ||

S. 1235 expired, which by the southern luni-solar system was **Pramādin** : Tuesday, 21st August, A. D. 1313; the 14th *tithi* of the dark half ended 15 h. 36 m. after mean sunrise.

76. — **S. 1295**. — *Ante*, Vol. XXI. p. 48. Date in an inscription from Java : —

'Sakavarshatita 1295, Asujimāsa, tithi trayōdaśī kṛishṇapaksha . . . **Su-vara** (i. e. **Sukra-vāra**).

S. 1295 expired : Friday, 14th October, A. D. 1373; the 13th *tithi* of the dark half ended 20 h. 49 m. after mean sunrise.

77. — **S. 1307**. — Hultzsch, *South-Ind. Inscr.* Vol. I. p. 157. Inscription on a lamp-pillar at Vijayanagara : —

(L. 36). — 'Saka-varshē 1307 pravarttamānē **Krōdhana-vatsarē** Phālguna-māsē kṛishṇapakshē dvitīyāyām tithau **Sukravārē**.

S. 1307 expired, which by the southern luni-solar system was **Krōdhana** : Friday, 16th February, A. D. 1386; the second *tithi* of the dark half commenced 0 h. 17 m. before mean sunrise of this Friday and ended 0 h. 43 m. after mean sunrise of the following day.

78. — **S. 1331**. — *Inscr. at Sravana Belgōla*, No. 106, p. 80. Date of a private inscription : —

Saka-varusha 1331neya **Virōdhi-samvatsarada** Chaitra-ba 5 **Gu** (i. e. **Guruvāra**).

S. 1331 expired, which by the southern luni-solar system was **Virōdhi** : Thursday, 4th April, A. D. 1409; the 5th *tithi* of the dark half ended 23 h. 22 m. after mean sunrise.

79. — **S. 1565**. — *Inscr. at Sravana Belgōla*, No. 142, p. 112. Date of the death of Chārukīrti : —

'Sri-Sakavarusha 1565neya

Srīmach-Chāru-sukīrti-panḍita-yatiḥ **Sōbhānu-samvatsarē**

māsē Pushya-chaturdāśī-tithi-varē kṛishṇē supakshē mahān |

madhyāhnē vara-**Mūla**-bhē cha(?)karaṇē **Bhārggavyavārē** Dhri(dhru)vrē

yōgē svargga-purām jagāma matimān(māms=)traividya-chakrēśvarah ||

S. 1565 expired, which by the southern luni-solar system was **Subhānu** : Friday, 29th December (the day of the Uttarāyana-samkrānti), A. D. 1643; the 14th *tithi* of the dark half and the *karaṇa* 'Sakuni' ended 19 h. 54 m., and the *nakshatra* was **Mūla** up to 11 h. 10 m., and the *yōga* **Dhruva** up to 5 h. 16 m. after mean sunrise.

80. — **S. 1731**. — *Inscr. at Sravana Belgōla*, No. 72, p. 61. Date of the death of Adita-kīrtidēva : —

'Sālivāhana-śakābdāḥ 1731neya **Sukla-nāma-samvatsarada** Bhādrapada-ba 4 **Budhavāra**-dalli.

S. 1731 expired, which by the southern luni-solar system was **Sukla** : Wednesday, 27th September, N. S., A. D. 1809; the 4th *tithi* of the dark half ended 19 h. 36 m. after mean sunrise.

81. — **S. 1739**. — *Coorg Inscr.* No. 17, p. 25. Merkara copper-plate inscription of the Coorg Rāja Liṅga Rājendra Vaḍeyar : —

'Sālivāhana-śaka-varsha 1739ney **Īsvara-samvatsarada** Jēshṭha-bahula bidigeṅy **Bhānu-varakkē** Kali-dina 1796 392 ne . . .

S. 1739 expired, which by the southern luni-solar system was **Īsvara** : Sunday, 1st June, N. S., A. D. 1817, which was the day of the Kaliyuga 1796 392; the second *tithi* of the dark half ended 11 h. 12 m. after mean sunrise.

[The same inscription also has the date : **Vikrama-samvatsarada** Chaitra-śuddha dvādasiyū **Bhānuvārada** varige varusha 2 tingaḷu 9 dina 25 Kali-dina 1797 421ue, corresponding, for **S. 1742** expired = **Vikrama**, to Sunday, 26th March, N. S., A. D. 1820, which was the day of the Kaliyuga 1797 421.]

82. — **S. 1748**. — *Inscr. at Sravana Belgōla*, No. 98, p. 74. Date from the reign of Kṛishṇarāja Vaḍeyar of Maisūr : —

'Sālivāhana-śaka-varusha 1748neya sanda varttamānakke saluva **Vyaya-nāma-samvatsarada** Phālguna-ba 5 **Bhānuvārada**lu.

S. 1748 expired, which by the southern luni-solar system was **Vyaya** : Sunday, 18th March, N. S., A. D. 1827; the 5th *tithi* of the dark half ended 3 h. 12 m. after mean sunrise.

2. — Dates in Current Years.

(a). — Dates in Bright Fortnights.

83. — **S. 1032**. — *Jour. Bo. As. Soc.* Vol. XIII. p. 3. Tālaleñ copper-plate inscription of the Silāhāra Gaṇḍarādityadēva : —

Sakanripa-kāl-ātita-dvātrīnśad-uttara-sahasrē **Virōdhi-samvatsarē** Māgha-śuddha-daśamām **Maṅgalavārē**.

S. 1032 current, which by the southern luni-solar system was **Virōdhi** : Tuesday, 1st February, A. D. 1110; the 10th *tithi* of the bright half ended 11 h. 58 m. after mean sunrise.

[The same inscription contains the date : tat-samvatsar-ōparitana-**Vikṛita-samvatsara**-Vaiśākha-paurṇamāsyām **sōmagrahaṇa-parvani**, corresponding, for **S. 1033** current, which by the southern luni-solar system was **Vikṛita**, to the 5th May, A. D. 1110, when there was a lunar eclipse, visible in India, 21 h. 57 m. after mean sunrise.]

84. — **S. 1051**. — *Ante*, Vol. XII. p. 212, No. 57. An Iṅglēśvar inscription of the Western Chālukya Sōmēśvara III. : —

'Sakha(ka)-varusha 1051neya **Kilaka-samvatsarada** Kārttika-paurṇamāseyoḷ **sōmagrahaṇa-nimittam**.

S. 1051 current, which by the southern luni-solar system was **Kilaka** : A lunar eclipse, visible in India, 20 h. after mean sunrise of the 8th November, A. D. 1128.

85. — **S. 1065**. — *Ante*, Vol. XIX. p. 317. Miraj stone inscription of the Silāhāra Vijayādityadēva : —

(L. 19). — ['Saka]-varsha 1065neya **Duṁdubhi-samvatsarada** Bhādrapada-su(śu)dhaha-(ddha) 2(altēred to 6) **Sukravārada**-aṁdu.

S. 1065 current, which by the southern luni-solar system was **Duṁdubhi** : Friday, 23rd August, A. D. 1142; the 6th *tithi* of the bright half ended 12 h. 33 m. after mean sunrise.

86. — **S. 1065**. — From Dr. Fleet's impression. Kōlbāpur stone inscription of the Silāhāra Vijayādityadēva : —

(L. 16). — 'Saka-varshēshu pañchashashty-uttara-sahasra-pramitēshv-atitēshu pravarttamāna-Duṁdubhi-samvatsara-Māgha-māsa-paurṇamāsyām **Sōmavārē** **sōmagrahaṇa-parvva-nimittam**.

S. 1065 current, which by the southern luni-solar system was **Duṁdubhi** : A lunar eclipse, visible in India, 17 h. 23 m. after mean sunrise of Monday, 1st February, A. D. 1143.

87. — **S. 1068**. — *Inscr. at Sravana Belgōla*, No. 50, p. 33. Date of the death of Prabhāchandra-siddhāntadēva : —

Sa(śa)ka-varsham 1068neya **Krōdhan-samvatsarada** Āśvīja-su(śu)ddha-daśamī **Bṛihavārada**-aṁdu Dhanur-lāguṇada pūrvvāṅṇad [a].

S. 1068 current, which by the southern luni-solar system was **Krôdhana**: Thursday, 27th September, A. D. 1145; the 10th *tithi* of the bright half ended 16 h. 26 m. after mean sunrise.

88. — **S. 1073**. — From Dr. Fleet's impression. Bâmañi stone inscription of the Silâhâra Vijayâdityadêva: —

(L. 12). — 'Saka-varshêshu trisaptaty-uttara-sahasra-pramitêshv-atîtêshu amkatô=pi 1073 pravarttamâna-Pramôda-saivatsara-Bhâdrapada-pauruṇamâsi-Sukravârê sômagrahana-parvva-nimittam.

S. 1073 current, which by the southern luni-solar system was **Pramôda**: A lunar eclipse, visible in India, 20 h. 6 m. after mean sunrise of **Friday**, 6th September, A. D. 1150.

89. — **S. 1099**. — *Inscr. at Sravaṇa Belgôla*, No. 42, p. 14. Date of the death of Naya-kirtidêva: —

Sâkê randhra-nava-dyu-chandramasi Durmmukhy-âkhyâ-saivatsarê
Vaisâkhê dhavalê chaturdâsa-dinë vâre cha Sûryâtmañê |
pûrvvâhê praharê gatê 'rddha-sahitê . . .

S. 1099 current, which by the southern luni-solar system was **Durmmukha**: Saturday, 24th April, A. D. 1176; the 14th *tithi* of the bright half ended 15 h. after mean sunrise.

90. — **S. 1127**. — *Jour. Bo. As. Soc.* Vol. X. p. 236. Kalhoji Jain temple inscription of the Raṭṭa chiefs Kârtavîrya IV. and Mallikârjuna:—

'In the Saka year 1127, the **Raktâkshi** saivatsara, on **Saturday**, the second lunar day of the bright fortnight of the month Paushya, at the time of the sun's commencement of his progress to the north.'

In **S. 1127** current, which by the southern luni-solar system was **Raktâksha**, the second *tithi* of the bright half of Paushya ended 4 h. 32 m., and the **Uttarâyaṇa-saṅkrânti** took place 4 h. 59 m. after mean sunrise of **Saturday**, 25th December, A. D. 1204.

91. — **S. 1131**. — *Ante*, Vol. XIX. p. 247. Bhôj copper-plate inscription of the Raṭṭa chief Kârtavîrya IV.:—

(L. 97). — 'Sakanripa-kâlasya=alkatî(ri)ñsâd-uttara-âat-âdhika-sahasratamasya Vibhava-saivatsarasya Kârttika-mâsasya śukla-dvâdaśyâm Budhavâra-samanvitâyâm.

S. 1131 current, which by the southern luni-solar system was **Vibhava**: Wednesday, 22nd October, A. D. 1208; the 12th *tithi* of the bright half ended 12 h. 45 m. after mean sunrise.

92. — **S. 1197**. — *Pâli, Skr. and Old-Kan. Inscr.* No. 236; *Mysore Inscr.* No. 120, p. 219. Halêbbidî memorial tablet: —

'Saka 1197 (in figures, 1 8), the **Bhâva** saivatsara; **Wednesday**, the twelfth day of the bright fortnight of Bhâdrapada.'

S. 1197 current, which by the southern luni-solar system was **Bhâva**: Wednesday, 15th August, A. D. 1274; the 12th *tithi* of the bright half ended 20 h. 11 m. after mean sunrise.

93. — **S. 1199**. — From Dr. Fleet's impression. Sidnûrle inscription of the Dêvagiri-Yâdava Râmachandra:—

(L. 13). — 'Saka-varshêshu 1199 rañdhr-âmka-Rudra-pramitêshu gatêshu varttamâna-Dhâtrî-saivatsar-âm(â)ntargata-Srâvaṇa-pûrṇimâyâm Sôma-dinë yajñôpavita-parvâñi.

S. 1199 current, which by the southern luni-solar system was **Dhâtrî**: Monday, 27th July, A. D. 1276; the full-moon *tithi* ended 4 h. 58 m. after mean sunrise.

94. — **S. 1205**. — *Inscr. at Sravaṇa Belgôla*, No. 129, p. 97. Date of a private inscription:—

Sa(śa)ka-varshañ 1205neya Chitrabhânu-saivatsara Srâvaṇa-su 10 Brijdandu.

S. 1205 current, which by the southern luni-solar system was **Chitrabhânu**: Thursday, 16th July, A. D. 1282; the 10th *tithi* of the bright half ended 20 h. 16 m. after mean sunrise.

95. — **S. 1295**. — *Inscr. at Sravaṇa Belgôla*, No. 111, p. 86. Date of a private inscription:—
'Saka-varsha 1295 Paridhâvi-saivatsara-Vaisâkha-śuddha 3 Budhavâra.

S. 1295 current, which by the southern luni-solar system was **Paridhâvin**: Wednesday, 7th April, A. D. 1372; the third *tithi* of the bright half ended 11 h. 3 m. after mean sunrise.

96. — **S. 1355**. — *Inscr. at Sravaṇa Belgôla*, No. 108, p. 85. The tomb of the Jaina Śrutamuni was set up:—

Ishu-âra-âikhi-vidhu-mita-âka-Paridhâvi-ârad-dvittiyag-Âshâdhe |
sita-navami-Vidhudin-ôdayajushi sa-Visâkhê pratishhit-êyam-ihâ ||

In **S. 1355** current, which by the southern luni-solar system was **Paridhâvin**, **Âshâdha** was intercalary;¹³ and the 9th *tithi* of the bright half of the second **Âshâdha** ended 4 h. 11 m. after mean sunrise of **Monday**, 7th July, A. D. 1432, when the *nakshatra* was **Visâkhâ** up to 17 h. 4 m. after mean sunrise.

97. — **S. 1455**. — *Ante*, Vol. V. p. 19. Bâdâmi inscription of the time of Achyutarâya of Vijayanagara:—

(L. 4). — Svasti âri-jayâbhyudaya-Sâlivâhana-âka-varsha 1455neya Nandana-saivatsarâda Jê(jyê)shthâ-âu 5 Guruvâradalu.

S. 1455 current, which by the southern luni-solar system was **Nandana**: Thursday, 9th May, A. D. 1532; the 5th *tithi* of the bright half ended 20 h. 24 m. after mean sunrise.

(b). — Dates in Dark Fortnights.

[1.] — Pûrṇimânta Dates: None.

[2.] — Amânta Dates.

98. — **S. 948**. — *Ante*, Vol. XVII. p. 120 (and Vol. XVI. p. 43). Kalas-Budrâkh copper-plate inscription of the Yâdava Bhillama III.:—

(L. 14). — 'Sakanripa-kâl-âtita-saivatsara-âatêshu navasy=ashtâchatvârî[m*]sâd-adhik[ê*]-shv-amkatô=pi || 948 || Krôdhana-saivatsara-Kârttika-saṁjât-âdityagrahañê.

S. 948 current, which by the southern luni-solar system was **Krôdhana**: A solar eclipse, visible in India, 2 h. 36 m. after mean sunrise of the 23rd November, A. D. 1025.

99. — **S. 1042**. — *Inscr. at Sravaṇa Belgôla*, No. 49, p. 28. Date of the death of Dêmiyyaka:—

Sa(śa)ka-varsha 1042neya Vikâri-saivatsarâda Phâlguna-bahula 11 Brijhavârad-andu.

S. 1042 current, which by the southern luni-solar system was **Vikârin**: Thursday, 26th February, A. D. 1120; the 11th *tithi* of the dark half ended 21 h. 42 m. after mean sunrise.

100. — **S. 1104**. — *Ante*, Vol. XIV. p. 19. Date in an Old-Kanarese stone inscription at Têrdâl:—

(L. 59). — Sa(śa)ka-varshañ 1104neya Plava-saivatsarâda Âsvayuja-bahula 3 Âdivâradalu.

S. 1104 current, which by the southern luni-solar system was **Plava**: Sunday, 27th September, A. D. 1181; the third *tithi* of the dark half ended 16 h. 5 m. after mean sunrise.

¹³ See *ante*, Vol. XIX. p. 356, No. 157.

101. — S. 1110. — *Ante*, Vol. XII. p. 97. Toragal inscription of the *Mahāmaṇḍalēśvara* Barma :—

(L. 33). — Sa(sa)ka-varshaṁ 1110neya Plavaṅga-saṁvatsarada Puśya(shya)-bahula 10 Vaddavāravuttarāyana-saṅkramaṇa-vyatīpātadalu.

In S. 1110 current, which by the southern luni-solar system was Plavaṅga, the Uttarāyana-saṅkrānti took place 19 h. 25 m. after mean sunrise of Friday, 25th December, A. D. 1187, during the 10th *tithi* of the dark half, which ended 15 h. 5 m. after mean sunrise of Saturday, 26th December, A. D. 1187.

102. — S. 1136. — *Jour. Bo. As. Soc.* Vol. XII. p. 7; *ante*, Vol. XIX. p. 440. Khēdrāpur stone inscription of the Dēvagiri-Yādava Siṅghaṇa II. :—

(L. 8). — Sri-Saka-varshē 1136 Sṛimukha-saṁvatsarē Chaitrē sūrya-parba(rva)ṇi Sōma-dinē.

S. 1136 current, which by the southern luni-solar system was Sṛimukha: A solar eclipse, visible in India, 10 h. 52 m. after mean sunrise of Monday, 22nd April, A. D. 1213. [The same date in a Haḷēbīḍ inscription of the Hoysaḷa Viraballāḷa, *Pāli, Skr. and Old-Kan. Inscr.* No. 234.]

103. — S. 1151. — *Arch. Survey of West. India*, Vol. III. p. 113; *Jour. Bo. As. Soc.* Vol. X. p. 232. Date in an Old-Kanarese stone inscription of the Raṭṭa chief Lakabmdēva at Saundatti :—

(L. 64). — Saka-varshaṁ 1151neya Sarvvadhāri-saṁvatsarada Āshāḍhad=ama(mā)vāse Sōmavārad=sāndina sarvvagrāsī-sūryyagrahaṇad=uttama-tithiyol.

S. 1151 current, which by the southern luni-solar system was Sarvvadhāri: A total solar eclipse, visible in India, 6 h. 3 m. after mean sunrise of Monday, 3rd July, A. D. 1228.

104. — S. 1172. — *Ante*, Vol. XXI. p. 201. Kāñchīpura Ēkāmranātha stone inscription of Gaṇapati :—

(L. 13). — Sākābdē tu dvisaptaty-adhika-Siva-śata-khyāta-saṅkhyāna-mānē
Saumya-ābdē Srēshṭha-māsē bahula-Hari-dinē Bhaumavārē samē=hnī |

S. 1172 current, which by the southern luni-solar system was Saumya: Tuesday, 8th June, A. D. 1249; the 11th (Hari) *tithi* of the dark half ended 13 h. 23 m. after mean sunrise.

105. — S. 1175. — *Mysore Inscr.* No. 171, p. 322, Bangalore Museum copper-plate inscription of the Hoysaḷa Sōmēśvara :—

'The Saka year 1175, the year Paridhāvin, the month Phālguna, new-moon day, during an eclipse of the sun.'

S. 1175 current, which by the southern luni-solar system was Paridhāvin: A solar eclipse, visible in India, 10 h. 30 m. after mean sunrise of the 1st March, A. D. 1253.

3. — Dates in Expired or Current Years.¹⁴

[1.] — A Pūrṇimānta Date.

106. — S. 534. — *Ante*, Vol. VI. p. 73; Vol. XVI. p. 109; Vol. XVII. p. 141; and Vol. XX. p. 3. Haidarābād copper-plate inscription of the Western Chalukya Pulikēśin II. :—

(L. 11). — ātmanah pravarddhamāna-rājyābhishēka-saṁvatsarē tritīyē Sakanripati-saṁvatsara-śatēshu chatustrimś-ādhikēshu pañohasv=atitēshu Bhādrapad-āmāvāsyāyām sūryyagrahaṇa-nimittān.

¹⁴ The question as to which of the possible equivalents of the original date should be regarded to be its true equivalent will be considered below.

S. 534 current: A partial solar eclipse, not visible in India, 21 h. 17 m. after mean sunrise of the 13th August, A. D. 611, which was the 15th of the dark half of the *pūrṇimānta* Bhādrapada.

S. 534 expired: A total solar eclipse, not visible in India, 14 h. 15 m. after mean sunrise of the 2nd August, A. D. 612, which also was the 15th of the dark half of the *pūrṇimānta* Bhādrapada.

[2.] — Amānta Dates.

107. — S. 716. — From Dr. Fleet's impression. Paiṭhan copper-plate inscription of the Rāshṭrakūṭa Gōvinda III. :—

(L. 60). — Sakanripa-kāl-ātita-saṁvatsara-sa(sa)tēshu saptamu(su) jē(śhē)ḍaś-ōttarēshu Vaiśākha-va(ba)hul-āmāvāsyām-ādityagrahaṇa-parvvaṇi.

S. 716 current: A circular solar eclipse, not visible in India, 17 h. 16 m. after mean sunrise of the 14th May, A. D. 793, which was the 15th of the dark half of the *amānta* Vaiśākha.

S. 716 expired: A total solar eclipse, visible in India, 3 h. 48 m. after mean sunrise of the 4th May, A. D. 794, which also was the 15th of the dark half of the *amānta* Vaiśākha.

108. — S. 730. — *Ante*, Vol. VI. p. 68, and Vol. XVI. p. 74. Rādhānpur copper-plate inscription of the Rāshṭrakūṭa Gōvinda III. :—

(L. 53). — Sakanripa-kāl-ātita-saṁvatsara-śatēshu saptasu trimśad-uttarēshu Sarvajin-nāmi saṁvatsarē Srāvāṇa-bahula-a(l-ā)māvāsyām sūryagrahaṇa-parvvaṇi.

S. 730 current: A total solar eclipse, not visible in India, 10 h. 35 m. after mean sunrise of the 7th August, A. D. 807, which was the 15th of the dark half of the *amānta* Srāvāṇa.

S. 730 expired: A total solar eclipse, visible in India, 1 h. 17 m. after mean sunrise of the 27th July, A. D. 808, which also was the 15th of the dark half of the *amānta* Srāvāṇa.

By the southern luni-solar system Sarvajit was S. 730 current; and by the mean-sign system Sarvajit lasted from the 31st May, A. D. 807, to the 26th May, A. D. 808, and accordingly was current on the 7th August, A. D. 807, and at the commencement of S. 730 expired, but not on the 27th July, A. D. 808.

109. — S. 769. — *Ante*, Vol. XII. p. 185, and Vol. XVIII. p. 56. Bagumrā copper-plate inscription of the Rāshṭrakūṭa Mahāsāmantādhi pati Dhārāvārsha Dhruvarāja III, of Gujarāt :—

(L. 64). — Sakanripa-kāl-ātita-saṁvatsara-śatēshu saptasv-ēka(kō)nauavaty-adhikēshv-aṅkatak saṁvat 789 Jyēshṭh-āmāvāsyāyām ādityagrahaṇa-parvvaṇi.

S. 769 current: A total solar eclipse, visible in India, 9 h. 5 m. after mean sunrise of the 16th June, A. D. 866, which was the 15th of the dark half of the *amānta* Jyāishṭha.

S. 769 expired: A total solar eclipse, visible in India, 1 h. 56 m. after mean sunrise of the 6th June, A. D. 867, which also was the 15th of the dark half of the *amānta* Jyāishṭha.

B. — DATES IN SOLAR MONTHS.

All in Expired Years.

110. — S. 944. — *Ante*, Vol. XIV. p. 53, and Vol. XIX. p. 129. Korumelli copper-plate inscription of the Eastern Chalukya Rājārāja II.; date of his accession :—

(L. 65). — Yō rakshitun vasumatim Saka-vatsarēshu
vēd-āmburāśi-nidhi-varttishu Simhagē=rkkō [1*]
kṛishṇa-dvitiya-divavas¹⁵.-ōttarabhadrikāyām
vārē Gurōr=vvaṇiji lagna-varē=bhishikṭah ||

¹⁵ Read *.divas..*

In S. 944 expired the *Simha-samkranti* took place (and the solar Bhādrapada commenced) 20 h. 46 m. after mean sunrise of the 26th July, A. D. 1022; and the day of the date is **Thursday**, 16th August, A. D. 1022, when the second *tithi* of the dark half (of the *amānta* Bhādrapada) ended 10 h. 55 m., and the *nakshatra* was *Uttara-bhādrapadā* up to 16 h. 25 m. after mean sunrise.

111. — S. 999. — *Ante*, Vol. XVIII. p. 163. Vizagapatam copper-plate inscription of Anantavarman Chōḍagaṅgādēva; date of his accession: —

(L. 30). — Śāk-āvdē(bdē) Nanda-randhra-grahagaṇa-gaṇitē Kumbha-samsthē dinēś
śuklē pakshē tri(tri)tiyā-yujī Ravija-dinē Rēvati-bhē nriyngmē
lagmē(gnē) . . .

In S. 999 expired the *Kumbha-samkranti* took place (and the solar Phālguna commenced) 19 h. 12 m. after mean sunrise of the 22nd January, A. D. 1078; and the day of the date is **Saturday**, 17th February, A. D. 1078, when the third *tithi* of the bright half (of the lunar Phālguna) ended 21 h. 23 m., and the *nakshatra* was *Rēvati* up to 19 h. 3 m. after mean sunrise.

112. — S. 1003. — *Ante*, Vol. XVIII. p. 164. Vizagapatam copper-plate inscription of Anantavarman Chōḍagaṅgādēva: —

(L. 40). — Haranayana-viyad-gagana-chandra-gaṇitē Śāk-āvdē(bdē) Mēshamaśa-kṛishṇ-śaṣṭhamyām-Ādityavārē.

In S. 1003 expired the *Mēsha-samkranti* took place (and the solar Vaiśākha commenced) 17 h. 20 m. after mean sunrise of the 23rd March, A. D. 1081; and the day of the date is **Sunday**, 4th April, A. D. 1081, when the 8th *tithi* of the dark half (of the *amānta* Chaitra) ended 12 h. 37 m. after mean sunrise.

113. — S. 1347. — Hultzsch, *South-Ind. Inscr.* Vol. I. p. 84. Inscription inside the front Gōpura of the Viriñchipuram temple: —

'On the day of (*the nakshatra*) *Anusham* (*i. e.* *Anurādhā*), which corresponds to **Wednesday**, the sixth lunar day, the 3rd (*solar day*) of the month of *Paṅguni* (*i. e.* *Phalguni*) of the *Viśvāvasu* year, which was current after the Saka year 1347 (*had passed*).'

In S. 1347 expired, which by the southern luni-solar system was *Viśvāvasu*, the month *Paṅguni* (*i. e.* the solar Chaitra) commenced 15 h. 42 m. after mean sunrise of the 24th February, A. D. 1426; and the day of the date is **Wednesday**, 27th February, A. D. 1426, when the 6th *tithi* of the dark half (of the *amānta* Phālguna) ended 20 h. 30 m., and the *nakshatra* was *Anurādhā* for about 23 h. after mean sunrise.

114. — S. 1371. — Hultzsch, *South-Ind. Inscr.* Vol. I. p. 111. Inscription on the east wall of the Sōmanāthēśvara temple at Paḍavēḍu: —

'On the day of (*the nakshatra*) *Uttirāḍam* (*i. e.* *Uttarāśāḍhā*), which corresponds to the *yōga* *Āyushmat* and to **Saturday**, the thirteenth lunar day of the former half of the month of *Simha* of the *Sukla* year, which was current after the Saka year 1371 (*had passed*).'

In S. 1371 expired, which by the southern luni-solar system was *Sukla*, the *Simha-samkranti* took place (and the solar Bhādrapada commenced) 8 h. 30 m. after mean sunrise of the 30th July, A. D. 1449; and the day of the date is **Saturday**, 2nd August, A. D. 1449, when the 13th *tithi* of the bright half (of the lunar *Śrāvāṇa*) ended 8 h. 43 m., and when the *nakshatra* was *Uttarāśāḍhā* for 10 h. 30 m., and the *yōga* *Āyushmat* for 4 h. 54 m. after mean sunrise.

115. — S. 1471. — Hultzsch, *South-Ind. Inscr.* Vol. I. p. 85. Inscription on a stone, built into the floor of the court-yard of the Viriñchipuram temple: —

'On **Thursday**, the day of (*the nakshatra*) *Punarvasu*, which corresponds to the seventh lunar day of the former half of the month of *Mēsha* of the *Saumya* year, which was current after the Sālivāha-Saka year 1471 (*had passed*).'

In S. 1471 expired, which by the southern luni-solar system was *Saumya*, the *Mēsha-samkranti* took place (and the solar Vaiśākha commenced) 19 h. 41 m. after mean sunrise of the 27th March, A. D. 1549; and the day of the date is **Thursday**, 4th April, A. D. 1549, when the 7th *tithi* of the bright half (of the lunar Vaiśākha) ended 14 h. 44 m., and the *nakshatra* was *Punarvasu* up to 17 h. 44 m. after mean sunrise.

116. — S. 1488. — Hultzsch, *South-Ind. Inscr.* Vol. I. p. 70. Inscription on a stone at Arappakkam: —

'On **Wednesday**, the twelfth lunar day of the latter half of the month of *Kumbha* of the *Akshaya samvatsara*, which was current after the Saka year 1488 (*had passed*).'

In S. 1488 expired, which by the southern luni-solar system was *Akshaya* (or *Kshaya*), the *Kumbha-samkranti* took place (and the solar Phālguna commenced) 7 h. 58 m. after mean sunrise of the 27th January, A. D. 1567; and the day of the date is **Wednesday**, 5th February, A. D. 1567, when the 12th *tithi* of the dark half (of the *amānta* Māgha) ended 20 h. 54 m. after mean sunrise.

117. — S. 1589. — *Arch. Survey of South. India*, Vol. IV. p. 77. Rāmēśvaram copper-plate inscription: —

'In the year *Plavaṅga*, current after 1589 of the Sālivāhana-Saka had elapsed, . . . on **Thursday**, the third lunar day of the light fortnight of the month of *Vaiyāṭi*, and in the asterism of *Pūsa* (*Pushya*), *Kaṇḍa yōga* and *Karāṣvā* (P) *karāṇa*.'

In S. 1589 expired, which by the southern luni-solar system was *Plavaṅga*, the month *Vaiyāṭi* (*i. e.* the solar *Jyaisṭha*) commenced 6 h. 42 m. after mean sunrise of the 29th April, A. D. 1667; and the day of the date is **Thursday**, 16th May, A. D. 1667, when the third *tithi* of the bright half (of the lunar *Jyaisṭha*) and the *karāṇa* *Gara* ended 1 h. 51 m., and when the *nakshatra* was *Pushya*¹⁶ after 21 h. 40 m., and the *yōga* *Gaṇḍa* up to 9 h. 10 m. after mean sunrise.

118. — S. 1636. — *Arch. Survey of South. India*, Vol. IV. p. 85. A Sētupati copper-plate inscription in the Rāmēśvaram temple: —

'In the year *Jaya*, current after 1636 of the Sālivāhana-Saka had elapsed, on . . . **Monday** the tenth lunar day, and the first day of the month of *Sittirai*, in the asterism of *Śrāvāṇa* and in the *Subha yōga* and the *Subha karāṇa*.'

In S. 1636 expired, which by the southern luni-solar system was *Jaya*, the month *Sittirai* (*i. e.* the solar Vaiśākha) commenced on **Monday**, 29th March, A. D. 1714, by the *Sūrya-siddhānta* 12 h. 21 m., and by the *Ārya-siddhānta* 9 h. 35 m. after mean sunrise. By the *Ārya-siddhānta*, therefore, this **Monday** was the first day of *Sittirai*; and on the same day the 10th *tithi* of the dark half (of the *amānta* Chaitra) ended 21 h., and the *nakshatra* was *Śrāvāṇa* up to 9 h. 12 m., and the *yōga* *Subha* from 9 h. 12 m. after mean sunrise.¹⁷

119. — S. 1637. — *Arch. Survey of South. India*, Vol. IV. p. 88. Another Sētupati copper-plate inscription in the Rāmēśvaram temple: —

'In the year *Manmatha*, current after the 1637th year of the Sālivāhana-Saka era had elapsed, on . . . **Monday** the third lunar day, and the 2nd day of the month of *Māsi*, and in the asterism of *Uttiram*' (*i. e.* *Uttara-phalguni*).

In S. 1637 expired, which by the southern luni-solar system was *Manmatha*, the month *Māsi* (*i. e.* the solar Phālguna) commenced 21 h. 17 m. after mean sunrise of **Saturday**, 28th January, A. D. 1716. The second day of *Māsi*, therefore, was **Monday**, 30th January, A. D. 1716; and on this day the third *tithi* of the dark half (of the *amānta* Māgha) ended 13th. 45 m., and the *nakshatra* was *Uttara-phalguni* up to 16 h. 25 m. after mean sunrise.

¹⁶ The *nakshatra* preceding *Pushya* is *Punarvasu*.

¹⁷ There is no *karāṇa* named *Subha*.

120. — S. 1655. — *Arch. Survey of South. India*, Vol. IV. p. 91. Another Sêṭupati copper-plate inscription : —

'At the auspicious time of the lunar eclipse that occurred on the 10th lunar¹⁹ day of the month of Kārttikai of the year Pīramātishba which is current after 1655 of the Śālivāhana-Saka had elapsed, on Saturday, when the time of full moon, the asterism of Rōhiṇī . . . are in conjunction.'

In S. 1655 expired, which by the southern luni-solar system was Pramādin, the month Kārttigai (i. e. the solar Mārgaśīra) commenced 5 h. 38 m. after mean sunrise of the first November, A. D. 1733. The 10th day of Kārttigai, therefore, was Saturday, 10th November, A. D. 1733; and on this day (the full-moon day of the lunar Kārttika) there was a lunar eclipse, visible in India, at 11 h. 42 m., and the nakshatra was Rōhiṇī from about 13 h. 47 m. after mean sunrise.

121. — S. 1658. — *Arch. Survey of South. India*, Vol. IV. p. 97. Another Sêṭupati copper-plate inscription : —

'On . . . the Tai new-moon day of the dark fortnight of the month of Pushya, . . . of the year Nala current after 1658 of the Śālivāhana era, in the Śravaṇa asterism, in the good yōga named Birummiyāyōga (P) and in the good karaṇa of Karulakarāṇa (P).'

In S. 1658 expired, which by the southern luni-solar system was Nala, the month Tai (i. e. the solar Māgha) commenced 20 h. 47 m. after mean sunrise of the 29th December, A. D. 1736; and the day of the date is the 19th January, A. D. 1737, when the new-moon tithi of the amānta Pausa and the karaṇa Chatuspada ended 18 h. 38 m., and when the nakshatra was Śravaṇa up to 22 h. 20 m., and the yōga Siddhi²⁰ up to 3 h. 17 m. after mean sunrise.

122. — S. 1705. — *Arch. Survey of South. India*, Vol. IV. p. 105. Another Sêṭupati copper-plate inscription : —

'In the year . . . Sōbhakṛit, current after 1705 of the Śālivāhana-Saka and 4884 of the Kali era had elapsed, . . . on Friday, the thirteenth lunar day of the light half of the month of Mithuna, in the asterism of Anusha (i. e. Anurādhā), in the auspicious yōga named Siddhi and in the auspicious Taittūla karaṇa.'

In S. 1705 = Kali 4884 expired, which by the southern luni-solar system was Sōbhakṛit (Sōbhana), the Mithuna-saṅkrānti took place (and the solar Āshāḍha commenced) 16 h. 45 m. after mean sunrise of the 11th June, N. S., A. D. 1783; and the day of the date is Friday, 13th June, A. D. 1783, when the 13th tithi of the bright half (of the lunar Jyāishṭha) and the karaṇa Taitilla ended 4 h. 36 m., and when the nakshatra was Anurādhā up to 22 h. 20 m., and the yōga Siddha (not Siddhi) up to 6 h. 43 m. after mean sunrise.

(To be continued.)

¹⁸ This word is wrong and should have been omitted.

¹⁹ The yōga Siddhi is followed by Vyetipāsta.

ON THE DATES OF THE SAKA ERA IN INSCRIPTIONS.

BY PROFESSOR F. KIELHORN, C. I. E.; GÖTTINGEN.

(Continued from Vol. XXIII. page 134.)

II. — IRREGULAR DATES.¹

1. — Dates with Current Tithis.

(a). — Dates with Uttarayāṇa-saṅkrāntis.²

123. — S. 1104. — *Inscr. at Śravaṇa Beḷgoḷa*, No. 124, p. 94. Date of a grant of the Hoysala Viraballāḷa : —

'Saka-varshada sāyirada nāra nākeneya Plava-saṁvatsarada Pausya-bahula-tadige Su(su)kravared uttarayāṇa-saṅkrāntiy-enda.

In S. 1104 current, which by the southern luni-solar system was Plava, the Uttarayāṇa-saṅkrānti took place 6 h. 9 m. after mean sunrise of Friday, 25th December, A. D. 1181, during the third tithi of the dark half, which commenced 0 h. 30 m. after mean sunrise of the same day, and ended 2 h. 8 m. after mean sunrise of the following day.

124. — S. 1182. — *Jour. Roy. As. Soc.*, O. S., Vol. V. p. 177; *Jour. Bo. As. Soc.* Vol. IV. p. 105. Terwan copper-plate inscription of Kāmvadēvarāya of Kalyāṇa : —

Śri-Saku 1182 varshē Baudra-saṁvatsarē | Pushya-vadisaptami(mi) Sa(sa)ni-dinē | . . . uttarayāṇa-saṅkrānti-parvani . . .

In S. 1182 expired, which by the southern luni-solar system was Baudra, the Uttarayāṇa-saṅkrānti took place 16 h. 45 m. after mean sunrise of Saturday, 25th December, A. D. 1260, during the 7th tithi of the dark half, which commenced on the same day, 13 h. 19 m., and ended on the following day, 12 h. 28 m. after mean sunrise.

125. — S. 1448. — *As. Res.* Vol. III. p. 49. Kāñchīpura copper-plate inscription of Kṛishnarāya of Vijayanagara : —

'One thousand four hundred and forty-eight years of the Sacābda . . . being elapsed; . . . in the year Vyaya, in the month of Pushya, when the sun was entering Mecara, in the dark fortnight, on the day of Bhṛigu, and on that venerable tithi, the tenth of the moon; . . . under the constellation of Viśakha.'

¹ Of these dates the following have been already examined by Dr. Fleet : Nos. 127, 128, 150, 155, 157, 160, 165-168, 170, 172, 178-180, 184, 186, 193 and 194. Other irregular dates will be marked as such in my chronological list, below.

² Compare also Nos. 143 and 151, below.

In S. 1448 expired, which by the southern luni-solar system was Vyaya, the Makara-samkrānti took place 12 h. 39 m. after mean sunrise of Friday, 28th December, A. D. 1526, during the 10th tithi of the dark half, which commenced 2 h. 29 m. after mean sunrise of the same day; on the same day the moon entered Visakha 7 h. 53 m. after mean sunrise.

(b). — A date with a Krishna-jayanti.

126. — S. 1452. — *Ante*, Vol. IV. p. 329, and Vol. XII. p. 214, No. 95. Harihar inscription of Achyutarāya of Vijayanagara : —

(L. 3). — 'Sri-jayabhūdaya-Sālivāhana-śaka-varsha 1452 Vikru(kṛ)ti-samvatsarada Srāvaṇa-bahula Śyu(ya) Sōmavāra Jayanti-puṇyakāledalli Sri-Kru(kṛ)jāhṇavātarasamaysdalli.

In S. 1452 expired, which by the southern luni-solar system was Vikṛita, the 8th tithi of the dark half of the amānta Srāvaṇa commenced 12 h. 45 m. after mean sunrise of Monday, 15th August, A. D. 1530, and ended 10 h. 12 m. after mean sunrise of the following day.

(c). — Other dates with current Tithis.

127. — S. 856. — *Ante*, Vol. X. p. 104, and Vol. XVIII. p. 316. Mahākūṭa pillar inscription of the Mahāsāmānta Bappuvarasa : —

(L. 6). — 'Sakanripa-kā-āṭṭa-sa[m]vatsara-śatamga=ṇṇu na(nū)ra ayivatta āraṇeya Jaya-sa[m]vatsarada Kārttika(rtti)ka-su(śu)ddha-pāñchamiyūṃ Budhavārad-andu[m].

In S. 856 expired, which by the southern luni-solar system was Jaya, the 5th tithi of the bright half of Kārttika commenced 2 h. 42 m. after mean sunrise of Wednesday, 15th October, A. D. 934, and ended 0 h. 30 m. after mean sunrise of the following day. [By the mean-sign system Jaya had ended on the 6th December, A. D. 933, in 'S. 856 current; and Kārttika-śudi 5 of S. 856 current was Saturday, 26th October, A. D. 933.]

128. — S. 1001. — Hultzsch, *South Ind. Inscr.* Vol. I. p. 55; *ante*, Vol. XIX. p. 431. Date of the appointment of Vira-Chōḍadēva as viceroy of Vēṅgi :—

(L. 76). — 'Sāk-ābdē śāsi-khadvay-ēndu-gaṇitē Siṃh-ādhirājē(dhē) ravau chaṃdrē vṛiddhimati trayōdasa-tithau vāre Gurōr=Vṛjīchikē lagnē=tha Srāvaṇē.

In S. 1001 current the Siṃha-samkrānti took place (and the solar Bhādrapada commenced) 8 h. 32 m. after mean sunrise of the 27th July, A. D. 1078; and the day of the date is Thursday, 23rd August, A. D. 1078, when the 13th tithi of the bright half (of the lunar Bhādrapada) commenced 0 h. 30 m. and ended 23 h. 51 m.,* and when the nakshatra was Srāvaṇa up to 7 h. 13 m. after mean sunrise.

129. — S. 1084. — *Ante*, Vol. XI. p. 12. Anāṃkoṇḍ inscription of Rudradēva of the Kākatya or Kākatya dynasty :—

(L. 6). — 'Saka-varshamulu 1084 vaneṇṇi Chitrabhānu-samvatsara Māgha-śu 13 Vaḍḍavāramunāṃḍu.

In S. 1084 expired, which by the southern luni-solar system was Chitrabhānu, the 13th tithi of the bright half of Māgha commenced 2 h. 29 m. after mean sunrise of Saturday, 19th January, A. D. 1163, and ended 3 h. 58 m. after mean sunrise of the following day.

130. — S. 1160. — *Pāli, Skr. and Old-Kan. Inscr.* No. 112. Tiṅṅwalli inscription of the Dēvagiri-Yādava Siṅghana II. :—

'Saka 1160 (in figures, l. 77), the Hēmalambī samvatsara; Thursday, the third day of the bright fortnight of Phālguna.'

* By Mr. Sh. B. Dikshit's exact calculations, according to the present Sūrya-siddhānta, the tithi commenced 1 h. 164 m. after sunrise of the Thursday, and ended 344 m. after sunrise of the following day.

In S. 1160 current, which by the southern luni-solar system was Hēmalamba, the third tithi of the bright half of Phālguna commenced 5 h. 12 m. after mean sunrise of Thursday, 18th February, A. D. 1238, and ended 3 h. after mean sunrise of the following day.

131. — S. 1169. — *Ante*, Vol. XII. p. 101. Date of an Old-Kanarese inscription at Kaḍakoḷ :—

(L. 1). — 'Sri-Sa(śa)kavarusa(rsha) 1189 Prabhava-samvatsarada Māgha-su(śu)dha(ddha) 5 Su(śu)kravāradalu.

In S. 1189 expired, which by the southern luni-solar system was Prabhava, the 5th tithi of the bright half of Māgha commenced 2 h. 42 m. after mean sunrise of Friday, 20th January, A. D. 1268, and ended 4 h. 41 m. after mean sunrise of the following day.

132. — S. 1192. — *Mysore Inscr.* No. 172, p. 325. Sōmnāthpur inscription of the Hoysala Narasiṃha III. :—

'The Saka year 1192, the year Sukla, the month Āshāḍha, the 12th day of the moon's increase, Wednesday.'

In S. 1192 current, which by the southern luni-solar system was Sukla, the 12th tithi of the bright half of Āshāḍha commenced 2 h. 25 m. after mean sunrise of Wednesday, 12th June, A. D. 1269, and ended about sunrise of the following day.

133. — S. 1201. — *Ante*, Vol. XII. p. 101. Date of an Old-Kanarese inscription at Kaḍakoḷ :—

(L. 1). — 'Srimatu-Sa(śa)kavarusa(rsha) 1201 Pramāthi-samvatsarada Bhādrapada-su(śu)ddha-chhat[?]i Sōmavārad-aṃḍu.

In S. 1201 expired, which by the southern luni-solar system was Pramāthi, the 6th tithi of the bright half of Bhādrapada commenced 4 h. 19 m. after mean sunrise of Monday, 14th August, A. D. 1279, and ended 3 h. 20 m. after mean sunrise of the following day.

134. — S. 1277. — *Ante*, Vol. XII. p. 212, No. 64. *Mysore Inscr.* No. 1, p. 3. Chitaldurg inscription of Bukkarāya-Voḍeya of Hosapaṭṭana (and afterwards of Vijayanagara) :—

Sa(śa)ka-varusha 1277 Manumatha-samvachchha(tsa)rada Jē(jyai)shṭa(shṭha)-śudhdha-(ddha) 7 Sō (i. e. Sōmavāra).

In S. 1277 expired, which by the southern luni-solar system was Manmatha, the 7th tithi of the bright half of Jyaiśṭha commenced 3 h. 58 m. after mean sunrise of Monday, 18th May, A. D. 1355, and ended 1 h. 17 m. after mean sunrise of the following day.

135. — S. 1296. — Hultzsch, *South Ind. Inscr.* Vol. I. p. 104. Inscription on the south wall of a Maḍḍapa at the base of the Tirumalai rock :—

'On the day of (the nakshatra) Uttiraṭṭadi (i. e. Uttara-bhādrapada), which corresponds to Monday, the eighth lunar day of the former half of the month of Dhanus of the Ānanda year, which was current after the 'Saka year 1296 (had passed).'

In S. 1296 expired, which by the southern luni-solar system was Ānanda, the Dhanuṣ-samkrānti took place (and the solar Pausha commenced) 20 h. 21 m. after mean sunrise of the 27th November, A. D. 1374; and the day of the date is Monday, 11th December, A. D. 1374 when the 8th tithi of the bright half (of the lunar Pausha) commenced 3 h. 41 m., and when the moon entered Uttara-bhādrapada 3 h. 17 m. after mean sunrise.

136. — S. 1560. — *Pāli, Skr. and Old-Kan. Inscr.* No. 237; *Mysore Inscr.* No. 119, p. 218. Date in a stone inscription at Halēbīḍ :—

'Sālivāhana-Saka 1560 (in figures, l. 9), the Śivara samvatsara; Thursday, the fifth day of the bright fortnight of Phālguna.'

In S. 1560 current, which by the southern luni-solar system was *Īṣvara*, the 5th *tithi* of the bright half of *Phālguna* commenced 3 h. 12 m. after mean sunrise of Thursday, 5th February, A. D. 1638, and ended 3 h. after mean sunrise of the following day.

137. — S. 1619. — *Pāli, Skr. and Old-Kan. Inscr.* Nos. 35 and 229; *Mysore Inscr.* No. 114, p. 211. *Dēvanhalli* copper-plate and stone inscriptions of *Gūpāla Gauḍa*, 'lord of the *Āvati nāq.*'

'*Sālivāhana-Saka* 1619, the *Īṣvara saṁvatsara*; Saturday, the fifteenth day of the bright fortnight of *Māgha*.'

In S. 1619 expired, which by the southern luni-solar system was *Īṣvara*, the full-moon *tithi* of *Māgha* commenced 6 h. 52 m. after mean sunrise of Saturday, 15th January, A. D. 1698, and ended 5 h. 57 m. after mean sunrise of the following day.

138. — S. 1714. — *Arch. Survey of South. India*, Vol. IV. p. 42. Date of a stone inscription at *Tirupperaikunṭam* :—

'On . . . Wednesday, the fourth *tithi*⁴ of the month of *Paṅgupī* in the year *Paritāpī*, which was current after the 1714th elapsed year of the *Sālivāhana Saka*, and on the second day⁵ of the light fortnight in which the asterism of *Rēvati*, the *yōga* named *Sōla*,⁶ and the *karāṇa* *Pālava-karāṇa* were in conjunction.'

In S. 1714 expired, which by the southern luni-solar system was *Paridhāvin*, the month *Paṅgupī* (i. e. the solar *Chaitra*) commenced, by the *Sūrya-siddhānta*, 14 h. 49 m., and by the *Ārya-siddhānta*, 11 h. 54 m. after mean sunrise of the 10th March, A. D. 1793; accordingly, by the *Ārya-siddhānta*, the fourth day of the solar month was Wednesday, 13th March, N. S., A. D. 1793. On this day the second *tithi* of the bright half (of the lunar *Chaitra*) of the luni-solar *Saka* year 1715 expired and the *karāṇa* *Bālava* commenced 3 h. 20 m., the *nakshatra* was *Rēvati* from 8 h. 32 m., and the *yōga* *Śukla* up to 9 h. 47 m. after mean sunrise.

2. — Dates with Wrong Saka Years, but Correct Jovian Years.⁷

139. — S. 775. — *Ants*, Vol. XIII. p. 134. *Kaṇheri* inscription of the *Rāshtrakūṭa Amōghavarsha I.* :—

(L. 1). — *Sakanṛipa-kāl-ātita-saṁvatsara-śatēshu saptasu pañcha-saptatishv-saṁkatakā* [api saṁva]tsaraśaḥ 775 tad-antarggata-Prājāpati-sasva(mva)tsar-āntahpāti-Āsvina-vahula-dvitiyā-yām Budha]dinā.

By the southern luni-solar system *Prājāpati* was S. 773 (not 775) expired, and by the mean-sign system *Prājāpati* lasted from the 26th November, A. D. 850, to the 22nd November A. D. 851; and during this time (by both systems in S. 773 expired) the second *tithi* of the dark half of the *amānta* *Āsvina* ended 10 h. 29 m. after mean sunrise of Wednesday, 16th September, A. D. 851.

140. — S. 1068. — *Ante*, Vol. XII. p. 126. *Anjanēri* inscription of the *Yādav. Mahāsāmanta Sēṇpadēva* :—

(L. 1). — *Saka-saṁvat* 1068 *Dumḍubhi-saṁvatsar-āntarggata-Jyēshṭha-sudi pañcha-daśyām Sōmē Anurādha-nakshatrē Siddha-yōgē asyām saṁvatsara-māsa-paksha-divasa-apūrvvāyām tithau.*

In the year *Dumḍubhi*, which by the southern luni-solar system was S. 1064 (not 1068) expired, the 15th *tithi* of the bright half of *Jyēshṭha* ended 13 h. 32 m. after mean sunrise of Monday, 11th May, A. D. 1142; and on this day the *nakshatra* was *Anurādha* up to 13 h. 47 m., and the *yōga* *Siddha* from 2 h. 38 m. after mean sunrise.

⁴ This should be 'day.'

⁵ This should be '*tithi*.'

⁶ This should be '*Śukla*.'

⁷ Compare also Nos. 149, 162, 183, 187 and 196, below.

141. — S. 1128. — *Ep. Ind.* Vol. I. p. 343. *Pitṭnā* inscription of the *Dēvagiri-Yādava* *Singhaga II.* :—

(L. 21). — '*Sri-Sakē* 1128 *Prabhava-saṁvatsarē Śrāvāṇa-misē paurnnamāsyaṁ ohaṁdra-grahaṇa-samyē.*

In the year *Prabhava*, which by the southern luni-solar system was S. 1129 (not 1128) expired, the full-moon *tithi* of *Śrāvāṇa* ended 11 h. 30 m. after mean sunrise of the 9th August, A. D. 1207, when there was a lunar eclipse, visible in India.

142. — S. 1444. — *Pāli, Skr. and Old-Kan. Inscr.* No. 27; *Mysore Inscr.* No. 135, p. 245. *Simoggā* copper-plate inscription of *Krishnarāya* of *Vijayanagara* :—

'*Sālivāhana-Saka* 1444 (in words; l. 5 of the fourth side), the *Svabhānu* saṁvatsara; Tuesday, in the month *Pushya*; at the time of the *Makara-saṁkrama* . . . ; under the constellation *Hasta*.'

In the year *Subhānu*, which by the southern luni-solar system was S. 1445 (not 1444) expired, the *Makara-saṁkrānti* took place 18 h. 1 m. after mean sunrise of Monday, 28th December, A. D. 1523, while the moon was in *Hasta*; and on the following day, Tuesday, the 29th December, the 8th *tithi* of the dark half of *Pausha* ended 21 h. 42 m. after mean sunrise.

143. — S. 1645. — *Mysore Inscr.* No. 169, p. 318. *Melkote* copper-plate inscription of *Krishnarāja* of *Maisūr* :—

'In . . . the *Sālivāhana Saka*, the year reckoned as *bhūta*, *arṇava*, *aṅga* and *kshiti* (1645) having passed, and the year *Krōdhi* being current, in the month *Pushya*, the 12th day of the moon's decrease, Wednesday, under the constellation *Anurādha*, the *Vridhhi yōga*, the *Bālave karāṇa*, the *uttarāyāṇa*, the sun being in *Makara*, — on this auspicious day, in the morning.'

In the year *Krōdhi*, which by the southern luni-solar system was S. 1646 (not 1645) expired, the *Uttarāyāṇa-saṁkrānti* took place 18 h. 16 m. after mean sunrise of Tuesday, 29th December, A. D. 1724; and the 12th *tithi* of the dark half of the *amānta* *Pausha* commenced (and the *karāṇa* *Bālava* ended) 3 h. 20 m. after mean sunrise of Wednesday, 30th December, A. D. 1724, when the *nakshatra* was *Anurādha* up to 11 h. 10 m., and the *yōga* *Vridhhi* from 3 h. 54 m. after mean sunrise.

3. — Dates with Wrong Months.⁸

144. — S. 872. — *Jour. Bo. As. Soc.* Vol. XI. p. 245. Date of a grant commemorated in an inscription at *Narēgal* :—

'On the occasion of an eclipse of the sun on Thursday, the day of the new moon of the month *Kārttika* of the *Sādhārāṇa saṁvatsara*, being the year of the *Saka* 872.'

In S. 872 expired, which by the southern luni-solar system was *Sādhārāṇa*, the 15th *tithi* of the dark half of the *amānta* *Kārttika* ended 13 h. 53 m. after mean sunrise of Tuesday, 12th November, A. D. 950, when there was no eclipse. But there was a total solar eclipse, not visible in India, at sunrise of Thursday, 12th December, A. D. 950, which was the 15th of the dark half of the following month, the *amānta* *Mārgaśīrṣha*. [By the mean-sign system *Sādhārāṇa* ended on the 30th September, A. D. 949.]

145. — S. 1096. — *Jour. Bo. As. Soc.* Vol. XVIII. p. 275. *Belgaum District* copper-plate inscription of the *Kalachuri Sōmēśvara* :—

(Plate iib, l. 20). — *Shaṅṅavaty-adhika-sahasratamē* akē *Jaya-saṁvatsarē* *Kārttika-śukla-dvādaśyām* *Brihaspativāra-Rēvatīnakshatra-Vyastipātayōga-Va(ba)vakarāṇa-yuktāyām.*

⁸ Perhaps '*Bālava*' may be an error for '*Kaulava*', the *karāṇa* which follows immediately upon *Bālava*.

⁹ Compare also No. 156, below.

In S. 1096 expired, which by the southern luni-solar system was **Jaya**, the 12th *tithi* of the bright half of Kārttika ended 12 h. 24 m., and the *karāṇa* Bava about one hour after mean sunrise of Wednesday, 9th October, A. D. 1174, and on this day the *nakshatra* was Pūrva-bhadrapadā, and the *yōga* Vyāghatā. But the 12th *tithi* of the bright half of the following month, Mārgaśrīsha, ended 21 h. 6 m., and the *karāṇa* Bava about 9 h. after mean sunrise of Thursday, 7th November, A. D. 1174; and on this day the *nakshatra* was **Bāvati** up to 13 h. 8 m. after mean sunrise, and the *yōga* **Vyati-pāta** about the whole day. [The date No. 69, above, from an inscription of the same king, shews that the 15th of the dark half of Mārgaśrīsha of S. 1096 expired corresponded to the 26th November, A. D. 1174. And it may be added that, calculated by Prof. Jacobi's Special Tables, Kārttika was not intercalary in S. 1096 expired.]

146. — S. 1353. — Hultzsch, *South Ind. Inscr.* Vol. I. p. 80. Date of an inscription on the base of the Śvara temple at Tellūr near Vēlūr:—

'On the day of (the *nakshatra*) **Tiruvōṇam** (i. e. **Śravaṇa**), which corresponds to **Monday**, the fifth lunar day of the former half of the month of **Karkaṭaka** of the **Sādharāṇa** year (and) the Saka year 1353.'

In S. 1353 current, which by the southern luni-solar system was **Sādharāṇa**, the sun was in the sign **Karkaṭaka** from 23 h. 13 m. after mean sunrise of the 28th June to 10 h. 30 m. after mean sunrise of the 30th July, A. D. 1430. During this time there was only one 5th *tithi* of the bright half, and this *tithi* ended 17 h. 34 m. after mean sunrise of Tuesday, the 25th July, when the moon was in Hasta (No. 13), not in Śravaṇa (No. 22). — In S. 1353 current, the year of the date, the only fifth of the bright half on which the moon was in Śravaṇa was **Monday**, the 20th November, A. D. 1430, which was the 5th of the bright half of the lunar Mārgaśrīsha and the 22nd day of the solar Mārgaśrīsha. Now, as the solar Mārgaśrīsha of the north would in the south be called the month of **Kārttigai**, I believe the word **Karkaṭaka** of the date to have been erroneously put for **Kārttigai**.

4. — Dates with Wrong Tithis.

147. — S. 902. — *Jour. Bo. As. Soc.* Vol. X. p. 210; *ante*, Vol. XII. p. 209, No. 11. Saundatti inscription of the Western Chālukya Taila II.:—

Sa(śa)kaṇṇipa-kāl-ātita-samvatsara-śataṅga[*] 902neya Vikrama-samvatsarada Paushya-(sha)-śuddha-daśami-Brīhaspativārad-aṁdin-uttarāyaṇa-sa(sa)ṁkramāṇado.

In S. 902 expired, which by the southern luni-solar system was **Vikrama**, the **Uttarāyaṇa-samkrānti** took place 5 h. 54 m. after mean sunrise of Thursday, 23rd December, A. D. 980; and on the same day the 14th (not the 10th) *tithi* of the bright half of Pausha ended 11 h. 37 m. after mean sunrise. [By the mean-sign system Vikrama ended on the 27th May, A. D. 979, in S. 902 current.]

148. — S. 966. — *Ante*, Vol. XII. p. 209, No. 14. Hūli inscription of the Western Chālukya Sōmēśvara I.:—

Sakanṇipa-kāl-ātita-samvatsara-śataṅga 966neya Tāraṇa-samvatsarada Puśya(shya)-su(śu)-dhaha(ddha) 10 Ādivāraṇa-(u)ttarāyaṇa-samkrānti-aṁdu.

In S. 966 expired, which by the southern luni-solar system was **Tāraṇa**, the **Uttarāyaṇa-samkrānti** took place 19 h. 21 m. after mean sunrise of Sunday, 23rd December, A. D. 1044; and on the same day the first (not the 10th) *tithi*¹⁰ of the bright half of Pausha ended 7 h. 1 m. after mean sunrise.

¹⁰ In the text of Rāmanujāchārya's *Sāraṇa* at Śravaṇa-Belgoḷa, printed *ante*, Vol. XIV. p. 234, the *tithi* of the date is the first (1); but according to the text (not the translation) published by the same editor in *Inscriptions at Śravaṇa-Belgoḷa*, p. 100, No. 136, the *tithi* is the tenth (10). Here my calculation shews this latter reading (10) to be correct. Compare also below, No. 196.

149. — S. 1317. — *As. Res.* Vol. IX. p. 420; Colebrooke's *Misc. Essays*, Vol. II. p. 264. Chitradurg copper-plate inscription of Harihara II. of Vijayanagara:—

Rishi-bhū-vabni-cbandrē tu gaṇitē Dhāt[ri]-vatsarē |
Māgha-māsē śukla-pakshē paṇṇamāsyām mahātithau ||
nakshatrē pitri-daivatye Bhānuvārēna saṁyutē |

In the year **Dhāttri**, which by the southern luni-solar system was S. 1318 (not 1317) expired, the full-moon *tithi* of Māgha ended 3 h. 20 m. before mean sunrise of Sunday, 14th January, A. D. 1397; but the day of the date is evidently this **Sunday**, the first of the dark half, on which the moon was in the **pitri-nakshatra**, i. e. **Maghā**, by the Brahma-siddhānta, from 2 h. 38 m., and, by the Garga-siddhānta, from 5 h. 16 m. after mean sunrise.

5. — Dates with Wrong Weekdays.

150. — S. 976. — *Ante*, Vol. XIX. p. 273. Honwād inscription of the Western Chālukya Sōmēśvara I.:—

(L. 33). — Sa(śa)ka-varaha 976neya Jaya-samvatsarada Vaisā(śa)khad-amāvāśye(śye) Sōmavārad-aṁdina tū(sū)ryagrahāṇa-nimitya(tta)diṁ.

In S. 976 expired, which by the southern luni-solar system was **Jaya**, the 15th *tithi* of the dark half of the *amānta* Vaisākha ended 6 h. 12 m. after mean sunrise of Tuesday (not Monday), 10th May, A. D. 1054, when there was a total solar eclipse, visible in India. [Compare above, No. 56.]

151. — S. 984. — *Ante*, Vol. XII. p. 209, No. 16. Hulgūr inscription of the Western Chālukya Sōmēśvara I.:—

Sa(śa)ka[n]ripa-kāl-ākṛānta-samvatsara-śataṅga[*] 984neya Subhākrīṭ-samvatsarati pravartitē tad-varsh-ābhyanterada Pushya-bahula-saptame(mi) Ādityavāramum-uttarāyaṇa-samkrānti-āndu.

In S. 984 expired, which by the southern luni-solar system was **Subhākrīṭ**, the **Uttarāyaṇa-samkrānti** took place 11 h. 8 m. after mean sunrise of Tuesday (not Sunday), 24th December, A. D. 1062, during the 7th *tithi* of the dark half of Pausha which commenced on the same day, 10 h. 33 m. after mean sunrise.

[*Ibid.* p. 209, No. 15, a Chillūr-Baḍṇi inscription of the same king is dated:—

Sa(śa)kaṇṇipa-kāl-ātita-samvatsara-sa(śa)taṅga[*] 984neya [Śu]bhākrīṭu-samvatsarada Paushya(sha)-su(śu)ddha-dasa(śa)mi Ādityavāram-uttarāyaṇa-samkrānti-vyatipāṭad-āndu.]

152. — S. 993. — *Ante*, Vol. XII. p. 212, No. 55; *Pāli, Skr. and Old-Kan. Inscr.* No. 159; *Mysore Inscr.* No. 70, p. 144. Baḷagāṁve inscription of the Western Chālukya Sōmēśvara II.:—

(L. 12). — Sa(śa)ka-varaha 993neya Virōdhikṛīṭ-samvatsarada Pushya-su(śu)ddha 1 Sōmavārad-aṁdin-uttarāyaṇa-samkrānti-parbba(rvva)-nimittadiṁ.¹¹

In S. 993 expired, which by the southern luni-solar system was **Virōdhakṛīṭ**, the **Uttarāyaṇa-samkrānti** took place 19 h. 2 m. after mean sunrise of Saturday, 24th December, A. D. 1071, during the first *tithi* of the bright half of Pausha which ended 8 h. 24 m. after mean sunrise of Sunday (not Monday), 25th December, A. D. 1071.

153. — S. 997. — *Arch. Survey of West. India*, Vol. III. p. 106; *ante*, Vol. I. p. 141. Kādarēli inscription of the Western Chālukya Sōmēśvara II.:—

(L. 19). — Sa(śa)ka-varaha 997neya Rākshasa-samvatsarada Pushyada puṇṇa(ṇṇi)me Ādityavāra uttarāyaṇa-sam(sam)krānti-vyatipāṭad-aṁdu.

¹¹ The same date in another Baḷagāṁve inscription of the same king, *Pāli, Skr. and Old-Kan. Inscr.* No. 160; and *Mysore Inscr.* No. 78, p. 165.

In S. 997 expired, which by the southern luni-solar system was Rākshasa, the Uttarāyana-samkrānti took place 18 h. 16 m. after mean sunrise of Thursday, 24th December, A. D. 1075, during the full-moon *tithi* of Pausha which ended 4 h. 49 m. after mean sunrise of Friday (not Sunday), 25th December, A. D. 1075.

[*Ante*, Vol. IV. p. 210, and *Mysore Inscr.* No. 69, p. 143, there is a Balagāhve inscription of the reign of the same king which is dated: 'On the occasion of the festival of the sun's commencing his progress to the north on Monday the first day of the bright fortnight of the month Pushya of the Rākshasa *samvatsara* which was the year of the Saka 997.']

154. — S. 1080. — *Ante*, Vol. XI. p. 274. Date of a Kādamba stone inscription at Siddāpur: —

(L. 28). — Saka-varṣam 1080neya Bahudhānya-samvatsarada Āśāḍad-amāvāsya Sōmavārad-amda dakshināyana-samkrānti-vyatipātaḍa puṇya-tithiyolū.

In S. 1080 expired, which by the southern luni-solar system was Bahudhānya, the Dakshināyana-samkrānti took place 12 h. 17 m. after mean sunrise of Thursday, 20th June, A. D. 1158, and the 15th *tithi* of the dark half of the *amānta* Āśāḍha ended 20 h. 16 m. after mean sunrise of Friday (not Monday), 27th June, A. D. 1158.

155. — S. 1098. — *Ante*, Vol. XVIII. p. 127. Hulgūr stone inscription of the Kalachuri Sōmēśvara: —

(L. 18). — Saka-varsha 1096neya Jaya-samvatsarada Jyēshthada amāvāsye Ādityavāra sūryyagrahaṇa-vyatipātaḍa-andu.

In S. 1098 expired, which by the southern luni-solar system was Jaya, the 15th *tithi* of the dark half of the *amānta* Jyāishṭha ended 8 h. 22 m. after mean sunrise of Saturday (not Sunday), 1st June, A. D. 1174, when there was a solar eclipse, visible in India.

156. — S. 1141. — *Jour. Bo. As. Soc.* Vol. X. p. 256. Date in a stone tablet at Nēsarige: —

'On a sacred lunar day which comprised the conjunction of a *vyatipāta* with the sun's commencement of his progress to the north, on Thursday, the seventh day of the bright fortnight of Māgha¹² in the year of the Saka era 1141, being the Bahudhānya *samvatsara*.'

In S. 1141 current, which by the southern luni-solar system was Bahudhānya, the Uttarāyana-samkrānti took place 19 h. 55 m. after mean sunrise of Tuesday (not Thursday), 25th December, A. D. 1218, during the 7th *tithi* of the bright half of Pausha which ended 20 h. 10 m. after mean sunrise of the same day.

157. — S. 1145. — *Jour. Bo. As. Soc.* Vol. XII. p. 20; *Arch. Survey of West. India*, Vol. II. p. 233, and Vol. III. p. 117; *ante*, Vol. XIX. p. 440. Muñōlli inscription of the Dēvagiri-Yādava Siṅghaṇa II: —

(L. 24). — Srimatu Sa(śa)ka-varsha 1145neya Chittrabhānu-samvatsarada Kārttika-su(śu)-dhaha(ddha)-puṇṇami Sōmavāra sōmagrahaṇa-bya(vya)tipātaḍadalli.

In S. 1145 current, which by the southern luni-solar system was Chittrabhānu, the full-moon *tithi* of Kārttika ended 0 h. 44 m. after mean sunrise of Saturday (not Monday), 22nd October, A. D. 1222, when there was a lunar eclipse, visible in India. The *yōga* Vyatipāta had ended 1 h. 58 m. before mean sunrise of the same day.

158. — S. 1148. — *Pāli, Skr. and Old-Kan. Inscr.* No. 110. Date in a Chauḍāmpur inscription of the time of the Dēvagiri-Yādava Mahādēva (?): —

'Saka 1148 (in figures, l. 26), the Pārthiva *samvatsara*; Monday, the fifteenth day of the bright fortnight of Bhādrapada; at the time of an eclipse of the moon.'

¹² This clearly is an error for 'Pausha.'

In S. 1148 current, which by the southern luni-solar system was Pārthiva, the 15th *tithi* of the bright half of Bhādrapada ended 18 h. 59 m. after mean sunrise of Tuesday (not Monday), 19th August, A. D. 1225, when there was a lunar eclipse, visible in India.

159. — S. 1483. — *Pāli, Skr. and Old-Kan. Inscr.* No. 134; *Mysore Inscr.* No. 24, p. 41. Harihar inscription of Sadāśivādēva of Vijayanagara: —

'Sālivāhana-Saka 1483 (in figures, l. 8), the Durmati *samvatsara*; Monday, the fifteenth day of the bright fortnight of Māgha; at the time of an eclipse of the moon.'

In S. 1483 expired, which by the southern luni-solar system was Durmati, the full-moon *tithi* of Māgha ended 14 h. 42 m. after mean sunrise of Tuesday (not Monday), 20th January, A. D. 1562, when there was a lunar eclipse, visible in India.

6. — Dates with Wrong Nakshatras.

160. — S. 814. — *Ante*, Vol. XIX. p. 150; *Mysore Inscr.* No. 134, p. 241. Sorab copper-plate inscription of the Western Chalukya Vinayāditya: —

(L. 18). — [Cha]turdsāsōttara-shatḥchatēshn Saka-varshēshv-atitēshn pravarddhamānavijaya-rājya-samvatsarē [ēk]adāśē varttamānē . . . dakshināyan-abhimukhē bhagavati bhāskarē Rōhiṇi(ṇi)-nakehatrē Sanaibcharavārē.

In S. 814 expired the Dakshināyana-samkrānti took place 0 h. 8 m. after mean sunrise of Saturday, 22nd June, A. D. 692; but at sunrise of this day the moon was in the *nakshatra* Āśāḍhā (No. 9), or, by the Brahma-siddhānta, in Māghā (No. 10), not in Rōhiṇi (No. 4).

161. — S. 735. — *Ante*, Vol. XII. p. 16. Kaḍab copper-plate inscription of the Rāshṭrakūṭa Gōvinda III: —

(Plate iva, l. 10). — Sakanripa-samvatsarēshn śara-śūkhi-munishu vyatitēshn J[y*]ēshṭha-māsa-śūkla-paksha-dasamyām Pushya-nakshatrē Chandravārē.

In S. 735 current the 10th *tithi* of the bright half of Jyāishṭha ended 15 h. 31 m. after mean sunrise of Monday, 24th May, A. D. 812; but on this day the moon was in Hasta (No. 13) and Chitrā (No. 14), not in Pushya (No. 8). [In S. 735 expired the *tithi* of the date ended on Friday, 13th May, A. D. 813, and the *nakshatra* then also was Hasta.]

162. — S. 822. — *Ante*, Vol. XII. p. 221. Nandwādige inscription of the Rāshṭrakūṭa Kriṣṇa II: —

(L. 1). — Sakanripa-kāl-ātita-samvatsaraṅga]-eṇṇ nūra irpatt-erāḍaneyā Dundubhiy-ēmba varisham pravarttise tad-varsh-ābhyanāra-Māgha-su(śu)ddha-paṅchamiyūm Brihaspati-vārad-andu[ṅ] Uttaraśāḍha(ḍha)-nakshatramūm Siddhiy-ēmba [yōgamu]m-āge.

In the year Dundubhi, which by the southern luni-solar system was S. 824 (not 822) expired, and which by the mean-sign system also was current at the commencement of S. 824 expired,¹³ the 5th *tithi* of the bright half of Māgha ended 21 h. 42 m. after mean sunrise of Thursday, 6th January, A. D. 903; but on this day the *nakshatra* was Uttara-bhadrapadā (No. 26), not Uttaraśāḍhā (No. 21), and the *yōga* Siva (No. 20), not Siddhi (No. 16).

7. — Seemingly Regular Dates from Spurious Inscriptions.

163. — S. 388. — *Ante*, Vol. VIII. p. 95; *Mysore Inscr.* No. 158, p. 296. Bangalore copper-plate inscription of Vira Nōṅamba, apparently a modern forgery: —

(L. 12). — Saka-varusha 366 Tāraṇa-samvachharē Phālguna-māsē kṛishṇa-pakshē Bi(bri)-bhavāra amāvāsyaṅgām tithau.

In S. 366 expired, which by the southern luni-solar system would be Tāraṇa, the new-moon *tithi* of the *amānta* Phālguna ended 18 h. 55 m. after mean sunrise of Thursday,

¹³ Dundubhi lasted from the 24th April, A. D. 901, to the 20th April, A. D. 902.

22nd February, A. D. 445. [By the mean-sign system Tāraṇa lasted from the 10th August, A. D. 448 (in S. 370 expired), to the 6th August, A. D. 449 (in S. 371 expired).]

164. — S. 411. — *Ante*, Vol. VII. p. 212. British Museum forged copper-plate inscription of the Early Chalukya Pulikēśin I. :—

(L. 28). — Śakaṇṛpa-ābdēshv-ēkīdās-ōttarēshu chatuś-satēshu vyatitēshu Vibhava-saṁvatsarē pravartamānē . . . Vaiśikh-ōdita-pūrṇa-paunya-divasē Rāhō(hau) vidhau(dhōr=) maṇḍalāṁ slēshō(ṇ)ṇ.

In S. 411 current, which by the southern luni-solar system would be Vibhava, there was a lunar eclipse, not visible in India, 2 h. 38 m. after mean sunrise of the 12th April, A. D. 498, the full-moon day of Vaiśākha. [By the mean-sign system Vibhava lasted from the 6th February, A. D. 492 (in S. 413 expired), to the 1st February, A. D. 493 (in S. 414 expired).]

165. — S. 417. — *Ante*, Vol. XIII. p. 117; and Vol. XVIII. pp. 92 and 286. Iliō copper-plate inscription of the Gurjara Dadda II. Prasāntarāga :—

(L. 18). — Śakaṇṛpa-kāl-ātita-saṁvachchba(tsa)ra-sata-chatuśṭayō saptadaś-ādhikē Yē(jyē)shṭh-[ā]m[ā]vāsya[ā]-su(su)ryagrahē.

In S. 417 current the new-moon *tithi* of the *pūrṇimānta* Jyaishṭha ended on the 21st April, A. D. 494, and that of the *amānta* Jyaishṭha on the 20th May, A. D. 494; on neither day was there a solar eclipse. For S. 417 expired the corresponding days are the 10th May, A. D. 495, when there was a solar eclipse, 9 h. 42 m. after mean sunrise, and the 8th June, A. D. 495, when there also was a solar eclipse, 16 h. 41 m. after mean sunrise; both these eclipses were invisible.

8. — Select Irregular Dates, not given above.

166. — S. 169. — *Ante*, Vol. VIII. p. 213, and Vol. XVII. p. 241. Tanjore copper-plate inscription of the Western Gaṅga king Arivarman (Harivarman) :—

(L. 10). — Sa(śa)kā(ka)-kālē nav-ōttara-shashṭir-ēka-sata-gatēshu Prabhava-saṁvatsar-ābhyauntarē Shā(Phā)lguṇ-āmāvāsō(syā)-Bhṛigu(vārē*) Rēvatī(tī)-nakshatrē Vṛiddhi-yōgē Vṛishabhā-lagnē.

By the southern luni-solar system Prabhava would be S. 169 expired. As shown by Dr. Fleet, the new-moon *tithi* of Phālguna did not end on a Friday, either in S. 169 expired or in S. 169 current. In S. 169 expired with the *pūrṇimānta* scheme of the month, it commenced about 3 h. 15 m. after mean sunrise of Friday, 11th February, A. D. 243; but the *nakshatra* then was Satabhishaj (No. 24), not Rēvatī (No. 27); and the *yōga* was Siddha (No. 21), not Vṛiddhi (No. 11). [By the mean-sign system Prabhava lasted from the 20th November, A. D. 253 (in S. 175 expired), to the 16th November, A. D. 254 (in S. 176 expired).]

167. — S. 261. — *Ante*, Vol. XV. p. 175, and Vol. XVII. p. 239. Mṇḍyanūr copper-plate inscription of the Bāṇa king Srivadhūvallabha-Malladēva-Nandivarman :—

(L. 23). — Ekashashṭy-uttara-dvaya-satē Sak-ābdah pravarddhamān-ātmanah trayō-vimśati varttamāna-Vīlambi-saṁvatsarē Kārttikā(ka)-śukla-pakshē¹⁴ trayōdaśyām Sōmavārē Aśvinyām nakshatrē.

In S. 261 current, which by the southern luni-solar system would be Vilamba, the 13th *tithi* of the bright half of Kārttika ended on Friday, 13th October, A. D. 338, when the *nakshatras* were Rēvatī and Aśvinī. And in S. 261 expired the same *tithi* occupied about the whole of Wednesday, 31st October, A. D. 339, when the *nakshatras* were Aśvinī and Bharaṇi. [By the mean-sign system Vilamba lasted from the 1st November, A. D. 343 (in S. 265 expired), to the 27th October, A. D. 344 (in S. 266 expired).]

¹⁴ That the intended reading is Kārttika-śuklapakshē, not Kārttik-śuklapakshē, is shown by the *nakshatra* quoted in the date.

168. — S. 261. — *Ante*, Vol. XVIII. p. 311. Spurious date in the Kalbhāvi Jain inscription :—

(L. 14). — Saka-varsha 261neya Vibhava-saṁvatsarada Paushya(sha)-bahuja-chatur-dāśī-Sōmavāram-uttarāyana-saṁkrāntiy-āmda.

By the southern luni-solar system S. 261 current would be Vilamba, and S. 261 expired Vikārin, — not Vibhava, which would be S. 230 expired. And by the mean-sign system the year Vibhava, nearest to S. 261, lasted from the 8th March, A. D. 314 (in S. 236 expired), to the 4th March, A. D. 315 (in S. 237 expired). This proves the wording of the date to be quite incorrect; and Dr. Fleet, *loc cit.* pp. 310, 311, has taken the trouble to shew that the date does not in any way work out satisfactorily for any one of the Saka years mentioned.

169. — S. (P) 388. — *Ante*, Vol. I. p. 363; *Mysore Inscr.* No. 151, p. 283; *Coorg Inscr.* No. 1, p. 3. Merkara copper-plate inscription of the Western Gaṅga king Avinita-Koṅgaṇi :—

(L. 16). — Aṣṭa asṭi ntarasya trayō satsasya saṁvatsarasya Māgha-māsāṁ Sōmavārah Svāti-nakshatra suddha-paichami.

In S. 388 current the 5th *tithi* of the bright half of Māgha ended on Friday, 7th January, A. D. 466, when the *nakshatra* was Uttara-bhadrapadā (No. 26), not Svāti (No. 15). And in S. 388 expired the same *tithi* ended on Wednesday, 28th December, A. D. 466, when the *nakshatra* also was Uttara-bhadrapadā.

170. — S. 415. — *Ante*, Vol. XVII. p. 200, and Vol. XVIII. p. 92. Bagmrā copper-plate inscription of the Gurjara Dadda II. Prasāntarāga :—

(L. 21). — Śakaṇṛpa-kāl-ātita-saṁva[chchba(tsa)]ra-sata-chatuśṭayē paichadaś-ādhikē Yē(jyē)shṭh-[ā]māvāsya-su(su)ryagrahē.

In S. 415 current the new-moon *tithi* of Jyaishṭha ended, by the *pūrṇimānta* scheme, on the 12th May, A. D. 492; and, by the *amānta* scheme, on the 10th June, A. D. 492; and for S. 415 expired the corresponding days are the 1st May, A. D. 493, and the 31st May, A. D. 493. On none of these days was there a solar eclipse. There was an invisible solar eclipse on the 10th July, A. D. 492; and one, which was invisible in India, on the 29th June, A. D. 493.

171. — S. 684. — *Mysore Inscr.* No. 152, p. 286. Hosūr copper-plate inscription of the Western Gaṅga king Pṛithuvi-Koṅgaṇi :—

Chaturaśṭy-uttarēshu shaṭchhatēshu Saka-varshēshu samatitēshu . . . Vaiśākha-māsā sōmagrahaṇē Vīśākha-nakshatrē Sukravārē.

In S. 684 expired the full-moon *tithi* of Vaiśākha ended on Tuesday, 13th April, A. D. 762; and in S. 684 current it ended 0 h. 13 m. after mean sunrise of Friday, 24th April, A. D. 761, on which day the moon was in the *nakshatras* Svāti and Vīśākha. On neither day was there a lunar eclipse; nor was there one on a Friday in A. D. 760 or A. D. 763.

172. — S. 730. — *Ante*, Vol. XI. p. 159, Vol. XVI. p. 74. Waṅi copper-plate inscription of the Rāshṭrakūṭa Gōvinda III. :—

(L. 46). — Śakaṇṛpa-kāl-ātita-saṁvatsara-satēshu saptasu tṛi(tri)śad-adhikēshu Vyaya-saṁvatsarē Vaiśākha-sita-paurṇamāsī-sōmagrahaṇa-mahāparvṛapi.

The year Vyaya, by the mean-sign system, lasted from the 4th June, A. D. 806, to the 31st May, A. D. 807, and was therefore current at the commencement of S. 730 current; and by the southern luni-solar system Vyaya would be S. 728 expired. The full-moon *tithi* of Vaiśākha ended, in S. 728 expired, when Vaiśākha was intercalary, on the 6th April and the 6th May, A. D. 806; in S. 729 expired (= S. 730 current), on the 25th April, A. D. 807; and in S. 730 expired, on the 14th April, A. D. 808. On none of these days was there a lunar eclipse. [In A. D. 805 there was only one lunar eclipse, in September; and in A. D. 809 there was none from February to June.]

173. — S. 872. — *Jour. Bo. As. Soc.* Vol. XI. p. 237. Date of a grant commemorated in an inscription at Narêgal :—

' On the occasion of an eclipse of the moon, when the sun was commencing his progress to the north, on Monday, the day of the full-moon of the bright fortnight of the month Pushya of the Saumya *sainivatsara*, being the year of the Saka 872.'

In S. 872 current, which by the southern luni-solar system was Saumya, the full-moon *tithi* of Pausha ended 1 h. 17 m. after mean sunrise of Monday, 7th January, A. D. 950; but there was then no lunar eclipse, and the Uttariyana-saṁkrānti had taken place already 5 h. 24 m. after mean sunrise of Sunday, 23rd December, A. D. 949, during the first *tithi* of the bright half of Pausha. In S. 872 expired, the Uttariyana-saṁkrānti took place on Monday, 23rd December, A. D. 950, during the 12th *tithi* of the bright half of Pausha. [By the mean-sign system Saumya had ended on the 4th October, A. D. 948, in S. 870 expired.]

174. — S. 896. — *Ante*, Vol. XII. p. 271. Guṇḍūr stone-tablet of the Rāshṭrakūṭa Kakala (Kakka II.):—

(L. 13). — Sa(śa)kha(ka)-varsham=ēṅṅu nūra tōmbhatt-āraṇeya Srimukha-saṁvatsar-Āshāḍha(ḍha)-dakshināyana(na)-saṁkrāntiyum=Ādityavārad-andum.

In S. 896 current, which by the southern luni-solar system was Srimukha, the Dakshināyana-saṁkrānti took place 17 h. 11 m. after mean sunrise of Tuesday, 24th June, A. D. 973. In S. 896 expired it took place 23 h. 23 m. after mean sunrise of Wednesday, 24th June, A. D. 974. [By the mean-sign system Srimukha had ended on the 24th June, A. D. 972, in S. 894 expired.]

175. — S. 919. — From impressions supplied to me by Dr. Fleet. Bhādūna copper-plate inscription of the Śīlāra Aparājita :—

(L. 53). — Sa(śa)kanṛipa-kāl-ātīta-saṁvatsara¹⁵-sa(śa)tēshu navasu ēkōnavimśaty-uttarēshu pravarttamāna-Hēmalamba(mba)-saṁvatsar-ānta¹⁶ Āshāḍha-va(ba)hula-chatusyām(rthyām=) anka(tika)tō=pi samvat¹⁷ 919 Āshāḍha-vadi 4 . . .

(L. 55). — samjāta-dakshināyana-karkkaṭa-saṁkrānti-parvvaṇi su(śu)bh-ābhudaya-kāriṇi.

In S. 919 expired, which by the southern luni-solar system was Hēmalamba, the Dakshināyana-saṁkrānti took place 22 h. 13 m. after mean sunrise of the 24th June, A. D. 997, during the second *tithi* of the dark half which ended 3 h. 7 m. after mean sunrise of the 25th June. And the 4th *tithi* of the dark half commenced 0 h. 43 m. and ended 21 h. 52 m. after mean sunrise of the 26th June. [By the mean-sign system Hēmalamba ended on the 15th March, A. D. 996, in S. 919 current.]

176. — S. 922. — *Ep. Ind.* Vol. II. p. 217. Saṅgamnēr copper-plate inscription of the Yādava Bhīlāma II. :—

(L. 1). — Sakanṛipa-kāl-ātīta-saṁvatsara-śatēshu navasu dvāvimśaty-adhikēshv=saṁkatō=pi saṁvatsarāḥ 922 ||

(L. 110). — Sa(śa)rvvari-saṁvatsariya-Bhādrapad-āmāvāsyāyām . . . sūrya-grahaṇē.

In S. 922 expired, which by the southern luni-solar system was Sārvarin, the new-moon *tithi* of the *pūrṇimānta* Bhādrapada ended on the 2nd, and that of the *amānta* Bhādrapada on the 31st August, A. D. 1000. On neither day was there a solar eclipse. There was one in the *amānta* Āsvina, 10 h. 16 m. after mean sunrise of the 30th September, A. D. 1000, but it was not visible in India. [By the mean-sign system Sārvarin ended on the 3rd March, A. D. 999, before the commencement of S. 922 current.]

¹⁵ Read *saṁvatsara*.

¹⁶ Read *saṁvatsar-āntargat. A.*

¹⁷ Read *samvat*.

177. — S. 941. — *Ante*, Vol. V. p. 18; *Mysore Inscr.* No. 72, p. 150. Baḷagāmve inscription of the time of the Western Chālukya Jayasimha III. :—

' On the occasion of the festival of the sun's commencement of his progress to the north, on Sunday, the second day of the bright fortnight of the month Pushya of the Siddhārthi *sainivatsara*, which was the year of the Saka era 941.'

In S. 941 expired, which by the southern luni-solar system was Siddhārthin, the Uttariyana-saṁkrānti took place 8 h. 6 m. after mean sunrise of Thursday, 24th December, A. D. 1019, during the 11th *tithi* of the dark half of Pausha; and the second *tithi* of the bright half of Pausha ended 6 h. 48 m. after mean sunrise of Tuesday, 1st December, A. D. 1019.

178. — S. 944. — *Ante*, Vol. XVIII. p. 274. Bēlūr inscription of the time of the Western Chālukya Jayasimha III. :—

(L. 29). — Sa(śa)kanṛipa-kāl-ātīta-saṁvatsara-śataṅga[*] 944neya Duṁḍubhi-saṁvatsarad=uttariyana-saṁkrāntiyum vyatipātamum=Ādityavārad-a[m*]du.

In S. 944 expired, which by the southern luni-solar system was Duṁḍubhi, the Uttariyana-saṁkrānti took place, by the Sūrya-siddhānta, 2 h. 44 m., and, by the Ārya-siddhānta, 1 h. 13 m. after mean sunrise of Monday, 24th December, A. D. 1022 (while the *yōga* was Dhruva, No. 12, not Vyatipāta, No. 17).

179. — S. 948. — *Ante*, Vol. V. p. 278, and Vol. XVI. p. 46. Bhāṇḍūp copper-plate inscription of the Śīlāra Chittarāja :—

(Plate ii, l. 2). — Sa(śa)kanṛipa-kāl-ātīta-saṁvatsara-sa(śa)tēshu navasu(sv=)ashtachativārimśad-adhikēshu Kshaya-saṁvatsar-āntargata-Kārttika-su(śu)ddha-pañchadasyām(śyām) yat=āmkatō=pi samvat 948 Kārttika-su(śu)ddha 15 Ravau samjātō(t=) ādityagrahaṇa-parvvaṇi.

As a solar eclipse is coupled here with the 15th *tithi* of the bright half of the month, the wording of the date must be wrong; and the suggestions which have been made are, either that the solar eclipse may have been erroneously put down instead of a lunar eclipse, or that the bright half of the month may have been wrongly quoted instead of the dark half. But the date in no way works out satisfactorily. By the southern luni-solar system Kshaya was S. 948 expired. In that year the full-moon *tithi* of Kārttika ended on Friday (not Sunday), 28th October, A. D. 1026, when there was a lunar eclipse, visible in India, 18 h. 18 m. after meansunrise; the new-moon *tithi* of the *pūrṇimānta* Kārttika ended on Thursday, 13th October, A. D. 1026, when there was no solar eclipse; and the same *tithi* of the *amānta* Kārttika ended on Saturday, 12th November, A. D. 1026, when there was a solar eclipse, not visible in India, 1 h. 49 m. after mean sunrise. [In S. 948 current, there was a solar eclipse, which was visible in India, on the new-moon *tithi* of the *amānta* Kārttika, corresponding to Tuesday, 23rd November, A. D. 1025; see above No. 98.]

180. — S. 962. — *Ante*, Vol. XIX. p. 164. Maṅḡūr inscription of the time of the Western Chālukya Jayasimha III. :—

(L. 5). — Sa(śa)ka-varsha 962neya Vikrava(ma)-saṁvatsarada śrūbeya-Mārggaśira-suddha 5 Ādityavārad-amdu.

In S. 962 expired, which by the southern luni-solar system was Vikrama, the 5th *tithi* of the bright half of Mārggaśira ended 0 h. 9 m. after mean sunrise of Wednesday, 12th November, A. D. 1040.

181. — S. 970. — *Ante*, Vol. IV. p. 180; *Mysore Inscr.* No. 53, p. 114. Baḷagāmve inscription of the time of the Western Chālukya Sōmēśvara I. :—

(L. 12). — Saka-varsha 970neya Sarvvadhāri-saṁvatsarada Jyēshṭha-suddha-trayōdaśi Ādityavārad-andu.

In S. 970 expired, which by the southern luni-solar system was Sarvadhārin, the 13th *tithi* of the bright half of Jyāishṭha ended 12 h. 24 m. after mean sunrise of Saturday, 28th May, A. D. 1048. The 13th *tithi* of the dark half of the same (*amānta*) month ended on Sunday, 12th June, A. D. 1048.

182. — S. 991. — *Ante*, Vol. XII. p. 120. Bassein copper-plate inscription of the Yādava Sēṇachandra II. : —

(L. 24). — Sa(śa)ka-saṁvat śkanavaty-adhika-nava-sa(śa)tēshu saṁvat 991 Saumya-saṁvatsariya-Srāvāṇa-sudi chaturdasyam(śyām) Guru-dinē.

In S. 991 expired, which by the southern luni-solar system was Saumya, the 14th *tithi* of the bright half of Srāvāṇa ended 14 h. after mean sunrise of Tuesday, 4th August, A. D. 1069.

183. — S. 1008. — From an impression supplied to me by Dr. Fleet. Sitābaldī inscription of the Western Chālukya Vikramāditya VI. : —

(L. 1). — Sa(śa)kanripa-kāl-ātita-saṁvatsar-āntargata-daśāśata ya[tra] ashtatyaadhikē (altered to ashtādhikē) saku 1008 Prabhava-saṁvatsarē Vaisā(śa)kha-su(śu)dha(dha)-tṛitīyā-Su(su)kradinē.

In the year Prabhava, which by the southern luni-solar system was S. 1009 (not 1008) expired, the third *tithi* of the bright half of Vaisākha ended 16 h. 9 m. after mean sunrise of Thursday, 8th April, A. D. 1087. In S. 1008 expired the same *tithi* ended on Sunday, 19th April, A. D. 1086; and in S. 1008 current on Monday, 31st March, A. D. 1085.

184. — S. 1056. — *Ante*, Vol. XIV. p. 58, and Vol. XX. p. 191. Chittūr copper-plate inscription of the Eastern Chalukya Kulōttunga-Chōḍadēva II. : —

(L. 49). — Śik-ābdānām pramāṇē rasa-viśikha-viyach-chāndra-saṁkhyām prayātē . . . s-Ārdra-rkshē pūrva-ma(pa)kshē vi¹⁹shuvati sutithi(thau).

In S. 1056 current the Mēsha-vishuvat-saṁkrānti took place on the 24th March, A. D. 1133, the 2nd of the dark half of Chaitra, when the *nakshatra* was Svīti (No. 15), not Ārdrā (No. 6); and the Tulā-vishuvat-saṁkrānti took place on the 27th September, A. D. 1133, the 12th of the dark half of Āśvina, when the *nakshatra* was Pūrva-phalgunī (No. 11). And for S. 1056 expired the corresponding days are the 24th March, A. D. 1134, the 12th of the dark half of Chaitra, with the *nakshatra* Pūrva-bhādrapadī (No. 25); and the 27th September, A. D. 1134, the 8th of the bright half of Āśvina, with the *nakshatra* Uttarāshāḍhā (No. 21). — According to Mr. Dikshīt, the nearest year which would satisfy the requirements of the date is S. 1054 expired; for in that year the Mēsha-vishuvat-saṁkrānti took place 22 h. 3 m. after mean sunrise of the 23rd March, A. D. 1132, during the 6th *tithi* of the bright half of Chaitra, and the moon entered the *nakshatra* Ārdrā about 5 h. 16 m. after mean sunrise of the 24th March, A. D. 1132.

185. — S. 1060. — *Mysore Inscr.* No. 174, p. 333. Sindigere inscription of the time of the Hoysaḷa Vishuvardhana : —

'The Saka year 1060, the year Piṅgala, the month Pushya, the 10th day of the moon's increase, Sunday, uttarāyāna-saṁkrānti.'

In S. 1060 current, which by the southern luni-solar system was Piṅgala, the Uttarāyāna-saṁkrānti took place 20 h. 54 m. after mean sunrise of Friday, 24th December, A. D. 1137, during the 11th *tithi* of the bright half, which ended 22 h. 14 m. after mean sunrise of the same day.

186. — S. 1066. — *Pāli, Skr. and Old-Kan. Inscr.* No. 96. Date in a Miraj inscription of the Śilāhāra Vijayāditya : —

'Saka 1066 (in figures, 1 47), the Rudhirōdgāri saṁvatsara; Vaḍḍavāra, the fourteenth day of the dark fortnight of Māgha.'

¹⁹ The aksharas from dra to vi are engraved over a cancelled passage.

In S. 1066 current, which by the southern luni-solar system was Rudhirōdgārin, the 14th *tithi* of the dark half of the *amānta* Māgha ended 13 h. 11 m. after mean sunrise of Friday, 4th February, A. D. 1144; and in S. 1066 expired the same *tithi* ended 20 h. 33 m. after mean sunrise of Tuesday, 23rd January, A. D. 1145.

187. — S. 1084. — *Jour. Do. As. Soc.* Vol. XI. p. 273. Paṭṭadakal inscription of the time of the Sinda Chāvūṇḍa II, the subordinate of the Western Chālukya Taila III. : —

'On a holy lunar day which combined a *vyatipāta* with an eclipse of the moon, on Monday, the day of the full-moon of the bright fortnight of the month Jyēshṭha of the Subhānu saṁvatsara, which was the year of the Saka one thousand and eighty-four.'

In the year Subhānu, which by the southern luni-solar system was S. 1085 (not 1084) expired, the full-moon *tithi* of Jyāishṭha ended about 20 h. after mean sunrise of Sunday, 19th May, A. D. 1163, (with the *yōga* Siddha). In S. 1084 expired the same *tithi* ended on Wednesday, 30th May, A. D. 1162 (with the *yōga* Śukla); and in S. 1084 current on Thursday, 11th May, A. D. 1161 (with the *yōga* Siddha). On none of these days was there a lunar eclipse.

188. — S. 1091. — *Ante*, Vol. XIX. p. 156; *Mysore Inscr.* No. 13, p. 23. Dāvagere inscription of the Mahāmaṇḍalāścara Vijayapādyaḍēva : —

(L. 16). — 'Śrīmat-Saka-varshada¹⁹ 1091neya Virōdhi-saṁvatsarada dvitīya-Srāvāṇa-śuddha-puṇṇami-Sōmavārād-āmda.

In S. 1091 expired, which by the southern luni-solar system was Virōdhi, Srāvāṇa was intercalary; but the full-moon *tithi* of the second Srāvāṇa ended 11 h. 36 m. after mean sunrise of Saturday, 9th August, A. D. 1169.

189. — S. 1105. — *Ante*, Vol. IV. p. 276. Bēhātṭi copper-plate inscription of the Kalachuri Siṅghaṇadēva : —

(L. 59). — Sa(śa)kanripa-kāl-ātītē cha pañchōttarasat-ādika-sahasratagā(mē) śakē Sōbhakrit-saṁvatsarē Āśva(śva)yukt-āmāvāsyām Sōmavārē Vyatipāta-yōgē.

In S. 1105 expired, which by the southern luni-solar system was Sōbhakrit (Sōbhana), the new-moon *tithi* of the *amānta* Āśvina ended 8 h. 47 m. after mean sunrise of Tuesday, 18th October, A. D. 1183, when the *yōga* was Āyushmat (No. 3), not Vyatipāta (No. 17). [The full-moon *tithi* of the same month ended on Monday, 3rd October, A. D. 1183, when the *yōga* was Vajra (No. 15).] In S. 1105 current, the same new-moon *tithi* ended on Wednesday, 29th September, A. D. 1182, when the *yōga* was Vaidhṛiti (No. 27).

190. — S. 1109. — *Ante*, Vol. XIV. p. 20. Date in an Old-Kanarese inscription at Tērdāl : —

(L. 79). — Sa(śa)ka-varśam(rśam) 1109neya Plavaṅga-saṁvatsarada Chaitra-su 10 Bri(bri)haspativārād-āmda.

In S. 1109 expired, which by the southern luni-solar system was Plavaṅga, the 10th *tithi* of the bright half of Chaitra ended 15 h. 12 m. after mean sunrise of Saturday, 21st March, A. D. 1187. In S. 1109 current, the same *tithi* ended on Monday, 31st March, A. D. 1186.

191. — S. 1114. — From an impression supplied to me by Dr. Fleet. Kōlhāpur inscription of the Śilāhāra Bhōja II. : —

(L. 13). — Sakanripa-kālād=īrabhya varshēshu chaturdaśōttara-satādika-sahasrēshu nirṇītēshu vartamāna-Paridhāvi-saṁvatsar-āntargata-Āśvija-śuddha-pratipadi Sukravārē.

In S. 1114 expired, which by the southern luni-solar system was Paridhāvin, the first *tithi* of the bright half of Āśvina ended 11 h. 12 m. after mean sunrise of Wednesday, 9th September, A. D. 1192. [For another, regular date in the same inscription see above, No. 70.]

¹⁹ Read Śrīmat-Chhāra.

192. — **S. 1157.** — Graham's *Kolhapour*, p. 426, No. 12. From an impression supplied to me by Dr. Fleet. Kôlhâpur inscription of the Dêvagiri-Yâdava Siṅghaṇa II. : —

(L. 1). — Saka 1157 **Manmatha-saṁvatsarê** Srâvaṇa-bahula 30 Guraṁ.

In **S. 1157 expired**, which by the southern luni-solar system was **Manmatha**, the 15th *tithi* of the dark half of the *amānta* Srâvaṇa ended 9 h. 8 m. after mean sunrise of Wednesday, 15th August, A. D. 1235. In **S. 1157 current**, which was the year **Jaya**, Srâvaṇa was intercalary, and the new-moon *tithi* of the first Srâvaṇa ended 15 h. 36 m. after mean sunrise of **Thursday**, 27th July, A. D. 1234.

193. — **S. 1174.** — *Jour. Bo. As. Soc.* Vol. XII. p. 39; *ante*, Vol. XIX. p. 441. Munôlli inscription of the Dêvagiri-Yâdava Kṛishṇa : —

(L. 20). — Sa(sa)ka-varsha 1174neya **Virô[dhikṛitu]-saṁvatsarada** Jêshṭa²⁰ bahuḷa ra(a)māvāse sūryyagrahaṇa Su(su)kravâ[rad-a]ṁdu.

In **S. 1174 current**, which by the southern luni-solar system was **Virôdhakrit**, the new-moon *tithi* of the *amānta* Jyaisṭha ended 15 h. 14 m. after mean sunrise of Tuesday, 20th June, A. D. 1251. In **S. 1174 expired** the same *tithi* ended 16 h. 1 m. after mean sunrise of Saturday, 8th June, A. D. 1252. On neither day was there a solar eclipse.

194. — **S. 1175.** — *Jour. Bo. As. Soc.* Vol. XII. p. 44; *ante*, Vol. XIX. p. 442. Bêhaṭṭ copper-plate inscription of the Dêvagiri-Yâdava Kṛishṇa : —

(L. 51). — Pañchasaptatyadhika-śatôttara-sahasrakê 'Saka-varshê varttamânê svasti śrîmad-Yâdavanârâyaṇa-bhujava (ba)lapraughapratâpachakravartti-śrî-Kanharadêva-varshêshu saptamê Pramâdi-saṁvatsarê Chaitra-masê kṛishṇa-pakshê amāvāsyaṁ Sômavarê.

In **S. 1175 expired**, which by the southern luni-solar system was **Pramâdin**, the new-moon *tithi* of the *amānta* Chaitra ended 19 h. 59 m. after mean sunrise of Sunday, 30th March, A. D. 1253. In **S. 1175 current** the same *tithi* ended 11 h. 7 m. after mean sunrise of Wednesday, 10th April, A. D. 1252.

195. — **S. 1180.** — Hultzsch, *South Ind. Inscr.* Vol. I. p. 108. Date of an inscription at the Ammaippêśvara temple at Paḍavêḍu : —

'To-day, which is (the day of the nakshatra) **Rêvati** and **Monday**, the seventh lunar day of the former half of the month of **Karkâṭaka**, which²¹ was current after the Saka year one thousand one hundred and eighty (had passed).'

In **S. 1180 expired** the sun was in the sign **Karkâṭa** from 11 h. 5 m. after mean sunrise of the 27th June to 22 h. 21 m. after mean sunrise of the 28th July, A. D. 1258. During this time there was one 7th *tithi* of the bright half, which commenced 3 h. 58 m. after mean sunrise of **Monday**, the 8th July, and ended 1 h. 46 m. after mean sunrise of the following day. But on **Monday**, the 8th July, the moon was in **Hasta** (No. 13) and **Chitrâ** (No. 14), not in **Rêvati** (No. 27).

196. — **S. 1261.** — *Ante*, Vol. X. p. 63. Bâdâmi inscription of the time of Harihara I. of Vijayanagara : —

(L. 1). — Saka-varusha 1261neya **Vikrama-saṁvatsarada** Chaitra-su(śu) 1 Gu (i. e. Guruvâra).

In the year **Vikrama**, which by the southern luni-solar system was **S. 1262 (not 1261)** expired, the first *tithi* of the bright half of Chaitra ended 4 h. 53 m. after mean sunrise of Tuesday, 29th February, A. D. 1340. In **S. 1261 expired** the same *tithi* commenced 1 h. 46 m. after mean sunrise of **Thursday**, 11th March, A. D. 1339, and ended 3 h. 41 m. after mean sunrise of the next day. — If the figure 1 for the *tithi* of the date were a mistake for 10, the

²⁰ Read *Jyêshṭha*.

²¹ The name of the Jovian year has here been omitted through an oversight.

date would regularly correspond, for **S. 1262 expired**, to **Thursday**, 9th March, A. D. 1340, when the 10th *tithi* of the bright half ended 18 h. 34 m. after mean sunrise.

197. — **S. 1276.** — *Jour. Bo. As. Soc.* Vol. XII. p. 349; *Mysore Inscr.* No. 131, p. 235; *ante*, Vol. XII. p. 214, No. 92. Harihar copper-plate inscription of Bukkarâya of Vijayanagara : —

(L. 19). — Sri-jayâbhuyudaya-nripa-Sâlivâhana-śaka 1276neya **Vijaya-saṁvatsarada** Mâgha-śudha(âdha) 15 **Chandravâra sômapârma(ga)-parvvaṇi** vu(n)shṭhakâladallu.

In **S. 1276 current**, which by the southern luni-solar system was **Vijaya**, the full-moon *tithi* of Mâgha ended 5 h. 53 m. after mean sunrise of Saturday, 8th February, A. D. 1354. In **S. 1276 expired** the same *tithi* ended 22 h. 11 m. after mean sunrise of Wednesday, 23th January, A. D. 1355. On neither day was there a lunar eclipse.

198. — **S. 1377.** — *Ante*, Vol. XX. p. 391. Copper-plate inscription of Gâṇadêva of Koṇḍavîḍu (a contemporary of Kapila, the Gajapati king of Orissa) : —

(L. 29). — Sâkê śaila-turaṅgam-âgni-sâsi-saṁkhyâtê Yuv-âbdê sūhhê . . . Bhâdrapadê vidhôr-graha-dinê.

In **S. 1377 expired**, which by the southern luni-solar system was **Yuvan**, the full-moon *tithi* of Bhâdrapada ended on the 27th August, A. D. 1455. In **S. 1377 current** the same *tithi* ended on the 7th September, A. D. 1454. On neither day was there a lunar eclipse.

199. — **S. 1478.** — From an impression supplied to me by Dr. Hultzsch. Chingleput copper-plate inscription of Sadâśiva of Vijayanagara : —

(L. 120). — Kramâd=vasu-hay-âbdh-îṁdu-gaṇitê 'Saka-vatsarê |

Nâḷa-saṁvatsarê mâsi Mârḡasîrsha iti śrutê |

sûry-ôparâgê=māvāsya-tithâ(thau) Mârṭtâṁḍa-vâsarê |

In **S. 1478 expired**, which by the southern luni-solar system was **Nâla** (Anala), the new-moon *tithi* of the *amānta* Mârḡasîrsha ended on, and occupied nearly the whole of, Tuesday, 1st December, A. D. 1556, when there was no eclipse. But there was a solar eclipse, visible in India, 6 h. 15 m. after mean sunrise of Monday, 2nd November, A. D. 1556, which was the new-moon day of the *amānta* Kârttika (or *pûrṇimânta* Mârḡasîrsha).

200. — **S. 1497.** — Hultzsch, *South Ind. Inscr.* Vol. I. p. 74. Date of an inscription at Sattuvâchchêri near Vêlûr : —

'On **Wednesday**, the thirteenth lunar day of the dark half of the month of **Makara**, of the **Yuva-saṁvatsara**, which was current after the Saka year 1497 (had passed).'

In **S. 1497 expired**, which by the southern luni-solar system was **Yuvan**, the sun was in **Makara** from 4 h. 57 m. after mean sunrise of the 29th December, A. D. 1575, to 15 h. 51 m. after mean sunrise of the 27th January, A. D. 1576. During this time there was one 13th *tithi* of the dark half, which lasted from shortly after sunrise of Thursday, the 29th December, A. D. 1575, to about the end of the same day.

(To be continued.)

ON THE DATES OF THE SAKA ERA IN INSCRIPTIONS.

BY PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

(Continued from p. 17.)

I NOW give a general list of Saka dates¹ which is similar to the list of Vikrama dates, published in Vol. XX. of this Journal. In addition to the 200 dates, the full details of which together with the calculated results have been already given, this list contains the dates which do not admit of verification, those the exact wording of which appeared to be doubtful, and a number of irregular dates not treated of before; but it also gives some regular dates which have only lately come to my knowledge. Throughout, the year of the date has been marked with an asterisk, whenever it can be combined with the Jovian year, mentioned along with it, only as a current year. And dates the calculation of which has yielded no satisfactory result, and which have not been included in the preceding list, are distinguished here by a cross, added to the last word of the date. — The list will be found to contain all the Saka dates published in this Journal, the *Epigraphia Indica*, Dr. Fleet's *Pāli, Sanskrit and Old-Kanarese Inscriptions*, Dr. Hultsch's *South-Indian Inscriptions*, and Mr. Rice's various publications (excepting the recently published *Epigraphia Karṇāṭaka*), and most of (if not all) those in the Journals of the Asiatic Societies, etc.; but from the *Inscriptions Sanscrites de Campā et du Cambodge* are the earliest dates, up to Saka-samvat 598, are given here.

General Chronological List of Saka Dates.

1. — P. 10, No. 166.² — S. 169, Prabhava, Phālgun-āmāvāsya, Bhṛigu-vārē. Tanjore spurious copper-plates of the Western Gaṅga Arivarman (Harivarman).
2. — P. 10, No. 167. — S. 261,* Vilambin, Kārttika-śudi 13, Sōma-vārē. Mudyanūr spurious copper-plates of the Bāṇa Malladēva-Nandivarman.
3. — P. 11, No. 168. — S. 261, Vibhava, Paṇṣa-vadi 14, Sōma-vāra, uttarāyaṇa-saṁkrānti. Spurious date in the Kalbhāvi Jaina inscription.
4. — S. 272 (P). — *Ante*, Vol. VII. p. 173; *Mysore Inscr.* No. 156, p. 293. Harihar spurious copper-plates of a son of the Western Gaṅga Vishnugōpa :—
(L. 9). — Saga[nayana gi neyā] Sādhāraṇa-sammachchharāda³. Phalguṇa mā amavāse Adivāradandu.†
5. — S. 310. — *Ante*, Vol. IX. p. 294. Pimpāṇēr spurious copper-plates of the Chalukya Satyākraya (Pulikēsin I. or II.) :—
(L. 1). — Sakanṛipa-kāl-ātita-samvatsara-śatēshu tṛi(tri)shu das-ōttarēshv-asyā[m] samvatsara-māsa-paksha-divasa-pūrvvāyān-tithau.
6. — P. 9, No. 163. — S. 366, Taraṇa, Phālgun-āmāvāsya, Briha-vāra. Bangalore spurious copper-plates of Vira-Noṇamba.
7. — P. 11, No. 169. — S. 388, Māgha-śudi 5, Sōma-vāra. Merkara spurious copper-plate of the Western Gaṅga Avinīta-Koṅgaṇi.

¹ I mean by this dates which distinctly refer themselves to the Saka era. The only exception to this is the date No. 7, of the year 388, from a spurious record. — The *Inscriptions Sanscrites du Cambodge* have several Saka dates which neither contain a reference to the era employed nor even a word for 'year.' Compare e. g. p. 87, v. 21, *Kha-nava-mūrttibhīr*; p. 88, v. 29, *vijad-vil-śeṣ-śāhikṛitādhiriṇya*; p. 88, C. v. 2, *dvi-nava-mūrttibhīr*; p. 104, v. 10, *vēda-dvi-vīla-rājyabhāk*; p. 106, v. 2, *vēda-dvi-naga-rājyabhāk*; etc.

² The references by page and number, here and in a similar manner under other dates, are to Vol. XXIII. pp. 113-134, and this volume, pp. 1-17.

³ By the mean-sign system Sādhāraṇa ended on the 7th September, A. D. 356, in S. 278 expired; and by the southern luni-solar system Sādhāraṇa would be S. 272 expired.

8. — S. 400. — *Ante*, Vol. VII. p. 64 (compare Vol. XIII. p. 72; and Vol. XVIII. p. 92). Umētā spurious copper-plates of the Gurjara Dadda Prasāntarāga :—
(L. 22). — Sakanṛipa-kāl-ātita-samvachchha(ṭsa)ra-śata-chatuṣṭayē Vaiśākha-paurṇamāsyām.
9. — S. 400. — *Ante*, Vol. X. p. 284. Bombay As. Soc.'s spurious copper-plates of Dhara-sēna II. of Valabhi :—
(L. 23). — Sakanṛipa-kāl-ātita-samvachchha(ṭsa)ra-śata-chatuṣṭayē Vaiśākhyām paurṇamāsi.
10. — P. 10, No. 164. — S. 411,* Vibhava, Vaiśākha-paurṇamāsi, a lunar eclipse. British Museum spurious copper-plates of the Early Chalukya Pulikēsin I.
11. — P. 11, No. 170. — S. 415, Jyaisṭh-āmāvāsya, a solar eclipse. Bagumrā spurious copper-plates of the Gurjara Dadda Prasāntarāga.
12. — P. 10, No. 165. — S. 417, Jyaisṭh-āmāvāsya, a solar eclipse. Ilāō spurious copper-plates of the Gurjara Dadda II. Prasāntarāga.
13. — S. 500. — *Ante*, Vol. III. p. 305; Vol. VI. p. 363; and Vol. X. p. 57. Bādāmi cave inscription of the Early Chalukya Maṅgalīvara :—
(L. 6). — Pravarddhmāna-rājya-samvatsarē dvādasē Sakanṛipati-rājyābhishēka-samvatsarēshv-atikrāntēshu pañchasa śatēshu . . . mahā-Kārttika-paurṇamāsyām.
14. — S. 526. — See S. 546.
15. — S. 532 (P). — *Ante*, Vol. VII. p. 220; and Vol. XVIII. p. 285. Kurtakōṭi spurious copper-plates of the Western Chalukya Vikramāditya I. :—
(L. 20). — Batrinā-ōttara-pañcha-śatēshu Saka-varshēshv-ātītēshu vijayarājya-sambachchha-śāhāśa-varshē pravarttamāna . . . tasya Vaiśākha-Jēṣṭhā-māsa-madhya-mamavāsya-Bhāskara-dinē Rōhiṇya-rikshē madhyāhna-kālē . . . Vṛishabha-rāśau tasmin Vṛishabha-rāśau sūryya-grāhāṇa-sarvvaṁ(grā)si(si)bhūtē.†
16. — S. 532. — *Jour. Be. As. Soc.* Vol. X. p. 365; *ante*, Vol. XII. p. 210, No. 37. Goa copper-plates of the Early Chalukya Maṅgalīvara's son or feudatory (?) Satyākraya-Dhru-varāja-Indravarman :—
(L. 6). — Māgha-paurṇamāsyām.
(L. 18). — Saka-kālah-pañcha varsha-śatāni dvātri(tri)śāni.
17. — P. 130, No. 106. — S. 534, 3rd year of reign, Bhādrapad-āmāvāsya, a solar eclipse. Haidarābād copper-plates of the Western Chalukya Pulikēsin II.
18. — S. 546 (and S. 526). — *Inscr. Sanscrites du Cambodge*, p. 36. Inscription at Bayang :—
(V. 11). — Rāsa-dasra-śarais-Sakēndra-varshē
padam=aisam viniva(ba)ddham-ishākābhīḥ [t*]
ṛitu-vārinidh-īndriyais=cha tīrthē
[sa]lila-sthāpanam=akāri tēna bhūyaḥ [t*]
19. — S. 548. — *Inscr. Sanscrites du Cambodge*, p. 41 (also p. 589; and *ante*, Vol. XXI. p. 47). Inscription at Vat Chakrot :—
Piṇḍibhūtē Sak-āpdē(bdē) vasu-jalanidhi-śarair-vvāsarē Mādhav-ādan
kīṭē prāglagnabhūtē kumudavanapatau Tāvurē Kṛittikāyām †
20. — S. 550. — *Inscr. Sanscrites du Cambodge*, pp. 55 and 57 (and p. 590). Inscription at Ang Chumnik :—
(P. 55, v. 2). — Kha-pañch-ēndriya-gē Sākē Rōhiṇyām śāsiṇi sthitē.

* Read -jaladhi.

(P. 57, v. 11). — Mādhavasya tṛitīyā-āhni dānakāla-prasāmsitē
kartavyasāśraddhayā pumbhir-i[chehbadbhīḥ phala*]m-akshayam.

21. — S. 556 (Kali 3735). — *Ante*, Vol. V. p. 70; Vol. VIII. p. 242; *Arch. Survey of West. India*, Vol. III. p. 135. Aihole inscription of the Western Chalukya Pulikēśin II. (mentions Kālidāsa and Bhāravi) :—

(L. 16). — Trimsatsu tri-sahasrēshu Bhāratād=āhavād=itah [1*]
sapt-ābda-śata-yuktēshu śa(ga)tēshv=ahdeshu pañchasa[11*]
Pañchāsaten Kalau kalē shaśu pañcha-śatāsu cha [1*]
samāsu samatītāsu Sakānām=api bhūbhujām 11

22. — S. 556. — *Inscr. Sanscritas du Cambodge*, p. 62 (and p. 591). Inscription at Vat Prey Vier :—

(V. 8). — Rasu-vasu-vishayānām sennipātēna labdhē
Sakapati-samay-ābdē Māgha-śukla[-dvitīyē].

23. — S. 556. — *Inscr. Sanscritas du Cambodge*, p. 68 (and p. 591). Inscription at Ang Chumnik :—

(V. 26). — Vaiśākha-prathama-dvipañchaka-dinē dvār-śaṣṭa-vāpāir=yyutē
jivas-chāpa-yutō vṛishē Kavi-sutas=simbhārdha-gaś=chandramāḥ [1*]
kaulirē-vapi(ni)jō ghaṭē Ravi-sutas-sēshā=tu mēsha-sthitās=
sō=yam śri-Vijayēśvarō vijayatē yaḥ kīṭa-lagnē-sthitah [11*]

24. — P. 122, No. 58. — S. 559, 16th day of Mādhava (Vaiśākha), sun in Mēsha, moon in Anurādhā, Jupiter in Chāpa (Dhanuḥ). Inscription at Vat Prey Vier.

25. — S. 558. — *Inscr. Sanscritas du Cambodge*, p. 76 (and p. 593). Inscription at Barai :—

Mūrtti-dvāra-śarais=Sakē sita-dinē prāptē das-aik-ōttarē
Jyēshthasy-ārka-kuj-ēndujā mithuna-g[Ā]- - - - -
śukrasy-ārka-antō vṛishē sura-gurōḥ kanyā[m] mṛig-ārdhdōdayē.

26. — S. 611. — *Ante*, Vol. VI. p. 86; *Jour. Bo. As. Soc.* Vol. XVI. p. 231. Togurshode copper-plates of the Western Chalukya Vinayāditya :—

(L. 24). — Ēkādas-ōttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravarddhamāna-vijayarājya-sāmvatsarē dasamē varttamānē . . . Kārttika-paurṇamāsyām.

27. — S. 613. — *Ante*, Vol. VI. p. 89. Karṇūl district copper-plates of the Western Chalukya Vinayāditya :—

(L. 24). — Trayōdas-ōttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravarddhamāna-vijayarājya-sāmvatsarē ēkādasē varttamānē . . . Māgha-paurṇamāsyām.

28. — P. 9, No. 160. — S. 614, 11th year of reign, dakshināyana(-sāmkṛānti), Sanaiśchara-vārē. Sorab copper-plates of the Western Chalukya Vinayāditya.

29. — S. 616. — *Ante*, Vol. VII. p. 302; *Mysore Inscr.* No. 192, p. 237. Harihar copper-plates of the Western Chalukya Vinayāditya :—

(L. 23). — Shōdas-ōttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravarddhamāna-vijayarājya-sāmvatsarē chaturdasē varttamānē . . . Kārttikē(ka)-paurṇamāsyām.

30. — S. 621. — *Ante*, Vol. X. p. 60. Bādāmi inscription of the Western Chalukya Vijayāditya :—

(L. 5). — Pravarddhamāna-vijayarājya-sāmvatsarē tṛitīyē varttamānē ēkavimś-ōttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu Jyēshthīyām paurṇamāsyām.

31. — S. 622. — *Ante*, Vol. IX. p. 128. Nērūr copper-plates of the Western Chalukya Vijayāditya :—

(L. 30). — Dvāvimsaty-uttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravarddhamāna-vijayarājya-sāmvatsarē chaturthē varttamānē . . . Āshāḍa(ḍha)-paurṇamāsyām.

32. — S. 627. — *Ante*, Vol. IX. p. 131. Nērūr copper-plates of the Western Chalukya Vijayāditya :—

(L. 29). — Saptavimsaty-uttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravarddhamāna-vijayarājya-sāmvatsarē dasamē varttamānē.

33. — S. 631. — *Ante*, Vol. XVIII. p. 235. Mntāl (in Central Provinces) copper-plates of the Rāshtrakūṭa chieftain Nandarāja-Yuddhasura :—

(L. 21). — Kārttika-paurṇamāsyām . . .

(L. 29). — Saka-kāla-sāmvatsara-śatēshu shachhv(ṭsv)-ēkatri[m*]ś-ōttarēshu.

34. — S. 651. — *Ante*, Vol. VII. p. 112. Lakshmēśvar inscription of the Western Chalukya Vijayāditya (recording a grant to his father's priest Udayadēvapaṇḍita, also called Niravadyapaṇḍita, who was the house-pupil of Śrīpūjyapāda) :—

(L. 42). — Ēkapañchāśad-uttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravartta(rdha)-māna-vijayarājya-sāmvatsarē chatustriṃśē varttamānē . . . Phālguna-māsē paurṇamāsyām.

35. — P. 113, No. 1. — S. 654, Kārttika-śndi 13, Indu-vārē. An inscription from Java.

36. — S. 656. — *Ante*, Vol. VII. p. 107. Lakshmēśvar inscription of the Western Chalukya Vikramāditya II. :—

(L. 72). — Shaṭpañchāśad-uttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravarddhamāna-vijayarājya-sāmvatsarē dvitīyē varttamānē Māgha-paurṇamāsyām.⁵

37. — S. 675. — *Ante*, Vol. XI. p. 112. Sūmangaḍ copper-plates of the Rāshtrakūṭa Dantidurga :—

(L. 30). — Pañchāśataty-adhika-Sakakāla-sāmvatsara-śata-śaṭkē vyatītē sāmvata(t) 675 pai(? pō or pau)hachchhikāyā Māgha-māsa-rathasaptamīyā[m*].

38. — P. 113, No. 2. — S. 676, Āśvayuja-śuddha 7, vishuva-sāmkṛānti. Antrōli-Chhārōli copper-plates of the Rāshtrakūṭa Kakka (Kakkarāja II.) of Gujārāt.

39. — S. 679. — *Ante*, Vol. VIII. p. 27; *Mysore Inscr.* No. 160, p. 301. Vokkalēri copper-plates of the Western Chalukya Kirtivarman II. :—

(Plate iv, b, 1. 4). — Navasaptaty-uttara-śaṭ-ohhatēshu Saka-varshēshv=atītēshu pravarddhamāna-vijayarājya-sāmvatsarē ēkādasē varttamānē . . . Bhādrapada-paurṇamāsyām.

40. — P. 11, No. 171. — S. 684, Vaiśākha, Viśākhā-nakshatrē, Sukra-vārē, a lunar eclipse. Hosūr spurious copper-plates of the Western Gaṅga Prithuvi-Kōṅgaṇi.

41. — S. 698. — *Ante*, Vol. II. p. 158. *Mysore Inscr.* No. 153, p. 287. Nāgamaṅgala spurious copper-plates of the Western Gaṅga Prithuvi-Kōṅgaṇi :—

(Plate iii, b, 1. 8). — Ashtānavaty-uttarē[shu*] shaṭ-ohhatēshu Saka-varshēshv=atītēshv=ātmanah pravarddhamāna-vijayavir(rāj)ya-sāmvatsarē pañch[ā*]śattamē pravarddha(rta)mānē.

42. — S. 700. — *Jour. Bo. As. Soc.* Vol. XVII. Pt. ii. p. 1. An inscription from Central Java :—

(L. 6). — Sakanpāpa-kāl-ātītair=varsba-śataih saptabhir . . .

43. — P. 131, No. 107 (*Ep. Ind.* Vol. III. p. 103). — S. 716, Vaiśākh-āmāvāsīyū, a solar eclipse. Pañhān copper-plates of the Rāshtrakūṭa Govinda III.

⁵ A lunar eclipse on the 13th January, A. D. 735, 17 h. 44 m. after mean sunrise.

44. — P. 122, No. 55. — **§. 726**, Subhānu, Vaiśākha-vadi 5, Bṛihaspati-vāra. Kanarese country copper-plates of the Rāshtrakūṭa Gōvinda III.

45. — **§. 726 (P)**. — *Ep. Ind.* Vol. I. p. 115. Date of the second *Prāsaīti* of Baijnāth :— (L. 33). — Sakakāla-gat-ābdāḥ 7[26].

46. — P. 11, No. 172. — **§. 730***, Vyaya, Vaiśākha-paurṇamāsī, a lunar eclipse. Wani copper-plates of the Rāshtrakūṭa Gōvinda III.

47. — P. 131, No. 108. — **§. 730**, Sarvajit, Srāvaṇ-āmāvāsya, a solar eclipse. Rādhapur copper-plates of the Rāshtrakūṭa Gōvinda III.

48. — **§. 734**. — *Ante*, Vol. XII. p. 161. British Museum (or Baroda) copper-plates of the Rāshtrakūṭa Karka-Suvarṇavarsha of Gujārāt.

(L. 52). — 'Sakanṛipa-kāl-ātita-samvatsara-śatēshu saptasu ścha(cha)tuśtrīṅśa[d-adhikē]shu mahā-Vaiśākhyām.

49. — P. 9, No. 161. — **§. 735**, Jyaisṭha-śudi 10, Chandra-vārē. Kaḍab copper-plates of the Rāshtrakūṭa Gōvinda III. (Prabhūtavarsha).

50. — **§. 735**. — *Ep. Ind.* Vol. III. p. 54. Tōrkhēḍ copper-plates of the reign of the Rāshtrakūṭa Gōvinda III., and of the time of his nephew and feudatory Gōvindarāja of Gujārāt :—

(L. 1). — 'Sakanṛipa-kāl-ātita-samvatsara-śatēshu saptasu pañchatṛi(tri)śatya(d)-adhikēshu Pausha-śuddha-saptamyām=āṅkatō=pi samvatsara-śatāni 735 Nandana-samvatsarē⁶ Paushaḥ śuddha-tithiḥ 7 asyām samvatsara-māsa-paksha-divasa-pūrvvāyām. [1*]

(L. 43). — vijaya-saptamyām.

51. — **§. 749**. — *Ante*, Vol. V. p. 148. Kāvī copper-plates of the Rāshtrakūṭa Gōvindarāja-Prabhūtavarsha of Gujārāt :—

(Plate iii, l. 7). — Sakanṛipa-kāl-ātita-samvatsara-śatē[shu saptasv=ē]kānnapañchāśat-samadhikēshu mahā-Vaiśākhyām.

52. — **§. 757**. — *Ante*, Vol. XIV. p. 200. Baroda copper-plates of the Rāshtrakūṭa Dhāravarsha-Dhruvarāja II. of Gujārāt :—

(L. 36). — Sakanṛipa-kāl-ātita-samvatsara-śatēshu saptasu saptapañchāśad-ādihikēshu Kārttika-śuddha-pañchadaśyām mahā-Kārttikī-parvvaṇi.

53. — P. 113, No. 3. — **§. 765**, Chaitra 15, Sōma-vāra, a lunar eclipse. An inscription from Java.

54. — **§. 765 (P)**. — *Ante*, Vol. XIII. p. 136. Kaṇheri inscription of the Rāshtrakūṭa Amōghavarsha I., and the (Śilāra) Mahāsāmanta Pullasakti :—

(L. 5). — Samva [765].

55. — P. 4, No. 139. — **§. 775** (for 773), Prajāpati, Āsvina-vadi 2, Budha-dinē. Kaṇheri inscription of the Rāshtrakūṭa Amōghavarsha I., and the (Śilāra) Mahāsā Kapardin.

56. — P. 113, No. 4. — **§. 782**, Jyaisṭha-śudi 9, Sukrē. Kalyān inscription of the Mahāmaṇḍalēśvara Māmvanirājadēva.

57. — P. 114, No. 5. — **§. 782**, Kārttika-śudi 13, Bṛihaspati-vāra. An inscription from Java.

58. — P. 123, No. 59. — **§. 788**, Vyaya, Jyaisṭh-āmāvāsya, Āditya-vāra, a solar eclipse. Sirūr inscription of the Rāshtrakūṭa Amōghavarsha I.

⁶ By the mean-sign system Nandana lasted from the 9th May, A.D. 812, in §. 735 current, to the 5th May, A.D. 813, in §. 735 expired; and by the southern luni-solar system Nandana was §. 735 current.

59. — P. 131, No. 109. — **§. 789**, Jyaisṭh-āmāvāsya, a solar eclipse. Bagumrā copper-plates of the Rāshtrakūṭa Dhāravarsha-Dhruvarāja III. of Gujārāt.

60. — **§. 797**. — *Jour. Bo. As. Soc.* Vol. X. p. 195. Saundattī inscription of the Rāshtrakūṭa Kṛishṇa II., and his feudatory the Raṭṭa Great Chieftain Prithvirāma :—

(L. 13). — Sapta-sa(śa)tyā navatyā ścha samāyukt[ē*]sa(shu) saptasu[1*]
Sa(śa)ka-kālēśv(shv)=atitēshu Manmath-āhvaya-vatsarē⁷ †

61. — **§. 799**. — *Ante*, Vol. XIII. p. 135. Kaṇheri inscription of the Rāshtrakūṭa Amōghavarsha I., and the (Śilāra) Mahāsāmanta Kapardin :—

(L. 1). — Sakanṛipa-kāl-ātita-samvatsara-śatēshu saptasu nananavaty-adhikēshv-sānkataḥ 799.

62. — **§. 809**. — *Ante*, Vol. VI. p. 102; *Coorg Inscr.* No. 2, p. 5; *Pāli, Skr. and Old-Kan. Inscr.* No. 269. Bijūr (Koḍagu) inscription of the Gaṅga or Koṅgu Satyavākya-Koṅgu-nivarma-Permanaḍi :—

'Saka 809 (in words, l. 2), the eighteenth year (in words, l. 5) of his reign; †the fifth day (śri-pañchameyaṇḍu) of Phālguna.'

63. — P. 123, No. 60. — **§. 810**, Chaitr-āmāvāsya, a solar eclipse. Bagumrā copper-plates of the Rāshtrakūṭa Akālavarsha-Kṛishṇarāja of Gujārāt.

64. — P. 9, No. 162. — **§. 822** (for 824 ?), Dundubhi, Māgha-śudi 5, Bṛihaspati-vāra. Nandwāḍige inscription of the Rāshtrakūṭa Kṛishṇa II.

65. — **§. 824**. — *Jour. Bo. As. Soc.* Vol. X. p. 190. Mulgund inscription of the Rāshtrakūṭa Kṛishṇa II. :—

(L. 2). — Sakanṛipa-kālēśhṭha(śhṭa)-śatē chaturttaraviṅśadu(ty-u)ttarē sampragatē Dundubhi-nāmani⁸ varshē pravarttamānē.

66. — **§. 831** (for 832 or 833 ?). — *Ante*, Vol. XII. p. 222. Aiholē inscription of the Rāshtrakūṭa Kṛishṇa II. :—

'While the *samvatsara* named Prajāpati,⁹ which was the eight hundred and thirty-first (of) the centuries of years that have elapsed from the time of the Saka king, was current.'

67. — **§. 832**. — *Ep. Ind.* Vol. I. p. 56. Kāpaḍvaṇaj copper-plates of the Rāshtrakūṭa Kṛishṇa II. :—

(L. 60). — Saka-samvat 832 Vaiśākha-śuddha-paurṇamāsyaḥ mahā-Vaiśākhyām.

68. — P. 114, No. 6. — **§. 836**, Pausha-śudi 4, uttarāyaṇa-samkrānti. Haḍḍālā copper-plates of the Chāpa Mahāsāmanta-dhipati Dharaṇivarsha, the feudatory of Mahāpāladēva.

69. — **§. 836**. — *Jour. Bo. As. Soc.* Vol. XVIII. pp. 260 and 264. Nausāri copper-plates of the Rāshtrakūṭa Nityavarsha Indra III. :—

(L. 52). — Sakanṛipa-kāl-ātita-samvatsara-śatēshv-asṭāśu śhaṭṭrīṅśad-uttarēshu Yuva-samvatsarē¹⁰ Phālguna-su(śu)ddha-saptamyām sampannē śri-paṭṭaya(va)ndh-ōtsavē.

⁷ By the mean-sign system Manmatha ended on the 13th August, A. D. 875, in §. 797 expired; and by the southern luni-solar system Manmatha was §. 797 expired.

⁸ By the mean-sign system Dundubhi ended on the 20th April, A. D. 902, in §. 824 expired; and by the southern luni-solar system Dundubhi was §. 824 expired.

⁹ By the mean-sign system Prajāpati lasted from the 18th March, A. D. 910, in §. 832 expired, to the 14th March, A. D. 911, in §. 833 expired (which commenced on the 4th March, A. D. 911); and by the southern luni-solar system Prajāpati was §. 833 expired.

¹⁰ By the mean-sign system Yuvan ended on the 25th February, A. D. 915, which was the 8th of the bright half of Phālguna of §. 836 expired; by the southern luni-solar system Yuvan would be §. 837 expired.

70. — **S. 838.** — *Ante*, Vol. XII. p. 224. Hattī-Mattūr inscription of the Rāshtrakūṭa Nityavarsha Indra III. :—

(L. 3). — Sa(śa)ka-bhūpāka-kā[-i*]krānta-sam[va*]tsara-Prabā(bha)v-ādi-nāmādē(dhē)-yam=uttama-madhyama-jaghanya-pa(pha)ladā(da)-prabhṛitiga[-e]ṇtu nūṛa māvati-ṇṇe(ṇṭa)-neya Dhātu-samvatsar[-i*]ntarggata.¹¹

71. — **S. 840.** — *Ante*, Vol. XII. p. 223. Daṇḍapur inscription of the Rāshtrakūṭa Prabhū-tavarsha (Gōvinda IV.) :—

‘When the eight hundred and fortieth year (of) the Saka era, that is known by the name of Pramāthi,¹² was current; at the time of the saṅkramaṇa, when the sun came to (the sign) Makara (and) on the lunar day of Pausha that coincided (with that saṅkramaṇa).’

72. — P. 114, No. 7. — **S. 851, Vikrīta**, Māgha-paurṇamāsī, Āditya-vāra, a lunar eclipse. Kaḷas inscription of the Rāshtrakūṭa Gōvinda IV.

73. — P. 114, No. 8. — **S. 855, Vijaya**, Srāvaṇa-paurṇamāsī, Guru-vārē. Sāṅglī copper-plates of the Rāshtrakūṭa Gōvinda IV.

74. — P. 2, No. 127. — **S. 856, Jaya**, Kārttika-śudi 5, Budha-vāra. Mahākūṭa inscription of the Mahāsāmanta Bappuvarasa.

75. — **S. 860.** — *Ep. Ind.* Vol. III. p. 180. Spurious Sūḍi copper-plates of the Western Gaṅga Bātuga :—

(L. 68). — Sa(śa)ka-vari[sh]ēshu shashṭyuttar-āshṭa[śa]tēshu atikrāntēshu Vikāni(ri)¹³. samvatsara-Kārttika-Nandīva(śva)ra-su(śu)kḷa-pakshah aṣṭamyaṁ Āditya-vārē.†

76. — **S. 862.** — *Jour. Bo. As. Soc.* Vol. XVIII. p. 248. Wardhā copper-plates of the Rāshtrakūṭa Kṛishṇa III. :—

(Plate iii. l. 1). — Sakaṛipā-kāl-ātita-samvatsara-śatēshv-ashṭasu dvishashṭy-adhikēshu Sārvarī¹⁴-samvatsar-āntarggata-Vaiśākha-bahula-paṅcha (ñcha)myām.

77. — P. 123, No. 61. — **S. 867 (Plavaṅga)**, Bhādrapad-āmāvāsya, Kuja(Maṅgala)-vāra, a solar eclipse. Sālṭēgi inscription of the Rāshtrakūṭa Kṛishṇa III.

78. — P. 123, No. 62. — **S. 867, Mārgaśrīsha**-vadi 13, sun in Dhanus, Bhṛigu-vārē. Accession of the Eastern Chalukya Amma II.

79. — **S. 872.*** — *Ep. Ind.* Vol. II. p. 171. Ātakūr inscription of the Rāshtrakūṭa Kṛishṇa III. :—

(L. 1). — Sa(śa)kanri(nri)pā-kāl-ātita-samvatsara-sa(śa)taṅga[-e]ṇtu-nūr=elpatt-erāḍaneyā Sau(sau)myam=emba samvatsaram pravarttise.¹⁵

80. — P. 12, No. 173. — **S. 872,* Saumya**, full-moon of Pausha, Monday, a lunar eclipse, uttarāyaṇa-samkrānti. An inscription at Narēgal.

81. — P. 5, No. 144. — **S. 872, Sādharāṇa**, new-moon of Kārttika, Thursday, a solar eclipse. Another inscription at Narēgal.

¹¹ By the mean-sign system Dhātī ended on the 21st February, A.D. 916, in S. 838 current; and by the southern luni-solar system Dhātī was S. 838 expired.

¹² By the mean-sign system Pramāthin ended on the 8th February, A.D. 919, in S. 840 expired; by the southern luni-solar system Pramāthin would be S. 841 expired.

¹³ By the mean-sign system Vikrīta commenced on the 19th November, A.D. 927, in S. 860 current, and ended on the 15th November, A.D. 938, in S. 860 expired; and by the southern luni-solar system Vikrīta would be S. 861 expired.

¹⁴ By the mean-sign system Sārvarī ended on the 11th November, A.D. 936, in S. 862 current; and by the southern luni-solar system Sārvarī was S. 862 expired.

¹⁵ By the mean-sign system Saumya ended on the 4th October, A.D. 948, in S. 870 expired; and by the southern luni-solar system Saumya was S. 872 current.

82. — P. 114, No. 9. — **S. 873, Virōdhin** (for Virōdhakṛit), Mārgaśrīsha-paurṇamāsī, Āditya-vāra, a lunar eclipse. Soraṭūr inscription of the Rāshtrakūṭa Kṛishṇa III.

83. — **S. 890.** — *Ante*, Vol. VII. p. 105. Lakshmēsvar inscription of the Gaṅga or Koṅgu Mārasimha Satyavākya Koṅguivarman :—

(L. 24). — ‘Sakanripa-kāl-ātita-samvatsara-śatēshv=ashtasu navaty-uttarēshu pravarttamānē Vibhava-samvatsarē.¹⁶

84. — P. 123, No. 63. — **S. 893, Prajāpati**, Āsvayuj-āmāvāsya, Āditya-vāra, a solar eclipse. Adaraguṅchi inscription of the Rāshtrakūṭa Koṭṭiga (Khotṭiga).

85. — P. 115, No. 10. — **S. 894, Aṅgīras**, Āsvayuja-paurṇamāsī, Budha-dinē, a lunar eclipse. Kardā copper-plates of the Rāshtrakūṭa Kakkala (Kakka II).

86. — P. 12, No. 174. — **S. 896,* Srimukha**, dakshināyaṇa-samkrānti, Āditya-vāra. Guṇḍūr inscription of the Rāshtrakūṭa Kakkala (Kakka II).

87. — **S. 899.** — *Ante*, Vol. VI. p. 102; Vol. XIV. p. 76; *Coorg Inscr.* No. 4, p. 7; *Pāli, Skr. and Old-Kan. Inscr.* No. 271. Peggu-ūr (Kodagu) inscription of the Gaṅga or Koṅgu Satyavākya Koṅguivarman :—

(L. 1). Sakanripa-kāl-ātita-samvatsara-sataṅga 829taneya Īsvara-samvatsaram¹⁷ pravattise . . . tad-varsh-ābhyanṭara Pā(phā)lguṇa-sukla-pakshada Nandīsvaram tallaj-āvāsam āge.

88. — P. 6, No. 147. — **S. 902, Vikrama**, Pausha-śudi 10, Bṛhaspati-vāra, uttarāyaṇa-samkrānti. Saundatti inscription of the Western Chālukya Taila II., and his feudatory the Raṭṭa Santivarman.

89. — P. 124, No. 64. — **S. 904, Chitrabhānu**, Chaitra-vadi 8, Soma-vāra. Death of the Rāshtrakūṭa Indrarāja (Indra IV.).

90. — **S. 904.** — From Dr. Fleet’s impression. Nilgund inscription of the Western Chālukya Taila II. :—

(L. 17). — Sa(śa)kanripa-samvatsarēshu chaturadhika-avaśatēshu gatēshu Chitrabhānu-samvatsarē Bhādrapada-māśē sūryya-grahaṇē.¹⁸

91. — **S. 911.** — *Ep. Ind.* Vol. III. p. 232. Bhairanmaṭṭi inscription of the Western Chālukya Taila II. and the Sinda Pulikāla :—

(L. 4). — Sa(śa)ka-varsha 911 Vikri(kṛi)tam¹⁹=emba samvatsara pravarttise.

92. — **S. 911.** — *Coorg Inscr.* No. 5, p. 8. An inscription at Merkara :—

(L. 1). — Saka-varisha 911neya ‘Sa(?) . . . uttarāyaṇa . . .

93. — P. 12, No. 175 (*Ep. Ind.* Vol. III. p. 274). — **S. 919, Hēmalamba**, Āshāḍha-vadi 4, dakshināyaṇa-samkrānti. Bhādāna copper-plates of the Śilāra Aparājita.

94. — **S. 919.** — *Pāli, Skr. and Old-Kan. Inscr.* No. 214; *Mysore Inscr.* No. 99, p. 187 (?). Tālgund inscription of the Western Chālukya Taila II., and his feudatory Bhīma :—

‘Saka 919 (in figures, 1. 12), the Hēmalambi sēkhvatsara; Sunday, the fifth day of the bright fortnight of (?) Āsvayuja.’ (*Mys. Inscr.*: ‘Vaiśākha, the 5th day of the moon’s decrease, Sunday.’)²⁰

¹⁶ By the mean-sign system Vibhava ended on the 16th July, A.D. 967, in S. 890 current; and by the southern luni-solar system Vibhava was S. 890 expired.

¹⁷ By the mean-sign system Īsvara ended on the 7th June, A.D. 976, in S. 899 current; and by the southern luni-solar system Īsvara was S. 899 expired.

¹⁸ A solar eclipse, visible in India, on the 20th September, A.D. 982.

¹⁹ By the mean-sign system Vikrīta ended on the 14th April, A.D. 989, in S. 911 expired; and by the southern luni-solar system Vikrīta was S. 912 expired.

²⁰ Vaiśākha-vadi 8 of S. 919 expired = Hēmalamba would correspond to Sunday, the 2nd May, A.D. 997.

95. — P. 12, No. 176. — **S. 922**, Sarvarin,²¹ Bhādrapad-āmāvāsyā, a solar eclipse. Saṃgamnēr copper-plates of the Yādava Bhillama II.

96. — **S. 924**. — *Ante*, Vol. XII. p. 210, No. 31. Gadag inscription of the Western Chālukya Satyāśraya II. : —

(L. 7). — Sa(śa)ka-bhūpāla-kāl-ākramāta-saṃvatsara-sa(śa)taṅga[*] 924neya Subhākrit-saṃvatsaraṃ pravarttise tad-varsh-ābhyantara-Chaitra-śuddha 5 Adityavārad-andu.²²

97. — **S. 928** (for 929 ?). — *Ante*, Vol. XII. p. 212, No. 67. Guḍikaṭṭi inscription of the Western Chālukya (?); Jayasimha III. : —

(L. 13). — Sa(śa)kam=ā(a)bdā gaja-dvi-nidhi Plavaṅgadolu.²³

98. — **S. 930**. — *Jour. Bo. As. Soc.* Vol. I. p. 218. Khārepāṭaṅ copper-plates of (the Western Chālukya Satyāśraya II. and) the Silāra Baṭṭarāja : —

(L. 40). — 'Sakanripa-kāl-ātita-saṃvatsara-nava-śatēshu trīmśad-adhikēshu pravarttamāna-Kilaka-saṃvatsar-āntarggata-Jyēshtha-paurṇamāsyām.

99. — **S. 930**. — *Ante*, Vol. XII. p. 212, No. 52. Mnnōḷi inscription of the Western Chālukya Satyāśraya II. : —

(L. 10). — Sa(śa)ka-varisha 930 Kilaka-[saṃva]tsa[rada] 'Srāvāṇa-bahuḷa-taddi(di)[gē*] Sōmavārad-amdu.†

100. — **S. 930** (for 931). — *Ante*, Vol. XVI. p. 24. Kanthēm copper-plates of the Western Chālukya Vikramāditya V. : —

(L. 61). — Sakanripa-kāl-ātita-saṃvatsara-śatēshu navasu tṛi(tri)śad-adhikēshu gatēshu 930 prava[r*]ttamāna-Saumya-saṃvatsarē²⁴ paurṇamāsyām sōmagrahaṇa-parvvaṇi.

101. — P. 115, No. 11. — **S. 939**, Piṅgala, Kārttika-śudi 15, a lunar eclipse. Ṭhāṇā copper-plates of the Silāra Arikēśarin.

102. — **S. 940**. — *Pāli, Skr. and Old-Kan. Inscr.* No. 153; *Mysore Inscr.* No. 80, p. 166. Baḷagāṃve inscription probably of the Western Chālukya Jayasimha III. : —

'Saka 940 (in figures, l. 10). The other details of the date are illegible.'

103. — P. 13, No. 177. — **S. 941**, Siddhārthin, Pausha-śudi 2, Sunday, uttarāyāna-saṃkrānti. Baḷagāṃve inscription of the Western Chālukya Jayasimha III.

104. — P. 131, No. 110. — **S. 944**, sun in Simha, vadi 2, Guru-vārē. Accession of the Eastern Chalukya Rājārāja I.²⁵

105. — P. 13, No. 178. — **S. 944**, Dundubhi, Āditya-vāra, uttarāyāna-saṃkrānti. Bēlūr inscription of the Western Chālukya Jayasimha III.

106. — P. 115, No. 12. — **S. 946**, Baktākshi, Vaiśākha-paurṇamāsi, Āditya-vārē. Miraj copper-plates of the Western Chālukya Jayasimha III.

107. — P. 129, No. 98. — **S. 948**,* Krōdhana, a solar eclipse in Kārttika. Kalas-Budrūkh copper-plates of the Yādava Bhillama III.

108. — P. 13, No. 179. — **S. 948**, Kshaya, Kārttika-śudi 15, Ravan, a solar (!) eclipse Bhāṅḍup copper-plates of the Silāra Chittārāja.

²¹ Here and in those of the following dates to which no special note is attached, the Śaka year can be combined with the Jovian year mentioned along with it, only by the southern luni-solar system.

²² This date regularly corresponds, for **S. 924** expired = Subhākrit, to Sunday, the 22nd March, A. D. 1002.

²³ By the mean-sign system Plavaṅga ended on the 1st February, A. D. 1006, in **S. 928** current; and by the southern luni-solar system Plavaṅga was **S. 929** expired.

²⁴ By the mean-sign system Saumya ended on the 24th January, A. D. 1006, in **S. 930** current; and by the southern luni-solar system Saumya was **S. 931** expired. There was no lunar eclipse in **S. 930** current.

²⁵ See *ante*, Vol. XX. p. 273, note 18.

109. — P. 115, No. 13. — **S. 950**, Vibhava, Pausha-śudi 5, Sōma-vāra, uttarāyāna-saṃkrānti. Tālgund inscription of the Western Chālukya Jayasimha III.

110. — **S. 955**. — *Ep. Ind.* Vol. III. p. 234. Bhairanmatṭi inscription of the Western Chālukya Jayasimha III., and the Sinda Great Chieftain Nagāditya : —

(L. 52). — Sa(śa)ka-varsha 955[ne*]ya Srimukha-saṃvatsara pravarttise.

111. — **S. 957**. — *Pāli, Skr. and Old-Kan. Inscr.* No. 155; *Mysore Inscr.* No. 71, p. 146. Baḷagāṃve inscription of the Western Chālukya Jayasimha III. : —

'Saka 957 (in figures, l. 10), the Yuva saṃvatsara; Sunday, the day of the full-moon of Pushya; at the time of the sun's commencing his progress to the north.†

112. — P. 13, No. 180. — **S. 962**, Vikrama, Mārgaśirsha-śudi 5, Āditya-vāra. Maṭṭūr inscription of the Western Chālukya Jayasimha III.

113. — P. 6, No. 148. — **S. 966**, Taraṇa, Pausha-śudi 10, Ādi-vāra, uttarāyāna-saṃkrānti. Hūli inscription of the Western Chālukya Sōmēśvara I.

114. — **S. 968**. — *Pāli, Skr. and Old-Kan. Inscr.* No. 156; *Mysore Inscr.* No. 92, p. 183. Baḷagāṃve memorial tablet of the time of (the Western Chālukya Sōmēśvara I., and his feudatory) the Great Chieftain Chāvūṇḍarāja : —

'Saka 968 (in figures, l. 3), the Vyaya saṃvatsara; Wednesday, the fifth day of the bright fortnight of Mārgaśirsha.' (*Mys. Inscr.* : 'the 13th day of the moon's increase, Friday.')

115. — P. 13, No. 181. — **S. 970**, Sarvadhārin, Jyāishṭha-śudi 13, Āditya-vāra. Baḷagāṃve inscription of the Western Chālukya Sōmēśvara I., and his feudatory the Great Chieftain Chāvūṇḍarāja.

116. — P. 124, No. 65. — **S. 972**, Vikṛita, Paush-āmāvāsyā, Aṅgāra(Maṅgala)-vārē, a solar eclipse. Surat copper-plates of the Chālukya Trilōchanapāla of Lāṭadēsa.

117. — **S. 973** (for 974 ?). — *Ante*, Vol. XII. p. 211, No. 42. Guḍikaṭṭi inscription of the Western Chālukya Sōmēśvara I. : —

(L. 19). — Sa(śa)ka-kāḷam guṇa-sapta-naīda-mṛi(mi)tam-āgalavarttakam Nandan-ābdakam.²⁷

118. — P. 122, No. 56. — **S. 976**, Jaya, new-moon of Vaiśākha, Sunday. Baḷagāṃve inscription of the Western Chālukya Sōmēśvara I.

119. — P. 7, No. 150. — **S. 976**, Jaya, Vaiśākha-āmāvāsyā, Sōma-vāra, a solar eclipse. Honwād inscription of the Western Chālukya Sōmēśvara I.

120. — P. 115, No. 14. — **S. 980**, Vilambin, Pausha-śudi 7, Bṛihaspati-vārē, uttarāyāna-saṃkrānti. Copper-plates of the Silāhāra Mārasimha.

121. — P. 7, No. 151. — **S. 984**, Subhākrit, Pausha-vadi 7, Āditya-vāra, uttarāyāna-saṃkrānti. Hulgūr inscription of the Western Chālukya Sōmēśvara I.

122. — **S. 984**. — *Ante*, Vol. XII. p. 209, No. 15. Chillūr-Baḍṇi inscription of the Western Chālukya Sōmēśvara I. : —

(L. 26). — Sa(śa)kanripa-kāl-ātita-saṃvatsara-sa(śa)taṅga[*] 984neya [Su]bhākrit-saṃvatsarada Pausya(sha)-su(śu)ddha-dasa(śa)mi Ādityavāram-uttarāyāna-saṃkrānti-vyatī-pāṭad-andu.†

²⁶ Mārgaśirsha-śudi 5 of **S. 968** expired = Vyaya would correspond to Wednesday, the 5th November; and śudi 13 to Friday, the 14th November, A. D. 1046.

²⁷ By the mean-sign system Nandana ended on the 26th July, A. D. 1050, in **S. 973** current; and by the southern luni-solar system Nandana was **S. 974** expired.

123. — S. 988. — *Pāli, Skr. and Old-Kan. Inscr.* No. 136; *Mysore Inscr.* No. 11, p. 19. Dāvāngere inscription of the Western Chālukya Sōmēśvara I. and his son Vishṇuvardhana-Vijayāditya : —

‘Saka 988 (in figures, l. 18), the Parābhava saṁvatsara; Tuesday, the day of the new-moon of Bhādrapada; at the time of an eclipse of the sun.’†

124. — S. 990. — *Mysore Inscr.* No. 170, p. 321. Banavāsi inscription of the Western Chālukya Sōmēśvara I. : —

‘In the Saka year 990, the year Kilaka, the month Chaitra, the 1st day of the moon’s increase.’

125. — P. 124, No. 66. — S. 991, Saumya, a solar eclipse in Āshāḍha. Vāghlī inscription of the Yādava Sēupachandra II.

126. — P. 14, No. 182. — S. 991, Saumya, ‘Srāvaṇa-śudi 14, Guru-dinē. Bassein copper-plates of the Yādava Sēupachandra II.

127. — P. 7, No. 152. — S. 993, Virōdhikrit, Pausha-śudi 1, Sōma-vāra, uttarāyana-saṁkrānti. Two Balagāṁve inscriptions of the Western Chālukya Sōmēśvara II.

128. — P. 115, No. 15. — S. 996, Ānanda, Pausha-śudi 5, Bṛihaspati-vāra, uttarāyana-saṁkrānti. Bijāpur inscription of the Western Chālukya Sōmēśvara II.

129. — P. 7, No. 153. — S. 997, Bākshasa, Pausha-paurṇamāsī, Āditya-vāra, uttarāyana-saṁkrānti. Kādarōḷi inscription of the Western Chālukya Sōmēśvara II.

130. — P. 8, No. 153. — S. 997, Bākshasa, Pausha-śudi 1, Sōma-vāra, uttarāyana-saṁkrānti. Balagāṁve inscription of the Western Chālukya Sōmēśvara II.

131. — S. 998. — *Ante*, Vol. XVIII, p. 39. Guḍigere Jaina inscription : —

(L. 19). — Sa(sa)ka-varsha 998 ney=Anaja-saṁvatsarada śrāheyoḷu.

132. — P. 116, No. 16. — S. 999, Piṅgala, Āshāḍha-śudi 2, Āditya-vāra, saṁkrānti-pavitṛārōhaṇa (dakṣiṇāyana-s.). Hulgūr inscription of the Western Chālukya Vikramāditya VI. and Jayasīrha IV.

133. — P. 132, No. 111. — S. 999, sun in Kumbha, śudi 3, Ravija(Sani)-dinē. Accession of the Gaṅga Anantavarman Chōḍagaṅgadēva.

134. — P. 2, No. 128. — S. 1001,* sun in Simha, śudi 13, Guru-vārē. Appointment of Vira-Chōḍadēva as viceroy of Vēṅgi.

135. — P. 132, No. 112. — S. 1003, Mēsha-māsa, vadi 8, Āditya-vārē. Vizagapatam copper-plates of the Gaṅga Anantavarman Chōḍagaṅgadēva.

136. — P. 14, No. 183. — S. 1008 (for 1009?), Prabhava, Vaiśākha-śudi 3, Sukra-dinē. Sitabaldī inscription of the Western Chālukya Vikramāditya VI.

137. — S. 1011. — *Pāli, Skr. and Old-Kan. Inscr.* No. 93. Hāli inscription of the Western Chālukya Vikramāditya VI., and his feudatory the Great Chieftain Kāma of the family of the Kādambas of Banavase : —

‘Saka 1011 (in words, l. 74) the Sukla saṁvatsara; at the time of the sun’s commencing his progress to the north.’

138. — S. 1016. — *Ante*, Vol. IX, p. 35. Khārepāṭṣ copper-plates of the Śilāra Anantadēva : —

(L. 73). — Sa(sa)kanripa-kāl-ātita-saṁvatsara-dāsa-sa(sa)tēshu shōḍas(ś)-ādhikēshu Bhāva-saṁvatsar-āntarggata-Māgha-su(śu)ddha-pratipadāyām yatr-ūmkaṭō-pi samvat 1016.

139. — S. 1025. — *Mysore Inscr.* No. 174, p. 330. Sindigere inscription of the Hoysala Ballāla I. : —

‘In the Saka year 1025, the year Svabhānu, the month Kārttika, the 10th day of the moon’s increase, Thursday.’†

140. — P. 127, No. 83. — S. 1032,* Virōdhin, Māgha-śudi 10, Maṅgala-vārē. Tālaleṅ copper-plates of the Śilāhāra Gaṅḍarādityadēva.

141. — P. 127, No. 83. — [S. 1033*], Vikṛita, Vaiśākha-paurṇamāsī, a lunar eclipse. Tālaleṅ copper-plates of the Śilāhāra Gaṅḍarādityadēva.

142. — S. 1035 (or 1037 ?). — *Inscr. at Sravaṇa Belgōla*, No. 46, pp. 22 and 126. Death of Būchapa, lay disciple of Subhachandra-siddhāntadēva (pillar set up by the wife of the general Gaṅga) : —

‘Saka-varusha 1037 (in translation 1035) neya Vijaya-saṁvatsarada Vaiśākha-su(śu)ddha 10 Ādityavārad-andu.’‡

143. — P. 116, No. 17. — S. 1037, Manmatha, Mārgaśirsha-śudi 14, Bṛiha-vāra. Death of Mēghachandra-traividya-dēva (tomb erected by the wife of Gaṅga-Rāja, the minister of the Hoysala Vishṇuvardhana).

144. — S. 1039. — *Pāli, Skr. and Old-Kan. Inscr.* No. 18; *Mysore Inscr.* No. 146, p. 265. Bēlūr copper-plates of the Hoysala Vishṇuvardhana and his chief queen Śantaladēvi : —

‘Saka 1039 (in words) the Hēmalambi saṁvatsara; Sunday (Mys. Inscr. : ‘Monday’), the fifth day of the bright fortnight of Chaitra.’‡§

145. — P. 116, No. 18. — S. 1039, Hēmaṇambi, Phālguna-śudi 5, Sōma-vāra. A grant by the Daṇḍanāyaka Gaṅga-Rāja, confirmed by the Daṇḍanāyaka Ēchi-Rāja.

146. — S. 1040. — *Ante*, Vol. XVIII, p. 169. Vizagapatam copper-plates of the Gaṅga Anantavarman Chōḍagaṅgadēva : —

(L. 169). — Viyad-udadhi-kh-ēndu-gaṇitēshu Saka-vatsarēshu puṇyē=hani.

147. — S. 1041.* — *Inscr. at Sravaṇa Belgōla*, No. 139, pp. 110 and 185. Death of Srimati Ganti, the pupil of Divākaranandin : —

Saka-varsham 1041 neya Viḷambi-saṁvatsarada Phālguna-śuddha-pāñcbamī Eudhavārad-andu.†

148. — P. 129, No. 99. — S. 1042,* Vikārin, Phālguna-vadi 11, Bṛiha-vāra. Death of Dēmiyyaka, the lay disciple of Subhachandra-siddhāntadēva.

149. — S. 1043.* — *Inscr. at Sravaṇa Belgōla*, No. 44, pp. 20 and 125. Death of Pōchaladēvi (tomb erected by her son, the Daṇḍanāyaka Gaṅga-Rāja, the minister of the Hoysala Vishṇuvardhana) : —

Sa(sa)ka-varsha 1043 neya Sa(sa)rvvari-saṁvatsarada Āshāḍha-su(śu)ddha 5 Sōmavārad-andu.†

150. — S. 1044.* — *Inscr. at Sravaṇa Belgōla*, No. 48, pp. 27 and 128. Death of Lakshmy-ambike (Lakkave), the wife of the Daṇḍanāyaka Gaṅga-Rāja : —

Sa(sa)ka-varsha 1044 neya Flava-saṁvatsarada . . . śuddha 11 Sukravārad-andu.

151. — P. 116, No. 19. — S. 1045, Subhakṛit (for Sōbhakṛit), Vaiśākha-paurṇamāsī, Bṛihaspati-vāra. Date in an inscription at Tērdāl, of the time of the Western Chālukya Vikrama-Tribhuvanamalla (Vikramāditya VI.); bis subordinate, the Rāja Mahāmaṅḍalēśvara Kārtavīrya; and the petty chief Goṅka.

* For S. 1035 expired = Vijaya the date regularly corresponds to Sunday, the 27th April, A. D. 1113.

† Chaitra-śudi 5 of S. 1039 expired = Hēmalamba would correspond to Saturday, the 10th March, A. D. 1117.

152. — P. 116, No. 20. — S. 1045, **Sōbhakrit**, Śrāvāṇa-śudi 10, Sita (Sukra)-vāra. Death of Śubhachandra-siddhāntadēva (tomb erected by the *Daṇḍanāyaka* Gāṅga-Rāja, the minister of the Hoysala Vishṇuvardhana).

153. — S. 1045. — *Inscr. at Sravāṇa Belgola*, No. 53, pp. 41 and 134. A grant by **Santaladēvi**, the chief queen of the Hoysala Vishṇuvardhana :—

Sa(śa)ka-varuṣa śāyirada nālvattaydeneya **Sōbhakrit**-sainvatsarada Chaitra-su(śu)ddha-pāḍiva Bṛihaspativārad-andu.†

(The same date in another grant by the same queen, *ib.* No. 56, pp. 52 and 143.)

154. — S. 1045 (P). — *Pāli, Skr. and Old-Kan. Inscr.* No. 146; *Mysore Inscr.* No. 4, p. 9. Chitaldurg inscription of the Western Chālukya **Jagadēkamalla**, and his feudatory the Great Chieftain **Vijaya-Pāṇḍyadēva** :—

‘Saka 1045 (in figures, the last two effaced, l. 28), the **Sōbhakrit** *sainvatsara*; Sunday, the tenth day of the bright fortnight of Phālguna’; ³⁰ (*Mys. Inscr.*: ‘at the time of the equinox’).

155. — P. 124, No. 67. — S. 1047, **Viśvāvasu**, Bhādrapada-vadi 13, Śakra-vāra, yugādi. Narēndra inscription of the Western Chālukya **Vikramāditya VI**.

156. — P. 124, No. 68. — S. 1050, **Kilaka**, Phālguna-vadi 3, Bhāskara-vārē. Death of **Mallishēṅga**.

157. — P. 127, No. 84. — S. 1051,* **Kilaka**, Kārttika-paurṇamāsī, a lunar eclipse. Inḡlēśvar inscription of the Western Chālukya **Sōmēśvara III**.

158. — S. 1053. — *Inscr. at Sravāṇa Belgola*, No. 53, pp. 38 and 132. Death of **Santaladēvi**, the chief queen of the Hoysala Vishṇuvardhana :—

Sa(śa)ka-varuṣam 1050mūṛṇeneya **Virōdhikrit**-sainvatsarada Chaitra-su(śu)ddha-paṇchamī Sōmavārad-andu.†

159. — P. 14, No. 184. — S. 1056, . . . vishuvati. Chittūr copper-plates of the Eastern Chalukya **Kulōttuṅga Chōḍadēva II**.

160. — S. 1057. — *Ante*, Vol. XVIII. p. 174. Vizagapatam copper-plates of the Gāṅga **Anantavarman Chōḍagaṅgādēva** :—

(L. 32). — Śāk-āvdē(bdē)shu muni-sa(śa)ra-viyach-chha(cha)m̄dra-gaṇitēshu Vṛiśchikamāṣē.

161. — S. 1059. — *Ep. Ind.* Vol. II. p. 338. Gōvindpur inscription of the poet Gāṅgād̄hara; mentions the Māna princes **Varṇamāna** and **Rudramāna** of Magadha :—

(L. 34). — Nand-ēndriy-ābhr-ēndu-samē Śāk-āvdē(bdē) . . . Śāka 1059.

162. — S. 1059 (P). — *Inscr. at Sravāṇa Belgola*, No. 68, pp. 60 and 150. Death of **Chaladaṅka-rūva** Hoysala-setti :—

Sa(śa)ka-varṣa(rsha) 1059neya³¹ **Saumya**-sainvatsarada Māgha-māsada śukla-pakshada saṅkramāṇad-andu.

163. — P. 14, No. 185. — S. 1060,* **Piṅgala**, Pauṣa-śudi 10, Sunday, uttarāyapa-saṅkrānti. Sindigere inscription of the Hoysala Vishṇuvardhana.

164. — S. 1061 (P). — *Inscr. at Sravāṇa Belgola*, No. 52, pp. 35 and 130. Tomb erected for **Siṅgamayya**, the son of the *Daṇḍanāyaka* **Baladēva** :—

Sa(śa)ka-varuṣa 1041(in translation 1061)neya³² **Siddhārthi**-sainvatsarada Kārttika-su(śu)ddha-dvādasa(śa) Sōmavārad-andu.†

³⁰ Phālguna-śudi 10 of S. 1045 expired = Sōbhakrit would correspond to Tuesday, the 26th February, A. D. 1124.

³¹ Saumya would be S. 1051 expired.

³² Siddhārthi would be S. 1061 expired.

165. — S. 1061 (P). — *Inscr. at Sravāṇa Belgola*, No. 51, pp. 34 and 129. Death of the *Daṇḍanāyaka* **Baladēva**, the lay disciple of **Prabhāchandra-siddhāntadēva** :—

Sa(śa)ka-varuṣa 1041 (in translation 1061) **Siddhārthi**-sainvatsarada Mārggasi(śi)ra-sur(śu)ddha-pāḍiva Sōmavārad-andu.†

166. — P. 4, No. 140. — S. 1063 (for 1064), **Dundubhi**, Jyaiṣṭha-śudi 15, Sōmē. Añjanēri inscription of the Yādava **Mahāsāmanta Sēṇadēva**.

167. — P. 127, No. 85. — S. 1065,* **Dundubhi**, Bhādrapada-śudi 6, Śakra-vāra. Miraj inscription of the Śilāhāra **Vijayāditya**.

168. — P. 127, No. 86 (*Ep. Ind.* Vol. III. p. 210). — S. 1065,* **Dundubhi**, Māgha-paurṇamāsī, Sōma-vārē, a lunar eclipse. Kōlhāpur inscription of the Śilāhāra **Vijayāditya**.

169. — P. 14, No. 186. — S. 1066,* **Rudhirōdgarin**, Māgha-vadi 14, Vāḍḍa-vāra. Miraj inscription of the Śilāhāra **Vijayāditya**.

170. — P. 127, No. 87. — S. 1068,* **Krōdhana**, Āśvina-śudi 10, Bṛiha-vāra. Death of **Prabhāchandra-siddhāntadēva**, the disciple of **Mēghachandra-traividya**.

171. — P. 128, No. 88 (*Ep. Ind.* Vol. III. p. 212). — S. 1073,* **Pramōda**, Bhādrapada-paurṇamāsī, Śakra-vārē, a lunar eclipse. Bāmaṇi inscription of the Śilāhāra **Vijayāditya**.

172. — S. 1075. — *Ante*, Vol. VIII. p. 41. Pāṭṅā inscription of **Gōvana III**. of the **Nikumbha** family :—

(L. 20). — Varshā[nām] pañchasaptatyā sahasrē śādhikē gatē t 1075 t

‘Saka-bhūpāla-kālasya tathā Śrimukha-vatsarē ||

173. — P. 116, No. 21. — S. 1076, **Bhāva**, Āshāḍha-śudi 5, Bṛihaspati-vāra. Hulgūr-inscription of the Western Chālukya **Taila III**.

174. — P. 116, No. 22. — S. 1078, **Dhātri**, Vaiśākha-śuddha, akshaya-tṛitīyā, yugādi, Bhauma-dinē. Bombay As. Soc.’s inscription of the Śilāra **Malikārjuna**.

175. — S. 1079. — *Pāli, Skr. and Old-Kan. Inscr.* No. 219; *Mysore Inscr.* No. 102, p. 193. Tālgund inscription of the **Kaḷachuri Bijjaṅga-Tribhuvanamalla**, and his **Leader** of the forces **Kēśimayya** :—

‘Saka 1079 (in figures, l. 57), the **Īsvara** *sainvatsara*; Monday, the day of the full-moon of Pushya; at the time of the sun’s commencing his progress to the north.†

176. — P. 8, No. 154. — S. 1080, **Bahudhānya**, Āshāḍha-āmāvāsīyā, Sōma-vāra, dakṣiṇāyana-saṅkrānti. Siddāpur inscription of the **Kādamba Mahāmaṅgalēśvara Śivachitta** and the **Yuvarāja Vijayāditya**.

177. — S. 1080. — *Pāli, Skr. and Old-Kan. Inscr.* No. 183; *ante*, Vol. XII. p. 212, No. 59; *Mysore Inscr.* No. 74, p. 159. Balagāṁve inscription of the **Kaḷachuri Bijjala-Tribhuvanamalla** :—

(L. 62). — Saka-varṣam 1080neya **Bahudhānya**-sainvatcha (tes)rada Puśya(śhya)da pūṇṇami Sōmavāram-uttarāyapa-saṅkrāntivyatipāta-sōmagrahaṇad-andu.†

178. — P. 117, No. 23. — S. 1081, **Pramādi(thi)n**, Pauṣa-śudi 14, Śakra-vāra, uttarāyapa-saṅkrānti. Śrāvāṇa Belgola inscription of the Hoysala **Narasimha I**.

179. — P. 2, No. 129. — S. 1084, **Chitrabhanu**, Māgha-śudi 13, Vāḍḍa-vāra. Anamkoṇḍ inscription of the **Kākatya (Kākatya) Rudradēva**.

180. — P. 15, No. 187. — S. 1084 (for 1085 ?), **Subhanu**, Jyaiṣṭha-paurṇamāsī, Monday, a lunar eclipse. Paṭṭadakal inscription of the **Sinda Chāvūṇḍa II**, the subordinate of the Western Chālukya **Taila III**.

181. — P. 117, No. 24. — S. 1085, Subhānu, Āshāḍha-śudi 9, Budha-vārē. Death of the *Mahāmaṇḍalēchārya* Dēvakīrti-panḍitadēva.

182. — S. 1089 (P). — *Pāli, Skr. and Old-Kan. Inscr.* No. 117 ('very illegible'); *Mysore Inscr.* No. 35, p. 71. Harihar inscription of the Great Chieftains *Vira-Paṇḍyadēva* and *Vijaya-Paṇḍyadēva*. The *Mysore Inscr.* give the date thus :—

'In the year 1089, the year *Subhakrit*,³³ the month *Pushya*, the 12th day of the moon's increase, Monday, the *sakshatra* being *Rōhiṇī*.'

183. — P. 15, No. 188. — S. 1091, Virōdhin, dvitīya-Srāvāṇa-paurṇamāsī, Sōma-vāra. Dāvāgere inscription of the *Mahāmaṇḍalēvara* *Vijaya-Paṇḍyadēva*.

184. — S. 1093.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 118; *Mysore Inscr.* No. 28, p. 54. Harihar inscription of the Great Chieftain *Vijaya-Paṇḍyadēva*, and his Leader of the forces *Vijaya-Permādi* :—

'Saka 1093 (in figures, l. 49), the *Vikrīti saṁvatsara*; Friday, the first day of the dark fortnight (*Mys. Inscr.* : 'moon's increase') of *Pushya*; at the time of the sun's commencing his progress to the north.'³⁴

185. — S. 1094. — *Pāli, Skr. and Old-Kan. Inscr.* No. 101. Narsāpūr inscription of the *Kaḷachuri Sōmēsvāra* or *Sōvidēva* :—

'Saka 1194 by mistake for 1094 (in figures, l. 89), the *Nandana saṁvatsara*; Monday, the day of the new-moon of the dark fortnight of *Māgha*.'†

185. — S. 1095.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 118; *Mysore Inscr.* No. 28, p. 54. Harihar inscription of the Great Chieftain *Vijaya-Paṇḍyadēva* and his Leader of the forces *Vijaya-Permādi* :—

'Saka 1095 (in figures, l. 63), the *Nandana saṁvatsara*; Thursday (*Mys. Inscr.* : 'Wednesday'), the third day of the bright fortnight of *Bhādrapada*.'³⁵

187. — S. 1095. — *As. Res.* Vol. IX. p. 431; *Colebrooke's Misc. Essays*, Vol. II. p. 276. Carugode inscription of the reign of *Bakshāmalla* :—

'The year of *Sālivāhan* 1095 in the *Vijaya* year of the cycle, and on the 30th of the month *Mārgaśīra*, on Monday, in the time of an eclipse of the sun.'†

188. — P. 117, No. 25. — S. 1096, *Jaya*, *Mārgaśīrsha-paurṇamāsī*, *Āditya-vāra*, a lunar eclipse. Hulḡūr inscription of the *Kaḷachuri Sōmēsvāra*.

189. — P. 124, No. 69. — S. 1096, *Jaya*, *Mārgaśīrsha-āmāvāsya*, *Maṅgala-vāra*, a solar eclipse. Hulḡūr inscription of the *Kaḷachuri Sōmēsvāra*.

190. — P. 5, No. 145. — S. 1096, *Jaya*, *Kārttika-śudi* 12, *Bṛihaspati-vārē*. Belgaum district copper-plates of the *Kaḷachuri Sōmēsvāra*.

191. — P. 8, No. 155. — S. 1096, *Jaya*, *Jyāishṭh-āmāvāsya*, *Āditya-vāra*, a solar eclipse. Hulḡūr inscription of the *Kaḷachuri Sōmēsvāra*.

192. — P. 128, No. 89. — S. 1099,* *Durmukha*, *Vaiśākha-śudi* 14, *Sūryātmaja*(*Sanī*)-vārē. Death of *Nayakīrtidēva*.

193. — S. 1103. — *As. Res.* Vol. IX. p. 431; *Colebrooke's Misc. Essays*, Vol. II. p. 276. Carugode inscription of the reign of *Bakshāmalla* :—

'The year of *Sālivāhan* 1103, of the cycle *Plava*, and on the 15th of *Kārttika*, on Monday, in the gracious time of the moon's eclipse.'†

³³ *Subhakrit* would be S. 1104 expired, and *Pausha-śudi* 12 of this year would correspond to Wednesday, the 8th December, A. D. 1183.

³⁴ In S. 1093 current = *Vikrīti* the *Uttarāyana-saṁkrānti* took place 9 h. 50 m. after mean sunrise of Friday, the 25th December, A. D. 1170, during the first *tithi* of the dark half which commenced 3 h. 36 m. after mean sunrise of the same day.

³⁵ *Bhādrapada-śudi* 8 of S. 1095 current = *Nandana* would correspond to Thursday, the 24th August, A. D. 1172.

194. — S. 1103. — *Pāli, Skr. and Old-Kan. Inscr.* No. 230. Halēbīḍ inscription of the *Kaḷachuri* (*Saṅkama-Āhavamalla*, and *Vikramāditya* of the *Gutta* family :—

'Saka 1103 (in words, l. 83), the *Plava saṁvatsara*; at the time of the sun's commencing his progress to the north.'

195. — P. 129, No. 100. — S. 1104,* *Plava*, *Āśvayuja-vadi* 3, *Ādi-vāra*. From an inscription at *Tērdāl*.

196. — P. 1, No. 123. — S. 1104,* *Plava*, *Pausha-vadi* 3, *Sukra-vāra*, *uttarāyana-saṁkrānti*. *Srāvāṇa* *Belgoḷa* inscription of the *Hoysala Vira-Ballāḷa*.

197. — P. 15, No. 189. — S. 1105, *Sōbhakrit*, *Āśvayuj-āmāvāsya*, *Sōma-vārē*. *Bēhaṭṭi* copper-plates of the *Kaḷachuri* *Sīṅghaṇa*.

198. — S. 1106. — *Pāli, Skr. and Old-Kan. Inscr.* No. 102; *ante*, Vol. XII. p. 209, No. 19. *Dambaḷ* inscription of the *Western Chālukya Sōmēsvāra* IV. :—

(L. 71). — *Sa*(śa)*kanri*(*ṅri*)*pa-kāl-ātīta-saṁvatsara* 1106^{neya} *Krōdhi-saṁvatsara*-*Āśā*(*shā*)-*ḍa*(*ḍha*)*d-āmāvāsya* *Sōmavāra* *sūryyagrahaṇa-saṁkrānti-vyatpāta*-*aṁdu*.†

199. — S. 1107. — From Dr. Fleet's impression. *Bombay As. Soc.*'s inscription of the *Silāra Aparāditya* :—

(L. 1). — *Saṁvatu* 1107 *Viśvā*(*tvā*)*vasu-saṁvachchha*(*tsa*)*rē* *Chaitra-śuddha* 15 *Evau* *dinē*.³⁶

200. — S. 1108. — *Ante*, Vol. V. p. 47; *Mysore Inscr.* No. 39, p. 78. Date in a *Kaḷachuri* inscription at *Baḷagāṁve* :—

(L. 47). — *Srīmat**sa*(*ch*)*chha* *sa-varsha* 1108^{neya} *Parābhava-saṁvatsara*-*Vaiśākha*-*ba* 5 *va*(*ya*).

201. — S. 1109.* — *Jour. Bo. As. Soc.* Vol. XII. p. 333. *Bombay As. Soc.*'s inscription of the *Silāra Aparāditya* :—

(L. 1). — *Saka-saṁvatu* 1109 *Parābhava-saṁvatsarē* || *Māghē* *māsi* ||

(L. 8). — *saṁjāta-Māghī*-*parvaṇi*.

202. — P. 15, No. 190. — S. 1109, *Plavaṅga*, *Chaitra-śudi* 10, *Bṛihaspati-vāra*. Grant by the *Daṇḍānyaka Bhāyidēva*, commemorated in an inscription at *Tērdāl*.

203. — P. 130, No. 101. — S. 1110,* *Plavaṅga*, *Pausha-vadi* 10, *Varḍa-vāra*, *uttarāyana-saṁkrānti*. *Toragal* inscription of the *Mahāmaṇḍalēvara* *Barma*.

204. — S. 1110.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 230. Halēbīḍ inscription of the *Kaḷachuri Saṅkama-Āhavamalla* (P) and *Vikramāditya* of the *Gutta* family (?) :—

'Saka 1110 (in figures, l. 103), the *Plavaṅga saṁvatsara*; Thursday, the thirteenth day of the bright fortnight of *Phālgava*.'†

205. — S. 1110.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 231. Halēbīḍ inscription of the Great Chieftain *Vikramāditya* of the *Gutta* family :—

'Saka 1110 (in figures, l. 87), the *Plavaṅga saṁvatsara*; Thursday, the thirteenth day of the bright fortnight of *Phālgava*.'†

206. — P. 125, No. 70 (*Ep. Ind.* Vol. III. p. 215). — S. 1112, *Sadharaṇa*, *Pausha-vadi* 12, *Bhāuma-vārē*, *uttarāyana-saṁkrānti*. *Kōlhāpur* inscription of the *Silāhāra Bhōja* II.

207. — P. 125, No. 71 (*Ep. Ind.* Vol. III. p. 219). — S. 1113, *Virōdhakrit*, *Jyāishṭh-āmāvāsya*, *Āditya-vārē*, a solar eclipse. *Gadag* inscription of the *Dēvagiri-Yādava Bhīllama*.

³⁶ The date regularly corresponds to Sunday, the 17th March, A. D. 1135.

208. — P. 125, No. 72. — S. 1113, Virōdhikrit, Mārgaśirsh-āmāvāsya, a solar eclipse. Chaudāmpur inscription of the Great Chieftain Vira-Vikramāditya of the lineage of Chandragupta, and his Nāyaka Khaṇḍeṅga-Kaṇa-Kamēyanāyaka.

209. — S. 1113 (P). — Pāli, *Skr. and Old-Kan. Inscr.* No. 221; *Mysore Inscr.* No. 103, p. 199, Tālgund inscription of the Hoysala Vira-Ballāla :—

‘Saka 1113 (in figures, l. 52), the Siddhārthi³⁷ saivatsara; Sunday, the eleventh day of the bright fortnight of Chaitra’ (*Mys. Inscr.*: ‘the time of the equinox’).

210. — P. 15, No. 191 (*Ep. Ind.* Vol. III. p. 216). — S. 1114, Paridhāvin, Āsṁva-śudi 1, Sukra-vārē. Kōlhāpur inscription of the Śilāhāra Bhōja II.

211. — P. 117, No. 26. — S. 1114, Paridhāvin, Mārgaśirsha-paurṇamāsī, Sanaischara-vārē, a lunar eclipse. Gadag inscription of the Hoysala Vira-Ballāla.

212. — S. 1114. — *Mysore Inscr.* No. 46, p. 107. (*Pāli, Skr. and Old-Kan. Inscr.* No. 200). Balagāmve inscription of the Hoysala Vira-Ballāla :—

‘Saka year 1114, the year Paridhāvin, the month Pushya, the 6th (‘the fifth’) day of the moon’s decrease, Friday, the uttarāyana-saṁkramaṇa.’³⁸

213. — S. 1114 (P). — Pāli, *Skr. and Old-Kan. Inscr.* No. 224; *Mysore Inscr.* No. 109, p. 206. Sorab memorial tablet of the time of the Hoysala Vira-Ballāla :—

‘Saka 1114 (in figures, l. 5), the Pramādi³⁹ saivatsara; Sunday, the fifth day of the bright fortnight of Bhādrapada’ (*Mys. Inscr.*: ‘Saka 1116,’ and ‘the 8th day’).

214. — S. 1117.* — Pāli, *Skr. and Old-Kan. Inscr.* No. 194; *ante*, Vol. XII. p. 210, No. 35; *Mysore Inscr.* No. 89, p. 180. Balagāmve inscription of the Hoysala Vira-Ballāla :—

(L. 34). — Sa(śa)kauripa-saṁvachchha(tsa)ram-irabhya śatādihika-sahas-ōpari saptadacha-(śa)mē Ā[na]*jnda-saṁvachchha(tsa)rē Mārgaśirsh-āmāvāsyaṁ Sōma-vārē Vyatipāta-yōgē.†

215. — S. 1118.* — *Inscr. at Sravaṇa Belgōla*, No. 130, pp. 99 and 178. Inscription of the reign of the Hoysala Vira-Ballāla :—

Sa(śa)ka-varsha 1118neya Rākshasa-saṁvatsarada Jēshtha-su 1 Bṛihavārad-andu.†

216. — P. 117, No. 27. — S. 1121, Siddhārthin, pratham-Ashāḍha-śudi 8, Bṛihaspiti-vāra. Gadag inscription of the Hoysala Vira-Ballāla.

217. — S. 1121. — Pāli, *Skr. and Old-Kan. Inscr.* No. 114. Hampe inscription of Maiduna-Chauḍayya :—

‘Saka 1121 (in figures, l. 11), the Siddhārthi saivatsara; at the time of the sun’s commencing his progress to the north.’

218. — P. 128, No. 90. — S. 1127,* Raktākshi, Pausha-śudi 2, Saturday, uttarāyana-saṁkrānti. Kalhoji inscription of the Raṭṭas Kārtavīrya IV. and Mallikārjuna.

219. — P. 5, No. 141. — S. 1128 (for 1129), Prabhava, Srāvaṇa-paurṇamāsī, a lunar eclipse. A grant of Śōidēva of the Nikumbha family, commemorated in the Pāṭṇa inscription of the Dēvagiri Yādava Siṅghaṇa.

220. — P. 128, No. 91. — S. 1131,* Vibhava, Kārttika-śudi 12, Budha-vāra. Bhōj copper-plates of the Raṭṭa Kārtavīrya IV.

³⁷ Siddhārthin would be S. 1121 expired; but the date would be incorrect for this year, as well as for the years S. 1113 current and expired.

³⁸ For S. 1114 expired = Paridhāvin and Pausha-vadi 5, the date regularly corresponds to Friday, the 25th December, A. D. 1192, when the Uttarāyana-saṁkrānti took place 2 h. 28 m., and the fifth tithi of the dark half ended 16 h. 39 m. after mean sunrise.

³⁹ Pramādin would be S. 1115 expired; but for that year the date would be irregular, both for the 5th and the 8th of the bright fortnight of Bhādrapada.

221. — S. 1135.* — Pāli, *Skr. and Old-Kan. Inscr.* No. 100; *ante*, Vol. XII. p. 210, No. 29. Gadag inscription of the Dēvagiri-Yādava Siṅghaṇa :—

(L. 34). — ‘Sakaṇ-ṇ-pa-kā]ākraṁta-saṁvatsara-śataṅga]u 1135neya Āṅgirasa-saṁvatsarada. Phālguna(na)-śudhā[ddha]-bidige Sanaischaravārad-andu.†

222. — P. 130, No. 102. — S. 1136,* Sṛimukha, Chaitra, Sōma-dinē, a solar eclipse. Khēdrāpur inscription of the Dēvagiri-Yādava Siṅghaṇa.

223. — S. 1136.* — Pāli, *Skr. and Old-Kan. Inscr.* No. 234. Haḷḷēbid inscription of the Hoysala Vira-Ballāla and his queen Tuḷvaladēvi; and Vikramāditya of the Gutta family :—

‘Saka 1136 (in figures, l. 63), the Sṛimukha saivatsara; Monday, the day of the new-moon of Chaitra; at the time of an eclipse of the sun.’ [See the preceding date.]

224. — P. 125, No. 73. — S. 1137, Yuvaṇ, Bhādrapad-āmāvāsya, Thursday. Balagāmve inscription of the Dēvagiri-Yādava Siṅghaṇa.

225. — S. 1140. — Graham’s *Kolhapur*, p. 425, No. 11; from an impression supplied to me by Dr. Fleet. Kōlhāpur inscription of the Dēvagiri-Yādava Siṅghaṇa :—

(L. 16). — Saka-varsha 1140 Bahudhānya-saṁvatsarē.

226. — P. 8, No. 156. — S. 1141,* Bahudhānya, Māgha-śudi 7, Thursday, uttarāyana-saṁkrānti. Date in a stone tablet at Nēsarige.

227. — S. 1141. — *As. Res.* Vol. IX. p. 403; Colebrooke’s *Misc. Essays*, Vol. II. p. 244; *ante*, Vol. XXII. p. 107. Tipura copper-plate of Raṇavāṅkamalla :—

(L. 22). — ‘Sakanripatēr-atitā abdhā 1141 Raṇavāṅkamalla-śrīmat Harikāladēvapādānām saptadaśa-saṁvatsarē Sbhilikhyamānē yat-āṅkēn-āpi samvat 17 sūryya-gatyā Phālguna-dinē 26.

228. — S. 1144. — *Ep. Ind.* Vol. III. p. 113. Bahā] inscription of the Dēvagiri-Yādava Siṅghaṇa :—

(L. 18). — Shaṭk-ōṇē sadala-śat-ādihikē sahasrē 1144
varshāṅam ‘Saka-prithivipatēḥ prayatē |
Chaitr-ādya-pratipadi Chitrabhānu-varshē.

229. — P. 8, No. 157. — S. 1145,* Chitrabhānu, Kārttika-paurṇamāsī, Sōma-vāra, a lunar eclipse. Muṅḥōli inscription of the Dēvagiri-Yādava Siṅghaṇa.

230. — P. 117, No. 28. — S. 1145, Svabhānu, dvitīya-Bhādrapada-śudi 5, Sukra-vāra. Kōlār inscription of the Dēvagiri-Yādava Siṅghaṇa.

231. — S. 1145. — Pāli, *Skr. and Old-Kan. Inscr.* No. 123; *Mysore Inscr.* No. 20, p. 84. Harihar inscription of the Hoysala Narasimha II., and his Leader of the forces Polā]va :—

‘Saka 1145 (in figures, l. 67), the Svabhānu saivatsara; Thursday, the eleventh day of the bright fortnight of Māgha.†

232. — P. 8, No. 158. — S. 1146,* Parthiva, Bhādrapada-paurṇamāsī, Monday, a lunar eclipse. Date in a Chaudāmpur inscription of the Dēvagiri-Yādava Mahādēva, and the Great Chieftain Gutta of the lineage of Chandragupta.

233. — P. 130, No. 103. — S. 1151,* Sarvadhārin, Āshāḍh-āmāvāsya, Sōma-vāra, a solar eclipse. Saundatti inscription of the Raṭṭa Lakshmidēva II.

234. — S. 1153. — *Ep. Ind.* Vol. III. p. 88. Gaṇapēsvaram inscription of the time of the Kākatīya Gaṇapati :—

(L. 119). — Guṇa-sara-Bhava-mita-śakē Khara-varshē Mādhavē sitē Gauryyāḥ | tidhyām.
(thyām).

235. — P. 118, No. 29. — S. 1156, Jaya, Vaiśākha-paurṇamāsī, Vaḍḍa-vāra. Bijāpur inscription of the Dēvagiri-Yādava Siṅghaṇa.

236. — P. 118, No. 30. — S. 1156, **Jaya**, Phālguna-śudi 3, Budhē. Image inscription at Elūrā.
237. — P. 16, No. 192. — S. 1157, **Manmatha**, Srāvaṇa-bahula 30, Gurau. Kōlhāpur inscription of the Dēvagiri-Yādava **Sīnghaṇa**.
238. — P. 118, No. 31. — S. 1158, **Durmukha**, Māgha-paurṇamāsī, Sōma-dinē, a lunar eclipse. Kōlhāpur inscription of the Dēvagiri-Yādava **Sīnghaṇa**.
239. — P. 2, No. 130. — S. 1160,* **Hemalambin**, Phālguna-śudi 3, Thursday. Tiliwalli inscription of the Dēvagiri-Yādava **Sīnghaṇa** and his feudatory **Sāvanta-Ṭhakkura**.
240. — S. 1160.* — *Jour. Bo. As. Soc.* Vol. XV. p. 388. **Harālahalli** copper-plates of the Dēvagiri-Yādava **Sīnghaṇa**, and his feudatory the **Danḍīśa Chikkadēva** :—
(L. 62). — **Saka-varṣahād-ārabhya shashtyadhika-śat-ōttara-śa(sa)hasra-mitē Hōmaṇa(lam)-vi(bi)-śa(sa)śuvatsarē Phālguna-māsē saptamyān.**
241. — S. 1160. — *South-Ind. Inscr.* Vol. I. p. 88. Poygai inscription of **Bājarājadēva** :—
'[In the month of] Tai of the twenty-second year of the illustrious **Tribhuvanachakravartin**, the illustrious **Rājarājadēva**, which was current during the Saka year 1160.'
242. — S. 1161. — *South-Ind. Inscr.* Vol. I. p. 89. Poygai inscription of **Bājarājadēva** :—
'From the month of Tai of the twenty-fourth year of the illustrious **Tribhuvanachakravartin**, the illustrious **Rājarājadēva**, which was current during the Saka year 1161.'
243. — S. 1162. — *Arch. Survey of West. India*, Vol. III. p. 89. **Ambā** inscription of the Dēvagiri-Yādava **Sīnghaṇa** :—
(L. 27). — **Sri Sa(śa)ku 1162 SA(MA)rvari-ma(sa)śuvatsarē Kārttika-śru(śn)ddhada 10.**
244. — S. 1165. — *South-Ind. Inscr.* Vol. I. p. 91. Poygai inscription of **Bājarājadēva** :—
'From the month of Karkaṭaka of the 28th year of the illustrious **Rājarājadēva**, which was current after the Saka year 1165 (*had passed*).'
245. — P. 118, No. 32. — S. 1171, **Saumya**, Āshāḍha-paurṇamāsī, Sanaiśchara-vārē. Chikka-Bāglwāḍi copper-plates of the Dēvagiri-Yādava **Kṛishṇa**.
246. — P. 118, No. 33. — S. 1171, **Saumya**, Srāvaṇa-śudi 12, Gura-vārē. Beṇḍigēri copper-plates of the Dēvagiri-Yādava **Kṛishṇa**.
247. — P. 130, No. 104. — S. 1172,* **Saumya** Srēṣṭha(Jyaishṭha)-māsē bahula-Hari-dinē (1) Bhauma-vārē. Kāschīpura inscription of (the) **Kākatīya Gaṇapati**.
248. — P. 16, No. 193. — S. 1174,* **Virōdhikṛit**, Jyaishṭh-āmāvāsya, Sukra-vāra, a solar eclipse. **Munōlli** inscription of the Dēvagiri-Yādava **Kṛishṇa**.
249. — P. 130, No. 105. — S. 1175,* **Paridhavin**, Phālgun-āmāvāsya, a solar eclipse. Bangalore copper-plates of the Hoysala **Sōmēsvara**.
250. — P. 16, No. 194. — S. 1175, **Pramadīn**, Chaitr-āmāvāsya, Sōma-vārē. Bēhāṭṭi copper-plates of the Dēvagiri-Yādava **Kṛishṇa**.
251. — S. 1177. — *Coorg Inscr.* No. 6, p. 9. **Niduta** memorial tablet of the time of the Hoysala **Narasimha III**. :—
Saka-varusha 1177ne Bāksṭasa-sam Vaisākha-śudha(ddha) 11.
252. — P. 16, No. 195. — S. 1180, month of Karkaṭaka, śudi 7, Monday. Inscription at the **Ammaipēṣvara** temple at Paḍavēḍu.
253. — P. 1, No. 124. — S. 1182, **Baudra**, Pausha-vadi 7, Sani-dinē, uttarāyaṇa-samkrānti. Terwan copper-plates of **Kāmvadēvarāya** of **Kalyāṇa**.

254. — S. 1183. — From an impression supplied to me by Dr. Fleet. **Renadā** inscription of the Dēvagiri-Yādava **Mahādēva** :—
(L. 1). — **Svasti śri Saku 1183 Dā(du)rmmati-samvatsarē.**
255. — S. 1184.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 19; *Mysore Inscr.* No. 147, p. 273. **Bēlūr** copper-plates of the Hoysala **Narasimha III**. :—
'Saka 1184 (in words, 1. 18 of the fourth side), the **Durmati samvatsara** ; Tuesday (*Mys. Inscr.* : 'Monday'), the twelfth day of the bright fortnight of Chaitra.'⁴⁰
256. — S. 1185.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 111. **Chauḍāmpur** inscription of the Dēvagiri-Yādava **Mahādēva**, and the Great Chieftain **Gutta** of the lineage of **Chandragupta** :—
'Saka 1185 (in figures, 1. 79), the **Dundubhi samvatsara** ; Monday, the fifteenth day of the bright fortnight of **Vaisākha** ; at the time of an eclipse of the moon.†
257. — P. 118, No. 34. — S. 1187, **Krōdhana**, Māgha-paurṇamāsī, Sukra-dinē. Kōlhāpur inscription of the Dēvagiri-Yādava **Mahādēva**.
258. — P. 125, No. 74. — S. 1189, **Prabhava**, Jyēṣṭha-ba 30, Budha-vāra, a solar eclipse. **Hulgūr** inscription of the Dēvagiri-Yādava **Mahādēva**.
259. — P. 3, No. 131. — S. 1189, **Prabhava**, Māgha-śudi 5, Sukra-vāra. An inscription at **Kadākol**.
260. — S. 1190. — *Mysore Inscr.* No. 27, p. 50 (*Pāli, Skr. and Old-Kan. Inscr.* No. 124). **Harihar** inscription of the Hoysala **Narasimha III** (P) :—
'The Saka year 1190 having passed, and the year **Vibhava** being current.'
261. — S. 1191 (P). — *Inscr. at Sravaṇa Belgōla*, No. 96, pp. 74 and 159. Inscription of the Hoysala **Narasimha III**. :—
'Saka-varusha 1191neya **Srimukha-samvatsarada**⁴¹ Srāvaṇa-śuddha 15 Ādivarādallu.
262. — P. 3, No. 132. — S. 1192,* **Sukla**, Āshāḍha-śudi 12, Wednesday. **Sōmnāthpur** inscription of the Hoysala **Narasimha III**.
263. — P. 118, No. 35. — S. 1193, **Prajāpati**, Māgha-śudi 12, Budhē. **Paithāp** copper-plates of the Dēvagiri-Yādava **Bāmaochandra**.
264. — P. 119, No. 36. — S. 1194, **Āngiras**, Māgha-paurṇamāsī, a lunar eclipse. Kōlhāpur inscription of the Dēvagiri-Yādava **Bāmaochandra**.
265. — S. 1194. — *Jour. Roy. As. Soc., O. S.*, Vol. V. p. 183. **Ṭhāṇā** copper-plates of the Dēvagiri-Yādava **Bāmaochandra** :—
Svasti śri Sālivāhana-śakē 1194 Āngirā-nāma-samvatsarē Āsvina-śuddha 5 Ravan.†
266. — P. 128, No. 92. — S. 1197,* **Bhāva**, Bhādrapada-śudi 12, Wednesday. **Halōḷḷi** memorial tablet.
267. — P. 123, No. 93. — S. 1199,* **Dhātṛi**, Srāvaṇa-paurṇamāsī, Sōma-dinē, yajñōpavīta-parvaṇi. **Sidnūrle** inscription of the Dēvagiri-Yādava **Bāmaochandra**.
268. — S. 1199. — *Pāli, Skr. and Old-Kan. Inscr.* No. 125; *Mysore Inscr.* No. 26, p. 47. **Harihar** inscription of the Dēvagiri-Yādava **Bāmaochandra**, and his feudatory the Great Chieftain **Sājuva-Tikkamadēva** :—
'Saka 1199 (in figures, 1. 67), the **Īvara samvatsara** ; Friday, the thirteenth day of the (P) bright fortnight of Chaitra.'⁴²

⁴⁰ Chaitra-śudi 12 of S. 1184 current = Durmati would correspond to Tuesday, the 15th March, A. D. 1261.

⁴¹ Srimukha would be S. 1195 expired ; and in that year the *tithi* of the date commenced 6 h. 14 m. after mean sunrise of Sunday, the 30th July, A. D. 1273.

⁴² Chaitra-śudi 13 of S. 1199 expired = Īvara corresponds to Friday, the 19th March, A. D. 1277.

269. — P. 119, No. 37. — S. 1200, Bahudhānya, Chaitra-śudi 1, Sukra-vāra. Sravaṇa Belgoḷa private inscription.

270. — S. 1200. — *Pāli, Skr. and Old-Kan. Inscr.* No. 20; *Mysore Inscr.* No. 148, p. 276. Bêlûr copper-plates of the Hoysala **Narasimha III.** :—

'Saka 1200 (in words, l. 19 of the second side), the Bahudhānya saivatsara; Saturday (*Mys. Inscr.* : 'Monday'), the fourteenth day of the dark fortnight of Māgha.⁴³

271. — P. 3, No. 133. — S. 1201, Pramāthin, Bhādrapada-śudi 6, Sōma-vāra. Inscription at Kaḍakol.

272. — S. 1203 (P). — *Inscr. at Sravaṇa Belgoḷa*, No. 131, pp. 99 and 178. Date of a private inscription :—

Srīmatu-Saka-varsha 1203neya Pramādi-saivatsara⁴⁴ Mārggaśira-su 1 Bridandu. †

273. — P. 128, No. 94. — S. 1205,* Chitrabhānu, Srāvaṇa-śudi 10, Bṛihaspati-vāra. Sravaṇa Belgoḷa private inscription.

274. — S. 1208. — *Pāli, Skr. and Old-Kan. Inscr.* No. 148; *Mysore Inscr.* No. 6, p. 11. Chitaldurg inscription of the Hoysala **Narasimha III.** :—

'Saka 1208 (in figures, l. 14), the Vyaya saivatsara; Thursday (*Mys. Inscr.* : 'Wednesday'), the tenth day of the bright fortnight of Chaitra.⁴⁵

275. — S. 1212.* — *Jour. Roy. As. Soc.*, O. S., Vol. V. p. 178. Thāṇa copper-plates of the Dēvagiri-Yādava **Rāmachandra** :—

Svasti śrī-Sālivāhana-śakē 1212 Virōdhi-saivatsarē Vaiśākha-śuddha-paurṇamāsyām Bhaumē. †

276. — S. 1222. — From an impression supplied to me by Dr. Fleet. Vêlāpur inscription of the Dēvagiri-Yādava **Rāmachandra** :—

(L. 1). — . . . śrī-Sak[u] 1222 Sarvari-saivatsarē Mārggīsarū-vadi [9?]⁴⁶ Sōmē.

277. — P. 119, No. 38. — S. 1227, Visvāvasu, Mārga-śudi 5, Sōmē. Vêlāpur inscription of the Dēvagiri-Yādava **Rāmachandra**.

278. — S. 1228 (P). — *Coorg Inscr.* No. 7, p. 10. Niduta memorial tablet of the time of the Hoysala **Narasimha III.** :—

Saka-varusha 1228 Parābhava-sam | rada Vaiśākha-śudha (ddha) 12. (The translation has 'Saka year 1208, the year Pārthiva'; and a note adds that 'in the copy the year is Paridhāvi. Pārthiva = S. 1208 current; Parābhava = S. 1228 expired.)

279. — P. 125, No. 75. — S. 1235, Pramādin, Srāvaṇa-vadi 14, Vakrē (Maṅgala-vārē). Death of Subhachandra.

280. — S. 1236. — *Ep. Ind.* Vol. III. p. 70. Bilvanāthēśvara inscription of **Vira-Champa** :—

(L. 4). — Tuṅgaśrīka-Sakābda-bhāji samayē.

281. — S. 1236. — *Ep. Ind.* Vol. III. p. 71. Arulāḷa-Perumāḷ inscription of [Vira-] Champa :—

(L. 1). — Tuṅgaśrīka-śaran-mitē Saka-nṛipē.

⁴³ Māgha-vadi 14 of S. 1200 expired = Bahudhānya would correspond to Saturday, the 11th February, A. D. 1279.
⁴⁴ Pramādin would be S. 1235 expired. Perhaps the intended year is S. 1201 expired = Pramāthin; but the date does not work out properly for that year.

⁴⁵ Chaitra-śudi 10 of S. 1208 expired = Vyaya would correspond to Thursday, the 7th March, A. D. 1285.

⁴⁶ Supposing this figure to be correct, the corresponding date would be Monday, the 5th December, A. D. 1300.

282. — P. 16, No. 196. — S. 1261 (for 1262 P), Vikrama, Chaitra-śudi 1, Guru-vāra. Bādāmi inscription of the *Mahāmaṇḍalēśvara* **Harihara I.** (Hariyappa-voḍeya) of Vijayanagara.

283. — P. 17, No. 197. — S. 1276,* Vijaya, Māgha-śudi 15, Chandra-vāra a lunar eclipse. Harihar copper-plates of **Bukkarāya I.** of Vijayanagara.

284. — P. 3, No. 134. — S. 1277, Manmatha, Jyaishtḥa-śudi 7, Sōma-vāra. Chitaldurg inscription of the *Mahāmaṇḍalēśvara* **Bukkarāya I.** (Bukkarāya-voḍeya) of Hosapaṭṭana, and afterwards of Vijayanagara.

285. — S. 1278. — *Pāli, Skr. and Old-Kan. Inscr.* No. 150; *Mysore Inscr.* No. 2, p. 5. Chitaldurg inscription of the *Mahāmaṇḍalēśvara* **Bukkarāya I.** (Bukkarāya-voḍeya) of Hosapaṭṭana, and afterwards of Vijayanagara :—

'Saka 1278 (in figures, l. 17), the Durmukha saivatsara; Thursday, the third day of the dark fortnight (*Mys. Inscr.* : 'of the moon's increase') of Āshāḍha.⁴⁷

286. — S. 1278. — *Ep. Ind.* Vol. III. p. 27. Bīraṅga copper-plates of **Saṅgama II.** of Vijayanagara :—

(L. 75). — Śāk-ābdē naga-śaila-dhyu(dyū)maṇi-parimitē 1278 Durmukh-ābdē tru(tri)-tiyyē(yē) māsi . . . saṅgame chaṁdra-bā(bhā)nvōḥ.

287. — S. 1286 (for 1287 P) — *South-Ind. Inscr.* Vol. I. p. 120. Kāñchīpuram inscription of the reign of the *Mahāmaṇḍalēśvara* **Kambara-uḍaiyar** :—

'From the month of Āḍi of the Visvāvasu year, which was current after the Saka year one thousand two hundred and eighty-six (*had passed*).'

[The same date in another inscription of the same, *ib.* p. 123, only with *Vīśvādi* instead of *Vīśvāvasu*.]

288. — S. 1290. — *Ante*, Vol. XIV. p. 233; *Inscr. at Sravaṇa Belgoḷa*, No. 136, pp. 100 and 179. Date of Rāmanujāchārya's *Sāsana*, of the time of **Bukkarāya I.** of Vijayanagara :—

Saka-varsha 1290neya Kilaka-samvatsarada Bhādrapada-śuddha 1 Bṛihaspati-vāra.

(In *Inscr. at Sr. Belg.* the text has 'Bhādrapada-śu 10 Bṛi,' and with this reading the date regularly corresponds to Thursday, the 24th August, A. D. 1368.)

289. — P. 129, No. 95. — S. 1295,* Paridhāvin, Vaiśākha-śudi 3, Budha-vāra. A private inscription at Sravaṇa Belgoḷa.

290. — P. 126, No. 76. — S. 1295, Āsina-vadi 13, Sukra-vāra. An inscription from Java.

291. — P. 3, No. 135. — S. 1296, Ānanda, month of Dhanus, śudi 8, Monday. Inscription from near the Tirumalai rock, of the reign of the *Mahāmaṇḍalika* **Ommaṇa-uḍaiyar**.

292. — S. 1300 (for 1301 P). — *Ep. Ind.* Vol. III. p. 62. Vanapalli copper-plates of **Anna-Vēma** of the Reḍḍi dynasty of Koṅḍaviṇu :—

(L. 41). — Śāk-ābdē gagan-ābhra-viśva-gaṇitē Sidhdha(ddha)rdhdhi(rthi)-saivatsarē Māghē kṛishṇachaturdāśī-Siva-tidhau (thau).

293. — P. 119, No. 39. — S. 1301, Siddhartha, Jyaishtḥa-paurṇamāsi, Bhaumē, a lunar eclipse. Dambaḷ copper-plates of **Harihara II.** of Vijayanagara.

294. — P. 119, No. 40. — S. 1301, Siddharthin, Kārttika-śudi 12, Bhāskara-vārē. Harihar inscription of **Harihara II.** of Vijayanagara.

⁴⁷ Āshāḍha-śudi 3 of S. 1278 expired = Durmukha would correspond to Thursday, the 2nd June, and Āshāḍha-vadi 3 to Thursday, the 16th June, A. D. 1356.

295. — S. 1304. — *Pāli, Skr. and Old-Kan. Inscr. No. 23; ante, Vol. XII. p. 212, No. 65; Mysore Inscr. No. 146, p. 268.* Bêlâr copper-plates of **Harihara II.** of Vijayanagara :—

Saka 1304 (in words, l. 16 of the third side), the Dundubhi *sahvatsara*; Sunday, the tenth day of the dark fortnight of Kârttika.†

296. — P. 126, No. 77. — S. 1307, Krôdhana, Phâlguna-vadi 2, Sukra-vârê. Inscription on a lamp-pillar at Vijayanagara, of the reign of **Harihara II.**

297. — S. 1309.* — *Ep. Ind. Vol. III. p. 118.* Bhaṭṭaka copper-plates of the time of **Harihara II.** of Vijayanagara :—

‘In the *Kahaya sahvatsara*, which corresponded to the Saka year one thousand three hundred and nine, (when) Jupiter (was standing) in Leo, on Thursday, the fifth (tithi) of the dark (fortnight) of (the month of) Pushya.’⁴⁸

298. — P. 122, No. 57. — S. 1313, Prajâpati, Vaiśâkh-âmavâsyâ, Saumya-dinê, a solar eclipse. Copper-plates of **Harihara II.** of Vijayanagara.

299. — P. 7, No. 149. — S. 1317 (for 1318), Dhâtri, Mâgha-paurṇamâsi, Bhânû-vâra. Chitaldurg copper-plates of **Harihara II.** of Vijayanagara.

300. — S. 1317. — *Pāli, Skr. and Old-Kan. Inscr. No. 24; ante, Vol. XII. p. 213, No. 70.* Hâsan copper-plates of **Harihara II.** of Vijayanagara :—

(L. 36). — Sak-âvda(bda) rishi-chamdr-âshni(gni)-vidhun-âyata-vatsarê |
Yuv-âkhyê Mâgha(?)-mâsê(?) cha śukla-pakshê śubh[ê*] dinê |
saptamyaîm cha mahâ-parvani.

301. — S. 1320.* — *Inscr. at Sravâṇa Belgola, No. 105, pp. 80 and 165.* Death of Puru-panḍita :—

Tatra trayôdasâ-śataiś cha daśa-dvayêna Śâkê-bdakê parimitê-bhavad-Īsvar-âkhyê |
Mâghê chaturdâśa-tithan sitabhâji vâre Svâtan Sanais(nêlî) sura-padam Puru-panḍitasya ||†

302. — S. 1321. — *Ep. Ind. Vol. III. p. 122.* Nallûr copper-plates of **Harihara II.** of Vijayanagara :—

(L. 50). — Dhâtri-nêtra-guṇa-kshapêta(śva)ra-yutê śri(śrî)-Sâlivâhê gatê
[Śâkhê(kâ) gô]tradhacha(?) Pramâdi(thi)ni tidhan(?) mâsy-
Ūrjakê nâmanî(?) |
pakshê tatra valakshakê Budba-dinê śri-paurṇimâsyâm tidhan(thau)
kâlê pu[ṇya]ma[ham]tarê śubha-karê sômôparâgê varê ||⁴⁹

303. — S. 1328. — *South-Ind. Inscr. Vol. I. p. 82.* Veppambaṭṭu inscription of the time (?) of **Bukkarâya II.** of Vijayanagara :—

‘On Thursday, the new moon of the dark half of Jyaishtha of the Vyaya year, which follows the Pârthiva year (and) which was current after the Saka year 132[8] (had passed).’ — And —

‘Thursday, the twelfth lunar day of the bright half of Vaiśâkha (of) the Pârthiva year.’⁵⁰

⁴⁸ The date regularly corresponds, for S. 1309 current = *Kahaya*, to Thursday, the 10th January, A. D. 1337; by the mean-sig system this day fell in the year Śrîmukha (i. e., Jupiter was in Śinba), which ended on the 17th August, A. D. 1367.

⁴⁹ The date regularly corresponds, for S. 1321 expired = Pramâthin, to Wednesday, the 15th October, A. D. 1399, when there was a lunar eclipse which was visible in India.

⁵⁰ Both dates are irregular; the first, for S. 1328 expired = Vyaya, would correspond to Wednesday, the 16th June, A. D. 1406; and the second, for S. 1328 current = Pârthiva, to Saturday, the 11th April, A. D. 1406.

304. — S. 1328. — *Pāli, Skr. and Old-Kan. Inscr. No. 25; ante, Vol. XII. p. 212, No. 66; Mysore Inscr. No. 150, p. 279.* Hâsan copper-plates of **Dêvarâya I.** of Vijayanagara :—

(L. 21). — Sa(śa)ka-varsha 1328 varttamâna-Vyaya-sahvatsarê Kârttika-mâsa-kriṣṇa-pakshê daśamyaîm Sukra(?)-vârê Uttarâ(?)-Bhâdrapadê Prîti-yôgê Bava-karanê . . . paṭṭa-bhishêka-samayê (*Mys. Inscr.* : ‘Monday’).⁵¹

305. — P. 126, No. 78. — S. 1331, Virôdhin, Chaitra-vadi 5, Guru-vâra. A private inscription at Sravâṇa Belgola.

306. — P. 119, No. 41. — S. 1332, Vikriti, Nabhasya(Bhâdrapada)-śudi 12, Sôma-vârê. **Harihar** inscription of **Dêvarâya I.** of Vijayanagara.

307. — S. 1334.* — *Pāli, Skr. and Old-Kan. Inscr. No. 151; Mysore Inscr. No. 5, p. 9.* Chitaldurg inscription of **Dêvarâya I.** of Vijayanagara, and his *kumdra*, “prince” or “son,” the Great Chieftain **Mallanna-voḍeya** :—

‘Saka 1334 (in figures, l. 4), the *Khara sahvatsara*; Tuesday (?), the fifteenth day of the bright fortnight of Kârttika.’†

308. — S. 1338. — *Prâchînâlekhamâlâ, Vol. I. p. 179.* Inscription of **Vira-Vijayarâya** of Vijayanagara :—

Śrî-vijayâbhayudaya-Sakavarsha 1338 vartamâna-Durmukhi-sahvatsarada Bhâdrapada-baula saptamiyalu.

309. — S. 1344. — *Mysore Inscr. No. 49, p. 112 (Pāli, Skr. and Old-Kan. Inscr. No. 206).* Balagâṇvo memorial tablet of the time of **Vira-Vijaya(?)** of Hastinâvatî (Vijayanagara) :—

‘The Saka year 1344, the year *Subhakrit*, the month *Âsvija*, the 5th day of the moon’s increase, Sunday.’⁵²

310. — S. 1346. — *Ep. Ind. Vol. III. p. 38.* Satyamaṅgala copper-plates of **Dêvarâya II.** of Vijayanagara :—

(L. 40). — Tatvalokê Sakasy-âbdê Krôdhi-sahvatsarê śubhê |
Âshâdî-âmâtithan puṇyê Sôma-vâra-virâjitê ||⁵³

311. — S. 1346. — *Pāli, Skr. and Old-Kan. Inscr. No. 128; Mysore Inscr. No. 23, p. 40.* **Harihar** inscription of **Dêvarâya II.** of Vijayanagara :—

‘Saka 1346 (in figures, l. 16), the *Krôdhi sahvatsara*; Monday, the twelfth day of the bright fortnight of Kârttika.’ †

312. — P. 132, No. 113. — S. 1347, **Vishvâvasu**, 3rd day of Paṅguni, 6th tithi, Wednesday. Inscription at the Viriñchipuram temple, of the reign of **Dêvarâya II.** of Vijayanagara.

313. — S. 1348. — *South-Ind. Inscr. Vol. I. p. 164.* On a *Jaina* temple at Vijayanagara, of the reign of **Dêvarâya II.** :—

(L. 25). — Śâkê-bdê pramitê yâtê vasu-sindhu-guṇ-êndubhiḥ |
Parâbhav-âbdê Kârttikyâm.

314. — P. 6, No. 146. — S. 1353,* **Sadhârana**, month of Karkâjaka, śudi 5, Monday. Inscription at Tellûr, of the reign of **Dêvarâya II.** of Vijayanagara.

⁵¹ In S. 1328 expired = Vyaya the 10th tithi of the dark half of Kârttika ended, and the *karasa* Bava commenced, 16 h. 48 m. after mean sunrise of Friday, the 5th November, A. D. 1408. On this day the *nakshatra* was *Utâra-phalguni* up to 21 h., and the *yôga* *Prîti* from 15 h. 17 m. after mean sunrise.

⁵² In S. 1344 expired = *Subhakrit* the tithi of the date commenced 5 h. 57 m. after mean sunrise of Sunday, the 20th September, A. D. 1422.

⁵³ The date regularly corresponds, for the first *Âshâdha* of S. 1346 expired = *Krôdhi*, to Monday, the 26th June, A. D. 1494.

315. — S. 1363.* — *Pāli, Skr. and Old-Kan. Inscr.* Nos. 227 and 26; *Mysore Inscr.* No. 116, p. 213, and No. 145, p. 259. Muḷbāgal stone inscription and copper-plates of **Dēvarāya II.** of Vijayanagara :—

'Saka 1353, the **Sādharāna saivatsara**; the tenth day of the bright fortnight of Phālguna.'

316. — P. 119, No. 42. — S. 1363, **Virōdhyādikṛit (Virōdhakṛit)**, Phālguna-śudi 12, Saumya-vāra. On Jaina statue at Kārkaḷa, erected by **Vira-Pāṇḍya**.

317. — P. 129, No. 96. — S. 1365,* **Paridhāvin**, dvitīy-Āshāḍha-śudi 9, Vidhu-dina. Date when the tomb of Srutamuni at Sravaṇa Belgōla was set up.

318. — P. 132, No. 114. — S. 1371, **Sukla**, month of Simha, śudi 13, Saturday. An inscription at Paḍavēḍi of the reign of **Dēvarāya II.** of Vijayanagara.

319. — P. 17, No. 198. — S. 1377, **Yuvan**, Bhādrapada, a lunar eclipse. Copper-plates of **Gāṇadēva** of Koṇḍavīḍu.

320. — S. 1387. — *Ante*, Vol. XXI. p. 322. Inscription at the Arulāḷa-Perumāl temple at Little Kāñchi, of the reign of **Mallikarjuna** of Vijayanagara :—

'On the day of (*the nakshatra*) **Kṛittikā**, which corresponded to Sunday, the full-moon *tithi* of the first fortnight of the month of **Vṛiśchika** in the **Pārthiva** year, which was current after the Saka year 1387.'⁵⁴

321. — S. 1392. — *Ante*, Vol. XXI. p. 322. Inscription at the Arulāḷa-Perumāl temple at Little Kāñchi, of the reign of **Virūpaksha I.** of Vijayanagara :—

'At the auspicious time of the *Ardhōdaya* on the day of (*the nakshatra*) **Sravaṇa**, which corresponded to Sunday, the new-moon *tithi* of the second fortnight of the month of **Makara** of the **Vikṛiti** year, which was current after the Saka year 1392.'⁵⁵

322. — S. 1403. — *Ep. Ind.* Vol. III. p. 73. Jambukēśvara inscription of the **Mahāmāṇḍalēśvara Vālaka-Kāmayā** :—

'At the auspicious time of **Mahāmāgam (Mahāmāgha)**, (*when*) **Jupiter (was standing in) Leo**, (*i. e.*) on the day of (*the nakshatra*) **Magam (Maghā)**, which corresponded to a Sunday and to the full-moon *tithi* of the first fortnight of the month of **Knmbha** of the **Plava saivatsara**, which was current after the Saka year 1403.'⁵⁶

323. — S. 1430 (for 1431 ?). — *Ep. Ind.* Vol. I. p. 366. Hampe inscription of **Kṛishṇarāya** of Vijayanagara :—

(L. 27.)—Sālivāhana-śaka-varsha 1430 saṁdu mēlē naḍava **Sukla-saivatsarada** Māgha śu 14 lu . . . **paṭṭābhishēkōtsava-puṇyakāladaln.**

324. — S. 1432.* — *Inscr. at Sravaṇa Belgōla*, No. 103, pp. 75 and 160. Inscription of a son of **Kēśavanātha**, minister of **Chaṅgaḷa-Mahādēva** :—

'Saka-varsha 1432 ḍaneya **Sukla-saivatsarada** Vayisākha ba 10 lū.

325. — S. 1434 (for 1435 ?). — *Jour. Bo. As. Soc.* Vol. XII. p. 384. Kuppēlūr copper-plates of **Kṛishṇarāya** of Vijayanagara :—

'Sak-ābdē Sālivāhasya sahasrēṇa chatṇ-śataih |
chatnstrimśat-samair-yuktē saṁkbyātē gaṇita-kramāt ||
Sṛimukhi-vatsarē ślāghyē Māghē ch-āsita-pakshakē |
Sivarātrau mahā-tithyām puṁ(pu)ṇya-kālē śubhē dinē ||

⁵⁴ The date regularly corresponds to Sunday, the 3rd November, A. D. 1435.

⁵⁵ The *tithi* of the date commenced 5 h. 19 m., and the *nakshatra* was **Sravaṇa** from 1 h. 58 m., after mean sunrise of Sunday, the 20th January, A. D. 1471.

⁵⁶ The date regularly corresponds, for S. 1403 expired — **Plava**, to Sunday, the 3rd February, A. D. 1482; by the mean-sign system this day fell in the year **Saumya** (*i. e.*, Jupiter was in **Simha**), which ended on the 7th July, A. D. 1482.

326. — S. 1435 (for 1436). — *As. Res.* Vol. XX. p. 30. Vijayanagar inscription of **Kṛishṇarāya** of Vijayanagara :—

'In the reign of Sālivāhana 1435, corresponding to the year **Bhāva**, in Phālguna sudi 'Tṛitīyā, Sukravār.' [Compare the following date.]

327. — P. 120, No. 43. — S. 1436, **Bhāva**, Phālguna-śudi 3, Sukra-vāra. **Kṛishṇapūra** inscription of **Kṛishṇarāya** of Vijayanagara.

328. — S. 1438. — *Archæol. Survey of West. India*, Vol. III. p. 115. Saundatti (?) inscription of the time of **Kṛishṇarāya** of Vijayanagara :—

Sālivāhana-śaka-varushaṅgaln 1436neya, **Bhāva-saivatsaradallu.**

329. — S. 1438 (P). — *Pāli, Skr. and Old-Kan. Inscr.* No. 228; *Mysore Inscr.* No. 112 p. 208. Rock inscription at Tyākāl :—

'Saka 1438 (in figures, l. 1; *Mysore Inscr.* : '1434'), the **Pramādi saivatsara**,⁵⁷ the first day of the bright fortnight of Phālguna.'

330. — S. 1442. — *As. Res.* Vol. XX. p. 28. Vijayanagar inscription of **Kṛishṇarāya** of Vijayanagara :—

'In the year of Sālivāhana 1442, corresponding to . . . **Vikrama**, in Māgha sudi Saptamī . . . on Rādhāsaptamī,⁵⁸ the 7th of the moon.'

331. — P. 5, No. 142. — S. 1444 (for 1445) **vabhānu**, Pausha, Tuesday, **Makara-saṁkrānti**. Simoggā copper-plates of **Kṛishṇarāya** of Vijayanagara.

332. — P. 1, No. 125. — S. 1448, **Vyaya**, Pausha-vadi 10, Bhṛign-vāra, **Makara-saṁkrānti**. Kāñchīpūra copper-plates of **Kṛishṇarāya** of Vijayanagara.

333. — P. 120, No. 44. — S. 1450, **Sarvadhārin**, Chaitra-śudi, Madana-tithi (13), **Jiva (Guru)-vārē**. **Kṛishṇapūra** inscription of **Kṛishṇarāya** of Vijayanagara.

334. — P. 120, No. 45. — S. 1451, **Virōdhin**, Vaiśākha-śudi 15, Sukra-vāra. **Kṛishṇapūra** inscription of **Kṛishṇarāya** of Vijayanagara.

335. — P. 2, No. 126. — S. 1452, **Vikṛiti**, 'Srāvaṇa-vadi 8, Sōma-vāra, **Kṛishṇa-jayanti**. Harihar inscription of **Achyutarāya** of Vijayanagara.

336. — S. 1453.* — *Coorg Inscr.* No. 10, p. 14. Date in an inscription at Aūjanagiri :—
Saka-varusha 1453neya **Vikṛitu-saivatsarada** Chaitradalln.

337. — S. 1453 (for 1454). — *Pāli, Skr. and Old-Kan. Inscr.* No. 130; *Mysore Inscr.* No. 25, p. 43. Harihar inscription of **Achyutarāya** of Vijayanagara :—

'Sālivāhana-Saka 1453 (in figures, l. 3), the **Nandana saivatsara**, Tuesday (?), the tenth day of the bright fortnight of **Āsvayuja**' (*Mys. Inscr.* : 'the year **Khara**, . . . Wednesday').⁵⁹

338. — P. 129, No. 97. — S. 1455,* **Nandana**, Jyaishtṥha-śudi 5, Guru-vāra. Bādāmi inscription of **Achyutarāya** of Vijayanagara.

339. — S. 1459 (for 1460 ?). — *Inscr. at Sravaṇa Belgōla*, No. 99, pp. 75 and 160. Date of a private inscription :—

'Saka-varsha sāvirada 1459taneya **Vilambin-saivatsarada** Māgha-śuddha 5 yaln.

340. — P. 120, No. 46. — S. 1460, **Vilambin** Kārttika-paurṇamāsī, Śaśisuta (Budha)-vārē, a lunar eclipse. Harihar inscription of **Achyutarāya** of Vijayanagara.

⁵⁷ Pramādin would be S. 1415 or 1475 expired; Pramāthin, 1441.

⁵⁸ This should be *rādhāsaptamī*.

⁵⁹ Nandana was S. 1454 expired, Khara S. 1453 expired; for the former year the regular equivalent of the date is Tuesday, the 8th October, A. D. 1533.

341. — S. 1461. — *Pāli, Skr. and Old-Kan. Inscr.* No. 132; *ante*, Vol. XII. p. 214, No. 89; *Mysore Inscr.* No. 19, p. 29. Harihar inscription of Achyutarāya of Vijayanagara : —

(L. 8). — Śikē chaṁdra-ras-Āmarēndra-gaṇitē . . . Bhādrapadaśya . . . dvādaśy-abhikhyē tithau varē Bhūmisutaśya.

342. — S. 1462. — *Ep. Ind.* Vol. III. p. 154. Ūgamāñjēri copper-plates of Achyutarāya of Vijayanagara : —

(L. 91). — Sak-ābdē Śālivāhaśya sahasrēṇa chatuś-śataiḥ |
dvishashyā cha samāyuktē(ktai)r-gaṇanām prāpitē kramāt ||
Śarvari-nāmakē varshē māsi Kārttika-nāmani |
śukla-pakshē cha puṇyāyām-utthāna-dvādaśi-tithau ||

343. — S. 1463.* — *As. Res.* Vol. XX. p. 26. Vijayanagar inscription of Achyutarāya of Vijayanagara : —

'In the year of Śālivāhana 1463, corresponding to the year Sarvari, in the month of Kārttika, śudī-pāñchamī, Guruvār.'†

344. — S. 1466.* — *Ante*, Vol. X. p. 66. Bādāmi inscription of Sadāśivarāya of Vijayanagara : —

(L. 1). — Śālivāhana-śaka-varuṣha 1466neya Śōbhakru(kṛ)it-samvatsarada Ā[śvīja śu]-dha(ddha) . . . [1]ū.

345. — S. 1466. — *Coorg Inscr.* No. 10, p. 14. Date in an inscription at Añjanagiri : —
Saka-varsha 1466 sanda vartamāna-Krōdhi-samvatsarada Kārtika śu 15 yallu.

346. — S. 1467. — *As. Res.* Vol. XX. p. 35. Vijayanagar inscription of Sadāśivarāya of Vijayanagara : —

'In the year of Śālivāhana 1467, corresponding to the year Viśvāvasu, in Krishna (!) sudi Tṛitīyā, Guruvāram.'

347. — S. 1469. — *Ante*, Vol. X. p. 64. Bādāmi inscription of Sadāśivarāya of Vijayanagara : —

(L. 1). — Śālivāhana-śaka 1469neya Plavaṅga-samvatsarada A(ā)śvayujya śu 15 yalū.

348. — S. 1470. — *Pāli, Skr. and Old-Kan. Inscr.* No. 240; *Mysore Inscr.* No. 126, p. 224. Bēlūr inscription of Sadāśivarāya of Vijayanagara.

'Śālivāhana-śaka 1470 (in figures, 1. 4), the Kilaka samvatsara; Monday, the eleventh day of the dark fortnight of Āshāḍha.'†

349. — P. 132, No. 115. — S. 1471, Saumya, month of Mēsha, śudi 7, Thursday. Inscription at the Viriñchipuram temple, of Bommu-nāyaka (Siṅṅa-Bommu-nāyaka or Bomma-nṛpati of Vēlūr).

350. — S. 1476.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 47. Inscription at Bādāmi : —

'Śālivāhana-śaka 1476 (in figures, 1. 2), the Pramādi samvatsara; the eleventh day of the dark fortnight of Āshāḍha.'

351. — P. 120, No. 47. — S. 1476 (Ānanda), Vaiśākha-śudi 14, Monday. Harihar inscription of Sadāśivarāya of Vijayanagara.

352. — S. 1477. — *Pāli, Skr. and Old-Kan. Inscr.* No. 241; *Mysore Inscr.* No. 127, p. 225. Bēlūr inscription of Sadāśivarāya of Vijayanagara : —

'Śālivāhana-śaka 1477 (in figures, 1. 3), the Bākhassa samvatsara; the fifth day of the bright fortnight of Māgha.'

353. — P. 17, No. 199. — S. 1478, Nala, Mārgaśrah-āmāśyā, Mārtāṇḍa-varē, a solar eclipse. Chingleput copper-plates of Sadāśivarāya of Vijayanagara.

354. — P. 9, No. 159. — S. 1483, Durmati, Māgha-paurṇamāsī, Monday, a lunar eclipse. Harihar inscription of Sadāśivarāya of Vijayanagara.

355. — S. 1483. — *As. Res.* Vol. XX. p. 28. Vijayanagar inscription of Sadāśivarāya : —

'In the year of Śālivāhana 1483, corresponding to the year Durmati, in Chaitra sudi pañchamī, Sanivār, . . . in the season of Makara-samkrānti-puṇyākāla.'†

356. — P. 133, No. 116. — S. 1488, Akshaya, month of Kumbha, vadi 12, Wednesday. An inscription at Arappakkam, records a grant made at the request of Siṅṅa-Bommu-nāyaka of Vēlūr by Tirumala-rāja (the younger brother of Rāmarāja) of Karṇāṭa, with the consent of Sadāśivarāya of Vijayanagara.

357. — S. 1490. — *Mysore Inscr.* No. 175, p. 334. Date in an inscription at Yelandur, of Siṅghadēva-bhūpa of Padināḍu : —

'In the Saka year 1490, the year Vibhava.'

358. — S. 1492 (P). — *Pāli, Skr. and Old-Kan. Inscr.* No. 246; *Mysore Inscr.* No. 129, p. 228. Hāsan inscription of Sadāśiva, the kumāra, "prince" or "son" of Achyutarāya, of Vijayanagara : —

'Śālivāhana-Saka 1492 (in figures, 1. 5), the Rudhirōdgārī⁶⁰ samvatsara; Monday, the thirteenth day of the bright fortnight of Srāvāṇa' (*Mys. Inscr.*: '1482' . . . 'the 10th day of the moon's decrease').

359. — P. 17, No. 200. — S. 1497, Yuvan, month of Makara, vadi 13, Wednesday. An inscription at Sattuvāchchēri near Vēlūr, records a grant made at the request of Siṅṅa-Bommu-nāyaka of Vēlūr by Kṛishṇappa-nāyaka Ayyaṇ, with the consent of Sriraṅgarāya I. of Vijayanagara (Karṇāṭa).

360. — S. 1500 (P). — *Pāli, Skr. and Old-Kan. Inscr.* No. 242; *Mysore Inscr.* No. 121, p. 220. Bēlūr inscription of Kṛishṇappa-nāyaka, of the reign of Sriraṅgarāya I. of Vijayanagara (Karṇāṭa) : —

'Śālivāhana-śaka 1500 or 1560 (in figures, 1. 10; *Mys. Inscr.*: '1500'), the Bahudhānya samvatsara; Saturday, the eighth day of the dark fortnight of Srāvāṇa.⁶¹

361. — P. 121, No. 48. — S. 1506, Tāraṇa, Kārttika-paurṇamāsī, a lunar eclipse. Dēvanhallī copper-plates of Sriraṅgarāya I. of Vijayanagara (Karṇāṭa).

362. — S. 1508. — *Ante*, Vol. V. p. 41. Date in the Śāsana of the Jaina temple at Kārkaḷa, of Immaḍi-Bhairava : —

Srī-Śālivāhana-śaka-varuṣha 1508neya Vyaya-samvatsarada Chaitra-śuddha 5ys Bndhāvāra Mṛigaśira-nakshatra Vṛishabha-lagnadalla.†

363. — S. 1514. — *South-Ind. Inscr.* Vol. I. p. 86. Viriñchipuram inscription of the reign of Veṅkaṭapati I. of Vijayanagara (Karṇāṭa) : —

'On the 6th solar day of the month of Tai of the Nandana year, which was current after the Saka year 1514 (*had passed*).'

364. — S. 1523. — *Ante*, Vol. II. p. 371. Viḷāpāka copper-plates of Veṅkaṭapati I. of Vijayanagara (Karṇāṭa) : —

Sakti-nētra-kalamb-ēndu-gaṇitē Saka-vatsarē |
Plava-samvatsarē puṇyē māsi Vaiśākha-nām[a]ni |
Pakshē 'valakshē . . . puṇyāyām dvādaśi-tithau |

⁶⁰ Rudhirōdgārin would be S. 1485 expired, and for this year Srāvāṇa-śudi 18 corresponds to Monday, the 2nd August, A. D. 1568.

⁶¹ In S. 1500 expired = Bahudhānya the tithi of the date commenced 2 h. 42 m. after mean sunrise of Saturday, the 26th July, A. D. 1578.

365. — P. 121, No. 49. — S. 1543, Durmati, Vaiśākha-śudi 3, Saturday. 'Simoggā copper-plates of Rāmadēva of Vijayanagara (Karnāṭa).

366. — S. 1547. — *Pāli, Skr. and Old-Kan. Inscr.* No. 243; *Mysore Inscr.* No. 122, p. 221. Bēlūr inscription of Kṛishṇappa-nāyaka and others:—

'Sālivāhana-śaka 1547 (in figures, l. 5), the Krōdhana *saṁvatsara*; Monday, the fifth day (*Mya. Inscr.*: 'the 8th') of the dark fortnight of Māgha.⁶³

367. — P. 121, No. 50. — S. 1556, Bhāva, Āshāḍha-śudi 13, Sthira(Sani)-vāra. 'Sravaṇa Belgoḷa inscription of Chāma Rāja Voḍeyar of Maisūr.

368. — S. 1558. — *Ante*, Vol. XIII. p. 131. Koṇḍyāta copper-plates of Veṅkaṭa II. of Vijayanagara (Karnāṭa):—

(Plate iva, l. 14). — Vasu-bāna-kaḷamb-ēndu-gaṇitē Saka-vatsarē |

Dhātṛi-saṁvatsarē(ra)-nāmui māsi ch=Āshāḍha-nāmani |

Pakshē valakshē puṇyarkshē dvādaśyām cha mahā-tithau ||

369. — P. 3, No. 136. — S. 1560,* Īsvara, Phālguna-śudi 5, Thursday. Haḷebīd inscription of Veṅkaṭādri-nāyaka (son of Kṛishṇappa-nāyaka) of Vēlūr.

370. — P. 126, No. 79. — S. 1565, Sōbhānu, Pausha-vadi 14, Bhārgavya-vārē. Death of Chārukirti.

371. — S. 1566. — *Ante*, Vol. XIII. p. 159. Kaḷakurūsi copper-plates of Sriraṅga II. of Vijayanagara (Karnāṭa):—

(Pate iva, l. 8). — Rasa-rtu-bāna-chandr-ākhyā-gaṇitē Saka-vatsarē |

Tāru(ra)ṇ-ākhyē mahā-varshē māsi Phālguna-nāmakē |

Pakshē vaḷakshē puṇyarkshē dvādaśyām cha mahā-tithau ||

372. — S. 1570. — *Inscr. at Sravaṇa Belgoḷa*, No. 118, pp. 88 and 172. Date of a private inscription:—

Sakē 1570 Sarvadhāri-nāma-saṁvatsarāḥ Vaiśāka-vadi 3 Sukkuravāra.†

373. — S. 1576. — *Mysore Inscr.* No. 175, p. 335. Date in an inscription at Yelandur, of Mudda-bhūpati of Padināḍu:—

'In the Saka year 1576, the year Jaya.'

374. — P. 133, No. 117. — S. 1589, Plavaṅga, month of Vaiyāsi, śudi 3, Thursday. Rāmēśvaram Sētupati copper-plates.

375. — S. 1594.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 33; *Mysore Inscr.* No. 137, p. 249. Simoggā copper-plates of Keḷadi-Sōmasēkhara-nāyaka:—

'Sālivāhana-śaka 1594 (in figures, l. 2 of the first side), the Virōdhikṛit *saṁvatsara*; the fifteenth day of the bright fortnight of 'Srāvaṇa.'

376. — S. 1601. — *Mysore Inscr.* No. 167, p. 310. Karigatta copper-plates of Chikkadēva of Maisūr:—

'The Saka year reckoned as *indu*, *bindu*, *aṅga* and *chandra* (1601) having passed, and the year Siddhārthi being current, in the month Saha (Kārttika), on the 2nd day of the moon's decrease, the anniversary of his father's death.'

377. — S. 1602.* — *Inscr. at Sravaṇa Belgoḷa*, No. 116, pp. 88 and 171. Date of a private inscription:—

'Sālivāhana-śaka-varuṣha 1602nē Siddhārthi-saṁvatsarada Māgha-bahula 10 yallu.

⁶³ Māgha-vadi 5 of the year of the date corresponds to Monday, the 6th February, A. D. 1626.

378. — S. 1615. — *Coorg Inscr.* No. 11, p. 16. Kaṭṭepura copper-plates of Kṛishṇappa-nāyaka (son of Veṅkaṭādri-nāyaka):—

'Sālivāhana-śaka-varuṣhagaḷu 1615neya Srīmukha-nāma-saṁvatsarada Pushya śu 12 lu.

379. — P. 4, No. 137. — S. 1619, Īsvara, Māgha-śudi 15, Saturday. Dēvanhalli copper-plates and stone inscription of Gōpāla Gauḍa, 'lord of the Āvati-nād.'

380. — S. 1620. — *Pāli, Skr. and Old-Kan. Inscr.* No. 36; *Mysore Inscr.* No. 144, p. 258. Kōlār copper-plates:—

'Sālivāhana-śaka 1620 (in figures, l. 2 of the first side), the Bahudhānya *saṁvatsara*; the seventh day of the bright fortnight of Jyāishṭha.'

381. — S. 1636.* — *Pāli, Skr. and Old-Kan. Inscr.* No. 34; *Mysore Inscr.* No. 138, p. 250. 'Simoggā copper-plates of Basapayya-nāyaka (son of Sōmasēkhara-nāyaka):—

'Sālivāhana-śaka 1636 (in figures, l. 3 of the first side), the Vijaya *saṁvatsara*; the fifteenth day of the bright fortnight of Chaitra.'

382. — P. 133, No. 118. — S. 1636, Jaya, first day of Sittirai, 10th lunar day, Monday. Rāmēśvaram Sētupati copper-plates.

383. — P. 133, No. 119. — S. 1637, Manmatha, second day of Māsi, third lunar day, Monday. Rāmēśvaram Sētupati copper-plates.

384. — P. 121, No. 51. — S. 1644, Subhakarit, Mārgaśrīsha-paurṇamāsi, Tuesday, a lunar eclipse. Tonnur copper-plates of Kṛishṇarāja of Maisūr.

385. — P. 5, No. 143. — S. 1645 (for 1646), Krōdhin, Pausha-vadi 12, Wednesday, uttarāyāna-saṁkrānti. Melkote copper-plates of Kṛishṇarāja of Maisūr.

386. — S. 1645 (P). — *Inscr. at Sravaṇa Belgoḷa*, No. 83, pp. 65 and 152. Inscription of the reign of Kṛishṇarāja of Maisūr:—

Sālivāhana-śaka-varuṣha 1621nē saluva Sōbhakṛitu-saṁvatsarada⁶³ Kārttika ba 13 Guruvāradallu.

387. — P. 121, No. 52. — S. 1650, Kīlaka, Kārttika-śudi 2, Budha-vāra. A grant of the Coorg Rāja Doḍḍa Virappa Voḍeyar.

388. — P. 134, No. 120. — S. 1655, Pramādin, the 10th day of Kārttigai, a lunar eclipse, Saturday. Sētupati copper-plates.

389. — P. 134, No. 121. — S. 1658, Nala, month of Tai, Paush-āmāvāsyā. Sētupati copper-plates.

390. — P. 121, No. 53. — S. 1683, Vishu, Chaitra-śudi 1, Monday. Copper-plates from Maisūr.

391. — P. 134, No. 122. — S. 1706 (Kali 4884), Sōbhakṛit, month of Mithuna, śudi 13, Friday. Sētupati copper-plates.

392. — P. 4, No. 138. — S. 1714, Paridhāvin, the 4th day of Paṅguṇi, śudi 2, Wednesday. Inscription at Timpparaṅkunṇam.

393. — P. 122, No. 54. — S. 1718, Nala, Chaitra-śudi 1, Bhṛigu-vāra. Abbimāṭha and Mahādēvapura copper-plates of the Coorg Rāja Vira Rājendra Voḍeyar.

394. — P. 126, No. 80. — S. 1731, Sukla, Bhādrapada-vadi 4, Budha-vāra. Death of Aditakīrtidēva.

⁶³ Sōbhakṛit would be S. 1645 expired, and for this year the date corresponds to Thursday, the 14th November, A. D. 1723.

395. — P. 126, No. 81. — S. 1739, *Iṅvara*, Jyaishṭha-vadi 2, Kali-dina 1796 592, Bhānu-vāra. Merkara copper-plates of the Coorg Rāja Liṅga Rājendra Voḍeyar.

396. — P. 127, No. 82. — S. 1748, *Vyaya*, Phālguna-vadi 5, Bhānu-vāra. Śravaṇa Belgoḷa inscription of the reign of Kṛishṇarāja Voḍeyar of Maisūr.

397. — S. 1768.* — *Coorg Inscr.* No. 22, p. 28. Inscription at Irpi :—

Śālivāhana-śaka-varsha 1763ne Śārvari-sāmvatsaradallu.

Additional Dates.

398. — S. 1305 (for 1306?). — *Ep. Ind.* Vol. III. p. 227. Ālampūṇḍi copper-plates of Virūpāksha, the son of Harihara II. of Vijayanagara :—

(L. 13). — Śakavarsha-sahasr-ādhi-pāñchōttara-śata-trayē |

Baktākshi(kshi)⁶⁴-Pushya-samkrāntau puṇya-kālē śubhē dinē |

399. — S. 1315. — *Ep. Ind.* Vol. III. p. 229. Kāñchīpura inscription of Harihara II. of Vijayanagara :—

(L. 1). — Saktyālōkē Sak-ābdē pariṇamati śubhē Śrīmukh-āshā[ḍha]-māsē
śuddhē pakshē daśamyām⁶⁵ Ravisuta-divase Mitra-bhē.†

400. — S. 1556. — *Ep. Ind.* Vol. III. p. 244. Kāniyūr copper-plates of Veṅkaṭa II. of Vijayanagara (Karnāṭa) and Tirumala Nāyaka of Madhurā :—

(L. 103). — Ri(ri)tu-bāṇa-kalāmb-ēṃdu-gaṇitē Śaka-vatsarē |

Bhāv-ābhidā(dhā)nakē varshē māsi Vaiśākha-nāmanī |

Palashē vaḷakshē puṇyarkshē paurṇa(rṇa)ināsyām mahā-tithau |

(To be continued.)

ON THE DATES OF THE SAKA ERA IN INSCRIPTIONS.

BY PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

(Continued from Vol. XXIV. p. 211.)

I now proceed to submit to the reader such general remarks as have suggested themselves to me by the study of the dates which I have given in the preceding volumes. Since the time when I compiled my lists of dates, many other Saka dates have been published, but an examination of the more important of these dates has shewn me that this new material in all probability will not oblige us to modify materially any conclusions that may be drawn from the limited number of dates in my own published lists.

Current and Expired Years.

Sometimes the years of the dates, by words like *atīta*, *atīkrānta* or *gata*,¹ apparently are intended to be described as expired years; and the word *vartamāna*, which is used in one or two dates, would naturally be taken to indicate that the year so qualified is quoted as current. But the majority of the dates tells us nothing about the nature of the years quoted in them. And since *atīta* and *gata* are used also with current years,² while *vartamāna* undoubtedly qualifies expired years,³ the fact whether the year of a date is current or expired must everywhere be ascertained from the particulars which may be given together with the year, especially from such details of the date as enable us to calculate its exact European equivalent.

Now it is clear that, to arrive at some definite notion regarding the relative frequency of the use of current and expired years, we must, in the first instance, consider those dates with full details for verification which work out regularly. In Vol. XXIII. p. 113 ff., I have given 122 such dates, and the result of my calculations shews that, out of this number, the years of 95 dates are expired, and the years of 23 dates current years, while the years of four dates (Nos. 106-109) may *prima facie* be taken as either current or expired. Of the 400 dates of the

⁶⁴ Baktākshi should be Ś. 1306 expired.

⁶⁵ In Ś. 1315 expired = Śrīmukha Āshāḍha.sudi 10 ended 2 h. 20 m. after mean sunrise of Friday, the 20th June, A. D. 1393, when the *nakṣatra* was Viśākhā. The *nakṣatra* was Anurādhā (the Mitra-n.) from 1 h. 58 m. after sunrise of Saturday, the 21st June, A. D. 1393.

¹ On the exact phrases, employed by the writers of the dates, see below. Sometimes, as in the date No. 33 in Vol. XXIII. p. 118, it is stated that the Jovian year which is quoted along with the Śaka year, followed upon that year, and the Śaka year thereby is distinctly described as expired.

² See *s. g.* Vol. XXIII. p. 127, No. 86, and p. 128, Nos. 88 and 93.

³ See *s. g.* Vol. XXIV. p. 16, No. 194.

chronological list in Vol. XXIV. p. 181 ff., 16 are from inscriptions marked as spurious, and 116 dates contain no details for exact verification; 78 other dates⁴ would seem to be altogether irregular; and the remaining 190 dates (which include the 122 dates already mentioned) are either quite regular or contain only slight errors which do not prevent our ascertaining their exact European equivalents. And here, again, I find that, of the years of these 190 dates, 141 undoubtedly are expired and 38 current. The result of our examination, therefore, so far shews that, for about every four Saka dates with expired years, we have one date the year of which is a current one.

But this very general conclusion is liable to considerable modifications, when we take into account the different periods to which the dates belong.

Of 30 regular dates of the classified list from S. 534 (the year of the earliest genuine Saka date which contains details for verification) to S. 1000, the years of 29 dates were expired years, and the year of only one date was a current year; of 48 dates from S. 1001 to S. 1200, 30 quote expired and 18 current years; of 15 dates from S. 1201 to S. 1400, 12 quote expired and 3 current years; and of 25 dates from S. 1401 to the most recent times, 24 quote expired years, and the year of only one date is a current one. Or, taking the dates of the chronological list, of 41 dates from S. 534 to S. 1000, 40 dates quote expired years, and the year of only one date is a current one; of 71 dates from S. 1001 to S. 1200, 41 quote expired and 30 current years; of 31 dates from S. 1201 to S. 1400, 26 quote expired and 5 current years; and of 36 dates from S. 1401 to the most recent times, 34 quote expired and only 2 current years.

From these details it appears that, down to S. 1000, the rule was to quote the Saka years as expired years, and that current years, till then, were quoted very exceptionally indeed.⁵ Afterwards we see a remarkable change. In the 11th and 12th centuries the proportion of current to expired years is as 3 to 5, or even as 3 to 4. During the two next centuries current years again are quoted much less frequently; and during the four last centuries the earlier practice of quoting expired years only has been re-established to such an extent that my list of quite regular dates contains only a single date with a current year, which is later than S. 1400. Had we only the Saka dates before S. 1000 and after S. 1400, the practice of the Saka era, so far as can be judged by the dates collected, might be said to entirely agree with the general practice of the Vikrama era. The difference between the two eras in the relative frequency of expired and current years is due to the Saka dates between S. 1000 and S. 1400, more especially to those between S. 1000 and S. 1200.

The result arrived at regarding the nature of the earlier years of the Saka era, in my opinion, must lead us to consider as expired the years of the four dates⁶ (of S. 534, 716, 730 and 789) also, the calculation of which, owing to the fact that no weekdays are given by the dates, has left us the choice between current and expired years. And it will be seen below that, in respect of at least two of these dates (those of S. 716 and 730), this view is supported by the fact that the solar eclipses mentioned in them were visible in India in the expired, and not visible in the current years.

⁴ It should not be forgotten that of many of the inscriptions from which these dates are taken we do not, as yet, possess critical editions.

⁵ Down to S. 1000, the only genuine and correct date in my published lists, with details for exact verification, which quotes a current year, is that of the Kalas-Budruk plates of the Yādava Bhīllama III. of S. 948, Vol. XXIII. p. 129, No. 98. An earlier correct date, of S. 943 current, I have given in *Ep. Ind.* Vol. IV. p. 68. The dates Nos. 46, 49 and 86 of the chronological list, of S. 730, 735 and 896, which would seem to quote current years, are irregular. The date No. 79 of the same list, of S. 872, contains no details for exact verification; and the date No. 80, also of S. 872, is called by Dr. Fleet, on historical grounds, a quite impossible date. — Perhaps it may be noted here, what will be more fully shown hereafter, that of three of the principal technical expressions by which the Saka era is denoted in the dates—*Saka-varshāshvattīshu*, *Sakavriparāshvattīshu*, and *Saka-varsha*—so far as regards the dates collected, the two first are used comparatively rarely after S. 1000, while the last is used more frequently between S. 1000 and S. 1200 than in all the other centuries together.

⁶ Vol. XXIII. pp. 130, 131, Nos. 106, 109.

In Vol. XXIV. pp. 4 and 5, I have given three dates⁷ (Nos. 140-142) which are quite regular, except that the given year in each case falls short by 1 of the expired year to which the date really belongs. Thus the year of the date No. 140 is put down as *Saka-samvat* 1063, but as the European equivalent of the date falls in May A. D. 1142, the year undoubtedly was S. 1064 expired. To account for this, it may be supposed that the writer of the date erroneously regarded the (expired) Saka years as current ones, and that then, intending to give the number of expired years, he quoted the year which preceded the actually expired year.⁸ This class of dates—my chronological list contains about 20 of them—clearly differs from dates like No. 139, *ibid.* p. 4, where wrong years have been quoted in consequence of mistakes of which it seems impossible to suggest a general explanation. — On the whole, my experience is that such error⁹ of the writers rarely cause us any great difficulty, because the Saka years of the dates may nearly always be checked at once by the Jovian years quoted along with them, which to the Hindus appear to be much more familiar than the numbers of the Saka years, and which they generally quote in a remarkably accurate manner.

Jupiter Years.

Commencing with the date No. 44 of the chronological list of S. 726 (Vol. XXIV. p. 185), as many as 322 out of 357 dates quote the years of the sixty-years' cycle of Jupiter to which the dates belong.¹⁰ The 35 dates, which fail to do so, are mostly from Java, Bengal, Northern India, Gujārat and Kāthiāvād, or taken from Eastern Chalukya and Eastern Gaṅga inscriptions. Although, in itself, as independent of the Saka era as of any other era,¹¹ the sixty-years' cycle, in practice, is closely connected with the era with which we are dealing here, because, from about the beginning of the 9th century A. D., it is principally used in the very parts of India where the Saka era also is chiefly employed. And the use of it would seem to be even more common in those parts than that of the Saka era itself, because we hitherto have found there more dates recorded in Jovian years, without the corresponding Saka years, than we have Saka dates that do not quote the corresponding Jovian years.

The regular dates which admit of exact verification shew that, excepting a date of S. 867 of which I shall speak below, beginning with S. 855 (Vol. XXIII. p. 114; No. 8), the system of the sixty-years' cycle followed in these dates can only be the southern luni-solar system by which, irrespectively of Jupiter's position, the name of the Jovian year is merely a name for a certain solar or luni-solar year.¹² The case is different with the dates before S. 855, which require a more detailed examination.

The date No. 55 (*ibid.* p. 122), of S. 726 expired and the year Subhānn, corresponds to the 4th April A. D. 804. Here Subhānn, by the southern luni-solar system, cannot be connected with S. 726 expired at all, but by the mean-sign system Subhāna was current both at the

⁷ The year of the date No. 143, *ibid.* p. 5, which at the time I had to take from a translation, is in the original inscription 1646. See *Ep. Carn.* Part I. p. 39, No. 160.

⁸ This explanation was first given by Dr. Bhandarkar, *Early History*, 1st ed., p. 107. — On the other hand, in the date No. 184 (Vol. XXIV. p. 14), the year of which appears to be really S. 1055 current, the writer has given us S. 1056, probably because he considered 1055 as an expired year and wished to quote the current year.

⁹ Years of the sixty-years' cycle are also quoted in six earlier Saka dates of the list (from S. 169 to S. 411), but these are all from spurious records. The date of S. 728, therefore, is so far the earliest genuine date, with details for verification, that quotes a year of the sixty-years' cycle. And the only earlier instance of the occurrence in a date of a year of the same cycle we seem to have in the Mahākūta (Bādāmi) pillar inscription of the Early Chalukya Maṅgalāśa, which thereby would be referred to A. D. 602. See *ante*, Vol. XIX. p. 18.

¹⁰ In dates of the Vikrama era the years of the sixty-years' cycle are quoted rarely, in those of the Ghēdi, Gupta and some other eras not at all.

¹¹ Dates like No. 64 in Vol. XXIII. p. 124, and Nos. 53 and 54, *ibid.* pp. 121 and 122, shew that, where the year is luni-solar, the Jovian year coincides with the luni-solar year, while the date No. 188 in Vol. XXIV. p. 4, shews that, where the year is solar, the Jovian year coincides with the solar year. To determine, therefore, what date were contained in a particular Jovian year, one must know what kind of calendar was used.

commencement of S. 726 expired¹² and on the actual day of the date. The date No. 108 (*ibid.* p. 131) of S. 730 expired¹³ and the year Sarvajit, corresponds to the 27th July A. D. 308. Here also the year Sarvajit, by the southern luni-solar system, cannot be connected with S. 730 expired; and by the mean-sign system Sarvajit was current at the commencement of S. 733 expired, but was no longer so on the day of the date. The date No. 59 (*ibid.* p. 123), of S. 788 expired and the year Vyaya, corresponds to the 16th June A. D. 866. Here Vyaya, by the southern luni-solar system, would be S. 788 expired; and by the mean-sign system also Vyaya was current both at the commencement of S. 788 expired and on the actual day of the date. The date No. 7 (*ibid.* p. 114), of S. 851 expired and the year Vikrita, corresponds to the 17th January A. D. 930. And here, again, the year Vikrita, by the southern luni-solar system, cannot be combined with S. 851 expired at all, while by the mean-sign system Vikrita was current at the commencement of S. 851 expired, but was no longer so on the day of the date. These four regular dates, then, (the only regular dates with Jovian years before S. 855, with details for verification,) have this in common that the given Jovian year, by the mean-sign system, was current at the commencement of the given Saka year. And taking this to be the characteristic feature of these dates, and regarding as accidental the facts that in one case the southern luni-solar system would suit equally well, and that in two dates the given Jovian year by the mean-sign system was current also on the actual day of the date, I conclude that the system which was followed here is the so-called northern luni-solar system. And I am the more inclined to regard this conclusion as correct because I find that, with perhaps one exception, the same system is equally applicable to the other dates of my chronological list, before S. 851. The exception alluded to is that of the date No. 70 of S. 838 (Vol. XXIV. p. 187), in the case of which the given year S. 838, as an expired year, can be connected with the given Jovian year Dhātī only by the southern luni-solar system.¹⁴

Of the dates subsequent to S. 851, the date No. 61 of S. 867 expired (Vol. XXIII. p. 123) causes some difficulty. The inscription from which that date is taken,¹⁵ first, in lines 3 and 4, has the words 'the years passed from the time of the Saka (or Sakas) being eight hundred and sixty-seven, . . . in the current year Plavaṅga'; and then, in line 45, it gives a specific date which commences with the words 'in the aforesaid current year,' and which corresponds to the 9th September A. D. 945 (in S. 867 expired). Here the connection of the year Plavaṅga with S. 867 expired would seem really to be owing to some mistake. By the southern luni-solar system S. 867 expired would be Viśvāvasu (not Plavaṅga), while by the northern luni-solar system as well as by the strict mean-sign system the Jovian year that should have been quoted is Paribhava, which was current both at the commencement of S. 867 expired and on the 9th September A. D. 945, the day of the date. Now, as the year Plavaṅga, by the mean-sign system, commenced on the 17th October A. D. 945, in S. 867 expired, I formerly have assumed that the first statement of the inscription, in lines 3 and 4, refers to the time when the inscription was put up, in S. 867 expired, on or after the 17th October A. D. 945 when the year Plavaṅga was really current, and that the denotation, to which the second part of the date in line 45 ff. more immediately relates, was made some time before the inscription was put up, in the given year S. 867 expired, but before the commencement of the Jovian year Plavaṅga. But this explanation does not satisfy me because the use of the strict mean-sign system, the only

¹² Here and in the following dates it makes no difference whether we take the Saka year to commence with the Mēsha-saṅkrānti or with Chaitra-sudi 1.

¹³ See the remarks on this date above.

¹⁴ If we were to take 838 as a current year, the northern luni-solar system would here also apply; but it seems to me more probable that, in accordance with the general rule, the year of the date is an expired year. This date would thus, in my opinion, furnish the earliest certain instance for the use of the southern luni-solar system. The date deserves notice also for the peculiar manner in which the Jovian year is described in it. — In the two dates of S. 833 and S. 840, which immediately surround the date of S. 838, the system followed cannot be the southern luni-solar system.

¹⁵ See *Ep. Ind.* Vol. IV. p. 60 ff.

one by which the year Plavaṅga could be connected with (part of) S. 867 expired, has not been proved for the part of India where the date comes from. And another suggestion, which would make the words 'in the current year Plavaṅga' equivalent to 'when Jupiter stood in the sign Mithuna,'¹⁶ appears to me equally liable to objection.

As regards Jupiter's place, I may state here that, besides being given in several Saka dates of inscriptions from Cambodia, it is recorded also in two South-Indian dates¹⁷ of my chronological list, the years of which are regularly named in accordance with the southern luni-solar system. In No. 297 (Vol. XXIV. p. 263) of S. 1309 current and the year Kshaya, it is stated that on the given date, which corresponds to the 10th January A. D. 1387, Jupiter stood in the sign Simha. And the same position is assigned to him in the date No. 323 (*ibid.* p. 205) of S. 1403 expired and the year Plava, which corresponds to the 3rd February A. D. 1482. These statements, as I now see, must probably be taken to refer to Jupiter's true (or apparent) place; but it also happens that both Jupiter's mean place and his true place were in the sign of Simha on either date.¹⁸ For (calculated by Warren's rules) on the 10th January A. D. 1387 Jupiter's mean longitude was $4^{\circ} 11' 48''$, and his true longitude $4^{\circ} 21' 45''$; and on the 3rd February A. D. 1482 his mean longitude was $4^{\circ} 17' 9''$, and his true longitude $4^{\circ} 23' 5''$.

Solar Months.

Beginning with the date No. 104 of S. 944 expired, my chronological list contains 29 dates¹⁹ the months of which are given as solar months (and the years of which therefore must be solar). Of the inscriptions which contain these dates, two are Eastern Chalukya and three Eastern Ganga inscriptions, one is from Bengal, and the rest are from the south of India. In the date from Bengal (No. 227 of S. 1141), the month is described as 'Phālguna by the sun's motion' (*śūrya-yatya*)²⁰ *Phālguna-dina* 26). In three dates, which are in verse, no word for month is employed, but the sun is said to have stood in a particular sign of the zodiac. In 14 dates, the earliest of which is No. 135 of S. 1003 expired, the months by such expressions as *Mēsha-māsa*, 'the month of Mēsha,' are called after the sign of the zodiac in which the sun happened to be; and the remaining 11 dates, the earliest of which is No. 241 of S. 1160, use the Tamil names from Sittirai²¹ (= the solar Vaiśākha) to Paṅguni (= the solar Chaitra).

Now, although the months of these dates are solar, of 24 dates which give details no less than 17 quote *tithis* and *pakshas*, just as is done in dates with lunar months, and do not give us the civil day of the recorded solar month; 5 dates, in addition to the *tithi* and *paksha*, also give the day of the solar month; and in only two dates (one of which is the date from Bengal) has the writer confined himself to giving the day of the solar month. As most of the religious ceremonies are connected with certain *tithis*, not with civil days, this is perhaps only natural; and it would seem to shew that, at least in Southern India where most of the dates come

¹⁶ See Dr. Fleet's *Dynasties*. 2nd ed., p. 421, note 1. By the mean-sign system the year Plavaṅga (the 15th year of the cycle, counted from Vyāsa) lasts as long as Jupiter's mean place is in Mithuna (the 3rd sign). Now, since on the day of the date, the 9th September A. D. 945, Jupiter's true place was in Mithuna — Jupiter's true longitude on that day, calculated by Warren's rules from his mean longitude $56^{\circ} 50'$, was $73^{\circ} 14'$ — it is suggested that there may have been a year Plavaṅga which lasted as long as Jupiter's true place was in the sign Mithuna. But there is nothing to prove the existence of such a year; and if the writer had intended to give us Jupiter's true place on the day of the date, he in all probability would have employed some phrase like *Mithuna-ślo guras*, which we meet with in other dates.

¹⁷ Jupiter's place is often given in dates of the Kollam era.

¹⁸ In the case of the date No. 58 of S. 589 expired (Vol. XXIII. p. 122), from Cambodia, I find that on the 15th April A. D. 667 Jupiter's mean longitude was $8^{\circ} 7' 1''$, and his true longitude $8^{\circ} 10' 28''$; i. e., Jupiter in either case was in the sign Dharma.

¹⁹ A few other dates, with lunar months, incidentally record that on the day of the date the sun stood in a particular sign of the zodiac. Of the saṅkrāntis, which mark the commencement of the solar months, I shall treat below.

²⁰ The same expression is used in line 53 of the Kamauī plates of Vaidyadeva; *Ep. Ind.* Vol. II. p. 358.

²¹ These names of course are really the names of the lunar months in which the solar months commence.

from, the solar reckoning, notwithstanding the nominal use of solar months, is of little practical importance.²²

As regards the civil beginning of the solar month, attention may perhaps be drawn to the date No. 392 of S. 1714 (Vol. XXIV. p. 4, No. 138), from which it appears that a day on which the *samkrānti* took place, by the Ārya-siddhānta, as late as 11 h. 54 m. after mean sunrise, was counted the first day of the solar month.²³

Lunar Months.

Intercalary months. — Intercalary months are distinctly quoted only in the regular dates Nos. 27, 28 and 96 of S. 1121 expired, 1145 expired, and 1355 current (Vol. XXIII. p. 117 ff.), and in the irregular date No. 188 of S. 1091 expired (Vol. XXIV. p. 15). In three of these four dates the name of the month (Āshāḍha, Śrāvāṇa, and Bhādrapada) is qualified by the word *deitīya*, and in one by *prathama* (*pratham-Āshāḍha*). But the months were intercalary also in other dates where this is not actually stated. Thus the month Śrāvāṇa of the date No. 8 of S. 855 expired²⁴ (Vol. XXIII. p. 114) was the *second* Śrāvāṇa; the month Jyaishtḥa of the date No. 71 of S. 1113 expired (*ibid.* p. 125) was the *second* Jyaishtḥa; the same month of the date No. 74 of S. 1189 expired (*ibid.* p. 125) was the *first* Jyaishtḥa; and the month Bhādrapada of the date No. 41 of S. 1332 expired (*ibid.* p. 119) was the *first* Bhādrapada. — The true and intercalated months are nowhere distinguished by the terms *nija* and *adhika*.

The pūrṇimānta and amānta schemes. — With the exception of apparently four dates, the dates in dark fortnights of which we are able to give the exact European equivalents all work out satisfactorily with the *amānta* scheme of the lunar months. Omitting the dates from Cambodia,²⁵ the earliest *amānta* date is that of the Paithan plates of the Rāshtrakūṭa Gōvinda III. of S. 716 (Vol. XXIII. p. 131, No. 107), and the next that of the Rādhapur plates of the same king of S. 730 (*ibid.* No. 106). After that, the *amānta* scheme is used throughout, except as it would seem, in a Balagāṇve inscription of the Western Chālukya Sōmēśvara I. of S. 976 expired (*ibid.* p. 122, No. 56), and in a copper-plate inscription of Harihara II. of Vijaynagara of S. 1313 expired (*ibid.* No. 57). But there can hardly be any doubt that the wording of these two dates of S. 976 and S. 1313 is incorrect. With the universal agreement of all the other dates after S. 730, it would be impossible to admit that at the time of these two dates the *pūrṇimānta* scheme could have been used in the localities where these dates come from; and we possess other dates both of Sōmēśvara I.²⁶ and of Harihara II.²⁷ — of Sōmēśvara I. one other date of nominally the very same *tithi*²⁸ — which shew that the scheme of the months during their reigns was the *amānta* scheme. The probabilities, therefore, in my opinion, are that in the date of S. 976, as in another date of Sōmēśvara I.,²⁹ the day Sunday has been wrongly put down instead of Tuesday (which would make the date fall in the *amānta* Vaiśākha), and that in the date of S. 1313 the month Vaiśākha has been quoted erroneously instead of (the *amānta*) Chaitra.

The number of *pūrṇimānta* dates is thus reduced to two only, one of which, of S. 534 (Vol. XXIII. p. 130, No. 106), is from a copper-plate inscription of the Western Chalukya Pulikēśin II., while the other, of S. 726 expired (*ibid.* p. 122, No. 55), is from a copper-plate inscription of the Rāshtrakūṭa Gōvinda III. The first of these two dates we need not

²² The same conclusion may be drawn from the practice observed in dates of the Kōllam era.

²³ The date also shews that the beginning of the month was calculated by the Ārya-siddhānta, not by the Sūrya-siddhānta.

²⁴ This date shews that the system of intercalation followed in S. 855 expired was the true system; for by the mean system of intercalation the day of the date, the 8th August A. D. 933, would have been the full-moon day of the first Bhādrapada (not of the second Śrāvāṇa).

²⁵ In Cambodia the *amānta* scheme was used in S. 539 (Vol. XXIII. p. 122, No. 58), and, before that, in S. 548 (*ante*, Vol. XXI. p. 47).

²⁶ Vol. XXIV. p. 7, Nos. 190 and 151.

²⁷ Vol. XXIII. p. 126, No. 77, and Vol. XXIV. p. 263, No. 287.

²⁸ Vol. XXIV. p. 7, No. 150.

²⁹ *Ibid.* No. 151.

hesitate to accept as correct, because in an inscription of a later Western Chalukya king we have another date³⁰ (corresponding to the 25th June A. D. 754 in S. 676 expired) which also can be accounted for only by the *pūrṇimānta* scheme. The date of S. 726 expired, on the other hand, I cannot help regarding with some suspicion, because it falls between the two *amānta* dates, already mentioned, of S. 716 and S. 730 of the same king Gōvinda III., which tend to prove that the scheme of the months, used during that king's reign, was the *amānta* scheme. With the two other dates to guide us, we might well suppose that the mistake, which undoubtedly was committed in the date of S. 1313 of Harihara II., was made also in the date of S. 726. The result I consider to be that, among all the dates collected, there is only the single date of S. 534 which may confidently be taken to prove the use of the *pūrṇimānta* scheme of the lunar months in connection with the Saka era.³¹

(To be continued.)

³⁰ Viz., in the Paṭṭadakal inscription of the time of the Western Chalukya Kirtivarman II., *Ep. Ind.* Vol. III. p. 3. An earlier *pūrṇimānta* date, corresponding to the 17th February A. D. 668 (in S. 639 expired), we have in the Maṭṭewāḍa (?) plates of the Eastern Chalukya Vishṇuvardhana II., *ante*, Vol. XX. p. 9.

³¹ So far as I know, up to the present the earliest indication, in an inscription, of the use of the *pūrṇimānta* scheme we have in the date of the Majhgawāni plates of the Parivṛjaka Mahārāja Hastin, of Gupta-samvat 191 = A. D. 510-11 (*Gupta Inscr.* p. 107); and the earliest proof for the use of the *amānta* scheme is furnished by an inscription from Cambodia of S. 548 = A. D. 626-27, referred to above.

ON THE DATES OF THE SAKA ERA IN INSCRIPTIONS.

By PROFESSOR F. KIELHORN, C. I. E.; GÖTTINGEN.

(Continued from p. 272.)

Tithis.

Current tithis.— Commencing with the date No. 123 (Vol. XXIV. p. 1) I have given a series of dates in which the *tithi* of the date is shown to be joined, not with the day on which it ended, but with the day on which it commenced. Of these, the dates which mention the Uttarāyana-samkrānti will more conveniently be considered below. The date No. 126 of S. 1452 expiring furnishes a very instructive instance of a current *tithi*, because the *tithi*, the 8th of the dark half of the *amānta* Śrāvāṇa, is joined with a day on which it commenced as late as about 12 h. 45 m. after mean sunrise (while it ended about 10 h. 12 m. after mean sunrise of the following day). But the date is quite according to rule. For the *tithi* is distinctly connected in the date with Kṛṣṇa's birth, and since that event took place both during the 8th *tithi* of the dark half of the *amānta* Śrāvāṇa (or *pūrṇimānta* Bhādrapada) and also at midnight, the 8th *tithi* or *Janmāshṭami*, as it is called, had necessarily to be combined here with the day on which it commenced, and could not have been joined with the day on which it ended, because midnight of that day already belonged to the 9th *tithi*. In the same way, in a date of Prof. Eggeling's *Catalogue*, p. 96, the *Janmāshṭami* is joined with a day on which it commenced 1 h. 38 m. after mean sunrise. And, more similarly still, in one of the Kamauli plates³² of Jayachandra of Kanauj the 8th *tithi* of the dark half of the *pūrṇimānta* Bhādrapada (the *Janmāshṭami*) is joined with a day on which it commenced 11 h. 58 m. after mean sunrise.— In the twelve dates from No. 127 to No. 133 the *tithi* generally commences from two to four hours, once 1 h. 16 m. only and once as much as 6 h. 53 m., after sunrise of the day with which it is joined. Here it is no doubt possible that in one or other of these dates either the *tithi* or the weekday has been given incorrectly, but this cannot be the case in the majority of the dates. And we, therefore, may assume, either that it was desired to specify not so much the weekday as the particular *tithi* during which a donation was made or some ceremony performed, or that the donation to which the date refers was made on account of some festival³³ the rules for which required the *tithi* to be connected with the first of the two days of which it occupied part. If, e. g., the 13th *tithi* of the bright half of Māgha of the date No. 129 of S. 1084 expired was taken as a *Kalpādi*, it was quite necessary to join it with the day on which it commenced. In a Bombay calendar for S. 1814 expired I similarly find the same *Kalpādi* joined with Sunday, the 29th January A. D. 1893, although in every-day life that day was the 12th of the bright half, because the 12th *tithi* ended (and the 13th *tithi* commenced) on the Sunday, about 5 h. after sunrise.

Repeated tithis.— A repeated *tithi*, i. e., a *tithi* the number of which is given to two consecutive days, is not distinctly mentioned in any of the dates of the published lists,³⁴ but instances of it are furnished by the regular dates No. 13 of S. 950 expired (Vol. XXIII. p. 115) and No. 77 of S. 1307 expired (*ibid.* p. 126). In the former date a fifth *tithi* is connected with a Monday and in the latter a second *tithi* with a Friday, and in either case the *tithi*, by my calculations, commenced before the commencement of the given weekday and ended after the end of it, and the two *tithis* therefore would be more accurately described by the terms *prathama-pañchami* and *prathama-dvitiyā*.

Special names and epithets of particular tithis.— The 3rd *tithi* of the bright half of *Vaiśākha* is termed *akshaya-tṛitīyā yugādi-parvan* in the date No. 22 of S. 1078 (Vol. XXIII.

³² See *Ep. Ind.* Vol. IV. p. 127.³³ Such festivals (or auspicious occasions for making donations, etc.) need not necessarily be specially mentioned in the dates or inscriptions.³⁴ An instance of a repeated *tithi* in a date of the Śaka era is distinctly furnished by the *Nāṣṅgādi* plates of Kṛṣṇarāja of Vijayanagara (*Ep. Carn. Part I.* p. 183, No. 16) where we have *prathamā-śabdānt-tithis* in a date of the bright half of *Ashādha* of S. 1435 expired, which correctly corresponds to the 13th June A. D. 1518.

p. 117); and the full-moon *tithi* of the same month³⁵ is called *mahā-Vaiśākhi* in the dates Nos. 48, 51 and 67 of S. 734, 749 and 832 of the chronological list, and described as *mahā-tithi* in the date No. 400 of S. 1556 of the same list. The same epithet *mahā-tithi* is applied to the 12th *tithi* of the bright half of *Ashādha*³⁶ in the date No. 368 of S. 1558 of the same list. The full-moon *tithi* of Śrāvāṇa³⁷ is called *yajñipravāna-parvan* in the date No. 93 of S. 1199 (Vol. XXIII. p. 128). The 13th *tithi* of the dark half of the *amānta* Bhādrapada is described as *mahā-tithi-yugādi* in the date No. 67 of S. 1047 (*ibid.* p. 124). The 12th *tithi* of the bright half of *Kārttika*³⁸ is called the *puṇyā utthāna-dāśai-tithi* in the date No. 312 of S. 1462 of the chronological list; and the full-moon *tithi* of the same month³⁹ is termed *mahā-Kārttika-paurṇamāsī* and *mahā-Kārttik-parvan* in the dates Nos. 13 and 52 of S. 500 and 757 of the same list, and described as *puṇyā mahā-tithi* in the date No. 48 of S. 1506 (*ibid.* p. 121). The 7th *tithi* of the bright half of *Pausha* is called *vijaya-saptamī* in connection with the date No. 50 of S. 735 of the chronological list; and the *aradhālaya*⁴⁰ on the new-moon *tithi* of the *amānta* *Pausha* is mentioned in the date No. 321 of S. 1392 of the same list. The 7th *tithi* of the bright half of *Māgha* is called *ratha-saptamī* in the dates Nos. 37 and 330 of S. 675 and 1442, and described as *mahā-parvan* in the date No. 300 of S. 1317 of the same list. The full-moon *tithi* of *Māgha* is called *mahā-tithi* in the date No. 149 of S. 1317 (for 1318, Vol. XXIV. p. 7); and the *Mahāmāgam* (*Mahāmāgha*) festival on that *tithi* is mentioned in the date No. 322 of S. 1403 of the chronological list. The 14th *tithi* of the dark half of the *amānta* *Māgha* is called *Siva-tithi* in the date No. 292 of S. 1300 (for 1301), and *Siva-rātri mahā-tithi* in the date No. 325 of S. 1434 (for 1435) of the same list. The 5th *tithi* (apparently of the bright half) of *Phālguna* is termed *śrī-pañchamī*⁴¹ in the date No. 62 of S. 809; and the 12th *tithi* of the bright half of the same month is called *mahā-tithi* in the date No. 371 of S. 1566 of the same list.

In verse, the 3rd *tithi* is described as the *tithi* of Gaurī in the date No. 234 of S. 1153 of the chronological list; the 11th *tithi* as the day of Hari in the date No. 104 of S. 1172 (Vol. XXIII. p. 130) and in the date No. 143⁴² of S. 1646 (Vol. XXIV. p. 5); the 13th *tithi* as the *tithi* of Madana in the date No. 44 of S. 1450 (Vol. XXIII. p. 120); and the new-moon *tithi* as *pitṛi-parvan* in the date No. 61 of S. 867 (*ibid.* p. 123).— In prose, we find the term *Nandīrara*⁴³ for the 8th *tithi* (of the bright half of *Kārttika* and *Phālguna*) in the dates Nos. 75 and 87 of S. 860 and 899 of the chronological list.⁴⁴

³⁵ This is the *Kṛma-jayanī*.³⁶ On this *tithi* the *chaturmāsya-vrata* commences.³⁷ The *upakarman* or renewal of the sacred thread takes place in the bright half of this month.— On the 8th *tithi* of the dark half of the *amānta* Śrāvāṇa see above under 'current *tithis*.'³⁸ On this *tithi*, which elsewhere (*ante*, Vol. VII. p. 161) is called *śaivaśara-pūjyatamā*, Viṣṇu awakes from his sleep.³⁹ On this *tithi* the *chaturmāsya-vrata* ends. It also is one of the *Manoḍāis*. *Ante*, Vol. XI. p. 67, l. 16, it is described as *Paṭimāht-Hiranyagarbha-mahāstava-samaya*.⁴⁰ The *aradhālaya* takes place on the new-moon *tithi* of the *amānta* *Pausha*, provided this *tithi* falls on a Sunday when during day-time the *nakṣatra* is Śrāvāṇa and the *yoga* *Vyatyakta*. This most suspicious conjunction for making donations did take place on the equivalent of the date, Sunday, the 20th January A. D. 1471, and the date furnishes another correct instance of a current *tithi*.⁴¹ *Ante*, Vol. IX. p. 192, *śrī-pañchamī* is taken to denote the 5th day of the bright half of *Māgha*.⁴² For the wording of the original date see *Ep. Carn. Part I.* pp. 68 and 64.⁴³ In *Ep. Carn. Part I.* p. 214, No. 192, we have *Māgha-māsa Peretala* (i. e., *Īcāra*-)divāsam in a date of apparently S. 690 current.⁴⁴ It may be stated here that, besides some religious festivals, etc., mentioned in the preceding, and besides eclipses and samkrāntis which will be treated of below, the only occasion for making donations, specially referred to in the dates collected, is the coronation festival of kings. It is mentioned (in the terms *śrīpaṭṭabandhōtasa*, *paṭṭābhishēka-samaya*, and *paṭṭābhishēka-kṛtaya*) in three dates of the chronological list, viz. in the date No. 69 of S. 886 of the Nandīr plates of the Bishtrakūta Nityavaraha Indra III., in the date No. 804 of S. 1823 of the Hāma plates of Dēvarāja I. of Vijayanagara, and in the date No. 528 of S. 1430 (for 1431) of a *Hampe* inscription of Kṛṣṇarāja of Vijayanagara. In an inscription of Chikkēdevaīśa of Maistr (Ep. Carn. Part I. p. 68, No. 94) donations are stated to have been made when, at a recitation of the *Mahābhārata*, the king heard the description of Yudhishtira's coronation (Yudhishtiraśhēka-īcāra-kāladāhī).

Nakshatras, Yogas, Karanas, and Lagnas.

Of these, *nakshatras* by themselves are quoted in 39 dates. The earliest correct mention of one in an Indian Saka date occurs in the date No. 7 of S. 851 expired (Vol. XXIII. p. 114). Before that year we find *nakshatras* quoted incorrectly in the two Indian dates⁴⁵ Nos. 160 and 161 of S. 614 and 735 (Vol. XXIV. p. 9); and *nakshatras* are also quoted in three earlier dates from Cambodia, in one from Java, and in four dates from spurious Indian inscriptions. Beginning with the date of S. 851 expired, the *nakshatras* are correctly quoted in 23 dates, while six other dates which mention them either are irregular or do not admit of exact verification.⁴⁶ — *Yogas* by themselves are quoted in the two dates Nos. 27 and 50 of S. 1121 and 1556 (Vol. XXIII. pp. 117 and 121), and in two other quite incorrect dates. In three out of the four dates the *yoga* quoted is *Vyatipāta*. — *Nakshatras and yogas* together we have in six dates; *nakshatras, yogas and karanas* in ten. In the latter, the earliest of which is the date from Java No. 5 of S. 782 expired (Vol. XXIII. p. 114), nearly all the items given by the dates are correct. In the former, which give the *nakshatra* and *yoga* only, the items quoted are correct in four dates, the earliest of which is No. 140 of S. 1063 (for 1064 expired, Vol. XXIV. p. 4); in one date, No. 162 of S. 822 (for 824 expired, *ibid.* p. 9), they are incorrect; and one (quite incorrect) date, No. 166 of S. 169 (*ibid.* p. 10), is from a spurious inscription.

As regards *nakshatras*, it may be noticed that dates with solar months from South-Indian inscriptions generally contain some such phrase as 'on the day of (*the nakshatra*) Punarvasu,' 'on the day of (*the nakshatra*) Kṛttikā,' etc. The calculations shew that in these cases, as might be expected, that *nakshatra* is quoted in which the moon happened to be at sunrise and during a considerable portion of the day, or which she entered shortly after sunrise. — It may also be mentioned that in the date No. 51 of S. 1644 (Vol. XXIII. p. 121) the *nakshatra* *Ārdra* is described as the constellation under which the great reformer *Rāmañuja* was born.⁴⁷

Among the *yogas*, *Vyatipāta*⁴⁸ and *Vaidhṛiti* are generally described as most auspicious occasions for making donations, etc. This is distinctly indicated in the date No. 27 of S. 1121 (Vol. XXIII. p. 117) by the words *Bṛihaspati-ira-vyatipāta-punya-dinadola-vyatipāta-nimitān*, and in No. 32 of S. 1171 (*ibid.* p. 118) by *Vaidhṛiti-yōḥ itthaihbhūta-puṇyakkāle*.

Another item, mentioned in ten of the dates here collected, is the *lagna* which, denoting the rising on the horizon of a sign of the zodiac, gives us the time of day when the action to which the date refers was performed. The earliest Saka date from a genuine Indian inscription in which the term occurs is No. 62 of S. 857 expired (*ibid.* p. 123), from an Eastern Chalukya inscription. Before that year, we find it in inscriptions from Cambodia and in the spurious Indian date of S. 169, above referred to.

Eclipses.

The number of eclipses mentioned in the 400 dates here collected is 69. Of these, 34 are solar and 35 lunar eclipses.

Solar eclipses. — Of the 34 dates with solar eclipses,⁴⁹ one, No. 179 of S. 948 (Vol. XXIV. p. 13), is a date on which a solar eclipse could not take place, and which is

⁴⁵ The three dates Nos. 160-132 in Vol. XXIV. p. 9 are the earliest Indian Saka dates that quote *nakshatras*, from inscriptions which are not obviously spurious, and it is a curious fact that in all three the *nakshatra*, which according to the ordinary rules we should expect to be quoted, is the 5th or 6th after the *nakshatra* that is actually mentioned.

⁴⁶ A *nakshatra* by itself only rarely enables us to verify a date, for the same *tithis* of the same months ver frequently have the same *nakshatras*.

⁴⁷ See *Ep. Ind.* Vol. IV. p. 3, note 1. — Like the *tithis*, the *nakshatras* also have their deities. Thus, *Anurādhā* is called the *Mātṛa-nakshatra* in the date No. 62 (Vol. XXIII. p. 123), *Uttara-phalgunī* the *Aryamañsha* in No. 44 (*ibid.* p. 120), and *Maghā* the *nakshatra pitṛi-daivaiya* in No. 149 (Vol. XXIV. p. 7).

⁴⁸ On a peculiar use of the word *vratipāta* in Kanarese inscriptions see below.

⁴⁹ In the two dates Nos. 65 and 102 of S. 972 and 1180 (Vol. XXIII. pp. 124 and 180) and in two other dates of my list, not published here, the solar eclipse is denoted by the term *sūrya-parvay*.

altogether incorrect; and seven others mention eclipses which did not take place on the days of the dates. Three of these seven dates, No. 170 of S. 415 (*ibid.* p. 11), No. 15 of S. 532 (P) of the chronological list, and No. 144 of S. 872⁵⁰ (*ibid.* p. 5), are from undoubtedly spurious records; the other dates are No. 176 of S. 922,⁵¹ No. 193 of S. 1174, No. 199 of S. 1478 (*ibid.* pp. 12, 16 and 17), and the date No. 193 of S. 1106 of the chronological list.⁵²

Of the remaining 26 dates, 20 mention eclipses which were visible in India, 4 apparently quote eclipses which were not visible there, and the eclipses of two dates (Nos. 107 and 108 of S. 716 and 731, Vol. XXIII. p. 131) were visible in India if the years of the dates are expired years, but not visible if those years are current years. But one at least of the four dates with eclipses that were not visible in India, No. 165 of S. 417 (Vol. XXIV. p. 10), is from a spurious inscription; and in two others (Nos. 123 and 187 of S. 988 and 1095 of the chronological list) the weekdays of the dates are wrong. On the other hand, the weekdays are incorrect also in two of the dates that quote visible eclipses, *viz.*, in the dates No. 150 of S. 976 expired and No. 155 of S. 1096 expired⁵³ (Vol. XXIV. pp. 7 and 8).

Setting aside, then, all spurious and suspicious cases, we find that of 21 solar eclipses, mentioned in correct and apparently genuine dates, 18 were visible in India,⁵⁴ while only one eclipse (the eclipse of the date No. 106 of S. 534,⁵⁵ Vol. XXIII. p. 130) could not have been visible there. And this result, in my opinion, makes it highly probable that the eclipses quoted in the two dates Nos. 107 and 108 of S. 716 and 730 also were visible ones, and that the years of those two dates, therefore, must be taken to be expired years, a conclusion which has already been arrived at above, on different grounds.

Lunar eclipses. — Of the 35 dates with lunar eclipses, one (No. 100 of S. 930, for 931, of the chronological list) contains no details for accurate verification; and nine others (the dates Nos. 171, 172, 173, 187, 197 and 198 of S. 634, 730, 872, 1084 for 1085, 1276 and 1377 in Vol. XXIV. pp. 11-17, and the dates Nos. 177, 193 and 256 of S. 1080, 1103 and 1185 of the chronological list) quote lunar eclipses that did not take place on the days of the dates. Of these nine dates, two at least (those of S. 684 and S. 872) are from spurious inscriptions, and

⁵⁰ On this date see now Dr. Fleet's *Dynasties*, 2nd ed., p. 575, note 8.

⁵¹ This date gives no weekday; in the two following dates the given weekdays are incorrect.

⁵² This date, Monday, the new-moon day of *Āshāḍha* of S. 1103 expired, '*sūrya-grahaṇa-saṅkrānti-vratipāta-ahḍu*,' corresponds to Monday, the 9th July A. D. 1184, a day on which there was neither an eclipse nor a *saṅkrānti*. The date is similar to the date No. 177 of the chronological list, Monday, the full-moon day of *Pausha* of S. 1080 expired, '*uttarayana-saṅkrānti-vratipāta-sūrya-grahaṇa-ahḍu*,' which corresponds to Monday, the 5th January A. D. 1159, a day on which also there was neither a *saṅkrānti* nor an eclipse. — I shall have occasion to mention nine other Saka dates, and I possess six more dates with years of the Chālukya-Vikrama era or regnal years, which contain the word *vratipāta*, used as in the above dates. With the single exception of the date No. 101 of S. 1110 current (Vol. XXIII. p. 130), all these dates are either entirely or partly incorrect. They are all found in inscriptions the language of which is Kanarese, and fall all in the two hundred years between S. 944 expired and S. 1145 current. In nine of them the weekday is Sunday, and in six Monday, but in 12 out of these 15 dates the given weekday is incorrect. Eight dates have *uttarayanasaṅkrānti-vratipāta* or a synonymous expression, one has *dakṣiṇāyanasaṅkrānti-vratipāta*, one *saṅkrānta-vratipāta*, one *sūrya-grahaṇa-vratipāta*, one *samagrahana-vratipāta*, one *uttarayanasamkrānta-vratipāta-sūrya-grahaṇa*, one *uttarayanasamkrānti-vratipāta-samagrahana*, one *sūrya-grahaṇa-samkrānti-vratipāta*, one *samagrahana-vratipāta-samkrānta*, and one *grahaṇa-vratipāta-samkrānta*. Of the *saṅkrāntis* so mentioned, only five took place on the given dates; of the eclipses, only two.

⁵³ This date has *dvītyavāra sūrya-grahaṇa-vratipāta-ahḍu*, but the eclipse took place on a Saturday.

⁵⁴ The earliest of these is the eclipse of the 16th June A. D. 866, date No. 69 of S. 788 expired, Vol. XXIII. p. 123. — I have ascertained that, with a single exception, the eclipses which above are spoken of as visible in India, were visible also at the particular places where the inscriptions which mention them may be supposed to come from. The exception is formed by the eclipse of the date No. 72 of S. 1118 expired (Vol. XXIII. p. 125) which was visible south of, and not very far from, *Chandāmpur*, but not at that place itself.

⁵⁵ This eclipse which, for S. 534 expired, was the total eclipse of the 2nd August A. D. 612, is the earliest eclipse mentioned in a date of a genuine inscription that admits of verification. The only other solar eclipses that were not visible in India, which hitherto have been found quoted in genuine inscriptions, are those of the 17th February A. D. 638 and the 2nd January A. D. 937 (*ante*, Vol. XX. p. 9, and Vol. XIX. p. 166).

three (the date of S. 872 and the dates⁶⁶ of S. 1080 and 1084) wrongly quote, not merely eclipses, but also saṁkrāntis. Moreover, what may be noted as suspicious, is, that in seven of these dates that give a weekday the day with a single exception is Monday.⁶⁷

Of the lunar eclipses quoted in the remaining 25 dates all were visible in India,⁶⁸ excepting the eclipse of the date No. 164 of S. 411 current (Vol. XXIV. p. 10), which is from a spurious copper-plate. But of the dates with visible eclipses the weekday again is wrongly given as Monday in the three dates Nos. 157-159 of S. 1145,⁶⁹ 1148 and 1483 (*ibid.*, pp. 8 and 9) The result is, that all lunar eclipses which are correctly quoted in genuine dates were visible in India.

Saṁkrāntis.

Saṁkrāntis are mentioned in 47 dates: the Uttarāyana-saṁkrānti in 38 dates, the Dakṣiṇāyana-saṁkrānti in 5 dates, a Vishuva-saṁkrānti in two dates, and unspecified saṁkrāntis in two other dates.

The Uttarāyana-saṁkrānti. — Of the 38 dates which mention the Uttarāyana or Makara-saṁkrānti, 6 give no details for verification, and in 11 other dates the saṁkrānti is quoted quite incorrectly. Two of these 11 dates (Nos. 168 and 173 of S. 251 and 872, Vol. XXIV. pp. 11 and 12) are from undoubtedly spurious inscriptions. The date of S. 872 and the date No. 177 of S. 1080⁷⁰ of the chronological list also mention, together with the saṁkrānti, a lunar eclipse, equally wrongly. In the date No. 355 of S. 1483 of the chronological list the Makara-saṁkrānti is joined with Chaitra-sudi 5, on which no saṁkrānti of any sort took place during the given year. The other quite incorrect dates are Nos. 177, 178 and 185 of S. 941, 944⁷¹ and 1060 (Vol. XXIV. pp. 13 and 14), and the dates of the chronological list No. 111 of S. 957, No. 122 of S. 984,⁷² No. 130 of S. 997, and No. 175 of S. 1079. It may be noted that the weekday of 10 out of these 11 incorrect dates is again either Sunday or Monday.

Of the remaining 21 dates six contain errors which may be corrected with some confidence. Two dates (Nos. 147 and 148 of S. 902 and 966, Vol. XXIV. p. 6) apparently quote wrong *tithis*, and three (Nos. 151-153 of S. 984, 993 and 997,⁷³ *ibid.* p. 7) wrong weekdays.⁷⁴ And in the date No. 156 of S. 1141 current⁷⁵ (*ibid.* p. 8), in which the Uttarāyana-saṁkrānti is connected with Māgha-sudi 7, either the month and the weekday are incorrect, or, and this now appears to me more probable, the Uttarāyana-saṁkrānti has been wrongly quoted instead of the Kumbha-saṁkrānti.⁷⁶

There remain thus only 15 dates (out of 32), in which the Uttarāyana-saṁkrānti apparently has been quoted with quite correct details. And here we find that in no less than 13 cases the saṁkrānti took place during the *tithi* quoted by the date, *viz.*, six times (in the dates Nos. 13, 14, 23, 70 and 90⁷⁷ in Vol. XXIII. pp. 115-128, and in the date No. 212 of the chronological list) on the given weekday on which the *tithi* also ended or which was wholly occupied by the *tithi*; once (in the date No. 6, *ibid.* p. 114), where no weekday is given, on the day on which the *tithi* ended; four times (in the dates Nos. 123-125, Vol. XXIV. p. 1, and in the date

⁶⁶ These two dates contain the term *vyatpāta*, spoken of above.

⁶⁷ The taking place of a lunar eclipse on a Monday is called *chāḍḍimāṇi*, 'crest-jewel,' and donations on such an occasion are highly meritorious.

⁶⁸ They were visible also at the particular places where the inscriptions which mention them come from. The eclipse of the date No. 3 of S. 765 expired (Vol. XXIII. p. 113) was visible in Java and in India.

⁶⁹ This date also contains the term *vyatpāta*.

⁷⁰ These dates contain the term *vyatpāta*.

⁷¹ This date, again, contains the term *vyatpāta*.

⁷² The days, given by the dates, here also are Sunday and Monday.

⁷³ This date, also, contains the term *vyatpāta*.

⁷⁴ In S. 1141 current the Kumbha-saṁkrānti took place 5 h. 38 m. after mean sunrise of Thursday, the 24th January A. D. 1219, during the 7th *tithi* of the bright half of Māgha which ended 7 h. 53 m. after mean sunrise of the same day.

⁷⁵ On Saturday, the 25th December A. D. 1201, the Uttarāyana-saṁkrānti took place, by the Śrīyā-siddhānta, 3 h. 54 m. (not 4 h. 52 m.) after mean sunrise.

No. 184 of the chronological list) on the given weekday, on which the *tithi* commenced; and twice (in the dates No. 101,⁷⁸ Vol. XXIII. p. 130, and No. 143,⁷⁹ Vol. XXIV. p. 5) from 4 to 6 hours before sunrise of the given weekday, on which the *tithi* ended. Differently from what is the case in the preceding dates, the saṁkrānti took place before the commencement of the *tithi*, and on the day preceding the given weekday on which the *tithi* ended, in the date No. 15, Vol. XXIII. p. 115; and the case may be said to be similar in the date No. 142, Vol. XXIV. p. 5, although no *tithi* is actually quoted in that date. As shewn by these dates, the rule for the Uttarāyana-saṁkrānti no doubt was, to quote that *tithi* during which the saṁkrānti actually took place.⁸⁰

The Dakṣiṇāyana-saṁkrānti. — Of the five dates which mention the Dakṣiṇāyana- or Karkata-saṁkrānti, not always in these terms,⁸¹ only one, No. 16 of S. 999 expired (Vol. XXIII. p. 116), is regular;⁸² and in this case the saṁkrānti took place 15 h. 2 m. after mean sunrise of the weekday of the date, after the given *tithi* which ended 3 h. 37 m. after sunrise of the same day. In the date No. 160 of S. 614 expired (Vol. XXIV. p. 9), which gives no *tithi*, the saṁkrānti took place on the weekday of the date, but the *nakṣatra* which is quoted by the date is apparently incorrect.⁸³ In the date No. 175 of S. 919 expired (*ibid.* p. 12), which quotes no weekday, the given *tithi* is wrong. In the date No. 154 of S. 1080 expired (*ibid.* p. 8) where the saṁkrānti took place before the commencement of the given *tithi*, the given weekday is incorrect.⁸⁴ And the date No. 174 of S. 896 (*ibid.* p. 12), which gives no *tithi*, is suspicious, both because the year of the date apparently is quoted as a current year and because the saṁkrānti did not take place on the given weekday.⁸⁵

Vishuva-saṁkrāntis. — Vishuva-saṁkrāntis are mentioned only in the two dates No. 2 of S. 679 expired (Vol. XXIII. p. 113), and No. 184 of S. 1056⁷⁴ (Vol. XXIV. p. 14). The saṁkrānti of the first date, which gives no weekday, is the Tulā-saṁkrānti (or autumnal equinox), which took place 18 h. 53 m. after mean sunrise, before the commencement of the *tithi* of the date which ended on the following day. The saṁkrānti of the second date, which gives neither a *tithi* nor a weekday, but only a *nakṣatra*, may be the Mēsha-saṁkrānti (or vernal equinox), but the year of the date is wrong.

Unspecified saṁkrāntis. — Saṁkrāntis are also mentioned, apparently wrongly, in the date No. 187 of S. 1084 (for 1085, Vol. XXIV. p. 15) and in the date No. 198 of S. 1106 of the chronological list, both times together with eclipses. These dates contain the term *vyatpāta*, and have been mentioned before.

A *saṁkrānti* in the bright half of Māgha is quoted in the date No. 162 of the chronological list which does not admit of verification.

In concluding these remarks on saṁkrāntis, I may state that, so far as I am aware, the dates collected furnish no instance of a tropical saṁkrānti.

(To be continued.)

⁷⁶ This is the only correct date with the term *vyatpāta*.

⁷⁷ The original text of this date shows that the *tithi* of the date is the 11th, not the 12th.

⁷⁸ The same rule is furnished by the dates of the Vikrama era; see *ante*, Vol. XX. p. 418.

⁷⁹ The date No. 16 of S. 999 has *saṁkrānti-pavitārāṅganā-avānta*, but the saṁkrānti must be the Dakṣiṇāyana-saṁkrānti, because it falls in the bright half of Āshāḍha. So far as I can make out, the *pavitārāṅga* (or investiture of the image of some god with the sacred thread) must take place on certain days of the months Āshāḍha or Śrāvṇa, but I am not aware that it is specially connected with the Dakṣiṇāyana-saṁkrānti. — The date No. 160 of S. 614 has *dakṣiṇāyana-śhīmuḥurī bhāgavati bhāskara*.

⁸⁰ The Sātrā plates of the Śiṅhāra Bhūja II. of S. 1113 expired (*Transactions, Lit. Soc. of Bombay*, Vol. III. p. 393) quote a Dakṣiṇāyana-saṁkrānti which took place on Thursday, the 27th June A.D. 1191, 1 h. 10 m. after mean sunrise, during the *tithi* of the date, which ended 14 h. 24 m. after mean sunrise of the same day.

⁸¹ See above, note 45.

⁸² The given weekday, here again, is Monday; and this date also contains the term *vyatpāta*.

⁸³ Here the given weekday is Sunday.

⁸⁴ The date has *vishuvati sutiḥ(ṭau)*. — A Vishuva-saṁkrānti may possibly be quoted in the date No. 209 of the chronological list of which I do not possess the original text.

ON THE DATES OF THE SAKA ERA IN INSCRIPTIONS.

BY PROFESSOR F. KIELHOEN, C. I. E.; GÖTTINGEN.

(Concluded from Vol. XXV. p. 294.)

Locality of the Era.

THE earliest genuine inscription, the date of which is explicitly referred to the Saka era, is the Bādāmi cave inscription of S. 500, of the time of the Western Chalukya Mañgalśvara and his elder brother Kirtivarman I., No. 13 of my chronological list;¹ and the list contains altogether 15 dates of the Western Chalukyas of Bādāmi, the latest of which is No. 39 of S. 679, of the reign of Kirtivarman II. We next have 30 dates² of the Rāshtrakūṭas of Mālkhēḍ and the Gujarāt branches of the Rāshtrakūṭa family, the first of which is No. 37 of S. 675, of the time of Dantidurga, and the last No. 89 of S. 904, which records the day on which Indra IV. died. Following upon the inscriptions of the Rāshtrakūṭas, the inscriptions of the Western Chalukyas of Kalyāna furnish 41 dates³ of the list, from No. 88 of S. 902, of the time of Taila II., to No. 198 of S. 1106, of the time of Sōmēśvara IV.⁴ Contemporaneous with some of these dates, we also have 9 dates of the Kaḷachuryas of Kalyāna, the earliest of which is No. 175 of S. 1079, of the time of Bijjana-Tribhuvanamalla, and the

¹ Among the dates Nos. 1-12 there are three (of S. 169, 272 (?), and 388) from spurious Western Gaṅga, and three (of S. 400, 415, and 417) from spurious Gurjara inscriptions. The earliest date of the list from a genuine Western Gaṅga inscription is No. 62 of S. 809.

² The chronological list actually gives 35 dates, but three of them (Nos. 54, 55 and 61) are reckoned here as belonging to the Śilāras, and one (No. 79) to the Western Gaṅgas, while one (No. 60) is not authentic.

³ The number would have been much larger if the Western Chalukyas had dated all their inscriptions in years of the Śaka era. But Vikramāditya VI. mostly used an era of his own, the so-called *Chalukya-Vikrama-varsha* or *Chalukya-Vikrama-kāla*, or, in other words, had his inscriptions dated in regnal years; and this practice of quoting regnal (and Jovian) years only has been largely followed by his successors (as well as by the Kaḷachuryas).

⁴ A later date for this king is furnished by the inscription quoted under No. 137, which, as I now learn, is one of Sōmēśvara IV., dated in S. 1111 (not 1011).

latest No. 197 of S. 1105, of the time of Siṅghana.⁵ The next dynasty to be mentioned is that of the Hoysalas of Dōrasamudra of which the list gives no less than 31 dates, from No. 139 of S. 1025, of the time of Balliḷa I., to No. 274 of S. 1208, of the time of Nara-siṃha III.⁶ And another family which is well represented in the list is that of the Yādavas; for we first have 5 dates of the Yādavas of the Sēuna country, the earliest of which is No. 95 of S. 922, of the time of Bhillama II., and the latest No. 166 of S. 1063 (for 1064), of the time of the *Mahāsāmanta* Sēunadēva, and afterwards 32 dates of the Yādavas of Dēvagiri, from No. 207 of S. 1113, of the time of Bhillama, to No. 277 of S. 1227, of the time of Rāmachandra.

The history of the dynasties, hitherto mentioned, has been told from their inscriptions by Dr. Fleet, in his *Dynasties of the Kanarese Districts of the Bombay Presidency*. Proceeding to the great feudatory families, treated of in the same work, we first have 21 dates of the Śilāras (or Silāras, or Silāhāras). Eleven of them are from inscriptions of the Śilāras of the Northern Koṅkaṇ,⁷ from No. 54 of S. 765 (?), of the time of Pullaśakti, to No. 261 of S. 1109, of the time of Aparāditya; one, No. 98 of S. 930, is from an inscription of Raṭṭarija, a Śilāra of the Southern Koṅkaṇ; and 9 dates are from inscriptions of the Śilāhāras of the Deccan, from No. 120 of S. 980, of the time of Mārasihha, to No. 210 of S. 1114, of the time of Bhōja II. Of the Raṭṭas of Saundatti there are 7 dates, from No. 88 of S. 902, of the time of Sāntivarman,⁸ to No. 233 of S. 1151 current, of the time of Lakshmidēva II. Of the Sindas we have the three dates⁹ No. 91 of S. 911 (for 912), of the time of Pulikāla, No. 110 of S. 955, of the time of Nāgāditya, and No. 180 of S. 1084 (for 1085), of the time of Chāvunda II.; of the Kādambas of Hāngal the two dates No. 124 of S. 990, which is of the time of Kirtivarman II., and No. 137 of S. 1111 (not 1011), of the time of Kāmadēva; and of the Kādambas of Goa¹⁰ the one date No. 176 of S. 1080, of the time of Permaḍi-Sivachitta. Lastly, of the Guttas of Guttal the list contains 8 dates, from No. 194 of S. 1103, which is a date of Jōyidēva I., to No. 256 of S. 1185 current, of the time of Gutta III.

To the times, covered by the dates which are enumerated in the preceding, also belong a number of other dates from the south and the eastern coast of India. Thus the list contains 10 dates of the Western Gaṅgas or Gaṅgas of Gaṅgavāḍi, the earliest genuine date of which is No. 62 of S. 809, of the time of Satyavākya-Koṅgiṇivarman-Permanaḍi, and the latest No. 87 of S. 899, of the time of Satyavākya-Koṅgiṇivarman-Rāchamalla-Permanaḍi. Of Anantavarman Chōḍagaṅgadēva, one of the Eastern Gaṅgas of Kālīnganagara,¹¹ the list gives four dates, from No. 133 of S. 999 to No. 160 of S. 1057. We also have four dates of the Eastern Chalukyas,¹² from No. 78 of S. 867, of the time of Amma II., to No. 159 of S. 1056 (for 1055 current ?), of the time of Kulōttuṅga Chōḍadēva II.; three dates of the Kakatiya dynasty of Worangal, viz., No. 179 of S. 1084, of the time of Rudradēva, and Nos. 234 and 247 of S. 1153 and S. 1172 current, of the time of Gaṇapati; and three dates, Nos. 241, 242 and 244 of S. 1160, 1161, and 1165, of a king Rājarājadēva, who may belong to the Chōja dynasty.¹³

⁵ The list contains two later dates which profess to be taken from Kaḷachurya inscriptions, No. 200 of S. 1108, and No. 204 of S. 1110 current; but these dates belong to a time when the rule of the Kaḷachuryas apparently had come to an end.

⁶ A later date of the same king, No. 278 of S. 1228 (?), is quite incorrect; but dates of the Hoysala dynasty which are later than S. 1203 are furnished by the inscriptions published in *Ep. Carr.* Part I.

⁷ To these also belongs the date No. 56 of Māmvāpidēvarāja, the year of which Dr. Fleet now takes to be S. 982 (not 782).

⁸ An earlier date, No. 60 of S. 797, of the time of Prithvirāma, is by Dr. Fleet regarded as plainly not authentic, so far, at least, as Prithvirāma is concerned.

⁹ The two dates Nos. 80 and 81, of S. 872 current and 872 expired, which profess to be of the time of the Sinda Permaḍi I., are by Dr. Fleet considered quite impossible dates.

¹⁰ Of the Kādambas of Goa we possess 5 dates in which the era of the Kālīyuga is used (from K. 4270 to K. 4343).

¹¹ Earlier Gaṅgas of Kālīnganagara use an era of their own.

¹² Some of the Eastern Chalukya inscriptions are dated in regnal years, but the majority of them give no years at all.

¹³ Some Śaka dates of Chōja kings I have given in *Ep. Ind.* Vol. IV. p. 95 ff.

Of the first half of the 13th century of the Saka era we have remarkably few dates. After the middle of the 13th century a large number of dates is furnished by the inscriptions of the kings of Vijayanagara. Of the first dynasty of Vijayanagara we have 32 dates, from No. 282 of S. 1261 (for 1262), of the time of Harihara I., to No. 321 of S. 1392, of the time of Virūpāksha I. Of the second dynasty there are 28 dates, from No. 323 of S. 1430 (for 1431), of the time of Krishnarāya, to No. 356 of S. 1488, of the time of Sadāśivarāya.¹⁴ And of the third dynasty (of Karnaṭa) we have 9 dates, the first of which is No. 359 of S. 1497, of the time of Srīraṅgarāya I., and the last No. 371 of S. 1566, of the time of Srīraṅgarāya II. The other dates of the same or later times, which it is unnecessary to enumerate in detail, are mostly from records of the Nāyakas of Vēlūr, of the kings of Maistūr and Coorg, and of the Śētopatis of Rāmnād.

The dates mentioned in the above comprise about four-fifths of the whole list. All these and about 60 other dates from inscriptions of subordinate chiefs and from private records are from that part of India which, speaking generally, would be south of a straight line, drawn from the mouth of the Narbadā on the west to the mouth of the Mahānadi on the east,¹⁵ excepting perhaps the extreme south of the peninsula. In that part of India, therefore, the Saka era is shewn by the dates collected to have been principally used, and there we find the earliest dates which are distinctly referred to it. But we have a few dates to prove that, from comparatively early times, the era occasionally was used, sometimes by the side of local eras, also in other and widely distant parts of India. Thus the date of the second *Prasasti* of Baijnāth, No. 45, of apparently 'S. 726, is from the extreme north of India, where, to judge from the date of the first *Prasasti* of Baijnāth, people ordinarily used the Saptarshi era. The Dōggaḍi inscription of Bhōjadēva of Kanaṅgi¹⁶ in the body of the inscription is fully dated according to the Vikrama era, but at the end the expired years (784) of the Saka era also are given. The date No. 68 of S. 836 is from Eastern Kāthiāwad; the date No. 161 of S. 1059 from the Gayā district of Bengal, and the date No. 227 of S. 1141 from the Tipperah district of the same province. In the *Zeitschrift d. Deutschen Morg. Ges.* Vol. XL, p. 45, Dr. Hultzsch has published a copper-plate inscription from Assam, dated in S. 1107; and in the *Journal, Beng. As. Soc.* Vol. XLIII, P. I, p. 322, there is a copper-plate inscription from Chittagong, with the date *Sak-ābdāh* 1165. Finally, the chronological list also gives some dates from Cambodia, the earliest of which is No. 18 of S. 546 (from an inscription which also contains the date No. 14 of S. 526), and five dates from Java, the earliest of which is No. 35 of S. 654, and the latest No. 290 of S. 1295.

Nomenclature of the Era.

What strikes one at once in looking over the dates of the lists, and what distinguishes these dates in a remarkable manner from those of the other principal eras,¹⁷ is this that, with

¹⁴ The year of the date No. 359, which is given as 1492 or 1482, probably is really 1485.

¹⁵ *Ante*, Vol. XX, p. 404, I have stated that, speaking generally, down to about A. D. 1300, the use of the Vikrama era was confined to that portion of India which would be included by straight lines drawn from the mouth of the Narbadā to Gayā, from Gayā to Delhi, and from Delhi to the Bunn of Cutch, and by the line of coast from the Bunn of Cutch back to the mouth of the Narbadā. Towards the west, therefore, the Vikrama era would appear to have been used north of the Narbadā and the Saka era south of that river. More towards the east the parts of India in which the two eras are principally used are separated by the tract of country in which during the 11th and 12th centuries A. D. we find the Kalachuri-Chēdi era employed.

¹⁶ See *ante*, Vol. XIX, p. 28, No. 30.

¹⁷ Of 328 Vikrama dates of inscriptions, known to me, only 72 are explicitly referred to the Mālava-Vikrama era. Of 74 Gupta-Valabhī dates, at the utmost 7 or 8 are (by the expressions *Gupta-ānvayānām nripa-sattamānāsh rājyē kulasya-bhōivarādhāmānā*, *Gupta-prakāśe ganendān sūtrāya*, *Guptānām kāta* . . . , *Gupta-nripa-rājya-bhūktav* and *Gāuptiē* ?) more or less distinctly referred to the Gupta era, and only 5 of the latest dates contain the technical phrases *Vai bhī-suvavā* and *Valabhī-sūn*. Of 41 dates which, some of them with more or less probability, have been referred to the Kalachuri-Chēdi era, only four dates (of the years 893, 896, 898 and 910) contain the phrase *Kalachuri-suvatsarē*, two dates (of the years 919 and 983) have *Chēdi-suvavā*, and in one date (of the year 992), which is in verse, the era is denoted by the expression *Chēdi-nishita*. In the 20 dates which — here, also, with more or less probability — have been assigned to the Harsha era, the name of this era is nowhere alluded to.

insignificant exceptions, all are explicitly referred to the era to which they belong. Of the 400 dates of my chronological list only five do not contain the word *Saka* or its derivative *Sāka*. And even as regards these five dates, the absence of the word *Saka* from the two dates No. 23 of S. 589 and No. 299 of S. 1317, which are in verse, may be said to be due to the exigencies of the metre; ¹⁸ the date No. 7 of the year 388 is altogether carelessly worded and is, moreover, from a spurious record; the reading of the date No. 54, 'samva [765]', is somewhat doubtful; and in the date No. 199, which I have given as 'sainvatu 1107', the word *sainvatu* is preceded in the original by one or two effaced *aksharas* which might well be taken to represent the word *Saka*.¹⁹

Now, among the various expressions, employed by the writers to indicate what era they are following,²⁰ there are five which are principally used. They are *Saka* (or *Sakanripa*)-*kāla*,²¹ *Saka-varshēshv-atitēshu*, *Sakanripa-kāl-ātita-sainvatsara*, the simple *Saka-varsha*, and the phrase *Sāivādhana-sakā* or some modification of it.

Saka-kāla,²² 'the time (or era) of the Saka (or Sakas, or Saka king or kings)', occurs first in the Western Chalukya date No. 16 of S. 532, where it stands in the Nominative case and is followed by the Nominative *paūcha varsha-śatāni dvātrīṣi(triṣ)śāni*. We also have *Saka-kālm*, without a word for 'year,' in No. 117 of S. 973; *Sakakāla-sainvatsara* in No. 33 of S. 631 and No. 37 of S. 673 (here with *vyatīta*); *Sakakāla-gat-ābdāh* in No. 45 of S. 726 (?); *Saka-kālanigal=varsham* in No. 71 of S. 840; *Sakanripa-kālē (sainpragatē)*, without a word for 'year,' in No. 65 of S. 824; *Sakanripa-kālasya*, without a word for 'year,' in No. 220 of S. 1131; and *Sakanripa-kāldd=urabhya (varshēshu . . . nirittēshu)* in Nos. 206 and 210 of S. 1112 and 1114. Besides we find, in dates which are in verse, *yātē kālē Sakānām*, without a word for 'year,' in the date No. 24 of S. 589, from Cambodia; *Saka-kāleshv-atitēshu*, without a word for 'year,' in No. 60 of S. 797; *Saka-kāldd=gat-ābdānām* in No. 77 of S. 867; *Sakāvanipāla-kālmām*, without a word for 'year,' in No. 89 of S. 904; *Saka-kālasya bhūpatav*, without a word for 'year' in No. 125 of S. 991; *Sakabhūpāla-kālasya (with varsha)* in No. 172 of S. 1075; and *Saka-nripasya kālē (varshēshu vrittēshu)* in No. 279 of S. 1235.

Saka-varshēshv-atitēshu, 'when . . . years of the Saka (or Sakas, or Saka years) had passed,' or 'after the expiration of . . . Saka years,' occurs first and is chiefly used in the inscriptions of the Western Chalukyas of Bādāmi. The earliest genuine date of the list²³ which contains this phrase is No. 26 of S. 611, and the latest No. 171 of S. 1073. Instead of *atitēshu* we occasionally, in altogether five dates, have *samatitēshu*, *vyatitēshu*, *atikāntēshu* and *gatēshu*; and three inscriptions from Java have the compound *Sakavarsh-ātita*. Before S. 1000 the expressions grouped under this head occur in 16 dates, and after S. 1000 in 6 dates the years of three of which (No. 168 of S. 1065, No. 171 of S. 1073, and No. 267 of S. 1199) have been shewn to be really current years.

¹⁸ A third similar date is that of the Trivandrum inscription of Sarvāṅganātha, of the [Saka] year 1296, which also is in verse; see *Ep. Ind.* Vol. IV, p. 203. That in the inscriptions from Cambodia there are several dates (in verse) which contain neither a reference to the era employed in them nor even a word for 'year,' has been stated *ante*, Vol. XXIV, p. 181, note 1.

¹⁹ The date No. 199 is from an inscription of the Śīlāra Aparāditya, and another inscription of the same Aparāditya (date No. 201) undoubtedly has the phrase *Saka-sainvatu*. That the word *sainvatu*, without *Saka*, is used to denote years of the Saka era, when a date, after having been given in words, is repeated in figures, will be shewn below.

²⁰ My remarks here throughout refer to those dates only of which I have been able to ascertain the exact wording, about 300 dates of my chronological list, commencing with the earliest genuine date No. 18 of S. 500. — With what follows, compare Dr. Fleet's valuable paper 'On the Nomenclature of the principal Hindu eras,' *ante*, Vol. XII, p. 207 ff.

²¹ In a few dates *sainipāla*, *bhūpāla* and *bhūpati* are substituted for *nripa*, especially in verse.

²² Compare the corresponding expressions *Mālava-kāla* and *Gupta-prakāla* (equivalent to *Gupta-kāla*) in dates of the Vikrama and Gupta eras. In some dates *Saka-kāla* must be translated by 'year (or years) of the Saka era.'

²³ A Western Chalukya date of S. 608, not included in the chronological list, which also contains the phrase *Saka-varshēshv-atitēshu*, is given *ante*, Vol. VII, p. 112.

Sakanripa-kāl-ātita-saivatsara,²⁴ 'years passed since the time (or of the era) of the Saka king (or kings),' we meet first in the date No. 38 of S. 679, which is from an inscription of one of the Rāshtrakūṭas of Gujarāt, and of the 46 dates which contain the phrase half the number are from inscriptions of the Rāshtrakūṭa dynasty. Three other dates, instead of *kāl-ātita*, have *kāl-dhrānita*; one has *ātita-kāla*, and two omit the word *saivatsara*; two have *Sākabhūpāl-ākhrānita-saivatsara*, one has *Sakanripa-kāl-ātita-ir-varsha-śataih*, and one *Sakanripa-kāl-ātite śakē*.²⁵ The latest of the dates which contain any of these expressions is No. 221 of S. 1135, and of a total of 56 dates 45 are earlier and 11 later than S. 1000. The years of two of these dates (No. 107 of S. 948 and No. 140 of S. 1032) have been shown to be current years.

Saka-varsha²⁶ (without *ātita*), 'the year of the Saka (or Sakas)' or 'Saka year' occurs first in the date No. 72 of S. 851, from a Rāshtrakūṭa inscription. It is mostly used in inscriptions the language of which is Kanarese, where we have *Saka-varsha* (or *-varishe*, or *-varusha*), *Saka-varshah* (or *-varushah*), *Saka-varshada*, *Srimat-Sakavarsha*, *Sri-Sakavarusha*, *Sri-vijayābhūdaya-Sakavarsha*, etc. In Sanskrit inscriptions, where the expression is used comparatively rarely, we have *Saka-varshā-*, *Saka-varshē* and *Sri-Sakavarshē*, and also *Saka-varshē vartamānē* or *pravartamānē* (in No. 250 of S. 1175 *expired* and No. 296 of S. 1307 *expired*), and *Saka-varshād-ārabhya*²⁷ (in No. 240 of S. 1160 current). Counting those dates of the list of which I know the exact wording, I find that the phrase occurs 47 times between S. 1000 and S. 1200, 17 times before S. 1000, and 18 times after S. 1200.

Disregarding as suspicious the two dates Nos. 187 and 193 of S. 1095 and S. 1103, we find the name **Sālivāhana**, for which in verse we also have **Sālivāha**, for the first time in the date No. 265 of S. 1194, from an inscription of the Dēvagiri-Yādava Rāmachandra, and have it also in the date No. 269 of S. 1200, from an inscription at Sravana-Belgoḷa, and in the date No. 275 of S. 1212, which is from another inscription of the Dēvagiri-Yādava Rāmachandra. After that we meet it again in the date No. 283 of S. 1276, from an inscription of Bukkarāya I. of Vijayanagara, and from that time it occurs frequently, especially in the inscriptions of the second dynasty of Vijayanagara, but also in those of other rulers of Southern India. In prose, the phrases made use of are *Sālivāhana-śaka* (also with *sri-* or *śri-jayābhūdaya-nripa-* prefixed to it), *Sālivāhana-śakavarsha* (also with *śri-*, or *śri-jayābhūdaya-*, or *śri-vijayābhūdaya-*), and *Sālivāhana-śak-ābdh* (in No. 394 of S. 1731); in verse we have *Sak-ābdē Sālivāhasya* (in No. 293 of S. 1301, etc.), *śri-Sālivāhē gatē śakē* (in No. 302 of S. 1321), and *Sālivāhana-nirṇita-śaka-varsha* (in No. 340 of S. 1460).²⁸ This last expression shews that the sense, which the phrases *Sālivāhana-śaka* and *Sālivāhana-śakavarsha* came to convey to a Hindu, was that of 'the year of the era (or established by) Sālivāhana,' but it may be doubted whether this meaning was distinctly present to the minds of those who first used the phrases. I rather believe that the name of Sālivāhana, as that of a personage famous in Southern India, was prefixed to the ordinary *Sakē* and *Saka-varshē*, 'in the Saka year,' simply in imitation of the name of Vikramāditya in the Vikrama dates, and feel sure that the addition of the name to the current phrases

²⁴ I give this separately, because it is a more technical and standing phrase than the expressions enumerated under *Saka-kāla*. In dates of the Vikrama era we have a corresponding phrase (*Vikramārkanripa-kāl-ātita-saivatsara*) first in a Kachchhapaghāta inscription of V. 1161; *ante*, Vol. XV. p. 202.

²⁵ No. 197 of S. 1105, where the word *śakē* clearly is used in the sense of 'year'; see *ante*, Vol. XIX. p. 24.

²⁶ We have no corresponding technical phrase *Vikrama-varsha*; but from about the beginning of the 13th century of the Vikrama era we frequently in Vikrama dates find *saivāt* . . . *varshē*, or *saiv* . . . *varshē*, with the figures for the years between *saivāt* or *saiv* and *varshē*, and here the terms *saivāt* and *saiv* undoubtedly are meant to refer the dates to the Vikrama era, as distinguished from the Saka era.

²⁷ Here *Saka-varsha* can only mean 'the commencement of the Saka era.'

²⁸ In an inscription of S. 1568 (for 1569) in *Ep. Carn. Part I. p. 66*, No. 103, we also have *Sālivāhan-śak-ābdhē śakē*, and in dates of manuscripts *varshē Sālivāhana-jāmmatah*. According to *Bhāvanagar Inscrip.* p. 155, an Udaypur inscription of V. 1770 = S. 1635 has *Saka-varshāya Sālivāhana-bhāpatēh*, but this can hardly be correct. That the phrase *Sālivāhana-śaka*, in quite modern times, is not confined to the south of India, is shewn by some dates, given in my note on the Saptarshi era, *ante*, Vol. XX. p. 152.

was especially suggested by the dates of the Chalukyas of Aṅghilvād,²⁹ with whom we know the Yādavas of Dēvagiri, in whose dates we first find the name Sālivāhana, to have been in close contact.

In addition to these standing phrases, which are used in about 200 out of 300 dates, we have a variety of other expressions which are employed more rarely. Those of them that occur chiefly in prose may be grouped under the heads of *Saka-nripati* (or *Sakanripa*)-*saivatsara*, the simple *Sakē*, and *Saka-saivāt*.

Sakanripati-saivatsara, 'years of the Saka king (or kings),' we have in the Western Chalukya date No. 17 of S. 534, *Sakanripati-saivatsara-śatēshu* . . . *atitēshu*; and *Sakanripa-saivatsara* in No. 49 of S. 735 and No. 90 of S. 904, *Sakanripa-saivatsarēshu* . . . *vyatitēshu* or *gatēshu*, and in No. 214 of S. 1117, where (against the rules of grammar) the text has *Sakanripa-saivatsaram-ārabhya*.³⁰ Instead of *saivatsara* the (poetical) word *abda* is used in No. 227 of S. 1141, where we have *Saka-nripatē-atitā abdh* (as well as in the spurious Western Chalukya date No. 10 of S. 411, which has *Sakanrip-ābdēshu* . . . *vyatitēshu*).

Sakē we find first, in verse, in the date No. 25 of S. 598³¹ from Cambodia, and afterwards in the prose dates No. 190 of S. 1096, No. 263 of S. 1193, and No. 372 of S. 1570; and, with *gatē*, in No. 298 of S. 1313. Instead of it, we have *Saka* in Nos. 237 and 238 of S. 1157 and 1158, and (in a compound and in verse) in No. 317 of S. 1355; and *Saku* in No. 243 of S. 1162, No. 253 of S. 1182, No. 254 of S. 1183, No. 276 of S. 1222, and No. 277 of S. 1227 (here written *Sāku*). Since, with the exception of No. 238, *śri-Saka* 1158 *varshē*, and No. 253, *śri-Saku* 1182 *varshē*, none of these dates contains any separate word for 'year,' *Sakē*, as well as *Saka* and *Saku*, can only be translated by 'in the Saka year.'

Saka-saivāt, 'in the Saka year,' occurs rarely, and is apparently foreign to the south of India.³² We find it in the dates Nos. 67 and 68 of S. 832 and 836, which are both from Gujarāt; in No. 56 of S. 932 (not 782), from an inscription of the Śilāras of the Northern Konkan; and in Nos. 126 and 166 of S. 991 and 1063 (for 1064), two dates of the Yādavas of Sēnadēsa. It is also used, when the date is repeated in figures, in the date No. 174 of S. 1078 of the Śilāra Mallikārjuna. Instead of it, we have *Saka-saivātu* in the date No. 201 of S. 1109 of the Śilāra Aparāditya, and perhaps also in the date of the same king No. 199 of S. 1107. The fuller expression *Saka-saivatsara* would seem to occur only in the date No. 246 of S. 1171 of the Dēvagiri-Yādava Kṛishṇa.

The expressions which remain occur almost exclusively in verse. The most common of them, in the order in which they appear first, are *Sak-ābdē*, *Sakē*, *Sak-ābdē*, and *Saka-vatsarē*.

Sak-ābdē, 'in the year of the Saka (or Sakas),' we find, everywhere in verse, in the dates No. 19 of S. 548 from Cambodia, No. 152 of S. 1045, No. 161 of S. 1059, No. 399 of S. 1315, and No. 300 of S. 1317. In verse we also have *Sakasy-ābdē* in No. 310 of S. 1346, *Sakābdābhāji samayē* in No. 280 of S. 1236, and *Sak-ābdēshu gatēshu* in No. 376 of S. 1601; and in prose, *Sak-ābdēshv-atitēshu* in No. 245 of S. 1171, and *Sa(sa)cam-ā(abda)* in No. 97 of S. 928.

Sakē, 'in the Saka year,' occurs, in verse, in the dates No. 20 of S. 550 from Cambodia, No. 116 of S. 972, No. 156 of S. 1050, No. 192 of S. 1099, No. 234 of S. 1153, No. 294 of S. 1301, No. 306 of S. 1332, No. 319 of S. 1377, No. 333 of S. 1450, and No. 341 of S. 1461; and, in prose, in No. 219 of S. 1128 (for 1129), and No. 226 of S. 1156. With the exception of the date No. 306 which has *varshē*, none of these dates contains a separate word for 'year.'

²⁹ See *ante*, Vol. XX. p. 405.

³⁰ The meaning is the same as that of *Saka-varshād-ārabhya*, given above.

³¹ This date shews that *Sakē* is by no means a late expression; the same applies to the term *Sākē* which will be given below.

³² The corresponding phrase *Vikrama-saivāt* occurs in nine Chalukya inscriptions. — European scholars now generally speak of the Saka years as *Saka-saivāt*, a practice which I have followed myself; but there can be no doubt that *Saka-varshā* would be a more suitable expression.

Sak-ābdē, 'in the Saka year,' we have, in verse, in No. 133 of S. 999, No. 134 of S. 1001, No. 247 of S. 1172, No. 286 of S. 1278, and No. 292 of S. 1300; and, in prose, in No. 135 of S. 1003. In verse we also find *Sākhē=bdē* in No. 313 of S. 1348, *Sākē=bdakē* in No. 301 of S. 1320, and *Sāk-ābdānām* in No. 159 of S. 1056; and in prose, *Sāk-ābdēshu* in No. 160 of S. 1057.

Saka-vatsarē, 'in the year of the Saka (or Sakas), occurs, everywhere in verse,³⁵ in No. 353 of S. 1478, No. 361 of S. 1506, No. 364 of S. 1523, No. 400 of S. 1556, No. 368 of S. 1558, and No. 371 of S. 1566; and *Saka-vatsarēshu*, in verse, in No. 104 of S. 944, and in prose, in No. 146 of S. 1040.

Besides we find, in dates which are in verse, *Sakēndra-varshē*, 'in the year of the Saka king (or kings),' in No. 18 of S. 526 and 546 from Cambodia; *samāsa samatītāsu Sakēndra-māyī bhūbhujām*, 'when . . . years of the Saka kings had passed,' in No. 21 of S. 556; *Sakapati-samay-ābdē*, 'in the year of the time (or era) of the Saka king (or kings),' in No. 22 of S. 586 from Cambodia; *Sākēndrē-tigatē . . . vatsarē*, 'when the year . . . of the Saka king (or kings) had passed,' in No. 35 of S. 654 from Java; *-ābdē Saka-samayē*, 'in the year . . . in the time (or era) of the Saka (or Sakas),' in No. 78 of S. 867; *varshānām Saka-prithivīpatēh*, 'years of the Saka king,' in No. 228 of S. 1144; *-saran-mitē Saka-ṛipē*, 'when (the time from) the Saka king was measured by . . . years,' in No. 281 of S. 1235; and, in a compound and without a word for 'year,' *īri-Sakabhūpati*, in No. 316 of S. 1353. And finally we have in prose, in the earliest genuine date of the list, No. 13 of S. 500, *Sakanripati-rājyābhishēka-samvatsarēshu=atikrāntēshu*, 'when . . . years had passed since the coronation of the Saka king.'

Where, after having been given in words, a date (or the number of years of a date) is repeated in figures, these figures are preceded by *samvat* in eight dates, the earliest of which is No. 37 of S. 675 and the latest No. 138 of S. 1016, and three of which are from inscriptions of the Śīlāras of the Northern Kōṅkaṇ. Other terms, used in the same way, are *sam* in the date No. 38 of S. 679, *samvatsarāh* in No. 95 of S. 922, *samvatsaradānām* in No. 73 of S. 855, *samvatsarakaḥ* in No. 55 of S. 775 (for 773), *samvatsara-satām*³⁶ (followed by 735) in No. 50 of S. 735, *Saku* in No. 136 of S. 1008, *Sākai* in No. 161 of S. 1059, *Saka-samvat* in No. 174 of S. 1078 (from a Śīlāra inscription), and *Saka-varsha* in No. 316 of S. 1353. In No. 61 of S. 799 and nine other dates the figures are not preceded by any word for 'year,' and in the dates Nos. 264 and 267 of S. 1194 and 1199 the numeral figures precede the numerical words by which the year of the date is expressed.

From the above we see that, ever since the earliest date of S. 500, the era with which we are dealing has been uniformly described as that of the Saka or Sakas, or, what really is the same,³⁵ of the Saka king or kings, but that none of the phrases enumerated contains any suggestion as to who those Sakas were, or what particular Saka king or kings those, who first used

³⁵ The corresponding phrase *Vikrama-vatsarē*, also, is only used in verse.

³⁶ With this *samvatsara-satām*, in which the word *sata* of course is superfluous, we may compare the expression *samvatsara-satāgaḥ* in dates which are in Kanarese, e. g. in No. 74 of S. 856. Compare also, in Vikrama dates, *samvatsara-sa(s)ita nava-sa(s)ita* in *Ep. Ind.* Vol. I. p. 173, ll. 2 and 4, and p. 174, ll. 8 and 11, and the similarly redundant use of the word *sahasra* in '*samvatsara-sahasra* 1049,' *ibid.* p. 81, l. 26. See, moreover, the date of the Nausāri plates of the Chalukya Pulakēśvara, '*samvatsara-sata* 400 90' (*Visva Vr. Congress, Arian Section* p. 234, l. 45), with which we may compare the date of an unpublished inscription at Jēdhpur, which has *samvachchhara-satēshu*, followed by a numerical symbol for one of the hundreds (perhaps 300). In my opinion, we have an abbreviation of this *samvatsara-sata* in the *samvat sa* of the Kōṅka inscription of the Śāmanā Dēvadatta (*ante*, Vol. XIV. p. 45), the date of which I would read '*samvat sa* 847 *Māgha-sudā* 6.'

³⁷ The years of the Mālava-Vikrama era are described both as years 'according to the reckoning of the Mālavas' and as years 'of the Mālava lords'; see *ante*, Vol. XX. p. 404. — Somestress has been laid on the fact that in the date of S. 500 the coronation of the Saka king is spoken of, but I fail to see the particular value of, this expression. As the regnal years of a king were his *rājyābhishēka-samvatsara* (as they are called e. g. in the date No. 17 of S. 531), it was only natural to describe 'the years of the Saka king' as his *rājyābhishēka-samvatsara*.

terms like *Sakanripa*, were thinking of. It is true that in a considerable number of dates the earlier phrases by which the years of the era were denoted are preceded by the proper name 'Sālivāhana'; this name, however, occurring, as it does, in late dates only, would not be expected to reveal the true origin of the era, and its connection with the era has been justly considered to be quite inappropriate.³⁶

Under these circumstances, I can only draw attention to another peculiar feature in the wording of the given dates, by which, taken as a whole, they are clearly distinguished from the dates of other eras, and which may, at least, enable us to connect them with some of those earlier dates of inscriptions, the exact relation of which to the well-known eras is open to discussion. I refer to the frequency with which, in the given Saka dates, the term 'year' is rendered by the word *varsha*.

Down to S. 1200 we have about 150 genuine dates, in prose, and here we find the word for 'year' to be *varsha* in about 90 dates, and *samvatsara* in 60 dates.³⁷ On the other hand, in the case of the Vikrama era the word *varsha*, down to V. 1200, appears in three dates only out of 123, and two to at least³⁸ of those three dates are in verse; of 71 Gupta-Valabhi dates, down to the Gupta-Valabhi year 900, only four contain the word *varsha*, and all four are in verse; ³⁹ and in the dates of the Kalachuri-Chēdi and Harsha eras *varsha* does not occur at all. The regular, technical word for 'year' in the dates of these four eras is *samvatsara* or some abbreviation of it, and the great preponderance of the word *varsha* in the technical language of the Saka dates must, no doubt, be regarded as a distinguishing feature of the Saka era.

Now an even more pronounced difference in the use of the words *samvatsara* and *varsha* (or their Prākṛit equivalents) is noticeable in the earlier dates known to us. In the dates of the inscriptions of Kanishka, Huvishka and Vāsudēva the word for 'year' everywhere is *samvatsara*, *savatsara*, or *sam*; and in those of the Sātavāhanas or Andhrabhṛityas we have *samvachchhara*, *savachchhara*, or *sava* throughout.⁴⁰ But no such word appears in the inscriptions of the Western Kshatrapas. In an inscription of the son-in-law of Nahapāna, (*Archæol. Surv. of West. India*, Vol. IV. p. 102, No. 9) we have *vasē 40 2* and *vasē 40 1* in one of a minister of his (*ibid.* p. 103, No. 11), *vasē 40 6*; in the Junāgaḥ rock inscription of Rudradāman (*ante*, Vol. VII. p. 259), *varshē dvīsaptatitāmē*; in the Guṇḍā inscription of his son Rudrasīnha (*Bhāvnagar Inscr.* p. 22), *varshē triuttara-satē*; in the Jasdhan (Gaḍha) inscription of his son Rudrasēna (*ibid.*), *varshē 100 20 7*; and in the Mulavāsara inscription of another Rudrasēna (*ibid.* p. 23), *varshē 200 50(r) 2*. In the dates of the Western Kshatrapas, therefore, and in them only, the word for 'year' everywhere is *varsha* (or its Prākṛit equivalent), and this circumstance seems to me to connect these dates in an unmistakable manner with the dates which are distinctly referred to the Saka era, in which the word *varsha* decidedly predominates. In fact, the way in which *varsha* is used both in the dates of the Western Kshatrapas and in the Saka dates universally so called, tends, in my opinion, to support the views of those scholars who have assigned the former to the Saka era, on historical grounds; and leads me to consider my list of dates as a continuation of the series of dates, from the year 41 to the year 310, which are furnished by the inscriptions and coins of the Western Kshatrapas. — This is all the information which I can derive from the Saka dates themselves.

³⁷ It will be sufficient to refer the reader to Dr Bhandarkar's *Early History of the Dekkan*, 2nd ed. p. 37.

³⁸ Above it has been already shewn that, among the usual technical phrases, *Saka-varshēshu=atikrāntēshu* precedes the phrase *Sakanripa-kāl-ātta-samvatsara*.

³⁹ I am doubtful about the date of the Bijayagaḥ pillar inscription of Vishnuvardhana of the year 428, *Gupta Inscr.* p. 253; the two other dates are those of the Dhōlpur inscription of Chandamabāsēna of the year 698 (*Zeitschr. Deutsch. Morg. Ges.* Vol. XL. p. 39), and the Ghatayāla inscription of the Pratihāra Kakkula of the year 918 (*Jour. Roy. As. Soc.* 1895, p. 516).

⁴⁰ The dates of the years 103, 138, 141 and 165, *Gupta Inscr.* pp. 258, 61, 67 and 89.

⁴¹ Another difference between these dates and those of the Western Kshatrapas is this that the former (with the exception of one date which quotes a Macedonian month) are all season-dates, whereas the latter all quote the ordinary lunar months.

SOME DATES OF THE BURMESE COMMON ERA.

Mr. Taw Sein Ko's account of the Pośuśdaung inscription of Sinbyūyin, *ante*, Vol. XXII. pp. 2-5, contains the following six dates of the Burmese common era, which should admit of verification:—

1. — 'Sunday, the 8th of the waxing moon of Pyāñō (i. e. Pāuśha), 1136, Sakkarāj';

2. — 'Monday, the 8th of the waning moon of the same month';

3. — 'Wednesday, the 9th of the waxing moon of Tabōdwè (i. e. Māgha), 1136, Sakkarāj, and 2318, Anno Buddhæ';

4. — 'An eclipse of the moon on the evening of Wednesday, the 1st of the waning moon of Tabōdwè'; also described as 'the first day of the waning moon of Māgha, 1136, Sakkarāj, and 2318, Anno Buddhæ, when Asurinda had seized the bright moon and released her from danger';

5. — 'Wednesday, the full moon day of Tabaug' (i. e. Phālguna), 1136, Sakkarāj;

6. — 'Saturday, the full-moon day of Vaiśākha, 1137, Sakkarāj, and 2319, Anno Buddhæ'; also described as 'Saturday, the full-moon day of the same month' (of Kaśon, i. e. Vaiśākha, 1137, Sakkarāj).

The common era of Burma, according to Sir A. Cunningham, was introduced from India¹ in A. D. 638; and there can, therefore, be no doubt that the eclipse spoken of in connection with the fourth of the above dates is the lunar eclipse which took place, at Ava, about 9 p. m. on Wednesday, the 15th February A. D. 1775,² by the Indian calendar the 15th of the bright half of the month Māgha, but here described as the first of the waning moon of Māgha. And counting backwards and forwards from that day, the other dates, as indicated by the week-days, must correspond—

No. 1 to Sunday, the 8th January A. D. 1775, by the Indian calendar the 7th of the bright half of Pāuśha, but here called the 8th;

No. 2 to Monday, the 23rd January A. D. 1775, by the Indian calendar the 6th of the dark half of Pāuśha, but here called the 8th;

No. 3 to Wednesday, the 8th February A. D. 1775, by the Indian calendar the 8th of the bright half of Māgha, but here called the 9th;

No. 5 to Wednesday, the 15th March A. D. 1775, by the Indian calendar the 13th of the bright half of Phālguna, but here called the full-moon day; and

No. 6 to Saturday, the 13th May A. D. 1775, by the Indian calendar the 13th of the bright half of Vaiśākha, but here also called the full-moon day.

The explanation of these discrepancies is perhaps to be found in the statement of Sir A. Cunningham that the Burmese luni-solar year has twelve lunar months of 29 and 30 days alternately. For if we assign 30 days to Pāuśha, 29 to Māgha, 30 to Phālguna, and 29 to Chaitra, and take the month Pāuśha of Sakkarāj 1136 to have commenced on the 1st January A. D. 1775, Sunday the 8th January will be the 5th of Pāuśha, Monday the 23rd January the 23rd (= 15 + 8th) of Pāuśha, Wednesday the 8th February the 9th of Māgha, Wednesday the 15th February the 16th (= 15 + 1st) of Māgha, Wednesday the 15th March the 15th of Phālguna, and Saturday the 13th May the 15th of Vaiśākha; and it would thus seem as if the first fifteen days of each month, in Burma, were called days of the waxing moon, and the following days of the month days of the waning moon, quite irrespectively of the actual course of the moon and of the *tithi* that ends on each day.

I hope that this matter will be inquired into by somebody residing in Burma, with the help of a Burmese calendar. What we want is, *e. g.* for the year now current, Sakkarāj 1255, the first day of each lunar month and a full and exact scheme of one of the months, with the proper European equivalent for each day. It would also be desirable to obtain the scheme of a year which contains an intercalated month. This information it would not be difficult to procure.

Göttingen.

F. KIELHOEN.

SRAHI.

Ante, Vol. XXII. p. 222, Dr. Fleet has given another instance of the use of the word *srāhe*, which he had previously found in some dates of Old-Kanarese inscriptions. I may perhaps draw attention to the fact that apparently the same word, only spelt *srāhi*, is regularly employed in the dates of the Orissa inscriptions, edited by Bābū Man Mohan Chakravarti in the *Jour. Beng. As. Soc.* Vol. LXII. Part i. pp. 90ff. Thus we read in Mr. Chakravarti's inscriptions:—

No. I. l. 2: . . . vijērājyē samasta 3 ānka *srāhi* Magusira kri trayōdasi Bhūmivārē;
No. II. l. 1: . . . Purnahōttamadēva mahārājānka samasta 2 *srāhi* Mēsa su 12 Grivārē;

No. III. l. 1: . . . vijayarājyē samasta 4 ānka *srāhi* Dhanu amāvai Saurivārē;
No. IV. l. 1: . . . vijērājyē samasta 41 *srāhi* Dhanu sukala saptami Ravivārē;
No. V. l. 1: . . . vijērājyē samasta 35 *srāhi* Mēsa kri 4 Vudhavārē;
No. VI. l. 2: . . . mahārājānka samasta 4 ānka *srāhi* Kakaḡā su 10 Vudhavārē.

The editor of these inscriptions considers *srāhi* to be a technical word, which has no particular meaning in the context. I myself am unable to offer any explanation of it.

F. KIELHOEN.

Göttingen.

MISCELLANEA.

THE MEANING OF SRAHI.

THE second of the two important copper-plate inscriptions of the Gaᅅgavamsa king Narasimhadēva IV., discovered by Babu Man Mohan Chakravarti at Purī (Jagannāth) and published by him in the *Journal Beng. As. Soc.* Vol. LXIV. P. I. p. 123 ff., contains the following dates:—

1. — Page 151, inscription B., plate v. a, l. 19: Saka-nripatēr-atīśēshu shōdash(ś)-ādhiśēshu trayōdasa-śata-saivataśēshu . . . śrī-Vira-Nripinādhēva-nripatīh(tēh) sva-rājyasya dvāvimśaty-ānkē abhiliśyamānē Vichhā śukla śkādā-śyām Maᅅgala-vārē; i. e., Saka-Saivvat 1316 expired, in the *ānka* (year) 22 of the king's reign, on Tuesday, the 11th *tithi* of the bright half of the month of Vichhā (Vriśchika).

Here the Saka year 1316 has been erroneously

¹ In counting the *ānka* years (which commence in the month Bhādrapada) the numbers ending with 6 or 0, excepting 10, are dropped. If, therefore, the 8th *ānka* year corresponded, as it did, to A. D. 1333-34, the 22nd

quoted instead of 1317. For Saka-Saivvat 1316 expired the date would correspond to Wednesday, the 4th November A. D. 1394; but for Saka-Saivvat 1317 expired it corresponds to the 23rd November A. D. 1395, which was a Tuesday, and which did fall in the 22nd *ānka* (year) of the king's reign, because the 6th March A. D. 1384, the equivalent of another date (p. 149, l. 9) of his reign, fell in the 8th *ānka* (year).¹

2. — *Ibid.* plate v. b, l. 1: asmin rājyē trayōvimśaty-ānkē Vichhā dvitīya-kriśᅅna-saptamī Paᅅᅅita-vārē; i. e., in the same reign, in the *ānka* (year) 23, on Wednesday, the 7th *tithi* of the second dark half of the month of Vichhā (Vriśchika).

This date regularly corresponds to Wednesday, the 22nd November A. D. 1396, when the 7th

ānka year must have corresponded to A. D. 1395-96, because in counting the years the numbers 16 and 20 would be omitted.

tithi of the dark half ended 13h. 53m. after mean sunrise.² It fell in the *second kṛishṇa-pakṣha* of the solar month of Vṛiṣchika, because another *kṛishṇa-pakṣha* had already ended in the same month on the 1st November, the solar month having commenced on the 29th October.

3. — *Ibid.* p. 152, plate vi.b, l. 5: śrāhi Mīna-saṁkrānti kṛishṇa śkāśāśi Śani-vārē; i. e.,—omitting the first two words—on the Mīna-saṁkrānti, on Saturday, the 11th *tithi* of the dark half.

This date falls in the same year as the immediately preceding date No. 2; for the Mīna-saṁkrānti then took place (by the Ārya-siddhānta) 1h. 24m. after mean sunrise of

Saturday, the 24th February A. D. 1397, and on the same day the 11th *tithi* of the dark half ended 2h. 54m. after mean sunrise.

This result, in my opinion, clearly shows that the phrase śrāhi, 'in this śrāhi,' with which the date opens, takes the place of, and is synonymous with, the expressions *asmin-śva samvat-sarē* and *asmin-śva śakē* of other inscriptions; and I do not consider it doubtful that the mysterious word *śrāhi* is used here in the sense of 'year.' This meaning would also suit the use of *śrāhi* in the dates to which I have drawn attention *ante*, Vol. XXIII. p. 224.

Göttingen.

F. KIELHOEN.

No. 7.—DATES OF CHOLA KINGS.

By F. KIELHOEN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

After the receipt of the large volume of *Inscriptions in the Mysore District*¹ for which we are indebted to Mr. Lewis Rice, the Director of Archaeological Researches in Mysore, I examined some of the earlier dates in that volume, and my notes on them were ready for publication, when Dr. Hultzsch sent me accurate transcripts and translations of five of the Chōla dates in the *Epigraphia Carnatica*, prepared under his orders by his First Assistant, Mr. Venkayya, from inked estampages of the original stones. Dr. Hultzsch at the same time requested me to treat of these dates separately, and to include in my account of them those dates also which have already been published by him in the *Indian Antiquary*, Vol. XXXIII. p. 297 ff. In now complying with his request, I would wish to state that in what follows I shall strictly confine myself to the consideration of the dates as I find them, and that I leave others to judge how far the results of my calculations would be acceptable on more general grounds.

A.—RAJARAJA.

1.—Inscription in the Bilvanāthēśvara temple at Tiruvallam in the North Arcot district.²

- 1 Svasti śrī [||*] Kō Rājarāja-Kēsarivammarṅku³ yā[ṇ]ḍu 7āvadu . . .
 ivv-āttē Ayppaśi-t.
 2 tīngaḷ paunnamāsiyūm Irēvadiyūm peṅṅa vishuvil⁴ sōmagrahaṇattī-pāṅṅu.⁵

"In the 7th year (of the reign) of king Rājarāja-Kēsarivarman,—on the day of an eclipse of the moon at the equinox, which corresponded to (the day of the *nakṣatra*) Bēvatī and to a full-moon *tithi* in the month of Aippaśi of this very year."

¹ *Epigraphia Carnatica*, Part I. Bangalore, 1894.

² From Dr. Hultzsch's transcript; compare *Ind. Ant.* Vol. XIX. p. 70, and *South-Indian Inscriptions*, Vol. I. p. 169.

³ Read *carmarṅku* or *carmarṅku*.

⁴ Read *vishuvattil*.

⁵ Read *paṅṅu*.

⁶ i. e. *grahaṇattī pāṅṅu*.

This date falling in the month Aippaśi (the solar Kārttika), the equinox spoken of is that of the Tulā-saṁkrānti, i. e. the autumnal equinox; and, as stated by Dr. Hultzsch,¹ Dr. Fleet has already pointed out that, within the period to which Rājarāja's reign must be allotted, there are only two years in which a lunar eclipse took place at or near the autumnal equinox, A. D. 991 and A. D. 1010. For these two years the details of the date work out as follows:—

In A. D. 991 (Śaka-Saṁvat 913 expired) the Tulā-saṁkrānti took place on the 26th September,² by the Śūrya-siddhānta 8h. 3'4m., and by the Ārya-siddhānta 6h. 35'9m. after mean sunrise; and accordingly, by the practice followed in Southern India, the 26th September A. D. 991 was the first day of the month Aippaśi. On the same day there was a lunar eclipse, which took place 13h. 48m. after mean sunrise and was therefore visible in India; and the moon was in the *nakṣatra* Bēvatī for 13h. 8m. after mean sunrise.

In A. D. 1010 (Śaka-Saṁvat 932 expired) the Tulā-saṁkrānti also took place on the 26th September, by the Śūrya-siddhānta 6h. 3m., and by the Ārya-siddhānta 4h. 33'5m. after mean sunrise; and accordingly the 26th September A. D. 1010 also was the first day of the month Aippaśi. And on this day also there was a lunar eclipse, which, since it took place 2h. 54m. after mean sunrise, was not visible in India; and the moon was in Bēvatī for 3h. 17m. after mean sunrise.

Both the 26th September A. D. 991 and the 26th September A. D. 1010 therefore would seem to answer the requirements of the case. But there is the important difference between them that the lunar eclipse of the 26th September A. D. 991 was visible in India, while that of the 26th September A. D. 1010 was not so. And considering that the eclipses quoted in dates, as a rule,³ are visible ones, it is highly probable that this here also is the case, and that the true equivalent of the date therefore is the 26th September A. D. 991 (in Śaka-Saṁvat 913 expired).

2.—Inscription on a stone built into the roof of the Gōpāla-Kṛishṇa temple at the village of Kaliyūr in the Tirumakūḍlu-Narasipur tālūka.⁴

- 1 Svasti [||*] Śakanripa-kāl-ātīta-saṁvatsara-śataṅga[!]* 929nēya Parābhava-saṁvatsarada Chaitra-māsada bahūḷa-pañchamiyu-
 2 m-Ādityavārad-andu.

"On Sunday, the fifth *tithi* of the dark fortnight of the month of Chaitra in the Parābhava year (which corresponded to) the year 929 since the time of the Śaka king."

By the southern luni-solar system Parābhava was Śaka-Saṁvat 929, the year given by the date, as a current year; but for that year the date is incorrect. For, the fifth *tithi* of the dark half of Chaitra of Śaka-Saṁvat 929 current ended, by the *amānta* scheme, on Friday, the 22nd March A. D. 1006, and, by the *pūrṇimānta* scheme, on Wednesday, the 12th March A. D. 1007, in neither case on a Sunday. If the year of the date were Śaka-Saṁvat 929 expired, which was the year Plavaṅga (not Parābhava), the corresponding days would be Thursday, the 10th April

¹ See *Ind. Ant.* Vol. XXIII. p. 297.

² According to Dr. Fleet, *ibid.* Vol. XIX. p. 71, the Tulā-saṁkrānti in A. D. 991 took place on the 26th September, at about 20 *ghaṭis* 54 *palas* after mean sunrise (for Bombay); but this is erroneous. By my Tables for the Ārya-siddhānta, published *ibid.* Vol. XVIII. p. 207, the time of the Saṁkrānti, expressed in days of the Julian period, is 2083 269 2740, i. e. 6h. 35'9m. after mean sunrise of the 26th September, A. D. 991; and by Professor Jacobi's Tables the Saṁkrānti took place, also according to the Ārya-siddhānta, 16 *ghaṭis* 23 *palas*, i. e. 6h. 35'2m., after mean sunrise of the same 26th September.

³ My list of dates from inscriptions contains 89 regular dates which quote lunar eclipses, and 33 regular dates which quote solar eclipses. The 39 lunar eclipses were all *śyāmas* *śāpīṭha* visible in India. Of the 23 solar eclipses, 20 were visible, and 3 (of Śaka-Saṁvat 634 and 639, and of Vikrama-Saṁvat 1043) were not visible in India.

⁴ From Mr. Rice's transcript, *Ep. Carn.* Part I. p. 149, No. 44. The inscription 'consists of praises of Appayya, a general and minister under Rājarājādēva.'

A.D. 1007, and Sunday, the 29th February A.D. 1008. Here the *pārnimānta* scheme would indeed yield the desired weekday, but it is quite improbable that the people of Southern India should have used that scheme of the lunar months in connection with the Śaka era in the 11th century A.D. And if I were permitted to alter the reading of the date, I would rather change the year of it to Śaka-Saṁvat 989 (current, the year Parābhava), for which, by the *amānta* scheme, the date would regularly correspond to Sunday, the 19th March A.D. 1066. The result is, that this date, at present, is of no value for historical purposes.

3.—Inscription on a stone standing close to the west wall of the Agastyēśvara temple at Balmuri in the Baḷaguḷa hōbaḷi of the Sēringapatam tālukā.¹

26 . . Saka-varisha 934nēya Paridhāvi-[sa]m[va]t[saraKe] śri-[Rā]jarāja[dē]-
27 [va]rge³ yāṇḍu irupatt-ēmtā[vu]
28 tad-varisha[da Pau]sha-mā[sa]
29 ³ rāyapa-saṁkrāntiyo!

“In the twenty-eighth year (of the reign) of the glorious Rājarājadēva, (which corresponded) to the Paridhāvin year (and to) the Śaka year 934 at the Uttarāyapa-saṁkrānti in the month of Pausa of this year”

This date does not admit of exact verification, and what can be said about it, is that the year Paridhāvin does correspond to the given Śaka year 934, as an expired year, and that the Uttarāyapa-saṁkrānti of that year took place 12h. 37.9m. after mean sunrise of the 23rd December A.D. 1012, during the 8th *tithi* of the bright half of the month Pausa, which ended 18h. 51m. after mean sunrise of the same day.

The date, nevertheless, is of great importance, because it definitely proves that the true equivalent of the date No. 1, above, is really, what on general grounds we should expect it to be, the 26th September A.D. 991 (in Śaka-Saṁvat 913), and cannot be the 26th September A.D. 1010 (in Śaka-Saṁvat 932). For, since the 28th year of Rājarāja's reign is here joined with Śaka-Saṁvat 934, the 7th year of his reign, mentioned in the date No. 1, must indeed have coincided with part of Śaka-Saṁvat 913. Assuming that the Uttarāyapa-saṁkrānti has been quoted correctly in the date No. 3, and that the years spoken of in the dates are solar years (which certainly is the case in the date No. 1), it follows from the dates No. 1 and No. 3, that the first year of Rājarāja's reign commenced not earlier than the 24th December A.D. 984, and not later than the 26th September A.D. 985 (between the Uttarāyapa-saṁkrānti of Śaka-Saṁvat 906 and the Vishuva-Tulā-saṁkrānti of Śaka-Saṁvat 907).

B.—RAJENDRA-CHOLA I.

4.—Inscription on a broken stone lying in front of the Mallēdēva temple at Nandigunda in the Hadināru hōbaḷi of the Nāñjanaguḍi tālukā.⁴

1 [Da]ra (?) Saka-varisham 943nē[ya] Raudra-saṁ-
2 vatsarada Phālguna-māsa[da] sukla-[pa]-

¹ No. 5 of the Government Epigraphist's collection for the year 1895; *Ep. Carn.* Part I. p. 78, No. 140.—From Mr. Venkayya's transcript.

² Lines 1.7 of this inscription contain a Kanarese verse which refers to the conquest of the Gaṅga country, Raṭṭavādi, Malenḍu and Iḷam (Ceylon), and the Nuḷumba, Andhra, Koṅgu, Kāḷiṅga and Pāṇḍya countries, and lines 7 and 8 contain the full name of the king, *vis.* Rājarājakeśarivarman *alias* Rājarājadēva.

³ *i.e.* *uttarāyapa*.

⁴ No. 2 of the Government Epigraphist's collection for the year 1895; *Ep. Carn.* Part I. p. 204, No. 184.—From the transcript of Mr. Venkayya who furnishes the following note: ‘The other face of this stone contains, in Kanarese characters, the usual Tamil historical introduction of the inscriptions of Parakēsarivarman *alias* Rājendra-Chōladēva. As the last item of conquest in the preserved part of the historical introduction is the victory over Jayasimha, it may be concluded that the date of the inscription is later than the 9th year of the king's reign.’

3 ksham Budhavāram puṇname Uttare-nakshatraṁ sō-
4 magrahaṇad-andu

“On the day of an eclipse of the moon, (the day of) the Uttarā nakshatra, a full-moon *tithi*, a Wednesday in the bright fortnight of the month of Phālguna in the Raudra year (which corresponded to) the Śaka year 943”

By the southern luni-solar system Raudra was Śaka-Saṁvat 943, as a current year, and for this year the date is correct. For, in Śaka-Saṁvat 943 current the full-moon *tithi* of Phālguna ended 22h. 32m. after mean sunrise of Wednesday, the 1st March A.D. 1021, when there was a lunar eclipse which was visible in India, and when the moon nearly the whole day was in the *nakshatra* Uttarā-Phālguni.¹

5.—Inscription on a stone standing to the north of the Sēmēśvara temple at Suttūru in the Tāyūru hōbaḷi of the Nāñjanaguḍi tālukā.²

1 [P]ūrvvadēsamu[m] Ga[m]geyu[m] Kādāramu[m]³ koṇḍa kō-Pparakē[sa]riparmar-
āna uḍeyār
2 śri-Rājendra-Chōladē[vargge] yāṇḍu 31āva[d]u [||*] Svasti [||*]
3 Saka-var[sha] 9[54]nēya Āṅgira-saṁvatsarada
4 Kārttika-māsa . . [ra]nam[i]⁴ tale-devasam-āge bidi-
5 ge Sōmavāra Rōhini-nakshatradal uḍeyār śri-Rājendra-Chō-
6 ladēvar-gurukka!

“In the 31st year (of the reign) of king Parakēsarivarman, *alias* the lord, the glorious Rājendra-Chōladēva, who conquered the Eastern country, the Gaṅgā, and Kādāram.

“Hail! On (the day of) the Rōhini *nakshatra*, a Monday, the second *tithi* (of the form 'ghī' which had) the full-moon *tithi* for its first day (?)³ of the month of Kārttika in the Āṅgira year (which corresponded to) the Śaka year 9[54]”

In the tenth century of the Śaka era the only year Āṅgira was Śaka-Saṁvat 954 expired, and for this year the date is correct. For in Śaka-Saṁvat 954 expired the second *tithi* of the *amānta* Kārttika ended 7h. 26m. after mean sunrise of Monday, the 23rd October A.D. 1032, when the moon was in the *nakshatra* Rōhini for about 11h. 10m. after mean sunrise.

As this day is referred to the 31st year of the reign of Rājendra-Chōla I., the first year of his reign, according to this date, should have commenced some time between the 24th October A.D. 1001 and the 23rd October A.D. 1002, both days inclusive. I cannot reconcile this result with the fact that, according to the date No. 3, Rājarāja was ruling in December A.D. 1012, nor can I say whether there are reasons to prove that the regnal year (31) of the present date is incorrect.

¹ This is the earliest correct date known to me, that admits of exact verification, in which the Śaka year quoted is a current year.

² No. 1 of the Government Epigraphist's collection for the year 1895; *Ep. Carn.* Part I. p. 208, No. 164.—From Mr. Venkayya's transcript.

³ This word is entered above the line, with a cross (*hamsapāda*) after it.

⁴ Read *pauryami* (?).

⁵ I give this as translated by Mr. Venkayya. The words of the original must be intended to mean ‘the second *tithi* after full-moon;’ compare Mr. P. Sandaram Pillai's *Some Early Sovereigns of Travancore*, p. 56, where a 5th *tithi* of the bright half is described as ‘the 5th *tithi* after new-moon.’ The mention of the *nakshatra* Rōhini in connection with a second *tithi* of the month Kārttika is sufficient to show that the dark fortnight of the month is intended. I had in fact found the proper equivalent of the date already from the *date* in Mr. Bice's mutilated text, long before I saw Mr. Venkayya's transcript.

C.—KULOTTUNGA-CHOLA I.

6.—Inscription on a stone standing close to the north wall of the Śaṅkaréśvara temple at Sindhuvaṅgi in the Kaṭṭale hōbaṅgi of the Naṅjanagudi tālukā.¹

1	Sva[sti]	śrī	[*]	Śakarai	yā[ṅ]ḍu	[āyira]-
2	[t]tu-muppadu		peṅga	²Dvaya-sam[va*]-		
3	tsarattu			śrī-Kolōttuṅka-Śō-		
4	ḷadēvar		ṅṛidhi[vi*]-rāṅyattu		yāṅ-	
5	[ḍu]		muppatt-ēḷāvadu			

"In the Vyaya year which corresponded to the Śaka year one thousand and thirty, (and) in the thirty-seventh year of the reign of the glorious Kulōttuṅga-Chōḷadēva"

This date contains no details for exact verification. Moreover, the Jovian year Vyaya put down in it does not correspond to the given Śaka year 1030; for, according to the southern luni-solar system,³ Vyaya was Śaka-Saṁvat 1028 expired, while Śaka-Saṁvat 1030 current was Sarvaṅgi and 1030 expired Sarvadhārin. Where there is a similar discrepancy between the Śaka year and the Jovian year of a date, it is generally the Jovian year that is quoted correctly,⁴ and a priori it appears reasonable to assume that the same is the case here and that, accordingly, the year intended is really Śaka-Saṁvat 1028 expired. This year, combined with the 37th year of the reign of Kulōttuṅga-Chōḷa I., would give us for the first year of his reign Śaka-Saṁvat 999 expired = A.D. 1070-71. It remains to be seen how far this result would agree with the following dates, Nos. 7 and 8.⁵

7.—Inscription in the Napaṅja temple at Chidambaram in the South Arcot district.

1	Svasti	śrī		Tiribuvāṅchachakkaravattigaḷ	śrī-Kulōttuṅga-
2	Śōḷadēvar		tiru-taṅgaiyār	Rājarāṅga	Kundavaiy-āḷvār
5				nā-ṅilattai	muḷud-āṅḍa
6	darāṅku	nāṅpattu-nāḷ-āṅḍil		³Mīṅa-nigaḷ	nāyāṅṅu
7	ṅṛa	Urōṅai-nāḷ-Iḍabam		pōḍāl.	Veḷḷi pe-

"In the forty-fourth year (of the reign) of Jayadhara,⁷ who ruled all the four quarters,—at the time (of the rising of the sign) Rishabha on the day of (the nakshatra) Bōhīṅi, which corresponded to a Friday in the month during which (the sign) Mīna was shining,—Kundavai āḷvār, (the daughter of) Rājarāṅga (and) the royal younger sister of the emperor of the three worlds, the glorious Kulōttuṅga-Chōḷadēva, [gave, etc.]"

8.—Inscription in the Āpatsahyēśvara temple at Ālaṅḍi in the Tanjore district.

1		Svasti	śrī		Pu[ga]	śōḷṅda
30					ḷōv- ⁸ Arājakēsaripattmar-āna	Tribhuvanachakrava[ṅ]ṅi	śrī-Kulōt-

¹ No. 8 of the Government Epigraphist's collection for the year 1895; *Ep. Carn.* Part I. p. 191, No. 81.—From Mr. Venkayya's transcript.

² Read *Vyaya-samva-*.

³ By the mean-sign system (which is out of the question here) Vyaya would have commenced on the 15th December A.D. 1102, in Śaka-Saṁvat 1024 expired.

⁴ Compare the dates given in *Ind. Ant.* Vol. XXIV. p. 4, No. 139 ff.

⁵ These dates have been already published by Dr. Hultzsch in *Ind. Ant.* Vol. XXIII. pp. 297 and 298.

⁶ Read *Mīṅam*.

⁷ This, according to Dr. Hultzsch, was a *divya* of Kulōttuṅga-Chōḷa I.

⁸ Read *Irāja*.

31 tu[ṅga]-Śōḷadēvarṅku yāṅḍu 45āvadu Tulā-nāyāṅṅu pō[r]vva-pakshattu Viyāḷa-
kijamaiyam saptamiyam peṅ[ṅa]
82 Uttira . . . [ti]-nāḷ.¹

"In the 45th year (of the reign) of king Rājakesarivarman, alias the emperor of the three worlds, the glorious Kulōttuṅga-Chōḷadēva, on the day of (the nakshatra),² which corresponded to a Thursday and to the seventh *tithi* of the first fortnight of the month of Tulā."

The conclusion arrived at under No. 6 was to the effect that the first year of the reign of Kulōttuṅga-Chōḷa I. probably coincided with part of Śaka-Saṁvat 992 expired. Supposing this to have been the case, the 44th year of his reign ought to have partly coincided with Śaka-Saṁvat 1035 expired, and the 45th year with Śaka-Saṁvat 1036 expired. And, as a matter of fact, the date No. 7 does work out faultlessly for Śaka-Saṁvat 1035 expired, and the date No. 8 does so for Śaka-Saṁvat 1036 expired.

For Śaka-Saṁvat 1035 expired the date No. 7 would correspond to Friday, the 13th March A.D. 1114, which was the 19th day of the month of Mīna (the solar Chaitra). On this day (the 5th *tithi* of the bright half of the lunar Chaitra ended 10h. 16m., and) the moon was in the nakshatra Bōhīṅi (by all systems) for 17h. 4m. after mean sunrise. The sun rose in 19° 1' of the sign Mīna, and the sign Rishabha therefore rose from about 2h. 44m. to about 4h. 44m. after sunrise (while the moon was in Bōhīṅi).

For Śaka-Saṁvat 1036 expired the date No. 8 would correspond to Thursday, the 8th October A.D. 1114, which was the 11th day of the month of Tulā (the solar Kārttika). On this day the 7th *tithi* of the first or bright half (of the lunar Kārttika) ended 3h. 33m., and the moon was in the nakshatra Uttarāshāḍhā for 13h. 8m. (or, according to the Brahma-siddhānta, 6h. 34m.) after mean sunrise.

As stated by Dr. Hultzsch,³ I have some time ago calculated the same dates, Nos. 7 and 8, on the supposition that Kulōttuṅga-Chōḷa I. ascended the throne in A.D. 1063. I then found that both dates work out properly for the year A.D. 1107 (No. 7 for Śaka-Saṁvat 1028 expired, and No. 8 for Śaka-Saṁvat 1029 expired); and, accepting my results, Mr. Dikshit has stated that, with them, the first year of the reign of Kulōttuṅga-Chōḷa I. would have commenced some time between the 2nd March and 24th October (both days inclusive) of A.D. 1063. But I am obliged to point out that the results obtained for A.D. 1107, though perhaps acceptable each by itself, are not so satisfactory as those obtained for A.D. 1114, when compared with each other.

For Śaka-Saṁvat 1028 expired the date No. 7 would correspond to Friday, the 1st March A.D. 1107, which was the 7th day of the month of Mīna (the solar Chaitra). On this day (the 5th *tithi* of the bright half of the lunar Chaitra ended 17h. 53m., and) the moon was in the nakshatra Kṛittikā, by the equal-space system 21h. 40m., by the Brahma-siddhānta 8h. 32m., and according to Garga 9h. 51m. after mean sunrise, and afterwards in Bōhīṅi. The sun rose in 6° 56' of the sign Mīna, and the sign Rishabha therefore rose from about 3h. 32m. to about 5h. 32m. after sunrise (while the moon was in Kṛittikā).

For Śaka-Saṁvat 1029 expired the date No. 8 would correspond to Thursday, the 24th October A.D. 1107, which was the 27th day of the month of Tulā (the solar Kārttika). On this day (which was Kārttika-śūdi 6) the 7th *tithi* of the bright half commenced 0h. 55m. after mean sunrise (ending 2h. 33m. after sunrise of the following day), and the moon was in the

¹ It is not clear if the actual reading is *Uttirāḍḍai-nāḷ* or *Uttirāḍḍai-nāḷ* (see *Uttirāḍḍai-nāḷ*).

² The nakshatra was either Uttarā-Bhadrpadā or Uttarāshāḍhā.

³ *Ind. Ant.* Vol. XXIII, p. 298.

nakshatra Uttaráshádhá (by the Brahma-siddhanta not at all, and) by the equal-space system and according to Garga for 3h. 17m. after mean sunrise, and afterwards in Śravaṇa.

The reason why I regard these results as less satisfactory than those obtained for A.D. 1114, is the different ways in which, supposing the days intended by the dates to be the 1st March and the 24th October A.D. 1107, the *nakshatras* would have been quoted in the two dates. If the day of the first date is called after Rôhini, although the moon entered that *nakshatra* at the earliest 8h. 32m. after sunrise, why is the day of the second date not called after Śravaṇa which the moon entered as early as 3h. 17m. after sunrise? And if the day of the second date is called after Uttaráshádhá in which the moon at the best was only for 3h. 17m. after sunrise, why is the first date not called after Kṛitika¹ in which the moon was for at least 8h. 32m., and by the equal-space system as much as 21h. 40m. after sunrise? The ordinary rule certainly is, to name the day after that *nakshatra* in which the moon is at sunrise, or which she enters within a few hours after sunrise, and this rule would not have been observed if Friday, the 1st March A.D. 1107, were the true equivalent of the date No. 7.

Besides, if the two dates Nos. 7 and 8 did fall in A.D. 1107, the date No. 6, of the 37th year of the reign of Kulôttuṅga-Chôla I., would be altogether wrong. Considering that date to be in the main correct, and taking the three dates together, the conclusion which I feel bound to draw from them, is that the king's reign began between the 14th March and the 8th October (both days inclusive) of A.D. 1070;² that the date No. 6 of the 37th year fell in the year Vyaya = Śaka-Saṃvat 1028 expired or A.D. 1106-7; and that the date No. 7 of the 44th year really corresponds to the 13th March A.D. 1114, and the date No. 8 of the 45th year to the 8th October A.D. 1114.

9.—Inscription on a stone lying in the ruins of a temple called Sôméśvara, in the midst of the rice fields of the village of Êchiganahalli near Nañjanagudi.³

1 Svasti [||*] Śrī-Kulôttuṅga-Chôladêvaru prituvi-râjyam 'geyye Sak[a-va]risham 1035-

2 nêya Jaya-saṃvatsarada Pâlguna-mâsada apara-paksham pâ[di]va Âdityavaram

3 Hasta-nakshatram

"On (the day of) the *Hasta nakshatra*, Sunday, the first *tithi* of the second fortnight of the month of Phâlguna in the *Jaya* year (which corresponded to) the Śaka year 1035, while the glorious Kulôttuṅga-Chôladêva was ruling the earth,"

By the southern luni-solar system *Jaya* was Śaka-Saṃvat 1036 expired, while Śaka-Saṃvat 1035 expired would be *Vijaya*; and contrary to what ordinarily is the case in similar dates, the date here works out properly for the given Śaka year, and the word *Jaya* would therefore seem to have been employed by the writer of the date erroneously for *Vijaya*. In Śaka-Saṃvat 1035 expired the first *tithi* of the dark half of Phâlguna ended 11h. 16m. after mean sunrise of Sunday, the 22nd February A.D. 1114, when the moon entered the *nakshatra* *Hasta*, by the Brahma-siddhanta about 3h. 17m., and by the equal-space system about 6h. 34m. after mean sunrise. This date therefore is of the same year (A.D. 1114) to which the dates Nos. 7 and 8 belong, and the three dates would prove that the reign of Kulôttuṅga-Chôla I. cannot have ended in A.D. 1112.⁵

¹ It must appear even more strange that the day should not have been called after Kṛitika, when one considers that 'the rising of the sign Rishabha,' mentioned in the date, on the 1st March A.D. 1107 certainly took place (from about 3h. 32m. to about 5h. 32m. after sunrise) while the moon was in Kṛitika. On the 13th March A.D. 1114, on the other hand, it took place while the moon was in Rôhini.

² [The inscriptions of Kulôttuṅga I. in the Telugu country also presuppose A.D. 1070 as the year of his accession; see my *Annals Report* for 1893-94, p. 5.—E.H.]

³ No. 4 of the Government Epigraphist's collection for the year 1895; *Ep. Carn. Part I. p. 190, No. 44*—From Mr. Venkayya's transcript.

⁴ The *akshara ga* is engraved above the line.

⁵ Compare *Ind. Ant.* Vol. XX. p. 288.

D.—VIKRAMA-CHOLA.

10.—Inscription in the Tyâgarâja temple at Tiruvârûr in the Tanjore district.¹

1 Svasti śrī [||*] Pâ-mâlai miḍaindu
3 kô=Ppara[k]êsarivarmmar-âna Tribhuva[na]chakrava-
[rttiga]! śrī-Vikrama-Chôla[dê]varkku [y]â[n]du aiñjâ[vadu] Mi[thu]na-nâyaṅgu
pâ[r]vva-pakshattu saptamiyum Nâ[yi]ṅgu-kki[ma]maiyum Attamum-âna nâ
munnûṅgu-nâr[pa]di[n]âl.

"In the fifth year (of the reign) of king Parakêsarivarma, *alias* the emperor of the three worlds, the glorious Vikrama-Chôladêva, on the three-hundred-and-fortieth day, which was (the day of the *nakshatra*) *Hasta*, a Sunday, and the seventh *tithi* of the first fortnight of the month of *Mithuna*."

Among the sixteen years from A.D. 1110 to A.D. 1125 there are only two, for which this date would work out satisfactorily, A.D. 1113 (Śaka-Saṃvat 1035 expired) and A.D. 1116 (Śaka-Saṃvat 1038 expired).

For Śaka-Saṃvat 1035 expired the date would correspond to Sunday, the 22nd June A.D. 1113, which was the 29th day of the month of *Mithuna* (the solar Âshâdha). On this day the 7th *tithi* of the bright half of the lunar Âshâdha ended 9h. 17m., and the moon was in the *nakshatra* *Hasta*, by the Brahma-siddhanta for 10h. 30m., and by the equal-space system for 13h. 47m. after mean sunrise. If this were the day of the date, the first day of the fifth year of the reign would be the 18th July A.D. 1112—the 23rd day of the month of Karkâṭaka of Śaka-Saṃvat 1034 expired; and the first day of the first year would be the 23rd of the month of Karkâṭaka of Śaka-Saṃvat 1030 expired=Saturday, the 18th July A.D. 1108, which was *Śravaṇa-sudi* 9, and on which the moon was in Visâkhâ for 5h. 16m. after mean sunrise, and afterwards in Anurâdhâ.

For Śaka-Saṃvat 1038 expired the date would correspond to Sunday, the 18th June A.D. 1116, which was the 25th day of the month of *Mithuna*. On this day the 7th *tithi* of the bright half ended 20h. 44m., and the moon entered the *nakshatra* *Hasta*, by the Brahma-siddhanta about 5h. 16m., and by the equal-space system 8h. 32m. after mean sunrise. If this were the day of the date, the first day of the fifth year of the reign would be the 15th July² A.D. 1115—the 20th day of the month of Karkâṭaka of Śaka-Saṃvat 1037 expired; and the first day of the first year would be the 20th of the month of Karkâṭaka of Śaka-Saṃvat 1033 expired=Saturday, the 15th July A.D. 1111, which was *Śravaṇa-sudi* 7, and on which the moon was in Svâti for 18h. 24m. after mean sunrise.

Of the two days, thus arrived at as perhaps possible days for the accession of Vikrama-Chôla, the second, the 15th July A.D. 1111 (in Śaka-Saṃvat 1033 expired), certainly comes nearest to the year (A.D. 1112) which has been hitherto regarded as the year of his accession. But, concerned as I am only with the dates before me, I must confess that Sunday, the 22nd June A. D. 1113 (which would make the king's accession fall on the 18th July A.D. 1108), on account of the manner in which it is joined with the *nakshatra* *Hasta*, appears to me to be a better equivalent of the original date than Sunday, the 18th June A.D. 1116. And whether the day of the accession be the 18th July A.D. 1108 or the 15th July A.D. 1111, it requires to be shown how either result can be reconciled with the fact that the three dates Nos. 7-9 of the reign of Kulôttuṅga-Chôla I. fall in the year A.D. 1114.

¹ From *Ind. Ant.* Vol. XXIII. p. 298.

² Mr. Dikshit, who also has calculated this date, *ibid.* p. 299, gives the 14th July; but this is clearly an error.

No. 31.—DATES OF CHOLA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

(Continued from page 73.)

When my account of the ten Chôla dates, published above, pp. 66-73, had already been printed, Dr. Hultsch sent me for examination the texts and translations of the following fresh Chôla dates. Five of these new dates (Nos. 11-15) belong to the reign of the king Râjâdhirâja; and the four other dates (Nos. 16-19) are of the reign of the king Kulôttunga-Chôla III.

A.—RAJADHIRAJA.

11.—Inscription on a stone behind the Sômésvara temple at Mîṇḍigal in the Kôlâr district.¹

1 Svasti śri [[*] Saka-varisha 97[0]nēya Sabbajitu-samva-
2 tsaradal śrîmat-Vira-Pâṇḍiyana taleyum Sêrama-
3 na sâleyu[m*] koṇḍa kôv=Irâjakésaripadmar-âna uḍeyâr śri-Râjâdhi-
4 râjadêvargge yâṇḍu muvattanēya.

"In the year Sarvajit (which corresponded to) the Śaka year 97[0], (and) in the thirtieth year (of the reign) of king Râjakésarivarman, alias the lord, the glorious Râjâdhirâjadêva, who took the head of the glorious Vira-Pâṇḍya and the palace of the Chêra king."

This date does not admit of exact verification, and all that can be said about it in this respect, is that the Jovian year Sarvajit by the southern luni-solar system does correspond to the given Śaka year 970 as a current year (= A.D. 1047-48). The date nevertheless is of great value, because the Śaka year 970 current (or 969 expired) is also joined here with the 30th year of the king's reign. For, assuming this statement to be correct, the first year of Râjâdhirâja's reign must, at any rate partly, have coincided with Śaka-Samvat 940 expired, and the 26th year of the king's reign in the date No. 12 must approximately correspond to Śaka-Samvat 965 expired; the 27th year in the date No. 13 to Śaka-Samvat 966 expired; the 29th year in the date No. 14 to Śaka-Samvat 968 expired; and the 32nd year in the date No. 15 to Śaka-Samvat 971 expired.

12.—Inscription in the Vaidyanâtha temple at Tirumalavâḍi in the Trichinopoly district.²

1 || Svasti śri [[*] Tiṅga]=ér
8 Jayaṅkoṇḍa-Śôlan-ennum madi-keju kôv=Irâjakésarivanmar-âna uḍaiyâr
śri-Râjâdhirâjadêva-
9 rkku yâṇḍu [2]Gâvadu
10 imyâṭṭai⁴ Mina-nâmaggu Budan-tijanaai peṭṭa U-
11 ttirattî-nânṅu irâ.

"In the [2]6th year (of the reign) of the wise king Râjakésarivarman surnamed Jayaṅkoṇḍa-Chôla, alias the lord, the glorious Râjâdhirâjadêva,—at night on the day of Uttara(-Phalguni), which corresponded to a Wednesday in the month of Mîna in this year."

¹ No. 279 of the Government Epigraphist's collection for the year 1895.² Read śrîmad-Vîra..³ No. 75 of the Government Epigraphist's collection for the year 1895.⁴ Read irvâṭṭai Mîna-adyarṅa.

By what has been stated under No. 11, this date, which is of the 26th year of Râjâdhirâja's reign, would in the first instance be expected to fall in Śaka-Samvat 965 expired, and, as a matter of fact, the calculation for that year does yield satisfactory results. In Śaka-Samvat 965 expired the month of Mîna lasted from the 22nd February to the 22nd March A.D. 1044, and during this time the moon was in the nakshatra Uttara-Phalguni on Wednesday, the 14th March A.D. 1044, by the equal-space system from 9h. 51m. after mean sunrise (and therefore certainly at night), and by the Brahma-siddhânta and according to Garga the whole day.

13.—Inscription in the Nilvanésvara temple at Tiruppaṅgili in the Trichinopoly district.¹

1 || Svasti śri [[*] Tiṅga]=ér
17 Jayaṅkoṇḍa[da]-
18 Ś[ô]lâṅ nyarnda-perum-puga]=kkôv=Irâjakésarivanmar-âna u[ḍai]-
19 [yâr śri]-Râjâdhirâjadêvarkku yâṇḍu [2]7vadu
21 Kumba-nâyar[ru a]para-pakshattu
22 navamiyum Budan-kilamaiyum peṭṭa M[ûlat]ti-nâḷ.

"In the [2]7th year (of the reign) of Jayaṅkoṇḍa-Chôla, the king whose great fame was rising, Râjakésarivarman, alias the lord, the glorious Râjâdhirâjadêva,—on the day of Mûla, which corresponded to a Wednesday and to the ninth tithi of the second fortnight of the month of Kumbha."

This date, of the 27th year of Râjâdhirâja's reign, would in the first instance be expected to fall in Śaka-Samvat 966 expired, and here, again, the calculation for that year does yield satisfactory results. In Śaka-Samvat 966 expired the month of Kumbha lasted from the 22nd January to the 20th February A.D. 1045, and during this time the 9th tithi of the dark half ended 7h. 22m. after mean sunrise of Wednesday, the 13th February A.D. 1045, when the moon was in the nakshatra Mûla (by the equal-space system) for 13h. 5m. after mean sunrise.

14.—Inscription in the Râjagôpâla-Perumâḷ temple at Maṇimaṅgalam in the Chingleput district.²

1 || Svasti śri || Tiṅga]=ér
7 Jayaṅkoṇḍa-Śôla[ṅ]=u]nyarnda-perum-puga] kôv=Arâjakésarivanmar-
âna uḍaiyâr śri-Râjâdhirâjadêvaṅku yâṇḍu 29[â]vadu
[Dhanu-nâyarṅu pûrvva-pakshattu dvitigaiyum Budan-kilamaiyum peṭṭa
Tiru-
8 vopatti=nâḷ.

"In the 29th year (of the reign) of Jayaṅkoṇḍa-Chôla, the king whose great fame was rising, Râjakésarivarman, alias the lord, the glorious Râjâdhirâjadêva,—on the day of Śravaṇa, which corresponded to a Wednesday and to the second tithi of the first fortnight of the month of Dhanus."

This date, of the 29th year of Râjâdhirâja's reign, would be expected to fall in Śaka-Samvat 968 expired. In Śaka-Samvat 968 expired the month of Dhanus lasted from the 25th November to the 23rd December A.D. 1046, and during that time the moon, as required, was in the nakshatra Śravaṇa on a Wednesday, vis. on Wednesday, the 3rd December A.D.

¹ No. 90 of the Government Epigraphist's collection for the year 1892.² No. 6 of the Government Epigraphist's collection for the year 1892.³ Read =Irâja°.

1046, by the Brahma-siddhanta from sunrise, and by the equal-space system and according to Garga from 3h. 17m. after mean sunrise; but the *tithi* which ended on the day so found, 11h. 54m. after mean sunrise, was the third, not the second *tithi* of the bright half. Considering that Wednesday, the 3rd December A.D. 1046, answers two of the requirements of the date, and that no satisfactory results can be obtained for either of the surrounding years Śaka-Saṃvat 967 and 969 expired, I feel no hesitation in accepting that day as the true equivalent of this date, and in maintaining that the writer of the date has erroneously quoted the second instead of the third *tithi* of the bright half.

15.— Inscripton in the Vaidyanātha temple at Tirumalavāḍi.¹

1^a Ja[ya]ḅkoṅḅa-Śólan u-
2 yaru[da]-perum-pugaḷ kō Rāja[k]ēsariva[nma]r-āna u[ḍ]ai-
3 yār śrī-Rājādhira-jadēvarkku
4 yā[ṅ]ḍu [3]2āvadu
6 [iv]v-ātt[ai]
7 [Viru]chchiga-nāyaggu Viyā[la]-kka[mai] peṅga Tiruvōpatti-nān-
8 ṅu.

"In the [3]2nd year (of the reign) of Jayankōṅḅa-Chōḷa, the king whose great fame was rising, Rājakēsarivarman, *alias* the lord, the glorious Rājādhira-jadēva,—on the day of Śravaṇa, which corresponded to a Thursday in the month of Vṛiśchika in this year."

This date, if really of the 32nd year of Rājādhira-jā's reign, would in the first instance be expected to fall in Śaka-Saṃvat 971 expired; but the date is incorrect both for that year and for the surrounding years Śaka-Saṃvat 970 and 972 expired. In Śaka-Saṃvat 971 expired the month of Vṛiśchika lasted from the 26th October to the 24th November A.D. 1049, and during this time the moon was in the *nakshatra* Śravaṇa on Friday, the 3rd November A.D. 1049, by the Brahma-siddhanta from sunrise, and by the equal-space system and according to Garga from 3h. 17m. after mean sunrise. In Śaka-Saṃvat 970 expired the month of Vṛiśchika lasted from the 26th October to the 23rd November A.D. 1048, and during this time the moon was in the *nakshatra* Śravaṇa on Saturday, the 12th November, and Sunday, the 13th November, A.D. 1048. And in Śaka-Saṃvat 972 expired the month of Vṛiśchika lasted from the 26th October to the 24th November A.D. 1050, and here the moon was in the *nakshatra* Śravaṇa on Wednesday, the 21st November A.D. 1050, by the equal-space system and according to Garga for 21h. 1m., and by the Brahma-siddhanta for 22h. 20m. after mean sunrise.

If the year of the date were the 22nd year of Rājādhira-jā's reign,² the date would be expected to fall in Śaka-Saṃvat 961 expired, and for that year it would be correct. For in Śaka-Saṃvat 961 expired the month of Vṛiśchika lasted from the 27th October to the 24th November A.D. 1039, and during this time the moon was in the *nakshatra* Śravaṇa on Thursday, the 22nd November A.D. 1039, by the Brahma-siddhanta from sunrise, and by the equal-space system and according to Garga from 1h. 58m. after mean sunrise.

Apart from this doubtful date, our examination of the three dates Nos. 12-14 has shown that the 14th March A.D. 1044 fell in the 26th year of Rājādhira-jā's reign, the 13th February A.D. 1045 in his 27th year, and the 3rd December A.D. 1046 in his 29th year; and the general conclusion to be drawn from this is, that the first year of Rājādhira-jā's reign commenced in A.D. 1018, between the 15th March and the 3rd December (both days inclusive).

¹ No. 81 of the Government Epigraphist's collection for the year 1896.

² Of the preceding lines of this inscription no impressions were prepared.

³ [As the first figure of the date is indistinct, the reading "22" is not absolutely impossible.—E.H.]

B.— KULOTTUNGA-CHOLA III.

16.— Inscripton in the Raṅganāyaka temple at Nellore.¹

2 Śa[ka]r yāṅḍu āyiratt-orunūṅṅ-orubatt-onbadā[ḷ] P[ṅ]gala-
saṃvatsarattu Maduraiyumu ḷlamuṅ-kōṅḅu Pā[ṅ]ḍiyayai muḍi-tta[ḷ]ai
kōṅḅ-arulīṅa śrī-Kulōttu[n]ga-Śōḷadē[va]rkku yāṅḍu pa[tt]-onbadā[ḷ]vadu
Vṛiśch[i]ka-nāyaggu-ppad[ḷ]ai yadiy-āṅa² Ve[ḷ]ḷi-kki[ḷ]amaiyumu
Rē[va]ḍiyumu

"In the year Piṅgala (which corresponded) to the Śaka year one thousand one hundred and nineteen, (and) in the nineteenth year (of the reign) of the glorious Kulōttuṅga-Chōḷadēva who took Madurai and ḷlam and was pleased to cut off the crowned head of the Pāṅḍya,— [on the day of] Rēvatī and a Friday which was the fifteenth solar day of the month of Vṛiśchika."

The Jovian year Piṅgala, quoted in this date, by the southern luni-solar system does correspond to the given Śaka year 1119 as an expired year. In that year the Vṛiśchika-saṃkrānti took place, by the Ārya-siddhanta 11h. 10m., and by the Sūrya-siddhanta 13h. 0m. after mean sunrise of the 27th October A.D. 1197. The month of Vṛiśchika of Śaka-Saṃvat 1119 expired, therefore, lasted from either the 27th or the 28th October to the 25th November, and the 15th solar day of that month accordingly was either the 10th or the 11th November A.D. 1197. But as these two days were Monday and Tuesday, neither of them can be the day intended by the date, which was a Friday.— In my opinion, it is perfectly certain that the writer of the date erroneously has given the 15th instead of the 25th solar day; for the 25th day of the month of Vṛiśchika corresponds—certainly by the Sūrya-siddhanta, and by the Ārya-siddhanta also when the civil beginning of the solar month is determined according to the rule followed in the calendars of the Kollam era—to the 21st November A.D. 1197 which was a Friday, and on which the moon was in the *nakshatra* Rēvatī for 13h. 47m. after mean sunrise.— According to the wording of the date this day, Friday, the 21st November A.D. 1197, would have fallen in the 19th year of Kulōttuṅga-Chōḷa's reign; but the following dates will show that the writer here has made another mistake, and that the day really fell in the 20th year of the king's reign.

17.— Inscripton in the Raṅganātha temple at Śrirāṅgam.³

1 || Hari || Svasti śrī [!]* Puyal vāyttu
7 kō-Pparakēsaripaṅmar-āṅa Tribhuvāṅachchakkaravartigaḷ Ma[ḍu]rai
kōṅ-
8 ḍu Pāṅḍiyayai muḍi-ttalai kōṅḅ-arulī[ya] śrī-Kulōttu[n]ga-Śōḷadēvaṅku yāṅḍu
19āvadu Vṛiśchika-nāyaggu apara-pakshattu paṅchamiyūḷ-Śevvāy-kki[ḷ]amaiyumu
peṅga Pūḷattu [nā].

"In the 19th year (of the reign) of king Parakēsarivarman, *alias* the emperor of the three worlds, the glorious Kulōttuṅga-Chōḷadēva, who took Madurai and was pleased to cut off the crowned head of the Pāṅḍya,— on the day of Pushya, which corresponded to a Tuesday and to the fifth *tithi* of the second fortnight of the month of Vṛiśchika."

This date, like No. 16, falls in the month of Vṛiśchika, and is, as No. 16 professes to be, of the 19th year of the king's reign. Like No. 16, it would therefore be expected to fall in Śaka-Saṃvat 1119 expired; but for that year it does not work out properly. We have seen that the month of Vṛiśchika of Śaka-Saṃvat 1119 expired lasted from the 27th or 28th October to the 25th November A.D. 1197, and during that time the 5th *tithi* of the dark half ended shortly

¹ No. 197 of the Government Epigraphist's collection for the year 1894.

² Read =ppadiṅ-aiṅḅa=tiyadiy-āṅa.

³ No. 66 of the Government Epigraphist's collection for the year 1892.

after sunrise of the 2nd November A.D. 1197, which was a Sunday, not a Tuesday.—The date really falls in Śaka-Saṃvat 1118 expired. In that year the month of Vṛiśohika lasted from the 27th October to the 25th November A.D. 1196, and during this period the 5th *tithi* of the dark half ended 14h. 19m. after mean sunrise of Tuesday, the 13th November A.D. 1196, when the moon was in the *nakṣatra* Pūshya, by the equal-space system and according to Garga for 15h. 6m., and by the Brahma-siddhānta for 13h. 8m. after mean sunrise.

18.—Inscription in the Vaidyaṅṭha temple at Tirumalavāḍi.¹

- 1 Svasti śri [(*)] Puyal vā[y*]ttu
 7 kō=Pparakēsaripaṅṅmar-āṅa Ti[ri]buvanaohakkara[va]ttiga|
 Maduraiyum [I]lamum Ka-
 8 ravārum Pāḍiyaṅ muḍi-ttalaiyuṅ-konḍu vīrar abishēkamum 'vijaiyā-
 [a]bishēkamum paṅṅ[i]y-a[r]uḷiṅa śri-Tiribuvanaviradē-
 9 vaṅku yāḍu 34vadu Kaṅṅi-nāyaṅṅru pōrvva-pakshattu daśamiyum
 Tiṅgaṅ-ki[ama]iyum peṅṅa Tiruvōḍattu nā|.

"In the 34th year (of the reign) of king Parakēsarivarman, *alias* the emperor of the three worlds, the glorious Tribhuvanaviradēva, who took Madurai, Iḷam, Karuvūr, and the crowned head of the Pāḍya and was pleased to perform the anointment of heroes and the anointment of victory,—on the day of Śravaṅa, which corresponded to a Monday and to the tenth *tithi* of the first fortnight of the month of Kanyā."

As the preceding date No. 17, of the 19th year of the king's reign, apparently fell in Śaka-Saṃvat 1118 expired, this date, which is of the 34th year of his reign, would in the first instance be expected to fall in Śaka-Saṃvat 1133 expired. And for that year the date does work out faultlessly. For in Śaka-Saṃvat 1133 expired the month of Kanyā lasted from the 29th August to the 27th September A.D. 1211, and during that time the 10th *tithi* of the bright half ended 8h. 56m. after mean sunrise of Monday, the 19th September A.D. 1211, when the moon was in the *nakṣatra* Śravaṅa, by the equal-space system and according to Garga for 12h. 29m., and by the Brahma-siddhānta for 13h. 47m. after mean sunrise.

19.—Inscription in the Bājagōpāla-Perumāḷ temple at Maṅṅimāṅgalam.²

- 1 Svasti śri [(*)] Tiribuvanachchakaravattiga[|] Maduraiyum Iḷamum
 Pāḍiyaṅai muḍi-ttalaiyuṅ-konḍ-aruliya śr[|]-Kulōttuṅga-Śō[|]a]dēvaṅku yā-
 2 ḍu 12Avadu Dhanu-nāyaṅṅru apara-pakshattu navamiyum Tiṅgaṅ-
 kiamaiyum peṅṅa Sittirai-nā|.

"In the 12th year (of the reign) of the emperor of the three worlds, the glorious Kulōttuṅga-Chōḷadēva, who was pleased to take Madurai, Iḷam, and the crowned head of the Pāḍya,—on the day of Chitrā, which corresponded to a Monday and to the ninth *tithi* of the second fortnight of the month of Dhanus."

The two preceding dates show that this date, which is of the 12th year of the king's reign, in the first instance may be expected to fall in Śaka-Saṃvat 1111 expired. In that year the month of Dhanus lasted from the 26th November to the 24th December A.D. 1189, and during this time the moon was in the *nakṣatra* Chitrā, by the equal-space system and according to Garga for 17h. 44m., and by the Brahma-siddhānta for 14h. 47m. after mean sunrise of Monday, the 4th December A.D. 1189. That this is the proper equivalent

¹ No. 74 of the Government Epigraphist's collection for the year 1895.

² Read *vijay-ābhāsi*.

³ No. 5 of the Government Epigraphist's collection for the year 1892.

of the original date, there can be no doubt; but it must be pointed out that the *tithi* quoted in the date, the 9th *tithi* of the dark half, when calculated by our tables, had ended 51 minutes¹ before mean sunrise of Monday, the 4th December A.D. 1189, instead of ending after sunrise. In my opinion the irregularity is so slight that in this particular instance it rather tends to confirm the correctness of our general result.

The results obtained under Nos. 17-19 are in such perfect agreement that they may be looked upon as certain; and they prove that the 21st November A.D. 1197, the equivalent of the date No. 16, fell in the 20th, not the 19th year of the king's reign. And the general result arrived at is, that the first year of the reign of Kulōttuṅga-Chōḷa III. commenced some time between the 6th December A.D. 1177 and the 19th September A.D. 1178 (both days inclusive).

No. 37.—DATES OF CHOLA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

(Continued from page 221.)

A.—KULOTTUNGA-CHOLA I.

20.—Inscription in the Bājagōpāla-Perumāḷ temple at Maṅṅimāṅgalam in the Chingleput district.³

- 1 Svasti śri || Puḷaḷ-mādu vīḷaṅga
 3 'kōvīrarājakēsaripaṅṅma-

¹ No. 23 of the Government Epigraphist's collection for the year 1896.

² Read *kōv-īrdja* or *kō Vīra-Edja*.

4 r-â[na] Tribhuvanachakravattiga! śrī-Kulōttuṅga-Śōladēvaṅku yāṅḍu 48vadu . . .
 7 yāṅḍu [4]0 [8]du¹
 8 Kumba-nāyaṅḍu-ppūrvva-pakshattu davittaiyumu² Veḷḷi-kkiḷam[aiyu]m [p]eṅṅa
 Śadaiyattu nā!

"In the 48th year (of the reign) of king Rājakesarivarman, alias the emperor of the three worlds, the glorious Kulōttuṅga-Chōladēva."

"In the [48]th year,³—on the day of Śatabhishaj, which corresponded to a Friday and to the second *tithi* of the first fortnight of the month of Kumbha."

The conclusion arrived at above, p. 72, was that the reign of Kulōttuṅga-Chōla I began between the 14th March and the 8th October (both days inclusive) of A.D. 1070. If this is right, the month of Kumbha (January-February) of the first year of the king's reign must have fallen in A.D. 1071, in Śaka-Samvat 992 expired, and the same month of his 48th year must fall in Śaka-Samvat 1039 expired. And for that year this date does work out faultlessly.

In Śaka-Samvat 1039 expired the month of Kumbha lasted from the 23rd January to the 21st February A.D. 1118, and during that time the second *tithi* of the bright half ended 15h. 35m. after mean sunrise of Friday, the 25th January A.D. 1118, when the *nakshatra* by the equal-space system was Śatabhishaj for 2h. 38m. after mean sunrise. The date thus confirms the conclusion previously arrived at, which may now be definitely accepted as correct.⁴

B.—VIKRAMA-CHOLA.

21.—Inscription in the Mahāliṅgavāmin temple at Tiruviḍaimarudūr in the Tanjore district.⁵

1 || Svasti śrī [H*] Pū-mālai miḍaindu
 3 kō-Pparakēsaripaṅmar-āṅṅa Tribhuvanaśakravattiga! śrī-Vikkrama-
 Śōladēvaṅku yāṅḍu 4āvadu [I]shapa-nā[ya]ṅḍu apara-pakshattu aṣṭamiyumu
 Tiṅga-kilamaiyumu peṅṅa Śadaiyatti-nā.
 4 |.

"In the 4th year (of the reign) of king Parakēsarivarman, alias the emperor of the three worlds, the glorious Vikrama-Chōladēva,—on the day of Śatabhishaj, which corresponded to a Monday and to the eighth *tithi* of the second fortnight of the month of Rishabha."

22.—Inscription in the Śvētāraṇyēśvara temple at Tiruveṅkāḍu in the Tanjore district.⁶

1 Svasti śrī [H*] Pū-mālai miḍaindu [u]
 8 kō-[Ppa]rak[ē]saripa[r]mar-ā[ṅṅa] Ti[r]ri[bh]u[van]achakra]vatti śrī-[V]ikrama-
 Śōladē[va*]ṅku yāṅḍu 5āvadu Śimha-nāyaṅḍu a[pa]ra-pakshattu Tiṅga-
 ki[la]maiyum [ē]kādi(da)ṣiyumu [p]eṅṅa T[iru]vādirai-nā!

¹ The figure 8 looks almost like ea, and it is possible, though not probable, that the actual date is 40vadu.

² Read *avittaiyumu*.

³ Or perhaps 'in the 40th year'; see note 1 above.

⁴ It may be added that, if the reign of Kulōttuṅga-Chōla I. had commenced in A.D. 1063, the *tithi* of the present date would, as a *keśava-tithi*, have fallen on Saturday, the 11th February A.D. 1111, when the *nakshatra* by the equal-space system was Pūrva-Bhadrapadā for 5h. 16m. after mean sunrise.

⁵ No. 138 of the Government Epigraphist's collection for the year 1895.

⁶ No. 121 of the Government Epigraphist's collection for the year 1896.

"In the 5th year (of the reign) of king Parakēsarivarman, alias the emperor of the three worlds, the glorious Vikrama-Chōladēva,—on the day of Ārdra, which corresponded to a Monday and to the eleventh *tithi* of the second fortnight of the month of Simha."

The examination of the date No. 10, above, p. 73, has shown that the accession of Vikrama-Chōla very probably took place on either the 18th July A.D. 1108 or the 15th July A.D. 1111; and I have stated that the manner in which the date No. 10 works out, in my opinion, speaks rather in favour of the first of those two days. With the earlier day, the date No. 21, of the month of Rishabha of the king's 4th year, would be expected to fall in April-May A.D. 1112, in Śaka-Samvat 1034 expired, and the date No. 22, of the month of Simha of the king's 5th year, in July-August A.D. 1112, also in Śaka-Samvat 1034 expired. With the later day for the king's accession, the date No. 21 would have to fall in April-May A.D. 1115, in Śaka-Samvat 1037 expired, and the date No. 22 in July-August A.D. 1115, also in Śaka-Samvat 1037 expired.

Now, with the 18th July A.D. 1108 as the day of Vikrama-Chōla's accession, the two dates, for Śaka-Samvat 1034 expired, actually work out as follows:—

In Śaka-Samvat 1034 expired the month of Rishabha lasted from the 24th April to the 24th May A.D. 1112, and during that time the 8th *tithi* of the dark half ended 19h. 19m. after mean sunrise of Monday, the 20th May A.D. 1112, when the *nakshatra* by the equal-space system was Śatabhishaj for 0h. 39m. after mean sunrise.

In the same year the month of Simha lasted from the 27th July to the 26th August A.D. 1112, and during that time the 11th *tithi* of the dark half ended 21h. 40m. after mean sunrise of Monday, the 18th August A.D. 1112, when the *nakshatra* was Punarvasu (which follows immediately upon Ārdra) for 17h. 44m. after mean sunrise.

On the other hand, with the 15th July A.D. 1111 as the day of the king's accession, the two dates, for Śaka-Samvat 1037 expired, would work out thus:—

In Śaka-Samvat 1037 expired the month of Rishabha lasted from the 24th April to the 25th May A.D. 1115, and during that time the 8th *tithi* of the dark half ended 23h. 13m. after mean sunrise of Tuesday, the 18th May A.D. 1115, when the *nakshatra* was Śatabhishaj for 5h. 55m. after mean sunrise.

In the same year the month of Simha lasted from the 28th July to the 27th August A.D. 1115, and during that time the 11th *tithi* of the dark half ended 19h. 58m. after mean sunrise of Tuesday, the 17th August A.D. 1115, when the *nakshatra* was Punarvasu the whole day.

From this it will be seen that, while the week-day of both dates comes out correctly when the king's accession is assumed to have taken place in July A.D. 1108, it would be wrong in both dates on the other alternative; and that in either case the *nakshatra* of the first date would be correct, and that of the second date incorrect. The two dates thus, in my opinion, prove that Vikrama-Chōla's accession cannot have taken place in July A.D. 1111; and they render it extremely probable that his accession really took place in July A.D. 1108.

C.—KULOTTUNGA-CHOLA III.

23.—Inscription in the Śvētāraṇyēśvara temple at Tiruveṅkāḍu in the Tanjore district.¹

1 Svasti śrīḥ [H*] Pūyal vāyppa
 2 kō-P[pa]rakēsaripaṅmar-āṅṅa Tribhuvanachchakravattiga!
 śrī-Kulōttuṅga-Śōla[d]ēvarkkn y[ā]ṅḍu eṅṅa vadu nā! Kaṅkaṅka-nāyaṅḍu
 pūrvva-paksha-
 3 ttu daśamiyumu Tiṅga-kilamaiyumu peṅṅa A[ṅ]i[la]t[ti]ṅṅa!

¹ No. 118 of the Government Epigraphist's collection for the year 1896.

"In the eighth year (of the reign) of king Parakésarivarman, *alias* the emperor of the three worlds, the glorious Kulóttuṅga-Chóladéva,—on the day of Anurádhá, which corresponded to a Monday and to the tenth *tithi* of the first fortnight of the month of Karkatáka."

The conclusion arrived at above, p. 221, was that the first year of the reign of Kulóttuṅga-Chóla III. commenced between the 5th December A.D. 1177 and the 19th September A.D. 1178 (both days inclusive). If this is right, the month of Karkatáka (June-July) of the first year of the king's reign must have fallen either in A.D. 1178, in Śaka-Saṃvat 1100 expired or in A.D. 1179, in Śaka-Saṃvat 1101 expired; and the same month of his 8th year must fall in either Śaka-Saṃvat 1107 expired or 1108 expired. As a matter of fact, this new date works out properly only for Śaka-Saṃvat 1107 expired.

In Śaka-Saṃvat 1107 expired the month of Karkatáka lasted from the 26th June to the 27th July A.D. 1185, and during that time the 10th *tithi* of the bright half commenced, by the Śūrya-siddhānta 0h. 13m. after, and by the Brahma-siddhānta about 1h. before, mean sunrise of Monday, the 8th July A.D. 1185, and ended shortly after sunrise of the next day;¹ and on the same Monday the *nakshatra* was Anurádhá, by the Brahma-siddhānta from 3h. 17m., and by the equal-space system and according to Garga from 7h. 53m. after mean sunrise.

It is clear that this date reduces the period during which the reign of Kulóttuṅga-Chóla III. must have commenced to the time from the 5th December A.D. 1177 to the 8th July A.D. 1178 (both days inclusive).

24.—Inscription in the Śvétáráṇyésvara temple at Kadappéri near Madurántakam.²

1 Tribhu[va]ṅgaśakravattigaḷ śri-Kulóttuṅga-
Śóladé[va]rkku yaṅḍu padin-āṅḍavadu
2 Āni
3 māsatu=[ppa]ttān=t[i]yadyiyum śaduttiyum Mūlamum Śani-kkijamaiyum=ānav-anṅu.

"In the sixteenth year (of the reign) of the emperor of the three worlds, the glorious Kulóttuṅga-Chóladéva,—on the day which was a Saturday and (the day of) Mūla and a fourth *tithi* and the tenth solar day of the month of Āni."

According to what has been said before, this date, of the month of Āni (or Mithuna, May-June) of the 16th year of the king's reign, would be expected to fall in Śaka-Saṃvat 1115 expired or 1116 expired.

In Śaka-Saṃvat 1115 expired the Mithuna-saṃkrānti took place, by the Ārya-siddhānta, 22h. 51m. after mean sunrise of the 25th May A.D. 1193, and the month of Āni therefore commenced on the 26th May A.D. 1193. Accordingly, the 10th day of Āni was the 4th June A.D. 1193, and on this day the 4th *tithi* (of the bright half) did end, 22h. 48m. after mean sunrise. But the day was a Friday (not a Saturday), and the *nakshatra* at sunrise was Pnshya (No. 8), not Mūla (No. 19).

On the other hand, in Śaka-Saṃvat 1116 expired the Mithuna-saṃkrānti took place 5h. 4m. after mean sunrise of the 26th May A.D. 1194, which therefore was the first day of the month of Āni. The 10th day of Āni, accordingly, was Saturday, the 4th June A.D. 1194, and on that day the *nakshatra* was Mūla, by the Brahma-siddhānta from 1h. 19m., and according to Garga from 5h. 55m. after mean sunrise. But the *tithi* which ended on the day so found, 13h. 2m. after mean sunrise, was the 14th (of the bright half), not a 4th *tithi*.

¹ The *tithi* therefore was either a current *tithi* or it was a *prātha ma-dāśami*.

² No. 181 of the Government Epigraphist's collection for the year 1892.

Now everybody who will compare the results of my calculations of the date will, I feel confident, admit that the fourth *tithi* has been erroneously quoted¹ in the date instead of the fourteenth, and that the proper equivalent of the date undoubtedly is Saturday, the 4th June A.D. 1194. Since this day fell in the 16th year of the reign of Kulóttuṅga-Chóla III., the general result now is that the king's reign commenced between the 5th June and the 8th July A.D. 1178 (both days inclusive).²

For convenience of reference the result of the examination of the 24 dates, so far sent to me by Dr. Hultzsch, may be summed up thus:—

1.—Rājārāja (Nos. 1-3). His reign commenced between the 24th December A.D. 984 and the 26th September A.D. 985. His latest date (No. 3), of the 28th year of his reign, very probably corresponds to the 23rd December A.D. 1012.

2.—Rājéndra-Chóla I. (Nos. 4-5). His reign commenced between the 24th October A.D. 1001 and the 23rd October A.D. 1002. His latest date (No. 5), of the 31st year of his reign, corresponds to Monday, the 23rd October A.D. 1032.

3.—Rājādhirāja (Nos. 11-15). His reign commenced between the 15th March and the 3rd December A.D. 1018. His latest date (No. 11), of the 30th year of his reign, falls in Śaka-Saṃvat 970 current = A.D. 1047-48.

4.—Kulóttuṅga-Chóla I. (Nos. 6-9, and 20). His reign commenced between the 14th March and the 8th October A.D. 1070. His latest date (No. 20), of the 48th year of his reign, corresponds to Friday, the 25th January A.D. 1118.

5.—Vikrama-Chóla (Nos. 10, 21 and 22). His reign most probably commenced on the 18th July A.D. 1108. His latest date (No. 10), of the 340th day of the 5th year of his reign, most probably corresponds to Sunday, the 22nd June A.D. 1113.

6.—Kulóttuṅga-Chóla III. (Nos. 16-19, 23 and 24). His reign commenced between the 5th June and 8th July A.D. 1178. His latest date (No. 18), of the 34th year of his reign, corresponds to Monday, the 19th September A.D. 1211.

¹ A fourth *tithi*, ending on the 10th day of the month of Mithuna, would be either the fourth *tithi* of the dark half of the *amānta* Jyāishtha or the fourth *tithi* of the bright half of Āshāḍha; it is easy to prove that the *nakshatra* could not possibly be Mūla on either of these two *tithis*. On the other hand, to judge from numerous calendars at my disposal, Mūla ordinarily goes together with Āshāḍha-sudi 14; and it commences on the day of Jyāishtha-sudi 14, when one of the months that precede Āshāḍha is intercalary. In Śaka-Saṃvat 1116 expired there was such an intercalary month (Chaitra), and one therefore would *a priori* expect the *nakshatras* on Jyāishtha-sudi 14 (= the 4th June A.D. 1194) to be Jyēshthā and Mūla, which they actually were.

Or, more accurately, between the 11th day of the month of Mithuna (corresponding to the 5th June) and the 13th day of the month of Karkatāka (corresponding to the 9th July) of Śaka-Saṃvat 1100.

No. 7.— DATES OF CHOLA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

(Continued from Vol. IV. page 266.)

A.— RAJARAJA.

No. 25.— Inscription in the Sthāpūnātha temple at Śuchindram near Cape Comorin.²

1 Svasti śr[i] [||*] Tiru-maga[l] pōla=
 5 kō Irāsārā[śa].
 6 Kēsari[vaṇma]rkku [yā]ṇdu paṇi-aiñ[ju] iv[v]-āṇdu Kaṇṇi-[nāy]irru muv[v-a]-
 7 n[diy-āg]i [Ś]e[v]vāy-[k]kilamai peṇṇa [Pā]rayirattādi-nā

“In the year fifteen (of the reign) of king Rājarāja-Kēsarivarman,—on the day of Pūrva-Bhādrapadā, which corresponded to a Tuesday, three evenings having expired³ of the month of Kanyā in this year.”

We have found before (above, Vol. IV. p. 266) that Rājarāja's reign commenced between the 24th December A.D. 984 and the 26th September A.D. 985. A date of the month of Kanyā (August-September) of the 15th year of his reign, therefore, will be expected to fall either in A.D. 999, in Śaka-Saṃvat 921 expired, or in A.D. 1000, in Śaka-Saṃvat 922 expired. As a matter of fact, this new date works out correctly for Śaka-Saṃvat 921 expired.

In Śaka-Saṃvat 921 expired the month of Kanyā lasted from the 27th August to the 25th September A.D. 999, and during this period the moon was in the *nakṣatra* Pūrva-Bhādrapadā—by the equal-space system for 15 h. 6 m., by the Brahma-siddhānta for 3 h. 56 m., and according to Garga for 3 h. 17 m., after mean sunrise—on Tuesday, the 29th August A.D. 999, which was the third day of the month of Kanyā⁴ (and the full-moon day⁵ of the month of Bhādrapada).

The date reduces the period during which the reign of Rājarāja must have commenced to the time from the 24th December A.D. 984 to (approximately) the 29th August A.D. 985.⁶

B.— KULOTTUNGA-CHOLA I.

No. 26.— Inscription in the Rājagōpāla-Perumāḷ temple at Maṇṇārguḍi in the Tanjore district.⁷

1 Svasti śr[i] ௭ Pagaḷ-mādu vi[lañ]ga kōv=
 Irājākēsarivarman-āna Tr[i]bhāvanachakrava[rtt][i]gāḷ] śrī-Kulōttuṅga-Śōḷa.

² The first 8 lines of this inscription are published above, p. 45 (No. 6, E).

³ I.e. either ‘on the night of the third solar day,’ or ‘on the fourth solar day.’

⁴ The moon also was in Pūrva-Bhādrapadā on Monday, the 25th September A.D. 999, which was the 30th day of the month of Kanyā.

⁵ The full-moon *tithi* ended 13 h. 36 m. after mean sunrise.

⁶ [According to the Śuchindram inscription C. (p. 44 above) it commenced in the month of Karkatāka.—E H.]

⁷ No. 103 of the Government Epigraphist's collection for 1897.

2 dā[va]rkk-iyāṇ[du] 48 āvadu Makara-nāyaru pūrva-pakṣhattu trayōdasiyumu
 Tiṅgaṭ-kilamaiyumu peṇṇa Tiru[v]ādirai-nāḷ.

“In the 48th year (of the reign) of king Rājākēsarivarman, *alias* the emperor of the three worlds, the glorious Kulōttuṅga-Chōḷadēva,—on the day of Ārdrā, which corresponded to a Monday and to the thirteenth *tithi* of the first fortnight of the month of Makara.”

Above, Vol. IV. p. 263, we have seen that a day in the month of Kumbha of the 48th year of the reign of Kulōttuṅga-Chōḷa I. corresponds to the 25th January A.D. 1118. This date, of the month of Makara which immediately precedes the month of Kumbha, of the same 48th year, will therefore be expected to fall within a month before the 23rd January A.D. 1118, the first day of the month of Kumbha of that other date. And so it really does. For, the date corresponds to Monday, the 7th January A.D. 1118, when the 13th *tithi* of the bright half (of the month Māgha¹) ended 15 h. 1 m., and when the *nakṣatra* was Ārdrā, by the equal-space system for 14 h. 27 m., by the Brahma-siddhānta for 0 h. 39 m., and according to Garga for 2 h. 38 m., after mean sunrise.

¹ The *tithi* of the date therefore is one of the *Kalpādis*.

No. 21.]

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No. 21.— DATES OF CHOLA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

(Continued from page 49.)

A.— RAJARAJA.

No. 27.— Inscription in the Vaikunṭha-Perumāḷ temple at Maṇimāṅgalam.¹

1 [T; *]ru-magaḷ pōl
 2 k-iyāṇḍu 15vadn Isha[bha]-nā[ya]rku pūrva-ba(pa)kṣhattu [da]śamiyu[m*]
 Viyāḷa-kilam[ai]yu[m] peṇṇa [A]ttattin nāḷ.

“In the 15th year (of the reign) of² on the day of *Hasta*, which corresponded to a Thursday and to the tenth *tithi* of the first fortnight of the month of *Ṛishabha*.”

As Rājarāja's reign has been found to commence between the 24th December A.D. 984 and (approximately) the 29th August A.D. 985 (above, p. 48, No. 25), a date in the month of *Ṛishabha* (April-May) of the 15th year of his reign will be expected to fall either in A.D. 999 (in Śaka-Saṃvat 921 expired) or in A.D. 1000 (in Śaka-Saṃvat 922 expired).

In A.D. 999 the month of *Ṛishabha* lasted from the 23rd April to the 24th May. During that time the 10th *tithi* of the bright half (of the lunar month Vaiśākhā) commenced 0 h. 53 m. after mean sunrise of Thursday, the 27th April, and ended 1 h. 4 m. after mean sunrise of Friday, the 28th April; and the *nakṣatras* on the two days were—

on the Thursday, by the Brahma-siddhānta and according to Garga, Uttara-Phalgunī the whole day; and by the equal space system, Pūrva-Phalgunī up to 9 h. 12 m., and afterwards Uttara-Phalgunī;

¹ No. 289 of the Government Epigraphist's collection for 1897.

² The name of the king is lost, but the historical introduction, the whole of which is preserved, makes it certain that the inscription belongs to the time of Rājarāja I.

on the Friday, Uttara-Phalguni, by the equal space system and according to Garga for 10 h. 30 m., and by the Brahma-siddhanta for 7 h. 13 m.; and afterwards **Hasta**.

In A.D. 1000 the month of **Rishabha** lasted from the 23rd April to the 23rd May; and during that time the 10th *tithi* of the bright half (of the lunar month **Jyaishta**) ended 20 h. 53 m. after mean sunrise of Wednesday, the 15th May, when the *nakshatra* was **Hasta**, by the equal space system and according to Garga for 22 h. 20 m., and by the Brahma-siddhanta for 19 h. 3 m., after mean sunrise.

From this it follows that, if the year of the king's reign is correctly given, either the *nakshatra* (**Hasta**) has been quoted incorrectly, or the weekday (Thursday). In A.D. 999 the 10th *tithi* of the bright half of the month of **Rishabha** may undoubtedly be joined with Thursday, the 27th April, because the *tithi* commenced as early as 0 h. 53 m. after mean sunrise of that day; but during no part of the Thursday was the moon in the *nakshatra* **Hasta**. On the other hand, for A.D. 1000 the day of the date would undoubtedly be the 15th May, when the *nakshatra* was **Hasta** up to nearly the end of the day; but the 15th May A.D. 1000 was a Wednesday, not a Thursday.

My own opinion is, that the day of the date probably is Thursday, the 27th April A.D. 999, and that the writer, confounding the solar and the lunar months **Jyaishta**, without verifying his statement, has coupled with that day the *nakshatra* **Hasta**, because in the great majority of years **Hasta** really is the proper *nakshatra* for the 10th *tithi* of the bright half of the lunar **Jyaishta**.

I may add that I have calculated the date also for the surrounding years A.D. 998 and 1001, as well as for A.D. 1009 and 1010, without any satisfactory results.

B.—KULOTTUNGA-CHOLA I.

No. 28.—Inscription in the **Rājagōpāla-Perumāl** temple at **Maṇimaṅgalam**.³

- 1 Svasti śri [||*] Tirubuvanachchakkaravattigaḷ śri-Kulōttuṅga-Śōḷadēvaṅkku yāṇḍu 48āvadu Kumbha-nāyaṅgu pūrvva-[pa]kshattu dvādas[ī]yumu Vel-
- 2 [i]i-kkiḷamaiyumu peṅga Śadaiya[ti]tu nā.

"In the 48th year (of the reign) of the emperor of the three worlds, the glorious **Kulōttuṅga-Chōḷadēva**,—on the day of **Śatabhishaj**, which corresponded to a Friday and to the twelfth *tithi* of the first fortnight of the month of **Kumbha**."

Since, during the month of **Kumbha**, a twelfth *tithi* cannot possibly be joined with the *nakshatra* **Śatabhishaj**, I feel confident that the twelfth is wrongly quoted here instead of the second *tithi* of the bright half, and that the date, therefore, in every respect is the same as No. 20, above, Vol. IV. p. 262.

C.—KULOTTUNGA-CHOLA III.

No. 29.—Inscription in the **Dharmēśvara** temple at **Maṇimaṅgalam**.⁵

- 1 Tiru-vā[y*]-kk[ē]vi mu[n]n-āga Tribuvanachchakkaravattigaḷ Maduraiyumu Iḷamumu Pāṇḍiya[n] m[u]ḍi-ttalaiyūn-gōṇḍ-aru[ī]ya śri-Kulōttuṅga-Śōḷadēvaṅkku yāṇḍu

¹ I could quote very many similar dates from my lists.

² A comparison of twelve native calendars for different years has yielded the following result for the day on which the 10th *tithi* of the bright half of the lunar **Jyaishta** ended: In nine years the *nakshatra* was **Hasta** at the commencement of the day, and in two others towards the end of it; and in the remaining year the *nakshatra* at the commencement of the day was **Chitra**, which follows immediately upon **Hasta**.

³ *Souā-Ind. Inscr.* Vol. III. No. 32.

⁴ The identity of this king with **Kulōttuṅga-Chōḷa I.** is proved by the fact that three persons mentioned in this inscription are also referred to in another inscription at **Maṇimaṅgalam** (above, Vol. IV. p. 262, No. 20), which opens with the usual historical introduction of the inscriptions of **Kulōttuṅga-Chōḷa I.** (*Pugaḷ-mādu viśāṅga*).

⁵ No. 282 of the Government Epigraphist's collection for 1897.

2[9]vadu Miṅa-nāyaṅgu p[ūr]vva-pakshattu sattamiyumu Buda[n]-kilamaiyumu peṅga Mirugasirishattu nā.

"In the 2[9]th year (of the reign) of the emperor of the three worlds, the glorious **Kulōttuṅga-Chōḷadēva**, who was pleased to take **Madurai**, **Iḷam**, and the crowned head of the **Pāṇḍya**,—on the day of **Mṛigaśirsha**, which corresponded to a Wednesday and to the seventh *tithi* of the first fortnight of the month of **Mina**."

As the reign of **Kulōttuṅga-Chōḷa III.** commenced between the 5th June and the 8th July A.D. 1178 (above, Vol. IV. p. 266), a date in the month of **Mina** (February-March) of the 29th year of his reign will be expected to fall in A.D. 1207 (in **Śaka-Saṁvat** 1128 expired); and for that year this date is correct.

In A.D. 1207 the month of **Mina** lasted from the 23rd February to the 24th March; and during that period the seventh *tithi* of the bright half (of the lunar month **Chaitra**) ended 20 h. 16 m. after mean sunrise of Wednesday, the 7th March A.D. 1207, when the *nakshatra* was **Mṛigaśirsha**, by the equal space system and according to Garga for 19 h. 42 m., and by the **Brahma-siddhanta** for 18 h. 23 m., after mean sunrise.

No. 30.—Inscription in the **Vaikuṅṭha-Perumāl** temple at **Uttaramallūr**.¹

- 1 Svasti śri [||*] Tiru-[v]āy-kk[ē]vi muṅṅ-āga Tribuvanachchakravatt[ī]gaḷ Maduraiyumu [i]a]muḍ-Garuvūrum Pāṇḍi[ya]ṅ muḍi-ttalaiyūn-gōṇḍ-a[ru]ḷi virar abhishēkam[u]m viśaiyar abhishēkamumu paṇṇi aru[ī]i[ṅa] Tribuvaṅa-
- 2 vi[ṅ]radēvaṅku yāṇḍu 37āvadu Mi[th]uṅga-nāyaṅgu pūrvva-pakshattu na[va]iyumu Nāyaṅgu-kki[ma]iyumu² [p]eṅga Attattu nā[ī].

"In the 37th year (of the reign) of the emperor of the three worlds **Tribuvanaviradēva**, who was pleased to take **Madurai**, **Iḷam**, **Karuvūr**, and the crowned head of the **Pāṇḍya**, and was pleased to perform the anointment of heroes and the anointment of victors,—on the day of **Hasta**, which corresponded to a Sunday and to the ninth *tithi* of the first fortnight of the month of **Mithuna**."

According to what has been stated above, a date in the month of **Mithuna** (May-June) of the 37th year of the king's reign will be expected to fall either in A.D. 1214 (in **Śaka-Saṁvat** 1136 expired) or in A.D. 1215 (in **Śaka-Saṁvat** 1137 expired). As a matter of fact, this date is correct for A.D. 1215.

In A.D. 1215 the month of **Mithuna** lasted from the 27th May to the 26th June; and during that time the 9th *tithi* of the bright half (of the lunar month **Āshāḍha**) ended 17 h. 17 m. after mean sunrise of Sunday, the 7th June A.D. 1215, when the *nakshatra* was **Hasta**, by the equal space system and according to Garga for 5 h. 55 m., and by the **Brahma-siddhanta** for 2 h. 38 m., after mean sunrise.

The date reduces the period during which the reign of **Kulōttuṅga-Chōḷa III.** must have commenced (by three days, viz.) to the time from (approximately) the 8th June to the 8th July A.D. 1178.

No. 31.—Inscription in the **Rājagōpāla-Perumāl** temple at **Maṇimaṅgalam**.³

- 1 Svasti śri [||*] Tribuvaṅgaśakkaravattiga[ī]
- 2 Madurai[yum*] [P]āṇḍiyāṅai muḍi-tta-
- 3 laiyumu koṇḍ-aruḷiya Kulōt-
- 4 tuṅga-Śōḷadēvaṅkku yāṇḍu 20-

¹ No. 67 of the Government Epigraphist's collection for 1898.

² The syllable *ma* seems to be entered below the line.

³ No. 276 of the Government Epigraphist's collection for 1897.

5 āvadu Viṛashaba-nāyaṛṛu pūṛva-pakshattu daśa-
6 miyumu Viyāla-kiḷamaiyumu peṛra Svāti-nāḷ.

"In the 20th year (of the reign) of the emperor of the three worlds, Kulóttuṅga-Chólādēva, who was pleased to take Madurai and the crowned head of the Pāṇḍya,—on the day of Svāti, which corresponded to a Thursday and to the tenth *tithi* of the first fortnight of the month of Vṛishabha."

From what has been stated above, this date of the month of Rishabha (April-May) of the 20th year of the king's reign would be expected to fall in A.D. 1198 (in Śaka-Samvat 1120 expired); but for that year the date is quite incorrect.

In A.D. 1198 the month of Rishabha lasted from the 25th April to the 25th May, and during that time the 10th *tithi* of the bright half (of the lunar month Jyaishtḥa, as a *kshaya-tithi*) commenced 0 h. 43 m. and ended 22 h. 43 m. after mean sunrise of Sunday, the 17th May, when the *nakshatras* by the equal space system and according to Garga were Uttara-Phalgunī and Hasta, and by the Brahma-siddhānta Hasta and Chitrā.

Of the many years for which I have calculated the date, only the year A.D. 1200 (the month Rishabha of which would fall in the 22nd year of the king's reign) yields an approximately correct result. In that year the *tithi* of the date ended 7 h. 9 m. after mean sunrise of Thursday, the 25th May, which was the last day of the month of Rishabha, and on which the *nakshatra* was Svāti, by the equal space system and according to Garga from 19 h. 42 m., and by the Brahma-siddhānta from 16 h. 25 m., after mean sunrise.¹ Even this result I cannot regard as satisfactory, because, in my opinion, this Thursday, the 25th May A.D. 1200, would have been described as 'the day of Chitrā.'

¹ It is easy to prove that during the time, which is actually occupied by the tenth *tithi* of the bright half, the moon cannot possibly be in the *nakshatra* Svāti during the month of Rishabha.

No. 3.— DATES OF CHOLA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

(Continued from Vol. V. page 200.)

Vol. IV. of Mr. Rice's *Epigraphia Carnatica* again contains a number of Chōla inscriptions with Śaka dates. Dr. Hultzsch has sent me revised transcripts and translations of six of them (Nos. 32-37), which are all in the Heggādādēvankōṭe tāluka of the Mysore district. The transcripts were made from inked estampages, prepared by Mr. H. Krishna Sastri, B.A. The seventh of the new dates (No. 38) is taken from Vol. III. of Dr. Hultzsch's *South-Indian Inscriptions*.

I would add here a few words about the commencement of Rājārāja's reign. Above, Vol. V. p. 43, I found that that reign commenced between (approximately) the 24th December A.D. 984 and the 29th August A.D. 985. By the statement of the Śuchindram inscription, *ibid.* p. 44, according to which the tenth year of the king's reign commenced with the month of Karkataka, the previously found period is reduced to the time from the 25th June to the 25th July A.D. 985.

A.— RAJENDRA-CHOLA I.

32.— On a stone at the Bāṇēśvara temple at Bejātūru.²

- 1 Śrī svasti [||*] Saka-varisha ³vombhaynōṛa-nālvatta-mūṛe(ra)neya varishada⁴
Raudra-samvatsarada Ā.
2 śhāḍha-māsada puppave Uttarāśhāḍha-nakshatraṁ Maka-
3 ra-chandraṁ Bri(bri)haspati-vāraṁ śrī-Muḍigoṇḍa-Rājendra-Chōlaṁ rājyaṁ [ge]-
4 yuytt-ire iyāṇḍu ombhattāvudara(ṛo).

"Thursday, the moon being in Makara, the *nakshatra* being Uttarāśhāḍhā, during the full-moon *tithi* of the month of Āśhāḍha in the Raudra year (which corresponded) to the nine-hundred-and-forty-third year of the Śaka years,—in the ninth year of the reign of the glorious Muḍigoṇḍa-Rājendra-Chōla."

The Jovian year Raudra by the southern luni-solar system was Śaka-Samvat 943 as a current year (= A.D. 1020-21). In that year the month Āśhāḍha was intercalary, and the full-moon *tithi* of the second or *nija* Āśhāḍha ended 17 h. 55 m. after mean sunrise of Thursday, the 7th July A.D. 1020, when the *nakshatra* was Uttarāśhāḍhā, by the Brahma-siddhānta for 7 h. 13 m., and by the equal-space system and according to Garga for 13 h. 47 m., after mean

² Mr. Rice's *Ep. Carn.* Vol. IV. Hg. 16.

³ The opening words of line 1 as far as *vombhāa* are engraved at right angle to the remainder.

⁴ This word is entered below the line and its omission indicated by a cross above *sega*.

sunrise. The ending point of Uttarāshādhā being 276° 42' 15" or 280°, the moon of course was in the sign Makara (270° —300°).

According to our date, this Thursday, the 7th July A.D. 1020, fell in the ninth year of the king's reign. How far this statement may agree with other dates of Rājendra-Chōla I., will be considered below, under No. 34.

33 — On a stone lying at the Bānēsvara temple at Bejātūru.¹

1	Svasti	śrī [I*]	Pūrvva-dēsamūh
2	Gaṅgeyūh	Kaḍāramūh	gonḍa kō Pa-
3	rakēsarivarṃmar-āna		śrī-Rājendra-
4	Chōjadēvargg-iyāṇḍu		irpatt-erada-
5	vudu [I*]	svasti [I*]	Saka-nripa-kāl-ātita-samvatsara-
6	śataniga	955ya	Śrīmukha-samvatsarada Mārgasā-
7	ra-suddha-pāḍivam=Mūl-Ārkkad-amdu.		

"In the twenty-second year (of the reign) of king Parakēsarivarman alias the glorious Rājendra-Chōladēva, who conquered the Eastern country, the Gaṅgā, and Kaḍāram,² — on Sunday, (the nakshatra being) Mūla, during the first tithi of the bright fortnight of Mārgasāra in the Śrīmukha year (which was) the 955th of the hundreds of years passed from the time of the Śaka king."

The Jovian year Śrīmukha by the southern luni-solar system was Śaka-Samvat 955 as an expired year (=A.D. 1033-34). In that year the first tithi of the bright half of Mārgasāra ended 3 h. 54 m. after mean sunrise of Saturday, the 27th October A.D. 1033, when the nakshatra was Anurādhā. This in no way satisfies the requirements of the case.

I have no doubt that the month intended in the original is really the month Pauha of our Tables³ (which follows immediately upon Mārgasāra), because, for that month, the date regularly corresponds to Sunday, the 25th November A.D. 1033,⁴ when the first tithi of the bright half ended 21 h. 14 m., and when the nakshatra was Mūla,⁵ by the Brahma-siddhānta for 2 h. 38 m., according to Garga for 7 h. 53 m., and by the equal-space system for 20 h. 21 m., after mean sunrise.

According to our date, this Sunday, the 25th November A.D. 1033, fell in the twenty-second year of the king's reign. This, too, will be considered under the next date.

34.— On a stone in front of the Arkēsvara temple at Ankanāthapura.⁶

1	Svasti [II*]	Sha(sa)ka-varisham	959neya	I(i)svara-shatsamrada ⁷
2	Āsaḍa-māsada ⁸	Kālashtavaya	Shāti-naktra	Somma-
3	varada [a]ndu	śrī-Mmu(mu)digonḍa-Gaṅgegonḍa-Rājēh(jē)ndra-Chō-		
4	ladēvarkk-iyā(yā)ṇḍu	ippata-aḍavudu. ⁹		

¹ Mr. Rice's *Ep. Carn.* Vol. IV. Hg. 17.

² Compare above, Vol. IV. p. 69, date No. 5.

³ I must add that there may be a way of proving the quotation in the original date of the month *Mārgasāra* to be correct. In Śaka-Samvat 955 expired, by the rules of mean intercalation, a month was intercalated before Pauha. That month would ordinarily be called *Pauha*; but it might be called *Mārgasāra* on the supposition that it was calculated by the Ārya-siddhānta, and named according to Brahmagupta's rule; see my *List of North. Inscr.* No. 484. This remark does not affect the correctness of the European equivalent of the date, given above.

⁴ On the immediately preceding day the *Dhanuḥ-samkrānti* took place, 18 h. after mean sunrise.

⁵ That it is correct to translate *Mūl-Ārkkad-amdu* by 'on Sunday, (the nakshatra being) Mūla,' is proved by a date on p. 17 of the Roman text of *Ep. Carn.* Vol. IV. That date gives us for calculation Śaka-Samvat 1039 (current, the year Durmukha), Jyēṣṭha-babula 1, and *Mūl-Ārkkadāra*; and it corresponds to Sunday, the 28th May A.D. 1116, when the first tithi of the dark half commenced 4 h. 32 m. after mean sunrise, and when the nakshatra was Mūla by all systems.

⁶ Mr. Rice's *Ep. Carn.* Vol. IV. Hg. 104.

⁷ Read *-samvatsarada*.

⁸ Read *Āshāḍha-māsada Kālashtamiyūh Svāti-nakshatram Sōma-drad-andu*.

⁹ Read *irpatt-aḍadu*.

"On Monday, the nakshatra being Svāti, during the Kālashtami (tithi) of the month of Āshāḍha in the Īsvara year (which was) the 959th Śaka year,—in the twenty-sixth year (of the reign) of the glorious Muḍigonḍa-Gaṅgegonḍa-Rājendra-Chōladēva."

The Jovian year Īsvara by the southern luni-solar system was Śaka-Samvat 959 as an expired year (=A.D. 1037-38). *Kāl-āshṭami* is a name of the 8th tithi of the dark half. As this tithi, in the month of Āshāḍha, can under no circumstances be joined with Svāti (the 15th nakshatra), the given date cannot be correct.

As a matter of fact, the 8th tithi of the dark half of Āshāḍha of Śaka-Samvat 959 expired ended 17 h. 34 m. after mean sunrise of Friday, the 8th July A.D. 1037, when the nakshatras were Āsvini and Bharani (the first and second nakshatras). And the 8th tithi of the dark half cannot have been quoted erroneously instead of the 8th tithi of the bright half (on which in Āshāḍha the nakshatra may be Svāti), because in the given Śaka year the 8th tithi of the bright half of Āshāḍha ended on a Thursday (the 23rd June A.D. 1037), not on a Monday. I have calculated the date also for other months of the given year, but without any satisfactory results.

Giving up this date as hopelessly wrong, we have still to consider what data are furnished by the two preceding dates for ascertaining the time of the commencement of the reign of Rājendra-Chōla I. By No. 32 the 7th July A.D. 1020 fell in the ninth year, and by No. 33 the 25th November A.D. 1033 in the twenty-second year of the king's reign. Accordingly (approximately) the 7th July A.D. 1012 and the 25th November A.D. 1012 must have fallen in the first year; and the reign of Rājendra-Chōla I., according to the two new dates, therefore undoubtedly must have commenced some time between (approximately) the 26th November A.D. 1011 and the 7th July A.D. 1012.

I have previously (above, Vol. IV. p. 266) stated that the king's reign commenced between the 24th October A.D. 1001 and the 23rd October A.D. 1002. That statement necessarily was based solely on the date No. 5 (*ibid.* p. 69), which corresponds to the 23rd October A.D. 1032, and which, according to the actual reading of the date, is of the 31st year of the reign of Rājendra-Chōla I. With the new dates before me, in which the numbers of the regnal years are given in words, I feel sure that the number 31 in the date No. 5 has been put erroneously for 21, and that the 23rd October A.D. 1032 really fell in the 21st year of the king's reign, which would agree with the new result. This result would also tend to shew that in the incorrect date No. 34 the Śaka year (959 expired), at any rate, is given correctly.

B.— RAJADHIRAJA.

35.— On a stone in front of the Māri temple at Kojagāla.¹

1	Śrī-Rājādirājadēva[r*]gg-iyāṇḍu	[35]- ²
2	āvadu [Sa]kha-va[ri]śam ³	975[ne]-
3	ya	°Vijayōśchaiva-samvatsara[da]
4	Jēshṭha-māsada snkla-pakshada	tra[yō*]-
5	daśi	Ādityavārad-andu.

¹ Mr. Rice's *Ep. Carn.* Vol. IV. Hg. 114.

² The two figures of the date are damaged, but cannot be read otherwise. Mr. Rice reads *gāṇḍugemāradu*. From this erroneous reading he further concludes that Rājādirāja's regnal years were reckoned in two different ways; see *Ep. Carn.* Vol. IV. p. 13 of the Introduction.

³ Read *Śaka-varsham*.

⁴ This curious form is derived from certain *versus memoriales* (*Madras Journal of Literature and Science* for 1881, p. 276), in which the year Vijaya is introduced by the words *Vijayai-chaiva*. Compare the two similar terms *Pramōdita* and *Pramōdita*; *South-Ind. Inscr.* Vol. I. p. 109, note 2.

“In the [36]th year (of the reign) of the glorious Rājādhirājadēva,—on Sunday, the thirteenth *tithi* of the bright fortnight of the month of Jyaisṭha in the Vijaya year (which was) the 975th Śaka year.”

The Jovian year Vijaya by the southern luni-solar system was Śaka-Saivvat 975 as an expired year (=A.D. 1053-54). For that year the date is incorrect; for the 13th *tithi* of the bright half of Jyaisṭha of the given year corresponds to Tuesday, the 1st June A.D. 1053, which was entirely occupied by the *tithi*.¹

The date would be correct for the third (instead of the 13th) *tithi* of the bright half of Jyaisṭha of the given year, which ended 8 h. 13 m. after mean sunrise of Sunday, the 23rd May A.D. 1053.

From what I have stated above, Vol. IV. p. 266, about the commencement of Rājādhirāja's reign, it is clear that any date of the 35th year of that king's reign must fall between (approximately) the 15th March A.D. 1052 and the 2nd December A.D. 1053.

C.—RAJENDRADEVA.

36.—On a stone near the Binakalamma temple at Bejatūru.³

- 1 Om [l*] Svasti śrī-Chōla-rājam sakaja-vasudheyam koṇḍu Rājēndradēvam
³dust-śrī-vrāta-ghātam negaḷe barisam=āṅge mattam Sak-ābdam [l*]
 vis[t]ā-
 2 rak[k*]=ombhat-ēl-ombhatum=ene barisam Hēmalambi-prasiddham svastam māsam
 gaḍam Kā[r*]tūkam=asi[ta]-dinam dvādasī Sōmavaram (ll)

“Hail! When it was six years after the glorious Chōla king Rājēndradēva, renowned as the slayer of crowds of wicked enemies, had taken possession of the whole earth,—and again, in detail, in the Śaka year reckoned as nine, seven and nine (i.e. 979), in the year known as Hēmalambin, on Monday, the twelfth *tithi*, a day of the dark (fortnight) of the auspicious month of Kārttika.”

The Jovian year Hēmalambin by the southern luni-solar system was Śaka-Saivvat 979 as an expired year (=A.D. 1057-58); and for that year the date corresponds to Monday, the 27th October A.D. 1057, when the 12th *tithi* of the dark half of the *amānta* Kārttika ended 22 h. 9 m. after mean sunrise.

Below, under No. 38, it will be seen that the words of the date ‘when it was six years after’ etc., simply are intended to convey the sense of ‘in the sixth year of the reign of.’

37.—On a vīrakal at Gujjappanahūṇḍi.⁴

- | | | | | |
|----|----------------------------|--------------------|---------------------------|-------|
| 5 | Vīra-singgaśanattu | vīṭr=irind=aruḷina | kōv=Irājakēsaripadmar=āna | oḍeya |
| 6 | śrī-Rājēndradēvargg=iyāṇḍu | panniraṇḍāvudu | | |
| 7 | | | | |
| 8 | Saka-variāha | | 11 Pālguna-mā- | |
| 9 | 984 | | 12 sada punnave- | |
| 10 | saivatsarada | | 13 y-andu. | |

¹ The date would be incorrect also for the current Śaka year 975.

² Mr. Rice's *Ep. Carn.* Vol. IV. Pg. 18.

³ Read *dust*.

⁴ Mr. Rice's *Ep. Carn.* Vol. IV. Pg. 115. The original is much worn and many *akṣaras* are indistinct, but the figures of the Śaka date in line 9 are clear. The introduction (ll. 1-4) mentions Rājēndra's elder brother (viz. Rājādhirāja), the planting of a pillar of victory at Kollāpuram, and the defeat of Āhavamalla at Koppam.

⁵ Here two or three *akṣaras* are lost.

“In the twelfth year (of the reign) of king Rājakēsarivarman¹ alias the lord śrī-Rājēndradēva, who was pleased to be seated on the throne of heroes,—during the full-moon *tithi* of the month of Phālguna in the year (which was) the Śaka year 984.”

This date does not admit of verification. All that I can say about it, is, that if the Śaka year is Śaka-Saivvat 984 expired, the date, which is stated to be of the twelfth year of the king's reign, will ordinarily correspond to the 15th February A.D. 1063. From No. 38, below, it will be seen that this day fell really in the eleventh year of the king's reign.

38.—In the Rājagōpāla-Perumāḷ temple at Maṇimaṅgalam.³

- 13 kō=Ppara[k]ēsarī[panmar]=āna [u]ḍai[y]ār śrī-
 Rājēndradēvaṅ[ku] yāṇḍu nālāva-
 14 du [nā*]ḷ 8[2] ḷ ivv-āṭṭai Si[m*]ha-nāyayṅṅu
 apara-paksha[t]tu aṣṭamiyūm Viyāḷa-kkilaṅṅaiyūm
 15 peṅṅa Rōja(hi)ṅi-nāl.

“On the 8[2]nd day of the fourth year (of the reign) of king Parakēsarivarman alias the lord śrī-Rājēndradēva,—on the day of Rōhiṅī, which corresponded to a Thursday and to the eighth *tithi* of the second fortnight of the month of Siṅha in this year.”

Of the years indicated in a general way by the two preceding dates, the one which yields a correct (and a most satisfactory) result for this date, is Śaka-Saivvat 977 expired. In that year the month of Siṅha lasted from the 27th July to the 26th August A.D. 1055; and during that time the 8th *tithi* of the dark half (which was the 8th *tithi* of the dark half of the *amānta* *nija* Śrāvāṇa) commenced 14 h. 20 m. after mean sunrise of Thursday, the 17th August A.D. 1055, when the *nakṣatra* was Rōhiṅī, from sunrise (or, by the equal space system, from about midday) to the end of the day. Although the *tithi* commenced so late in the day, the result is correct, because the *tithi* with which we are concerned is the *Janm-āṣṭamī* or *Kṛishṇa-āṣṭamī*, a *tithi* which must be joined with that day of which the time of midnight is occupied by it, and which therefore, in the present instance, could have been joined only with the Thursday on which it commenced about four hours before midnight. The occasion was the more auspicious as the *nakṣatra* at midnight was Rōhiṅī.³

The equivalent of this date, then, undoubtedly is Thursday, the 17th August A.D. 1055. As this was the 82nd day of the fourth year of the king's reign, the first day of the fourth year was the 28th May A.D. 1055, and Rājēndradēva's reign commenced (approximately) on the 28th May A.D. 1052. The result shews that the equivalent of the date No. 36 (the 27th October A.D. 1057) fell in the sixth year of his reign, while the equivalent suggested for No. 37 (the 15th February A.D. 1063) fell in the eleventh, not in the twelfth year.

For convenience of reference the commencement of the reigns of the seven Chōla kings whose dates have been examined in the preceding, may now be given thus:—

- 1.—Rājārāja : between the 25th June and the 25th July A.D. 985.
- 2.—Rājēndra-Chōla I. : between the 26th November A.D. 1011, and the 7th July 1012.
- 3.—Rājādhirāja : between the 15th March and the 3rd December A.D. 1018.
- 4.—Rājēndradēva : (approximately) the 28th May A.D. 1052.
- 5.—Kulōttuṅga-Chōla I. : between the 14th March and the 8th October A.D. 1070.
- 6.—Vikrama-Chōla : (most probably) the 18th July A.D. 1108.
- 7.—Kulōttuṅga-Chōla III. : between the 8th June and the 8th July A.D. 1178.

¹ In all other published inscriptions the king bears the surname Parakēsarivarman.

² *South-Ind. Inscr.* Vol. III. No. 29, pp. 61 and 63.

³ Compare *Ind. Ant.* Vol. XXVI. p. 132, *Śrāvāṇa-kṛishṇa-paksha* VIII.

No. 27.— DATES OF CHOLA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

(Continued from page 24.)

A.— KULOTTUNGA-CHOLA I.

39.— Near the Nāgēśvara temple at Chēbrōlu.²

1	Svasti	Śakha(ka)-varshamblu	998	n=ēmti	Nala-sam(sam)vatasa-
2	ra	śrāhi	svasti		Sarvvalōkāsraya-śrī-
3	Vishnu(śhnu)	varddhana-mahārājula			pravarddhamā-
4	na-vijaya-rājya-sam(sam)vatasa(mblu)		7	n=ēgdu	Māgha-māsamuna
6					sōmagrahapa-
7	punnamayu	Su(śu)kravāramuna			
8	nimittamunan-				

"In the Śaka year 998, in the year² (which was) the Nala year, (and) in the 7th year of the increasing reign of victory of the asylum of the whole world, the glorious Vishnuvardhana-mahārāja,— on the occasion of an eclipse of the moon on Friday, the full-moon tithi of the month of Māgha."

As the reign of Kulōttunga-Chōla I. commenced⁴ between the 14th March and the 8th October A.D. 1070, a date in the month of Māgha of his 7th year must fall about the commencement of A.D. 1077, in Śaka-Samvat 998 expired which was the Jovian year Nala (Anala). In this year the full-moon tithi of Māgha ended 23 h. 51 m. after mean sunrise of Wednesday, the 11th January A.D. 1077, when there was no eclipse. But there was an eclipse of the moon, visible in India, from 17 h. 9 m. to 20 h. 13 m. after mean sunrise of Friday, the 10th February A.D. 1077, which was the full-moon day of Phālguna. I have no doubt that this is the day intended by the inscription, and that in the original date the month of Māgha has been quoted erroneously⁵ instead of Phālguna.

² No. 151 of the Government Epigraphist's collection for 1897; see p. 220 above.

³ For the word śrāhi compare *Ind. Ant.* Vol. XXV. p. 285.

⁴ See above, p. 24.

⁵ The case is different with the date of the Nauskri plates of Suvarnavarsha Karkarāja of Gujarrat, edited in *Jour. Bo. As. Soc.* Vol. XX. p. 136 ff., which quotes a lunar eclipse in the month of Māgha of Śaka-Samvat 738 expired. The eclipse undoubtedly is the one of the 5th February A.D. 817, which by the rules now in force would be the full-moon day of Phālguna. The original date is nevertheless correct, because by the rules of mean intercalation Māgha in Śaka-Samvat 738 was an intercalary month, so that the month which we now should call Phālguna, in accordance with those rules would have been called the second (or proper) Māgha, or simply Māgha, as it is actually called in the inscription. In Śaka-Samvat 998 expired there was no intercalation of either description.

40.— In the Bhimōśvara temple at Drākstārāma.¹

- 1 [Sva]sti Śaka-va[r*]shambulu 1036 svasti Sarvvalōkāsraya-śrī-Vishnuvarddhana-mā(ma)hārājula
- 2 [pra]varddhamāna-vijaya-rājya-divya-samvatasa 45 Dhanu-māsamuna śukla-pa[kshamu]na śkāda-
- 3 [ś]iyu Budhavāramu nāpdu uttarāyana-vyatiyipāta-nimittamuna.

"In the Śaka year 1036 (and) the 45th heavenly year of the increasing reign of victory of the asylum of the whole world, the glorious Vishnuvardhana-mahārāja,— on Wednesday, the eleventh tithi of the bright fortnight of the month of Dhanus,— on the occasion of the vyatipāta of the Uttarāyana."

A date in the month of Dhanus of the 45th year of the king's reign will be expected to fall near the end of A.D. 1114, in Śaka-Samvat 1036 expired. In this year the 11th tithi of the bright fortnight in the month of Dhanus commenced 7 h. 52 m. after mean sunrise of Wednesday, the 9th December A.D. 1114 (when the nakshatras were Aśvini and Bharanī, and the yōgas Śiva and Siddha, Nos. 20 and 21, not Vyatipāta, No. 17), and ended 5 h. 53 m. after mean sunrise of the following day.— The sidereal Uttarāyana-samkrānti took place, by the Ārya-siddhānta, 20 h. 18 m. after mean sunrise of Thursday, the 24th December A.D. 1114, which was the last day of the month of Dhanus, and on which the 11th tithi of the dark fortnight ended 14 h. 48 m. after mean sunrise. The nakshatra on the same day was Anurādhā, and the yōgas were Gaṇḍa and Vṛiddhi, Nos. 10 and 11.— Lastly, the tropical Uttarāyana-samkrānti took place on Wednesday, the 16th December A.D. 1114, on which ended the 3rd tithi of the dark fortnight in the month of Dhanus.

Having considered these results of my calculations, I have come to the conclusion that the choice of the proper equivalent of the original date can only lie between Wednesday, the 9th, and Thursday, the 24th December A.D. 1114; and the following reasons make me decide in favour of Wednesday, the 9th December A.D. 1114. If we were to accept Thursday, the 24th December A.D. 1114, as the equivalent of the date, the writer would have been guilty of quoting, not only a wrong weekday, but also a wrong lunar fortnight. On the other hand, accepting Wednesday, the 9th December, as the equivalent, we indeed have to admit that the words *uttarāyana-vyatipāta-nimittamuna*— supposing them to be intended for 'on the occasion of the Uttarāyana-samkrānti,'— have been wrongly added; but similar statements are added, apparently wrongly, in many other dates where the word *vyatipāta* is made use of.⁴ In the date under discussion and in a number of other dates this term can neither denote the yōga Vyatipāta nor convey any of the three other meanings of *vyatipāta* which I have given in *Ind. Ant.* Vol. XX. p. 292 f. What it means exactly, I do not know; but it may be suggested that *e.g.* in the present date the writer by *uttarāyana-vyatipāta* wishes to say, not that the donation— for such I suppose to be spoken of— was actually made at the Uttarāyana-samkrānti, but that it shall be regarded as equivalent in merit to one which may be made on the occasion of an Uttarāyana-samkrānti.

B.— VIKRAMA-CHOLA.

41.— In the Kailāsanātha temple at Sevillimēdu.⁵

- 2 Śrīmad-Vikra[ma]-Chōlādēva-nripatēr-vva[rshē] śubhā shōḍaśē grāmē śrī-Nripasundar-śtī viditē Vaiśākha-māsē-parē [r*] pakshē s-Ōttara-Chandravāra-viditē kalē.

¹ No. 374 of the Government Epigraphist's collection for 1893; see above, p. 220 f.

² Read *vyatipāta*.

³ *Uttarāyana-vyatipāta* undoubtedly is equivalent to *uttarāyana-samkrānti-vyatipāta* which occurs in at least eight other dates.

⁴ Compare *Ind. Ant.* Vol. XXV. p. 292. note 52. The dates referred to in that note are all in Kanarese, and I have not found yet any Sanskrit date in which the word *vyatipāta* is similarly employed.

⁵ No. 43 of the Government Epigraphist's collection for 1900; see above, pp. 228 and 229.

"In the auspicious sixteenth year (of the reign) of the glorious king Vikrama-Chôjadêva, in the month of Vaiśākha, in the second fortnight, at the time known as Monday combined with an Uttarâ (nakshatra)."

The term *Uttarâ* of the date might denote any one of the three *nakshatras* Uttarâ Phalguni, Uttarâ Ashâdâhâ, and Uttarâ Bhâdrapadâ. As it occurs here in connection with the dark fortnight of Vaiśākha, it must denote either Uttarâ Ashâdâhâ which is generally joined with the 5th *tithi*, or Uttarâ Bhâdrapadâ which is generally joined with the 11th *tithi* of that dark fortnight. The calculation of the date shows that the *nakshatra* intended is really Uttarâshâdâhâ, and that the *tithi* of the date would be the 5th of the dark fortnight of Vaiśākha.

I have previously¹ arrived at the conclusion that the reign of Vikrama-Chôja commenced 'most probably' on the 18th July A.D. 1108. There remained just the possibility² that it might have commenced on the 15th July A.D. 1111. If it commenced on the earlier date, the present date, of the month of Vaiśākha of the 16th year of the king's reign, ought to fall in A.D. 1124, in Śaka-Samvat 1046 expired; and if it commenced on the later date, the present date ought to fall in A.D. 1127, in Śaka-Samvat 1049 expired. It so happens that the date would be quite correct for either Śaka year.

In Śaka-Samvat 1046 expired the 5th *tithi* of the dark fortnight of Vaiśākha ended 14 h. 57 m. after mean sunrise of Monday, the 5th May A.D. 1124, when the *nakshatra* was Uttarâshâdâhâ, by the equal space system and according to Garga for 13 h. 8 m., and by the Brahma-siddhânta for 6 h. 34 m., after mean sunrise.

And in Śaka-Samvat 1049 expired the same *tithi* ended 19 h. 54 m. after mean sunrise of Monday, the 2nd May A.D. 1127, when the *nakshatra* was Uttarâshâdâhâ, by the equal space system and according to Garga for 23 h. 38 m., and by the Brahma-siddhânta for 17 h. 4 m., after mean sunrise.

There is absolutely nothing which could make us prefer one of these possible equivalents to the other, and it is only the following date, No. 42, which in my opinion definitely shows that the king's reign commenced in A.D. 1108, and that the true equivalent of the present date therefore is Monday, the 5th May A.D. 1124.

42.—In the Késavasvâmin temple at Chêbrôlu.³

10 śrîma[t*]-Tribh[u]-
11 vanachakravartti Vikrama-Chô-
12 jadêvara pravardda(rddha)mâna-vi-
13 jaya-râjya-samvatsarambu-
14 lu 9 agun=ê[nti] Sa(śa)ka-[va]-
15 rushambulu 1049 a-
16 gu Shla(pla)va-samvatsara Jêshṭa-⁴
17 mâsa sômagrahana(pa)-nimitya-
18 muna.

"In the 9th year of the increasing reign of victory of the glorious emperor of the three worlds, Vikrama-Chôjadêva, (and) in the Plava year which was the Śaka year 1049,—on the occasion of an eclipse of the moon in the month of Jyaisṭha."

In Śaka-Samvat 1049 expired which was the year Plavaṅga—not Plava, which would be Śaka-Samvat 1043 expired—there was a lunar eclipse, visible in India just after sunset on the 27th May A.D. 1127, which was the full-moon day of Jyaisṭha. If the king commenced to reign on the 18th July A.D. 1108, this day would fall in the 19th, not the 9th year of his reign.

¹ See above, p. 24.

² See above, Vol. IV. pp. 78 and 264.

³ No. 153 of the Government Epigraphist's collection for 1897; see above, pp. 224, 226, and 227.

⁴ Read *Jyêshṭha*- or, more correctly, *Jyaisṭha*.

I have no doubt that the 27th May A.D. 1127 is the proper equivalent of this date, and believe that the writer erroneously has quoted the 9th instead of the 19th regnal year, and the year Plava instead of Plavaṅga. And, as intimated already, this date, faulty as it is, in my opinion would definitely prove that Vikrama-Chôja commenced to reign on the 18th July A.D. 1108.

43.—In front of the Chôlêsvara temple at Niçubrôlu.¹

62 Svasti śrîmat-Tribhuvanachakravartti
63 śrî-Vikrama-Chôjadêvara vijaya-
64 râjya-samvatsarambulu pa[djyêd=a-
65 gun=êmṭu Śaka-varshambulu 1054
66 gan=êmṭṭi Vaiśākha-suddha-tṭṭiyya-
67 yu² Guruvâramu nâṇḍu ||

"In the seventeenth year of the reign of victory of the glorious emperor of the three worlds, the glorious Vikrama-Chôjadêva, (and) in the Śaka year 1054,—on Thursday, the third *tithi* of the bright (fortnight) of Vaiśākha."

The date is correct for Śaka-Samvat 1054 current, when the 3rd *tithi* of the bright fortnight of Vaiśākha ended 6 h. 14 m. after mean sunrise of Thursday, the 2nd April A.D. 1131.

According to what we have found before, this day would fall in the 23rd, not the 17th, year of Vikrama-Chôja's reign. A date in the month Vaiśākha of his 17th year would fall in A.D. 1125, in Śaka-Samvat 1048 current; but for that year the date would be incorrect. I can only assume that the writer has quoted the regnal year erroneously.

C.—KULOTTUNGA-CHOLA III.

44.—In the Êkâmrânâtha temple at Conjeeveram.³

1 Tribhuvanachchakravattiga Maduraiyum Pândiya[ṅ] muṭi-
ttalai[yu]h=gonḍ=aru[li]ya śrî-Kulôttunga-Sôjadêvaṅku yâṇḍu 27 âvadu
2 ivv-âṇḍai Vaigâsi-mâsattu=p[pa]diṅṅân-diyadiyum Vi[yâ]la-
ki[la]mai peṅga Aṅṅalamum=âṅṅav=âṅṅu.

"In the 27th year (of the reign) of the emperor of the three worlds, the glorious Kulôttunga-Chôjadêva, who was pleased to take Madurai and the crowned head of the Pândya,—on the day of Anurâdhâ, which corresponded to a Thursday and to the eleventh day of the month of Vaigâsi in this year."

As we have found⁴ that Kulôttunga-Chôla III. commenced to reign between the 8th June and the 8th July A.D. 1178, a date in the month of Vaigâsi, i.e. the solar month Jyaisṭha, of his 27th year must fall in A.D. 1205, in Śaka-Samvat 1127 expired. In this year the Vriahabha-samkrânti by the Ârya-siddhânta took place 15 h. 44 m. after mean sunrise of Sunday, the 24th April A.D. 1205, and the 11th day of Vaigâsi therefore was Thursday, the 5th May A.D. 1205. The *nakshatra* on this day was Anurâdhâ, by the equal space system and according to Garga for 9 h. 51 m., and by the Brahma-siddhânta for 4 h. 36 m., after mean sunrise.

D.—RAJARAJA III.

45.—In the Jambukêsvara temple near Śrirângam.⁵

1 Svasti śrîṭ [||*] [Ś]r maṅgi

¹ No. 163 of the Government Epigraphist's collection for 1897.

² Read *-tṭṭiyya*.

³ No. 10 of the Government Epigraphist's collection for 1893; compare *South-Ind. Inscr.* Vol. III. p. 122 and note 9.

⁴ See above, p. 24.

⁵ No. 23 of the Government Epigraphist's collection for 1891.

- 3 kô Irâsakêsaripaṅmar-âṅa Tiribu[va]ṅachchakkaravatti[ga] śrī-
Râjarâjadēvarṅku yâṅḍu 16 vadiṅ
4 edir-âm-âṅḍu Kappi-nâyaru-ppûrvva-pakshattu daṣamiyum Śaṅi-kkijamaiyu[m]
peṅṅa Tiruvôṅattu nâi.

"In the year which was opposite the 16th year (of the reign) of king Râjakêsarivarman *alias* the emperor of the three worlds, the glorious Râjarâjadēva,— on the day of Śravaṇa, which corresponded to a Saturday and to the tenth *tithi* of the first fortnight of the month of Kanyâ."

To simplify matters, I may state here at once that this date and the following dates 46-54 work out well on the supposition that the reign of Râjarâja III. commenced between (approximately) the 17th March and the 13th August A.D. 1216.

The year opposite the 16th was the 17th year of the king's reign. A date in the month of Kanyâ of this year must fall in A.D. 1232, in Śaka-Saṁvat 1154 expired. In this year the 10th *tithi* of the bright fortnight in the month of Kanyâ ended 13 h. 19 m. after mean sunrise of Saturday, the 25th September A.D. 1232, when the *nakshatra* was Śravaṇa, by the equal space system and according to Garga for 5 h. 16 m., and by the Brahma-siddhânta for 6 h. 34 m., after mean sunrise.

46.— In the Ēkâmranâtha temple at Conjeeveram.¹

- 1 Svast[i] śr[i]ḥ [o.] Tr[i]bhuvanaścha(cha)kravattiga| śrī-Râjarâjadēvarṅku
yâṅḍu 17 vadu
2 Magara-nâyaru pûrvva-pakshattu=Têe(chche)vvây-kkijamaiyum
Aśvatiyumu-â[ṅa]v-aṅṅu.

"In the 17th year (of the reign) of the emperor of the three worlds, the glorious Râjarâjadēva,— on the day of Aśvini and a Tuesday in the first fortnight of the month of Makara."

This date, in the month of Makara of the 17th year of the king's reign, must fall in Śaka-Saṁvat 1154 expired. In this year the 6th *tithi* of the bright fortnight in the month of Makara ended 8 h. 47 m. after mean sunrise of Tuesday, the 18th January A.D. 1233, when the *nakshatra* was Aśvini for 20 h. 59 m. after mean sunrise.

47.— In the Dharmêśvara temple at Maṅimaṅgalam.²

- 1 Tribhuvanachchakkarava[t]tuga| śrī-Râjarâjadēvarṅku yâṅḍu 18
vadu Simha-nâ-
2 [ya]ṅḍu apara-pakshattu dvi[t]yaiyuñ-Jevvây-kkijamaiyum peṅṅa Rêvatî-nâ[.].

"In the 18th year (of the reign) of the emperor of the three worlds, the glorious Râjarâjadēva,— on the day of Rêvatî, which corresponded to a Tuesday and to the second *tithi* of the second fortnight of the month of Simha."

This date, in the month of Simha of the 18th year of the king's reign, may be expected to fall in A.D. 1233, in Śaka-Saṁvat 1155 expired. In this year the second *tithi* of the dark fortnight in the month of Simha ended 8 h. 30 m. after mean sunrise of Tuesday, the 23rd August A.D. 1233, when the *nakshatra* was Rêvatî from 3 h. 56 m. after mean sunrise.

48.— In the Râjagôpâla-Perumâ] temple at Maṅimaṅgalam.³

- 1 T[i]ribhuvanachchakkaravatt[i]ga[.]| śrī-Râjarâjadēvarṅ-

¹ No. 6 of the Government Epigraphist's collection for 1893.

² *South-Ind. Inscr.* Vol. III. No. 41.

³ *South-Ind. Inscr.* Vol. III. No. 39.

- 2 ku yâṅḍu 18 vadu Dhanu-nâya[.][.]u pûrvva-pakshattu pañchamiyumu Budaṅ-
kkijamaiyum pe-
3 ṅṅa Aviṭattâ-ṅâ[.].

"In the 18th year (of the reign) of the emperor of the three worlds, the glorious Râjarâjadēva,— on the day of Dhanishṭhâ, which corresponded to a Wednesday and to the fifth *tithi* of the first fortnight of the month of Dhanu."

This date, in the month of Dhanu of the 18th year of the king's reign, must fall in the same year as the last, Śaka-Saṁvat 1155 expired. In this year the 5th *tithi* of the bright fortnight in the month of Dhanu ended 17 h. 21 m. after mean sunrise of Wednesday, the 7th December A.D. 1233, when the *nakshatra* was Dhanishṭhâ for 8 h. 32 m. after mean sunrise.

49.— In the Râjagôpâla-Perumâ] temple at Maṅimaṅgalam.¹

- 2 Tribhuvanachchakkarava[r]tuga[.]| śrī-Râjarâjadēvarṅku yâṅḍu 18
âva[.]dju
3 Magara-nâyaru pûrvva-pakshattu prathamaiyumu Tiṅgaṭ-kkijamaiyum peṅṅa
Tiruvô[.]ṅatu nâi.

"In the 18th year (of the reign) of the emperor of the three worlds, the glorious Râjarâjadēva,— on the day of Śravaṇa, which corresponded to a Monday and to the first *tithi* of the first fortnight of the month of Makara."

This date, in the month of Makara of the 18th year of the king's reign, also must fall in Śaka-Saṁvat 1155 expired. In this year the first *tithi* of the bright fortnight in the month of Makara ended 11 h. 3 m. after mean sunrise of Monday, the 2nd January A.D. 1234, when the *nakshatra* was Śravaṇa for 17 h. 4 m. after mean sunrise.

50.— In the Âdhipuriśvara temple at Tiruvorriyûr.²

- 2 Tribhuvanachcha[k*]karavattiga| śrī-Râjarâja-
3 d[ê]vârṅku yâṅḍu 19 vadu Si[m*]ha-nâyaru-p-
4 p[â]rvva-pakshattu trit[ti]yayiyumu Uttirattâdiyumu pe-
5 ṅṅa Nâyaru-kkijamai-nâi.

"In the 19th year (of the reign) of the emperor of the three worlds, the glorious Râjarâjadēva,— on a Sunday which corresponded to (the day of) Uttara-Bhadrapadâ and to the third *tithi* of the first fortnight of the month of Simha."

This date, in the month of Simha of the 19th year of the king's reign, ought to fall in A.D. 1234, in Śaka-Saṁvat 1156 expired. This it undoubtedly does, but the date is not quite correct. In Śaka-Saṁvat 1156 expired the third *tithi* of the bright fortnight in the month of Simha ended 16 h. 56 m. after mean sunrise of Sunday, the 30th July A.D. 1234, when the *nakshatra* was Uttara-Phalgunî for 21 h. 1 m. after mean sunrise; and the third *tithi* of the dark fortnight in the same month ended 14 h. 53 m. after mean sunrise of Sunday, the 13th August A.D. 1234, when the *nakshatra* was Uttara-Bhadrapadâ for 5 h. 55 m. after mean sunrise. This shows that either the *nakshatra* Uttirattâdi has been wrongly quoted for Uttiram (Uttara-Phalgunî), or that instead of pûrvva-pakshattu we must read apara-pakshattu. I am inclined to adopt the latter alternative,³ and to regard Sunday, the 13th August A.D. 1234, as the proper equivalent of the date.

¹ *South-Ind. Inscr.* Vol. III. No. 40.

² No. 110 of the Government Epigraphist's collection for 1893.

³ At the same time, I may state that in one of the Vijayanagar inscriptions (*P.S.O.C.I.* No. 25) Uttara-Bhadrapadâ has really been wrongly quoted instead of Uttara-Phalgunî. The mistake made in the present inscription has also been made in the Kadamba plates in *Ind. Ant.* Vol. VII. p. 35.

51.— In the Śvētāranyēśvara temple at Tiruveṅgāḍu.¹

1 Svasti śrīḥ [||*] Tribhuvāṇachchakkaravattiga! śrī-Rājarājadēvarḥku yāṇḍu 22 vadu Mīṇa-nāyaṅṅu apara-pakḥattu śa[d]u[r*]tthiy[u]m Śe[v*]v[āy]-kīlāmai[u]m peṅṅa Utīratīādi-nāḥ.

In the 22nd year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Uttara-Bhadrapadā, which corresponded to a Tuesday and to the fourth tithi of the second fortnight of the month of Mīna.”

This date, in the month of Mīna of the 22nd year of the king's reign, would be expected to fall in A.D. 1238, in Śaka-Samvat 1159 expired, and it undoubtedly does so; but the wording of the date is intrinsically wrong because, in the month of Mīna, the nakshatra can never be Uttara-Bhadrapadā on the 4th tithi of the dark fortnight. What suggests itself at once is that the fourth tithi has been quoted wrongly instead of the fourteenth; and for this tithi the date is correct. In Śaka-Samvat 1159 expired the 14th tithi of the dark fortnight in the month of Mīna ended 21 h. 37 m. after mean sunrise of Tuesday, the 16th March A.D. 1238, when the nakshatra was Uttara-Bhadrapadā, by the Brahma-siddhānta and according to Garga during the whole of the day, and by the equal space system from 9 h. 51 m. after mean sunrise. I feel certain that this is the proper equivalent of the date.

52.— In the Rājagōpāla-Perumāḥ temple at Maṅṅārguḍi.²

1 Svasti śrīḥ [||*] Tribhuvāṇa[chcha]k[arava]ttiga! [śrī]-Rājarājadēvar[ḥ]kku yāṅḍu [i]rubattiraṇ[ḍ]āvadi[ṅ] edir-ām-āṇḍu ³Mīṇa-nāyaṅṅu [a]para-pakḥa[t]tu navam[i]yumu Tiṅga-kīlāmaiyyum peṅṅa Pūr[āḍa]ttu [nā].

“In the year which was opposite the twenty-second year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Pūrvaśāḍhā, which corresponded to a Monday and to the ninth tithi of the second fortnight of the month of Mīna.”

The year opposite the 22nd year of this date and of the two following dates was the 23rd year of the king's reign, and the three dates, being all of the month of Mīna, will therefore be expected to fall in A.D. 1239, in Śaka-Samvat 1160 expired. In this year the 9th tithi of the dark fortnight in the month of Mīna entirely occupied⁴ Monday, the 28th February A.D. 1239, when the nakshatra was Pūrvaśāḍhā, by the equal space system the whole day, by the Brahma-siddhānta for 11 h. 10 m., and according to Garga for 16 h. 25 m., after mean sunrise.

53.— In the Kailāsanātha temple at Maṅṅārguḍi.⁵

1 Svasti [i] śrī [||*] Tr[i]bhuvā[ṅa]chchakkaravattiga! śrī-Rājarā[ja]dēvaḥkku yāṅḍu i[rubatt]iraṇ[ḍ]āvadi[ṅ] edir-ām-āṇḍu Mi(mī)ṅa-nāya[ṅ]ṅu apara-pa[kḥatt]u da[sam]i[yumu] Budan-kīlā[mai]yumu p[e]ṅṅa Utīrāḍa[t]tu nāḥ.

“In the year which was opposite the twenty-second year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Uttaraśāḍhā, which corresponded to a Wednesday and to the tenth tithi of the second fortnight of the month of Mīna.”

¹ No. 119 of the Government Epigraphist's collection for 1896.

² No. 104 of the Government Epigraphist's collection for 1897.

³ Read *Mīna*.

⁴ It commenced 38 m. before mean sunrise of the Monday and ended 1 h. 12 m. after mean sunrise of the following Tuesday, and would therefore be properly described (for the Monday) as *prathamā-nacant*.

⁵ No. 99 of the Government Epigraphist's collection for 1897.

In Śaka-Samvat 1160 expired¹ the 10th tithi of the dark fortnight in the month of Mīna ended 2 h. 59 m. after mean sunrise of Wednesday, the 2nd March A.D. 1239, when the nakshatra was Uttaraśāḍhā, by the equal space system and according to Garga for 9 h. 51 m., and by the Brahma-siddhānta for 3 h. 17 m., after mean sunrise.

54.— In the Kailāsanātha temple at Maṅṅārguḍi.²

1 Svasti [śrī] [||*] Tribhuvāṇachchakkaravattiga! śrī-Rājarājadēvarḥku [y]āṅḍu irubattiraṇ[ḍ]āvadi[ṅ] ed[i]r-ām-āṅḍu M[i]ṅa-nā[ya]ṅṅu a³ [tray]ē[d]i[ḍ]iyu[m] Vell[i]-kk[i]lāmai[yumu] p[e]ṅṅa A[vi]ṭṭat[tu] nāḥ.

“In the year which was opposite the twenty-second year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Dhanishṭhā, which corresponded to a Friday and to the thirteenth tithi of the second fortnight of the month of Mīna.”

In Śaka-Samvat 1160 expired⁴ the 13th tithi of the dark fortnight in the month of Mīna commenced 5 h. 57 m. after mean sunrise of Friday, the 4th March A.D. 1239, when the nakshatra was Dhanishṭhā for 13 h. 8 m. after mean sunrise.

¹ See date No. 52.

² No. 96 of the Government Epigraphist's collection for 1897.

³ Restore *apara-pakḥattu*.

⁴ Read *trayōdaśyam*.

⁵ See date No. 52.

No. 1.— DATES OF CHOLA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

(Continued from Vol. VI. page 285.)

A.—PARANTAKA I.

55.— In the Késava-Perumāḥ temple at Kūram.¹

1 Svasti [i] śrī [||*] [Ma]d[irai] ko[ḍ]ḍ-ī[ḥ]am pu[ḅ]ḅḅa [kō]-Pparakkē[sa]ri[pan]-ma[r*]k[ku] yāṅḍu nāṅḅḅavadu
2 i[v*]v-āḥ[ḥ]ai . . . [ḍa]ga-nāya[ṅ]ṅu apara-pa[kḥa]t[tu]nāḥ=Chohaṅi-kīlāmaiyyum nava[m]iyumu peṅṅa Urōyaṅi-nāḥ irātri.

“In the fortieth year (of the reign) of king Parakésarivarman who took Mēdirai and entered Iḥam,— at night on the day of Bōhiḅ, which corresponded to a Saturday and to the ninth tithi of the second fortnight of the month of [Karkāṭa]ka in this year.”

Although I am unable to give with confidence the actual equivalent of this date, I may state that between A.D. 900 and 985 the only years for which the date would be quite regular are A.D. 919 and 946.

For A.D. 919 the date would correspond to Saturday, the 24th July, which was the 30th day of the month of Karkāṭaka, and on which the 9th tithi of the dark half (of the month Śrāvaṇa) ended 4 h. 41 m., and the nakshatra was Bōhiḅ for 17 h. 44 m., after mean sunrise.

And for A.D. 946 it would correspond to Saturday, the 25th July, which was the last day of the month of Karkāṭaka, and on which the 9th tithi of the dark half (of the month Śrāvaṇa) ended 13 h. 11 m. after mean sunrise, and the nakshatra was Bōhiḅ the whole day.

B.—KULOTTUNGA-CHOLA I.

56.— In the Lakshminārāyaṇa temple at Kāvāntaḅḅalam.²

1 Svasti śrī [||*] Tiru ma[ḅ]ḅi viḅāṅga

¹ No. 24 of the Government Epigraphist's collection for 1900.

² Read perhaps *Karkāḍaga*.

³ No. 206 of the Government Epigraphist's collection for 1901; *South-Ind. Inscri.* Vol. III. No. 77.

2 kôv=Irâjakêsarivatmar-âpa udaiyâr śri-[R]âjêndra-Śôladêvaykku
yâpû 4âvadu
3 ivv-âṣṭai Mṛi(vṛi)śchika-nâyagru pûrvva-pakshattu 'shashṭiyut=
Tiruvôpamum peṛra Vi[y]â-kki]amai-nâ[ṇ]ru.

"In the 4th year (of the reign) of king Râjakêsarivarma *alias* the lord, the glorious Râjêndra-Chôladêva,— on a Thursday which corresponded to (the day of) Śravaṇa and to the sixth *tithi* of the first fortnight of the month of Vṛiśchika in this year."

A date of the fourth year of the king's reign will be expected to fall in A.D. 1073 or 1074, and this date actually corresponds to Thursday, the 7th November A.D. 1073. This was the 12th or 13th day of the month of Vṛiśchika, and on it the 6th *tithi* of the bright half (of the month Mârgasîra) commenced 1 h. 38 m. after mean sunrise, while the *nakshatra* was Śravaṇa, by the equal space system and according to Garga for 23 h. 38 m. after mean sunrise, and by the Brahma-siddhânta the whole day.

C.— VIKRAMA-CHOLA.

For reasons suggested partly by the new dates of this king, I must recapitulate here the *data* furnished by the dates already treated of,² and the results derived from them.

No. 10 (above, Vol. IV. p. 73).—"In the fifth year . . . on the three-hundred-and-fortieth day, which was (the day of the *nakshatra*) Hasta, a Sunday, and the seventh *tithi* of the first fortnight of the month of Mithuna." Taking this date to have been correctly recorded, I found the best equivalent for it between A.D. 1110 and 1125 to be Sunday, the 22nd June A.D. 1113; and counting backwards from this day, I obtained the 18th July A.D. 1108 as the day of the commencement of the king's reign.

No. 21 (*ibid.* p. 263).—"In the 4th year . . . on the day of Śatabhisaj, which corresponded to a Monday and to the eighth *tithi* of the second fortnight of the month of Rishabha." Guided by the result obtained under No. 10, I found this date to correspond to Monday, the 20th May A.D. 1112, when, to omit other particulars, the *nakshatra*, by the equal space system only, was Śatabhisaj for 0 h. 39 m. after mean sunrise.

No. 22 (*ibid.* p. 264).—"In the 5th year . . . on the day of Ârdra, which corresponded to a Monday and to the eleventh *tithi* of the second fortnight of the month of Simha." Guided again by the result obtained under No. 10, I found that this date would correspond to Monday, the 10th August A.D. 1112; but there was the difficulty that on this day the *nakshatra* was Punarvasu, not Ârdra.

No. 41 (above, Vol. VI. p. 279).—"In the . . . sixteenth year . . . in the month of Vaiśākha, in the second fortnight, at the time known as Monday combined with an Uttarâ (*nakshatra*)." Again guided by the result obtained under No. 10, I found that Monday, the 5th May A.D. 1124, would be an unobjectionable equivalent of this date.

No. 42 (*ibid.* p. 280).—"In the 9th year . . . in the Plava year which was the Śaka year 1049, on the occasion of an eclipse of the moon in the month of Jyaishtba." This date for Śaka-Samvat 1049 expired (which was Plavaṅga, not Plava) was found to correspond to the 27th May A.D. 1127, but the result obtained under No. 10 led me to assume that the 9th year of the reign had been quoted erroneously instead of the 19th regnal year.

From this it will be seen that the results obtained under Nos. 21, 22 and 41, as well as the correction suggested with regard to the regnal year of No. 42, mainly depend on the correctness of the *data* furnished by the text of No. 10, which it did not occur to me to suspect. Setting aside the date No. 10, it may be asked, however, how the three dates Nos. 21, 22 and 41

¹ Read *shashṭiyut*.

² I omit here the date No. 43, which will be reconsidered below.

would work out, if the date No. 42 were really, as it is stated to be, a date of the 9th year of Vikrama-Chôla's reign. Supposing this to be the case, the king's reign would have commenced some time between approximately the 28th May A.D. 1118 and the 27th May A.D. 1119, and with such a commencement of the reign the dates Nos. 21, 22 and 41 would yield the following equivalents:—

No. 21, of the 4th year, would correspond to Monday, the 1st May A.D. 1122. This was the 7th day of the month of Vṛishabha, and on it the 8th *tithi* of the dark half (of the month Vaiśākha) ended 13 h. 28 m., while the *nakshatra* was Śatabhisaj, by the equal space system and according to Garga from 0 h. 39 m., and by the Brahma-siddhânta from 1 h. 19 m., after mean sunrise.

No. 22, of the 5th year, would correspond to Monday, the 31st July A.D. 1122. This was the 4th day of the month of Simha, and on it the 11th *tithi* of the dark half (of the month Śravaṇa) ended 4 h. 24 m., while the *nakshatra* was Ârdra, by the equal space system for 12 h. 29 m., and according to Garga for 0 h. 39 m., after mean sunrise.

No. 41, of the 16th year, would correspond to Monday, the 16th April A.D. 1134, when the 6th *tithi* of the dark half of Vaiśākha ended 13 h. 11 m., and the *nakshatra* was Uttarâshâdâ, by the equal space system and according to Garga for 23 h. 38 m., and by the Brahma-siddhânta for 17 h. 4 m., after mean sunrise.

It is quite clear then, that, supposing the king's reign to have commenced between approximately the 28th May A.D. 1118 and the 27th May A.D. 1119, the three dates Nos. 21, 22 and 41 would work out in the best possible manner—better, in fact, than with the 18th July A.D. 1108 as the commencement of his reign, because on the equivalent here found for the date No. 22 the *nakshatra* really was Ârdra, whereas on the equivalent previously given for the same date the *nakshatra* was found to be Punarvasu (instead of the *nakshatra* Ârdra, quoted by the original date).

To the date No. 10 I shall have to revert below. For the present it will be sufficient to state that, irrespectively of No. 10, the four dates Nos. 21, 22, 41 and 42 for the commencement of the reign appear to yield some day between approximately the 28th May and the 31st July A.D. 1118. The new dates of Vikrama-Chôla may be expected to show whether his reign really commenced at the time here given or on the 18th July A.D. 1108.

57.— In the Tyâgarâja temple at Tiruvârûr.¹

8 [Tribhuvana]cha[kra]vatti[ga] śri-[i-Vikrama]-Ch[ô]la[dêvaykku
y]âpû aṅjâvadu Midhuna-nâyagru pûrvva]-paksha[t*]tu pa[ñchami]y[u]m
Magamum peṛra Vi[yâ]a-]kk]amai-nâ].

"In the fifth year (of the reign) of the emperor of the three worlds, the glorious Vikrama-Chôladêva,— on a Thursday which corresponded to (the day of) Maghâ and to the fifth *tithi* of the first fortnight of the month of Mithuna."

If the king's reign commenced on the 18th July A.D. 1108, this date would correspond to Thursday, the 10th June A.D. 1113, which was the 26th day of the month of Mithuna, and on which the 5th *tithi* of the bright half (of the month Âshâdha) commenced 5 h. 15 m., and the *nakshatra* was Maghâ, by the equal space system only, for 7 h. 53 m., after mean sunrise.

On the other hand, if the reign commenced between the 28th May and the 31st July A.D. 1118, the date must correspond to Thursday, the 31st May A.D. 1123, which was the 6th day

¹ No. 164 of the Government Epigraphist's collection for 1894. Another date, which occurs in line 8 of the same inscription, was published above, Vol. IV. p. 73, No. 10.

of the month of **Mithuna**, and on which the 5th *tithi* of the bright half (of the first **Āshāḍha**) ended 11 h. 37 m., and the *nakshatra* was **Maghā**, by the Brahma-siddhānta for 11 h. 10 m., according to Garga for 13 h. 47 m., and by the equal space system from 1 h. 19 m., after mean sunrise.

Theoretically both the equivalents found might be taken to satisfy the requirements of the case, but there can be no doubt that the second, **Thursday, the 31st May A.D. 1123**, would be preferable because the *tithi* of the date ended on that day. This date therefore also would tend to shew, though it would not actually prove, that the king's reign commenced in A.D. 1118.

58.—In the Divyajñānēśvara temple at Kōvilāḍi.¹

1 Svasti śri [||*] I(ti)ribuva[na]śakkaravattiga] śri-Vikkirama-Śōjadēvaḥ-iyāḍu
11āva[d]u Magara-nāyaru [p]ḍ[rvva]-

2 pakshat[t]u trai(tra)yō[da*]siyumu Śaṅi-kilamaiyumu peṅra P[u]narbuda-nā].

"In the 11th year (of the reign) of the emperor of the three worlds, the glorious Vikrama-Chōjadēva,²—on the day of **Punarvasu**, which corresponded to a **Saturday** and to the thirteenth *tithi* of the first fortnight of the month of **Makara**."

If the king's reign commenced on the 18th July A.D. 1108, this date would correspond to Friday, the 27th December A.D. 1118, which was the 3rd day of the month of **Makara**, and on which the 13th *tithi* of the bright half (of the month **Pausha**) ended 16 h. 30 m. after mean sunrise, and the *nakshatra* were **Mṛigaśiṛṣa** and **Ārdra**.

On the other hand, if the king's reign commenced between the 28th May and the 31st July A.D. 1118, the date will correspond to **Saturday, the 5th January A.D. 1120**, which was the 13th day of the month of **Makara**, and on which the 13th *tithi* of the bright half (of the month **Pausha**) ended 5 h. 49 m. after mean sunrise, and the *nakshatra* was **Punarvasu**, by the Brahma-siddhānta and according to Garga the whole day, and by the equal space system from 9 h. 12 m. after mean sunrise.

As this date then would be entirely incorrect if the king's reign had commenced in A.D. 1108, and is in every way correct on the assumption that the reign commenced in A.D. 1118, I take it to prove that the latter was really the case. And in my opinion the six dates Nos. 21, 22, 41, 42, 57 and 58, for which—in entire agreement with the original *data*—absolutely faultless equivalents have now been given, shew beyond a doubt that the reign of **Vikrama-Chōla** must have commenced between approximately the 1st June and the 31st July A.D. 1118.

With the result now obtained, the equivalent previously given for the date No. 10 cannot, of course, be the proper equivalent of that date. A comparison of the dates No. 10 and No. 57, which are both from the same inscription, at once suggests to us that No. 10 is only three days later than No. 57. Both dates are of the first fortnight of the month of **Mithuna** of the 5th year of the king's reign; the week-day of No. 57 is **Thursday**, and that of No. 10 **Sunday**; and the *nakshatra* of No. 57 is **Maghā** (10), while that of No. 10 is **Hasta** (13). If then the equivalent of No. 57 is **Thursday, the 31st May A.D. 1123**, the equivalent of No. 10 can only be **Sunday, the 3rd June A.D. 1123**. This day was the 9th day of the month of **Mithuna**, and on it the *nakshatra* was **Hasta**, by the Brahma-siddhānta for 22 h. 59 m., and by the equal space system and according to Garga from 1 h. 58 m., after mean sunrise; but the *tithi* which ended on the same day, 10 h. 12 m. after mean sunrise, was the 8th, not the 7th *tithi*, of the bright half.

¹ No. 276 of the Government Epigraphist's collection for 1901.

² It is impossible to say *a priori* whether the son of Kulēttinga I. is meant.

Considering the complete agreement of the six dates previously treated of, I have no doubt whatever that **Sunday, the 3rd June A.D. 1123**, is really the day intended by the date No. 10, and that the writer of this date, in recording the *tithi*, has erroneously written *saptamiyumu*, instead of *ashṭamiyumu*.

Since the date No. 10 is stated to have been the 340th day of the 5th year of the king's reign, the first day of that year would now have been the 29th June A.D. 1122, and the accession of **Vikrama-Chōla** must have taken place on (approximately) the 29th June A.D. 1118.¹

The result now arrived at receives an unexpected confirmation from a reconsideration of the date No. 43 (above, Vol. VI. p. 281). This date is of the seventeenth year (given in words) of the king's reign, and of the Śaka year 1054 (given in figures only), and gives us for calculation Thursday, the third *tithi* of the bright half of **Vaiśākha**. When previously examining it, I found that for Śaka-Samvat 1054 current it would correspond to Thursday, the 2nd April A.D. 1131; and as I found it to be incorrect for what I then had to consider the 17th year of the king's reign, I felt no hesitation in accepting Thursday, the 2nd April A.D. 1131, as the true equivalent of the date, and in assuming that the regnal year had been quoted erroneously.

But now, with the 29th June A.D. 1118 as the date of the king's accession, a date in the month **Vaiśākha** of his seventeenth year will be expected to fall in A.D. 1135, and for this year the date regularly corresponds to Thursday, the 18th April A.D. 1135, when the third *tithi* of the bright half of **Vaiśākha** ended 9 h. 30 m. after mean sunrise. I now therefore assume that the date is really of the 17th year of **Vikrama-Chōla**'s reign, and that the Śaka year 1054 has been erroneously quoted instead of 1057 (expired).

59.—In the Vaidyanātha temple at Tirumalavāḍi.³

This inscription is dated in the 15th year of the reign of "king **Parakēsarvarman** alias the emperor of the three worlds, the glorious **Vikrama-Chōjadēva**." In the introduction it is stated that he made gifts to the temple at **Chidambaram** on the following date:⁴—

24 -ppattām-āṅḍil [Ś]i[t]tirai-ttiṅga[!] Atta-
25 m peṅra Ādittavāratu-[t]tiru-vaḷar-madiyin trayōdaśi-ppakkat[tu].

"In the tenth year, (in) the month of **Śittirai**, on a **Sunday** which corresponded to (the day of) **Hasta**, (on) the thirteenth *tithi* of the fortnight of the auspicious waxing moon."

This date, of the month of **Śittirai** (or **Māṣa**) of the 10th year of the king's reign, would be expected to fall in A.D. 1128, and for that year it would actually correspond to **Sunday, the 15th April A.D. 1128**, which was the 23rd day of the month of **Śittirai**, and on which the 13th *tithi* of the bright half (of the month **Vaiśākha**) ended 1 h. 25 m. after mean sunrise. But the *nakshatra* on this day was **Chitrā**, by the equal space system and according to Garga for 17 h. 44 m., and by the Brahma-siddhānta for 14 h. 27 m., after mean sunrise.—If the week-day of the

¹ The following statement will shew at a glance what mistakes the seven dates Nos. 10, 31, 22, 41, 42, 57 and 58 would necessarily contain, if the accession had taken place on either the 18th July 1108 or the 29th June A.D. 1118. If it had taken place on the 18th July A.D. 1108,—

in No. 22, **Ārdra** would have been wrongly quoted for **Punarvasu**;
in No. 42, the 9th year would have been wrongly quoted instead of the 19th;
No. 58 would be entirely incorrect.

On the other hand, assuming it to have taken place on the 29th June A.D. 1118,—
in No. 10, *saptamiyumu* is wrong for *ashṭamiyumu*.

³ No. 52 of the Government Epigraphist's collection for 1895; *South-Ind. Inscr.* Vol. III. No. 79.

⁴ The same date is quoted in the introduction of an inscription of the 11th year at **Āṅḍi** (No. 165 of 1894. l. 4 f.).

date were Saturday, the date would correspond to Saturday, the 14th April A.D. 1128, when the 13th *tithi* of the bright half commenced 2 h. 33 m., and the *nakshatra* was *Hasta*, by the equal space system and according to Garga for 17 h. 44 m., and by the Brahma-siddhanta for 14 h. 27 m., after mean sunrise.—The earliest year of Vikrama-Chôla's reign, in which the date, as recorded, is quite correct, would be the 13th, for which the date would correspond to Sunday, the 12th April A.D. 1131, with the *nakshatra* *Hasta*.

D.—KULOTTUNGA-CHOLA III.

60.—In the Sômanâthésvara temple at Sômañgalam.¹

1 Tribhuvanachchakravartiga Maduraiyum=[Ī]amun-gopd=aruñiṇa
śri-Kulôttunga-Śôladévaṅku yâṇḍu lâvadu Magara-nâyaru pû[r]vva-pakshatn
Viyâja-kkiamaiyum Pû[śa]mnam prathamaiym-âṅava-aru.

"In the 14th year (of the reign) of the emperor of the three worlds, the glorious Kulôttunga-Chôladéva who was pleased to take Madurai and Īlam,—on a day which was Thursday, (the day of) Pushya, and the first *tithi* of the first fortnight of the month of Makara."

The wording of this date is intrinsically wrong, because during the month of Makara the moon can never be anywhere near the *nakshatra* Pushya on the first *tithi* of the first fortnight. The probability is that the first fortnight has been erroneously quoted instead of the second, and for the second fortnight the date is correct.

A date of the month of Makara of the 14th year of the king's reign will be expected to fall in December A.D. 1191 or in January A.D. 1192, and in my opinion this date actually corresponds to Thursday, the 2nd January A.D. 1192, which was the 8th day of the month of Makara, and on which the first *tithi* of the dark half (of the month Pausha) ended 10 h. 12 m., and the *nakshatra* was Pushya, by the equal space system and according to Garga for 3 h. 56 m., and by the Brahma-siddhanta for 1 h. 58 m., after mean sunrise.

For convenience of reference I give below a list of all the dates of Chôla kings examined in Vols. IV.—VII., with the exception only of the date of the 40th year of Parântaka I., No. 55, for which, as possible equivalents, I have given above Saturday, the 24th July A.D. 919, and Saturday, the 25th July A.D. 946. Under the name of each king, I state approximately the time when he must have commenced to reign.

A.—Râjarâja I. Râjakésarivarma.²

(Between the 25th June and the 25th July A.D. 985.)³

- No. 1 (Vol. IV. p. 66).—Year 7 : the 26th September A.D. 991.
No. 25 (Vol. V. p. 48).—Year 15 : Tuesday, the 29th August A.D. 999.
No. 27 (Vol. V. p. 197).—Year 15 : Wednesday, the 15th May A.D. 1000.⁴
No. 2 (Vol. IV. p. 67).—Śaka 929 (current). This date is incorrect.
No. 3 (Vol. IV. p. 68).—Year 28, Śaka 934. The date would correspond to the 23rd December A.D. 1012, but contains no details for verification.

¹ No. 189 of the Government Epigraphist's collection for 1901.

² Or Késarivarma. ³ See Vol. VI. p. 20.

⁴ In the original date the week-day is wrongly given as Thursday, instead of Wednesday.

B.—Râjendra-Chôla I. Parakésarivarma.

(Between the 26th November A.D. 1011 and the 7th July A.D. 1012.)

- No. 32 (Vol. VI. p. 20).—Year 9, Śaka 943 (current) : Thursday, the 7th July A.D. 1020.
No. 4 (Vol. IV. p. 68).—Śaka 943 (current) : Wednesday, the 1st March A.D. 1021.
No. 5 (Vol. IV. p. 69).—Year 31 (for 21),¹ Śaka 954 : Monday, the 23rd October A.D. 1032.
No. 33 (Vol. VI. p. 21).—Year 22, Śaka 955 : Sunday, the 25th November A.D. 1033.
No. 34 (Vol. VI. p. 21).—Year 26, Śaka 959. This date is incorrect.

C.—Râjâdhirâja Râjakésarivarma.

(Between the 15th March and the 3rd December A.D. 1018.)

- No. 15 (Vol. IV. p. 218).—Year [3]2 (for 22) : Thursday, the 22nd November A.D. 1039.
No. 12 (Vol. IV. p. 216).—Year 26 : Wednesday, the 14th March A.D. 1044.
No. 13 (Vol. IV. p. 217).—Year 27 : Wednesday, the 13th February A.D. 1045.
No. 14 (Vol. IV. p. 217).—Year 29 : Wednesday, the 3rd December A.D. 1046.²
No. 11 (Vol. IV. p. 216).—Year 30, Śaka 970 (current). The date does not admit of verification.
No. 35 (Vol. VI. p. 22).—Year 35, Śaka 975 : probably Sunday, the 23rd May A.D. 1053.³

D.—Râjêndradéva Parakésarivarma.⁴

(The 28th May A.D. 1052.)

- No. 38 (Vol. VI. p. 24).—The 82nd day of year 4 : Thursday, the 17th August A.D. 1055.
No. 36 (Vol. VI. p. 23).—Year 6, Śaka 979 : Monday, the 27th October A.D. 1057.
No. 37 (Vol. VI. p. 23).—Year 12 (for 11 ?), Śaka 984. The date does not admit of verification.

E.—Kulôttunga-Chôla I. Râjakésarivarma.

(Between the 14th March and the 8th October A.D. 1070.)⁵

- No. 56 (Vol. VII. p. 1).—Year 4 : Thursday, the 7th November A.D. 1073.
No. 39 (Vol. VI. p. 278).—Year 7, Śaka 998 : Friday, the 10th February A.D. 1077.⁶
No. 6 (Vol. IV. p. 70).—Year 37, Śaka 1030 (for 1028 ?). The date does not admit of verification.
No. 9 (Vol. IV. p. 72).—Śaka 1035 : Sunday, the 22nd February A.D. 1114.
No. 7 (Vol. IV. p. 70).—Year 44 : Friday, the 13th March A.D. 1114.
No. 8 (Vol. IV. p. 71).—Year 45 : Thursday, the 8th October A.D. 1114.

¹ See Vol. VI. p. 23.

In the original date the second *tithi* (*dvitīyāyām*) is wrongly quoted instead of the third (*tritīyāyām*).

² In the original date the 13th *tithi* has probably been wrongly quoted instead of the third. Assuming the above to be the true equivalent of the date, Râjâdhirâja's reign would have commenced after (approximately) the 23rd May A.D. 1018.

³ In No. 37 surnamed Râjakésarivarma.

⁴ If the dates 5 and 6 given by Dr. Hultzsch above, Vol. VI. p. 221, from No. 389 and No. 886 of 1898 can be trusted—and I see no reason to suspect them—the king's reign must have commenced on approximately the 9th June A.D. 1070. The first day of his 37th year would have been the 9th June A.D. 1106, and the 289th day of that year the 24th March A.D. 1107, which was the day of the Mēha-(Vishuva-jeankrānti and Chaitra-vadi 13 of Śaka 1029 expired.

⁵ In the original date the month Māgha is wrongly quoted instead of Phālguna.

- No. 40 (Vol. VI. p. 279).—Year 45, Śaka 1036 : Wednesday, the 9th December A.D. 1114.¹
 No. 26 (Vol. V. p. 48).—Year 48 : Monday, the 7th January A.D. 1118.
 Nos. 20 and 28 (Vol. IV. p. 262, and Vol. V. p. 198).—Year 48 : Friday, the 25th January A.D. 1118.²

F.—Vikrama-Chôja Parakésarivarman.

(The 29th June A.D. 1118.)

- No. 21 (Vol. IV. p. 263, and Vol. VII. p. 3).—Year 4 : Monday, the 1st May A.D. 1122.
 No. 22 (Vol. IV. p. 264, and Vol. VII. p. 3).—Year 5 : Monday, the 31st July A.D. 1122.
 No. 57 (Vol. VII. p. 3).—Year 5 : Thursday, the 31st May A.D. 1123.
 No. 10 (Vol. IV. p. 73, and Vol. VII. p. 4).—The 340th day of year 5 : Sunday, the 3rd June A.D. 1123.³
 No. 42 (Vol. VI. p. 280).—Year 9, Śaka 1049 : the 27th May A.D. 1127.
 No. 59 (Vol. VII. p. 5).—Year 10 : Sunday, the 15th April, or Saturday, the 14th April, A.D. 1128.⁴
 No. 58 (Vol. VII. p. 4).—Year 11 : Saturday, the 5th January A.D. 1129.
 No. 41 (Vol. VI. p. 279, and Vol. VII. p. 3).—Year 16 : Monday, the 16th April A.D. 1134.
 No. 43 (Vol. VI. p. 281, and Vol. VII. p. 5).—Year 17, Śaka 1054 (for 1057) : Thursday, the 18th April A.D. 1135.

G.—Kulôttunga-Chôja III. Parakésarivarman.

(Between the 8th June and the 8th July A.D. 1178.)

- No. 23 (Vol. IV. p. 264).—Year 8 : Monday, the 8th July A.D. 1185.
 No. 19 (Vol. IV. p. 220).—Year 12 : Monday, the 4th December A.D. 1189.
 No. 60 (Vol. VII. p. 6).—Year 14 : Thursday, the 2nd January A.D. 1192.⁵
 No. 24 (Vol. IV. p. 265).—Year 16 : Saturday, the 4th June A.D. 1194.⁶
 No. 17 (Vol. IV. p. 219).—Year 19 : Tuesday, the 12th November A.D. 1196.
 No. 16 (Vol. IV. p. 219).—Year 19 (for 20), Śaka 1119 : Friday, the 21st November A.D. 1197.⁷
 No. 31 (Vol. V. p. 199).—Year 20. This date is quite incorrect.
 No. 44 (Vol. VI. p. 281).—Year 27 : Thursday, the 5th May A.D. 1205.
 No. 29 (Vol. V. p. 198).—Year 29 : Wednesday, the 7th March A.D. 1207.
 No. 18 (Vol. IV. p. 220).—Year 34 : Monday, the 19th September A.D. 1211.
 No. 30 (Vol. V. p. 199).—Year 37 : Sunday, the 7th June A.D. 1215.

¹ The original date contains the expression *uttaradyana-vyatipata-nimittanasa*, the exact import of which here and elsewhere is doubtful.

² In the original date No. 28 the 12th *tithi* is wrongly quoted instead of the second which is correctly given in No. 20.

³ In the original date the 7th *tithi* (*saptamiyam*) is wrongly quoted instead of the 8th (*astamiyam*).

⁴ In the original date either the *nakshatra* or the week-day is quoted incorrectly.

⁵ In the original date the first fortnight is wrongly quoted instead of the second.

⁶ In the original date the 4th *tithi* is wrongly quoted instead of the 14th.

⁷ In the original date the 15th solar day is wrongly quoted instead of the 26th.

H.—Râjarâja III. Râjakésarivarman.¹

(Between the 17th March and the 13th August A.D. 1216.)²

- No. 45 (Vol. VI. p. 281).—Year opposite to 16 : Saturday, the 25th September A.D. 1232.
 No. 46 (Vol. VI. p. 282).—Year 17 : Tuesday, the 18th January A.D. 1233.
 No. 47 (Vol. VI. p. 282).—Year 18 : Tuesday, the 23rd August A.D. 1233.
 No. 48 (Vol. VI. p. 282).—Year 18 : Wednesday, the 7th December A.D. 1233.
 No. 49 (Vol. VI. p. 283).—Year 18 : Monday, the 2nd January A.D. 1234.
 No. 50 (Vol. VI. p. 283).—Year 19 : probably Sunday, the 13th August A.D. 1234.³
 No. 51 (Vol. VI. p. 284).—Year 22 : Tuesday, the 16th March A.D. 1238.⁴
 No. 52 (Vol. VI. p. 284).—Year opposite to 22 : Monday, the 28th February A.D. 1239.
 No. 53 (Vol. VI. p. 284).—Year opposite to 22 : Wednesday, the 2nd March A.D. 1239.
 No. 54 (Vol. VI. p. 285).—Year opposite to 22 : Friday, the 4th March A.D. 1239.⁴

To the above I may add that, between A.D. 1054 and 1069, the date of the fifth year (of the reign) of Virarâjendra Râjakésarivarman, which occurs in *South-Ind. Inscr.* Vol. III. No. 30, is correct only for Monday, the 10th September A.D. 1067,⁵ and that therefore, if the date does fall within the sixteen years stated and has been correctly recorded, Virarâjendra Râjakésarivarman must have commenced to reign between (approximately) the 11th September A.D. 1062 and the 10th September A.D. 1063.

POSTSCRIPT.

Date of the Chellûr plates of Kulôttunga-Chôja II.

In the text of these plates, published by Dr. Fleet with a photo-lithograph in *Ind. Ant.* Vol. XIV. p. 56 ff., the date, in lines 49-51, is given thus :—

Śak-âbdânâm pramâṇe rasa-vîsikhâ-viyach-chaṇdra-saṁkhyâm prayâtê . . . s-ârdra-rkshê pûrvva-ma(pa)kshê vîshuvati su-tithâ(thau)—

i.e. "when the measure of the Śaka years had advanced to the number of the flavours (6), the arrows (5), the sky (0), and the moon (1),"—i.e. in Śaka-Saṁvat 1056—
 "at the equinox combined with the Ârdra *nakshatra*, in the bright half, on an excellent *tithi*."

In *Ind. Ant.* Vol. XX. p. 191, Dr. Fleet has shown that this date would be incorrect for Śaka-Saṁvat 1056 current and expired, as well as for Śaka-Saṁvat 1057 expired; and he has communicated a suggestion of Mr. Sh. B. Dikshit's, in accordance with which the date would correspond to the 24th March A.D. 1132, in Śaka-Saṁvat 1055 current. But really the date would be incorrect even for Śaka-Saṁvat 1055 current, because in this year also the equinox was not combined with the Ârdra *nakshatra*.

In the twenty Śaka years from 1047 to 1066 the date is correct only for Śaka-Saṁvat 1066 expired. In this year the Mâsha-vîshuva-saṁkrânti took place 16 h. 37 m. after mean sunrise

¹ This surname occurs only in the date No. 45.

² The latest date of this Râjarâja, known to me, is from the month of Karkâṭaka of his 28th year which was current after the Śaka year 1165; see *South-Ind. Inscr.* Vol. I. No. 64. This date would shew that Râjarâja's reign could not have commenced after the last day of the month of Karkâṭaka in A.D. 1216, i.e. not later than the 27th July A.D. 1216.

³ In the original date either the *nakshatra* Uttirâtâdi (Uttara-Bhâdrapadâ) has been wrongly quoted instead of Uttiram (Uttara-Phalguni), or the first fortnight instead of the second.

⁴ In the original date the 4th *tithi* has been wrongly quoted instead of the 14th.

⁵ The day was the 16th day of the month of Kanyâ, and on it the 14th *tithi* of the dark half (of the month Bhâdrapadâ) ended 9 h. 21 m. after mean sunrise; the *nakshatra* was Uttara-Phalguni, by the Brahma-siddhanta for 21 h. 40 m. after mean sunrise, according to Garuda the whole day, and by the equal space system from 0 h. 39 m. after mean sunrise.

of the 24th March A.D. 1143, and on this day the 7th *tithi* of the bright half of Chaitra commenced 8 h. 9 m., and the *nakshatra* by the equal space system was Ārdra for 23 h. 48 m., after mean sunrise; i.e. the equinox took place while the moon was in the *nakshatra* Ārdra, during the 7th *tithi* of the bright half. This result, moreover, shows that the *tithi* on the day now given by me was really, in agreement with the term *su-tithi* of the original text, an excellent *tithi*; for, a seventh *tithi* of the bright half, on which — as is the case in the present instance — a Samkrānti takes place, is called *Mahājyā*, and for making donations is superior even to an eclipse.¹

For these reasons I have no doubt whatever that the 24th March A.D. 1143 is the proper equivalent of the date, and that the Śaka year intended is 1065, not 1056. The writer of the date has wrongly written *rasa-viśikha*-, instead of *viśikha-rasa*-.

No. 24.— DATES OF CHOLA KINGS.

By F. KIELHORN, Ph.D., D.Litt., LL.D., C.I.E.; GÖTTINGEN.

(Continued from page 10.)

Dr. Hultsch again has sent me a large number of dates of Chōla kings, of which I now publish twenty-three, with the results of my calculations. Of these, the dates Nos. 61-74 show that the times previously found for the commencements of the reigns of the five kings to whom they belong—Rājarāja I., Rājendra-Chōla I., Kulōttuṅga-Chōla I., Vikrama-Chōla, and Kulōttuṅga-Chōla III.—are correct. The dates of Rājarāja III., Nos. 75-78, reduce the time during which this king must have commenced to reign, to the period from (approximately) the 23rd June to the 13th August A.D. 1216. And the dates Nos. 79-83, belonging to Rājendra-Chōla III., of whom no dates had yet been examined, prove that this king commenced to reign between (approximately) the 21st March and the 8th May A.D. 1246. The remaining dates sent to me are very difficult to deal with;¹ their publication will probably have to be deferred to the time when more dates of the kings to whom they belong have been discovered.

A.—RAJARAJA I.

61.—In the Mūlēsvara temple at Bāhūr.²

- 1 Svasti śrī [H*] Kānda[ī]ūr-Chch[ā][ai] ka[lam-aṅ]tta kō I[rā]jarāja-
k[ē]sar[ipa]nmaṅku yā[ṅ]-
2 ḍu 11a(ā)vadu ivv-āṅṅai Midhu(thu)na-nāyaṅgu
3 apara-pakabattu Nāyaṅgu-kkiḷamai perṅa Kātti[g]ai-nāṅṅu³ pagal.

"In the 11th year (of the reign) of king Rājarājakesarivarman who destroyed the ships (at) Kāndaūr-Sālai,—in daytime on the day of Kṛittikā, which corresponded to a Sunday of the second fortnight of the month of Mithuna in this year."

The date corresponds to Sunday, the 14th June A.D. 996, which was the 22nd day of the month of Mithuna, and on which the 11th *tithi* of the dark half (of Jyaiṣṭha) ended 12 h. 58 m., while the *nakshatra* was Kṛittikā, by the Brahma-siddhānta for 13 h. 47 m., according to Garga for 15 h. 6 m., and by the equal space system from 2 h. 33 m., after mean sunrise.

B.—RAJENDRA-CHOLA I.

62.—In the Karavandiśvara temple at Uḍaiyārkōyil.⁴

- 1 Sva[st]i śrī [H*] Tiru manni vaḷara
17 kō-Ppararē(kā)śaripaṅ[ma] . . [v=U]ḍaiyār śrī-Rājendra-Śōladēva[ṅ]ku
yāṅḍu 31ā[vadu]

¹ They apparently belong to three kings of whom no dates have yet been published in this list.² No. 178 of the Government Epigraphist's collection for 1902.³ Read -ndra-.⁴ No. 403 of the Government Epigraphist's collection for 1902.¹ Compare *Ind. Ant.* Vol. XXVI. p. 178.

19 i[rv-āṇḍu] Kar[kaḍaga-nāya]ṛru pū[rvva-pakṣat]tu chatu[r]tth[iy]um Ve[[i]-
kk[i]lamaiyum [pe]ṛra Pu[ṇarbhā]-
20 śatti-nā].

"In the 31st year (of the reign) of king Parakēsarivarman [alias] the lord, the glorious Rājendra-Chōjadēva,—on the day of Punarvasu, which corresponded to a Friday and to the fourth *tithi* of the first fortnight of the month of Karkātaka in this year."

The date is intrinsically wrong because the *nakṣatra* on the fourth *tithi* of a bright half in the month of Karkātaka cannot be Punarvasu. The equivalent of the date apparently is Friday, the 23rd July A.D. 1042, which was the 23rd day of the month of Karkātaka and which was entirely occupied¹ by the fourth *tithi* of the bright half (of Śrāvana). The *nakṣatra* on this day was Uttara-Phalgunī, by the equal space system and according to Garga for 13 h. 8 m., and by the Brahma-siddhānta for 9 h. 51 m., after mean sunrise.

C.—KULOTTUNGA-CHOLA I.

63.—In the Karavandīvara temple at Uḍaiyārkōyil.⁵

1 Svasti śrī || Puḡa] śū]nda puḡari
8 [kōv-īrāja]kēsaripat[ma]r-āna Tribhuva-
9 nachchakkaravattigal śrī-Ko[1]ō[t]tūnga-Śō]adēvar[k*]ku yāṇḍu lōāvadu
Mina-nāyaṛru [apara-pakṣattu V]i[y]ā]la-kkila[m]ai[y]um
dacha(śa)mīyu[m] peṛra Uttirāḍa[ttu nā].

"In the 16th year (of the reign) of king Rājakēsarivarman alias the emperor of the three worlds, the glorious Kulōttūnga-Chōjadēva,—on the day of Uttarāśāḍhā, which corresponded to a Thursday and to the tenth *tithi* of the second fortnight of the month of Mina."

A date of the month of Mina of the 16th year of Kulōttūnga-Chōja I. would be expected to fall in A.D. 1086,² and in my opinion this date undoubtedly corresponds to Thursday, the 12th March A.D. 1086, which was the 19th day of the month of Mina, and on which the *nakṣatra* was Uttarāśāḍhā, by the equal space system and according to Garga for 16 h. 25 m., and by the Brahma-siddhānta for 9 h. 51 m., after mean sunrise. But the *tithi* which ended on this day, 10 h. 50 m. after mean sunrise, was the 9th, not the 10th *tithi*, of the dark half (of Phalgunā).—This result shows that the word *dachamiyūm* of the original date should be altered to *navamiyūm*.⁴

D.—VIKRAMA-CHOLA.

64.—In the Vāmanapurīvara temple at Tirumāṅkūji.⁵

1 [S]va[s]ti śrī[t]i [i]* Pū-mādu puḡara
2 kō-P[parakē]śar[i]p[ā]mar-ā[ṅa] Ti[r]ibuvaṇachcha[k*]karavattigal
śrī-Vikkirama-Śō]adēvaṛku yāṇḍu paḍiṇ-ō[ṅrāvadu] [nāya]ṛ[ttu
apa]ra-pakṣattu śkāśīyūm Budaṅ-kilamaiyūm peṛra Viśāgattu nā].

"In the eleventh year (of the reign) of king Parakēsarivarman alias the emperor of the three worlds, the glorious Vikrama-Chōjadēva,—on the day of Viśākhā, which corresponded to a Wednesday and to the eleventh *tithi* of the second fortnight of the month of"

¹ The *tithi* was a *prathama-chaturthī*.

² No. 399 of the Government Epigraphist's collection for 1902.

³ See above, p. 7, note 5.

⁴ [It is not absolutely excluded that the writer wanted to write *saramiyūm*, and that the two Grantha letters *da* and *cha* are in reality a badly shaped *sa* and *va*, respectively.—E. H.]

⁵ No. 148 of the Government Epigraphist's collection for 1902.

My calculation shows that the name of the month of this date was Dhanus. For this month the date corresponds to Wednesday, the 19th December A.D. 1128,¹ which was the 25th day of the month of Dhanus, and on which the 11th *tithi* of the dark half (of Mārgāśrāha) ended 22 h. 1 m. after mean sunrise, while the *nakṣatra* was Viśākhā, by the equal space system and according to Garga for 16 h. 25 m., and by the Brahma-siddhānta for 11 h. 50 m., after mean sunrise.

65.—In the Karavandīvara temple at Uḍaiyārkōyil.⁵

1 [Sva]sti [ś]rī[t]i [i]* Pū-mādu p[unara]
2 kō- paṇ[ma*]r-āna
Tir[i*]bu[va*]na[cha][k*]karavattigal śrī-Vik[kira*]ma-Śō]adēvaṛku yāṇḍu
l[5]āva[du] Si]mha-nāyaṛru apara-[pa]³ [m]
V[iyā]la-kkila[m]ai[yum] peṛra⁴

"In the 15th year (of the reign) of king [Parakēsarivarman] alias the emperor of the three worlds, the glorious Vikrama-Chōjadēva,—[on the day of], which corresponded to a Thursday and to the [*tithi*] of the second fortnight of the month of Simha."

This date does not admit of verification.

E.—KULOTTUNGA-CHOLA III.

66.—In the Vāmanapurīvara temple at Tirumāṅkūji.⁵

1 Svasti śrī [i]* Puḡal peruḡa
3 kō-Pparakēsaripamar-āna Tribhā(bhu)vaṇasakra[va]ttigal śrī-
Kulōttūnga-Śō]adēvaṛku y[ā]ṇḍu mu(mā)[n]rāvadu Simha-nāyaṛru
apara-bha(pś)akṣattu paḍhamiyūm Tiṅga-kilamaiya(yu)m peṛra Aśvati-nā].

"In the third year (of the reign) of king Parakēsarivarman alias the emperor of the three worlds, the glorious Kulōttūnga-Chōjadēva,—on the day of Aśvini, which corresponded to a Monday and to the fifth *tithi* of the second fortnight of the month of Simha."

A date of the month of Simha of the third year of Kulōttūnga-Chōja III. would be expected to fall in A.D. 1180, and in my opinion this date undoubtedly corresponds to the 12th August A.D. 1180, which was the 16th day of the month of Simha, and on which the 5th *tithi* of the dark half (of Śrāvāṇa) ended 9 h. 34 m., while the *nakṣatra* was Aśvini for 3 h. 17 m., after mean sunrise. But the day was a Tuesday, not a Monday.⁵

67.—In the Bhaktaparādhiśvara temple at Giḍaṅgil.⁷

1 Svasti śrī [i]* Kō-Pparakēsarivanamar-āna Tribhuvaṇachchavarttigal śrī-Kulōttūnga-
Śō]adēvaṛku
2 yāṇḍu Svadu Simha-nāyaṛru irubattē[an-di]yadi[*]y-āṅa Budaṅ-kilamai peṛra
Aśvati-nā].

"In the 3rd year (of the reign) of king Parakēsarivarman alias the emperor of the three worlds, the glorious Kulōttūnga-Chōjadēva,—on the day of Aśvini, which corresponded to a Wednesday which was the twenty-seventh solar day of the month of Simha."

¹ The year A.D. 1118 would yield no satisfactory equivalent for this date.

² No. 404 of the Government Epigraphist's collection for 1902.

³ Read *-pakṣattu*; the *tithi* is lost.

⁴ The *nakṣatra* is lost.

⁵ No. 165 of the Government Epigraphist's collection for 1902; *South-Ind. Inscr.* Vol. III. No. 85.

⁶ On Monday, the 11th August A.D. 1180, the 5th *tithi* of the dark half commenced 8 h., and the *nakṣatra* was Aśvini from 3 h. 56 m., after mean sunrise.

⁷ No. 226 of the Government Epigraphist's collection for 1902.

Under the preceding date it has been stated that the *nakshatra* was *Āsvini* on the 16th day of the month of *Siṃha* of the third year of the king's reign; *Āsvini* therefore cannot have been the *nakshatra* on the 27th day of the same month. Nor would the weekday be correct; for the 27th day of *Siṃha* of the third year would be Saturday, the 23rd August A.D. 1180 (when the *nakshatra* was *Uttara-Phalguni*).—I have not found any year of the reign of *Kulōttuṅga-Chōla III.* for which the date would be correct.

68.—In the *Vāmanapurīśvara* temple at *Tirumāṅkuṭi*.¹

- 1 Svasti śrī [||*] Tiribuvaṇachchakravattiga| śrī-Virarājēndira-Śōjadēvaṅku yāṅḍu
 ślāvadu Siṃha-[nāyaṅ]ṅu irubattāṅān-diyadi āṅa Budan-kilamaiyum
 pūrshva-(rvva)-pakshattu=chchatu[r*]daśiyum=āṅa² Śādaiya-
 2 ttu nāl.

“In the seventh year (of the reign) of the emperor of the three worlds, the glorious *Virarājēndra-Chōjadēva*,³—on the day of *Śatabhishaj*, which was the fourteenth *tithi* of the first fortnight and a *Wednesday*, which was the twenty-sixth solar day of the month of *Siṃha*.”

The 26th day of the month of *Siṃha* of the 7th year of *Kulōttuṅga-Chōla III.* corresponds to *Wednesday*, the 22nd August A.D. 1184.⁴ On this day the 14th *tithi* of the bright half (of *Bhādrapada*) ended 13 h. 19 m., and the *nakshatra* was *Śatabhishaj*, by the equal space system and according to *Garga* from 1 h. 19 m., and by the *Brahma-siddhānta* from 1 h. 58 m., after mean sunrise.

If this were a date of *Rājēndra-Chōla III.*, it would be quite incorrect.

69.—In the *Darbhāraṇyēśvara* temple at *Tirunallār*.⁵

- 1 Svasti śrī [||*] Tiribuvaṇachchakravattiga| Madurai koṅḍu Pāṅḍiyan muḍi-
 ttalaiyum koṅḍ-aruliya śi-Kulōttuṅga-Śōjadēvarkku [y]āṅḍu 17vadu Kumba-
 [n]āyayṅṅu pūrva-patīśattu⁶ ti[tī]yayum⁷ Tiṅga-kilamaiyum peṅṅa Uttirattādi-
 nāl.

“In the 17th year (of the reign) of the emperor of the three worlds, the glorious *Kulōttuṅga-Chōjadēva*, who, having taken *Madurai*, was pleased to take also the crowned head of the *Pāṅḍya*,—on the day of *Uttara-Bhādrapadā*, which corresponded to a *Monday* and to the second *tithi* of the first fortnight of the month of *Kumbha*.”

The date corresponds to *Monday*, the 13th February A.D. 1195, which was the 21st day of the month of *Kumbha*, and on which the second *tithi* of the bright half (of *Phālguna*) commenced 1 h. 55 m. after mean sunrise, while the *nakshatra* was *Uttara-Bhādrapadā*, by the *Brahma-siddhānta* and according to *Garga* the whole day, and by the equal space system from 3 h. 17 m. after mean sunrise.

70.—In the *Kṛipapurīśvara* temple at *Tiruveṅṅainallūr*.⁸

- 1 Svasti śrī [||*] Pā maraviya diśaimugattōn
 Tiribuvāschchakravattiga| Maduraiyum Pāṅḍiyan muḍi-ttalaiyū=goṅḍ-arulina

¹ No. 164 of the Government Epigraphist's collection for 1902.
² The *da* of *daśi* is entered below the *i*.
³ The name *Virarājēndradēva* (II.) is applied to *Kulōttuṅga III.* in two inscriptions of the 5th year at *Chidambaram* (Nos. 121 and 122 of 1887-88).
⁴ The *Siṃha-sankrānti* took place 16 h. 48 m. after mean sunrise of the 27th July A.D. 1184.
⁵ No. 395 of the Government Epigraphist's collection for 1902.
⁶ Read *pakshattu*.
⁷ Read *daśiyayum*.
⁸ No. 315 of the Government Epigraphist's collection for 1902.

śrī-Kulōttuṅga-Śōjadēva[r]ku yāṅḍu 17āvadu Miduna-nāyaṅ[ṅu] apara-pakshattu
 trai(tra)yōdaśiyum Viyāla-kkilamaiyum peṅṅa Urōśapi-[nāl].

“In the 17th year (of the reign) of the emperor of the three worlds, the glorious *Kulōttuṅga-Chōjadēva*, who was pleased to take *Madurai* and the crowned head of the *Pāṅḍya*,—on the day of *Bōhiṇi*, which corresponded to a *Thursday* and to the thirteenth *tithi* of the second fortnight of the month of *Mithuna*.”

The date undoubtedly corresponds to *Thursday*, the 8th June A.D. 1195, which was the 13th day of the month of *Mithuna*, and on which the *nakshatra* was *Bōhiṇi* for 9 h. 51 m. (or 9 h. 12 m.) after mean sunrise. As the 13th *tithi* of the dark half (of *Jyaisḥḥa*) ended on this day only a minute or two after true sunrise, I should have expected the writer to quote the 14th *tithi* instead of the 13th.

71.—In the *Ikshupurīśvara* temple at *Kōvilveṅṅi*.¹

- 1 T[i]r[i]buvanachchakravatt[i]ga| Ma-
 2 duraiyum Pāṅḍiyan muḍi-ttalaiyū=go[n]ḍ-aruliya [ś]i-[Ku]-
 3 lōttuṅga-Śōjadēvaṅku yā[n]ḍu pattoṅbadabadu=Kkani-śnā-
 4 yāṅṅu=ppōr[va*]-pakshattu navamiyum Tiṅga[!]-kilamaiyum peṅṅa At[ta]-
 5 nāl.

“In the nineteenth year (of the reign) of the emperor of the three worlds, the glorious *Kulōttuṅga-Chōjadēva*, who was pleased to take *Madurai* and the crowned head of the *Pāṅḍya*,—on the day of *Hasta*, which corresponded to a *Monday* and to the ninth *tithi* of the first fortnight of the month of *Kanyā*.”

The date is intrinsically wrong because the *nakshatra* on the 9th *tithi* of a bright half in the month of *Kanyā* cannot be *Hasta*. The equivalent of the date apparently is *Monday*, the 2nd September A.D. 1196, which was the 6th day of the month of *Kanyā*, and on which the 9th *tithi* of the bright half (of *Bhādrapada*) ended 22 h. 22 m. after mean sunrise. The *nakshatras* on this day were *Māla* and *Pārvāshāḍhā*.

72.—In the *Vāmanapurīśvara* temple at *Tirumāṅkuṭi*.²

- 1 S[va]sti śrī [||*] T[iribu]vaṇachchakrara[va]ttiga[!] Ma[d]urai koṅḍu Pāṅ[ḍi]yaṅ
 muḍi-ttalai-
 2 yū=goṅḍ-aruliya śrī-Kulōttuṅga-Śōjadēvaṅku yā[n]ḍu pattoṅbadā-
 3 vadu Rishabha-nāyayṅṅu āṅān-diyadi-āṅa pūrva-pakshattu dvādaśiyum Budan-
 kilam[ai]yum peṅṅa [A]-
 4 ttattu nāl.

“In the nineteenth year (of the reign) of the emperor of the three worlds, the glorious *Kulōttuṅga-Chōjadēva*, who, having taken *Madurai*, was pleased to take also the crowned head of the *Pāṅḍya*,—on the day of *Hasta*, which corresponded to a *Wednesday* and to the twelfth *tithi* of the first fortnight, which was the sixth solar day of the month of *Rishabha*.”

The date corresponds to *Wednesday*, the 30th April A.D. 1197, which was the 6th day of the month of *Rishabha*,³ and on which the 12th *tithi* of the bright half (of *Vaiśākha*) ended 19 h. 37 m., while the *nakshatra* was *Hasta*, by the equal space system and according to *Garga* for 7 h. 13 m., and by the *Brahma-siddhānta* for 3 h. 56 m., after mean sunrise.

¹ No. 397 of the Government Epigraphist's collection for 1902.
² Read *pattoṅbadabadu=Kkani*.
³ No. 161 of the Government Epigraphist's collection for 1902.
⁴ The *Rishabha-sankrānti* took place 14 h. 4 m. after mean sunrise of the 25th April A.D. 1197.

73.—In the Vāmanapurīśvara temple at Tirumānikuḷi.¹

1 Svasti śrī [||*] Tiribuvanachchakkaravattiga [I] Maduraiyūḥ Ḥamum Pāṇḍiyan muḍi-ttalaiyūḥ-gonḍ-aru [i]ya śrī-Kulōttuṅga-Śōladēva [r*]kku yāṇḍu 21vadu Mēsha-n[ā]yāḥḥ pūrvva-[pa*]kshattu daśamiyūḥ Budan-kiḷamaiyū[m] peḡra [Ma]gattu nā.

"In the 21st year (of the reign) of the emperor of the three worlds, the glorious Kulōttuṅga-Chōladēva, who was pleased to take Madurai, Ḥam and the crowned head of the Pāṇḍya,—on the day of Maghā, which corresponded to a Wednesday and to the tenth *tithi* of the first fortnight of the month of Mēsha."

The date corresponds to Wednesday, the 7th April A.D. 1199, which was the 14th day of the month of Mēsha, and on which the 10th *tithi* of the bright half (of Vaiśākha) ended 23 h. 39 m., while the *nakshatra* was Maghā, by the equal space system for 22 h. 20 m., by the Brahma-siddhānta for 7 h. 53 m., and according to Garga for 10 h. 30 m., after mean sunrise.

74.—In the Vāmanapurīśvara temple at Tirumānikuḷi.²

1 Svasti śrī [||*] Pu[ya]l vāyittu
4 kō-Pparakēsariparman-āṅa Tiribuvanachchakkaravattiga [I]
Maduraiyūḥ-Ḥamūḥ-gonḍu Pāṇḍiyan muḍi-ttalaiyūḥ-gonḍ-aruliṅa śrī-Kulōt-
5 tu[ga]-Śōladēvarḥku yāṇḍu 21vadu Rishabha-nāyāḥḥ pūrvva-pakshattu tri(trā)yō-
daśamiyūḥ Śani-kkiḷamaiyūḥ peḡra Attatti-nā.

"In the 21st year (of the reign) of king Parakēsarvarman *alias* the emperor of the three worlds, the glorious Kulōttuṅga-Chōladēva, who, having taken Madurai and Ḥam, was pleased to take also the crowned head of the Pāṇḍya,—on the day of Hasta, which corresponded to a Saturday and to the thirteenth *tithi* of the first fortnight of the month of Rishabha."

A date of the month of Rishabha of the 21st year of the reign of Kulōttuṅga-Chōla III. would be expected to fall in A.D. 1199, but for that year this date is incorrect, and I have not found any other year of the king's reign for which it would be correct. Such being the case, I feel certain that the month of Rishabha has been quoted erroneously instead of Mēsha. For this month the date regularly corresponds to Saturday, the 10th April A.D. 1199, which was the 17th day of the month of Mēsha, and on which the 18th *tithi* of the bright half (of Vaiśākha) ended 22 h. 48 m. after mean sunrise, while the *nakshatra* was Hasta, by the equal space system and according to Garga the whole day, and by the Brahma-siddhānta for 21 h. 40 m. after mean sunrise.

F.—RAJARAJA III.

75.—In the Tirumālīśvara temple at Māgaral.³

1 i-ttā[varkku] yāṇḍu nālāvadu Mid[u]ṅa-[nāya]r[ru] apara-
pakshat[t]u-ppaṅchamiyūḥ-D[i]ṅga[t-ki]ḷamaiyūḥ peḡra Śadaiyattu nā.

"In the fourth year (of the reign) of this king,⁴—on the day of Śatabhishaj, which corresponded to a Monday and to the fifth *tithi* of the second fortnight of the month of Mithuna."

The date corresponds to Monday, the 22nd June A.D. 1220, which was the 29th day of the month of Mithuna, and on which the 5th *tithi* of the dark half (of Āshāḍha) ended 15 h.

¹ No. 169 of the Government Epigraphist's collection for 1902.

² No. 170 of the Government Epigraphist's collection for 1902.

³ This is an earlier date of the same reign which is quoted in No. 76 below.

⁴ *Via* Rājaraḷa III.

56 m., while the *nakshatra* by the equal space system was Śatabhishaj for 4 h. 36 m., after mean sunrise.

76.—In the Tirumālīśvara temple at Māgaral.¹

1 T[i]r[i]buvanachchak[ka]ravatt[i]ga [I] śrī-Rājarājadēvarḥku yāṇ[ḍu]
5[v]adu Śimha-nāyāḥḥ a[pa]ra-[pa]kshattu paṅchamiyūḥ Buda[ḡ]-
k[i]ḷamaiyūḥ [p]eḡra Aśvat[i]-nā.

"In the 5th year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Aśvini, which corresponded to a Wednesday and to the fifth *tithi* of the second fortnight of the month of Śimha."

The date corresponds to Wednesday, the 19th August A.D. 1220, which was the 24th day of the month of Śimha, and on which the 5th *tithi* of the dark half (of Bhādrapada) commenced 10 h. 38 m., while the *nakshatra* was Aśvini for 18 h. 24 m., after mean sunrise.—As the 5th *tithi* commenced very late in the day, I consider it probable that it has been quoted erroneously instead of the 4th.

77.—In the Ikshnapurīśvara temple at Kōvilveṅṅi.²

1 [Sva]sti śrī [||*] Tiribuvanachchakka-
2 vattiga śrī-I[r]ājarājadēvarḥku
3 yāṇḍu 6ā[vad]u edir-ām-ā[n]-
4 ḍu Tuḷā-nā[ya]r[ru] pūrvva-[pa*]kshat-
5 tu asptamiyūḥ Viyāḷa-[k]k[i]ḷamai-
6 [y]um peḡra Uttirāḍattu [n]ā[||*].

"In the year which was opposite the 6th year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Uttarāshāḍha, which corresponded to a Thursday and to the seventh *tithi* of the first fortnight of the month of Tuḷā."

The date corresponds to Thursday, the 13th October A.D. 1222, which was the 16th day of the month of Tuḷā, and on which the 7th *tithi* of the bright half (of Kārttika) ended 11 h. 33 m., while the *nakshatra* was Uttarāshāḍha, by the equal space system and according to Garga for 13 h. 8 m., and by the Brahma-siddhānta for 6 h. 34 m., after mean sunrise.

78.—In the Ādiyappaṅ temple at Kiḷ-Rāśākūḍi.³

1 Rājarājadēvarḥku yāṇḍu pattāvadu Mēsha-nāyāḥḥ apara-pakshattu
asptamiyūḥ Śevvāy-kkiḷamaiyūḥ peḡra Avittattu nā.

"In the tenth year (of the reign) of Rājarājadēva,—on the day of Śravishthā, which corresponded to a Tuesday and to the eighth *tithi* of the second fortnight of the month of Mēsha."

The date corresponds to Tuesday, the 21st April A.D. 1226, which was the 28th day of the month of Mēsha, and on which the 8th *tithi* of the dark half (of Vaiśākha) ended 10 h. 16 m., while the *nakshatra* was Śravishthā, by the equal space system and according to Garga for 19 h. 3 m., and by the Brahma-siddhānta for 19 h. 42 m., after mean sunrise.

G.—RAJENDRA-CHOLA III.

79.—In the Karavandīśvara temple at Uḍaiyārkōyil.⁴

1 Svasti śrī [||*] T[i]r[i]bu[va]ḥ[va]ḥ[ḥ]chakkaravatt[i]ga śrī-Irājēḍira-Śōḷa-
dēvarḥku⁵ yāṇḍu 3vadu Miṅa-nā-

¹ No. 217 of the Government Epigraphist's collection for 1: 61.

² No. 396 of the Government Epigraphist's collection for 1902.

³ No. 392 of the Government Epigraphist's collection for 1901.

⁴ No. 406 of the Government Epigraphist's collection for 1902.

⁵ Read 'dēvarḥku.

2 [ya]ṛru pū[rva]-pakshattu pañ[cha]m[i]yum Śaṅgi-kkijamaiyu[m] p[er]ra [U]rōśaṇi-nā].

"In the 3rd year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōjadēva,— on the day of Rōhini, which corresponded to a Saturday and to the fifth *tithi* of the first fortnight of the month of *Mina*."

My examination of the four dates Nos. 79-83 has yielded the result that the reign of Rājendra-Chōja III. commenced between (approximately) the 21st March and the 8th May A.D. 1246.

This date, No. 79, corresponds to Saturday, the 20th March A.D. 1249, which was the 26th day of the month of *Mina*, and on which the 5th *tithi* of the bright half (of Chaitra) commenced 0 h. 30 m., while the *nakshatra* was Rōhini for 18 h. 24 m. (or 17 h. 44 m.), after mean sunrise.

80.—In the Raṅganātha temple at Śrīraṅgam.¹

1 Kannarigārja-pra[ti]kūla-kāladanḍa makarālaya-majjita-[Kali]-bala Vi(vi)ra-Sōmi(mē)śvara-kar-ārukta-pāda-[vi]rābharaṇa
2 Tiribuva[ṇa]ohachakkaravattiga] śri-Rāśēṇḍira-Śōjadēvarkku yāṇḍu 7āvadu Magara-nāyaṛru apara-pakshattu saṣṭami[y]um Budan-k[i]lamaiyum peṛra Sittirai-nā].

"In the 7th year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōjadēva, the hostile rod of death to the Kannariga (i.e. Kar-ṇāṭaka) king, he who had drowned the power of the Kali (age) in the ocean, the hero's anklets² on whose feet were put on by the hands of Vira-Sōmēśvara,³ — on the day of Chitrā, which corresponded to a Wednesday and to the eighth *tithi* of the second fortnight of the month of *Makara*."

The date corresponds to Wednesday, the 25th December A.D. 1252. On this day the *Makara*-(Uttarāyaṇa)-samkrānti took place 13 h. 3 m.,⁴ the 8th *tithi* of the dark half (of Pausha) commenced 0 h. 17 m., and the *nakshatra* was Chitrā, by the equal space system and according to Garga the whole day, and by the Brahma-siddhānta for 21 h. 1 m. after mean sunrise.

81.—In the Rājagōpāla-Perumā temple at Maṅṅārguḍi.⁵

Svasti śri [||*] Tribuvanachchakkaravattiga] śri-Rāja[jē]ndra-⁶[Śō]jādēvarku yāṇḍu 2lvadu Karakaḍaga-nā[ya]ṛru] a[para]-pakshattu śk[ā]śāsiyum Budan-kijamaiyum peṛra Rōhi[ṇi]-nā].

"In the 21st year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōjadēva,— on the day of Rōhini, which corresponded to a Wednesday and to the eleventh *tithi* of the second fortnight of the month of *Karkaṭaka*."

The date corresponds to Wednesday, the 30th June A.D. 1260, which was the fourth day of the month of *Karkaṭaka*, and on which the 11th *tithi* of the dark half (of Āshāḍha) ended

¹ No. 64 of the Government Epigraphist's collection for 1892.

² *Vīr-ābharaṇa* is used in the sense of the Tamil *vīr-akkalāi*.

³ This implies that the Chōja king had defeated the Hoysala king Sōmēśvara and employed him as a servant.

⁴ Ordinarily, therefore, the 26th December A.D. 1252, here described as a day of the month of *Makara*, would be considered to be the last day of the month of *Dhanu*.

⁵ No. 105 of the Government Epigraphist's collection for 1897.

⁶ Read -*Rājendra*.

10 h. 21 m. after mean sunrise, while the *nakshatra* was Rōhini, by the Brahma-siddhānta and according to Garga the whole day, and by the equal space system from 2 h. 38 m. after mean sunrise.

82.—In the Appāmalainātha temple at Maṅṅārguḍi.¹

1 Ti[ru](ri)buvaṇachchak[ka]ravattiga] śri-Rāj[ē]n[di]ra-Śōja[d]ēvarkku yāṇḍu 22vadu Rishabha-nāyaṛru [pū]rva-pakshattu śadurtesiyum Nā[ya]ṛru-kkijamaiyum peṛra Viśāgattu nā].

"In the 22nd year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōjadēva,— on the day of Viśākhā, which corresponded to a Sunday and to the fourteenth *tithi* of the first fortnight of the month of *Rishabha*."

The date corresponds to Sunday, the 8th May A.D. 1267, which was the 14th day of the month of *Rishabha*, and on which the 14th *tithi* of the bright half (of the first *Jyāishṭha*) ended 21 h. 40 m. after mean sunrise, while the *nakshatra* was Viśākhā, according to Garga the whole day, by the Brahma-siddhānta for 22 h. 20 m., and by the equal space system from 3 h. 17 m., after mean sunrise.

83.—In the Raṅganātha temple at Śrīraṅgam.²

1 Svasti śriḥ [||*] Māma-Sōmi(mē)śvara-pratikūla-kāladanḍa [T]iribuvaṇachchakkaravattiga] śri-Rājendra-Śōjadēvarkku yāṇḍu Śāvad[ī]ṇ edir-āṅḍu Vriśchika-nāyaṛ[ru] pūrvva-[pa]ksha[t]tu pañchamiyum Tiṅgaṭ-kijamaiyum peṛra Aśvati-nā].

"In the year which was opposite the seventh year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōjadēva, the hostile rod of death to (his) nuncle Sōmēśvara,— on the day of Aśvini, which corresponded to a Monday and to the fifth *tithi* of the first fortnight of the month of *Vriśchika*."

The date is intrinsically wrong because the *nakshatra* cannot be Aśvini on the 5th *tithi* of a bright half in the month of *Vriśchika*.— A date of the month of *Vriśchika* of the year opposite the 7th, i.e. of the 8th year, of the king's reign would be expected to fall in A.D. 1253; but for that year this date would correspond to Tuesday, the 28th October, when the *nakshatras* were Pūrvāshāḍhā and Uttarāshāḍhā. If the date were one of the 9th year of the king's reign, it would correspond to Monday, the 6th November A.D. 1254, when the *nakshatras* were Uttarāshāḍhā and Śrāvāṇa.— I am unable confidently to suggest any correction of the original date with which the date would yield a satisfactory equivalent.

¹ No. 91 of the Government Epigraphist's collection for 1897.

² No. 65 of the Government Epigraphist's collection for 1892.

A date of the month of Simha (July-August) of the 7th year of Vikrama-Chôja would be expected to fall in A.D. 1124, and this date actually corresponds to Thursday, the 7th August A.D. 1124. This was the 12th day of the month of Simha, and on it the 11th *tithi* of the dark half (of Śrāvapa) ended 20 h. 6 m., while the *nakshatra* was Ārdra, by the equal space system for 15 h. 46 m., by the Brahma-siddhanta for 1 h. 58 m., and according to Garga for 3 h. 56 m. after mean sunrise.

B.— RAJARAJA II.

85.— In the Kapardīvara temple at Tiruvalañjuḷi.¹

1 Svasti śrī [||*] Pū maruviya [Ti]ru-mādum
4 kō=Pparakēsaripaṇmar-ā[ṇa Tri]bhuvanachchakravatt[i]ga[] śrī-Rājarājad[ē]vaṅku
yāṇḍu 4āva[du] Vṛiśchika-nāyaṅgu apa[ra-pa]kshattu [sa]ptam[i]yu[m]
[B]uda[ṅ]-[ki]lam[ai]yum [p]eṅga [P]āra[tt]u nā[ti].

"In the 4th year (of the reign) of king Parakēsarivarman *alias* the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Pūrva-Phalguni, which corresponded to a Wednesday and to the 7th *tithi* of the second fortnight of the month of Vṛiśchika."

My examination of the four dates Nos. 85-88 has yielded the result that the reign of Rājarāja Parakēsarivarman, *i.e.* Rājarāja II., commenced between (approximately) the 27th March and the 23rd November A.D. 1146.

This date, No. 85, corresponds to Wednesday, the 23rd November A.D. 1146, which was the 27th day of the month of Vṛiśchika, and on which the 7th *tithi* of the dark half (of Mārga-śirsha) ended 14 h. 10 m., while the *nakshatra* was Pūrva-Phalguni, by the equal space system for 22 h. 20 m., by the Brahma-siddhanta for 5 h. 55 m., and according to Garga for 10 h. 30 m. after mean sunrise.

86.— In the Karavandīvara temple at Udaiyārkōyil.²

1 Svasti śrī [||*] Pū maruviya Tiru-mādum
8 k[ō=Ppara]kēsa-
9 [ri]patmar-āna Tribu[va]nachechak[ka]ravattiga[!] śrī-Rāja[r]ājadēvaṅku yāṇ[ḍu]
āṅ[va]d[u] Ku-
10 m[bha]-nāyaṅgu apara-pakaha[t]tu pratham[ai]yu[m] Vi[y]āla-kkiḷamaiyum peṅga
Maga[tt]u nā[ti].

"In the sixth year (of the reign) of king Parakēsarivarman *alias* the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Maghā, which corresponded to a Thursday and to the first *tithi* of the second fortnight of the month of Kumbha."

The date corresponds to Thursday, the 24th January A.D. 1152,³ which was the first day⁴ of the month of Kumbha, and on which the first *tithi* of the dark half (of Māgha) ended 15 h. 27 m., while the *nakshatra* was Maghā, by the equal space system for 22 h. 20 m., by the Brahma-siddhanta for 7 h. 53 m., and according to Garga for 10 h. 30 m. after mean sunrise.

87.— In the Kapardīvara temple at Tiruvalañjuḷi.⁵

1 Svasti śrī || Pū maruviya Tiru-mādum
5 [k]ō=Pparakēsaripaṇmar-āṇa Tir[i]buvanachchak[ka]ravattiga[] śrī-
Rājarāja-

¹ No. 622 of the Government Epigraphist's collection for 1902.

² No. 407 of the Government Epigraphist's collection for 1902.

³ Between A.D. 1131 and 1178 this is the only day for which the date is correct.

⁴ The Kumbha-samkrānti took place 20 h. 58 m. after mean sunrise of the 23rd January A.D. 1152.

⁵ No. 628 of the Government Epigraphist's collection for 1902.

No. 1.— DATES OF CHOLA KINGS.

By PROFESSOR F. KIELEORN, C.I.E.; GÖTTINGEN.

(Continued from Vol. VII. page 177.)

OF the numerous dates of Chôja kings sent to me by Prof. Hultzschan and Mr. Venkayya, I again publish seventeen. Among these, the most interesting — and, I may add, those which have given me most trouble — are perhaps the five dates Nos. 85-89 of Rājarāja [II.] Parakēsarivarman, which prove that this king, of whom no dates have yet been published here, commenced to reign between (approximately) the 27th March and the 23rd November A.D. 1146. The date No. 99 reduces the time, previously found for the commencement of the reign of Rājendra-Chôja III., to the period from (approximately) the 21st March to the 20th April A.D. 1246. The date No. 94, of Kulōttunga-Chôja III., is of the 25th January A.D. 1217, while the dates of his successor Rājarāja III. show that this king commenced to reign already between (approximately) the 23rd June and the 13th August A.D. 1216; and similarly the dates Nos. 96 and 97, of Rājarāja III., are of the 7th February and the 22nd April A.D. 1248, while the years of his successor Rājendra-Chôja III., as has just been stated, are counted from some time between (approximately) the 21st March and the 20th April A.D. 1246. The date No. 100 belongs to a king or chief Tribhuvanavira-Chôja, who apparently commenced to reign in A.D. 1331-32.

A.— VIKRAMA-CHOLA.

84.— In the Śaranāryapa-Perumāḷ temple at Tiruvadi.¹

1 Svasti śrī [||*] Pū-mādu puṇara
9 kō=Pparakēsaripanma-
10 r-āna Tīribvapaachchakkravatti[ga*]! śrī-Vikkirama-Śōjadēvar-
11 kku yāṇ[ḍu*] 7vadu Sim[ha]-nāyaṅgu apara-pakshattu ēkā-
12 [di(da)]siyun=Tiruvādiraiyum peṅga [V]i[y]āla-kkiḷamai-nā.

"In the 7th year (of the reign) of king Parakēsarivarman *alias* the emperor of the three worlds, the glorious Vikrama-Chôjadēva,— on a Thursday, which corresponded to (the day of) Ārdra and to the eleventh *tithi* of the second fortnight of the month of Simha."

¹ No. 30 of the Government Epigraphist's collection for 1903.

6 dévaṅku y[āṅ]ḍu panniraṅḍavadu Mésha-n[āya]ṅṅu apara-pakshattu navamiyum
B[uda]n-kiḷamaiyu[m] peṅṅa Ti-
7 ruvōṅa[ttā nā].

“In the twelfth year (of the reign) of king Parakésarivarman *alias* the emperor of the three worlds, the glorious Rájarájadéva,—on the day of Śravaṇa, which corresponded to a Wednesday and to the ninth *tithi* of the second fortnight of the month of Mésha.”

The date corresponds to Wednesday, the 26th March A.D. 1158, which was the 2nd day of the month of Mésha, and on which the 9th *tithi* of the dark half (of Chaitra) ended 6 h. 35 m., while the *nakshatra* was Śravaṇa, by the equal space system and according to Garga for 12 h. 29 m., and by the Brahma-siddhānta for 13 h. 47 m., after mean sunrise.

88.—In the Ékámranátha temple at Conjeeveram.¹

1 Svasti śrī [||*] Pá maruviya Tiru-máduṁ
2 kō=Pparakésaripatmar-āṅa Tribhuvanachchakkaravattigaḷ śrī-
Rájarájadévaṅku yāṅḍu paḍiṅṅājavadu Tai-másattu púrva-pakshattu
Puparpúsamum chatu[r]ddasīyumu Viyāḷa-kkiḷamaiyumu-á[ṅṅa] nāḷ.

“In the fifteenth year (of the reign) of king Parakésarivarman *alias* the emperor of the three worlds, the glorious Rájarájadéva,—on the day of Punarvasu, which was a Thursday and the fourteenth *tithi* of the first fortnight of the month of Tai.”

The date corresponds to Thursday, the 12th January A.D. 1161, which was the 19th day of the month of Tai (or Makara), and on which the 14th *tithi* of the bright half (of Māgha) ended 19 h. 3 m., while the *nakshatra* was Punarvasu, by the equal space system and according to Garga for 11 h. 10 m., and by the Brahma-siddhānta for 10 h. 30 m., after mean sunrise.

89.—In the Ápatsaháyéśvara temple at Álaṅḍuḷ.²

1 Svasti śrī [||*] Pá maruviya Tiru-máduṁ
6 kō=Pparakésaripatmar-āṅa
7 Tribhuvanachchakkaravattigaḷ
8 śrī-Rájarájadévaṅku yā-
9 ṅḍu áṅḍavadu
14 Mīna-nāyaṅṅu pú-
15 rva-pakshattu saptamiyumu Viyāḷa-k-
16 kiḷamaiyumu peṅṅa Oróṅapi-ná-
17 }.

“In the sixth year (of the reign) of king Parakésarivarman *alias* the emperor of the three worlds, the glorious Rájarájadéva,—on the day of Bōhiṅḷ, which corresponded to a Thursday and to the seventh *tithi* of the first fortnight of the month of Mīna.”

Between A.D. 1136 and 1299 the only days for which this date would be correct, are Thursday, the 26th February A.D. 1159, and Thursday, the 27th February A.D. 1186, neither of which could have fallen in the 6th year of the king's reign. Guided by the results of my calculations, I therefore assume that the month of Mīna has been wrongly quoted in the date instead of the immediately preceding month of Kumbha. For this month the date regularly corresponds to Thursday, the 14th February A.D. 1152, which was the 22nd day of the month of Kumbha, and on which the 7th *tithi* of the bright half (of Phāḷguna) ended 17 h. 26 m. after

¹ No. 9 of the Government Epigraphist's collection for 1893; compare *South-Ind. Inscri.* Vol. III. p. 79 and note 4.

² No. 5 of the Government Epigraphist's collection for 1899.

mean sunrise, while the *nakshatra* was Bōhiṅḷ, by the Brahma-siddhānta and according to Garga during the whole day, and by the equal space system from 6 h. 34 m. after mean sunrise.

C.—KULOTTUNGA-CHOLA III.

90.—In the Pátáḷléśvara temple at Aridváramaṅgalaṁ.¹

1 [cha]kkaravattigaḷ śrī ra³ Madurai koṅḍ-aru[ī]ya śrī-Kuló[t]tuṅga-
Śóḷadéva[r³]kku yāṅḍu 10vadu pattávalu Ma[ga]ra-nāyaṅṅu apara-pasha(keha)ttu
pañchamiyumu Śevvá[y³]-kkiḷamaiyumu peṅṅa Uttiráttádi-nāḷ.

“In the 10th—tenth—year (of the reign) of the emperor [of the three worlds], the glorious Kulóttuṅga-Chóḷadéva, who was pleased to take Madurai,—on the day of Uttara-Bhadrapadā, which corresponded to a Tuesday and to the fifth *tithi* of the second fortnight of the month of Makara.”

The wording of this date is intrinsically wrong. As in the dates of the inscriptions Nos. 480 and 604 of my *Southern List*, either the *nakshatra* Uttara-Bhadrapadā has been quoted erroneously instead of Uttara-Phalgunī or the second fortnight instead of the first. My calculation has shown that really the latter is the case.

The intended day undoubtedly is Tuesday, the 5th January A.D. 1188, which was the 11th day of the month of Makara, and on which the 5th *tithi* of the bright half (of Māgha) ended 19 h. 42 m. after mean sunrise, while the *nakshatra* was Uttara-Bhadrapadā, by the Brahma-siddhānta and according to Garga the whole day, and by the equal space system from 5 h. 55 m. after mean sunrise.

91.—In the Aruṅḷchaléśvara temple at Tiruvaṅṅamalai.⁴

1 Svasti [||*]
2 Tiribvuvavi(vi)radévaṅku yāṅḍu 35va[du]
3 M[i]ḍuṅa-nāyaṅṅu eṭṭān-diyadiyumu A[ṅṅu]lamumu peṅṅa tiru-Nā[ya]ṅṅu-
kkiḷamai-nāḷ.

“In the 35th year (of the reign) of Tribhuvanaviradéva,—on a sacred Sunday which corresponded to (the day of) Anurádhā and to the eighth solar day of the month of Mithuna.”

The date should fall in A.D. 1213. In this year the Mithuna-saṅkrānti took place 3 h. 1 m. after mean sunrise of Sunday, the 26th May, which was the first day of the month of Mithuna. The 8th day of the same month therefore was Sunday, the 2nd June A.D. 1213; and on this day the *nakshatra* was Anurádhā, by the Brahma-siddhānta for 22 h. 20 m., and by the equal space system and according to Garga from 3 h. 17 m., after mean sunrise.

92.—In the Kapardíśvara temple at Tiruvalaṅjuḷi.⁵

1 Svasti śrī [||*]
2 Tr[i]bhuvanachchakkarava[tt]i[ga]ḷ Maduraiyumu Í[ā]-
3 mum Karuvárum Pá[ṅṅu]ḍiyāṅṅai muḍi-ttalaiy[u]-
4 ṅ-gōṅḍ-aru[ī] virar-abhihékamumu vi-
5 jayar-abhihékamumu paṅṅi-ar[ā]ḷi[ya] śrī-Tiri-
6 [b]uvava[na]v[ira]dévaṅku yā[ṅḍu] mu[p]paḷ[t]áṅṅa-

¹ No. 611 of the Government Epigraphist's collection for 1902.

² The beginning of the inscription is built in.

³ Cancel the syllables *śrī ra*.

⁴ No. 557 of the Government Epigraphist's collection for 1902.

⁵ No. 631 of the Government Epigraphist's collection for 1902.

7 vadu Mēsha-nāyarr[ru] pū[rvva]-pakshattu
8 tri(tri)tiyaiyum Tiṅgal-ki[lam]aiyum per-
9 ra Rōśāpi-nā].

“In the thirty-sixth year (of the reign) of the emperor of the three worlds, the glorious Tribhuvanavirādēva, who was pleased to take Madurai, Iḷam, Karuvūr and the crowned head of the Pāṇḍya, and was pleased to perform the anointment of heroes and the anointment of victors,— on the day of Rōhīṇī, which corresponded to a Monday and to the third *tithi* of the first fortnight of the month of Mēsha.”

The date corresponds to Monday, the 14th April A.D. 1214, which was the 21st day of the month of Mēsha, and on which the 3rd *tithi* of the bright half (of Vaiśākha, i.e. the *akshaya-tṛitīyā*) ended 19 h. 29 m., while the *nakshatra* was Rōhīṇī, by the equal space system and according to Garga for 14 h. 27 m., and by the Brahma-siddhānta for 13 h. 47 m., after mean sunrise.

93.— In the Kailāsanātha temple at Kaḷappā].¹

1 Svasti śri [||*] Tribhuvanachchakravattiga[Ma]dhuraiyum Iḷamū=Garuvūru[m]
Pāṇḍiyāṇ muḍi-ttaliyū=goṇḍu [vi]rar=abhishēkamum vijai[ya]r=abhi[sh]ā.
2 kamu[m] pappiy-aruiya śri-Tri[bhu]va[ṅga]virādēvaṅku yāṇḍu 37ḍu
Vri(vri)śohika-nāyarr[u] pū[rvva]-pakshattu [cha]ta(tu)[r]dda[sī]yunn=Diṅgal-
kkaḷamaiyu[m] perṅa
3 Kārttigai-nā].

“In the 37th year (of the reign) of the emperor of the three worlds, the glorious Tribhuvanavirādēva, who took Madurai, Iḷam, Karuvūr and the crowned head of the Pāṇḍya, and was pleased to perform the anointment of heroes and the anointment of victors,— on the day of Kṛittikā, which corresponded to a Monday and to the fourteenth *tithi* of the first fortnight of the month of Vṛiśchika.”

The date corresponds to Monday, the 17th November A.D. 1214, which was the 21st day of the month of Vṛiśchika, and on which the 14th *tithi* of the bright half (of Mārgaśīrṣa) commenced about sunrise, while the *nakshatra* was Kṛittikā, by the Brahma-siddhānta for 11 h. 50 m., according to Garga for 13 h. 8 m., and by the equal space system from 0 h. 39 m., after mean sunrise.

94.— In the Kapardīvara temple at Tiruvalaḷju].²

1 Svasti [śri][||*] Tirib[va]ṅachchak[k]ava[r]ttiga[Madurai]y[u]m Iḷamum Karuvūrum
Pāṇḍiyāṇai muḍi-ttaliyūm koṇḍu virar=abhishē[ka]mmum³ vijayar=
abhishēkammum³ panni[y-a]ruiya śri-Tiribuvaṅa[vīra]dēvaṅku yāṇḍu 39āvadu
Kumba-nāyarru a[pa]ra-pakshattu prathamaiyum [Bu]ḍaṅ-kiḷammaiym⁴ perṅa
Magattu nā].

“In the 39th year (of the reign) of the emperor of the three worlds, the glorious Tribhuvanavirādēva, who took Madurai, Iḷam, Karuvūr and the crowned head of the Pāṇḍya, and was pleased to perform the anointment of heroes and the anointment of victors,— on the day of Maghā, which corresponded to a Wednesday and to the first *tithi* of the second fortnight of the month of Kumbha.”

The date corresponds to Wednesday, the 25th January A.D. 1217, which was the 3rd day of the month of Kumbha, and on which the first *tithi* of the dark half (of Māgha) ended 12 h. 54 m., while the *nakshatra* was Maghā, by the equal space system for 11 h. 50 m., after mean sunrise.

¹ No. 659 of the Government Epigraphist's collection for 1902.

² No. 618 of the Government Epigraphist's collection for 1902.

³ Read -abhishēkamum.

⁴ Read -kiḷamaiyum.

D.— RAJARAJA III.

95.— In the Kapardīvara temple at Tiruvalaḷju].¹

1 Tiribuvaṅachchakravattiga[||] śri-Rā[ra]*rā[ra]*dēvaṅku yāṇḍu eṭṭāvadiṅ e[dirā]m-
āṇḍu Tul[ā-nā]yarru apara-pakshattu na[vami]yu[m] Tiṅ-
2 ga[||]-kiḷamaiyum perṅa Pū[sattu] n[ā].

“In the year opposite the eighth year (of the reign) of the emperor of the three worlds, the glorious Rā[ra]rā[ra]dēva,— on the day of Pushya, which corresponded to a Monday and to the ninth *tithi* of the second fortnight of the month of Tulā.”

The date undoubtedly corresponds to Monday, the 7th October A.D. 1224, which was the 11th day of the month of Tulā, and on which the *nakshatra* was Pushya, by the equal space system and according to Garga for 15 h. 46 m., and by the Brahma-siddhānta for 13 h. 47 m., after mean sunrise. But the *tithi* which ended on this day, 14 h. 40 m. after mean sunrise, was the 8th, not the 9th, *tithi* of the dark half (of Āśvina).— The result shows that, instead of the word na[vami]yu[m] of the original date, we ought to read *aṣṭamīyūm*.

96.— In the Aruṅśchalésvara temple at Tiruvaṅṅmalai].²

1 Svasti śri [||*] Tiribuvaṅachchakravatt[i]ga[śri-Irā]jarājadēvaṅku [y]āṇḍu
32vadu Kumba-nāyarru pū[rvva]-pakshattu tu[vāda]siyum Vel[||i]-kk[i]lamai-
yum perṅa Puṅar[p]ūsattu nā].

“In the 32nd year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Punarvasu, which corresponded to a Friday and to the twelfth *tithi* of the first fortnight of the month of Kumbha.”

The date corresponds to Friday, the 7th February A.D. 1248, which was the 15th day of the month of Kumbha, and on which the 12th *tithi* of the bright half (of Phālguna) ended 21 h. 23 m., while the *nakshatra* was Punarvasu, by the equal space system and according to Garga for 13 h. 47 m., and by the Brahma-siddhānta for 13 h. 8 m., after mean sunrise.

97.— In the Aruṅśchalésvara temple at Tiruvaṅṅmalai].³

1 Svast[i] śri [||*] T[i]ribuvaṅachchakka[ra]va[ttiga] śri[I-R]ājarājadēvaṅku yāṇḍu
32vadu Mēsha-nāy[ru] apara-pakshattu trayōś[si]yūm Buḍaṅ-k[i]lamaiyūm
perṅa Irōba(va)d[i]-nā].

“In the 32nd year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,— on the day of Rēvatī, which corresponded to a Wednesday and to the thirteenth *tithi* of the second fortnight of the month of Mēsha.”

The date corresponds to Wednesday, the 22nd April A.D. 1248, which was the 29th day of the month of Mēsha, and on which the 13th *tithi* of the dark half (of Vaiśākha) commenced 6 h. 40 m., while the *nakshatra* was Rēvatī for 21 h. 1 m., after mean sunrise.

E.— RAJENDRA-CHOLA III.

98.— In the Prēmapurīvara temple at Aṅbil].⁴

1 T[i]r[i]bu[va]ṅachchakka[ra]va[ttiga] śri[I-R]ā[ra]dēva[ra]ḍi-
ḍ[ō]jadēva[r]kku yāṇḍu 4vadu Kaṅṅ[i]-nāyarru pūrvva-pakshattu pañchamīyūm
Nāy[i]ru-kkiḷamaiyum perṅa A[ni]attu nā[||].

¹ No. 629 of the Government Epigraphist's collection for 1902.

² No. 491 of the Government Epigraphist's collection for 1902.

³ No. 608 of the Government Epigraphist's collection for 1902.

⁴ No. 596 of the Government Epigraphist's collection for 1902.

"In the 4th year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōladēva,— on the day of Anurādhā, which corresponded to a Sunday and to the fifth *tithi* of the first fortnight of the month of Kanyā."

The date corresponds to Sunday, the 12th September A.D. 1249, which was the 16th day of the month of Kanyā, and on which the 5th *tithi* of the bright half (of Āsvinā) commenced 1 h. 42 m., while the *nakshatra* was Anurādhā, by the Brahma-siddhānta for 22 h. 59 m., and by the equal space system and according to Garga from 3 h. 56 m., after mean sunrise.

99.— In the Sākshināthasvāmin temple at Avalivanallūr.¹

- 1 . . . Tiribu[va]ṅgaśakkara[va]-
- 2 ttiga| śr[ī]-Irāsēndira-Ś[ō]-
- 3 ḷadēva[r*]kku yāṇḍu 22[va]ḍu
- 4 Mēḷa-nāyaru apara-pakshattu
- 5 de(da)śam[i]yum Budāṅ-kiḷamaiyum [p]e-
- 6 ṅga [Śa]dai[yattu] n[ā].

"In the 22nd year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōladēva,— on the day of Śatabhishaj, which corresponded to a Wednesday and to the tenth *tithi* of the second fortnight of the month of Mēsha."

The date will be expected to fall in A.D. 1267 or 1268. It actually corresponds to Wednesday, the 20th April A.D. 1267, which was the 26th day of the month of Mēsha, and on which the 10th *tithi* of the dark half (of Vaiśākha) ended 13 h. 40 m., while the *nakshatra* was Śatabhishaj, by the equal space system for 4 h. 36 m., after mean sunrise.

This result reduces the time² during which Rājendra-Chōla III. must have commenced to reign to the period between approximately the 21st March and the 20th April A.D. 1246.

F.— TRIBHUVANAVIRA-CHOLA.

100.— In the Aruṅchalēśvara temple at Tiruvannāmalai.³

- 1 Svasti śrī [||*] T[r]ibhuvanavira-Śōḷadēvaṅku yāṇḍu llāvaḍu
- 2 Chitrabhānu-varushattu Simha-nāyaru apara-pakshattu sa-
- 3 ptamiyum Ve[||]i-kkiḷamaiyum peṅga Urōṣapi-nā-
- 4 l.

"In the 11th year (of the reign) of Tribhuvanavira-Chōladēva,— on the day of Rōhini, which corresponded to a Friday and to the seventh *tithi* of the second fortnight of the month of Simha of the year Chitrabhānu."

If the Tribhuvanavira-Chōladēva of this date were identical with Kulōttuṅga-Chōla III. who bears the name Tribhuvanaviradēva, the date would fall in A.D. 1188; but for that year it is in every respect incorrect. Between A.D. 1000 and 1500 the only day for which the date is correct is Friday, the 23rd August A.D. 1342. This day by the southern luni-solar system fell in the Jovian year Chitrabhānu (Śaka-samvat 1264 expired). It was the 26th day of the month of Simha, and on it the 7th *tithi* of the dark half (of Bhādrapada) ended 10 h. 8 m., while the *nakshatra* was Rōhini, by the equal space system and according to Garga for 19 h. 42 m., and by the Brahma-siddhānta for 19 h. 3 m., after mean sunrise.

¹ No. 605 of the Government Epigraphist's collection for 1902.

² See above, Vol. VII. p. 176.

³ No. 522 of the Government Epigraphist's collection for 1902.

If correctly recorded, the date would prove that there was a king or chief Tribhuvanavira-Chōla who commenced to reign between approximately the 24th August A.D. 1331 and the 23rd August A.D. 1332 (in Śaka-samvat 1253-54).

No. 26.— DATES OF CHOLA KINGS.

By PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

(Continued from page 8.)

From the Government Epigraphist's collection of inscriptions Mr. Venkayya again has sent me for examination a large number of dates, of which I here publish 36 dates of Chōla kings. The most important of them is No. 101, which has only quite lately been discovered by Mr. Venkayya. It is of the reign of Parāntaka I and, together with my date No. 55, proves that this king commenced to reign between (approximately) the 15th January and the 25th July A.D. 907. Of the other dates, one (No. 102) is of the reign of Rājendra-Chōla I., and one (No. 106) of the reign of Rājarāja II.; 3 dates (Nos. 103-105) belong to Vikrama-Chōla, 8 (Nos. 107-114) to Kulōttuṅga-Chōla III. (Virarājendra-Chōladēva, Tribhuvanaviradēva), 16 (Nos. 115-130) to Rājarāja III., and 6 (Nos. 131-136) to Rājendra-Chōla III. These dates in every way confirm the correctness of the general results previously obtained; at the same time, they enable us to give within narrower limits the times during which some of the kings to whom they belong must have commenced to reign. Thus it may be affirmed now that Rājendra-Chōla I. commenced to reign between (approximately) the 27th March¹ and the 7th July A.D. 1012; Rājarāja II. between (approximately) the 27th March and the 11th July² A.D. 1146; Kulōttuṅga-Chōla III. between (approximately) the 6th³ and 8th July A.D. 1178, and Rājarāja III. between (approximately) the 27th June and the 10th July A.D. 1216.⁴

¹ See No. 102.

² See No. 106.

³ See No. 106.

⁴ See Nos. 129 and 119.

Mr. Venkayya has discovered and sent to me a third date of the king Parāntaka I., which should admit of verification, and which I have examined but do not venture to publish yet. I am also keeping back a number of dates of Kulōttuṅga-Chōla II. and Rājādhirāja II., because I am not fully convinced of the correctness of my general results. The discovery of additional dates of these kings is highly to be desired and would be of considerable importance. Mr. Venkayya has kindly checked the readings of the original dates here published, after they were in print.

A.—PARANTAKA I.

101.—In the Sivalōkanātha temple at Grāmam.¹

16 Svasti śrī [||*] Kali[y*]uga-va[r*]sham nālayirattu nār[pa]-
 17 ttn nālu Madiraiḱopda kō=Pparakēsariḱamag-
 18 ku yāṅḱu 36āvadu Kali[y*]u . . . [ḱra] nāḱ
 19 paḱipāṅgu-nāḱ[y*]irattu eḱu[ba] . . . [i]rattu
 20 mupattu ś[lu]
 22 i[v]v-āḱḱai Ma-
 23 [gā-nā]yāḱḱu=Chchāṅi-ḱḱiḱamai peḱḱa 'Iravadi-n[ā].

"(In) the Kaliyuga year four thousand and forty-four, the 38th year (of the reign) of king Parakēsariḱarman who took Madirai,—on the fourteen-hundred-thousand, seven[ty] . . . [thousand] thirty-seventh day Kaliyuga on the day of Bēvati, which corresponded to a Saturday of the month of Ma(kara) in this year."

For the current year 4044 of the Kaliyuga this date corresponds to Saturday, the 14th January A.D. 943, which by the Ārya-siddhānta was the 23rd day of the month of Makara, and on which [the 6th tithi of the bright half of Māgha ended 18 h. 21 m., while] the nakshatra was Bēvati for 9 h. 12 m., after mean sunrise. The preceding Makara-sam rānti, according to the Ārya-siddhānta, had taken place 8 h. 33 m. after mean sunrise of Friday, the 23rd December A.D. 942, when the ahargana, calculated by Warren's Table, was 1477014d. 8 h. 33 m. That Friday, therefore, was the 1477015th day of the Kaliyuga, and Saturday, the 14th January A.D. 943, the 1477037th day, the day which, without any doubt, was put down in the original date.

Above, Vol. VII. p. 1, I have stated that between A.D. 900 and 985 the Chōla date No. 55, which is of the 40th year of the reign of Parāntaka I., must correspond to either the 24th July A.D. 919 or the 25th July A.D. 946. The present date No. 101, which is of the 36th year of the same reign and corresponds to the 14th January A.D. 943, shows that the second alternative given by me really furnishes the true equivalent of the date No. 55. And the two dates together prove that Parāntaka I. commenced to reign between (approximately) the 15th January and the 25th July A.D. 907.

I may add that this is the earliest known Chōla date which can be verified, and that of the 136 dates hitherto examined it is the only one in which the era of the Kaliyuga is quoted. Among the same dates, 18 quote the Śaka era; and of these, 12 are in Kanarese, 4 in Telugu, and only 2 (No. 6 of Ś. 1030, and No. 16 of Ś. 1119) in Tamil inscriptions. The Śaka year 991 is quoted in the date of a Tamil inscription of Virarājendra, which does not admit of verification.

B.—RAJENDRA-CHOLA I.

102.—In the Dārukāvanēśvara temple at Tiruppālāttuḱrai.²

1 Sva[sti] śrī [||*] Tiru maṅḱ[i] vaḱara kō-
 [Ppa][ra*]kēsariḱa[nma]r-āṅa śrī-Rājēnta(nḱra)-Chōḱadēvaḱku [yāṅḱu 5āvadu]

¹ No. 735 of the Government Epigraphist's collection for 1905.
² Read Iravadi.
³ No. 275 of the Government Epigraphist's collection for 1905.

2 ivv-āḱḱu Mēsha-nā[ya*]ḱḱu Śev[vā][y*]-ḱḱiḱamai
 peḱḱa Śadaiya-ttir[unā].¹

"In [the 5th year] (of the reign) of king Parakēsariḱarman alias the glorious Rājēndra-Chōḱadēva,—on the auspicious(?) day of Śatabhishaj, which corresponded to a Tuesday of the month of Mēsha in this year."

According to the result previously² found for the commencement of the reign of Rājēndra-Chōla I., this date will be expected to fall in A.D. 1016 or A.D. 1017. In A.D. 1016 the month of Mēsha contained no Tuesday on which the nakshatra was Śatabhishaj. The date therefore apparently corresponds to Tuesday, the 28th March A.D. 1017, which was the 4th day of the month of Mēsha, and on which [the 11th tithi of the dark half of Chaitra ended 21 h. 33 m., while] the nakshatra was Śatabhishaj, by the equal space system from 5 h. 55 m. after mean sunrise to the end of the day, according to Garga from 5 h. 55 m. to 21 h. 40 m., and by the Brahma-siddhānta from 6 h. 34 m. to 19 h. 3 m., after mean sunrise.—I can give no special reason why the day should be described as 'the auspicious day of Śatabhishaj.'

The date would prove that the reign of Rājēndra-Chōla I. could not have commenced before (approximately) the 27th March A.D. 1012.

C.—VIKRAMA-CHOLA.

103.—In the Tyāgarājasvāmin temple at Tiruvārūr.³

1 Svasti [śrī ||*] Pū-mālai miḱaindu
 5 kō=Pparakēsariḱarman-āṅa Tribhu[va*]nāchakravattigai śrī-Vikrama-
 Śōḱadēvaḱ[k*]ḱu y[ā]ṅḱu
 6 nāḱāvadu Isha[bha-n]āyāḱḱu [p]ḱ[rvā]-pakshattu tri[tī]yāyḱum [Bu]dan-[ki]ḱamai-
 yu[m*] peḱḱa Tiruvādirai-nāḱ.

"In the fourth year (of the reign) of king Parakēsariḱarman alias the emperor of the three worlds, the glorious Vikrama-Chōḱadēva,—on the day of Ārdra, which corresponded to a Wednesday and to the third tithi of the first fortnight of the month of Bishabha."

The date corresponds to Wednesday, the 10th May A.D. 1122, which was the 16th day of the month of Bishabha, and on which the 3rd tithi of the bright half (of Jyāishḱha) ended 16 h. 22 m., while the nakshatra was Ārdra, by the equal space system for 12 h. 29 m., and according to Garga for 0 h. 39 m., after mean sunrise.

104.—In the Tyāgarājasvāmin temple at Tiruvārūr.⁴

1 Pū-mādu pu[ra]ra
 2 kō=Pparakēsariḱarman-āṅa Tiribuvanāchakravattigai [Vi]ḱkrama-
 [Ś]ōḱadēvaḱḱu yā-
 3 ḱḱu [n]āḱāvadu Bishabha-nāyāḱḱu a[para-pakshat]tu [trit]i[yāyḱum Budha]n-ḱiḱamai-
 yḱum peḱḱa Tiruvādirai-nāḱ.

"In the fourth year (of the reign) of king Parakēsariḱarman alias the emperor of the three worlds, Vikrama-Chōḱadēva,—on the day of Ārdra, which corresponded to a Wednesday and to the [third] tithi of the [second] fortnight of the month of Bishabha."

There can be no doubt that this date is identical with the preceding one, and that the reading in line 3 of the original should have been pūva-pakshattu, not apara-pakshattu.

¹ According to Mr. Venkayya the reading to all appearance is as given above; but he adds that 'tis ad' may be intended.
² See above, Vol. VII. p. 7.
³ No. 564 of the Government Epigraphist's collection for 1904.
⁴ No. 563 of the Government Epigraphist's collection for 1904.

105.— In the Tyāgarājāsvāmin temple at Tiruvārūr.¹

- 1 Svasti śr[ī] [||*] Pū-mādu pupara
 2 kō=Pparakēsaripanmar=āna Tribhuvanach[cha]k[ka]rava[tti]ga|
 Vi[k]kīrama-Śōladēvaṅku yāṇḍu Śāvadu Śīnga-nāyaṅgu [a]pa[ra-ra]kkattu²
 tritīyayum Śevvāy-kkīlamaiyum peṅga Rēvati-nā[ī].

“In the 8th year (of the reign) of king Parakēsarivarman *alias* the emperor of the three worlds, Vikrama-Chōjadēva,— on the day of Rēvati, which corresponded to a Tuesday and to the third *tīthi* of the second fortnight of the month of Śimha.”

The date corresponds to Tuesday, the 18th August A.D. 1125, which was the 22nd day of the month of Śimha, and on which the 3rd *tīthi* of the dark half (of Bhādrapada) commenced 0 h. 34 m., while the *nakshatra* was Rēvati from³ 3 h. 56 m., after mean sunrise.

D.— RAJARAJA II.

106.— In the Kapardīśvara temple at Tiruvālājnji.⁴

- 1 || Svasti śrī [||*] Pū maruviya Tiru-mādu[m]
 5 kō=Pparakē[śa]ripa[nma]r=āna T[iri]buvaga[śa]kka[ravattiga]
 śrī-Rājarājādēva[r*]kku yāṇḍu padin[ā]rāva[di]-
 6 [ṅ e]dirām=āṇḍu Kaṅka[da]ga-nā[ya]ṅgu [aparapaksha]-tuvād[e]ṣiyum Budag-
 ki[la]maiym peṅga Pu[nā]rpōsattu nā[ī].

“In the year opposite the sixteenth year (of the reign) of king Parakēsarivarman *alias* the emperor of the three worlds, the glorious Rājarājādēva,— on the day of Punarvasu, which corresponded to a Wednesday and to the twelfth *tīthi* [of the second fortnight] of the month of Karkāṭaka.”

According to the result previously⁵ found for the commencement of the reign of Rājarāja II, this date would be expected to fall in either A.D. 1162 or A.D. 1163. For A.D. 1163 my calculation has yielded no result that could be at all acceptable. Nor can a perfectly correct result be obtained for A.D. 1162; but in this year the choice would clearly lie between Wednesday, the 11th July, and Thursday, the 12th July, as may be seen from the following details:—

Wednesday, the 11th July A.D. 1162, was the 15th day of the month of Karkāṭaka. The 12th *tīthi* of the dark half (of Āshāḍha) ended on this day 0 h. 26 m. after mean sunrise; but the *nakshatra* was Ārdrā (by the Brahma-siddhānta for 8 h. 32 m., according to Garga for 10 h. 30 m., and by the equal space system for 22 h. 20 m., after mean sunrise), followed by Punarvasu. On the other hand—

Thursday, the 12th July A.D. 1162, was the 16th day of the month of Karkāṭaka. On this day the *nakshatra* was Punarvasu, by the equal space system and according to Garga for 22 h. 59 m., and by the Brahma-siddhānta for 22 h. 20 m., after mean sunrise; but the *tīthi* which ended on it, 1 h. 0 m. after mean sunrise, was the 13th, *not* the 12th, *tīthi* of the dark half (of Āshāḍha).

Obliged to choose between the two, I would decide in favour of Wednesday, the 11th July A.D. 1162, and assume that in the original data the *nakshatra* Punarvasu has been erroneously quoted instead of the immediately preceding *nakshatra* Ārdrā.

¹ No. 556 of the Government Epigraphist's collection for 1904.

² Read -pakkattu. ³ Compare below, No. 121.

⁴ No. 626 of the Government Epigraphist's collection for 1902.

⁵ See above, p. 2.

I may add that between A.D. 1146 and 1173 the only days for which the original date would be perfectly correct are Wednesday, the 27th July A.D. 1155, and Wednesday, the 23rd July A.D. 1169, but that with neither of these days could the other dates of Rājarāja II. be reconciled.

The date would appear to show that the reign of Rājarāja II. could not have commenced after (approximately) the 11th July A.D. 1146.

E.— KULOTTUNGA-CHOLA III.

107.— In the Vēdāraṇyēśvara temple at Vēdāraṇyam.¹

- 1 [Sva]sti śrī [||*] T[ir]i[bu]vaga[cha]kka[ravattiga] śrī-Kulōttu[ṅga-Śō]la-
 dēva[r]kku yāṇḍu n[ā]-
 2 lāvadu Mīga-nāyaṅgu [pū*]rvva-pakshattu pañjamiyum V[i]yāla-kkīlamai-
 yum peṅ[ra*]
 3 [U]rōśani-nā[ī].

“In the fourth year (of the reign) of the emperor of the three worlds, the glorious Kulōttunga-Chōjadēva,— on the day of Rōhiṇi, which corresponded to a Thursday and to the fifth *tīthi* of the first fortnight of the month of Mīna.”

The date corresponds to Thursday, the 11th March A.D. 1182, which was the 17th day of the month of Mīna, and on which the 5th *tīthi* of the bright half (of Chaitra²) ended 9 h. 25 m., while the *nakshatra* was Rōhiṇi for 20 h. 21 m. or 21 h. 1 m., after mean sunrise.

108.— In the Vāliśvara temple at Rāmagiri.³

- 1 Svasti śrī [||*] Tir[i]buvaga[cha]kka[ravattiga] śrī-[V]īrarāśē[ṅga]ra-
 Śō[la]dēva[r]kku yāṇḍu ś[rā]vadu Kaṅkaḍaga-nāyaṅgu apara-pakkahat[ta*]
 dāvāśiyum [V]iyāla-kkīlamaiyum peṅga Urōśa[ni]-nā[ī].

“In the sixth year (of the reign) of the emperor of the three worlds, the glorious Vīrarāśēndra-Chōjadēva,— on the day of Rōhiṇi, which corresponded to a Thursday and to the twelfth *tīthi* of the second fortnight of the month of Karkāṭaka.”

The date undoubtedly corresponds to Thursday, the 5th July A.D. 1184, which was the 9th day of the month of Karkāṭaka, and on which the *nakshatra* was Rōhiṇi the whole day. But the *tīthi* which ended on this day, 18 h. 7 m. after mean sunrise, was the 11th, *not* the 12th, *tīthi* of the dark half (of Āshāḍha).— The result shows that in the original the 12th *tīthi* has been wrongly quoted instead of the 11th.

The result would also show that the reign of Kulōttunga-Chōja III. could not have commenced before (approximately) the 6th July A.D. 1178.

109.— In the Vāliśvara temple at Rāmagiri.⁴

- 1 Svasti śrī [||*] Tiribuvaga[cha]kka[ravattiga] śrī-[V]īrarāśēnd[ra-Śō]la-
 ḍu śrāvadu Kaṅkaḍaga-nā[ya]ṅgu apara-
 pakshattu [du]vā[da]śa[si]y[u]m Viyāla-kkīlamaiyum peṅga Urōśa[ni]-nā[ī].

¹ No. 415 of the Government Epigraphist's collection for 1904.

² This *tīthi* is a *Kalpādi*.

³ No. 644 of the Government Epigraphist's collection for 1904.

⁴ Read -pakkattu *śōd*.

⁵ No. 661 of the Government Epigraphist's collection for 1904.

⁶ The engraver has corrected *gi* into *gi*.

"In the sixth [year] (of the reign) of the emperor of the three worlds, the glorious Virarājendra-Chōjadēva,— on the day of Rōhīṇī, which corresponded to a Thursday and to the twelfth *tithi* of the second fortnight of the month of Karkāṭaka."

This date is practically identical with the preceding one, and contains the same mistake.

110.— In the Chandramaujisvara temple at Tiruvakkara.¹

1 k[o]ṇḍ-arai[i]ṅga śrī-Kul[ō]ttuṅga-
Śōjadēvaṅku iy[ā]ṇḍu lōvadu Magara-nāyya(ya)ṅṅu irubattunālan-
diyadiyum Tiṅga[-ki]lamaiyum ama(pa)ra-pakshattu navamiyum peṅṅa
Apilattu nāi.

"In the 16th year (of the reign) of the glorious Kulōttuṅga-Chōjadēva, who was pleased to take,— on the day of Anurādhā, which corresponded to the ninth *tithi* of the second fortnight, to a Monday, and to the twenty-fourth solar day of the month of Makara."

The date corresponds to Monday, the 17th January A.D. 1194. The preceding Makara-sankrānti took place 6 h. 45 m. after mean sunrise of Saturday, the 25th December A.D. 1193, which was the first day of the month of Makara. The 24th day of the same month therefore was Monday, the 17th January A.D. 1194; and on this day the 9th *tithi* of the dark half (of Māgha) ended 19 h. 8 m., while the *nakshatra* was Anurādhā, by the Brahma-siddhānta for 22 h. 40 m., and by the equal space system and according to Garga from 3 h. 17 m., after mean sunrise.

111.— In the Vēdāraṇyēsvara temple at Vēdāraṇyam.²

1 [Sva]ṅṅi śrī [||*] Tribh[ū]vanachchakkaravat[ti]gaḷ Madurai[yum] Iḷamum
Pāṇḍiyān muḍi-ttala[yum]
2 k[o]ṇḍ-araiya śrī-Kulōttuṅga-Śōjadēvaṅku [yā]ṇḍu i[rū]ba[d]āvadu Ishaba-nāyyaṅṅu
3 apara-pakkattu ākādā[ai]yum [N]āyāṅṅu-kki]lamaiyu[m] peṅṅa U[ti]tirāḍa[ti*]ti-nāi.

"In the twentieth year (of the reign) of the emperor of the three worlds, the glorious Kulōttuṅga-Chōjadēva, who was pleased to take Madurai, Iḷam and the crowned head of the Pāṇḍya,— on the day of Uttaraśābhā, which corresponded to a Sunday and to the eleventh *tithi* of the second fortnight of the month of Rishabha."

The date corresponds to Sunday, the 3rd May A.D. 1198, which was the 9th day of the month of Rishabha, and on which the 11th *tithi* of the dark half (of Vaiśākha) ended 14 h. 40 m. after mean sunrise. But the *nakshatra* on this day was Uttara-Bhadrapadā, for 7 h. 53 m. after mean sunrise.— The result shows that in the original U[ti]tirāḍa[ti*]ti- is an error for Uttirāḍāti-³

112.— In the Kailāsanāthasvāmin temple at Kaḷḷa-Perumbūr.⁴

1 [Ha]ra Svast[i] śr[i] [||*] T[i]r[i]buvaṅga[chcha]kkaravatt[i]gaḷ Ma-
2 durai[yum] I]la[mu]m Pāṇḍiyān m[ū]ḍi-ttala[yu]n-
3 [Garu*]vā[rū]ṅ-gōṇḍ-araiya śrī-Kulōttuṅga-Śōjadēvaṅku
4 ḍu yāṇḍu 23vadu Vṛiśchika-nāyāṅṅu apara-pakshattu tray[ō]-
5 daḷiyum Ti]h[ga]t-k[i]lamai[yum] [p]eṅṅa Viśā[ga]t[ti] nāi.

¹ No. 198 of the Government Epigraphist's collection for 1904.

² No. 430 of the same collection.

³ In the month of Rishabha an 11th *tithi* of the dark half cannot possibly be joined with the *nakshatra* Uttaraśābhā (Uttirāḍam).

⁴ No. 585 of the Government Epigraphist's collection for 1904.

"In the 23rd year (of the reign) of the emperor of the three worlds, the glorious Kulōttuṅga-Chōjadēva, who was pleased to take Madurai, Iḷam, the crowned head of the Pāṇḍya and Karuvūr,— on the day of Viśākha, which corresponded to a [Monday] and to the thirteenth *tithi* of the second fortnight of the month of Vṛiśchika."

The date corresponds to Monday, the 6th November A.D. 1200, which was the 11th day of the month of Vṛiśchika, and on which the 13th *tithi* of the dark half (of Kārttika) ended 11 h. 46 m., while the *nakshatra* was Viśākha, by the Brahma-siddhānta from 1 h. 58 m., according to Garga from 5 h. 55 m., and by the equal space system from 18 h. 24 m., after mean sunrise.

113.— In the Kailāsanāthasvāmin temple at Kaḷḷa-Perumbūr.¹

1 [Ha]ra Svasti śrī [||*] Tiribuvāṅga[ch]chakkaravattigaḷ Madu[r]ai[ai]yu*]-
2 [m*] [I]ḷamum Pāṇḍiyān muḍi-talaiyu[m*] koṇḍu aruḷi-
3 [ya] śrī-Kulō[t]tuṅga-Śōjadēvaṅku yāṇḍu 25-
4 vadu Kaḷkadaga-nāyā[rū*] [pū]rva-paksha[ti*]tu pe[ā]jja[m]iyum Budaṅ-kila-
[m]ai pe[ṅṅa*]
5 Utt[i]ra[ttu] nāi.

"In the 25th year (of the reign) of the emperor of the three worlds, the glorious Kulōttuṅga-Chōjadēva, who was pleased to take Madurai, Iḷam and the crowned head of the Pāṇḍya,— on the day of Uttara-Phalguni, which corresponded to a Wednesday and to the fifth *tithi* of the first fortnight of the month of Karkāṭaka."

The date corresponds to Wednesday, the 24th July A.D. 1202, which was the 28th day of the month of Karkāṭaka, and on which the *nakshatra* was Uttara-Phalguni, by the equal space system and according to Garga for 11 h. 10 m., and by the Brahma-siddhānta for 7 h. 53 m., after mean sunrise. But the *tithi* which ended on this day, 21 h. 31 m. after mean sunrise, was the 4th, not the 5th, *tithi* of the bright half (of Śrāvaṇa).— Accordingly, we should have expected *chaturthiyum* in the original instead of *pa[ā]jja[m]iyum*.

114.— In the Vēdāraṇyēsvara temple at Vēdāraṇyam.²

1 Svasti śr[i] [||*] T[i]r[i]buvaṅga[ch]chakkaravattigaḷ Madurai[yu]m
Ka[rū]vārum Pāṇḍi[ya]ṅ muḍ[i]-
2 ttalaiyuṅ-gōṇḍu virar abishēgamum viśaiyar abishēgamum paṇṇiy-a[rū]ḷiṅa Tiri-
3 buvaṅaviradēvarkku yāṇḍu 3[2]vadu Daṅu-nāyāṅṅu apara-pakshattu na[va]mi-
yum Ti-
4 ṅgaṭ-ki[la]mai[m] peṅṅa Śittirai-nāi.

"In the 3[2]nd year (of the reign) of the emperor of the three worlds, Tribhuvanaviradēva, who took Madurai, Karuvūr and the crowned head of the Pāṇḍya, and was pleased to perform the anointment of heroes and the anointment of victors,— on the day of Chitrā, which corresponded to a Monday and to the ninth *tithi* of the second fortnight of the month of Dhanu."

The date corresponds to Monday, the 21st December A.D. 1209, which was the 27th day of the month of Dhanu, and on which the *nakshatra* was Chitrā, by the equal space system and according to Garga for 21 h. 1 m., and by the Brahma-siddhānta for 17 h. 44 m., after mean sunrise. But the *tithi* which ended on this day, 12 h. 28 m. after mean sunrise, was the 8th, not the 9th, *tithi* of the dark half (of Panaba).— Accordingly, we should have expected *aṣṭamiyum* in the original instead of *na[va]miyum*.

¹ No. 584 of the Government Epigraphist's collection for 1904.

² I.e. the *Gaṅḍā-chaturthi*.

³ No. 427 of the Government Epigraphist's collection for 1904.

F.—RAJARAJA III.

115.—In the Agastyésvara temple at Agattiyānpaḷi.¹

1 Sva[sti] śrī [||*] Tiriba(bu)va[ṇa]chchakkara[va]rt[ti]gaḷ śrī-Rājarājadēva[k]ku yāṇḍu irāṇ[ḍ]āvadu Kumba-nāyaṅṅu-ppūrva-pakkasha(paksha)-dudigaiyum² Tiṅgaḷ-kiḷamaiyum peṅṅa Śadaiyattu nāḷ.

"In the second year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Śatabhishaj, which corresponded to a Monday and to the second *tithi* of the first fortnight of the month of Kumbha."

The date corresponds to Monday, the 29th January A.D. 1218, which was the 6th day of the month of Kumbha, and on which the 2nd *tithi* of the bright half (of Phālguna) commenced 5 h. 15 m., while the *nakshatra* was Śatabhishaj, by the equal space system for 9 h. 51 m., and according to Garga for 1 h. 19 m., after mean sunrise.

116.—In the Āmalakésvara temple at Tirunelikkāval.³

1 Svasti śrī [||*] Tiribuvāṅga[ḥ]chakkara[va]ttigaḷ śrī-Irāja[r]ājadēva[r]kku yāṇḍu eṭṭāvedin edirām-āṇḍu Kumma(mba)-nāyaṅṅu pūrva-pakshattu chaturdeśiyum Nāyaṅṅu-kkila-
2 maiyum⁴ peṅṅa Pūrat[tu] nāḷ.

"In the year opposite the eighth year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Pūrva-Phalguni, which corresponded to a Sunday and to the fourteenth *tithi* of the first fortnight of the month of Kumbha."

The date undoubtedly corresponds to Sunday, the 23rd February A.D. 1225, on which the 14th *tithi* of the bright half (of Phālguna) ended 18 h. 4 m., while the *nakshatra* was Pūrva-Phalguni, by the equal space system from 7 h. 53 m., by the Brahma-siddhānta for 15 h. 6 m., and according to Garga for 20 h. 21 m., after mean sunrise. The day, however, did not fall in the month of Kumbha, but was the first day of the immediately following month of Mīna.⁵

117.—In the Akshayaṅgésvara temple at Kivaḷūr.⁶

1 Svasti [śrī] [||*] Tiribu[va]ṅga[ḥ]chakkara[va]ttigaḷ [śrī-Rāja*]rājadēvaṅṅu yāṇḍu pa[t]tāvadu Mēsha-nāyaṅṅu apara-pakshattu chatutthiyum Veḷi-
kkilamaiyum peṅṅa Mūlattu nāḷ.

"In the tenth year (of the reign) of the emperor of the three worlds, [the glorious Rāja]rājadēva,—on the day of Mūla, which corresponded to a Friday and to the fourth *tithi* of the second fortnight of the month of Mēsha."

The date corresponds to Friday, the 17th April A.D. 1226, which was the 24th day of the month of Mēsha, and on which the 4th *tithi* of the dark half (of Vaiśākha) ended 20 h. 45 m., while the *nakshatra* was Mūla, by the equal space system from 1 h. 19 m., by the Brahma-siddhānta for 7 h. 53 m., and according to Garga for 13 h. 8 m., after mean sunrise.

¹ No. 506 of the Government Epigraphist's collection for 1904.

² *Dudigai* is a Tamil corruption of the Sanskrit *duṣṭyā*.

³ No. 523 of the Government Epigraphist's collection for 1904.

⁴ The *ai* of *mai* is engraved at the end of the preceding line.

⁵ The Mīna-saṁkrānti took place 18 h. 35 m. after mean sunrise of Saturday, the 22nd February A.D. 1225.

⁶ No. 517 of the Government Epigraphist's collection for 1904.

118.—In the Kapardiśvara temple at Tiruvālāṅṅu.¹

1 Tiribuvāṅga[k]karava[ti]gaḷ śrī-Rāja*]rā[ja*]dēvaṅṅu yāṇḍu
12ā[va]du Śinna-nā[ya]ṅṅu apara-pakkashat[ti]n² [śa]duttī[ya]m Tiṅgaḷ-
[k]ilamaiyum peṅṅa Utti

"In the 12th year (of the reign) of the emperor of the three worlds, the glorious [Rāja]rājadēva,—[on the day of] Utta, which corresponded to a Monday and to the fourth *tithi* of the second fortnight of the month of Śimha."

The date corresponds to Monday, the 2nd August A.D. 1227, which was the 6th day of the month of Śimha, and on which the 4th *tithi* of the dark half (of Śrāvāṇa) ended 17 h. 13 m., while the *nakshatra* was Uttara-Bhadrapadā for 7 h. 13 m., after mean sunrise.—The result shows that the last words of the original date must have been *Uttirattādi-nāḷ*.

119.—In the Vāliśvara temple at Rāmāgiri.³

1 [Sva]sti śrī [||*] Tiri[b]uvāṅga[ḥ]chakkara[va]ttigaḷ śrī-Irāja[r]ājadēvaṅṅu yāṇḍu
pad[i]ṅṅā[va]du Kaṅkaḍaga-nāyaṅṅu padinālān=d[i]-
2 yadiy-āṅṅa Viyāḷa-kkilamaiyum pūrva-pakshattu daśamiy[un]m Aṅ[i]lamum-āṅṅav-
aṅṅu.

"In the sixteenth year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Anurādhā, which was the tenth *tithi* of the first fortnight and a Thursday, corresponding to the fourteenth solar day of the month of Karkātaka."

The date will be expected to fall in A.D. 1231 or 1232, and it actually corresponds to Thursday, the 10th July A.D. 1231. In A.D. 1231 the Karkāṭa-saṁkrānti took place 9 h. 21 m. after mean sunrise of Friday, the 27th June, which was the first day of the month of Karkātaka; and the 14th day of the same month therefore was Thursday, the 10th July. On this day the 10th *tithi* of the bright half (of Śrāvāṇa) ended 15 h. 48 m., while the *nakshatra* was Anurādhā, by the equal space system and according to Garga for 23 h. 38 m., and by the Brahma-siddhānta for 18 h. 24 m., after mean sunrise.

The date shows that the reign of Rājarāja III. could not have commenced after (approximately) the 10th July A.D. 1216.

120.—In the Aruṅgāchalésvara temple at Tiruvāṅṅamaḷai.⁴

1 Svasti śrī [||*] Tir[i]bu[va]ṅga[ḥ]chakkara[va]ttigaḷ śrī-Rājarājadēvaṅṅu yāṇḍu
16vadu Iṣhapa(ba)-nāyaṅṅu iru[ba]ttettān=diyadiyum Śaṅ[i]-k[ki]lamaiyum peṅṅa
Mirugaś[ī]rīshattu nāḷ.

"In the 16th year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Mṛigaśīras, which corresponded to a Saturday and to the twenty-eighth solar day of the month of Ṛishabha."

The date corresponds to Saturday, the 22nd May A.D. 1232. In A.D. 1232 the Ṛishabha-saṁkrānti took place 15 h. 22 m. after mean sunrise of Saturday, the 24th April. The first day of the month of Ṛishabha therefore was Sunday, the 25th April, and the 28th day of the same month was Saturday, the 22nd May, on which day the *nakshatra* was Mṛigaśīras, by the equal space system and according to Garga for 10 h. 30 m., and by the Brahma-siddhānta for 9 h. 12 m., after mean sunrise.

¹ No. 630 of the Government Epigraphist's collection for 1902.

² Read *-pakshattu*.

³ No. 646 of the Government Epigraphist's collection for 1904.

⁴ No. 485 of the Government Epigraphist's collection for 1902.

121.— In the Aruṅśchalésvara temple at Tiruvaṅṅāmalai.¹

- 1 Svasti śrī [||*] T[ir]i[ru]v[an]achchakkaravattiga! śrī-Irājāradēvaṅku yāṇḍu
 18vaḍu Kārttigai-mādam piṇanda paṇḍiḷāṅ(n)-diyadi[y]-āṅa Nāyaṅṅu-
 kk[i]lamaiyum Rēvatium daśamiyum [p]eṅṅa
- 2 ipu.

“In the 18th year (of the reign) of the emperor of the three worlds, the glorious Rājāradēva,— on this day, which corresponds to the tenth *tithi*, to (the day of) Rēvati and to a Sunday, which is the seventeenth solar day after the commencement of the month of Kārttigai.”

The date will be expected to fall in A.D. 1233, and it actually corresponds to Sunday, the 13th November A.D. 1233. In A.D. 1233 the Vṛīschika-samkrānti took place 18 h. 28 m. after mean sunrise of Thursday, the 27th October. The first day of the month of Vṛīschika or Kārttigai therefore was Friday, the 28th October, and the 17th day of the same month was Sunday, the 13th November. On this day the 10th *tithi* (of the bright half of Mārgasīra) ended 2 h. 16 m., and the *nakshatra* was Rēvati from² 3 h. 17 m., after mean sunrise.

122.— In the Akshayalingésvara temple at Kivaḷūr.³

- 1 Om svasti śrī [||*] Tr[i]bhuvanachchakravatt[i]ga! śrī-Irājāradēvaṅku
 yāṇḍu pad[i]ṅ[e]ttāva[du] Dha[nu]-[n]āyaṅṅu apara-pakshattu ashtamiyum
 Nāya-
- 2 ṅṅu-kk[i]lamaiyum peṅṅa At [t*]tu nā.

“In the eighteenth year (of the reign) of the emperor of the three worlds, the glorious Rājāradēva,— on the day of Hasta, which corresponded to a Sunday and to the eighth *tithi* of the second fortnight of the month of Dhanu.”

The date corresponds to Sunday, the 25th December A.D. 1233, which was the last day of the month of Dhanu (and the day of the Uttarāyana-samkrānti that took place 15 h. 5 m. after mean sunrise), and on which the 8th *tithi* of the dark half (of Pausa) commenced 5 h. 27 m., while the *nakshatra* was Hasta, by the equal space system and according to Garga for 4 h. 36 m., and by the Brahma-siddhānta for 1 h. 19 m., after mean sunrise.

123.— In the Védāraṇyésvara temple at Védāraṇyam.⁴

- 1 . . . [ṅa]chcha[k]karavatt[i]ga[i] śrī-Rājāradēva[r]ku y[ā]ṇḍu 19[ā]vaḍu
 Mi[du]ṅa-nāyaṅṅu=pp[ā]rva-pakshattu tiraiyōdesiyum Nāyaṅṅu-kk[i]lamaiyum
 peṅṅa Kē[t]ai-nā.

“In the 18th year (of the reign) of the emperor of [the three worlds], the glorious Rājāradēva,— on the day of Jyēshthā, which corresponded to a Sunday and to the thirteenth *tithi* of the first fortnight of the month of Mithuna.”

The date corresponds to Sunday, the 11th June A.D. 1234, which was the 17th day of the month of Mithuna, and on which the 13th *tithi* of the bright half (of Āshāḍha) ended 7 h. 22 m. after mean sunrise, while the *nakshatra* was Jyēshthā, by the equal space system the whole day,

¹ No. 494 of the Government Epigraphist's collection for 1902.

² As there can be no doubt whatever here about the proper equivalent of the date, it may be specially noted that the day of the date is combined, not with the *nakshatra* (Uttara-Bhadrapadā) at the commencement of the day, but with the *nakshatra* (Rēvati) which only commenced 3 h. 17 m. after mean sunrise. Compare above, Nos. 102, 106 and 112.

³ No. 515 of the Government Epigraphist's collection for 1904.

⁴ No. 496 of the same collection.

by the Brahma-siddhānta for 7 h. 13 m., and according to Garga for 11 h. 50 m., after mean sunrise.—By the result previously¹ found for the commencement of Rājāraja's reign this day fell in the 18th, not the 19th, year of the king's reign.

124.— In the Vaidyanāthasvāmin temple at Tiṭṭaguḍi.²

- 1 Svasti śrī [||*] Tiribhuvanachchakkaravattiga! śrī-Rāja-
 2 rājadēvaṅku yāṇḍu pattu-onbadāvaḍu Vṛich-
 3 chiga-nāyaṅṅu pūrva-pakshattu trayōdaśiyum
 4 Nāyaṅṅu-kilamaiyum [peṅṅa] Aśvā[ti]-nā.

“In the nineteenth year (of the reign) of the emperor of the three worlds, the glorious Rājāradēva,— on the day of Aśvini, which corresponded to a Sunday, and to the thirteenth *tithi* of the first fortnight of the month of Vṛīschika.”

The date corresponds to Sunday, the 5th November A.D. 1234, which was the 9th day of the month of Vṛīschika, and on which the 13th *tithi* of the bright half (of Kārttika) ended 8 h. 22 m., while the *nakshatra* was Aśvini for 7 h. 13 m., after mean sunrise.

125.— In the Vighnésvara temple at Anbil.³

- 1 Svasti śrī [||*]
 15 Ti[r]i[ru]v[an]ach[cha]kkaravattiga[i]
 16 śrī-Rājāradēvaṅku yāṇḍu pat-
 17 *to[ṅ]badāvaḍu Kumbha-nā[ya]ṅṅu pū-
 18 [r*]va-pakshattu pañjam[i]yum Viyāla-[k]ki-
 19 lamaiyu[m] peṅṅa Rēvati-nā.

“In the nineteenth year (of the reign) of the emperor of the three worlds, the glorious Rājāradēva,— on the day of Rēvati, which corresponded to a Thursday and to the fifth *tithi* of the first fortnight of the month of Kumbha.”

The date corresponds to Thursday, the 25th January A.D. 1235, which was the 2nd day of the month of Kumbha, and on which the 5th *tithi* of the bright half (of Māgha) ended 6 h. 44 m., while the *nakshatra* was Rēvati for 4 h. 36 m., after mean sunrise.

126.— In the Rajatagirīsvara temple at Tiruttēngūr.⁵

- 1 Svasti śrī [||*] Tribhuvanachchakkaravattiga! śrī-Rāja-
 2 tige! śrī-Rājāradēva[ku*]
 3 yāṇḍu 24 edirāṅ-āṇḍu [Mā*]-
 4 gara-nāyaṅṅu apara-pakshattu [chatu*]-
 5 rddasiyum Śaṅi-kkilamaiyum [pe*]-
 6 ṅṅa Uttirāḍattu nā.

“In the year opposite the 24th year (of the reign) of the emperor of the three worlds, the glorious Rājāradēva,— on the day of Uttarāshāḍhā, which corresponded to a Saturday and to the fourteenth *tithi* of the second fortnight of the month of Makara.”

The date corresponds to Saturday, the 12th January A.D. 1241, which was the 20th day of the month of Makara, and on which the 14th *tithi* of the dark half (of Pausa) ended 15 h. 22 m., while the *nakshatra* was Uttarāshāḍhā, by the equal space system and according to Garga for 21 h. 40 m., and by the Brahma-siddhānta for 15 h. 6 m., after mean sunrise.

¹ See above, p. 1.

² No. 30 of the Government Epigraphist's collection for 1902.

³ No. 601 of the Government Epigraphist's collection for 1902.

⁴ Part of the o of to is entered at the end of the preceding line.

⁵ No. 532 of the Government Epigraphist's collection for 1904.

127.—In the Vaidyanāthasvāmin temple at Tiṭṭagaṇḍi.¹

- 1 Svasti śrī [||*] Tiribuvanachchakkaravattiga! śrī-Irājarājadēvaṅku yāṇḍu 27vaḍu
Simha-
- 2 nāyaṅṅu pūrvva-pakshattu prathamai[y]um [B]udan-ki]lamaiyum peṅṅa Magattu
nā].

"In the 27th year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Maghā, which corresponded to a Wednesday and to the first *tithi* of the first fortnight of the month of Simha."

The date corresponds to Wednesday, the 30th July A.D. 1242, which was the 2nd day of the month of Simha, and on which the 1st *tithi* of the bright half (of the first Bhādrapada) ended 6 h. 6 m., while the *nakshatra* was Maghā, by the equal space system for 5 h. 55 m., after mean sunrise.

128.—In the Védāraṇyēśvara temple at Védāraṇyam.²

- 1 Sva[sti] śrī [||*] Tiribuvanachchakkaravattiga! śrī-Rāja[rā]jadē[va]ṅkku [yā]ṇḍu
27[ā]vaḍu Ma[ga]ra-[n]āyaṅṅ[u] [spa*]-
- 2 [ra]-pakshattu pañjadēśayum Tiṅga]k]lamai[yum] peṅṅa Pūśattu nā[.].

"In the 27th year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Pushya, which corresponded to a Monday and to the fifteenth *tithi* of [the second] fortnight of the month of Makara."

In the month of Makara a fifteenth *tithi* of the second fortnight cannot possibly be combined with the *nakshatra* Pushya, and the probability therefore is that the second fortnight has been quoted erroneously for the first. But even with the first fortnight the date would be incorrect for the 27th year of the king's reign, a calculation for which and for the first fortnight has yielded Wednesday, the 7th January A.D. 1243.

In my opinion it is highly probable that this date really belongs to the 21st year of Rājarāja's reign.³ For that year it would correspond to Monday, the 12th January A.D. 1237, which was the 20th day of the month of Makara, and on which the fifteenth *tithi* of the bright half (of Māgha) ended 20 h. 11 m., while the *nakshatra* was Pushya, by the equal space system and according to Garga for 16 h. 25 m., and by the Brahma-siddhānta for 14 h. 27 m., after mean sunrise.—It may be noted that on this 12th January A.D. 1237 there was a total eclipse of the moon, visible in India.

129.—In the Vāliśvara temple at Rāmagiri.⁴

- 1 Svasti śrī [||*] Tir[.]buvana[.]chcha[kkara[.]va]ttiga! śrī-Irājarāja-
- 2 dēvaṅku⁵ yāṇḍu [2]9[va]ḍu Miduna-ñ[ā*]yaṅṅu mappattiraṇḍ[ā]-
- 3 n-diyadiy-āṅṅa Tiṅga]k]lamaiyum pūrvva-pakshat-
- 4 tu pradamaiyum Pū[śa]mum āṅṅa aṅṅu.

"In the [2]9th year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on the day of Pushya, which was the first *tithi* of the first fortnight and a Monday, corresponding to the thirty-second solar day of the month of Mithuna."

¹ No. 19 of the Government Epigraphist's collection for 1903.

² No. 436 of the Government Epigraphist's collection for 1904.

³ Mr. Venkayya now informs me that the reading in line 1 of the original may really be 20, and that, what was taken for 7, may be part of the flourish which denotes *śvaśu*. On the other hand, he states that *apara-pakshattu* probably is the actual reading.

⁴ No. 656 of the Government Epigraphist's collection for 1904.

⁵ The *ś* of *ś* is engraved at the end of the preceding line.

This date would be expected to fall in A.D. 1244 or 1245, and it actually corresponds to Monday, the 26th June A.D. 1245. In A.D. 1245 the Mithuna-samkrānti took place 9 h. 41 m. after mean sunrise of Friday, the 26th May, which was the first day of the month of Mithuna; and the 32nd day of that month therefore was Monday, the 26th June.¹ On this day the first *tithi* of the bright half (of the second Āshāḍha) ended 16 h. 5 m. after mean sunrise, and the *nakshatra* was Pushya, by the equal space system and according to Garga the whole day, and by the Brahma-siddhānta for 22 h. 59 m. after mean sunrise.

The date shows that the reign of Rājarāja III. could not have commenced before (approximately) the 27th June A.D. 1216.

130.—In the Aruṇāchalēśvara temple at Tiruvannāmalai.²

- 1 Svasti [śrī] [||*] [Ti]ribuvanachchakkaravattiga! śrī-Irājarājadēva[k*]ku
yāṇḍu 30vaḍu Daṅṅu-nāyaṅṅu apara-paksha[t]tu trayō[daśi]yum
- 2 Anilamum peṅṅa Nāyaṅṅu-kk]lamai-nā].

"In the 30th year (of the reign) of the emperor of the three worlds, the glorious Rājarājadēva,—on a Sunday, which corresponded to (the day of) Anurādhā and to the thirteenth *tithi* of the second fortnight of the month of Dhanu."

The date apparently corresponds to Sunday, the 17th December A.D. 1245, which was the 22nd day of the month of Dhanu, and on which the *nakshatra* was Anurādhā, by the equal space system and according to Garga for 17 h. 44 m., and by the Brahma-siddhānta for 12 h. 29 m., after mean sunrise. But the *tithi* which ended on this day, 15 h. 44 m. after mean sunrise, was the 12th, not the 13th, of the dark half (of Mārgaśira).—The word *trayōdaśiyum* of the original therefore would be a mistake for *tuvaśāśiyum*.

G.—RAJENDRA-CHOLA III.

131.—In the Védāraṇyēśvara temple at Védāraṇyam.³

- 1 Sva[sti] śrī [||*] Tirubuvanachchakkaravattiga! śrī-Irāśēndra-Śōladēvaṅkku
yāṇḍu
- 2 nālāvaḍu Magara-nāyaṅṅu-ppūrvva-pakshattu prathamaiyum Budaṅ]k]lamai-
- 3 yum peṅṅa Tiruvōnattu nā].

"In the fourth year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōladēva,—on the day of Śravaṇa, which corresponded to a Wednesday and to the first *tithi* of the first fortnight of the month of Makara."

The date corresponds to Wednesday, the 5th January A.D. 1250, which was the 12th day of the month of Makara, and on which the 1st *tithi* of the bright half (of Māgha) ended 12 h. 45 m., while the *nakshatra* was Śravaṇa, by the equal space system and according to Garga for 13 h. 47 m., and by the Brahma-siddhānta for 15 h. 6 m., after mean sunrise.

132.—In the Védāraṇyēśvara temple at Védāraṇyam.⁴

- 1 [Ti]r[.]b[.]v[.]u[.]n[.]a[.]c[.]c[.]h[.]a[.]k[.]k[.]a[.]r[.]a[.]v[.]a[.]t[.]t[.]i[.]g[.]a[.]! śrī-Rāśēnd[.]i[.]r[.]a-Śōladē[.]v[.]a[.]ṅ[.]k[.]k[.]u [y]āṇḍu [o]ṅ-
- 2 badāvaḍu Magara-nāyaṅṅu pūrvva-[pa]kshattu dvitiyaiyum Śēv[vā-kki]lamaiy pe-
- 3 ṅṅa Sadaiyattu nā].

¹ The Karkata- or Dakṣiṇyāna-samkrānti took place 0 h. 16 m. after mean sunrise of the 27th June.

² No. 504 of the Government Epigraphist's collection for 1902.

³ No. 423 of the Government Epigraphist's collection for 1904.

⁴ No. 413 of the same collection.

"In the ninth year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōladēva,— on the day of Śatabhishaj, which corresponded to a Tuesday and to the second *tithi* of the first fortnight of the month of Makara."

The date corresponds to Tuesday, the 12th January A.D. 1255, which was the 19th day of the month of Makara, and on which the 2nd *tithi* of the bright half (of Māgha) ended 1 h. 21 m., while the *nakshatra* was Śatabhishaj, by the equal space system for 17 h. 4 m., by the Brahma-siddhānta for 5 h. 55 m., and according to Garga for 8 h. 32 m., after mean sunrise.

133.— In the Rajatagiriśvara temple at Tiruttengūr.¹

- 1 Svasti śri ||— Tribhu[va*]nachchakravattiga| śri-Rājendra-Śōladē[va*]r[ku]
yāṇḍu llvadiṇ edirām-āṇḍu Kaṅkaḍaga-nā[ya]r[ru] apara-pakshattu T[i]-
2 ngat-kilā[m]aiyum Urōśaniyum - peṅga nā[.].

"In the year opposite the 11th year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōladēva,— on the day of Bōhini, which corresponded to a Monday of the second fortnight² of the month of Karkaṭaka."

The date corresponds to Monday, the 9th July A.D. 1257, which was the 13th day of the month of Karkaṭaka, and on which [the 11th *tithi*] of the dark half (of Āshāḍha) ended 10 h. 59 m., while the *nakshatra* was Bōhini, by the equal space system and according to Garga for 11 h. 10 m., and by the Brahma-siddhānta for 10 h. 30 m., after mean sunrise.

134.— In the Védāraṇyēśvara temple at Védāraṇyam.³

- 1 Svasti śri ॐ Tri[bhuvā]nachchakkaravatt[iga] śr[ī-Rājē]ndira-Śō[la]dēvarkku
y[ān]-
2 ḍu l6[āvadu] Rishaba-nā[ya]r[ru] [p]ū[rva]-pakshattu śkādaś[i]yu[m] Tiṅgaṭ-
kilāmaiyeum pe[ṅga]
3 Uttirattu nā[.].

"In the 16th year (of the reign) of the emperor of the three worlds, the glorious [Rājē]ndra-Chōladēva,— on the day of Uttara-Phalguni, which corresponded to a Monday and to the eleventh *tithi* of the first fortnight of the month of Rishabha."

The date clearly corresponds to Monday, the 1st May A.D. 1262, which was the 7th day of the month of Rishabha, and on which the 11th *tithi* of the bright half (of Vaiśākha) ended 17 h. 0 m., while the *nakshatra* was Uttara-Phalguni, by the equal space system and according to Garga for 1 h. 19 m., after mean sunrise.— By the result previously⁴ found for the commencement of the reign of Rājendra-Chōla III. this day fell in the 17th, not the 16th, year of the king's reign.

135.— In the Védāraṇyēśvara temple at Védāraṇyam.⁵

- 1 Svasti śri [||*] Tir[ibuva]nachcha[kka]ravattiga| śri-⁶[Rā]śēṇḍ[i]ra-
Sō[la]dē[va]r[ku] [y]āṇḍu l[Sāvadu] Maga[ra]-[n]āya[r]ru [a]pa[ra]-pakshattu
[ḍu]di[ya]iyum Budan-k[i]lāmai[y]um peṅga T[i]ruvō[ṅat]tu [ṅā].

¹ No. 531 of the Government Epigraphist's collection for 1904.

² The *tithi* is omitted in the original.

³ No. 460 of the Government Epigraphist's collection for 1904.

⁴ See above, p. 7.

⁵ No. 494 of the Government Epigraphist's collection for 1904.

⁶ The *rd* of *rdi* seems to have been written twice in the original.

"In the [18th] year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōladēva,— on the day of Śravaṇa, which corresponded to a Wednesday and to the second *tithi* of the second fortnight of the month of [Maka]ra."

In the month of Makara a second *tithi* of the second fortnight cannot possibly be combined with the *nakshatra* Śravaṇa, and the probability again is that the second fortnight has been quoted erroneously for the first. Undoubtedly the date corresponds to Wednesday, the 2nd January A.D. 1264, which was the 9th day of the month of Makara, and on which the 2nd *tithi* of the bright half (of Māgha) commenced 0 h. 51 m., while the *nakshatra* was Śravaṇa, by the equal space system and according to Garga for 9 h. 12 m., and by the Brahma-siddhānta for 10 h. 30 m., after mean sunrise.— Accordingly, the reading in the original should have been *pūrva-pakshattu*, not *apara-pakshattu*.

136.— In the Tyāgarājasvāmin temple at Tiruvārūr.¹

- 1 Svasti śri ॐ Tiribuvaṇachchakkaravattiga| śri-Rājendra-Śōladēvarkku yāṇḍu
20[ā]vadu Ma[ga]ra-nāya[r]ru pūrva-pakshattu trayōḍāsiyum Budhaṅ-
kilāmaiyeum [p]eṅga Puna[r]pūśattu nā[.].

"In the 20th year (of the reign) of the emperor of the three worlds, the glorious Rājendra-Chōladēva,— on the day of Puna[r]vasu, which corresponded to a Wednesday and to the thirteenth *tithi* of the first fortnight of the month of Makara."

The date corresponds to Wednesday, the 20th January A.D. 1266, which was the 27th day of the month of Makara, and on which the 13th *tithi* of the bright half (of Māgha²) ended 19 h. 29 m., while the *nakshatra* was Puna[r]vasu, by the equal space system and according to Garga for 21 h. 40 m., and by the Brahma-siddhānta for 21 h. 1 m., after mean sunrise.

The Date of the Buddhist Inscription from Sravasti, ante, Vol. XVII. p. 61.

SINCE I edited the Buddhist inscription from Srāvasti (Sēt-Mahēt), ante, Vol. XVII. p. 61 ff., Dr. W. Hoey has published a translation of it in the *Jour. Beng. As. Soc.* Vol. LXI. Part I, Extra No. p. 60 ff., which is a decided improvement on my own translation. What I would draw attention to here, is, that Dr. Hoey has read the date in line 18 correctly *samvat 1176*, instead of *samvat 1276*, as I, misled by my rubbings, had given it. That *samvat 1176* is the true date of the inscription, is proved both by the reference in the text to a king Madana, who must be the king Madanapāla, or Madanadēva, of Kanauj, about whose time there can be no doubt now, and especially by the wording of verse 11 of the inscription. In the original that verse reads:—

Rasādhikam-abhivyāpi Girīśa-charaṇ-āsitam |
haṁsē-iva mānasam yasya jahāti sma na
Bhāratī ||;

and Dr. Hoey's translation of it is:— "His mind, of mighty grasp and perfect taste, devoted to the feet of Girīśa, Bhāratī forsaketh not, even as the swan forsaketh not the broad Mānasa lake, reposing with its vast store of water at the feet of the Lord of mountains (Himālaya)." This is simple enough; but the two native scholars, who have furnished Dr. Hoey with this translation, deserve great credit indeed for having perceived that some of the words of the verse are so chosen as to suggest the year 1176, *Giri-śa* being equal to 117 and *rasa* to 6.— The matter shews how dates may be hidden away in places where one would be least likely to look for them.

F. KIELHORN.

Göttingen.

Die Sonnen- und Mondfinsternisse in den Daten Indischer Inschriften.

Von

F. Kielhorn.

Vorgelegt in der Sitzung vom 25. Januar 1896.

Nach den Angaben der modernen indischen Textbücher dauert bei Sonnen- und Mondfinsternissen der *punya-kāla*, d. h. die für Schenkungen und andre fromme Handlungen passende Zeit, nur so lange wie die Finsterniß sichtbar ist oder doch sichtbar sein würde, wenn Sonne oder Mond nicht von Wolken bedeckt wären. Bei einer in Indien nicht sichtbaren Finsterniß giebt es keinen *punya-kāla*; geht Sonne oder Mond verdunkelt auf, so rechnet der *punya-kāla* von Aufgang der Sonne oder des Mondes; geht sie verdunkelt unter, so dauert er nur bis zum Untergange. Wenn diese Lehren immer gegolten haben, so können die in den Daten indischer Inschriften, die von Schenkungen berichten, erwähnten Finsternisse nur solche sein, die in Indien sichtbar waren. Ich bin zu einer sorgfältigeren Erwägung dieser Frage zunächst durch das Datum einer Inschrift des Coḷa Königs Rājarāja-Kesarivarman¹⁾ veranlaßt worden, bei dem zu entscheiden war zwischen dem 26. September 991, wo eine in Indien sichtbare Mondfinsterniß stattfand, und dem 26. September 1010, wo ebenfalls eine Mondfinsterniß stattfand, die aber in Indien nicht sichtbar war; und ich glaube denen, die sich für indische Epigraphik interessieren, einen Dienst dadurch zu erweisen, daß ich meine aus mehr als 1500 Inschriften zusammengestellten Listen von Finsternissen mit einer kurzen Angabe des wirklichen Thatbestandes hier veröffentliche²⁾. Zu meiner Eintheilung der Finsternisse bemerke ich,

1) Vgl. *Ep. Ind.* IV, 66; das Datum ist das unten unter Mondfinsternissen, No. 9, erwähnte.

2) Von den untersuchten Inschriften gebrauchen 496 die Śaka Aera (unten

daß die hier als in Indien sichtbar bezeichneten Finsternisse es auch an dem jedesmal genannten Orte waren, wenn nicht das Gegentheil gesagt wird.

Sonnenfinsternisse werden in den mir bekannten Inschriften 62 erwähnt. Bei dreizehn davon (No. 50—62 der Liste) enthalten die betreffenden Inschriften kein oder wenigstens kein berechenbares Datum, oder das Datum ist eins, an dem eine Sonnenfinsterniß nicht stattfinden könnte. Werthlos sind hier auch zehn andre (No. 40—49), weil an den gegebenen berechenbaren Daten Sonnenfinsternisse überhaupt nicht stattfanden. In Betreff dieser zehn Daten mag bemerkt werden, daß wenigstens zwei derselben (No. 40 und 41) gefälschten Inschriften angehören; daß in drei Fällen (No. 42, 43 und 46), wo in dem auf den gegebenen Monat folgenden Monate wirklich eine Finsterniß (in No. 42 und 46, wo der Wochentag gegeben wird, an diesem Wochentage) stattfand, der Schreiber sich vielleicht nur in der Angabe des Monats geirrt haben könnte; und daß von den übrig bleibenden fünf Fällen der gegebene Wochentag des Datums zweimal (in No. 44 und 48) richtig sein würde, zweimal (in No. 45 und 47) dagegen falsch ist.

Es bleiben demnach 39 Fälle, in denen die Rechnung für das überlieferte Datum oder eins seiner möglichen Aequivalente wirklich eine Sonnenfinsterniß ergibt; und meine Liste zeigt zunächst, daß von diesen 39 Sonnenfinsternissen 32 in Indien sichtbar¹⁾ und 7 nicht sichtbar waren. In der Liste der nicht sichtbaren Finsternisse sind jedoch zwei, No. 36 und 37, ohne Weiteres zu streichen, denn die beiden Inschriften, die sie erwähnen, sind Fälschungen, und überdies stimmt bei einer derselben weder der Wochentag noch das nakṣatra. Sehr zweifelhaft müssen aber auch No. 38 und 39 erscheinen, weil auch hier die Finsternisse nicht

bezeichnet mit Ś., mit einem Stern hinter der Jahreszahl wo das Jahr ein laufendes ist), 325 die Vikrama Aera (V.), 70 die Gupta-Valabhi Aera, 40 die Cedi Aera, 33 die als Cālukya-Vikrama-varṣa bekannte Aera (Cā-Vi-va.), 16 die Harṣa Aera, 16 die Kollam Aera, 10 die Newār Aera, 9 die Gāngeya Aera, und 25 die Aera des Kaliyuga, die Siṃha Aera, die Saptarṣi Aera, die Lakṣmaṇasena Aera, und die Aeren von Buddha's Nirvāṇa und Vardhamāna's Nirvāṇa. 152 sind in Regierungsjahren datiert, 30 in Regierungsjahren und Jupiterjahren, und 24 nur in Jupiterjahren. 259 Inschriften enthalten kein Datum irgendwelcher Art.

1) Der Grund weshalb ich die beiden Daten für die [verflossenen] Śaka Jahre 716 und 730 (No. 2 und 3) als Daten mit sichtbaren Finsternissen gebe, obwohl in Indien nicht sichtbare Finsternisse an den gegebenen Daten auch in den laufenden Śaka Jahren 716 und 730 stattfanden, ist der, daß die mir bekannten correcten Daten, über deren exacte Aequivalente kein Zweifel obwalten kann, bis zum Śaka Jahre 943 nur verflossene Jahre citieren.

an den von den Daten der Inschriften gegebenen Wochentagen stattfanden. Aus dem gleichen Grunde werden unter den sichtbaren Finsternissen Bedenken erregen die Finsternisse No. 12, 16, und 18, wenn auch der (scheinbar falsche) Wochentag der beiden letzten vielleicht in dem Gebrauche des Terminus *vyatipāta* im Datum seine Erklärung finden könnte.

Das Resultat der Untersuchung ist demnach folgendes: Von 32 in correct datierten Inschriften, deren Aechtheit zu bezweifeln kein Grund vorliegt, erwähnten Sonnenfinsternissen waren 29 in Indien — alle an dem Orte der Inschrift — sichtbar und nur 3 nicht sichtbar. Die früheste sichtbare Sonnenfinsterniß ist die vom 25. Juni 754; von den nicht sichtbaren sind früher die vom 2. August 612 und die vom 17. Februar 668, und die dritte nicht sichtbare Finsterniß, vom 2. Januar 987, ist die früheste in einem ächten Datum der Vikrama Aera erwähnte Sonnenfinsterniß. In weiter zurückliegenden Jahrhunderten gaben also bisweilen auch nicht sichtbare Sonnenfinsternisse Anlaß zu Schenkungen¹⁾; für die spätern Inschriften aber, auf jeden Fall für alle Inschriften nach dem Jahre 1000 n. Chr., gilt die oben

1) Manche Schenkung ist gewiß durch eine Sonnen- oder Mondfinsterniß veranlaßt worden, ohne daß dies in der über die Schenkung ausgestellten Urkunde gesagt wird. Eine noch nicht veröffentlichte Kupferplatte des Govindacandra von Kanauj ist datiert *V. 1200, Śrāvāṇa-sudi 15, Ravau* = Sonntag d. 16. Juli 1144, wo eine in Indien sichtbare Mondfinsterniß stattfand, die hier nicht, in einer Kupferplatte des Paramāra Lakṣmivarman (No. 23 der Mondfinsternisse) aber wohl erwähnt wird. In ähnlicher Weise entspricht das Datum einer Inschrift des W. Calukya Vikramāditya II., *Ś. 656, Māgha-paurṇamāsyaṃ* (*Ind. Ant.* VII, 107), dem 13. Januar 735, wo ebenfalls eine in Indien sichtbare Mondfinsterniß stattfand. Besonders aber möchte ich hier darauf aufmerksam machen, daß alle bekannt gewordenen Gupta-Valabhī Daten mit Tagen des Neumonds oder Vollmonds, soweit sich dies ohne Angabe der Wochentage behaupten läßt, Tagen entsprechen, an denen Finsternisse stattfanden. Die Pālī Kupferplatte des Mahārāja Lakṣmaṇa von Jayapura (*Ep. Ind.* II, 364) ist datiert *samvatsara-śate-ṣṭapāñcāśad-uttare Jyēṣṭha-māse paurṇamāsyaṃ* = d. 13. Mai 477, mit einer in Indien sichtbaren Mondfinsterniß; die Gaṇeśgaḍ Kp. des Dhruvasena I. von Valabhī (*Ep. Ind.* III, 320) *sam 207 Vaiśākha-ba 15*, für den *pūrṇimānta* Vaiśākha = d. 28. März 526, mit einer in Indien nicht sichtbaren Sonnenfinsterniß. Vier Kupferplatten des Dharasena II. von Valabhī (*Gupta Inscr.* 165, *Ind. Ant.* VII, 68 und VIII, 301, und *Bhāvnagar Inscr.* 35) sind datiert *sam 252 Vaiśākha-ba 15*, für den *pūrṇimānta* Vaiśākha = d. 10. April 571, ebenfalls mit einer in Indien nicht sichtbaren Sonnenfinsterniß. Und die Boṭṭād Kp. des Dhruvasena II. von Valabhī (*Ind. Ant.* VII, 13 und *Bhāvnagar Inscr.* 40) trägt das Datum *sam 310 Āśvayuja-ba 15*, auch hier für den *pūrṇimānta* Āśvina = d. 24. August 629, mit einer in Indien nicht sichtbaren Sonnenfinsterniß.

erwähnte Vorschrift der Textbücher, und die Erwähnung einer nicht sichtbaren Sonnenfinsterniß in einer spätern Inschrift dürfte darum wohl geeignet sein, Zweifel an der Aechtheit einer solchen Inschrift zu erwecken.

Die Zahl der in den Inschriften erwähnten Mondfinsternisse ist 65. Fünf davon (No. 61—65) lassen sich nicht berechnen; und in 13 Fällen (No. 48—60) fand an dem überlieferten berechenbaren Datum keine Finsterniß statt. Eins dieser 13 Daten (No. 48) gehört einer sicher gefälschten Inschrift an; was die andren 12 Daten betrifft, so muß es von vorn herein Mißtrauen erwecken, daß in den neun davon, die überhaupt einen Wochentag geben, dies siebenmal Montag (und zweimal Sonntag) ist¹⁾. Auffällig ist auch, daß viermal (in No. 50, 51, 52 und 58) außer der Mondfinsterniß noch eine *saṃkrānti* in Verbindung mit dem Datum erwähnt wird, nur in einem Falle (in No. 58), wie es scheint, mit einer gewissen Berechtigung.

Es bleiben uns somit 47 Fälle, in denen an dem überlieferten Datum wirklich eine Mondfinsterniß stattfand; und hier ist das sehr einfache Resultat dies, daß in 46 Fällen die Finsterniß eine in Indien sichtbare war, und daß die einzige in Indien nicht sichtbare Finsterniß (No. 47) in einer Inschrift erwähnt wird, die anerkanntermaßen eine Fälschung ist. Dies Resultat wird in keiner Weise durch den Umstand beeinträchtigt, daß die Finsterniß in fünf Fällen (No. 15, 19, 31, 32 und 41) nicht an dem vom Datum gegebenen Wochentage stattfand²⁾, denn auch so dürfen wir behaupten, daß die in den bisher gefundenen ächten und richtig datierten Inschriften erwähnten Mondfinsternisse alle in Indien — und zwar, meiner Berechnung nach, alle an dem Orte der Inschrift — sichtbar waren. Gestützt auf dieses Resultat habe ich mich bei dem oben erwähnten Datum des Rājarāja-Kesarivarman für den 26. September 991 entschieden, und eine nach der Śaka Aera datierte, vor kurzer Zeit gefundene Inschrift desselben Königs hat die Richtigkeit meiner Entscheidung bestätigt.

Zum Vergleich mit der Thatsache, daß mehr als 20 Daten

1) Das Eintreten einer Mondfinsterniß an einem Montag heißt *cūḍī maṇi* 'Scheiteljuwel', und Schenkungen bei solcher Gelegenheit sichern endloses Verdienst. Dies ist gewiß der Grund, weshalb in den sonst regelmäßigen Daten der Mondfinsternisse No. 15, 31, 32 und 41 Montag statt des richtigen Wochentags genannt wird. Aber von 28 ganz correcten Daten mit Mondfinsternissen, die den Wochentag geben, haben doch nur fünf den Montag.

2) Vgl. die vorhergehende Anmerkung.

in den folgenden Listen Finsternisse erwähnen, die an den gegebenen Daten nicht stattgefunden haben, und daß in andren Fehler namentlich in Betreff des Wochentags nicht selten sind, diene hier noch eine kurze Bemerkung über die inschriftlichen Daten, die eine *saṁkrānti*, d. h. den Eintritt der Sonne in ein Sternbild des Thierkreises erwähnen. Die mir zu Gebote stehenden Inschriften enthalten 125 solcher Daten, fast genau ebensoviele wie Daten mit Finsternissen. Nicht weniger als 84 davon erwähnen die *Utarāyaṇa-saṁkrānti* (das Winter-solstitium), 12 die *Dakṣiṇāyaṇa-saṁkrānti* (das Sommer-solstitium), nur 16 eine der beiden *Viṣuva-saṁkrāntis* (das Frühlings- oder Herbstäquinocetium), und nur 10 eine der acht andren *saṁkrāntis*. Von den 125 Daten sind 31 nicht berechenbar, und bei 25 andren fand an dem gegebenen Datum oder in unmittelbarer Nähe desselben keine *saṁkrānti* statt, auch keine tropische. Aber auch in 23 der übrigen 69 Fälle, in denen die gemeinte *saṁkrānti* mit Sicherheit bestimmt werden kann, enthält das gegebene Datum, wenigstens wie es uns vorliegt, einen Fehler. Neunmal ist der gegebene Wochentag (mit einer Ausnahme Sonntag¹⁾ oder Montag) falsch, fünfmal die *tithi*, einmal das *nakṣatra*, viermal die Monatshälfte, zweimal der Monat²⁾, und zweimal das Jahr. Uebrigens darf man nicht vergessen, daß wir von manchen der hier benutzten Inschriften noch keine kritischen Ausgaben besitzen³⁾.

1, a. — In Indien sichtbare Sonnenfinsternisse.

1. — 25. Juni 754; totale Finsterniß im Monat *Śrāvaṇa*. — *Paṭṭadakal* I. des W. *Calukya Kirtivarman* II. *Satyasraya*; *Ep. Ind.* III, 4.

2. — 4. Mai 794; *Ś. 716, Vaiśākha*⁴⁾. — *Paithāṇ* Kp. des *Rāṣṭrakūṭa Govinda* III.; *Ep. Ind.* III, 103 und *Ind. Ant.* XXIII, 131.

3. — 27. Juli 808; *Ś. 730, Śrāvaṇa*⁵⁾. — *Rādhapur* Kp. des *Rāṣṭrakūṭa Govinda* III.; *Ind. Ant.* VI, 68 und XXIII, 131.

1) Auch bei den 25 berechenbaren Daten, an denen in Wirklichkeit keine *saṁkrānti* stattfand, ist der Wochentag mit einer einzigen Ausnahme immer Sonntag oder Montag.

2) Es ist wahrscheinlich, daß in einem dieser beiden Fälle eine andre als die im Datum genannte *saṁkrānti* gemeint ist.

3) In den folgenden Listen bezeichnet I. eine Steininschrift und Kp. eine Kupferplatte.

4) Eine in Indien nicht sichtbare Sonnenfinsterniß fand am 14. Mai 793, im selben Monate des laufenden Jahres *Ś. 716*, statt.

5) Berechnet für *Nāsik*. Eine in Indien nicht sichtbare Sonnenfinsterniß fand am 7. August 807, im selben Monate des laufenden Jahres *Ś. 730*, statt.

4. — 16. Juni 866; *Ś. 788, Jyaiṣṭha*. — *Sirūr* I. des *Rāṣṭrakūṭa Amoghavarṣa* I.; *Ind. Ant.* XII, 219 und XXIII, 123.

5. — 6. Juni 867; *Ś. 789, Jyaiṣṭha*¹⁾. — *Bagumrā* Kp. des *Rāṣṭrakūṭa Dhāravarṣa Dhruvarāja* II. von *Gujarāt*; *Ind. Ant.* XII, 185 und XXIII, 131.

6. — 15. April 888; *Ś. 810, Caitra*. — *Bagumrā* Kp. des *Rāṣṭrakūṭa Akālavarṣa Kṛṣṇarāja* von *Gujarāt*; *Ind. Ant.* XIII, 69 und XXIII, 123.

7. — 9. September 945; *Ś. 867, Bhādrapada*. — *Sāloṭgi* I. des *Rāṣṭrakūṭa Kṛṣṇa* III.; *Ep. Ind.* IV, 60 und *Ind. Ant.* XXIII, 123.

8. — 22. October 971; *Ś. 893, Āśvina*. — *Adaraguñchi* I. des *Rāṣṭrakūṭa Khoṭṭiga*; *Ind. Ant.* XII, 256 und XXIII, 123.

9. — 20. September 982; *Ś. 904, Bhādrapada*. — *Nilgund* I. des W. *Calukya Taila* II.; noch nicht veröffentlicht.

10. — 23. November 1025; *Ś. 948*, Kārttika*. — *Kalas-Budrūkh* Kp. des *Yādava Bhillama* III.; *Ind. Ant.* XVII, 120 und XXIII, 129.

11. — 15. Januar 1051; *Ś. 972, Pauṣa*. — *Surat* Kp. des *Calukya Trilocanapāla* von *Lāṭadeśa*; *Ind. Ant.* XII, 202 und XXIII, 124.

12. — 10. Mai²⁾ 1054; *Ś. 976, Vaiśākha*. — *Honwād* I. des W. *Calukya Someśvara* I.; *Ind. Ant.* XIX, 273 und XXIV, 7.

13. — 21. Juli 1069; *Ś. 991, Āṣāḍha*. — *Vāghlī* I. des *Yādava Seunacandra* II.; *Ep. Ind.* II, 227 und *Ind. Ant.* XXIII, 124.

14. — 19. März 1094; *Cā-Vi-va. 18, Phālguna*. — *Baḷagāmve* I. des W. *Calukya Tribhuvanamalla Vikramāditya* VI.; *Ind. Ant.* V, 342 und XXII, 110.

15. — 11. Mai 1119; V. 1176, *Jyaiṣṭha*. — *Kamauli* Kp. des *Govindacandra* von *Kanauj*; noch nicht veröffentlicht.

16. — 26. December 1144; Jahr 7, *Raktākṣa* (= *Ś. 1066*), *Pauṣa*³⁾. — *Koḍikoppa* I. des W. *Calukya Jagadekamalla* II. und des *Sinda Permaḍi* I.; *Bo. As. Soc.* XI, 253.

1) Eine in *Baroda* ebenfalls sichtbare Sonnenfinsterniß fand am 16. Juni 866, im selben Monate des laufenden Jahres *Ś. 789*, statt; s. No. 4.

2) Dies war ein Dienstag, nicht, wie in der Inschrift angegeben, ein Montag.

3) In *Koḍikoppa* nicht sichtbar. Der Wortlaut des Datums ist *Puṣyad-amāvāsye Soma-vāra uttarāyaṇasaṁkramaṇa-vyatīpāta-sūryyagrahaṇad-aṁdu*. Die *uttarāyaṇa-saṁkrānti* fand statt Sonntag, d. 24. December 1144, 16 h. 22 m., und die Sonnenfinsterniß Dienstag, d. 26. December 1144; der im Datum erwähnte Montag wäre also vielleicht der zwischen dem Tage der *saṁkrānti* und dem Tage der Finsterniß liegende Tag. Von siebzehn mir bekannten Daten, die das Wort *vyatīpāta* enthalten, sind sechzehn scheinbar unregelmäßig. Dazu

17.—17. Januar 1162; Jahr 6, Viṣu (= Ś. 1083), Pauṣa. — Baḷagāṃve I. des Kaḷacūrya Bijjala-Tribhuvanamalla; *Pāli, Skr. and Old-Can. Inscr.* No. 184 und *Mysore Inscr.* 92, No. 43.

18.—1. Juni¹⁾ 1174; Ś. 1096, Jyaiṣṭha. — Hulgūr I. des Kaḷacūrya Someśvara; *Ind. Ant.* XVIII, 127 und XXIV, 8.

19.—26. November 1174; Ś. 1096, Mārgaśīrṣa. — Hulgūr I. des Kaḷacūrya Someśvara; *Ind. Ant.* XVIII, 127 und XXIII, 124.

20.—26. November 1174; Kaliyuga 4275, Mārgaśīrṣa. — Degāṃve I. des Kādamba Permāḍi-Śivacitta von Goa; *Bo. As. Soc.* IX, 266 und *Ind. Ant.* XVII, 266.

21.—23. Juni 1191; Ś. 1113, Jyaiṣṭha. — Gadag I. des Devagiri-Yādava Bhīllama; *Ep. Ind.* III, 219 und *Ind. Ant.* XXIII, 125.

22.—18. December 1191; Ś. 1113, Mārgaśīrṣa. — Chaudāmpur I. des Vira-Vikramāditya; *Pāli, Skr. and Old-Can. Inscr.* No. 109 und *Ind. Ant.* XXIII, 125.

23.—5. October 1195; Ś. 1118*, [Āśvina]. — Tadi-Māliṅgi I. des Hoysaḷa Vira-Ballāla; *Ep. Carn.* I, 146, No. 31.

24.—22. April 1213; Ś. 1136*, Caitra. — Khedrāpur I. des Devagiri-Yādava Singhaṇa; *Bo. As. Soc.* XII, 7 und *Ind. Ant.* XXIII, 130.

25.—22. April 1213; Ś. 1136*, Caitra. — Haḷebīḍ I. des Hoysaḷa Vira-Ballāla; *Pāli, Skr. and Old-Can. Inscr.* No. 234.

26.—22. April 1213; V. 1270, Vaiśākha. — Bhopāl Kp. des Paramāra Arjunavarman; *Amer. Or. Soc.* VII, 32 und *Ind. Ant.* XIX, 175.

27.—3. Juli 1228; Ś. 1151*, Āṣāḍha. — Saundatti I. des Raṭṭa Lakṣmīdeva II.; *Bo. As. Soc.* X, 260 und *Ind. Ant.* XXIII, 130.

28.—1. März 1253; Ś. 1175*, Phālguna. — Bangalore Museum Kp. des Hoysaḷa Someśvara; *Mysore Inscr.* 322, No. 171 und *Ind. Ant.* XXIII, 130.

gehören von den hier aufgezählten Daten noch das der Sonnenfinsternis Nr. 18 (das Datum giebt den Wochentag Sonntag, während die Finsternis an einem Sonnabend stattfand); das der Mondfinsternis No. 31 (das Datum giebt Montag, aber die Finsternis fand an einem Sonnabend statt); das der Sonnenfinsternis No. 44 und das der Mondfinsternis No. 51. bei denen der Wochentag stimmt, die aber wie es scheint fälschlich sowohl Finsternisse wie saṃkrāntis erwähnen; und die der Mondfinsternisse No. 52 und No. 58. Ueber die Bedeutungen des Wortes *vyatīpāta* siehe meine Angaben im *Ind. Ant.* XX, 292. Von den siebzehn Daten, die das Wort *vyatīpāta* enthalten, geben neun den Tag Sonntag und sechs Montag.

1) Dies war ein Sonnabend; der Text der Inschrift hat aber *Āditya-v-ṛa sūryyagrahaṇa-vyatīpātad-andu*; s. die vorhergehende Anmerkung.

29.—25. Mai 1267; Ś. 1189, Jyaiṣṭha. — Hulgūr I. des Devagiri-Yādava Mahādeva; *Ind. Ant.* XVIII, 128 und XXIII, 125.

30.—5. April 1391; Ś. 1313, Vaiśākha¹⁾. — Kp. des Harihara II. von Vijayanagara; *Bo. As. Soc.* IV, 115 und *Ind. Ant.* XXIII, 122.

31.—13. December 1498; Jahr Kālayukta (= Ś. 1420), Mārgaśīrṣa. — Datum für Narasa (Nṛsiṃha) von Vijayanagara, in der Nañjaṅgūḍ Kp. des Kṛṣṇarāya von Vijayanagara; *Ep. Carn.* I, 186, No. 16.

32.—2. November 1556; Ś. 1478, Kārttika. — Tumbala I. des Sadāśivarāya von Vijayanagara; *Ep. Carn.* I, 174, No. 108.

1, b. — In Indien nicht sichtbare Sonnenfinsternisse.

33.—2. August 612; Ś. 534, Bhādrapada²⁾. — Haidarābād Kp. des W. Calukya Pulikeśin II.; *Ind. Ant.* VI, 73 und XXIII, 130.

34.—17. Februar 668; Jahr 5, Phālguna. — Maṭṭewāḍa Kp. des Ö. Calukya Viṣṇuvardhana II. Viṣamasiddhi; *Ind. Ant.* VII, 191 und XX, 90.

35.—2. Januar 987; V. 1043, Māgha, Sonntag. — Kaḍi Kp. des Calukya Mūlarāja; *Ind. Ant.* VI, 192 und XIX, 166.

36.—Ś. 417, Jyaiṣṭha. — Die möglichen Aequivalente des Datums für Ś. 417 sind d. 10. Mai und 8. Juni 495; an beiden Tagen fanden in Indien nicht sichtbare Sonnenfinsternisse statt. Ilāo gefälschte Kp. des Gurjara Dadda Praśāntarāga; *Ind. Ant.* XIII, 117 und XXIV, 10.

37.—V. 794, Kārttika, Sonntag, Jyeṣṭhā-nakṣatra. Am 28. October 737, einem der möglichen Aequivalente des Datums, fand eine nicht sichtbare Sonnenfinsternis statt; aber der Tag war ein Montag, mit den nakṣatras Viśākhā und Anurādhā. Dhiniki gefälschte Kp. des Jāikadeva; *Ind. Ant.* XII, 155 und XIX, 369.

38.—Ś. 988, Bhādrapada, Dienstag. — Dem Datum entspricht d. 22. September 1066, an dem eine in Indien nicht sichtbare (oder doch nur im äußersten Norden eben sichtbare) Sonnenfinsternis stattfand; der Tag war jedoch ein Freitag. Dāvāṅgere I. des W. Calukya Someśvara I.; *Pāli, Skr. and Old. Can. Inscr.* No. 136 und *Mysore Inscr.* 19, No. 11.

39.—Ś. 1095, Mārgaśīrṣa, Montag. — Dem Datum entspricht d. 6. December 1173, an dem auch eine in Indien nicht sichtbare

1) Dies wäre der *pūrṇimānta* Vaiśākha; es scheint aber sicher, daß der *amānta* Caitra beabsichtigt war.

2) Eine nicht sichtbare Sonnenfinsternis fand auch am 13. August 611, im selben Monate des laufenden Jahres Ś. 534, statt.

Sonnenfinsterniß stattfand; aber der Tag war ein Donnerstag. Curugode I. des Rakṣamalla; *As. Res.* IX, 431 und Colebrooke's *Misc. Essays* II, 276.

1, c. — Sonnenfinsternisse, die an den gegebenen Daten nicht stattfanden.

40. — Ś. 415, Jyaiṣṭha. — Die möglichen entsprechenden Daten sind d. 12. Mai und 10. Juni 492, und d. 1. und 31. Mai 493; an keinem dieser Tage war eine Finsterniß. Bagumrā gefälschte Kp. des Gurjara Dadda Praśāntarāga; *Ind. Ant.* XVII, 200 und XXIV, 11.

41. — Ś. 532(?), Vaiśākha, Sonntag. — Das für Ś. 532 entsprechende Datum ist Dienstag, d. 28. April 610, an dem keine Finsterniß stattfand. Kurtakoṭi gefälschte Kp. des W. Calukya Vikramāditya I.; *Ind. Ant.* VII, 220 und XVIII, 285.

42. — Ś. 872, Kārttika, Donnerstag. — Dem Datum entspricht Dienstag, d. 12. November 950, an dem keine Finsterniß stattfand. Eine in Indien nicht sichtbare Finsterniß fand in dem auf Kārttika folgenden Monate Mārgaśirṣa, Donnerstag d. 12. December 950, statt. Naregal I. des Sinda Permāḍi I.; *Bo. As. Soc.* XI, 239 und *Ind. Ant.* XXIV, 5.

43. — Ś. 922, Bhādrapada. — Dem Datum entspricht d. 31. August 1000, an dem keine Finsterniß stattfand. Eine in Indien nicht sichtbare Finsterniß fand in dem auf Bhādrapada folgenden Monate Āśvina, am 30. September 1000, statt. Saṅgamner Kp. des Yādava Bhillama II.; *Ep. Ind.* II, 217 und *Ind. Ant.* XXIV, 12.

44. — Ś. 1106, Āṣāḍha, Montag, sūryyagrahaṇa-saṅkrānti-vyatipātad-aṅdu¹⁾. — Das Datum ist Montag, d. 9. Juli 1184, an dem weder eine Finsterniß noch eine saṅkrānti stattfand. Eine in Indien sichtbare Sonnenfinsterniß fand im Monate Kārttika desselben Jahres, Montag d. 5. November 1184, statt. Dambaḷ I. des W. Calukya Someśvara IV.; *Pāli, Skr. and Old-Cun. Inscr.* No. 102.

45. — Ś. 1174*, Jyaiṣṭha, Freitag. — Dem Datum entspricht Dienstag, d. 20. Juni 1251, an dem keine Finsterniß stattfand. Munolli I. des Devagiri-Yādava Kṛṣṇa; *Bo. As. Soc.* XII, 34 und *Ind. Ant.* XXIV, 16.

46. — Ś. 1254, prathama-Caitra, Montag, Pūrvā-Bhadrpadā-nakṣatradalli. — In Ś. 1254 war Jyaiṣṭha, nicht Caitra, ein Schaltmonat, und im ersten Jyaiṣṭha fand eine in Indien sichtbare Sonnenfinsterniß Montag, d. 25. Mai 1332, statt; aber das nakṣatra

1) Vgl. oben S. 64, Anm. 3.

an diesem Tage war Mṛgaśirṣa. Hulluhalli I. des Hoysaḷa Viraballāla (Ballāla III.); *Ep. Carn.* I, 194, No. 65.

47. — Ś. 1478, Mārgaśirṣa, Sonntag. — Dem Datum entspricht Dienstag, d. 1. December 1556, an dem keine Finsterniß stattfand. Eine in Indien sichtbare Sonnenfinsterniß fand in dem vorhergehenden Monate Kārttika, aber an einem Montag, statt; s. oben No. 32. Chingleput Kp. des Sadāśivarāya von Vijayanagara; *Ep. Ind.* IV, 2 und *Ind. Ant.* XXIV, 17.

48. — V. 1166, Pauṣa, Sonntag. — Das beabsichtigte Datum ist aller Wahrscheinlichkeit nach Sonntag, d. 3. Januar 1109, an dem keine Finsterniß stattfand. Eine in Indien nicht sichtbare Sonnenfinsterniß fand einen Monat früher, Freitag d. 4. December 1108, statt. Rāhan Kp. des Govindacandra von Kanauj; *Ind. Ant.* XVIII, 15 und XIX, 371.

49. — V. 1235, Pauṣa. — Die möglichen Aequivalente des Datums sind d. 21. December 1177, d. 20. Januar und d. 11. December 1178, und d. 9. Januar 1179; an keinem dieser Tage war eine Finsterniß. Pipliānagar Kp. des Paramāra Hariścandra; *Beng. As. Soc.* VII, 736.

1, d. — Sonnenfinsternisse in Daten mit Vollmontagen und nicht berechenbare Finsternisse.

50. — Ś. 948, Kārttika-suddha 15, Sonntag. — Dem gegebenen Datum entspricht d. 28. October 1026, an dem eine in Indien sichtbare Mondfinsterniß stattfand; der Tag war aber ein Freitag. In demselben Monate Kārttika, Sonnabend d. 12. November 1026, fand eine in Indien nicht sichtbare Sonnenfinsterniß statt. Bhāṇḍūp Kp. des Śilāra Cittarāja; *Ind. Ant.* V, 278 und XXIV, 13.

51. — V. 1164, 'on the full-moon of Pauṣa'. — Dem Datum entspricht d. 31. December 1107, an dem eine in Indien sichtbare Mondfinsterniß stattfand. In demselben Monate Pauṣa, am 16. December 1107, fand aber auch eine in Indien sichtbare Sonnenfinsterniß statt. Madhucaraghar I. des Paramāra Naravarman; *Transactions Roy. As. Soc.* I, 226.

52. — V. 1299(?), Phālguna. — Das in der Inschrift gegebene Datum, von dem das Jahr der Finsterniß abhängt, ist falsch. Kaḍi Kp. des Calukya Tribhuvanapāla; *Ind. Ant.* VI, 208 und XIX, 372.

53. — Gupta Jahr 585. — Morbi Kp. des Jāiṅka; *Ind. Ant.* II, 257.

54. — Gāṅgeya Jahr 51 (?). — Chicacole Kp. des Gaṅga Deven-dravarman; *Ind. Ant.* XIII, 275.
55. — Gāṅgeya Jahr 304. — Alamanda Kp. des Gaṅga Anantavarman; *Ep. Ind.* III, 18.
56. — Gāṅgeya Jahr 351. — Chicacole Kp. des Gaṅga Satyavarman; *Ind. Ant.* XIV, 11 und Dr. Fleet's *Dynasties*², 297.
57. — Jahr 5, Meṣa-dine 10, Soma-vāra. — Zweifelhaft ob Sonnen- oder Mondfinsterniß gemeint ist. Balasore Kp. des Puruṣottamadeva von Orissa; *Ind. Ant.* I, 355; vgl. auch XXII, 108.
58. — Sāṅkheḍā Kp. des Śāntilla; *Ep. Ind.* II, 23.
59. — Īdara Kp. des Ö. Calukya Vijayāditya II.; *Ind. Ant.* XIII, 55.
60. — Buguḍa Kp. des Mādhavarman; *Ep. Ind.* III, 43.
61. — Komāraliṅgam gefälschte Kp. des Ravidatta; *Ind. Ant.* XVIII, 366.
62. — Monat Caitra, uttarāyaṇasamkrānti-vyatipāta-nimittē sūryya-parvaṇi ardhagrāsa-grhita-samae. — Gauja Agrahāra gefälschte Kp. des Janamejaya; *Proceedings Beng. As. Soc.* 1873, 75 und *Ind. Ant.* I, 377 und III, 268.

2, a. — In Indien sichtbare Mondfinsternisse.

1. — 7. Juli 632; Jahr 18, Śrāvaṇa. — Chipurupalle Kp. des Ö. Calukya Viṣṇuvardhana I. Viṣamasiddhi; *Ind. Ant.* XX, 16 und 4.
2. — 2. Februar 706; [Cedi] Jahr 456¹), Māgha. — Nausāri Kp. des Gurjara Jayabhaṭa III; *Ind. Ant.* XIII, 77 und XVII, 220.
3. — 19. März 843; Ś. 765, Caitra. — I. auf Java²); *Notulen Batav. Genootschap*, XXVI, 21; *Ind. Ant.* XXIII, 113.
4. — 17. Januar 930; Ś. 851, Māgha. — Kaḷas I. des Rāṣṭrakūṭa Govinda IV.; *Ind. Ant.* XII, 211 und XXIII, 114.
5. — 16. November 951; Ś. 873, Mārgaśirṣa. — Soraṭūr I. des Rāṣṭrakūṭa Kṛṣṇa III.; *Ind. Ant.* XII, 257 und XXIII, 114.
6. — 25. September 972; Ś. 894, Āśvina. — Kardā Kp. des Rāṣṭrakūṭa Kakka II.; *Ind. Ant.* XII, 266 und XXIII, 115.
7. — 3. Juli 977; Ś. 899, Āṣāḍha. — Dodḍa-Homma I. des W. Gaṅga Satyavākya Koṅguṇivarman Permanaḍi; *Ep. Carn.* I, 212, No. 183.
8. — 6. November 979; V. 1036, Kārttika. — Ujjain Kp. des Paramāra Vākpatirāja; *Ind. Ant.* XIV, 160 and XIX, 23.

1) Nach der von mir für die spätern Cedi Daten berechneten Epoche der Aera würde man 457 statt 456 erwarten.

2) Die Finsterniß war sowohl in Indien wie auf Java sichtbar.

9. — 26. September 991; Jahr 7, Monat Aippaśi¹). — Tiruvallam I. des Coḷa Rājarāja-Kesarivarman; *Ep. Ind.* IV, 66.
10. — 19. Januar 995; V. 1051, Māgha. — Baroda Kp. des Caulukya Mularāja; *Wiener Ztschr.* V, 300.
11. — 6. November 998; V. 1055, Kārttika. — Nanyaurā Kp. des Candella Dhaṅgadeva; *Ind. Ant.* XVI, 203 and XIX, 23.
12. — 6. November 1017; Ś. 939, Kārttika. — Ṭhāṇā Kp. des Śilāra Arikesarin; *As. Res.* I, 363 und *Ind. Ant.* XXIII, 115.
13. — 1. März 1021; Ś. 943*, Phālguna. — Nandigunda I. des Rājendra-Coḷa I.; *Ep. Carn.* I, 204, No. 134 und *Ep. Ind.* IV, 68.
14. — 6. August 1077; Cā-Vi-va. 2, Śrāvaṇa. — Yewūr I. des W. Cālukya Tribhuvanamalla Vikramāditya VI.; *Ind. Ant.* VIII, 20 und XXII, 109.
15. — 30. Januar²) 1078; Cā-Vi-va. 2, Māgha. — Baḷagāṃve I. des W. Cālukya Tribhuvanamalla Vikramāditya VI.; *Pāli, Skr. and Old-Can. Inscr.* No. 164 und *Mysore Inscr.* 163, No. 77.
16. — 5. Mai 1091; V. 1148, Vaiśākha. — Sūnak Kp. des Caulukya Karṇadeva; *Ep. Ind.* I, 317.
17. — 5. Juni 1099; Cā-Vi-va. 24, Jyaiṣṭha. — Kiruvatti I. des W. Cālukya Tribhuvanamalla Vikramāditya VI.; *Pāli, Skr. and Old-Can. Inscr.* No. 113 und *Ind. Ant.* XXII, 110.
18. — 5. Mai 1110; Jahr Vikṛta (= Ś. 1033*), Vaiśākha. — Tālaleṇ Kp. des Śilāhāra Gaṇḍarāditya; *Bo. As. Soc.* XIII, 3 und *Ind. Ant.* XXIII, 127.
19. — 11. Januar³) 1126; V. 1182, Māgha. — Kamauli Kp. des Govindacandra von Kanauj; noch nicht veröffentlicht.
20. — 8. November 1128; Ś. 1051*, Kārttika. — Inḡleśvar I. des W. Cālukya Someśvara III.; *Ind. Ant.* XII, 212 und XXIII, 127.
21. — 9. October 1139; V. 1196, Āśvina. Kamauli Kp. des Govindacandra von Kanauj; *Ep. Ind.* II, 361.
22. — 1. Februar 1143; Ś. 1065*, Māgha. — Kolhāpur I. des Śilāhāra Vijayāditya; *Ep. Ind.* III, 210 und *Ind. Ant.* XXIII, 127.
23. — 16. Juli 1144⁴); V. 1200, Śrāvaṇa. Ujjain Kp. des Paramāra Lakṣmivarman; *Ind. Ant.* XIX, 352 und 40.

1) Die Finsterniß fand am Tage der Viṣuva-Tulā-samkrānti statt.

2) Dies war ein Dienstag, nicht, wie in der Inschrift angegeben, ein Montag.

3) Dies war ein Montag, nicht, wie in der Inschrift angegeben, ein Sonnabend.

4) Dies ist das Aequivalent des Datums für das verflossene Kārttikādi V. Jahr 1200. In Indien eben sichtbare Finsternisse fanden auch an den beiden Tagen (d. 8. August 1142 und 28. Juli 1143) statt, die dem Datum für das laufende und das verflossene Caitrādi V. Jahr entsprechen.

24.—8. September 1150; Ś. 1073*, Bhādrapada. — Bāmaṇi I. des Śilāhāra Vijayāditya; *Ep. Ind.* III, 212 und *Ind. Ant.* XXIII, 128.

25.—12. December 1163; [V. 1220, Pau]ṣa. — Udaypur I. des Caulukya Kumārāpāla; *Ind. Ant.* XVIII, 343 und XIX, 357.

26.—18. Juli 1171; V. 1228, Śrāvaṇa. — Ichchhāwar Kp. des Candella Paramardin; *Beng. As. Soc.* LXIV, I, 156.

27.—10. November 1174; Ś. 1096, Mārgaśirṣa. — Hulgūr I. des Kaḷacurya Someśvara; *Ind. Ant.* XVIII, 127 und XXIII, 117.

28.—21. November 1192; Ś. 1114, Mārgaśirṣa. — Gadag I. des Hoysaḷa Vira-Ballāḷa; *Ind. Ant.* II, 301 und XXIII, 117.

29.—9. August 1207; Ś. 1128 (statt 1129), Śrāvaṇa. — Datum in der Pāṭnā I. des Devagiri-Yādava Siṅghaṇa; *Ep. Ind.* I, 343 und *Ind. Ant.* XXIV, 5.

30.—9. September 1215; V. 1272, Bhādrapada. — Bhopāl Kp. des Paramāra Arjunavarman; *Amer. Or. Soc.* VII, 25 und *Ind. Ant.* XIX, 31.

31.—22. October¹⁾ 1222; Ś. 1145*, Kārttika. — Munolli I. des Devagiri-Yādava Siṅghaṇa; *Bo. As. Soc.* XII, 11 und *Ind. Ant.* XXIV, 8.

32.—19. August²⁾ 1225; Ś. 1148*, Bhādrapada. — Datum in einer Chauḍadāmpur I. des Devagiri-Yādava Mahādeva; *Pāli, Skr. and Old-Can. Inscr.* No. 110 und *Ind. Ant.* XXIV, 8.

33.—12. Januar 1237; Ś. 1158, Māgha. — Kolhāpur I. des Devagiri-Yādava Siṅghaṇa; Graham's *Kolhapoor*, 426, No. 13 und *Ind. Ant.* XXIII, 118.

34.—3. Februar 1273; Ś. 1194, Māgha. — Kolhāpur I. des Devagiri-Yādava Rāmacandra; Graham's *Kolhapoor*, 437, No. 15 und *Ind. Ant.* XXIII, 119.

35.—31. Mai 1379; Ś. 1301, Jyaiṣṭha. — Dambaḷ Kp. des Harihara II. von Vijayanagara; *Bo. As. Soc.* XII, 352 und *Ind. Ant.* XXIII, 119.

36.—15. October 1399; Ś. 1321, Kārttika. — Nallūr Kp. des Harihara II. von Vijayanagara; *Ep. Ind.* III, 122.

37.—24. Juni 1526; Ś. 1448, Āṣāḍha. — Hemmige I. des Kṛṣṇarāya von Vijayanagara; *Ep. Carn.* I, 151, No. 49.

38.—23. April 1529; Ś. 1451, Vaiśākha. — Kṛṣṇāpura I.

1) Dies war ein Sonnabend; der Text der Inschrift hat *Somavāra somagrahaṇa-vyatipātadalli*. S. oben S. 64 Anm. 3.

2) Dies war ein Dienstag, nicht, wie in der Inschrift angegeben, ein Montag.

des Kṛṣṇarāya von Vijayanagara; *Ep. Ind.* I, 399 und *Ind. Ant.* XXIII, 120.

39.—6. October 1530; Ś. 1452, [Āśvina]. — Koḍagahaḷli I. des Acyutarāya von Vijayanagara; *Ep. Carn.* I, 133, No. 105.

40.—6. November 1538; Ś. 1460, Kārttika. — Harihar I. des Acyutarāya von Vijayanagara; *Ind. Ant.* IV, 332 und XXIII, 120.

41.—20. Januar¹⁾ 1562; Ś. 1483, Māgha. — Harihar I. des Sadāśivarāya von Vijayanagara; *Mysore Inscr.* 41, No. 24, *Pāli, Skr. and Old-Can. Inscr.* No. 134, und *Ind. Ant.* XXIV, 9.

42.—7 (17). November 1584; Ś. 1506; Kārttika. — Devanahaḷli Kp. des Śrīraṅgarāya I. von Vijayanagara; *Pāli, Skr. and Old-Can. Inscr.* No. 28 und *Ind. Ant.* XXIII, 121.

43.—29. November (9. December) 1620; Ś. 1542, Mārgaśirṣa. — Ānevāḷa I. des Rāmadeva von Vijayanagara und Cāmarāj-Oḍeyar von Maisūr; *Ep. Carn.* I, 33, No. 36.

44.—11 (22). December 1722; Ś. 1644, Mārgaśirṣa. — Toṇḍanūr Kp. Kṛṣṇarāja von Maisūr; *Ep. Carn.* I, 39, No. 64.

45.—10 (21). November 1733; Ś. 1655, Kārttika. — Setupati Kp.; *Arch. Surv. of South. India*, IV, 91 und *Ind. Ant.* XXIII, 134.

46.—22. Juli 1804; V. 1861, Āṣāḍha. — Nāgpur Kp. der Ratnakumārikā; *Proceedings Beng. As. Soc.* 1869, 204.

2,b.—Eine in Indien nicht sichtbare Mondfinsterniss.

47.—Ś. 411*, Vaiśākha. — Dem Datum entspricht d. 12. April 488, an dem eine in Indien nicht sichtbare Mondfinsterniß stattfand. British Museum gefälschte Kp. des W. Calukya Pulikeśin I.; *Ind. Ant.* VII, 212 und XXIV, 10.

2,c.—Mondfinsternisse, die an den gegebenen Daten nicht stattfanden.

48.—Ś. 684, Vaiśākha, Freitag. — Dem Datum entspricht entweder Freitag, d. 24. April 761, oder Dienstag, d. 13. April 762; an keinem dieser beiden Tage war eine Finsterniß. Hosūr gefälschte Kp. des W. Gaṅga Pṛthuvī-Koṅgaṇi; *Mysore Inscr.* 286, No. 152 und *Ind. Ant.* XXIV, 11.

49.—Ś. 730, Jahr Vyaya, Vaiśākha. — Die möglichen Aequivalente des Datums sind d. 6. April und 6. Mai 806, d. 25. April 807, und d. 14. April 808; an keinem dieser Tage war eine Fin-

1) Dies war ein Dienstag, nicht, wie in der Inschrift angegeben, ein Montag.

sterniß. Waṇī Kp. des Rāṣṭrakūṭa Govinda III.; *Ind. Ant.* XI, 159 und XXIV, 11.

50.—Ś. 872*, Pauṣa, Montag, somagrahaṇam-uttarāyaṇa-saṁkrānti-yāṁdu. — Das Datum ist Montag, d. 7. Januar 950, an dem weder eine Finsterniß noch eine saṁkrānti stattfand¹⁾. Naregal I. des Sinda Permāḍi I.; *Bo. As. Soc.* XI, 224 und *Ind. Ant.* XXIV, 12.

51.—Ś. 1080, Pauṣa, Montag, uttarāyaṇasaṁkrānti-vyatipāta-somagrahaṇad-aṁdu²⁾. — Das Datum ist Montag, d. 5. Januar 1159; auch an diesem Tage fand weder eine Finsterniß noch eine saṁkrānti statt³⁾. Baḷagāṁve I. des Kaḷacūrya Bijjala-Tribhuvanamalla; *Pāli, Skr. and Old-Can. Inscr.* No. 183 und *Mysore Inscr.* 152, No. 74.

52.—Ś. 1084 (statt 1085), Jyaiṣṭha, Montag, somagrahaṇa-vyatipāta-saṁkramaṇada⁴⁾ puṇyatithiyal. — Dem Datum entspricht Sonntag, d. 19. Mai 1163, an dem weder eine Finsterniß noch eine saṁkrānti stattfand⁵⁾. Paṭṭadakal I. des Sinda Cāvūṇḍa II.; *Bo. As. Soc.* XI, 259 und *Ind. Ant.* XXIV, 15.

53.—Ś. 1103, Kārttika, Montag. — Dem Datum entspricht Sonnabend, d. 24. October 1181, an dem keine Finsterniß stattfand. Curugode I. des Rakṣāmalla; *As. Res.* IX, 431 und Colebrooke's *Misc. Essays* II, 276.

54.—Ś. 1185*, Vaiśākha, Montag. — Dem Datum entspricht Freitag, d. 5. Mai 1262, an dem keine Finsterniß stattfand. Chaudāmpur I. des Devagiri-Yādava Mahādeva; *Pāli, Skr. and Old-Can. Inscr.* No. 111 (auch 110).

55.—Ś. 1276*, Māgha, Montag. — Dem Datum entspricht Sonnabend, d. 8. Februar 1354, an dem keine Finsterniß stattfand. Harihar Kp. des Bukkarāya I. von Vijayanagara; *Bo. As. Soc.* XII, 346 und *Ind. Ant.* XXIV, 17.

56.—Ś. 1296, Kārttika. — Dem Datum entspricht entweder d. 1. November 1373 oder d. 21. October 1374; an keinem dieser beiden Tage war eine Finsterniß. Naḍupūru Kp. des Anna-Vema von Koṇḍaviḍu; *Ep. Ind.* III, 288.

1) Es fand keine Mondfinsterniß statt zwischen dem 17. Januar 949 und dem 3. Juni 950.

2) Vgl. oben S. 64, Anm. 3.

3) Es fand keine Mondfinsterniß statt zwischen dem 9. October 1158 und dem 23. Februar 1160.

4) Vgl. oben S. 64, Anm. 3.

5) Eine in Indien nicht sichtbare Mondfinsterniß fand Dienstag, d. 18. Juni 1163, statt.

57.—Ś. 1377, Bhādrapada. — Dem Datum entspricht d. 27. August 1455, an dem keine Finsterniß stattfand. Kistna District Kp. des Gaṇadeva von Koṇḍaviḍu; *Ind. Ant.* XX, 391 und XXIV, 17.

58.—Cā-Vi-va. 39, Caitra, Sonntag, grahaṇa-vyatipāta-saṁkramaṇad-aṁdu¹⁾. — Die Vollmond-tithi fing an Sonntag, d. 22. März 1114, 1 h. 29 m. nach Sonnenaufgang, und die Meṣa-saṁkrānti war Dienstag, d. 24. März, 5 h. 43 m. nach Sonnenaufgang; eine Finsterniß fand nicht statt. Baḷagāṁve I. des W. Cālukya Tribhuvanamalla Vikramāditya VI.; *Pāli, Skr. and Old-Can. Inscr.* No. 175 und *Mysore Inscr.* 175, No. 88.

59.—Jahr 13, Śukla (= Ś. 1071 oder Ś. 951), Kārttika, Montag. — Dem Datum entspricht entweder Dienstag, d. 18. October 1149, oder Sonnabend, d. 25. October 1029; an keinem dieser beiden Tage war eine Finsterniß. Baḷagāṁve I. des W. Cālukya Jagadekamalla; *Pāli, Skr. and Old-Can. Inscr.* No. 180 und *Mysore Inscr.* 97, No. 44.

60.—Jahr 16, Sarvadhārin (= Ś. 1090), Vaiśākha, Sonntag. — Dem Datum entspricht Dienstag, d. 23. April 1168, an dem keine Finsterniß stattfand. Eine in Baḷagāṁve nicht sichtbare Mondfinsterniß fand einen Monat früher, Montag, d. 25. März 1168, statt. Baḷagāṁve I. des Kaḷacūrya Bijjala-Tribhuvanamalla; *Pāli, Skr. and Old-Can. Inscr.* No. 185 und *Mysore Inscr.* 109, No. 48.

2, d. — Nicht berechenbare Mondfinsternisse.

61.—Ś. 930 (statt 931). — Kauṭheṁ Kp. des W. Cālukya Vikramāditya V.; *Ind. Ant.* XVI, 24.

62.—Gāṅgeya Jahr 128, Mārgaśīrṣa. — Chicacole Kp. des Gaṅga Indravarman; *Ind. Ant.* XIII, 120.

63.—Jahr 13 (oder 12?), Caitra-dine 9. — Āmgāchhi Kp. des Pāla Vighrahapāla III.; *Ind. Ant.* XIV, 166 und XXI, 100; vgl. auch XXII, 108.

64.—British Museum (?) Kp. des Ö. Cālukya Vijayāditya II.; *South-Ind. Inscr.* I, 33, No. 35 und *Ind. Ant.* XX, 415.

65.—Monat Māgha. — Hosūr gefälschte Kp. des W. Cālukya Satyāśraya [Pulikeśin II.] und seiner Tochter Amberā; *Ind. Ant.* VIII, 96.

1) Vgl. oben S. 64, Anm. 3.

Nachtrag.

Bei der Entscheidung über die Sichtbarkeit der Sonnenfinsternisse an den angegebenen Orten habe ich Dr. Schram's Tafeln zur Berechnung der näheren Umstände der Sonnenfinsternisse (Wien, 1886) benutzt. Während der Correctur dieses Aufsatzes habe ich mich dann noch in Betreff derjenigen Sonnenfinsternisse, bei denen das Resultat meiner Berechnungen mir etwas zweifelhaft erschien, an Herrn Dr. Schram selbst gewandt, und er hat die Güte gehabt, mir darüber folgende Mittheilungen zu machen, für die ich ihm zu großem Danke verpflichtet bin.

Die Finsterniß No. 11, vom 15. Januar 1051, war in Surat bei Sonnenuntergang 1,5 Zoll groß.

Die Finsterniß No. 13, vom 21. Juli 1069, war in Vāghli bei Sonnenaufgang 1,4 Zoll groß.

Die Finsterniß No. 16, vom 26. December 1144, war an der äußersten Südspitze Indiens wohl noch sichtbar, aber so klein, daß es fast gleichbedeutend mit unsichtbar ist, nämlich etwa 0,1 Zoll.

Die Finsterniß No. 22, vom 18. December 1191, war in Chauḍāmpur (für dessen Lage ich, auf ganze Grade abgerundet, 15° nördl. Breite und 76° östl. Länge angegeben hatte) nicht sichtbar, aber so nahe an der Gränze der Sichtbarkeit, daß schon eine geringe Aenderung der Position des Ortes sie zu einer sichtbaren machen könnte.

Die Finsterniß No. 24—26, vom 22. April 1213, war an den drei gegebenen Orten noch vor Sonnenuntergang sichtbar, wenn auch die größte Phase unsichtbar war. Bei Sonnenuntergang war sie in Khedrāpur (für dessen Lage ich 17° nördl. Breite und 74° östl. Länge angegeben hatte) 7,4 Zoll groß, in Halebiḍ 4,5 Zoll, und in Bhopāl 6,3 Zoll.

Hieraus ergibt sich, daß meine Liste der sichtbaren Finsternisse höchstens in Bezug auf die Sonnenfinsterniß No. 22 einer Aenderung bedarf. Aber diese eine Ausnahme würde, denke ich, die Regel nur bestätigen. Denn der Umstand, daß Chauḍāmpur der Gränze der Sichtbarkeit so sehr nahe liegt, zeigt doch wohl, entweder daß die Finsterniß nach indischer Rechnung wirklich eine für den Ort sichtbare war, oder daß sie einem für einen etwas südlicher gelegenen Ort (wo die Finsterniß zweifellos sichtbar war) berechneten Kalender entnommen ist, daß man es also jedenfalls mit einer sichtbaren Finsterniß zu thun zu haben glaubte.

MISCELLANEA.

DATES OF THE KOLLAM OR KOLAMBA ERA.

MR. P. SUNDARAM PILLAI of Trivandrum has asked me to test the dates of the inscriptions, contained in his pamphlet on *Some Early Sovereigns of Travancore*, and has sent me for examination a number of other dates from inscriptions which he is preparing for publication. I have the more readily complied with his request, because all these dates belong to the Kollam or Kolamba era, of which few dates with sufficient details for verification have been hitherto available; and I publish the results of my calculations, because they tend to shew that the materials, so zealously collected by Mr. Pillai, may be confidently used for historical purposes.

My knowledge of the Kollam *āṇḍu* or *Kōlamba vareha* is chiefly derived from a Trivandrum calendar for the year 1069, kindly furnished to me by the Dewan of Travancore, and a Calicut calendar for the year 1065, for which I am indebted to Dr. Hultsch. These calendars shew that the Kollam year is a solar year, the twelve months of which are named after the signs of the Zodiac.¹ According to both calendars, a new month begins

with the day on which the sun enters a sign of the Zodiac, whenever this *saṁkrāntī* takes place, according to the *Ārya-siddhānta*, within about 7 h. 20 m. (or about 18 *ghaṭikās*) after mean sunrise;² but when the *saṁkrāntī* takes place later in the day, the new month only commences with the following day. According to the Trivandrum calendar, the year 1069 of which comprises the time from the 15th August A. D. 1893 to the 15th August A. D. 1894 (both days inclusive), the year begins with the month of *Simha* (the solar *Bhādrapada*); but according to the Calicut calendar, the year 1065 of which corresponds to the period from the 15th September A. D. 1889 to the 15th September A. D. 1890 (both days inclusive), it begins with the month of *Kanyā* (the solar *Āsvinā*).³ The calendars thus shew that when, for purposes of calculation, we have to convert a given year of the Kollam era into an expired year of the Kaliyuga, we must add 3925 for the months from *Simha* to *Mīna* (or, according to the Calicut calendar, from *Kanyā* to *Mīna*), and 3926 for the remaining months; that, for converting a Kollam year into an expired *Śaka* year, the corresponding figures are 746 and 747;

¹ This is actually the case in all the dates given below except the date No. 8.

² In the Trivandrum calendar a day on which the *saṁkrāntī* takes place 6 h. 59 m. after mean sunrise is counted as the first day of the month, and another day on which the *saṁkrāntī* takes place 8 h. 41 m. after mean sunrise is counted as the last day of the preceding month. Similarly, in the Calicut calendar a day on which the *saṁkrāntī* takes place 6 h. 9 m. after mean sunrise is counted as the first day of the month, and a day on which the *saṁkrāntī* takes place 7 h. 51 m. after mean sunrise

is counted as the last day of the preceding month. In the date No. 8, below (the same date in which the month is called by the Tamil name *Tai*), a day, on which the *saṁkrāntī* took place 8 h. 5 m. after mean sunrise, has been counted as the first day of the month (in accordance with the practice of the Tamil calendars, by which a day is reckoned as the first day of the month, when the *saṁkrāntī* takes place within 12 hours after mean sunrise).

³ Compare Dr. Buchanan's *Journeys through Mysore*, Vol. II, p. 355.

and that, roughly speaking, a Kollam year may be converted into a year A. D. by the addition of 824-25.* With these equations, the dates in Mr. Pillai's pamphlet which contain details for exact verification work out as follows:—

1. — P. 19, No. 3. A Puravachēri inscription of the time of Vira-Ravivarman of Vēṇāḍ is dated in the year 336 after the appearance of Kollam, with the sun six days old[†] in the sign of Vṛishabha, Saturday, Mṛigaśirsha nakshatra. — In Saka-Samvat 336 + 747 = 1083 expired the Vṛishabha-samkrānti took place (by the Ārya-siddhānta) 6 h. 35 m. after mean sunrise of the 24th April A. D. 1161; and the 6th day of the month of Vṛishabha therefore was Saturday, the 29th April A. D. 1161, when the moon was in the nakshatra Mṛigaśirsha for 20 h. 21 m. after mean sunrise.

2. — P. 56, No. 13. A Varkkalai inscription of the time of Vira-Padmanābha-Mārtanḍavarman of Vēṇāḍ is dated in the Kollam year 427, with Jupiter entering into Mēsha, and the sun 21 days old in Vṛishabha, Wednesday, the 5th lunar day after new-moon. — In Saka-Samvat 427 + 747 = 1174 expired the Vṛishabha-samkrānti took place 19 h. 33 m. after mean sunrise of the 24th April A. D. 1252; and the 21st day of the month of Vṛishabhatherefore was Wednesday, the 15th May A. D. 1252, when the 5th tithi of the bright half ended 10 h. 38 m. after mean sunrise, and when Jupiter was in the sign Mēsha which it had entered on the 17th March A. D. 1252.

3. — P. 46, No. 11. A Kaḍṇamkulam inscription of the time of Vira-Rāma-Kēraḷavarman of Vēṇāḍ is dated in the Kollam year 389, with Jupiter in Kumbha, and the sun 18 days old in Mina, Thursday, Pushya nakshatra, the 10th lunar day. — By our equation the year 389 should correspond here to Saka-Samvat 389 + 746 = 1135 expired; but in reality the date fell in Saka-Samvat 1136 expired. In that year the Mina-samkrānti took place 23 h. 29 m. after mean sunrise of the 22nd February A. D. 1215; and the 18th day of the month of Mina therefore was Thursday, the 12th March A. D. 1216, when the 10th tithi of the bright half ended 13 h. 2 m. and the nakshatra was Pushya for 11 h. 10 m. after

mean sunrise. Besides, Jupiter was in the sign Kumbha which it had entered on the 25th August A. D. 1214.

4. — P. 25, No. 6. A Tiruvattar inscription of the time of Vira-Udaiya-Mārtanḍavarman of Vēṇāḍ is dated in the Kollam year 348, with Jupiter in Karkāṭaka, and the sun . . . days old in Mina, Thursday, Anurādhā nakshatra. — Here the year 348 should correspond to Saka-Samvat 348 + 746 = 1094 expired; but the date really fell in Saka-Samvat 1093 expired. In that year the Mina-samkrānti took place 20 h. 32 m. after mean sunrise of the 22nd February A. D. 1172; and during the month of Mina the moon was in the nakshatra Anurādhā on Thursday, the 16th March A. D. 1172, which was the 23rd of the month. On this 16th March Jupiter, as required, was in the sign Karkāṭaka which it had entered on the 23rd February A. D. 1172.

I am not at present prepared to say that the figures 389 and 348 of the dates 3 and 4 must necessarily both be considered as incorrect, but it is clear that at least one of them must be wrong. Similarly to what is the case in many Saka dates which quote wrong years, the position of Jupiter is given correctly in both dates,[‡] and there is not the slightest doubt about the proper European equivalent of either date.

The other dates in Mr. Pillai's pamphlet do not admit of exact verification. But the dates of the inscriptions 7, 9 and 10, on pp. 28, 38 and 43 may be looked upon as correct, because in the years quoted by the dates Jupiter really was in the positions assigned to it. On the other hand, the dates of the inscriptions 2 and 8 on pp. 15 and 36 are quite incorrect. And in the date of the inscription 12 on p. 49 one would at any rate have expected the year to be 411 instead of 410.

The following dates are from inscriptions which have not yet been published:—

5. — The year 428, the 8th day of Mina, Sunday, Rēvati nakshatra. — In Saka-Samvat 428 + 746 = 1174 expired the Mina-samkrānti took place 19 h. 24 m. after mean sunrise of the 22nd February A. D. 1253; and the 8th day of the month of Mina therefore was Sunday, the 2nd

of an inscription in *Archæol. Surv. of South. India*, Vol. IV. p. 112, the Kollam year 775 is rightly described as Śarvarin according to the southern luni-solar system.
[†] This inscription has not been translated correctly by Mr. Pillai. The original indicates that Jupiter was in *Dhanus* in the Kollam year 306 (expressed by the word *Māriandā*) = A. D. 1189.90; and Jupiter was in *Dhanus* from the 12th December A. D. 1188 to the 8th December A. D. 1189.

March A. D. 1253, when the nakshatra was Rēvati from 3 h. 17 m. after mean sunrise.

6. — The year 428, the 17th day of Mina, Tuesday, the 10th lunar day, Pushya nakshatra. — The year and month being the same as in the preceding date, the 17th day of the month of Mina was Tuesday, the 11th March A. D. 1253, when the 10th tithi of the bright half ended 12 h. 10 m., and the nakshatra was Pushya for 12 h. 29 m. after mean sunrise.

7. — The year 440, the 23rd day of Karkāṭaka, Sunday, the 5th lunar day of the bright half, Hasta nakshatra. — In Saka-Samvat 440 + 747 = 1187 expired the Karkāṭaka-samkrānti took place 4 h. 35 m. after mean sunrise of the 27th June A. D. 1265; and the 23rd day of the month of Karkāṭaka therefore was Sunday, the 19th July A. D. 1265, when the 5th tithi of the bright half ended 2 h. 8 m., and the nakshatra was Hasta for 6 h. 34 m. after mean sunrise.

8. — The year 663, the 28th day of Tai (Makara), Thursday, the 11th lunar day of the bright half, Mṛigaśirsha nakshatra, Vaidhṛiti (?). — In Saka-Samvat 663 + 746 = 1409 expired the Makara-samkrānti took place 8 h. 5 m. after mean sunrise of the 28th December A. D. 1487, which, according to the practice of the Trivandrum and Calicut calendars, should have been counted as the last day of the month of Dhanus. But it was apparently here counted as the first day of the month of Makara, and the 28th day of this month therefore was Thursday, the 24th January A. D. 1488, when the 11th tithi of the bright half commenced 4 h. 2 m., and when the nakshatra was Mṛigaśirsha for 21 h. 1 m., and the yōga Vaidhṛiti for 13 h. 26 m. after mean sunrise.

9. — The year 749, the 1st day of Karkāṭaka, Wednesday, the 12th lunar day of the bright half, Anurādhā nakshatra. — In Saka-Samvat 749 + 747 = 1496 expired the Karkāṭaka-samkrānti took place 2 h. 58 m. after mean sunrise of Wednesday, the 30th June A. D. 1574, which therefore was the 1st day of the month of Karkāṭaka. On this day the 12th tithi of the bright half ended 21 h. 16 m., and the nakshatra was Anurādhā for 7 h. 13 m. after mean sunrise.

10. — The year 779, Kaliyuga 4704, the 26th day of Mithuna, Saturday, the 7th lunar day of the bright half, Hasta nakshatra, Jupiter in Dhanus. — In Saka-Samvat 779 + 747 = 1526 = Kaliyuga 4705 (not 4704)[§] expired the Mithuna-samkrānti took place 6 h. 33 m. after mean sunrise of the 29th May A. D. 1604; and the 26th day of the month of Mithuna therefore was Saturday,

the 23rd June A. D. 1604, when the 7th tithi of the bright half ended 21 h. 36 m., and when the nakshatra was Hasta, by the equal-space system from 7 h. 13 m., and by the Brahma-siddhānta from 3 h. 56 m. after mean sunrise. Jupiter, as required, was in Dhanus, which it had entered on the 3rd February A. D. 1604.

11. — The year 635, the 6th day of Tulā, Friday, the 8th lunar day of the dark half, Punarvasu nakshatra. — In Saka-Samvat 635 + 746 = 1431 expired the Tulā-samkrānti took place 6 h. 31 m. after mean sunrise of the 30th September A. D. 1509; and the 6th day of the month of Tulā therefore was Friday, the 5th October A. D. 1509, when the 8th tithi of the dark half commenced 9 h. 47 m., and the nakshatra was Punarvasu for 17 h. 44 m. after mean sunrise.

12. — The year 720, the 26th day of Makara, Friday, the 12th lunar day of the bright half, Mṛigaśirsha nakshatra. — In Saka-Samvat 720 + 746 = 1466 expired the Makara-samkrānti took place 1 h. 58 m. after mean sunrise of the 28th December A. D. 1544, and the day intended by the date clearly is Friday, the 23rd January A. D. 1545, when the nakshatra was Mṛigaśirsha for 10 h. 30 m. after mean sunrise. This, however, was the 27th (not the 26th) day of the month of Makara, and on it the 11th (not the 12th) tithi of the bright half ended, 14 h. 10 m. after mean sunrise.

13. — The year 757, the 12th day of Vṛiśchika, Saturday, the 1st lunar day of the dark half, Rōhiṇī nakshatra, Jupiter in Dhanus. — In Saka-Samvat 757 + 746 = 1503 expired the Vṛiśchika-samkrānti took place 19 h. 10 m. after mean sunrise of the 30th October A. D. 1581; and the 12th day of the month of Vṛiśchika therefore was Saturday, the 11th November A. D. 1581, when the 1st tithi of the dark half ended 14 h. 36 m., and the nakshatra was Rōhiṇī for 13 h. 8 m. after mean sunrise. But Jupiter was no longer in the sign Dhanus, having left that sign already on the 11th May A. D. 1581.

14. — The year 778, Kaliyuga 4704, the 7th day of Mēsha, Monday, Rōhiṇī nakshatra, Gaṇḍa yōga, Jupiter in Vṛiśchika. — In Saka-Samvat 778 + 747 = 1525 = Kaliyuga 4704 expired the Mēsha-samkrānti took place 16 h. 27 m. after mean sunrise of the 28th March A. D. 1603, and the 7th day of the month of Mēsha therefore was Monday, the 4th April A. D. 1603. On this day the nakshatra was Rōhiṇī, by the Brahma-siddhānta from sunrise, and by the equal-space system from 6 h. 34 m. after mean sunrise; but the yōga

[§] Compare the date No. 14, below.

was Saubhāgya (4), not Gaṇḍa (10). Jupiter, as required, was in Vṛiśchika, having entered that sign on the 7th February A. D. 1603.

To these dates from Mr. Pillai's inscriptions I add here the date of a short inscription from Suchndram, published *ante*, Vol. II. p. 361, the only date of the Kōlamba era in this Journal which furnishes details for verification:—

15.—The Kōlamba year 654 (expressed by the word *visati*), Jupiter in Vṛiśhabha, the sun at the end of Tula, the *nakshatra* Anurādhā, Monday, the first lunar day.—In Saka-Samvat

654 + 746 = 1400 expired the Tula-samkrānti took place 6 h. 3 m. after mean sunrise of the 30th September A. D. 1478, and the day of the date is Monday, the 26th October A. D. 1478, which was the 27th day of the month of Tula, and on which the first tithi of the bright half ended 19 h. 29 m., and the *nakshatra* was Anurādhā (by the Brahma-siddhānta) from 5 h. 16 m. after mean sunrise. On the same day Jupiter was in the sign Vṛiśhabha which it had entered on the 24th July A. D. 1478.*

Göttingen.

F. KIELHOEN.

MISCELLANEA.

DATES OF THE KOLLAM OR KOLAMBA ERA.

(Continued from p. 66.)

MR. P. SUNDARAM PILLAI has sent me two more dates of the Kollam era which admit of exact verification.

16.—The year 782, Kaliyuga 4708; the 6th day of Mēsha, Friday, the first tithi of the dark half, Jyōti (?)¹ *nakshatra*, Siddhi yōga, the sign of Karkāṭaka rising; Jupiter in Mīna, and Saturn in Dhanus.—In Saka-Samvat 782 + 747 = 1529 = Kaliyuga 4708 expired the Mēsha-samkrānti took place on the 28th March A. D. 1607, by the Sūrya-siddhānta 19 h. 52 m., and by the Ārya-siddhānta 17 h. 17 m. after mean sunrise; and the month of Mēsha therefore commenced on the 29th March, and the 6th of Mēsha was Friday, the 3rd April A. D. 1607. On this day the first tithi of the dark half ended 6 h. 48 m., and the *nakshatra* was Svāti for 11 h. 50 m., and the yōga Siddhi from 2 h. 27 m. after mean sunrise. At noon Jupiter's mean place was 11° 5' 55', and his true place 11° 9' 16', in both cases in Mīna; and Saturn's mean place 8° 23' 37', and his true place 8° 26' 19', in both cases in Dhanus. The sun's longitude at sunrise was 5° 4', and the sign of Karkāṭaka therefore was rising about midday.

17.—The year 412, the month of Makara, Sunday, Rēvati *nakshatra*, Jupiter in Dhanus.—In Saka-Samvat 412 + 746 = 1158 expired the month of Makara commenced on the 26th December A. D. 1236, and the day of the date is Sunday, the 4th January A. D. 1237, when the *nakshatra* was Rēvati about the whole day. Jupiter's mean place was 8° 18' 42', and his true place 8° 17' 42', in both cases in Dhanus.

It will be seen that in these two dates it practically makes no difference whether we take the statements regarding Jupiter's position to refer to his mean place or to his true place. And the same may be said of the dates Nos. 2 (Jupiter in Mēsha), 3 (in Kumbha), 10 (in Dhanus), 14 (in Vṛiśchika), and 15 (in Vṛiśhabha). The two remaining dates that mention Jupiter's place, Nos. 4 and 13, each offer a difficulty.

The date No. 13, as we have seen, corresponds to the 11th November A. D. 1581, and it records that Jupiter then was in Dhanus. But by the Sūrya-siddhānta rule *without bīja* Jupiter's mean place on the 11th November A. D. 1581 was

¹ This apparently should be *Svāti*.

² This note was written in April 1896, before the publication of *The Indian Calendar* by Mr. Sewall and

9° 15' 17', and his true place 9° 1' 47', i. e., Jupiter in either case was in Makara, not in Dhanus. If we might calculate Jupiter's true place from his mean place *with bīja*, we should indeed obtain 8° 28' 57', with Jupiter in Dhanus, but are we allowed to do so?²

The date No. 4 (the year 343, the month of Mīna, Thursday, Anurādhā *nakshatra*, Jupiter in Karkāṭaka), judging by the other dates, should fall in A. D. 1173, but in that year the month of Mīna contained no Thursday on which the *nakshatra* was Anurādhā; and the probability therefore is that the corresponding date is Thursday, the 16th March A. D. 1172, when the *nakshatra* was Anurādhā. If this were absolutely certain, the position of Jupiter, referred to in the date, would undoubtedly be his mean one; for on the 16th March A. D. 1172 Jupiter's mean place was in Karkāṭaka (3° 1' 48'), as required by the date, and his true place in Mithuna (2° 25' 25').

The seventeen dates treated of do not enable us to say whether the years of the Kollam era are ordinarily quoted as current or expired years. In fifteen of them (Nos. 1 and 2, and 5-17) the difference between the given year and the year A. D. (from about the middle of August to about the middle of August), in which the date falls, is 824-25; but in No. 3 that difference is 825-26, and in No. 4 it is 823-24. This shows that either the given year of No. 3 or that of No. 4 is certainly wrong (whether current or expired), and that neither of them can be utilized to decide the question whether the years of the other dates are current or expired ones.

Göttingen.

F. KIELHOEN.

* [With these notes compare Dr. Schram's article, *ante*, p. 9 f., on the same subject. The comparison will be found, not only to be valuable, but exceedingly interesting.—ED.]

Mr. Dikshit. According to that book, we apparently are allowed to calculate Jupiter's true place from his mean place *with bīja*.

WARREN'S RULES FOR FINDING JUPITER'S PLACE.

BY PROF. F. KIELHORN, C. I. E.; GÖTTINGEN.

THE dates of some inscriptions record that on the day of the date Jnpiter was in a certain sign of the zodiac. Thus the Bhaṭkaḷ plates of the time of Harihara II. of Vijayanagara¹ are dated 'in the Kshaya *sahatsara* which corresponded to the 'Saka year 1309, when Jupiter was in (the sign) *Siṃha*, on Thursday, the fifth *tithi* of the dark half of Pausha;' and this practice of quoting the sign in which Jupiter was at a particular time is especially common in dates of the Kollam era. In order to verify dates, we therefore occasionally must calculate Jupiter's place, or find his longitude, for a given day. This may be done by certain rules and tables in Warren's *Kāla-sahkalita*, but that work is very difficult to obtain now. To supply a substitute, I reprint here two of Warren's Tables, slightly modified, and give his rules, some of them so altered as to make them applicable to some Tables in Vol. XVIII. of this Journal. I shall only be too glad, if my doing this will induce a more competent scholar to show us how the problem may be solved in a simpler manner.²

To show the working of the rules and Tables here given, I take as an example the 18th October A. D. 475, when, according to Mr. Dikshit,³ the true longitude of Jnpiter was 195° 24'.

RULES.

1. — Convert the given date into the corresponding day of the Julian period, by Table I in Vol. XVIII. p. 203.

The 18th October A. D. 475 is found to be the day 1894 842 of the Julian period.

2. — To find Jupiter's mean place, use the Tables 1 and 2 in Vol. XVIII. pp. 382 and 383, taking the Nos. 1-12, 13-24, 25-36, 37-48, and 49-60 in the first column of Table 2 in each case to be equivalent to the (complete) signs from 0 to 11,⁴ thus:—

From the day of the Julian period subtract the next lower number of days in the column without *ḥija* of Table 1. From the remainder subtract the next lower number of days in the column without *ḥija* of Table 2, to obtain signs. The remainder divide by 12·0342 to obtain degrees; and the remainder by 0·2006, to obtain minutes.

Day of Jul. per.	1894 842·0000	
Table 1	— 1888 161·9457	
	6 680·0543	
Table 2	— 6 498·4810	= No. 19 = 6 signs;
	12·0342 :	181·5733 = 15°;
	120 342	
	61 2313	
	60 1710	
0·2006 :	1·0603	= 5'.

¹ See *Ep. Ind.* Vol. III. p. 117. The date corresponds to Thursday, the 10th January A. D. 1387, and according to Warren's rules, here given, Jupiter's mean place on that day was 4° 11' 48", and his true place 4° 21' 45", in both cases in the sign *Siṃha*.

² I may state here that my manuscript of this article was sent to the press in April last, before the publication of *The Indian Calendar*. In the Additions and Corrections of that work, pp. 155-161, the authors have done now what I very much wished them to do.

³ See *Gupta Inscr.* Introduction, p. 105.

⁴ 0 = *Mṛga*; 1 = *Mēsha*; 2 = *Vriṣabha*; 3 = *Mithuna*; 4 = *Karkāṭa*; 5 = *Siṃha*; 6 = *Kanyā*; 7 = *Tulā*; 8 = *Vriśchika*; 9 = *Dhanu*; 10 = *Makara*; 11 = *Kumbha*.

Accordingly, Jupiter's mean place on the 18th October A. D. 475 was 6° 15' 5"; *i. e.*, Jupiter's mean position was in the 16th degree of the 7th sign (*Tulā*), or his mean longitude was 195° 5'.

3. — Since Jupiter's true place is found from his mean place, the place of his apsis, and the sun's mean place, take the place of Jupiter's apsis for the given year A. D. from the accompanying Table I.

The place of Jupiter's apsis for A. D. 475 is 5° 21' 16'.

4. — To obtain the sun's mean place, find first the number of days of the elapsed years of the *Kaliyuga*, by Table V. Col. A. in Vol. XVIII. p. 207, and increase it by 2·1476. Subtract the total from the day of the Julian period. Divide the remainder by 30·4382, to obtain signs; the remainder by 1·0146, to obtain degrees; and the remainder by 0·0169, to obtain minutes.

The 18th October A. D. 475 falls in *Kaliyuga* 3576 expired, and the number of days of 3576 years, calculated by the Table, and increased by 2·1476, is 1894 631 0631. We therefore have:—

Day of Jul. per.	1894 842·0000	
	— 1894 631·0631	
30·4382 :	210·9369	= 6 signs;
	182 6292	
1·0146 :	28·3077	= 27°;
	20 292	
	8 0157	
	7 1022	
0·0169 :	·9135	= 54'.

Accordingly, the sun's mean place on the 18th October A. D. 475 was 6° 27° 54'.

Now, having found Jupiter's mean place, the place of his apsis, and the sun's mean place,—

5. — From the sun's mean place subtract that of Jupiter. With the remainder as argument take out the equation from Jupiter's Annual Table (herewith published), and apply one half of it to Jupiter's mean place, to get it once corrected.

6° 27° 54'	6° 15° 5'
— 6 15 5	+ 1 3
0 12 49;	6 16 8;
equation + 2° 5';	Jupiter's place once corrected.
half of it + 1° 3'.	

6. — From the place of Jupiter's apsis subtract his place once corrected. With the remainder as argument take out the equation from Jupiter's Anomalistic Table (herewith published), and apply one half of it to Jupiter's place once corrected, to get it twice corrected.

5° 21° 16'	6° 16° 8'
— 6 16 8	— 1 5
11 5 8;	6 15 3;
equation — 2° 10';	Jupiter's place twice corrected.
half of it — 1° 5'.	

7. — From the place of Jupiter's apsis subtract his place *twice* corrected. With the remainder as argument take out the equation from the Anomalistic Table, and apply it to Jupiter's uncorrected mean place, to get his **true heliocentric place**.

5° 21' 16'	6° 15' 5'
— 6 15 3'	— 2 5
11 6 13;	6 13 0;
equation — 2° 5'.	Jupiter's heliocentric place.

8. — From the sun's mean place subtract Jupiter's heliocentric place. With the remainder as argument take out the equation from the Annual Table, and apply it to Jupiter's heliocentric place, to get his **true geocentric place**.

6° 27' 54'	6° 13' 0'
— 6 13 0	+ 2 25
0 14 54;	6 15 25;
equation + 2° 25'.	Jupiter's true geocentric place.

Jupiter's true place at the time of mean sunrise of the 18th October A. D. 475 is therefore found to be 6° 15' 25'; i. e., Jupiter's true position was in the 16th degree of the 7th sign (Tulā), or his true longitude was 195° 25'. This differs 1' from Mr. Dikshit's result, but the difference is somewhat less because Mr. Dikshit's calculation is made for about an hour before sunrise.

Another Example.

I give another example in which there is a considerable difference between Jupiter's mean and true places.

According to a Benares *Pañchāṅga* Jupiter entered the sign Mēsha (i. e., his true longitude was 360° = 0) on Jyēshṭha-sudi 12 of Vikrama-saṁvat 1949 = the 7th June A. D. 1892.⁵ What was Jupiter's true longitude, by the rules here given, at the time of mean sunrise of the 7th June A. D. 1892 (which falls in Kaliyuga 4993 expired)?

1.— Day of Jul. per.	2412	257·0000
2.—	— 2408	040·4240
	4	216·5760
	— 3	971·2939 = No. 12 = 11 signs;

$$12·0342 : \frac{245·2821}{240\ 6840} = 20°;$$

$$0·2006 : \frac{4·5981}{4\ 5981} = 23'.$$

Jupiter's mean place: 11° 20° 23'.

3.— Place of Jupiter's apsis: 5° 21' 22'.

4.— Number of days of 4993 years + 2·1476 = 2412·2027212.

Day of Jul. per.	2412	257·0000
	— 2412	202·7212

$$30·4382 : \frac{54·2788}{30\ 4382} = 1 \text{ sign};$$

$$1·0146 : \frac{23·8406}{20\ 292} = 23°;$$

$$\frac{3\ 5496}{3\ 0438}$$

$$0·0169 : \frac{·5048}{·5048} = 30'.$$

Sun's mean place: 1° 23° 30'.

⁵ In other *Pañchāṅgas* which I have at hand, Jupiter is stated to have entered the sign Mēsha on the 19th June, on the 30th June, on the 1st July, and on the 2nd July A. D. 1892.

<p>5.— 1° 23° 30'</p> <p style="text-align: right;">— 11 20 23</p> <p style="text-align: right; border-top: 1px solid black;">2 3 7;</p> <p>equation + 9° 16';</p> <p>half of it + 4° 38'.</p> <p>6.— 5° 21° 22'</p> <p style="text-align: right;">— 11 25 1</p> <p style="text-align: right; border-top: 1px solid black;">5 26 21;</p> <p>equation + 0° 20';</p> <p>half of it + 0° 10'.</p> <p>7.— 5° 21° 22'</p> <p style="text-align: right;">— 11 25 11</p> <p style="text-align: right; border-top: 1px solid black;">5 26 11;</p> <p>equation + 0° 21'</p> <p>8.— 1° 23° 30'</p> <p style="text-align: right;">— 11 20 44</p> <p style="text-align: right; border-top: 1px solid black;">2 2 46;</p> <p>equation + 9° 13·5'.</p>	<p>11. 20° 23'</p> <p style="text-align: right;">+ 4 38</p> <p style="text-align: right; border-top: 1px solid black;">11 25 1;</p> <p>Jupiter's place once corrected.</p> <p>11° 25° 1'</p> <p style="text-align: right;">+ 0 10</p> <p style="text-align: right; border-top: 1px solid black;">11 25 11;</p> <p>Jupiter's place twice corrected.</p> <p>11° 26° 23'</p> <p style="text-align: right;">+ 0 21</p> <p style="text-align: right; border-top: 1px solid black;">11 20 44;</p> <p>Jupiter's heliocentric place.</p> <p>11° 20° 44'</p> <p style="text-align: right;">+ 9° 13·5</p> <p style="text-align: right; border-top: 1px solid black;">11 29 57·5</p> <p>Jupiter's true geocentric place.</p>
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The true longitude of Jupiter at the time of mean sunrise of the 7th June A. D. 1892 therefore is found to be 11° 29° 57·5' = 359° 57·5', which is sufficiently near to 360° = 0, to enable us to say that Jupiter did enter the sign Mēsha on the given day.

TABLES.

II. — Anomalistic Table.

	+ 0. ^s —VI. ^s			+ I. ^s —VII. ^s			+ II. ^s —VIII. ^s		
	Equation.			Equation.			Equation.		
0° 0'	0°	0'		2°	35'	4°	26'	30°	0'
3 45	0	21'	21'	2	52	4	35	26	15
7 30	0	41'	20	3	8	4	43	22	30
11 15	1	1	20	3	24	4	50	18	45
15 0	1	21'	19	3	38	4	56	15	0
18 45	1	40'	19	3	52	5	0	11	15
22 30	1	59'	18	4	4	5	3	7	30
26 15	2	17'	18	4	16	5	5	3	45
30 0	2	35'	18	4	26	5	6	0	0
	— XI. ^s + V. ^s			— X. ^s + IV. ^s			— IX. ^s + III. ^s		

I. — Jupiter's Apsis.

Years A. D.	Place of Apsis.
343—564	5° 21° 16'
565—786	5 21 17
787—1008	5 21 18
1009—1230	5 21 19
1231—1452	5 21 20
1453—1674	5 21 21
1675—1896	5 21 22

III.—Annual Table.

	+ 0. ^a	+ I. ^a	+ II. ^a	+ III. ^a	+ IV. ^a	+ V. ^a	
	Equation.	Equation.	Equation.	Equation.	Equation.	Equation.	
0° 0'	0° 0'	4° 49'	8° 55'	11° 18'	10° 51'	6° 47'	30° 0'
3 45	0 37 37	5 23 34	9 20 25	11 26 8	10 33 18	6 2 45	26 15
7 30	1 13 36	5 57 34	9 43 23	11 30 4	10 11 22	5 15 47	22 30
11 15	1 50 37	6 29 32	10 5 22	11 32 2	9 45 26	4 26 49	18 45
15 0	2 26 36	7 1 32	10 24 19	11 30 2	9 16 29	3 35 51	15 0
18 45	3 3 37	7 31 30	10 41 17	11 25 5	8 44 32	2 42 53	11 15
22 30	3 38 35	8 1 30	10 56 15	11 17 8	8 8 33	1 49 53	7 30
26 15	4 14 35	8 29 28	11 8 12	11 6 11	7 29 39	0 54 55	3 45
30 0	4 49 35	8 55 26	11 18 10	10 51 15	6 47 42	0 0 54	0 0
	—XI. ^a	—X. ^a	—IX. ^a	—VIII. ^a	—VII. ^a	—VI. ^a	

MISCELLANEA.

MISCELLANEOUS DATES OF INSCRIPTIONS.

1. — A date with a Vijaya-saptami.

The Törkhêdê plates of the reign of the Râshtra-kûta Gôvinda III., published by Dr. Fleet in *Ep. Ind.* Vol. III. p. 54 ff., in lines 1-3, contain the date — Sakanripakâlâtita-saivatsara-sâtêshu saptasu pañchatriusaty-adhikêshu¹ Pausha-suddha-saptamyâm=ankatô-pi saivatsara-sâtâni 735 Nandana-saivatsarê Paushah suddha-tithi; 7 asyâm saivatsara-mâsa-paksha-divasa-pûrvvâyâm; and in line 43 we are told, besides, that the grant was made 'adya vijaya-saptamyâm,' i. e., 'today, on the (tithi called) vijaya-saptami.' This additional remark enables us to verify the date with absolute certainty.

According to a verse² from the *Bhavishyat-purâna*, quoted in Hêmdrî's *Chaturvarga-chintâmani*, Vol. III. Part II. p. 625, the seventh tithi of the bright half of a month is termed Vijaya (i. e., such a tithi is a vijaya-saptami), when it falls on a Sunday. Applying this in the present case, the given date practically is Sunday, the 7th tithi of the bright half of Pausha of Saka-saivât 735; and it corresponds, for Saka-saivât 735 expired, to Sunday, the 4th December A. D. 813, when the 7th tithi of the bright half ended 2 h. 8 m. after mean sunrise.

This equivalent of the date shews that the Jovian year Nandana has been quoted in the date in accordance with the so-called northern luni-solar system. By the southern luni-solar system Nandana would have been Saka-saivât 735 current, not expired. And by the mean-sign system Nandana lasted from the 9th May A. D. 812 to the 5th May A. D. 813, i. e., it was current at the commencement of Saka-saivât 735 expired, but was no longer so on the day of the date, the 4th December A. D. 813, which by the mean-sign system would have fallen in the Jovian year Vijaya. This agrees with what I have stated *ante*, Vol. XXV. p. 269.

2. — A date with the Ardhodaya-yôga.

When during the 15th tithi of the dark half of the *amânta* Pausha (or *pârvinânta* Mâgha), on a Sunday in day-time, the moon's *nakshatra* is *Bravâna*, and the *yôga* *Vyatipâta*, this coincidence is called *Ardhodaya*. It is a most auspicious occasion for making donations. An instance³ is furnished by the date of some copper-

¹ Read *pañchatriusad*.
² *Sukla-pakshasya saptamyâm Ravi-vêrô bhavêd-yadi saptami Vijâyâ nâma ta'sra dattav mahâ-phalam* ||
³ For another instance see *ante*, Vol. XXV. p. 290, note 40.

plates of Allâda-Doççaya-Reddî, lately sent to me for calculation by Dr. Hultsch, which runs thus:—

Sri-Sâkê kara-bâna-viâra-ganitê Sâdhârânê vatsarê Paushê-rdhodaya-nâmi punya-samayê;

i. e., at the auspicious time of the *Ardhodaya*, in (the month) Pausha of the year Sâdhârâna, which was the Saka year 1352.

From the given definition it follows that, for purposes of calculation, the date is Sunday, the 15th tithi of the dark half of the *amânta* Pausha of Saka-saivât 1352 expired, which by the southern luni-solar system was the year Sâdhârâna. And with these *data*, it regularly corresponds to Sunday, the 14th January A. D. 1431, when the new-moon tithi of Pausha ended 2 h. 20 m., and when the *nakshatra* was *Bravâna* for 11 h. 10 m., and the *yôga* *Vyatipâta* for 18 h. 56 m. after mean sunrise. The *Ardhodaya* of the date, therefore, is the time from sunrise to 2 h. 20 m. after mean sunrise of Sunday, the 14th January A. D. 1431.

3. — A date with the Kapilâ-shashthî.

The 6th tithi of the dark half of the *amânta* Bhâdrapada (or *pârvinânta* Âsîna) is called *Kapilâ-shashthî*, when it falls on Tuesday, and is joined with the *nakshatra* *Rôhîni* and the *yôga* *Vyatipâta*, and is particularly auspicious for making donations, when the sun, besides, is in the *nakshatra* *Hasta*.⁴ Here an instance is furnished by the date of the Sañkalâpura inscription of Krishnarâya of Vijayanagara, sent to me for calculation by Dr. Hultsch, which runs thus:—

Saka-varushaigalu 1435nêya Srimukha-saivatsara nija-Bhâdrapada ba 6 Man-galavâra Ka[pilâ]-shashthî-pumnyakâladalâ.

This date, for Saka-saivât 1435 expired, which by the southern luni-solar system was the year Srimukha, and in which Bhâdrapada was intercalary, corresponds to Tuesday, the 20th September A. D. 1613, when the 6th tithi of the dark half of the second Bhâdrapada ended 17 h. 38 m. after mean sunrise. On this day the moon's *nakshatra* was *Rôhîni* for 1 h. 58 m., and the *yôga* was *Vyatipâta* for 11 h. 37 m. after mean sunrise; besides, the sun's longitude at mean sunrise was 169° 46', and the sun, therefore, was in the *nakshatra* *Hasta* (160°-173° 20').

⁴ Because this synchronism is rare, the Marâthî expression *Kapilâshashthîkâ yôga*, according to Molesworth, is used of any astonishing or unlooked for combination of favourable circumstances.

4.—A date with a *Shaḍasitimukha-saṁkrānti*.

Dr. Fleet informs me that the Chaujadāmpur inscription of the Dēvagiri-Yādava Mahādēva of Saka-saṁvat 1185 (current) and the year Dundubhi (*Pāli, Skr. and Old-Kan. Inscr.* No. 111) contains two other dates, one of which, in lines 92 and 93, is —

Rudhirōdgāri-[saṁvatsa]rāda Jēshṭha-bahula 5 (but possibly 1) Adī-vāra Shaḍasitimukha-saṁkrānti-tātkāladalli; i. e., 'Sunday, the 5th (but possibly 1st) of the dark half of Jyaishṭha of the year Rudhirōdgārin, at the time of a Shaḍasitimukha-saṁkrānti.'

The Shaḍasitimukha-saṁkrāntis are the saṁkrāntis of the sun into the signs of Mithuna, Kanyā, Dhanuḥ, and Mīna,² and of these, a saṁkrānti that takes place in the dark half of Jyaishṭha can only be the Mithuna-saṁkrānti. And the year Rudhirōdgārin of the date must be Saka-saṁvat 1185 expired. In that year the Mithuna-saṁkrānti took place, by the Sūrya-siddhānta, 3 h. 33 m. after mean sunrise of Sunday, the 27th May A. D. 1263, during the 3rd 1 tithi of the dark half of the amānta Jyaishṭha, which ended on the same day, 12 h. 15 m. after mean sunrise. This result shows that the numeral figure for the tithi of the date ought to be 3, not 5 (nor 1).

5.—Date of the death of Pratāpa-Dēvarāya of Vijayanagara.

In the genealogical table of the first Vijayanagara dynasty, given by Dr. Hultzsch in *Ep. Ind.* Vol. III. p. 36, Pratāpa-Dēvarāya is put down as a younger brother of Dēvarāya II.³ The day on which he died is recorded in *Inscr. at Sravāna Belgola*, p. 95, No. 125, in the following verse in the Pṛithvī metre:—

Kshayaḥhvaya-kuvatsarē dvitayayukta-
Vaisākhakē Mahitanaya-vārsakē yuta-
baḷaksha-paksh-ētarē |

Pratāpanidhi-Dēvarāṭ pralayam-āpa hant-
āsamaś-chaturdaśa-dinē katham Pitṛi-
patē nivāryā gatiḥ ||

'In the evil year Kshaya, in the wretched second Vaisākha, on a miserable Tuesday, in the fortnight which was the reverse of bright, on the fourteenth day, the unequalled store of

² See *ante*, Vol. XIX. p. 330.

³ So far as I know, the latest available date for Dēvarāya II. is the date of the Tañjavūr inscription, published by Dr. Hultzsch in *South-Ind. Inscr.* Vol. II. p. 339, of Saka-saṁvat 1338 expired and the year Kshaya, which corresponds to Wednesday, the 29th June A. D. 1445. And the Seringapatam plates of his son and successor Mallikārjuna Immaḷi-Dēvarāya (*Ep. Carn. Part I.*

valour (*pratāpa*) Dēvarāḷ, alas, met with death. How, O Yama, can fate be averted?'

Here it so happens that Saka-saṁvat 1368 expired is the *only* year Kshaya of the southern luni-solar cycle, in which the month Vaisākha was intercalary; and for that year the date is correct. For in Saka-saṁvat 1368 expired the 14th tithi of the dark half of the second Vaisākha ended 14 h. 57 m. after mean sunrise of Tuesday, the 24th May A. D. 1446, which therefore is the day on which Pratāpa-Dēvarāya died.

6.—A date of the year 2493 after Vardhamāna's Nirvāṇa.

In an inscription, published in *Inscr. at Sravāna Belgola*, p. 111, No. 141, Kṛishnarāja Voḍeyar of Maisūr confirms some grants on a date which is given thus:—

Svasti sri-Vardhamāna-ākhyē Jinē muk-
tim gatē sati |
vahnirandhr-śbdhi-nētrais=cha vatsarēshu
mitēshu vai ||

Vikramāṅka-samāsv=ind u-gaja-sām a ja-
hastibhiḥ |
satishu gananiyāsu gaṇita-jñair=bbudhais=
tadā ||

Śālivāhana-varshēshu⁴ nētra-bāṅa-nag-
ēndubhiḥ |

pramitēshu Vikṛity-abdē Śrāvāṇē māsi
maṅgalē ||

Kṛishna-pakshē cha pañchamyām tithau
Chandrasya vāsarē | ;

i. e., on Monday, the 5th tithi of the dark half of Śrāvāna of the year Vikṛiti, which was the year 2493 after Vardhamāna's Nirvāṇa, the Vikrama year 1888, and the Saka year 1752, the numbers of the years being denoted by numerical words, which, in the case of the Vikrama year, are irregularly put in the same order (1, 8, 8, 8) as the figures are written.

The date, for Saka-saṁvat 1752 expired, which was the year Vikṛiti, regularly corresponds to Monday, the 9th August A. D. 1830, when the 5th tithi of the dark half ended 3 h. 16 m. after mean sunrise. Saka-saṁvat 1752 expired is equivalent to the *Chaitrādi* Vikrama-saṁvat 1888 current; and this, again, has been commuted into the year 2493 after Vardhamāna's Nirvāṇa simply by the addition of 605. See *ante*, Vol. XII. p. 21.

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p. 17, No. 11) are dated in the month of Mārgaśrēsha of Saka-saṁvat 1370 (current) and the year Prabhava, falling in A. D. 1447.

⁷ For a similar date, of Vikrama-saṁvat 1100, see *ante*, Vol. XIX. p. 181, No. 134.

⁸ The omission of the word Saka from this phrase is quite unusual.

THREE DATES OF THE HARSHA ERA.

BY PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

A.—An inscription of [Harsha-]Saṁvat 184, from the Pañjāb.

SOME five years ago Dr. Fleet sent me an impression, which he had received in 1887 from the late Prof. J. Darmesteter, of an inscription which is somewhere in the Pañjāb. This inscription contains four lines of well-preserved writing which covers a space of about 11" broad by 6" high. The average size of the letters is between 1 $\frac{1}{2}$ " and 1 $\frac{1}{4}$ ". The characters are closely related to those of the Siradi alphabet, as is shown by the forms of the letters *t, dh, c, z, s, h*, the medial *ā*, and the superscript *ō*; but for *n* the peculiar form of that letter is used which we have, e.g., in the Kāmi or Kāmavāna (in Biharapur) fragmentary pillar inscription of the Śūrasēna family (*ante*, Vol. X. p. 34, Plate), and in the Bengal As. Soc.'s plate of the *Mahārāja* Vināyakapāla of [Harsha-] Saṁvat 188 (e.g. in the word *śāsanasya*, l. 16, *ibid.*, Vol. XV. p. 141, Plate). They include numeral figures for 1, 4, and 8, in line 1, and for 1 and 5, in line 2. Of these, the figure for 4 is the numerical symbol, resembling the *akshara śka*, which we find (employed like an ordinary numeral figure) e.g. in line 30 of the Chambā plate of Sōmavarmadēva and Āsaḍadēva¹ (*ibid.* Vol. XVII. p. 13); and the figures for 1, 5, and 8, are almost identical with the figures for the same numerals in the Bakshāli manuscript² (*est.*, *ibid.* p. 47, Plate i.,³ lines 8 and 9). The language of the inscription is Sanskrit; and the whole is in prose. In respect of orthography, it may be noted that *g* is doubled before *r* in the word *Viggraha*, in line 3.

After the words *ōm svasti śm ||*, the inscription has the date *saṁvat 184 Śrāvāna-vati 15 atra pinē*, 'in the year 184, on the 15th tithi of the dark half of Śrāvāna, on this day.' This date does not admit of verification, but there can be no doubt that it must be referred to the Harsha era, and that, therefore, it approximately falls in A. D. 789-90, a time which well accords with the palaeography of the inscription. As regards the wording of the date, attention may be drawn to the employment, instead of the ordinary *vadi*, of the term *vati*, with which we may compare its counterpart *śuti*, for *śudi*, in the dates of the Delhi Siwalik Pillar inscriptions of Visaladēva (*ibid.* Vol. XIX. p. 218). In editing those inscriptions, I have stated that *śuti* and *vati* are commonly used in Kāsmīr, and that, therefore, it is not at all strange that we should find instances of the usage of them also in the northern parts of India proper. After the date, the inscription apparently refers itself to the reign of a certain *Viggraha*, and it then records the foundation of a well or tank by Dhōn[dh]a, the son of Aghōraśiva. It ends with the word *likhitān*, but the name of the writer is either broken away or was not accessible in the original, when the impression was taken.

Text.⁴

- 1 Ōm⁵ s[v]asti śm || Saṁvat⁶ 184
- 2 Śrāvāna-vati 15 atra di-
- 3 nē mahā-śrī-Viggraha-rā[jyē ?] = ghōraśi-
- 4 va-putra-Dhōn[dh]ēna vāpi pratishṭhitā⁸ [||⁷] Likhi[ta]n⁹

¹ The same sign is used (in '847'), like an ordinary numeral figure, in line 20 of the Kōtā inscription of the Sōmantā Dēvadatta (*ante*, Vol. XIV. p. 45); and similar numeral figures for 4 we have in the Bakshāli MS.

² The same figure for 1 is also used in the Chambā plate of Sōmavarmadēva and Āsaḍadēva.

³ The figure for 8 in the plate differs very considerably from the figure given, *ante*, Vol. XVII. p. 36.

⁴ From Prof. J. Darmesteter's impression.

⁵ The word *ōm* is both times denoted by a symbol.

⁶ Read *saṁvat*.

⁷ I am doubtful about the *akshara* in brackets: the original, possibly, may have *jō* or *jyā*.

⁸ Originally *pratishṭhitān* was engraved; *pratishṭhitā* is used for *pratishṭhitān* (in the sense of *kōritā*).

⁹ The name of the writer is not given in the impression.

B.—Khajurāhō image inscription of [Harsha-]Samvat 218.

In *Archæol. Surv. of India*, Vol. X., Plate ix. 1, Sir A. Cunningham has published a photozincograph of an inscription which is on the pedestal of a statue of the monkey-god Hanumat at Khajurāhō, in the Chhatarpur State, Bundelkhand; and *ibid.* p. 21, he has given his transcript of the text of it, in which the date which the inscription contains is given as 'samvatsrē 940 Māgha-sudī 9.'¹⁰ My account of this short inscription is based on Sir A. Cunningham's own rubbings, which some years ago were handed over to me by Dr. Fleet.

The inscription contains three lines of well-preserved writing which covers a space of 1' 11" broad by 5" high. The size of the letters is between $1\frac{1}{4}$ " and $1\frac{1}{2}$ ". The characters belong to the northern class of alphabets, and would, in the absence of any date, undoubtedly be assigned to about the 9th century A. D. In the word *Harim* at the end of line 3, and probably also in *dtmajam* in line 2, they include a form of the final *m*, consisting of a half-form of *m* with the sign of *virāma* below it.¹¹ And they also contain numerical symbols for 200, 10, and 8, in the date in line 2, which I read *samvatsrō* 200 10 8 *Māgha-sudī* 10. The symbols which are employed in this date are fairly accurately represented in Sir A. Cunningham's photozincograph. The symbol for 200 is like the *akshara srā*, except that the left top stroke of the letter *s* is drawn out into a hook which is turned towards the left. Undoubtedly, the symbol for 100, known to the writer, was essentially like the symbol for 100 which we have *e. g.* in line 1 of the Matharā image inscription of the [Gupta] year 135 (*Gupta Inscr.* Plate xxxix, A),¹² and the symbol for 200, used by him, is developed out of the symbol for 200 in line 2 of the Mathurā image inscription of the [Gupta] year 230 (*ibid.* Plate xl, D). The symbol for 10, which resembles the *akshara lri*, is like the symbol for the same number in line 14 of the Dighwā-Dnbaulī plate of the *Mahārāja* Mahēndrapāla (*ante*, Vol. XV. p. 113, Plate), with this difference only that a small circle is attached to the top of the symbol on the right side. And the third symbol is a more developed form of the symbol for 8 in line 1 of the Bijayagadh pillar inscription of Vishnuvardhana of the [Vikrama] year 428 (*Gupta Inscr.* Plate xxxvi, C), and is essentially like the later sign which looks like the *akshara hrā*. The word *samvatsrō* (for *samvatsarah*) of the date we also have, only spelt *samvatsrō*, in the date of [Harsha-]Samvat 188 of the Bengal As. Soc.'s plate of the *Mahārāja* Vināyakapāla (*ante*, Vol. XV. p. 141, l. 17), while the date of [Harsha-]Samvat 155 of the Dighwā-Dnbaulī plate of the *Mahārāja* Mahēndrapāla, instead of it, has *samvatsrā* (*ibid.* p. 113, l. 14). The language of the inscription is Sanskrit, writing by an uncultivated person.

The inscription divides itself into two parts; the first, proper right half of the three lines (marked A in the text) is in prose; the second, proper left half (marked B in the text) is a verse in the Anushtubh metre. The part A, in line 1, records [that the statue under which the inscription is engraved is the work or gift] of Gōllā, the son of Sāhila (or Sahila, as the word is spelt in B); in line 2 it has the date, given above; and in line 3 it adds that Gōllāka, *i. e.*, Gōllā, bows down to the holy Hanumat. And B repeats, in verse, that Gōllāka, the son of Sāhila, piously made (or gave) the [statue of] Hanumat, the son of the Wind.

The only thing of interest in the inscription is the date, partly because this date also, in my opinion, must be referred to the Harsha era, and partly because, if my views regarding the era which is employed here be accepted, this for the present is the latest certain date from an inscription in India proper, in which numerical symbols are made use of. Concerning the first point, I need only state that for Harsha-Samvat 218 the date would correspond to

¹⁰ See also *ibid.* p. 20: 'The date is in the beginning of the second line, which I read as "Samvatsra hundreds nine (and) forty," the figures being those of the old notation with the 9 placed immediately on the right of the symbol for hundreds.'

¹¹ A similar (not quite the same) form of final *m* is used in the Kōlā inscription of the *Sāmanta* Dēvadatta, *ante*, Vol. XIV. p. 45.

¹² Compare also the symbol for 100, in the symbol for 400, *Gupta Inscr.*, Plate xxxvi, C, line 1.

Friday, the 15th January A. D. 824,¹³ which is just about the time to which the inscription would be assigned on palæographical grounds, and that we know of no other era of which the year 218 would fall in the 9th century A. D.¹⁴ And as regards the second point, the latest Indian¹⁵ date with numerical symbols, from an inscription dated according to one of the well-known eras, hitherto was that of the Bengal As. Soc.'s plate of Vināyakapāla of [Harsha-]Samvat 188 = A. D. 793-94. It is a curious, but rather significant fact, that that date of Vināyakapāla's plate is the only other known date which, like the date of the present inscription, contains the word *samvatsrō*.

Text.¹⁶

- A.—1 Om [॥*] Gōllā¹⁷ Śihila-pū(pu)trasya ।
 2 Samvatsrō¹⁸ 200 10 8 Māgha-sudī¹⁹ 10 [॥]
 3 Śrī-Hanmantam Gōllākaḥ praṇamati [॥*]
- B.—1 Sahilasya²⁰ sutah śrīmān=Hanumān²¹=Pa-
 2 van-ātmaja [m] [22] [a] karōd=dharmmam=ā-
 3 lōkya Gōllākō²³ prakṛitam Harim [॥*]

C.—Pañjaur inscription of [Harsha-]Samvat 563.

In *Archæol. Surv. of India*, Vol. XIV., Plate xxii. 3, Sir A. Cunningham has published a photozincograph of an inscription in four lines, which he discovered at Pañjaur (Panjor, Pañchapura), an old town about 70 miles north of Thaneshwar, and 80 miles north by east of Peheva Pehoa,²⁴ in the Pañjāb; and *ibid.* p. 72 he has given, without any comment, a transcript of the text, in which the date of the inscription is read as 'samvat 56 . . Jeth Sudī 9 wār Sukre.' Although I possess an excellent impression of this inscription, kindly given to me by Dr. Fleet I am not prepared, owing to the damaged state of the second and third lines, to publish the full text, which, indeed, with the exception of the date, does not seem to me to be of any importance. The language of the inscription is Sanskrit, greatly influenced by the Prakṛit of the writer. The characters look like a mixture of the ordinary Nāgarī and the Śaradā characters; they in some respects resemble those of the Chambā plate of Sōmavarmadēva and Āsatadēva, and still

¹³ The same 10th tithi of the bright half of the same month Māgha of the [Harsha] year 155 of the date of the Dighwā-Dnbaulī plate of Mahēndrapāla, which admits of verification, corresponds to the 20th January A. D. 761.

¹⁴ The only later date, hitherto published, of an inscription in which the Harsha era is employed, is that of the Peheva (Pehoa) inscription of the reign of Bhōjadēva of Kanauj, of the year 276 (given in words and numeral figures); *Ep. Ind.* Vol. I. p. 186. I take this opportunity of stating that the *Piśāch-chaturdaśī*, which is mentioned in the Peheva inscription (see *ibid.* p. 188, note 25), is the 14th tithi of the dark half of the *amānta* Chaitra (or *pūrnimanta* Vaiśākha), and that it is so called because bathing in the Ganges near Siva on a Tuesday during this tithi is believed to remove trouble from Piśāchas.

¹⁵ In Nepal we have an inscription of [Gupta-]Samvat 535 = A. D. 854-55, in the date of which numerical symbols are used (*ante*, Vol. IX. p. 168, Plate), and even one of the Newār year 259 = A. D. 1138-39 (Prof. Bendall's *Journey*, p. 81, Plate).

¹⁶ From Sir A. Cunningham's rubbings.

¹⁷ This is used in the sense of the Genitive case; judging from the list of names, given in *Ep. Ind.* Vol. IV. p. 171, the proper form to employ would have been *Gōllākasya*.

¹⁸ Read *samvatsarah*, and see my introductory remarks.

¹⁹ The rubbings have clearly *sudī*, not *sudī*, which is the reading of the photozincograph.

²⁰ Metre: Ślōka (Anushtubh).

²¹ The writer apparently meant to say *śrīmantaḥ Hanumantaḥ*.

²² The photozincograph, instead of *m* and the sign of punctuation, has here an *akshara* which looks somewhat like *śr* and was so read by Sir A. Cunningham; but I have no doubt that the sign in the rubbings is a final form of *m*, followed by the sign of punctuation.

²³ If the following *prakṛitān*, which is quite clear in the rubbings, is correct, *Gōllāk* must be altered to *Gōllākān*; but I do not understand the exact meaning of the word *prakṛitān*, nor do I see how the words *prakṛitān* *Harim* are to be construed with what precedes.

²⁴ See *Archæol. Surv. of India*, Vol. XIV. Plate i.

more those of the Chambā plate of Bhōtavarmadēva.²⁵ Owing to the nature of these character it would be somewhat difficult to assign the inscription on palaeographical grounds to any particular century; it is sufficient to say that it cannot well be earlier than the 11th, nor later than the 14th century A. D.

In line 1, after the words *śih svasti* [śih] 11, the inscription contains a date which I read—

Sāmvat²⁶ 563 Jyēṣṭha-sūdi 9 vāra Śukrah.²⁷

Three of the four numeral figures of this date are not drawn very accurately in Sir A. Cunningham's photozincograph. In the original, the figure for 5 is like the figure for 5, e. g., in line 33 of the Harsha inscription of Vighararāja (*Ep. Ind.* Vol. II. p. 124, Plate); the figure for 6 is a more ornamental form of the figure for 6, used in the Bakshālī manuscript (e. g., in lines 25 and 26 of Plate ii., ante, Vol. XVII. p. 276); and the figure for 9 resembles the figure for 9 in the Siyāḍōū inscription²⁸ (*Ep. Ind.* Vol. I. p. 173 ff.) The figure of the unit of the number of the years (which is fairly well drawn in the photozincograph) may be compared with some of the figure-numerals for 3 in the table of Prof. Bendall's *Catalogue of Buddhist Sanskrit Manuscripts*²⁹; there is just a possibility that it might be interpreted as 2, but I believe that it is really 3. Put into proper Sanskrit, the date would be—

Sāmvat 563 Jyāishṭha-sūdi 9 Sukra-vārē, i. e., Friday, the 9th of the bright half of Jyāishṭha of the year 563.

Considering the locality where the inscription is, and the fact that on palaeographical grounds it has to be assigned to some time between the 11th and 14th centuries A. D., I feel sure that the era to which the date must be referred here also is the Harsha era. The only other date with details for verification, which may be confidently referred to this era, is the date of the Dighwā-Dubānī plate of the Mahārāja Mahēndrapāla,³⁰ the 10th of the bright half of Māgha of the year 155, which has been shown to correspond to the 20th January A. D. 761. Now, judging from that date, and assuming the years of the Harsha era to have been *Chaitriyā* years, our date of the month of Jyāishṭha of the year 563 would be expected to fall in A. D. 1168, in Kaliyuga-Sāmvat 4269 expired. And for that year the date really does work out faultlessly. For in Kaliyuga-Sāmvat 4269 expired the 9th of the bright half of Jyāishṭha corresponded to **Friday, the 17th May A. D. 1168,**³¹ when the 9th *tithi* of the bright half ended 10 h. 50 m. after mean sunrise.

That we should have so late a date of the Harsha era, I consider no more strange than the occurrence of dates of the 10th century of the Gupta-Valabhi era; and I expect that more such dates will be discovered, when the country about Thaneswar and Pañjaur is carefully searched for inscriptions.

²⁵ See ante, Vol. XVII. pp. 7 and 10.

²⁶ It may be stated that the dental sibilant is denoted here by the sign which in the Śāradā alphabet denotes the palatal sibilant, and vice versa.

²⁷ This may have been altered in the original to *vārē Śukrē*. In a date of Śaka-Sāmvat 654 from Java we have *vārēndau* instead of *Indu-vārē*; see ante, Vol. XXIII. p. 113, No. 1.

²⁸ The figure for 9 resembles even more closely the figure for 9, used in the Cambridge MS. Add. 1693, which was written in A. D. 1165; see Prof. Bendall's *Catalogue*, Table of figure numerals.

²⁹ See especially the figure for 3 of the MS. Add. 1648, written in A. D. 1216.

³⁰ See ante, Vol. XV. p. 112, and *Gupta Inscr.* Introduction, p. 178.

³¹ As there may be some slight doubt as to whether the year of the date is 563 or 562—it must be either one or the other—I would add that, judging from the date of the month Māgha of the year 155, the above Friday, the 17th May A. D. 1168, would be the proper equivalent of *Jyāishṭha-sūdi* 9 of the year 562 also, if the year commenced with the month Kārttika, or in fact with any of the months from Āshādha to Māgha.

FESTAL DAYS OF THE HINDU LUNAR CALENDAR.

BY PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

SOME years ago I compiled, chiefly from the *Dharma-sindhu* and a number of Native calendars, a list¹ of the principal festivals and religious observances connected with the *tithis* of the Hindu lunar months, of the names and epithets of certain *tithis*, and generally of such items of information concerning individual *tithis* as seemed likely to be of use in the verification of Hindu dates. This brief list was not intended for publication. If, nevertheless, I now yield to the request of a friend to publish it, I do so, because something of the kind appears really to be wanted, and in the hope that I may induce others to correct, and improve on, what I can offer myself.

What I should especially like to see treated by a competent Native scholar, is the question, how the *tithis*, for the purpose of the particular festivals or rites connected with them, are joined with the civil days.² For my own use I have indeed translated most of the rules on this subject, given in the *Dharma-sindhu*;³ but some of these precepts are so intricate that I should be afraid of giving an authoritative version of them or of applying them in practice. In my list, therefore, I have only inserted, in square brackets, some very general hints. Thus, by the word *pūrva-vidhā* I have indicated that certain *tithis*, so far as regards the rites mentioned along with them, are liable to be joined with the days on which they commence.⁴ And more frequently I have given the time of the day or night⁵ during which a rite must be performed or a festival celebrated, statements from which it may sometimes be possible to ascertain with which day a *tithi* should be connected, because the particular time of the day or night, mentioned in the list, must generally be included in the *tithi*.⁶ But I know only too

¹ For a similar list see Sir W. Jones's article on the lunar year of the Hindus, in the *Asiatick Researches*, Vol. III. p. 257 ff.

² In the case of rites, prescribed for a certain *tithi*, there can be no doubt as to the day on which the rite should be performed, when the *tithi* happens to last from sunrise to sunrise; and the same is mostly the case, when the *tithi* lasts from sunrise to sunset. But *tithis* often commence after sunrise of one day, and end before sunset of the following day, and the question therefore arises whether, for the purpose of particular rites, they should be joined with the days on which they commence, or with the days on which they end.

³ The general rules on the *tithis*, given in the *Dharma-sindhu*, have been translated by the Rev. A. Bourquin, in the *Jour. Bo. As. Soc.* Vol. XV.

⁴ A *tithi* is *pūrva-vidhā* (in the sense in which this term is used here), when it commences more than 4 *ghaṭikās* before sunset of one day and ends before sunset of the following day; and when such is the case, it must be joined with the day on which it commences. Thus, when the first *tithi* of the bright half of Kārttika commences 20 *ghaṭikās* after sunrise (or 7 *gh.* before sunset) of Monday and ends 16 *gh.* after sunrise of Tuesday, the *Pañc-pūjā*, prescribed for the first *tithi* of the bright half of Kārttika, must be performed on the Monday (although in civil life that day is *Āsvini-vadi* 15). When, on the other hand, the first *tithi* of the bright half of Kārttika commences 41 *gh.* after sunrise of Monday, and ends 48 *gh.* after sunrise of Tuesday, the same rite must be performed on the Tuesday (in civil life Kārttika-sūdi 1).

⁵ The day, from sunrise to sunset, is divided into the forenoon and afternoon. But it is also divided into five equal parts, each of about 6 *ghaṭikās*, called *pūṭāḥṭikā* (the early forenoon), *svāyambhā* (the forenoon part), *madhyahna* (midday), *aparāhṇa* (the afternoon part), and *siyāhna* (the late afternoon part). The four *ghaṭikās* before sunrise are called *arunodaya* (the rise of the dawn), the six *ghaṭikās* after sunset *prāśaha* (evening), and the two *ghaṭikās* in the middle of the night *suśītha* (midnight).

⁶ This may be shewn by an example. The time which I have given for the *Ganēśa-chaturthi* of Chaitra-sukla-pakṣha is midday (*ghaṭikā* 13-18 after mean sunrise). If, then, the 4th *tithi* of the bright half of Chaitra commences 43 *gh.* after sunrise of Sunday and ends 44 *gh.* after sunrise of Monday, the *Ganēśa-chaturthi* must be joined with the Monday (Chaitra-sūdi 4); but if the 4th *tithi* commences 5 *gh.* after sunrise of Sunday and ends 7 *gh.* after sunrise of Monday, the *Ganēśa-chaturthi* must be joined with the Sunday, as in calendars this Sunday will be described as *Ganēśa-chaturthi*, although in civil life it is Chaitra-sūdi 3. — Now it is clear that sometimes the 4th *tithi* of the bright half of Chaitra may occupy the whole or part of the midday portion of two days (as would be the case, if it were to commence 13 *gh.* after sunrise of Sunday and to end 17 *gh.* after sunrise of Monday), and that for such and similar cases we want special rules to guide us. In the present instance the special rule for all *Ganēśa-chaturthis* is this, that, when the fourth *tithi* occupies, entirely or partly, the midday part of two days, or does not occupy the midday part of either day, it must be joined with the day on which it commences (in the present case, with the Sunday). — If there were a similar conflict in the case of a *Manuvādi* of a bright fortnight, for which the prescribed time is the forenoon, we should have to decide in favour of the day on which the *tithi* ends, provided the *tithi* were to occupy more than 6 *gh.* after sunrise of that day; but if the *tithi* happened to occupy less than 6 *gh.* of the second day, we should have to join the *Manuvādi* with the first day. — There are many such special rules, which form an essential part of the Hindu calendar.

well that such and similar short remarks, by themselves, are not sufficient to solve the problem, even in cases which are not beset with any great difficulties.

I add here some general notes on several of the *tithis*, which could not be given in the list:—

A fourth *tithi* is considered auspicious when it falls on Tuesday. Such a *tithi* of the bright half is called **Sukha**, and is most auspicious for making donations. A fourth *tithi* of the dark half, which falls on Tuesday and continues till moonrise, is called **Aṅgaraki**.

A seventh *tithi* is considered auspicious when it falls on Sunday, particularly so, when it is joined with the *nakshatra* Rêvati. A seventh *tithi* of the bright half, which falls on Sunday, is called **Vijaya**,⁷ and donations made on it secure great rewards. A seventh *tithi* of the bright half is called **Bhadra**, when it is joined with the first quarter of the *nakshatra* Hasta. Moreover, a seventh *tithi* of the bright half is called **Mahājaya**, when a saṁkrānti takes place on it, and for making donations such a *tithi* is said to be superior even to an eclipse.

When the sixth and seventh *tithis* meet on a Sunday, this coincidence is called **Padmaka-yōga**.⁸

An eighth *tithi* is considered auspicious when it falls on Wednesday (**Budh-āshṭami**).

An eleventh *tithi* of the bright half, which is joined with the *nakshatra* Punarvasu, is called **Vijaya**.

Eight kinds of the twelfth *tithi* are called **Mahā-dvādasi**. Their special names are **Unmilani**, a 12th *tithi* which follows upon an 11th *tithi* that is current at sunrise on two days; **Vañjuli**, a 12th *tithi* which itself is current at sunrise on two days; **Trisparsā**, a 12th *tithi* which commences after sunrise and ends before the next sunrise; **Pakshavardhini**, a 12th *tithi* preceding a full-moon or new-moon *tithi* which is current at sunrise on two days; **Jaya**, a 12th *tithi* joined with the *nakshatra* Pushya; **Vijaya**, a 12th *tithi* joined with the *nakshatra* Śravaṇa; **Jayanti**, a 12th *tithi* joined with the *nakshatra* Punarvasu; and **Pāpanāsinī**, a 12th *tithi* joined with the *nakshatra* Rôhini.

A fifteenth *tithi* of the dark half (*i. e.*, the new-moon *tithi*) is regarded as very auspicious for making donations, when it falls on Monday (in which case it is called **Sônavati**), or on Tuesday. — Concerning the 15th *tithi*, it may also be stated that a solar eclipse which takes place on Sunday, and a lunar eclipse which takes place on Monday, are called **chûḍāmani**, 'crest-jewel,' and that donations made at such eclipses are said to bear endless fruit.

In the following list the Roman figures at the commencement of the lines give the numbers of the *tithis* of the half-months.

I. — Chaitra-suklapaksha.

I. — Vatsar-ārambha, commencement of the year.

Navarātr-ārambha, commencement of the vernal Navarātra. (For the autumnal Navarātra see the same *tithi* of Āśvina-śuklapaksha.)

Kalpādi. [Forenoon.]

III. — Gauri-ṭṭṭiyā.

Matsya-jayanti, Vishṇu's incarnation in the form of a fish. [Afternoon part.]

Manvādi. [Forenoon.]

IV. — Vaināyaki or Gaṇēsa-chaturthi. [Midday.]

V. — Śrī-pañchami, according to some. (See the same *tithi* of Māgha-śuklapaksha.)

Kalpādi. [Forenoon.]

⁷ This is the *vijaya-saptami* of the inscription, published in *Ep. Ind.* Vol. III. p. 54 ff.

⁸ For another meaning of *Padmaka-yōga* see below, under *Kārtika-śuklapaksha* XV.

VIII. — Durgā- or Annapūrṇā-ashṭami.⁹

Bhavāny-utpatti, birth of Bhavāni.

Bathing in the morning during this *tithi*, when it falls on Wednesday and is joined with the *nakshatra* Punarvasu, is as meritorious as a *vājapēya* sacrifice.

IX. — Rāma-navami; Rāma-jayanti, Vishṇu's incarnation as Rāma. [Midday.]

XI. — Kāmadā êkādaśi.

XIII. — Madana-trayōdasi; Anaṅgapūjana-vrata, worship of the god of love. [*Pārva-viddhā*.]

XV. — Hanumaj-jayanti, birth of Hanumat. (Only in calendars.)

Manvādi. [Forenoon.]

Bathing, etc., during this *tithi*, when it falls on Sunday, Thursday, or Saturday, is as meritorious as an *āsvamedha* sacrifice.

Chaitra-[or pūrṇimānta] Vaisākha-]krishṇapaksha.

IV. — Saṁkashṭa-chaturthi.¹⁰ [Moonrise.]

VIII. — Kāl-āshṭami. [*Pārva-viddhā*.]

XI. — Varāthini êkādaśi.

XIII. — (See the same *tithi* of Phālguna-[pūrṇ. Chaitra-]krishṇapaksha.)

XIV. — Sivarātri. [Midnight.]

Bathing (especially in the Ganges) near Śiva during this *tithi* (according to some, when the *tithi* falls on Tuesday) prevents trouble from Piśāchas or demoniac possession.¹¹

II. — Vaisākha-suklapaksha.

III. — Kalpādi. [Forenoon.]

Trētāyugādi. [Forenoon.]

Akshaya-ṭṭṭiyā; is highly auspicious, when it falls on Wednesday and is joined with the *nakshatra* Rôhini. [Forenoon.]

Parasurāma-jayanti, Vishṇu's incarnation as Parasurāma. [Midday; or, according to others, evening.]

IV. — Vaināyaki or Gaṇēsa-chaturthi. [Midday.]

VII. — Gaṅgā-saptami; Gaṅg-ōtpatti, birth of Gaṅgā. [Midday.]

VIII. — Durgā- or Annapūrṇā-ashṭami.

XI. — Mōhini êkādaśi.

XII. — When the 12th *tithi* of the bright half is joined with the *nakshatra* Hasta, while Jupiter and Mars are in the sign Śimha, and the sun in Mēsha, this coincidence is called **Vyatipāta**.¹² Donations made on such an occasion are highly meritorious.

⁹ Annapūrṇā is an epithet of Durgā.

¹⁰ According to Molesworth's *Month and English Dictionary*, on this *tithi* ceremonies are performed for the averting of difficulties or troubles. When a *Saṁkashṭa-chaturthi* falls on Tuesday, it is called *Āyīraka-chaturthi*; see above.

¹¹ Compare the term *Piśāchī-chaturdasi* in *Ep. Ind.* Vol. I. p. 187, line 3.

¹² For other meanings of the term *vyatipāta* see ante, Vol. XX. p. 292 f.

XIV. — **Nṛisīṃha-jayanti**, Vishṇu's incarnation as mān-lion. [Sunset.]
The *tithi* is highly auspicious, when it falls on Saturday and is joined with the *nakshatra* Svāti.

XV. — **Kūrma-jayanti**, Vishṇu's incarnation in the form of a tortoise. [Late afternoon part.]

Donations on this *tithi* are particularly enjoined.

Vaisākha-[or **pūrṇimānta Jyaishṭha**]-**krishṇapaksha**.

IV. — **Saṃkashṭa-chaturthī**. [Moonrise.]

VIII. — **Kāl-āshṭami**. [*Pūrva-viddhā*.]

XI. — **Aparā ēkādaśī**.

XIV. — **Sivarātri**. [Midnight.]

III. — **Jyaishṭha-suklapaksha**.

III. — **Rambhā-trītiyā**; **Rambhā-vrata**, worship of Bhavānī. [*Pūrva-viddhā*.]

IV. — **Vaināyakī** or **Gaṇeśa-chaturthī**. [Midday.]

VIII. — **Durgā** or **Annappūrṇā-ashṭami**.

X. — **Daśaharā**,¹³ Gaṅg-āvatāra, descent of Gaṅgā to the earth. [The choice of the day depends on the moon, during the forenoon, of the greater number of certain occurrences, such as the *tithi*'s falling on Wednesday (according to others, on Tuesday), the *nakshatra* being Hasta, the *yōga* Vyatīpāta, etc.] When **Jyaishṭha** is intercalary, the **Daśaharā** falls in the first (intercalated) **Jyaishṭha**.

XI. — **Nirjalā ēkādaśī**.

XV. — **Vaṣṭa-pūrṇimā** or **Vaṣṭa-sāvitrī**.¹⁴ [*Pūrva-viddhā*.]
Manvādi. [Forenoon.]

When the moon and Jupiter are in the *nakshatra* Jyēshṭhā, and the sun in Rōhiṇī, the *tithi* is called **Mahā-jyaishṭhī**, and is most auspicious for making donations.

Jyaishṭha-[or **pūrṇimānta Āshāḍha**]-**krishṇapaksha**.

IV. — **Saṃkashṭa-chaturthī**. [Moonrise.]

VIII. — **Kāl-āshṭami**. [*Pūrva-viddhā*.]

XI. — **Yōginī ēkādaśī**.

XIV. — **Sivarātri**. [Midnight.]

IV. — **Āshāḍha-suklapaksha**.

II. — **Bathayātrā-dvītiyā**; **Rāma-rathōtsava**, Rāma's car-festival.

IV. — **Vaināyakī** or **Gaṇeśa-chaturthī**. [Midday.]

VIII. — **Durgā** or **Annappūrṇā-ashṭami**.

X. — **Manvādi**. [Forenoon.]

XI. — **Vishṇusavyan-ōtsava**; **Sayanī** or **Vishṇusavyanī ēkādaśī**, on which Vishṇu goes to sleep.

¹³ This really is an epithet of Gaṅgā, as 'taking away ten sins.'

¹⁴ Molesworth explains *Vaṣṭasāvitrī-vrata* to be a particular observance of women, viz., worship of the *Fixus Indica*, etc.

XII. — **Chāturmāsya-vrata** commences on this *tithi* (or on the 11th).

XV. — **Manvādi**. [Forenoon.]

Sivaśayan-ōtsava. [Evening.] — **Kōkilā-vrata**; **Vyāsa-pūjā**.

Āshāḍha-[or **pūrṇimānta Srāvaṇa**]-**krishṇapaksha**.

II. — **Asūnyāsavyana-vrata**.¹⁵ [Moonrise.]

IV. — **Saṃkashṭa-chaturthī**. [Moonrise.]

VIII. — **Kāl-āshṭami**. [*Pūrva-viddhā*.]

XI. — **Kāmadā** or **Kāmikā ēkādaśī**.

XIV. — **Sivarātri**. [Midnight.]

V. — **Srāvaṇa-suklapaksha**.

III. — Called **Madhusravā** by the people of Gujarāt.

IV. — **Vaināyakī** or **Gaṇeśa-chaturthī**. [Midday.]

V. — **Nāga-pañchamī**,¹⁶ on which the serpents are worshipped. [The day on which the *tithi* commences, if the fourth *tithi* ends less than 6 *ghaṭikās* after sunrise of that day, and the fifth *tithi* less than 6 *ghaṭikās* after sunrise of the following day.]

VI. — **Kalki-jayanti**, Vishṇu's incarnation in his last Avatāra. [Sunset.]

VIII. — **Durgā** or **Annappūrṇā-ashṭami**.

XI. — **Putradā ēkādaśī**.

XII. — **Vishṇoḥ pavitrārōpanam**. The *pavitr-ārōpana* is 'the ceremony of casting new threads around an idol that they may be sanctified, and of thence taking them to wear.'

XV. — **Ṛig-yajuh-brāvaṇī**, for students of the *Ṛigvēda* and *Yajurvēda* the chief time of renewing the sacred thread (*u pūḥkarma*).¹⁷ [*Pūrva-viddhā*.]

Rakshā-bandhana, the tying of a piece of silk or string round the arm, as a preservative against evil spirits. In **Marāṭhī**, the *tithi* therefore is called **Rakhi-pūrṇimā**. (In **Marāṭhī** it is also called **Nārāṭi-pūrṇimā**, because cocoa-nuts are thrown into the sea, and the monsoon is declared to be broken up.)

Hayagrīva-jayanti, birth of Hayagrīva.

Srāvaṇa-[or **pūrṇimānta Bhādrapada**]-**krishṇapaksha**.

II. — **Asūnyāsavyana-vrata**.¹⁸ [Moonrise.]

III. — **Kajjali-trītiyā**.

¹⁵ See the same *tithi* of the next three months.

¹⁶ See the same *tithi* of *Mārgaśrīṣha-suklapaksha*.

¹⁷ In an inscription the *tithi* is described as *Yajñōpavīta-parvan*; see ante, Vol. XXV, p. 290.

¹⁸ See the same *tithi* of the preceding month.

- IV. — **Saṁkashṭa-chaturthī**; commencement of the **Saṁkashṭachaturthī-vrata**. [Moonrise.]
Bahulā-chaturthī; worship of cows. [Late afternoon part.]
- VI. — **Hala-shashṭhī**.
- VII. — **Sitalā-saptamī**; **Sitalā-vrata**. [*Pūrva-viddhā*.]
- VIII. — **Kāl-āshṭamī**. [*Pūrva-viddhā*.]
Janm-āshṭamī, **Kṛishṇ-āshṭamī**, **Gōkul-āshṭamī**, or **Kṛishṇa-jayanti**, birth of **Kṛishṇa**; is very auspicious, when joined with the *nakshatra* **Rōhiṇī**, and also, though in a less degree, when it falls on Monday or Wednesday. [In general, midnight.]
Manvādi, [Afternoon part.]
- XI. — **Ajā ēkādaśī**.
- XIV. — **Sivarātri**. [Midnight.]
- XV. — **Piṭhūrī** (only in some calendars. According to Molesworth) a name of this *tithi* on account of a particular observance, *viz.*, 'the drawing with flour the figures of 64 **Yōginis**, and the worshipping of them.'
Kuśōtpātīnī (only in some calendars).
- VI. — **Bhādrapada-suklapaksha**.
- III. — **Varāha-jayanti**, **Vishṇu's** incarnation in the form of a boar. [Afternoon part.]
Haritālīkā; worship of **Pārvati**.
Manvādi. [Forenoon.]
- IV. — **Gaṇēsa-** or **Varada-chaturthī**; especially auspicious, when it falls on Sunday or Tuesday. [Midday.]
According to the *Bhaviṣyatpurāṇa*, called **Sivā**.
- V. — **Ṛishi-pañchamī**. [Midday; others differently.]
- VI. — **Sūrya-shashṭhī**.
Skanda-shashṭhī (only in some calendars. See the same *tithi* of **Mārgaśīrsha-suklapaksha**).
- VII. — According to the *Bhaviṣyatpurāṇa*, called **Aparājītā**.
- VIII. — **Durgā-** or **Annapūrṇā-āshṭamī**.
Dūrv-āshṭamī. [*Pūrva-viddhā*.]
Jyēshṭhā-Gaurī-pūjana-vrata, when the moon is in the *nakshatra* **Jyēshṭhā** (which need not necessarily be the case during this particular *tithi*).
- IX. — **Aduḥkha-navamī** (only in some calendars).
- XI. — **Vishṇuparivartan-ōtsava**; **Parivartini ēkādaśī**. On this *tithi*, or on the 12th, **Vishṇu**, sleeping, turns on his side.

- XII. — Is called **Sravaṇa-dvādaśī** (or **Vijayā**), when joined with the *nakshatra* **Sravaṇa**; and is particularly auspicious, when it falls on Wednesday. (The union of the 11th and 12th *tithis* and the *nakshatra* **Sravaṇa** is called **Vishṇu-brīṅkhala**.
Vāmana-jayanti, **Vishṇu's** incarnation in the form of a dwarf. [Midday.]
- XIV. — **Ananta-chaturdaśī**, sacred to **Vishṇu**.
- XV. — **Praushṭhapadī pūrṇimā**; **Praushṭhapadī-srāddha**.
Bhādrapada-[or pūrṇimānta Āsvina-]kṛishṇapaksha.
- I. — **Mahālay-ārambha**. **Srāddhas** are performed during the whole of this dark half.
- II. — **Aśūnyaśayana-vrata**.¹⁹ [Moonrise.]
- IV. — **Saṁkashṭa-chaturthī**. [Moonrise.]
- VI. — Is called **Kapilā-shashṭhī**, when it falls on Tuesday, and is joined with the *nakshatra* **Rōhiṇī** and the *yōga* **Vyatipāta**; and is particularly auspicious, when the sun, besides, is in the *nakshatra* **Hasta**.²⁰ Donations on such an occasion secure great rewards.
Chandra-shashṭhī. [Moonrise.]
- VIII. — **Kāl-āshṭamī**. **Mahālakshmi-vrata**. [*Pūrva-viddhā*.]
Ashtakā-srāddha. [Afternoon part.]
- IX. — **Avidhavā-** or **Mātri-navamī** (only in some calendars. According to Molesworth, offerings are made to the manes of women who have died unwidowed).
- XI. — **Indirā ēkādaśī**.
- XIII. — **Kaliyugādi**. [Afternoon part.]
Is called **Maghā-trayōdaśī**, when joined with the *nakshatra* **Maghā**; and **Gajachchhāyā**, when the sun, besides, is in **Hasta**.
- XIV. — **Sivarātri**. [Midnight.]
- XV. — **Sarvapitrī amāvāsya** (only in some calendars; so called, because **Srāddhas** are offered to all ancestors).
Is called **Gajachchhāyā**, when the sun and the moon are both in the *nakshatra* **Hasta**.
- VII. — **Āsvina-suklapaksha**.²¹
- I. — **Navarātr-ārambha**. (See the same *tithi* of **Chaitra-suklapaksha**).
- IV. — **Vaināyaki** or **Gaṇēsa-chaturthī**. [Midday.]
- V. — **Lalitā-pañchamī**; **Upāngalalitā-vrata**, worship of **Durgā**. [Afternoon part.]
- VIII. — **Durgā-** or **Annapūrṇā-āshṭamī**.
Mahāshṭamī; is especially auspicious, when it falls on Tuesday.

¹⁹ See the same *tithi* of the two preceding months.

²⁰ Molesworth says that, because this synchronism is very rare, *Kapilashashṭhīchā yōga*, in **Marāṭhī**, is applied to any astonishing and unhopd for combination of favourable circumstances.

²¹ Under the *nakshatra* **Mūla** (on about the 7th *tithi*) of this half **Sarasvatī** is worshipped.

- IX.** — **Mahā-navamī** or **Durgā-navamī**. [*Pūrva-viddhā*.]
Manvādi. [Forenoon.]
- X.** — **Vijaya-daśamī**, anniversary of Rāma's marching against Rāvaṇa; worship of Aparājitā, dēśāntara-yātrā, etc.; (Dasrā festival). Is very auspicious, when joined with the *nakshatra* Śravaṇa. [Afternoon part or evening; special rules.]
Buddha-jayanti, Viṣṇu's incarnation as Buddha. [Sunset.]
- XI.** — Pāsāṅkuśā ēkādaśī.
- XV.** — **Kōjāgarī pūrṇimā**; **Kōjāgara-vrata**; the night is spent in worshipping Lakshmi and Indra, and in games of chance. [Midnight.]
 Navāna-pūrṇimā (only in some calendars. According to Molesworth, so called, because at this time people generally begin to dress the new corn of the year).
Āsvina-[or pūrṇimānta Kārttika-]kṛishṇapaksha.
- II.** — **Āśīṇyaśayana-vrata**.²² [Moonrise.]
- IV.** — **Karaka-chaturthī** (in some calendars called **Saṅkashṭa-chaturthī**). [Moonrise.]
- VIII.** — **Kāl-āshṭamī**. [*Pūrva-viddhā*.]
- XI.** — **Ramā ēkādaśī**.
- XII.** — **Gōvatsa-dvādaśī** (in Marāṭhī also called **Vasū-bārasa**), on which the cow and calf are worshipped. [Evening.]
- XIII.** — **Dhana-trayōdaśī**, on which money-lenders and others worship money.
- XIV.** — **Sivarātri**. [Midnight.]
Naraka-chaturdaśī; bathing, etc., of people who are afraid of falling into hell. [Moonrise.]
- XV.** — This *tithi* and the immediately preceding and following *tithis* are called **Dīpāvalī** (**Divāli**), 'a festival with nocturnal illuminations, feasting, gambling, etc., in honour of Viṣṇu and in propitiation of Lakshmi.' The principal day is the one on which the moon is in the *nakshatra* Svāti.
- VIII.** — **Kā ttika-śuklapaksha**.
- I.** — **Bali-pratipadā**; **Bali-pūjā**, worship of the *Daitya* Bali. [*Pūrva-viddhā*.]
- II.** — **Yama-** or **Bh ātri-dvitiyā** (in Marāṭhī, **Bhāu-bij**). On this *tithi* Yama was entertained by his sister Yamunā; hence 'sisters (on this *tithi*) give entertainments to their brothers, who make presents in return.' [The day on which the *tithi* commences, if the *tithi* occupies the afternoon part of that day only; otherwise the day on which the *tithi* ends; others differently.]
- IV.** — **Vaināyaki** or **Gaṇēśa-chaturthī**. [Midday.]
- VI.** — When it falls on Tuesday, feeding of Brāhmins, etc.
- VII.** — **Kalpādi**. [Forenoon.]
- VIII.** — **Durgā-** or **Annaspūrṇā-ashṭamī**.
Gōp-āshṭamī; worship of cows.
- IX.** — **Kṛitayugādi**. [Forenoon.]

²² See the same *tithi* of the three preceding months.

- XI.** — **Prabōdhīnī ēkādaśī**. (According to some, the **Prabōdh-ōtsava** takes place on this *tithi*; see the following *tithi*.)
Bhishmapaṅchaka-vrata commences.
- XII.** — **Prabōdh-ōtsava**, 'ceremonies for the purpose of awakening Viṣṇu';²³ and **Tulasī-vivāha**, 'the marriage between an image of Viṣṇu and the *Tulasī* plant.'
Manvādi. [Forenoon.]
 (According to some, the **Chāturmāsya-vrata** ends here. See below.)
- XIV.** — **Vaikunṭha-chaturdaśī**. [Midnight.]
- XV.** — **Tripurī-pūrṇimā**; **Tripur-ōtsava**, at which lamps are placed on the lamp-pillars in front of the temples. [Late afternoon and evening.]
Manvādi. [Forenoon.]
Chāturmāsya-vrata ends. (See the 12th *tithi* of this half, and of **Āshāḍha-śuklapaksha**.)
 Donations on this *tithi* are particularly enjoined.
 The *tithi* is very auspicious, when it is joined with the *nakshatra* **Kṛittikā**. It is called **Mahā-kārttikī**, when the moon is in the *nakshatra* **Rōhiṇī**; or when the moon and Jupiter both are in **Kṛittikā**. (When the moon is in the *nakshatra* **Kṛittikā**, while the sun is in **Viśākhā**, this auspicious coincidence is called **Padmaka-yōga**.)²⁴
Kārttika-[or pūrṇimānta Mārgaśrīsha-]kṛishṇapaksha.
- IV.** — **Saṅkashṭa-chaturthī**. [Moonrise.]
- VIII.** — **Kāl-āshṭamī** or (in pūrṇ. **Mārgaśrīsha**) **Kṛishṇ-āshṭamī**; as on this *tithi* **Kālabhairava** (a form of **Siva**) is worshipped, the *tithi* also is called **Kālabhairav-āshṭamī** and **Kālabhairava-jayanti**. [Midday; others differently.]
- XI.** — **Utpatī-ēkādaśī**.
- XIV.** — **Sivarātri**. [Midnight.]
- IX.** — **Mārgaśrīsha-śuklapaksha**.
- IV.** — **Vaināyaki** or **Gaṇēśa-chaturthī**. [Midday.]
- V.** — **Nāgspūjā-** or **Nāga-paṅchamī**,²⁵ (in Marāṭhī **Nāga-divāli**; according to Molesworth) 'a festival, on which serpents of flour, etc., are made and worshipped.'
- VI.** — **Champā-shashṭhī**, 'on which there is a festival of **Khaṇḍobā**' (an incarnation of **Siva**). [In the choice of the day, the preference is given to the union of Sunday or Tuesday with the *nakshatra* **Satabhishaj** and the *yōga* **Vaidhṛiti** or to the occurrence of the greater number of the three.]
Skanda-shashṭhī.²⁶ [*Pūrva-viddhā*.]
 According to the *Bhaviṣyatpurāṇa*, called **Mahā-shashṭhī**.
- VII.** — **Sūrya-vrata**.
 According to the *Bhaviṣyatpurāṇa*, called **Nandā** and **Jayanti**.
- VIII.** — **Durgā-** or **Annaspūrṇā-ashṭamī**.

²³ In an inscription the *tithi* is described as the *purnyā utthānī-dvādaśī-tithi*; see *anta*, Vol. XXV. p. 290.

²⁴ For another meaning of *Padmaka-yōga* see above.

²⁵ See the same *tithi* of **Śrāvaṇa-śuklapaksha**.

²⁶ See the same *tithi* of **Bhādrapada-śuklapaksha**.

- IX.** — Kalpādi. [Forenoon.]
XI. — Mōkshadā ēkādaśī.
XIV. — According to the *Līlāpurāna*, called Pāshāna-chaturdāśī.
XV. — Dattātrēya- or Datta-jayanti, birth of Dattātrēya (an incarnation of Siva). [Evening.]
 Donation of salt on this *tithi*, when it is joined with the *nakshatra* Mṛiga, secures beauty of person.
Mārgasirsha-[or pūrṇimānta Pausha-]kṛishṇapaksha.
IV. — Saṅkashṭa-chaturthī. [Moonrise.]
VIII. — Kāl-āshṭami. [*Pārva-viddhā*.]
 Aṣṭakā-śrāddha. [Afternoon part.]
XI. — Saphalā ēkādaśī.
XIV. — Sivarātri. [Midnight.]

X. — Pausha-suklapaksha.

- IV.** — Vaināyaki or Gaṇēśa-chaturthī. [Midday.]
VIII. — Durgā- or Annapūrṇā-āshṭami.
 When the *tithi* falls on Wednesday, bathing, feeding of Brāhmins, etc., are very meritorious, especially when the moon is in the *nakshatra* Bharani, or, according to others, in Rōhiṇi and Ārdrā.²⁷
XI. — Putradā ēkādaśī.
Manvādi. [Forenoon.]

Pausha-[or pūrṇimānta Māgha-]kṛishṇapaksha.

- IV.** — Saṅkashṭa-chaturthī. [Moonrise.]
VIII. — Kāl-āshṭami. [*Pārva-viddhā*.]
 Aṣṭakā-śrāddha. [Afternoon part.]
XI. — Shaṭilā ēkādaśī.
XIV. — Sivarātri. [Midnight.]
XV. — When during this *tithi*, on a Sunday in day-time, the *nakshatra* is Śravaṇa and the *yōga* Vyatipāta, this coincidence is called Ardhōdaya. It is a most auspicious occasion for making donations. When one of the particulars enumerated is wanting, the coincidence of the rest is by some called Mahōdaya.

XI. — Māgha-suklapaksha.

- IV.** — Vaināyaki chaturthī, Gaṇēśa-chaturthī, Gaṇēśa-jayanti (these three only in calendars); or Tila-chaturthī. [Evening.]
Kunda-chaturthī; worship of Siva with jasmine flowers. [Evening.]
 According to the *Bhavishyatpurāna*, called Sāntā.
V. — **Vasanta-pañchami**; worship of Rati and Kāma. [The day on which the *tithi* ends, if the *tithi* occupies the for moon of that day only; otherwise the day on which the *tithi* commences.]
Sri-pañchami, according to some. (See the same *tithi* of Chaitra-suklapaksha.)

²⁷ I do not see how the moon can be in Rōhiṇi and Ārdrā on the above *tithi*; on Pausha-sudi 8 she generally is in Rōvatī and Āśvini.

- VII.** — **Ratha-saptami** (also called **Mahā-saptami**). [Rise of the dawn.]
Manvādi. [Forenoon.]
VIII. — Durgā- or Annapūrṇā-āshṭami,
Bhishm-āshṭami. [Midday.]
XI. — Jayā ēkādaśī.
XII. — **Bhishma-dvādasi.** [*Pārva-viddhā*.]
XIII. — Kalpādi. [Forenoon.]
XV. — Donations on this *tithi* are particularly enjoined.
 When on this *tithi* the moon and Jupiter are both in the *nakshatra* Maghī, the *tithi* is called **Mahā-māghī**.
Māgha-[or pūrṇimānta Phālguna-]kṛishṇapaksha.
IV. — Saṅkashṭa-chaturthī. [Moonrise.]
VIII. — Kāl-āshṭami. [*Pārva-viddhā*.]
 Aṣṭakā-śrāddha. [Afternoon part.]
 Birth of Rāma's wife Sītā.
IX. — Rāmādāsa-navami (only in Bombay calendars).
XI. — Vijayā ēkādaśī.
XII. — When joined with the *nakshatra* Śravaṇa, called Tila-dvādasi (or Vijayā).
XIV. — **Sivarātri** or **Mahā-sivarātri**; is very auspicious, when it falls on Sunday or Tuesday, and is joined with the *yōga* Siva. [Midnight.]
XV. — **Dvāparayugādi.** [Afternoon part.]
 The union of the *nakshatra* Satabhishaj or of Dhanishṭhā with this *tithi* is particularly auspicious for Śrāddhas.
XII. — Phālguna-suklapaksha.
IV. — Vaināyaki or Gaṇēśa-chaturthī. [Midday.]
VIII. — Durgā- or Annapūrṇā-āshṭami.
XI. — Āmalaki ēkādaśī.
XV. — **Hōlika** or **Hutāsani pūrṇimā** (in Marāṭhī, Hōli). [The day of which the *tithi* occupies the evening; but there are many special rules.]
Manvādi. [Forenoon.]
Phālguna-[or pūrṇimānta Chāitra-]kṛishṇapaksha.
I. — **Vasantāramb-ōtsava** or **Vasant-ōtsava**, spring festival.
III. — Kalpādi. [Afternoon part.]
IV. — Saṅkashṭa-chaturthī. [Moonrise.]
V. — **Rāṅga-pañchami**, 'on which people throw colour, etc., about'; (only in calendars).
VIII. — Kāl-āshṭami. [*Pārva-viddhā*.]
 Aṣṭakā-śrāddha. [Afternoon part.]
XI. — Pāpamōchani ēkādaśī.
XIII. — Is called **Vāruṇi**, when joined with the *nakshatra* Satabhishaj (the deity of which is Varuṇa); **Mahā-vāruṇi**, when it falls on Saturday and is joined with the *nakshatra* Satabhishaj; and **Mahā-mahāvāruṇi**, when it is joined, besides, with the *yōga* Subha. Donations made on such occasions are as meritorious as those made at an eclipse, etc.
XIV. — Sivarātri. [Midnight.]
XV. — **Manvādi.** [Afternoon part.]

SELECTED DATES FROM THE EPIGRAPHIA CARNATAKA.

BY PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

BEFORE I published my remarks on the dates of the Saka era, *ante*, Vol. XXV. p. 266 ff., I examined the dates of many inscriptions in Part I. of Mr. Rice's *Epigraphia Carnataca*. Of some of the earlier dates in that collection I have already treated in the *Epigraphia Indica*. Here I give 19 other dates from my list, which, on account of the details mentioned in them, are perhaps of more general interest.¹

The dates Nos. 1-7 quote eclipses which were all visible in that part of India where the inscriptions come from. Nos. 8-13 are dates with Samkrántia. Nos. 14 and 15 give instances of intercalary months, the month of No. 14 being described as *prathama-Bhādrapada*, and that of the quite modern date No. 15 as *nija-Jyēshtha*. No. 16 quotes a repeated *tithi* (*pratham-aikādaśī*), and the *tithi* of No. 17 also is shewn to be a repeated one. And Nos. 18 and 19, in addition to the weekdays, give the *karaṇas*, *nakshatras* and *yōgas* of the dates.

In twelve of these dates the given Saka year was an expired year, and in four (Nos. 2, 11, 13 and 14, of S. 1118, 1390, 1396 and 1456) a current year. In No. 18 the year 1568 is wrongly

quoted instead of 1569 (expired); and in No. 8 the published text of the inscription gives, in words, the year 1062, while both the concurrent Jovian year and my calculation prove the year of the date to be 1082 (current). One date (No. 3) gives the Jovian year only, without the corresponding Saka year; and the other dates, in addition to the Saka years, quote the corresponding Jovian years, in every case in accordance with the southern luni-solar system. — Special terms, to which I may draw attention here, are *Yaksha-tadige* (?) in No. 2, and *Vaiśāṇava-tithi* in No. 17.

The date No. 1 of S. 899 is from an inscription of the Western Gaṅga Satyavākya Koṅṅuṅvarman Permanaḍi; three dates (Nos. 8, 9 and 2) are from inscriptions of the Hoysaḷa Narasiṃha I. and Vira-Ballāla; eleven from the inscriptions of the Vijayanagara kings Harihara II. (No. 10), Virūpāksha I. (Nos. 14 and 11), Narasa (No. 3), Kṛishṇarāya (Nos. 16, 4 and 12), Achyutarāya (Nos. 5 and 13), Sadāśivarāya (No. 6), and Rāmadēva (No. 7); three (Nos. 17-19) from those of the rulers of Maisūr; and one, No. 15, is from a private inscription.

1. — S. 899. — Page 212, No. 183. Doḍḍa-Homma inscription of the Western Gaṅga² Satyavākya Koṅṅuṅvarman Permanaḍi:—

Sakanṛipa-kāl-ātita-samvatsara-śataṅga| eṅṅu-nūṛa-tombhatt-ombhattaneya īsvara-samvatsaram pravarttisutt-ire . . . Āshāḍha-māsada puṅṅamiyūm Aṅṅaravārad-andu sōmagrahaṅṅadōḷ kālām.

S. 899 expired = *īsvara*: Tuesday, 3rd July A. D. 977; a lunar eclipse, visible in India, 14 h. 27 m. after mean sunrise.

2. — S. 1118*. — Page 146, No. 31. Taḍi-Māliṅgi inscription of the Hoysaḷa Vira-Ballāla:—

Saka-varśada 1118neya Bākshasa-samvatsarada Yaksha-tadige³ (?) Bihavāra sūryya-grahaṅṅadalu.

S. 1118 current = *Bākshasa*: Thursday, 5th October A. D. 1195, the day of the new-moon *tithi* of the month Āśvina; a solar eclipse, visible in India, 5 h. 27 m. after mean sunrise.

3. — [S. 1420.] — Page 186, No. 16. — Date of the time of Narasa of Vijayanagara, in the Nanjāṅṅūḍ plates of his son Kṛishṇarāya:—

Vatsarē Kālayukty-ākhyē Mūrgaśīrshaka-māsi cha |
sūryōparāga-samayē puṅṅyē darśa-samanvitē ||

Kālayukta = S. 1420 expired: 13th December A. D. 1498; a solar eclipse, visible in India, 4 h. 10 m. after mean sunrise.

4. — S. 1448. — Page 151, No. 49. Hemmige inscription of Kṛishṇarāya of Vijayanagara:—

Sri-jayābhūdāya-Sālivāhana-śakavarṅsha 1448 sanda varttamānavāda Vyaya-samvatsarada Srāvāṅa-śu 5 lū . . . tat-samvatsarada Āshāḍha-śuddha-puṅṅamiyū ohandrōparāga-puṅṅakāladalli.

S. 1448 expired = *Vyaya*: 24th June A. D. 1526; a lunar eclipse, visible in India, from 11 h. 39 m. to 15 h. 21 m. after mean sunrise.

5. — S. 1452. — Page 133, No. 105. Koḍḍagahaḷi inscription of Achyutarāya of Vijayanagara:—

¹ The date of 'the last Gaṅga inscription' in Mr. Rice's volume (p. 101, No. 78, of S. 944) is quite incorrect and is, in fact, an impossible date.

² With *Yaksha-tadige*, which I cannot explain, compare the Sanskrit *Yaksha-rātri*, another name of the festival generally called *Dipāvāli* (*Dīvāli*); see above, p. 184, Āśvina-kṛishṇapaksha XV. ³ See below, No. 16.

¹ I have selected only regular dates. My private list contains many dates from the *Epigraphia Carnataca*, which are quite incorrect.

Sri-vijayābhyudaya-Sālivāhana śakavarsha 1452 sanda vartamānavāda Vikritu-saṁvatsarada . . . Guruvāradalu . . . chandragrahaṇa-puṇyakāladalli.

S. 1452 expired = Vikrita: Thursday, 6th October A. D. 1530, the day of full-moon of the month Āsvinā; a lunar eclipse, visible in India, 21 h. 49 m. after mean sunrise.⁵

6. — **S. 1478.** — Page 174, No. 108. Tambala inscription of **Sadāsivarāya** of Vijayanagara :—

Sri-jayābhyudaya-Sālivāhana-śakavarsha sâ 1478 sanda vartamānavāda . . . saṁvatsarada Kārtika-ba 30 Chandravāra sūryōparāga-puṇyakāladalu.

S. 1478 expired [= Anala]: Monday, 2nd November A. D. 1556; a solar eclipse, visible in India, 6 h. 15 m. after mean sunrise.

7. — **S. 1542.** — Page 33, No. 36. Ānevāla inscription of **Bāmadēva** of Vijayanagara :—

Sri-vijayābhyudaya-Sālivāhana-śakavarshaṅgaḷu 1542ya Bāudri-saṁvatsarada Mārggaśira-śu 15 lu . . . chandragrahaṇa-puṇyakāladali.

S. 1542 expired = Baudra: 29th November A. D. 1620; a lunar eclipse, visible in India, 16 h. 20 m. after mean sunrise.

8. — **S. 1062 (for 1082*).** — Page 38, No. 60. Toṇḍanūr inscription of the Hoysala **Narasimha I.** :—

Saka-varisham sāsiraḍ-araṇatt-erāḍaneya Pramāthi-saṁvatsarada Āsvaya-śudda-trayō-dāśi-Ādivāra Uttarā-Bhādrapada Tulāya(na)-saṅkramaṇad-andu.

Pramāthin = S. 1082 (not 1062) current, and for that year the date regularly corresponds to Sunday, 27th September A. D. 1159. On this day the 13th tithi of the bright half ended 3 h. 58 m., and the Tulā-(vishuva)-saṅkrānti took place 17 h. 30 m., after mean sunrise; and the nakshatra was Uttarā Bhādrapadā about the whole day.

9. — **S. 1102.** — Page 173, No. 106. Tambala inscription of the Hoysala **Vira-Ballāla** :—

Saka-varusha sāsiraḍa nūra-erāḍaneya Śarvvari-saṁvatsarada Pnshya-śuddha ashtami Bṛihavārad uttarāyaṇa-saṅkramaṇadalu.

S. 1102 expired = Sarvvari: Thursday, 25th December A. D. 1180; the 8th tithi of the bright half ended 6 h. 12 m. after, and the Uttarāyaṇa-saṅkrānti took place 9 h. 4 m. before mean sunrise (during the tithi of the date).

10. — **S. 1319.** — Page 160, No. 64. Narasipura plates of the reign of **Harihara II.** of Vijayanagara, recording a grant which was made by Nārāyaṇadēv-Oḍeyar, the son of the *Mahāmaṇḍalśīvara* Mallapp-Oḍeyar (Mallinātha) who was a brother of Harihara II. :—

Saka-varusha 1319 . . . Śvāra-saṁvatsarada Śrāvāna-śuddha 5 Ādivāra Simhasaṅkrānti-puṇyakāladalu.

S. 1319 expired = Śvāra: Sunday, 29th July A. D. 1397; the 5th tithi of the bright half ended 15 h. 12 m., and the Simha-saṅkrānti took place 19 h. 21 m., after mean sunrise.

11. — **S. 1396*.** — Page 135, No. 121. Sujjalūru plates of **Virūpāksha I.** of Vijayanagara :—

Sālivāhana-nirṇāta-right śakavarsh[ē*] kram-āgatē |

ritu-randhra-guṇair=yuktē vidhunā yuta-vatsarē ||

Vijay-ākbyē tathā māśē Pushyē pakshē viśēshataḥ |

śuklē cha daśami-yuktē vārē ch=Āngi(ṅga)ra-saṅjñitē ||

Saṅkrāntyaṁ Makar-ākhyatē puṇya-kālē.

⁵ In S. 1452 expired there was only one other lunar eclipse, which took place on Tuesday, 12th April A. D. 1530.

S. 1396 current = Vijaya: Tuesday, 28th December A. D. 1473; the 10th tithi of the bright half commenced 0 h. 51 m. after, and the Makara-(Uttarāyaṇa)-saṅkrānti took place 4 h. 29 m. before, mean sunrise.

12. — **S. 1450.** — Page 14, No. 2. Seringapatam inscription of **Kṛishṇarāya** of Vijayanagara :—

Sālivāhana-śakavarshē 'bhr-ēshu-vēda-śasi-saṅkhyē | varshē 'tha Sarvadhāriṇi puṇyatamāyām Kuṭra-saṅkrāntau | Āshādhē śukla-pakshē . . . Śi(sit)arōchishō vārē | . . . Āshāḍha-sudda 12 Sōmavāra Karkaṭakasāṅkrānti-puṇyakāladalli.

S. 1450 expired = Sarvadhārin: Monday, 29th June A. D. 1528; the 12th tithi of the bright half ended 8 h. 9 m., and the Karkaṭaka-(Dakṣiṇāyaṇa)-saṅkrānti took place 7 h. 49 m., after mean sunrise.

13. — **S. 1456*.** — Page 95, No. 55. Huragalavāḍi plates of **Achyutarāya** of Vijayanagara :—

Sak-ābdē Sālivāhaya sahasrēṇa chatuś-śataiḥ | pañchāśatā cha saṅkhyatē shaḍ-abhyadhikayā kramāt || Vikramē(?) Vijayē) vatsarē Pushya-śukla-pakshē 'rka-vāsarē | dvādaśyām ch-aiva Bōhinyām . . . bhavyē Makarasāṅkrānti-puṇyakālē.

S. 1456 current = Vijaya (not Vikrama): Sunday, 28th December A. D. 1533; the 12th tithi of the bright half ended 9 h. 8 m., the Makara-(Uttarāyaṇa)-saṅkrānti took place 8 h. 7 m. (during the tithi of the date), and the nakshatra was Bōhini for about 8 hours, after mean sunrise.

14. — **S. 1390*.** — Page 77, No. 139. Sitāpura inscription of **Virūpāksha I.** of Vijayanagara :—

Sālivāhana-śakavarsha 1390 ttaneya Sarvajit- saṁvatsara prathama-Bhādrapa[da]-ba 8 Sani Bōhini-nakshatradalu.

In **S. 1390 current = Sarvajit Bhādrapada** was intercalary, and the 8th tithi of the dark half of the first Bhādrapada ended 20 h. 33 m. after mean sunrise of Saturday, 22nd August A. D. 1467, when the nakshatra was Bōhini for 11 h. 10 m. after mean sunrise.⁶

15. — **S. 1769.** — Page 100, No. 67. Maṇḍya inscription of Tirukuḍi **Srinivāsa-Rāvu** :—

Sri-vijayābhyudaya-Sālivāhana-śakābda 1769 ne sanda vartamānavāda Plavaṅga-saṁvatsarada nija-Jyēshṭha-śuddha 15 Sōmavārada.

In **S. 1769 expired = Plavaṅga Jyēshṭha** was intercalary, and the 15th tithi of the bright half of the nija (or second) Jyēshṭha ended 12 h. 20 m. after mean sunrise of Monday, 28th June A. D. 1847.

16. — **S. 1435.** — Page 186, No. 16. Nāṅjaṅgūḍ plates of **Kṛishṇarāya** of Vijayanagara :—

Sālivāhana-nirṇāte śak-ābdē sa-chatuśśataiḥ |

pañchatrimsat-samāyuktaiḥ-saṅkhyatē daśabhis-śataiḥ ||

Vatsarē Srimukh-ābhikhyē māsi ch=Āshāḍha-nāmani |

śukla-pakshē cha puṇyāyām pratham-aiśādasi-tithau ||

In **S. 1435 expired = Srimukha** the 11th tithi of the bright half of Āshāḍha commenced about 30 m. before sunrise of the 13th June, and ended about 20 m. after sunrise of the 14th June, A. D. 1513. Accordingly, in a calendar both these days would be numbered '11,' and

⁶ The same inscription contains an earlier date, of the year Pārthiva (= S. 1387 expired), the weekday of which is incorrect.

the 13th June A. D. 1513, the first of these two *ékādāshis*, is the proper equivalent of the date.⁷

17. — S. 1585. — Page 143, No. 23. Talakāḍa plates of Dēvarāja of Maisūr : —

Srī-Sīlīvāhana-śakē śara-nāga-bāṇa-
śītāmśu-sammita-śaratsu gatāsv-amushmin |
varshē tu Śōbhakṛiti māsi Suchau vaḷakshē
pakshē 'tha Vaishṇava-tithāṅv-Amṛitāmśu-vārē ||

In S. 1585 expired = Śōbhakṛit (Śōbhana) the *Vaiṣṇavī* (i. e., here, 12th) *tithi*⁸ of the bright half of Suchi (Āshāḍha) commenced 1 h. 21 m. before mean sunrise of Monday, the 6th July, and ended 26 m. after mean sunrise of Tuesday, the 7th July, A. D. 1663. Here, again, in a calendar both the Monday and the Tuesday would be numbered '12,' and the day of the date, Monday, the 6th July A. D. 1663, would be properly described by the term *prathamā-drāśāsi*.

18. — S. 1588 (for 1589). — Page 66, No. 103. Mēlukōṭe plates of Kapṭhīrava Narasārāja of Maisūr : —

Nāga-rtu-bāṇa-vasudhā-yuji Sālivāhan-
ākhyē śakē śaradi Sarvajit-āhvayāyām |
Vaiśākha-māsi Mṛigaśirsha-samāhvaya-rkshē
pūnyē tath-Ākshayaṭṭitīya-dinē cha Bhaumē ||
Vārē Sukarma-yuji sat-karaṇē cha bhadrē (?)
san-māṅgaḷē sakaladharmada-pūnyakālē |

In Sarvajit = S. 1569 (not 1568) expired the *Akshaya-ṭṭitīyā* or third *tithi* of the bright half of Vaiśākha and the *karaṇa* Gara⁹ ended 13 h. 6 m. after mean sunrise of Tuesday, 27th April A. D. 1647, when the *nakshatra* was Mṛigaśirsha for 16 h. 25 m., and the *yōga* Sukarman for 12 h. 50 m., after mean sunrise.

19. — S. 1671. — Page 156, No. 63. Narasīpura plates of the time of Kṛishṇarāja of Maisūr : —

Sālivāhana-nirṇṭtē śak-ābdē daśabhiś-śataih |
samanvit-aikasaptatyā shaṭ-śatair=api vatsaraih ||
Sukl-ākhyē vatsarē māsi Vaiśākhē Bhauma-vāsarē |
dvādaśyām śukla-pakshasya chandra-tārā-bal-ānvitē ||
Hasta-rkshē Harshaṅē yōgō karaṇē Bālav-ābhidhē |

S. 1671 expired = Sukla : Tuesday, 18th April A. D. 1749 ; the 12th *tithi* of the bright half and the *karaṇa* Bālava ended 9 h. 25 m., the *nakshatra* was Hasta from 2 h. 38 m., and the *yōga* Harshaṅa for 15 h. 17 m., after mean sunrise.

⁷ In Ep. Carn. p. 14, No. 6, there is a similar date, which at the same time would furnish an instance of an *Umṛāni Mahā-drāśāsi* (see ante, p. 178) ; but that date is quite incorrect.

⁸ Compare Hemādri's *Chaturvarṅga-chintāmani*, Vol. III. Part II. p. 365, l. 11: *dvādaśi Chakriṅas-tathā*. — In other dates the 11th *tithi* is described as *Harī-dina*.

⁹ As the text stands, the word *bhadrē* would be taken as the name of a *karaṇa*, but, so far as I know, *Bhadra* is not synonymous with *Gara*. According to the Rev. F. Kittel's *Kannala-English Dictionary*, *bhadrē* in *Kannareso* denotes 'the seventh astrological division of the day' (= *viśāḍi*, which would be out of place here).

THE PHILOLOGICAL SECRETARY read the following communications concerning the date of an Inscription of Narasiṃha Dēva II., published by Babu N. N. Vasu in *Journal*, Vol. LXV, 1896, Part I, page 229 ff.) :

Professor F. Kielhorn, Ph.D., LL.D., C.I.E., Göttingen writes :—

The Kēndupāṭṇā plates of the Gaṅga King Narasiṃha II., for an edition of which we are indebted to Mr. Nāgēndra-Nātha Vasu, are

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N. N. Vasu — *Inscription of Narasiṃha Dēva II.*

[Nov.,

dated in the Çaka year 1217, on Monday, the 6th *tithi* of the bright half of the month of Siṃha. According to the editor of the inscription (*ibid.* p. 230), this date corresponds to Monday, the 19th September A.D. 1295. May I venture to state that this is incorrect? In A.D. 1295 the month of Siṃha lasted from the 30th July to the 29th August, and the *tithi* which ended on the 19th September, 1295, was the 10th, not the 6th, of the bright half.

In reality, the original date would be wrong for Çaka 1217, both current and expired, and there can be no doubt that the year 1217 has been wrongly quoted in the plates instead of 1218 expired, and that the intended date is Monday, the 6th August A.D. 1296. We find the same mistake in the Purī plates of Narasiṃha IV. (*Journal*, Vol. LXIV, Part I, p. 151), where the Çaka year 1316 has been wrongly quoted instead of 1317, and I have given numerous similar dates in my paper on the Çaka era in the *Indian Antiquary*.

11. A NOTE ON THE KINGS OF PRĀGJYOTIṢA.

Göttingen, 4 March, 1898.

DEAR PROFESSOR RHYS DAVIDS,—I have studied with great interest Dr. Hoernle's paper on the Gauhaṭī plates of Indrapālavarman of Prāggyotiṣa (Journ. As. Soc. Bengal, vol. lxvi, pt. 1, p. 113 ff.), and hope that Dr. Hoernle will soon give us the other grants of the same family, of which hitherto we have known so little. In the meantime, I would propose two alterations in the text of the inscription already published by him.

In line 4, instead of *Bhagadatta-vatsa-mātā*, the Earth, "the mother of him (i.e. Naraka), whose son is Bhagadatta," I take the reading of the photo-etching to be *Bhagadatta-vansa-mātā* (*Bhagadatta-vamśa-mātā*), the Earth, "the mother of Bhagadatta's family." *Vamśa* is spelt *vansa* also in other inscriptions. The circumstance that the family of the kings of Prāggyotiṣa is thus called the *Bhagadatta-vamśa* is of some importance. It shows that

that Harṣa of Gauḍa, Uḍra, Kaliṅga, etc., whose daughter Rājyamati, "born in the *Bhagadatta-rājakula*," was married by Jayadeva-Paracakrakāma of Nepāl (*Ind. Ant.*, vol. ix, p. 179), was almost certainly a king of Prāggyotiṣa. In fact, he most probably was the Hariṣa (or Harṣa) of the Tejpur grant (Journ. As. Soc. Bengal, vol. ix, p. 767), who would be thus placed in the first half of the eighth century A.D.¹

Besides, in line 13, instead of *Kaumr-ānvaya*, the photo-etching suggests the reading *Bhaum-ānvaya*. *Kaumra* is an impossible word, which could not be derived from *Kumāra*. On the other hand, as the family derived its origin from Viṣṇu and the Earth, it may well have been called the *Bhauma-vamśa*, either after the Earth herself or after her and Viṣṇu's son Naraka (Bhauma), the father of Bhagadatta, just as in the *Harṣa-carita* it is called the *Vaiṣṇava-vamśa* after Viṣṇu.²

In the admirable English translation of the *Harṣa-carita*, the prince of Prāggyotiṣa who sends a messenger to Harṣa is called "Bhāskaradyuti, otherwise named Bhāskaravarman," and is described as heir-apparent (*kumāra*). But I still believe that Kumāra was the prince's name, and that he was surnamed Bhāskaravarman, because, as the poet says, he possessed the sun's splendour (*bhāskara-dyuti*).

¹ Jayadeva-Paracakrakāma's inscription is dated in (Harṣa)-samvat 153, i.e. about A.D. 758. The known inscriptions of the kings of Prāggyotiṣa are not dated, except in regnal years.

² The Pāla dynasty belonged to the solar, the Sena dynasty to the lunar race.

No. 7.—THE DATE OF THE KOTTAYAM (SYRIAN CHRISTIANS')
PLATE OF VIRA-RAGHAVA.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÖTTINGEN.

After a careful examination of the Grantha letters in the Kōttayam plate of Vira-Rāghava, above, Vol. IV. page 293, Mr. Venkayya has intimated that, on palaeographical grounds, Vira-Rāghava's grant may be assigned to about the 13th or 14th century A.D. Convinced of the general correctness of Mr. Venkayya's conclusion, I have examined the date of the grant for the four hundred years from A.D. 1100 to A.D. 1500, and am enabled to state that during that period¹ there is only a single day for which the date is absolutely correct, viz. **Saturday, the 15th March A.D. 1320.**

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[VOL. VI.]

The data furnished by the original date are—"the day of (the *nakshatra*) Rōhiṇī, a Saturday on which passed¹ (the day) twenty-one (of) the month of Mīna, (when) Jupiter (was in) Makara."

In Śaka-Saṁvat 1241 expired=A.D. 1319-20 the Mīna-saṁkrānti by the Ārya-siddhānta took place 3 hours 22 minutes after mean sunrise of Sunday, the 24th February A.D. 1320, which therefore was the first day of the month of Mīna. Accordingly, the 21st day of the month of Mīna was Saturday, the 15th March A.D. 1320. On this day (which was the 5th of the bright half of Chaitra) the moon was in the *nakshatra* Rōhiṇī during the whole of the day, and the true longitude of Jupiter by the Ārya-siddhānta was $9^{\circ} 1' 14'$, i.e. Jupiter was in the 10th sign Makara.

I may add that in the period from A.D. 1100 to A.D. 1500 there are two other Saturdays, 95 years before and 95 years² after the 15th March A.D. 1320, either of which answers two of the other requirements of the original date, but not all of them. They are:—

Saturday, the 15th March A.D. 1225, which was the 21st day of the month of Mīna, and on which the *nakshatra* was Rōhiṇī, while the true longitude of Jupiter was only $8^{\circ} 27' 58''$; and—

Saturday, the 16th March A.D. 1415, when the *nakshatra* was Rōhiṇī, and the true longitude of Jupiter $9^{\circ} 4' 28''$, but which was the 20th day of the month of Mīna.

I venture to hope that the results of Mr. Venkayya's examination of the plate and of my own calculations will be considered to render it extremely probable that Vira-Rāghava's grant was made in A.D. 1320, and not in either A.D. 775 or so strangely early a year as A.D. 230.³

¹ I owe a literal translation of the date to Dr. Hultzsch.

² The same number of years (or, more accurately, the number of 34699 days) intervenes between the two days in the 7th and 8th centuries A.D. which would answer all the requirements of the date, viz. Saturday, the 10th March A.D. 680, and Saturday, the 11th March A.D. 775.

³ See above, Vol. IV. p. 292, note 7. So far as I can see, the astronomical calculations of Mr. Kookel Keloo Nair were not quite correct. Saturday, the 6th March A.D. 280, was the 21st day of Mīna and the *nakshatra* for part of the day was Rōhiṇī; but Jupiter was in the sign Kumbha, not in Makara.—I do not venture to hope that we ever shall find in an inscription a date of the third century A.D. that would admit of exact verification.

8. SANSKRIT DEED OF SALE.

Göttingen.

June 17, 1900.

DEAR SIR,—In his interesting article on "A Sanskrit Deed of Sale concerning a Kaśmīrian Mahābhārata Manuscript," Dr. Stein, above p. 191, has stated that the date of that deed corresponds to Thursday, the 10th July, 1682; but the 10th July, 1682, old style, was a Monday, and new style, a Friday. Really the original date, "Thursday, the 1st¹ of the dark half of Āśvina of the laukika year 58 [i.e. the Saptarṣi year 4758]," corresponds to Thursday, the 7th September, 1682, old style.—Yours truly,

F. KIELHORN.

¹ On p. 191, line 3, Dr. Stein has "the 8th day," but from pp. 188 and 189 it is clear that the day was the 1st.

No. 30.—DATES OF PANDYA KINGS.

By F. KIELHORN, Ph.D., LL.D., C.I.E.; GÖTTINGEN.

Dr. Hultzsch has sent me for examination the texts and English translations of fifty-four Pāṇḍya dates.¹ Of this number I now publish, with the results of my calculations, twenty-six dates, together with four others (Nos. 1, 5, 14 and 16 of my list), which have been published by Dr. Hultzsch in the *Indian Antiquary*, and for two of which (Nos. 14 and 16) the European equivalents have been already ascertained by the late Mr. S. B. Dikshit. All these dates quote only regnal years, not years of any era; and in a number of cases it was uncertain whether the dates connected with a particular name belonged to the reign of one king or to the reigns of two or more kings bearing the same name. How my results will fit into the history of the time to which the dates refer, others may decide; I have been solely guided by the dates, and have not allowed myself to be influenced by other considerations. Though the dates do not quote years of any era, the fact that some of them, in addition to the weekday, the *tithi* and the *nakshatra*, also give the corresponding solar day, has helped me greatly in ascertaining what I consider to be the proper European equivalents, and makes me place great confidence in the results which I now put forward. The reader will understand this when he sees, that e.g. for the date No. 1 there is only a single day in 500 years that would fully satisfy all the requirements of the original date. To Dr. Hultzsch I owe sincere thanks for having enabled me to do this work.

A.—JATAVARMAN KULASEKHARA.

1.—Date in the larger Tiruppūvaṇam grant.²

Plate i. a, line 4 f.

Nijē vatsarē pañchavimsē chaṇḍāmsāv-āṭṭa-Chāpē Kanakapati-tithau kṛishṇapaksh-Ārkivāra-Svāti-yōgē;

“in his twenty-fifth year, while the sun was in Chāpa, in the *tithi* of Kanakapati, at the union of Saturday and Svāti in the dark fortnight.”

Plate v. b, line 2 f.

Padiṇṇmūṇṇrāvadiṇ-edir paṇṇiraṇḍām-āṇḍu Dhanu-nāyaru nālān-diyadiyum apara-pakshattu ēkādaśiyum Śaṇi-kkiḷamaiyum peṇṇa Śōdi-nāḷ;

“the day of Svāti, which corresponded to a Saturday, and to the eleventh *tithi* of the second fortnight, and to the fourth solar day of the month of Dhanus, in the twelfth year opposite to the thirteenth.”

Between A.D. 1000 and 1500 there is only a single year for which this date would be absolutely correct, viz. the year 1214. In this year the Dhanu-saṁkrānti took place 8 h. 43 m. after mean sunrise of Wednesday, the 26th November, which was the first day of the month of Dhanus. The 4th day of the month of Dhanus therefore was Saturday, the 29th November. And on this day the 11th *tithi* of the dark half (of the month Mārgaśīrsha) ended 9 h. 38 m., and the *nakshatra* was Svāti, by the equal space system for 19 h. 3 m., according to Garga for 6 h. 34 m., and by the Brahma-siddhānta for 2 h. 38 m., after mean sunrise. Accordingly, if the date does fall between A.D. 1000 and 1500 and has been correctly recorded, Saturday, the 29th November A.D. 1214, must be its proper equivalent.

¹ [It is but right to state that these dates were looked up, transcribed and translated by my First Assistant, Mr. V. Venkayya, and that I have done nothing but checking his transcripts and renderings.—E. H.]

² See Dr. Hultzsch in *Ind. Ant.* Vol. XX, p. 283.

2.—In the Nellaiyappar temple at Tinnevely.¹

- 1 Svasti [śrī] [I*] [Pūvi]ṇ kiḷatti²
 5 śrī-kō-Chchadaiypan[ma].
 6 r=[ā]ṇa Tri[bhuvana]chchakravartigaḷ śrī-Kulaśēgarad[ē]vaṅku yāṇḍu
 padinṇu(mū)ṇṇā[vadi]ṇ edirām-āṇḍu Miṇa-nāyaru nālān-diyadiyum apara-pakshattu
 daśa-
 7 [miyum] Viyāḷa-kkiḷamai[yum] peṇṇa Pūr[ā]ḍattu nāḷ.

“In the year opposite to the thirteenth year (of the reign) of the glorious king Jaṭavarman *alias* the emperor of the three worlds, the glorious Kulaśēkharadēva,—on the day of Pūrvāshādhā, which corresponded to a Thursday, and to the tenth *tithi* of the second fortnight, and to the fourth solar day of the month of Mīna.”

Under No. 1 we found that a date of the 12th opposite to the 13th year, i.e. of the 25th year, of the king's reign fell in November A.D. 1214. If such was really the case, this date No. 2, of the month of Mīna of the year opposite to the 13th, i.e. of the 14th year, of the same reign, must fall in February-March of either A.D. 1203 or 1204. As a matter of fact, the date is correct for Thursday, the 26th February A.D. 1204. In A.D. 1204 the Mīna-saṁkrānti took place 3 h. 12 m. after mean sunrise of Monday, the 23rd February, which was the first day of the month of Mīna. The fourth day of the month of Mīna therefore was Thursday, the 26th February; and on this day the 10th *tithi* of the dark half (of the month Phālguna) commenced 3 h. 33 m., and the *nakshatra* was Pūrvāshādhā, by the equal space system for 14 h. 27 m., and according to Garga for 1 h. 58 m., after mean sunrise.

The way in which this date works out proves that the equivalent found for the date No. 1 undoubtedly is the proper equivalent of that date; and the two dates together shew that the reign of Jaṭavarman Kulaśēkhara commenced between (approximately) the 27th February and the 29th November A.D. 1190.

B.—MARAVARMAN SUNDARA-PANDYA I.³3.—In the Nellaiyappar temple at Tinnevely.⁴

- 1 Svasti śrī [I*] Śrī-kō Māraṇmar-āṇa Tribhuvanaachchakkaravartigaḷ Śōṇāḍu
 koṇḍu Muḍikoṇḍaśō-
 2 ḷapurattu vi(vi)rābhishēkam paṇṇiy-aruṇiya śrī-Śundara-Pā[ṇ]ḍiyadēvaṅku yāṇḍu
 padinṇēḷāvadi[ṇ*]
 3 edirām-āṇḍi[ṇ*] edi[r]ām-āṇḍu
 5 yivv-ā[ḷ].
 6 tai=Ppurattādi-māsattu ēḷān-diyadiyum deśa[m]iyum T[i]ṇ[ga]ḷ-k[i]ḷamaiyu[m]
 peṇṇa Uttarāḍattu nā[ḷ].

“In the year opposite to the year opposite to the seventeenth year (of the reign) of the glorious king Māraṇmarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva who was pleased to take the Chōḷa country and to perform the anointment of heroes at Muḍikoṇḍaśōḷapuram,—on the day of Uttarāshādhā, which corresponded to a Monday, and to the tenth *tithi*, and to the seventh solar day of the month of Purattādi in this year.”

Between A.D. 1200 and 1300 the only year for which this date would be correct, is 1234. In this year the Kanyā-saṁkrānti took place 16 h. 3 m. after mean sunrise of Monday, the 28th

¹ No. 123 of the Government Epigraphist's collection for 1894.

² See the larger Tiruppūvaṇam grant.

³ I add the numbers 'I.' and 'II.' here and below merely for convenience of reference so far as this list is concerned. There may have been other kings of the same names before those here numbered as I.

⁴ No. 155 of the Government Epigraphist's collection for 1894.

August. The 7th day of the month of Kanyā (or Purattādi) therefore was Monday, the 4th September A.D. 1234; and on this day the 10th *tithi* of the bright half (of the month Bhādrapada) ended 13 h. 6 m., and the *nakshatra* was Uttaraśādhā, by the equal space system and according to Garga for 19 h. 42 m., and by the Brahma-siddhānta for 13 h. 8 m., after mean sunrise.

4.—In the Nellaiyappar temple at Tinnevely.¹

- 1 Śrī-kō [M]āra[va]ṇmar-āṇa Tribhu[va]ṇachchakra[va]rttigal
Śōṇāḍu=goṇḍu Muḍikoṇḍa-
- 2 [v]iṇḍiśhākam paṇṇiy=aruṇiya śrī-Sundara-Pāṇḍiyadēvarku
yāṇḍu 17vadin=edirām=āṇḍin=edirām=āṇ-
- 3 ru iruba[t]tē[ā]n=diyadiyu[m] pūrvva-[pa]ksha[t]tu prathamaiyūn=
Diṅgal-[k]iḷamaiyūm peṇṇa Pārā(ra)tt[ā]di-nāḷ.

"In the year opposite to the year opposite to the 17th year (of the reign) of the glorious king Māravarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva who was pleased to take the Chōla country and to perform the anointment of heroes at Muḍikoṇḍa[śōlapuram],—on the day of Pūrva-Bhadrpadā, which corresponded to a Monday, and to the first *tithi* of the first fortnight, and to the twenty-seventh solar day of . . ."

Although the name of the solar month of this date is broken away or quite illegible, the fact that during that month the first *tithi* of the bright half was joined with the *nakshatra* Pūrva-Bhadrpadā, at once suggests the conjecture that the month was that of Kumbha; and this conjecture is shewn to be correct by the calculation of the date. The date, which is of the same regnal year as No. 3, corresponds to Monday, the 19th February A.D. 1235. In A.D. 1235 the Kumbha-saṁkrānti took place 8 h. 16 m. after mean sunrise of Wednesday, the 24th January, which was the first day of the month of Kumbha. The 27th day of the month of Kumbha therefore was Monday, the 19th February; and on this day the first *tithi* of the bright half (of the month Phālguna) commenced 0 h. 30 m., and the *nakshatra* was Pūrva-Bhadrpadā, by the equal space system for 14 h. 27 m., according to Garga for 2 h. 38 m., and by the Brahma-siddhānta for 3 h. 17 m., after mean sunrise.

5.—In the Raṅganātha temple at Śrīraṅgam.²

- 1 Śrī-kō Māraṇmar-āṇa Tiribuvāṇachchakaravatt[i]gal Śōṇāḍu
vaḷaṅgi aruṇiya śrī-Sundara-Pāṇḍiyadēvar[k*]ku yāṇḍu oṇḍadāvadu
- 2 Mēsha-nāyaṇṇu apara-pakshattu tṭitīyaiyūm Velli-kkiḷamaiyūm peṇṇa Viśāgattu
nāḷ.

"In the ninth year (of the reign) of the glorious king Māravarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva who was pleased to present the Chōla country,³—on the day of Viśākhā, which corresponded to a Friday and to the third *tithi* of the second fortnight of the month of Mēsha."

As the two preceding dates Nos. 3 and 4, of the year opposite to the year opposite to the 17th year, *i. e.* of the 19th year, of the king's reign fell in A.D. 1234 and 1235, this date No. 5, of the 9th year of the same reign, will be expected to fall in A.D. 1224 or 1225. The date actually corresponds to Friday, the 28th March A.D. 1225, which was the 4th day of the month of Mēsha, and on which the third *tithi* of the dark half (of the month Chaitra) ended 22 h. 45 m., and the *nakshatra* was Viśākhā, by the equal space system and according to Garga for 11 h. 50 m., and by the Brahma-siddhānta for 7 h. 13 m., after mean sunrise.

¹ No. 133 of the Government Epigraphist's collection for 1894.

² See *Ind. Ant.* Vol. XXI. p. 344.

³ See the smaller Tirupuvāṇam grant.

6.—In the Agniśvara temple at Tirukkāṭṭuppaḷi.¹

- 1 Svasti śrī [||*] Kō Māraṇma[r=ā]ṇa Tiribuvāṇachchakaravattigal Śōṇāḍu
vaḷaṅgiya Sundara-Pāṇḍiyadē[va]rku yāṇḍu 7āvadu Mīna-nāyaṇṇu=ppūrvva-
pakshattu navamiyu[m] [yu]m [pe]ṇṇa Pūsattu nāḷ
- 2 Rishabham muhūrttattu.

"In the 7th year (of the reign) of king Māravarman *alias* the emperor of the three worlds, Sundara-Pāṇḍiyadēva who presented the Chōla country,—on the auspicious occasion of the Rishabha (*lagna*) on the day of Pushya, which corresponded to and to the ninth *tithi* of the first fortnight of the month of Mīna."

The three preceding dates Nos. 3-5 shew that a date of the month of Mīna of the 7th year of the king's reign should fall in A.D. 1223, and in my opinion this date No. 6 undoubtedly corresponds to [Monday,] the 13th March A.D. 1223, which was the 19th day of the month of Mīna, and on which the *nakshatra* was Pushya, by the equal space system and according to Garga for 19 h. 42 m., and by the Brahma-siddhānta for 17 h. 44 m., after mean sunrise. There is the difficulty that by our Tables the 9th *tithi* of the bright half had ended 0 h. 21 m. before mean sunrise of the 13th March, but it may be reasonably supposed that by other Tables it ended shortly after mean sunrise. The name of the weekday which would have removed all doubt unfortunately is illegible or broken away.—On the day found Rishabha was *lagna* from 2 h. 28 m. to about 4 h. 28 m. after mean sunrise.

The four dates Nos. 3-6 together prove that the reign of Māravarman Sundara-Pāṇḍya I. commenced between (approximately) the 29th March and the 4th September A.D. 1216.

C.—MARA VARMAN SUNDARA-PANDYA II.

7.—In the Nellaiyappar temple at Tinnevely.²

- 1 Svasti śrī [||*] Śrī-kō Māraṇma[r=ā]ṇa Tiribuvāṇachchakarava[t]t[i]gal śrī-
Sundara-Pāṇḍiyadēvarku yāṇḍu paṇḍi-ōṇḍāvad[iṇ]=edir[ā]m=āṇḍin=edirām=āṇḍu
Magara-nāyaṇṇu [i]rubattunāḷu=diyadiyūm apara-pakshattu daśamiyu[m] Budan-
kiḷamaiyūm peṇṇa Aṇḷattu nā-
- 2 1.

"In the year opposite to the year opposite to the eleventh year (of the reign) of the glorious king Māravarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva,—on the day of Anurādhā, which corresponded to a Wednesday, and to the tenth *tithi* of the second fortnight, and to the twenty-fourth solar day of the month of Makara."

Between A.D. 1150 and 1350 the only year for which this date would be correct, is 1251. The Makara-saṁkrānti took place 0 h. 38 m. after mean sunrise of Monday, the 26th December A.D. 1250, which was the first day of the month of Makara. The 24th day of the month of Makara therefore was Wednesday, the 18th January A.D. 1251; and on this day the 10th *tithi* of the dark half (of the month Pausa) ended 17 h., and the *nakshatra* was Anurādhā by the equal space system and according to Garga for 3 h. 56 m., after mean sunrise.

8.—In the Nellaiyappar temple at Tinnevely.³

- 1 Svasti śrī [||*] Kō Māraṇmar-āṇa Tiribuvāṇachchakaravattigal śrī-[Śuṇḍa]ra-
[P]āṇḍiyadē[va]rku yāṇḍu [11]va[d]iṇ edirām=āṇḍi-
- 2 ṇ edirām=āṇḍu Magara-nāyaṇṇu irubat[t]unāḷu=diyadiyūm a[pa]ra-paksha[t]tu da]-
śamiyūm Bu[daṇ]-kiḷamaiyūm peṇṇa Aṇḷa[t]tu nāḷ.

¹ No. 52 of the Government Epigraphist's collection for 1897.

² No. 148 of the Government Epigraphist's collection for 1894.

³ No. 146 of the Government Epigraphist's collection for 1894.

“In the year opposite to the year opposite to the [11]th year (of the reign) of king Māravarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Anurādhā, which corresponded to a Wednesday, and to the tenth *tithi* of the second fortnight, and to the twenty-fourth solar day of the month of Makara.”

This date is the same as No. 7, except that in the expression ‘opposite to the 11th year’ numeral figures are used by the writer.

9.—In the Nallaiyappar temple at Tinnevely.¹

1 Śrī-kō Māraṇmar-āṇa Tribh[u]va[ṇa]chchakkaravattiga[1] śr[ī]-Sundara-Pāṇḍiyadēvarkku [y]āṇḍu paḍiṇ-ōṇṇāvadīṇ=edīrām=[ā*]ṇḍiṇ=ē[di]rām=ā[ṇ]ḍn M[ī]ṇa-nāyaṇṇu-ppat[ī]ṇ[bad]ān=di[ya]diyudiyum² a[pa]ra-[pa]kshattu navamiyum Budaṇ-kiḷamaiyum peṇṇa Aśvati-nā.

“In the year opposite to the year opposite to the eleventh year (of the reign) of the glorious king Māravarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Aśvini, which corresponded to a Wednesday, and to the ninth *tithi* of the second fortnight, and to the nineteenth solar day of the month of Mīna.”

The wording of this date is intrinsically wrong, because during the month of Mīna a 9th *tithi* of the dark half can never be joined with the *nakshatra* Aśvini. The probability is that the month intended was that of Mithuna, and calculation proves that it *was* that month. The date, which is of the same year as No. 7, corresponds to Wednesday, the 14th June A.D. 1251. In A.D. 1251 the Mithuna-saṁkrānti took place 22h. 56 m. after mean sunrise of Friday, the 26th May. The 19th day of the month of Mithuna therefore was Wednesday, the 14th June; and on this day the 9th *tithi* of the dark half (of the month Jyaiṣṭha) ended 5 h. 19 m., and the *nakshatra* was Aśvini for 20 h. 21 m., after mean sunrise.

10.—In the Nallaiyappar temple at Tinnevely.³

1 Svasti śrī [||*] Kō Māraṇ[ma]r-āṇa Tribhu[vaṇa]chchakra[vat]t[ī]ga! śr[ī]-Sundara-Pāṇḍiyadēvarkku yāṇḍu paḍ[ī]ṇo-
2 ṇṇāvadū Vaigāsi-[m]āṣattu madaṇ-tiyadi Nāy[ṇ]ru-kiḷamai peṇṇa Attattu nā[ī].

“In the eleventh year (of the reign) of king Māravarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Hasta, which corresponded to Sunday, the first solar day of the month of Vaigāsi.”

As the dates Nos. 7-9, which are of the year opposite to the year opposite to the 11th year, i.e. of the 13th year, of the king's reign, have been found to fall in A.D. 1251, this date No. 10, which is of the 11th year of the same reign, will in the first instance be expected to fall in A.D. 1249. It actually corresponds to Sunday, the 25th April A.D. 1249, which was the first day of the month of Vaigāsi—the Vṛishabha-saṁkrānti having taken place 0 h. 54 m. after mean sunrise—and on which the *nakshatra* was Hasta, by the equal space system and according to Garga for 15 h. 6 m., and by the Brahma-siddhānta for 11 h. 50 m., after mean sunrise.

The dates Nos. 7-10 together prove that the reign of Māravarman Sundara-Pāṇḍya II. commenced between (approximately) the 15th June A.D. 1238 and the 18th January A.D. 1239.

¹ No. 147 of the Government Epigraphist's collection for 1894.

² Read =diyudiyum.

³ No. 143 of the Government Epigraphist's collection for 1894.

D.—JATAVARMAN SUNDARA-PANDYA I.

11.—In the Pañchanadēvara temple at Tiruvaivāru.¹

1 Svasti śrīh [||*] Kō=Chchaḍapaṇmar-āṇa Ti[r]ibuvaṇachchakkaravattiga! śrī-Sundara-Pāṇḍiyadēvarkku yāṇḍu 2āvadu Mēsha-nāyaṇṇu apara-pakshattu ēkādaṣiyum Viyāḷa-kkiḷamaiyum peṇṇa Śad[ai]yat[tu] nā[ī].

“In the 2nd year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Śatabhishaj, which corresponded to a Thursday and to the eleventh *tithi* of the second fortnight of the month of Mēsha.”

To shorten my remarks, I may state here at once that the six dates Nos. 11-16 work out correctly on the assumption (and prove thus) that the reign of Jaṭavarman Sundara-Pāṇḍya I. commenced between (approximately) the 20th and 28th April A.D. 1251.

This date, No. 11, corresponds to Thursday, the 27th March A.D. 1253, which was the third day of the month of Mēsha, and on which the 11th *tithi* of the dark half (of the month Chaitra) ended 2 h. 20 m., and the *nakshatra* was Śatabhishaj, by the equal space system for 13 h. 47 m., according to Garga for 5 h. 16 m., and by the Brahma-siddhānta for 2 h. 38 m., after mean sunrise.

To ascertain whether this date could possibly be one of the reign of Jaṭavarman Sundara-Pāṇḍya II., I have calculated it also for the years A.D. 1277, 1278, and 1279, and have found that it would be incorrect for any one of these years. The same remark applies to the dates Nos. 12 and 13.

12.—In the Vaidyanātha temple at Tirumalavādi.²

1 Svasti śrī [||*] Kō=Chchaḍaiva[r*]mmar-āṇa Tribhuvaṇachchakkaravattiga! śrī-[Su]ndara-Pāṇḍiyadēvarkku yāṇḍu 2vadu Mēsha-nāyaṇṇu apara-pakshattu śadu[r]tthiyum Śaṇi-kk[ī]lamaiyum peṇṇa Mu(mū)lattu nā[ī].

“In the 2nd year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Mūla, which corresponded to a Saturday and to the fourth *tithi* of the second fortnight of the month of Mēsha.”

The date corresponds to Saturday, the 19th April A.D. 1253, which was the 26th day of the month of Mēsha, and on which the 4th *tithi* of the dark half (of the month Vaiśākha) ended 2 h. 59 m., and the *nakshatra* was Mūla by the equal space system for 5 h. 16 m., after mean sunrise.

13.—In the Vaidyanātha temple at Tirumalavādi.³

1 Svasti śrī [||*] Kō=Chchaḍapa[ṇmar-āṇa] Tiru(ri)bu[va]ṇachchakkaravattiga! śrī-Sundara-Pāṇḍiyadēvarkku yā[ṇ]ḍu 3vadu Vṛiśchika-nāyaṇṇu pūrvva-pakshattu [sha]ṣṭhiyum Budaṇ-kiḷamaiyum peṇṇa Uttirāḍattu nā[ī].

“In the 3rd year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Uttarāśhādhā, which corresponded to a Wednesday and to the sixth *tithi* of the first fortnight of the month of Vṛiśchika.”

The date corresponds to Wednesday, the 20th October A.D. 1253, which was the second day of the month of Vṛiśchika, and on which the 6th *tithi* of the bright half (of the month Kārttika) ended 18 h. 4 m., and the *nakshatra* was Uttarāśhādhā, by the equal space system and according to Garga for 12 h. 29 m., and by the Brahma-siddhānta for 5 h. 55 m., after mean sunrise.

¹ No. 254 of the Government Epigraphist's collection for 1894.

² No. 90 of the Government Epigraphist's collection for 1895.

³ No. 89 of the Government Epigraphist's collection for 1895.

14.—In the Vēdagirīśvara temple at Tirukkaḷukkuṇṇam.¹

- 2 Tribhuvanachakrava[r]ttiga[1] śrī-Sundara-Pāṇḍiyadēvaṅku yā[ṇ]ḍu
 9āvadu Ishava-nā[ya]ṅṅu pūrvva-pakshattu pañchamiy[u]m Śe[v*]vāy-kkiḷa-
 3 maiyum peṅṅa Punaṅpūśattu nāl.

“In the 9th year (of the reign) of the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva,— on the day of Punaṅvasu, which corresponded to a Tuesday and to the fifth *tithi* of the first fortnight of the month of Ṛishabha.”

The date corresponds to Tuesday, the 29th April A.D. 1259, which was the 4th day of the month of Ṛishabha, and on which the 5th *tithi* of the bright half (of the month Vaiśākha) ended 6 h. 44 m., and the *nakshatra* was Punaṅvasu, by the equal space system and according to Garga for 6 h. 34 m., and by the Brahma-siddhānta for 5 h. 55 m., after mean sunrise.

15.—In the Vēdagirīśvara temple at Tirukkaḷukkuṇṇam.²

- 1 Śrī-kōṅ-Chaḍaipanmar-āṅṅa Tiru(ri)buvanachchakkaravattigaḷ emma-
 2 ṇḍalamuṅ-gonḍ-aruliya śrī-Sundara-Pāṇḍi[ya]dēvaṅku y[ā]-
 3 ṇḍu 9āvadu Miduna-nāyaṅṅu apara-pakshattu navamiyum Nāyaṅṅu-[k]kiḷamai-
 4 yum peṅṅa Irēba(va)di-nāl.

“In the 9th year (of the reign) of the glorious king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva who was pleased to take every country,— on the day of Rēvatī, which corresponded to a Sunday and to the ninth *tithi* of the second fortnight of the month of Mithuna.”

The date corresponds to Sunday, the 15th June A.D. 1259, which was the 20th day of the month of Mithuna, and was entirely occupied by the 9th *tithi* of the dark half (of the month Jyāishṭha), and on which the *nakshatra* was Rēvatī for 9 h. 51 m. after mean sunrise.

16.—In the Jambukēśvara temple near Śrīraṅgam.³

- 2 Kō-Chchaḍaipanmar-āṅṅa Tribhuvanachchakravartigaḷ emmaṇḍalamuṅ-
 gonḍ-aruliya śrī-Sundara-Pāṇḍiyadēvaṅku yāṇḍu 10vadu pattāvadu Ṛishabha-
 nāyaṅṅu apara-[pa]kshattu Budaṅ-kiḷamaiyum prathamaiyum peṅṅa A[ṇi]-
 3 jattu nāl.

“In the 10th—tenth—year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva who was pleased to take every country,— on the day of Anurādhā, which corresponded to a Wednesday and to the first *tithi* of the second fortnight of the month of Ṛishabha.”

The date corresponds to Wednesday, the 26th April A.D. 1260, which was the 4th day of the month of Ṛishabha, and on which the first *tithi* of the dark half (of the month Vaiśākha) ended 0 h. 4 m.,⁴ and the *nakshatra* was Anurādhā, by the equal space system and according to Garga for 3 h. 56 m., after mean sunrise.

17.—In the Pushpavanēśvara temple at Tiruppanḍurutti.⁵

- 1 Svasti śr[ī] [11*] Pū-[ma]ḷar [va]ḷar
 16 śrī-[k]ō-Chcha[ḍa]panmar-āṅṅa Tiribuvanachcha[k]karavattigaḷ śrī-
 Śu[n]dara-Pāṇḍiya[d]ḷ[va]ṅku yāṇḍu

¹ See *Ind. Ant.* Vol. XXI. p. 343, and Vol. XXII. p. 221.

² No. 186 of the Government Epigraphist's collection for 1894.

³ See *Ind. Ant.* Vol. XXI. p. 121, and Vol. XXII. p. 221.

⁴ The *tithi* ended later after true sunrise.

⁵ No. 186 of the Government Epigraphist's collection for 1894. The king took Kaṅṅanṅ from the Hoysals king and covered the temple at Śrīraṅgam with gold.

- 17 7āvadu Kanni-nāyaṅṅu [a]gha(pa)ra-gha(pa)kshattu trayōśāyiyum Nāyaṅṅu-
 kk[i]ḷamaiyum [p]eṅṅa Atta[t]tu nāl.

“In the 7th year (of the reign) of the glorious king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva,— on the day of Hasta, which corresponded to a Sunday and to the thirteenth *tithi* of the second fortnight of the month of Kanyā.”

The wording of this date, so far as I can see, is intrinsically wrong, because during the month of Kanyā a 13th *tithi* of the dark half can never be actually joined with the *nakshatra* Hasta. Judging by the preceding dates Nos. 11-16, a date of the 7th year of the king's reign should fall in A.D. 1257 or 1258; and during these two years the date would be correct only for the month of Tulā, which follows immediately upon the month of Kanyā. For the month of Tulā it regularly corresponds to Sunday, the 7th October A.D. 1257, which was the 10th day of the month of Tulā, and on which the 13th *tithi* of the dark half (of the month Āsvina) ended 7 h. 31 m., and the *nakshatra* was Hasta, by the equal space system and according to Garga for 22 h. 20 m., and by the Brahma-siddhānta for 19 h. 3 m., after mean sunrise.

18.—In the Vaidyanātha temple at Tirumalavāḍi.¹

- 1 Svasti śrī [11*] Kō-Chcha[ḍa]panmar Tiribuvanachchakkaravattigaḷ śrī-Sundara-
 Pāṇḍiya-
 2 dēvaṅku yāṇḍu 11āvadu Kaṅkaḍaga-nāyaṅṅu apara-pakshattu sha-
 3 shṭhiyum Viyāḷa-kkiḷamaiyum peṅṅa Āsvati-nāl.

“In the 11th year (of the reign) of king Jaṭavarman (*alias*) the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva,— on the day of Āsvini, which corresponded to a Thursday and to the sixth *tithi* of the second fortnight of the month of Karkāṭaka.”

As this date is of the month of Karkāṭaka of the 11th year, it should fall in A.D. 1261, if it is a date of Jaṭavarman Sundara-Pāṇḍya I.; but for that year it does not work out properly. In A.D. 1261 the 6th *tithi* of the dark half in the month of Karkāṭaka ended 7 h. 22 m. after mean sunrise of Tuesday, the 19th July, which was the 23rd day of the month of Karkāṭaka, and on which the *nakshatra* was Āsvini from 1 h. 58 m. after mean sunrise. As I obtain no really better result for other years of the same reign, and no satisfactory result at all for the 11th year of the reign of Jaṭavarman Sundara-Pāṇḍya II., I would take Tuesday, the 19th July A.D. 1261, to be the intended day, and assume that in the original date the weekday has been given incorrectly.

E.—MABAVARMAN KULASEKHARA I.

19.—In the Nellaiyappar temple at Tinnevely.²

- 2 Śrī-[k]ō Māraṅpanmar-ā[ṅṅa] Tribhuvanachcha-
 3 kkaravattigaḷ e[m*]maṇḍalamuṅ-gon-
 4 ḍ-aruliya śrī-Kulasēgaradēvaṅku [y]ā[ṇ*]-
 5 ḍu 27va[d]u Dhanu-nā[ya]ṅṅu 14 tiyadiyu[m]
 6 Vēḷi-kkiḷamaiyum apara-paksha[t]tu
 7 saptamiyum peṅṅa Ū[t]tira-nāl.

“In the 27th year (of the reign) of the glorious king Māraṅvarman *alias* the emperor of the three worlds, the glorious Kulasēkharadēva who was pleased to take every country,— on the day of Uttara-Phalguni, which corresponded to the seventh *tithi* of the second fortnight, and to a Friday, and to the 14th solar day of the month of Dhanu.”

¹ No. 71 of the Government Epigraphist's collection for 1895.

² No. 137 of the Government Epigraphist's collection for 1894.

Between A.D. 1200 and 1350 the only year for which this date would be correct, is 1294. In this year the Dhanuḥ-saṁkrānti took place 1 h. 23 m. after mean sunrise of Saturday, the 27th November, which was the first day of the month of Dhanuḥ. The 14th day of the month of Dhanuḥ therefore was Friday, the 10th December A.D. 1294; and on this day the 7th *tithi* of the dark half (of the month Mārgaśirsha) commenced 4 h. 45 m. after mean sunrise, and the *nakshatra* was Uttara-Phalguni, by the equal space system from 7 h. 13 m. after mean sunrise, and by the Brahma-siddhānta and according to Garga during the whole day.

20.—In the Jambukéśvara temple near Śrīraṅgam.¹

1 Svasti śrīḥ [||*] Tēri pōl
 4 śr[i]-kō Māra[pa]nma(=)āṇa Tiribuva[na]chchakkaravattiga! śrī-
 Ku[la]śégaradēvarkku yāṇḍu pattāvadu [Ma]gara-nā[ra*]ṅgu pū[r]vva-pakshattu
 daśamiyum
 5 yum² Budaṅ-ki[ama]iyu[m] peṅga [U]rōśaṇi-nā.

“In the tenth year (of the reign) of the glorious king Māravarman *alias* the emperor of the three worlds, the glorious Kulaśékharadēva,— on the day of Rōhiṇi, which corresponded to a Wednesday and to the tenth *tithi* of the first fortnight of the month of Makara.”

If the equivalent obtained under No. 19 for the date of the 27th year is the true equivalent of that date, this date No. 20, of the 10th year of the king's reign, will be expected to fall in about A.D. 1277. It actually corresponds to Wednesday, the 5th January A.D. 1278. This day was the 11th of the month of Makara; and on it the 10th *tithi* of the bright half (of the month Māgha) ended 7 h. 39 m. after mean sunrise, and the *nakshatra* was Rōhiṇi by the equal space system from 7 h. 13 m. after mean sunrise, and by the Brahma-siddhānta and according to Garga during the whole day.

21.—In the Nellaiyappar temple at Tinnevely.³

1 [Sva*]stī śrī [||] Śrī-kō Mārapaṅmar-āṇa Tribhuvanachchakra-
 2 [va*]rttiga! emmaṇḍalamu[n]=go[n]d-aruliya śrī-Kula-
 3 ségaradēvaṅku [y]āṇḍu [2]ḍvadu Vriśchika-nā[yaṅ]ṅgu
 4 irubbatt[i]ra[n]dā[n]-diyadiyṁ [a]para-[pa]kshattu [dv]itī-
 5 yaiyu[m] B[ud]aṅ-ki[ama]iyum p[er]ra Pupa[r]pūśa-n-
 6 [ā].

“In the [2]6th year (of the reign) of the glorious king Māravarman *alias* the emperor of the three worlds, the glorious Kulaśékharadēva who was pleased to take every country,— on the day of Punarvasu, which corresponded to a Wednesday, and to the second *tithi* of the second fortnight, and to the twenty-second solar day of the month of Vriśchika.”

The results obtained under Nos. 19 and 20 shew that this date, of the month of Vriśchika of the 26th year of the king's reign, must fall in about A.D. 1293. The date, in my opinion, actually corresponds to Wednesday, the 18th November A.D. 1293. In A.D. 1293 the Vriśchika-saṁkrānti took place 6 h. 58 m. after mean sunrise of Wednesday, the 28th October, which was the first day of the month of Vriśchika. The 22nd day of the month of Vriśchika therefore was Wednesday, the 18th November; and on this day the *nakshatra* was Punarvasu by the equal space system and according to Garga for 19 h. 42 m., and by the Brahma-siddhānta for 19 h. 3 m., after mean sunrise. But the *tithi* which ended 8 h. 39 m. after mean sunrise of the same day was the third (not the second) *tithi* of the dark half (of the month Mārgaśirsha).— I have no doubt that in the original date the second *tithi* (*dvitīyayum*) has been wrongly quoted instead of the third (*tritīyayum*).

¹ No. 25 of the Government Epigraphist's collection for 1891.

² Cancel *yum*.

³ No. 134 of the Government Epigraphist's collection for 1894.

22.—In the Śvētāraṇyēśvara temple at Kaḍappēri.¹

1 Kō Māra(ra)paṅmar Tiru(ri)[buva]ṅachchakravattika(ga)! śrī-
 Kulaśégaradēva[k*][k]u [y]āṇḍu 40 Mi(mi)ṇa-nāyaṅgu pūrvva-pakshattu
 dvitīyayum Śaṅi-kk[i]lam[ai]yum peṅga Rēvati-nā.

“In the 40th year (of the reign) of king Māravarman (*alias*) the emperor of the three worlds, the glorious Kulaśékharadēva,— on the day of Rēvati, which corresponded to a Saturday and to the second *tithi* of the first fortnight of the month of Mīna.”

The results obtained under the three preceding dates shew that this date, of the month of Mīna of the 40th year of the king's reign, must fall in either A.D. 1307 or A.D. 1308. It actually corresponds to Saturday, the 24th February A.D. 1308. On this day the Mīna-saṁkrānti took place 8 h. 45 m. after mean sunrise, and the day therefore was the first of the month of Mīna; the second *tithi* of the bright half (of the month Phālguna) ended 12 h. 32 m., and the *nakshatra* was Rēvati for 21 h. 40 m., after mean sunrise.

The four dates Nos. 19-22 together prove that the reign of Māravarman Kulaśékharā I. commenced (approximately) the 25th February and the 18th November A.D. 1298.

F.—JATAVARMAN SUNDARĀ-PANDYA II.

23.—In the Ṭamiśvara temple at Tāramaṅgalam.²

1 Svasti śrī [||*] Kōr-Chaḍapaṅmar-āṇa Tribhuvanachchakravattiga! śrī-Śundara-
 Pāṇḍiyadēvarkku yāṇḍu pad[i]mu(mū)ṅṅāvadu Simha-nāyaṅgu
 pūrvva-pakshattu trayōdaśiyum Tiṅga[ma]iyum peṅga Uttaraḍattu nā.

“In the thirteenth year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva,— on the day of Uttaraśāḍhā, which corresponded to a Monday and to the thirteenth *tithi* of the first fortnight of the month of Simha.”

24.—In the Ādhipuriśvara temple at Tiruvorriyūr.³

1 Svasti śrī [||*] Kōr-Chaḍapaṅmar-āṇa Tribhuvanachchakravattiga! śrī-
 2 Śundara-Pāṇḍiyadēvarkku yāṇḍu padinmu(mū)ṅṅāvadu Simha-nāyaṅgu
 3 a[pa]ra-pakshattu tritīyayum Veḷi-kk[i]lamaiyum peṅga Uttara-
 4 ṭād[i]-nā.

“In the thirteenth year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍiyadēva,— on the day of Uttara-Bhadrapadā, which corresponded to a Friday and to the third *tithi* of the second fortnight of the month of Simha.”

The two dates Nos. 23 and 24 are both stated to be of the month of Simha of the 13th year of the king's reign. In No. 23 the 13th *tithi* of the bright half is combined with a Monday and the *nakshatra* Uttaraśāḍhā, in No. 24 the third *tithi* of the dark half with a Friday and the *nakshatra* Uttara-Bhadrapadā. Of all the years between A.D. 1236 and 1325 there is only a single year that satisfies all the requirements of both dates, *viz.* the year 1289. For that year the date—

No. 23 corresponds to Monday, the 1st August A.D. 1289, which was the 4th day of the month of Simha, and on which the 13th *tithi* of the bright half (of the month Śrāvaṇa) ended 5 h. 23 m., and the *nakshatra* was Uttaraśāḍhā, by the equal space system and according to Garga for 7 h. 53 m., and by the Brahma-siddhānta for 1 h. 19 m., after mean sunrise; and the date—

¹ No. 134 of the Government Epigraphist's collection for 1896.

² No. 24 of the Government Epigraphist's collection for 1800.

³ No. 400 of the Government Epigraphist's collection for 1896.

No. 24 corresponds to **Friday, the 5th August A.D. 1289**, which was the 8th day of the month of **Siṃha**, and on which the third *tithi* of the dark half (of the month **Śrāvaṇa**) ended 19 h. 8 m. after mean sunrise, while the *nakshatra* was **Uttara-Bhadrapadā**, according to Garga and by the Brahma-siddhānta the whole day, and by the equal space system from 1 h. 19 m. after mean sunrise.

I may add that, if these were dates of the reign of Jaṭavarman Sundara-Pāṇḍya I., they would fall in A.D. 1263, but that either of them would be incorrect both for that year and for A.D. 1264. For A.D. 1262 No. 24 would be correct, but not No. 23.

25.—In the Ṭamiśvara temple at Tāramaṅgalam.¹

1 Svasti śrīḥ [||*] Kōṛ-Chchaḍapaṇmar-āṇa Tribhuvanachchakkaravatt[i]ga[||] śr[!]-
Śutta(nda)ra-Pāṇḍiyadēvarkku yāṇḍu. Gāvadu āṇāvadu Karkāḍaga-nāyarr[u]

2 pūrvva-pakshattu chat[u]rtthiyum Tīngāṭ-ki[la]maiyum peṇṇa Utirattu nā.
“In the 6th—sixth—year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,—on the day of **Uttara-Phalguni**, which corresponded to a **Monday** and to the fourth *tithi* of the first fortnight of the month of **Karkāṭaka**.”

Considering that the two preceding dates Nos. 23 and 24, which are said to be of the 13th year of the king's reign, fall in A.D. 1289, this date, which is of the 6th year of the reign, would in the first instance be expected to fall in A.D. 1282. But the date apparently corresponds to **Monday, the 21st July A.D. 1281**, which was the 25th day of the month of **Karkāṭaka**, and on which the 4th *tithi* of the bright half (of the month **Śrāvaṇa**) ended 9 h. 30 m., and the *nakshatra* was **Uttara-Phalguni**, by the equal space system and according to Garga for 7 h. 51 m., and by the Brahma-siddhānta for 4 h. 36 m., after mean sunrise.

Here again, if this date belonged to the reign of Jaṭavarman Sundara-Pāṇḍya I., it would be expected to fall in A.D. 1256; but for that year it would be incorrect.

28.—In the Jayaṅgaṇḍanātha temple at Maṇṇārguḍi.²

14 [Ś]rī-kō-Chchaḍapaṇmar-āṇa Tiribuvanachchak-
15 karavattiga! śrī-Sundara-Pāṇḍiyadē-
16 varkku yāṇḍu paṇṇiraṇḍāvadu Kaṇ-
17 ṇi-[u]āyarru pūrvva-pakshattu trayōḍāsiyu[m]
18 [V]eḷi-[kk]iḷamaiyum peṇṇa Śōḍi-nā.

“In the twelfth year (of the reign) of the glorious king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,—on the day of **Svāti**, which corresponded to a **Friday** and to the thirteenth *tithi* of the first fortnight of the month of **Kanyā**.”

The wording of this date is intrinsically wrong, because during the month of **Kanyā** a 13th *tithi* of the bright half can never be joined with the *nakshatra* **Svāti**. Supposing the *nakshatra* to have been given correctly, the *tithi* in the month of **Kanyā** would in all probability be the third of the bright half. And for this *tithi* the date regularly corresponds to **Friday, the 12th September A.D. 1287**, which was the 15th day of the month of **Kanyā**, and on which the third *tithi* of the bright half (of the month **Āśvina**) ended 4 h. 7 m., and the *nakshatra* was **Svāti** by the equal space system for 5 h. 55 m., after mean sunrise.

Here too, if the date belonged to the reign of Jaṭavarman Sundara-Pāṇḍya I., it would be expected to fall in A.D. 1262; but for that year it would be incorrect (also for the third *tithi* of the bright half).

¹ No. 25 of the Government Epigraphist's collection for 1900.

² No. 90 of the Government Epigraphist's collection for 1897.

27.—In the Ṭamiśvara temple at Tāramaṅgalam.¹

1 Svasti śrī [||*] Kōṛ-Chchaḍapaṇmar-āṇa Tiribuvanachchakkaravattiga! śrī-Sundara-
Pāṇḍiyadēvarkku yāṇḍu paṇḍiḷāvaduk-ēdirāvadu Rishabha-nāyarru [pū] . .
[Ti]ṅgaṭ-kiḷamaiyum peṇṇa Pūṣattu nā.

“(In the year) opposite to the fourteenth year (of the reign) of king Jaṭavarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,—on the day of **Pushya**, which corresponded to a **Monday**, [of the first fortnight] of the month of **Rishabha**.”

Judging by the dates Nos. 25 and 26, this date, which is of the year opposite to the 14th, *i.e.* of the 15th year, of the king's reign, would in the first instance be expected to fall in A.D. 1290. Though the number of the *tithi* is broken away or illegible, the fact that on the *tithi* in question during the month of **Rishabha** the *nakshatra* was **Pushya**, permits us to conjecture that the *tithi* was approximately the fifth *tithi* of the bright half of the month **Jyaiṣṭha**, or perhaps the seventh *tithi* of the bright half of the month **Vaiśākha**. Now the year A.D. 1290 does contain a day which satisfies all the requirements of the date, and which I therefore take to be its proper equivalent. It is **Monday, the 15th May A.D. 1290**, which was the 20th day of the month of **Rishabha**, and on which [the 5th *tithi*] of the bright half (of the month **Jyaiṣṭha**) ended 4 h. 24 m., and the *nakshatra* was **Pushya** by the equal space system and according to Garga for 0 h. 39 m., after mean sunrise (and somewhat longer after true sunrise).

If this date were one of the reign of Jaṭavarman Sundara-Pāṇḍya I., it would be expected to fall in A.D. 1265 or 1266. In A.D. 1265 the month of **Rishabha** contained no **Monday** on which the *nakshatra* was **Pushya**. In A.D. 1266, during the month of **Rishabha**, the *nakshatra* was **Pushya** from 5 h. 16 m. after mean sunrise of **Monday, the 10th May**; but the 10th May A.D. 1266 would have belonged to the 16th, not the 15th, year of the reign of Jaṭavarman Sundara-Pāṇḍya I.

The difficulty presented by the five dates Nos. 23-27 is this that, while according to the three dates Nos. 25-27 the reign of Jaṭavarman Sundara-Pāṇḍya II. would have commenced between approximately the 13th September A.D. 1275 and the 15th May A.D. 1276, by the two dates Nos. 23 and 24, which are both of the 13th year, it could not have commenced before approximately the 6th August A.D. 1276. I can reconcile this discrepancy only by the assumption that in the dates Nos. 23 and 24 the 13th year has been wrongly quoted instead of ‘the year opposite to the 13th,’ *i.e.* the 14th year, an assumption which would make the king's reign commence between (approximately) the 13th September A.D. 1275 and the 15th May A.D. 1276, as suggested by the dates Nos. 25-27.

G.—MARAVARMAN KULASEKHARA II.

28.—In the Nellaiyappar temple at Tinnevely.²

1 Śrī-kō M[ā]raṇmar-āṇa [Tr]ibhuvanachchakravattiga! śrī-
Kulaśēgaradēvarkku yāṇḍu eṭṭāvadu Vriśchika-nāyarru-ppadiṇḷān-
2 [diyadiyu]m [apara]-cha(pā)kshatta(ttu) navamiyum [Sa]ṇ[i]-kkilaiyum pe[ṇ]ra
Utirattu nā.

“In the eighth year (of the reign) of the glorious king **Māraṇmarman** *alias* the emperor of the three worlds, the glorious **Kulaśēkharadēva**,—on the day of **Uttara-Phalguni**, which corresponded to a **Saturday**, and to the ninth *tithi* of the second fortnight, and to the seventeenth solar day of the month of **Vriśchika**.”

¹ No. 23 of the Government Epigraphist's collection for 1900.

² No. 123 of the Government Epigraphist's collection for 1894.

Between A.D. 1200 and 1400 the only year for which this date would be correct, is 1321. In this year the *Vṛiśchika-samkrānti* took place 12 h. 48 m. after mean sunrise of Wednesday, the 28th October. The 17th day of the month of *Vṛiśchika* therefore was Saturday, the 14th November A.D. 1321; and on this day the 9th *tithi* of the dark half (of the month *Kārttika*) ended 19 h. 50 m., and the *nakshatra* was *Uttara-Phalguni*, by the equal space system from 3 h. 17 m., according to Garga from 8 h. 32 m., and by the *Brahma-siddhānta* from 13 h. 8 m., after mean sunrise.

If this date were one of *Māravarma* *Kulaśekhara* I, it would fall in either A.D. 1275 or 1276; I need hardly say that for both these years it would be incorrect.

29.—In the *Bṛihadīśvara* temple at *Gaṅgaikoṇḍaśōlapuram*.¹

- 1 Svasti śrīḥ [||*] Kō Mā vaṇachchakkaravattigaḥ śrīḥ(śrī)-
Kulaśē[gara]dēvaṅku yāṇḍu 4vadu Katka(rka)ṭaka-nāyaṅgu pūrvva-pakshattu
chatu[r]ddasiyum Śaṇi-[k]kilamaiyum [p]eṅṅa
2 Uttirāḍattu nāḷ.

“In the 4th year (of the reign) of king *Māravarma* (*alias*) the emperor of the three worlds, the glorious *Kulaśekhara*dēva,— on the day of *Uttarāshāḍhā*, which corresponded to a Saturday and to the fourteenth *tithi* of the first fortnight of the month of *Karkāṭaka*.”

If the equivalent obtained under No. 28 for the date of the 8th year is the true equivalent of that date, this date No. 29, of the 4th year of the king's reign, will in the first instance be expected to fall in A.D. 1317. It actually corresponds to Saturday, the 23rd July A.D. 1317. This day was the 26th of the month of *Karkāṭaka*; and on it the 14th *tithi* of the bright half (of the month *Śrāvaṇa*) ended 22 h. 22 m., and the *nakshatra* was *Uttarāshāḍhā*, by the equal space system and according to Garga for 15 h. 6 m., and by the *Brahma-siddhānta* for 8 h. 32 m., after mean sunrise.

I may add that, if this were a date of *Māravarma* *Kulaśekhara* I, it would fall in either A.D. 1271 or 1272, but that for both these years it would be incorrect.

30.—In the *Bṛihadīśvara* temple at *Gaṅgaikoṇḍaśōlapuram*.²

- 1 [Kō] Māraṇṇamar Tribhuvanachchakravattigaḥ śr[ī]-Kulaśēgaradēvaṅku
yā[ṇḍu] 5āvadu Ś[i]mīna-nāyaṅgu
2 pūrvva-pakshattu trayōdasiyum Tīnga yum peṅṅa Pūṣattu nāḷ.

“In the 5th year (of the reign) of king *Māravarma* (*alias*) the emperor of the three worlds, the glorious *Kulaśekhara*dēva,— on the day of *Pushya*, which corresponded to a Monday and to the thirteenth *tithi* of the first fortnight of the month of *Siṁha*.”

The wording of this date is intrinsically wrong, because during the month of *Siṁha* the *nakshatra* on the 13th *tithi* of the bright half can never be *Pushya* or any *nakshatra* near *Pushya*. The probability is that the month of the date was *Mīna*; and actual calculation shews, not only that it was *Mīna*, but also that the word *Pūṣattu* of the text should be altered to *Pūṛattu*, i.e. that the *nakshatra* was *Pūrvva-Phalguni*, not *Pushya*.

I have no doubt that the proper equivalent of the date is Monday, the 5th March A.D. 1319. This was the 10th day of the month of *Mīna*; and on it the 13th *tithi* of the bright half (of the month *Phālguna*) ended 3 h. 54 m. after mean sunrise, and the *nakshatra* was *Pūrvva-Phalguni*, by the equal space system during the whole day, according to Garga for 12 h. 29 m., and by the *Brahma-siddhānta* for 7 h. 53 m., after mean sunrise.

¹ No. 75 of the Government Epigraphist's collection for 1892.

² No. 78 of the Government Epigraphist's collection for 1892.

The three dates Nos. 28-30 together prove that the reign of *Māravarma* *Kulaśekhara* II. commenced between (approximately) the 6th March and the 23rd July A.D. 1314.

For convenience of reference I now give a list of the above thirty dates, in the order of the results obtained, with the approximate commencement of the reign of each king put in brackets after his name.

A.—*Jaṭāvarma* *Kulaśekhara* (February 27—November 29, A.D. 1190).

- No. 2. Year opp.¹ to 13 (i.e. 14th year): February 26, A.D. 1204.
No. 1. Year 12 opp. to 13, or 25th year: November 29, A.D. 1214.

B.—*Māravarma* *Sundara-Pāṇḍya* I. (March 29—September 4, A.D. 1216).

- No. 6. 7th year: March 13, A.D. 1223.
No. 5. 9th year: March 28, A.D. 1225.
No. 3. Year opp. to year opp. to 17 (i.e. 19th year): September 4, A.D. 1234.
No. 4. Year opp. to year opp. to 17 (i.e. 19th year): February 19, A.D. 1235.

C.—*Māravarma* *Sundara-Pāṇḍya* II. (June 15, A.D. 1238—January 18, A.D. 1239).

- No. 10. 11th year: April 25, A.D. 1249.
Nos. 7 and 8. Year opp. to year opp. to 11 (i.e. 13th year): January 18, A.D. 1251.
No. 9. Year opp. to year opp. to 11 (i.e. 13th year): June 14, A.D. 1251.

D.—*Jaṭāvarma* *Sundara-Pāṇḍya* I. (April 20—28, A.D. 1251).

- No. 11. 2nd year: March 27, A.D. 1253.
No. 12. 2nd year: April 19, A.D. 1253.
No. 13. 3rd year: October 29, A.D. 1253.
No. 17. 7th year: October 7, A.D. 1257.
No. 14. 9th year: April 29, A.D. 1259.
No. 15. 9th year: June 15, A.D. 1259.
No. 16. 10th year: April 28, A.D. 1260.
No. 18. 11th year: July 19, A.D. 1261.

E.—*Māravarma* *Kulaśekhara* I. (February 25—November 18, A.D. 1268).

- No. 20. 10th year: January 5, A.D. 1278.
No. 21. 26th year: November 18, A.D. 1293.
No. 19. 27th year: December 10, A.D. 1294.
No. 22. 40th year: February 24, A.D. 1308.

F.—*Jaṭāvarma* *Sundara-Pāṇḍya* II. (September 13, A.D. 1275—May 15, A.D. 1276).

- No. 25. 6th year: July 21, A.D. 1281.
No. 26. 12th year: September 12, A.D. 1287.
No. 23. 13th [for 14th] year: August 1, A.D. 1289.
No. 24. 13th [for 14th] year: August 5, A.D. 1289.
No. 27. [Year] opp. to 14 (i.e. 15th year): May 15, A.D. 1290.

¹ I.e. 'opposite.'

G.—Māravarma Kulasēkhara II. (March 6—July 23, A.D. 1314).

No. 29. 4th year : July 23, A.D. 1317.

No. 30. 5th year : March 5, A.D. 1319.

No. 28. 8th year : November 14, A.D. 1321.

(To be continued.)

No. 2.—DATES OF PANDYA KINGS.

By F. KIELHORN, PH.D., LL.D., C.I.E.; GÜTTINGEN.

(Continued from Vol. VI. page 315.)

I herewith publish thirteen more Pāṇḍya dates, the European equivalents of which may be given with certainty. Eight of these dates, in addition to regnal years, also give the Śaka years in which the dates fell, and the three latest dates, Nos. 41-43, also quote the corresponding Jovian years, according to the southern luni-solar system. I have still a number of other dates — of apparently twelve different Pāṇḍya kings — the publication of which may be deferred to the time when more dates of the same kings have been discovered.¹

A.—VIRA-PANDYA.

31.—In the Kailāsapati temple at Śrivaikuṇṭham.²

2 śrī-Vi(vi)ra-Pāṇḍiyadē[va]rkku yā-
3 ndu 15vadu Kā[r*]tt[i]gai-mā[da*]ttu 13 tūyad[i]yum apara-pakshattu
saptam[i]yum Viyā[la-ki]lamaiyum peṅga Magattu nā.

“In the 15th year (of the reign) of the glorious Vira-Pāṇḍyadēva, — on the day of Maghā, which corresponded to a Thursday, and to the seventh *tithi* of the second fortnight, and to the 13th solar day of the month of Kārttigai.”

Between A.D. 1200 and 1500 the only year for which this date would be correct, is 1267. In this year the Vṛiśchika-samkrānti took place 13 h. 33 m. after mean sunrise of Friday, the 28th October. The 13th day of the month of Vṛiśchika (or Kārttigai) therefore was Thursday, the 10th November A.D. 1267; and on this day the 7th *tithi* of the dark half (of the month Kārttika) ended 8 h. 9 m., and the *nakshatra* was Maghā, by the equal space system for 19 h. 42 m., by the Brahma-siddhānta for 5 h. 16 m., and according to Garga for 7 h. 53 m., after mean sunrise.

¹ The date No. 32, here published, has been sent to me by Dr. Hultsch quite recently. It proves the correctness of the equivalent which I had previously ascertained for the date No. 31, but which for want of confirmation I did not wish to publish with my first series of Pāṇḍya dates.

² No. 174 of the Government Epigraphist's collection for 1895.

32.—In the Akshēvara temple at Achoharapākkam.¹

1 Svasti śrī [||*] Tribhuvanach[cha]kra[va]ttiga[|] śrī[|]-Vi[ra]-Pāṇḍi[ya]dēvaṅku
[y]āṇḍu 7[va]du Kaṅkaḍaga-ṅāyaṅgu apa[ra]-pakshattu N[ā]-
2 yaṅgu-k[i]lamai[yu]m saptamiyum peṅga Śāvati-ṅā[|].

“In the 7th year (of the reign) of the emperor of the three worlds, the glorious Vira-Pāṇḍyadēva, — on the day of Śāvini, which corresponded to a Sunday and to the seventh *tithi* of the second fortnight of the month of Karkatāka.”

If the equivalent found for the date No. 31, which is of the 15th year of the king's reign, is the true equivalent of that date, this date No. 32, which is of the 7th year of the same reign, will in the first instance be expected to fall in A.D. 1259. The date actually corresponds to Sunday, the 13th July A.D. 1259, which was the 17th day of the month of Karkatāka, and on which the 7th *tithi* of the dark half (of the month Śāhāḍha) ended 11 h. 3 m., and the *nakshatra* was Śāvini for 19 h. 3 m., after mean sunrise.

The two dates Nos. 31 and 32 together shew that the reign of Vira-Pāṇḍya commenced between (approximately) the 11th November A.D. 1252 and the 13th July A.D. 1253.

B.—MĀRAVARMAN PARAKRAMA-PANDYA.

33.—In the Ṛishabhēvara temple at Śeṅgama.²

1 Svasti śrīh [||*] Śakā[bda[m*] 1262ṅ mēl kō Māraṅpaṅmar T[|]ru(ri)bu-
[va*]ṅṅasakravattiga[|] śrī-Parākrama-Pāṇḍiyadēvaṅku yāṇḍu 6[vadu] Vṛiś-
chika-nāyaṅgu pūrvva-pakshattu dvādaśiyum Budaṅ-ki[|]lamaiyum peṅga*]
2 Uttaraṅtādi-n[ā][|]*.

“After the Śaka year 1262 (*had passed*), in the 6th year (of the reign) of king Māravarma (*alias*) the emperor of the three worlds, the glorious Parākrama-Pāṇḍyadēva, — on the day of Uttara-Bhadrapadā, which corresponded to a Wednesday and to the twelfth *tithi* of the first fortnight of the month of Vṛiśchika.”

For Śaka-Samvat 1262 expired this date regularly corresponds to Wednesday, the 1st November A.D. 1340, which was the 5th day of the month of Vṛiśchika, and on which the 12th *tithi* of the bright half (of the month Kārttika) ended 22 h. 56 m., and the *nakshatra* was Uttara-Bhadrapadā for 1 h. 19 m., after mean sunrise.

34.—In the Kailāsanātha temple at Maṅṅaṅḍi.³

1 Svast[i] śr[ī] [||*] Kō [M]āraṅpaṅmar Tr[|]bhu[va]nachakra[vatti]ga[|] [śrī]-
Parākrama-Pā[ṅ]ḍiyadēvaṅku yā[ṅ]ḍu 8vadu] Dhanu-[n]āyaṅgu apara-
pakshattu navamiyu[m] V[e]ḥi-kk[i]lam[ai]yum peṅ[ra]
2 Attattu nā.

“In the [8th] year (of the reign) of king Māravarma (*alias*) the emperor of the three worlds, the glorious Parākrama-Pāṇḍyadēva, — on the day of Hastā, which corresponded to a Friday and to the ninth *tithi* of the second fortnight of the month of Dhanus.”

If this date were one of the 8th year of the king's reign, it ought, in accordance with the result obtained under No. 33, to fall in Śaka-Samvat 1263 or 1264 expired; but for either of these years it would be incorrect. The date, in my opinion, is really one of the 18th (*not* the 8th)

¹ No. 243 of the Government Epigraphist's collection for 1901.

² No. 113 of the Government Epigraphist's collection for 1900.

³ No. 100 of the Government Epigraphist's collection for 1897.

year of the king's reign and corresponds— for Śaka-Saṃvat 1274 expired—to **Friday, the 30th November A.D. 1352**, which was the 4th day of the month of **Dhanu**, and on which the 9th *tithi* of the dark half (of the month **Mārgaśīrṣa**) commenced 0 h. 17 m., and the *nakshatra* was **Hasta**, by the Brahma-siddhānta from 0 h. 39 m., and by the equal space system and according to Garga from 2 h. 38 m., after mean sunrise.

The two dates Nos. 33 and 34 would shew that the reign of **Māra-varman Parākrama-Pāṇḍya** commenced between (approximately) the 1st December A.D. 1334 and the 1st November A.D. 1335.

C.—JATAVARMAN PARAKRAMA-PANDYA.

35.—In the Chōlēsvara temple at Chōlapuram near Nagercoil.¹

- 1 ॐ Svasti śri [||*] Śakābdam 1293ṇ mēl
 3 śr[i-k]ō-Chchaḍaipanmar=āṇa Tribhuvana-
 4 chhakra-vartigaḷ śri-Parākrama-Pāṇḍiyadēvar iyāṇḍu añjā-
 5 vadiṇ edir pattāvadu Makara-ñāyirru pūrvva-pakshattu tṛiti(tī)ai-
 6 yum Vell[i].kki[la]m[aiyum] peṇṇa Śadayattin nā.

"After the Śaka year 1293 (*had passed*), in the tenth (*year*) opposite to the fifth year (*of the reign*) of the glorious king **Jaṭavarman** *alias* the emperor of the three worlds, the glorious **Parākrama-Pāṇḍyadēva**,—on the day of **Śatabhishaj**, which corresponded to a **Friday** and to the third *tithi* of the first fortnight of the month of **Makara**."

For Śaka-Saṃvat 1293 expired this date regularly corresponds to **Friday, the 9th January A.D. 1372**, which was the 14th day of the month of **Makara**, and on which the third *tithi* of the bright half (of the month **Māgha**) ended 19 h. 59 m., and the *nakshatra* was **Śatabhishaj**, by the equal space system for 20 h. 21 m., according to Garga for 11 h. 50 m., and by the Brahma-siddhānta for 9 h. 12 m., after mean sunrise.

Being of the 10th opposite to the 5th, *i.e.* of the 15th year of the king's reign, the date would shew that the reign of **Jaṭavarman Parākrama-Pāṇḍya** commenced between (approximately) the 10th January A.D. 1357 and the 9th January A.D. 1358.

D.—JATILAVARMAN PARAKRAMA-PANDYA (ABIKESARIDEVA).

36.—In the Kuttalanātha temple at Kuttalam.²

- 1 Śakābdam 1377 mēl [ś]ellāniṇṇa
 Parākkirā[ma*]-Pāṇḍiyadēvaṅku yāṇḍu śilvadiṇ edir y[ī]raṇḍāvadu
 Mi(mi)ṇa-ñāyayru irubattēṭṭān-diyadiyum pūrvva-pakshat[t]u shashayam³ Tiāgat-
 [k]ilamaiya(yu)m [pe]ṇṇa Mṛigaśīrṣa[ir]shattu n[ā].

"In the second (*year*) opposite to the 31st year (*of the reign*) of **Parākrama-Pāṇḍyadēva**, which was current after the Śaka year 1377 (*had passed*),—on the day of **Mṛigaśīrṣa**, which corresponded to a **Monday**, and to the sixth *tithi* of the first fortnight, and to the twenty-eighth solar day of the month of **Mina**."

In solar Śaka-Saṃvat 1377 current the **Mina-saṃkrānti** took place 1 h. 30 m. after mean sunrise of Tuesday, the 25th February A.D. 1455, which was the first day of the month of **Mina**. The 28th day of the month of **Mina** therefore was **Monday, the 24th March A.D. 1455**; and on this day the 6th *tithi* of the bright half (of the month **Chaitra** of luni-solar Śaka-Saṃvat 1377 expired) ended 15 h. 44 m., and the *nakshatra* was **Mṛigaśīrṣa**, by the equal

¹ No. 30 of the Government Epigraphist's collection for 1896.
² No. 203 of the Government Epigraphist's collection for 1895.

³ Read *shashāyiyum*.

space system and according to Garga for 10 h. 30 m., and by the Brahma-siddhānta for 9 h. 12 m., after mean sunrise.

37.—In the Viśvanātha temple at Tenkāśi.¹

- 1 Svasti śri [||*] Kō Jaṭilavarmanmar=āṇa Tribhuvanaścha(cha)kravartigaḷ śri-
 Parākrama-Pāṇḍiyadēvaṅku yāṇḍu muppattonṇāvadīṇ edirāvadu Ka[r]kkaṭaka-ñāyayru
 irubattōṇṇān=diyadiyum pūrvva-pakshattu chcha(cha)turddaśiyum Tiāgat-kilamaiyum
 peṇṇa Uttirāḍattu nā.

"(In the year) opposite to the thirty-first year (*of the reign*) of king **Jaṭilavarman** *alias* the emperor of the three worlds, the glorious **Parākrama-Pāṇḍyadēva**,—on the day of **Uttarāśāḍhā**, which corresponded to a **Monday**, and to the fourteenth *tithi* of the first fortnight, and to the twenty-first solar day of the month of **Karkaṭaka**."

Judging by the preceding date, this date would be expected to fall in about A.D. 1454; in my opinion, it corresponds to the 19th July A.D. 1453. In A.D. 1453 the **Karkaṭaka-saṃkrānti** took place 19 h. 36 m. after mean sunrise of the 28th June. The 21st day of the month of **Karkaṭaka** therefore was the 19th July; and on this day the 14th *tithi* of the bright half (of the month **Śrāvaṇa**) ended 14 h. 14 m., and the *nakshatra* was **Uttarāśāḍhā**, by the equal space system and according to Garga for 18 h. 24 m., and by the Brahma-siddhānta for 11 h. 50 m., after mean sunrise. But the day found was a **Thursday**, not a **Monday**.—Since in the whole of the 15th century A.D. there is not a single year for which the date, as recorded by the writer, would be correct, I take **Thursday, the 19th July A.D. 1453**, to be its proper equivalent, and have no doubt that the writer has quoted the week-day incorrectly.

38.—In the Kuttalanātha temple at Kuttalam.²

- 1 Svasti śri [||*] Kō [Ś]eḍilavaṇmar=ā[na] Tribhuvanaścha[cha]kravatt[i]gaḷ śr[i]-
 Parākk[i]rama-Pāṇḍi[yad]ēvaṅku yāṇḍu muppattonṇ[ā]vadiṇ edir nā[ī]ḷ[va]du
 Mi(mi)ṇa-ñāyayru iru[badān=diya]di[ya]m [apa]ra-[pa]kshattu pañchamiy[u]m
 Budaṇ-kilamaiyum peṇṇa Anisha[tti-n]ā.

"In the fourth (*year*) opposite to the thirty-first year (*of the reign*) of king **Jaṭilavarman** *alias* the emperor of the three worlds, the glorious **Parākrama-Pāṇḍyadēva**,—on the day of **Anurādhā**, which corresponded to a **Wednesday**, and to the fifth *tithi* of the second fortnight, and to the twentieth solar day of the month of **Mina**."

Judging by the preceding dates, this date would be expected to fall in about A.D. 1457; it actually corresponds to **Wednesday, the 18th March A.D. 1457**. In A.D. 1457 the **Mina-saṃkrānti** took place 13 h. 55 m. after mean sunrise of Thursday, the 24th February. The 20th day of the month of **Mina** therefore was **Wednesday, the 16th March**; and on this day the 5th *tithi* of the dark half (of the month **Phālguna**) ended 10 h. 25 m., and the *nakshatra* was **Anurādhā**, by the equal space system and according to Garga for 4 h. 36 m., and by the Brahma-siddhānta for 0 h. 39 m., after mean sunrise.

39.—In the Viśvanātha temple at Tenkāśi.³

- 1 Sakābdam āyirattu-muṇṇūru-epbattu-onṇi mēṇ=chellāniṇṇa
 Ar[ī]keśar[ī]dēvar=āṇa Parākkirāma-Pāṇḍiyadēvaṅku yāṇḍu 31[va]du edir
 Śvadu Miduṇa-ñāyayru irubattumu(mā)-

¹ No. 195 of the Government Epigraphist's collection for 1895.

² No. 204 of the Government Epigraphist's collection for 1895.

³ No. 199 of the Government Epigraphist's collection for 1895.

2 ṅrān-diyadiyum pūruva-pakshattu-tde(tta)śamiyuyum¹ Budāṅ-kīlāmayum peṅṅā Śōdi-nā.

"In the 8th (year) opposite to the 31st year (of the reign) of Arikēsāridēva alias Parākrama-Pāṅḍyādēva, which was current after the Śaka year one thousand three hundred and eighty-one (*had passed*),—on the day of Svāti, which corresponded to a Wednesday, and to the tenth *tithi* of the first fortnight, and to the twenty-third solar day of the month of Mithuna."

The three dates Nos. 36-38 shew that the reign of Jaṭilavarman Parākrama-Pāṅḍya commenced between (approximately) the 25th March and the 19th July A.D. 1422. A date of the month of Mithuna of the 8th year opposite to the 31st year, *i.e.* of the 39th year, of the same reign should therefore fall in either A.D. 1460 or 1461. Now assuming this date No. 39 to be really one of the 39th regnal year, its proper equivalent could only be Wednesday, the 17th June A.D. 1461. On this day the 10th *tithi* of the bright half (of the month Āśbhāḍha) ended 17 h. 51 m., and the *nakṣatra* was Svāti, by the equal space system for 19 h. 42 m., by the Brahma-siddhānta for 3 h. 17 m., and according to Garga for 7 h. 13 m., after mean sunrise. But the 17th June A.D. 1461 was the 21st (not the 23rd) day of the month of Mithuna,² and fell in Śaka-Saṁvat 1383 (not 1381) expired.

No better result would be obtained if we were to assume the writer to have quoted the Śaka year correctly and the regnal year incorrectly. Śaka-Saṁvat 1381 expired would yield no satisfactory result at all. For Śaka-Saṁvat 1381 *current* the date might be said to correspond to Wednesday, the 21st June A.D. 1458, on which day the 10th *tithi* of the bright half (of the month Āśbhāḍha) ended 15 h. 35 m., and the *nakṣatra* was Svāti, by the equal space system for 10 h. 30 m., after mean sunrise. But the 21st June A.D. 1458 was the 24th (not the 23rd) day of the month of Mithuna³ (and would fall in the 36th or 37th, not the 39th year of the king's reign).

The date therefore is certainly incorrect; but I have hardly any doubt that its incorrectness is caused by the writer's interchanging the last figures of the numbers of the Śaka year and of the solar day (*i.e.* by his giving us erroneously 1381 instead of 1383, and 23 instead of 21), and that the day intended is Wednesday, the 17th June A.D. 1461. And accepting this result as correct, it would follow that the king's reign commenced between (approximately) the 18th June and the 19th July A.D. 1422.

E.—JATILAVARMAN PARAKRAMA-PANDYA (KULASEKHARA).

40.—In the Viśvanātha temple at Teṅkāśi.⁴

- 1 Śubham-astu [||*] Śākābdam 1421¹ mēl śellāniṅṅā [||*] svasti śrī [||*] Kō Jaṭilavarmmar-āna Tribhuvanachchakravattiga! Kā[r*]ttagai-nā! piṅṅanda Parākka[ra*]ma-Pāṅḍiyādēvar
2 āna Kulasegarādēvar nam yāṅḍu irubāḍāvadu Virichchiga-nāyāṅṅa padipaṅṅān-diyadiyum ḥpūrvvava-pakshattu dvādaśiyum Bṛihaspati-vāramum peṅṅā
3 Rēba(va)ti-nā.

"In the twentieth year (of the reign) of king Jaṭilavarman alias the emperor of the three worlds, Parākrama-Pāṅḍyādēva alias Kulasekharādēva who was born on the day of Kṛittikā, which (year) was current after the Śaka year 1421 (*had passed*),—on the day of Rēvati, which corresponded to a Thursday, and to the twelfth *tithi* of the first fortnight, and to the fifteenth solar day of the month of Vṛiśchika."

¹ Cancel the second *yam*.

² In A.D. 1461 the Mithuna-saṁkrānti took place 6 h. 41 m. after mean sunrise of Thursday, the 28th May.

³ In A.D. 1458 the same Saṁkrānti took place 12 h. 4 m. after mean sunrise of Sunday, the 28th May.

⁴ No. 197 of the Government Epigraphist's collection for 1895.

⁵ Read *pūrvva*.

In Śaka-Saṁvat 1421 expired the Vṛiśchika-saṁkrānti took place 13 h. 53 m. after mean sunrise of Wednesday, the 30th October A.D. 1499. The 15th day of the month of Vṛiśchika therefore was Thursday, the 14th November A.D. 1499, and on this day the 12th *tithi* of the bright half (of the month Mārgaśīraha) ended 16 h. 13 m. after mean sunrise. On the day found the *nakṣatra* by our Tables ceased to be Rēvati exactly at mean sunrise, but it may be reasonably assumed that by other Tables the moon continued in Rēvati for some short time after mean sunrise.

Being of the 20th year of the king's reign, the date would shew that the reign of Jaṭilavarman Parākrama-Pāṅḍya Kulaśekhara commenced between (approximately) the 15th November A.D. 1479 and the 14th November A.D. 1490.

F.—JATILAVARMAN SRIVALLABHA.

41.—In the Viśvanātha temple at Teṅkāśi.¹

- 2 Śākābdam āyirattu-nānūṅṅu-aṅṅattu-aṅṅadil mēṅṅ-chellāniṅṅā
4 kō Jaṭilavarmmar-āna Tribhuvanachchakrava[r]tti Kōnērmaikoṅḍā[ḥ]ṅ
5 Perumā! Śrivallabhadēva[r]ku yāṅḍu mu(mū)ṅṅāvadu [E]vīlāmbi-va[r]ṅṅam
Vṛiśchika-[ravi irubā]ḥ[tu]-aṅṅadā[n]-diyadiyum [a]para-pakshattu [ḥ]kā[da]ḥṅiyu-
6 m Budha-vāramum peṅṅā Śōdi-nā.

"In the [H]ēvilāmbin year, the third year (of the reign) of king Jaṭilavarman alias the emperor of the three worlds, Kōnērmaikoṅḍān Perumā! Śrivallabhadēva, which (year) was current after the Śaka year one thousand four hundred and fifty-nine (*had passed*),—on the day of Svāti, which corresponded to a Wednesday, and to the eleventh *tithi* of the second fortnight, and to the twenty-ninth solar day of (the month in which) the sun (was) in Vṛiśchika."

The Jovian year Hēvilāmbin (Hēmalamba) by the southern luni-solar system corresponds to Śaka-Saṁvat 1459 expired. In this year the Vṛiśchika-saṁkrānti took place on Tuesday, the 30th October A.D. 1537, by the Ārya-siddhānta 9 h. 48 m., and by the Sūrya-siddhānta 12 h. 30 m., after mean sunrise. By the Sūrya-siddhānta therefore—and by the Ārya-siddhānta also in case the Malabar rule was followed²—the month of Vṛiśchika commenced on the 31st October, and the 29th day of that month was Wednesday, the 28th November A.D. 1537. On this day the 11th *tithi* of the dark half (of the month Mārgaśīraha) ended 9 h. 34 m. after mean sunrise, and the *nakṣatra* was Svāti, by the equal space system during the whole day, by the Brahma-siddhānta for 9 h. 12 m., and according to Garga for 13 h. 8 m., after mean sunrise.

Being of the third year of the king's reign, the date would shew that the reign of Jaṭilavarman Śrivallabha commenced between (approximately) the 29th November A.D. 1534 and the 28th November A.D. 1535.

G.—MARAVARMAN SUNDARA-PANDYA.

42.—In the Kailāsspati temple at Gaṅgaikoṅḍān.³

- 1 Svasti śrī [||*] Kō Māra[vaṅ]mar-āna Tribhuvanachchā(cha)kravat[t]i
Kōnērmaikoṅḍā[ṅ] śrī-Sundara-Pāṅḍiyādēva[r]ku yāṅḍu 2 āvadu edir
22āvadukku Śākābdam[m*] 1477⁴ mēl śellān[i]ṅṅā Irākshasa-varuṅṅam
Āṅi-mādam⁴ 3 tēdi⁴ pū[rvva]-pakshattu
2 duvādeśiyum [Manda]-vāramum peṅṅā Śōdi-nā.

¹ No. 200 of the Government Epigraphist's collection for 1895.

² See Sewell and Dikshit's *Indian Calendar*, p. 12.

³ No. 171 of the Government Epigraphist's collection for 1895.

⁴ The two words *mādam* and *tēdi* are expressed by their modern abbreviations.

"In the Rākshasa year which was current after the Śaka year 1477 (*had passed*), (and which corresponded) to the 22nd (year) opposite to the 2nd year (of the reign) of king Māravarman *alias* the emperor of the three worlds, Kōṇērmaikoṇḍāṇ, the glorious Sundara-Pāṇḍyadēva,— on the day of Svāti, which corresponded to a Saturday, and to the twelfth *tithi* of the first fortnight, and to the 3rd solar day of the month of Āṇi."

The Jovian year Rākshasa by the southern luni-solar system corresponds to Śaka-Saṁvat 1477 expired. In this year the Mithuna-saṁkrānti took place 14 h. 16 m. after mean sunrise of Wednesday, the 29th May A.D. 1555, and the third day of the month of Mithuna (or Āṇi) therefore was Saturday, the 1st June A.D. 1555. This day was entirely occupied by the 12th *tithi* of the bright half (of the month Jyāishtha), and on it the *nakshatra* by the equal space system was Svāti for 11 h. 10 m. after mean sunrise.

Being of the 22nd opposite to the 2nd, *i.e.* of the 24th year of the king's reign, the date would shew that the reign of this Māravarman Sundara-Pāṇḍya commenced between (approximately) the 2nd June A.D. 1531 and the 1st June A.D. 1532.

H.—JATILAVARMAN SRIVALLABHA (ATIVIRARAMA).

43.—In the Kulaśékharamuḍaiyār temple at Teṅkāśi.¹

- 2 Śakā[bda]m 1489 l mēl śellāniṅṅa [i*] svasti śrī [i*] Kō
Jaṭilava[r]mmar-āna Tribhuvanachchakrava[r]tt[i] Kōṇērmai[k]o[ṇ]ḍāṇ
Śrī-[P]erumā[ī]
- 3 Aḷagaṇ-Perumāḷ Ativirarāmaṅ Śrīva[i*]laba[d]ēvaṅku yāṇḍu aṅ[ī]āvadu
Piṅabava-varuṣam² Āvaṅ[i]-mādam³ 22 tēdi³ apara-[pa]kshastu(ttu)
- 4 tiḍigaiyūm Sukk[i]ṅa-vāramum Keṅḍa-[yō]gamum Vapik-karaṇamum perṅa
Uttirattādi-nāḷ.

"In the Prabhava year (*corresponding to*) the fifth year (of the reign) of king Jaṭilavarman *alias* the emperor of the three worlds, Kōṇērmaikoṇḍāṇ Śrī-Perumāḷ Aḷagaṇ-Perumāḷ Ativirarāma Śrīvāllabhadēva, which (year) was current after the Śaka year 1489 (*had passed*),—on the day of Uttara-Bhādrapadā, which corresponded to the Vapik-karaṇa and to the Gaṅḍa-yōga and to a Friday, and to the third *tithi* of the second fortnight, and to the 22nd solar day of the month of Āvaṅi."

The Jovian year Prabhava by the southern luni-solar system corresponds to Śaka-Saṁvat 1489 expired. In this year the Simha-saṁkrānti took place 18 h. 35 m. after mean sunrise of Thursday, the 31st July A.D. 1567, and the 22nd day of the month of Simha (or Āvaṅi) therefore was Friday, the 22nd August A.D. 1567. On this day the third *tithi* of the dark half (of the month Bhādrapadā) ended 20 h. 28 m., the *karaṇa* Vapij ended 8 h. 43 m., the *nakshatra* was Uttara-Bhādrapadā for 1 h. 19 m., and the *yōga* was Gaṅḍa for 11 h. 37 m., after mean sunrise.

Being of the 5th year of the king's reign, the date would shew that the reign of Jaṭilavarman Ativirarāma Śrīvāllabha commenced between (approximately) the 23rd August A.D. 1562 and the 22nd August A.D. 1563.

For convenience of reference I subjoin a list of the above dates, with the approximate commencement of the reign of each king, put in brackets after his name.

¹ No. 202 of the Government Epigraphist's collection for 1895.

² The three words *varuṣam*, *mādam* and *tēdi* are expressed by their modern abbreviations.

A.—Vira-Pāṇḍya (November 11, A.D. 1252—July 13, A.D. 1253).

No. 32. 7th year: July 13, A.D. 1259.

No. 31. 15th year: November 10, A.D. 1267.

B.—Māravarman Parākrama-Pāṇḍya (December 1, A.D. 1334—November 1, A.D. 1335).

No. 33. 6th year (Śaka 1262): November 1, A.D. 1340.

No. 34. 8th [for 18th] year: November 30, A.D. 1352.

C.—Jaṭavarman Parākrama-Pāṇḍya (January 10, A.D. 1357—January 9, A.D. 1358).

No. 35. Year 10 opp. to 5 (*i.e.* 15th year; Śaka 1293): January 9, A.D. 1372.

D.—Jaṭilavarman Parākrama-Pāṇḍya Arikēsariḍeva (June 18—July 19, A.D. 1422).

No. 37. [Year] opp. to 31 (*i.e.* 32nd year): July 19, A.D. 1453.

No. 36. Year 2 opp. to 31 (*i.e.* 33rd year; Śaka 1377): March 24, A.D. 1455.

No. 38. Year 4 opp. to 31 (*i.e.* 35th year): March 16, A.D. 1457.

No. 39. Year 8 opp. to 31 (*i.e.* 39th year; Śaka 1381 [for 1333]): June 17, A.D. 1461.

E.—Jaṭilavarman Parākrama-Pāṇḍya Kulaśékhara (November 15, A.D. 1479—November 14, A.D. 1480).

No. 40. 20th year (Śaka 1421): November 14, A.D. 1499.

F.—Jaṭilavarman Śrīvāllabha (November 29, A.D. 1534—November 28, A.D. 1535).

No. 41. 3rd year (Śaka 1459): November 28, A.D. 1537.

G.—Māravarman Sundara-Pāṇḍya (June 2, A.D. 1531—June 1, A.D. 1532).

No. 42. Year 22 opp. to 2 (*i.e.* 24th year; Śaka 1477): June 1, A.D. 1555.

H.—Jaṭilavarman Śrīvāllabha Ativirarāma (August 23, A.D. 1562—August 22, A.D. 1563).

No. 43. 5th year (Śaka 1489): August 22, A.D. 1567.

No. 27.— DATES OF PANDYA KINGS.

BY PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

(Continued from Vol. VII. page 17.)

Of the nineteen new Pāṇḍya dates here published, Nos. 44-56 confirm the general results previously arrived at concerning the kings Jaṭavarman Kulaśekhara, Māṇavarman Sundara-Pāṇḍya I, Māṇavarman Kulaśekhara I., and Jaṭavarman Sundara-Pāṇḍya II., and reduce the periods during which the first and third of these kings commenced to reign to the times from (approximately) the 30th March to the 29th November A.D. 1190, and from (approximately) the 19th March to the 27th June A.D. 1268, respectively. The date No. 47 of Māṇavarman Kulaśekhara I., which expressly connects a day in the 40th year of the king's reign with Śaka-samvat 1229,³ has been particularly gratifying to me, because I had independently found another date of his 40th year to fall in exactly the same Śaka year. The dates Nos. 57-59 belong to a king Kōṇḍarimēlkoṇḍāṇ Vikrama-Pāṇḍya, who commenced to reign between (approximately) the 13th January and the 27th July A.D. 1401; and Nos. 60-62 to a king Māṇavarman Vira-Pāṇḍya, who apparently commenced to reign between (approximately) the 13th March and the 28th July A.D. 1443.

I have 35 other dates which seem to belong to 18 different Pāṇḍya kings. These cannot be published till more dates of the same kings have been discovered.

³ This until recently was the earliest known Śaka year, quoted in a Pāṇḍya date. Quite lately Mr. Venkaya has discovered a date of the 8th year of the Pāṇḍya Varaguna, coupled with the Śaka year 792.

A.— JATAVARMAN KULASEKHARA.

44.— In the Agastyéśvara temple at Tiruchchupai.¹

- 1 Tir[ibu]va[ṇa]ohohakkara[va]tt[i]ga| śri-Kulaśégaradē[va]ṅku yāṅḍu 13 eḍir
14va-
2 du ³Mē[la-n]āya[r]ru a]para-pakkattu pañjamiyum Budaṅ-k[i]la[m]aiyum
peṅga Mu(mā)lattu
3 [n]ā|.

“In the 14th opposite the 13th year (of the reign) of the emperor of the three worlds, the glorious Kulaśékaradēva,— on the day of Mūla, which corresponded to a Wednesday and to the fifth *tithi* of the second fortnight of the month of Mēsha.”

The manner in which the regnal year is given in this date— ‘the 14th opposite the 13th year’— in my opinion renders it highly probable that the date belongs to Jaṭavarman Kulaśekhara of whom I have examined two dates, ‘of the twelfth year opposite to the thirteenth,’ and of ‘the year opposite to the thirteenth,’ i.e. of the 25th and 14th years, and whose reign I have found to commence between (approximately) the 27th February and the 29th November A.D. 1190.³ If this should really be the case, the date, being of the 14th opposite to the 13th, i.e. of the 27th year, would have to fall in either A.D. 1216 or A.D. 1217. It is actually correct for Wednesday, the 29th March A.D. 1217. This was the 5th day of the month of Mēsha, and on it the 5th *tithi* of the dark half (of Chaitra) ended 9 h. 38 m., while the *nakshatra* was Mūla, by the Brahma-siddhānta for 9 h. 12 m., according to Garga for 14 h. 27 m., and by the equal space system from 2 h. 38 m., after mean sunrise.

With this result, I would definitely assign the date to Jaṭavarman Kulaśekhara,⁴ the time for the commencement of whose reign would be reduced by it to the period from (approximately) the 30th March to the 29th November A.D. 1190.

45.— In the Agastyéśvara temple at Tiruchchupai.⁵

- 1 o|| Svasti śri ||⁶ Tiribuvagaohchakkaravattiga| śiri(śri)-Kulai(la)[śégar]dēva[r]ku i-
2 y[ā]ṅḍu paḍiṅm[ā]ṅka[ṅka]vadu Tulā-nāya[r]ru . . . -[pakshat]tu aṣṭami-
3 ym Viyāla-kkiḷama(mai)yum peṅga Pūṣattu nā|.

“In the thirteenth year (of the reign) of the emperor of the three worlds, the glorious Kulaśékaradēva,— on the day of Pūshya, which corresponded to a Thursday and to the eighth *tithi* of the . . . fortnight of the month of Tulā.”

This date is in the same temple as the preceding date, and is also one of the *Tribhuvana-chakravartin* Kulaśékaradēva. It may therefore be reasonably assumed that here also Kulaśekhara is identical with Jaṭavarman Kulaśekhara. A date of that king's 13th year would be expected to fall in A.D. 1202 or A.D. 1203, but for either year the date would be quite incorrect.

My calculations have led me to suspect that the date may be one, not of the 13th, but of the 13th opposite the 13th year of Jaṭavarman Kulaśekhara, and that its equivalent may be Thursday, the 6th October A.D. 1216. This was the 10th day of the month of Tulā, and on it the *nakshatra* was Pūshya, by the equal space system and according to Garga for 3 h.

¹ No. 181 of the Government Epigraphist's collection for 1908.

² The *la* of *Mūla* is entered below the *m* of *mā*.

³ See above, Vol. VI. pp. 801 and 802, Nos. 1 and 2.

⁴ In the Pāṇḍya date No. 14, above Vol. VI. p. 307, Jaṭavarman Sundara-Pāṇḍya I. is simply called the *Tribhuvana-chakravartin* Sundara-Pāṇḍyadēva.

⁵ No. 182 of the Government Epigraphist's collection for 1908.

56 m., and by the Brahma-siddhānta for 1 h. 58 m., after mean sunrise. The only difficulty is, that by our Tables the 8th *tithi* of the [dark] half (of Kārttika) had ended 0 h. 26 m. before mean sunrise of the Thursday, and that therefore we should have expected the writer to quote the 9th *tithi*, not the 8th.

B.— MARAVARMAN SUNDARA-PANDYA I.

46.—In the Sundarésvara temple at Madura.¹

120 śri-kō Mā²
 121 rapanmar-āṇa ³Trabhuvāṇa-
 122 chchakkaravattiga! Śōṇā-
 123 ḍu koṇḍu Mṇḍigo[ṇ]-
 124 ḍasōlapurattu virar-ava-
 125 *bhishēgamum vijaiya[r-a-
 126 *va]bhishēgamum pa[ṇ]ni-
 127 [y-a]ruliya śri-Sundara-Pāṇḍi-
 128 yadē[vaṅku] yāṇḍu 1-
 129 5vadu Dhann-nāyaru a-
 130 para-pakshattu trayōda-
 131 siyum Śevvāy-kkila-
 132 maiyum perra [Vi]śā-
 133 gattu [u]ā[!].

"In the 15th year (of the reign) of the glorious king Māravarman *alias* the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva, who took the Chōla country and was pleased to perform the anointment of heroes and the anointment of victors at Mṇḍigonḍa-śōlapuram,— on the day of Viśākhā, which corresponded to a Tuesday and to the thirteenth *tithi* of the second fortnight of the month of Dhanus."

I have previously⁵ found that Māravarman Sundara-Pāṇḍya I. commenced to reign between (approximately) the 29th March and the 4th September A.D. 1216. With that commencement of his reign this date of the 15th year regularly corresponds to Tuesday, the 3rd December A.D. 1230, which was the 8th day of the month of Dhanus, and on which the 13th *tithi* of the dark half (of Mārgasīra) commenced 4 h. 53 m., while the *nakshatra* was Viśākhā, by the equal space system and according to Garga for 10 h. 30 m., and by the Brahma-siddhānta for 5 h. 55 m., after mean sunrise.

C.— MARAVARMAN KULASEKHARA I.

47.—In the Tyāgarājasvāmin temple at Tiruvārūr.⁶

1 Svast[i] śr[i] [!]* [Kō Mā]rapaṇ[mar Tirubu]vaṇachchakkaravattiga! śrī-
 Kulasēgaradē[va]ṅku yāṇḍu 40vadu Mīṇa-nāyaru apa[ra]-pakshattu
 daśamiyū Tiṅga-kkila[m]aiyum perra Tiruvōṇattu nā!
 2 i-ṇṇālavadu Śakādhi(tī)tam 1229.

"In the 40th year (of the reign) of king Māravarman (*alias*) the emperor of the three worlds, the glorious Kulasēkharadēva,— on the day of Śravaṇa, which corresponded to a Monday and to the tenth *tithi* of the second fortnight of the month of Mīna this day (i.e. year) corresponds to Śaka 1229 expired."

¹ No. 61 of the Government Epigraphist's collection for 1905.

² The *d* of *Mā* is engraved at the beginning of the next line.

³ Read *Tridhā*.

⁴ See above, Vol. VI. p. 314.

⁵ Read *abhishēga*.

⁶ No. 561 of the Government Epigraphist's collection for 1904.

Above, Vol. VI. p. 310, No. 22, I have found that a date of the 40th year of Māravarman Kulasēkhara I. corresponded to Saturday, the 24th February A.D. 1308 (in Śaka-saṃvat 1229). This date No. 47, which also is of the 40th year, and which is expressly stated to have fallen in Śaka-saṃvat 1229, regularly corresponds to Monday, the 18th March A.D. 1308, which was the 24th day of the month of Mīna, and on which the 10th *tithi* of the dark half (of Phālguna) ended 11 h. 29 m., while the *nakshatra* was Śravaṇa, by the equal space system and according to Garga for 11 h. 10 m., and by the Brahma-siddhānta for 12 h. 29 m., after mean sunrise.

48.—In the Jagannāthasvāmin temple at Tirupullāṇi.¹

1 k[ō] Mārapaṇ[ma]r-ā[ṇa Tribhu]
 ga! [e]mmaṇḍalamum koṇḍ-arn[i]ya śr[i]-Kulasēgaradēvaṅku yāṇḍu
 [2]2vadu Kaṅkaḍaga-nāyaru mudal tiyad[i]yum
 2 [tū] a[ṣṭam]i[yu]m [Ti]ṅga-k[ila]mai-yum Śi[t]tirai-yum perra
 nā!

"In the [2]2nd year (of the reign) of king Māravarman (*alias*) the emperor of the three worlds, the glorious Kulasēkharadēva, who was pleased to take every country,— on the day which corresponded to (the day of) [Chi]trā, to a Monday, to the eighth *tithi* of the [fortnight], and to the first solar day of the month of Karkaṭaka."

The date corresponds to Monday, the 27th June A.D. 1289, which was the first day of the month of Karkaṭaka,² and on which the 8th *tithi* of the [bright] half (of Āshāḍha) ended 19 h. 46 m., while the *nakshatra* was Chitrā, by the equal space system and according to Garga for 20 h. 21 m., and by the Brahma-siddhānta for 17 h. 4 m., after mean sunrise.

49.—In the Ādivarāha-Perumāḷ temple at Śiṅgavaram.³

1 Svasti śrī [!]* kō Mārapaṇmar Tribhuvaṇa-
 chchakkaravatt[iga]! [śrī]-Kulasēgara[d]ēvaṅku yā-
 2 ṇḍu 30āvadu Siṃha-nāyaru-ppūrvva-pakshattu ēkādaśa(si)yum perra
 Mu(mū)lattu nāt-.

"In the 30th year (of the reign) of king Māravarman (*alias*) the emperor of the three worlds, the glorious Kulasēkharadēva,— on the day of Mūla, which corresponded to the eleventh *tithi* of the first fortnight of the month of Siṃha."

The date corresponds to [Wednesday], the 31st July A.D. 1297, which was the 4th day of the month of Siṃha, and on which the 11th *tithi* of the bright half (of Śravaṇa) ended 18 h. 38 m., while the *nakshatra* was Mūla, by the equal space system for 17 h. 4 m., and according to Garga for 4 h. 36 m., after mean sunrise.

50.—In the Āpaikāṭṭa-Perumāḷ temple at Kaḷappāḷ.⁴

1 Svasti śrīḥ — [K]ō [M]ārapaṇ[mar Tiri]buvāchchakkaravatt[i]ga! śr[i]-Kulasēgara-
 dēvaṅku yāṇḍu 3[4]vadu Kaṅkaḍaga-nāyaru pūrvva-paksha[t]tu tr[i]t[i]-
 yaaiyūm Śaṅ[i]-kkilamai-yum perra Magattu nā!

"In the 34th year (of the reign) of king Māravarman (*alias*) the emperor of the three worlds, the glorious Kulasēkharadēva,— on the day of Maghā, which corresponded to a Saturday and to the third *tithi* of the first fortnight of the month of Karkaṭaka."

¹ No. 107 of the Government Epigraphist's collection for 1903.

² The Karkaṭa- or Dakṣiṇīyana-saṃkrānti took place 9 h. 26 m. after mean sunrise.

³ No. 231 of the Government Epigraphist's collection for 1904.

⁴ No. 661 of the Government Epigraphist's collection for 1902.

The date apparently corresponds to Saturday, the 8th July A.D. 1301, which was the 12th day of the month of *Karkaṭaka*, and on which the *nakṣatra* was *Maghā*, by the Brahma-siddhānta for 13 h. 47 m., according to Garga for 16 h. 25 m., and by the equal space system from 3 h. 56 m., after mean sunrise. But the *tithi* which ended on this day, 12 h. 24 m. after mean sunrise, was the 2nd, not the 3rd, *tithi* of the bright half (of *Śrāvāṇa*).—Accordingly, the word *tr[ī]t[ī]yāyiyum* of the original seems to be a mistake for *deṣitāyiyum*.

51.— In the Paśupatiśvara temple at Allūr.¹

- 1 Svasti śrī [I*] Kō [M]ārapaṅmar-āṅa
- 2 Tiribuvaṅa[ch]chakkaravattiga-
- 3 | śrī-Kulaśekharaḍevaṅku y[ā]-
- 4 ṅḍu 29vadu Kaṅkaḍa-
- 5 ga-nāyaṅṅu apara-pakshattu tra-
- 6 yōdeṣiyum Śaṅi-k[ī]lamaiyum pe-
- 7 ṅṅa Punapūṣattu nā.

"In the 29th year (of the reign) of king *Māṅavarman* alias the emperor of the three worlds, the glorious *Kulaśekharaḍeva*,— on the day of *Punarvasu*, which corresponded to a Saturday and to the thirteenth *tithi* of the second fortnight of the month of *Karkaṭaka*."

For the 29th year of *Māṅavarman Kulaśekhara I.*² this date would be expected to fall in A.D. 1296 or A.D. 1297; but neither of these years yields a satisfactory result. I can therefore only suggest that the date may be one of the 39th year of the king's reign. For that year it would regularly correspond to Saturday, the 9th July A.D. 1308, which was the 12th day of the month of *Karkaṭaka*, and on which the 13th *tithi* of the dark half (of *Āṣāḍha*) ended 8 h. 34 m. after mean sunrise, while the *nakṣatra* was *Punarvasu*, by the Brahma-siddhānta the whole day, according to Garga from 2 h. 38 m., and by the equal space system from 14 h. 27 m., after mean sunrise.

The two dates Nos. 47 and 48 reduce the period, during which *Māṅavarman Kulaśekhara I.* must have commenced to reign, to the time from (approximately) the 19th March to the 27th June A.D. 1268.

D.— JATAVARMAN SUNDARA-PANDYA II.⁴

52.— In the Dévanāyaka-Perumāḷ temple at Tiruvēndipuram.⁵

- 1 6. Svasti śrī [I*] Kōṅ-Chchaḍai[pa]ṅmar Tiribuvaṅachchakkaravattiga| śrī-
- Śundara-Pāṅḍiyadēvarkku yāṅḍu 10[ā]vadu] pattā[va]ḍu Kaṅkaḍaga-nāyaṅṅu
- 2 apara-pakshattu paṅjamiyum Tīṅga-kīlamaiyum peṅṅa Rēvati-nā.

"In the 10th—tenth—year (of the reign) of king *Jatāvarman* (alias) the emperor of the three worlds, the glorious *Sundara-Pāṅḍiyadēva*,— on the day of *Rēvati*, which corresponded to a Monday and to the fifth *tithi* of the second fortnight of the month of *Karkaṭaka*."

For *Jatāvarman Sundara-Pāṅḍya II.*, whose reign has been found to commence between (approximately) the 13th September A.D. 1275 and the 15th May A.D. 1276,⁶ this date corresponds to Monday, the 23rd July A.D. 1285, which was the 27th day of the month of

¹ No. 379 of the Government Epigraphist's collection for 1903.
² Part of the *o* of *śō* is engraved at the end of the preceding line.
³ For *Māṅavarman Kulaśekhara II.* the date would be incorrect.
⁴ No. 56 may be a date of *Jatāvarman Sundara-Pāṅḍya I.*
⁵ No. 137 of the Government Epigraphist's collection for 1902.
⁶ See above, Vol. VI. p. 314.

Karkaṭaka, and on which the 5th *tithi* of the dark half (of *Śrāvāṇa*) ended 9 h. 4 m., while the *nakṣatra* was *Rēvati* for 18 h. 24 m., after mean sunrise.

For *Jatāvarman Sundara-Pāṅḍya I.* the date would be incorrect.

53.— In the Dévapuriśvara temple at Tēvūr.¹

- 1 Sva[s]t[i] śr[ī] [I*] Kōṅ=[Ch]chāḍai[pa]ṅma[r]-āṅa [Tiribuva]ṅachchakkaravatt[i]ḅa|
- 2 śrī-Śundara-Pāṅḍiyadēvarkku yāṅḍu 1[1]vadu M[ri]chchīya-ānā-
- 3 [ya]ṅṅu apara-pakshattu shash[ī](sh[ī]ṅhi)yum [Buda]ṅ-kīlamaiyum peṅṅa Pā-
- 4 ṣattu nā.

"In the 1[1]th year (of the reign) of king *Jatāvarman* alias the emperor of the three worlds, the glorious *Sundara-Pāṅḍiyadēva*,— on the day of *Pushya*, which corresponded to a Wednesday and to the sixth *tithi* of the second fortnight of the month of *Vṛiśchika*."

For *Jatāvarman Sundara-Pāṅḍya II.* this date apparently corresponds to Wednesday, the 29th October A.D. 1287, which was the first day of the month of *Vṛiśchika*,² and on which the 6th *tithi* of the dark half (of *Kārttika*) ended 7 h. 52 m., while the *nakṣatra* was *Pushya*, by the equal space system and according to Garga for 15 h. 46 m., and by the Brahma-siddhānta for 13 h. 47 m., after mean sunrise. But by the previously³ found result this day would fall in the 12th, not the 11th, year of *Jatāvarman Sundara-Pāṅḍya II.*⁶

For *Jatāvarman Sundara-Pāṅḍya I.* the date would be quite incorrect.

54.— In the Kāllīśvara temple at Kāḷaiyārkōvil.⁵

- 1 [śrī]-kō-Chchaḍai[pa]ṅmar-āṅa stri(tri)[bhuvā]ṅa-
- chchakka[rava]ttiga| [śrī]-Śundara-Pāṅḍi-
- 2 yadēvarkku iyāṅḍu 12vadu Sīmha(mha)-nāyaṅṅu [3]1 tēdi? [apa]ra-[pa]ksha[t]tu
- tr[ī]t[ī]yāi[ya]m Buda-
- 3 ṅ-kīla[m]aiyu[m] peṅṅa Irēba(va)di-nā.

"In the 12th year (of the reign) of the glorious king *Jatāvarman* alias the emperor of the three worlds, the glorious *Sundara-Pāṅḍiyadēva*,— on the day of *Rēvati*, which corresponded to a Wednesday, to the third *tithi* of the second fortnight (and) to the [3]1st solar day of the month of *Sīmha*."

For *Jatāvarman Sundara-Pāṅḍya II.* the date apparently corresponds to Wednesday, the 27th August A.D. 1287, when the 3rd *tithi* of the dark half (of *Bhādrapada*) ended 16 h. 22 m., while the *nakṣatra* was *Rēvati* for 8 h. 32 m., after mean sunrise. But this day was the 30th, not the 31st, day of the month of *Sīmha*, the *Sīmha-saṅkrānti* having taken place

¹ No. 518 of the Government Epigraphist's collection for 1904.

² Read *Vṛiśchika*.

³ The *Vṛiśchika-saṅkrānti* took place 17 h. 48 m. after mean sunrise of Tuesday, the 28th October A.D. 1287.

⁴ See above, Vol. VI. p. 314.

⁵ Mr. Venkayya, who has checked the readings of the original dates after they were in print, has informed me that the second figure of the regnal year cannot be read 2, but may be 3. And I find that for the 19th regnal year of *Jatāvarman Sundara-Pāṅḍya II.* the above date would regularly correspond to Wednesday, the 10th November A.D. 1294, which was the 14th day of the month of *Vṛiśchika*, and on which the 6th *tithi* of the dark half (of *Kārttika*) ended 17 h. 17 m., while the *nakṣatra* was *Pushya*, by the equal space system and according to Garga for 1 h. 19 m. after mean sunrise. Nevertheless, I am not fully convinced that the date really belongs to the 19th year of *Jatāvarman Sundara-Pāṅḍya II.* For the 19th year of *Jatāvarman Sundara-Pāṅḍya I.* it would be incorrect.

⁶ No. 575 of the Government Epigraphist's collection for 1903.

⁷ The word *tēdi* is denoted by a symbol.

8 h. 15 m. after mean sunrise of Tuesday, the 29th July A.D. 1287 (which was the first day of the month of Simha).

For Jaṭāvarman Sundara-Pāṇḍya I. the date would be quite incorrect.

55.—In the Akshēśvara temple at Acharapākkam.¹

- 1 Svasti śri [||*] Kōṛ-Chatapaṇmar Tiri[buvaṇa]chchakaravatti śri-Śu[n]dara-
[Pāṇ]ḍiyadēva[r][k*]ku yā[n*]ḍu 13ku edir [2āva]ḍu Kaṅ-
- 2 ṇi-nāyagru apara-[pa*]kshattu Tiṅgaṭ-kiḷa[m]aiyu[m*] saptamiyum peṇṇa
Rō[sa]ṇi-nā[ī].

"In the [2nd] opposite the 13th year (of the reign) of king Jaṭāvarman (alias) the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Rōhiṇi, which corresponded to a Monday and to the seventh *tithi* of the second fortnight of the month of Kanyā."

For Jaṭāvarman Sundara-Pāṇḍya II. the date apparently corresponds to Monday, the 26th August A.D. 1290, when the 7th *tithi* of the dark half (of Bhādrapada) ended 9 h. 38 m., while the *nakshatra* was Rōhiṇi, by the equal space system and according to Garga for 9 h. 51 m., and by the Brahma-siddhānta for 9 h. 12 m., after mean sunrise. But this day was the last day of the month of Simha, which immediately precedes the month of Kanyā.²

For Jaṭāvarman Sundara-Pāṇḍya I. the date would be quite incorrect.

56.—In the Dārukāvanēśvara temple at Tiruppallāturai.³

- 1 Svasti śri [||*] K[ō- Chchaḍ]aiapaṇmar-ā[ṇa] Tribhuvaṇachchakkaravattiga!
śri-Śundira-[P]āṇḍiyadēvarkku yāṇḍu
- 2 9[āvaḍu] oṅ[ba]dāvaḍu [M]ēsha-[nā]yagru pū[rva]-pakshattu tṛiti(ti)yaiyum
Velli-kiḷamaiyum peṇṇa Kāṭṭa(tti)gai-nā.⁴
- 3 [ī].

"In the 9th—ninth—year (of the reign) of king Jaṭāvarman alias the emperor of the three worlds, the glorious Sundara-Pāṇḍyadēva,— on the day of Kṛittikā, which corresponded to a Friday and to the third *tithi* of the first fortnight of the month of Mēsha."

My examination of this date does not enable me to decide whether it belongs to Jaṭāvarman Sundara-Pāṇḍya I. or to Jaṭāvarman Sundara-Pāṇḍya II. According to the previously obtained result,⁵ the 9th year of Jaṭāvarman Sundara-Pāṇḍya I. should have commenced between (approximately) the 20th and 23rd April A.D. 1259; but there is no day from April A.D. 1259 to the end of A.D. 1260 for which the date would be correct. The date would be correct for Friday, the 26th March A.D. 1260, which was the 3rd day of the month of Mēsha, and on which the 3rd *tithi* of the bright half (of the second Chaitra) ended 16 h. 56 m., while the *nakshatra* was Kṛittikā, by the Brahma-siddhānta for 6 h. 34 m., according to Garga for 7 h. 53 m., and by the equal space system for 19 h. 42 m., after mean sunrise. By what we have found before, this day would fall in the 8th, not the 9th, year of Jaṭāvarman Sundara-Pāṇḍya I.

If the date were one of Jaṭāvarman Sundara-Pāṇḍya II., it should fall in either A.D. 1284 or A.D. 1285. Here again it would be incorrect for either year. It would be correct for

¹ No. 252 of the Government Epigraphist's collection for 1901.

² The Kanyā-saṅkrānti took place 3 h. 43 m. after mean sunrise of Tuesday, the 23rd August A.D. 1290, which was the 1st day of the month of Kanyā.

³ No. 283 of the Government Epigraphist's collection for 1903.

⁴ The *ā* of *nā*- is engraved at the beginning of the next line.

⁵ See above, Vol. VI. p. 314.

Friday, the 26th March A.D. 1260, which was the 4th day of the month of Mēsha, and on which the 3rd *tithi* of the bright half (of the first Vaiśākha) ended 19 h. 8 m. after mean sunrise, while the *nakshatra* was Kṛittikā exactly as stated above under the other date. But this day would fall in the 10th or 11th, not in the 9th, year of Jaṭāvarman Sundara-Pāṇḍya II.

The result is that the date is one of either the 8th year of Jaṭāvarman Sundara-Pāṇḍya I., or the 10th (or 11th) year of Jaṭāvarman Sundara-Pāṇḍya II.

E.—KONERANMAIKONDAN¹ VIKRAMA-PANDYA.

57.—In the Vṛiddhapuriśvara temple at Tiruppuṇāvāsāl.²

- 1 Svasti śr[ī] [||*] Śakābdam
- 2 1339ṇ mēl śri-
- 3 Kōṅēraṇmaiko[n]-
- 4 dān-Tribhuvaṇachchakravatti
- 5 śri-Vikrama-Pāṇḍyadēvar
- 6 [2āvaḍu e]dir 15 Makara-nāyagru
- 7 pūrvva-pakshattu paṇjamiyum
- 8 Budha-v[ā*]ramum peṇṇa Uttarā(ra)-
- 9 t[ā]di-nā[ī].

"In the 15th opposite the [2nd year] (of the reign) (of) the glorious Kōṅēraṇmaikoṇḍāṅ, the emperor of the three worlds, the glorious Vikrama-Pāṇḍyadēva, (which was current) after the Śaka year 1339,— on the day of Utara-Bhādrapadā, which corresponded to a Wednesday and to the fifth *tithi* of the first fortnight of the month of Makara."

For Śaka-saṁvat 1339 expired this date regularly corresponds to Wednesday, the 12th January A.D. 1418, which was the 17th day of the month of Makara, and on which the 5th *tithi* of the bright half (of Māgha) ended 11 h. 12 m., while the *nakshatra* was Utara-Bhādrapadā for 11 h. 10 m., after mean sunrise.

58.—In the Virāṭṭanēśvara temple at Kiḷūr.³

- 1 Svasti śr[ī] [||*] Kōṅērimēlkoṇḍāṅ Tribhu[va]ṇachchakkaravattiga! śr[ī]-
Vikk[ī]rama-Pāṇḍiyadē[va]rku
- 2 yāṇḍu 8āvaḍu Kaṅkaḍaga-nāyagru pūrvva-pakshattu paṇjamiyum Velli-
kk[ī]lamaiyum [p]eṇṇa
- 3 Attattu nā[ī].

"In the 8th year (of the reign) of Kōṅērimēlkoṇḍāṅ, the emperor of the three worlds, the glorious Vikrama-Pāṇḍyadēva,— on the day of Hasta, which corresponded to a Friday and to the fifth *tithi* of the first fortnight of the month of Karkāṭaka."

Judging by the preceding date, this date would be expected to fall in about A.D. 1408, and it actually corresponds to Friday, the 27th July A.D. 1408, which was the 30th day of the month of Karkāṭaka, and on which the 5th *tithi* of the bright half (of Śrāvāṇa) ended 18 h. 16 m., while the *nakshatra* was Hasta, by the equal space system and according to Garga for 9 h. 51 m., and by the Brahma-siddhānta for 6 h. 34 m., after mean sunrise.

¹ Kōṅēraṇmaikoṇḍāṅ or Kōṅērimēlkoṇḍāṅ.

² No. 612 of the Government Epigraphist's collection for 1902.

³ No. 287 of the same collection.

59.—In the Śivāṅkurēśvara temple at Tirthanagari.¹

- 1 Svasti śri [—] Kōṅēr[i]-
 2 mēlkōṅḍ[ā]ṅ Tiribuvāchchakkaravattiga|
 3 śri-Vikkira[ma*]-Pāṅḍiyadēvarkku yāṅḍu nā-
 4 l[ā]vadu Kumba-nāyaru pūrvva-pakahattu triti(tū)yaiyum
 5 N[āya]ṅṅu-kkilamaiy[u]m peṅṅa Uttirattu nā|.

“In the fourth year (of the reign) of Kōṅērimeḷkōṅḍāṅ, the emperor of the three worlds, the glorious Vikra[ma]-Pāṅḍyadēva,—on the day of Uttara-Phalguni, which corresponded to a Sunday and to the third *tithi* of the first fortnight of the month of Kumbha.”

The date is intrinsically wrong because in the month of Kumbha a *tithi* of the first fortnight cannot be joined with the *nakshatra* Uttara-Phalguni; and the probability is, that either the first fortnight has been erroneously quoted instead of the second, or Uttara-Phalguni instead of Uttara-Bhadrapadā. For the month of Kumbha² of the king's 4th year the choice of an equivalent of the date lies between Monday, the 2nd February, and Sunday, the 15th February, A.D. 1405.

Monday, the 2nd February A.D. 1405, was the 9th day of the month of Kumbha, and on it the 3rd *tithi* of the bright half (of Phālguna) ended 14 h. 27 m., while the *nakshatra* was Uttara-Bhadrapadā for 17 h. 44 m., after mean sunrise. On the other hand—

Sunday, the 15th February A.D. 1405, was the 22nd day of the month of Kumbha, and on it the 2nd *tithi* of the dark half (of Phālguna) commenced 6 h. 18 m., while the *nakshatra* was Uttara-Phalguni, by the equal space system and according to Garga for 18 h. 24 m., and by the Brahma-siddhānta for 15 h. 6 m., after mean sunrise.

I am inclined to assume that this second day, Sunday, the 15th February A.D. 1405, is the true equivalent of the date, and that the writer of the original has wrongly quoted the first fortnight instead of the second, and the third *tithi* instead of the second (*dvitīyayum*).

Under any circumstances the two dates Nos. 57 and 58 would prove that Kōṅērimeḷkōṅḍāṅ Vikrama-Pāṅḍya commenced to reign between (approximately) the 13th January and the 27th July A.D. 1401.

F.—MĀRAVARMAN VIRA-PANDYA.

60.—In the Viśvanātha temple at Tenkāśi.³

- Svasti śri [||*] Kō Māravarmmar-āna Tribhuvanaścha(cha)kravattiga| śri-Vira-
 Pāṅḍiyadēvarkku yāṅḍu irāṅḍavadin edir pad[i]ṅṅōṅḍavadu Karkkaṭaka-nāyaru
 muppādān-diyadiyum pū[r]ṅṅaiyum Sōma-vāramum peṅṅa Tiruvō[pa]ttu nā|.

“In the eleventh opposite the second year (of the reign) of king Māravarmman *alias* the emperor of the three worlds, the glorious Vira-Pāṅḍyadēva,—on the day of Śrāvana, which corresponded to a Monday and to the full-moon *tithi* and to the thirtieth solar day of the month of Karkkaṭaka.”

Between A.D. 1300 and 1500 the only year for which this date would be correct is 1455. In this year the Karkkaṭa-sankrānti took place 8 h. 1 m. after mean sunrise of Sunday, the 29th June, which was the first day of the month of Karkkaṭaka. The 30th day of the same month

¹ No. 124 of the Government Epigraphist's collection for 1904.

² For the month of Makara and the 3rd *tithi* of the dark half the date would correspond to Sunday, the 18th January A.D. 1405, with Uttara-Phalguni.

³ No. 196 of the Government Epigraphist's collection for 1895.

therefore was Monday, the 28th July A.D. 1455, and on this day the full moon *tithi* (of Śrāvana) ended 21 h. 25 m., while the *nakshatra* was Śrāvana, by the equal space system and according to Garga for 13 h. 8 m., and by the Brahma-siddhānta for 14 h. 27 m., after mean sunrise.

61.—In the Kāṣiēvara temple at Kāṣaiyārkōvil.¹

- 1 Svasti śri [||*] Kō [M]āra[pa]ṅmar-āna [Tri]bhuvanaśa[kra]vatti[ga] śri-
 [Vi][ra*]-Pā[ṅ]ḍiyadē[va]rku [y]āṅ[du] lāva[du] Ma[gara]-nā[ya*]ṅṅu
 [a]para-pakahattu-[ppaṅ]ṅam[i]yūm N[ā]ya[ṅṅu]-kkilamaiyūm peṅṅa Attattu
 2 nā|.

“In the 14th year (of the reign) of king Māravarmman *alias* the emperor of the three worlds, the glorious Vira-Pāṅḍyadēva,—on the day of Hasta, which corresponded to a Sunday and to the fifth *tithi* of the second fortnight of the month of Makara.”

If the day given under No. 60 is the true equivalent of that date, and if the present date belongs to the same king, this date will be expected to fall in about A.D. 1456. And the date would actually be correct for Sunday, the 18th January A.D. 1457, which was the 21st day of the month of Makara, and on which the 5th *tithi* of the dark half (of Māgha) ended 5 h. 36 m., while the *nakshatra* was Hasta, by the equal space system and according to Garga for 10 h. 30 m., and by the Brahma-siddhānta for 7 h. 13 m., after mean sunrise.

62.—In the Virattāpēśvara temple at Tiruvadi.

- 2 [K]ō M[ā]ra[pa]ṅmar T[irib]huvana-
 3 chchakkaravattiga| śri-V[ir]a-Pā-
 4 ṅḍiyadēvarkku yāṅ-
 5 ḍu padipālāvadu Miṅa-nāyaru-
 6 ṅu spara-pakahattu prathamai-
 7 [yu]m Sāpi-kk[ī]lāmai[y]um* [pe]ṅṅa Attattu nā|.

“In the fourteenth year (of the reign) of king Māravarmman (*alias*) the emperor of the three worlds, the glorious Vira-Pāṅḍyadēva,—on the day of Hasta, which corresponded to a Saturday and to the first *tithi* of the second fortnight of the month of Miṅa.”

Judging by the two preceding dates, this date, if the three dates belong to one and the same king, would be expected to fall in A.D. 1456 or 1457; and the date would actually be correct for Saturday, the 12th March A.D. 1457, which was the 16th day of the month of Miṅa, and on which the first *tithi* of the dark half (of Phālguna) ended 10 h. 21 m., while the *nakshatra* was Hasta, by the equal space system and according to Garga for 1 h. 19 m., after mean sunrise.

The results set forth under Nos. 60-62 would appear to prove that the three dates really belong to one and the same king, and that this king, Māravarmman Vira-Pāṅḍya, commenced to reign between (approximately) the 18th March and the 28th July A.D. 1443.

I may state here that I have a date,⁵ which does not admit of verification, of the 17th opposite the 2nd, *i.e.* the 19th year, and of Śaka-samvat 1361, of a king Māravarmman, *alias* the emperor of the three worlds, Tirunelvēli-Perumāl, the glorious Vira-Pāṅḍyadēva. This king would have commenced to reign about A.D. 1421, and cannot be identical with the Māravarmman Vira-Pāṅḍya of Nos. 60-62.

¹ No. 578 of the Government Epigraphist's collection for 1903.

² No. 57 of the Government Epigraphist's collection for 1903.

³ The secondary *d* is repeated at the beginning of the next line.

⁴ The word *Sāpi-kk[ī]lāmai[y]um* is entered above the line.

⁵ No. 178 of the Government Epigraphist's collection for 1895. Compare also Mr. Venkayya's Report for 1904-05, p. 58.

Zu ai. *tithi*.

Auf S. 371 des 19. Bandes der IF. bemerkt Professor Zubatý, er könne sich nicht leicht vorstellen, daß das Wort *tithi* im Epos und in sonstigen volkstümlichen Schriften 'etwas anderes als einen wirklichen Tag' bedeute. Nach meinen Erfahrungen weiß auch der gewöhnliche Inder, daß die *tithi* und der wirkliche Tag zwei ganz verschiedene Dinge sind. Die *tithi* ist, wie man aus jedem Handbuche ersehen kann, der nach den Umständen variierende Zeitraum, den der Mond gebraucht, um sich 12° von der Sonne zu entfernen. Die erste *tithi* der hellen (oder zunehmenden) Hälfte des Monats fängt im Momente des Neumondes an und endet, wenn der Mond sich 12° von der Sonne entfernt hat; dann fängt die zweite *tithi* an und endet bei 24°, usw. Bei jedem 'wirklichen Tage' gibt der Kalender, ohne den der Inder nicht die einfachste Zeitbestimmung machen könnte, bis auf die Minute genau an, wann im Laufe des Tages eine bestimmte *tithi* endet. Der Tag erhält seine Nummer von der *tithi*. Für religiöse Zwecke ist die *tithi* auch heute die Hauptsache, nicht der 'wirkliche Tag', und ich bezweifle nicht, daß das schon vor Jahrtausenden so gewesen ist. Die *tithi* ist ein durchaus indisches Produkt, und das Wort meines Erachtens nicht zu übersetzen. Je eher wir das irreführende 'lunarer Tag' los werden, desto besser!

Göttingen. F. Kielhorn.

A.D.	1.	2.	3.	4.	
400	401. Gupta Chandra- [gupta II.] 415. Kumāragupta I. 455-65. Skandagupta.	Guptas of Magadha. Kṛishnagupta.	Maukharis. Harivarman.	Maitrakas of Valabhi. Bhatārka.	
500	Kumāragupta II.	Harshagupta. Jivitagupta I. Kumāragupta. Dāmōdaragupta.	Ādityavarman. Īśavarvarman. Īśānavarman. Śarvarvarman.	502 (P). Drōpasinha. 526. Dhruvasēna I. 556. Guhasēna. 571. Dharasēna II.	Kaṭ K Śa
600		Mahāsēnagupta. Mādhavagupta. 671. Ādityasēna. Dēvagupta.	Susthitavarman(?). Bhōgavarman(?).	605. Śilāditya I. 629. Dhruvasēna II. 645. Dharasēna IV. 653. Dhruvasēna III. 656. Kharagraha II. 669. Śilāditya III. 691. Śilāditya IV.	609. B
700		Viśhugupta. Jivitagupta II.		723. Śilāditya V. 760. Śilāditya VI. 766. Śilāditya VII. [-Dhrūbhata.	
800					842. Ch 861. Pra
900					916. Vid 939. Ma 997. Dh
1000					1018. Ki 1061. Tr 1060. Pa 1080.
1100					1133. Vij 1153. Āll
1200					1205. Ud 1276. Chi
1300	¹ His father Samudragupta (the son of Chandragupta I.) conquered Eudradēva, Matila, Nāgadatta, Chandrarvarman, Ganapatināga, Nāgasēna, Achyuta, Nandina, Balavarman, and other kings of Āryāvarta. (For other conquests see Table II.)				

I.—SYNCHRONISTIC TABLE FOR NORTHERN INDIA, A.D. 400-1400.—BY F. KIELHORN.

4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
Maitrakas of Valabhl. Bhatarka.				Family of Harsha of Thānēsar and Kanauj.						
502 (P). Dr̄nāsīmha. 526. Dhruvasēna I. 556. Guhasēna. 571. Dharasēna II.	Katachchuris. Kriahparāja- Śamkaragapa.	Gurjaras. Dadda I.	Gujar Chalukyas. Jayasimharāja.	Naravardhana. Rājyavardhana I. Ādityavardhana.						
605. Śilāditya I. 620. Dhruvasēna II. 645. Dharasēna IV. 653. Dhruvasēna III. 656. Kharagraha II. 669. Śilāditya III. 691. Śilāditya IV.	609. Buddharāja.	Jayabh̄ta I. 628. Dadda II. Jayabh̄ta II. Dadda III.	Buddhavarmanrāja. 642. Vijayarāja. 669. Śryāsraya- Śilāditya. ²	Prabhākaravardhana. 627, 630. Harsha (y. brother of Rājyav. II.)						
722. Śilāditya V. 760. Śilāditya VI. 766. Śilāditya VII. [-Dhr̄bh̄ta.		706- 736. Jayabh̄ta III.	731. Jayāśraya. 738. Pulakēsīrāja. G. Rāsh̄trakūṭas. Indrarāja. ³	[Kings of Kanauj ?] [Indrāyudha.]	Pratthāras of Kanauj. Dēvasakti. [763]. Vatsarāja.		Guhilas of Mēvād. Bappa.	Chāhamānas of Śākambhari.		
	Miscellaneous Kings. 942. Chāhāvāpa Chāṇḍa- [mahāsēna]. 961. Pratihāra Kakkuka.	870. Jayāditya II. of [Vijayapura.	812. Karharāja. 835. Dhruvarāja I. 867. Dhruvarāja II. 888. Kriahparāja.	[Chakrāyudha.]	815. Nāgabhaṭa. ⁴ Rāmabhadra. 843. Bhōja-Ādivarāha- [Mihira]. 893. Mahēndrapāla.			Gūvaka I.* Chandr rāja. Gūvaka II. Chandana.	Chaulukyas and Vāghēlās of Anahilapātaka.	Paramāras of Mālava.
916. Vidagdha of Hasti- [kuṇḍi]. 939. Mammata " " . 997. Dhavala " " .		992. Chhinda Lalla.			914. Mahipāla. 948. Dēv pāla. 960. Vijayapāla.	Gāhaḍavālas of Kanauj.	951. Allāṭa. 971. Naravāhana. 977. Śaktikumāra.	Vākpatirāja. Simharāja. 973. Vighararāja.	Rāji. 974. Mālarāja I. Chāmupḍ rāja.	Vairisimha-Vajra Styaka-Harsha. 974. Vākpati-Muñja- [Uṭpa] Sindhurāja.
1018. Kirtirāja of Lāṭa. 1051. Trilōchanapāla. 1060. Paramāra Kriahna- [rāja]. 1080. " Chāmupḍa- [rāja].		1077. Kalachuri Sōgha- [dēva].	Sēnas. Sāmantasēnas.		Rājyapāla. 1027. Trilōchanapāla. 1036. Yasahpāla (?).		Śuchivarman. Naravarman. Kirtivarman. Vairāṭa.		Vallabha ; Durlabha. 1029. Bhimsadēva I. 1091. Karṇa.	1021. Bhōjadēva. 1055. Jayasimha I. 1059. Udayāditya. Lakshmadēva.
1133. Vijayapāla. 1153. Ābhana of Nadōla.		1111. Kirtipāla of [Uttarasamudra. 1171. Asōkavalla. 1194. Daśaratha.	Hēmantasēna. Vijayasēna. [1169]. Ballālasēna. Lakshmanasēna.		1104. Madanapāla. 1114. Gōvindachandra. 1168. Vijayachandra. 1170- 87. Jayachandra.		Vairisimha. Vijayasimh .	Arpōrāja. 1153. Vighararāja. 1167. Prithvirāja I. 1170. Sōmēsvara. 1182-87. Prithvirāja II.	1136. Jayasimha. 1145. Kumārapāla. 1173. Ājayapāla. 1199. Bhimsadēva II.	1104. Naravarman. 1134. Yasōvarman. 1143. Lakshmirvarman. 1178. Harisōchandra. 1200. Udayavarman.
1205. Uday sīmha of [Śrīmāla]. 1276. Chāchiga of Śri- [māla].		1292-98. Ganapati of [Nalapura.	Vidvārḍpasēna.				1267. Tējaśimha. 1278-87. Samarasimha.		(1223. Jayantasimh .) 1242. Tribhuvanapāla. 1251. Visal dēva. 1264. Arjunadēva. 1275-95. Śāraṅgadēva.	1211. Arjunavarman. 1218. Dēvapāla. 1256-69. Jayasimha I
			² Grandson of Pulakēsīn II in Table II. Col. 1. ³ Brother of Gōvinda- rāja III. in Table II. Col. 2.		⁴ Perhaps also called Nāgavalōka.			⁵ Feudatory of Nāga- valōka. See Col. 9.		

12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	A.D.	
			Miscellaneous Kings.							400	
			455. Traikṭṭ. Dahrasēna. 475-511. Hastin. 484. Budhagupta.							500	
			510. Bhānugupta. 532. Yasōdharman- [Vishnuvardhana.	Tōramāna. Mihirakula.						600	
			619. Śāsānkarāja. 625. Varmalāta. 654. Sēndraka Nikum- [bhallasakti.	Dēvagupta. ⁷						700	
amānas ambharī.			709. Rāshtrak. Nanda- [rāja-Yuddhāsura. 756(?). Jayadēva Para- [chakrakāma.	Vākṣa Pravara- [sēna II. ⁸ Harshadēva of [Gauḍa, etc.	Chandēllas of Jōjābhukti.				Pālas. ¹⁰	800	
ka I. ⁹ darāja. ka II. dana.	Chaulukyas and Vāghēlās of Anhilapāṭaka.	Paramāras of Mālava.	Rāshtrak. Jējja. Rāshtrak. Karkarāja. ⁶ 861. Rāshtrak. Parabala.	829. Harjaravarman [of Assam.	Nannuka. Vākpati. Jējā; Vijā. Rāhila.	Kalachuris of Tripuri. Kōkkalla I. ⁹		E. Gāngas of Kalīnga. Gupamahārāva.	Gōpāla I. Dharmapāla. ¹¹ Dēvapāla.	900	
atirāja. arāja. sharāja.	Rāji. 974. Mūlarāja I. Chāmapdarāja.	Vairisimha-Vajraja. Siyaka-Harsha. 974. Vākpati-Muñja- [Utpala. Sindhurāja.	Kachchhapaghātas.			Harsha. Yasōvarman. 954. Dhātga.	Mughhatunga. Yuvarāja I. Lakshmarāja. Śamkaragana. Yuvarāja II.	Kalachuris of Ratnapura.		Vigrahapāla I. Nārāyanapāla. Rājyapāla. Gōpāla II.	1000
	Vallabha; Durlabha. 1029. Bhīmadēva I. 1091. Karṇa.	1021. Bhōjadēva. 1055. Jayasimha I. 1059. Udayāditya. Lakshmadēva.	Kirtirāja. Mūladēva. Dēvapāla. Padmapāla. 1093. Mahipāla.	Arjuna; Abhimanyu. 1 44. Vijayapāla. 1088. Vikramasimha.	Gaṇḍa. Vidyādharā. Vijayapāla. 1051. Dēvarvarman. 1098. Kirtivarman.	Kōkkalla II. 1037(?). Gāngēya. 1042. Karṇa.	Kāmarāva. Kalingarāja. Kamalarāja. Ratnarāja I. Prithvidēva I.	Kāmarāva. 1038. Vajrahasta. 1075. Rājarāja I. 1078. Anantavarman- [Chōdagaiga.	Vigrahapāla II. 1026. Mahipāla I. Nayapāla. Vigrahapāla III.	1100	
gōrāja. rābarāja. thvirāja I. nēvara. rithvirāja II.	1138. Jayasimha. 1145. Kumārāpāla. 1173. Ajayapāla. 1199. Bhīmadēva II.	1104. Naravarman. 1134. Yasōvarman. 1143. Lakshmirvarman. 1178. Hariśohandra. 1900. Udayavarman.		1120. Virasimha.	1117. Jayavarman. 1129. Madanavarman. 1167. Paramardin.	1120. Yasāhkarṇa. 1151. Gayākarna. 1155. Narasimha. 1175. Jayasimha. 1180-96. Vijayasimha.	1114. Jājalla I. Ratnadēva II. 1141. Prithvidēva II. 1167. Jājalla II. 1181. Ratnadēva III.	1142. Kāmārāva. Rāghava. Rājarāja II. Anagabhīma I.	1175. Gōvindapāla.	1100	
	(1233. Jayantasiṃha.) 1242. Tribhuvanapāla. 1251. Visaladēva. 1264. Arjunadēva. 1275-95. Sāraṅgadēva.	1211. Arjunavarman. 1218. Dēvapāla. 1256-89. Jayasimha II.			1212. Trailōkyavarman. 1261. Viravarman. 1288. Bhōjavarman.			Rājarāja III. Anagabhīma II. Narasimha I. Bhānudēva I. 1296. Narasimha II.		1200	
ry of Nāgā- ; Col. 9.			⁶ Defeated Nāgavalōka. See Col. 9.	⁷ Subdued by Rājyav. II. in Col. 8. ⁸ Son of daughter of Dēvgupta in Col. 2.		⁹ Contemporary of Bhōja in Col. 9 and of Kṛishna- rāja II. in Table II. Col. 2.		1309. Bhānudēva II. Narasimha III. Bhānudēva III. 1384-97. Narasimha IV.	¹⁰ For Sēnas see Col. 7. ¹¹ Married daughter of Parabala in Col. 15.	1300	

A.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
400	W. Chalukyas of Bādāmi. Jayasimha I.											
500	Raparāga. Pulakēsin I. [567]. Kirtivarman I. Maṅgalēsa.											
600	612. Pulakēsin II. Vikramāditya I. 686(P). Vinayāditya. 699. Vijayāditya.	Rāshtrakūṭas of Mālkheḍ. Gōvindarāja I.										
700	735(P). Vikramāditya II. 747-57. Kirtivarman II.	Kakkarāja I. Indrarāja II. 753. Dantidurga. Kriṣṇarāja I. 779. Gōvindarāja II. Dhruvarāja. 794. Gōvindarāja III.	W. Gāṅgas of Tajakāḍ. ?						Silāras of S. Koṅkaṇa. Sasphulla.	Silāras of N. Koṅkaṇa.		
800		817. Amōghavaraha I. [877]. Kriṣṇarāja II.	867. Bātuga I. (?)	W. Chālukyas of Kalyāṇi.		Raṭṭas of Saundatti and Belgaum. Nanna. 980. Kārtavīrya I.			Dhammiyara. Aiyaparāja. Avasara I. Ādityavarman.	Kapardin I. 843 (?). Pulakēti. 861. Kapardin II. Vappuvanna.	Silāhāras of Kōlhāpur.	Yādavas of Sēunadēsa and Dēvagiri. Sēunachandra I.
900		914. Indrarāja III. 918. Gōvindarāja IV. 937. Baddiga. 940. Kriṣṇarāja III. 971. Khottiga. 972. Kakkarāja II. 982. Indrarāja IV.	Ereyapa. Rāchamalla I. 949. Bātuga II. 968(P). Mārasimha [II]. 975. Paūchhaladēva. 977. Rāchamalla II.	973. Taila II. [998]. Satyāśraya.			Kādambas of Hāṅgal.	Kādambas of Goa. Gōhalla.	Avasara II. Indrarāja. Bhīma. Avasara III.	Jhañjha; Goggi. Vajjada I. 997. Aparājita.	Jatiga I. Nāyivarman. Chandrarāja.	Dhādīyappa. Bhillama I. Rāja. Vaddiga. 1000. Bhillama II.
1000				1009. Vikramāditya V. 1018(P). Jayasimha II. 1044. Sōmēśvara I. 1068. Sōmēśvara II. 1076. Vikramāditya VI. (Jayasimha III.)		Dāyima; Kanna I. 1040. Erega. 1048. Anka. Sēna I. 1082. Kanna II. 1087. Kārtavīrya II.	Jayavarman II. Tailapa I. 1068. Kirtivarman II.	1007 (P). Shashṭha I. 1052. Jayakēsin I. Vijayāditya.	1008. Raṭṭarāja. Sindas of Yelburga.	Vajjada II. 1017. Arikēsarin. 1026. Chhittarāja. 1060 (P). Mummupi. 1094. Anantapāla.	Jatiga II. Gonka. 1058. Mārasimha. Bhōjadēva I.	Vēsū. 1025. Bhillama III. 1069. Sēunachandra II.
1100				1128. Sōmēśvara III. 1139. Jagadēhamalla II. 1154. Taila III. 1184-89. Sōmēśvara IV.	1128. Permādi. 1155. Bijjala. 1168. Sōvidēva. 1183. Siṅghapa.		1108. Tailapa II. Tailama. 1189-96. Kāmadeva.	1147 (P). Jayakēsin II. 1158. Śivachitta- (Permādi). 1199. Jayakēsin III.	1123 (P). Ācha II. 1144. Permādi I. 1163-69. Chāvūḍa II.	1154. Haripāla. 1156. Mallikārjuna. 1185. Aparāditya.	1110. Gaṇḍarāditya. 1143. Vijayāditya. 1178-94. Bhōjadēva II.	1142. Sēunadēva. 1191. Bhillama.
1200						1201. Kārtavīrya IV. 1228. Lakshmidēva II.		Tribhuvanamalla. 1250. Shashṭha II.		1259. Sōmēśvara.		Jaitugi I. 1207. Siṅghapa. 1249. Kaohara. 1261. Mahādēva. 1272-
1300	Samudragupta (see Table I.) conquered Mahēndra of Kōsala, Vyāghrarāja of Mahākūtāra, Maṅṭarāja of Kurja (Kollera), Mahēndra of Pishtapura, Svamidatta of Kottāra on the hill (?), Damana of Eraṅṅapalla, Vishvugūpa of Kāśchit, Nilarāja of Avamukta, Hestivarman of Vēḅgi, Ugrasēna of Palakka, Kubēra of Dēvarāshtra, Dhanañjaya of Kusthalapura, and other kings of Dakṣhiṅgpatha.											

12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	A.D.
										400
			E. Chalukyas of Vēngl.		Pallavas of Kāñchi. Śiṅṅaviahpa. Mahēndravarma I.					500
			[615]. 632. Viṣṅuvardhana I. Jayasimha I. 664. Viṣṅuvardhana II. 678. Maṅgiyavarāja.		Narasimhavarma I. Mahēndravarma II. Paramēśvaravarma I. Narasimhavarma II. Mahēndravarma III.		Bāṅga.			600
			Jayasimha II. Viṣṅuvardhana III. Vijayāditya I. Viṣṅuvardhana IV.		Paramēśvaravarma II. Nandivarman. Gāṅga-Pallavas.	Jayanandivarman. Vijayāditya I. Malladēva.		Pedigree of Gāṅga-Bāṅga Prithivipati II.		700
davas ṅṅadēśa ṅṅevagiri. handra I.			Vijayāditya II. Viṣṅuvardhana V. Vijayāditya III. Chālukya-Bhīma I.		Dantivarman. Nandivarman. Nripātunga. (?) Kampavarman.	Bāpavidyādihara. Prabhumeru. Vikramāditya I. Vijayāditya II.		Chōlas. Vijayālaya. Āditya I.	Pāṅṅyas [863]. Varaguṅga.	800
iyappa. ama I. iga. llama II.	Hoysaṅgas of Dōrasamudra.		Ammarāja I. Yuddhamalla II. Chālukya-Bhīma II. 945. Ammarāja II. Dānārpava. Śaktivarman.			Vikramāditya II.	Prithivipati II.	907. Parāntaka I. Rājāditya Mēvaḍi-Chōla. 985. Rājārāja I.	Rājāsīmha. Vira-Pāṅṅya.	900
lama III. pachandra II.	1022. Nripakāma. 1040 (?) Vinayāditya. Eṅṅyāṅga.		1011. Vimalāditya. 1022. Rājārāja. (Vijayāditya VII.) Rājendra-Chōla [II.] ¹ (1078. Vira-Chōla.) (1084. Chōdagaṅga- Rājārāja.)	Kākatiyas of Anumakoṅṅa. Durjaya.				1012. Rājendra- [Chōla I. 1018. Rājādhirāja I. 1052. Rājendradēva. 1063. Virarājendra. 1070. Kulōttunga- [Chōla I.	Sundara-Pāṅṅya. Vikrama-P.; Vira-P.	1000
adēva. ama.	1103. Ballāla I. 1115. Viṣṅuvardhana. 1159. Narasimha I. 1173. Ballāla II.		Vikrama-Chōla. 1143. Kulōttunga- [Chōla II.	Bēta. Prōla. 1163. Rudra. Mahādēva.		Miscellaneous Kings.		1118. Vikrama-Chōla. Kulōttunga-Chōla II. 1146. Rājārāja II. 1178. Kulōttunga- [Chōla III.	Pāṅṅyas of Madhurā. 1190. J. ² Kulasēkhara.	1100
gi I. hana. hara. ādēva.	1220. Narasimha II. 1253. Sēmēśvara. 1254. Narasimha III. 1292-	First dynasty of Vijayanagara.		1213-49. Gaṅṅapati.	1202. Mallapa III. [of Piṅṅapuram. 1273. Vijayāditya II. of Śrīkōrman. 1277-	1205. Telugu-Chōla [Tammusiddhi. 1250- 1265. Vijaya-Gaṅṅa- [gōpāla.		1216. Rājārāja III. 1246- 1267. Rājendra- [Chōla III.	1216. M. Sundara-P. I. 1236. M. Sundara-P. II. 1261. J. Sundara-P. I. 1263. Vira-Pāṅṅya. 1268. M. Kulasēkhara I. 1276. J. Sundara-P. II.	1200
amachandra.	1330. Ballāla III.	Saṅṅama I. 1340. Harihara I. 1353. Bukkarāya I. 1356. Saṅṅama II. 1379-1404. Hari- hara II.	¹ Brother of Pulakēsin II. in Col. 1. ² Identical with Kulōt- tunga-Chōla I. in Col. 20.	1316. Pratāparudra.	1318. Purushōttama of [Śrīkōrman. 1374. Roḍḍi Anna- [Vēma. 1391. Kāṅṅaya-Vēma.	1314. Chōla Vira- [Champa.	1313. Ravivarman [of Kēraja. 1390. Vira-Rāghava. 1390. Mārtaṅṅavar- [man.	1314. M. Kulasēkhara II. 1335. M. Parākrama-P. 1358. J. Parākrama-P. ³ J. = Jātavarman ; M. = Māṅṅavarman.	1300	

WRONGLY CALCULATED DATES, AND SOME DATES OF THE
LAKSHMANASĒNA ERA.

With great interest I have studied various papers on historical subjects published by Mr. Monmohan Chakravarti in the *Journal of the Asiatic Society of Bengal*. I am also glad to see that Mr. Chakravarti has attempted to verify a number of Indian dates taken from inscriptions and manuscripts. But his results do not seem to me to be always reliable. The following remarks may perhaps induce him to re-examine some of his calculations.

In a paper of his on the last Hindu kings of Orissa, in the *Journ. As. Soc. Beng.*, vol. lxix, pt. 1, p. 180 ff., I find on four pages no less than six wrong week-days.

On page 180, the 29th May, A.D. 1437, is put down as a Tuesday, but was a Wednesday. Similarly, on page 181, the 26th August, A.D. 1455, was a Tuesday, not a Saturday; and the 12th May, A.D. 1461, a Tuesday, not a Monday. On page 181, the 28th November, A.D. 1470, was a Wednesday, not a Tuesday. And on page 183, the 20th June, A.D. 1472, was a Saturday, not a Thursday; and the 18th April, A.D. 1485, a Monday, not a Thursday. As it is very easy to find the week-day for a particular date A.D., I am at a loss to account for such errors. But I clearly see that any conclusions drawn from such dates may not perhaps be very readily accepted.

Mistakes of another kind we find in a paper of

Mr. Chakravarti's, in the *Journ. & Proc. As. Soc. Beng.*, N.S., vol. ii, pages 15 ff., on certain dates of the Lakshmaṇasēna era in Hara Prasād Śāstri's catalogue of palm-leaf and selected paper MSS. belonging to the Durbar Library, Nepal. Here Sunday, the 15th October, A.D. 1591, is wrongly given instead of Sunday, the 10th October, A.D. 1591; Tuesday, the 15th August, A.D. 1491, wrongly instead of Tuesday, the 16th August, A.D. 1491; and Monday, the 23rd February, A.D. 1511, wrongly instead of Monday, the 23rd February, A.D. 1512. These could hardly be mere printer's errors.

In this second paper there are one or two other matters to which I should like to draw attention.

The words *nētr-ābdhi-rāma* of one date, Mr. Chakravarti, on page 16, has taken to denote the year 372. But since the word *abdhi* (like *jaladhi*, *udadhi*, *vāridhi*, etc.) in Vikrama and Śaka dates denotes 4, the year intended undoubtedly is 342.

On page 17 he states that the only colophon in the catalogue, which gives the year of the Lakshmaṇasēna era together with that of another era, is one (which is clearly incorrect) on page 13. It has escaped his attention that on page 109 of the catalogue there occurs the statement *Śākē 1536 La-sam 494*. This would give us a difference of 10+2 between the Śaka and Lakshmaṇasēna eras, which, with my epoch of the latter, is the correct difference between the two for the months from Chaitra to Āśvina.

Finally, I would add to the dates given by Mr. Chakravarti two other dates from the catalogue, which, with the Lakshmaṇasēna era commencing in A.D. 1119, also would work out correctly :—

Page 20: *La-sam 171 Mārga-vadi 3 Chandrē*. This date, for the expired year 171 of the Lakshmaṇasēna era and the *amānta* month Mārgaśira, corresponds to Monday, the 20th November, A.D. 1290, when the 3rd *tithi* of the dark half commenced 2 h. 3 m. after mean sunrise.

Page 29: *La-sam 339 | Śrāvāṇa-śudi shashṭhyām Ravi-vāsarē*. This date, for the current year 339 of the Lakshmaṇasēna

era, corresponds to Sunday, the 16th July, A.D. 1458, which was entirely occupied by the 6th *tithi* of the bright half.

Göttingen.

F. KIELHORN.

POSTSCRIPT.

By PROFESSOR F. KIELHORN, C.L.E.; GÖTTINGEN.

The inscription edited above by Prof. Hultzsch is dated in the 6th year of the reign of the W. Chalukya Vikramāditya I, at the time of a solar eclipse in the month Śrāvāṇa. From page 2 of Appendix II. to Vol. VIII. of this Journal it will be seen that this date must necessarily fall between A.D. 635 and 685; and from what we know to be the general rule regarding eclipses that are quoted in dates, we may conclude that the eclipse here referred to most probably was one that was visible at Bādāmi, the capital of the W. Chalukyas, situated in about Long. 76° and Lat. 16°.

Now it so happens that during the fifty years from A.D. 635 to 685 there was, in both the *pūrṇimānta* and the *amānta* month Śrāvāṇa, only a single solar eclipse that could have been at all visible at Bādāmi, viz. the eclipse which took place 3 h. 5 m. after mean sunrise of Monday, the 13th July A.D. 660. That eclipse, an annular one, was fully visible at Bādāmi, and the 13th July A.D. 660 was the 15th of the dark half of the *pūrṇimānta* Śrāvāṇa. We may compare especially the solar eclipse in the date of the Paṭṭadakal duplicate pillar inscription of the reign of the W. Chalukya Kirtivarman II. (No. 48 of my *Southern List*), of the 25th JUNE A.D. 754, which likewise took place in the *pūrṇimānta* Śrāvāṇa; and to show that in early times the *pūrṇimānta* scheme of the months was prevalent in Southern India, we may also cite the solar eclipse in the date of No. 9 of the *List*, which took place in the *pūrṇimānta* Bhādrapada, and the solar eclipse in the date of No. 551 of the *List*, which took place in the *pūrṇimānta* Phālguna.

Monday, the 13th July A.D. 660 (in Śaka-samvat 582) would thus be in every way a suitable equivalent of our date; that it is its true equivalent is rendered more than probable by the date of the Nerūr plates of the queen Vijayabhāṭṭārikā (No. 23 of my *Southern List*). That date corresponds to the 23rd September A.D. 659, and is of the 5th year of a reign of which hitherto it appeared doubtful whether it was the reign of Vikramāditya's eldest brother Chandrāditya or of Vikramāditya himself. Since we now have a date in A.D. 660 which would be a most proper equivalent for a date of the 6th year of the reign of Vikramāditya I, the date in A.D. 659 must surely be definitely assigned to the 5th year of the same reign, and the two dates in my opinion must be taken to prove that Vikramāditya I. commenced to reign between some time in September A.D. 654 and July A.D. 655.¹

¹ Dr. Fleet, in his *Dynasties*, p. 363, arrived at the conclusion that "we shall probably be very close to the mark, if we place the formal commencement of his reign somewhere in the autumn of A.D. 655."

POSTSCRIPT.

By PROFESSOR F. KIELHORN, C.I.E.; GÖTTINGEN.

Prof. Hultsch has asked me to express an opinion on the date of the stone inscription published above, of which he has sent me an impression. He also, at the instance of Mr. Hira Lal, has requested me to give my readings of, and, if possible, to verify, the dates of two copper-plate inscriptions of the Kākaira (Kanker) chief Pamparājādēva, which are about to be published by Mr. Hira Lal, and of which impressions have been forwarded by him.

The date of the stone inscription clearly is, as given by Mr. Hira Lal: *Samvat 1242 Raudra-samvatsarā* | *Jyēshṭha-vadī pañchamīyām* |. It does not admit of exact verification, and the only question concerning it is, to which era the year 1242 should be referred so that the date may fall in a *Raudra-samvatsara*. *A priori* the expression *samvat 1242* would be taken here to denote the Vikrama year 1242; but there is no Vikrama year 1242 that could be called a Raudra year. Nearest to V. 1242, Raudra, by the southern system, would be the expired *Chaitrādī* Vikrama year 1257; and by the northern mean-sign system it would indicate the time from the 13th November A.D. 1195 to the 8th November A.D. 1196, in the expired *Chaitrādī* or *Kārttikādī* Vikrama years 1252 and 1253. If the year of the date were 1252 instead of 1242, it might be taken to be the expired *Kārttikādī* Vikrama year 1252, in which case the 5th of the dark half of Jyēshṭha would undoubtedly fall in a Raudra year; but there is nothing to prove that the writer erroneously put 1242 instead of 1252.

Assuming, then, the figures for the year and the Jupiter's year to have been correctly given, it would only remain to take the expression *samvat 1242*, as has been done by Mr. Hira Lal, to denote the expired Śaka year 1242, which by the southern system was a Raudra year. But here we are at once met by a difficulty. In my paper on the dates of the Śaka era in inscriptions I have shown¹ that among 400 Śaka dates of inscriptions only five do not contain the word *Śaka* or *Śāka*, and that of even these five dates three are spurious or suspicious, while the two others are in verse. There is therefore every reason to assume that the writer of the inscription would have denoted the Śaka year 1242 by some such expression as *Śakā* 1242, not by *samvat* 1242. And there might be the further objection that in the Central Provinces, where the date comes from, the system of Jupiter's years ordinarily followed seems to have been the northern system, not the southern system by which alone the Śaka year 1242 can be described as a Raudra year.

¹ See *Ind. Ant.* Vol. XXVI. p. 149.

As the date cannot be verified, it would be useless to indulge in further speculations.¹ To me the wording of it seems certainly to be suspicious. And I can only say that, assuming the figures for the year to be correct and the date to be really a Śaka date, it would correspond, for the *pūrṇimānta* Jyēshṭha, to Monday, the 28th April A.D. 1320, and for the *amānta* Jyēshṭha, as stated by Mr. Hira Lal, to Tuesday, the 27th, or Wednesday, the 28th May,² A.D. 1320.

Of the two copper-plate inscriptions of Pamparāja, one is clearly dated as follows:—

[L. 7] Śvara-
[L. 8] *saṃvatsarē Kārtika-māsē Chitrā-rikshē Ravi-dinē suryōparāgē*
[L. 10] *saṃvat 966*

i.e. "in the Śvara year, at an eclipse of the sun on a Sunday, in the *nakshatra* Chitrā in the month Kārtika, in the year 966."

I have no doubt that the year 966 of this date must be referred to the Kalachuri era.

In *Festgruss an Roth*, p. 53 ff., I have tried to prove from the 12 dates between the years 793 and 958, which hitherto have been available, that the Kalachuri (Chēdi) era commenced on the 5th September A.D. 248, that the years were *Śivindī* years and the months *pūrṇimānta* months, and that therefore, to convert an expired Kalachuri year into an expired year of the Kaliyuga, we must add 3349 when the date falls in the bright half of Śvina or in any month from Kārtika to Phālguna, and 3350 in all other cases. Applying this here, we find that our date, for the *pūrṇimānta* Kārtika of the expired Kalachuri year 966 = Kaliyuga expired 966 + 3349 = 4315, regularly corresponds to Sunday, the 5th October A.D. 1214, when the 15th *tithi* of the dark half ended 3 h. 33 m., and when the *nakshatra* was Chitrā, by the equal space system and according to Garga for 2 h. 38 m., after mean sunrise. On the same day there was a total eclipse of the sun, the greatest phase of which at Kanker (in about Long. 82° and Lat. 20°) was four digits.³

It will, I think, be generally admitted that Sunday, the 5th October A.D. 1214, undoubtedly is the proper equivalent of our date; but, in connection with this date, the writer apparently has wrongly quoted the year Śvara instead of the immediately following year Bahudhānya. By the northern mean-sign system Śvara lasted from the 2nd September A.D. 1212 to the 29th August A.D. 1213. By the northern luni-solar system therefore Śvara was the proper name of Kaliyuga 4314 expired, and not of the year of our date, viz. Kaliyuga 4315 expired, which according to the northern luni-solar system, as already intimated, would have received the name Bahudhānya. For the present, I can ascribe the error only to the writer's carelessness, but the error is of such a nature that it confirms rather than invalidates our general result.⁴

The date of the other copper-plate of Pamparāja I read thus:—

[L. 9] | *saṃvata* | 965 Bhādrapadē vadi 1[0]
[L. 10] *Mṛiga-rikshē Śō[ma]-dinē* |

Here everything is perfectly clear and certain in the impression excepting the number of the *tithi* and the second *akshara* of the name of the weekday. As regards the latter, it appears to

¹ If the year were 1244 (instead of 1242), it might be taken to be a Kalachuri year, in which case the date would have fallen in a Raudra year. I do not mean to suggest hereby that the inscription could be assigned to so late a period (A.D. 1492-93).

² The 5th *tithi* commenced 1 h. 4 m. before mean sunrise of the Tuesday and ended 0 h. 30 m. after mean sunrise of the Wednesday.

³ Between A.D. 1201 and 1260 this is the only solar eclipse in the month Kārtika that could have been visible at Kanker.

⁴ Mr. Hira Lal quite lately has sent me for calculation a date from the Central Provinces, which undoubtedly corresponds to Wednesday, the 5th October A.D. 1065. According to the original date, this day should fall in the year Parābhava; but by the northern luni-solar system it would fall in the year Plavaṅga which follows immediately upon Parābhava, and by the southern system in the year Viśvāvan which immediately precedes Parābhava.

me evident that the engraver after the *akshara śā* in the first instance by mistake engraved the letter *d* (of *dina*), and that he then altered this *d* to *ma*. Under any circumstances there could be no doubt that the intended weekday is *Sōma-dina* or 'Monday.' Nor can there be any real doubt about the number of the *tithi*. The date clearly gives us the dark half of the month Bhādrapada and during it the *nakshatra* Mriga (Mrigaśiraha). Now in the dark half the *nakshatra* will ordinarily be Mriga about the 8th *tithi* of the *amānta* and the 10th *tithi* of the *pūrṇimānta* Bhādrapada; and a careful examination of the impression shows that the word *vadi* is actually followed by 10, the 0 of which is engraved quite on the margin of the plate. I therefore take it that the date gives us for calculation "the year 965, the 10th *tithi* of the dark half of (the *pūrṇimānta*) Bhādrapada, with the *nakshatra* Mriga and a Monday." And treating the year again as a Kālachuri year, I find the following equivalents:—

For the expired Kālachuri year 965 = Kaliyuga expired 965+3350=4315: Saturday, the 2nd August A.D. 1214, when the 10th *tithi* of the dark half of the *pūrṇimānta* Bhādrapada ended 18 h. 25 m., and the *nakshatra* was Mriga, by the equal space system and according to Garga for 21 h. 40 m., and by the Brahma-siddhānta for 20 h. 21 m., after mean sunrise.

For the current Kālachuri year 965=Kaliyuga 4315 current: Monday, the 12th August A.D. 1213, when the 10th *tithi* of the dark half of the *pūrṇimānta* Bhādrapada commenced 7 h., and when the *nakshatra* was Mriga, by the equal space system and according to Garga for 15 h. 46 m., and by the Brahma-siddhānta for 14 h. 27 m., after mean sunrise.

Of the two, I do not hesitate to accept Monday, the 12th August A.D. 1213, as the true equivalent of our date. That the *tithi* of the date was a current *tithi* can cause no difficulty. And the fact that Kālachuri years, occasionally and exceptionally, are quoted as current years is proved by another date, in an inscription of which Mr. D. R. Bhandarkar some time ago has been good enough to send me a photograph. The inscription referred to is one at Śeorinārāyan which the late Sir A. Cunningham had stated to be dated—

Kalachuri-samvatsarā || 898 || *Āsvina-sudī* 2 *Sōma-dinā*.

According to the photograph the date really is—

Kalachuri-samvatsarā || 898 || *Āsvina-sudī* 7¹ *Sōma-dinā*, and with this reading the date regularly corresponds, for the current Kālachuri year 898, to Monday, the 24th September A.D. 1145, when the 7th *tithi* of the bright half of *Āsvina* ended 20 h. 57 m. after mean sunrise.

¹ So the *tithi* was already given, correctly, in *As. Res.* Vol. XV. p. 406.

ANCIENT PALM-LEAF MSS. LATELY ACQUIRED FOR THE GOVERNMENT OF BOMBAY.

BY DR. F. KIELHORN, DECCAN COLLEGE, PUNA.

After some months of hard work I am enabled to give a short account of the collection of ancient palm-leaf MSS., which it has been my good fortune lately to acquire for the Government of Bombay. It has not been an altogether easy task to reduce to something like order more than 12,000 leaves which for hundreds of years have been hidden away unread and uncared for, and so to arrange them as to make the works which they contain generally accessible and useful to my fellow-workers; but the result has amply repaid any little trouble which has been undergone.

The collection will be particularly welcome to those who specially devote their energies to the elucidation of the history of the Jain religion, but it also contains some works which are sure to interest Sanskrit scholars generally. Its acquisition gives rise to the hope that the liberality of the Government of India will enable us to continue the examination of the ancient libraries of this country which has already yielded most valuable and un hoped-for results.

There are several works in the collection which hitherto were either unknown or of which only imperfect copies were accessible, but what renders these MSS. specially valuable, and the one point in which they excel all MSS. of the principal European Libraries, is their great antiquity. The oldest MS. of the Berlin Library is dated Saṃvat 14:35 (A.D. 1378), and I cannot be far wrong in saying that the London and Oxford Libraries contain few MSS. written before the 16th century. Those of the palm-leaf MSS. which are dated give the years when they were written as stated below, and there is evidence to prove that those which contain no dates were written about the same time, viz., from six to eight hundred years ago. The dates actually given are:—

Saṃvat 1138 = A.D. 1081.

Saṃvat 1145 and 46 = A.D. 1088 and 89; during the reign of Karmadeva.

Saṃvat 1179 = A.D. 1122; during the reign of Jayasingha.

Saṃvat 119-(?) = between A.D. 1133 and 42. Saṃvat 1218 = A.D. 1161; during the reign of Kumārāpāla.

Saṃvat ? = ? during the reign of Bhimadeva.

Saṃvat 1294 = A.D. 1237.

Saṃvat 1300 = A.D. 1243.

Saṃvat 1304 = A.D. 1247.

Saṃvat 1315 = A.D. 1258.

Saṃvat 1332 = A.D. 1275.

Saṃvat 1340 = A.D. 1283.

Saṃvat 1342 = A.D. 1285.

Kaliyuga 4398 = A.D. 1297; during the reign of Rāmachandradeva.

Saṃvat 1359 = A.D. 1302.

Reserving for my Report to Government any further remarks I may have to offer and a more accurate description of the MSS., I now proceed to give the titles of the works which they contain, together with the names of the authors, where they are mentioned, and the number of leaves of each MS:—

1. *Anekārthasaṅgraha* by Hemachandra; 99 ll.
2. *Achāraniryukti*; 32 ll.
3. *Uttarādhyayanāsūtra*; 64 ll.; Saṃvat 1342.
4. The same; 175 ll.; Saṃvat 1332.
5. The same, incomplete; 134 ll.
6. *Uttarādhyayanāsūtravṛitti sūbhoḥā*; 394 ll.; 12,000 Gr.; Saṃvat 1342.
7. *Upadeśakaulūṭeritti* by Bālachandra; fragments of 250 ll.
8. *Upamitabhavaprapanchā Kathā*; 355 ll.
9. *Rishidattācharita* by Guṇapāla; 153 ll.; written during the reign of Bhimadeva.
10. *Ohasamāyāsi*; 110 ll.; 1162 Gāthās.
11. *Kandalīppana*; fragments of 150 ll.

12. *Karmastavaṭṭhā* by Govindagaṇi; 47 ll.; Saṃvat 1179.
13. *Kalpachūṛṇi*, on the Bṛihatkalpasūtra; 281 ll.; 16000 Gr.; Saṃvat 1218, during the reign of Kumārāpāla.
14. *Kalpasūtra*; 130 ll.
15. *Kavidarpaṇavṛtti*, incomplete; 85 ll.
16. *Keṭtrasamāsa* of Jinabhadragaṇi-kṣhamāśramaṇa, with commentary by Malayagiri; 283 ll.
17. *Gaṇḍavaha*, Kairāyalaṃchhapassa Vapairāyassa; 111 ll.
18. *Chatuṣṭhopāṅgatṛitīya-palasaṅgrahaṇi* by Abhayadevasūri; 17 ll.
19. *Chaityavandanakulavṛtti* by Jinakuśalasūri, incomplete; 169 ll.
20. *Chaityavandanasūtravṛtti lalitavistarā* by Haribhadra; leaves 60-143, and fragments.
21. *Lalitavistarāpanjikā* by Śrīmanichandrasūri; 249 ll.
22. *Chaulukyavaiśiḥ Dvyārayamahākāvya*, in 20 Sargas, by Hemachandra; with marginal notes; 189 ll.
23. *Jītakalpachūṛṇi* by Siddhasena; 85 ll.
24. *Jītavayahārasūtra* with Vivaraṇa; 79 ll.
25. *Jainendravaiśikāraṇa-śabdārṇavachandrikā* by Somadeva; incomplete; 280 ll.
26. *Jyotiṣharatnakosa* by Lalla, the son of Bhaṭṭa Trivikrama; 200 ll.
27. *Tātparyapariśuddhi* by Udayana; incomplete; 240 ll.
28. The same; fragments of 100 ll.
29. *Damayantīkathā* by Trivikramabhaṭṭa; with marginal notes; 179 ll.
30. The same; 76 ll.; last leaf missing.
31. *Dvātrīṇisaddvātrīṇisikā*; 90 ll.; 830 Gr.
32. *Narapatijayacharyā*; 111 ll.
33. *Nāmalīṅgānusāsana* by Amarasīma; 118 ll.; Kaliyuga 4398, during the reign of Rāmachandradeva.
34. *Nīṭhasūtra*; 15 ll.; Saṃvat 1145.
35. *Nīṭhasūtrachūṛṇi viśeṣanāmnā*, Uddesaḥ XIV-XX, by Jinadāsagaṇi, and Jihāḥya; 415 ll.; Saṃvat 1145 and 46, during the reign of Karmadeva.
36. *Nīṭhasūtrachūṛṇi viśeṣanāmnā*, Udd. I-X, by Jinadāsagaṇi; 326 ll.; Saṃvat 1359.
37. The same, Udd. XI-XX; 353 ll.; Saṃvat 1294.

38. *Naishadhacharita* by Śrīharsha, Sargas I-XII; 179 ll.
39. *Nyāyapraveśaṭṭhā* by Haribhadra, incomplete; 51 ll.
40. *Panchavastuka*; 97 ll.; 1700 Gāthās; Saṃvat 1179.
41. *Pañjikāḍḍurgapadoprabodha*, a commentary on Trilochanadāsa's Kātantravṛttivivaraṇapanjikā, by Jinaprabodhasūri; 232 ll.
42. *Pāśhikasūtravṛtti* by Yaśodevasūri; ll. 1-157 and 170-189.
43. *Pinḍaniryukti*; 61 ll.
44. *Pinḍaniryuktivṛtti śiṣyahitā* by Viragaṇi; 226 ll.
45. *Pinḍaviśuddhiprakaraṇavṛtti* by Yaśodevasūri; 142 ll.; Saṃvat 1300.
46. *Prajñāpanapradeśavyākhyā* by Haribhadra; 97 ll.
47. *Pramāṇanayatattvālokāṅkāra*; fragments of 100 ll.
48. *Moharājaparājayanāṭṭaka* (in honour of Kumārāpāla) by Yaśaḥpāla; 105 ll.
49. *Yogāśāstravṛtti*; 150 ll. much damaged.
50. The same; 300 ll. much damaged.
51. *Rudraṭṭakāvyaśālikāraṭṭippanaka* (Śvetāmbara) Nami; 199 ll.
52. *Vārttikāṭṭippana* (Nyāya); 150 ll. damaged.
53. *Vichārasāra* by Jinavallabhagaṇi; 128 ll.
54. *Viśeṣāvaiśyakabhāṣya*; 131 ll.
55. *Viśeṣāvaiśyakabhāṣyaṭṭhā* by Kōtyāchārya; 341 ll.; 13700 Gr.; Saṃvat 1138.
56. *Viśeṣāvaiśyakavṛtti śiṣyahitā*; 345 ll.; Saṃvat 119—(?)
57. *Satakavṛtti* by Hemachandra; 198 ll.
58. *Śabdāsiddhi*, a gloss on Durgasīma's Com. on the Kātantra, by Mahādeva, the son of Dhundhuka; 177 ll.; Saṃvat 1340.
59. *Śabdānusāsana*, with Vṛtti, by Malayagiri; incomplete; 288 ll. Related to the Śākaṭāyana-vyākaraṇa; composed under Karmārāpāla.
60. *Śabdānusāsana-laghuvṛtti*, Adhy. I, 1-III, 2, by Hemachandra; 137 ll.; Saṃvat 1315.
61. The same; 141 ll.
62. *Śabdānusāsana-vṛtti*, Adhy. I, 1-II, 1, by Hemachandra; 178 ll.; much damaged.
63. *Sāntināṭṭhacharita*, a Mahākāvya by Māṇikyachandra; incomplete; 300 ll.
64. *Śrāvaka-pratikramṇavṛtti*, incomplete; 32 ll.; Saṃvat 1179.

65. *Saptatikā*, with commentary by Malayagiri; 205 ll.
66. *Saravatikāṅthābharaṇa* by Śrībhōjadēva, incomplete; 353 ll.
67. *Siddhahemachandra-śabdānusāsana-rahasyavṛtti* (i. e. laghuvṛtti), Adhy. III, 3-IV, 4, 62 ll.
68. *Sūryasataka* with Commentary; 47 ll.
69. *Śikhāṅgasūtra*; 210 ll.
70. A work in Māgadhi the proper title of

which I have not discovered; 214 ll. Last leaf missing.

71. A MS. of 186 ll. containing 10 Jain works.

72. A MS. of 203 ll. containing 7 Jain works.

73. A MS. of 18 ll. containing 3 Jain works.

74. A MS. of 190 ll. containing about 20 Jain works.

75. A MS. of 189 ll. containing about 25 Jain works.

Die Colebrooke'schen Pāṇini-Handschriften der Königlichen Bibliothek zu Göttingen.

Von

F. Kielhorn.

Die Göttinger Bibliothek hat die Ehre eine kleine Sammlung Colebrooke'scher Handschriften ihr eigen nennen zu dürfen. Durch welches tragische Geschick sie in den Besitz dieses Schatzes gekommen ist, zeigt ein in den Akten der Bibliothek befindlicher Brief¹⁾, dem ich folgende Stellen entnehme: —

„Mein vor 15 Jahren verstorbener ältester Sohn, der Professor Rosen in London, ordnete im Jahre 1837 auf Bitte des allmählig ganz erblindenden T. Colebrooke die Sammlung und den sorgfältig

1) Der Schreiber des Briefes, Vater des zu früh verstorbenen Orientalisten F. A. Rosen, studierte in Göttingen zuerst Philologie 1793—98 (Dr. phil. 1798), dann seit 1802 Jurisprudenz (Dr. juris 1803), und war bis 1816 Docent in der juristischen Facultät.

tigen Wiederabdruck der, hauptsächlich in den Asiatick researches, zerstreueten, sich auf indische Sprache und Literatur beziehenden Aufsätze (Essays) desselben an, welche denn auch im Todesjahre Beider (1837) bekanntlich erschienen sind. Bei dieser Gelegenheit und in Anerkennung der Mühe, welche mein Sohn von diesem Geschäfte hatte, schenkte Colebrooke ihm einige Handschriften von Sanskritwerken, die reich mit seinen beige-schriebenen Anmerkungen grammaticalischen und lexicalischen Inhalts versehen sind, in denen man Vorarbeiten zu den Werken des berühmten Sanskritisten erkennen kann.

Diese Mspte befinden sich seit dem Tode meines Sohnes in meinem Besitze. Herr Prof. Lassen in Bonn hatte vor 13 Jahren die grosse Güte, für mich ein Verzeichniss dieser und anderer zum literarischen Nachlasse des Verstorbenen gehörigen Handschriften anzufertigen. Eine von diesen enthält

A grammar of the Sanscrit language from the text of Pānini and the commentaries of Ramachandra, Bhattoji Dīkshita etc. — (Devanagari-Schrift). — Herr Pr. Lassen hat dabei bemerkt „es ist Pānini mit Colebrooke's handschriftlicher Uebersetzung und wahrscheinlich die vorbereitende Arbeit zu seiner Grammatik“.

Die Colebrooke'schen Anmerkungen scheinen aus den letzten neunziger Jahren des vorigen Jahrhunderts herzurühren und werden allerdings nicht mehr im Stande seyn, dem in den letzten 50 Jahren so weit geförderten Sanskritstudium noch irgend bedeutend zu statten zu kommen; allein die Handschriften haben sicher noch immer hohen Werth als autographische Denkmale jenes würdigen Gelehrten, und sie verdienen aus dem Privatbesitze eines Dilettanten, wo sie später manchen Gefahren ausgesetzt sind, in eine öffentliche Bibliothek überzugehen.

Ich biete sie dem Bücherschatze der noch immer dankbar von mir verehrten Georgia Augusta als Geschenk an.

Bei dieser Schenkung mache ich eine einzige Bedingung. Es ist folgende. — Nach dem Tode meines unvergesslichen Sohns übersandten mir seine Londoner Freunde, unter andern rührenden Beweisen ihrer Theilnahme an meinem Verluste auch eine von Rd. Westmacott gearbeitete Marmorbüste des Verstorbenen. Dass ich diese Büste so lange ich lebe bewahren werde versteht sich von selbst. Ich werde aber anordnen, dass dieselbe nach meinem nicht mehr fernem Ableben ebenfalls an die Universitätsbibliothek in Göttingen übersandt werde. — Nun bitte ich mir nur von der vor-

gesetzten Behörde dieser Bibliothek ein schriftliches Versprechen aus, dass die Büste, wenn Ihr dieselbe übersandt worden, in einem der Bibliotheksäle aufgestellt werden solle. — Das Bild eines zu früh dahingerafften Mannes, der sich nicht bloß durch Gelehrsamkeit, sondern auch durch unermüdete Dienstfertigkeit gegen andere Gelehrte die Achtung und Liebe seiner Zeitgenossen erworben, und dessen Namen auch in Göttingen nicht vergessen ist, wird diesen Sälen nicht zur Unzier gereichen.

Detmold den 25sten Sept. 1852.

Dr. Ballhorn-Rosen,
F. Lipp. Canzler.“

Die in diesem Briefe erwähnten Handschriften, neun Folio-Bände, wurden der Bibliothek im October und December des Jahres 1852 übersandt, zusammen mit einem Exemplare des 7ten Bandes der *Asiatic Researches*, das ebenfalls aus Colebrooke's Bibliothek stammt und manche Bemerkungen von seiner Hand enthält, und einem Exemplare seiner *Essays*. Die Büste Friedrich August Rosen's ziert seit Februar 1856 den großen historischen Saal der Bibliothek.

Es ist nicht meine Absicht, eine Beschreibung sämtlicher Handschriften zu liefern, die so in den Besitz der Bibliothek übergegangen sind; und ich brauche dies um so weniger zu thun, als ein Verzeichniß aller unsrer Sanskrit-Handschriften¹⁾ in Professor Wilhelm Meyer's Kataloge der Göttinger Handschriften seine Stelle finden wird. Aber ich halte es für meine Pflicht, hier wenigstens auf die darunter befindlichen Handschriften der Grammatik des Pānini aufmerksam zu machen; denn wegen der reichen Bemerkungen Colebrooke's, die sie enthalten, besitzen diese Handschriften noch immer einen grossen Werth. Colebrooke's Versuche die Grammatik des Pānini in eine europäische Sprache zu übertragen, mit denen wir hier bekannt werden, zeigen, daß er sich schon gegen das Ende des vergangenen Jahrhunderts wie kein anderer Europäer vor oder nach ihm mit der Technik der indischen Grammatik vertraut gemacht hatte. Und die Probe einer Uebersetzung des Pānini mit erklärendem Commentare in englischer Sprache, die eine dieser Handschriften im Anhang enthält, veräth überall, durch wie umfassende und tiefgehende Studien im Bereiche der grammatischen Literatur er sich für das von ihm beabsichtigte Werk vorbereitet hatte. Es ist darum nicht zu verwundern, daß Colebrooke's Uebersetzungen mancher schwierigen

1) Bearbeitet von einem meiner Schüler, Herrn H. Lüders.

Regel, die sich in den Handschriften zerstreut finden, bis heute kaum erreicht, viel weniger übertroffen sind; und daß das, was er uns bietet, fast immer geeignet ist uns das Verständniß einer Regel zu erleichtern oder den richtigen Ausdruck für ihre Uebersetzung finden zu lassen, auch wo wir ihm nicht ganz beistimmen können.

Diese Handschriften des Pāṇini sind in den Katalogen der Bibliothek als Cod. MS. Orient. 207, 208, und 209 bezeichnet. Alle drei sind von Eingebornen in Devanāgarī Schrift auf starkem europäischen Papiere großen Formats (etwa 48 Centimeter hoch und 29—32 Centimeter breit) nach Art europäischer Bücher geschrieben.

Das Papier von 208 und 209, um die weniger wichtigen Handschriften vorweg zu nehmen, enthält Wasserzeichen der Jahre 1801 und 1802. In beiden ist es auf beiden Seiten beschrieben, und jede Seite enthält zwei Columnen mit leeren Zwischenräumen, die von Colebrooke für eigne Bemerkungen bestimmt waren und für solche benutzt sind.

No. 208, aus 62 Blättern bestehend, enthält nach Colebrooke's Aufschrift „Pāṇini's Sūtras or Rules of Grammar“; in Wirklichkeit aber in schwarzer Schrift den Text der Sūtras, und in rother Schrift Zusatzregeln oder sonstige Bemerkungen (Vārttikas, Kārikās etc.) aus der Kāśikā-Vṛitti. Manche Regeln sind von Colebrooke kurz übersetzt; öfter hat er den Paragraphen seiner Grammatik angegeben, in dem sich die Uebersetzung findet oder wo der betreffende Gegenstand behandelt wird. Außerdem hat er vielen Regeln oder Bemerkungen des Sanskrit Textes gewisse Zeichen (arbitrary marks, — eine Hand, einen Stern, einen Dolch, u. a.) vorgesetzt, durch welche er, wie er selbst angibt, andeuten wollte, unter welche der folgenden Rubriken eine Regel oder Bemerkung fällt: —

1. A rule premised (d. i. eine Adhikāra-regel).
2. A maxim (d. i. eine Paribhāshā).
3. An exposition (d. i. eine Saṃjñā-regel).
4. A rule peculiar to the Veda.
5. An emendatory rule or Vārttika.
6. A remark (Isṭi) extracted from the Bhāshya.
7. A metrical rule or Kārikā.
8. A memorial verse.
9. A list from the Gaṇapāṭha.

Colebrooke's in dieser Handschrift enthaltene Uebersetzungen einiger wichtiger Regeln hoffe ich an andrer Stelle nutzbar zu

machen. Hier möchte ich nur noch bemerken, daß zwischen Blatt 1 und 2 dieser Handschrift ein Blatt mit dem Wasserzeichen des Jahres 1801 eingheftet ist, auf dem Colebrooke die „Grammarians named in the Preface of the Gaṇaratna Mahādadhī, as explained by Bardhamāna (Pupil of Góvinda Śīri)“ verzeichnet hat.

No. 209, aus 107 Blättern bestehend, wird am Anfange und am Schlusse vom Schreiber als Pāṇinisūtrabhāshyavārttika bezeichnet, und enthält in der That die Sūtras des Pāṇini mit Vārttikas und andern Auszügen aus dem Mahābhāshya. Es unterliegt keinem Zweifel, daß wir in dieser Handschrift den ersten Versuch vor uns haben, der Grammatik des Pāṇini die Form zu geben, die sie später in der Calcuttaer Ausgabe der *Ashṭādhyāyī* erhalten hat. Colebrooke's handschriftliche Bemerkungen sind nicht zahlreich. Doch kann ich auf zwei Punkte aufmerksam machen, welche beweisen wie weit er auch in dem Verständniß und der richtigen Erkenntniß der Natur des Mahābhāshya seiner Zeit voraus war. Ein formeller Punkt besteht darin daß er, bei Regeln die er studiert hat, die Worte *kartavya* und *vaktavya*, wo sie der Schreiber oder Paṇḍit an das Ende eines Vārttika gesetzt hatte, als nicht zum Texte des Vārttika gehörig gestrichen hat. Und bedeutsamer noch ist der zweite Punkt, daß nämlich Colebrooke schon hier das Mahābhāshya als einen Commentar zu den Vārttikas bezeichnet, und — wiederum durch arbitrary marks — dann und wann angedeutet hat, daß gewisse Vārttikas von Patañjali adoptiert, andere verbessert, und noch andre vermittelt einer künstlichen Erklärung der Regeln des Pāṇini zurückgewiesen werden.

Wichtiger ist die dritte Handschrift, No. 207 unserer Kataloge, die von Colebrooke selbst als „A Grammar of the Sanscrit Language; from the text of Pāṇini, and the commentaries¹⁾ of Rāma-chandra, Bhattóji-dicshita, and others“ bezeichnet wird. Diese Handschrift enthält zunächst auf 73 Blättern, die das Wasserzeichen des Jahres 1794 tragen, den Text der *Ashṭādhyāyī*, so geschrieben daß rechts vom Texte reichlicher Raum für handschriftliche Bemerkungen blieb. Da dieser Raum indessen nicht genügte, wurden später noch 81 Blätter²⁾,

1) Unter diesen Commentaren sind ohne Zweifel die *Prakriyā-kaumudī* und die *Siddhānta-kaumudī* zu verstehn, die besten Werke, die sich Colebrooke für den Anfang hätte wählen können.

2) Außerdem liegen in der Handschrift einige lose Blätter mit Uebersetzungen einzelner Regeln; und ein Briefkouvert mit dem Wasserzeichen 1797, das von Colebrooke an J. H. Harington Esq., und von diesem an H. Colebrooke Esq. zurück adressiert ist. John Herbert Harington, Civilbeamter im Dienste der East

mit dem Wasserzeichen des Jahres 1796, zwischen den Blättern des Textes eingefügt. Der neben dem Texte gelassene Raum und die so eingeschobenen Blätter enthalten Colebrooke's Uebersetzung von etwa drei Vierteln sämmtlicher Regeln der Grammatik des Pāṇini. Nahezu vollständig übersetzt ist Alles, was sich auf die Technik der indischen Grammatik, auf die Lautlehre, die Declination und Conjugation, die Bildung der Femininstämme, die Bedeutung der Suffixe und die Syntax bezieht; und in den Abschnitten, die von der Composition der Nomina, den *kṛit* und *taddhita* Suffixen handeln, sind wenigstens die Regeln allgemeineren Inhalts erklärt und die sich aus den Regeln ergebenden Resultate bisweilen durch tabellarische Uebersichten erläutert worden. Nicht übersetzt sind im Wesentlichen nur die Regeln über die Accente und die Sprache des Veda. Ich hege keinen Zweifel, daß der Anfang mit dieser Uebersetzung gemacht wurde, als Colebrooke zum ersten Male den Pāṇini mit seinen Paṇḍits studierte. Aber es ist sicher, daß er später, als er die Commentare selbst verstehn gelernt hatte, aber schon ehe er seine Sanskrit Grammatik veröffentlichte, das zuerst Niedergeschriebene immer wieder zu verbessern gesucht hat. Ich könnte mehr als eine schwierige Regel anführen, von der uns die Handschrift drei oder vier Versuche einer Uebersetzung bietet, die aber alle von der in Colebrooke's Grammatik gedruckten Uebersetzung derselben Regel noch übertroffen werden.

Ich bin überzeugt, daß Colebrooke in den letzten Jahren des verflossenen Jahrhunderts die Absicht gehabt hat, den Text der Grammatik des Pāṇini mit einer englischen Uebersetzung und einem Commentare in englischer Sprache herauszugeben, und daß er sich erst später, durch äußere Umstände veranlaßt, entschloß, das von ihm gesammelte Material in seiner (leider nie vollendeten) Sanskrit Grammatik zusammenzustellen und die Herausgabe des Textes des Pāṇini den Calcuttaer Paṇḍits zu überlassen. Auf jeden Fall enthält unsre Handschrift in einem Anhang auf 11 Blättern Colebrooke's Reinschrift einer Uebersetzung des größten Theiles des ersten Adhyāya von Pāṇini's Werke, und seinen Commentar zu einer beträchtlichen Anzahl von Regeln. Die hier übersetzten Regeln sind P. I, 1, 1—58 und 60—75; 2, 1—52 und 64—73; 3, 1—43; und 4, 1—12; commentiert sind I, 1—20, 27—37, 42—49,

India Company seit 1780, und zuletzt Member of the Supreme Council and President of the Board of Trade, „was also for some years honorary professor of the laws and regulations of the British government in India in the college of Fort William . . . and afterwards president of the council of the college“ (*Dict. of Engl. Biogr.*)

und 51; 2, 27—29, und 64—73; und 3, 1—43. Außerdem ist bei vielen Regeln auf dem Rande bemerkt, wo sie oder die in ihnen gelehrten Termini zur Anwendung kommen. Vieles von dem, was unsre Handschrift bietet, hat Colebrooke in seiner Grammatik selbst veröffentlicht. Trotzdem dürfte die Handschrift auch jetzt noch dem, der die Grammatik des Pāṇini ins Englische übersetzen wollte, sehr werthvolle Dienste zu leisten im Stande sein. Zum Beweise hierfür gebe ich die Uebersetzung des ersten Pāda der *Ashṭādhyāyī*, wie sie Colebrooke in seinen Handschriften selbst gegeben hat. Ich folge im Allgemeinen der erwähnten Reinschrift, gestatte mir aber einzelne Ausdrücke oder Wendungen aus andern Stellen der Handschriften aufzunehmen. Colebrooke's Anmerkungen zu veröffentlichen ist hier nicht der Ort.

Pāṇini Adhyāya I, Pāda 1.

1. *Ā*, *ai* and *au* are named *vṛiddhi*;
2. and *a*, *e* and *o* are called *guṇa*.
3. When the substitution of such a letter is enjoined under these denominations, without specifying the letter which gives place thereto, such *guṇa* and *vṛiddhi* element shall be substituted for an *ik* vowel only.
4. The substitution of a *guṇa* or *vṛiddhi* letter, for an *ik* vowel, does not take effect in right of an *ārdhadhātuka* suffix on account of which some part of the verb is expunged;
5. nor in right of an affix, which does really or fictitiously contain a mute *k* or *ñ*;
6. nor does it take place in the verbs *dīdhi* 'to shine', or 'to play', and *vevī* 'to move, to pervade, to conceive, to desire, to throw', or 'to eat'; nor in the prefix *ī*.
7. Consonants, not separated by intervening vowels, are termed conjunct.
8. An element prolated by the nose and mouth is nasal.
9. Letters, articulated near the same organ of speech and with the same aperture for the voice, are homogeneous;
10. but a vowel and a consonant are not so.
11. *Ī*, *ū* and *e*, terminating a word in the dual number, are named *pragṛihya* (and are consequently unalterable, even though a vowel follow in connected orthography).
12. So are the same vowels following *m* in the inflections of the pronoun *adas* 'this';
13. and so is *śe* (which is employed in the Veda, in the inflections of the personal pronouns).

14. A particle consisting of a single vowel, except (*ā* deduced from) *ān*, is likewise named *pragrihya*;
15. and so is *o*, being the final of a particle.
16. In the vocative case a final *o* is likewise so named, according to Śākalya, when *iti* follows, unless it be in a passage of holy writ.
17. So likewise (*u* deduced from) *uñ* is named *pragrihya*, according to the same author, when that particle follows;
18. and so is the nasal vowel *ū*, which may be substituted for *uñ* before the same term, according to the same authority.
19. *ī* and *ū*, terminating a word that bears the sense of the seventh case, are likewise named *pragrihya*.
20. The verbs *dā* and *dhā*, and such as assume those forms, except *dāp* 'to cut' and *dāip* 'to cleanse', are called *ghu*; (*vis. dūdāñ* and *dāñ* 'to give'; *do* 'to cut'; *deñ* 'to protect'; *ḍudhāñ* 'to hold, to nourish'; and *dheṭ* 'to drink'.)
21. A single letter is liable to the same inflections as if it were initial or final.
22. *Tarap* and *tamap* (terminations denoting the comparative and superlative degrees) are named *gha*.
23. The words *bahu* 'many' and *gana* 'a set' or 'class'¹⁾, and terms ending in the suffixes *vatu* and *ḍati* are called numerals.
24. A numeral ending in *śh* or *n*²⁾ is named *śat*;
25. and so is one, the termination whereof is deduced from the suffix *ḍati*.
26. *Kta* and *ktavatu* (suffixes with which are formed the participles of the past tense) are called *nishthā*.
27. *Sarva* and certain other words, whether single or terminating a compound, are termed pronouns.
28. They may at pleasure be, or not be, so named in a Bahuvrīhi compound formed of terms signifying regions of space.
29. They are not so named in any other Bahuvrīhi compound;
30. nor in a compound, which, if resolved, would exhibit its other term in the third case; [nor in a phrase equivalent to such a compound;]
31. nor in a Dvandva compound.
32. However, they may at pleasure be, or not be inflected as pro-

1) An anderer Stelle: „*bahu* and *gana*, unless they signify greatness or assemblage“.

2) Oder „a numeral originally ending in *śh* or *n*“; oder „numerals which in their elementary form end in *śh* or *n*“. — Siehe P. I, 1, 24, Vārtt. 1.

- nouns, in a Dvandva compound, with *jas*, the termination of the first case in the plural number.
33. *Prathama* 'first', *charama* 'last', derivatives ending in *taya* (deduced from the suffix *tayap*), *alpa* 'little', *ardha* 'half', *katipaya* 'few', and *nema* 'half', may at pleasure be, or not be, inflected as pronouns in the plural number of the first case. [*Ubhaya* 'both', derived from *ayach* substituted for *tayap*, must be inflected like a pronoun in this case and number. Ordinals ending in *tiya* may be inflected as pronouns with the suffixes distinguished by a mute *ñ*].
 34. So may *pūrva* 'east' or 'prior', *para* 'subsequent', *avara* 'west' or 'posterior', *dakṣiṇa* 'south' or 'right', *uttara* 'north' or 'subsequent', *apara* 'other' or 'inferior', and *adhara* 'west' or 'inferior', denoting relative situation, unless they be used as appellatives.
 35. So may *sva* 'own', unless it be used as an appellative and signify 'kinsman' or 'wealth';
 36. and so may *antara* provided it signify 'external' or 'lower garment'.
 37. *Svar* and certain other words are indeclinable; and so are particles.
 38. So are words ending in a taddhita suffix, to which all the signs of cases cannot be subjoined;
 39. and so are words terminated by a kṛit suffix ending in *m* or in a diphthong;
 40. or terminated by the suffixes *ktvā*, *tosun*, or *kasun*.
 41. An adverbial compound too is indeclinable.
 42. *Śi* (which is substituted for *jas* and *śas* in the inflections of neuter nouns) is called *sarvanāmasthāna*;
 43. and so are *su*, *au*, *jas*, *am* and *auṭ*, except in the neuter gender. (The exception does not contradict the preceding rule.)
 44. *Vibhāshā* denotes prohibition together with option. (It signifies "not, optionally however".)
 45. An *ik* vowel, which has been, or is to be, substituted for a semivowel (*yañ*)¹⁾, is called *samprasāraṇa*.

1) Bei einer etwas andern Fassung der Regel fügt Colebrooke hinzu „and the substitution of such a vowel for a semivowel“; and hat die Anmerkung „the rule admits of two interpretations, and must in fact be taken in both senses, as here translated“. Er will offenbar sagen, daß *samprasāraṇa* nicht nur den für den Halbvocal substituierten Vocal bezeichnet, sondern auch gleichbedeutend ist mit dem Satze „*ik* tritt an die Stelle von *yañ*“. Vgl. die Vārtikas zu der Regel.

46. That which is distinguished by a mute *t*, is initial; by a mute *k*, is final;
47. and by a mute *m*, is subjoined to the last vowel, (whether this be, or be not, followed by a consonant).
48. When a short vowel must be substituted for a diphthong, only the *ik* element becomes short (but the other element is rejected¹⁾).
49. In rules of grammar, the sixth case imports "instead of".
50. When an element is to be substituted for another, the most similar to the original one must be chosen out of those which are offered.
51. When an *an* vowel is substituted for *ri*, *r* must be subjoined to it. [In like manner *l* is subjoined to such a vowel substituted for *i*.]
52. What is thus (49) directed to be substituted for a term so exhibited in the sixth case, shall be put in the place of the last letter thereof;
53. and so shall a substitute containing a mute *n* (even though it consist of several efficient letters, 55).
54. A variation of a subsequent term on account of a preceding one affects its initial letter only.
55. A substitute consisting of two or more efficient letters, (without a mute *n*, 53,) or distinguished by a mute *s*, shall be put in the place of the whole term so (49) exhibited in the sixth case.
56. The substitute is equal to the original, except in regard to operations depending on the particular letters of the original.
57. That, which is substituted for a vowel on account of a subsequent term, is equal to the original so far as the preceding element is concerned;
58. except in regard to operations on the termination of an inflected word; in regard to the duplication of elements; in regard to the preceding element in the instance of *vara*; in regard to the expunging of *y*; in regard to the tone of vowels; in regard to the substitution of a homogeneous element; in regard to the substitution of *anusvāra*; in regard to the lengthening of a vowel; in regard to the substitution of a *jaś* consonant; and in regard to the substitution of a *char* consonant.

1) An anderer Stelle: „when a short vowel must be substituted for a diphthong, it shall be an *ik* vowel“.

59.¹⁾
60. The expunging, obliterating, effacing, or omitting of an element, so that it shall be unheard and unpronounced, is called *lopa* or substitution of a blank.
61. *Luk*, *slu* and *lup* are names for the expunging of suffixes with such consequent operations, as are denoted by these terms respectively²⁾.
62. When the whole of a suffix is expunged, operations, depending on such a suffix, do nevertheless take place;
63. unless the term, by which the suffix is directed to be expunged, contains the syllable *lu*; for, in that case, the radical body³⁾ remains unaffected.
64. The last vowel, together with a subsequent consonant (if any there be), is called *ni*, the last syllable.
65. The element, which precedes the last letter, is called penultimate.
66. When that, on account of which something is directed to be done, is exhibited in the seventh case, the consequent operation affects a preceding term only.
67. When it is exhibited in the fifth case, the operation affects a subsequent term only.
68. In grammar, the particular form only of a word (abstracted from its sense) is meant; excepting the technical denominations of words, for they, not the word which designates them, are thereby meant.
69. A vowel or a semivowel (*an*), or a consonant to which a mute *u* is annexed, implies the homogeneous elements as well as the particular letter, which is expressed; excepting suffixes.
70. Preceded or followed by the letter *t*, an element implies the homogeneous sounds of the same length as well as the particular one which is expressed.
71. The first term of any set, together with a final mute letter, is a designation of all the intermediate elements as well as of that initial term itself.

1) Diese Regel ist nirgends vollständig übersetzt.

2) An anderer Stelle: „the expunging of a suffix with such further consequences as are severally denoted by the terms *luk*, *slu*, and *lup*, is designated by these terms respectively“.

3) Später hat Colebrooke *aṅga* mit „inflective root“ übersetzt. Vgl. seine Grammatik, S. 14: „*Luk*, *slu* and *lup* are also names for the expunging of affixes; and, when a blank is substituted under one of these denominations, the inflective root remains unaffected by the expunged affix“.

72. That, by which, as a limitation¹⁾, a grammatical operation is directed, implies the whole term whereof it is the final.
 73. A word, whereof the first vowel is *vṛiddhi*, is named *vṛiddha*;
 74. and so are *tyad* and certain other pronouns;
 75. and so is a word, whereof the first vowel is *e* or *o*, provided it be the name of an eastern country.

1) An anderer Stelle „as a restrictive term“, oder „as an epithet“.

CORRESPONDENCE.

2. SANSKRIT MANUSCRIPTS IN CHINA.

[The following letter appeared in the *Academy* of June the 16th :—]

Göttingen.

In a paper on “Sanskrit Texts discovered in Japan,” published in the *Journal* of the Royal Asiatic Society (N.S., Vol. XII., pp. 153 ff.), Prof. Max Müller has told us that during the Middle Ages innumerable MSS. were taken from India to China, but that every effort to discover any of these MSS. in the temples or monasteries of China, up to 1880, had proved futile. “Being myself convinced,” he writes, “of the existence of old Indian MSS. in China, I lost no opportunity, during the last five and twenty years, of asking any friends of mine who went to China to look out for these treasures, but—with no result!”

By a piece of good fortune, I now have before me photographs and tracings of a few leaves of two or three Sanskrit MSS. or portions of MSS. which are preserved in one of the Chinese monasteries. In themselves these fragments may be considered to be of slight value; but they prove that Indian MSS. do exist in China, and encourage us to hope that more may in time be forthcoming.

What I possess at present, I owe to the exertions of my friend and former pupil Dr. A. O. Franke, of Shanghai, to whom the thanks of Sanskrit scholars are due for the trouble which he has taken in this matter. When Dr. Franke, six years ago, went to China, I also urged him to look out for Indian MSS.; and I now have had the pleasure of receiving from him, on April 30th, a letter in which he writes as follows:—

“When, some years ago, I said good-bye to you at Göttingen, I promised to write about any Sanskrit MSS. which I might come across in China. I am rather late in fulfilling my promise, and even now can do so to a very modest extent only. But it is not my fault that such should be the case, for Sanskrit MSS. are indeed a rare article here. . . . The only old MS. which has yet been found is in a small dilapidated Buddhist monastery in the mountainous wilds of the T'ien t'ai shan, in the province of Chekiang, about 125 English miles south-west of the port of Ningpo, where it was seen by Dr. Edkins about thirty years ago. Last autumn I set out to have a look at the MS. myself, and I am sending you now a few results of my expedition. I have photographed a portion of the MS., which consists of twenty palm-leaves, and is evidently incomplete, and have copied other parts; and what I am sending are photographs of both sides of the first and second leaves, and tracings of the concluding lines on page 24, as well as of the writing on a leaf which is not numbered.”

Dr. Franke adds that by the people on the spot the MS. is believed to be 1300 or 1400 years old.

In what follows I shall call the two palm-leaves, of which

Dr. Franke has sent photographs, A and B, and shall denote the concluding lines of page 24, spoken of by him, by the letter C, and the unnumbered leaf by the letter D.

Of the two palm-leaves which have been photographed, B is in a perfect state of preservation. In the middle it has the usual hole for the string by which the leaves were held together; and it is marked on the proper right of the back with the figure 2, and on the left with the letter numeral *divi*. On either side of the leaf there are five lines of writing, each of which contains from fifty-five to sixty *aksharas*. The leaf A is similar to B, but on the proper right a portion of it is broken away, so that at the commencement of each line from five to six *aksharas* are missing. This leaf also is marked, on the proper right margin of the back, with the figure 2, showing at once that A and B belong to two different MSS.; and it contains six lines of writing on the first side and five on the second, also with from fifty-five to sixty *aksharas* in each line. C presents two lines of well-preserved writing; and D contains six lines, which cover a space of about eleven and three-quarter inches broad, by two and three-quarter inches high, and of which the beginning of the first line and the end of the last line are broken away, while the rest is well preserved.

The writing on these fragments proves that the MSS to which they belong, so far from being 1300 or 1400 years old, were not written before the twelfth century A.D., and may possibly belong to the thirteenth or fourteenth century. For A, B, and C exhibit the distinctly Nepalese characters, characterized by the addition of a curve or hook to the top of each letter, of which we find the earliest specimens in the Nepalese MSS. of the second half of the twelfth century; and the writing of D differs little from the ordinary Nāgarī, and may be described as that particular variety of the Nāgarī alphabet which was current in parts of Bengal about the thirteenth century A.D. On these points there can be no doubt whatever, and it is, therefore, quite certain that the MSS., or fragments of MSS., which are now preserved in the T'ien t'ai shan monastery, were brought to

TRANSCRIPT OF THE TEXTS.

A.—Leaf 2, a.

- 1 [dya] | oñkārahīnūik[ra]mittāshamantram-anya- punaā prākṛam-eta-uktam | evan-na jānāti viśāhāvuddhir-yachohhavadamātrāni hi tad-eva mātrāni || arājahāno sarasī pravishā 2 50-
- 2 — — — [ko] viśahāde | praohchhanna-mvityuk evakūle [jha]jānāni yathā tathā dushaguro[r]-janānāni || ākūchya kasāśāni malanidale tu nishāsena ekena padena dhūrtāā | bhāntūi-ka-
- 3 — — — [ja]jānāni vāho yathā dushaguru[r]-janānāni | ya thā nato nābhābhāva-herōā ka | pōti pārasya surādharūpan | tathābhāhōke jīnasaalivandham karōty-asmāggā-
- 4 — — — ā [i] kāmātur madysasāt-pramattā ekabudhichito vahuvittaluv-dhā | asatyavādi śrutavāchānāsthī da-dāti dūākhāni sa guru[r]-nna chittre ni | samāvadūkhānāla-
- 5 — — — [ta] ghitā-timire kahāsena | san tāpanāśāya mahāpāthashe[tho] bhāntūyā viśayeva sumpasayyā || dharmāntarātr-mnūrtkejanātr-ānekātr-nmivāsānkyam prati luvdachi-
- 6 — — — [dha]to dushaguro kim rtham-parikhamāso narakādūtā || samāra-nirvāsavināshabhi[va]ā prajñānivāhāā haruā[pra]bhinnā || nīrindriyā sāvata ity-atariko na-

Leaf 2, b.

- 1 — — — eva śāntā | śivrasāstropi sa chādivuddhā śrīmanjūgubhāā sa cha loknūthā | śivrajā s(?) kr(?) sa cha chittavrajā sa chākhāro nishāhalyoga-gamyaā | sache-
- 2 — — — tā sahaiva nūrināsāā sugato jīnendāā śrīśākyaśānā ā sayasomunī-cha śrīkālā-hakraya cha sa(?)rvavuddhāā || sa śīguro[r]-nirmitta eva śāntā-
- 3 — — — [su]khādo dhārasyaśm | māvir-eko jagadekavandhu chintāmasāā samūta-— kīnāni | dhvāyī bhavedhāyanāvāshā-sasūgāā kūmi mahākūmavivuddha-chittāā |
- 4 — — — [dri]yasukhyayogo mudrāpra-sāngo - py- avināsharūgāā | chandrārk-kamārggam prati nashayogāā prajñānule vogavalāt-pravishāā | anantāsukhyāmrī-tas-
- 5 — — — gurur-vajradhāro 'ghabantāā || Ayāchakāā sātū takānīvārkkū(?) tyāgi na dāna(?) sukhsāpatasya | lavdhāya vit-tasya na sañchayāsthī lavdhāā nimitāny-uya(?)bhcgakartāā || sūi-

B.—Leaf 2, a.

- 1 thayāmi || idānim-uddēśāā prabhedam-āha | uddēśāā trividhāā | tantre sarvasmin | tathā nirddēśāā trividho-bhavat | tad-uddēśanirddēśayōā pratyuddeśam-āha | pratyuddeśo mahō-
- 2 ddeśā ity-uddeśaya prabhedāā | pratīnirddēśa ko-para itī mahānirddēśā ābhūptāā | etau cha nirddēśaya prabhedau | ehiūi vyā-pīram-āha | uddēśa evetyādī | evoddeśa-
- 3 ā sa eva nirddēśāā | sa cha tantragitir-uchyate | atra hi nirddēśāāvlema vīhātāntra-sūgītīr-uchyate | vīhātāntrāntarbhū-

tas-oh-oddeśāā sa e hi tsingitārahakāā prīthak-kriyate-

- 4 | tadā anyatāro bhavati | yathālakshābhī-dhātāā nīpātām-ānyatārobhīdhānāā | ity-uddeśāā-oh-eti chākṛitāā pradāsvādī-kaḥope pratīnirddēśa-uchyate | dvayam-etaā yathākra-
- 5 man alpapañjīkā | vīhātāñjīkā | sū cha padāmāstrabhāñjīkā | na sarvvrīthasūchikā | yataā śikā sarvvrīthasūchik-eti vak-shyate | mahoddeśāā-oh-eti chākṛitāā mahāchcharakāshepe mahāni-

Leaf 2, b.

- 1 rddēśū uchyate | dvayam-etaā yathāśānīkhyāni | alpāñjīkā vīhātīkā ch-ochyete | evam-ity-ūptakramena śhaśkoḥbhīā śha/vidhāir-ālpāntaravīhātāntrāsāngītyādīkāā sū-dhāni parī-śodhāni ādīvudhāā ||
- 2 kālechākṛībhidhānāni syād-iti vakshāmasāna samvandhāā | evan[pra]flyogātī-chatur-vidhāir-iti manītrāme[?]janīsthāndīva-yalakshasāā | chātusasmvohir-iti eka-kaśābhīśānīvohīā pañchīkāra-
- 3 vīhātāyā [cha] māyājāābhīśānīvohīkāka-śāā | skandhā rūpavodānāśānīśānī-śkāvājīnālakshā-āir-dhe[r]jmadbhū-tbhīā | prīthivyaṭṭejevīyāvākūśadhā[r]mm-ādhitūlakshasāā | śya-
- 4 tanātr-vīhāyavīhāybhīśāna dvādeśābhīā | rūpe-āvdagandhārasāparādhārmadbhū-tulakshasāā | śhaśkulāā chākāru-rotā-ghrīśāñjīvākūyamanolākshasāā | sātāy-bhīāni [su]khā-
- 5 lokottarābhīyām kāyavākchittasānīvuddhāā ābhīśānīdvayāni dvayam-iti | udakānū-kūśābhīyām kāyāśānīvuddhāā | śharvājāghā-sūbhīyām vāśāśānīvuddhāā | mahāvratānā-mā-bhīyām chittāśāśānīvuddhāā | aujāyājīnā-

C.—Concluding lines of p. 24.

- 1 || itī Paramārthasavā nāmāā śhaśārasānāchārg-gochāra-Tātvāvalokānāsavā samāptā ||
- 2 śrī-Pa-śarīkapādānāni || likhitam-īdāni Rāma-dattena vai || śubhāā ||

D.—An Unnumbered Leaf.

- 1 mūrkhā rājā śrīŚrībhojādeva-rāblā | mūrkhā | n-śm (An) (?) ra | Umayā sahitō Rudrāā Ś'śūktāra saha Vīśvanāā | thā(?)kūra Ś'ū-
- 2 lapāśī-cha rakshāntū śvāā sarvavādāā || Ś'arā-savā | Kālī de(?)vī(?) | Kāldāsāā || Ś'arā-savā | aśī ka-śhit vāk vīś(?)hā | Kāldāsāā ||
- 3 Asty-ntarāsyaśm dīśī devatātāmā Himālayo nūma nagādhirājāā | pūrvvāparau toya-nidhī vī—hya sthita prīthivyor-iva māna-dāśāā ||
- 4 Kumārāā | Ka-śhit kāntāvīrahagurośāā svā-dhīkāpramāstāā śāpēnīśānīgamitāna-hīmā vāśābhōna(?) bhārtūā | yakshā-schakre Janakatasāyā-
- 5 snānapūyāvadāśānī mīgdhachohhāyāātaruubhā vāśānī Rāmāgryāśārasānī | Meghā-dūtāā | Vāgāśhāv-īva śānpīkītan vāgārthapratīpattayō | jagatāā | pītarau vai-
- 6 de Pārvvatīparameśvarāā || Rāghūā || trā(?)ya- (?)kāvyāā || vī. 54, cha trayā (?) kāryāni | śhaśān(?) vā —

F. KIELHORN.

China from Northern India or Nepal not earlier than 1200 A.D.

I give below an exact transcript of the texts of the four fragments. Although the writing of A and B is very neat and distinct, it is quite possible that, owing to the small size of the photographs, I may have misread one or two letters; and the texts contain a number of clerical blunders, which it would hardly be worth while attempting to correct here. Even with these faults what I give will probably enable others to tell us to what works these fragments belong. The text of A is throughout in the Upajâti metre, and is in praise of Buddha, the true teacher, who is contrasted with false teachers. B apparently is a commentary on a work composed in Anushtubh verses, probably, as my friend Prof. Cowell suggests to me, a Tântic work connected with the *Kâlachakra-tantra*. And the exact title of this work and the name of its author, or of the author of the commentary, may be given in C (*Paramârthasevâ* or *Tattvâvalôkanasetâ*, composed by Pundarîka or Srîpundarîka). Of D I do not know what to make, and will only point out that it gives us the initial verses of Kâlidâsa's three Mahâkâvyas, the *Kumârasambhava*, *Meghadûta*, and *Raghuvamsa*.

F. KIELHORN.

Sanskrit-Handschriften.

Beschrieben von Professor Dr. Franz Kielhorn.

Übersicht.

- I. Die Vedische Litteratur (Samhitâ, Brâhmana, Sûtra, Prayoga, Upanishad, Prâtiçâkhya, Vedânga, [Nighaṇṭu, Çikshâ, Iyotisha]): no 1—38.
- II. Die klassische Litteratur:
- (a) Poesie (Itihâsa, Purâna, Tantra, Kâvyâ, Nâṭaka, Niti, Kathâ): no. 39—67.
- (b) Wissenschaft (Grammatik, Lexicographie, Metrik, Rhetorik, Philosophie, Astronomie und Astrologie, Medicin): no. 68—123.
- III. Die Jaina Litteratur: no. 124—145.
- Appendix: Marâṭhî Litteratur: no. 146—148 (basiert auf Sanskrit).
- Mappe mit Bildern no. 149. Varia no. 150.
- Wo etwas andres nicht bemerkt ist, ist die Hs. eine Papier-Hs., und die Schrift Nâgarî (aus Palmblättern bestehen no. 34 und 59; die Schrift ist Grantha in no. 34; Malayâlam in no. 59; Bengâlî in no. 96 97; Lateinisch in no. 54 und 150).
- Die Jaina-Handschriften no. 124 125 126 127 128 129 130 131 132 133 134 135 136 sind von Dr. J. Klatt beschrieben.
- Was die Herkunft der Handschriften betrifft, so sind 7 geschenkt von Rosen 1852, vgl. Nachrichten d. Ges. d. W. 1891 S. 107 (no. 68—70 96—99), 4 von Ewald 1875 (no. 41 54 (?) 122 149), 1 von G. Bühler 1879 (no. 1), 13 von Bhâṇḍârkar, vgl. Nachrichten d. Ges. d. W. 1888 S. 16 (no. 88 104 106 124—127 129 131 133—136); 85 sind in den Jahren 1887—1892 von Professor Franz Kielhorn geschenkt worden mit der Bedingung, dass deren litterarische Ausnutzung seiner Zustimmung bedarf (no. 24—38 40 44—46 48—51 55 56 60—66 71—83 89—95 102 108—114 119 120 130 146). Die Herkunft der übrigen ist unbekannt.

Sanskrit 1 761 Bl. 22½ cm breit, 11½ cm hoch von verschiedenen Schreibern zwischen 1734 und 1804 (Çake 1656 und 1726) geschrieben

Taittirîyasamhitâ, Samhitâ-pâṭha; in 7 Kâṇḍa, hier Ashtaka genannt. Accente mit rother Tinte geschrieben.

Ashtaka 1, 108 Bl., datiert (Bl. 108^a): Çake 1699 Hemalambanâmasamvatsare Kârttikavadyadvâçî Bhaumavâsare.

Ashtaka 2, 161 Bl., datiert (Bl. 160^b): Çake 170023 (d. i. 1723) || Durmatinâmasamvatsare Ashâḍhaçuddha 11 Saumyavâsara.

Ashtaka 3, 49 Bl., datiert (Bl. 49^b): Çake 1702 Çârvarinâmasamvatsare Paushavadya 14 caturdaçî Bhaumavâsare.

Ashtaka 4, 63 Bl., datiert (Bl. 63^a): Çake 1706 Krôdhinâmasamvatsare Jyeshthavadya 13.

Ashtaka 5, 127 Bl., datiert (Bl. 127^a): Çake 1656 Râkshasanâmasamvatsare.

Ashtaka 6, 76 Bl., datiert (Bl. 75^b): Çake || 1726 || Raktâkshinâmasamvatsare Caitramâse krishnapakshe | 14.

Ashtaka 7, 77 Bl., nicht datiert. Bl. 12 und 13 sind fälschlich zwischen Bl. 46 und 47 dieses Ashtaka gebunden; und Bl. 14—20 zwischen Bl. 70 und 71 des 5 Ashtaka.

1879 geschenkt von Dr. G. Bühler (Surat, Bombay).

Sanskrit 2 81 + 68 Bl. 35½—37 cm breit, 14½ cm hoch geschrieben 1881

Theile der *Kapishṭhala-Kâṭhasamhitâ*; Adhyâyas 1—8, 25—32 und 34—48, aber auch diese nicht vollständig. Oft hat der Schreiber kleine Lücken gelassen; bisweilen (wie auf Bl. 64^b, 76^b) ausdrücklich bemerkt, dass in seiner Vorlage ein Blatt fehlte. Die Accente sind mit rother Tinte geschrieben, fehlen aber auf manchen Seiten. (Über eine andere Copie desselben Werkes, die wahrscheinlich nach derselben Hs. gemacht war, von der diese Hs. abgeschrieben ist, siehe L. von Schröder in seiner Ausgabe der Maitrâyaṇî Samhitâ, Einleitung, S. xxxviii, wo die den einzelnen Adhyâyas entsprechenden Capitel der Maitr. S. angegeben sind).

(a) 81 Bl., enthalten Adhyâyas 1—8, und 25—32. Die einzelnen Adhyâyas enden: 1 auf Bl. 6^b, 2 auf Bl. 12^a, 3 auf Bl. 16^b, 4 auf Bl. 21^b, 5 auf Bl. 25^a, 6 auf Bl. 31^a, 7 auf Bl. 36^a, 8 auf Bl. 40^b (*iti Kapishṭhala-Kâṭha-samhitâyâṃ ashtamodhyâyâḥ samâptâḥ* ||); 25 auf Bl. 45^b, 26 auf Bl. 49^b, 27 auf Bl. 52^b, 28 auf Bl. 56^b, 29 auf Bl. 61^a, 30 auf Bl. 66^a, 32 auf Bl. 81^a (*iti çriKapishṭhala-Kâṭhasamhitâyâṃ dvâtriṃçattamodhyâyâḥ || samâptâḥ* ||).

(b) 68 Bl., enthalten Adhyâyas 34—48 (oder Theile derselben). Die einzelnen Adhyâyas enden: 34 auf Bl. 2^a, 35 auf Bl. 6^a, 36 auf Bl. 9^b, 37 auf Bl. 15^a, 38 auf Bl. 19^a, 39 auf Bl. 23^b, 40 auf Bl. 29^b, 41 auf Bl. 36^a, 42 auf Bl. 41^a, 44 auf Bl. 47^a, 46 (fälschlich als 47 bezeichnet) auf Bl. 56^a, 47 auf Bl. 62^b, 48 auf Bl. 68^b (*iti Kapishṭhala-Kâṭha-samhitâyâṃ ashtacatvâriṃçattamodhyâyâḥ* ||).

Für Prof. Kielhorn 1881 in Benares abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 3 28 Bl., gezählt 38 40—45 47 48 53—57 69—83 (77—78 nur ein Bl.) 19 cm breit, 8½ cm hoch etwa 16 Jahrh. Bruchstücke des 13 Kâṇḍa des Çatapathabrâhmana, Weber's

Ausgabe S. 970 Z. 13—20; 971 5—973 6; 973 14—974 6; 975 11—977 4; 980 15—985 2. Accente und Verbesserungen mit rother Tinte geschrieben.

Sanskrit 4 76 Bl. 20½ cm breit, 9½ cm hoch geschrieben 1772 (*Çake 1694 Namdananâmasamvatsare*)

Āçvalâyanaçrautasûtra, bis zum Ende des 6 Adhyâya. Geschenk 1887 von Prof. Kielhorn.

Sanskrit 5 45 Bl. 20½ cm breit, 10 cm hoch geschrieben 1816 (*Çake 1738 Dhâtrinâmasamvatsare*)

Hîranyakeçî(grihya)sûtra. Geschenk 1887 von Prof. Kielhorn.

Sanskrit 6 43 Bl. 23½ cm breit, 9½ cm hoch 18 Jahrh.

Nṛisimha's (Narasimha's) Çrautaprayogaratna (s. Bhândârkâr's Report 1883—84, S. 26 und 344) in Versen; basiert auf das Çrautasûtra des Āçvalâyana und Gârgya Nârâyana's Commentar, die häufig als *sûtra* oder *sûtrakrit* und *vṛitikrit* citiert werden.

Anfang auf Bl. 1^a: *ÇriGaṇeçâyâ namuḥ || Pranamâmi Gaṇadhîçam vighnadhvam:adivâkaram || daṁtâva(la)mukham sâdrasîmdûrûnavîgraham || 1 || vande Vishnum jagadvamdyam nîlâçalanîvasînam || yatkatâkshaiçakadeçâh syuh kṛitakṛityâh surâ api || 2 || mîmâmsâyugâlavyâkhyânîpurnam çrautakarmam || vijñâtâram guru[m] naumi yatim Içvarabhâratim || 3 || pranamyâ paṁçânânavaha[nâ]m Umâm rîshim tathâ Çaunakam Āçvalâyanam || karoti tatsûtravibodhitârtham*

Prayogaratnam Narasî(s)imhayajvâ || 4 ||

Am Schlusse des ersten Theiles (Bl. 12^a) giebt der Verfasser über sich Auskunft (s. Bhândârkâr, loc. cit., S. 344):

Jayati sa Hoçaladeçe grâmavaro nâma[to] Vasurvâlûh || yatra çriNarasimho jâtas tatra sînu (Bh. tatsînuṇ anu)gatah

Kâçim || 97 || Avy(try)anvayâvatamto(so) Nârâyana bhattâh(tta)saîmînakah

Kâçyâm || Ammâyî ca suputam Gopi(pî)nâtham vipaçcitam sushuvo(ve)

|| 98 || Gopinâthabudhânulajayajvanâ(yajva)çrimanNṛisimhâviracite (ra-

çite) smin || Çrautaprayogaratne yajamânasya¹⁾ darçapûrnamâsavidhir

uktah || 199 || || iti darçapûrnamâsayor hautrakârikâ || ||

Die Anfangsworte dieser Verse werden öfter am Ende von Abschnitten wiederholt.

Schluss auf Bl. 43^b: *ity avabhṛîtheshṭikârikâ || Dhumdhîrâjabhatta-syâtmajaÇriçimabhâçtena lîkhitam ||*

Geschenkt 1887 von Prof. Kielhorn.

1) Lies *yajamânasya*, aber der Vers bleibt falsch.

Sanskrit 7 109 Bl. 21 cm breit, 10 cm hoch 18 Jahrh.

Maheçabhâçta's HîranyakeçîSmârtaprayogaratna, genannt *Maheçabhâçtî*.

Anfang: *ÇriGaṇeçâyâ namaḥ || çriçurucuranâbhyâm namaḥ || Pranamyâ Gopâlam anantamâyanetrâmcâlânâmditagopavṛ[m]dam || smârtaprayogam vadadhâti yatnâd dhîranyakeçîyavidhau Maheçah || 1 || Sâyîçâshâdham unim vande svarnakeçavîrâjitam || yonushtheyapadârîhânâṁ kramakalpam akalpayat || 2 || yatkrîtâm vedavad vṛittim âdriyamle vipaçcitah || Mâtridattaç çiram jîyâd vṛittîrûpeṇa tattvavit || 3 || atha saṁskâraçântiçrâddhâkhyaprakaranaatrayepi Hîranyakeçîsmârtakarmanâṁ prayogo pidhî(vîdhî)ate ||*

Schluss auf Bl. 109^a: *Āpastambâdisvatulyaçraṁthân âloçya yatnataḥ || kevalam vaidikacṛaddhâpreçâñj jâtabuddhinâ || kritah Kâçyâm Maheçena prayoga[h] smârtakarmanâṁ || atrânuktam duruktam vâ mater mâñdyâ[c] chrutasya vâ || sanmârgadarçakair eta[c] chodhyam syâd bahuvêdîbhîḥ || anena prîyatâm devo Gopâlah kuladâivatam || iti çriSâyîçâshâdhaçriçiranyakeçî-smârtaprayogaratne Vaiçampâyana-Mahâdevâtmaja-Maheçabhâçta kritau saṁskâraprakaraṇam samâptam || || çubham bhavatu ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 8 96 Bl. 23½ cm breit, 12½ cm hoch geschrieben 1788 (*Çake 1710*)

Govindaçeçha's Agniçhîtomaprayoga (s. Weber's Verzeichniss der Berliner Hss., no. 1453).

Anfang auf Bl. 1^b: *Govindaçeçhasudhîyâ Çeçhayajñeçasûnânâ | kramaprâptah prayogoyam agniçhîtomasya likhyate || 1 ||*

Schluss auf Bl. 96^a: *saṁtiçhîtegnîçhîtomah saṁtiçhîtegnîçhîtomah || çriVâsudevârpanam astu || çriÇriçimâyâ namaḥ || Çake 1710 Kîlâkanâmasamvatsare Jeçhthaçuddhashaçhîmîndvâsare lîkhitam idam somayâgâpustakam Gaṁdhe-ityupanâmaka Tryambakabhâçtîh ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 9 83 Bl. 26 cm breit, 10 cm hoch geschrieben 1783 (*Çake 1705*)

Ādhânâprayoga oder *Prayogaratnabhûshâ* des *Navahastya*, eines Schülers der *Ananta*. Die Accente der Mantras sind mit rother Tinte geschrieben.

Der sehr fehlerhafte Anfang lautet Bl. 1^b: *ÇriGaṇeçâyâ namaḥ || Sarasvatyai namaḥ || çriyajñanârâyanaçamgâyâ sahaparîvârâyâ namaḥ || namata vitataviçvam yadvisah kilâsa druhinavidhutavâdyâ yadvîbhâsâvabhâṁtî || nigamavîçapîbijam vyaktam avyaktam âdyâm ramamîtavitânâṁ tatsadonbhâvamgamyam || mayi vastu kim apy astu târanâyâ trayîmayam || paçavopi vinâdyâsam âsan yatrapavargînah || 2 || tîtrshatâm tarîr va dhvâmtadurvâravarîdhîm || saikarmasâkshî bhavatâd Anantaḥ sa gurur mayi || yady api paddhatayonyâh saṁti cadhânâyâh kṛitâh kṛitîbhîh || dîpaçikheva tadatho tanvîpîyeshâm tanotu vispaçtân || muni-sûtrasaṁskâtabhâçhyoktiprîthumauktîkâh || Prayogaratnabhûshâ gramthiyate çishâtushtaye ||*

Schluss auf Bl. 83^a: *iti Ādhânâprayogaḥ samâptah || Çake 1705 Çobhananâmasamvatsare Mâghamâse çuklapakshe daçamyâm 10*

taddine samāptaḥ || *hastākshara Abāgamdheyasya pustakaṃ* || || *iti Navahastyakṛita Ādhānaprayogaḥ samāptaḥ* || ...

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 10 21 Bl. 23½ cm breit, 12¼ cm hoch
geschrieben 1788 (Çake 1710)

Çeṣha's Paçubandhaprayoga.

Anfang auf Bl. 1^b: *Atha Paçubamdhaprayogo likhyate* || || *tasya udagayane pūrvapakṣe devanakṣatre revatyām vā amāvāsyaḥ vā yajaniye vānushānam* || Schluss auf Bl. 20^b: *Çrāvanādicaturshu parvasu paçuḥ kartavya itī kālah* || *iti Baudhāyana sūtrānusārī Paçubamdhaprayogaḥ samāptaḥ* || || *iti Çeṣhakṛita Paçubamdhaprayogaḥ* || || *ÇrīKṛishnārpanam astu* || || *Çake 1710 Kūlakānāmasamvatsare Kārttikakṛishnāshṭamyām tūhau Guruvāsare maghānakṣatre taddine Tryambakabhaṭṭagamdhena svārthoddeçena parārthoddeçena likhitam Paçuprayogoyam itī* ||

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 11 94 Bl. 24 cm breit, 12 cm hoch
geschrieben 1802 (Çake 1724)

Vāsudevaḍikṣhita's Bau dhāyanīya Mahāgnicayana prayoga (s. Rājendralāl's Notices, no. 836). Die Accente der Mantras sind mit rother Tinte geschrieben.

Das von Rājendralāl gegebene Colophon steht auch hier am Ende des 19 Adhyāya (Bl. 87^b). Darauf folgt (Bl. 88^a): *PātanakaraçrīBālakṛishnādikṣhitārthe tat Saccham bhūbhāṭṭair likhitam çubham* || || *gramthasamkhyā | 2100 || atha sautrāmanicayanāṅga āvaçyakam karttavyam | tatra prayogaḥ | ...*

Schliesst auf Bl. 94^a: *iti Bodhāyanāgnicayanaprayogaḥ samāptaḥ* | *Çake 1724 Dumdubhināmasamvatsare dakṣhiṇāyane varsharttau Çrāvanamāsi kṛishnapakṣe trayodaçyām likhitam idam Mahāgnicayanapustakam Gamdhopānāmnā Tryambakabhaṭṭena çrīKṛishnaprasādaḥ* ||

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 12 14 + 54 Bl. 21½ cm breit, 9½ cm hoch
19 Jahrh.

(a) 14 Bl. *Vyāsātīrtha's Māṇḍūkopaniṣad bhāṣya* aṭīkā, ein Commentar zu *Anandatīrtha's Māṇḍūkopaniṣad bhāṣya*.

Schliesst auf Bl. 14^a: *iti çrīmadĀnandatīrthabhagavatpādācāryaviracitā Māṇḍūkopaniṣad bhāṣyaṭīkā Jayātīrthapūjyācaranāçishya Vyāsātīrthaviracitā samāptā* || *çrī^o || idam pustakam YakkumdiRāghavendrasuta Anena likhitam paropakārtham.*

(b) 54 Bl. *Çrinivāsa's Māṇḍūkopaniṣad bhāṣya* vivṛittīḥ *Padārthadīpikā*, ein anderer Commentar zu demselben Werke.

Anfang auf Bl. 1^b: *çakshurādīsthito yo hi jāgradādīpravarttakāḥ || viçvādīrūpītam Vyāsam vandeḥam Madhvavallabham || 1 || çrīmadĀnandatīrthāryān Jayāryādīṃçca sanmunīn || namāni parayā bhaktiyā smṛityā sarveshṭadān āham || 2 || yena vedāntabhāṣyāni vivṛitāni mahātmanā || tam vande Vyāsātīrthākhyaṃ Jayarājānishe-*

vakam || 3 || prāṇamya Yādavācārya gurīnām pādapaṃkaje || Māṇḍūkopaniṣad bhāṣya vivṛittīḥ kriyate mayā || 4 ||

Schluss auf Bl. 54^a: *yair aham çukavat samyak çikṣhitosmi kripālubhīḥ || tām vande Yādavācāryān Vedeçamunisevakān || 2 || || iti çrīmadYadupatyācāryapūjyapādārādhakena Çrinivāsena viracitā Māṇḍūkopaniṣad bhāṣya vivṛittīḥ Padārthadīpikākhyaḥ samāptā ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 13 42 Bl. 27 cm breit, 12 cm hoch 18 Jahrh.
Sureçā's (Sureçvara's) Taittirīyakaçrutivārttika.

Schluss auf Bl. 42^a: *Taittirīyakasārasya vārttikāmṛitam uttamam || maskarīndrapraṇāṭīyasya bhāṣyasyaitad vivecanam || 20 || mumukṣhusārthavāḥasya Bhavanā[vārttikam]mabhṛito yateḥ || çishyaç cakāra tadbhaktiyā Sureçākhyo mahārthavit || 21 || || || iti Taittirīyakaçruter vārttikam samāptam ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 14 64 Bl. 30 cm breit, 13 cm hoch 18 Jahrh.
Anandajñāna's Taittirīyakavārttikaṭīkā, ein Commentar zum vorhergehenden Werke.

Schluss auf Bl. 64^b: *Parāparagurum natvā sampradāyanūsārataḥ || vyākṛitam saṃgrahaṇāiva Taittirīyaka vārttikam || 1 || sā ceyam vyākṛiyā prītim bhagavaty eva kurvati || cirāya varttatām Kṛishne triṣhṇam tyaktvānyagāminim || 2 || || iti çrīmatparamahamsaparivṛājākācāryasya çrīÇud dhānam dāpūjyapādāçishyasya bhagavadĀnandajñānaviracitā Taittirīyaka vārttikaṭīkā samāptā ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 15 14 Bl. 32½ cm breit, 20½ cm hoch
19 Jahrh.
Taittirīyaprātiçākhyā; mit dem Originale verglichene Abschrift einer Çake 1697 datierten Hs.

Anfang auf Bl. 1^b: *ÇriGaneçāya namaḥ ||*

Bhaktiyuktaḥ prāṇamīham Ganeçacaranadvayam || gurūn api girām devīm idam vakshyāmi lakṣhaṇam | ||
atha varṇasamāmnāyah || aha navāditaḥ samānākṣharāni ||

Schluss auf Bl. 14^b, mit dem Datum des Originals: *Çake 1697 Manmathanāmasamvatsare Açvinaçuklapaṃcadaçyām Ravau Punyagrāme likhitam idam prātiçākhyam ||*

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 16 118 Bl. 32½ cm breit, 20½ cm hoch
geschrieben 1866 (Çake 1788)
Tribhāshyaratna, Commentar (*vivarana*) zum *Taittirīyaprātiçākhyā*; Abschrift einer Çake 1708 datierten Hs.

Anfang auf Bl. 1^b: *ÇriGaneçāya namaḥ ||*

Çuklāmbāradharam Vishṇum çāçivarṇam caturbhujam || prasannavadanam dhyāye tsa(sa)rvavighnopaçāmtaye || 1 || bhaktiyuktaḥ prāṇamīham Ganeçacaranadvayam || gurūn api girām devīm idam vakshyāmi lakṣhaṇam || 2 ||

*vyākhyānam prāticākhyaśya vīkshya Vāraruçādikam ||
kṛitam tribhāshyaratnam yad bhāsate bhūsurapriyam ||*
Schluss auf Bl. 118^a: *evam sāṃgopāṃgavedalakṣaṇam Tribhā-
shyaratnam sampūrnam | çrivedapurushārpanam astu | || Çake 1708
Parābhavanāmasam|vaṭsare ÇrāvanavadyanavamiBhriguvāsare Tribhā-
shyaratnam sampūrnam | Kīlāhāra (Kielhorn) nāmakasāhebasyedam pu-
stakam || Çake 1788 Kshayanāmasamvatsare Kārtike māse çuklapakshe
paurṇamāsyām tithau Guruvāsare idam pustakam samāptam ||*
Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 17 27 Bl. 32½ cm breit, 20½ cm hoch
19 Jahrh.

Anantabhaṭṭa's Commentar, genannt *Padārthaprakāṣa*,
zum *Vājasaneyi-prāticākhya*, Adhyāyas 3 und 5.

Bl. 19^a: *iti çrīmatprathamaçākhiNāgādevabhaṭṭātmajena çri-
ma[d-A]nanta bhaṭṭena viracite çrīmatKātyāyanapraṇītaprāticā-
khyasūtrabhāshye trīṇyodhyāyah samāptah ||*

Bl. 27^b: *iti çrīmadAnanta bhaṭṭa viracite Kātyāyanapraṇīta-
prāticākhyaabhāshye Padārthaprakāṣe pañcamodhyāyah ||*
Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 18 53 Bl. 32½ cm breit, 20½ cm hoch
19 Jahrh.

Rāmaçarman's Prāticākhya jyotsnā, ein anderer Com-
mentar zum *Vājasaneyi-prāticākhya* (s. Weber, no. 1463).

Schliesst auf Bl. 53^b: *amkāgnisaptaku 1739 mite çaka Īçvaravat-
sare || Ishaçukladaçamyām çrīSiddheçvaratanūbh[u]vā || 1 || Rāmeṇa
racitā Prāticākhya jyotsnā samarpitā ||*

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 19 41 Bl. 20½ cm breit, 10¾ cm hoch
19 Jahrh.

Vier *Vedāṅga*, bezeichnet als *Çikshā-catushṭaya*; *Pā-
ṇinīyaçikshā* Bl. 1^b—7^b; *Jyotiṣha* bis Bl. 11^b; *Chandas* bis
Bl. 20^b; *Nighaṇṭu* bis Bl. 41^a.

Anfang auf Bl. 1^b: *ÇrīGaneçāya namaḥ || om || Atha çikshāṇ
pravakshyāmi Pāṇinīyam matam yathā ||* Schluss auf Bl. 41^a:
*iti Nighaṇṭe pañcamodhyāyah || iti çikshācatushṭaya sam-
āptah || || Rām || çrīprasan ||*

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 20 85 Bl. 32 cm breit, 22 cm hoch ge-
schrieben 1845 (Çake 1767)

Devarājajayvan's Nighaṇṭubhāshya.

Schliesst: *iti Devarājajayva kṛitir devatākāṃḍamirvacanavy-
ākhyāne pañchamo 'dhyāyah samāptah || || çrīLakshmiNārāyanārpanam
astu || || Çake 1767 Çrāvanuçukla 5 Budhavāra taddine samṣṭu^o.*

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 21 175 Bl., nur auf einer Seite beschrieben (Bl.
139—140 zwischen Bl. 116 und 117 gebunden), 21 cm breit, 34 cm
hoch geschrieben 1870

Dasselbe Werk.

Für Prof. Kielhorn in Poona abgeschrieben, und 1892 von ihm
geschenkt.

Sanskrit 22 31 Bl. 24½ cm breit, 12 cm hoch
19 Jahrh.

Die *Āraṇyaçikshā*, mit *Commentar* (s. Indian Antiquary,
vol. V p. 193).

Anfang auf Bl. 1^b: *ÇrīGanādhipataye namaḥ || ||
Vighnarājam pranamyātau Vāsudevam ca kāmadaṃ ||
Āraṇyaçikshāvvyākhyānam aham vakshye yathāmati || 1 ||
prāripsitapratibandhakavighnavighātāya kṛitam maṃgalam graṃthato
nibadhnan svagraṃthasya prayojanam ca darçayamç cikrīshitam prati-
jānīte || ||*

Ganapatim abhivandya vadyajātām ayagham . . .

Schluss auf Bl. 31^a: *ity Āraṇyaçikshābhāshyaṃ sampūr-
nam ||*

Für Prof. Kielhorn 1875 in Maistūr abgeschrieben und 1892 von
ihm geschenkt.

Sanskrit 23 19 Bl. (paginiert wie ein europäisches Buch),
17 cm breit, 21 cm hoch 19 Jahrh.

Die *Kātyāyanaçikshā* (s. Indian Antiquary, vol. V p. 196).

Anfang auf S. 1: *ÇrīGaneçāya namaḥ | Yājñavalkya uvāca |
athātas traisvarya lakṣaṇam vyākhyāsyāmaḥ | udāttaç cānuḍāttaç ca . . .*

Schluss auf S. 37: *abhidhānaparo nityam prāyaçcittiyate naraḥ
|| 169 ||* (s. Benares Sanskrit Series, no. 35, p. 35, Vers 231).

Von Dr. Rājendralāl Mitra 1875 für Prof. Kielhorn besorgte Ab-
schrift; von diesem 1892 geschenkt.

Sanskrit 24 4 Bl. 32 cm breit, 20 cm hoch 19 Jahrh.

Die *Keçavaçikshā* (s. Indian Antiquary, vol. V p. 193).

Anfang auf Bl. 1^a: *Keçaviçikshā || ||*

Natvā Ganapatim devam paribhāshāmkasūtrakam ||

ucyate Keçavenedam vedādhyāyisukhāptaye || 1 ||

Schluss auf Bl. 4^a: *iti Mādhyamādinīyavedaparibhāshāmkasūtrāni ||
|| iti Keçavaçikshā samāptā || || lekhakartā bhāṭṭa Jayaçamkaro Jāge-
çvariyaḥ || . . .*

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 25 11 Bl. 38 cm breit, 18 cm hoch 19 Jahrh.
Die *Cārāyaṇyaçikshā*, auch *Cārāyaṇī Mahāçikshā*
und *Cārāyaṇīyakam* genannt (s. Indian Antiquary, vol. V p. 194).

Anfang auf Bl. 1^b: *Om namo Nārāyaṇāya*

Om Prāk prapadye vibhum bhaktiyā sarvalokapitām aham

çikshām sākshāt pravakshyāmi tenavālapitām aham

Cārāyaṇīm mahāçikshām pravakshyāmy anupūrvaçah

Nivodhata vudhair jushṭām nityam vānmalaçāntaye

varṇānām caiva saṅkhyānam saṃjñā sthānam prithagvidham

svarās savyaṅjanāç caiva teshām bhedaṃ açeshataḥ

Schluss auf Bl. 11^b:

ya idam paṭhate nityam yaç ca cā(vā)dhyāpyed dvijam

asyārtham vudhyate yo vai vrahmalokam sa gacchati
iti Cārāyanīyaçikshâyâṃ daçamodhyâyâḥ 10 ||
 Von Prof. Bühler für Prof. Kielhorn in Kāçmīr besorgte Abschrift;
 von diesem 1892 geschenkt.

Sanskrit 26 9 Bl. 31½ cm breit, 20 cm hoch 19 Jahrh.
Çikshâpañjikâ, ein kurzer Commentar zur *Pāṇinīyaçikshâ*
 (s. Indian Antiquary, vol. V p. 195). Abschrift einer Saṃvat 1903
 datierten Hs.

Anfang auf Bl. 1^a: *Om namaḥ || çriNṛisimhâya namaḥ ||*
Pātu vo nīkashagrāvâ matihemnah Sarasvatī ||
prājñetaraparicchedaṃ vacasaiva karoti yâ || 1 ||
Chandakalpanirultāni vivṛitāniha sūrībhiḥ ||
çikshâ tv avivṛitâ yasmât tasmât tām vivṛinomy aham || 2 ||
 Schluss auf Bl. 9^a (mit dem Datum des Originals): *iti Çikshâ-*
pañjikâ sampūrṇâ || saṃvat 1903 nâ Bhâdrapadamâse çuklapakṣhe
7 çriBhṛiguvâsare . . .

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 27 77 Bl. 24½ cm breit, 12 cm hoch
 19 Jahrh.

Die *Bhâradvâjaçikshâ*, mit *Commentar* (s. Indian Anti-
 quary, vol. V p. 195 und E. Sieg's Ausgabe, Berlin 1892).

Anfang auf Bl. 1^b: *ÇriHayagrivâya namaḥ || Hariḥ om || Bhâ-*
radvâjaçikshâ savyâkhyânam ||

Om Gaṇeçam pranipatyâham samdehânâṃ nivṛittaye |
çikshâm anupravakshyâmi vedânâṃ mûlakâraṇam ||

Schluss auf Bl. 77^a:

yo jānāti Bhâradvâjaçikshâm arthasamanvitâm ||
sa brahmalokam āpnōti grahamedhī gṛihaṃ yathâ ||
çlokaṃ || 133 || Hariḥ om || Bhâradvâjaçikshâvyâkhyâ sa-
mâptâ || om || çriKṛishnârpanam astu ||

Für Prof. Kielhorn 1875 in Maisûr abgeschrieben, und 1892 von
 ihm geschenkt.

Sanskrit 28 50 Bl. (nur auf einer Seite beschrieben); 32½ cm
 breit, 20 cm hoch 19 Jahrh.

Die *Yājñavalkyaçikshâ* (s. Indian Antiquary, vol. V p. 196).
 Abschrift einer Saṃvat 1820 datierten Hs.

Anfang auf Bl. 1: *ÇriGaṇeçâya namaḥ || çriYājñavalkyâya namaḥ ||*
Athâtas traisvaryaalakṣhaṇam vyâkhyâsyâmah || udâttaç cānudâttaç ca . . .

Schluss auf Bl. 50: *yat ki[m]cid vānmayam loke sarvam atra*
pratiṣṭhitam iti || iti Yājñavalkyoktaçikshâ samâptim agamat
|| saṃvat 1820 || . . .

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 29 10 Bl. 32½ cm breit, 20 cm hoch
 19 Jahrh.

Die *Bṛihad-yājñavalkyaçikshâ* (s. Indian Antiquary, vol.
 V p. 196).

Anfang auf Bl. 1^a: *ÇriGaṇeçâya namaḥ || Athâtas trisvarala-*
kṣhaṇam vyâkhyâmah || udâttaç cānudâttaç ca . . .

Schluss auf Bl. 10^a: *iti çriYājñavalkyaviracitâ bṛihacchi-*
kshâ samâptâ || . . .

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 30 14 Bl., nur auf einer Seite beschrieben; 11 cm
 breit, 17 cm hoch 19 Jahrh.

Die *Lomaçî Çikshâ* (s. Indian Antiquary, vol. V p. 196).

Anfang auf Bl. 1^a: *ÇriGaṇeçâya namaḥ || Sāmavedâya namaḥ ||*
Om Lomaçinyâṃ pravakshyâmi Gargâcârlyeṇa cimtītām.

Schluss auf Bl. 14^a: *iti Lomaçî sikshâ samâptâ çubham astu*
om Ca[n]draçekharâya namaḥ om Vāmavedâya namaḥ ||

Von Dr. Rājendralâl Mitra 1875 für Prof. Kielhorn besorgte Ab-
 schrift; von diesem 1892 geschenkt.

Sanskrit 31 7 Bl. 20½ cm breit, 14½ cm hoch ge-
 schrieben 1876 (Çake 1798)

Dasselbe Werk.

Schluss auf Bl. 7^b: *iti Lomaçî çikshâ samâptâ || çubham bhū-*
yât Çake 1798 Dhâtṛinâmasaṃvatsare Paushe mâse caturthyâṃ sam-
âptam idā[m] pustakam.

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 32 4 Bl. 24½ cm breit, 12 cm hoch
 19 Jahrh.

Die *Vâsishthaçikshâ*, mit *Commentar*; unvollständig (s.
 Indian Antiquary, vol. V p. 196).

Anfang auf Bl. 1^b: *ÇriGaṇeçâya namaḥ || Svaram svarâc cānu-*
svârât vyamjanam vyamjane pare ||

Schluss auf Bl. 4^b: *catushtayānuvākāms trin avāpyādhyāpayed*
budhah || || çriçru]bhyo namaḥ ||

Für Prof. Kielhorn 1875 in Maisûr abgeschrieben und 1892 von
 ihm geschenkt.

Sanskrit 33 130 Bl. 24½ cm breit, 12 cm hoch
 19 Jahrh.

Die *Vyâsaçikshâ* mit dem *Commentare*, genannt *Veda-*
taijasa, des *Sûrya-Nârâyana* (?; s. Indian Antiquary, vol. V
 pp. 196—198, wo dies Werk nach dieser Hs. ausführlicher beschrieben ist).

Anfang auf Bl. 1^b: *Çriçrurubhyo namaḥ || çubham astu || Vyâsa-*
çikshâvyâkhyâ || ||

Vâgîçaprabhṛitistutyam praṇamyâham Ganâdhipam ||

karomi Vyâsaçikshâyâ vyâkhyânam Vetataijasaṃ ||

Brahmâdibhir devâih sarvai stutyam Ganâdhipam ahan namaskṛitya
Vyâsaçikshâyâ vyâkhyânarīpaṃ vedataijasaṃ lakṣhaṇam ve-
dasya tejah tatsaṃbandhi vedataijasam iti bhâshyam karomi ||

ÇriVâsudevam varadam praṇamya çṛimadGaṇeçam vacasām ca
devīm ||

çikshâm pravakshye çrutikâraṇâṅgam subodhakam lakṣhaṇaçir-
shabhūshâm ||

Schluss auf Bl. 130^a:

Çrîrâtaraṅgīna Vyâsaçikshâyâ bhâshyam uttamam ||

VelamīkanyâpūrjâtaSvarâvadhâninâ kṛitam || ||

*iti çriVelamikanyâSvarâvadhânviracite Vyâsaçikshâ-
vivarane uccâraṇaprakaranam sampûrṇam || Vyâsacikshâ sam-
pûrṇam ||*

Für Prof. Kielhorn 1875 in Maisûr abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 34 79 Palmblätter; 30½ cm breit, 5 cm hoch
in Grantha Schrift des 18 (?) Jahrh.

Dasselbe Werk mit demselben Commentare.

Die Unterschrift am Ende des 1 Capitels lautet: *iti çriSûrya-
nârâyanaṇviracite Vedataijase Vyâsaçikshâvivaraṇe samjñâ-
prakaranam samâptam.* Am Schlusse, ähnlich wie in der vorherge-
henden Hs., *Çrîrântaraṅgina°.* Datiert auf Bl. 79^a: *Rudhîro-
dgârinâmasamvathasaram Tulâmâsam 27 teti budhan Saumyavâsaram
samâptam | ... Nârâyanaṇ svahastalikhitaṇ | ...*

Für Prof. Kielhorn in Maisûr gekauft und 1892 von ihm geschenkt.

Sanskrit 35 19 Bl. 24½ cm breit, 12 cm hoch
19 Jahrh.

Çikshâsamuccaya (s. Indian Antiquary, vol. V p. 198).

Anfang auf Bl. 1^b: *ÇriGaṇeçâyâ namaḥ || Çikshâsamucca-
yam || om || Âdyâ shoḍhaça svarâç ca kathitâç çeshâḥ khalu vyaṇjanam... ||*

Schluss auf Bl. 19^b: *iti Çikshâsamuccayaḥ samâptah ||*

Für Prof. Kielhorn 1875 in Maisûr abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 36 33 Bl. 24½ cm breit, 12 cm hoch
19 Jahrh.

Die *Sarvasammatâçikshâ*, mit *Commentar* (s. Indian Anti-
quary, vol. V p. 198, und A. O. Franke's Ausgabe, Göttingen 1886).

Anfang auf Bl. 1^b: *Çrîgurubhyo namaḥ || çubham astu || Sarva-
sammatâçikshâvyâkhyâprârâmbhaḥ || ||*

*Dhyâtva sarvajagunnâtham Sâmham sarvârthasâdhakam ||
vyâkhyâyatedhunâ çikshâ Sarvasammatalakshanaḥ ||
kripâluṇ varadam devam pranipatyâ Gajânanam ||
dvîtvâdinâm pravakshyâmi lakshanaṇ sarvasammatam ||*

Schluss auf Bl. 33^b:

Sarvasammatâçikshâpi sampradâyânusârataḥ ||

Vâsudevaprasâdena vyâkhyâtâ lakshanena vai || 135 ||

iti Sarvasammatâçikshâ savyâkhyâ sampûrṇâ ||

Für Prof. Kielhorn 1875 in Maisûr abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 37 33 Bl. 24½ cm breit, 12 cm hoch
19 Jahrh.

Die *Siddhântaçikshâ* des *Çrinivâsadikshita*, mit *Com-
mentar*; unvollständig (?) (s. Indian Antiquary, vol. V p. 198).

Anfang auf Bl. 1^a: *ÇriGaṇâdhipataye namaḥ || ||*

Sampranamyâ sakataikâkâranam

BrahmaRudramukhamaulibhûshanaṇ

lakshanaṇ çrutigirâm vilakshanaṇ

Çrinivâsamakhinâ pravâçyate || 1 ||

Schluss auf Bl. 33^b: *Siddhântaçikshâ savyâkhyânam sam-
pûrṇam || || çrimate Hayagrivâya namaḥ ||*

Für Prof. Kielhorn 1875 in Maisûr abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 38 7 Bl. 20½ cm breit, 32½ cm hoch
19 Jahrh.

Atharvavedoktam Jyotisham (s. Weber no. 1506): wie die
Berliner Hs., Abschrift einer 1661 (Samvat 1718) geschriebenen Hs.
des Deccan College.

Für Prof. Kielhorn abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 39 109 Bl., theilweise beschädigt, gezählt als 1—3
19—21 23—93 95 96 98—127; 24 cm breit, 13½ cm hoch
18 Jahrh.

Bhagavadgîtâ, mit freier Übersetzung oder Erklärung in *Gu-
jarâti*.

Adhyâya 2 schliesst auf Bl. 27^b; 3 auf Bl. 35^a; 4 auf Bl. 43^a;
5 auf Bl. 48^a; 6 auf Bl. 55^b; 7 auf Bl. 60^b; 8 auf Bl. 65^b; 9 auf
Bl. 71^b; 10 auf Bl. 78^b; 11 auf Bl. 89^b; 12 auf Bl. 93^a; 13 auf Bl.
98^a; 14 auf Bl. 102^b; 15 auf Bl. 106^a; 16 auf Bl. 109^b; 17 auf Bl.
114^a; und 18 auf Bl. 125^b.

Sanskrit 40 113 Bl. (gezählt als 2—114; Bl. 1 fehlt); 28 cm
breit, 12½ cm hoch geschrieben 1550 (Samvat 1607)

Çivasahasranâman, aus dem Anuçâsanaparvan des Mahâ-
bhârata, mit dem *Commentare*, genannt *Gûḍhârthadîpikâ*, des
Harinâtha, eines Sohnes des Vâsudeva, und Schülers des Çrikân-
tabhaṭṭa (Bl. 2^b) und (Bl. 113^a) des Lakshmidhara (s. Aufrecht's Oxf.
Cat. p. 132, über desselben Harinâtha *Râmavilâsakavya*).

Aus den einleitenden Versen, die nicht vollständig sind, vgl. Bl. 2^a:

*cimtâm vrîthâ na kuru putra madiya bhaktah
çriVâsudevatanayo Harinâthaçarmâ |*

*Çrikâṇtabhaṭṭaracitâmalavâgvilâsash
tikâm karishyati çubhâm Çitikâṇthanâmnâm || 13 ||*

Bl. 112^b: *ÇrikâṇtaLakshmidharaVâsudevân*

Bl. 113^a: *gurûn namâmy ekatanûn udârân |*

yadpâdapadmâṅgulireṇumâtrâ

Sarasvatî manmukha âvirâsî || 1

*iti çridharmabrahmamimâsopâdhyâyâçaryaçrîLakshmidharaPûjya-
pâdaçishyabhâṭṭaçrîHarinâthaviracitâ Çivasahasranâmatîkâ
Gûḍhârthadîpikâ samâptâ ||*

Schluss auf Bl. 114^a: *iti çriMahâbhârate çatasahasryâm samhi-
tâyâm anuçâsanike parvaṇi çriÇivasahasranâma sampûrṇam sabhâ-
shyam || || samvat 1607 varshe Bhâdrapâdasitapakshâshṭamyâm tithau
Gurudîne likhitam idam Çivanâmnâm sahasram || mûlapratîḥ.*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 41 142 Bl. 18 cm breit, 22½ cm hoch nach
Art eines europäischen Buches, wahrscheinlich für einen Europäer
geschrieben geschrieben im Jahre *Vikârin* (1839 n. Chr.)

Açvamedhikaparvan, in 67 Adhyâyas (s. Aufrecht's Oxf.

Cat. p. 4 no. 32). Die Zahl der Adhyāyas ist scheinbar nur 65, aber je zwei Adhyāyas sind mit 31 und 50 bezeichnet (Bl. 77^b und 79^b; 116^b und 118^b).

Anfang auf Bl. 1^a: *ḶṛiGaṇeṣāya namaḥ Hariḥ oṃ Nārāyaṇaṃ namaskṛitya naraṃ caiva narottamaṃ || devīṃ Sarasvatīṃ Vyāsaṃ tato jayam udīrayet || 1 ||*

Adhy. 10 (*ḶṛiKṛishṇāgamaṇaṃ nāma*) schliesst auf Bl. 22^a; 20 (*Surathavadho nāma*) auf Bl. 57^b; 30 (*Lavāṅvagrahaṇaṃ nāma*) auf Bl. 76^b; 40, fälschlich als 39 bezeichnet, (ohne Titel) auf Bl. 100^a; 50, fälschlich als 48 bezeichnet, (*Vīravijayasamāptir nāma*) auf Bl. 115^a; 60, fälschlich als 58 bezeichnet, (ohne Titel) auf Bl. 133^a.

Schluss auf Bl. 142^b: *ity Āṅvamedhike parvaṇi pañcashashtī-tamoḍhyāyaḥ || 65 ||* (falsch für 67) . . . *SodāpurasthitaAnamdarāyena Maṅgalapurāyaṃ* (d. i. Mangalore) *ayaṃ pustakaṃ likhitvā saṃpūrṇaṃ kṛitam śubhaṃ bhavatu || Vikāri Māghavādya 11 Sthiravāsare ||*
"Ex donatione Henrici Ewald. 1875."

Sanskrit 42 3 Bl., gezählt 62—64; 25½ cm breit, 13 cm hoch 17 oder 18 Jahrh.

Bruchstück aus dem *Uttarakhaṇḍa des Padmapurāna*. Bl. 62^a: *iti ḶṛiPadmapurāne uttarasha(kha)ṃḍe VāṣiṣṭhaDīl-pasaṃvāde ḍaṅcamoḍhyāya[ḥ] sam[ā]ptaḥ ||*

Sanskrit 43 6 Bl., gezählt 1—5 7; 12½ cm breit, 8½ cm hoch 18 Jahrh.

Ein anderes Bruchstück aus *demselben*; Nāmastotram des Kṛishṇa, in 22 Versen. Bl. 7^b: *iti ḶṛiPadmapurāne ŚivaPārvatī-saṃvāde ḶṛiKṛishṇāśhottaraṇāṇāṃ divyaṇāmastotraṃ saṃpūrṇaṃ ||*

Sanskrit 44 401 Bl. (gezählt 1—73 85—109 111—323 333—422). Die Blätter 61—73 107—109 und 421—422 sind von anderer Hand und enger geschrieben als der Rest, zum Ersatz für verloren gegangene Blätter der ursprünglichen Hs.; zwischen Bl. 323 und 333 fehlt Nichts; 28½ cm breit, 13 cm hoch der grössere ursprüngliche Theil der Hs. ist gegen Ende des 18 Jahrh. geschrieben; die zur Ergänzung eingefügten Blätter sind viel jünger.

Das *Mārkaṇḍeyapurāna*.

Anfang auf Bl. 1^b: *Oṃ namo bhagavate ḶṛiVāsudevāya || ||*

Nārāyaṇaṃ namaskṛitya naraṃ caiva narottamaṃ ||

devī[ṃ] Sarasvatīṃ Vyāsaṃ tato jayam udīrayet || 1 ||

(Auf dem Rande: *Sūta uvāca*)

tapahsvādhyāyaniratam Mārkaṇḍeyaṃ mahāmuniṃ ||

Vyāsaśishyo mahātejā Jaimu(mi)niḥ paryyapricchata ||

Der Schluss ist ganz verschieden von dem der Ausgabe in der Bibliotheca Indica und stimmt mehr mit dem Texte der Maithila Hss. überein (Banerjea's Ausgabe, S. 655—660).

Schluss auf Bl. 422^a: *Yaṃ Braṃ(brahmā) Varuṇendrarudramarutas tu(ta)nvamti divyai stavair vedaiḥ sāṃgāpadakramosha(pa)ni-shadair gāyaṃti yaṃ sāmagāḥ || dhyaṇāvasthitatādātena manasā pa-çyaṃti yaṃ yogino yasyāṃtaṃ na viduḥ surāsuragaṇāḥ devāya tasmai namaḥ || iti ḶṛiMārkaṇḍeyapurāne Jaiminikhaṃḍam prathamam*

samāptam || (vgl. Wilson's Vishṇupurāṇa, ed. Hall, vol. I, preface p. LIV) *ḶṛiDurgāCaṃdreçvarāraṇam astu || paṭhakapāṭhakayoḥ śubhaṃ bhavatu.*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 45 100 + 65 + 50 + 47 + 100 + 33 Bl.; 32 cm breit, 21 cm hoch 19 Jahrh.

Das *Vishṇupurāna* mit dem *Commentare*, genannt *Vai-ṣṇavākūtacandrīkā*, des *Ratnagarbhahattācārya*.

Amṇa 1, 100 Bl. Von Bl. 2^a an stimmt der *Commentar* genau überein mit dem der Bombayer Ausgabe von Çake 1788, von Bl. 1^a Zeile 4 an (*jitam jayostv ity arthak*); und Bl. 100^b schliesst: *iti ḶṛiRatnagarbhahattācārya viracitāyām Vaiṣṇavākūtacaṃdrikāyāṃ prathamēṇṇe dvāvimṇoḍhyāyaḥ || 22 ||*. Dagegen ist der Anfang auf Bl. 1^b aus *Ḷṛidharasvāmi*'s *Commentare* zum Vishṇupurāṇa genommen (vgl. Aufrecht's Oxf. Cat. p. 63^a). Er lautet: *|| ḶṛiGaṇeṣāya namaḥ || oṃ ḶṛiBīṇḍumādhavaṃ vaṇḍe paramāṇaṃdavigrahaṃ || vācam viçveçvaraṃ Gaṃgām Parāçaramukhāṇ munin || 1 || ḶṛimacCitsukha yogimukhyaracitavyākhyāṃ nirikshya sphuṭam tanmārgena subodhu(dha)samgrahavatīm ātmaprakāçābhīdham || Ḷṛimad Vishṇupurāṇa-sāravivṛittim(tim) karttā yatih Ḷṛidharasvāmī sadgurupāḍapadmamadhpupā(pah) sādhuḥ svadhīçuddhaye || 2 || Ḷṛimad Vishṇupurāṇasya vyākhyāṃ svalpātvistarāṃ || prāçāṃ ālokya tadvyākhyā mādhyaṃcyaṃ vidhīyate || 3 || asmin vivakṣhitam yat tu vastu tan namanātmakaṃ munir mampṛo panishadā kṛitam badhnāti maṅgalaṃ || 4 || jitam ta iti || . . .*

Amṇa 2, 65 Bl. Anfang des *Comm.* wie in der Bombayer Ausgabe. Schluss auf Bl. 65^b: *iti Ḷṛi^o shoḍaḍoḍhyāyaḥ || 16 || ḶṛiSāmbār-ṇam astu ||*

Amṇa 3, 50 Bl. Anfang des *Comm.* wie in der Bombayer Ausgabe. Schluss auf Bl. 49^b: *iti ḶṛiVishṇupurāne trīṭīye[ṇ]çeshṭāḍaḍoḍhyāyaḥ || Ḷṛigopījanavallabhāya namaḥ.*

Amṇa 4, 47 Bl. Anfang des *Comm.* wie in der Bombayer Ausgabe. Schluss auf Bl. 47^b: *iti ḶṛiVishṇupurāne caturtheṇṇe caturvim-ṇoḍhyāyaḥ || 24 || samāptoyaṃ caturthoṃṇaḥ ||*

Amṇa 5, 100 Bl. Anfang des *Comm.* wie in der Bombayer Ausgabe. Schluss auf Bl. 100^a: *iti ḶṛiRatnagarbhanaḍā(bhāṭṭā)cārya viracitāyām Vaiṣṇavākūtacandrīkāyām pañcame aṃṇe aṣṭatrimṇoḍhyāyaḥ || 38 ||*

Amṇa 6, 33 Bl. Anfang des *Comm.* wie in der Bombayer Ausgabe. Schluss auf Bl. 33^a: *iti ḶṛiRatnagarbhanaḍā(bhāṭṭā)cārya viracitāyām ḶṛimadVaiṣṇavākūtacandrīkāyām shashṭe-(shṭhe) aṃṇe aṣṭamoḍhyāyaḥ || samāpta ||*

Darunter in kleinerer Schrift folgende Verse, nach denen ein gewisser *Haṃsarāja* in Bombay den Bhāgavatas in Çake 1777 (1855 n. Chr.) ausser anderem auch Hss. der achtzehn grossen Purāṇas, zu denen wahrscheinlich auch diese Hs. gehörte, geschenkt haben soll:

KacchadeçyaMāskāhvapurābhījanasamsthiteḥ ||

Raṇamallasya tanayaḥ Karamsir iti viçrutah ||

dhanī māni vadānyaṅca devabrāhmaṇapūjakaḥ ||

vapikūpataḍgānām prāsādānām ca kārakah ||

tasya sūnur Haṁsarājo Mumūpuraniketanaḥ ||
śrīmadbhāgavatānām sa śatam aṣṭottaram mudā ||
sākam aṣṭādaśamahāpurānānām ca pustakaiḥ ||
prāyachhad vipravaryebhyaḥ svarāganagabhūṣake ||
punyāyām Agrahāyanyām Purushottamatushṭaye ||
Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 46 25 Bl. 20¼ cm breit, 10 cm hoch
19 Jahrh.

10 Adhyāyas der *Sanatkumārasaṁhitā* (*Kaumārasaṁhitā*, oder *Kumārasaṁhitā*).

Adhy 1 schliesst auf Bl. 4^a (*SadācīvaBrahmasaṁvāde vidyāGaṇe-
camantrodhāre*); 2 auf Bl. 8^a; 3 auf Bl. 11^a; 4 auf Bl. 12^a; 5 auf
Bl. 14^a (*vācyādiprayogaḥ*); 6 auf Bl. 16^a (*staṁbhanocātanam nāma*);
7 auf Bl. 17^b (*homavidhir nāma*); 8 auf Bl. 20^b (*homamāhātmyam nāma*);
9 auf Bl. 22^b (*vāṁchākalpalatākathanaṁ nāma*); 10 auf Bl. 25^b (*vāṁ-
chākalpalatāmanuvidhānam nāma*).

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 47 Ein nach europäischer Weise geschriebenes und
geheftetes (defectes) Büchelchen mit 53 Bl., (gezählt als 1—13 19—46
52 53 56—63 und am Schluss zwei nicht gezählten); 16 cm breit,
10 cm hoch 19 Jahrh.

Enthält folgende auf die Verehrung des Viṣṇu-Kṛiṣṇa bezüg-
liche Werkchen:

Bl. 1—31^a: *Purushottamasahasranāma* (Bl. 31^a *iti śrī-
Bhāgavate mahāpurāne daśamaskandhe Vaiśvānaroktam śrīPurushotta-
masahasranāma saṁpūrṇam*).

Bl. 31^b—46^b: *Vallabhācārya's Trividhālilānāmāvalī*
(Bl. 46^b *iti śrīVallabhācāryaviracitam Trividhānāmāvalī saṁpūrṇam*).

Bl. 46^b beginnt *Kṛiṣṇāśṣṭottaraśatanāma*; Bl. 47—51
fehlen; Bl. 52^b schliesst: *iti śrīBrahmāṁdapurāne DharanīSesasaṁvāde
|| Kṛiṣṇāśṣṭottarasatanāmāmṛitasto(tram saṁ(?)pūrṇam*.

Bl. 52^b—59^b: *Gopikāgīta*, der 31 Adhyāya des 10 Skandha
des Bhāgavatapurāṇa.

Bl. 59^b—61^a: *Bhujāṅgāśṣṭaka* (Bl. 61^a *iti Bhujāṅgāśṣṭaka
samāptam*).

Bl. 61^a—62^a: *Kṛiṣṇāśṣṭaka*.

Bl. 62^a—63^a: *śrīViṣṭhaleṅkṭam Aṣṭāksharanirūpanam*.

Die folgenden Schlusszeilen enthalten Verse u. a. in Sanskrit und
Gujarātī.

Sanskrit 48 342 Bl. 30¼ cm breit, 14 cm hoch
geschrieben gegen Ende des 18 Jahrh.

Nārada pañcarātre Paramāgamaṣṭādāmaṇi, in 95 Ca-
piteln, genannt *paṭala*. Jedes *paṭala* hat seinen Namen von dem
darin behandelten Gegenstande; z. B. Bl. 6^b *iti śrīNārada pañca-
rātre Paramāgamaṣṭādāmaṇau Nārada pañcarātre parābrahma-
saṁgavarṇano nāma[ḥ] prathamāḥ paṭalaḥ*; Bl. 15^b *iti Nārada śriṣṭyādi-
vicitravarṇanam dvitīyāḥ paṭalaḥ*; Bl. 25^a *iti śrīNārada śriṣṭi^o
amṭashkaraṇacatusṭayavātmāvabodha nāma tritīyāḥ paṭalaḥ*; Bl. 28^b

*iti śrīNārada bhūtādivyaktivarṇane sadbuddhivarnana nāma caturthāḥ pa-
ṭalaḥ*; u. s. w.

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 49 51 Bl. (gezählt 1—21 und 27—56); 26 cm breit,
15¼ cm hoch 18 Jahrh.

Fragmente von *Mahidharabhaṭṭa's Mantramahodadhi*
mit dem *Naukā* genannten Commentare (s. Aufrecht's Oxf. Cat. p.
99—100), Tarāṅgas 8—12.

Bl. 12^a im Text: *iti śrīmanMahidharabhaṭṭaviracite Ma-
tramahodadhau (!) nāmāśṭamas tarāṅgaḥ*; im Commentar: *iti
śrīMantramahodadhīNaukāyāṁ bālaṣṭyāmādinirūpanam aṣṭamaḥsta-
rāṅgaḥ*. Schluss von Tarāṅga 9 auf Bl. 21^b; 10 auf Bl. 30^a; 11 auf
Bl. 43^a.

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 50 46 Bl. 20¼ cm breit, 10 cm hoch
19 Jahrh.

Śivarāma's Mantrasārasaṅgraha oder *Mantrasāra-
paddhati*.

Anfang auf Bl. 1^b: *Śrīgururṇam Ṣaṁkaram natvā Nārāyaṇapuruṣasaram ||
kriyate Śivarāmeṇa maṅtrānāṁ sārasaṅgraham || 1 ||*

Schluss auf Bl. 46^a: *iti sarvamaṅtrāntargatamaṅtrasāranirgata
iṣvareṇoditamāṅtrasārapaddhatiḥ samāptā ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 51 18 Bl. 21 cm breit, 10 cm hoch
19 Jahrh.

Theil eines Tantrawerks, bezeichnet als *Mṛityuṁjayakalpaḥ
Vasishṭhoktaḥ*.

Anfang auf Bl. 1^b: *Śrīgurubhyo Gaṇapataye namaḥ | atha kāmāni
karmāni pravakṣyāmi samāsataḥ | śrīkāmō bilvavṛikshasya samīdhir
athavā punaḥ | yavair vāpy asya juhuyān mahatīm śrīyam āpmuyāt |
Bl. 2^b: *iti Vasishṭhokte Tryambakapaṭale pañcamaḥ paṭalaḥ ||*
Bl. 5^a: *iti VasishṭhoktaTryambakatamre shashṭaḥ paṭalam ||* Bl. 5^b:
iti VasishṭhoktaTryambakatamre sapṭamam paṭalam || Bl. 8^b: *iti
Vasishṭhoktamahāmṛityuṁjaya-Tryambakapaṭale aṣṭama-
paṭalaḥ ||* u. s. w.*

Sanskrit 52 Ein Blatt, gezählt als 63 13 cm breit, 9¼ cm
hoch geschrieben 1781 (Śaṁvat 1838)

Schlussblatt des von *Ādinātha* verfassten *Kālisahasranā-
mastotra*, genannt *Sundarivaradāna*, aus des Verfassers *Ma-
hākālasaṁhitā* (s. Rājendralāl's Notices, no. 392 und 478). Datum:
Samvat 1838 prathama Caitraṣṭada 15 Ravau.

Sanskrit 53 73 Bl. (einige Blätter zerfetzt; Bl. 8 nur auf
einer Seite beschrieben) 24¼ cm breit, 10¼ cm hoch geschrieben
1500 (Śaṁvat 1556, Ṣake 1422)

Kālidāsa's Kumārasaṁbhava, Sargas 1—8. Vers 91
von Sarga 8 lautet wie in Bhāu Dāji's Ausgabe; darauf folgt (Bl. 72^b)
folgender Schlussvers:

ÇriKālidāsa *kavinā kṛitarāmyakāvye*
sargesṭhame Harahimācalakanyayor yat |
ekāntasaukhyam ajanishṭa gṛihodbhavetra
taj jāyatām jagati dehabhṛitām hitāya || 92

Darauf (Bl. 73*) das Datum: *Samvat 1556 varshe Çake 1422 pravarttamāne uttarāyanagate çrisūrye çicararttau Māghamāse kṛishṇapakṣhe aṣṭāmyām tīhau Bhṛiguwāsare*. Die Namen des Ortes und des Schreibers sind ausgestrichen. Es folgen noch mehrere Verse (ohne historische Bedeutung), von denen einer einen *mantriçvara Vastupāla* erwähnt.

Sanskrit 54 23 Bl. 15 cm breit, 20 cm hoch 19 Jahrh.

Dasselbe Werk, Sargas 1—7, in lateinischer Schrift, wahrscheinlich von *Ewald* geschrieben.

Anfang auf S. 1: *O namaḥ Çivāya çriGaneçāya namaḥ astyū* (soweit in Nāgarī; dann in latein. Schrift) *o nama: civāya criganecāya nama: astjutorasjā . dici devatātmā himālaajo nāma.*

Schluss auf S. 45: *iti crīkumārāsa . bhāve mahakavje sap-tama: sarga: crīgañecāya nama: darcanāja prayudschjamānā prijadar-canena sā drischṭha itja.*

Sanskrit 55 (a) 14 Bl. (gezählt als 1—14) 24½ cm breit, 7½ cm hoch 18 Jahrh.

(b) 119 Bl. (gezählt als 9—18 und 27—135) 29 cm breit, 12 cm hoch geschrieben 1756 (Çake 1678)

Çriharsha's Naishadhacarita, unvollständig.

(a) enthält Sargas 1 und 2, 1—69; (b) Bl. 9—18 Sargas 2, 24—3, 121; Bl. 27—135 Sarga 5, 8 bis zum Ende von Sarga 22.

Datum auf Bl. 135*: *Çake 1678 Dhātāsāmvatsare Āçvinaçuddhapratipattīhau.*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 56 Zwei Bände mit insgesamt 765 Bl. 29 cm breit, 13 cm hoch Ende des 18 Jahrh.

Çriharsha's Naishadhacarita, mit dem Commentare, genannt *Naishadhīyaprakāça*, des *Nārāyana*, eines Sohnes des *Nṛsiṃha* (oder *Narasimha*) *Pañḍita Bedarakara*; unvollständig.

Bd. I enthält Sargas 4 (gezählt als Bl. 172—217); 5 (gez. 218—270); 6 (gez. 271—312); 10 (gez. 467—511); 11 (gez. 512—559); 13, 1—54 (gez. 1—39); 15 (gez. 1—40); 16 (gez. 1—53). Band II enthält Sargas 17 (gez. 1—85); 18 (gez. 1—61); 19 (gez. 1—43); 20 (gez. 1—49); 21 (gez. 1—85); die Zahl der Verse ist 164, gegen 142 der Calcuttaer Ausgabe); 22 (gez. 1—75; von den drei letzten Versen nur Commentar).

Schluss auf Bl. 75*: *Samtā samtu paraprāyojanakṛitāḥ kalpadrumāntāḥ sadā svāsmīn eva pathi pravarttanaparāḥ satkīrttayaç çāpare || anye nisprīhanāḥ crīta[h]çrutīpathā divyaṃtu bhavyāçayāḥ || kākāmṭāḥ ka[m]khaḥpriyāḥ khalajānā jāyāṃtu jamvāntu vā || 1 || Vāsānām asya Rāmasya kimkarasya jagatpate || no cet pūrāya kalpeça kalpasya tava kimkarāḥ || iti çriBedarakaropanāmaçṛimanNṛsiṃhapāṃdi tāt-*

majaNārāyaṇakṛite Naishadhīyaprakāçe dvāvīṃçatimāḥ sar-gaḥ || 22 || samāpto(pte)yaṃ Naishadhātīkā Nārāyaṇi ||
 Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 57 2 Bl., gezählt als 42 und 43, an den Rändern beschädigt 25½ cm breit, 11 cm hoch 17 oder 18 Jahrh.

Bruchstück von *Hemacandra's Caulukyavamaṇçadvyāçraya-mahākāvya* mit Commentar (s. Kielhorn's Report 1880—81, p. 15). Bl. 42* beginnt mit Vers 59; Bl. 43^b schliesst mit Vers 86: *iti shash-ṭhah pādah samarthitah.*

Sanskrit 58 ein Blatt, beschädigt 25½ cm breit, 11 cm hoch 17 oder 18 Jahrh.

Bruchstück *desselben Werkes*, aus einer anderen Hs. Beginnt mit Vers 58, und schliesst mit Vers 69, die den Versen 58 und 70 des vorhergehenden entsprechen.

Sanskrit 59 56 Palmblätter zwischen zwei Holzdeckeln, etwas über 12 cm breit, und ungefähr 4 cm hoch. (54 Blätter sind auf der Vorderseite numeriert; zwischen Bl. 1 und 2 liegt ein nur theilweise beschriebenes, nicht numeriertes Blatt; ein anderes nicht numeriertes, leeres Blatt am Ende. Bis Bl. 22 zwei Löcher für den Bindfaden, später nur eins.) Malayālam, zierliche Schrift; mit vielen Correc-turen; eingeritzt und dann geschwärzt.

Jayadeva's Gītagovinda.

Anfang auf Bl. 1*: *çriGanapataye namaḥ avighnam astu. Meghair mmeduram ambaram vanabhuva çyāmā(la mā ausgestrichen)s tamāla-drumair naktam bhīrur aya tvam eva tad ita ausgestrichen)maṇ Rādhē gṛīham prāpaya.*

Schluss auf Bl. 54*: *iti çriGītāgonde (!) çriṃgāramahākāvye çriKṛi-shṇadāsaJayadevakṛitau svādhirabhartṛikāvarṇṇanē sarasasarasi-ruhākṣho nāma dvādaça sarggaḥ Hariḥ çriḥ.*

Zwischen den Deckeln liegen, am Ende, noch 2 Palmblätter, 9 cm breit und 3½ cm hoch, mit Malayālam Schrift. Sanskrit Verse, reli-giösen Inhalts.

Lag früher bei der Tamil-Bibel cod. Orient. var. 70.

Sanskrit 60 84 Bl. 35½ cm breit, 14½ cm hoch 18 Jahrh.

Bhāskararāya Bhāratī's Çivanāmakalpalatālavāla, mit *Veṅkaṭācalasūri's* Commentar, genannt *Sudhāpūra*.

108 Verse in verschiedenen Versmassen über ebensoviele Namen des Çiva, mit sechs einleitenden Versen und drei Schlussversen. Die zwei letzten Verse lauten:

Bl. 83*: *Iyaṃ Çambhor aṣṭottaraçatākanāmārthavivṛitir*

vijātyair aṣṭottaraçatakavrittair viracitā |

phalaṃ nāmasv arthāvagatishu ca bhūmnaiva vihitaṃ

bahūnām vṛittānām pramītir adhikāpy atra phalati ||

Bl. 83^b: *Iti Kāçinivāsīsāgnicityakratukṛid Bhāskararāyabhā-*

ratī |

janushaḥ saphalatvasiddhaye Çivanāmāshṭaçatam

vyavararīt ||

Der Schluss des Commentars auf Bl. 84^a :

*Çrīma[c]ChamkarasamhitāCīvarahasyādīprasiddhātmanām
nāmnām aṣṭāçataçasya shoðaçaçataçlokyā niruktiṃ vyadhāt |
çrīBhāratyupanāmaBhāskarākṛitī tāṃ vistarād dustarām
vyāçakhyau paṭu Venkaṭāçalapa(ya)tiḥ Kāçipatiṣṭayā || 1 ||
iti Çivanāmakalpaṅvalyā Bhāskarākavir ālavālam ābadhnāt |
tad Venkaṭāçalasudhīḥ sudhābhīr āpūrayāmāsa || 2 ||
iti çrīVenkaṭāçalasūripranītaḥ Çivanāmakalpalatālavālasudhā-
pūrah samāptāḥ ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 61 32 Bl. 30½ cm breit, 10½ cm hoch
geschrieben 1835 (Çake 1757)

Bhavabhūti's Uttararāmacarita.

Anfang auf Bl. 1^b: *çrīgurubhyo namaḥ || aviḅnam astu || idam
gurubhyaḥ pūrvebhyo namovākaṃ praçōsmahe || ...*

Schluss auf Bl. 32^a: *garbho nāma saptamonkaḥ || 7 || iti çrīBha-
vabhūti viracitaṃ Uttararāmacaritaṃ nāma nāṭakaṃ samāp-
taṃ || çrīKṛishṇārpaṇam astu munibānarshicandraiḥ ca mite çaketha
Manmathe vatsare ca Sahāçuklapaṇcamyām Jñe ca vāsare || 1 || Pā-
rāçaryasamudriyā Rāmāçandrāryasūnūnā || Kṛishṇena likhitaṃ hy etad
Uttaraṃ Rāmānāṭakaṃ || 2 ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 62 30 Bl. 31 cm breit, 11 cm hoch 19 Jahr.
Dasselbe Werk.

Anfang auf Bl. 1^b, genau wie im vorhergehenden.

Schluss auf Bl. 30^b: *iti nishkrāṃtāḥ sarve garbho nāma sapta-
monkaḥ || iti çrīBhavabhūti viracitaṃ Uttararāmacaritaṃ
nāma nāṭakaṃ samāptaṃ || çrīKṛishṇārpaṇam astu || idam gratham
Māghaçūdhdhāçamyām samāptobhūt ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 63 40 Bl. 24½ cm breit, 9½ cm hoch ge-
schrieben 1700 (Samvat 1757)

Kṛishṇamiçra's Prabodhacandrodaya.

Schluss auf Bl. 40^a: *iti çrīKṛishṇamiçraviracite Prabo-
dhacandrodaya nāṭake jīvanmuktir nāma shashṭhoṅkaḥ || samāp-
tam idam Prabodhacandrodaya nāmakaṃ nāṭakaṃ || çrīḥ || çrī-
madGovindātmajaBābūbhāṭṭasya pustakaṃ etat || ... grānṭhasamkhyā
1000 || || muniçaragiriçandraiḥ 1757 sammite samvad etan mahati Sa-
hasi māse çuklapakshe navamyām | prahītaJaḍkūlodyadvijñāGovin-
dasūnūḥ samalikhad akhilam sat pustakaṃ nāṭakasya || 1 || ...*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 64 12 Bl. 23 cm breit, 11 cm hoch 19 Jahr.
Vṛiddhacāṇakya (in der Hs. selbst: *Vṛiddhacāṇakhya*) *Rāja-
nitiçāstra*, in 8 Adhyāyas (s. Aufrecht's Oxf. Cat., p. 131^b).

Anfang auf Bl. 1^b: *çrīGañeçāya namaḥ || atha Vṛiddhacāṇā-
khyāṃ likhyate || || Pranamyā çirasā Vishṇuṃ trailokyādhipatiṃ pra-
bhūṃ || nānāçāstrodhṛikaṃ vakshe rājānītisamuccayaṃ || 1 ||*

Schluss auf Bl. 12^b: *iti Vṛiddhacāṇakhye Rājānitiçāstre
aṣṭamodhyāyaḥ ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 65 36 Bl. 25½ cm breit, 11 cm hoch ge-
schrieben 1751 (Çake 1673)

Bhartrihari's Niti- und Çringāraçataka, mit einem
kurzen *Commentare*.

Das *Nitiçataka* schliesst auf Bl. 19 : *iti çrīBhartrihari vira-
citaṃ Nitiçatakaṃ samāptaṃ ||*; das *Çringāraçataka* auf Bl. 36^b:
*iti Bhartriharinā viracitaṃ Çringāraçatakaṃ satikam samā-
ptaṃ || ... Çake 1673 Kharebde bāhule paṃcodaçyām Çukre idam pu-
stakaṃ Çotriyopanāmnā Viṭthalena likhitaṃ iti ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 66 96 Bl. 32½ cm breit, 20½ cm hoch ge-
schrieben 1869

Dyādviveda's Nitimanjari, mit *Bhāshya*, genannt *Ve-
dārthaprakāçā* (s. Indian Antiquary, vol. V p. 116).

Anfang: *çrīGañeçāya namaḥ || çrīSarasvatyai namaḥ || çrīMu-
kuṃdadvivedasya naptānamyātrimocitaṃ || sūryam vicārya vedār-
thān vakti Dyā Nitimanjarīm || 1 || dvau vedau yasycāsu dvide-
dāḥ çriyā yukto Mukuṃdah çrīMukuṃdah || sa cāsau divedaḥ ca tathā
|| tasya naptā prapañtraḥ || Dyānamā caturthaḥ || Nitimanjarīm vakti
bravīti || ... çrīMukuṃdādāvijātestrir (dād dhi jāto'trir?) Atrer
Lakshmidharo mahān || tasya Lakshmir mahādevi Dyādvivedam
ajjanāt ||*

Bl. 31^b: *Diveda çrīLakshmidhara sūnūnā satrayajvanā
Dyādvivedena viracite Nitimanjaribhāshye prathamāshṭake
nīvākyaṇi samāptāni || Bl. 41^a dvitīyāshṭake. Bl. 50^b Nīti-
manjaribhāshye vedārthaprako (kā)çe tṛitīyāshṭake. Bl. 61^b Nīti-
manjaribhāshye vedārthaprako (kā)çe caturthāshṭake. Bl. 72^a
Nitimanjaribhāshye vedārthaprako (kā)çe paṃcamāshṭake.
Bl. 82^a Nitimanjarivyākhyāne shashṭhāshṭake. Bl. 87^a Nitimanjari-
vyākhyāne saptamāshṭake. Bl. 95^a Nitimanjaribhāshye 'shṭame.*

Für Prof. Kielhorn 1869 von einer 1778 (Çake 1700) datierten
Hs. abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 67 173 Bl. (25 cm breit, 8½ cm hoch), je 3 (zwei-
mal je 4) zusammen auf einen Bogen aufgezogen unter Aufsicht
Prof. Max Müller's 1859 hergestellte Durchzeichnung einer Hs. des
India Office.

Çivadāsa's Vetālapaṇcaviṃçatikā.

Schluss auf Bl. 173 (Bl. 87^b der Londoner Hs.): *iti Çivadāsavira-
citāyām Vetālapaṇcaviṃçatikāyām paṇcaviṃçatimanḥ kathāna-
kaṃ samāptaṃ sa[n]pat 1849 | Açvine māse çuddhapakshe 4 puṅya-
tīthau taddine sampūrṇam ||*

Sanskrit 68 170 Bl., die 31 cm breit, 48 cm hoch sind; und
9 Bl. verschiedenen Formats Ende des 18 und Anfang des 19 Jahr.
Die Hs. wird auf Bl. 2^a von *H. T. Colebrooke* selbst bezeichnet
als *'A Grammar of the Sanscrit Language; from the*

text of Pāṇini, and the commentaries of Rāma-chandra, Bhaṭṭōji-dīcshita, and others. Sie enthält zunächst auf 73 Blättern, die das Wasserzeichen des Jahres 1794 tragen, in Nāgarī Schrift, den Text von Pāṇini's Grammatik, so geschrieben, dass rechts vom Texte Raum für Bemerkungen blieb. Da dieser Raum indessen nicht genügte, wurden später noch andere Blätter (mit dem Wasserzeichen des Jahres 1796) zwischen den Blättern des Textes eingefügt. Der neben dem Texte gelassene Raum und die so eingeschobenen Blätter enthalten Colebrooke's Übersetzung (oder Versuche einer Übersetzung) sehr vieler Regeln. Nahezu vollständig übersetzt ist Alles, was sich auf die Technik der indischen Grammatik, auf die Lautlehre, die Declination und Conjugation, die Bildung der Femininstämme, die Bedeutung der Suffixe und die Syntax bezieht; und in den Abschnitten, die von der Composition der Nomina, den kṛit und taddhita Suffixen handeln, sind wenigstens die Regeln allgemeiner Inhalts erklärt und die sich aus den Regeln ergebenden Resultate bisweilen durch tabellarische Übersichten erläutert. Nicht übersetzt sind im Wesentlichen nur die Regeln über die Accente und die vedische Sprache. Bl. 160—170 enthalten Colebrooke's Reinschrift seiner Übersetzung des grössten Theils des ersten Adhyāya von Pāṇini's Grammatik, und seinen Commentar zu einer beträchtlichen Anzahl von Regeln. Ausserdem ist bei vielen Regeln auf dem Rande bemerkt, wo sie oder die in ihnen gelehrten Termini zur Anwendung kommen. 9 angebundene Blätter enthalten Übersetzungen einzelner Regeln, Listen von Wörtern, u. s. w. Eins derselben ist ein Briefcouvert mit dem Wasserzeichen 1797, das von Colebrooke an J. H. Harrington Esq. (Beamten im Dienste der East India Company seit 1780, zuletzt Member of the Supreme Council and President of the Board of Trade, und 'for some years honorary professor of the laws and regulations of the British government in India in the College of Fort William... and afterwards president of the council of the College') und von diesem an H. Colebrooke Esq. zurück adressirt ist. Ein Specimen von Colebrooke's Übersetzung siehe in den Nachrichten von der K. Ges. der Wiss. zu Göttingen v. J. 1891, S. 107—112.

Diese Hs. und die unten verzeichneten Hss. no. 69 70 96 97 98 99 stammen aus dem Nachlasse des 1837 verstorbenen Orientalisten F. A. Rosen, dem sie von Colebrooke geschenkt waren, und sind 1852 vom Vater Rosens, dem F. Lipp. Kanzler Dr. Ballhorn-Rosen, zusammen mit einer Büste F. A. Rosens der Bibliothek geschenkt worden.

Sanskrit 69 62 Bl., 28½ cm breit, 46 cm hoch Anfang des 19 Jahrh. (Papier aus den Jahren 1797—1801)

Die Hs. enthält nach Colebrooke's Aufschrift Pāṇini's Sūtras or Rules of Grammar, in Wirklichkeit aber in schwarzer Schrift den Text der Sūtras, und in rother Schrift Zusatzregeln (Vārttikas, Kārikās, u. s. w.) aus der Kāṇikā-Vṛitti. Die Blätter sind auf beiden Seiten beschrieben, und jede Seite enthält zwei Columnen mit leeren Zwischenräumen, die von Colebrooke für eigene Bemerkungen bestimmt waren und theilweise für solche benutzt sind. Manche Regeln sind von Colebrooke kurz übersetzt; öfter hat er die

Paragrafen seiner Grammatik angegeben, in denen sich die Übersetzung findet oder wo der betreffende Gegenstand behandelt wird. Ausserdem hat er vielen Regeln oder Bemerkungen des Sanskrit Textes gewisse Zeichen ('arbitrary marks', — eine Hand, einen Stern, einen Dolch, u. a.) vorgesetzt, durch die er, wie er selbst angiebt, andeuten wollte, unter welche der folgenden Rubriken eine Regel oder Bemerkung fällt: — a rule premised (d. i. eine adhikāra-regel); a maxim (d. i. eine Paribhāshā); an exposition (d. i. eine samjñā-regel); a rule peculiar to the Veda; an emendatory rule or Vārttika; a remark (ishṭi) extracted from the Bhāshya; a metrical rule or Kārikā; a memorial verse (d. i. eine Kārikā); a list from the Gaṇapāṭha. Zwischen Bl. 1 und 2 ist ein nicht paginiertes Blatt eingehftet, auf dem Colebrooke die 'Grammarians named in the Preface of the Gaṇaratna Mahodadhi, as explained by Bardhamāna (pupil of Govinda sūri)' verzeichnet hat. Vgl. zu Sanskrit 68.

Sanskrit 70 107 Bl. 30 cm breit, 48½ cm hoch Anfang des 19 Jahrh. (Papier aus dem Jahre 1802)

Die Hs. wird auf einem vorgehefteten Blatte und am Schlusse als Pāṇini's ūtrabhāshyavārttika bezeichnet, und enthält in der That die Sūtras des Pāṇini mit Vārttikas und anderen Auszügen aus dem Mahābhāshya. Sie ist ganz wie die vorhergehende Handschrift eingerichtet, enthält aber nur wenige Bemerkungen Colebrooke's. Dann und wann hat Colebrooke — auch hier durch gewisse 'arbitrary marks' — angedeutet, dass gewisse Vārttikas von Patañjali adoptiert, andere verbessert, und noch andere vermittelst einer künstlichen Erklärung der Regeln Pāṇini's zurückgewiesen werden. Vgl. zu Sanskrit 68.

Sanskrit 71 36 + 171 (Bl. 13 doppelt gezählt) + 98 Bl. 39 cm breit, 15 cm hoch 19 Jahrh.

Patañjali's Vyākaraṇamahābhāshya mit Kaiyaṭa's Bhāshyapradīpa.

(a.) Bl. 1—36 und Bl. 1—126; Adhyāya I, Pāda 1.

(b.) Bl. 127—171 und Bl. 1—98; von den Worten otive kṛite im Mahābhāshya zu P. VI 3 112 (Kielhorn's Ausgabe, Bd. III S. 176 Z. 3) bis zum Ende von Adhyāya VII.

Geschent 1892 von Prof. Kielhorn.

Sanskrit 72 89 Bl. 27½ cm breit, 9½ cm hoch 19 Jahrh.

Dasselbe Werk mit Kaiyaṭa's Bhāshyapradīpa; vom Anfange des 7 Adhyāya bis gegen Ende von P. VII 4 47 (Kielhorn's Ausgabe, Bd. III S. 351 Z. 17).

Geschent 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 73 59 Bl. (gezählt als 1—20, 22—37, 42—43, 60—80) 32 cm breit, 14 cm hoch 18 Jahrh.

Dasselbe Werk mit Kaiyaṭa's Bhāshyapradīpa; Fragmente des 3 Adhyāya, von P. III 1 1 bis III 1 94 (Kielhorn's Ausgabe, Bd. III S. 79 Z. 18).

Geschent 1892 von Prof. Kielhorn.

Sanskrit 74 135 Bl. (Bl. 128—131 falsch gebunden) 23½ cm breit, 10 cm hoch geschrieben 1521 (Samvat 1578)

Rāmacandrācārya's Prakriyākaumudī; das *subanta-prakarana*, bis zum Ende der *dviruktiprakriyā*.

Schliesst auf Bl. 135^a: *iti cīRāmacandrācārya viracitāyām Prakriyākaumudyām dviruktiprakriyā samāptā* || || || *saṃvat 1578 varṣe Kārttikaçudī 9 Bhaume Vriddhabhojayaniwāsina cīGauḍajñātīyena jyotirvidRāmasūmwā Raghunāndanākhyena likhitā Kaumudī* || *gramthasamkhyā ślokaçata 2300*.

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 75 206 Bl. (Bl. 93—99 falsch gebunden) 21 cm breit, 10 cm hoch geschrieben 1774 (Çake 1696)

Varadarāja's Madhyasiddhāntakaumudī.

Bl. 205^a: *iti cīvaviṭikamḍiVaradarājakṛitā¹⁾ Madhyasiddhāntakaumudī samāptā* || || *eshā Varadarājena bālānām upakārikā* || *akāri Pānīnyānām Madhyasiddhāntakaumudī* || 1 || || || || || *Çake 1696 Jayanāmasamvatsare dakṣiṇāyane grīshmaritau Aśhādhamāse kṛiṣṇapakshe adya daçamyām tithau Bhaumya (ma)vāsare²⁾ taddīne GhaḷasāsītyupanāmaNārāyaṇācāryātmajaMādhavena likhitam* || Schluss auf Bl. 205^b von anderer Hand: *kṛitir Varadarājasya Madhyasiddhāntakaumudī* || *tasyā[h] samkhyā tu vijñeyā khabānakaravahmibhīh* || 1 || 3250.

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 76 109 Bl. 32½ cm breit, 20½ cm hoch 19 Jahrh.

Des *Mahāmahopādhyāya Śīradeva Paribhāshāvṛitti*.

Für Prof. Kielhorn von einer Çaka (?) 1636 datierten Hs. in Poona abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 77 20 Bl. 26½ cm breit, 14½ cm hoch 19 Jahrh.

Kolāhala's Paribhāshāpradīpa; eine kurze Erklärung der in *Śīradeva's Paribhāshāvṛitti* enthaltenen *Paribhāshās*.

Schliesst auf Bl. 20^a: *iti cīmahopādhyāyapamḍitaKolāhala-kṛitah Paribhāshāpradīpah samāptah* ||

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 78 45 Bl. 29½ cm breit, 12 cm hoch 19 Jahrh.

Nāgojibhaṭṭa's Paribhāshenduçekhara; mit einigen Randbemerkungen.

Bl. 45^a: *idaṃ pustakam Brahmāvarte VāmanaçarmaGhāreṇekaropanāmakena Bhādrapadaçuddhapratipadyām Gīrūvāsare likhitam svārthe* || Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 79 30 Bl. 32 cm breit, 10½ cm hoch 19 Jahrh.

Dasselbe Werk. Bl. 30^a: *idaṃ pustakam Thatte ityupanā-makaMāhādevasūmwā Harinā likhitam* || *svārtham parārtham ca* ||

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 80 131 Bl. 27½ cm breit, 12 cm hoch geschrieben 1776 (Samvat 1833)

Vaidyanātha Pāyagunḍe's Paribhāshenduçekhara-kāçikā, ein ausführlicher Commentar, genannt *Gadā*, zu *Nāgojibhaṭṭa's Paribhāshenduçekhara* (Bl. 1^b: *Vaidyanāthah Pāpa(ya)-gumḍo natvā Nāgeçvaram gurum | vivṛitīm* (auf dem Rande *kāçikām*) *Paribhāshenduçekhara tanute Gadām*).

Schliesst auf Bl. 131^a: *iti cīmatPāyagunḍopākhyā Mahādeva sūtaVenīgarbhajaVaidyanāthabhaṭṭakṛitaParibhāshenduçekhara-kāçikā paripūrṇā savat 1833 miti Jeṭasudī 12 cīRāma-Rāma* ||

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 81 236 Bl. 34 und 32 cm breit, 10 cm hoch geschrieben 1870 (Çalivāhanaçake 1792)

Citprabhā, ein ausführlicher Commentar zu *Nāgojibhaṭṭa's Paribhāshenduçekhara*, verfasst von *Brahmānanda Sarasvatī*, einem Schüler *Govindānanda's* (s. Kielhorn's Ausgabe des *Paribhāshenduçekhara*, Vol. II, Preface xxiii).

Schliesst auf Bl. 236^a: *iti cīmatparamahamṣaparivrājakācārya Govindānanda bhagavatpādapūjyaçishyatārakaBrahmānandasarasvatīviracitā Citprabhānāmni Paribhāshenduçekharavyākhyā samāptim agamat* || *ida[m] pustakam pakṣhanidhiraśabhūmite¹⁾ Çalivāhanaçake 1792 Pramodanāmni samvatsare Māghastashashṭhyām Punyapattane likhitam* ||

Für Prof. Kielhorn in Poona abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 82 83 Bl. (Bl. 9—14 falsch gebunden) 32½ cm breit, 20½ cm hoch 19 Jahrh.

Bhīma's Paribhāshārthamañjarī, ein Commentar zu *Nāgojibhaṭṭa's Paribhāshenduçekhara*.

Schliesst auf Bl. 83^a: *Paribhāshārasāsvādabaddhādaradhiyāmūnā* || *Bhīmena racitā seyam Paribhāshārthamañjarī* || || || *iti cīmadGalagalekaropanāmakaMādhavācāryatanayaBhīmapraṇātā Paribhāshāmañjarī samāptā* || ||

Für Prof. Kielhorn von einer Samvat 1852 datierten Hs. in Poona abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 83 76 Bl. 21½ cm breit, 17 cm hoch 19 Jahrh.

Rāghaven dra's Tripathugā, ein kurzer Commentar zu *Nāgojibhaṭṭa's Paribhāshenduçekhara* (der Verfasser starb um 1855 in Benares).

Für Prof. Kielhorn 1867 in Poona abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 84 ein Blatt (gezählt als 12) 26 cm breit, 11 cm hoch 18 Jahrh.

Bruchstück von *Hemacandra's Çabdānuçāsana*, mit *La-ghuvṛitti*; auf dem Rande Auszüge aus der *Bṛihadvṛitti*. Be-

1) Eine Oxforder Hs. (Aufrecht's Catalog, p. 166^a) hat *cīvaviṭikamḍiVaradarājabhāṭṭakṛitā*, eine von Rājendra'lāl beschriebene (Notices, no. 2524) *cīcaritī-kanḍiVaradarājabhāṭṭakṛitā*.

2) Das Datum ist Dienstag, der 2 August 1774.

1) *rasa* ist 6, nicht 7; *Pramoda* ist Çaka 1792.

ginnt im Commentare zu II 1, 95. Auf der Rückseite Z. 7: *dvitīya-syādhyāyasya pañcamaḥ pādaḥ* (d. i. der erste Pāda des 2 Adhy.) *samāptah* ||

Sanskrit 85 5 Bl., am Rande stark zerfressen und darum jetzt ohne Blattzahlen 27 (ursprünglich etwa 29) cm breit, 11 cm hoch etwa 17 Jahrh.

Der *Syādiçabdāsamuccaya*, ein Abriss der Sanskritdeclination in Versen, von *Amaracandra*, einem Schüler des *Jinadatta-sūri*, aus dem *Vāyaḍagaccha* der *Çvetāmbaras*; in vier Prakramas mit zusammen 54 Versen; mit einer *Avacūri* (s. Bhāṇḍārkar's Report 1883—84, S. 6). Das Werk scheint auf die Grammatik des *Hemacandra* basiert zu sein, dessen Regeln im Commentare citiert werden. Anfang auf Bl. 1^a: || *om* || *çri Çaradām hṛidi dhyātvā* (vgl. den Anfang von desselben Verfassers *Kāvyaikalpalatāvṛttiparimala* in *Aufrecht's Oxf. Cat.*, p. 210^b) *Syādiçabdāsamuccayaṃ | karoty Amara-candrā khyo muniḥ çvetāmbarāgrāṇiḥ || 1 çabdāḥ pulliṅgastrī-lingāḥ syur nanyamsaka . .* (der Rest weggefressen). Schluss des 1 Prakrama mit Vers 26 auf Bl. 2^a; des 2 Prakrama mit Vers 49 auf Bl. 4^a (*iti Syādisamuccaye vyañjanāntaçabdollāso dvitīyah prakramah*); des 3 Prakrama mit Vers 51 auf Bl. 5^a (*iti Syādisamuccaye sarvanā-magañollāsaḥ tritīyah prakra(mah)*); des 4 Prakrama mit Vers 54 auf Bl. 5^b (*iti Syādisamuccaye samkhyāçabdollāsaç caturthah prakramah sāvacūriḥ samāptah*). Darauf folgen noch vier Zeilen mit Bemerkungen über *Indeclinabilia* u. s. w., die anfangen: *atha kiñcid adhikam likhyate || çri Vāya[da]gacche |*

çrīmajJinadattasūriçishya

. . . d idam Amaramuniḥ samuccayaṃ syādiçabdā-nām || 55

Schluss: *iti Syādisamuccaye || cha || grañthasasūtra 560 || cha || || çriḥ || || cha ||*

Sanskrit 86 5 Bl., gezählt als 1—3, 24, 25 (die beiden letzten mit der Randmarke *prayogīyam*) 26 cm breit, 11 cm hoch 18 Jahrh.

Bruchstücke desselben Werkes, mit einem anderen *Commentare*.

Anfang auf Bl. 1^b: || *om* || *om namaḥ || Kavimdrāmaracaṃ-drākhyakṛitaçabdānusārataḥ | likhyate smṛitaye Hemaprakriyah çab-dāsamuccayaḥ || 1 ||*

Schluss auf Bl. 25^a: *iti sarvepi syādiçabdāḥ sampūrnāḥ || cha || iti Syādiçabdāsamuccayaḥ sakalāḥ samāptah viracitah || çri-Amaraçandra kavimdreṇa || cha || || çri ||*

Sanskrit 87 11 Bl. gezählt als 8 13 15—23 26 cm breit, 11 cm hoch 18 Jahrh.

Bruchstücke von *Anubhūtiavarūpa's Sarasvatīprakriyā*, mit seinem *Commentar*; sie handeln von der Declination der *Nomina* und *Pronomina*.

Sanskrit 88 81 Bl. 26½ cm breit, 12½ cm hoch geschrieben 1693 (Samvat 1750)

Rāmacandrāçrama's Siddhāntacandrīkā, ein *Comentar* zum *Sārasvatāsūtra*. Bis Bl. 69 viele *Anmerkungen* auf dem Rande und zwischen den Zeilen.

Schliesst auf Bl. 81^a: *iti çri Rāmacandrāçramaviracitā Siddhāntacandrīkā sampūrnāḥ samvat 1750 varshe Çrāvaṇamāse çuklapakshe dasamyām tithau Bhaumavāsare çri Ahimadāvādamadhya likhitoyam pustakam ciraṃ namdatu yāvaccandrārkam.*

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 89 370 + 5 Bl. (diese letzten 5 Bl., numeriert 29—33, gehören zwischen Bl. 166 und 167) 32½ cm breit, 20½ cm hoch geschrieben 1866—67

Nāgeçabhaṭṭa's Vaiyākaraṇasiddhāntamañjūshā (laghūḥ).

Für Prof. Kielhorn in Poona abgeschrieben (beendet d. 4 März 1867), und von ihm 1892 geschenkt.

Sanskrit 90 34 Bl. 28 cm breit, 13 cm hoch 18 Jahrh.

Koṇḍabhaṭṭa's Vaiyākaraṇabhūshanasāra.

Schluss auf Bl. 33^b: *iti çrīmatpadavākyaḥ pramāṇapārāvārinadhurina - Ramgojibhaṭṭātmaja Koṇḍabhaṭṭakṛita - Vaiyākaraṇabhūshanasāre samāptoyam sphoṭavādaḥ samāptaç cāyam gram-thah ||*

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 91 36 Bl. gezählt als 1—8 14—41 28 cm breit, 12 cm hoch geschrieben 1755 (Samvat 1812)

Dasselbe Werk, unvollständig.

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 92 51 Bl., nur auf einer Seite beschrieben 32½ cm breit, 20½ cm hoch geschrieben 1867

Vararuci's Liṅgānuçāsane Liṅgavṛitti (Liṅgaviçeshavidhi; siehe R. O. Franke 'Die indischen Genuslehren', S. 118).

Anfang: *çrimate Rāmānujāya namaḥ || Haratu Haras tava duritam kanakarajapūñjapūñjare çirasi || kshīrālutir wa hutabhuji nipatati Bhāgīrathī yasya || 1 || Liṅgajñāsunācāryah priṣṭhah çishyena kenacit | idam Vararucis tasmai provāca hitakāmyayā || 2 ||*

Schluss auf Bl. 51^a: *iti çriācāryaVararuciviracite Liṅgānuçāsane liṅgavṛittih samāptā ||*

Für Prof. Kielhorn in Poona abgeschrieben und von ihm 1892 geschenkt.

Sanskrit 93 6 Bl. 26 cm breit, 12 cm hoch 15 oder 16 Jahrh.

Hemacandra's Liṅgānuçāsana, mit *Scholien* am Rande der ersten Seite von Bl. 1. Schluss auf Bl. 6^b: *ity ācāryaçri Hemacandra viracitam Liṅgānuçāsanasūtram ||* Vgl. Sanskrit 95.

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 94 6 Bl. 26½ cm breit, 11½ cm hoch geschrieben 1432 (Samvat 1489)

Dasselbe Werk, mit auf dem Rande geschriebener *Avacūri*.

Schluss der Avacūrṇi auf Bl. 6^b: *iti Liṅgānuçāsanaṅgīter avacūrṇiḥ samāptā* || || *saṃvat 1489 varṣhe dvitīyaḥCrāvaṇaṇḍi 6 Yaṭapadravāstavyao^o NarabadasutaVyāsapadmanābhena Liṅgānuçā[sa]ṅgīter avacūrṇir likhitā* || Vgl. Sanskrit 95.

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 95 95 Bl. 26 cm breit, 11 cm hoch 18 Jahrh. *Hemacandra's eigener Commentar (vivarana) zu demselben Werke* (benutzt, zusammen mit den beiden vorhergehenden Hss., von R. O. Franke in seiner Dissertation 'Hemacandra's Liṅgānuçāsana', Göttingen 1886).

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 96 89 + 79 Bl. 28 cm breit, 43½ cm hoch in Bengālī Schrift; mit interlinearen Notizen und Randbemerkungen *H. T. Colebrooke's* am Schlusse datiert 1793 (Saṃvat 1850)

(a.) 89 Bl. *Brihaspati Rāyamukuṭa's Commentar*, genannt *Padacandrikā*, zum *Amarakoṣa*, bis zum Schluss des *siṃhādīvarga*. Auf einem nicht numerierten Blatte am Anfange giebt *Colebrooke* (ausser der bekannten Zeitbestimmung des Verfassers) eine kurze Inhaltsangabe; am Schlusse, auf Bl. 89^a, bemerkt er 'For a commentary on the subsequent chapters, see the following fragment of the gloss of Achyuta. See p. 26^b'. Anfang auf Bl. 1^b (wie in Eggeling's Catalogue, p. 270): *Om namo Gaṇeçāya* ||

Adhyāste yaḥ sarva[m] dhruva idriçā ity agocarō vacasaḥ | aham iti samvim[ṃ]dvishayaḥ puruṣaḥ sa paraḥ purātano jayati || Kāṇḍa 1 endet auf Bl. 47^b. Schluss auf Bl. 89^a: iti mahāntapanīya-kavicakravarttirājanapāṇḍitapāṇḍitasārvabhaumakavipāṇḍitacūḍāmaṇma-hācāryya - Rāya mukṭa maṇiçrīmadBrihaspati kṛitāyām Amarakoṣapañjikāyā[m] Padacandrikākhyāyām siṃhādīpradhāno varggaḥ samāptaḥ || || çubham bhūyāt || çrīr astu || ||

(b.) 79 Bl. *Acyutopādhyāya's Commentar*, genannt *Vyākhyāpradīpa*, zum *Amarakoṣa*, vom Anfange des 2 Kāṇḍa; benutzt von *Colebrooke* für seine Ausgabe des Amara. Auf Bl. 1^a bemerkt *Colebrooke* dass dies Werk 'apparently an abridgement of the commentary of Rāya mucut'a' sei; auf einem nicht numerierten Blatte am Schlusse giebt er eine Inhaltsangabe. Anfang auf Bl. 1^b:

Namo Gaṇeçāya atha dvitīyakāṇḍavarggān saṃgrihyān āha || varggān pṛithvīyādi bhūr ityādi mahyantaṃ pṛithvīyām bhavanti asyām bhūḥ bahulavacanād adhikarane kvip bhūr iti bhūr avyutpanne rephānto vyāhṛitau bhuvāḥ kmīn iti kmīn bhūmīḥ na calaty acalā nānto yasyā anantā arçadyaci rasā rasa āsvādane . . . Kāṇḍa 2 endet auf Bl. 61^b. Schluss auf Bl. 79^a: iti JallakīsamudbhavaçrīAcyutopādhyāya kṛitau Vyākhyāpradīpe liṅgādisaṃgrahavarggavivaranaṃ || || samāptaç cāyaṃ granthāḥ || saṃvat[ṃ]vat) 1850 sāla || Pausaḥçuklasaptamyām Çanau¹) çrīmadĀtmārāmo vyalekhīt pustakīr iyam ||

Vgl. zu Sanskrit 68.

1) Dies Datum ist nicht richtig.

Sanskrit 97 38 Bl., von denen 1—34 die Seitenzahlen 1—36 und darauf folgend 1—31 tragen, während die letzten 4 Blätter nicht paginiert sind 28½ cm breit, 46½ cm hoch datiert 1794 (Çāke 1717) und 1795

Der Band enthält, in Bengālī Schrift, auf Bl. 1—19 (S. 1—36) *Purushottamadeva's Hārāvalī*; auf Bl. 19—34 (S. 1—31) eine *Anekārthadhvanimañjarī*; und auf den vier letzten Blättern *Purushottamadeva's Ekāksharakoṣa*. Diese Abschrift der drei Werke wurde im Jahre 1794 (Çāke 1717) für *Colebrooke* gemacht. Zwischen den Zeilen sind breite Zwischenräume gelassen, in denen *Colebrooke* seine englische Übersetzung der in den drei Glossaren enthaltenen Wörter eingetragen hat. Am Ende der *Anekārthadhvanimañjarī* steht, von seiner Hand geschrieben, 'Finished 8 April 1795'; am Schluss des *Ekāksharakoṣa*, 'Translated 4th April 1795'. Der Band enthält noch vier kleinere Blätter mit index-artigen Listen von Wörtern, und ein gedrucktes Blatt (offenbar eine erste Correctur), bezeichnet als '*Hemacandrakṛitā nekārthaçuddhipatram*'. Auf der ersten Seite des Bandes steht, von *Colebrooke's* Hand, 'Hārāvalī by Dāmódhara. A Dictionary of uncommon words and Anēca dwani manjerī A dictionary of words of several senses And Ēcāçhara a dictionary of single Letters by Purushottama deva'.

Die *Hārāvalī* beginnt (auf Bl. 1^b, S. 1): *Om namo Gaṇeçāya || Bhujagapativimuktasvacchanirmmokavallīvilasitam anukurvān yasya Gaṅgāpravāhaḥ | çirasi sarasabhāsanmālatīdhāmalakṣmīr laghayati himagaurāḥ so 'stu vaḥ sādhyasiddhyai ||* Schluss (auf Bl. 19^a, S. 36): *hītvā mahāçābdikatābhīmānam mātsaryyam anyatra muhur nīvartya | Hārāvalīn tām prakaroti kaṅthe vidagdhagoṣhṭhīshu paraṃ sa bhāti || || iti Hārāvalī samāptā || çubham astu ||*

Die *Anekārthadhvanimañjarī* beginnt (auf Bl. 19^b, S. 1): *Namo Gaṇeçāya || Çuddhavarṇam anekārthaçabdamauktikam uttamam | kaṅthe kurvantu vidvānsaḥ çragdadhānā divāniçam ||* Bl. 27^a (S. 16): *ity Anekārthadhvanimañjarīyām çlokādhikārah || athārthaçlokaādhikārah ||* Bl. 32^b (S. 27): *ity arddhaçlokaādhikārah || atha padādhikārah ||* Bl. 34^b (S. 31): *ity Anekārthadhvanimañjarīyām padādhikārah || samāptaç cāyam granthāḥ || || çubham astu || || çrīr astu || ||* Auf derselben Seite folgen noch zwei Verse (beginnend *hamse candramayūra^o* und *pikāḥ krishno nityam*) des Mahopādhyāya Kṛiṣṇa-patiçarman (s. Rājendralāl's Notices, no. 2403 und 4).

Der *Ekāksharakoṣa* beginnt (auf Bl. 34^a): *Namaḥ çrīKṛiṣṇāya || Atha ikāksharakoṣaḥ parikīrtiyate || Akāro Vāsudevāḥ syāt; und schliesst (auf Bl. 38^b): iti mahopādhyāyaçrīPurushottamadeva-viracitā ikāksharakoṣaḥ samāptaḥ ||*

Die Hs. schliesst: *Çāke 1717 || Rājasāhimahārājaçāsakamahāmahomatapratāpaçālī-çrīçrī-mīstara-Kulaburuka-sāhebāvalokanāya tadā-jñāyava likhitaishā pusti mahopādhyāyaçrīCitrapatiçarmanabhāgīneyena çrīVrajanandananaçarmanā Dhamadahāvāsīnā navamatīnā nyāyādhyayanaratinā ceti || || dānopabhogaçūnyena dhanena dhanino yaḍi | bhavāmaḥ kin na tenaiva dhanena dhanino vāyam || || çubham astu ||*

Vgl. zu Sanskrit 68.

Sanskrit 98 drei Bände, mit zusammen 967 numerierten Blättern (die Zahlen 16 und 367 sind bei der Zählung der Blätter übersprungen), durchschossen mit anderen nicht numerierten Blättern 25 cm breit, 33½ cm hoch Ende des 18 und Anfang des 19 Jahrh. Bd. I enthält Bl. 1—334, Bd. II Bl. 335—678, und Bd. III Bl. 679—967.

Die numerierten Blätter enthalten zunächst in Nāgari Schrift den *Çabdasamdarbhasindhu*, ein in den achtziger Jahren des 18 Jahrh. in Benares von Kāçināthaçarman (nach Art eines europäischen Lexicons) compiliertes Sanskrit Glossar, in dem auch die Bedeutungen der einzelnen Wörter in Sanskrit gegeben werden. Diese Abschrift des Lexicons war für *H. T. Colebrooke* gemacht, und dieser hat dann die von Kāçinātha gegebenen Bedeutungen ins Englische übersetzt und seine *Übersetzung* (mit zahlreichen Citaten aus lexicographischen und anderen Werken) auf den numerierten und den zwischen sie eingefügten nicht numerierten Blättern eingetragen. Bd. I geht bis zum Buchstaben *n*, Bd. II bis zum Worte *yakshadhūpa*, und Bd. III schliesst mit den mit *ksh* (das hier auf *h* folgt) anfangenden Wörtern.

Colebrooke selbst äussert sich auf Bl. 1^a über Kāçinātha's Arbeit und seine eigene, hier vorliegende Übersetzung so: 'Sabda Sandarbha Sindhu, a dictionary by Cāçinātha carelessly compiled with very little knowledge of the Sanscrit Language. Compiled from the five dictionaries entitled *Amara-cōsha*, *Viśva*, *Mēdini*, (*Anēcār'tha*) *Nānārtha*, and *Bhāṛprayōga-cōsha*. This compilation is very inaccurate; and I have made many mistakes in hastily translating it. There are even errors in what I have transcribed into it from Sir Wm Jones's translation of Amara. I find it necessary then to collate Sir Wm J's Amara with two commentaries: viz. Mucut'a's and Rāmésvara's, referring occasionally to Achyuta's. It is also requisite to collate this with the *Viśva* and *Mēdini*, and to add the contents of the *Hārāvali*. When this task has been completed and the verbs are added from another careful collation, the Dictionary will be tolerably complete'.

Kāçinātha's Arbeit beginnt auf Bl. 1^a mit folgenden Versen:

*Dhyātvā viçveçapādāmbujayugam amalāṃ lokadharmmānuçāstā
Tarkālakārasamjñāsa Tripurāharapure paṇḍiteṃdraḥ kshītīmdrāt ||
vidyāvāhādūrākhyām alabhata bhuvane sarvaçāstre gurur yaḥ
çriKāçināthaçarmanā viracayati mudā Çabdasamdarbhā-
sindhūm || 1 ||*

*Nānākoshasamāhṛitam khalu satāṃ ramyaṃ pramodāvaham
vispashṭīkrītavistritārthavilasacchabdāvalīsamjñatam ||*

*Imliṇḍyādhipa vaidyārājatilakasyādeçato dhīmato
vidvadvrindasuposhanārjītaçorākāsudhāmçuçriyaḥ || 2 ||*

Am Schlusse des Werkes, auf Bl. 967^a, steht der Vers:

*Çāke 'bde yugaleṇḍusindhuharanīsamkhyāmīte çrīmatā
Kāçināthadhārāmāreṇa viduṣhā harṣheṇa samnirmītaḥ ||
grāmtho dhīrajanapramodajanakaḥ saṃdrīçyamānāḥ sukham
pāṇḍītyapradā eṣha Çāmbhavapure 'pūrvāḥ samāptim gataḥ || 1 ||*
Vgl. zu Sanskrit 68.

Sanskrit 99 23 Bl. 47 cm breit, 30½ cm hoch 19 Jahrh. (Papier vom Jahre 1805)

Die *Pflanzennamen* des *Amarakosha* mit den von verschiedenen indischen Erklärern gegebenen und den noch jetzt (im Hindi) gebräuchlichen entsprechenden Namen aus den indischen Volkssprachen; eine für *Colebrooke* und offenbar nach seinen Anweisungen gemachte Liste. Jede Seite enthält 9 Columnen. Die erste Column giebt den Sanskrit Namen nach dem *Amarakosha* (*Amarakoçamūla-prasiddhanāma*); Columnen 2—7 geben die Namen aus den Volkssprachen nach Rāyamukūṭa, Bharatamallika, Rāmatarkavāgiça, Bhānudikshita, Vidyāvācaspati, und Acyuta; Columnne 8 giebt den Namen der *deçabhāshā* (Hindi); in der letzten Columnne beabsichtigte *Colebrooke* den lateinischen Namen einzutragen, hat es jedoch nur in einigen Fällen gethan. Beispiele: Bl. 5^a *tindukaḥ, kamdu, kemdu, kenu, temdu, çāla, temdu, temdu*; Bl. 6^a *ingudī, jiāpūtā, jiyāpūtā, jiyāpūtā, imguā, jiyāpūtā, mujāilī, himgoṭa*. Vgl. zu Sanskrit 68.

Sanskrit 100 12 Bl. (etwas beschädigt) 29 cm breit, 11½ cm hoch 18 Jahrh.

Der *Vṛittaratnākara* des *Kedārabhaṭṭa*, Sohnes des *Pabbeka* (oder *Pibbeka*, wie er hier auch genannt wird), mit Commentar in Sanskrit und Gujarāṭi.

Anfang auf Bl. 1^a: || *om || om namāḥ Sarasvatyai || çāstrārambhe çāstrakārah svādhikṛitadevatānamaskārapūrvakam çāstrasambandhaprayojanam çlokatrāyenāha ||* Adhy. 1 schliesst auf Bl. 3^a; 2 auf Bl. 5^b; 3 auf Bl. 10^a; 4 auf Bl. 11^a; 5 auf Bl. 12^a. Schluss auf Bl. 12^b: *iti Vṛittaratnākaraçchamḍovṛittau shashṭho 'dhyāyaḥ || samāptā ceyam vṛittih ||*

Sanskrit 101 2 zerrissene, nicht numerierte Bl. 26 cm breit, 11 cm hoch 17 Jahrh.

Bruchstück einer *Metrik*.

Sanskrit 102 77 Bl. 25 cm breit, 11 cm hoch geschrieben 1784 (Samvat 1841)

Mammaṭa's Kāvya prakāça.

Schluss auf Bl. 77^a: *Kāvya prakāçe 'rihālamkāranirṇayo nāma daçama ullāsaḥ || samāptoyam Kāvya prakāçaḥ samāpta || samvat || 1841 || miti Bhāḍau māse sukalapakṣhe aikādasī || 11 || vāra-viphai ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 103 121 Bl. (Bl. 1 zerfetzt) 26 cm breit, 7½ cm hoch 16 oder 17 Jahrh.

Dasselbe Werk, unvollständig; bis zum Ende des 9 Ullāsa mit zahlreichen Randbemerkungen. Ullāsa 1 schliesst auf Bl. 4^a; 2 auf Bl. 12^a; 3 auf Bl. 14^a; 4 auf Bl. 35^b; 5 auf Bl. 47^a; 6 auf Bl. 48^a; 7 auf Bl. 80^b; 8 auf Bl. 85^a; 9 auf Bl. 92^a; Bl. 121^a bricht ab in Ullāsa 10 mit dem Worte *nibadhyate* (Maheça Chandra Nyāyaratna's Ausgabe, S. 345 Z. 3).

Sanskrit 104 7 Bl. 26 cm breit, 11 cm hoch die

Schrift ist an einzelnen Stellen verwischt, und auch sonst beschädigt 17 Jahrh.

Vāgbhaṭālaṃkāra (auf dem Rande als *Vāgbhaṭālaṃkārasūtra* bezeichnet. S. Aufrecht's Oxf. Cat., p. 214^a).

Schluss auf Bl. 7^b: *iti Vāgbhaṭālaṃkāre pañcamah paricchedaḥ* |

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 105 12 Bl. 25½ cm breit, 11 cm hoch 17 oder 18 Jahrh.

Dasselbe Werk.

Schluss auf Bl. 12^a: *iti Vāgbhaṭālaṃkāre pañcamaparicchedaḥ samāptaḥ*.

Sanskrit 106 10 Bl. (gezählt als 5—14) 26 cm breit, 11 cm hoch 16 oder 17 Jahrh.

Bruchstück desselben Werkes, von Pariccheda 4, 9 bis zum Ende von Pariccheda 5, mit einem auf dem Rande geschriebenen *Commentare*.

Schluss von Pariccheda 4, auf Bl. 12^b, im Text: *iti Bāhāda¹)-ma[m]triṣvaraviracite Vāgbhaṭālaṃkāre caturthaḥ paricchedaḥ*; im Commentar: *iti Vāgbhaṭālaṃkāraṭīkāyāṃ caturthaḥ pariccheda* ||. Schluss von Pariccheda 5, auf Bl. 14^b: *iti Vāgbhaṭālaṃkāre pañcamah paricchedaḥ samāptaḥ || Ūjenisthāne Amarālashitam || || graṃthāgram 291 || . . ; im Commentar: iti Vāgbhaṭālaṃkāra-pañcamaparicchedasya ṭīkā || || iti ṣṛimamtriṣvara Vāgbhaṭālaṃkārasya ṣṛi Vāgbhaṭālaṃkārasya ṭīkā samāptaḥ || . . .*

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 107 2 Bl. (gezählt als 2 3) 26 cm breit, 11½ cm hoch 17 Jahrh.

Bruchstück des (von *Haribhadrasūri* verfassten) *Shaddarṣanasamuccaya* (s. Weber, no. 1610), mit einer auf dem Rande geschriebenen *Avacūri*. Bl. 2^a fängt an in Vers 28; Bl. 3^b schliesst nach Vers 89 mit *iti Shaṭdarṣanasamuccayaḥ sampūrṇaḥ*. Die *Avacūri* schliesst: *iti Shaṭdarṣanāvacūriḥ || likhitam Macchempure || cha || ṣṛi ||*

Sanskrit 108 52 Bl. 32½ cm breit, 20 cm hoch 19 Jahrh.

Āpadeva's Mīmāṃsānyāyaprakāṣa.

Für Prof. Kielhorn 1875 in Poona abgeschrieben und 1892 von ihm geschenkt.

Sanskrit 109 22 Bl. (Bl. 4 doppelt gezählt) 20 cm breit, 6½ cm hoch 19 Jahrh.

Anandatīrtha's Karmānirṇaya (s. Burnell's Tanjore Cat., p. 107^a).

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 110 29 Bl. 20 cm breit, 6½ cm hoch 19 Jahrh.
Anandatīrtha's Tattvasamkhyāna (endet Bl. 2^b); *Tat-*

1) Siehe Weber, II 275, Anm.

tvaviveka (Bl. 3^b); *Māyāvādakhaṇḍana* (Bl. 5^b); *Upādhi-khaṇḍana* (Bl. 7^b); *Mithyātvānumānakhaṇḍana* (Bl. 9^a); *Tattvodyota* (Bl. 22^a); *Pramāṇalakṣhaṇa* (Bl. 27^a); und *Katḥalakṣhaṇa* (Bl. 29^b). — (S. Burnell's Tanjore Cat., p. 104—106).

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 111 95 Bl. 21½ cm breit, 8½ cm hoch geschrieben 1822 (Čake 1744 Citrabhānu-nāma-saṃvatsare).

Jayatīrtha's Tattvodyotavivarāṇa, ein Commentar zu *Anandatīrtha's Tattvodyota*.

Anfang auf Bl. 1^b: *viṣvotpattisthitidhvamsakāraṇam ramaṇam Ṣṛiyah || abhivāṃdya yathābodham Tatvodyotaṃ vivrinmahe || 1 ||* Schluss auf Bl. 95^a: *iti ṣṛimadĀnandatīrthabhagavatpādācārya-viracitasya Tattvodyotasya vivarāṇam Jayatīrthabhikṣhu-viracitaṃ samāptaṃ ||*.

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 112 55 Bl. 22½ cm breit, 11½ cm hoch 19 Jahrh.

Ein Theil (nach der Aufschrift vom Anfange des 5 Prajvāla) von *Nārāyaṇa's Advaitakālānala*, (wie es scheint) einem Commentare zu einem Werke *Anandatīrtha's*.

Anfang auf Bl. 1^b: *ṣṛiKṛiṣṇāya namaḥ || om || Madhvasiddhānta evety evakāreṇa paramate katham api vishayālābhān na ṣāstram āram-bhañāyam ity uktam bhavati ||*

Bl. 57^a: *iti budhajanatusṭim tanvatāpeyādikṣhāvyaṇimukhavi-bhagaḥ sūriNārāyaṇena || vyaraci sapādi tena ṣṛimadĀnanda-tīrthāmalahṛidayāniviṣi priyatam ṣṛiNṛisimhaḥ || || ity Advaitakālānalaḥ samāptaḥ ||*

Schluss auf Bl. 57^a: *idaṃ pustakam KalyāṇiVyāsācāryātmaṇa Anāṇdanāmasa[m]vatsaraCṛāvaṇaṣuddha 9 Guruvāsare Satyādhirāja-purākhyaṅgrāme asmadgururājapādārādhakena Kalyāṇityupanāmakena Veṃkobena atiprayāsena likhitoyam graṃthah ||*

Bl. 57^b: *ṣṛiṣṛigurubhyo namaḥ Advaitakālānalaḥ samāptaḥ || ṣṛiṣṛi || ṣṛiKalyāṇiVeṃkobena likhitam || svārtha parārtha ca ṣṛi ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 113 60 Bl. 22 cm breit, 9½ cm hoch von verschiedenen Schreibern im 18 Jahrh. geschrieben.

Viṣvanātha's Nyāyasiddhāntamuktāvalī.

Schluss auf Bl. 60^a: *iti ṣṛimahāmahopādhyāyanyāsiddhāntapañ-cānanabhaṭṭācāryakṛitā Siddhāntamuktāvalī samāptā ||* und von anderer Hand: *idaṃ pustakam Ṣṛotriyopaniṃmo Viṭthalākhyā Kācyām dhanam datvā grihītam iti jñeyam | Čake 1723 Mārgamāse |*

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 114 103 + 117 + 12 Bl. 19½ cm breit, 7½ cm hoch geschrieben 1690 (Saṃvat 1747)

Gaṅgeṣa's (Gaṅgeṣvara's) Tattvacintāmaṇi, Pratyakṣa-, Anumāna-, und Ūpamāna-khaṇḍas.

Bl. 103^a des *Pratyakṣakhaṇḍa*: *Saṃvat 1747 varshe Caitravādī 2 Bhṛiguvāsare Prakāṣikṛitābjapuranivāsina bhāṭṭaJīvanena likhitam*

idam pustakam ||; ähnlich Bl. 117^a des *Anumānakhaṇḍa*, mit dem Datum *saṃvat 1747 varshe Phālgunamāse site pakshe trīṭīyāyām Čanivāsare*; und Bl. 12^a des *Upamānakhaṇḍa* mit dem Datum *saṃvat 1747 varshe Caitramāse sitetarapakṣe trīṭīyāyām Čanivāsare*.

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 115 108 Bl. (gezählt als 112—225, mit Ausnahme der fehlenden Bl. 128 143 145 157 166 und 188; ausserdem fehlen kleine Stücke von einigen der vorhandenen Blätter) 27 cm breit, 8 cm hoch 16 Jahr.

Bruchstücke der *Tattvapradīpikā*, verfasst von *Citsukha*, dem Schüler des *Jñānottama* (s. Rājendralāl's Notices, no. 1134). Bl. 208^a: *iti śrīparamahamsaparivṛājākācārya Jñānottama munipūjyapādaśiṣya śrī [C]iṭsukha muniviracitāyām Tattvapradīpikāyām trīṭīyāḥ paricchedaḥ* ||

Sanskrit 116 6 Bl. 26½ cm breit, 11¼ cm hoch 17 Jahr.
Der Anfang des (von *Bhāsarvajña* verfassten) *Nyāyasāra* (s. Rājendralāl's Notices, no. 727), mit einer auf dem Rande geschriebenen *Avacūri*. Anfang des Textes auf Bl. 1^a: || *Om* || *śrīSomasundarasūrigurubhyo namaḥ* ||

Pranāmya Čambhuṃ jagataḥ patim param | samastatavārthavidam svabhāvataḥ | śiṣuprabodhāya mayābhīdhāsyate | pramānatadbhedatadanyalakṣaṇam || 1

Anfang der *Avacūri*: || *om* || *śrī Satyačekharagurubhyo namaḥ* || *ihādau vighnopaçamanārtham ishtadevatānamaskāram āha* ||

Bl. 2^a im Texte: *iti Nyāyasāre prathamāḥ paricchedaḥ*, in der *Avacūri*: *iti Nyāyasāre prathamaparicchedāvavacūriḥ*.

Sanskrit 117 8 Bl. (gezählt als 14—21; die einzelnen Blätter bestanden aus zwei Lagen Papier, die zusammengeklebt waren, sich aber wieder von einander abgelöst haben) 24 cm breit, 8 cm hoch 16 oder 17 Jahr.

Bruchstück eines zur *Nyāya-philosophie* gehörigen Werkes, handelt von den *hetvābhāsa*.

Sanskrit 118 2 Bl. 25 cm breit, 11 cm hoch 18 Jahr.

Anfang eines elementaren Werkes über die *Nyāya-philosophie*, mit einer auf dem Rande geschriebenen *Avacūri*. Anfang auf Bl. 1^b: || *om* || *śrīgurubhyo namaḥ* ||

Hetave jagatām eva saṃsārārnavasetave prabhava sarvavidyānām Čambhave gurave namaḥ ||
pramitvishayāḥ padārthāḥ te ca dravyagūṇakarmasāmānyaviçeshasamavāyābhāvākhyaḥ saptaiva.

Sanskrit 119 56 Bl. 28¼ cm breit, 13¼ cm hoch geschrieben gegen Ende des 18. Jahr.

Des *Svātmārāmayogīndra Haṭhāpradīpikā*, mit einer kurzen Erklärung in Gujarāṭī (?); (s. Aufrecht's Oxf. Cat., p. 233^b).

Upadeça 1, mit 68 Versen, endet auf Bl. 12^a; *Upadeça 2*, mit 80 Versen, auf Bl. 21^b; *Upadeça 3*, mit 142 Versen, auf Bl. 38^b; und

Upadeça 4, mit 128 Versen, auf Bl. 56^a. Schluss auf Bl. 56^a: *iti śrīsadguru Svātmārāmayogīndra viracitāyām Haṭhāpradīpikāyām samādhilakṣaṇa nāma caturtha upadeçaḥ* ||

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 120 38 + 146 (Bl. 41 doppelt gezählt) + 68 Bl. 23 cm breit, 12 cm hoch die letzten 68 Bl. sind 1795 (Çake 1717) geschrieben, die übrigen etwas früher.

Raṅganātha's Gūḍhārthaparakāçaka, ein *Commentar* zum *Sūryasiddhānta*.

Die ersten 38 Bl. enthalten den *madhyādhikāra*, die folgenden 146 Bl. die übrigen Capitel des *pūrvakhaṇḍa*; die letzten 68 Bl. das *uttarakhaṇḍa*. Schluss auf Bl. 68^a: *iti śrīsakalaganakasārvabhauma-Ballāladai vajñātmaja Raṅganāthaganakaviracitaḥ Sūryasiddhāntagūḍhārthaparakāçakaḥ sampūrṇaḥ* || *śrīHerambārpānam astu* || || || *atra graṃthasamkhyā 1250 asmin pūrv[śho]ttarārdayor milivā graṃthasamkhyā sapādashaṣṣahasramitā* || 6250 || *Çake 1717 Rākhasanāmasaṃvatsare dakṣiṇāyane varshārītau Črāvaṇamāsi sitetarapakṣe caturthyaṃ tithau Bhaumavāsare idam Gūḍhārthaparakāçakapustakam samāptam* ||

Geschenkt 1892 von Prof. Kielhorn.

Sanskrit 121 28 Bl. 25¼ cm breit, 11¼ cm hoch geschrieben 1624 (Saṃvat 1681)

Die *Kārikā* genannte *Tājikasāraṭīkā*, 1620 (Saṃvat 1677) unter einem Fürsten Vishṇudāsa (in Sheravāpur oder Kheravāpur?) verfasst von *Sāmanta*, einem Schüler des *Harsharata* (vgl. Rājendralāl's Notices, no. 1354). Das Werk ist offenbar dasselbe wie das von Rājendralāl, Notices no. 2797, beschriebene, und es ist kaum zweifelhaft, dass *Sāmanta* mit dem dort genannten *Sumatiharshagaṇi* identisch ist.

Anfang auf Bl. 1^a:

|| *Om* || *śrīBhagavatyai namaḥ* || *śrīgurubhyo namaḥ* ||
Śrīsūryacandra budhendra pūjyān
bhṛigvārkimukhyān praṇipatya khetān
hṛimānasasvarṇasubodhapadma-
prabodhane tignakaram guruṃ svam || 1
Črīçārādiyam çaradimduçubhram
tejoñātādhvānta vaikadīpaṃ |
nīdhāya cūte vivrinomi Tājika-
ka sārataṃtrāsukarān padārthān || 2
Viracyādau vṛihatparvamālāvṛittim athodyataḥ |
karitum — kārikām etām çishyabodhakṛite || 3
iha çishtāḥ ishte vastuni pravarttamānā 'bhishtadevatānamaskārapūrvam
eva pravarttamte iti çishtasamayapratipālanāya
greyasi bahuvighnāni bhavaṃti mahatām ati |
açreyasi pravṛittānām kvāpi yānti vināyākāḥ || 1
iti vacanāt asya çāstrasya prārambhe vighnaughopaçāmtaye graṃthakṛit parameṣṭhādevatānamaskārapūrvam maṃgalācarānam abhidheyam cāha || *śrīRāmasya padāravimdayugalam iti* || 1 *aham Haribhadra-*
nāmā gaṇakas Tājikasāraṃ vakshye ity anvayaḥ .

Schluss auf Bl. 28^a: *evam uktam anuktaṃ ca svadhīyā jñeyam alam vistareṇa* ||
Subodhā Āripatī Mahādevī vrahmā'rkaparvaṇām |
etasā vṛttayo jñeyāḥ svasāro hrīdayaṅgamāḥ || 1
Varshe çailahayā'ngabhūparimite 1677 māse tathā Phālgune |
pakṣhe çubhṛtare tithau daçamite çriSheravāpūrvare |
rājye çrīmati Vishnudāsanṛipater vairībhavṛimāde hare[ḥ] |
vṛttim çrīguruHarsharatnakṛipayā Sāmāntanāmākarot||2
GurubāmhavaRatnāhvadīrghāyur[dhaj]narājaye |
niraṃtarāgrahād eshā racitā tanūtāc ciraṃ || 3
itī çrīTājikasāraṣīkā Kārikānāmnī saṃpūrṇāḥ || Saṃvat 1681
varshe | çrīUdayapuramādhye || paṃ^o Vidyākīrtī | satyakīrtīyutaiḥ li-
pīkṛitā || çrī.

Sanskrit 122 ein Papierstreifen 132 cm lang, 11 cm breit, beschrieben in schwarzer und rother Tinte (in einer Rolle).
Ein indischer Kalender für das luni-solare Jahr Kaliyuga 4963 = Çaka 1784 = Vikrama 1919 (verflossen; Montag, den 31 März 1862, bis Donnerstag, den 19 März 1863). Das Schema der Monate ist das *amānta* Schema. Für jeden Tag werden ausser dem Namen des Wochentags die Zahlen nach dem lunaren und solaren Kalender, *nakṣatra*, *yoga* u. s. w. gegeben; ausserdem steht am Anfange jeden Monats die Zahl der seit der Epoche des *Khaṇḍakhādyā* verflossenen Tage.

Anfang: *ÇrīGaneçāya nam || Sṛiṣṭīçauragatāvdam 1*
955884963¹⁾ gata-Kali 4963 sekha-Ka-
li 027037²⁾ çrī-Çāshe 1784 Saṃvat 1919
gamgāmatme 37³⁾ tata Khaṇḍakhādīnaganamḥ 437200.

“Ex donatione Henrici Ewald. 1875”.

Sanskrit 123 11 Bl. (gezählt 62 78 85—89 91—94)
 25½ cm breit, 11 cm hoch 18 Jahrh.

Bruchstücke eines *medicinischen Werkes*, in Sanskrit und Prākṛit. Die Blätter haben auf der Rückseite die Randmarke *Dhanamtarāya namaḥ*.

Sanskrit 124⁴⁾ 67 Bl. 30½ cm breit, 11 cm hoch 17 oder 18 Jahrh.

Ācārāṅgasūtra mit *Niryukti*.

Anfang: *om namaḥ siddhebhyaḥ || suyam me āusam teṇam . . .*
 s. Jacobi's Ausg. (London 1882) und Weber, Bd. II S. 356.

Çrutaskandha I, (adhy. 1) schliesst Bl. 4^a, (2) 6^b, (3) 8^a, (4) 9^a, (5) 11^a, (6) 13^a, (7) 16^b, (8) 18^b *vrahmacaryāni prathamāḥ çrutaskandhaḥ samāptāḥ* ||

Çrutask. II, (adhy. 1) schliesst Bl. 29^a, (2) 34^a, (3) 38^a, (4) 40^a, (5) 42^b, (6) 44^a, (7) 46^a, (8) 46^b, (9) 46^b, (10) 48^a, (11) 49^a, (12) 49^a,

1) Nach meiner Rechnung 1 972 948 963.

2) Fehlerhaft für 427037.

3) Dies verstehe ich nicht; das correspondierende *laukika* Jahr würde 38 sein.

4) Die Handschriften no. 124 125 126 127 129 130 131 133 134 135 136 sind von Klatt beschrieben.

(13) 50^a, (14) 50^a, (15) 57^a, (16) 57^b *iti Ācārasūtraṃ samāptaṃ || gramhāgram 2544.*

Darauf folgt Bl. 57^b—67^a die *Niryukti*, 365 Verse; gedruckt in *Ācārāṅga*, Calcutta edit., samvat 1936, p. 428—37 und 282—3.

Anfang: *vamditu savva-siddhe jñe ya ānuogadāyae savve | āyārassa bhagava o nijjuttim kittaissāmi || 1* (s. Peterson, I Report, App. p. 39. III Report, App. p. 89).

Bl. 65^b schliesst *prathamāçrutaskandhaniryukti*, V. 302; darauf Bl. 65^b—67^a Çrutask. II, V. 303—65, *āyāra-nijjutti sammattā || gramhāgram 4400.*

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 125 45 Bl. 26½ cm breit, 11 cm hoch 17 oder 18 Jahrh.

Samavāyāṅgasūtra.

Anfang: *namaḥ çrutadevatāyai || suyam me āusam teṇam . . .*
 s. Weber, Bd. II S. 402, no. 1783.

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 126 120 Bl. 25½ cm breit, 12 cm hoch geschrieben 1830 (Saṃvat 1887) in Vikramapura.

Abhayadevasūri's Commentar zum *Samavāyāṅgasūtra*, verfasst samvat 1120 in Aṇahilapāṭaka.

Anfang: *çrī-siddhacakrāya namaḥ ||*
çrī-Vardhamānam ānamya Samavāyāṅga-vṛittikā |
vidhīyate 'nya-çāstrānām prāyāḥ-samupajīvanāt || 1

s. Weber, Bd. II S. 418.

Am Schluss, Bl. 119^b—120^a, Kolophon des *Abhayadeva*, 9 Verse; s. ebd. S. 420. Darauf Bl. 120^a: *anumānato gramhāgramtha 3575 samvat 1887 rā miṭi Vaiçākha sudi 1 çrī-Jīnarātnasūri-çākhāyām mahopādhyāya-jī-çrī-Sumatisoma-jī-gaṇī tac-chishya-paṃ-çrī-Dāyācam-dra-jī tac-chishya-paṃ-Harshakuçāla-jī-çishya-paṃ-Ashagamāndireṇa likhītam Vikramapura-mādhye yādriçam pustakam . . .*

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 127 103 Bl. 26 cm breit, 10½ cm hoch 18 Jahrh.

Jñātādhar makathāḥ.

Anfang: *om namaḥ sarvajñāya || teṇam kālenam teṇam samaeṇam Campā nāma nagari hotthā . . .*; s. Weber, Bd. II S. 466.

Çrutaskandha I (adhy. 1) schliesst Bl. 23^b, (2) 29^b, (3) 32^a, (4) 33^a, (5) 40^a, (6) 40^b, (7) 43^a, (8) 54^b, (9) 59^b, (10) 60^a, (11) 60^b, (12) 63^a, (13) 66^b, (14) 71^b, (15) 73^a, (16) 90^a, (17) 93^a, (18) 96^a, (19) 98^b, *paḍhamo suyakkhamāho sammatto.*

Çrutask. II (varga 1) schliesst 101^b, (2) 101^b, (3) 102^a, (4) 102^a, (5) 102^b, (6) 102^b, (7) 102^b, (8) 103^a, (9) 103^a, (10) 103^a.

Schluss (s. Weber, Bd. II S. 481): *dasahim vagehim Nāyādhamamakahāu sammattāu || gramhāgram 5464.*

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 128 109 Bl. (gezählt 1—9 11—16 20—113)
 26 cm breit, 11 cm hoch 18 Jahrh.

Dasselbe Werk, unvollständig. Bl. 113^b schliesst im 4. Varga von Çrutaskandha II, mit dem Worte *Rūyaṃsā* in Weber, Bd. II S. 479 Z. 13.

Sanskrit 129 99 Bl. 25½ cm breit, 11 cm hoch
18 Jahrh.

Abhayadevasūri's Commentar zu den *Jñātādharma-kathās*, verfasst samvat 1120 in Aṇahilapāṭaka. Das letzte Blatt (100) fehlt.

Anfang: *namo jināgamāya* ||
natvā çrīman-Mahāvīra[m] prāyo 'nya-gramha-vikshitaḥ |
Jñātādharma-kathāṅgasyā 'nyogaḥ kaçcid ucyate || 1
s. Weber, Bd. II S. 466.

Çrutask. I (1) schliesst Bl. 46^b, (2) 51^a, (3) 53^b, (4) 54^b, (5) 59^a, (6) 59^a, (7) 61^a, (8) 75^a, (9) 81^a, (10) 81^b, (11) 82^b, (12) 83^a, (13) 85^a, (14) 86^b, (15) 87^b, (16) 93^a, (17) 96^b, (18) 99^a, *ity ekonaviṃṣatitama-jātaṃ vivaraṇataḥ samāptaṃ || samāptaḥ ca prathamāḥ çrutaskandhāḥ || atha dvitīyo vyākhyāyate*. Çrutask. II umfasst nur 6 Zeilen (s. Weber S. 481) und schliesst Bl. 99^b: *samāpto dvitīya-çrutaskandhāḥ | samāptā ceyam Jñātādharma-kathā-pradeçaḥ keti*. Darauf Abhaya-deva's Kolophon (s. Weber S. 481—2), bricht ab (Bl. 99^b) in V. 8: *tasyācārya-Jineçvarasya madavad-vādi-pratisparddhinah | tad - vandhor api Buddhisāgara iti khyātasya sūrer bhūvi | chaṃdo-baṃdha-nibaṃdha-baṃdhura-vacah-çabdādi-sal-lakshmanah | çri-samvigna-vihārīnah çruti*. Das Schlussblatt mit V. 9—12 des Kolophon fehlt.

Zu Anfang (Bl. 1^b) steht am Rande: *u^o çri-Naṃdivijaya-gaṇi-çishya-paṃ^o-çri-Vimalavijaya-gaṇiṇi prati* ||
Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 130 8 Bl. 27½ cm breit, 11½ cm hoch goldene Schrift auf rothem Grunde mit blauen Randlinien geschrieben
1431 (Samvat 1488) von Haridāsa

Bruchstücke einer Hs. des *Kalpasūtra*.

Bl. 1 beginnt: *ya(m) | ahīna-sampunna-paṃce(m)diya-sarīram | lakkhāna-vamjāna-guṇovaveyam* | und schliesst: *gamdhavaṭṭi-bhūyam | karaḥ ya | kāraveha ya kari* (s. Kalpasūtra ed. by H. Jacobi, Leipzig 1879, S. 48 Z. 6 bis S. 49 Z. 2; folgt Bl. 7).

Bl. 2 beginnt: *hānāim bhavaṇti | tam jahā | pakhīna-sāmiyāim* |
Schluss: *aṭṭa-jjhānovagaya-bhūmi-gaya-ditthiyā jhyāi | tae naṃ se bhagavam Mahāvī* (Jacobi, S. 54 Z. 21 bis S. 55 Z. 24).

Bl. 3 beginnt: *yassa Ajjadinnā-pāmokkhāo solasa samana-sāhassio*.
Schluss: *samneya-sela-siharamsi appa-cottisāime māsie* (Jacobi, S. 69 Z. 18 bis S. 70 Z. 9).

Bl. 4 beginnt: *gotte therassa naṃ ajja-Sambhūyavijayassa*.
Schluss: *there Somadatte Kāsava-gottenaṃ Godāsehiṃto* (Jacobi, S. 78 Z. 11 bis S. 79 Z. 2).

Bl. 5 beginnt: *ḍire vasabhā(o) iva jāyathāme*. Schluss: *terasamassa samvaccharassa aṇṭarā vaṭṭamānassa je se giṃ* (Jacobi, S. 62 Z. 3 v. u. bis S. 63 Z. 2 v. u.).

Bl. 6 beginnt: *vi kesā tam rayaniṃ uvāināvittae*. Schluss:

teneva bhava-ggahanena | sijjhamti bujjhamti muccamti (Jacobi, S. 94 Z. 4 bis S. 95 Z. 5).

Bl. 7 beginnt: *tā ya karāvittā ya sīhāsanam rayāveha*. Schluss: *avagaya-parissame aṭṭana-sālā* (Jacobi, S. 49 Z. 2 bis S. 50 Z. 2).

Bl. 8 enthält 4 Zeilen des Kolophon (die ersten Buchstaben nicht mehr lesbar): . . . *māsi sīta-pakshe | pustakam eta(l) likhitaṃ Haridā-sena . . . eva syāt (?) 4 cha . samvat 1488 varshe Māgha-māse çukla-pratīpad-dina māha-Duṃgareṇa (?) patnī Dūlahadū (?) putra Suvarṇa . . . dvitīya-putra-Jivā-prapautra-Sahasakiraṇa-Sahasadhīrādī (?)-sahitena suvarṇāksharaiḥ çri-Kalpa-pustakam likhāpya (?) sva-gurubhyah Kharatara-gacchīyebhyah pradatta(m) | likhitaṃ maham-Haridā-sena || çiraṃ naṃdatu || çri ||*

Geschenkt 1887 von Prof. Kielhorn.

Sanskrit 131 151 Bl. (gezählt 2—152; Bl. 1 fehlt), 26 cm breit, 11 cm hoch 18 Jahrh.

Kalpasūtra, mit der samvat 1677 verfassten *Dīpikā* des *Jayavijaya*¹⁾, Schülers des *Vimalaharsha*²⁾.

Der Anfang des Commentars fehlt, Bl. 2^a beginnt:

him samanāi ahigicce | kaḍam iha savvesim cia | na kappāi purimaca-rimāṇamti || 1 || vyākhyā | samghādy - uddeçena | samghopāçraya - lamba-nena | ughāihitti | sāmānya-viçeshābhyam | tatra samghārtham iti vikal-pah | sāmānyam | viçeshas tu | prathama-jina - samghārtham | carama-jina-samghārtham ceti vikalpah | evam upāçayam āçrityāpi | samanāi ahigicce tti | çramaṇān çramaṇe çādihikrityety arthah | . . . (Bl. 6^b) ca-turdaçapūva-dhāri-çri-Bhadrabāhu-svāmibhīḥ | pratyākhyānapravādābhi-dha - navama - pūrvāt | çri - Daçāçrutaskandhāshtamādhyayanatvena | sat(ḥ)va-kītārtham | samuddhritah | sakala-kalpītārtha-vitarāna-kalpadru-kalpah çri-Kalpah | kalyānārtham çrotavyah | . . . (Bl. 7^a) evam ca na-vama-pūrvopaniṣhad-bhūta-çri-Daçāçrutaskandhāshtamādhyayana-rūpah çri-Kalpo bāla-stri-ādi-mahopakarāya prakṛitabhāshayā nir(v)yuḍḍhaḥ | yataḥ |

bāla-stri-mamda-mūrkhanām | nrinām cāritra-kāmkshinām | anugrahārtham tattvajñāih | siddhāntah prakṛitah kṛitah || 1

Bl. 7^b—8^b: *tatra tapasi Nāgaketu-kathānakam*. Bl. 9^a: *iti pīṭhikā | iha tāvan maṅgala-nimittam | paṃca-parameshṭhi-namaskāra-maṅgalam āha | namo arihaṃtānam | namo 'rhadbhyah | Çakrādi-kṛitām pujām siddhi-gatim çarhamtīti | arhamtas tebhyah | . . .*

Der Text beginnt Bl. 9^a: *om namaḥ siddham || namo arihaṃtānaṃ | namo siddhānaṃ | . . .* (s. Jacobi's Ausg., S. 33).

Jinacarita reicht von Bl. 9^a—117^a, Sthavirāvalī 117^a—129^a, Sāmā-cārī 129^a—151^a.

1) Derselbe, Jayavijaya verfasste samvat 1680 eine Pattāvalī des Tapāgaccha, in 27 Prākṛit Āryās mit Sanskritcommentar (enthalten in Poona Coll. of 1871—72 no. 392 und Coll. of 1879—80 no. 402).

2) Dasselbe Werk ist wohl die Kalpasūtradīpikā „by a pupil of Vimalaharshagapi“, im Catal. of the coll. in the Deccan College, p. 17 no. 47, wo jedoch als Datum der Abschrift samvat 1660 (!) angegeben ist, und die Kalpadīpikā von Vyayaganipramukha (!), s. Bhau Daji Memorial, p. 131.

Schluss des Textes (Bl. 151^a): *bhujjo uwadamsei tti bemi | cha | Pajjosavanākappo Dasāsuakkhamādhassa aññhamam aññhayanam sammatam | cha |* (s. Weber, Bd. II S. 647, Jacobi S. 95).

Schluss des Commentars (Bl. 151^a): *iti bravimīti | çri-Bhadrabāhu-svāmī sva-çishyān prati brūte | nedaṃ sva-buddhyā bravimī | kiṃtv arhad-gaṇadhāropadeçeneti anena ca guru-pāratamtryam abhīhitam iti | Pajjosavanākappo tti Paryushanākappo Daçāçrutaskamdhasyāshātam adhyayanam samartha itī Sāmācāri-vyākhyānam sampūrnam | tat-sampūrta ca sampūrna çri-Kalpādīpiketi çreyaḥ | cha |*

Guṇa-gaṇa-maṇi-gehe çri-Tapā-gacchā-siṃdhau | kumata-timira-bhede jāgarūka-prabhāvāḥ | vijayi-Vijaya dānā(h)¹ sūri-sūryā babhūvus | tribhuvana-jana-padmaśānaika-svabhāvāḥ | 1 tat-paṭṭodaya-sānumāli-çikhare bhāsvat-prabhā-bhāsurā | jāta(h) çri-guru-hira-Hīra vijaya² yad-deçanā-ramjītaḥ | ā-pāthodhi-taṭam jalā-sthala-vi (Bl. 151^b) yat-prānasprīçām pālanam | prīthvayām kāritavān Akabbara³-mahā-bhūpāla-cūdāmaṇiḥ | 2 tat-paṭṭāmbudhi-bhāsanāika-çāçinaḥ saṃjajñe(i)re sūrayaḥ | çrīmaṃto Vijayādīsenā⁴-guravaḥ praudha-pratishṭhāspadam | yaiḥ çāheḥ purataḥ kuvādi-nivahān nirjītya darpoḍdhurān | kīrti-stambha va vyadhāyi girvā-prāneça-çi(!)-lā-chalān | 3 suvihīta-muni-vrīṃdāsevyamānāmhrī-padma | jina-guru-jana-vākyārādhānoḍbhūta-padmaḥ | vijayi-Vijaya senā⁴-çri-guroḥ praudha-paṭte | Vijaya tilaka-saṃjñā jajñire sūri-caṃdrāḥ | 4 teshām paṭte vadāta-dyuti-rucira-ruci-jīvaraiḥ çobhamānāḥ | raṃgad-vairāgya-mukhyair vimalatara-guṇair dāta-viçva-pramodaiḥ | niççeshācārya-cakrāvani-ramāna-guṇaiḥ sārvaḥaumāyamānā | rājante çri-sanāthāḥ savijaya-Vijayānāmaḍa-sūrimdra-mukhyāḥ | 5

tribhuvana-jana-sevyāḥ sarva-çāstrāmbu-rāçau | jaladhīçayana-deçyāḥ çri-Tapā-gacchā-dhuryāḥ | vimala-Vimala harshā reja(i)re vācakemdrāḥ | sakala-guṇa-garishṭhāḥ prāpta-bhūri-pratishṭhāḥ | 6 tat-pādāmbhoja-bhṛīṃgo budha-Jayavijayaḥ svasya citta-pramoda-prāpty-arthaṃ mugdha-buddhyālikhad atisugamāḥ dīpikāṃ Kalpa-saktām | varshe saptārnavāṃga-dvijapa-parimite 1677 Kārttike çvetashashṭhyām | çrīmat-Pārçva-prabhāvāj jayatu ca suciraṃ vācyamāneyam āryaiḥ | 7 pratyaksharam gaṇanayā | gramīhe smīn çloka-samkhyayā | catus-trīṃçac-chatī çajñe | dvā-trīṃçat-kalitā kila | 8 vidvad-vrīṃda-çīromaṇi-paṃḍita-vara-Bhāvavijaya-gaṇi-mukhyaiḥ | çri-Kalpādīpikēyam samaçodhi-jināgame bhaktarḥ | 9 iti | cha . . .

1) Vijayādāna samvat 1587—1622 sūri, s. Ind. Antiqu. XI, 256^b no. 57.

2) Hīravijaya samvat 1610—1652, ib. no. 58.

3) Kaiser Akbar regierte A. D. 1556—1605.

4) Vijayasena † samvat 1671, ib. no. 59.

(Bl. 152^a) *çri-Kalpādīpikā likhitā ca | prathamādarçe svayam sva-çishya-Vrīddhivijaya-gaṇi-prārthanayā | anābhogāt kiṃcit kimāpi mati-vaikalya-vaçataḥ | kimāpy autsukyena smṛiti-virahato vāpi kimāpi | yad utsūtram sūtre kathamāpi mayā khyātam iha cet | kshamamtām dhīmanātas tad asama-dayā-pūrna-hrīdayāḥ | 1 nakshatrākhshata-pūritam marakata-sthālam visālam nabhaḥ | piyūshadyuti-nālikera-kalitam caṃdra-prabhā-caṃdanam | yāvan meru-kare gabhasti-kaṭake dhatte dharitri-vadhūs | tāvan naṃdatu tīrtha-rāja-vinutah çri-saṃgha-bhāṭṭārakah | 2 iti çri-saṃgha-praçastih | ekaḥ sahasro dvi-çāṭī-sametaḥ | çliṣṭas tathā shoḍaçabhir vidamtu | Kalpasya samkhyā kathitā viçishṭā | viçāradaih Paryushanābhīdhāsya | 1 (s. Kalpasūtra ed. by Jacobi, p. 24, Peterson I. Report, App. p. 19 no. 31, p. 43 no. 68) iti cha.*

Von zweiter Hand: *Stambhatīrtha-vāstavaya-Ūkeça-jñātīya-Sonināthasuta-Sonī-çri-Jaṃgasi-nāmnā sva-çreyorthe likhāpitā pratilābhītā ca | cha | . . . paṃḍita-çri-Vijayaharsha-gaṇi-çishya-muni-Sādhuvijaya-saktaḥ*, darauf 4 Zeilen in kleinerer Schrift, Gujarāṭī.

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 132 23 Bl. (gezählt 3—5 8 40 42 73—77 79 85—92 111 112 140) 25 cm breit, 11 cm hoch 17 oder 18 Jahr.

Bruchstücke des *Uttarādhyayanāsūtra*, mit einem auf den Rändern geschriebenen *Commentare*. Bl. 140^a schliesst der Text: *Chattisam Uttarajjhayanaṃ samattam | chaḥ | iti Uttarajjhayanaśkaṃdho samatto | çriḥ*; der Commentar: *iti śhatṭriçatçri-Uttarādhyayanārthalavaleçam sampūrnaḥ | çriḥ astu leshakapāṭhakayoḥ |*

Sanskrit 133 156 Bl. 25½ cm breit, 11 cm hoch geschrieben 1673 (Samvat 1730)

Uttarādhyayana sūtra-kathāḥ, die in der *Vṛihad-vṛitti* zum *Uttarādhyayanāsūtra* enthaltenen, in *Prākṛit* abgefassten *kathāḥ*, samvat 1657 von *Padmasāgara-gaṇi*, dem Schüler des *Vimalasāgara-gaṇi*, ins Sanskrit übersetzt.

Andere Hss. dieses Textes, s. Decc. C. p. 322 no. 245. Rājendralāl's Notices VIII p. 240—241 no. 2799 (ausführliche Inhaltsangabe; angeblich samvat 1648 geschrieben, während der Text erst samvat 1657 verfasst ist), IX p. 81—82 no. 2975. Jacobi, ZDMG. 33, 694 (Padmasāgara's Text, Autopsie).

Anfang auf Bl. 1^b: *om namaḥ çri-sarvajñāya | pranāmya çri-Mahāvīram namrākhamāḍala-maṃḍalam | ārabhyamte kathāḥ kartum Uttarādhyayana-sthitāḥ | 1 Sarasvatyāḥ prasādena prākṛīyas(tās) tāḥ kathāḥ sadāḥ(ā) | Premasāgara-vākyena vidhīyamte 'tha samskritāḥ | 2*

Uttarādhyayana-vṛihad-vṛitti-gatāḥ kathāḥ sarasvatāḥ (!) kartum ārabhyamte ānā amīdesakare 3 gāhāyām (s. Weber, Bd. II S. 719 V. 3) *Kūlavālaka-kathā yathā ekasya ācāryasya kshullako 'vinutah tam ācāryaḥ çikshārthe tāḍati . . .*

Schluss auf Bl. 156^b: *iti paṃcaviṃçādhyayana-kathā samāptā | etāvātā Uttarādhyayana-vṛihad-vṛitti-gatāḥ prākṛitāḥ kathāḥ(ḥ) sarvā api*

samskritāḥ kṛitās. Tapāgacche bhāṭṭā- (das folgende in rother Schrift) *raka-cakra-cakravartī-ḥri 6-Vijayasena¹⁾-sūri-ācārya-ḥri 6-Vijayadeva²⁾-sūri-rāḥye samvat 1657 varshe Pīpāda* (Not. IX p. 82 : *Pīyāda-grāme paṇḍita-prakāṇḍa-paṇ⁰⁾-ḥri 6-Vimālasāgara-gaṇi-ḥri 6-Padmāsāgara-gaṇinā gaṇi-vara-Premasāgara-vākyaena kathā(h) kṛitāḥ* || *paṇḍita-Padmasāgaraiḥ* || *sva-ḥriya-vākya-praṇayena* | *samskritāḥ Pīpādi-puryām jina-Pārvaṇāyaka-prasādātāḥ* | *satkuṣalāya saṃtv imā* | 1 *ḥodhayamtu saj-janāḥ svasty astu saj-janebhyo yeshām hrīdayāni darpana-nibhāni* | *durvacana-bhasma-saṃgād* | *adhikatarām nirmalāni syu(h) saṃvat 1730 varshe Phāguṇa vadi 11 Ravau dine* || *paṇḍita-ḥri-paṇ-ḥri* (Name ausgelöscht) *gaṇi-lakhāpittam svāvacanārtham* ||

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 134 139 Bl. 26 cm breit, 12½ cm hoch geschrieben 1798 (Samvat 1855)

Vṛihatsamgrahaṇī des *Jinabhadrāgaṇi-kṣhamācramaṇa³⁾* mit Commentar des *Malayagiri*. Leider ist die Hs. dieses seltenen Commentars theilweise unbrauchbar, weil viele Blätter zusammenkleben und beschädigt sind.

Andere Hss. von Malayagiri's Commentar s. Kielhorn, Report 1880—81 p. 97 no. 205; Peterson I. Report, p. 130 no. 336, p. 131 no. 352.

Anfang auf Bl. 1^a: *namo Vītarāgāya* ||

jayati nakha-rucira-kāṃti-prahasita-nata-maghava-mukūṭa-maṇi-kirāṇāḥ |

parama-karūṇā-parito viḥva-jñātā jino Vīrah | 1
namata nija-buddhi-tejah-pratihataḥ(a)-niḥṣeṣha-kumata-ghana-timira(m) |

jina-vaṇaika-nishanṇam Jinabhadrāgaṇi-kṣhamācramaṇam | 2
yām akuruta Saṃgrahaṇīm Jinabhadrāgaṇi-kṣhamācramaṇa-pūjyaḥ |

tasyā gurūpadeḥānusārato vacmi vivṛitim aham | 3

iha yady api kāya-manobhyām apishṭa-devatā-namaskāra-karaṇato ni-khila-vighna-ve(i)nāyakopaḥānti-sambhavād abhishṭa-prakarāṇa-pari-samāptir upajāyate tathāpi sarve ḥrotārah prakaraṇe niyamataḥ sam-asta-vighna-vināyako paḥānti-nimittam abhishṭa-devatā-stavābhidhāna-purassaram pravartantām iti . . . Bl. 1^b *ādāv idam gāthā-trayam āha* | *cha* | *niṭṭhaviya-aṭṭhakammaṃ Vīraṃ namiṭṭha tigarāṇa-visuddham* | *nānam aṇantam ahattam tā saṃgahana tti nāmeṇa* | 1 *voccham ṭhii-bhavaṇogāhanā ya sura-nārayāna patteyam* | *nara-tiriya-deha-mānam āu-pamāṇam ca vocchāmi* | 2 *virahuvavāovvade saṃkham taha ceva ega-samaṇam* | *gair-āgatim ca voccham savvesim āṇupuvvie* | 3 (s. Peterson, I. Report, App., p. 26. 51—52). *ihādya-gāthayā abhishṭa-deva-stavasyābhidhānam itareṇa tu gāthā-dvayenābhidheyasya sambandham prayojane tu sāmārthya-gamyē* | *iti gāthā-traya-saṃkṣhepārthah* | . . .

1) Vijayasena samvat 1652—1671, s. Ind. Antiqu. XI, 256^b no. 59.

2) Vijayadeva samvat 1656—1713, ib. no. 60.

3) lebte nach der Tradition 1115 Vīra (samvat 645), s. Ind. Antiqu. XI. 253^a no. 27.

Schluss auf Bl. 139^a: *pratipādita eva tad evaṃ saṃkṣiptām saṃkṣiptatarām ca Saṃgrahaṇīm abhidhāya sampraty ācāryānuddhata-tvam ātmano* (Bl. 139^b) *darḥayann āha* | *cha* | *jam uddhiyam suyāo puvvāyariya-kayam ahava sa-maie* | *khamiyavvam suya-harehi taheva suya-devayāe o* || 66 . . . *Saṃgrahaṇer vivṛittim imām kṛitvā yad avāpi Malayagiriṇeḥa* | *kuṣalam tena labhamtām* | *sattvāḥ sarve pi jina-vaṇanam* || *cha* || *iti ḥri-Malayagiri-viracitā Vṛihatsaṃgrahaṇi-ḥikā samāptā* || *grāṇthāgram 5000* || *cha* || *māṅgalam astu* || *saṃvat 1855 varshe Vaiḥṣha vīdā(vadi) 13* || *Ḥukravāsare* || *Udayapura-nagare* ||

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 135 10 Bl. 25 cm breit, 11 cm hoch 18 Jahrh. *Saṃgrahaṇīsūtra¹⁾* des *Ḥricandrasūri*, Schülers des *Maladhāri-Hema-sūri²⁾*, ein Auszug aus der *Vṛihatsamgrahaṇī*. 279 Āryā. Ausführliche Angaben über diesen Text s. Weber, Bd. II S. 891—5 no. 1950, und Rājendralāl's Notices VIII p. 192—3 no. 2743.

Anfang auf Bl. 1^a: *om* || *namim arihamtāi* | *ṭhii-bhavanogāhanā ya patteam* | *sura-nārayāna buccham* | *nara-tiriṭṭam vinā bhavanam* || 1

Die Götter bis V. 162 (Bl. 6^a), *niraya-dāram* V. 162—201 (Bl. 6^a—7^a), *maṇua-dāram* V. 202—219 (Bl. 7^a—8^a), *tiria-dāram* V. 220—275 (Bl. 8^a—9^b).

Schluss auf Bl. 9^b: *saṃkṣittā Saṃ*(Bl. 10^a)*ghayaṇi* | *gurutara-Saṃghayaṇi-majjhaḥ esā* |

siri-Siricaṃda-munimdena | *nimmiā attā-padhaṇatṭhā* || 76 (276)

saṃkṣittayari u imā sariramogāhanā ya Saṃghayanā |

saṃnāsam ṭhāna-kasāya-lesa-imdia-du-samughāyā || 77 (277)

diṭṭhī-dāmsana-nāne | *joguvaogovavāya-cavaṇa-ṭhii* |

pajjatti-kimāhare | *sanni-gair-āgat-vee* || 78 (278)

Maladhāri-Hema-sūriṇa | *sisalesena sūrinā raiam* |

Saṃghayaṇi-rayanam eam | *namdāi jā Vīra-jina-tittham* || 279

iti ḥri-Saṃgrahaṇi-sūtraṃ sampūrnam || *cha* ||

Geschenkt 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 136 24 Bl. 26½ cm breit, 11½ cm hoch 18 Jahrh.

Bhaktāmarastava-ḥikā, Commentar zu *Mānatuṅga's Bhaktāmarastava*, verfasst samvat 1426 in Sarasvatī-pattana von *Guṇākara-sūri*, dem Schüler des *Guṇacandra-sūri*.

Das stotra ist von H. Jacobi in den Indischen Studien, XIV S. 363—376, herausgegeben und übersetzt. Andere Hss. von *Guṇākara's* Commentar, s. ZDMG. XXXIII S. 695 (Jacobi = J.), Weber, Bd. II S. 939—40 no. 1969 (die Berliner Hs. ist ohne Kolophon, und daher fehlt der Verfasser), Peterson I. Report, p. 128 no. 309, Flor. G. 68 94.

1) Der Text mit *Ḥivanidhānagani's* (samvat 1692 verf.) *Bālāvabodha* ist gedruckt in *Prakaranaratnākara* Bd. 4 (Bombay 1881), S. 33—184.

2) *Maladhāri-Hema-sūri* verfasste samvat 1170 *Bhavabhāvanā* und samvat 1175 *Viḥṣeḥavācyaka-bhāṣya-vṛitti*.

Anfang (Bl. 1_a): *pūjā-jñāna-vaco¹-pāyāpagamātīṣayādbhutam* |
ṣrī-Nābheyam namaskurve sarva-kalyāna-kāraṇam || 1
mahārajata-sad-varṇam mahānamda-vibhūṣaṇam
Mahāvīra(m) jinaṃ vande mahā-moha-tamo²-pāham || 2
ṣrutadevī-prasādena Bhaktāmara-(J. vara)-sta ve |
vārttā(h) kāṣṭhī camatkāra-kārinīḥ sārthikām prāpya (J. ^okāḥ pra-
the) || 3
tad yathā || *purāmarāvati-jayinyām ṣrī-Ujjaya(i)nyām puri vṛiddha-*
Bhoja-rāja-pūjyo 'dhīta-ṣāstra-pūro Mayūro nāma pamdītaḥ prativa-
sati sma | *taj-jāmātā Bānaḥ . . .*, die bekannte Erzählung, s. Hall,
Vāsavad., pref. p. 8, Ind. Antiqu. I p. 113—5, Ind. Stud. XIV S. 359.
 Der Commentar enthält 28 prabhāva-kathās, Bl. 23^b: *ity ashtā-*
vimṣī kathā.
 Schluss auf Bl. 24^b: *iti catuṣ-catvāriṃṣad-vṛittārthaḥ saṃpūrṇas-*
tat-sampūrtaṃ sampūrṇeyam Bhaktāmara-stava-vṛittīḥ | *sa-*
prabhāva-kathānikā-samyuktā || *cha*
gīṛīm (J. ā) gumpha-dhātṛī kavīmdreshu vānī
catur-varṇa-varṇyaṣ catu(r)-varṇa-saṃghaḥ |
guruṣ cānuṣṭāṣṭā sudhīḥ ṣroṭṛi-vargo (J. e)
jayeyur jagatyām amī ā-samudraṃ || 1
ṣrī-Caṃdra-gacche 'bhaya-sūri-vaṃṣe
ṣrī-Rudrapallīya¹-gaṇāccī (J. bhī)-caṃdrāḥ |
Ṣrīcaṃdra¹-sūri-pravarā babhus te
yad-bhrātaraḥ ṣrī-Vimaleṃdu¹-sa(m)jñāḥ || 2
tat-paṭṭe Jinabhādra-sūri-guravaḥ sal-labdhī-labha-prabhāḥ |
siddhāntāmbudhī - Kuṃbhasaṃbhava-nibhāḥ | *pre(m)khan-manishā-*
ṣubhāḥ |
jātāḥ ṣrī-Guṇaṣekhara ābhīdha-gurus¹) tasmāt tapo-nīrmalaḥ |
ṣīla-Ṣrītilako jagat-tilaka ity āsīd guru-grāmanīḥ || 3
sad-gadya-padya-sukaviḥ sa (J. kavi-tattva-dhātā |
cāritra-cāru-karaṇaḥ karaṇāsta-kāmaḥ |
tat-paṭṭa-bhūṣana-maṇir jana (J. gata)-dūshano 'bhūt |
ṣrīmān munīṃdu-Guṇacaṃdra-gurur garīṣṭhaḥ || 4
saṃpraty avanau jayinām nirdeṣād Abhaya-deva-sūrīnā(m) |
Guṇacaṃdra-sūri-ṣiṣhyo Guṇākaraḥ sūrīr alpa-matīḥ || 5
adbhuta-mahatīr dadhatīm bahu-ṣruta-mukha-ṣrutāḥ prabhāva-
kathāḥ |
Bhaktāmarastavas yābhīnavām vṛittīm vyadhād enām || 6
varshe śaḍ-viṃṣādhika-caturdaṣa-ṣaṭi-mite ca varsharto(au) |
māsi Nabhasye racitā Sarasvatī-pattane vṛittīḥ || 7
yad gaditam artha-kūṭam yal labdhī (J. lakṣhaṇa) -ṣabdataṣ ca
dushṭam iha |
tat sādhubhīḥ sudhībhīḥ ṣodhyam sadyaḥ prasadya mayi || 8
Bhaktāmarastavākshara-vivṛit(t)īm kṛitvā yad arjitam sukṛitam |
tenāsau sukṛitī-jano nirāmayah syāt sadānamdī || 9
pañca-daṣa-ṣatāny atra dvā-saptati-samadhīkāni ganitāni |

1) Zu Rudrapallīya Ṣrīcandra, Vimalendu, Guṇaṣekhara, vgl. Peterson I. Report, p. 93 V. 7. 8, Weber Verz. II p. 1089 V. 7. 8, p. 1122 V. 12—14.

nīṣeṣha-varṇa-vṛimāṇy amuṣṭubhām prāyaṣaḥ saṃtī || 10
grāṃthāgrāṃ 1572 sakalākshara-saṃkalanayeti || *cha* || *ṣubham bhavatu* ||
cha || *ṣreyo 'stu* || *bhadraṃ bhūyāt* || *ṣrī-yugādi-jinendrāya namaḥ* || *cha* ||
 Geschenk 1887 von Prof. R. G. Bhāṇḍārkar.

Sanskrit 137 38 Bl. (gezählt 4—41) 25 cm breit, 11½ cm hoch 18 Jahrh.

Das *Daṣavālikāsūtra*, unvollständig.

Bl. 4^a beginnt, im 4 adhyāyana: *dhammapannatī* | *taṃ jahā* |
puḍhāvīkāyā | *āukātā* | *teukātā* | (Weber, Bd. II S. 808 Z. 19).

Bl. 41^a schliesst: *Daṣavālikāyassa daṣamaṃ bhikkhūjjhayaṇam samattam* || . . . *grāṃthasaṃkhyā ṣloka sādā sāta se* ||

Sanskrit 138 23 Bl. (gezählt 37—54 56—60) 26 cm breit, 11 cm hoch 17 Jahrh.

Die *Upadeṣamālā* (des *Dharmadāsa*; s. Weber, no. 2003), in 544 Prakṛit gāthā, von denen 416—438 fehlen.

Anfang auf Bl. 37^b: || *Om* || *om namīna Jinavarīnde imdanarīmda-*
ccie tiloyagurū | *uvaesamālam inamo buccāmi gurūvaesenam* || 1

Schluss auf Bl. 60^b: *akkharamattāhīnam jaṃ viya padhīyam ayā-*
ṇamāneṇam | *taṃ khamaha mujja savvaṃ jīṇavayaṇavīggayā vāṇī* ||
 44 || *itī* || *ṣrī Upadeṣamālā sumāptā* ||

Sanskrit 139 7 Bl. (von Bl. 5 nur die Hälfte vorhanden)

26 cm breit, 11 cm hoch geschrieben 1535 (Samvat 1592)

Jinavallabhagaṇi's Piṇḍaviṣuddhiprakaraṇa, mit auf den Rändern geschriebener *Avacūrṇi*. Der Text beginnt auf Bl. 1^a: || *Om* || *namaḥ Sarvajñāya* |

Devīmdavīmdavāṇḍīyapayāraṇīṃde bhīvaṇḍīya Jīṇīṃde |

vuccāmi suvīhīyāhīyam Piṇḍavisohīṃ samāseṇam || 1

Schluss auf Bl. 7^b: *itī ṣrīPiṇḍaviṣuddhiprakaraṇam saṃ-*
pūrṇam || *likhe sā saṃ^o 1592 varshe* || *ṣrīsrāmaṇasaṃghasya* || *Nāgo-*
ranagarē ||

Die *Avacūrṇi* schliesst: *itī Piṇḍaviṣuddhiprakaraṇasyā vacūr-*
ṇīḥ || *Nāgoranagaramadhīe* || *ṣrīsrāmaṇasaṃghasya* || *cha* || *ṣrī* ||

Sanskrit 140 11 Bl. (gezählt 9—19) 25½ cm breit, 11 cm hoch 18 Jahrh.

Bruchstück einer *Paīna-sammlung* (vgl. Weber, no. 1870 und 1871); enthält Vers 83—171 der *Bhattaparinnā* (schliesst auf Bl. 11^b); das *Mahāpaccakkhānam* in 142 Versen (schliesst auf Bl. 16^b); und Vers 1—92 des *Samthāragapayannam*, mit auf den Rändern geschriebener Erklärung.

Sanskrit 141 4 Bl. 26 cm breit, 11 cm hoch 17 Jahrh.

Devendrasūri's Siddhapaṃcācīkā, mit auf den Rändern geschriebener *Avacūrī* (Weber, no. 1823). Der Text schliesst auf Bl. 4^b: *itī Siddhapaṃcācīkāśūtram samāptam* || *cha* || *ṣubham bhavatu ṣrīsaṃghasya* || *cha* || *ṣrī*; 'die *Avacūrī: Siddhapaṃcācīkā vacūrīḥ* ||.

Sanskrit 142 2 Bl. 26½ cm breit, 11 cm hoch 17 Jahrh.

Mānatuṅga's Bhayaharastotra, mit auf den Rändern

geschriebener *Avacūri*. (Siehe Peterson's Report 1882—83 p. 88.)
Der Text schliesst auf Bl. 2^b: *iti Bhayaharastotraṃ || śubhaṃ bhavatu ||*; die Avacūri: *iti Bhayaharastavanasyāvacūriḥ samāptā || graṃ^o 175 sam^o.*

Sanskrit 143 ein Blatt, gezählt als 2 26 cm breit, 11 cm hoch 17 Jahrh.

Schlussblatt des *Pratikramanasūtra*, mit auf den Rändern geschriebener *Avacūri*. Der Text schliesst auf Bl. 2^b: *khāme savve jive | savve jivā khamantu me || iti ya Pratikramanasūtraṃ samāptam ||* (s. Weber Bd. II S. 741 Z. 28).

Sanskrit 144 ein Blatt gezählt als 24 26 cm breit, 11½ cm hoch 17 Jahrh.

Upadhānapratishṭhāpañcācaka, aus *Jinaprabhasūri's Vidhimārgaprapā* (s. Weber, Bd. II, S. 862 Z. 33). Schliesst auf Bl. 24^b: *Upadhānapratishṭhāpañcācakam samāptam || chha ||*

Sanskrit 145 ein Blatt (nicht numeriert, und etwas zerrissen) 26 cm breit, 11 cm hoch 17 Jahrh.

Bruchstück eines *Caityavandanābhāshya* (?).

Sanskrit 146 Bd. I 382 Bl., und Bd. II 414 Bl. 31 cm breit, 16 cm hoch datiert 1834 (Samvat 1891)

Kācīkhaṇḍa des *Skandapurāna*, in *Marāṭhī*; Pūrvārḍha und Uttarārḍha, in zusammen 80 Adhyāyas (Adhy. 1—40 in Bd. I, und Adhy. 41—80 in Bd. II); Pūrvārḍha schliesst mit Adhy. 43. Die Blätter eines jeden Adhyāya sind gesondert gezählt. Die Anzahl der Blätter der einzelnen Adhyāyas und die Titel¹⁾ derselben sind wie folgt (vgl. Aufrecht's Oxf. Cat. p. 69): —

Bd. I, Adhy. 1, 6 Bl., *Maṅgalācarāṇa*; 2, 10 Bl., *Vindhyācalavarāṇa*; 3, 10 Bl., *Deva Kācīpraveça*; 4, 12 Bl., *Agastibhēṭivarāṇa*; 5, 12 Bl., *Agastimahālakṣmīsamvāda*; 6, 8 Bl., *Māyāpurivarāṇa*; 7, 10 Bl., *Yamapurivarāṇa*; 8, 6 Bl., *Amarāvāṭivarāṇa*; 9, 14 Bl., *Agnipurivarāṇa*; 10, 12 Bl., *Varuṇavarāṇa*; 11, 8 Bl., *Samudramathanavarāṇa*; 12, 6 Bl., *Samudramathana-daityamardana*; 13, 10 Bl., *Vāyulokavarāṇa*; 14, 10 Bl., *Gunasīdhimrityuvarāṇa*; 15, 8 Bl., *Kūberalokavarāṇa*; 16, 10 Bl., *Candrotpattivarāṇa*; 17, 12 Bl., *Budhalokavarāṇa*; 18, 12 Bl., *Nakshatralokavarāṇa*; 19, 6 Bl., *Brihaspatilokavarāṇa*; 20, 8 Bl., *Čanaiccaralokavarāṇa*; 21, 14 Bl., *Dhruvatapaḥsādhana*; 22, 10 Bl., und 23, 8 Bl., *Dhruvalokavarāṇa*; 24, 6 Bl., *Tapalokavarāṇa*; 25, 8 Bl., *Prayāgamāhātmya*; 26, 10 Bl., *Čivaçarmoddharaṇa* (?); 27, 10 Bl., *Mucukunḍa-Tārakāsurayuddhavarāṇa*; 28, 10 Bl., *Tārakāsurayuddhavarāṇa*; 29, 6 Bl., *Tārakāsura-vādha*; 30, 10 Bl., *Manikarnikāmāhātmyavarāṇa*; 31, 8 Bl., 32, 12 Bl. und 33, 6 Bl., *Garṅgāmāhātmyavarāṇa*; 34, 12 Bl., *Kālabhairavavarāṇa*; 35, 14 Bl., *Bhairavākhyānavarāṇa*; 36, 8 Bl., *Dandapāñimā-*

1) Die Titel sind ohne Zweifel nicht alle correct, werden aber auch so zusammen mit Aufrecht's sorgfältiger Inhaltsangabe einen ungefähren Begriff vom Inhalte des Werkes geben.

hātmyavarāṇa; 37, 12 Bl., *Jñānavāpimāhātmyavarāṇa*; 38, 10 Bl., *Caturvarnācāramīvarāṇa*; 39, 10 Bl., *Viçuddhācarāṇa*; 40, 8 Bl., *Yogābhyaṣanirūpaṇa*.

Bd. II, Adhy. 41, 6 Bl., *Strīlakṣhanavarāṇa*; 42, 12 Bl., *Avimukteçvaramāhātmyavarāṇa*; 43, 8 Bl., *Divodāsarājyavarāṇa* (?). Ende des Pūrvārḍha. — Granthasamkhyā bis hierher 5680.

Adhy. 44, 8 Bl., *Čamkarayoginīprerāṇa*; 45, 10 Bl., *Dravapādādi-tvarāṇa*; 46, 8 Bl., *Maheçādītyavarāṇa*; 47, 8 Bl., *Khakholkavarāṇa*; 48, 12 Bl., *Vainatādītyavarāṇa*; 49, 10 Bl., *Ghushmeçvaramāhātmyavarāṇa*; 50, 10 Bl., *Lolārka-māhātmyavarāṇa*; 51, 8 Bl., *Vibhūtivarāṇa*; 52, 8 Bl. und 53, 10 Bl., *Vibhūtīmāhātmyavarāṇa*; 54, 8 Bl., *Vidhi Kācīpraveça*; 55, 8 Bl., *Daçāçvamedhavarāṇa*; 56, 10 Bl., *Gaṇa prakaraṇa* (?); 57, 8 Bl., *Kācī Gaṇeça praveça*; 58, 10 Bl., *Vishnu-Kācīpraveça*; 59, 10 Bl., *Bindumādhavākhyāna*; 60, 10 Bl., *Ganeçot-patti*; 61, 12 Bl., *Vriṣabhadvajātīrthavarāṇa*; 62, 10 Bl., *Viçvakarmakathāvarāṇa*; 63, 10 Bl., *Vireçvarakathāvarāṇa*; 64, 10 Bl., *Vireçvara Kāmeçvaravarāṇa*; 65, 10 Bl., *Nandīkeçvarotpattivarāṇa*; 66, 10 Bl., *Nandīkeçvaramāhātmyavarāṇa*; 67, 10 Bl., *Dakshayāgarāṇa*; 68, 10 Bl., *Dakshayāgavidhvamsa*; 69, 14 Bl., *Dakshavadhavarāṇa*; 70, 12 Bl., *Dakshacaritra*; 71, 14 Bl., *Himādri Kācīvarāṇa*; 72, 10 Bl., *Durgākhyānavarāṇa*; 73, 12 Bl., *Durgāsukhadhana* (?); 74, 12 Bl., *Vyāsālāñchanavarāṇa*; 75, 10 Bl., *Trilocanamāhātmyavarāṇa*; 76, 12 Bl., *Dhutapāpamāhātmyavarāṇa*; 77, 10 Bl., *Viçveçvaramāhātmyavarāṇa*; 78, 10 Bl., *Čvaçarmaganasamvāda*; 79, 10 Bl., Titel nicht lesbar; 80, 24 Bl., *Granthasamāptīphalavarāṇa* (?). Ende des Uttarārḍha.

Granthasamkhyā der 80 Adhyāyas 121(?)13.

Datum (auf Bl. 21^b von Adhy. 80): *çake || samat || 1891 || Viçvāva sunāmasavatsare Caitraçuklapaurṇimā*. Geschrieben in Gvāleyar (Gwālior). Geschenk 1887 von Prof. Kielhorn.

Sanskrit 147 60 Bl. 21½ cm breit, 13 cm hoch 19 Jahrh.

Der *Vivekasindhu* (des *Mukundarāja*), in *Marāṭhī*, Prakaraṇas 9—17 (s. Weber, no. 1365). Die Blätter eines jeden Prakaraṇa sind besonders gezählt.

Anfang auf Bl. 1^b: *Čri Gaṇeçāya namaḥ || Tam va çishyaçiromani bole || vaṃduni çri guruce pāuleṃ |* Prakaraṇa 9 (6 Bl.) schliesst: *iti çri madVivekasindhu samhārakrame guruçishyasamvāde limgadehaniraçanam nāma navamaprakaraṇam samāptam ||* 10 (5 Bl.) ... *kāraṇadehaniraçanam nāma ... 11 (6 Bl.) ... mahākāraṇadehaniraçanam nāma ... 12 (6 Bl.) ... içvaratanutrayakathanam ... 13 (6 Bl.) ... içvaramāhākāraṇadehaniraçanapūrvakatatpadārthaçodhanam nāma ... 14 (9 Bl.) ... jivaparāmātmātādātmyapūrvakamuktisvarūpakathanam nāma ... 15 (7 Bl.) ... bhedakhaṃḍanapūrvaka advayasvarūpapratīpādanam nāma ... 16 (11 Bl.) ... advaitapratīpādanam nāma ... 17 (4 Bl.) iti çri madVivekasindhu samhārakrame guruçishyasamvāde saccidānamdapatatrayākhyānam nāma saptadaçaprakaraṇam samāptam ||*

Sanskrit 148 58 Bl. (gezählt 454—511) 32 cm breit, 17½ cm hoch 19 Jahrh.

17. Der letzte übertrifft sie all, im Geiste stets mit mir vereint,
Denn ich bin Freund des Wissenden und er auch mir ein lieber Freund.
18. Zwar edel sind sie all, jedoch der letzte ist von mir ein Theil,
Der andachtsvoll, mir zugewandt, in mir erkennt das höchste Heil.
19. Durch Wiederkunft geläutert, geht der Wissende zu mir dann ein,
Denn „Vāsudeva ist das All“, so denkt der Wissende allein.
20. Von mancherlei Begier verlockt, d'rob andern Göttern zugewandt,
Der eigenen Natur getreu, folgt man der Priester Gängelband.
21. Welch Götterbild auch einer ehrt, wenn er's mit rechtem Glauben thut,
Um dieses Glaubens Willen nehm' ich ihn in meine eig'ne Hut.
22. Und wer mit gläubigem Gemüth um Gut die andern Götter ehrt,
Dem wird, was er von jenen wünscht, am Ende doch von mir beschert.
23. Doch nimmt ein Ende sein Gewinn, den er erfleht mit blinder Gier,
Zum Himmel geht der Götzenknecht, wer mir vertraut, der kömmt zu mir.
24. Wer mich, den unsichtbaren Gott, in Thorheit sichtbar hat genannt,
Hat meine andere Natur, die höh're, ew'ge, nicht erkannt.
25. Nicht bin ich sichtbar Jedermann, in Scheingebilde eingehüllt,
Als ungeboren, ewig kennt die Welt mich nicht, von Trug erfüllt.
26. Vergang'ne, gegenwärtige und künft'ge Wesen kenne ich,
Sie sind mir alle wohlbekannt, doch ihrer keines kennet mich.
27. Zwiefacher Irrthum täuscht sie, den Neigung oder Hass gebiert,
Von ihnen wird in dieser Welt die ganze Wesenheit verwirrt.
28. Doch wer durch reinen Wandel hier der Sünde argem Bann entwich,
Befreit von diesem Doppelwahn, der ehret festen Sinnes mich.
29. Wer, um erlöst zu sein von Tod und Greisenalter, mir sich naht,
Erkennt Gottes Wesen und den innern Geist, die ganze That.
30. Wer mich der Wesen Seele und der Götter und des Opfers Herrn
Auch in der Todesstunde nennt, von dem ist jeder Irrthum fern.

R. BOXBERGER'S ÜBERSETZUNG.

ERLÄUTERUNG.

Die *Bhagavad-gītā*, „das Lied der Gottheit“, ist das erste Werk aus der indischen Litteratur das (durch die Übersetzung von CH. WILKINS, London 1785) in Europa bekannt wurde. Sie ist zugleich das erste Sanskrit-Werk, das (von A. W. VON SCHLEGEL im Jahre 1823) in Deutschland mit Sanskrit-Typen gedruckt wurde. In Indien wird das Gedicht, eine Episode aus dem Mahābhārata, an Heiligkeit von keinem anderen Werke übertroffen. W. VON HUMBOLDT nannte es das schönste, ja vielleicht das einzig wahrhaft philosophische Gedicht, das alle uns bekannte Litteraturen aufzuweisen haben. — Über Inhalt und Litteratur vgl. L. VON SCHROEDER, *Indiens Litteratur und Cultur*, S. 694ff. Göttingen, im September 1901. F. KIELHORN.

THE NĪTIMANJARĪ OF DYĀ DVIVEDA.

BY DR. F. KIELHORN, DECCAN COLLEGE, PUNA.

At a time when both in Europe and in India much attention is paid to the study of the Vedas, a short account of the *Nītimanjari*, composed by Dyā Dviveda, may not be altogether void of interest, the more so because MSS. of it appear to be rare,* and because the title describes the contents of the work very vaguely and imperfectly. The *Nītimanjari* is a collection of moral maxims in verse which differs from similar collections in this, that the maxims propounded in it are in every case illustrated by some story told or alluded to in the *Rigveda*. Indra's battles with the demons, the many legends told about the Aśvins and R̥ibhus, the prayers addressed to the rising sun, interest the author only in so far as they appear to him to inculcate some moral truth,—that the wicked are sure to meet with punishment, that kindness towards all beings is the true sign of nobility, that father and mother should be honoured, &c. &c. For illustrations of such maxims he has searched through the whole of the *Rigveda*, and in making the Vedic legends serve his purpose he has shown no small amount of ingenuity.†

The *Nītimanjari* contains about 200 verses; it is divided into eight chapters, each of which contains those verses of which the illustrations are taken from the corresponding Ashtaka of the *Rigveda*. The whole is accompanied by a commentary, which not only explains the original verses, but also cites the Vedic passages referred to in the latter and comments on them at great length. Both the text and commentary are composed by Dyā Dviveda, the son of Lakshmidhara, grandson of Atri, and great-grandson of Mukunda Dviveda. Nothing certain is known to me regarding his age, but as in the interpretation of the Vedic verses cited by him he closely follows and often copies the commentary of Śāyana‡ a c h ā r y a, it is clear

* The only copy which has ever reached Europe is, if I am not mistaken, in the possession of Prof. M. Müller. One copy I bought some years ago and a few others are mentioned in the catalogues of Sanskrit MSS. that have lately been published in India.

† It is hardly necessary to remind the reader that the Homeric poems have been treated similarly by the Greeks. Anaxagoras is said to have been the first who maintained τῶν Ὀμηρῶν ποιῆσαι εἶναι περὶ ἀρετῆς καὶ δυναστοσύνης, or who considered the Homeric poems to be ποιήματα περὶ διαφοράς δικαίων τε καὶ ἀδικίων. See Bernhardt's *History of Greek Literature*, vol. II. 1, p. 66.

that he cannot be older than the latter. The large number of Vedic and other writings quoted by him‡ give to his work at first sight some appearance of originality, which it loses as soon as one discovers that in this, as in everything else, the author has simply followed Śāyana. The only work of which he does cite long passages that are not to be found in Śāyana's commentary is the *Bṛihaddevatā*, a fact from which a future editor of the latter may be able to derive some advantage.

On the whole, the *Nītimanjari*, together with its Bhāshya, appears to me to be of little value, and not to deserve a complete edition. To give the reader some idea of the way in which the author has accomplished his task, I publish, below, the verses contained in the first chapter. They are generally so simple and easy to understand that an English translation would be superfluous; but in order to show at once what Vedic passages are alluded to, I have quoted under each verse the verse or verses of the *Rigveda* on which the author professes to have based each maxim.

बहुमन्त्रस्यापत्यस्य दारिद्र्यं सूचयति

बहुमन्त्रस्य पुत्रस्य सुवाचोऽपि सदा विपत् ।

सीदन्निन्द्रं मधुच्छन्दा वस्त्रयावदृचोतः३ नः ॥ १ ॥

(Rv. I, 4, 6.)

याचकानां धैर्यं कुत इत्यर्थ आह

याचकानां कुतो धैर्यं यत्तस्याज्ञ पुंरदरः ।

अभूत्सोममनाः सानौ वृष्णा तमिष्मन्मसम् ॥ २ ॥

(Rv. I, 10, 2.)

कार्यैत्यर्थ आह

न स्यात्स्वेषां नैव तस्करः !

निन्दावादाद्धि गोहतां शक्रेणाभिहतो बलः ॥ ३ ॥

(Rv. I, 11, 5.)

‡ In the commentary on the first chapter the author quotes the following:—Anukramanī, Aśvalāyana-sūtra, an Upaniṣad, R̥glokaśāstra or Vaidikalokashāstra of Saunaka (R̥gveda-pratishākhya), R̥gvidhāna of Saunaka, Kaushītaki-brāhmana and gr̥hyasūtra, Taittilya, Pañchavinśa-brāhmana, Bṛihaddevatā, Br̥hadnana, Bhāshya (sometimes Śāyana's commentary on the R̥gveda, but perhaps also some commentary on the Bṛihaddevatā), Yaska, Vishvapurāna, Satupatham, Śātyāyanam, and Śātyāyanam.

§ MS. दचल नः.

सोमसुद्धन्वः इत्यर्थ आह
 कुयोनित्रो ऽपि सर्वेषो धन्यो भवति सोमसुन् ।
 ऐच्छन्मेधातिथिः साम्यमुशक्युवस्म सुन्वतः ॥ ४ ॥
 (Rv. I, 18, 1.)

पित्रोर्भक्तिपरेण भाव्यमित्युद्घृष्टान्तेनाह
 मातरं पितरं भक्त्या तेष्वयैः स भाःसुह ।
 पितरावृभवश्चकुरुहभासो नवावतः ॥ ५ ॥
 (Rv. I, 20, 4.)

कृतसंविभागो भुङ्क्ते इत्याह
 विभज्य भुञ्जते सन्तो भक्ष्यं प्राप्य सहाभिना ।
 चतुरश्वमसान्कृत्वा तं सोममभुवः पयुः ॥ ६ ॥
 (Rv. I, 20, 6.)

पितरौ वन्द्यावित्याह
 पितरौ हि सदा वन्द्यौ न त्यजेदपराधिने ।
 पित्रा बद्धः * शुनःशेषो ययाचे पितृदर्शनम् ॥ ७ ॥
 (Rv. I, 24, 1.)

देवानामपि स्तुतिः प्रियेत्याह
 ऐश्वर्यपरिपूर्णो ऽपि दद्यात्सुन्यापि चेप्सितम् ।
 शुनःशेषाय सौवर्णं रथमिन्द्रः स्तुतो ददौ ॥ ८ ॥
 (Rv. I, 30, 16.)

बहुभिःस्पर्धो न कार्येत्याह
 हिंसाक्रूरतराचरिर्न ब्रजोद्विश्वानुत्तम ।
 विश्वशनुहंतो वृत्र इन्द्रेणाप्यं निरोधकः ॥ ९ ॥
 (Rv. I, 32, 11.)

यज्वनां ये स्पर्धिनस्तेषामिन्द्र एव शास्तेत्याह
 यज्वभिर्नास्तिको भूत्वा स्पर्धो कुर्यान्न बुद्धिमान् ।
 स्पर्धमाना अयज्वानो हता इन्द्रेण तैः सह ॥ १० ॥
 (Rv. I, 33, 5.)

देवतापि कृतं कर्म भुङ्क्ते इत्याह
 शुभाशुभं कृतं कर्म भुञ्जते देवता अपि ।
 सविता हेमहस्तोऽभुङ्क्ते ऽन्धः पूषको ऽहिजः ॥ ११ ॥
 (Rv. I, 35, 9.)

कया प्रजया प्रजावान्भवतीति मश्र आह
 अन्य इच्छन्ति यस्साम्यं प्रजावान्प्रजया तया ।
 ब्रह्मा स्वसुनुसाम्येष्टेः कृण्वस्यातः प्रजापतिः ॥ १२ ॥
 (Rv. I, 45, 3.)

† MS. सोमसुद्धन्वः * MS. बद्धशु † MS. शुभकृत.

यात्रा रूपहानिकरी भवतीत्याह
 मभोरपि धिगर्थिवं रूपहानिं करोति यत् ।
 मेधातिथिं यदायाचदन्द्रो मेधो ऽभवत्ततः ॥ १३ ॥
 (Rv. I, 51, 1.)

निःस्युहदातारं स्तुत्रनाह
 स इन्द्रादधिको दानं यो दद्यान्निस्युहः पुमान् ।
 इन्द्रो ऽदाहृचयां पुर्वोः सुन्वते सोमवल्लभः ॥ १४ ॥
 (Rv. I, 51, 13.)

नृणां धनदो धन्यो महानित्याह
 नृपु यो धनदो धन्य इन्द्रतुल्यैः प्रदास्यते ।
 सुटुत्या द्रविणोदःसु सव्यो नाहेति दुःश्रुतिः ॥ १५ ॥
 (Rv. I, 53, 1.)

विमलेन मनसा भाव्यमित्याह
 देवा रक्षन्ति तं नित्यं यस्य स्याद्विमलं मनः ।
 ररक्षेत्रो ऽमलाऽश्रोणुर्वीतियदुत्तुर्वेशान् ॥ १६ ॥
 (Rv. I, 54, 9.)

द्विजो रक्ष्य इत्याह
 इन्द्रः स्याद्ब्रह्मर्षी ऽपि द्विजर्क्षां करोति यः ।
 पुरेन्द्रः सूर्यसंग्रामे ररक्ष ह्यतसं द्विजम् ॥ १७ ॥
 (Rv. I, 61, 15.)

तत्त्वविदापि संसारात् मुच्यत इत्याह
 तत्त्वविदापि संसारं मूढो भवति लोभतः ।
 तत्त्वज्ञा सरमायाचदन्द्रमन्नं गवां ग्रहे ॥ १८ ॥
 (Rv. I, 62, 3.)

महान्मृतो ऽप्युपकारीत्याह
 महान्मृतिकायो ऽपि करोति सुखिनं परम् ।
 दधीचो ऽश्वशिरोऽनेन्द्रो हत्वात्रुत्रायभूत्सुखी ॥ १९ ॥
 (Rv. I, 84, 13.)

सतामुपकाराय यः श्रमस्तसुखमित्याह
 सतां परतृषां हन्तुं यः श्रमस्तसुखं भवेत् ।
 मरुतः कूपमुत्क्षिप्य गीतमायाम्बु शं दंतुः ॥ २० ॥
 (Rv. I, 85, 10.)

साधव उपकर्तुमकृत्यमपि कुर्वन्तीत्याह
 अकृत्यमपि कुर्वन्ति परकार्या साधवः ।
 दीर्घां ब्रह्मं मनुष्येभ्यः कुत्सो हत्वाभयं ददौ ॥ २१ ॥
 (Rv. I, 97, 1.)

‡ MS. पुषोः § MS. परतृषाः

उक्तं कर्तव्यमित्याह
 उक्तं चैव प्रकर्तव्यं हि सायुक्तं भवेद्यदि ।
 पश्वादिहिंसनं कुत्समृषिराह तमध्वरम् ॥ २२ ॥
 (Rv. I, 101, 8.)

अनुक्तं सुखरूपमपि हिंसेत्याह
 अनुक्तं च न कर्तव्यं सुखरूपं भवेद्यदि ।
 परस्त्रीणां हि संभोगाकुत्सं आहति निययी ॥ २३ ॥
 (Rv. I, 104, 5.)

द्वेषदुष्टं मनो न कार्यमित्याह
 द्वेषदुष्टं मनः कार्यं पुंसा नामहिंसादिना ।
 इन्द्रो ऽवधीर्षुपः पिमुक्यवृगुण्यमभ्वरान् ॥ २४ ॥
 (Rv. I, 106, 8.)

यदि भ्राता द्विः स शत्रुवित्याह
 अन्यः मुहूर्जनां भ्राता शत्रुर्भाता सहोदरः ।
 आश्वभ्यां तारितो भुग्युस्त्रितः कृपनिपातितः ॥ २५ ॥
 (Rv. I, 106, 17.)

श्रुतिस्मृत्युक्ते कृते देवत्वमामोतीत्याह
 श्रुतिस्मृत्युक्त आचारः कर्तव्यो ऽमृतिमिच्छता ।
 नरो ऽमृतत्वमापन्नो ऋभवः कर्मणा तयोः ॥ २६ ॥
 (Rv. I, 110, 4.)

सन्त उपकारनिरता इत्याह
 सन्तः प्रमुन्वमापन्ना नेपकारं त्यजन्ति हि ।
 ऋभवः प्राप्य देवत्वमृषेर्वसमजीवयन् ॥ २७ ॥
 (Rv. I, 110, 8.)

सन्तो लीलयोपकुर्वन्तीत्याह
 दृष्ट्वा परव्यथां सन्त उपकुर्वन्ति लीलया ।
 दितोर्गर्भेत्यायां हन्ता रुद्रो ऽभूमरुतां पिता ॥ २८ ॥
 (Rv. I, 114, 6.)

महतामुदयः सुखकर इत्याह
 महतामुदयो धन्यो येन विश्वं प्रकाशयते ।
 पुर्यते तेजसा विश्वमुदये जगदात्मनः ॥ २९ ॥
 (Rv. I, 115, 1.)

उपकारात्समृद्धिं सार्थकीं कुर्यादित्याह
 समृद्धिं सार्थकीं कुर्यात्सुपकारेण सत्यवान् ।
 वैशया जाहुपाञ्जातं नासत्यानां हि सार्थकम् ॥ ३० ॥
 (Rv. I, 116, 1 and 29.)

¶ MS. तयोः हिंसायुक्तं भवेद्यदि. * MS. संयोगकृतम्.
 † नास्वहन्तिपिना. ‡ MS. प्रकाशते. § MS. आश्वभ्याम्

यादृशः पिता तादृशः पुत्र इत्याह
 यादृशाञ्जायते जन्तुर्नाम कर्मास्य तादृशम् ।
 ऽश्विनावश्वजावश्वं दटनुःपदवै सितम् ॥ ३१ ॥
 (Rv. I, 118, 6.)

विदुषां स्तुत्या वैदुष्यं भवतीत्याह
 वैदुष्यामिच्छता कार्यं विदुषां गुणवर्णनम् ।
 आश्विनोर्विदुषोः कीर्त्या कर्मावःनभवत्सुधीः ॥ ३२ ॥
 (Rv. I, 116, 7.)

ब्राह्मणान् पीडयेदित्याह
 विप्रपीडाकरो दैव्यो विप्ररक्षाकरः सुरः ।
 दैव्यैर्बद्धस्तमस्यान्विश्वभ्यां मोचितो वधात् ॥ ३३ ॥
 (Rv. I, 116, 8.)

यो ऽमृदः स सत्यनाम्भवतीत्याह
 नासत्यं त्रिधते तस्य यो ऽभुव दद्यात्पिपासते ।
 नासत्यो ददनुः कृपाश्रान्तमाय शराय वाः ॥ ३४ ॥
 (Rv. I, 116, 9.)

जरया सर्वे पीड्यन् इत्याह
 सर्वेणामेव जन्तूनां सर्वदुःखाधिका जरा ।
 च्यवनो ऽप्यश्विनोः स्तुत्या ययाचो ऽभुसुनुर्गवा** ॥ ३५ ॥
 (Rv. I, 116, 10.)

दोषयुक्तस्याश्रयोः न कर्तव्य इत्याह
 न दद्याद्दोषशालानामाश्रयोः कृत्कर्मणाम् ।
 दैव्या दत्ताश्रयाः कूपे ऽऽप्राक्षिपन्स्वभ्वन्दनौ ॥ ३६ ॥
 (Rv. I, 116, 11 and 24.)

विद्या देयेत्याह
 शीर्ष्णां ऽपि कर्तेन सर्वो विद्यां दातुं प्रबुद्धिभिः ।
 दध्वङ् मधुपदानार्थं तस्याज्जगिस्तो हयम् ॥ ३७ ॥
 (Rv. I, 116, 12.)

रूपादिपञ्चके सत्कारार्थं भवतीत्याह
 रूपादिः कुलावधत्ते सत्कारासार्थमाश्वित् ।
 विश्वके वधिमस्यां यत्पुनदानास्वभूतयोः ॥ ३८ ॥
 (Rv. I, 116, 13 and 23.)

साधवो निर्गुणेषुपि दयां कुर्वन्तीत्याह
 निर्गुणेषुपि सत्त्वेषु दयां कुर्वन्ति साधवः ।
 आश्विनोर्भोचिता प्रस्तापक्षिणीं वार्तिकां शुना ॥ ३९ ॥
 (Rv. I, 116, 14.)

¶ MS. यो ऽमृदः ** MS. पुनर्गवा. †† MS. दोषङ्कुस्याश्रयोः.
 ‡‡ MS. श्वयः §§ MS. प्राक्षिपन्स्वभ्वन्दनौ ¶¶ MS. शुभा.

<p>रात्रौ निःशङ्कमनसा न संचरेदित्याह न संचरणशीलः स्यान्निति निःशङ्कमानसः । विश्वला छिन्नपादासीस्त्रैलस्याजौ यतो निशि ॥ ४० ॥ (Rv. I, 116, 15.)</p> <p>हितकारी पितेत्याह यो हितो ऽन्यः पिता ज्ञेयो अहितो ऽपि* पितापिता । † ऋत्राश्वो ऽन्धः कुतः पितृनासत्याभ्यां सुलोचनः ॥ ४१ ॥ (Rv. I, 116, 16.)</p> <p>सत्येन जयतीत्याह प्राप्त्यादिजयं सत्यात्तस्मात्सत्यं समाचरेत् । नासत्यावभिनौ सूर्या देवेभ्यो ज्ञिग्यतुः पुरा ॥ ४२ ॥ (Rv. I, 116, 17.)</p>	<p>पौरुषे कारणं बीजमित्याह पौरुषे कारणं बीजं योनिरिव न कारणम् । अश्विभ्यां नासिकाजाभ्यां दोग्धी कृता शयोहिंमौः ॥ ४३ ॥ (Rv. I, 116, 22.)</p> <p>मनस्विनां लक्षणमाह ऽस्वीयपीडामपि घ्नन्ति कृत्वा कार्यं मनस्विनः । चक्रतुः सुभगां घोषां प्रविश्य भर्गमाश्वनौ ॥ ४४ ॥ (Rv. I, 117, 7.)</p> <p>कुलधर्मो न त्याज्य इत्याह कुलक्रमागतो § धर्मो न त्याज्यः प्रभुभिः सह । कण्ठो ऽश्विभ्यां भिषग्भ्यां हि सुत्वक् सुश्रुतः सुदृक् ॥ ४५ ॥ (Rv. I, 117, 8.)</p>
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Zu Daṇḍin's Kāvyaḍarṣa III, 150.

Von

F. Kielhorn.

Während des Druckes seiner Uebersetzung des Kāvyaḍarṣa fragte mich von Böhtlingk nach der Bedeutung des vom indischen Commentator zu den Versen III, 150 und 151 citierten Satzes „karmādi-vishaye 'py-avivakshite karmāda sambandha-vivakshāyām shashthî“. Was ich dem verehrten Gelehrten damals antwortete, hat er in einer Anmerkung mitgetheilt. Seitdem habe ich Gelegenheit gehabt Daṇḍin's Werk wieder einmal sorgfältiger zu lesen, und habe gefunden, daß der Commentator seinen Autor an der bezeichneten Stelle nicht verstanden, und auch von Böhtlingk irre geführt hat.

Die beiden Verse, um die es sich handelt, lauten mit von Böhtlingk's Uebersetzung: —

Dakṣiṇādrer-upasaran-mārutaç-chūta-pādapān |
kurute lalitādhūta-prabālānkura-çobhinah || 150 ||
Ityādi çāstra-māhātmya-darṣan-ālasa-chetasām |
apabhāṣaṇavad=bhāti na cha saubhāgyam-ujjhati || 151 ||

150. „Der an das Malaja-Gebirge herankommende Wind macht, daß die Mangobäume mit ihren leise bewegten jungen Sprossen prangen“.

151. Dieses und Aehnliches erscheint denjenigen, deren Geist zu träge ist die würdevollen Lehrbücher einzusehen, als fehlerhafte Sprache, bleibt aber trotzdem reizend.

Der Sinn des zweiten Verses ist klar. Leuten, die keine gründliche Kenntniß der Grammatik besitzen, mag Etwas fehlerhaft erscheinen, das in Wahrheit nicht nur correct ist, sondern dem Ausdrucke sogar einen besonderen Reiz verleiht. Ein Beispiel hierfür soll der erste Vers enthalten. Nach dem Commentare und der Uebersetzung wäre der Fehler, den der Vers enthält, der, daß

* MS. ऊचः ऽपि.

† MS. ऋत्राश्वेभः कृतापिशा.

‡ MS. स्वययी?

§ MS. क्रमगतो.

der Dichter statt des zu erwartenden Accusativs *dakṣhiṇādrim* den Genetiv *dakṣhiṇādreḥ* gebraucht hätte. Der Fehler wäre aber nur ein scheinbarer, weil sich auch der Genetiv durch das Maxim der Grammatiker *karmādīnām=api sambandhamātra-vivakṣhāyām shashṭhy=eva* erklären ließe.

Betrachten wir den Vers näher, so muß uns zunächst auffallen, daß der Dichter von dem an das Malaya-Gebirge herankommenden Winde reden soll. Denn gewöhnlich ist es der von Süden kommende Wind, der im Frühlinge die Mangobäume sprossen macht; und hätten wir den Commentar nicht, so würden wir auch hier ohne Weiteres „der vom Malaya-Gebirge kommende Wind“ übersetzen. Angenommen aber, Daṇḍin hätte wirklich den Genetiv statt des Accusativs gebraucht, so würden wir doch vergeblich nach dem besonderen Reize suchen, den der Genetiv an Stelle des Accusativs dem Verse verleihen sollte. Und endlich möchte ich behaupten, daß kein respectabler Grammatiker Indiens einen auf die Frage *Wohin?* gebrauchten Genetiv durch den vom Commentator citierten Satz rechtfertigen würde. Man mag über die indische Grammatik denken wie man will; sicher ist, daß der indische Grammatiker auch mit seinen Kunstgriffen nur den *ṣiṣṭa-prayoga* zu erklären sucht. Der Satz *karmādīnām=avivakṣhā ṣeṣhaḥ* würde demnach zwar für den Genetiv *māshānām* in *māshānām=acñiyāt* gelten¹⁾, weil der Gebildete wirklich so sagt; aber nicht für *adrēr=upasarati* „er kommt an den Berg heran“, denn Niemand bedient sich auf die Frage *Wohin?* des Genetivs. Die Erklärung des Commentators ist also in jeder Hinsicht unhaltbar.

In Wirklichkeit liegt der scheinbare Fehler des ersten Verses in dem Worte *upasaran*, und gerade der Gebrauch dieses Wortes mußte dem gebildeten Leser reizend erscheinen. Pāṇini lehrt in VII, 3, 78, daß die Wurzel *sri* ihre Specialtempora von *dhau* bildet. Für den, der nur die Regeln der *Asṭādhyāyī* kennt, scheint *upasaran* deshalb fehlerhaft gebraucht zu sein statt des richtigen *upadhāvan*. Wer aber Grammatik gründlicher studiert hat, wer z. B. die *Kāçikā-Vṛitti* oder die Grammatik des *Çakatāyana* kennt, weiß, daß *dhau* für *sri* nur dann eintritt, wenn von einer schnellen oder stürmischen Bewegung die Rede ist²⁾. *Upasaran* ist also

1) Vgl. z. B. *Sāyana* zu *Rigveda* I, 20, 6.

2) Vgl. *Kāçikā-Vṛitti* zu P. VII, 3, 78: *sarter-vegītāyām gatau dhāv-ādeçam-ichchhanti | anyatra sarati anusarat-ity-eva bhavati | . Çakatāyana* hat die Regel *sarter-dhau vege; Hemachandra, vege sarter-dhāv, und das Gegenbeispiel priyām-anusarati. In der Mādhaviya Dhātu-vṛitti* lesen wir: *yad-āyām sarati-vegita-gamane vartate tadā pāghrādīnā çit-pratyaye dhāv-ādeçe dhāvati-ityādi.*

grammatisch correct in der Bedeutung „langsam, oder sanft, oder leise herankommend“, und die Worte *dakṣhiṇādrer=upasaran=mārutah* (wo *dakṣhiṇādreḥ* natürlich Ablativ ist) bedeuten „der leise vom Malaya-Gebirge herankommende Wind“. Das Ansprechende des Ausdrucks liegt darin, daß der Sinn des in Versen ähnlichen Inhalts gebrauchten Adjectivs *manda*¹⁾ schon durch das gewählte Verbum bezeichnet wird.

Mit Recht benutzt meines Erachtens der indische Commentator den oben erwähnten Satz der Grammatiker zur Erklärung eines Genetivs in Vers II, 149 des *Kāvyaḍarça*, wo von Böhlingk seinen eignen Weg gegangen ist. Der Vers lautet, mit der gedruckten Uebersetzung: —

*Kṣhaṇaṁ darçana-vighnāya pakṣma-spandāya kupyataḥ |
preṇṇaḥ prayāṇaṁ tvaṁ brūhi mayā tasy=esṭam=ishyate ||*

„Verkünde, da mir erwünscht ist, was der Zuneigung erwünscht ist, daß diese sich auf die Reise begeben, diese Zuneigung, die schon über das Blinzeln der Augenlider, dieser flüchtigen Störung für's Sehen, zürnt.“

Von Böhlingk macht hier den Genetiv *preṇṇaḥ* von *prayāṇam* abhängig. Der Commentator erklärt, der Genetiv stehe an Stelle des Accusativs, abhängig vom Verbum *brūhi*. Welche Erklärung die richtige sei, ist nicht schwer zu entscheiden. Der Vers ist ein Beispiel für den *Paravaçakṣhepa*. Ein Verliebter bittet die Geliebte, ihn zu entlassen; sie, die ganz die Sklavin ihrer Liebe ist und darum selbst Nichts zu erlauben hat, antwortet: „Sag es meiner Liebe, daß Du gehn willst, — der Liebe, die schon dem Blinzeln der Augenlider grollt, wenn es Dich den Blicken einen Moment entzieht; ich will, was sie will“. Es ist klar, daß Daṇḍin hier, statt nach der Regel *bruvi-çāsi-guṇena cha yat=sachate* das Verbum *brū* mit doppeltem Accusative zu construieren, an Stelle des Accusativs den Genetiv der Person gesetzt hat, — ein Gebrauch, für den sich Beispiele genug beibringen ließen; und der Commentator war zweifellos berechtigt, sich diesen Genetiv durch das von ihm angeführte *karmatv-āvivakṣhāyām sambandha-vivakṣhāyā shashṭhī* zu erklären.

Daß übrigens der Commentator selbst in Dingen, die er hätte verstehn sollen, keineswegs unfehlbar ist, mag man z. B. aus seiner Erklärung von I, 43 ersehen, wo er die Worte *mālatī-mālā lolāli-kalilā* für ein Beispiel des *çlishṭa* ausgibt, während sie doch von Daṇḍin gerade angeführt werden um zu zeigen, was

1) Vgl. z. B. *Çarigadhara's Paddhati* 3789, 3791, 3808, 3813, 3816.

unter *ṣithila*, dem Gegentheile von *ṣliṣṭa*, zu verstehn sei. Die falsche Erklärung des Commentators hat in der Uebersetzung des Verses 44 natürlich die Hinzufügung eines doppelten „auch“ nothwendig gemacht, das sich im Originale nicht findet.

Die Nītimañjarī des Dyâ Dviveda.

Von

F. Kielhorn.

Als ich vor funfzehn Jahren im 5ten Bande des *Indian Antiquary* einen kurzen Aufsatz über die Nītimañjarī des Dyâ Dviveda veröffentlichte, glaubte ich nicht, daß ich mich nochmal mit diesem Werke, dem nur die im Commentare enthaltenen Citate einigen Werth verleihen, befassen würde. Der Grund, weshalb ich es jetzt dennoch thue, ist folgender. In dem erwähnten Aufsatze hatte ich behauptet, daß Dyâ Dviveda aus Sāyaṇas Commentar zum R̥gveda abgeschrieben hätte und deshalb natürlich später als Sāyaṇa, also nach der Mitte des 14ten Jahrhunderts gelebt haben müsse. Seitdem hat Professor Peterson auf S. 8 seines *Second Report of operations in search of Sanskrit MSS.* über eine in der Bibliothek des Mahārāja von Alwar befindliche HS. der Nītimañjarī berichtet, in der das Vikrama Jahr 1110 = 1053 n. Chr. als das Jahr bezeichnet sein soll, in dem Dyâ Dviveda sein Werk

vollendete. Obgleich diese Mittheilung meines Erachtens auf einem Irrthum beruht, halte ich es doch für richtig, meinen Fachgenossen ein Specimen von Dyâ Dvivedas Commentare vorzulegen, aus dem sie selbst ersehen mögen, ob Sāyaṇa von Dyâ oder Dyâ von Sāyaṇa abgeschrieben hat. Was ich mittheile, ist nicht gerade sehr schön, wird aber einen Begriff von Dyâ Dvivedas Geschmacke geben.

Was das erwähnte Datum betrifft, so kann ich nur sagen, daß die von Professor Peterson auf S. 103 citierten Worte des Originals — *binduśivaikena mite sanivaty ambudhivatsare* —, die 1110 bedeuten sollen, mir unverständlich sind. Es ist wahr, *bindu* bedeutet 0, *śiva* mag, wie *īvara*, *śaṅkara*, 11 bedeuten, und *eka* ist 1; aber daß etwas mit diesem Datum nicht in Ordnung ist, zeigen die Worte *ambudhivatsare*, die, wenn *binduśivaika* 1110 bedeuten, keinen Sinn geben. Und ich möchte hinzufügen, daß ich das Wort *sanivat*, decliniert, bis jetzt nur in ganz modernen Daten gefunden habe. Daß aber Dyâ Dviveda lange nach 1053 n. Chr. gelebt hat, folgt schon daraus, daß er Shaḍguruśishyas Commentar zur Sarvānukramaṇī citiert, für dessen Abfassungszeit der Verfasser selbst uns den Tag des Kaliyuga 1565132, d. i. den 24ten März 1184 n. Chr., oder, mit andern Worten, den Tag der Meshasaṁkrānti, mit dem Kaliyuga 4285 = Śaka 1106 endete, gegeben hat.

Die folgenden zwei Verse samt ihrer Erklärung sind dem zweiten Capitel der Nītimañjarī entnommen.

Aprāptayauvanayā saha saṅgo na kārya ita āha |

Sahāromakayā saṅgo nakartavyo naraiḥ striyā |

Bhāvayavyobhajajjñātvā Romasāṁ prāptaromakām ||
Aromakayāprāptalomnyā striyā saha saṅgo narair na kartavyaḥ |
Bhāvayavyadriṣṭāntena draḍhayati | yathā Bhāvayavyo rājā Romasāṁ striyaṁ prāptaromakām jātalomnīm jñātvābhajat bheje ||
Ākhyānapūrvike ṛichau¹⁾ |

Āgadhitā párigadhitā yā kaśikēva jāngahe |

dādāti máhyaṁ yāduri yāsūnām bhojyā satā' ||

úpoa me pára mṛisa má' me dabhrāṇi manyathāḥ |

sārvāhām asmi romasā' gandhāriṇām ivāvika' ||

Bhāvayavya-Romasāyor dampatyoh saṁvāda ity anukramaṇī ||
Tathā Bṛihaddevatā²⁾ |

Pañchāmandān Bhāvayavyasya gītā

jāyāpatyor dve ṛichau saṁpravādaḥ |

1) R̥gveda I, 126, 6 und 7.

2) Vgl. Bṛihaddevatā III, 155—IV, 3.

prādāch cha tām Romasām nāma sāmna
 Bṛihaspatir Bhāvayavyāya rājñe ||
 Tatas tat sarvaṁ Harivān viditvā
 priyaṁ sakhāyaṁ Svanayaṁ didrikshuḥ |
 abhyājagāmātha Śachīsametaḥ
 pratyarchitas tad vidhinā cha rājñā ||
 Abhyājagāmāngirasī cha tatra
 dṛiṣṭvā tayoh sā charaṇau vavande |
 Indrah sakhitvād atha tām uvācha
 romāṇi te santi [na santi] 1) rājñi ||
 Sā bālabhāvād atha saṁjagāda
 romāṇi me Śakra parāmṛisēti |
 Sambhogāya prārthito Bhāvayavyaḥ svabhāryām 2) Romasām aprau-
 dhām matvā parihasann anushtubhāha || Ayam arthaḥ | bhojyā bho-
 gayogyaiśhāgadhitā ā samantād grihitā svīkritā 3) | tathā parigadhitā
 parito gadhitā | ādarārthaṁ punarvachanam | gadhyaṁ grihṇāter iti
 Yāskah | yadvā āgadhitā ā samantād bhāvena miśrayantī | āntaraṁ
 prajanana 4) bāhyaṁ bhujādibhir ity arthaḥ | gadhyatir miśrībhāva-
 karmeti Yāskah | pūrvapakshe purushasya prādhānyam uttarapakshe
 yoshita iti bhedah | kīdrīśī sā | yā 5) jaṅgahe atyarthaṁ grihṇāti
 kadāpi na muñchati | atyāge dṛiṣṭāntaḥ kaśīkeva | kaśīkā nāma
 sūtavatsā 6) nakulī sā yathā patyā saha chiraakālam kriḍati kadāpi
 na muñchati tathaiśhāpi | kimchaishā bhojyā 7) yādurī | yādur ity
 udakam | retolakshaṇam udakam rāti 8) ādadāti | bahuretoyuktety
 arthaḥ | tādrīśī satī yāsūnām saṁbhogānām | yāsūr iti prajanana-
 nāma | tatsaṁbandhīni karmāṇi yāsūni bhogāḥ | teshām śatā śatāni
 mahyaṁ dadātīti parihasantaṁ svabhartāraṁ praty āha | upopa ma
 iti | bhoḥ pate me mām | dvitīyārthe chaturthī | upopa upetyopetya
 parāmṛisā samyak spṛisā | bhogayogyām avagachchety arthaḥ | me
 mamāṅgāni dabhrāṇi alparomāṇi | dabhram arbhakam alpasyeti Yā-
 skah | mā manyathā mā budhyasva | adabhratvaṁ viśadayati | ahaṁ
 sarvā romaśā bahuromayuktāsmi | yatoham īdrīśy atah saṁpūrṇāva-
 yavāsmi | romaśatve dṛiṣṭānto gandhārīṇām avikeva | Gandhārā
 desās teshām saṁbandhiny avijātir iva | tadesāsthā avayo meshā

1) Die Worte in Klammern fehlen.

2) MS. svabhāvam.

3) MS. tsīkritā; vielleicht matsīkritā.

4) MS. prajanena.

5) MS. om.

6) MS. sūtavatsā yā nakulī sā kadāpi na muñchati yathā.

7) MS. bhogyā.

8) MS. udakam eti.

yathā romaśās tathāham asmi | yāṁvā yathā gandhārīṇām garbhadhā-
 riṇīnām strīṇām avikātyantaṁ tarpayantī yonir iva | tāsām āprasa-
 vaṁ romādikartanasya śāstre nishiddhatvād yonī romaśā bhavati | ya-
 toham īdrīśy ato mām aprauḍhām mā budhyasveti || Sā magrihye 1) |
 nājātalomnyopahāsam ichchedh iti || Tathā Karma pradīpe |

ajātavyaṅjanālomnī na tayā saha saṁviśed iti ||

Agnir ārādhyā ity artha āha |

Dhīmadbhir agnir ārādhyo yaṁ vinā na sukhī bhavet |
 mukto Dīrghatamāḥ śāpād agninā hi Bṛihaspateḥ ||
 Dhīmadbhir buddhimadbhir vipair agnir ārādhyo yam agniṁ vinā
 na sukhī bhavet | brāhmaṇasyāgneḥ sukhaṁ bhavātīty arthaḥ | hi
 yasmād Dīrghatamā rīshir Bṛihaspateḥ śāpād agninā mochitah 2) ||
 Taddarsā nāyēti hāsaḥ 3) | Uchathya-Bṛihaspatināmānau dvāv
 rīshī āstām | tatrochathyasya Mamatā nāma bhāryā sā cha garbhīṇī
 tām Bṛihaspatir grihītvāramayat | śukranirgamanāvasare prāpte gar-
 bhasthaṁ retaḥ prāvādīt | he mune reto mā tyākshīḥ pūrvam ahaṁ
 saṁvasāmi retaḥsaṁkaramā mā kārshīr iti | evam ukto Bṛihaspatir
 balāt pratiruddharetaskaḥ saṁ śāsāpa | he garbha tvaṁ yato reto-
 roddham akaror atas tvaṁ dīrghaṁ tamaḥ prāpnuhi jātyandho bha-
 veti | evaṁ śāpato Dīrghatamā ajāyata 4) | sa utpannas tamovya-
 yāyāgnim astaushīt | sa cha stutyā prīta āndhyaṁ paryaharad
 iti || T a t h ā n u k r a m ā ṅ i b h ā s h y e 5) |

Itihāso hetubhūto vispashtāya pravarnyate ||

Prajāpateḥ putra āsīd Aṅgirā nāma vai muniḥ |

tasya putrās trayas tv āsaṁs tretāgnisamatejasah ||

Uchathyo jyeshṭha ity eva madhyamas tu Bṛihaspatih |

Saṁvartas tu kanishṭhotha jyeshṭho guṇagaṇair vibhuḥ ||

Uchathyabhāryā Mamatā nāmnāsīd varavarṇini 6) |

Uchathyāhitagarbhām tām chakametha Bṛihaspatih ||

Uchathyaputro Mamatāgarbhasthovichad uttaram |

jyeshṭhapatnīṁ mātrikalpāṁ mainām 7) gantuṁ manaḥ krīthāḥ ||

amogharetās tvaṁ chāsi na dvayor iha saṁbhavaḥ |

iti garbhavachaḥ śrutvā śāsāpainaṁ Bṛihaspatih ||

dīrghaṁ tamaḥ tvaṁ [praviśā ma] 8) dvākyād andha eva vā |

tato Dīrghatamā nāma Uchathyatanayobhavat ||

1) Vgl. Gobhītyagrihyasūtra III, 5, 3.

2) MS. hat hier noch agneḥ sukhi bhavety arthaḥ.

3) Vgl. Sāyana zu Rīgveda I, 147, 3.

4) MS. ajāyateti.

5) Vgl. Shaḍguruśishyas Vedārthadīpikā, Macdonell's Ausgabe, S. 127.

6) MS. vānsavarṇini.

7) MS. nainām gantu mano krīthāḥ.

8) Die Sylben in Klammern fehlen im MS.

Tathā Bṛihaddevatā¹⁾ |

Dvā Uchathya-Bṛihaspatī rishiputrau babbhūvatuḥ |
 āsīd Uchathyabhāryā tu Mamatā nāma Bhārgavī ||
 tām yavīyān²⁾ Bṛihaspatir maithunāyopachakrame |
 śukrasyotsargakāle tu garbhas tam pratishedhati ||
 ihāsmīn³⁾ pūrvasāmbhūto na kāryaḥ śukrasāmkarah |
 tam śukrapratighātam tu Bṛihaspatir amarshayat⁴⁾ ||
 sa vyājahāra garbham tam tamas⁵⁾ te dīrgham astv iti |
 sa cha Dīrghatamā nāma babbhūvarshir Uchathyajaḥ ||
 sa jātobhyātapad⁶⁾ devān akasmād andhatām gataḥ |
 dadau devaḥ stuto⁷⁾ netre tatonandho babbhūva saḥ || iti ||

Asmīn artha ṛik⁸⁾ |

Yé pāyāvo māmāteyam te agne pāsyaṅto andhām duritīd ārakshan |
 rarāksha tān sukrīto viśvāvedā dīpsanta id ripāvo nāha debhuḥ ||
 Dīrghatamās trishṭubhāgniṁ tushṭāva | he agne te
 tava sambandhīno ye pāyavaḥ prasiddhāḥ pālayitāro rāsmayo mā-
 mātēyam Mamatāyāḥ putram Dīrghatamasam andham pāsyaṅto⁹⁾
 rakshañīyosmābhir ity avagachchanto duritād duḥkhād āndhyād¹⁰⁾
 arakshams tān rāsmīn sukṛitāḥ sukhakarṭṛīn viśvāvedā viśvapraj-
 ñognī rarāksha rakshati | asmatpālanāyeti bhāvaḥ | tair asmān raksha-
 tīty arthaḥ | evam rakshitān asmān dīpsanto dambhitum ichchanto
 ripavaḥ kāmādayo nāha debhuḥ | na khalu dambhitum śaknuvanti ||
 tān | āhuḥ sakārodayayos takāram¹¹⁾ iti nakārasya pakshe takā-
 rāgamah || Evam dhīmadbhir agnir ārādhyā iti siddham | uktaṁ
 cha |

Ekāham api karmastho yogniṁ śuśrūṣaṇaḥ śuchiḥ |
 nayaty atra tad evāsya śatāham divi jāyate || iti ||

1) Vgl. Bṛihaddevatā IV, 11—15.

2) MS. tām abravīd Bṛihaspatir.

3) Lies ihāsmi.

4) Lies amarshayan(?), und vgl. die Ausgabe.

5) MS. tatas.

6) Lies abhyāpatad(?).

7) MS. stutaṁ.

8) Rīgveda I, 147, 3.

9) MS. pāsyaṅtaḥ ikshañīyo.

10) MS. āndhyatvād.

11) Rīkprātīśākhya IV, 6.

Zu Aṣṭvaghosha's Buddhacarita.

Von

F. Kielhorn.

Vorgelegt am 13. October 1894.

Unter den in neuerer Zeit veröffentlichten Sanskrit Werken können wenige ein so grosses Interesse beanspruchen wie Prof. Cowell's Ausgabe von Aṣṭvaghosha's *Buddhacarita*, und jeder Sanskritist wird es dem hochverehrten Englischen Gelehrten Dank wissen, daß er die Herausgabe dieses Werkes unternommen hat, und wird ihn zu der Art und Weise beglückwünschen, wie er seine Aufgabe gelöst hat. Diese Aufgabe war deshalb besonders schwierig, weil der Text, soweit er überhaupt existiert, nur in nachlässig geschriebenen modernen Handschriften zugänglich ist. An zahllosen Stellen mußte der Herausgeber das Ueberlieferte verbessern, und Prof. Cowell hat dies mit der Meisterschaft gethan, die wir bei ihm erwarten konnten. Er macht aber selbst kein Hehl daraus, daß immerhin noch mancher Vers auf eine glückliche Conjectur wartet. Die richtige Lesart zu finden, ist oft Sache des Zufalls; und wenn es Anderen jetzt gelingt den gedruckten Text wirklich hier und da zu verbessern, so werden sie sicher in erster Linie dem Manne dafür danken, der ihnen zuerst den Weg gebahnt hat.

Ich habe das *Buddhacarita* in den letzten zwei Jahren wiederholt gelesen, und dabei meine Conjecturen gemacht, wie jeder Andere es auch gethan haben wird. Manche davon habe ich von Zeit zu Zeit Prof. Cowell mitgetheilt, und ich würde mich damit auch in Zukunft begnügt haben, wenn nicht von Böhtlingk

jetzt eine größere Anzahl seiner Conjecturen veröffentlicht hätte¹⁾. Einige seiner Vorschläge sind dieselben, die auch ich Prof. Cowell gemacht habe²⁾, und Manches hat er gesehen was ich nicht gefunden hatte. Ueber Anderes, bei dem ich mich nicht beruhigen kann, ist er hinweggegangen; und bisweilen wendet er vielleicht zu gewaltsame Mittel an wo ein einfacheres Verfahren näher liegt. Nach meiner Schätzung der Ueberlieferung hat der Text auch den späteren Abschreibern in ziemlich correcter Gestalt vorgelegen, und sind die uns vorliegenden Fehler wesentlich auf falsche Lesung oder Verwechslung einzelner Buchstaben zurückzuführen. Ich würde es deshalb nicht wagen, Worte in den Text zu setzen, aus denen der in den Hss. vorliegende Wortlaut sich nicht in einfacher Weise herleiten läßt. Im Folgenden gebe ich diejenigen meiner noch nicht veröffentlichten Conjecturen³⁾, die ich mit einiger Zuversicht als Verbesserungen des Textes zu betrachten wage. Leider kann ich bei einer Anzahl gerade der schwierigsten Stellen keine Vorschläge machen, die mich selbst befriedigen würden.

I, 13. — *dharmārthakāmā vishayaṃ mitho 'nyam*
na veṣam ācakramur asya nityā |
vispardhamānā iva tūgrasiddheḥ
sugocare dīptatarā babhūvuh ||

Ich lese *leṣam* statt *veṣam*, und *svagocare* statt *sugocare*, und übersetze: „Vermöge seiner Lebensklugheit nahmen das Gute, das Nützliche und das Angenehme nicht im Geringsten Besitz eines von des anderen Gebiete; aber gleichsam wetteifernd wurden sie in Folge ihrer großen Vollkommenheit noch glänzender jedes im eigenen Bereiche“. Die Zeichen für *v*, *l* und *r*, und die Sylben *su* und *sva* werden auch sonst von den Schreibern verwechselt; *svagocare* findet sich IV, 13.

I. 28. — *surapradhānaiḥ paridhāryamāṇo*
dehāṃcujālair anurañjayams tām |

Ich lese *parivāryamāṇo*; die Zeichen für *dh* und *v* werden auch sonst verwechselt. Ob man im 4. Pāda *hi jigāya* statt *vijigāya* lesen soll, kann zweifelhaft erscheinen; jeden

1) Berichte der Königl. Sächs. Gesellschaft der Wissenschaften, 1894, S. 160 ff.

2) Es sind folgende: I, 43 *vanam āpupūre*; III, 37 *jarābhaye*; III, 42 *ṣakto*; III, 57 *saṃvardhya*; IV, 52 *citram*; V, 54 *avanamyamāna*; VIII, 1 *ṣokanigrahe* und *cikshīye*; VIII, 23 *vishāṇṇavaktrā*; VIII, 25 *ṣihlāmsabāhavaḥ*; VIII, 37 *sahāvārodhanaiḥ*.

3) Einige unbedeutende Aenderungen des Textes lasse ich unerwähnt.

falls gebraucht Aṣvaghosha II, 34 grammatisch richtig *jigāya* und *vijigye*¹⁾.

I, 87. — *narapatir api putrajanmatuḥṣṭo*
vishayamatāni vimucya bandhanāni |
kulasadriṣam acākarad yathāvat
priyatanayaṃ tanayasya jātakarma ||

Prof. Cowell erwähnt Prof. Bühler's Conjectur *priyatanayas tanayasya*. Ich lese außerdem *vishayagatāni* statt *vishayamatāni*. Aus Freude über die Geburt eines Sohnes gab der König allen Gefangenen in seinem Reiche die Freiheit. Bezeichnend für den Unterschied zwischen Kālidāsa und Aṣvaghosha ist *Raghuv.* III, 20 —

na samyatas tasya babhūva rakṣhitur
visarjayed yaṃ sutajanmaharṣitaḥ |
ṛiṇābhīdhānāt svayam eva kevalam
tadā pīṛiṇām mumuce sa bandhanāt ||

II, 2, c. — *tadā hi naikātmanidhīn avāpi*. Prof. Cowell deutet selbst an, daß *avāpa* zu lesen ist, und er erklärt *naikātman* durch „of manifold nature“. Es fehlt aber in dem Verse ein auf den König hinweisendes Pronomen, und ich lese deshalb *naikān sa nidhīn*, „er erhielt viele Schätze“.

II, 10. — *yac ca pratibhvo vibhave 'pi ṣakye*
na prārthayanti sma narāḥ parebhyaḥ |
abhyarthitāḥ sūkshmadhano 'pi cāyam
tadā na kaṣcid vimukho babhūva ||

Die Hss. geben *pratibhvo*, wofür Prof. Cowell *pratibhvo* gesetzt hat, obgleich die richtige Form, wie er selbst bemerkt, *pratibhvo* sein würde. Von Böhlingk denkt an *vratibhvo*, erwähnt als mögliche Lesarten *ṣaṅkyam* oder *ṣaṅkye*, und vermuthet *cārtham* (an Stelle von *cāyam*). Ich lese Pādas 1 und 3 —

yac ca praribhvo vibhave 'pi gamye und
abhyarthitāḥ sūkshmadhano 'vi cārya,

und übersetze: „Und was man früher von Anderen nicht erbeten

1) Schwerlich wird es gelingen alles grammatisch Falsche aus dem Texte zu entfernen. Es ist leicht genug, statt *samupekshyam* in IV, 65 *samupekshya*, statt *pravishṭā* in V, 84 *praveshṭā*, und statt *nishidatuḥ* in IX, 11 und XII, 3 *nishedatuḥ* zu schreiben. Aber schon wenn man *supet* in IV, 59 in *śtapet* verwandelt, erhält man dadurch doch nur eine dem Kunstdichter ebenso unerlaubte Form wie *viṣvaset* in XI, 16 es ist. Und absolut falsche Formen wie *sasarjatuḥ* in I, 46 (neben *saṣṛijuḥ* in III, 40 und XIII, 44) und *siṣṅcīre* in VIII, 26 würden immer noch bleiben. Aṣvaghosha ist gewiß ein sehr bedeutender Dichter, von dem Andere viel gelernt haben; mit dem exacten Maße der Indischen Grammatik dürfte er schwerlich zu messen sein.

hatte, selbst wenn von Begüterten Reichtum zu erlangen gewesen wäre, darum wurde jetzt ohne Zaudern selbst der Wenigerbegüterte gebeten und wendete sich nicht weg (von dem Bittenden)¹⁾. Die Zeichen für *g* und *ç* werden häufig verwechselt (Beispiele dafür unten), und *my* für das *ky* der Schreiber wird nicht mehr auffallen als *mph* für *kph* in II, 8. An dem Worte *prari* wird man bei einem Schriftsteller, der bei aller Natürlichkeit doch gelegentlich seine Kenntniß der Grammatik zur Schau trägt¹⁾ und eine Anzahl ungewöhnlicher Worte gebraucht, kaum Anstoß nehmen dürfen.

II, 11. — *nāço vadho bandhushu nāpy adātā
naivāvratō nānṛitiko na himsraḥ |
āsīt tadā kaçcana tasya rājye.*

An Stelle von *nāço vadho* haben zwei Hss. *nāsauvadho*. Da *ç*, *g* und *s*, *v* und *r*, *dh* und *v* mehrfach verwechselt werden, lese ich *nāgauravo*; es gab Keinen, dem es an Hochachtung für die Verwandten (Vater, Mutter u. s. w.) gefehlt hätte.

II, 15. — *kshemaṃ subhikṣaṃ ca bahūva tasya
purāny aranyāni yathaiiva rāṣṭre ||*

Die (besseren) Hss. CD haben *aranyasya*, P hat *aranyāni*. Prof. Cowell übersetzt: „prosperity and plenty belonged to him, and the cities in his realm were (healthy) like the forests“; und bemerkt, daß man bei der Lesart *aranyasya* übersetzen müßte: „the cities in his kingdom seemed part of the forest campaign“. Nach von Böhtlingk ist das tertium comparationis vielleicht „still, geräuschlos“. Meines Erachtens bilden beide Pādas einen Satz, und werden Ruhe und Friede und Ueberfluss an Lebensmitteln nicht vom Könige, sondern von seinem Reiche ausgesagt. Ich vermuthete deshalb, daß in dem *purānyaranyasya* der Hss. CD der Name eines Königs der Vorzeit verborgen ist, und lese *purādyarājasya*. „Friede und Wohlstand herrschten in seinem Reiche, wie vormals im Reiche des Urkönigs“ Manu, des *mahīkṣhitām ādya*, wie Kālidāsa, *Raghuv.* I, 11, ihn nennt. Ich bemerke hierzu, daß der folgende Vers 16, mit ausdrücklicher Nennung des Manu (*Manor Adityasutasya = Vaivasvato Manur* in dem

1) Ich möchte nur darauf aufmerksam machen, daß wir auf S. 15—18 des gedruckten Textes ohne alle inneren Gründe fast dreimal so viel Aoriste verschiedener Verba finden wie sonst in den 13 Gesängen zusammen erscheinen, und zwar so gewählt als sollten sie die Regeln der Grammatik illustrieren: *adhyaiṣṭa*, *adhyagṣṭa*; *acechidishṭa*, *abebhidishṭa*; *ajihṣṣṭ*, *acikṣṣṭ*, *avivakṣṭ*, *abibhaksṣṭ*; *atapta*, *ayashṭa*; u. a.

citirten Verse Kālidāsa's), denselben Gedanken weiter ausführte (*tadā hi*), und daß das wohl der Grund ist weshalb eine Uebersetzung des letzten Pādas unsres Verses 15 in der Tibetanischen Version fehlt (vgl. Prof. Cowell's Anmerkung in der Uebersetzung).

II, 28. — *kiṃcin manaḥkshobhakaram pratīpaṃ
kathaṃca paçyed iti so 'nucintya |*

Für *kathaṃ ca* setze ich das dem Açvaghosha, soweit ich sehe, eigenthümliche *kathaṃ na*. Vgl. II, 54 *dṛiṣṭvā kathaṃ putramukhaṃ suto me vanam na yāyād iti nāthamānāḥ*; VI, 17 *mokṣhāya me matiḥ viprayogaḥ kathaṃ na syād bhūyo 'pi svajanādibhiḥ*; VIII, 66 *sa tu priyo mām iha vā paratra vā kathaṃ na jahyād iti me manorathaḥ*. Es bedeutet also „damit nicht, daß nicht“.

II, 40. — *yuddhād ṛite vṛittaparaçvadhena
dvidarpam udvṛittam abebhidishṭa ||*

Trotz der von Prof. Cowell gegebenen Erklärung von *dvidarpam* möchte ich an meiner Conjectur *dvidārpam*, „den Uebermuth der Feinde“, festhalten.

II, 44, d. — *na chādīdhakṣhīd dhṛidayena manyum*. Das handschriftliche *avidhakṣhīt* deutet meines Erachtens auf *abibhaksṣhīt*.

III, 1. — *tataḥ kadācin mṛiduçādvalāni
pumskokilonnādītapādapāni |
çuçrāva padmākaramañḍītāni
çīte nibaddhāni sa kānanāni ||*

Prof. Cowell übersetzt *çīte nibaddhāni* mit (the forests) „which had been all bound up in the cold season“; von Böhtlingk vermuthet *vibuddhāni* „aufgeblüht“. Ich lese *çīte* statt *çīle*, „eingefügt in Gesang, besungen“. XI, 42 haben die Hss. umgekehrt *çīte* statt des richtigen *çīte*.

IV, 26, c. — *jahruḥ kṣhipram aviçrambham*. Prof. Cowell's eigene Uebersetzung „they soon regained their confidence“ deutet auf *jahuḥ* für *jahruḥ*, „sie gaben ihren Mangel an Selbstvertrauen auf“. XII, 111 haben die Hss. denselben Fehler.

IV, 28. — *sa tasmin kānane rāmye jajvāla strīpurāhsaraḥ |
ākriḍa iva babhrāje vivasvān apsarovṛitaḥ ||*

Statt *babhrāje* haben die Hss. CD *vibhrāje*; dies würde ich zu *vaiibhrāje* verändern, „wie im Lusthain des Himmels“. Aehnlich liest Prof. Cowell II, 4 *āptaiḥ* für das *āptiḥ* der Hss. (wo von Böhtlingk ohne Grund *uptaiḥ* schreiben will).

IV, 91. — *māhātmyaṃ na ca tanmadhye yatra sāmānyataḥ kshayaḥ |*
Ich möchte *tan manye* statt *tanmadhye* lesen.

V, 1. — *sa tathā vishayair vilobhyamānaḥ*
paramohair api Čākyarājasīnuḥ |
na jagāma ratim na çarma lebhe
hridaye siṃha ivātidigdhaviddhaḥ ||

Prof. Cowell übersetzt *paramohair* mit (objects of sense) „which infatuates others“. Von Böhtlingk zerlegt das Wort in *parama* + *ūhaiḥ* und übersetzt „trotz der sorgfältigsten Ueberlegung gelangte er nicht zu Behagen“; allein wir brauchen ohne Zweifel ein Adjectivum zu *vishayair*. Ich lese *paramārhair*, und vergleiche IV, 71 *vishayān durlabhān*, IV, 81 *vishayān guṇasaṃhitān*, IV, 86 *manojñeshu vishayeshu*, und V, 39 *uttamān kāmān*.

V, 22, b. — *pravivikshuḥ paramāçvam āuroha*. Ich lese *puram açvam*; vgl. V, 23 *praviveça punaḥ puram*. In V, 50 haben die Hss. umgekehrt *tathāpurā* statt *tathāparā*.

V, 38. — *jagataç ca yathā dhruvo viyogo*
na tu dharmāya varam tv ayaṃ viyogaḥ |
avaçaṃ nanu viprayojayen mām
akṛitasvārtham atriptam eva mṛityuḥ ||

Prof. Cowell übersetzt die erste Hälfte des Verses: „as separation is inevitable to the world, but not for Dharma, this separation is preferable“. Von Böhtlingk liest *jagatā ca* und *dharmena* und übersetzt demnach: „da die Trennung von der Welt sicher ist, nicht aber die vom Dharma“. Ich schlage vor —

jagataç ca yathā dhruvo viyogo
n anu dharmāya varam svayaṃ viyogaḥ |
avaçaṃ na tu viprayojayen mām
akṛitasvārtham atriptam eva mṛityuḥ ||

„Da die Welt der Trennung nicht entgehn kann, so ist es doch wohl besser, daß ich um des dharmas willen mich von selbst trenne als daß der Tod mich zwingt, mich, ohne daß ich mein Ziel erreicht habe, unbefriedigt, gegen meinen Willen zu trennen“.

V, 75. — *bahuçaḥ kaliçatravo nirastāḥ*
samare tvām adhiruhya pārthivena |

Statt *kaliçatravo*, „evil enemies“, lese ich *kilā çatravo*. Denselben Fehler haben die Hss. IX, 5.

VI, 19. — *ayaṃ ca kila pūrveshām asmākaṃ niçcayaḥ sthiraḥ |*
iti dāyādabhūtena na çocyo 'smi pathā vrajan ||

Ich lese *dāyādyabhūtena*, „der Weg, der meine Erbschaft ist, der ererbte Weg“.

VII, 12, d. — *yo niçcayo yaṃ prati vaḥ pravṛittāḥ*

Trotz der Randbemerkung in der Hs. C würde ich *yaṃ prati* zu *yat prati* verändern.

VII, 21. — *çriyaṃ ca bandhūn vishayāṃçca hitvā*
ye svargahetau niyamaṃ caranti |
te viprayuktāḥ khalu gantukāmā
mahattaraṃ svaṃ vanam eva bhūyaḥ ||

Da Aṣvaghosha sonst überall *hetoḥ* hat, würde ich auch hier in der ersten Hälfte des Verses *svargahetor* schreiben. Die zweite Hälfte übersetzt Prof. Cowell „they, when parted, only wish to go to a still greater wood of their own again“, und erklärt dies durch „their desired heaven will only be a fresh penance grove“. Ich lese *mahattaram bandhanam eva*, und übersetze: „die wahrlich wünschen, befreit, nur wieder in ein größeres Gefängniß zu gehn“. Eine ähnliche Conjectur macht Prof. Cowell, wenn er VIII, 33 für *sasvadati* der Hss. *saṃsvadati* schreibt (das gewiß, wie so oft in Inschriften, *saṃsvadati* geschrieben wurde). Zur Ausdrucksweise vgl. XII, 77 *kasmād' ādau vimuktaḥ sañ çarirī badhyate punaḥ*.

VII, 30. — *tathaiiva ye karmaviçuddhihetoḥ*
sprīçanty apas tīrtham iti pravṛittāḥ |
tatrāpi tosho hṛidi kevalo 'yaṃ
na pāvayishyanti hi pāpam āpaḥ ||

„So too those who for the sake of purifying their actions, earnestly sprinkle water on themselves, saying 'this is a sacred spot', — even there this satisfaction resides only in the heart, — for waters will not cleanse away sin“. Ich lese *dosho* statt *tosho*, und übersetze die zweite Hälfte des Verses: „auch hier liegt die Sündhaftigkeit (nicht in den Handlungen, sondern) ausschließlich im Herzen, und von der Sünde kann Wasser wahrlich nicht reinigen“.

VIII, 11. — *patad vijahruḥ salilam na netrajaṃ*
mano nininduçca phalārtham ātmanaḥ ||

„They did not wipe away the tears which fell from their eyes, and they blamed their own (evil) hearts on account of the consequences of their actions“. Das will der Dichter gewiß sagen; ich würde aber lesen —

mano nininduḥ saphalāgham ātmanaḥ,

„sie tadelten ihre Herzen, deren Sünde (jetzt) ihren Lohn erhalten hatte“.

VIII, 21, c. — *krishnā vivarṇāṃjanayā vinākṛitāḥ.*

Ich vermuthe *vivarṇā mṛijayā vinākṛitāḥ*. *Varṇa* und *mṛijā* erscheinen auch sonst neben einander als Zeichen der Gesundheit und Schönheit. Vgl. auch IX, 8 *mṛijayā vikānam* (unten), und XI, 38 *mṛijārogyabala*⁰.

VIII, 22, b. — *akundalair ārjavakarnīkair mukhaiḥ*. Für *ārjavakarnīkair* schlägt von Böhtlingk *añjanavarjitair* vor. Ich lese *ujjhītakarnīkair*; der Unterschied in der Nāgarī Schrift ist nicht groß, besonders wenn *ujjhīta*, wie in Inschriften geschieht, *ujhīta* geschrieben wird.

VIII, 64. — *dhruvaṃ sa jānan mama dharmavallabho
manaḥ priye 'py ākalahāṃ muhur mithaḥ |
sukhaṃ vibhīr mām apahāya roshaṇām
mahendraloke 'psaraso jighrīkshati ||*

Prof. Cowell übersetzt den 2. Pāda: (knowing) „that my mind was secretly quarrelling even with my beloved“. Von Böhtlingk liest mit einer Hs. *dharmavallabhaṃ* und vermuthet *priyo 'py ākulayan*; „sicher wissend, daß mein Herz den Dharma liebt, dieses, obgleich mein Gatte, im Geheimen wiederholt verwirrend“. Ich lese *priyershyākalahāṃ*, als Adjectivum zu *manaḥ*; „wissend, daß mein Herz gern aus Eifersucht hadert“. Der Gedanke ist derselbe wie *Kumārasambhava* IV, 9 —

*smarasi Smara mekhalāgūṇair uta gotraskhaliteshu bandhanam |
cyutakeçaradūshitekshaṇāny avatamsotpalatādānāni vā ||*

Anklänge an VIII, 60—69 finden sich auch sonst im 4. Gesange des *Kumārasambhava*.

VIII, 80, c. — *ime pariṣanti hi te pipāsavo*. Ich würde nicht *imaṃ* statt *ime*, wohl aber *taṃ* statt *te* schreiben.

IX, 8. — *yāntau tatas tau srijayā vihīnam
apaçyatām taṃ vapushā jvalantam |*

Ich lese *mrijayā* statt *srijayā*. Vgl. oben zu VIII, 21 und Prof. Cowell's eigene Conjectur XI, 39; auch *Rāmāyaṇa*, *Sundarak.* XXI, 5, *mrijāvihīnām dīptāṅgim*.

IX, 19. — *maulīdharair aṃsavishaktahāraiḥ
keyūravishṭabhasrajair narendraiḥ |*

Statt *°srajair*, das das Metrum stört, ist *°bhujair* zu lesen. An Stelle des *u* haben die Hss. auch sonst *r*, z. B. I, 6 *indraḥ* für *induh*, I, 43 *prapūraiḥ* für *pupūre*.

IX, 24. — *tasmāt tam uttārāya nāthahīnaṃ
nirāçrayaṃ magnam ivārṇave gāṃ ||*

Die Lesart *gauḥ* für *gāṃ* der Hss. CD deutet meines Erachtens an, daß *nauḥ* zu lesen ist.

X, 7. — *anyakriyāṇām api rājamārgē
strīṇām nriṇām vā bahumānapūrvam |
tad cva kalpaṃ naradevasūtraṃ
nirikshamānā na tu tasya dṛishṭiḥ ||*

In der Hs. C ist *sūtraṃ* auf dem Rande zu *sūtam* corrigiert,

und D hat *sūtam* im Text. Ich lese die zweite Hälfte des Verses
*taṃ devakalpaṃ naradevasūnum
nirikshamānā na tūtoṣha dṛishṭiḥ ||*

Sie konnten sich nicht satt sehen an dem göttergleichen Königssohne. *Kalpa* ist im *Buddhacarita* ein nicht seltenes Suffix; z. B. II, 18 *vibudharshīkalpa*, II, 19 *suragarbhakalpa*, VIII, 81 *viṣamjñākalpa*, IX, 5 *Indrakalpa* und *Jayantakalpa*.

XI, 29. — *a gāraakarshapratimeshu teshu
kāmeshu kasyātāvato ratiḥ syāt ||*

Von Böhtlingk liest *aṅgāraakarshū* und vergleicht *karshūveda*. Ich lese *aṅgāravarsa*, „Regen von glühenden Kohlen“, das der Dichter auch XIII, 41 hat. *Ka* statt *va* (*ba*) haben die Hss. auch XII, 110 (unten).

XI, 61. — *svakarmadakshaçca yadā tu ko jagad
vayaḥsu sarveshu ca saṃvikarshati |
vināçakāle katham avyavasthite
jarā pratikshyā vidushā çamepsunā ||*

Die Hss. CD haben *vasaṃvikarshati*. Ich lese demnach die erste Hälfte des Verses

*svakarmadakshaçca yadāntako jagad
vayaḥsu sarveshu vaççaṃ vikarshati |*

„da der Tod, der sein Geschäft versteht, die Menschen in jedem Lebensalter unter seine Botmäßigkeit bringt“; *tu* statt *nta* haben die Hss. auch III, 44, *rujāturo = rujāntare*.

XII, 9. — *tad vijñātum imaṃ dharmam paramaṃ bhājanam bhavān |
jñānapūrvam adhishṭhāya çighraṃ duḥkharṇavaṃ tara ||*

Ich lese *jñānaplavam*. Vgl. XII, 13 *titirshur iva ca plavam*, und I, 75 *uttarayishyaty ayām uhyamānam ārttaṃ jagaj jñānamāhāplavena*.

XII, 110. — *paryāptāpyānamūrtiçca sārdaṃ suyaçasā munīḥ |
kāntidhairyaikabhāraikaḥ çaçānkārṇavavad babhau ||*

Am Schlusse des Verses haben die Hss. *°varddhayoḥ*. Ich lese mit von Böhtlingk *°mūrtiçca* und *svayaçasā*. Die zweite Hälfte des Verses dagegen lese ich

kāntidhairye babhāraikaḥ çaçānkārṇavayor dvayoḥ ||

Ka für *va* (*ba*) haben wir schon oben XI, 29 gehabt.

XIII, 20. — *ajāsu saktā ghaṭajānavaçca
damshṭrāyudhāçcaiva nakhāyudhāçca |*

„Blended with goats, with knees swollen like pots, armed with

tusks and with claws“. Von Böhlingk fragt: Warum nicht „auf Ziegen reitend“? Ich lese *ajâçvasakthâ* „mit Ziegen- und Pferdeschenkeln“; Ziegen und Pferde erscheinen ähnlich zusammen *Râmâyana*, *Sundarak*. XVII, 31, *ajamukhîr açvamukhîh*. Die Hss. verwechseln öfter *su* und *sva*, und für *ç* haben wir oft *s*. (Mit von Böhlingk's Conjectur in der zweiten Hälfte des Verses, *bhugnârdhavaktrâh* statt *bhagnârdhavaktrâh* kann ich mich nicht befreunden; vgl. *Râmâyana*, *Sundarak*. XVII, 26, *bhagnavaktrâh*.)

XIII, 64. — *drishṭvâ ca saṃsâramaye mahaughe*
magnaṃ jagat pâram avindamânam |
yaçcedam uttârâyitum pravrittâh
kaçcin nayet tasya tu pâpam âryaḥ ||

Prof. Cowell übersetzt den letzten Pâda „would any right-minded soul offer him wrong?“ Von Böhlingk liest *kaḥ svin nayet tasya tu potam âryaḥ*, und übersetzt „welcher Ehrenmann möchte aber wohl dem das Schiff entführen?“ Ich lese *kaç cintayet tasya nu pâpam âryaḥ* „welcher Edle möchte wohl gegen ihn Uebles sinnen?“

Erst nachdem die obigen Bemerkungen in Druck gegeben waren, habe ich Beal's Englische Uebersetzung der von Dharmaraksha am Anfange des 5. Jahrhunderts verfassten Chinesischen Version von Açvaghosha's Gedichte mit dem Sanskrit Texte vergleichen können. Manche der oben behandelten Verse fehlen in der Chinesischen Uebersetzung, und andere sind so frei übersetzt, daß aus ihrer Englischen Uebersetzung für den Wortlaut des Urtextes Nichts gefolgert werden kann. Was ich aber für die Richtigkeit der von mir vorgeschlagenen Lesarten anführen möchte, ist Folgendes: —

I, 87. — *vishayagatâni vimucya bandhanâni*, der König gab den Gefangenen in seinem Reiche die Freiheit. Beal, V. 115: „(moreover) he issued decrees through the empire, to liberate all captives in prison.“

III, 1. — *gîte nibaddhâni*, besungen. Beal, V. 190: „Minstrel maidens cause their songs, and chorded music, to invite the prince. He, hearing the sounds of singing, sighs for the pleasures of the garden shades“.

V, 22. — *pravivikshuḥ puram açvam âruroha*, nach der Stadt zurückzukehren wünschend bestieg er sein Roß. Beal, V. 350: „and rising turned again towards the city.“

V, 38. — *nanu dharmâya varam svayamviyogaḥ*. Beal, V. 373:

„Or if he were forbidden, then by self-destruction he might solve the difficulty, in an unrighteous way.“ Der Sinn ist ein anderer, aber 'self-destruction' ist gewiß *svayamviyoga*.

VII, 30. — *tatrâpi dosho hṛidi*, das Herz ist sündig, nicht die Handlungen. Beal, V. 530—31: „if, for instance, all those heretics profess purity because they use water (in various ways), then those who thus use water among men, even with a wicked mind, yet ought ever to be pure.“ Auch hier ist der Sinn des Originals ganz anders ausgedrückt, doch glaube ich, daß 'a wicked mind' auf *dosho hṛidi* zurückgeht.

VIII, 64. — *priyeshyâkalaham*, das Herz, das aus Eifersucht hadert. Beal, V. 634: „Is it that you saw me jealous, and so turned against me! that you now seek some one free from jealousy!“

IX, 24. — *nauḥ* „Schiff“ statt *gâm* „Kuh.“ Beal, V. 697: „Having no stay and no dependence now — no source from which the Çakya stem may grow — you ought, like the captain of the ship, to bring it safely across to a place of safety“.

XI, 61. — *yadântako jagat . . . vaçam vikarshati*, der Tod bringt Alle unter seine Botmäßigkeit. Beal, V. 899: „but death as a robber with a drawn sword follows us all, desiring to catch his prey“.

XII, 9. — *jñânaplavam*, das Boot des Wissens. Beal, V. 926: „able to embark in the boat of wisdom, and to cross over the sea of life and death“.

XIII, 20. — *ajâçvasakthâ ghaṭajânavaçca*, mit Ziegen- und Pferdeschenkeln und Knieen wie Töpfe. Beal, V. 1065: „others long-legged, mighty-knee'd; others big-shanked and fat-calved“. 'Shanked' ist sicher *saktha*.

Ob mein *agaurava* in II, 11 in den Worten „those who had not received the seeds of instruction“ in Beal's V. 136 enthalten ist, wage ich kaum zu entscheiden. Ich will aber zum Schlusse erwähnen, daß wenigstens eine Conjectur von Böhlingk's durch die Chinesische Version bestätigt wird. XII, 115 liest Prof. Cowell *vâyapañktayaḥ*, wofür von Böhlingk mit theilweisem Anschlusse an die Lesart der Hs. C (*câya*) *câshapañktayaḥ* schreiben will. *Câsha* ist der blaue Holzhäher, und in Beal's V. 1029 heißt es: „five hundred bluish tinted birds (I see), wheeling round to the right, flying through space“.

The reader of this translation will perhaps agree with me in thinking that there is something wrong here about the context. From the words which follow upon the verse we should have expected the verse to describe some inferior kind of king, while according to the translation it speaks of an unskilled attendant. And the facts of the case seem to be that the translators have taken the words *na yāti vaktum* of the original text to be equivalent to *na śaknoti vaktum*, while in accordance with the passages quoted above they should be paraphrased by *na śakyate vaktum*. The verse itself and the translation which I would propose are as follows:

Svecchopajātaviṣayo'pi na yāti vaktum
dehīti mārgaśatais ca dadāti duḥkham |
mohāt samakṣipati jīvanam apy akāṇḍe
kaṣṭam Manobhava iveśvaradurvidagdhah ||

A PECULIAR USE OF THE VERB YĀ IN A VERSE OF THE HARṢACARITA.

While editing the fragments of the *Lalūtavīgraharāja-nāṭaka*, I came across the sentence *virahaḥ soḍhuṃ katham yasyati* ¹⁾, which clearly means 'how will the separation be borne?' or 'how will it be possible to bear the separation?' For the peculiar use of the verb *yā*, here presented to us, I should not have been able at the time to adduce any parallel passages. I now see that von Böhtlingk already, in his Dictionary, has quoted from a Jaina poem ²⁾ *na yānti guṇās tavu vaktum*, 'your excellences cannot be described'; and in Prof. Pischel's *Materialien zur Kenntnis des Apabhraṃśa* 350, 1 and 441, 1 I find, in two Apabhraṃśa verses, *taṃ akhamañ na jāi = tad ākhyātum na yāti*, 'that cannot be told', and *bhūṣṇajāhī na jāi = bhoktum na yāti*, 'it cannot be enjoyed'. Moreover Dr. Lüders, whom I had requested to look about for similar passages, has kindly drawn my attention to the verse I, 30 of the *Karpūramañjarī*, which contains the two instances *ṇo bahūhiṃ ramaṇaphalaṃ vedhīṃ jāi dohiṃ = na bahubhyāṃ ramaṇaphalakaṃ veṣṭitum yāti dvabhyām*, 'the expanse of her hips cannot be compassed with both arms', and *vilihiṃ jāi eśā na citte = vilikhitum* ³⁾ *yāty eśā na citre*, 'she cannot be drawn in a picture'.

Another example is furnished by the verse on page 60 of the Bombay edition of Baṇa's *Harṣacarita*, which, with the words immediately preceding and following it, by Prof. Cowell and Mr. Thomas has been translated thus:

"Nor shouldst thou shrink from the toil of court-attendance or feel any fear of waiting upon him; for although it may be true enough,

'Alas! he who is unskilled in waiting upon a king is like Kāma, — he cannot speak out his request, although the opportunity is come exactly as he had wished, — he gives pain (to his patron) by hundreds of ill-timed petitions for favours, — and by his folly he throws away his livelihood in a moment'; ⁴⁾

yet these other common kings are one thing, and our ambrosial lord is quite another, who puts to shame such ancient heroes as Nṛga, etc."

1) See *Bruchstücke Ind. Schauspiele in Inschr. zu Ajmere*, p. 9, l. 4.

2) See *Ind. Stud.* Vol. XIV, p. 379, v. 6.

3) I use this form purposely; compare *Vāśavadattā*, p. 104, *citreṇāpi na śakyate 'bhilikhitum*; *Gupta Inschr.* p. 147, l. 8, *ity utkarṣaṃ guṇānāṃ likhitum iva*.

4) I omit the note of the translators in which the meaning of the verse, as referred to Kāma, is correctly given.

"Alas! A wrong-headed king, though his possessions come to him at his own pleasure ¹⁾, does not allow himself to be told to give something; he causes pain by hundreds of behests; and in his infatuation takes even one's livelihood away without cause; — so that he is like the god of love, who, although something born from one's own desire, cannot be called a corporeal being; who causes pain by hundreds of arrows; and who in his folly suddenly throws away even his own life, miserably burnt as he is by Śiva."

The compound *īśvara-durvidagdhā*, as applied to the king, is correctly formed by Paṇini II, 1, 53; and the example *mīmāṃśaka-durdurūḍhā* (or *-durdurūṣṭa*), given for that rule by the commentators (as well as in the *Gaṇaratnamahodadhī*, p. 156, and by Hemacandra) shows that in the commentary on the *Harṣacarita*, instead of *durvidagdhā durūḍhah*, we ought to read *durvidagdhā durdurūḍhah* (or *durdurūṣṭah*).

GÜTTINGEN.

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1) Or 'of their own accord'.

A PECULIAR USE OF THE CAUSAL IN SANSKRIT
AND PĀLI.

Though my knowledge of Pāli is very limited, it has struck me more than once that texts in that language offer examples for one or the other of the rules of the Sanskrit grammarians for which no examples have yet been found in Sanskrit texts. An instance of this kind is furnished by the sentence *namassamāno vivasemi rātriṃ*, quoted by Dr. Fleet above, p. 20, from the *Suttanipāta*.

In Vārttika 9 on Pāṇini iii, 1, 26, Kātyāyana lays down a rule concerning a peculiar use of the causal, the meaning of which will be best understood from the example for it given by Patañjali. According to the latter, instead of saying *ārātrivivāsam ācaṣṭe*, we may say *rātriṃ vivāsayati*; i.e., we may employ the causal of the root from which the noun *vivāsa* is derived, drop the preposition *ā*, and make *rātri* dependent on the causal *vivāsayati*. By the wording of Kātyāyana's rule *ārātrivivāsam ācaṣṭe* must mean 'he tells (stories) the whole night, until the night grows light' (i.e. till daybreak), and the same, therefore, should be the meaning of Patañjali's example *rātriṃ vivāsayati*. I have some doubts as to Patañjali's explanation of the Vārttika, and in particular as to whether he should not have said more fully *ācakṣāṇo rātriṃ vivāsayati*; however this may be, a correct example for Kātyāyana's rule is clearly furnished by the above sentence, *namassamāno vivasemi rātriṃ*.¹ The literal translation of this sentence would be 'worshipping I cause the night to grow light,' which, according to the Vārttika, in Sanskrit would be equivalent to *ārātrivivāsam namasyāmi*, 'I worship the whole night, until the night grows light' (i.e. till daybreak).

I am surprised to see that in the St. Petersburg dictionary, where the word *vivāsa* of *ārātrivivāsam* is correctly derived from *vas* 'to shine,' the causal *vivāsayati* of *rātriṃ vivāsayati* is placed under *vas* 'to dwell.' This surely is due to an

¹ For the (short) *a* of the causal *vivasemi* compare e.g. *Jāt.*, vol. ii, p. 178, l. 20, *upatāpeti* (for *upatāpeti*).

oversight, because *vivāsa* and *vivāsayati* must necessarily be derived from one and the same root.

In Vārttika 10 on Pāṇini iii, 1, 26, Kātyāyana gives another rule for the employment of the causal, by which, e.g. in the sentence *Ujjayinyāḥ prasthito Māhiṣmatyān sūryodgamanam sanibhāvayate*, 'having started from Ujjayinī he meets sunrise at Māhiṣmatī' (i.e. he reaches M. at sunrise), for the two last Sanskrit words we may use *sūryam udgamayati*, 'having started from U. he causes the sun to rise at M.' With this we may compare *suriyam utthāpesi* and *arunam utthāpesi*, which occur several times in the *Jātakas*: compare e.g. *Jāt.*, vol. i, p. 318, l. 19, *aggim ujjāletum asakkontī suriyam utthāpesi*, 'unable to get the fire to burn she caused the sun to rise' (i.e. the sun rose while she was still unable to get the fire to burn); p. 103, l. 22; p. 399, l. 14; vol. vi, p. 330, l. 15, etc. The difference between Sanskrit and Pāli here is, that in Sanskrit the causal, according to Kātyāyana, is to be used in this manner only when some astonishing feat (such as the accomplishment of the journey from U. to M. in one night) is described, while in Pāli there apparently is no such restriction.

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March 4th, 1904.

MISCELLANEA.

NOTE ON HARṢA-CARITA, VERSE 18.

I have read with great interest the papers of Mr. Thomas in the October number of this Journal. Perhaps I may venture to publish this short note on the verse from the *Harṣa-Carita* treated of by him on p. 830.

The verse is—

Ādhyarājakṛtotsāhair=hrdayasthaiḥ smṛtair=api |
jihvāntaḥ kṛṣyamāṇeva na kavīte pravartate || ;

and my literal translation would be—

“Being drawn inward as it were by Ādhyarāja’s achievements, which, remembered though they are, stay in my heart, my tongue does not move forward to poetry.”

Ādhyarāja’s achievements are *remembered*, i.e., they are things of the past; they no longer exist, and could not therefore have any effect on the poet’s tongue; they nevertheless draw the tongue inward, because they stay in Bāṇa’s heart.—It may be noticed that the employment of the adjective *hrdayasthaiḥ* furnishes an instance of the poetical figure *Kāvyaṅga*.

For the way in which Bāṇa here uses the word *smṛta*, we may compare the following verse on p. 226 of the *Jātakamālā* :—

Kṛpaṇā bata lokasya calatvavirasā sthitiḥ |
yad=iyam kaumudīlakṣmīḥ smartavyaiva bhaviṣyati ||

“Pitiable, alas! is this worldly existence, void of charm on account of its perishableness; for this moonlight festivity will become a thing only to be remembered.”

Here it is at once clear that the words in italics are equivalent to ‘will certainly pass away.’ And similarly, in Bāṇa’s verse, the words *smṛtair=api*, in my opinion, mean in effect ‘past though they are.’ Past though they are, the achievements stay in the heart, and are therefore able to draw the tongue inward.

F. KIELHORN.

1062

APARUDDHAS=CHARATI.

APARUDDHAS=CHARATI IN THE DAŚAKUMĀRACHARITA.

In verse 14 of the Aihole inscription of Pulakēśin II¹ we are told that this prince (afraid of the machinations of his uncle Maṅgalēśa) resolved to wander abroad as an exile; and this wandering abroad, in the original text, is denoted by *aparuddha-charita*. In my notes on the inscription I have shown that *aparuddha* is practically equivalent to *rāshṭrād=bhrashṭa*, and that *aparuddhas=charati*, as used in the inscription, is a standing and very old phrase. I would now draw attention to a passage in the *Daśakumāracharita*, where the same phrase must undoubtedly be restored, in the place of the reading which is given by the published editions.

In the third *uchchhvāsa* of Daṇḍin’s work² a woman, in order to make Vikatavarman’s queen fall in love with Upahāravarmā, tells that lady a story which begins with the words: *asti kō=pi rājasūnur=avaruddhas=charan*³ | *amushya vasantōtsavē saha sakhībhir=nagarōpavana-vihāriṇi Ratir=iva vighraṇi yadṛichchhayā darśanapatham gat=āsi* |. The queen, offended as she is by her husband’s dissolute manners, readily falls in love with Upahāravarmā. She asks the woman to arrange a meeting with him (*amunā purushēṇa mām . . . samāgamaya*), and in the end is made to say: *asti ch=āyam=artharāsiḥ | anēn=āmushya padē prati-shṭhāpya tam=ēv=ātyantam=upacharya jivishyāmi* |.

¹ See *Ep. Ind.*, vol. vi, p. 9.

² Bühler’s second ed., p. 70.

³ The same reading we have in Wilson’s edition, p. 101; the Nirṇayasāgara press edition has *nigūḍham charan*.

The word *avaruddha* of the first passage has been paraphrased by *gupta*, and translated by 'incognito' ("there is a prince who is travelling incognito"). And the concluding passage was rendered by Professor Bühler: "And I possess all this wealth. With the help of that I will place him (viz. Upahāvarman) in that man's (*amushya*, i.e. Vikāṭavarman's) place and live worshipping him exceedingly." But apart from other objections, the preceding *amushya* and *amunā purushēṇa* would show that the pronoun *amushya* in the queen's answer could only refer to the lover Upahāvarman, not to the husband Vikāṭavarman, and there is no question at all of Upahāvarman's requiring the queen's wealth to be put in *King Vikāṭavarman's place*.

For the words *anēn-āmushya padē pratishṭhāpya* we have the various reading *anēn-āmum svapadē*¹ (or *svē padē*) *pratishṭhāpya*; and as soon as we adopt this reading, and at the same time alter the words *avaruddhaś=charan* of the first passage to *aparuddhaś=charan*, everything becomes perfectly plain and consistent. The woman relates that there is a prince who (driven from, or deprived of, his kingdom) is wandering abroad as an exile; and the queen says that she has plenty of wealth by means of which she will reinstate him *in his own place*.

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MISCELLANEOUS COMMUNICATIONS.

ON ŚISUPĀLAVADHA, II, 112.

In this verse Māgha, speaking of the *śabda-vidyā*, uses the words *vṛitti* and *nyāsa*. By these words the poet has been understood, already by Mallinātha, to allude distinctly to the Kāśikā Vṛitti and to a commentary on it sometimes called Nyāsa,¹ which was composed by Jinēdrabuddhi; and the verse has then been made use of in an attempt to ascertain the time of Māgha as well as that of Jinēdrabuddhi. We know now from epigraphical evidence that Māgha has to be placed in about the second half of the seventh century A.D.² I may nevertheless perhaps be permitted to point out that there is nothing to prove that the poet must necessarily have alluded to the Kāśikā Vṛitti, and that the allusion to

¹ In an introductory verse in the Deccan College MS. No. 34 of 1881-2, Jinēdrabuddhi's commentary is called simply *Pañjikā* (corrected to *Pañchikā*), and in the same verse it is intimated that the author made use of other commentaries, so that his work cannot have been the first commentary on the Kāśikā Vṛitti. In the same MS. the title given at the end of chapters is *Kāśikā-vivarana-pañchikā* (or *-pañjikā*), e.g. on fol. 45a, *iti bōdhisattvadēśiyāchārya - Jinēdrabuddhipāda - virachitāyām Kāśikāvivarana-pañchikāyām prathamasyādhyāyasya prathamah pādah* ||. On the margin of the leaves the title in the same MS. is *Kāśikānyāsa*. In No. 284 of the Kaśmīr Collection of the Deccan College the title is *Nyāsapañchikā*, e.g. fol. 191b, *iti śrīsthavirāchārya - Jinēdrabuddhy-uparachitāyām Nyāsapañchikāyām dvitīyōdhyāyah samāptah* |. No. 285 of the same collection has on the margin of the leaves *Kā nyā* (i.e. *Kāśikā-nyāsa*). The title *Nyāsa* (which also denotes a gloss on Hēmachandra's *Śabdānuśāsanavṛitti*) I have not found in any of the five MSS. which I have examined.

² See the article referred to in this Journal, 1906, 728.

Jinēndrabuddhi's commentary which has been found in the word *nyāsa* is solely due to a wrong interpretation of the verse. To show this I give the text of the verse with my translation and notes :—

Anutsūtrapadanyāsā sadvṛittih sannibandhanā |
śabdavidyēva nō bhāti rājanītir-apaspaśā ||

“The policy of kings, even when it takes no step that is contrary to rule, and when it provides a livelihood (for dependents) and makes donations (for services rendered), by no means prospers without (the employment of) spies—just as the study of grammar does not prosper without (a knowledge of) the (introduction called) *paspaśā*, even when (in the interpretation of rules) no words are supplied¹ that are not in the *sūtras*, and when (the study is) aided by commentaries and the Mahābhāshya.”

An introductory verse of the Kāśikā Vṛitti tells us that that work contains the essence of the doctrines which were scattered about in the *vṛitti* (used in the singular and in a collective sense) and the *bhāshya*. Māgha here speaks of the *vṛitti* and the Mahābhāshya as the two aids in the study of grammar, and, like the author of the Kāśikā Vṛitti, he by *vṛitti* does not mean any particular commentary, but commentaries generally of the Ashtādhyāyī, whatever is *Pāṇini-praṇīta-sūtrāṇām vivaraṇam*. This, of course, may include the Kāśikā Vṛitti, but it would equally include such commentaries as were composed by Kuṇi and other Āchāryas, and those composed by Chulli (?),² Bhaṭṭi, and Nallūra, which according to Haradatta and Jinēndrabuddhi were made

¹ Compare the use of the word *nyāsa* in the well-known *arthāntara-nyāsa*.

² I am not sure about this name; the writer of the MS. which I have used seems to have altered *Chulli* to *Rulli*.

use of by the authors of the Kāśikā Vṛitti in the compilation of their work; and it is quite impossible to infer from the poet's words what particular commentary or commentaries he was acquainted with. On the other hand, the very unusual term *nibandhana*, which, in order to obtain a suitable word with a double meaning, he chooses to denote the Mahābhāshya, renders it highly probable that Māgha was acquainted with that verse of the Vākyapadiya, ii, 485, in which the Mahābhāshya is described as *sarvēśhām nyāya-bijānām nibandhanam*.

In addition to mentioning the two chief aids in the study of grammar, the poet also speaks of the proper method of interpreting Pāṇini's rules; and in using the expression *anutsūtrapadanyāsā* he clearly has in view, and actually paraphrases, a passage of the Mahābhāshya which will be found in my edition, vol. i, p. 12, last line: *yō hy-utsūtram kathayēn-n-ādō gṛihyēta*, “if anybody (in interpreting a rule) should say anything that is not contained in the *sūtra*, such a statement of his would not be accepted.” Interpretation ought not to supply anything that is not contained in the *sūtras* themselves—a statement to which later grammarians have given the somewhat different and wider meaning, that the *sūtras* already contain all that is found in the commentaries and in the Vārttikas (*sūtrēshv-ēva hi tat-sarvam yad-vṛittau yach-cha vārttikē*).

The grammarian, moreover, must not only interpret Pāṇini's rules in the proper manner and avail himself in the explanation of rules of such assistance as may be afforded by commentaries and the Mahābhāshya, but he must primarily be familiar also with those more general and fundamental questions regarding the necessity and the object of the study of grammar, the benefit to be derived from it and the ways to secure that benefit, and generally all such matters as are handled in the *paspaśā* or introductory chapter of the Mahābhāshya, where no

individual rules of Pāṇini's are as yet treated of. That Māgha, profound grammarian as he was, had himself studied that chapter, he shows by the very term *anutsūtra-padanyāsā* which he uses in the verse under discussion, and he shows it also, e.g., by the manner in which in two consecutive verses (xiv, 23 and 24) he speaks of the *ūha* and *asam̐dēha*, which are both treated of among the objects of grammar on the first page of the Mahābhāshya.

Any interpretation of the verse which would take the word *nyāsa* to denote here Jinēdrabuddhi's gloss on the Kāśikā Vṛitti would seem to me to be based solely, if I may say so, on the outward form of the word and its proximity to the word *vṛitti*, and would completely disregard the meaning and context of the poet's interesting and scholarly statement. But apart from this, there probably is a very simple way of finding out whether Jinēdrabuddhi could possibly be older than Māgha, a way which I would strongly recommend to those to whom the MSS. of the Deccan College are readily accessible. Many years ago, when I myself was able to study those MSS., my impression certainly was that Jinēdrabuddhi had freely copied from Haradatta's Padamañjarī, and if this should prove to be correct it would make Jinēdrabuddhi decidedly much later than Māgha, because that poet is quoted, even by name, more than once in the Padamañjarī.

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BHAGAVAT, TATRABHAVAT, AND DEVĀNAMPRIYA.

In an article on the child Krishna, Mr. Keith, above, p. 171 f., says that "in discussing Pāṇini, iv, 2, 98"—which is a misprint for iv, 3, 98—"Patañjali distinctly says that Vāsudeva is a *sam̐jñā* of the Bhagavant." As

the same statement has already been made more than once and would be likely to be repeated, I need not apologize for drawing attention to the fact that it is based on a wrong reading of the Benares edition of the Mahābhāshya (*sam̐jñāishā tatra bhagavataḥ*). The true reading of the passage, uniformly given by more than half a dozen MSS. from different parts of India which I have compared, is *sam̐jñāishā tatrabhavataḥ*. Patañjali's remark on the word *Vāsudēva* of Pāṇini's rule may be compared with another remark of his, regarding the word *Ka* (= Prajāpati), in vol. ii, p. 275, l. 21, of my edition. There he says that *Ka* is not a pronoun (*sarvanāman*), but a proper name (*sam̐jñā chaishā tatrabhavataḥ*), so that, e.g., the dative case of this *Ka* would be *Kāya*, not *Kasmai*. Similarly, the word *Vāsudēva* of P. iv, 3, 98, does not denote a certain class of persons descended from Vasudēva, but is the proper name of an individual called Vāsudēva (quite independently of the etymological derivation of the word). In either case the word *tatrabhavataḥ*, by which *sam̐jñāishā* is followed, does not in the least suggest that the personage denoted by the proper name is a divine being; the word indeed conveys an honorific sense, but would be equally applicable to a human being.

It is a curious fact that in the text of the Mahābhāshya the word *bhagavat*, with a single exception, is only used as an epithet of, or as a word denoting, Pāṇini, and that in the case of the exception referred to (in a verse in vol. ii, p. 97, l. 26) it is an epithet of Kātyāyana. In vol. iii, p. 467, l. 1 (in a Vārttika), we have *bhagavataḥ Pāṇinēḥ*; in vol. i, p. 6, l. 14, vol. iii, p. 3, l. 22, p. 241, l. 20, and p. 467, l. 3, *bhagavataḥ Pāṇinēr-āchāryasya*. We have besides *āha bhagavān* or *āha hi bhagavān* in vol. i, p. 362, l. 10, p. 363, l. 9, and vol. iii, p. 293, l. 4, in each case with reference to certain rules given by Pāṇini: and similarly *bhagavān* denotes Pāṇini in vol. iii, p. 93, l. 21, and (in verses) p. 54, l. 3, and p. 189, l. 21. The

Mahābhāshya itself was composed by the *bhagavat* Patañjali, as he is styled at the end of every Āhnika.

The honorific *tatrabhavat*, used in the singular or plural, in addition to the two passages already given, occurs twelve times in the Mahābhāshya. We find *tatrabhavān* as an epithet of, or denoting, Viśvāmitra, Gādhi, and Kuśika, in vol. ii, p. 254, ll. 17, 18, and 19. Other Ṛishis are spoken of as *tatrabhavantaḥ* in vol. i, p. 11, l. 12, and vol. ii, p. 233, l. 13; authors of Prātiśākhya and Yājñikās in vol. i, p. 22, l. 23, p. 117, l. 23, and p. 38, l. 17; and Brāhmaṇs who speak pure Sanskrit even without having studied grammar, in vol. iii, p. 174, l. 10. We have besides *tatrabhavantō Gārgyāyanāḥ* and *tatrabhavantō Vātsyāyanāḥ* (where the *yuvan* derivative is used to denote in an honorific way the *vridhdha*), and with reference to them *tatrabhavantaḥ* separately, in vol. ii, p. 265, ll. 23 and 24.

In the only remaining passage where *tatrabhavat* occurs, in vol. i, p. 3, l. 5, this honorific word—being used with reference to an author who composed a śloka which is described as sung by one who was not in his proper senses—appears to me to be used in an ironical sense. And so the word would have to be compared with the honorific *dēvānāmpriya*, when used in an ironical sense in the well-known dialogue of the grammarian and the charioteer in vol. i, p. 488, l. 20, of the Mahābhāshya. I may add that in imitation of this passage of the Mahābhāshya the word *dēvānāmpriya* has been used in a similar way by later writers (e.g. in the Śāṅkarabrahmasūtrabhāshya, vol. i, p. 176, l. 8; in the Kāvya prakāśa, p. 255, l. 3, of Vāmanāchārya's edition; and in the Padamañjarī, vol. i, p. 523, l. 19), and that to that passage is due in the first instance the meaning *mūrkhā*, assigned to *dēvānāmpriya* in more modern times. In grammar even Hēmachandra (in iii, 2, 34) only seeks to account for the form of *dēvānāmpriya* (i.e. the retention in the compound of the

genitive ending), and, so far as I know, it is only the author of the Prakriyākaumudī¹ who first combines with that form the meaning of *mūrkhā*,² to the exclusion of every other sense. If he were a contemporary, I should refer him to the Harshacharita, p. 28, l. 13, and p. 268, l. 14, of the Bombay edition, where the honorific sense is unmistakable.

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¹ Like the Siddhāntakaumudī the Prakriyākaumudī has: *dēvānāmpriya itī cha mūrkhē | anyatra dēvapriyaḥ |*

² It is amusing to see how commentators try to account for this meaning of the word *dēvānāmpriya*. The author of the Manōramā says: *mūrkhā hi dēvānām prītim janayanti dēvapaśutvāt*; to which is added in my MSS. the marginal note *mūrkhā hīti | brahmajñānarahitā ityarthāḥ | tē hi paśuvad=dēvaniyamās=tad=āha dēvapaśutvād=itī |*. And the Tattvabōdhini, in commenting on the above passage of the Manōramā, has: *brahmajñānarahitatvāt=samsārīṇō mūrkhās=tē tu yāgādīkarmāny=anutiśṭhantaḥ purōḍāsādīpradānadvārā dēvānām=atyantapritim janayanti | brahmajñāninas=tu na tathā tēshām yāgādyanushṭhānābhāvāt | atō gavādīshānāpannatvān=mūrkhā ēva dēvapaśava itī |*. Nāgōjibhaṭṭa, on the other hand, following Kaiyata, takes the gods themselves to be fools, and appropriately adds that fools are fond of fools.

OBITUARY.

HENRY WHITE WALLIS.

University of Göttingen: July 23, 1887.

IT is with the deepest regret that I have read to-day in the papers the news of Mr. Wallis's death. I trust you will allow me to express my great sorrow at the loss which the University of Cambridge and English scholarship had suffered by this most sad event. Mr. Wallis had attended my lectures for only six months; but I have seen enough of him to be able to say that he was a most earnest and successful student, and that he certainly would have become a first-rate Sanskrit scholar had he lived.

F. KIELHORN.

VIII.

INDISCHE PHILOGIE.

Nachdem F. von Schlegel durch seine Schrift „Ueber die Sprache und Weisheit der Indier“ (1808) das Studium des Sanskrit in die deutsche Wissenschaft eingeführt und Bopp in seinem „Conjugationssystem“ (1816) seine Bedeutung für die Sprachwissenschaft erwiesen hatte, wurde im Jahre 1818 die erste Sanskritprofessur in Deutschland an der Universität zu Bonn gegründet und A. W. von Schlegel übertragen. Schlegel (1767—1845), gebildet in der Schule der classischen Philologie und als Dichter und Aesthetiker bereits im Genusse eines europäischen Rufes, hatte sich, wenigstens für jene Zeit, exakte und ausgebreitete Kenntnisse des Sanskrit erworben, und konnte so dem neuen Studium nicht nur durch das Gewicht seiner Persönlichkeit zu Ansehen verhelfen, sondern ihm auch durch die Sicherheit seiner Methode und durch seine Erfahrung in allen philologischen Wissenschaften eine feste Basis schaffen. Während er durch seine Textausgaben und Uebersetzungen (Bhagavadgītā, 1823; Rāmāyana, 1829; u. a.) und durch zahlreiche Abhandlungen den Grund der deutschen Sanskritphilologie legte, lieferte der Schöpfer der vergleichenden Sprachwissenschaft die für das Wachsthum des neuen Wissenszweiges nothwendigen Hilfsmittel. F. Bopp (1791—1867) hatte schon in London eine Episode (Nalus, 1819) aus dem Mahābhārata herausgegeben, die durch Form und Inhalt vorzüglich geeignet ist, in das Studium des Sanskrit einzuführen. Im Jahre 1821 als Lehrer des Sanskrit an die Universität zu Berlin berufen, veröffentlichte er 1827 seine durch Klarheit und methodische Darstellung ausgezeichnete Grammatik des Sanskrit. Ihr folgte drei Jahre später ein Glossar, durch das das dritte der einer allgemeineren Verbreitung des Sanskritstudiums im Wege stehenden Hindernisse beseitigt wurde. Unter Schlegel's Schülern war sein Nachfolger in Bonn, Ch. Lassen (1800—1876), ein Norweger, der hervorragendste. Mit tieferer Kenntniss des Sanskrit und seiner Tochteridiome und umfassenderer Bekanntschaft mit der indischen Litteratur verband er eine historische Auffassung,

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die ihn die indische Kultur als ein Ganzes betrachten liess. Ihm war Indien eine besondere Welt, deren Entfaltung in allen Richtungen zu erfassen sein Streben war. Neben seinen Ausgaben von wissenschaftlichen und dichterischen Werken (Gitagovinda, 1836; Institutiones linguae pracriticae, 1837; Anthologia, 1838; u. a.) und Abhandlungen über litterarische und historische Gegenstände ist sein Hauptwerk die „Indische Alterthumskunde“, in der er das damalige Wissen über Indien zusammenfasste, ein Werk, das für die Sanskritstudien von der grössten Bedeutung war, nicht nur durch die darin enthaltene Belehrung, sondern besonders auch dadurch, dass es die indische Philologie als eine einheitliche Wissenschaft darstellte und vor der Trennung in Specialstudien bewahrte.

Das Erscheinen des ersten Bandes von Lassen's Alterthumskunde im Jahre 1847 bezeichnet den Abschluss einer ersten Periode der Sanskritstudien in Deutschland. Wie schnell auch der jungen Wissenschaft ein Platz an verschiedenen Universitäten eingeräumt wurde, gewöhnlich in Verbindung mit anderen orientalischen Sprachen oder der Sprachvergleichung, so bewegten sich ihre Vertreter in dieser Periode doch wesentlich in den Bahnen, die ihnen von den grossen in Indien selbst gebildeten englischen Gelehrten eröffnet waren, und beschränkten sich so bei ihren litterarischen Arbeiten auf das Gebiet des späteren Sanskrit. Ihre Studien weiter auszudehnen hinderte sie schon das Fehlen von eigenen Handschriftensammlungen. Wer Neues veröffentlichen oder Bekanntes kritisch bearbeiten wollte, musste sich das Material im Auslande, namentlich in London, verschaffen. Und liessen die Regierungen es auch an Unterstützungen nicht fehlen, so blieb das Studium doch immer ein beschwerliches. Der kurze Aufenthalt in der Fremde erlaubte es wohl, den kritischen Apparat für einzelne Texte zu beschaffen; er gestattete keine sorgfältige Prüfung und richtige Schätzung der dort vorhandenen reichen Sammlungen, und genügte nicht, der Wissenschaft neue Gebiete zu erobern.

Es ist unmöglich, auf die Arbeiten aus dieser Periode näher einzugehen. Zu den frühesten Lehrern des Sanskrit gehören O. Frank (1770—1840, seit 1821 in Würzburg und 1826 in München), J. G. L. Kosegarten (1792—1860, seit 1823 in Greifswald), und P. von Bohlen (1796—1840, seit 1825 in Königsberg; „das alte Indien“, 1830). Eine hervorragende Stellung nimmt durch seine Arbeiten

schon aus jener Zeit A. F. Stenzler (1807—87, seit 1833 in Breslau) ein, sowohl wegen des Umfangs und der Sicherheit seiner Kenntnisse wie wegen seiner strengen Methode und der gewissenhaften Sorgfalt, die ihn nur Fertiges veröffentlichen liess (Raghuvan̄a, 1832; Kumārasambhava, 1838; Mṛicchakaṭikā, 1847). Mehr noch als Lehrer und als Förderer der Sanskritstudien überhaupt denn als Herausgeber von Texten wirkte H. Brockhaus (1806—77, seit 1841 in Leipzig; Kathāsaritsāgara, 1839—66). Lassen selbst wurde in seinen späteren Lebensjahren in seiner Lehrthätigkeit unterstützt und zuletzt ersetzt durch seinen Schüler Joh. Gildemeister (1812—90), der wie kein anderer die beiden Gebiete der semitischen und indischen Philologie beherrschte und ähnlich wie Stenzler durch die Strenge seiner Methode einen weitgehenden Einfluss ausgeübt hat. Andere Gelehrte, die in jener Periode anregend wirkten, waren K. G. A. Höfer (1812—83, seit 1840 in Greifswald) und A. H. Holtzmann (1810—70, seit 1852 in Heidelberg). Von Uebersetzern ist der hervorragendste und einflussreichste Friedrich Rückert. Das Ausland verdankt den deutschen Universitätslehrern der früheren Generation F. Rosen, Th. Goldstücker, Max Müller, Th. Aufrecht (1862—75 Professor in Edinburgh) und O. Böhtlingk.

Schon im Jahre 1828 hatte W. von Humboldt den Ankauf der in England verkäuflichen Chambers'schen Sammlung von Sanskrithandschriften warm empfohlen, überzeugt, dass nur so an ein tieferes Studium der indischen Quellen zu denken sei und dass der Erwerb einer so bedeutenden Sammlung eine neue Epoche für diesen ganzen Zweig der Wissenschaften bilden würde. Die besonders an vedischen Handschriften reiche Sammlung wurde wirklich im Jahre 1842 für die Berliner Bibliothek erworben und ist später durch eine grosse Zahl anderer wichtiger Handschriften vermehrt worden. Andere Regierungen sind Preussens Beispiele gefolgt — Deutschland besitzt jetzt etwa 4000 indische Handschriften gegen kaum mehr als 40 im Jahre 1840 — und alle haben dadurch eine Bewegung gefördert, die den Kreis der Sanskritstudien in ungeahnter Weise zu erweitern und dieselbe besonders in Deutschland zu entwickeln bestimmt war, die Erforschung des Veda. Wohl sind in den drei Jahrzehnten bis gegen das Ende der siebziger Jahre auch auf anderen Gebieten der indischen Litteratur bedeutsame Werke erschienen, aber das Hauptinteresse der deutschen Gelehrten

concentrierte sich in dieser Zeit auf die ältesten Denkmale indischen Geisteslebens; und es wird mit Recht behauptet, dass die wichtigsten Erfolge auf diesem Arbeitsfelde sich an die Namen deutscher Forscher knüpfen. Die hervorragendsten Vertreter dieser vedischen Richtung zählen zu ihren Schülern Gelehrte des Auslandes wie M. Bréal, O. Donner, C. Giussani, A. de Gubernatis, H. Kern, C. R. Lanman, A. A. Macdonell, J. P. Minayeff, F. L. Pullé, L. von Schröder, É. Senart und W. D. Whitney, ebenso wie die Deutschen, die während der letzten dreissig Jahre in England und namentlich in Indien selbst als Lehrer und Forscher thätig gewesen sind oder noch sind: M. Haug, G. Bühler und F. Kielhorn im westlichen Indien, G. Thibaut in Benares, R. Hörnle in Calcutta, E. Hultsch in Madras, A. Stein in Lahore, E. Haas in London, J. Eggeling in Edinburgh u. a.

An der Spitze dieser neuen Bewegung stehen von Lehrern der deutschen Universitäten R. Roth, A. Weber und Th. Benfey. Nach mehrjährigen Studien in Paris, London und Oxford brachte Roth (seit 1845 in Tübingen) in seinen Abhandlungen „zur Litteratur und Geschichte des Veda“ (1846) zum ersten Male Licht und Ordnung in das dunkle Gewirr der vedischen Schriftenmasse und zeigte, welche Resultate vom Studium des Veda erhofft werden dürften. In kleineren Schriften und in seiner Ausgabe des Nirukta (1852) erwies er, dass für die Erklärung des Veda die indischen Commentare nicht eine Richtschnur, sondern nur eines der Hilfsmittel seien, deren sich der Erklärer zu bedienen habe, und bezeichnete es als des Forschers Aufgabe, nicht, dasjenige Verständniss des Veda zu erreichen, das vor etlichen Jahrhunderten in Indien gangbar gewesen sei, sondern den Sinn zu suchen, den die Dichter selbst in ihre Lieder und Sprüche gelegt hätten. Und diese Aufgabe zu lösen hat er selbst den sicheren Grund gelegt, indem er sich mit Böhtlingk zur Bearbeitung des grossen Petersburger Wörterbuches (1852—75) verband, das allen Sanskritisten das unentbehrlichste Werkzeug des Arbeitens geworden ist. A. Weber (seit 1848 in Berlin) begann seine wissenschaftliche Laufbahn mit der Bearbeitung des weissen Yajurveda (Yajurvedae specimen, schon 1845) und hat in zahlreichen anderen Arbeiten das Verständniss der vedischen Schriften besonders in sachlicher Richtung gefördert. Für ihn jedoch giebt es wenige Gebiete der

indischen Philologie, denen er seine unermüdliche Thätigkeit nicht in ähnlicher Weise gewidmet hätte. Er besitzt vielleicht von allen Sanskritisten das grösste encyclopädische Wissen; eine seiner Hauptbestrebungen ist seit früher Zeit gewesen, den gegenseitigen Einfluss von Orient und Occident nachzuweisen. Werke wie seine Ausgabe des Yajurveda (1852—59), seine Litteraturgeschichte (1852), seine Ausgabe von Hāla's Saptācātaka (1881) und seine Handschriftenverzeichnisse der Berliner Bibliothek (1853 und 1886—92) sind für Sanskrit wie Prakrit, für die vedische wie die Jaina-Litteratur von der grössten Bedeutung. Th. Benfey (1809—81, seit 1834 in Göttingen), der schon 1840 seine ideenreiche Abhandlung „Indien“ veröffentlicht hatte, wurde durch Rosen's Arbeiten zum Studium der vedischen Sprache angeregt und hat diese Richtung, deren Ziel für ihn eine (leider nicht vollendete) vedische Grammatik war, bis an sein Ende verfolgt und durch zahlreiche Abhandlungen bethätigt. Im Jahre 1848 erschien sein Sāmaveda mit Uebersetzung und Glossar, eine für jene Zeit vortreffliche Arbeit, die er selbst als seine gelehrteste bezeichnet hat. Ausser dem Veda interessierten ihn von indischen Dingen besonders die einheimische Grammatik der Inder, die er seiner eigenen Sanskritgrammatik (1852) zu Grunde gelegt hat, und der Buddhismus, dessen Bedeutung für die indische Fabellitteratur er in seinem bahnbrechenden Werke über das Pancatantra (1859) zu zeigen versucht hat.

Die dieser flüchtigen Skizze gezogenen Grenzen gestatten es nicht, die Thätigkeit der durch diese Männer gegründeten vedischen Schule im Einzelnen zu verfolgen oder auch nur die bedeutenderen Werke der verschiedenen Forscher aufzuzählen. Wollte man die Summe des Geleisteten etwa nach den in Deutschland veröffentlichten Texten bemessen, so würden ausser schon erwähntem zu nennen sein die erste vollständige Ausgabe des R̥gveda von Th. Aufrecht (1875—89 in Bonn), Weber's Text der Taittirīya-samhitā, Roth's und Whitney's Ausgabe des Atharvaveda, und die Prolegomena einer neuen Ausgabe des R̥gveda von H. Oldenberg (in Kiel); Ausgaben von Brāhmaṇas durch Aufrecht, B. Lindner (in Leipzig) und Weber; Texte mit und ohne Uebersetzungen aus der Sūtra-Litteratur von R. Garbe (in Königsberg), A. Hillebrandt (in Breslau), Oldenberg, Stenzler und

Weber u. a. Aber die Veröffentlichung solcher Texte repräsentiert nur einen geringen Theil von dem, was auf vedischem Gebiete in Deutschland gethan ist, und es muss genügen, ausser den schon genannten noch P. von Bradke (in Giessen), B. Delbrück (in Jena), K. Geldner (in Berlin), E. Windisch (in Leipzig), H. Zimmer (in Greifswald), und von nicht mehr lebenden M. Haug (1867 bis 75 in München) und Ad. Kuhn als Gelehrte zu nennen, die ihre Arbeit ausschliesslich oder mit Vorliebe dem Veda zugewandt haben.

Das durch die intensive Beschäftigung mit dem Veda eine Zeit lang zurückgedrängte Studium der schönen und wissenschaftlichen Litteratur Indiens ist in den beiden letzten Jahrzehnten mit erneuter Energie wieder aufgenommen und nicht wenig gefördert durch die besonders G. Bühler zu verdankende Entdeckung vieler wichtiger Werke des indischen Mittelalters, und durch die Liberalität, mit der ihre Handschriften den deutschen Gelehrten von den indischen Regierungen zur Verfügung gestellt sind. Hier sind ausser Textausgaben und kleineren Schriften von Aufrecht und Stenzler zu nennen die Arbeiten von C. Cappeller (in Jena) auf dem Gebiete der Dichtkunst, die von P. Deussen (in Kiel) und Garbe auf dem der indischen Philosophie, die Untersuchungen von A. Holtzmann (in Freiburg) über das Mahābhārata, die Arbeiten von H. Jacobi (in Bonn) über die indische Kunstdichtung, namentlich das Rāmāyaṇa, und über astronomische und epigraphische Fragen, die von J. Jolly (in Würzburg) über das indische Recht, F. Kielhorn's (in Göttingen) Publicationen über indische Grammatik, Epigraphik und Chronologie, R. Pischel's (in Halle) Ausgaben und Untersuchungen auf den Gebieten des Drama und der Poetik, und Th. Zachariae's (in Halle) lexicographische Schriften. Was die Mehrzahl dieser Studien betrifft, so haben der Umstand, dass eine Reihe von deutschen Gelehrten (Haug, Bühler, Kielhorn, Jacobi, Jolly, Garbe, denen sich in neuster Zeit Deussen anschliesst) entweder in amtlicher Stellung in Indien selbst gewirkt oder Studien halber Indien besucht und mit den einheimischen Gelehrten gearbeitet hat, und der Aufschwung, den die indische Epigraphik seit der Begründung des Indian Antiquary genommen hat, dazu beigetragen, allmählich die Methode des Forschens zu ändern und der Wissenschaft neue Ziele zu stecken. Abgesehen davon, dass

der wissenschaftlichen Litteratur Indiens ernstere Aufmerksamkeit geschenkt wird, bildet sich eine neue Richtung, deren Streben es ist mit möglichster Beseitigung subjectiver Elemente das Studium der Litteratur und der Wissenschaften durch eine sorgfältigere Erwägung des indischen Characters und bessere Schätzung der Tradition zu fördern und die Geschichte mit Hülfe der Inschriften zu reconstruieren. Sie verlangt eine genaue und ausgedehnte Kenntniss des classischen Sanskrit, und legt Werth auf Fertigkeit in der Sprache fast eben so sehr wie auf ihre kritische Kenntniss; und sie hält darauf, dass man erst das gründlich lernen soll, was sicher zu lernen ist, ehe man zu dem fortschreitet, wo der Möglichkeiten viele sind. Wesentlich dieselbe Richtung vertreten auf vedischem Gebiete die in neuester Zeit veröffentlichten Arbeiten von Pischel und Geldner.

Hand in Hand mit dieser ernsteren Pflege des classischen Sanskrit, und in den schon erzielten Resultaten vielleicht von grösserer Bedeutung, geht das in neuerer Zeit in Deutschland besonders eifrig getriebene Studium des Pāli und der Prakrits. Das Pāli wurde zuerst grammatisch von Lassen behandelt in dem mit E. Burnouf gemeinsam herausgegebenen „Essai sur le Pāli“ (1826). Nach kleineren Arbeiten von F. Spiegel (in Erlangen) und W. Storck hat dann E. Kuhn (in München) zuerst (1875) die Sprache vom wissenschaftlichen Standpunkte behandelt und Oldenberg die Kenntniss des Pāli durch Herausgabe wichtiger und grosser Texte (Dīpavaṃsa, 1879; Vinayaṭākam in fünf Bänden, 1879—83) gefördert. Einzelne Texte haben auch Pischel und Windisch veröffentlicht. Und auf Grund der alten Texte hat zuerst Oldenberg, der selbst mehrere von ihnen übersetzt hat, im Jahre 1881 eine wissenschaftliche Darstellung der Lehre des Buddha gegeben. — Die Prakritdialekte wurden zuerst in grösserem Umfange dargestellt ebenfalls von Lassen in seinem schon erwähnten grundlegenden Werke „Institutiones linguae pracriticae“ (1837); und später stellte die Behandlung des Prakrit auf philologische Grundlage Stenzler in seiner Ausgabe der Mṛicchakaṭikā (1847). Zwanzig Jahre hernach beschäftigte sich Weber zunächst mit dem Jainaprākṛit in zwei Abhandlungen, die die erste Anregung zur wissenschaftlichen Erforschung der Jainalitteratur überhaupt gegeben haben, an der sich Weber selbst, namentlich durch eine Uebersicht der cano-

nischen Litteratur und durch die ausführliche Beschreibung der von Bühler für die Berliner Bibliothek erworbenen Jainahandschriften, in ausgedehntem Masse betheilt hat. Ihm haben sich besonders Jacobi und E. Leumann (in Strassburg) angeschlossen, sowohl mit Textausgaben und Uebersetzungen wie mit Untersuchungen, durch die das Verhältniss zwischen den Stiftern des Jainismus und Buddhismus und die litterarischen Beziehungen zwischen beiden Religionen klar gelegt werden, während J. Klatt sich besonders der chronologischen Litteratur angenommen hat. Weber hat zuerst auch die Mahārāshṭrī näher bekannt gemacht in seiner Arbeit „Ueber das Saptāṭakam des Hāla“ (1870), der er mehrere ergänzende Abhandlungen und (1881) eine Gesamtausgabe des Hāla folgen liess; und auf gleichem Gebiete sind S. Goldschmidt (1872—84 in Strassburg) und Jacobi thätig gewesen. Das Dramenprakrit, die Çaurasēṇī, hat zuerst Pischel philologisch behandelt, der ausser kleineren Schriften auch die einheimische Grammatik des Hemacandra (1877—80) in Text und Uebersetzung veröffentlicht und (1880) die Deçināmāḷā des Hemacandra bearbeitet hat.

Göttingen.

F. Kielhorn.

Max Müller.

Von

F. Kielhorn.

Am 28. Oktober vergangenen Jahres hat die Königliche Gesellschaft der Wissenschaften ihr auswärtiges Mitglied F. Max Müller durch den Tod verloren. Die wissenschaftliche Thätigkeit dieses hochbegabten und vielseitigen Gelehrten in jeder Richtung zu schildern und richtig zu beurtheilen, würde eine schwere Aufgabe sein; mir, dem viele seiner Arbeiten fern liegen, wäre es unmöglich. Wenn ich dennoch Ihre Geduld für wenige Worte in Anspruch nehme, so geschieht es, weil ich Ihnen eine Idee von den großen, heute oft weniger beachteten Verdiensten geben möchte, die sich Max Müller auf dem beschränkten Gebiete der indischen Philologie erworben hat.

Die erste zuverlässige Beschreibung der Masse indischer Schriften, die mit dem Namen Veda bezeichnet werden, verdanken wir dem englischen Gelehrten Colebrooke, der uns den Zugang zu den meisten Gebieten namentlich der wissenschaftlichen Literatur Indiens eröffnet hat. Aber die Schlußsätze seiner im Jahre 1805 veröffentlichten Abhandlung über die heiligen Schriften der Inder waren wenig geeignet zu einer eingehenden Beschäftigung mit diesen Schriften aufzumuntern. Die Veden sind zu umfangreich für eine vollständige Uebersetzung, und ihr Inhalt würde kaum die Mühe des Lesers, viel weniger die des Uebersetzers belohnen. Ihre Sprache ist außerordentlich schwierig und dunkel; und wenn auch merkwürdig als die Mutter einer eleganteren und verfeinerten Sprache, des classischen Sanskrit, wird sie lange eine Prüfung der Veden verhindern, die uns in den Stand setzen würde, Alles zu erfahren, was seltsam und wichtig in diesen umfangreichen Werken ist. Aber diese verdienen wohl gelegentlich von Orientalisten eingesehen zu werden.

Wenn die vedischen Schriften heute als die Grundlage betrachtet werden, auf der unsre Kenntniß der Sprachen, Religionen und Wissenschaften Indiens sich aufbauen muß, und wenn die von Colebrooke erwähnten Schwierigkeiten zum großen Theile gehoben sind, so ist dies in nicht geringem Maße das Verdienst der deutschen Wissenschaft. Hier in Göttingen werden wir vor allen des zu früh verstorbenen Friedrich Rosen gedenken, der die wahre Bedeutung der Veden zuerst erkannt hat, und der durch seine 1838 nach seinem Tode veröffentlichte Ausgabe und Uebersetzung des ersten Buches des Rigveda uns gezeigt hat, wie Großes wir von ihm hätten erwarten dürfen, wenn ihm ein längeres Leben beschieden gewesen wäre.

Nach Rosens Tode war sein Freund, der französische Gelehrte Eugène Burnouf, zunächst der einzige, der die Tradition der vedischen Studien wach erhielt. In seinen Vorlesungen, die auch von Deutschen wie Goldstücker und Roth besucht wurden, betonte er auf's schärfste den Werth des Veda für die Geschichte der Sprachen und Religionen; und er ist es, ohne dessen Rath und Beistand Max Müller, wie dieser dankbar anerkennt, nicht im Stande gewesen sein würde, das zu unternehmen, was er selbst oft als Hauptwerk seines Lebens bezeichnet hat.

Es war im Jahre 1845, während er die Vorlesungen Burnoufs besuchte, als Max Müllers Gedanken sich zum ersten Male auf eine Ausgabe des Rigveda mit dem indischen Commentare richteten. Vorher hatte er das classische Sanskrit bei Hermann Brockhaus in Leipzig gelernt, auch die erste deutsche Uebersetzung des Hitopadeśa, einer Sammlung von Fabeln, veröffentlicht. Aber seine Ideen von Sanskrit Literatur waren kaum hinausgegangen über Kālidāśas Dichtungen, die epischen Gedichte, die indischen Systeme der Philosophie und die Upanishads. Von diesen hatte er einige für Schelling übersetzt und Commentare dazu abgeschrieben, und er dachte daran, sich ganz diesem Zweige der Literatur zu widmen. Wohlerinnere ich mich, so schreibt er, meines Erstaunens, als Burnouf von diesen Upanishads als Werken sehr geringer Bedeutung sprach, verglichen mit den älteren Theilen des Veda, den Mantras und den Brāhmaṇas. Burnouf las über das von Rosen bearbeitete erste Buch des Rigveda. Er gab Auszüge aus Śāyaṇas Commentar, von dem er ein vollständiges Exemplar besaß, mit Stellen aus dem Nirukta und den Erklärungen desselben, Werken, die damals kaum in Europa bekannt waren. Nach einiger Zeit lieh er Max Müller einige seiner Handschriften, und ermuthigte ihn Stellen daraus abzuschreiben. Es war eine schwere Arbeit;

oft verzweifelte der junge Gelehrte; und ohne Burnoufs Aufmunterung und sein Geständniß, daß auch er nicht Alles in Sāyaṇas Commentare verstehe, würde er nie den Muth gehabt haben, auszuharren. Der Muth hat Max Müller nicht verlassen, und in langen Jahren angestrenzter Arbeit hat er, bei den späteren Bänden von anderen Gelehrten unterstützt, sein großes Werk vollendet. Müssen wir ihm dafür stets dankbar sein, so gebührt unser Dank nicht weniger der Gesellschaft englischer Kaufleute, die dem 24jährigen Ausländer im Jahre 1847 die Mittel für die Ausführung seiner Pläne gewährte. Der erste dicke Quartband von Max Müllers Rigveda ist im Jahre 1849, der sechste und letzte 1874 erschienen.

Heute, nach mehr als 50 Jahren, machen wir uns nur mit Mühe eine Vorstellung von den großen Schwierigkeiten, die Max Müller zu überwinden hatte, ehe er den ersten, ausschließlich von ihm selbst bearbeiteten Band seines Werkes veröffentlichen konnte. Eine Ausgabe bloß des Textes der vedischen Hymnen wäre verdienstlich und verhältnißmäßig leicht gewesen, denn dieser Text ist uns seit mehr als zwei Jahrtausenden auf das sorgfältigste und unverändert überliefert, so daß kein Herausgeber es wagen würde, an dem auch ihm heiligen Texte nur einen Buchstaben zu ändern. Max Müller erstrebte von Anfang an — und dies wird ihm stets zu hohem Ruhme gereichen — die kritische Herausgabe auch des indischen Commentars, nicht in nach Gutdünken gemachten Auszügen, sondern in seinem ganzen vollen Umfange. Ueber den Werth der einheimischen Exegese ist heftig gestritten worden. Auf jeden Fall mußten wir diese sogenannte traditionelle Erklärung der vedischen Texte kennen lernen, die trotz ihrer Mängel allen europäischen Erklärern des Veda grosse Dienste geleistet hat. Als Max Müller an sie herantrat, gab es kein auch nur einigermaßen vollständiges Lexicon, viel weniger Ausgaben der zahlreichen Texte, die der Commentator beständig citirt und ohne deren Kenntniß seine Erklärungen unverständlich oder nicht zu controlliren sind. Heute besitzen wir, außer dem grossen Petersburger Wörterbuch, Ausgaben mit Erklärungen oder Uebersetzungen von Yāskas Nirukta, von den Śrauta- und Ḡṛihya-sūtras und den Brāhmaṇas, und vollständige Texte der umfangreichen grammatischen Literatur, und doch wird Jeder bekennen, daß Sāyaṇas Commentar in allen seinen Theilen dieser Werke nur in mehr oder weniger correcten Handschriften, er mußte ihre Texte sich selbst constituiren und wenigstens die

wichtigsten davon mit Indices versehen, ehe er seine eigentliche Aufgabe in Angriff nehmen konnte. Daß er diese glänzend gelöst hat, wird allgemein anerkannt. Wer wie ich ihn drei Jahre lang beim Rigveda thätig gesehen hat, weiß, wie gewissenhaft er arbeitete, und daß er nicht der Mann war auch nur eine Zeile des Commentars zu drucken, deren Sinn er nicht wohl erwogen gehabt hätte. Besäßen wir auch nur den ersten Band seines Rigveda, wir würden Max Müller zweifellos unter die ersten Sanskritisten des vergangenen Jahrhunderts rechnen müssen.

Von den Werken, die Max Müller noch während der Publication des Rigveda veröffentlicht hat, muß ich wenigstens zwei bahnbrechende Arbeiten nennen — seine sorgfältige Ausgabe des Rigveda-Prātiśākhya, eines Lehrbuchs der Phonetik, das für den Text des Rigveda und unsere Kenntniß des Vedastudiums überhaupt von Wichtigkeit ist, und besonders seine 1859 erschienene Geschichte der vedischen Literatur, die eine Fülle der Belehrungen bot und noch heute nicht übertroffen ist. Der unermeßliche Umfang dieser Literatur, die Unzugänglichkeit ihrer Monumente und der Umstand, daß diese so schwer zu verstehen sind, erheischen ein lange fortgesetztes und unermüdliches Studium, vereint mit ungewöhnlichem Scharfsinn. Es giebt kaum einen anderen unter den Lebenden, der so tief in diesen Schacht hinabgestiegen wäre wie Max Müller, und wir alle schulden ihm Dank nicht nur für das, was er selbst ans Tageslicht gefördert hat, sondern auch für die Wege, die er eröffnet und gebahnt hat für künftige Arbeiten. So urtheilte über die Literaturgeschichte Whitney, dem es sonst an Schärfe des Urtheils Max Müller gegenüber nicht gefehlt hat.

Schon vor der Beendigung des Rigveda hatte sich Max Müller, zum Theil veranlaßt durch seine Stellung in Oxford — er war zuerst Professor der modernen Europäischen Sprachen und seit 1868 Professor der Vergleichenden Sprachforschung — wesentlich anderen Studien zugewendet; und später ist seine große Arbeitskraft nicht wenig in Anspruch genommen durch die Herausgabe der von ihm im Jahre 1876 begründeten, jetzt 50 Bände zählenden Serie von Uebersetzungen der Heiligen Bücher des Ostens. Aber wir verdanken ihm auch in dieser späteren Zeit, wenn vielleicht weniger bleibende Resultate seiner eigenen Arbeit, so doch die mannigfachen Anregungen auf fast allen Gebieten unsrer speciellen Studien. Wie er vom Veda ausgegangen war, so ist der Veda fortgesetzt das Lieblingsstudium seines Lebens geblieben, und wir bedauern darum, daß andere Arbeiten ihn verhindert haben,

seine Kenntniß desselben durch Erklärung und Uebersetzung in ausgedehnterem Maße auch für uns nutzbar zu machen.

Unübertroffen steht Max Müller da durch die Art und Weise, wie er durch seine Essays und in öffentlichen Vorlesungen das Interesse für das alte Indien namentlich in England und bei den Indern selbst zu erwecken und zu fesseln verstanden hat. Er hat sich immer bemüht in dem, womit er sich beschäftigte, die Punkte allgemeineren Interesses herauszufinden; und fast möchte man sagen, daß ihm das Wissen seinen rechten Werth erst dann hatte, wenn er es zum Gemeingut der Gebildeten machen konnte.

Wir Sanskritisten schulden Max Müller noch besonderen Dank, nicht nur dafür, daß er dem Einzelnen stets mit Rath und That zu helfen bereit gewesen ist, sondern auch dafür, daß er seinen großen Einfluß zum Nutzen unsrer Wissenschaft auszuüben sich bemüht hat. In seinem bezaubernd liebenswürdigen Wesen Jedem zugänglich, hat er Viele zu Arbeiten angeregt, Manchem den Weg nach Indien eröffnet; und wenn die Jüngeren unter uns die ihnen von den indischen Regierungen nach Deutschland geschickten Handschriften jetzt leichter und bequemer benutzen als die unsrer eigenen deutschen Bibliotheken, so mögen auch sie dankbar des Mannes gedenken, auf dessen Anregung die Erforschung der Bibliotheken Indiens und die Sicherstellung ihrer Schätze zurückzuführen sind.

VI. Sanskrit.

Unter den deutschen Universitäten ist Bonn die erste, an der die Sanskritstudien Aufnahme in den Lehrplan gefunden haben. Im Sommer 1819 kündigte A. W. von Schlegel zum erstenmal eine Vorlesung über indische Altertümer und Literatur an, in der Folge regelmäßig Anfangsgründe des Sanskrit, Erklärung des Rāmāyaṇa, des Hitopadeśa, der Bhagavadgītā usw. Heute wird das Sanskrit an jeder der 21 deutschen Universitäten, an allen zusammen von mehr als 40 Dozenten gelehrt. Von dieser Zahl dürften jedoch etwa 15 genauer als Lehrer der vergleichenden Sprachwissenschaft zu bezeichnen sein, während anderseits an einigen Universitäten die eigentlichen Sanskritisten durch Lehrauftrag verpflichtet sind, auch die vergleichende Sprachwissenschaft in Vorlesungen zu behandeln. Die Zahl der Studierenden, die sich mit Sanskrit beschäftigen, ist an den verschiedenen Universitäten sehr verschieden. Überall können nur wenige sich dem Studium der indischen Philologie ausschließlich widmen und die Lehrer des Sanskrit haben deshalb nur vereinzelt Gelegenheit, Spezialisten auszubilden. Die Anzahl der klassischen Philologen, Germanisten, Studierenden der neueren Sprachen usw., die wenigstens die Anfangsgründe des Sanskrit erlernen und einen flüchtigen Blick in die Kulturwelt Indiens werfen wollen, wechselt je nach dem Werte, der der fremden Disziplin von den Lehrern der klassischen Philosophie usw. beigemessen wird. Zur Zeit des klassischen Philologen G. Curtius, der sehr zur Erlernung des Sanskrit ermunterte, hatte der Sanskritist Brockhaus in Leipzig mehr als 40 Zuhörer in seinem grammatischen Kolleg, während ausgezeichnete Lehrer anderer, selbst großer Universitäten sich mit 3 oder 4 begnügen mußten. Noch heute sind die Verhältnisse wesentlich dieselben; neben 25 Zuhörern in München finden wir anderwärts verschwindend kleine Zahlen.

Die Tätigkeit des Lehrers wird bedingt durch die Art der Schüler, die seine Vorlesungen besuchen. Wäre er unabhängig von äußeren Verhältnissen, so würde der Sanskritist wohl überall zu-

nächst einen bestimmten Kursus von drei oder vier Semestern durchzuführen suchen, dessen Ziel eine im ganzen sichere Beherrschung des klassischen Sanskrit und eine allgemeine Bekanntschaft mit der Ideenwelt der klassischen Zeit sein würde. In diesem Kursus würde der Reihe nach die Anfangsgründe mit Übungen im Übersetzen aus dem Sanskrit ins Deutsche und vice versa, epische Stücke und Fabeln, schwerere Prosa, einige Gesänge verschiedener Kunstgedichte mit leichten einheimischen Kommentaren, und ein Drama zu behandeln sein. Reifere Schüler würden dann nach Umständen in das eine oder andere Gebiet der eigenartigen wissenschaftlichen Literatur Indiens, den Veda, das Studium der Inschriften, des Prākṛit und Pāli usw. eingeführt werden. Da aber die meisten Zuhörer nur wenig Zeit für das Sanskrit erübrigen und sich selten länger als zwei Semester damit beschäftigen können, so nehmen in Wirklichkeit die für Anfänger gehaltenen Vorlesungen, die Elemente der Grammatik und die Erklärung leichter Texte, im Lehrplane den bei weitem größten Raum ein. Hierbei ist zu bemerken, daß mit Rücksicht auf die Zwecke der Zuhörer in den Vorlesungen über Grammatik die Ähnlichkeiten zwischen dem Sanskrit und den verwandten Sprachen gewöhnlich auch von den eigentlichen Sanskritisten mehr oder weniger hervorgehoben werden. Die Erklärung der Texte findet von Anfang an in der Form von Übungen statt, für die der Schüler sich vorzubereiten hat; und wo aus dem Deutschen ins Sanskrit übersetzt wird, werden schriftliche Arbeiten verlangt, durch die die grammatischen Regeln und Formen dem Gedächtnis am besten eingeprägt werden. Als erstes Lehrbuch der Grammatik und für die Lektüre leichter Texte wird meistens Stenzlers Elementarbuch der Sanskrit-Sprache, umgearbeitet von Pischel, an einigen Universitäten Geigers Elementarbuch benutzt; für Übungen besonders zum Übersetzen ins Sanskrit dient Bühlers Leitfaden für den Elementarkursus. Zur Vervollständigung der grammatischen Kenntnisse wird namentlich für sprachvergleichende Zwecke Whitneys Grammatik empfohlen. Wo die in den Handbüchern gegebenen Texte nicht ausreichen sollten, wird in der Regel Böhlingks Sanskrit-Chrestomathie zu Hilfe genommen, wobei dann für die Präparation Cappellers Sanskrit-Wörterbuch benutzt wird. Im ganzen wird der fleißige Zuhörer — und an Fleiß fehlt es nicht — nach zwei Semestern mit den Elementen des Sanskrit vertraut und imstande sein, einen leichten Text ohne besondere Hilfe des Lehrers zu erklären. — Für die nächsten Semester bieten die Vorlesungsverzeich-

nisse eine lange Reihe von hier nicht einzeln aufzuführenden Schriftwerken aus allen Gebieten besonders der sogenannten schönen Literatur, deren Erklärung auch hier in konversatorischer Form vor sich geht und an den Zuhörer große Anforderungen stellt. Dabei wird dem Studierenden Gelegenheit gegeben, sich einen Einblick in gewisse Zweige der wissenschaftlichen Literatur, in erster Linie das System der indischen Grammatik und das Alamkāraśāstra, zu verschaffen, ohne die ein Verständnis der einheimischen Kommentare, deren Wert immer mehr anerkannt wird, unmöglich ist. Zugleich wird er bei der Erklärung der Dramen in das Studium des Prākṛit eingeführt. Im übrigen fehlt es für die oft sehr kleine Zahl der noch weiter Fortgeschrittenen nicht an Vorlesungen, in denen gemäß den Spezialstudien und Neigungen der Lehrer die indische Grammatik, einzelne Systeme der indischen Philosophie, das indische Recht, Epigraphik, Prākṛit und Pāli usw., immer zusammen mit der Erklärung entsprechender Texte, besonders gelehrt werden. An die Vorlesungen über Werke der klassischen Literatur schließen sich ferner exegetische Vorlesungen über den Veda, besonders den Rigveda und ausgewählte Abschnitte der Brāhmaṇas, in denen bei ersterem zunächst gewöhnlich Hillebrandts Vedachrestomathie zugrunde gelegt, später M. Müllers Ausgabe des Rigveda mit dem indischen Kommentare benutzt wird. Neben den exegetischen Vorlesungen werden endlich auch solche über Literatur-, Kultur-, Religionsgeschichte, Altertümer usw. gehalten, doch nehmen sie im Lehrplan einen bescheidenen Raum ein und sind zum Teil auch für Nicht-Sanskritisten berechnet.

Der Studierende soll durch den Unterricht zu selbständiger wissenschaftlicher Arbeit befähigt werden, als deren Grundbedingungen in erster Linie eine sichere Kenntnis der Sprache und aus eigener Lektüre gewonnene möglichst ausgedehnte Bekanntschaft mit der indischen Literatur zu betrachten sind. Diese können nur durch ausdauernden Fleiß erworben werden, und das Studium wird noch erschwert dadurch, daß die notwendigen Hilfsmittel oft sehr teuer und nicht leicht zu beschaffen sind. Glücklicherweise suchen die Universitätsbibliotheken ihren Bestand an Werken der indischen Philologie immer mehr zu vergrößern und gestatten ihre Benutzung in liberalster Weise auch außerhalb der Bibliotheksräume. Außerdem sind in den letzten Jahren an einigen Universitäten Seminare mit besonderen Handbibliotheken für Sanskritisten errichtet worden, und es ist zu erwarten, daß diese nützliche Einrichtung bald eine allgemeine sein wird.

F. Kielhorn.

CENTENARY REVIEW OF THE ASIATIC SOCIETY OF BENGAL, FROM 1784 TO 1884. Published by the Society, (Calcutta: Printed by Thacker, Spink and Co., 1885). 8vo.—Part I. History of the Society, by Dr. RAJENDRAL MITRA, LL.D., C.I.E., pp. 1-35.—Part II. Archaeology, History, Literature, etc., by Dr. A. F. RUDOLF HOERNLE, pp. 216 and ciii.—Part III. Natural Science, by BAROO P. N. BOSE, pp. 109 and xvi. With Proceedings of the Special Centenary Meeting, pp. 20.

"A hundred years have elapsed—a century of arduous and unremitting labour, and the time has now arrived for a review of the progress made and of the services rendered to the cause of literature and science by the Asiatic Society of Bengal since its foundation." Such are the opening words of the valuable volume before us, a volume which we owe to the united labours of Dr. Rajendral Mitra, Dr. A. F. Rudolf Hoernle, and Mr. P. N. Bose, and which will be received with gratitude by all who take an interest in India and in Oriental studies generally. The Asiatic Society of Bengal may indeed be proud of what it has accomplished since the days of its foundation; and its centenary festival could not have been celebrated in a more fitting manner than by placing before the world a record of the names and labours of its distinguished members, who—few of them trained to be scholars or Orientalists by profession—have opened up new fields of inquiry, have made discoveries which must ever rouse the grateful admiration of later generations, and have laid the foundations of many branches of study, which, thanks to their genius and painstaking toil, we are prosecuting with ease, and with some hope of completing the building designed by them. But there was another, if we may say so, more practical reason why such a record, as has now been presented to us, should have been written. The *Researches*, the *Journal*, and the *Proceedings* of the Society fill, we are told, no less than 103 volumes. "These 103 volumes represent, roughly speaking, a total of 50,000 pages of

closely printed matter, replete with innumerable essays, papers, monographs, and notes of great interest." By most men these volumes can be consulted only in one of our large public libraries; and a scholar interested in any particular subject in coins or inscriptions, language or literature, manners or religion, geology or geography, &c., even when within reach of one of the centres of learning, has had to search through many volumes in order to ascertain what, or where, or whether anything had been written on it in this Society's journals. Such search, if not rendered altogether unnecessary, has now been at least greatly facilitated by this *Centenary Review*.

As has been suggested above, the *Review* consists of three parts. In the first part Dr. Rajendral Mitra has sketched what may be called the outward history of the Society; how it was founded by Sir W. Jones; what rules were made from time to time regarding the election of members, their contributions, meetings, &c.; how the Society acquired a house of its own, and founded and extended its library; what gifts were made to it of coins, inscriptions and other objects of interest; how it created the finest Museum in India, undertook the completion of a series of valuable works, the printed sheets of which had been directed by Government "to be sold as waste paper," gave its liberal assistance to Oriental publications of all kind, and particularly established and successfully carried on the *Bibliotheca Indica*, &c. Towards the end Dr. R. Mitra has given brief personal notices of some of the most renowned scholars with whom the fame of the Society is intimately associated, of Sir W. Jones, F. H. Colebrooke, Sir Charles Wilkins, H. H. Wilson, James Prinsep, R. H. Hodgson, and others; and in four appendices he has added a statement showing the number of members from time to time, a list of the officers of the Society from 1784 to 1884, a list of the books published directly or indirectly by the Society, and finally a valuable alphabetical index of the papers and contributions to the *Asiatic Researches* and the *Journal and Proceedings* of the Society.

The literary work done by members of the Society or under its auspices has been more fully detailed in the second and third parts of the *Review*, the former composed by Dr. A. F. Rudolf Hoernle and the latter by Mr. P. N. Bose. Dr. Hoernle has arranged the matter which fell to his share under the heads of Antiquities, Coins, Ancient Indian Alphabets, History, Languages and Literature; and Mr. Bose has described the achievements in Mathematical and Physical Science, Geology, Zoology, Botany, Geography, Ethnology, and Chemistry. Under similar headings both scholars

have appended to their own account and estimate of what has been done, accurate classified indices of all the papers in the Society's publications arranged in the order in which they have been published,—indices which will prove of very great value to future inquirers. That both Dr. Hoernle and Mr. Bose have had to go through an immense amount of reading is evident from the innumerable references which are crowded together in the pages of their reviews. It is equally certain that what they have done has been a labour of love to themselves, and that they will earn the gratitude of many scholars for what they have so successfully accomplished.

Where three men have done so much to insure our grateful acknowledgment of their services, it would seem invidious to single out one of them for particular praise. But there can be no doubt that, of the scholars named, it is Dr. Hoernle, whose task has been the most laborious; just as it is his share of the work which will prove of the greatest interest to most readers of the *Indian Antiquary*. The great discoveries which form the foundation of our knowledge of the history of Ancient India, the decipherment of the Indian alphabets which will ever render illustrious the names of men such as James Prinsep and Alexander Cunningham, and the researches of Prinsep, Thomas, and others, into the coinages of various Indian dynasties, were indeed sure to prove attractive themes to a scholar who combines accuracy in details with a wide range of reading; and the account which he has given of them will in turn be regarded as perhaps the most attractive portion of this *Centenary Review*. That opinions should differ regarding some of the statements made by Dr. Hoernle, and the views suggested by him, is only natural, when we remember how fragmentary is our knowledge of the history of India, and how often new discoveries force us to cast aside what were before accepted facts. It is true that some scholars do consider A. D. 168 as the initial year of the Gupta era, and that some do place the accession of Kanishka A. D. 78; though an impartial examination of all the evidence available would appear to prove that the Gupta era really commenced A. D. 319, and that Kanishka must have reigned long after the date assigned to him. But such and similar details in no wise detract from the value of the work before us; and the writer of this notice feels sure that all readers will join him in thanking both those who designed, and those who were directly instrumental in bringing about the publication of the *Centenary Review* of the Asiatic Society of Bengal.

F. KIELHORN.

BOOK NOTICES.

THE ROOTS, VERB-FORMS, AND PRIMARY DERIVATIVES OF THE SANSKRIT LANGUAGE, by W. D. WHITNEY. A supplement to his Sanskrit Grammar. Leipzig, Breitkopf and Hartel; London, Trübner & Co. 1885. 8vo. pp. xiii. & 250.

Highly as we value the works of the native grammarians, and convinced as we are that to them is mainly due that rapid progress which the study of Sanskrit has been making during the last century, we may yet, without fear of being misunderstood, venture to say that the time has arrived when their teaching should be subjected, by a comparison with the actual usage of the language, to a thorough and searching examination. No one who has given any serious thought

to the subject, would suggest that those ancient scholars of India, whose labours have been served by Pāṇini, Kātyāyana, and Patañjali, would willingly have misled us, or would have invented rules which they did not believe to be warranted by the language as known to them. At the same time it is possible that, in their attempt to analyse and explain the facts of the language, they may have arrived at conclusions which cannot be upheld; that their desire to generalise may have led them to lay down rules which, true in individual cases, would, if generally observed, give rise to forms or expressions that have never been in actual use; and that the

commentators may have given a meaning to their dicta which was not intended by those who originated them. Moreover, it cannot be denied, that the ancient idiom of the Vedas has not received from the grammarians that careful attention and minute description which it deserves, and that their labours here at any rate must be supplemented by modern research.

But a comparison of the teachings of the grammarians with the usage of the language during its consecutive periods is likely to furnish valuable results in another direction. If it be true, that the grammarians were not like potters who fabricate their wares for those who demand them, if what they aimed at was by means of rules and exceptions to explain the existing words of the language, a careful examination and comparison of the extant literature should reveal what works must have been known to the grammarians, and assist us in fixing more accurately the place which they hold in Sanskrit literature.

It is from such considerations as these, that we welcome the appearance of the valuable work, the result of years of patient labour, by which Prof. Whitney has laid under deep obligations all who are interested in the study of Sanskrit grammar. The book is intended, to use the author's own words, especially as a Supplement to his Sanskrit Grammar, giving, with a fulness of detail that was not then practicable, nor admissible as part of the grammar itself, all the quotable roots of the language, with the tense and conjugation-systems made from them, and with the noun and adjective (infinitival and participial) formations that attach themselves most closely to the verb; and further, with the other derivative noun and adjective-stems usually classed as primary: since these also are needed, if one would have a comprehensive view of the value of a given root in the language. So far as the information at present available allows, everything given is dated, — whether found in the language throughout its whole history, or limited to a certain period. Vēda, Brāhmaṇa, Sūtra, Upanishads, epic poetry, or so-called classical Sanskrit. Of the forms taught by the grammarians, which have not yet been met with in actual use, a liberal presentation is made under the different roots: such material being always distinguished from the rest by being put in square brackets. In addition to this regular *Distupāṭha*, the author has given indexes of tense and conjugation-stems, from which it becomes at once apparent, whether a particular stem is found only in the earlier or only in the later language, or occurs in both; and an index of roots, arranged in reversed alphabetical order, under which we find the interesting note, that “of

the more than 800 roots here recorded as making forms of conjugation, nearly 200 occur only in the earlier language, nearly 500 in both earlier and later, and less than 150 only in the later language.”

For the later periods of the language Prof. Whitney has drawn his information mainly from the St. Petersburg Dictionary; but in the older language he has done much more independent work. He has, namely, himself “gone over all the texts of the earlier period accessible to him, including the as yet unpublished Kaushtaki-Brāhmaṇa and Kāthaka, and the immense Jainīniya or Talavakāra-Brāhmaṇa, which has as yet hardly been accessible to any one else; and from them he has excerpted all the noteworthy verbal forms and (less completely) the primary derivatives; thus verifying and occasionally correcting the material of the Lexicon, supplying chance omissions, and especially filling in not a few details which it had not lain in the design of that work to present in their entirety.” The forms taught by the native grammarians have been given chiefly on the authority of Westergaard's *Radices*, and for this reason a few wrong forms, which had found their way into that very accurate work, have here also been repeated.

Without entering into details, for which this is not the place, we venture to maintain that Prof. Whitney's book will prove of the greatest service not only to the student of Sanskrit generally, but also to those who more particularly have turned their attention upon the works of the native grammarians. To the latter the accurate and full collections contained in the work will probably suggest additional reasons for the belief that the so-called grammarian's dialect accords in a most curious manner with the language of what Prof. Whitney calls the language of the Brāhmaṇa period.

F. KIELHORN.

THE KIRĀTĀRĀJUNĪYA OF BHARAVI, with the COMMENTARY OF MALLINĀTHA. Edited with various readings by N. B. GODABOLE, B.A., and K. P. PARABA. Printed and published by the proprietor of the Nirṇaya-Sāgara Press. Bombay: 1865.

Of the private publishing-firms of Bombay, none seems more anxious than is the Nirṇaya-Sāgara Press, to furnish the student of Sanskrit with clearly printed, well got up, and moderately priced editions of the classical works of Sanskrit literature. The list of books already brought out by that press, includes amongst others several works of Kālidāsa, the *Ratnāvalī*, the *Duśakund-racharita*, and the *Kirātārjunīya*. Other works are in the press; and more are to follow, if sufficient assistance and encouragement be given by the public. The principal editors appear to be Mr. K. T. Paraba, and Mr. N. B. Godabole, B.A., and, if I remember rightly, formerly a Jagannath Shankershet scholar of the Bombay University. In Europe it is unfortunately somewhat difficult to get hold of books published in India. But having succeeded in procuring a copy of the *Kirātārjunīya* brought out by the Nirṇaya-Sāgara Press, I consider it right both to the public and to the enterprising publishers, to state plainly what opinion I have arrived at by an examination of a portion of this 'Edition.'

In a few words, it is this, that Messrs. Godabole and Paraba have given us in this 'edition' little more than a reprint of a Calcutta print;—that, as regards the commentary, they have taken no great trouble to understand what they have handed to their printers;—and that, for the part which I have had the patience to study, they do not appear to have consulted a single one of the many MSS. which must have been within reach.

A few examples out of many may prove this:—(1) On II. 19, in which verse the word गत्वर occurs, we read the note "गत्वरश्च" इति कसन्तो निधानः. At first, we are inclined to consider कसन्तो, as a misprint for कवरन्तो. but when we find the same misprint in the Calcutta Edition of 1875, we begin to suspect that the Bombay Editors have copied.

On II. 7 Mallinātha is made to say "अस्तिर्भवति-परः प्रथमपुरुषे ऽप्रभुत्वमानो ऽप्यस्ति" इति भाष्यकारः । भवतीति लटः पूर्वाशर्वाभ्यां संज्ञा. Here there are three mistakes. भवतिपरः should have been भवन्तीपरः;

प्रथमपुरुषे, प्रथमपुरुषो; and भवतीति, भवन्तीति. The same mistakes occur in the Calcutta Ed. of 1875; but the Bombay Editors have corrected a fourth mistake of that edition.

On II. 17 we have the note उक्तं च न्यासा-होतेन—'केवलं भूयमाणैश्च क्रियानिमित्तं कारकभाव-स्यापि तु गम्भयानस्यापि' इति. The Editors have copied from the Calcutta Ed., but, trying perhaps to give some sense to the passage, they have added a mistake in compounding the two words क्रियानिमित्तं of that edition. It should of course have been उक्तं च न्यासाहोतेन—'न केवलं भूयमाणैश्च क्रिया निमित्तं कारकभावस्यापि तु गम्भयमानापि' इति.

The Commentary on II. 27, as printed in the Bombay Edition, is a regular mine of mistakes. In the first place, a well-known definition has been, with two mistakes, thus copied from the Calcutta Ed.—अर्थैकवादेकवाक्यं सापेक्षा चंद्रिभाग-स्यात्. Secondly the interpunctuation of the whole passage, in which Mallinātha discusses the compound अर्थगौरव, shows that the passage has not been understood; and the words सुहृद् for शत्रुः and बलाकायां for बलाकायाः prove that the Editors have again been copying. And lastly, the final remark अत एवाह वायनः—'अत्र पीतिमादिषु गुणवचनसमासो बली स्यात्' इति shows, not merely they have been copying, but also that they have taken no trouble to understand what they were putting before the public. Had they made any attempt to do so, they would probably have discovered that the words अत्र पीतिमादिषु of the Calcutta Ed. stand for पञ्चपीतिमादिषु, and बली स्यात् for बालिव्यात्.

Proof of copying may also be afforded by आक्रमति for आक्रामति on II. 20; by the sign of interpunctuation before कर्तृस्थे on II. 35; by लक्ष्म्याः for लक्ष्म्या, on II. 39; and by other mistakes which have been reprinted.

To give the editors their due, I must add that they have appended to their edition an alphabetical index of the verses of the *Kirātārjunīya*.

On the whole, the first edition of the *Kirātārjunīya*, published at Calcutta in 1814, may be said to be still the best. Many of its mistakes have been repeated, while others have been added, in the later editions. May we hope that the Superintendents of the Bombay Sanskrit Series will arrange to put us in possession of a trustworthy and correct text of Mallinātha's excellent commentary on a poem which, for many reasons, is one of the most important and attractive works of the classical literature of India?

F. KIELHOEN.

Göttingen.

Bihâr Peasant Life, being a discursive catalogue of the surroundings of the people of that province. With many illustrations from photographs taken by the author. Prepared, under orders of the Government of Bengal, by George A. Grierson, B.C.S. Calcutta: the Bengal Secretariat Press; London, Trübner & Co. 1885. 7, VI, 431, XVII, u. CLV S. Lex. 8°. 15 Shillings.

Die litterarische Thätigkeit des Verfassers zeigt uns, wie hohe Verdienste sich der europäische Beamte in Indien noch immer um die Kenntnis der Sprachen und Sitten des Landes erwerben kann, wenn er die Gelegenheiten, die sich ihm im täglichen Leben darbieten, zu nützen versteht, und mit Hingebung an die Interessen des Volkes einen offenen Blick und Verständnis für seine Eigentümlichkeiten verbindet.

Mr. Grierson erhielt seine erste Anstellung im Bengalischen Civildienste im Jahre 1873. Im folgenden Jahre von Calcutta nach Tirhut in Bihâr versetzt, das damals von einer Hungersnot heimgesucht war, die es den Beamten zur Pflicht machte, sich von den Verhältnissen der Landbewohner aufs genaueste zu unterrichten, fand er es unmöglich, sich dem Volke mittelst des Bâgh o Bahâr Ūrdû verständlich zu machen. Nicht besser ergieng es ihm mit dem Prem-sâgar Hindî, und es blieb ihm nichts übrig als die Sprache vom Volke selbst zu lernen, so gut es gieng. Später stellte es sich heraus, daß der Dialekt, den er sich so, zunächst für Zwecke der Konversation, angeeignet hatte, das Maithilî gewesen war, eine

Gött. gel. Anz. 1886. Nr. 5.

Sprache, welche die Europäer in Bihâr Gâonwârî nannten, und die allgemein aber fälschlich für ein verderbtes Hindî gehalten wurde. Damals scheint Mr. Grierson noch nicht den Wert und die Bedeutung des Schatzes erkannt zu haben, den er sich erworben hatte.

Im Herbste des Jahres 1874 wurde er wieder nach Howrah (Calcutta) zurückversetzt, und wir finden ihn nun einige Jahre lang als Beamten in Howrah, Murshidâbâd, und Rangpûr, neben seinen officiellen Arbeiten Sanskrit treibend und sich ernstlich mit dem Studium des Bengâlî beschäftigend. Seine Thätigkeit in dem letztgenannten Distrikte veranlaßte ihn, auch der Sprache Assams seine Aufmerksamkeit zuzuwenden, und als das Resultat seiner damaligen Studien veröffentlichte er zwei Aufsätze über den Rangpûr Dialekt und eine Ausgabe und Uebersetzung des Gesangs des Mânichandra. Es waren diese Arbeiten, welche ihn ganz dem Studium der Indischen Volkssprachen zuführten.

An Rangpûr Fieber erkrankt, gieng er gegen Ende des Jahres 1877 nach Madhubanî, einer Unterabteilung des Tirhut-Distrikts von Nord-Bihâr. Dort fand er die beste Gelegenheit seine Kenntnis des Maithilî zu vervollkommen, und er war nicht wenig erstaunt von der Existenz einer reichhaltigen Maithilî-Litteratur Kunde zu erhalten, die sich bis etwa zum Jahre 1400 n. Ch. zurückverfolgen ließ. Die Pandits waren erfreut darüber, daß sich endlich ein Europäer gefunden hatte, der sich für ihre Sprache und Litteratur interessierte; sie halfen so viel sie konnten, und das Ergebnis war, daß Mr. Grierson schon im Jahre 1880 als Extranummern des Journals der Asiatischen Gesellschaft von Bengalen zwei Bände veröffentlichten konnte, die eine Maithilî-Grammatik, Chrestomathie, und Glossar enthielten.

Während dieser Zeit schrieb er auch mehrere Aufsätze für die Calcutta Review, in denen er zu zeigen suchte, wie wünschenswert es sei die eigene Sprache Bihârs als officielle Sprache bei den Gerichten des Landes einzuführen, an Stelle des Ūrdû, das vom Volke nicht verstanden wird. Fand Mr. Grierson auch mit diesem Vorschlage noch kein Gehör, so sah er seine Wünsche doch in einer andern Richtung erfüllt. Die Regierung beschloß nämlich die Abschaffung der Persischen und befahl die Einführung der Kayathî- oder Kaitbî-Schrift in Schulbüchern und gerichtlichen Dokumenten. Allerdings war dies nur eine Art Abschlagzahlung, aber es wurde durch diesen Beschluß wenigstens der Gebrauch der im Volke allein üblichen Schreibweise von Staatswegen sanktioniert. Es würde zu weit führen, wollte ich auseinandersetzen, welche Verdienste Mr. Grierson sich in dieser Sache erworben, welcher Arbeit er sich unterzogen

hat die Ausführung des Beschlusses der Regierung zu ermöglichen und zu beschleunigen. Das mir vorliegende Aktenstück zeigt, wie hoch seine Thätigkeit von der Regierung von Bengalen geschätzt wurde.

In Madhubanî und auf den Reisen, welche er im Interesse der Schriftreform zu unternehmen hatte, fand Mr. Grierson Gelegenheit, sich eine Kenntnis auch der andern Hauptdialekte Bihârs, des Bhojpûrî, Magahî, und Baiswârî zu erwerben. Er erkannte nun, daß alle diese Dialekte einer Sprachgruppe angehörten, die sich aus dem ältern Ardha-Magadhî entwickelt hat, und, sobald sein 'Handbook of the Kayathî character' beendet war, zögerte er nicht der Regierung den Vorschlag zu machen, Alles zu sammeln, was für die Kenntnis und richtige Beurteilung der Bihârî-Dialekte von Bedeutung sein könnte. Der Vorschlag wurde bereitwillig aufgenommen und Mr. Grierson autorisiert, Grammatiken sämtlicher Dialekte auf Kosten der Regierung zu veröffentlichen. Drei dieser Grammatiken sind bereits erschienen, andre im Drucke. Daneben veröffentlichte Mr. Grierson Ausgaben und Uebersetzungen von Manbodhs Haribans in Maithilî-Versen, the Song of Âlbâs marriage in Bhojpûrî, die Gît Râjâ Gopî Chand, eine Ballade in Magahî, einen längeren Artikel über Vidyâpati, den berühmtesten der alten Meistersänger Bihârs, und zahlreiche andre Aufsätze.

Daß Mr. Grierson bei seinen Studien über die Volkssprachen Bihârs in nahe Beziehungen zu einem der vortrefflichsten Kenner der Prâkrîtsprachen Indiens, zu unserm Landsmanne Dr. Hörnle in Calcutta, treten mußte, versteht sich von selbst. Ebenso natürlich ist es, daß beide Gelehrte es unternommen haben, zusammen das großartig angelegte Vergleichende Lexikon der Bihârî-Sprache zu bearbeiten, das sie mit Unterstützung der Regierung von Bengalen herausgeben, und von dem vor kurzem das erste Heft erschienen ist.

Daß es Mr. Grierson möglich gewesen ist, alles was ich mit kurzen Worten zu schildern versucht habe, in wenigen Jahren als Civilbeamter ¹⁾ neben seinen officiellen Arbeiten zu Stande zu bringen,

1) Mr. Grierson gehört dem Zweige des Indischen Civildienstes an, dessen Mitglieder 'Collector-Magistrates' genannt werden. Wie der Name besagt, sind die Pflichten eines solchen Beamten wesentlich zwiefacher Natur. Er ist ein fiskalischer Beamter, der die Steuerzahlungen jeder Art zu überwachen hat; er ist auch Richter in Civil- und Kriminalen. Aber der Titel erschöpft keineswegs seine mannigfaltigen Pflichten. Seine Thätigkeit richtet sich auf Alles, was in England im Bereiche des Home Secretary liegt; seine Verantwortlichkeit ist größer, insofern er der Repräsentant einer väterlichen, nicht einer konstitutionellen Regierung ist. Polizei, Gefängnisse, Unterrichtswesen, Municipalitäten,

ist wahrhaft wunderbar, und zeugt auf jeden Fall von eisernem Fleiße, von Mr. Griersons Gewohnheit stets zu sammeln und das gesammelte systematisch zu ordnen, von der innigsten Hingabe an die Interessen des Volkes, und von dem Eifer der Eingebornen dem, der ihre Sprache zuerst in ihre Rechte eingesetzt hatte, zu helfen und seine Studien zu fördern. Nur daraus, daß Mr. Grierson wirklich solche Eigenschaften in hohem Grade besitzt, und daß er sich die Zuneigung und das Vertrauen des Volkes wie wenige Europäer erworben hat, können wir uns auch die Entstehung und Vollendung des Werkes erklären, welches mir Anlaß zu diesen Bemerkungen gegeben hat, seines 'Lebens der Bibâr Bauern'. Dieses Werk gibt uns in Form eines Katalogs eine bis in die geringfügigsten Details gehende Beschreibung alles dessen, was den Landbewohner in allen Beziehungen des Lebens umgibt, eine Beschreibung seiner Ackerbaugeräte, seiner Art zu säen und zu ernten, seiner Wagen und Tiere; es beschreibt die auf dem Lande betriebenen Handwerke; belehrt uns über die Einrichtung des Hauses und über Alles was darin und darum ist, über Kleidung und Schmuck des Landvolks, über seine Sitten bei Hochzeit, Geburt und Tod, über die Arten des Bodens und seiner Bebauung, — kurz, über Alles, wonach wir nur fragen möchten. Es erklärt, um es in wenigen Worten zu sagen, etwa 11,000 Ausdrücke und Redensarten, die sich auf das Leben und die Umgebung des Bauern beziehen oder von ihm gebraucht werden. Eine eingehende Kritik an dem umfangreichen Werke zu üben, steht mir nicht zu. Ein jedes Wort ist dem Munde des Bauern entnommen und an Ort und Stelle niedergeschrieben; die so gemachten Sammlungen sind später in ihren Einzelheiten sorgfältig geprüft; und endlich sind die Druckbogen des Buches der Kritik kompetenter Personen in den verschiedenen Teilen Bibârs unterworfen worden. Der Verfasser darf mit Recht versichern, daß er keine Mühe gescheut hat, sein Werk so zuverlässig wie möglich zu machen.

Straßen, gesundheitliche Verhältnisse, lokale und kaiserliche Steuern sind Dinge, mit denen er täglich zu thun hat. Er soll sich mit jeder Phase des socialen Lebens der Eingebornen, mit allen natürlichen und lokalen Verhältnissen seines Distrikts bekannt machen. Die durchschnittliche Größe eines Distrikts beträgt etwa 3800 Englische Quadratmeilen, seine Einwohnerzahl etwa 800,000. Man vgl. W. W. Hunter, the Indian Empire, p. 332; und Sir R. Temple, India in 1880, p. 46.

F. Kielhorn.

BOOK NOTICE.

KAVYAMĀLĀ, a collection of old and rare Sanskrit Kāvya, Nāṭakas, Champūs, Bhūgas, Prahasanas, Chandas, Āṅkāsas, etc. Edited by PANDITA DURGA PRASĀDA and KASHINATHA PANDURANGA PANDITA. Printed and published by the Proprietor of the Nirmaya-Sāgara Press, Bombay. Parts I.-VI., January to June 1886.

In a short notice of an edition of the *Kirātārjunīya* (ante, page 156) I have already expressed the opinion, that no Indian publishers have during late years done more for Sanskrit literature than the proprietor of the Nirmaya-Sāgara Press of Bombay, and I have mentioned the titles of some of the works published by that firm. Since then I have had occasion to inspect the editions, brought out by the same press, of several of Kālidāsa's works, and to examine more carefully, and with very great pleasure, an edition by Paṇḍit Durgāprasāda of Trivikramabhaṭṭa's *Damayantī-kathā*, and a handy and useful copy of the *Siddhāntakāvaṇudī*. About some of these works I may perhaps venture to write more fully on a future occasion. At present, I wish to express to the enterprising publisher and to the learned editors Paṇḍit Durgāprasāda and Kāśnāth P. Paṇḍita my best thanks for having started the journal, to which they have given the appropriate title *Kāvya-mālā*, and to draw the attention of European scholars to this most interesting and useful publication.

The *Kāvya-mālā* is devoted to the poetical literature of the Indian middle ages. It is intended mainly for the publication of such Sanskrit Kāvya, Nāṭakas, Champūs, works on rhetorics and metrics, etc., as have not hitherto been generally accessible. The more extensive works published in it are accompanied by the best commentaries that were available; and, in the case of works printed without running commentaries, short footnotes have been added by the editors for the elucidation of difficult or unusual words or phrases. Besides, in introductory notes an attempt has been made to fix the time of each writer and to give a list of his works. Each number consists of 96 octavo pages of closely but clearly printed matter, and contains portions varying from 12 to 24 pages of more extensive works, while the rest of the number is made up by shorter works. The pagination of these shorter works is continuous, but the pages of every larger work are numbered separately, so that each work, when finished, may be bound up by itself. The annual subscription is exceed-

ingly moderate, amounting to six rupees; and, in the interest of intending European subscribers, I would only suggest that the publisher should fix the price, including postage to Europe, also in shillings. Unfortunately, Indian publications become very slowly known in Europe; and, when they are known, nobody knows how to get them, without paying the most extravagant prices.

The following are the larger works, the publication of which has been begun in the first six numbers of the *Kāvya-mālā*: Mañkhaka's *Śrīkaṅthacharita*, with Jōnarāja's commentary, pp. 112, Sargas I.-VIII., 20; Gōvardhanāchārya's *Āryāśrīlāsāṭī*, with Anantapaṇḍita's Com., pp. 112, 308 Āryās; Murāri's *Anargharāghava*, with Ruchipati's Com., pp. 64, up to the beginning of Act II.; Rudrata's *Kāvya-lakṣṇa*, with Namisādhu's Com., pp. 64, Adhyāyas I.-VI., 15. The list of the shorter works, that have been completed (on 160 and 64 pages), is as follows: Rāghavaachaitanya's *Mahāgṇapatisōtra*, with Com.; Lañkēśvara's *Śivastūti*; Kālidāsa's *Syāmalādāntaka*; Kulasekharanripati's *Mukundamālā*; Jagannāthapaṇḍitarāja's *Sudhālaharī*, *Prānālaharī* with Com., *Anurīlaharī*, and *Karandāharī*; Sambhumahākavi's *Rājēndrakarṇāpāra* and *Aryōktimuktālatī*; Kshēmēndra's *Kalāvīśa*, *Achūtyaachāracharcha*, and *Survītatīlaka*; Appayadikshita's *Vairāgyasūta*; Ratnākara's *Vakrōkti-pāñchāsīkā*; Bāṅkarāchārya's *Vishṇupādīkīchāntavarnavastōtra*; and Gumānikavi's *Upadēśasūta*.

I do not profess to have studied carefully every one of these works. But, as the *Kāvya-mālā* has been a pleasant companion to me during my summer-holiday, I have certainly read through by far the greater portion of the numbers under notice, and I feel no hesitation in saying, that the editors have performed their task in a very scholarly and satisfactory manner. There are some passages, particularly in the commentary on Rudrata's *Kāvya-lakṣṇa*, which, to judge from the inter-punctuation, appear to me to have been misunderstood, and readings (such as *Mādhvānuda* on pages 2 and 9), which, I believe, are not supported by the best MSS.; but, on the whole, I must congratulate both the editors and the publisher on what they have already achieved, and I wish their undertaking every success.

F. KIELHORN. //

And its low price is not the only thing to recommend this new Bombay edition. Having been got up after the fashion of European books, and being in one volume, the edition is much more handy than previous editions. And as the editor has numbered the Sūtras consecutively, besides giving their places in the *Ashṭādhyāyī*, and has also added an alphabetical index of the Sūtras, showing where the rules occur both in the *Siddhānta-Kaumudī* and in the *Ashṭādhyāyī*, the student is saved the trouble of preparing an index of the kind, which indeed is indispensable, for himself. The use of the book has been further facilitated by appending, for the sake of ready reference, their proper numbers to any rules which have been quoted by Bhaṭṭojīdikshita in his commentary. Some errors or misprints of former editions have no doubt been repeated in the present one. As in the Calcutta edition, the rule 1091 is wrongly made an *optional* rule. Similarly, under 2579 we are referred to P. II. 4, 51, and under 2601 to P. VI. 1, 31, while really the first rule is in the *Ashṭādhyāyī* VI. 1. 31, and the second II. 4, 51. Under 2763 we have *achāmi* for *āchāmi*, as in the Benares and Calcutta editions. But many mistakes of the other editions certainly have been corrected, and I therefore feel no hesitation in saying, that the work under notice is the best edition of the *Siddhānta-Kaumudī* hitherto published.

Besides the text of the *Siddhānta-Kaumudī* and the index already mentioned, the editor has given us in the shape of *Parīśiṣṭas* the original text of Pāṇini's *Ashṭādhyāyī*, the *Gaṇapīṭha* arranged in the order of the Sūtras and Vārttikas in which the Gaṇas are referred to, the *Dhātupīṭha*, *Līngānūśāsana*, and the so-called Rīgvēda redaction of the *Pāṇinīya-Sikshā*. Of these, the two last might well have been omitted; the more so because the text here printed undoubtedly contains numerous mistakes. The text of the *Ashṭādhyāyī* also, which generally follows the printed editions, might by a comparison of good MSS. have been improved on more often still than has actually been the case. On the two other *Parīśiṣṭas*, which no doubt are indispensable, I suspend my judgment, because I have not at hand the MSS. which alone would enable me to test the value of the texts here printed.

In conclusion, I may well say that this new Bombay edition in every way is a decided improvement on previous editions, and that it will be gratefully received by the small number of European scholars who take an interest in the national grammar of India.

F. KIELHORN.

Göttingen.

THE *SIDDHĀNTA-KAUMUDĪ* OF BHATTOJĪDIKSHITA, edited by KASINATH PANDURANG PARABA. Bombay, Nirṇayasāgar Press, Sākā 1807. 8vo., pp. 2, 467, 111, and 61.

The longer I am teaching Sanskrit in a German University, the more often have I occasion to observe, that the difficulty of procuring the necessary books and the enormous prices charged for them are not the least among the obstacles in the way of a more general and more extended study of Sanskrit in this country. It so happens, that I intend to lecture on the *Taghu-kaumudī*. Unless I myself take care to provide a sufficient number of copies beforehand, I shall probably be told by my students that only a single copy of the work is for sale at Leipzig, and that the price of that one copy is 20 shillings. My pupils at Poona would have procured a hundred copies at a day's notice, and would have paid 8 annas. I am grateful, then, for every effort made in India, be it by the Government or by private publishers, which may tend to lessen the difficulties we have to contend with, and I gladly bring to the notice of the public this neat edition of the *Siddhānta-Kaumudī*, for which we are indebted to the proprietor of the Nirṇayasāgar Press, and which European students, if they set about it in the right way, should be able to purchase for 4 shillings, while hitherto they have had to pay eight times as much for the Calcutta edition.

BOOK NOTICES.

THE *TARKA-KAUMUDĪ* OF LAUGAKṢHI BHASKARA, edited with various readings, notes critical and explanatory, and an introduction, by MANILAL NABHUBHAI DIVĒDĪ, B.A. Bombay Government Central Book Depot; 1886. 8vo. pp. 18 and 70. [Bombay Sanskrit Series, No. XXXII.]

European scholars, desirous of acquiring an elementary knowledge of the Nyāya-system of philosophy, which indeed is indispensable for all who engage in the study of Sanskrit, hitherto have had to resort to the *Tarkasamgraha* and its often inaccurate English translation. For the understanding of the original texts, they have, from the Dictionaries, not been able to get any real help whatever; for, in them, even the ordinary terms of the Nyāya are either not given at all, or are explained in a vague and slovenly manner, apt to mislead rather than to instruct the beginner. This edition of the *Tarka-Kaumudī*, therefore, in my opinion, supplies a long-felt and urgent want; and I may well congratulate the Superintendents of the Bombay Sanskrit Series, not only on the choice of this particular text, but even more on having found an editor so eminently qualified to explain that text, as Mr. Divēdī has proved himself to be. Mr. Divēdīno doubt has had the advantage of studying Nyāya under Bhīmāchārya in the Elphinstone College; and he himself gratefully acknowledges what he owes to that learned Naiyāyika. But even with such assistance his task has been by no means an easy one. And the result of his labours is all that could have been desired. His full and yet very concise notes show that he has thoroughly mastered his subject, and that he is able to explain it to others. He has shirked no difficulty himself; and, judging from my own study of the book, he has succeeded in solving the difficulties, which the student is likely to encounter in his attempt to master the somewhat unfamiliar contents of the *Tarka-Kaumudī*. By furnishing similar text books for other Śāstras, the Bombay Department of Public Instruction will certainly earn the gratitude of all who are interested in the progress of Sanskrit scholarship.

F. KIELHORN.

Göttingen.

BOOK-NOTICES.

The Hindu luni-solar calendar is to a great extent based on the solar calendar. When we wish to construct an almanac for a luni-solar year, we must first ascertain the duration of the corresponding solar year, and of the several solar months of that year; because the extent of the luni-solar year is regulated by that of the solar year, and because the (lunar) months of the former receive their names, according to certain fixed rules, from the (solar) months of the latter. A solar year begins when the sun enters the first sign, *Mēsha* (or Aries), of the fixed solar ecliptic; and so a solar month begins whenever the sun enters any one of the twelve signs of the fixed ecliptic. Given the epoch from which we have to start, the times of the entrance or *Samkrānti* of the sun into the several signs may be easily calculated from certain *data* which furnish, in days and parts of days, the exact length of the solar year, as well as that of every month of that year. Here, it is only necessary to draw particular attention to the fact that the solar year spoken of, on which the luni-solar calendar has been hitherto based, is the sidereal year (*i. e.* that space of time during which the sun, departing from a star, returns to the same), which, according to the *Sūrya-Siddhānta*, contains about 365 days, 6 h. 12·6 m.

If we were to calculate the *Samkrāntis* and the phases of the moon for the expired Saka year 1811, the result would be as in Table 1, on the opposite page 257.

From that Table it will appear that, by the rule according to which a lunar month receives the name of that solar month in which occurs the new-moon at the commencement of the bright fortnight of the lunar month, the lunar months of the expired Saka year 1811, lasted —

the *amānta* Chaitra, from the 1st April to the 30th April, 1889;

the bright fortnight of the *pārnimānta* Chaitra, from the 1st April to the 15th April, 1889;

¹ The *Pañchāṅg* for the Saka year 1812 is published at the Khandesh Chitragupta Press; Dhulia.

THE SAYANA-PANCHANG FOR THE SAKA YEAR 1811.
Edited by VISAJI RAGHUNATH LELE, JANARDAN BALAJI MODAK, and SHANKAR BALAKRISHNA DIKSHIT. Printed by Hari Narayan Limaye; the Satyaśādhaka Press; Ratnāgiri.¹

During the last few years the editors of the *Sayana-Pañchāṅga* have attempted a reform of the Hindu calendar, the nature of which may be readily explained, without entering too much upon minute details or abstruse calculations.

TABLE 1.

The Luni-solar Calendar based on the Sideral Year.

Saka 1811 expired. Samkrāntis of the Sideral Year.	A.D. 1889.	Saka 1811 expired. Solar Months.	Phases of the Moon.
<i>Mēsha</i> (<i>Vishuva</i>), on	11 April, 18 h. 52·5 m. ²	<i>Vaiśākha</i> . <i>Jyāishṭha</i> . <i>Āshāḍha</i> . <i>Śrāvaṇa</i> . <i>Bhādrapada</i> . <i>Āsṛvina</i> . <i>Kārttika</i> . <i>Mārgaśīras</i> . <i>Pausha</i> . <i>Māgha</i> . <i>Phālguna</i> . <i>Chaitra</i> .	● 31 March.
<i>Vṛiṣha</i> , „	12 May, 17 h. 54 m.		○ 15 April.
<i>Mithuna</i> , „	13 June, 2 h. 46·1 m.		● 30 April.
<i>Karkāṭa</i> , or <i>Dakṣiṇāyana</i> , „	14 July, 17 h. 25·4 m.		○ 15 May.
<i>Siṁha</i> , „	15 August, 4 h. 42·2 m.		● 29 May.
<i>Kanyā</i> , „	15 Sept., 5 h. 34·2 m.		○ 13 June.
<i>Tulā</i> (<i>Vishuva</i>), „	15 October, 16h. 31·1m.		● 28 June.
<i>Vṛiśchika</i> , „	14 Nov., 14 h. 98 m.		○ 12 July.
<i>Dhanuḥ</i> , „	14 December, 2 h. 19·5 m.		● 27 July.
<i>Makara</i> , or <i>Uttarāyana</i> , „	12 January, 10 h. 40·8 m.		○ 11 August.
<i>Kumbha</i> , „	10 February, 21h. 35·1 m.		● 26 August.
<i>Mīna</i> , „	12 March, 16 h. 56·7 m.		○ 9 September.
<i>Mēsha</i> (S. 1812), „	12 April, 1 h. 5·2 m.	● 25 September.	
		○ 9 October.	
		● 24 October.	
		○ 7 November.	
		● 23 November.	
		○ 7 December.	
		● 22 December.	
		○ 6 January.	
		● 20 January.	
		○ 5 February.	
		● 19 February.	
		○ 6 March.	
		● 20 March.	
		○ 5 April.	

² *i. e.* 18 h. 52·5 m. after mean sunrise at Ujjain; and so below.

the *amānta* Vaiśākha, from the 1st May to the 29th May, 1889 ;
 the *pārnimānta* Vaiśākha, from the 16th April to the 15th May, 1889 ;
 the *amānta* Jyāishṭha, from the 30th May to the 28th June, 1889 ;
 the *pārnimānta* Jyāishṭha, from the 16th May to the 13th June, 1889 ; and so on.

And the same result would be obtained from the rule by which both the *amānta* and the *pārnimānta* months receive their names from the *nakshatra*, in which the moon happens to be when full. For, on the 15th April, 1889, the moon was full in Chitrā, on the 15th May in Viśākhā, on the 13th June in Jyāishṭhā, on the 12th July in the group Aśādhā ; and so on. The whole lunar year Saka 1811, expired, would, of course, last from the 1st April, 1889, to the 20th March, 1890.

Among the twelve *Samkrāntis*, by which this lunar year is practically regulated, the *Mēsha*- and *Tulā*-*samkrāntis* are distinguished from the rest by being called *Vishuva-samkrāntis* ; and the *Karkāṭa*- and *Makara-samkrāntis* are also called *Dakṣiṇāyana*- and *Uttarāyana-samkrānti*, respectively. *Vishuva* is defined as the time when day and night are of equal length ; and, accordingly, the *Mēsha-samkrānti* and the *Tulā-samkrānti*, since they are called *Vishuva-samkrāntis*, should be expected to coincide — the one with the vernal, and the other with the autumnal equinox. Similarly, *dakṣiṇāyana* being characterised as the time during which the days become shorter and the nights longer, and *uttarāyana* as the time during which the reverse is the case, the *Karkāṭa*- and *Makara-samkrāntis*, if they are to be really *Dakṣiṇāyana*- and *Uttarāyana-samkrāntis*, should clearly take place — the former on the longest, and the latter on the shortest day of the year. But if we turn to our scheme of the Saka year 1811, we find that, by the ordinary Hindu calendar, the *Mēsha-samkrānti* of that year took place on the 11th April, twenty-two days after the vernal equinox, and the *Tulā-samkrānti* on the 15th October, twenty-three days after the autumnal equinox ; and that, in like manner, the *Karkāṭa*- and *Makara-samkrāntis* took place from twenty-two to twenty-three days after the longest and shortest days of the year respectively. And if, on the same principles, we were to construct a calendar for the Saka year 2311, we should

³ I find that in Saka 444 the *Mēsha-samkrānti* of the sidereal year, calculated by the rules of the *Sūrya-Siddhānta*, took place on the 19th March, A.D. 522, 1 h. 35.6 m. after mean sunrise ; and that of the tropical year, calculated according to European methods, on the same day, 3 h. 48 m. after mean sunrise. For Saka 450 expired, the dates for both would be the 18th March, A. D. 528,

find that, five hundred years hence, the *Samkrāntis* mentioned would be later than they would be expected to be, by a whole month.

The reason of this ever-increasing discrepancy is this, that the Hindu calendar, as we have seen above, has been hitherto based on the sidereal year, while the return of the seasons depends on the tropical year which, owing to the precession of the equinoxes, is about 22 minutes shorter than the sidereal year. According to some Hindu astronomers, the commencement of the sidereal year coincided with that of the tropical year in Saka 444.³ In subsequent years, the sidereal year would, owing to its greater length, commence later than the tropical year, and the time by which it thus commences later, and by which the *Samkrāntis* therefore fall later than we should expect them to take place, has now increased to about 22 days. And by so much the ordinary calendars at present make the seasons commence later than they commence in reality ; and the *Samkrāntis* put down in those calendars are clearly no longer what, according to the definitions of ancient and authoritative works, they should be.

To put an end to this incongruous state of things, the compilers of the *Sūrya-Pāñchāṅg*, (*i. e.*, as I would put it, " a calendar which takes into account the precession of the equinoxes ") have based their luni-solar calendar on the tropical year. The change which they have thereby effected will be made clear by Table 2 on the opposite page 259, for which I have calculated the times of the *samkrāntis* with the help of European Tables,⁴ and in which I have again indicated the phases of the moon, for reasons which will appear below.

Here, then, it will be seen that, in the new calendar, the *Mēsha*- and *Tulā*-*samkrāntis* do coincide with the vernal and autumnal equinoxes, and that the *Karkāṭa*- and *Makara-samkrāntis* fall really, as they should, on the longest and shortest days of the year. And if the same principle were followed in future calendars, this would be always the case ; and, to mention a point which may be of particular weight in India, a Hindu who, in the performance of his religious ceremonies, should allow himself to be guided by these calendars, would at all times perform those ceremonies at the right season, and would not, as might otherwise often be the case, for instance,

14 h. 51.2 m. and 14 h. 52.6 m. after mean sunrise, respectively.

⁴ My results will be found to agree so closely with the times put down for the *Samkrāntis* in the *Sūrya-Pāñchāṅg* that the difference in no case amounts to more than one minute ; and I therefore cannot help thinking that the editors too have here used European Tables.

TABLE 2.
 The Luni-solar Calendar based on the Tropical Year.

Baka 1811 expired. Samkrāntis of the Tropical Year.	A.D. 1889.	Baka 1811 expired. Solar Months. Phases of the Moon.			
Mēsha (Vishuva), on	20 March, 8 h. 54.6 m.	Vaiśākha. ● 1 March. ○ 17 March.			
			Vṛisha, ,,	19 April, 20 h. 50 m.	Jyāishṭha. ● 31 March. ○ 15 April.
			Karkāṭa, or Dakṣiṇāyana, ,,	21 June, 5 h. 12.6 m.	Srāvāṇa. ● 29 May. ○ 13 June.
			Kanyā, ,,	22 August, 22 h. 46.1 m.	Āśvīna. ● 27 July. ○ 11 August.
			Vṛiśchika, ,,	23 October, 4 h. 10.5 m.	Mārgaśīras. ● 25 September. ○ 9 October.
			Makara, or Uttarāyana, ,,	21 Dec., 13 h. 54.6 m.	Māgha. ● 23 November. ○ 7 December.
			Kumbha, ,,	20 January, 0 h. 30.6 m.	Chaitra. ● 20 Jan. 22 h. 43 m. ○ 5 February.
Mīna, ,,	18 February, 15 h. 1.8 m.	● 19 February. ○ 6 March.			
Mēsha (S. 1812) ,,	20 March, 14 h. 44.5 m.				

do during the *uttarāyana* what his sacred books require him to do during the *dakṣiṇāyana*, or *vice versa*.

The change thus inaugurated by the compilers of the *Sāyana-Pāñchāṅg*, appears then indeed to be an important reform of the calendar, similar to that reform of the European calendar which was first introduced about 300 years ago. But the editors will no doubt have to agitate for their idea steadily and patiently; and if their endeavours should not at once meet with any very general support, they must remember that a reform which not even now, after more than 300 years, has been introduced in every country of Europe, is not likely to be generally adopted in India in the space of two or three, or even twenty or thirty years.

Highly as I esteem the work of the editors of the *Sāyana-Pāñchāṅg* so far, I cannot help thinking that in their treatment of the lunar year there is one point which perhaps will hardly meet with approval. I allude to the fact that the editors have applied to the *pūrṇimānta* months the rule *Māhādī-śthē savitārī*, which, so far as I can see, without offering any advantages may cause much practical inconvenience and confusion, and which I cannot find to have ever been observed in practice, from any of the numerous dates which I have examined.

From Table 2 it is clear that, by the ordinary rule which hitherto has been generally followed, the lunar months of Śaka 1811 expired, when based on the tropical year, would stand as follows:—

Amānta scheme.

Chaitra, from the 2nd March to the 31st March, 1889;

Vaiśākha, from the 1st April to the 30th April, 1889;

Jyāishṭha, from the 1st May to the 29th May, 1889; and so on.

Pūrṇimānta scheme.

Chaitra, bright fortnight, from the 2nd March to the 17th March, 1889;

Vaiśākha, from the 18th March to the 15th April, 1889;

Jyāishṭha, from the 16th April to the 15th May, 1889; and so on.

Here the several bright fortnights would belong to the same months under both the *amānta* and the *pūrṇimānta* schemes, while the dark fortnight of a month would follow the bright fortnight of the same month in the *amānta* scheme, and precede it in the *pūrṇimānta* scheme. The lunar

year would begin on the 2nd March, 1889, which would be the 1st of the bright half of Chaitra according to both the *amānta* and the *pūrṇimānta* schemes. All this would agree with the practice which has been followed in India for a long time, and which renders it easy to turn a date of the *amānta* calendar into one of the *pūrṇimānta* calendar, or *vice versa*.

But the editors of the *Sāyana-Pāñchāṅg* name the months by a rule which says that the lunar month, *amānta* or *pūrṇimānta*, which ends while the sun is in Māśha, is called Chaitra, while the sun is in Vṛisha, Vaiśākha, and so on; and in their calendar they accordingly give the several months thus:—

Amānta scheme.

Chaitra, from the 2nd March to the 31st March, 1889;

Vaiśākha, from the 1st April to the 30th April, 1889;

Jyāishṭha, from the 1st May to the 29th May, 1889; and so on.

Pūrṇimānta scheme.

Chaitra, from the 18th March to the 15th April, 1889;

Vaiśākha, from the 16th April to the 15th May, 1889;

Jyāishṭha, from the 16th May to the 13th June, 1889; and so on.

Here, then, it is the *dark* fortnight which is common to the *amānta* and *pūrṇimānta* month of the same name; and this, though contrary to the practice hitherto followed, might be put up with, if only we could say generally that in the new calendar a dark fortnight will *always* belong to the same calendar month, under both the *amānta* and *pūrṇimānta* schemes. But this is by no means possible. For, when on the same principles we construct a calendar for the Śaka year 1810 expired, we find that during the first five months of that year it is the bright fortnight that is common to the *amānta* and *pūrṇimānta* months of the same name; and, in fact, we find that by the rule *Māhādī-śthē savitārī* the Śaka year 1810 by the *pūrṇimānta* scheme contains one month more than by the *amānta* scheme, just as we find that by the newly introduced principle the year 1811 commences on different days according as we follow one or the other scheme of the lunar fortnights. In theory all this may be unobjectionable, but it certainly carries with it great practical inconvenience, and may thus tend to retard the general adoption of the *Sāyana-Pāñchāṅg*, to which I would wish every success.

Göttingen.

F. KIELHORN.

PRAKRIT AND SANSKRIT INSCRIPTIONS OF KATTYWAR, ETC.
Published by order of H.H. the Mahārāja of Bhāvnagar.

This is a collection of fifty-four inscriptions from Kāṭhiāvād and neighbouring parts of India, with English translations and forty-one plates. It is published by the Bhāvnagar Archæological Department, under the auspices of His Highness the late Mahārāja of Bhāvnagar, whose liberality deserves, indeed, most cordial acknowledgment.¹

Some of these inscriptions are of very great interest, and have played an important part in the history of Indian epigraphy, and more than half of them have been published at least once before. Although the new editors² must have been well aware of this fact, they, I regret to say, have neglected to take full advantage of it; and the result is that the texts and translations of the more important and difficult inscriptions here offered to the public fall far short of the standard of scholarship that had already been attained by previous workers in the same field. Of the smaller number of inscriptions which are now published here for the first time, a few bring to light historical details of some value. But as the editors themselves confess that some of this fresh material has been taken from "written copies," not from the originals or impressions, it is indispensable to have it re-edited critically before it can be utilized with confidence. Of the plates which accompany the texts some are fair, while others cannot for a moment be compared with the previously published plates of the same inscriptions.

Instead of entering upon a detailed criticism of individual texts, for which I should have ample material, I propose to give here a short summary of the contents of the whole collection, in order to show, what the editors have failed to do, where and by whom some of these inscriptions have

¹ In this I quite agree with Prof. Peterson, who has written an introductory note on the earlier inscriptions of this collection.

² Their names are not given in the book.

last been edited before, and to indicate briefly the nature of those records¹ which are now brought to public notice for the first time. In doing so I shall follow the order and divisions adopted by the editors themselves.

Maurya Dynasty, pp. 1–16.—The Girnār rock edicts of Aśoka, with a Sanskrit version by Paṇḍit Gattulālāji, and with photolithographs. Last edited by Prof. Bühler, with excellent photolithographs from estampages by Dr. Burgess, in *Ep. Ind.*, vol. ii, pp. 448 ff.

Kṣatrapa (here still called 'Śāh') *Dynasty*, pp. 17–23.—Five inscriptions, all with photolithographs—

1.* Fragments of 4 lines of an inscription of the time of the Kṣatrapa Svāmi-*Rudrasīmha* (?), found at Junāgaḍh.

2. Junāgaḍh rock inscription of the time of the Mahākṣatrapa *Rudradāman*. Last edited from Dr. Bhau Dāji's version (revised by Prof. Eggeling) in *Archaeol. Surv. of W. India*, vol. ii, p. 128, with a plate, and by Dr. Bhagvanlāl Indrajī and Prof. Bühler in *Ind. Ant.*, vol. vii, p. 259.

3. Guṇḍā inscription of the time of the Kṣatrapa Svāmi-*Rudrasīmha* (whose name has been omitted in the translation). Edited by Prof. Bühler in *Ind. Ant.*, vol. x, p. 157.

4. Jasdan (Gaḍha) inscription of the time of the Mahākṣatrapa Svāmi-*Rudrasena*. Last edited by Dr. Hoernle in *Ind. Ant.*, vol. xii, p. 32.

5.* Mulavāsara (now Dvārkā) fragmentary inscription (4 lines) of the time of the Mahākṣatrapa Svāmi-*Rudrasena*, of the year 232 (?).

Gupta Dynasty, pp. 24–29.—Junāgaḍh rock inscription of *Skandagupta*, with a plate. Last edited, with a photolithograph, by Dr. Fleet in *Gupta Inscr.*, p. 58.

¹ These are marked with an asterism.

Valabhī Dynasty, pp. 30–66.—Seven inscriptions, all with photolithographs—

1.* Fragment of a stone inscription from Bānkoḍi (now in the Bhāvnagar Museum), 20 syllables, with the name *Guhasena*.

2. Jhar plates of *Dharasena II*, of the year 252. A full summary of the contents was given by Dr. Fleet in *Ind. Ant.*, vol. xv, p. 187.

3.* Katapur (now Bhāvnagar Museum) plates of *Dharasena II*, of the year 252.¹

4. Boṭād (now Bhāvnagar Museum) plates of *Dhruvasena II Bālāditya*, of the year 310.² Edited, with plates, by Prof. Bühler in *Ind. Ant.*, vol. vi, p. 13.

5. Luṅsaḍi (now Bhāvnagar Museum) plates of *Śīlāditya III*, of the year 352. Edited by Prof. Bühler in *Ind. Ant.*, vol. xi, p. 306 (where two lines of the second plate have been omitted).

6. Devali (now Bhāvnagar Museum) plates³ of *Śīlāditya IV*, of the year 375. Edited, with plates, by Mr. V. G. Ozhā in *Wiener Zeitschrift*, vol. i, p. 253.

7. A single first plate, found at Gopnāth, giving the genealogy as far as *Dharasena III*. Edited by Dr. Hultzsich in *Ind. Ant.*, vol. xii, p. 148.

Guhila (here called Sūrya) *Dynasty of Mewāḍ*, pp. 67–157. Fifteen inscriptions—

1. Udaypur inscription (6 long lines, apparently well preserved) of *Allaṭa*, the father of Naravāhana, dated in Vikrama-saṁvat 1008 and 1010, with a useless photolithograph. Known to me from *Prācīnalekhamālā*, vol. ii, p. 24, where it is taken from an earlier publication of the

¹ The exact date, *saṁ* 252 *Vaiśākha-ba* 15 (not, as given here, *Vaiśākha-bahu* 5), corresponds perhaps to the 10th April, A.D. 571, when there was a solar eclipse which was not visible in India. In the first line of this inscription the plate has *sapatna* (not *sampanna*, as given in the text), which is important: see Dr. Hultzsich in *Ep. Ind.*, vol. iii, p. 319.

² The date of this inscription perhaps corresponds to the 24th August, A.D. 629, when also there was a solar eclipse which was not visible in India.

³ The photolithograph of the first plate, now published, is a reverse.

Bhāvnagar Archæol. Department, which I have been unable to secure.

2.* Udaypur inscription (fragments of 18 lines) of *Naravāhana*, the son of Allāṭa (not, as stated by the editors, of Bappa Gohila), dated in Vikrama-saṁvat 1028.¹

3.* Udaypur fragmentary inscription (6 lines), containing the names of (Naravāhana's successor) *Śaktikumāra*² and his son *Śucivarman*; with a photolithograph.

4. Chitor inscription of the Guhilas from *Bappa to Naravarman*,³ dated in Vikrama-saṁvat 1331 (not, as stated by the editors, 1339); taken from 'a written copy.' The contents have been given by myself, from a rubbing, in *Ind. Ant.*, vol. xxii, p. 80.

5. Mount Ābū inscription of *Samarasimha*, of Vikrama-saṁvat 1342, with a photolithograph. Last edited by myself in *Ind. Ant.*, vol. xvi, p. 345.

6. Chitorgaḍh inscription of *Mokala*, dated in Vikrama-saṁvat 1485,⁴ again given from 'a written copy.' Edited by myself in *Ep. Ind.*, vol. ii, p. 408.

7.* Nāgadā Jaina inscription (8 lines) of the reign of Mokala's son *Kumbhakarṇa*, with a date in Vikrama-saṁvat 1494, corresponding to Thursday, the 6th February, A.D. 1438.

8. Sādaḍī Jaina inscription (47 lines) of the reign of *Kumbhakarṇa*, with a list of the Guhila chiefs of Mewāḍ from Bappa to Kumbhakarṇa, dated Vikrama-saṁvat 1496. Known from *Prācīnalekhamālā*, vol. ii, p. 28.

9.* Udaypur inscription of the reign of Kumbhakarṇa's son *Rājamalla*, with a date in Vikrama-saṁvat 1545, corresponding to Thursday, the 12th March, A.D. 1489; again

¹ The dates of the inscriptions 1 and 2 are the earliest known dates for the list of Guhila chiefs given in *Ind. Ant.*, vol. xvi, p. 346.

² The name of this chief also occurs in a fragmentary inscription at Ar, near Udaypur, published with a photolithograph by Prof. Bendall in his *Journey*, p. 82.

³ In the translation the prince Simha has received here the name *Aghasimha*, which is deduced from the words of the text *babhūva tasmād aṭha Simha-nāmā*. Mallata in the text is *Mamtaṭa*, and in the translation *Mamtata*.

⁴ The date given here is *saṁvat 1485 śāke 1350 varṣe Māghaśukla 3*, while in reality the original has *saṁvat 1485 varṣe Māghasudi 3 Guru-dine*.

from 'a written copy.' The writer especially eulogizes the chiefs from Arisimha to Rājamalla; at the end he repeats part of the contents in the vernacular.

10. Śatruñjaya inscription on the seventh restoration of the temple of Puṇḍarika, dated Vikrama-saṁvat 1587; mentions Kumbharāja, his son *Rājamalla*, his son *Samgrāmasimha*, and (his son) *Ratnasimha*. Edited by Prof. Bühler in *Ep. Ind.*, vol. ii, p. 42.

11.* Nārailai Jaina stone-pillar inscription (56 short lines) of the time of Kumbhakarṇa's son *Rāyamalla*, and (his son) the *Mahākumāra Pṛthvirāja*, with a date in Vikrama-saṁvat 1597;¹ mentions Yaśobhadrasūrī with the date 'saṁ 964.'

12.* Sādaḍī inscription (22 short lines) of the time of the Mahārāṇā *Amarasimhajā*, with a date in Vikrama-saṁvat 1654 and Śaka-saṁvat 1520, corresponding to Thursday, the 13th April, A.D. 1598; records the construction of a tank.

13* and 14.* Rājanagar-Kāṅkaroli inscriptions, with dates in Vikrama-saṁvat 1718, 1722, and 1732, containing the second and third *sargas* of Raṇacchoḍa's *Rājaprasasti-mahākāvya*. Some twenty-five such inscriptions are said to exist 'on the Navachoki *ghaut* of the Rāyasāgara lake.' The specimens here given are of no historical value.

15.* Udaypur inscription (29 lines), recording the construction of a Śiva temple during the reign of *Samgrāmasimha*, in Vikrama-saṁvat 1770.

Gohilā Dynasty (?), pp. 158–171.—Eleven inscriptions²—

1. Maṅrol inscription of the reign of the Caulukya *Kumārāpāla*, with a date in Vikrama-saṁvat 1202 and

¹ I very much doubt the correctness of this. At any rate, the given date is wrong for Vikrama-saṁvat 1597, and Rāyamalla's rule must have ended long before that time. For the expired *Kārttikādi* Vikrama year 1557 the date (Friday, the 6th of the bright half of Vaiśākha, with the *nakṣatra* Punarvasu) would correctly correspond to Friday, the 23rd April, A.D. 1501, when the 6th *tithi* of the bright half ended 16 h. 56 m., and the *nakṣatra* was Punarvasu for 7 h. 13 min. after mean sunrise.

² No. 1 clearly belongs to the Caulukya dynasty. No. 3 is a copy of the last leaf of a MS. of Nṛsimhāranya Muni's *Viṣṇubhakticondrodaya*.

Siṃha-saṃvat 32, corresponding to Monday, the 15th October, A.D. 1145; with a photolithograph. Records the foundation of a temple, etc., by a subordinate chief of the Gūhila family. Published in *List of Antiquarian Remains Bom. Pres.*, p. 179.

2.* Ghelāṇā inscription (2 lines, damaged), recording the gift of a seat, dated in Valabhī-saṃvat 911; with a photolithograph.

4. Mahuvā inscription, with a date in Vikrama-saṃvat 1500, corresponding to Thursday, the 23rd April, A.D. 1444; with a photolithograph. Records the construction of a tank by the Śreṣṭhin Mokala, in the land of the Gohilla Sāraṅga. Known from *Prācīnalekhamālā*, vol. ii, p. 26.

5-12*. Eight short inscriptions of no importance, dated between Vikrama-saṃvat 1674 and 1876, all except one in Gujarāti.

Caulukya (here called Solanki) *Dynasty*, pp. 172-233.—
Fourteen inscriptions—

1.* Kerāḍu stone pillar inscription (fragments of 17 lines and 4 complete lines) of the reign of *Kumārapāla*, with a date in Vikrama-saṃvat 1209, corresponding to Saturday, the 24th January, A.D. 1153; contains an order of the *Mahārāja Ālhaṇadeva*, forbidding the killing of animals on certain days of the month.

2. Mount Ābū inscription of *Vastupāla* and *Tejaḥpāla*, composed by *Someśvara*, and dated¹ here in Vikrama-saṃvat 1267; mentions the *Caulukyās* (of *Ḍholkā*) *Arṇorāja*, *Lavaṇaprasāda*, and *Vīradhavalā*, and gives a list of the *Paramāras* (of *Candrāvati*) ending with *Somasimha* and his son *Kṛṣṇarāja*. Translated by H. H. Wilson in *As. Res.*, vol. xvi, p. 302, and edited by Mr. Kāthavate in his edition of *Someśvara's Kīrtikaumudī*, Appendix A.

¹ The date of this inscription has met with a most extraordinary fate. According to the translation in the *As. Res.* it is 'Sunday, the 3rd of the light fortnight of Phālguna, in the year of Vikrama 1287'; Mr. Kāthavate's text has '1293 varṣe śrī-Śrāvāna vadī 3 Ravau,' while his translation gives 'the year 1287,' and his introduction '1297 Samvat'; and now the present edition has '1267 varṣe Phālguna-vadī 10 Saumya-dine, Wednesday, the 10th of Phālguna Vadi (dark half) of the year 1267 of the Vikrama Samvata.'

3.* Junāgaḍh inscription¹ (fragments of 34 lines) of the reign of (?) *Kumārapāla*; said to be dated 'Valabhī-saṃvat 850 śrī-Siṃha-saṃvat 60 varṣe,' which cannot be right.

4. Somnāthpattan (Verāval) inscription of the temple-priest *Bhāva Bṛhaspati* and the *Caulukyās Jayasimha-Siddharāja* and *Kumārapāla*, dated in Valabhī-saṃvat 850. Edited by Mr. V. G. Ozhā and Prof. Bühler in *Wiener Zeitschrift*, vol. iii, p. 7.

5. Rādhapur plates of *Bhīmadeva I*, of Vikrama-saṃvat 1086; with photolithographs. Edited by Prof. Bühler in *Ind. Ant.*, vol. vi, p. 193.

6. Somnāthpattan inscription, being Śrīdhara's *prāsasti* of the *Vastrākula* family and of the *Caulukyās* from *Mūlarāja I* to *Bhīmadeva II*, with a date in Vikrama-saṃvat 1273, corresponding to Friday, the 22nd April, A.D. 1216. Edited by Prof. Bühler and Mr. V. G. Ozhā in *Ep. Ind.*, vol. ii, p. 439.

7.* *Bharāṇā* fragmentary inscription (9 lines) of the reign of *Bhīmadeva II*, dated in Vikrama-saṃvat 12[7]5.

8.* *Ratnapur* (in *Mārwād*) inscription (11 lines) of the reign of *Kumārapāla*; contains an order of *Pūnapākṣadeva* (?), forbidding (like No. 1) the killing of animals on certain days of the month.

9.* *Kerāḍu* fragmentary inscription (only a few words), containing the name *Bhīmadeva*.

10.* *Verāval* inscription (45 lines, damaged) of the temple-priest *Bhāva Bṛhaspati* (above, No. 4) and his family, and the *Caulukyās* from *Siddharāja* to *Bhīmadeva II*.

11.* *Cambay* inscription (19 lines, incomplete), eulogizing the *Caulukyās* (*Vāghelās*) *Arṇorāja*, *Lavaṇaprasāda*, *Vīradhavalā*, and *Viśvaladeva*.

12. Mount Ābū inscription of the time of *Bhīmadeva II*, of the *Mahāmaṇḍateśvara Somasimha* of *Candrāvati*, and the *Rānaka Vīradhavalā* (of *Ḍholkā*), dated in Vikrama-saṃvat 1287, on a day corresponding to Sunday, the 3rd March,

¹ On 'a hard black stone, measuring on its surface 20 ft. by 12 ft.' The size of this stone is beaten by that of the stone which contains the preceding inscription, No. 2, '39 ft. by 31 ft.'

A.D. 1230. Edited by Mr. Kāthavaṭe in his edition of Someśvara's *Kīrtikaumudī*, Appendix B.

13. Verāval inscription of the reign of the Vāghelā *Aṛjunadeva*, with a date corresponding to Sunday, the 25th May, A.D. 1264. Edited by Dr. Hultzsch in *Ind. Ant.*, vol. xi, p. 242.

14.* Cambay Jaina inscription (29 lines, some of them much damaged) of the time of the Vāghelā *Sāraṅgadeva*, dated in Vikrama-saṁvat 1352; mentions Lūṅigadeva, Viradhavala, Pratāpamalla, and Arjuna.

F. KIELHORN.

NOTICES OF BOOKS.

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THE INDIAN CALENDAR, with Tables for the conversion of Hindu and Muhammadan into A.D. dates, and *vice versa*. By R. SEWELL and Ś. B. DĪKSHIT. With Tables of eclipses visible in India, by Dr. R. SCHRAM. (London: Swan Sonnenschein and Co., Limited, 1896.)

Although during the last ten years several excellent essays have been published on the subject,¹ the verification of Hindu dates is often still considered a task of great intricacy, to be approached only by people who possess an intimate knowledge of Indian astronomy. If those who

¹ I allude to Prof. Jacobi's "Methods and Tables for Verifying Hindu Dates," in *Ind. Ant.*, vol. xvii, p. 145 ff., and especially to the same scholar's "Computation of Hindu Dates in Inscriptions," etc., in *Ep. Ind.*, vol. i, p. 403 ff., and vol. ii, p. 487 ff. Very good tables for the approximate conversion of Hindu dates have been published by Dr. Schram in *Ind. Ant.*, vol. xviii, p. 290 ff.

hold such an opinion will devote a few hours' study to the work which we now owe to the painstaking industry of Mr. Sewell and Mr. Dikshit, they will see how greatly they are mistaken, or will, at any rate, admit that the two authors have removed whatever difficulty hitherto has seemed to surround the matter of which the work treats.

This new work naturally divides itself into two parts. The first part gives a clear account of the Hindu and Muhammadan calendars, and of the various eras and cycles which have been, or are still, used in different parts of India, interspersed with some valuable remarks on the astronomical writings of the Hindus. The second, more extensive part contains 136 pages of tables for the conversion of Hindu and Muhammadan dates into the corresponding European dates, and *vice versa*, and for the calculation of the *nakṣatras*, *yogas*, and other items, sometimes quoted in Indian dates. It also fully explains the construction of the tables, and gives examples to show the working of them. In an appendix the well-known astronomer, Dr. R. Schram, of Vienna, besides, furnishes a list of the solar eclipses likely to have been visible in India during the period to which the work refers (*i.e.* from A.D. 300 to A.D. 1900), with tables by which it is extremely easy to ascertain whether (the greatest phase of) a solar eclipse was visible at a given place in India, and at what time of the day it took place there. The additions and corrections, among other things, contain Mr. Dikshit's rules and tables for calculating Jupiter's apparent (or true) place, the necessity for which has probably been suggested by a number of South Indian dates, lately published.

That this work is the outcome of an immense amount of patient labour, is self-evident; and, judging from the tests which I have applied, it may well be trusted for the accuracy of its statements. To convey to the reader some idea of the great ease with which the object for which it is designed is really attained by it, I shall show the practical working of its rules and tables by using them for the verification of two or three dates of Indian inscriptions.

But to make my calculations generally intelligible, I must premise some trite remarks on the Hindu calendar, and say a few words about the tables of our authors.

The first month of the ordinary Hindu solar year theoretically commences at the instant of the sun's entrance into the sign Aries, *i.e.* at the Meṣa-saṁkrānti, and each succeeding saṁkrānti (or entrance of the sun into a sign of the zodiac) marks the theoretical beginning of a new solar month. The civil beginning of a solar month, *i.e.* whether in every-day life the month commences on the day of the saṁkrānti or on the following (or third) day, depends on the exact time of the day when the saṁkrānti takes place, and is regulated by rules which differ in different parts of India. The first month of the luni-solar year, on the other hand, commonly commences at the new moon which immediately precedes the commencement of the solar year, and each succeeding new moon forms the commencement of a new lunar month. The year ordinarily contains 12 such months, but to keep the luni-solar year in accord with the solar year another lunar month (homonymous with one of the 12 ordinary months) is added every third or, more rarely, every second year; and sometimes we have two homonymous lunar months in a year, while at the same time the name of another month is expunged. Each lunar month has two halves (*pakṣa*)—the bright half from new moon to full moon, and the dark half from full moon to new moon. Either *pakṣa*, again, contains 15 *tithis* which (since a *tithi* is the variable time occupied by the moon in increasing her distance from the sun by 12 degrees) are of variable length, and the calculation of the exact length of which is of the utmost importance, because a civil day receives the number of the *tithi* which ends in it or is wholly occupied by it. Thus, "the 1st of the bright half of Caitra" (*Caitra-sudi* 1) would ordinarily denote that civil day on which ends the first *tithi* of the bright half of Caitra (the first lunar month of the luni-solar year); and "the 11th of the dark half of Phālguna," that civil day on which ends the 11th *tithi* of the dark half (*i.e.*, counting from new moon, the 26th *tithi*)

of Phālguna. In general, 60 *tithis* (the collective number of *tithis* of two lunar months) are approximately equivalent to 59 civil days. Subject to the modification that a civil day is reckoned from sunrise to sunrise, the weekdays of the Hindus agree with our own; and the most ordinary (though not always sufficient) way of testing the correctness of the date of an Indian inscription, is to ascertain whether the *tithi* of the date did really end on the weekday which is joined with it in the original record, or whether a given solar day really fell on the given weekday.

Now our authors have furnished us with tables for both the approximate and the accurate conversion of Hindu solar and luni-solar dates. To the tables for the approximate conversion of dates—they are two "eye-tables," constructed on methods invented by two native scholars of Madras—they themselves apparently do not attach any very great importance, and in my opinion these tables should never be used for the verification of dates.¹ The tables for the accurate conversion of Hindu dates are to a considerable extent based on, and some of them are identical or nearly identical with, the tables published by Prof. Jacobi in the *Indian Antiquary*. But the principal Table I, which comprises no less than one hundred pages, contains a great amount of independent work, inasmuch as it furnishes ready to hand, for each of the 1601 years from Kaliyuga 3402 current² to Kaliyuga 5002 current (*i.e.* A.D. 300 to

¹ Regarding the approximate method, the authors, on p. 65, say: "Results found by this method *may* be inaccurate by as much as two days, but not more. If the era and bases of calculation of the given Hindu date are clearly known, and if the given date mentions a weekday, the day found by the tables may be altered to suit it." But "the bases of calculation" of a given date can never be known until a date has been *accurately* verified; and that one should alter the day found by the tables so as to suit a given weekday, I consider rather dangerous advice.

² Although the dates which employ the principal Hindu eras commonly give expired years—dates of the Vikrama era do so nearly always, and for every Śaka date with a current year we have about four Śaka dates with expired years—the authors in their tables throughout have given current years. How, from a practical point of view, they may justify this, I do not know; but I am the more surprised at their procedure because, judging from the notes on pp. 40 and 42, they are inclined to look on the Vikrama years of the dates and on the "so-called expired Śaka years" as current years (*not* the current years of their tables).

1900), a number of important data which a person engaged in the examination of Hindu dates formerly in many cases had to calculate for himself, often at no small expense of time and labour. Thus, Table I gives us for each year not merely the concurrent Jovian year according to both the northern and southern systems, but also the added lunar month (both mean¹ and true) and the suppressed month when there is one, the moment of the Meṣa-saṁkrānti according to the Ārya- and Sūrya-siddhāntas, and the European equivalent of the first civil day of the luni-solar year, with certain sets of figures from which the end of the first *tithi* (*Caitra-sudi* 1) on that day may be ascertained, etc. These data in Table I form the basis of all calculations; and the conversion or verification of a date, as I shall now show, consists in the simple addition to them of the interval in time between the commencement of the year and the given date, which is found by the help of one of the minor tables.

(1) In *Ind. Ant.*, vol. xix, p. 25, No. 12, I have shown that the date “*Tuesday*, the 3rd of the bright half of Pausa of Vikrama 1280 expired, at the Uttarāyaṇa-saṁkrānti,” correctly corresponds to *Tuesday*, the 26th December, A.D. 1223 (when, by Prof. Jacobi’s tables, the 3rd *tithi* of the bright half ended approximately 14h. 6m. after mean sunrise), and that the Uttarāyaṇa-saṁkrānti did take place on that day. By the work under notice the calculation would be made thus:—

From Table I we see that Vikrama (1280 expired=) 1281 current corresponds to A.D. 1223–4, and that Bhādrapada (the 6th month of the year) was repeated in that year. Pausa, ordinarily the 10th month of the luni-solar year (Table III), therefore, was here the 11th month, and the number of *tithis* from (but exclusive of) the first *tithi* of the year (the equivalent of which is given in

¹ Our authors on p. 27 say that the change from the mean to the true system of intercalation took place about A.D. 1040. But my examination of dates has shown to me that in practice the change had taken place already in the beginning of the 10th century A.D.

Table I) to the 3rd *tithi* of the bright half of Pausa was $30 \times 10 = 300 + 3 = 303 - 1$ (for the first *tithi* of the year) = 302, approximately equivalent, according to what has been said above, to 297 civil days. All we have to do now is to take from columns 19, 20, and 23–25 of Table I (p. lix) the figures given for the commencement of the luni-solar year Vikrama 1281 current, and to add from Table IV (p. cx) the increase for 297 civil days, thus:—

	<i>d.</i> ¹	<i>w.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>
T. I.	(63)	0	9916	549	221
+ T. IV.	(297)	3	574	779	813
	(360)	3	490	328	34
Equation for 328 by T. VI.			264		
„ „ 34 by T. VII.			47		
			<u>311</u>		
			<i>t</i> = 801		

Now, one complete *tithi* (*t*) being equal to 333, the result, *t* = 801 (which is between 667 and 1000), shows (Table VIII) that on the 360th day of A.D. 1223–4, which by Table IX was the 26th December, A.D. 1223, and which was 3 = *Tuesday*, the 3rd *tithi* of the bright half was current at mean sunrise; and the difference between 801 and 1000 (the end of the 3rd *tithi*) = 199 by Table X shows further that that 3rd *tithi* ended approximately 14h. 6m. after mean sunrise, exactly as found by Prof. Jacobi’s tables.

Similarly, to find the exact moment of the Uttarāyaṇa- (or Makara-) saṁkrānti, we only have to take from columns 13–17*a* of Table I (p. lix) the time of the Meṣa-saṁkrānti for the year of the date, and to add from columns 6–9 of Table III (p. cvii) the increase for the Makara-saṁkrānti. Proceeding thus, according to the Sūrya-siddhānta, we find—

¹ The number 63 under *d* denotes the 63rd day of A.D. 1223; the 0 under *w* denotes the weekday Saturday (Sunday being counted as 1, Monday as 2, etc., and Saturday as 7 or 0). The figures under *a*, *b*, and *c* give certain quantities from which the condition of the *tithi* at sunrise is ascertained, *a* being corrected by the equations for *b* and *c*, taken from Tables VI and VII. In adding up the numbers under *b* and *c*, thousands are omitted; in adding up those under *a*, ten-thousands.

T. I.	(84)	0	10 h.	37 m.
+ T. III, col. 9.	(275)	2	15 h.	17 m.
	(359)	2	25 h.	54 m.
	=(360)	3	1 h.	54 m.

which means that the Uttarāyana-saṁkrānti took place on the same day which above we have found for the *tithi* of the date, by the Sūrya-siddhānta 1 h. 54 m. after mean sunrise. The original date is therefore shown to be correct in every particular.

(2) In *Ind. Ant.*, vol. xxiii, p. 129, No. 99, I have stated that the date “*Thursday*, the 11th of the dark half of Phālguna of Śaka 1042 current, the year Vikārin,” regularly corresponds to *Thursday*, the 26th February, A.D. 1120.

From Table I (p. lii) we see that Śaka 1042 current = A.D. 1119–20 by the southern luni-solar cycle *was* the year Vikārin, and that there was no added month in that year. Phālguna, therefore (by Table III), was the 12th lunar month, and the 11th *tithi* of the dark half being the 15 + 11 = 26th *tithi* of the month, we have $30 \times 11 = 330 + 26 = 356 - 1 = 355$ *tithis*, approximately = 349 civil days. Accordingly we have—

T. I (p. liii).	(73)	6	30	340	251
+ T. III (p. cx).	(349)	6	8183	666	955
	(422)	5	8213	6	206 ¹
Equation for 6 by T. VI. 145					
,, ,, 206 by T. VII. 2					
$t = 8360.$					

$T = 8360$, being between 8333 and 8667 (Table VIII), the result is that the 11th *tithi* of the dark half was current at mean sunrise² of 5 = *Thursday*, the day 422 of

¹ These figures for *a*, *b*, and *c*, again, are exactly the same as those found by Prof. Jacobi's tables for the 26th February, A.D. 1120.

² The exact time of the end of the *tithi*, calculated according to the new tables, was 19 h. 56 m. after mean sunrise, but for ordinary purposes it is unnecessary to calculate this, because $t = 8360$ sufficiently shows that the 26th February, A.D. 1120, under any circumstances was the 11th of the dark half.

A.D. 1119–20, which by Table IX (p. cxvii) was the 26th February, A.D. 1120.

(3) In *Ind. Ant.*, vol. xxiii, p. 132, No. 113, we have a date which gives us “*Wednesday*, the 3rd of the month of Paṅguṇi of Śaka 1347 expired, the year Viśvāvasu.”

From Table II, Part II (p. cv), we see that Paṅguṇi is the solar month of Mīna, the commencement of which is marked by the Mīna-saṁkrānti. We therefore must find the time of that saṁkrānti for Śaka 1347 expired = 1348 current, which by Table I (p. lxxii), according to the southern luni-solar cycle, *was* the Jovian year Viśvāvasu, and which corresponds to A.D. 1425–6. Using the figures for the Ārya-siddhānta, we find from columns 13, 14, and 17 of

T. I (p. lxxiii).	(85)	2	15 h.	22 m.
+ T. III (p. cvii).	(334)	5	22 h.	5 m.
	(419)	7 = 0	37 h.	27 m.
	=(420)	1	13 h.	27 m.

Accordingly, the Mīna-saṁkrānti of the given year took place 13 h. 27 m. after mean sunrise of 1 = Sunday of the day 420 of A.D. 1425–6, which by Table IX (p. cxvii) was the 24th February, A.D. 1426. And since the saṁkrānti took place here more than 12 hours after mean sunrise, the month of Mīna or Paṅguṇi commenced (p. 12) on the following day, Monday the 25th February, and the 3rd of Paṅguṇi was the 27th February, A.D. 1426, which *was* a *Wednesday*.

The great advantage of the addition of Dr. Schram's tables for solar eclipses I would exemplify by the date of an inscription at Saundatti (*Ind. Ant.*, vol. xxiii, p. 130, No. 103), which mentions a *total eclipse of the sun* on Monday, the new-moon *tithi* of Āṣāḍha of Śaka 1151 current, the year Sarvadhārin. By the tables of Mr. Sewell and Mr. Dikshit the date is found to correspond regularly to Monday, the 3rd July, A.D. 1228, and we know that on that

day there was a solar eclipse. The question is whether the eclipse was visible at Saundatti, and if so, whether for that place it was a total eclipse.

The latitude, ϕ , of Saundatti is $15^{\circ} 46' N. = 16^{\circ}$, and its longitude, λ , is $75^{\circ} 10' E. = 75^{\circ}$.

Dr. Schram's Table A for A.D. 1228, VII, 3, gives—

$$\begin{array}{r} L=508 \quad \mu=269^{\circ} \quad s'=54.85 \\ \text{Saundatti has } \lambda=75^{\circ} \\ \lambda+\mu=344^{\circ} \end{array}$$

With $\phi=16^{\circ}$ and $\lambda+\mu=344^{\circ}$ —

$$\begin{array}{r} \text{Table B, } L=500 \text{ gives } s''=1.15 \\ \text{and Table B, } L=510 \text{ gives } s''=1.17 \\ \text{therefore } L=508 \quad . \quad . \quad . \quad . \quad s''=1.17 \\ s'+s''=56.02 \end{array}$$

Now Table C, with $s'+s''=56.00$ gives *total*, and with $s'+s''=56.04$ *eleven digits*; with $s'+s''=56.02$; therefore, the eclipse at Saundatti was one of 11.5 digits or an *almost total* eclipse.

Proceeding in the same simple manner by Table D, we further find that the moment of the greatest phase of the eclipse at Saundatti was 11.7 ghaṭikās or 4 h. 41 m. after true sunrise.

As I merely wish to indicate the way in which the new tables are used, I have given here only dates which at once work out quite satisfactorily. The cases we meet with are not always so simple, and in practice we have to consider various possibilities. A *tithi* sometimes may or must be joined with the civil day on which it *commences*. A lunar month, instead of commencing with the new moon, often commences with the full moon. A luni-solar year, instead of beginning with the month Caitra, may commence with Kārttika or other months, and a solar year, *e.g.*, with the Simha- instead of the Meṣa-samkrānti. Besides, we rarely know beforehand whether the year of a date is current

or expired, and sometimes only regnal or Jovian years are given to us. But the manner of calculation is the same everywhere, and the work before us contains ample information as to how most of these difficulties should be dealt with.

In a note on p. 109 Mr. Sewell informs us that in a second edition he proposes to add a list of the lunar eclipses visible in India. A list of lunar eclipses is indeed necessary, but in my opinion the lists of both solar and lunar eclipses should give *all* eclipses for the period of which the work treats, because in the verification of dates we also meet with eclipses that were not visible in India. In a new edition a few paragraphs might also be added about the calculation of the *lagna*, sometimes quoted in dates, and of the *ahargana* for a given day; and lists should be given of the deities of the *tithis*, *nakṣatras*, etc., so as to explain such expressions as “the *tithi* of Madana” and “the Maitra *nakṣatra*.” I would also suggest the addition of a list of the words used to express numbers, and an explanation of the so-called *kaṭapayādi* method of denoting numbers.

Our authors have acknowledged their indebtedness to Prof. Jacobi, and, for the solution of some problems, have referred us to that scholar's Special Tables, published in *Exp. Ind.*, vol. i, p. 450 ff. Highly as I appreciate the new work of Mr. Sewell and Mr. Dīkshit, I should be wanting in gratitude if, on my part, I did not acknowledge here the great benefit which I myself have derived from Prof. Jacobi's unpretending General Tables, *ibid.*, pp. 443–445, the design of which has always appeared to me a marvel of ingenuity.

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ECLIPSES OF THE MOON IN INDIA. By ROBERT SEWELL.
(London, 1898.)

This continuation of the "Indian Calendar" gives a list of the lunar eclipses from A.D. 300 to 1900, which will prove of great use to those who have to calculate or verify dates of Indian inscriptions. It is mainly based on Von Oppolzer's *Canon der Finsternisse*, but possesses a value of its own, inasmuch as Mr. Sewell, for the date of every eclipse, has given not only the week-day, but also the Hindu lunar month in which the eclipse took place (or will take place). This may best be shown by an example.

The Nanyaurā plate of Dhaṅgadeva mentions a lunar eclipse on *Sunday*, the 15th of the bright half of *Kārttika* of the [Vikrama] year 1055. We know that this date must fall in either A.D. 997 or 998, and from Mr. Sewell's list we see, without any calculation, that there was a lunar eclipse on the 6th November, A.D. 998, which was a *Sunday*, and which did fall in the month *Kārttika*. We also see from it that the eclipse was total, and from the times given (which have been taken from the *Canon*) we may say at once that the eclipse was visible everywhere in India.

To test the accuracy of Mr. Sewell's part of the work, I have recalculated the *data* given by him for about fifty lunar eclipses mentioned in Indian inscriptions, and have found only one instance where Mr. Sewell is wrong. The eclipse of Monday, the 9th October, A.D. 1139, which is mentioned in a plate of Govindacandra of Kanauj, took place in the month Āsvina, not in *Kārttika*.

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Besides the list of lunar eclipses, Mr. Sewell's new work contains some minor additions to the "Indian Calendar," which it seems unnecessary to specify here.

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F. KIELHORN.

M. L. Ettinghausen, Harṣa Vardhana empereur et poète de l'Inde septentrionale (606—648 A.D.). Londres, Paris, Louvain 1906. X, 194 S.

Ich erinnere mich keines Buches über indische Geschichte, in dem die Arbeiten Anderer in der Weise und mit solchem Mangel an eigener Kenntnis benutzt worden sind, wie dies in der vorliegenden Kompilation der Fall ist. Eine ausführliche Besprechung könnte ein solches Buch hier schwerlich beanspruchen. Nur sein verlockender Titel veranlaßt mich, denen, die mit der Geschichte und Epigraphik des indischen Mittelalters vielleicht weniger vertraut sind, an ein paar Beispielen zu zeigen was uns hier geboten wird.

Das Buch gibt auf S. 8—16 eine Chronologie der Regierungszeit des Königs Harṣavardhana. Der ganze Abschnitt ist, mit Ausnahme weniger Zeilen, eine Uebersetzung des betreffenden Abschnittes in C. Mabel Duff's Chronology of India, mit Wiederholung Alles dessen, wovon wir jetzt wissen daß es falsch ist. Auch bei E. vernichtet Maṅgaliśa (Maṅgaleśa) 'die Mātangas', und schickt

Pulikeśin (Pulakeśin II.) 'Caṇḍadaṇḍa' gegen die Mauryas, u. s. w. Trotz der Citate in dem englischen Originale und ihrer sorgfältigen Wiederholung in der französischen Uebersetzung scheint es ausgeschlossen, daß Herr E. die Inschriften, auf deren falscher (später verbesserter) Uebersetzung¹⁾ derartige Angaben beruhen, angesehen hat.

Eine indische Inschrift gibt er selbst, S. 145—150, in Text und Uebersetzung, und mit Anmerkungen, die eine gewisse Vertrautheit mit der epigraphischen Literatur zu verraten scheinen. Der Text ist, abgesehen von einigen Ungenauigkeiten, derselbe wie in *Ep. Ind.* Vol. VII. p. 157 ff., das Uebrige eine wörtliche Uebersetzung ins Französische der ebendasselbst veröffentlichten englischen Uebersetzung. Hätte die Sache nicht ihre ernste Seite, so könnte es nur Heiterkeit erregen, z. B. die beiden folgenden Anmerkungen mit einander zu vergleichen:

Ep. Ind. VII. p. 160, 3: With *sarva-parihṛta-parihāra* compare *sarva-viṣṭi-parihāra-parihṛta* in the plates of the Vākāṭaka *Mahārājas*, e. g. above, Vol. III. p. 262, l. 20. The meaning intended is more correctly expressed by *parihṛta-sarvaṇḍa*, e. g. above, Vol. IV. p. 250, l. 53, and by *sarvakara-parihāraṃ kṛtvā*, above, Vol. III. p. 223, l. 15. Compare also *sarvabādhā-parihāra* (e. g. *Ind. Ant.* Vol. IX. p. 128, l. 35), and for similar expressions see above, Vol. VI. p. 13, note 3.

Herr E., S. 149, 1: Avec *sarva-parihṛta-parihāra* comparez *sarvaviṣṭi-parihāra-parihṛta* dans les plaques des Vākāṭaka (!) *Mahārājas*, E. I. vol. III, p. 262, l. 20. L'idée est rendue plus correctement par *parihṛta-sarvaṇḍa*, ibid. vol. IV, p. 250, l. 53, et par *sarvakara-parihāraṃ kṛtvā*, ibid. vol. III, p. 223, l. 15. Comparez aussi *sarva-bādhā-parihāra*, I. A. vol. IX, p. 218, l. 35; et pour des phrases semblables voyez E. I. vol. VI, p. 13, n. 3.

Selbstverständlich war für das vorliegende Buch Bāṇa's Harṣa-carita von der größten Bedeutung. Nach des Verfassers Angabe in der Liste der Abkürzungen und nach seinen Anmerkungen zu schließen, hätte er den Text der Bombayer Ausgabe benutzt. In Wirklichkeit hat er überall, wo ich verglichen habe, die englische Uebersetzung von Cowell und Thomas ohne Kritik ins Französische übersetzt. An einer einzigen Stelle glaubte ich wirklich etwas Originelles zu finden, nämlich auf S. 46 und 47, wo eine höchst ansprechende und meines Erachtens richtige Erklärung der Worte *atra paramēsvareṇa tuṣāraśailabhūvo durgāyā grhātāḥ karaḥ* auf S. 101 des Bombayer Textes gegeben wird. Nur zu bald ergab sich, daß auch diese Erklärung schon in Professor Sylvain Lévi's *Le Népal*, Vol. II. p. 145, steht.

Brauche ich zu sagen, daß andere Werke in ähnlicher Weise

1) Vgl. *Ind. Ant.* Vol. VIII. p. 243 ff., und *Ep. Ind.* Vol. VI. p. 7 ff.

haben erhalten müssen? Seite 50 mit den vier ersten Anmerkungen ist ohne Angabe der Quelle übersetzt aus Dr. Bhandarkar's *History of the Dekkan*, 2. Auflage, S. 51. Charakteristisch ist hier, daß auch in der französischen Uebersetzung 'die Pferde der Meere des Nordens' (des chevaux des mers du nord, horses from the northern seas) figurieren, die ein gewisser Appāyika in seiner Armee mitgebracht haben soll, während doch die von Herrn E. selbst auf derselben Seite zitierte Uebersetzung einer Inschrift des Pulakeśin II. hätte zeigen sollen, daß jene merkwürdigen Pferde ihre Existenz nur einer falschen Lesart verdanken¹⁾.

Nach solchen Erfahrungen mag ich nicht untersuchen, ob das Buch des Herrn E. für Gebiete, die mir augenblicklich ferner liegen, irgendwelchen selbständigen Wert besitzt. In seinem eigenen Interesse wäre dem Verfasser für seine historischen Studien in erster Linie die Herausgabe und Uebersetzung noch nicht veröffentlichter Texte dringend zu empfehlen.

Göttingen

F. Kielhorn

1) Vgl. *Ep. Ind.* Vol. VI. p. 2.

Rāmkrishṇa Gopāl Bhāṇḍārkar's
Glückwunsch
zum Jubiläum der Universität Göttingen
mitgetheilt von
F. Kielhorn.

[Mit einem Verzeichnisse der von R. G. Bhāṇḍārkar und F. Kielhorn
der Königlichen Bibliothek geschenkten Sanskrit MSS.]

गोत्राङ्गणस्थबुधपरिषद् :

प्रशस्तिः ।

स्रग्धरा ।

प्राच्यानार्यान्समन्तात्कलिमलकलुषान्क्षीणसत्त्वान्विलोक्य
त्रस्तागाच्छ्रोः शरण्यान्सकलगुणनिधीन्भारती च प्रतोच्यान् ।
एकाङ्गलानां प्रदेशं स्ववसतिमकरोत्पौरुषोत्साहभाजां
ज्ञाने बडस्पृहाणां प्रगुणमतिजुषां शार्मणानां तथान्या ॥ १ ॥

शार्दूलविक्रीडितम् ।

तत्रान्वेषणतत्पराः परिषदो बहूव्यो बुधानामिह
सत्रं दोर्धमशेषमानुषमतिधातन्नयायासते ।
तासामन्यतमा दिगन्तरत्नसत्कीर्तिस्वयाधिष्ठिता
सार्धं वर्षशतं प्रभो विज्ञयते विद्योतयन्तो महीम् ॥ २ ॥

उपज्ञातिः ।

गोत्राङ्गणस्था परिषद्वरेणं न कस्य वन्द्या भुवि मानवस्य ।
ग्रिमस्तथान्ये प्रतिभाप्रगल्भा यत्रार्थिकल्पा गुरवो बभूवुः ॥ ३ ॥

वसन्ततिलका ।

पञ्चाशदुत्तरशतं शरदः पिबन्ती
ज्ञानामृतं ज्ञनमथापि च पाययन्ती ।
संतन्वती सकललोकमहोपकारं
दिद्या विवर्धत इयं समितिः कवीनाम् ॥ ४ ॥

शिखरिणी ।

यथापां सर्वासां जलनिधिरसावेकमयनं
तथेयं विद्यानां निखिलविषयाणां बुधसभा ।
यतोस्यां सा भाषा भुवि न विदिता शास्त्रमपि त-
त्प्रवक्तारो यस्य प्रथितमहिमानो न सुधियः ॥ ५ ॥

गीतिः ।

चण्डांशोरधिकारादवतां श्रेयान्विभाति मे नियतम् ।
अपनुदति भौतिकमसौ यूयं वाध्यात्मिकं तमो जगतः ॥ ६ ॥

स्वागता

ज्ञानराशिगुरुकोविदशिष्या वर्धमानविभवेयमुदात्ता ।
धुन्वती युगसहस्रमवयं नन्दतु स्वगुणानन्दितलोका ॥ ७ ॥

आर्ये ।

पद्यसुमनोज्जलिमिमं मूर्धन्यध्यक्षस्य राजसिंहस्य ।
आचार्याणां च तथा सार्धशताब्द्युत्सवे रम्ये ॥ ८ ॥
प्रह्वीभूय न्यस्यति सभाजितस्तेः सद्ः प्रवेश्य स्वम् ।
कौशिकगोत्रोत्पन्नः प्राचार्यो रामकृष्णोयम् ॥ ९ ॥ युगम् ।

Als Çrî und Bhârâtî, die Göttinnen des Glücks und der Gelehrsamkeit sahen, daß die Arier des Ostens rings vom Schmutze des eisernen Zeitalters befleckt waren und daß ihre Kraft geschwunden war, da gingen sie, erschrocken, Schutz zu suchen bei den Männern des Westens, den Besitzern jeglicher Vorzüge. Die Eine erkor sich zum Wohnsitze das Land der Engländer, denen Maneskraft und Energie eigen ist, die Andere das Land der Deutschen, die sich vorzüglichen Verstandes erfreuen und Gefallen finden am Wissen.

Hier widmen sich viele Vereine von Gelehrten, bestrebt die Wahrheit zu suchen, stets dem heiligen Werke, alle Finsterniss des Menschengestes zu verscheuchen. Einem unter ihnen, dessen Ruhm in die Fremde strahlt, der 150 Jahre die Erde erleuchtet, dem Du vorstehst, o Fürst, ihm gilt mein Hoch!

Für wen auf Erden ist die hehre Universität Göttingen nicht ein Gegenstand der Verehrung, wo Grimm und andere, den Sehern gleiche Männer, reich an Geist, als Lehrer wirkten?

Heil dieser Versammlung von Weisen, die 150 Jahre des Wissens Nectar trinkt und Anderen darreicht, der ganzen Welt einen großen Dienst erweisend!

Wie das Meer das eine Ziel aller Wasser, so ist diese gelehrte Körperschaft der Sammelplatz des Wissens auf allen Gebieten; denn keine Sprache giebt es auf der Erde und keine Wissenschaft, für die bei ihr nicht kluge weitberühmte Lehrer zu finden wären.

Besser fürwahr erscheint mir Euer Werk als das der Sonne; sie vertreibt die natürliche, Ihr aber die geistige Finsterniss der Welt.

Möge dieser edle Verein, mit wissensreichen Lehrern und begabten Schülern, in stets wachsender Kraft, alle Unvollkommenheit abschüttelnd, tausend Weltalter Freude erleben, mit seinen Vorzügen die Welt erfreuend!

Zur schönen 150jährigen Jubelfeier legt demüthig diese Verse, wie eine Handvoll Blumen, auf die Häupter des Rectors, des löwengleichen Prinzen, und der Lehrer, die ihm die Doctorwürde verliehen haben, ein Arier des Ostens, Râmâkrishṇa, entsprossen dem Geschlechte Kuçîka's.

Zusammen mit obigem Glückwunsche übersandte Professor Bhāṇḍārkar für die Königliche Bibliothek folgende Manuscripte:

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