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IN

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The bija, however, has to be rejected for the centuries anterior to the time of its introduction; and this is to be effected by a modification of Table 6. Here again (Table 6), in col. b, the figures, all through, as they stand, include the bija. In the case of the centuries marked 15 to J. 3, in which the bija is not to be applied, in col. b, correct the numbers from 185 to 785, inclusive, by substituting 0 for the last figure; thus, for 185, read 180; for 484, read 480; and for 785, read 780. Then, with Table 5 as it stands, and with Table 6 thus corrected, the final results will be in accordance with the text of the Svarga-Siddhánta, with the bija. For the centuries marked G. 1 and G. 2, the application of the bija is proper and necessary, and the figures 972 and 436 are correct, as they stand.

p. 167, Table 7, opposite 2nd August (common year), for b 720, read 739. Opposite 13th August read b 129 for 126, and opposite 14th August read b 166 for 169.

p. 168, Table 7, opposite 12th October (common year) for d 630, read 639.

p. 172, Table 10, opposite the argument 260, for equation 4·10, read 14·10.

p. 219, note 16, line 5, for Árdra, read Árdra; and line 11, omit the word March.

p. 239 b, line 46, for trayô, read trayô.

p. 240 b, last line, omit the comma at the end of the line.

p. 248 b, line 7, for Which, read which.

p. 250 a, line 20, for ithau, read ithau.

p. 251 b, last line, read (No. 17 instead of No. 9).

p. 270, in the column for the Tithi-suddhi, opposite 720, for 1 9, read 1 9; and opposite 740, for 1 6, read 1 6; 6.

p. 271, in the column for the Tithi-Kéndra, opposite 1040, for 1 45, read 1 48.

p. 315 b, last line, for Varahi-, read Varaha.

p. 336 b, line 7 from the bottom, for maná—vijaya-rájyé, read maná-vijaya-rájyé.
THE INDIAN ANTIQUARY,
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THE TWELVE-YEAR CYCLE OF JUPITER.

BY SHANKAR BALKEISHNA DIKSHIT.

THE names of the saṅkṣetras, or years, of the Twelve-Year Cycle of Jupiter, are determined in accordance with the following rule in the Bṛhat-Saṅhitā of Varāhamihira, adhyāya viii. verse 1:—

Nakṣatṛaṃ sah-śādayam
upagachchhitā yena devapati-mañtri;

tat-saṁjñānā vaktavyah
varṣamāṇa kramāṇām-aiva II

"With whatever nakṣatra (Jupiter) the counsellor of (Indra) the lord of the gods attains (his) rising, the year is to be spoken of (as) having the appellation of that (nakṣatra), in accordance with the order of the months."

Here, by the word udaya, 'rising,' we have to understand, not the daily rising of Jupiter, but his heliacal rising. Jupiter becomes invisible for some days before and after his conjunction with the sun. The sun's daily motion is faster than that of Jupiter. So, when the sun in his course comes near Jupiter, the latter becomes invisible, on the west side of the horizon; and he is then said to set. He remains from twenty-five to thirty-one days in this state of invisibility. And, when he is left behind by the sun, he again becomes visible, in the east; and then he is said to rise. Generally, in India, when the interval between the daily settings or risings of the sun and Jupiter amounts to forty-four minutes (of time), then the so-called setting or rising of

its setting. In the Sūrya-Siddhānta, xiv. 17, the text is—Kṛttikā-dānī vārṣika Gucīr ant-udayat tathā—"so the years Kṛttika and the others (that follow), are to be named) from the setting or rising of Jupiter." But there also, the commentator, Khāṇḍakātyāya, remarks—yādānām udaya-vārṣha-vyavahāra ganābhāṣan gavyati.—"at the present time, the practice of (naming) the year by the rising, is taken into account by astronomers."—[The reading in the text above, is the one adopted by Kern, in his edition of the Bṛhat-Saṅhitā, p. 47. His translation (Jour. R. As. Soc. N. S. Vol. V. p. 45) is—"each year (during which Jupiter completes a twelfth part of his revolution) has to bear the name of the lunar mansion in which he rises; the years follow each other in the same order as the lunar months." Both in his "Various Readings," p. 6, and in the note to his translation, he notices the reading sah-śādayam astanā vā yañā sā tur-mañtri. But he points out that "the comparison of the MSS. leaves little doubt that this reading is a correction, suggested by the remark of Utpala, that, in case the planet should set in one and rise in another nakṣatra, only that name must be taken which agrees with the order of the month."—J. F. F.]
Jupiter, i.e. his heliacal rising or rising, takes place.

To such a system, as is taught in this verse of Varšamihara, and by several other authorities, of determining the commencement of a sanuvtara of the Twelve-Year cycle and of naming it, from Jupiter’s heliacal rising, I would give the name of the heliacal rising-system, in order to distinguish it from the other system in which the duration and name of a sanuvtara of the twelve-year cycle are determined from the particular sign of the zodiac in which Jupiter stands with reference to his mean longitude, and which latter system, to be treated more fully in a continuation of this article, I would name the mean-sign-system.²

Now, the years of the Sixty-Year Cycle of Jupiter, and of the Twelve-Year Cycle according to the mean-sign system are determined by his mean longitude,³ which sometimes differs from his apparent longitude by as much as fifteen degrees. But, as the disappearance or reappearance of Jupiter is no imaginary thing, it is evident that it can be calculated, and is to be calculated, only according to Jupiter’s actual place, which is his apparent longitude (or right ascension), and not from his mean longitude. And, consequently, the beginning of each sanuvtara of the Twelve-Year Cycle depends on Jupiter’s apparent longitude at the time of his heliacal rising.

Three systems of determining the nakshatra with which the heliacal rising of Jupiter takes place, will be explained below. And, in connection with all three systems, an important point may be noticed here. One revolution of Jupiter, in the zodiac, is completed in about twelve years; and, in twelve years, there are twelve revolutions of the sun (that is of the earth). So that, in this period of about twelve years, there are only eleven conjunctions of the sun and Jupiter. Therefore, in twelve years there are only eleven heliacal risings of Jupiter. The interval between two risings is generally 399 days. And thus, as the sanuvtaras of the Twelve-Year Cycle begin with the heliacal risings of Jupiter, there are only eleven sanuvtaras in twelve years; the duration of each being about 400 days, and one sanuvtara being altogether omitted.

The names of the lunar months are used as the names of the sanuvtaras of the Twelve-Year Cycle of Jupiter. And the names of these months are given to the sanuvtaras, in accordance with the particular nakshatra in which Jupiter’s heliacal rising takes place. Of the twenty-seven nakshatras, two are assigned to each of nine of the twelve months; and three to each of the remaining three months. The rule for this is given in the Brihatsamhitā, viii.2:—

Varśāṇī Kārttiḳā-ādīnī—agnyād bha-dvay-anuyogini 1
kramaasās tri-bhau tu paśchamam

upantyam antyaḥ ca yad varṣhaṃ II

“The years Kārttiḳā, and others (that follow), combine two nakshatras, from (the nakshatras) belonging to Agni (as the starting-point),³ in regular succession; but that year which is the fifth, (or) the last but one, or the last, has three nakshatras.”⁴

And, from this and similar authorities, we obtain the results exhibited in Table I., on the upper part of page 3 below, for the naming of the sanuvtaras from the nakshatras.⁵

2 I shall discuss it in full on another occasion. It does not apply to the Gupta inscriptions, with special reference to which this paper has been written. The sanuvtaras in those inscriptions are proved only by the heliacal-rising system now given by me; and there is not the least doubt of its being in use, and of its having been applied in those records.

3 The mean longitude of a heavenly body is the longitude of an imaginary body, of the same name, conceived to move uniformly with the mean motion of the real body.

4 i.e. from Kṛṣṭīkā. Agni is the regent of the nakshatra Kṛṣṭīkā, which was, at one time, the first in order of the lunar mansions.

5 [Kern’s text is the same. His translation is:—“the years Kārttiḳā and following comprehend two lunar mansions beginning with Kṛṣṭīkā, and so on, in regular succession, except the fifth, eleventh, and twelfth years, to each of which appertain three asterisms.”—J. F. F.]
TABLE I.

Regulation of the Names of the Samvatsaras from the Nakshatras.

<table>
<thead>
<tr>
<th>Names and Grouping of the Nakshatras</th>
<th>Names of the Months to be allotted to the Samvatsaras</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kṛttikā; Rōhini</td>
<td>Kārttika.</td>
</tr>
<tr>
<td>Mrīga; Ādrā</td>
<td>Mārgaśīrha.</td>
</tr>
<tr>
<td>Punarvasu; Pushya</td>
<td>Pūrvā.</td>
</tr>
<tr>
<td>Āśāśā; Maghā</td>
<td>Māgha.</td>
</tr>
<tr>
<td>Pūrvā-Phalgudi; Uttarā-Phalguni; Hasta</td>
<td>Phalguna.</td>
</tr>
<tr>
<td>Chitrā; Svāti</td>
<td>Chaitra.</td>
</tr>
<tr>
<td>Viśākhā; Anurādhā</td>
<td>Vaiśākha.</td>
</tr>
<tr>
<td>Jyēṣṭhā; Māla</td>
<td>Jyēṣṭhā.</td>
</tr>
<tr>
<td>Pūrvā-Āshāḥdhā; Uttarā-Āshāḥdhā; (Abhijit)</td>
<td>Ashādhā.</td>
</tr>
<tr>
<td>(Abhijit); Sravana; Dhanishtha</td>
<td>Śrāvāna.</td>
</tr>
<tr>
<td>Śatataṅkā; Pūrvā-Bhādrapāda; Uttarā-Bhādrapāda</td>
<td>Bhādrapāda.</td>
</tr>
<tr>
<td>Rēvati; Āśvinī; Bharani</td>
<td>Āśvina.</td>
</tr>
</tbody>
</table>

---

TABLE II.

Longitudes of the Ending-points of the Nakshatras.

<table>
<thead>
<tr>
<th>Order of the Nakshatras</th>
<th>System of Equal Spaces</th>
<th>Systems of Unequal Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aśvinī</td>
<td>13° 20' 0&quot;</td>
<td>Garga System</td>
</tr>
<tr>
<td>Bharani</td>
<td>26</td>
<td>40</td>
</tr>
<tr>
<td>Kṛttikā</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>Rōhini</td>
<td>66</td>
<td>40</td>
</tr>
<tr>
<td>Mrīga</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>Ādrā</td>
<td>106</td>
<td>40</td>
</tr>
<tr>
<td>Punarvasu</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>Pushya</td>
<td>133</td>
<td>20</td>
</tr>
<tr>
<td>Āśāśā</td>
<td>146</td>
<td>40</td>
</tr>
<tr>
<td>Maghā</td>
<td>160</td>
<td>0</td>
</tr>
<tr>
<td>Pūrvā-Phalguni</td>
<td>173</td>
<td>20</td>
</tr>
<tr>
<td>Uttarā-Phalguni</td>
<td>186</td>
<td>40</td>
</tr>
<tr>
<td>Hasta</td>
<td>200</td>
<td>0</td>
</tr>
<tr>
<td>Chitrā</td>
<td>213</td>
<td>20</td>
</tr>
<tr>
<td>Svāti</td>
<td>233</td>
<td>20</td>
</tr>
<tr>
<td>Viśākhā</td>
<td>246</td>
<td>40</td>
</tr>
<tr>
<td>Anurādhā</td>
<td>253</td>
<td>20</td>
</tr>
<tr>
<td>Jyēṣṭhā</td>
<td>260</td>
<td>0</td>
</tr>
<tr>
<td>Māla</td>
<td>286</td>
<td>40</td>
</tr>
<tr>
<td>Pūrvā-Āshāḥdhā</td>
<td>289</td>
<td>0</td>
</tr>
<tr>
<td>Uttarā-Āshāḥdhā</td>
<td>306</td>
<td>40</td>
</tr>
<tr>
<td>(Abhijit)</td>
<td>313</td>
<td>20</td>
</tr>
<tr>
<td>Śrāvāna</td>
<td>320</td>
<td>0</td>
</tr>
<tr>
<td>Dhanishtha</td>
<td>333</td>
<td>20</td>
</tr>
<tr>
<td>Śatataṅkā</td>
<td>346</td>
<td>40</td>
</tr>
<tr>
<td>Pūrvā-Bhādrapāda</td>
<td>360</td>
<td>0</td>
</tr>
</tbody>
</table>
Now the 27th part of the ecliptic circle is called a nakshatra. And 360 degrees, divided by 27, gives 13 degrees, 20 minutes (of arc). Therefore, there is this much distance from the beginning of one nakshatra to the beginning of the next following. And, when the longitude of a heavenly body exceeds nil, but does not exceed 13 degrees 20 minutes, it is said to be in Áśvini; and so on. The longitudes of the ending points of all the nakshatras, on this system of equal spaces, are given in the last column but two in Table II., on the lower part of page 3 above. And generally, whenever we meet with a nakshatra with reference to the place of a heavenly body, that nakshatra is to be taken in the above sense.

There is, however, a second method of naming the nakshatras with reference to the places of heavenly bodies. And, though it has now gone almost out of use, yet it was undoubtedly prevalent to a great extent in early times, and was much made use of, on important religious occasions at least. The chief feature of it is, that the space on the ecliptic allotted to each nakshatra is not equal. Fifteen nakshatras are held to be of an equal average space; but six, of one and a half times the average; and six others, of only half the average.

A system of unequal spaces, according to this method, is referred to in some of the verses from the Garga-Saṅkhita, which are quoted by Utpala in his commentary on the Brihat-Saṅkhita. The commentary, with the passages quoted in it, runs—

Tathā cha Gargaḥ 1
Uttarās cha tath=Ādityaḥ Viśākhāḥ ch=aiva
Rōhiṇī 1
ētāni shad adhyārdu-bhōgāni II
Pausñ-Aśvi-Kṛittikā - Sōma - Tiṣhya - Pitrya-
Bhag-āhvayāḥ
Sāvitra-Chitr-Ānūrādha Mālañ Tōyaḥ cha
Vaiśākhavaṁ
Dhanishth=Ājaikapāch=ch=aiva sama-vargāḥ
prakṛtītāḥ 1
ētāni pañcachāsama-bhōgāni II
Yāmy-Aindra-Raudra-Vāyahya-Sārpa-Vāruṇa-
samjñītāḥ 1
ētāni shad ardha-bhōgāni II

"And so Garga (naya), 'the Uttarās (i.e.

\[1\text{ Kṛittikā, which is now the fifth, was, in the sixth century A.D., the third in the order of the nakshatras if reckoned from the vernal equinox.}]

\[2\text{ Uttarā-Phalguni, Uttarā-Āśādha, and Uttarā-
Bhādra-padā, and Āditya (Punarvasu), Viśākhā,
and also Rōhiṇī; these six (aro) of one-and-
a-half times (the average) longitude.} (The
nakshatras) of which the names are Paušna
(Rāvati), Āśva (Āśvinī), Kṛittikā, Sōma (Mrjuna),
Tiṣhya (Pushya), Pīrya (Magha), and Bhaga
(Pūrvā-Phalguni), (and also) Sāvitrā (Hasta),
Chitrā, Anūrādha, Mālañ Tōya (Pūrvā-Āśādha),
and Vaiśākhava (Śrāvaṇa), (and) Dhanishthā,
and also Ājaikapāch (Pūrvā-Bhādra-padā); (this class of nakshatras) is called the
equal class; these fifteen (aro) of equal (average)
longitude. (The nakshatras) which have the
appellations of Yāmya (Bharagi), Aindra
(Jyēṣṭha), Raudra (Ādrā), Vāyahya (Śvāti),
Sārpa (Asleṣha), and Vāruṇa (Śatārakā); these six (aro) of half (the average) longitude."

In this system, which I would name the
Garga system of unequal spaces, the number of the nakshatras is twenty-seven, as usual. The average space of a nakshatra, therefore, is 13 degrees, 20 minutes; a one-and-a-half space is 20 degrees; and a half space is 6 degrees, 40 minutes. The longitudes of the ending-points of all the nakshatras, according to this system, are given in the last column but one in Table II., on the lower part of page 3 above; and the entries of \(\frac{3}{4}\) and \(\frac{1}{2}\) in the sub-column, mark the spaces which differ from the average space. Nārada and Vasishtha give this system in the same way as Garga. It seems to have originated in the fact that the distances between the chief stars, called yōga-tārā, of the different nakshatras, are not equal. The distance is naturally expected to be 13 degrees, 20 minutes. But, in some cases it is less than 7 degrees; while in others it is more than 20 degrees. However, be the reason of the system what it may, there is no doubt that it was extensively in use in ancient times. And, that either it, or the very similar system of the Brahma-Siddhānta, explained below, was still in use, at least on important occasions, up to A.D. 862, is proved by the Deōgaṛh inscription of Bhōjadēva of Kanauj; the results for which, calculated by me, have been exhibited by Mr. Fleet at page 23 below.

Another system of unequal spaces is given in the Brahma-Siddhānta\(^*\), chapter xiv. verses

\* By this name, is to be understood, throughout this paper, the Siddhānta by Brahmagupta.
45 to 53. In its leading feature, it is the same with Garga's system; but it differs a little from Garga's, in introducing Abhijit, in addition to the twenty-seven nakshatras. The moon's daily mean motion,—13 degrees, 10 minutes, 35 seconds,—is taken as the average space of a nakshatra. And, as the total of the spaces thus allotted to the usual twenty-seven nakshatras, on a similar arrangement of unequal spaces, amounts to only 355 degrees, 45 minutes, 45 seconds, the remainder,—4 degrees, 14 minutes, 15 seconds,—is allotted to Abhijit, as an additional nakshatra, placed between Uttarā-Aśādhāra and Śravāṇa. This system, which I would name the Brahma-Siddhānta system of unequal spaces, is best explained by Bhāskaracārya, in his Siddhānta-Sirṣa, Part III, chapter 2, (Grahagaṇitapaddhatibhakti), verses 71 to 74. His text, and his own commentary on it, are as follows:

Sthūlaṁ kriyam bh-ānayanam yad ětaj jyotirvidīnā saṁyuvahāra-hetūḥ 71
Sākṣhamānaṁ pravakṣhayētha mani-pra&qut;#150;"uṭaṁ vivāha-yātra-ādi-palā-prasiddhiyāi 72
adhyāyadha-bhōgaṁ shaḏ ātra taśaṁ jāśā prūchur Viśākha-Aditibha-dhruvaṁ 72
Shaḏ arda-bhōgaṁ cha Bhūga-Rudra-
Vāt-Antak-Éndra-dhipa-Vāruṇaṁ 72
śaṁhāṁ-ataṁ paṁchadaṁ-aika-bhōgaṁ= uktō bh-a-bhōgaṁ śaṁ-madhyā-bhuktiṁ 78

Sarv-arksha-bhōga-śūna-chakra-liptā
Vaśv-āgraṁ syād Abhijid-bha-bhōgaḥ 74

Commentary. — Iya yan nakshatr-ānayanāṁ kriyāṁ tat sthūlaṁ lōka-vyaavahāra-ārthā-mātraṁ kriyaṁ 71 Atha Pulāsa-Vasīṣṭhā-Gargādibhir yad vivāha-yātra-ādāna saṁyuvā-phaḷa-

siddhy-ārthaṁ kathitaṁ tat śākhām mam ētunīṁ pravakṣhayē 71 Tatra shaḏ adhyāya-dha-bhōgaṁ 71 Viśākha Punavāyu Rōhiṁ=Uttarā-trayāṁ 71
atha shaḏ arda-bhōgaṁ 71 Āśādeḥ-Ārdrā Svātī
Bharagi Jyēṣṭēḥ 71 Śatābbhishaḥ 71 ēbhyaḥ śaṁhāṁ paṁchedaṁ-aika-bhōgaṁ 71 Bhōga-

pramānaṁ tu saṁ-madhyā-bhuktiṁ 790 35
adhyāya-dha-bhōgaṁ 1185 52 7 arda-bhōgaṁ 395 17

Sarv-arksha-bhōgāṁ ēṁītānāṁ chakra-kalānāṁ yaḥ eṁhēṣhāṁ sū-Bhujidbhōgaṁ 254 15
Translation. — "This bringing out of nakshatras (i.e. the method of finding nakshatras, with their ghaṭas and palas) which has been made (in the preceding verses), (is) clumsy, (and is only) for the practical purposes of astrologers. Now I will explain the accurate (method) taught by [Pulisa, Vasistha, Garga, and other] sages, for the purpose of securing [good] results in the case of a marriage, a journey, ņc. On this point, those who are versed in that (branch of the science) say, that six (nakshatras) have (each) a space which is one-and-a-half (times of the average space); (viz.) Viśākha, Aditibha (Punavrāṇa), and the dhruvas (Rōhiṁ, Uttarā-Phalguna, Uttarā-Aśādhāra, and Uttarā-Bhārapadā). And six have a half-space (each); (viz.) those the lords of which are Bhūga, Rudra, Vātā, Antaka, and Indra, and Vāruṇa [Āśādeḥ, Ārdrā, Svātī, Bhrāga, Jyēṣṭēḥ, and Śatābbhisha (Śatāāra)]. The remaining fifteen (nakshatras) have one space (each). The (average) space of a nakshatra is declared to be the (daily) mean motion of the moon [790' 35" (=13° 10' 35'')] [A one-and-a-half space (is) 1185' 52 7" (=19° 45' 52 7'']. A half space (is) 395' 17 7" (=6° 35' 17 7''] of the space of the nakshatra Abhijit (which comes) next after Viśāka (Uttarā-Aśādhāra) is [the remainder, 254' 15" (=4° 14' 15''), of] the minutes of the whole circle, diminished by the spaces of all the other nakshatras."

The longitudes of the ending points of all the nakshatras according to this system, are given in the last column of Table II. on the lower part of page 3 above. And, as before, the entries of 7 and 7 in the previous sub-column, mark the spaces which differ from the average space.

Now, the additional nakshatra Abhijit, introduced in this system, is not taken into account among the nakshatras from which the names of the months are derived.10 The question, therefore, arises,—what name is to be given to the saṁvastara, when Jupiter rises in Abhijit? It can be solved thus. Abhijit is considered to be composed of the last quarter of Uttarā-Aśādhāra, and the first fifteenth part of Śravāṇa. This is stated in the following verse of Vasistha, as quoted in the commentary, called Piyāshadārda, on the Mahārāṣṭra-Chintāmaṇi;—Abhijid-bha-bhōgam ātā Viśvēdēv-

Brahma-Siddhānta itself.

10 See the verse sarvāṁ kārtikā-lārni, ņc., at page 2 above.
exclusive; with Jupiter's apparent longitudes at the time, and his nakshatras determined from those longitudes. The dates of the risings of Jupiter are taken from ordinary Pānchāṅga in my possession, printed in different Presses at various places. The lunar months in which the risings took place, are all given by the Amānta southern reckoning. The longitude of Jupiter at each rising, is calculated from his longitude, given in the Pānchāṅga, at some stated interval; for instance, of seven or fifteen days. In naming the nakshatras, the Brahma-Siddhānta system of unequal spaces, in the last column of Table II. on the lower part of page 3 above, is the one that has been resorted to. In the last column, the months, that is the names of the satuvaras which then began, are given. It will be seen, that Mārgaśirsha is omitted in each of these two cycles. Other satuvaras also may be omitted, in the same way, according to the circumstances of the particular cycle.

### TABLE III.

Details of two Twelve-year Cycles of Jupiter.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1730</td>
<td>7th June, 1858</td>
<td>41° 47' Rōhini</td>
<td>Kārttika</td>
<td>Paśuha.</td>
</tr>
<tr>
<td>1731</td>
<td>18th July, 1859</td>
<td>77 2</td>
<td>Punarvasu</td>
<td>Māgha.</td>
</tr>
<tr>
<td>1732</td>
<td>15th August, 1860</td>
<td>110 20</td>
<td>Aśleṣha</td>
<td>Phalguna.</td>
</tr>
<tr>
<td>1733</td>
<td>16th September, 1861</td>
<td>141 38</td>
<td>Uttarā-Phalguni</td>
<td>Chaitra.</td>
</tr>
<tr>
<td>1734</td>
<td>17th October, 1862</td>
<td>171 55</td>
<td>Viśākha</td>
<td>Vaiśākha.</td>
</tr>
<tr>
<td>1735</td>
<td>16th December, 1863</td>
<td>201 32</td>
<td>Jyēṣṭha</td>
<td>Vaiśākha.</td>
</tr>
<tr>
<td>1736</td>
<td>16th December, 1864</td>
<td>232 3</td>
<td>Māla</td>
<td>Vaiśākha.</td>
</tr>
<tr>
<td>1737</td>
<td>18th January, 1866</td>
<td>263 48</td>
<td>Uttarā-Āsāṇḍha</td>
<td>Śrāvaṇa.</td>
</tr>
<tr>
<td>1738</td>
<td>22nd February, 1867</td>
<td>298 0</td>
<td>Dhanishtā</td>
<td>Śrāvaṇa.</td>
</tr>
<tr>
<td>1739</td>
<td>29th March, 1868</td>
<td>334 17</td>
<td>Uttarā-Bhadrapadā</td>
<td>Bhādrapadā.</td>
</tr>
<tr>
<td>1740</td>
<td>6th May, 1869</td>
<td>10 27</td>
<td>Aśvinī</td>
<td>Aśvina.</td>
</tr>
<tr>
<td>1741</td>
<td>12th June, 1870</td>
<td>46 39</td>
<td>Rōhini</td>
<td>Kārttika.</td>
</tr>
<tr>
<td>1742</td>
<td>18th July, 1871</td>
<td>81 47</td>
<td>Punarvasu</td>
<td>Paśuha.</td>
</tr>
<tr>
<td>1743</td>
<td>19th August, 1872</td>
<td>114 45</td>
<td>Maghā</td>
<td>Māgha.</td>
</tr>
<tr>
<td>1744</td>
<td>20th September, 1873</td>
<td>145 53</td>
<td>Uttarā-Phalguni</td>
<td>Phalguna.</td>
</tr>
<tr>
<td>1745</td>
<td>21st October, 1874</td>
<td>175 52</td>
<td>Chaitra</td>
<td>Chaitra.</td>
</tr>
<tr>
<td>1746</td>
<td>22nd November, 1875</td>
<td>206 36</td>
<td>Viśākha</td>
<td>Vaiśākha.</td>
</tr>
<tr>
<td>1747</td>
<td>16th December, 1876</td>
<td>236 21</td>
<td>Māla</td>
<td>Jyēṣṭha.</td>
</tr>
<tr>
<td>1748</td>
<td>18th January, 1878</td>
<td>267 22</td>
<td>Uttarā-Āsāṇḍha</td>
<td>Śrāvaṇa.</td>
</tr>
<tr>
<td>1749</td>
<td>27th February, 1879</td>
<td>302 46</td>
<td>Dhanishtā</td>
<td>Śrāvaṇa.</td>
</tr>
<tr>
<td>1750</td>
<td>4th April, 1880</td>
<td>339 0</td>
<td>Uttarā-Bhadrapadā</td>
<td>Bhādrapadā.</td>
</tr>
<tr>
<td>1751</td>
<td>11th May, 1881</td>
<td>15 30</td>
<td>Bharatī</td>
<td>Aśvina.</td>
</tr>
</tbody>
</table>
From this Table III. it will be seen that from one rising of Jupiter to another, the motion of the planet amounts to from 30 to 36 degrees. By the systems of unequal spaces, some months, and the sauvvatras which are named from them, have the average space of one and a half nakshatras; that is, about 20 degrees only; they are Margaśırśha, Māgha, Chaitra, and Jyēṣṭha; and these are the sauvvatras that are most apt to be omitted. For example, in Śaka-Saṅvat 1789 expired, when Jupiter rose, he was in Rōhiṇī. The following rising took place in Punarvasu; that is, from the first rising, he passed entirely through Mriga and Ārdrā, before the next rising occurred. And therefore, Margaśırśha was omitted. Again, by these two systems, Śrāvaṇa contains the average space of two nakshatras; that is, about 26 degrees, 40 minutes; and, therefore, it also is liable to be omitted. Kārttika, Pausa, Vaiśākha, Ashādha, and Āśvini contain the average space of two and a half nakshatras each; that is, about 33 degrees; and will but rarely be omitted. And Phālguna and Bhādrapada, containing not less than 40 degrees each, will never be omitted. So also, by the system of equal spaces, the nine months that contain two nakshatras each (excluding Abhijit), are sometimes likely to be omitted. But the remaining three, viz. Phālguna, Bhādrapada, and Āśvini, containing three nakshatras each, will never be omitted.

On the other hand, sometimes it is possible that a sauvatasa may be repeated. By either system of unequal spaces, this may happen in respect of Kārttika, Pausa, Phālguna, Vaiśākha, Ashādha, Bhādrapada, and Āśvini; but, by the system of equal spaces, only in respect of Phālguna, Bhādrapada, and Āśvini. And, whenever a sauvatasa is repeated, then two sauvvatras will be omitted in the same cycle; one, under ordinary circumstances; and one, on account of the repetition.

(To be continued.)

CHAMBA COPPER-PLATE INSCRIPTION OF SOMAVARMADEVA AND ASA-TADEVA.

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

I edit this inscription from two rubbings, supplied to me by Mr. Fleet, to whom they were made over by General Sir A. Cunningham. According to the information furnished to me, the original inscription was discovered in the State of Chamba, or Champa,1 in the Pañjāb, but I am unable to ascertain where it is at present. The two rubbings just suffice for editing, but they are, I regret to say, useless for photographing.

The plate is a single one, inscribed on one side only, measuring about 17½" broad by 12" high. To judge from the rubbing, a small piece of the upper proper left corner of the plate is broken away, causing the loss of about five akṣaras at the end of line 30, and of about three akṣaras at the beginning of line 31; otherwise the plate appears to be well preserved; and, with the exception of a few akṣaras which are indistinct in the impressions, the inscription is legible with certainty. There is no indication in the rubbing that the plate contains a hole for a ring with a seal on it.

The inscription consists of 32 lines. Of these, lines 1-28 are full lines, covering the whole breadth of the plate. Line 29 is written regularly below line 28, but fills only about two-thirds of the breadth of the plate, beginning below the word likhitam of line 28. Line 30 is written in continuation of line 29 up the proper left margin of the plate, line 31 on the top-margin above line 1, and the short line 32 down the rather broad right margin, which also contains, in somewhat large letters, the names of the two sovereigns by whom the grants recorded in the plate were made.

The average size of the letters is between \(\frac{1}{6}\)" and \(\frac{1}{4}\)". — The characters belong to the northern class of alphabets and bear (with the exception perhaps of the signs for ja, bha, ra, and the initial i) in every respect a most remarkable resemblance to the characters of the Śrāda alphabet, as written, e.g., in the Bhūrijapattra MS. of the Kāśikā-Vṛitti, which was brought by Dr. Bühler from Kaśmir, and is now in the Deccan College.2 The sign for the Jihvā-
mūliya, which occurs in *dēvah kusāli, line 13, and yah ko-, line 24, and that for the Upadhmāṇiya, which occurs in *viśeḥa Purāṇi, line 2, *prakritā pratiśūlī, line 15, and dharmaḥ pālandi, line 25, show exactly the same forms as in the Ṣāraṇa alphabet. The numerals 1, 2, and 5 are denoted by the ordinary numerical figures resembling closely the figures used in Śāraṇa MSS.; but the numeral for 4 is throughout, both when used by itself and as the latter portion of 14, denoted by a symbol resembling the symbol for 4 employed in Jaina palm-leaf MSS.—The language is Sanskrit, and, excepting two verses in honour of the gods Brahmā, Viṣṇu, Śiva, his consort Bhaṇḍā, and Gaṇeśa, at the beginning, one verse giving the names of the deities to whom the greater part of the grant was made, in lines 23 and 24, and four of the customary benedictory and imprecatory verses, in lines 24-27, the inscription is in prose. From a grammatical point of view I may draw attention to the employment of the Instrumental case Śūravārāṇa, in line 27, instead of the Locative Śūravārāṇa, and to the position of the numeral in bhūmāsaka-chaturāṇā, line 29, and in déva-devajh, line 30, which is not uncommon in Sanskrit inscriptions of the middle-ages. The Sanskrit of the genealogical part of the inscription, up to line 13, is unobjectionable.—In respect of orthography I would notice the occasional employment of the Jihvāṃula and Upadhmāṇiya in the passages mentioned above; the use of the dental for the palatal sibilant in Kulūvāraṇa and sākhinah, line 5, Āīvi, line 8, aśeṣha-sinārākha, line 11, paramāsava, line 12, and dandājāna, line 15; the employment of the guttural nasal instead of the anusvāra in vaśē, line 24; and the fact that ba is everywhere denoted by the sign for va.

The inscription may be divided into two parts, the first of which extends from line 1 up to the words iti śubham in line 28, while the second comprises the short remaining portion up to the end.

The first portion is dated, in line 27, on Śukravāra or Friday, the second lunar day of the light half of Vaishāka, in the first year in the augmenting auspicious reign of victory of the illustrious Āṣatādēva; and it records that the devout worshipper of Brahmā, the paramabhaṭṭāraṇa mahārājādhirāja paramāśavara, the illustrious Sōmavarmadēva (evidently the immediate predecessor of Āṣatādēva), from his residence at the glorious Chanpāka, made grants of land, etc., to certain temples of the gods Viṣṇu and Śiva, as will be shown below. The dīta or 'messenger' for these grants was the mahākṣapaṭalika or 'great keeper of records,' the illustrious Kāhuka (line 28); and this portion of the inscription as well as the concluding one was written by the karaṇāśravas or 'writers of legal documents' Śiva and Pamanna (lines 29 and 52).

In lines 3-13, Sōmavarmadēva, the grantor, is described as meditating on the feet of the paramabhaṭṭāraṇa mahārājādhirāja paramāśavara, the illustrious Śālāvāhanadēva, and as the son of the paramabhaṭṭāraṇa, the mahārājā, the illustrious Rādhādēva; and it is recorded of him that he was born in the spotless family of the illustrious Sāhiladēva, the great jewel to adorn the Pausha vanāya or solar race, who had acquired for himself such names as Sāhāsākha, Nīlānuka, and Maṭamata-simgha; "who was a new cloud to extinguish in a moment the mighty blazing fire of the Kira forces, fanned, as by the wind, by the Durgā lord assisted by the Saumati; . . . ; whose alliance was humbly sought by the ruler of Trigarta, subdued by force; who was asked the favour of bestowing royalty, in return for services rendered or to be rendered, by his kinsman the lord of Kulūta, anxious to render him homage; who by the weight of battle had broken, like a wide-spreading tree, the large force of the Turoshkās, on whom wounds had been inflicted;" and who, by destroying in Kurukshetra the array of the elephants of his enemies, had acquired for himself the name of Karivarshā.

I may state here at once that the mention of Śālāvāhan, the predecessor of Sōmavarmadēva, and of Āṣatādēva, his successor, enables us to fix with certainty the approximate date of the grant. According to the Rājatāraṅgiṇi, vii. 218, the Kaśmiri king Ananta uprooted the king Śāla of Champā; and according to
vii. 589 of the same work, Asaṭa, the Chāmpēya, was one of a number of tributary chiefs who presented themselves at the court of the king Kalala of Kāśmir. As the first-mentioned event is placed by Sir A. Cunningham between A. D. 1028 and 1031, and the second in A.D. 1087, and as Sāla and Asaṭa are clearly the two princes Sālavāhana and Asaṭa of our grant, the grant must have been made between those two dates, or about the middle of the 11th century.—The traditional list of the Chambā Rājas given in Archæol. Survey of India, Vol. XIV. pp. 114 and 115, identifies Sāla with Sōla or Sahila, the Sāhiladēva who in our grant is described rather as the founder of the family; and it has between Sāla and Asaṭa no less than five princes, none of whom is called Sōmavarmedāvā.—Some of the people mentioned in the grant in connection with Sāhiladēva can be readily identified. Trigarta, according to Sir A. Cunningham, is the name of the country between Kāṅgārā and Jālandhar, to the south of Chambā; and Kulōtā, the district of Kūlū, to the south-east of Chambā. The Kīras have by some been identified with the Kāśmirīs, but in the Bṛihatsūkhrutat, xiv. 29 they are separately enumerated, as a people inhabiting the north-east, together with the Kāśmirīs. About the Durgara lord and the Saumāṭika, with whom the Kīras would appear to have been allied, I have not been able to collect any information, but it does not seem impossible that Durgara may be identical with Dōgrā, which by Sir A. Cunningham is given as a name of the country including "Jamma and the other petty States between the Jehlam and the Rāvi." The allusion to Sāhiladēva’s victory over the Turushkas or Muhammadans, probably has reference to the repulse of one of Sultān Māḥmūd’s invasions at the beginning of the 11th century.

Sōmavarmedēva, being about to make a grant, in lines 13-15 of the inscription addresses himself in the usual manner to the various officials of his dominions and to the inhabitants of the districts concerned. The number of officials mentioned is unusually large, and reminds one of the lists of officials given in the Amgāchḫī and Bhāgalpur plates.¹¹ The individual names of every official named are by no means clear, and I would point out that I have not found the office of viṇayāṭika, line 14, mentioned in any other grant which I have studied.

The objects granted are in lines 16-21 stated to be 15 bhūmi or bhā of land, and a yearly gift of one bhāri of grain from the granary at Bhadravarma, the said 15 bhūmi of land being made up as follows:—

1. In the Pānthila mandala,—
   (a) 4 bhūmi belonging to Kulōtī, described as being in the enjoyment of the maḥādrājī Rājdhā (the mother of the grantor);
   (b) in Munagala, 2 bhūmi, situated in Sūpākāra-suramabhāta;
   (c) in Vāṭa, 2 bhūmi, situated in Chhōmmrakak-gosāṭhika.

2. In the Tāvasaka mandala,—
   (a) in Bhadravarma, 1 bhā, situated in bhadravakāśiya-Vijjanap;
   (b) in Sarāhula, 1 bhūmi, situated in Bhāṭavasanta;
   (c) in Phālyaka, 2 bhūmi in Lārṭuka, belonging to Dāṃnasuta; and 2 bhā in Jānuḍhaka, belonging to Rāmājyāyasuta.

3. In the Pārakamaṇṭa mandala,—
   in Māṅgala, in Ṯhulūkā, 2 bhūmāshaka belonging to Lutchakusuta, and 2 bhūmāśhaka belonging to Hūrtākusuta, these 4 bhūmāshaka being equal to 1 bhā.

Or, in figures, 4 bhā in Kulōtī, 2 bhā in Māṅgala, 2 bhā in Vāṭa, 1 bhā in Bhadravarma, 1 bhā in Sarāhula, 4 bhā in Phālyaka, and 1 bhā in Māṅgala; total 15 bhā.

There are several things in the passage of which the above is an abstract, which I am unable to explain satisfactorily; others, about

¹⁰ Ancient Geography of India, Vol. I. page 150.
¹¹ In the genealogical part of the grant I am unable fully to explain the epithet applied to Sāhiladēva in line 9, according to which he had his extraordinary expanded sparkling might proclaimed by the venerable holy god Sūdrakasvāmin. I suspect that Sūdrakasvāmin is a local name of the god Viṣṇu, in honour of whom Sāhiladēva may have founded a temple.
which I am doubtful. The term bhūmi or bhū I take to be a measure of superficial area, and from line 19 it is clear that the bhūmi or bhū was subdivided into four māḍhaka. But I do not see the exact force of the term sit prefixed to bhūmi and bhū in lines 16, 17, and 18; and, similarly, I cannot explain the term askṭaprahaṅkika which occurs twice in line 18, and again below in line 31; nor the phrase sakhiliḥ pakhilam in line 20.—As regards the territorial names, it appears that the realm of Sōmavarmadēva was divided into māḍalas, and that the names Kulot, Mūṅgala, Vāti, Bhadra-varma, Sarahula, Dhālaka, and Maṅgala, denote certain sub-divisions of the three māḍalas Pāṇḍhila, Tāvasaka, and Pārankamaṇa mentioned. The remaining terms Sūpakāra-surabhāta, Chhāmēraka-gleṣṭhika, etc., I would regard, judging merely from the wording of the text, as names of villages. But on the very imperfect maps at my disposal I have not been able to identify any of the places or districts enumerated, with the exception of Bhadravarma, which would seem to be the Bhadrawār of the maps, to the north-west of Chambā. Finally, as regards this portion of the inscription, I would draw attention to the fact that the owners of the land concerned, where they are mentioned at all, are not called by their own proper names, but described as the sons of their respective fathers—Deuna-suta, 'the son of Dēna,' Rāmājīya-suta 'the son of Rāmājīya,' etc. The same practice is observed in the concluding portion of the inscription, lines 29 and 31.

Of the 15 bhūmi of land described, two bhūmaśaka or half a bhūmi, according to lines 21-24, were granted by the king, as an agrahāra, to a temple of Vīṣṇu erected in honour of (?) the mahārāja, the illustrious Āsanta (?) and the remaining land, as well as the yearly contribution of grain, was given, as an agrahāra, jointly to the gods Vīṣṇu and Śiva, who must have been worshipped in one temple, the former in honour of the illustrious Lakiṣmanavarman, and the latter, an image of whom had been set up by the queen Rādhā, in honour of the illustrious Sālakaravarman. The first line of the verse (line 23) in which the two gods are mentioned, is not quite clear to me; as regards the remaining portion of the verse, I take Sālakara-
the village Juṅgarāra, in Kōshṭagrāhara, in the Chaturāha maṇḍala, to an individual of the Kāśyapa gṛītra. So far as I can make out, this grant contains no date of any kind.

The princes Maśiyavarmarvan and Bhōja-varmaḍeṇa are evidently No. 44 and No. 45 of the genealogical list of the Chamba Rājas, placed by Sir A. Cunningham (Archæol. Survey of India, Vol. XIV, page 115) in A.D. 1400 and 1425.

TEXT.

1 Ōuni23 namiṣa-Śivāya | (1) Jayati24 bhuvana-kārapāṇī Svaṃabhūr-jayati Purandaranaṇandā Murāriḥ[25] jayati Girīṣutā-niruddha-dēhō durīta-bhay-āpaharō Hara-


3 samastō vighnha-varg-ōpasargali | Śī. Chāppakā28 vāsakatā parama-vr(āha)manyō lalāṭa | tata-gaṭīta | vikaṣa | bhhrukuti- prakaṣa-kutṣita-katka-[S]aumāṭika-kṛita-sānāthya-Duraga-

4 rōṣvara-samṛī-sandhukshita-Kīra-v[a]la-va[ba]lavad-dav-āsānakṣaṇi-kṣama-kṣapaṇa-[na]-va-jaladharasya l8 daṇḍ-ōpanata-Trigartādhipī-anunaya-prārthita-sandhānasya ī śīva-viṣayāgra-


6 ga-samaya-samarthita-mada | gandha | invdha(bh)ā-madhukara-kul-ākula-kapōla-phalaka-kari-gaṭa-dāra-pṛitī-prasanṇa-mānasa-bhagavād-Bhāskar ī | abhimandita-nīj ī | ānvaṇa-prasūti-

7-paramparā-sāra-Karivarsha-abhidhān-ābhuddasya | tattāla-milita-nikhiṇa-mahipāla-mukhaśa-kurčikā-kṛti-snarabhipa-saptā-bhuvan-ābhuddasya | nṛtisāa-

8 ya-saury-andā-rāgahāgambhūra-maryādā-dayā | dākṣiṇya-viśaḷakṣaṇa- | jajarīta-Jāmادagnya-Si Śiti | Karṇa | Yudhisīthiḥ-ādi-pravara-prasiddhē darśana-saphalita-lo-

9 ka-lōchana-manōrama-mū[ṛtē]29 bhagavach-chhrl Śūrdakasvāmi-dēva-prakhāpya[m] ī | ānanyasāmāya-sphāra-sphurad-uru-mahimnā saṃara-sahṛsara-saṃvīdāna-kōp-ārjita-

10 Sāhasānaka-Nīaṃaṇkamalla-MoṭamatāISING-hūḍy-āpara-parādyasya ī | Paśuhaṇa-vē(va)m30 | šā-bhūṣapa-mahāmaṇaḥ śrīmat-Sāhiladevaśya ī | nirmalē kulē tila-


12 ta-mārtiḥ tribhuvana-bhavānī-vi[cha]chhurita-kṛtiḥ paramabhaṭṭāraka-mahārājadhirāja-pramāṇaṃ[sva]ra-śrīmat-Sālavāhanadeva-pāṇāudhyātaḥ | paramabhaṭṭārikā-mahā-

13 dōvī-kukshī-kṣhriṇānandī-sudhādhitīḥī paramabhaṭṭāraka-mahārājadhirāja-paramēśvaraśrīmat-Somavarmadevaḥ-kūsali | sarvān-ēva niyogastān rāja-raśjanaka-rāj[ī] ī | ī-

14 mātya-rājā[ja]putra-parikara-samānyuktaka-viniyuktaka-dūta-gamāgamikā-bhitvaramaṇānī khāsa-kulika-saulkika-gaulikā | khaḍgarakṣa | tarapati-virayātrika-chaurō-

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23 From the rubbing.
24 Expressed by a symbol.
25 Metre, Pushpitāgrā.
26 Metre, Mālinī.
27 Chāppakā, instead of chāmpaka, according to Professor Pischel, is the ordinary spelling of Śākata MSS. See Solf, Kaimārī Recension der Pañc̄ahādīka, page 29.
28 Here and in other places below, which it is unnecessary to point out separately, the sign of punctuation is superfluous.
29 At first sight this akeha looks like rī, and this was no doubt originally engraved; but a careful examination shows that rī has been altered to rī. This akeha, which originally was omitted, is written below the line.
15. dharaṇīka-[dā]ṇḍika-daṇḍa[p]āśi(śi)kā-vrī(brā)hman[ā]-[kshatrya]-[śvīt-]chhūdr-ādi-[ś]āṣṭā-
dāsa-prakṛtiḥ-pravāsī-yanapadānāḥ-cha samājāpyata-yastu vas-samvīditaṁ
yathā svāsāyamāna-śa(chechha ṣ)a""trātha
16. bhogē Pāṇthila-maṇḍala-pratīva(ba)ddha-mahārājā[ś]-Rādhā-dēvyā[ś] bhuchya[jya]māna-
Kulōṭi-satka-bhūmāyā-ḥataṣaṛaḥ tathā Mungalē Sūpākāra-surambhūta-sthitā
sīt bhūmi-dvayaṁ i tathā
17. Vāṭāyaṁ Chhāṃnārakā-gāḏhikā-sthītā sīt bhūmi-dvayaṁ tathā Tāvasaka-maṇḍala-
pratīva(ba)ddha-Bhadravarmē bhadrakāśīya-Viṣvān-dhitā sīt bhūr-ekāḥ
tathā Sāraḥūlō
18. Bhāṭavasaṇta-sthitā sīt bhūmir-ekāḥ tathā Dāhāyakē-shaprahaṇīra-Dēnناسun-satka-
Lartukō bhūmi-dvayaṁ tathā-ātra-aiśa diviti-āṣṭaprahārika-Rāmājyasyata
19. kamaṇḍa-maṇḍala-pratīva(ba)ddha-Maṅgalē Dhaullēkāyāṁ Latthhusaṇa-satka-bhūmāsha-
dvayaṁ tathā Hu[ś]ṛtā[kasatka-bhūmāshaka-dvayaṁ-ubhau sanāṣū[ddha]ṃ
dhvē ekāḥ-āṅkātaḥ Kulōṭi bhū 4 Mungalē bhū 2 Vāṭāyaṁ
20. bhū 2 Bhadravarmē bhū 1 Sāraḥūlō bhū 1 Dāhāyakē bhū 4 Maṅgalo bhū 1 āvaṁ bhū 15 āvaṁ pūrvaprasiddha-bhukti-pramāṇa svāsāma-trīna-
goyūṭhī[ś]gāḍhara-yaṃ pāṭih Sakhalana[ś]̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐̐ś

35 This word, which originally was omitted, is written below the line.
36 I am almost certain that the original akṣara šha has been struck out, and that chechha has been engraved below it. With ekaṇṭhaḥ jñānaṃ iṣvaraṁ-anuvāyataṁ i Tathā cha yāṣya-
37 This should properly be -dēvī-bhūjyamāna.
38 Originally Pārī.; 39 Originally Hūna.
40 Originally maṇḍhūdaṇḍa.
41 The ordinary spelling of the last portion of this word is -yātī, but this inscription and the unpublished Chamba grant of Bhādaravarmē have distinctly gīyūī-tāhī.
42 This Anuvātra is somewhat indistinct; but the unpublished grant mentioned in the last note has clearly saṅkhitā [pakhasī]. I have not met with the expression anywhere else and am unable to explain it.
43 I am very doubtful, especially about the second akṣara in brackets. So far as I can judge from the rubbing the original reading would seem to be śrīpā; but the second of these two akṣaras has been altered, and the i of śri also may have been struck out. It is not impossible that the right reading may be śrī-Āṇḍāya.
44 This word is plain in the rubbing, but I cannot explain it; of course, it is easy to say that it may be a mistake for anya or anye. The following bhū 14 mā 2 I take to mean "hāmī and 2 mahīkā;" but the figure 2 is indistinct in the impressions.
45 Metre, Śārdūlavikrūṭī.
46 Metre, Śūka (Anuḥṭuḥ), and in the following three verses.
47 Read haratō hārayantaṁ-cha.
48 So this word is spelt e. g. also ante, Vol. XIII. p. 78, lha 24.
49 The akṣara in brackets looks like tri, altered to devi.
FOLKLORE IN SALSETTE.

BY GEO. FR. D'PENHA.

No. 2.—The poor boy who went in search of Īśvara.

There once lived an old woman with her only son, whose occupation was to take out other people's cattle to graze, for which he received a very meagre remuneration; and this was their only source of maintenance. Poverty stared them in the face. Very hard indeed was their lot; hard to such an extent that they had very often to be content with only one meal a day. Things continued in this state for some time till at last it became unbearable, and the boy determined to seek out Īśvara, and ask why of all mankind he alone had to endure such misery.

Accordingly one day told his mother of his intention and asked her to make him enough bread to serve him for several days. The old woman, as ignorant as himself, prepared some bājīrī cakes, and giving them to him, bid him a loving adieu, wishing him every success.

Taking the cakes and an axe, the boy started in search of Īśvara. He walked on and on till night overtook him, and he sat under a jackfruit tree, and partaking of his coarse fare went to sleep. At dawn, when he was leaving the place, the tree detained him and asked him where he was going. The boy told the tree the object of his journey. Wherupon the tree said:

"Well, if you are in search of Īśvara do me a favour. If you should happen to meet with him tell him it is now twice twelve years since I have stood here, but so far I have not borne a single fruit."

The boy promised to give the message; and the better to remember it he tied a knot on a rope which he had with him, and started on his errand.

He walked another whole day, and night coming on he partook of his bājīrī cakes and rested himself under a mango tree. In the morning he arose and as he was going away the tree asked him where he was going, and on being told it exclaimed:

"Tell Īśvara for me that for twice twelve years I have been standing here, bent down with the burden of my fruit, but not one living creature will touch, much less eat, any of it."

The boy said he would do it, tied another knot on the rope, and pursued his journey. He walked with rapid strides for another whole day and by dusk entered a city and there passed the night after eating some of his cakes. At day-break he saw a big tank under construction. It was being built by the king of that place for the benefit of his subjects, but to his great grief it could not be completed, for no sooner was one side built and the other commenced than the first would break down, and by the time it was rebuilt the other would give way; and so had it continued for twenty-four years. The boy seeing the king very sad, asked him the reason and the king told him,

* * *

40 Here about five aksharas are missing.

* * *

4 Here two or three aksharas are missing.
and in turn asked where he was going. He told him everything, whereupon the king said:—

"Do take my message, too, to Īśvara. Tell him I have been twice twelve years building a tank for the good of my subjects, but it has not been completed. Ask him the reason why, and what I should do."

The boy said he was at His Majesty's service and would do everything the king told him. And he again started; but before he left he made a third knot on the rope lest he should forget.

For a fourth day our hero walked on and on till late in the evening, by which time he had reached a certain shore. Being very weary and hungry he ate what little remained of his bājāri cakes and slept soundly till break of day.

When he woke up the next day he saw at a little distance an enormously big manghal-

māsā (fish) stretched on the dry land. On approaching him he questioned the boy as to where he was going, and he told him that he was in search of Īśvara. Thereupon the whale said:—

"If you happen to meet with Īśvara, do not forget me. Tell him it is twice twelve years since I was thrown on this shore, and since then not a single tide has come within my reach to enable me to get into the sea again."

The boy made a promise to the whale to mention him to Īśvara, and made a fourth knot on the rope. He then rushed into the sea, little recking of the roaring of the waves, when lo! a passage opened out for him and he was enabled to proceed on his way. He walked a long while and came to a house, at the entrance of which, on the sixth step, was seated an ascetic, in whom the boy did not recognize the object of his search, for he was Īśvara himself, who pitied the boy and had come to aid him. Īśvara questioned the boy as to who he was and what he wanted in that place. The boy said:—

"O holy saint, tell me, if you can, where I can find Īśvara."

"What do you want from Īśvara? Tell me all, and I will try and help you."

Upon this the boy related his story, and how he had journeyed for several days to seek Īśvara, and beg of him to better his condition!

Īśvara bade him go home and said he would now live in a better position. Hearing this the boy went down from the fifth to the fourth step, when Īśvara detained him and asked him if he had anything else to say. Just then the boy remembered his promise to the whale, and told Īśvara how for twice twelve years he had been lying on dry land and how he was longing for a tide to come and take him back to his mother, the ocean.

On this Īśvara told the boy to tell the whale that he had in his belly a box containing very precious gems, and that if he would throw up that box and give it to the first passer-by, the tide would come and carry him back into the sea.

The boy heard these words and went down to the third step when Īśvara again detained him and asked him if he had nothing else to say; whereupon he remembered the king who was building the tank, and said:—

"There is a certain king who says he has spent twice twelve years in constructing a tank for the benefit of his subjects; but to his sorrow as soon as one side is built and the other commenced, the first side breaks down, and by the time it is rebuilt the other side gives way, and so it has continued for twice twelve years. He wants to know what he should do to complete the tank."

Upon this Īśvara said:—"Tell the king that if he has the welfare of his subjects at heart, he must give half his kingdom by bestowing it on the first passer-by, and also give him his daughter in marriage, and then only will the tank be completed."

The boy then stepped on to the second step when Īśvara asked him for the third time whether he had to give him any other message, and this time he was put in mind of the mango-tree, and said:—

"In a certain forest stands a mango-tree bent down with the load of its fruit, and it complains that it has been in that position for twice twelve years, but no living creature eats of its fruit."

The boy was ordered to tell the tree that at its foot was buried a box containing great treasure, which box the first passer-by should be allowed to dig out and take away, and then its fruit would be eaten.
He came down to the first step and he was again stopped by Īśvara and asked if he had no more to say, and he thought of the jackfruit tree. He said:

"At a great distance from here grows a jackfruit tree which has been in existence for twelve years, but unfortunately has borne no fruit through all this long period."

Upon this Īśvara said: "In the trunk of the tree is hidden an immense quantity of gold, which if the tree gives up to the first passer-by, it will produce fruit abundantly, such as its kind has never borne."

Hearing this the boy left. He was asked over and over again if anything more was to be said, but he replied in the negative, and took leave of the supposed holy man.

When he had passed the sea, which closed up after him, he came on the whale to whom he told what Īśvara had said, upon which the whale replied:

"For twelve years have I been lying here and have seen no other human being besides yourself; and as you have been the instrument of my delivery I will give the box containing the precious gems to you, take it and be happy."

Thus saying the whale threw up a box, which the boy took up, thanking the whale; and behold! the waves of the sea came up foaming furiously, and rising higher and higher encircled the whale and drew him again into his mother, the ocean.

Taking the box the boy came to the city the king of which was building the tank, and delivered the message of Īśvara to the king. The king, whose greatest ambition was the welfare of his subjects, willingly risked half his kingdom. It also happened that this boy was the only foreigner who had ever passed through the dominions of this king, and consequently he was selected as the fortunate recipient of half the kingdom and the king's daughter in marriage. The gift and the marriage were therefore offered to the boy, who readily and with great pleasure gave his assent; and this brought about the completion of the tank.

In due time the wedding was celebrated with great pomp, and our hero, as a prince and the son-in-law of a great Rājā, proceeded on his journey homewards, accompanied by a retinue of many soldiers, horses, elephants and camels laden with costly articles. In this way he soon came upon the mango-tree and delivered the message of Īśvara to the effect that a great treasure was lying buried at its foot, and that the tree should allow the first passer-by to unearth it and take it away, when its fruit would be eaten to the very last.

On hearing this the tree said to the boy:

"I have been standing here for twelve years and have seen no human being besides yourself; therefore the treasure is yours, take it and enjoy it."

The boy got the treasure dug out, and no sooner had he taken possession of it, than all the retinue climbed up the tree, and ate each and every mango that was on it.

They soon left the place, and after a long time came to the jackfruit tree, which was waiting impatiently to hear from the boy, whether he had met with Īśvara and what news he had brought concerning itself. The boy replied:

"Īśvara has ordered me to tell you that in your trunk is hidden an immense quantity of gold which should be given to the first passer-by, and then only you will blossom and bear fruit."

The jackfruit tree, when it heard the command of Īśvara at once burst open its trunk from which fell out heaps upon heaps of gold, all of which was left at the disposal of the boy; and lo! the tree, the same moment, blossomed and bore fruit such as its kind never bore before, and in such quantity that it was nigh breaking with the weight.

Leaving this place, the boy, with all his retinue and the treasures he had got from the trees, took the road to his native place, where his mother was still living in a wretched hut. He therefore went in advance, hired a splendid abode, and prepared his mother for the reception of his royal bride.

A little while after the retinue arrived. The boy and his mother came out to receive them, and conveyed the bride to their new residence. Being now well settled and having large resources of wealth at their disposal, the boy lived with his royal wife to a good old age, occasionally paying and receiving visits from his royal father-in-law. He also did many charitable deeds and was loved and respected by all around him.
“Aurā māṇīā nirap sāngh Īśvarālā. Bārā ānī bārā chauvis varsān zhaliṁ guā miṁ thalam bindhithamān thā mangō raithchā kartāham, pūn ēkā thavār bindhanāṁ bīgī thavār bāndhāṁ lāgūṇā kā pailī bāzū kāêśalā, āni thi dhārūrs kartāham bīgī bāzū khōsālā, āni thi thalamān kaiṁ pūrā mān hōi nāhān. Khabar kar Īśavarāparaisāṁ kān, āni miṁāṁ kā karvāṁ.”

Thā sōkrā kabūl zhailā, thisrī gānth mārī ērōlān āni chālthā zhailā.

Chauthā dhīs chālīā āni ponchālā ēkā bāndhrāā. Thāaṁ ēthān rāth zhailī, rōti rēthī thi khalī āni nīzālā. Sakalē̄mā uṭhālā thā ēk mōṭhā manghāmāsā nadhrān parā sākē zaminivār. Thō guālā mārē, thavānā thē manghūleś̄aśān dzāpār khabar k’laṁ kaiṁ kāţh thāthā thē. Sōkrāzūn sāngathālām guā Īśvarāchē sūdīlā. Thavaṁ thō manghūleś̄a boṭhān:

“Zhar tūlā Īśvār bhēṭīl thar māṇā nirap dhēs, guā bārā āni bārā chauvis varsān zhaliṁ mānāṁ kā sūkhī zaminivār parlaun thē, pūn aurē tēpān ēk thari pūchās āiī nāhīn mānāṁ dhāriāmānī zhāvālā.”

Sūkrā kabūl zhailā, chauthā gānth mārī āni dhāriāmānī dhāuvā mārī. Thavaṁ bagā kā zhailām, ēk rasthā zhailā, āni sōkrā sākēśān chālūn lāghālā. Murādā lāmā chālliāvar ēk ghar ailmān, thē gharācchē savē pairivār baislāthā Īśvar, pūn thē sōkrāzūn ālkhilān nāhīn.


Thavaṁ thē sōkrāzūn sāngathālāṁ thō kōn hōthā thē āni kaiśā āiīl Īśvarāchē sūdīlā. Īśvarāzūn sāngathālā thālā thērā zāvā āni boṭhā thē boṭhā thē diissāśānī thō hoil khāūnān pūn hōnuṁār.

Aurān aikūnūnī thō sōkrā deulā chauethical pairivār. Īśvarāzūn hōlthīrīlām āni khabar k’laṁ bīzān kaiṁ sāṅgivācchē aśēl thē. Thē vakhthān thālā viāłh parālī manghāmāśaśūnī āni sāngathālā Īśvarālā guā ēk manghūleś̄aśā parlaū sākē zaminivār, āni bārā āni bārā chauvis varsān zhaliṁ thālā pūn aurē tēpān ēk bi phūās nāhīn āiī thālā dhāriāmānī nēvā sārkı.

Īśvar boṭhālā: “Sāṅgh thē manghūleś̄aśaālā
FOLKLORE IN SALSETE.

January, 1888.] 17.

gu' thiaché pótámání hai ék pétti hiriam mó-
thiáuchí. Zar thi pétti thi vôkil àni paíl-
vatsariala dhél thi ék phénús aíl àni thiáal-
nail dhariamáni.

Auræn aikünisím thi sökrà deulál thiá-
pairivar, thavámi Íivarazün dhúsrun pêkhwilân àni khabar kelaam: "Bizaam kaii sângháváchaam hai?" Thavámi sökrílaal viâdh parli rájáchi àni thó bôthlal: "Ékk gåvámáni ék râza hai, thiá-
zün ék thalaam bândath gháthlalín, pùn bàra àni bára chaunis varsaám zhailím thari thiám thalaam kaii puram hoí náhir. Ékk bâzú bândhünisim bige bâzú bândhû lághthán ká paii bâzú khésálthé àni thi dhûhús kartham bigi bâzú khésálthé. Thiáthó thiáatun sângháthlai shrihârvá gu' thiáatun ká karâvàm.

Íivarazün bôthlal: "Sângi thiá rájâlá gué-
thiáaché máñalám aíl bâzú raithaam bârdhéam thar thiáatun ápâlaus ardhaam râz àni sökrí dhiâvi pâlái vatsariala, thaváam-them thalaam puram hoil.

Thaváam thi sökrá ñuthrâla dhûsrun pêkhwilân àni Íivarazuân dhúsrun khabar kelaam: "Bizaam kaii sângháváchaam hai?" Thaváami thiáatla viâdh aíl ámbiaché àni thó bôthlal: "Ékk râsámaní hai ék ámbá. Thò sanghthái gué bâra àni bára chaunis varsaám zaillí thiáalán úpazlai thè, pùn auré varsaám bilkul kôni thiáachém phal khái náhir.

Íivarazuân sângtalám thiá ámbiáalá sán-
gâvá gu' thiáaché bándháslám hai ék pétti mothô dhânachí. Zar thi pétti dhél paii vatsariala thi mánsuam thiáachém phuàm phal kháitn.

Én aikünisín deulái pâlái pêkhwilân, pùn Íivar-

Íivar bôthlál: "Sângi thiá phansálá gué thiá-
aché bhândamáni hai murád dhàn. Zar thim dhàn dhél paii vatsariala thò pha-
lámáisim bharál.

Auræn aikünisín thi deulál àni chálthá zhailal. Íivarazuân pêkhwilân àni bédhun bédhun khabar kelaam bizaam kaii sângâváchaam aísl thè. Thiáatun bôthlám náhir àni chálthá zhailal.

Dhârâ passâr kéliâvar rasthá bandh zhailál, àni manghalmásá bhélál, àni thiáal géoo Íivar-
zün bôthlthâmá thiém sângtalám. Thaván thi mánghalmsá bótthlál: "Bâra àni bára chaunis varsaám zhailím miim parlaam thi pùn tûge ñiva bizaam kôniim èi zai náhir, thar thûs gè thi pétti àni khâsal ho.' Aissam bòllnísim thi pétti vôkilá àni thiá thiáktham zâr aílà àni thiá manghâmsâlà dherian nelaam.

Thi pétti geûnsäam thi sökrá gélá thiá gân-
vlâla zaiâm kâ râza thalâm bândhith hothâ àni Íivarâchá nírap sânghâthl thiá râjâlá. Thò râzá, giañcha dhiâan mian hothám thiáaché raithéchh bârânânavar kâbûl zhâlal ardham râz àni thiáchí sökrí dëvâlál gué vatsariala.

Athaam aissam zhailam gué hia sökrâ ñiva biza mânuû kôni thiá gåvnânsîm passâr zhailâl nôthà, thiáthó rájázun thialâs thiaâchá ardham râz àni sökrí dhili. Thaurâ dhíssan varâd zhailam. Thaván thi thiaâchâm bândkâm samâporâm. Athaam thi sökrá ék rájâchh zâvaim partam g'la ghará, thiaâchá sângâthi paltan, ghor, hathî àni hûttaam, àni murâd dhàn àni mûl. Zâthám zâthám aíl thi ámbiâché meë, àni thiall Íivarâchá nírap dhilá.

Thaván thi ámbó bôthlál: "Bâra àni bára chaunis varsaám zhâlilin mânuû pûn auré varsaám tûge khirîs bizaam kôni avârâsîm èi zai náhir, thar thûs kûru àni thém dhàn nò.

Thia sökriâzun hukum keli thi'm dhân kur-
vûn kârâvâ, àni kûrvithûs sùriû mânsuam charliû àni phalan phal kâlaam.

Ansoi' g'la àni zâthám zâthám bhèlal phan-
sâlal àni thialâs sângtalám: "Íivarâzun sâng-
talâm gué tûge bândhâslâm hai murád dhàn. Zar thim dhân, dh'él paii vatsarialâ thi-
thâvar phuàm àni phalâm èthin."

Auræn thi phansâzun aikünisín thiáachém bândh ugrilân, àni râisîsîn soñam parliaam àni thiém dhilâm thia sökriâl, àni thiâs vâthân thiâvar phuâlâm àni phalân àliûm aurethûk gué thiâchém bhárâsíûn thi phanis môrthôthâh.

Ansoi' núgâlal àni thiáché gharchh rasthá dhilal. Thò gélâ purâtthi thiaâché aísla khabar dh'vilâ. Thi adhip r'thaaëd'èké thömprémaam. Thò gélâ àni èk móthûn ghar gethâm bhâria-
sûn. Thaurâ vâthàntám thiáché paltan bîltan pônchliûn. Thò sökrâ àni thiáché âis núgâîinn bh'tâvâ àni rájâchh sökriâl nélâm thiáchnè navé gharan.

Athaam thiáchém mëc murâd dhûnhâl zhailâm àni thi sökrâ rëlî thiáché baikùsôni khûsâlin. Thiaâzun thari murâd dhûnaam kéla àni sàrim mânsuam thilaâl bâraam châllîn.
26. His desire of subjugating Kashmir having again become dominant, the Mahārājā determined to attack Muhammad Āzīm, the Afghān governor of it, and went against him in St. 1871 [A.D. 1814] with numerous Rājas of the mountains, accompanied by their forces. He remained for some time at Sīlākot, till he was joined by his allies, and then marched into the mountains where also ‘Az Khān, the chief of Rājāur, came to meet him, paid him homage, and tribute. Then Ranjit Singh went on to Dehra Bahram,18 where he encountered a force of the enemy but routed it, whereon it took refuge in the fort, which was besieged and surrendered. Then he continued his progress to Pūnchh, where he halted several days and sent an envoy to Muhammad Āzīm, requiring him to submit, and the latter replied that he was not subject to the Mahārājā, but to the Shāh of Kābul, who had entrusted him with the government of Kashmir, which he was prepared to defend, Ranjit Singh now determined immediately to attack him, and crossing the Pir Panjāl Range marched to Hirāpūr, where he found numerous Afghān and Kashmiri forces collected, and gave them battle. During the fight, so violent a fall of rain took place that it caused an inundation, and the cold being very intense, disheartened the Pañjābīs so much, that they were defeated; three of their high officers being killed, namely, Gurū Singh, Mahēshā Singh, and Dasā Singh. Whilst the battle was yet raging, the treacherous ‘Az Khān, who had joined the forces of Ranjit Singh only on compulsion, informed him that most of the troops left by him at Hirāpūr had been slain or captured. This news was false, but was believed by the Sikhs to be true, and Ranjit forthwith retreated in great haste to Bhimān on the frontier of Kashmir, but on ascertaining that ‘Az Khān had made a mendacious statement, he desired immediately to return and subdue Muhammad Āzīm. The sarās of his Court, however, made strong representations to the contrary, boldly giving him the advice to retreat with his forces to Lāhōr, which he was ultimately compelled to adopt. They also suggested that in Lāhōr preparations might be made for renewing the campaign if necessary, but that meanwhile the Mahārājā ought to send to the Afghān governor of Kashmir a conciliatory letter, mixed notwithstanding with threats, counselling him to abandon the siege of Hirāpūr, and to allow the Sikh garrison to depart. This Ranjit Singh did, and was in a short time joined by the garrison of Hirāpūr, which had capitulated, and brought a friendly reply from Muhammad Āzīm. The march back to Lāhōr now began immediately, but the Diwān Mohkam Chand, who had already fallen sick in Kashmir, expired on arriving in the capital of the Pañjāb. His loss was much deplored by Ranjit Singh, who appointed his two sons Rāmīdāl and Mōtrām to succeed him as Diwāns, and put them in charge of various military expeditions. Disturbances were now raised by the Khutak tribe of Afghāns and by other malcontents in the districts round Makhad19 and they besieged the small Sikh garrison left in the fort of that name. This information having reached Atak, troops marched forthwith from that place to relieve the garrison, but were totally defeated by the Afghāns, whereon Ranjit Singh came in person with his forces, dispersed the rebellious zamīn-dārs to the four winds, relieved the distressed garrison of Makhad, and conquered the district again. A portion of the vanquished rebels having been slain and the remnant made prisoners, the troops departed.

27. Having for a long time entertained the design of subjugating the Nawāb of Multān, and becoming master of the whole Pañjāb, Ranjit Singh despatched an army under the command of Diwān Bhawānīdās to Multān, who, on his arrival, pitched his camp near the city, but found the gates of it locked. The Nawāb, by name Muẓaffar Khān, had paid his tribute and nazarān regularly during several years, but had at last fallen into poverty, and

18 i.e. Bahrāmīnwār, near the Pir Panjāl Pass.

19 Makhad is a fort 50 miles S. of Peshawar on the left bank of the Indus.
now possessed only an exhausted treasury; so he determined to resist further demands with an armed force, which he had collected from the surrounding Muslim population, calling upon it to fight for its religion. After waiting for some time, the Diwan at last opened fire on the fort, which was however most energetically returned from the ramparts, and a desultory warfare ensued, in consequence of which the Diwan Bhawândás\(^{11}\) asked for reinforcements, which were granted, and consisted of an army of ten thousand men. When these troops, who had made forced marches, arrived, siege batteries were immediately erected, and a breach in the fort-wall was made, giving admittance to a storming party; whereas the Nawâb, who now perceived the great danger of his position, promised to give to Bhawândás all the money at his disposal, or in more plain language, offered him a very large bribe, which the Diwan accepted. He immediately ceased his hostilities and indited a mendacious letter to Ranjit Singh, informing him that the Nawâb was too powerful to be subdued at present and that, such being the case, the Sikh forces were only being wasted, but that in a future campaign with fresh troops they would certainly be successful. After despatching this letter, Bhawândás returned to Lâhór. The Mahârâjâ, disgusted with the results of this campaign, reproached Bhawândás with being a traitor, bribed by the enemy after he had almost obtained possession of the fort; accordingly he put him in chains and, casting him into prison, confiscated all his property, but nevertheless again liberated him after the lapse of a few months.

The desire of conquering Multán having again become uppermost in his mind, Ranjit Singh made great preparations for a new campaign and appointed his own son, Prince Khářák Singh to command it, with instructions to deprive the Nawâb of the district and all the wealth he possessed. The Mahârâjâ also ordered the Diwan Dêvîchând to collect a number of siege guns and to second all the efforts of the prince to the best of his ability. The gates of the fort having been found closed when the army arrived, the siege began as soon as the guns could be put in position, and firing continued till breaches could be opened, and then scaling ladders were applied in various places, and the first man to climb over the rampart was Sâdhu Singh, who was followed by thousands of others. When the Nawâb beheld the Sikhs thus rushing into the fort, he resolved to die sword in hand; and courting martyrdom in green habiliments, sallied forth with his Muslims, who were slain in the contest as well as three of his sons, and when the fourth was captured, the Nawâb became more furious than ever and fought till he was cut down. When all resistance had ceased, the Sikhs plundered every street, bazaar and house, getting so excited and indulging so long in this occupation, that the Diwan, whose orders to cease plundering were disobeyed, succeeded only after many efforts in quelling the tumult. He collected on behalf of his government all the wealth of the Nawâb and despatched it to Lâhór, where the Mahârâjâ ordered the whole population to make preparations for rejoicing, as soon as a courier with the news of the victory arrived. When the booty, which consisted of gold, silver, precious stones, shawls, silk cloth, and every kind of valuable article arrived, Ranjit Singh was engaged in banqueting, and on meeting the Diwan, bestowed on him a rich dress of honour, not forgetting however his own son Khářák Singh, whose position he likewise exalted. He even tried to console Sarfarâz Kháñ, the captured son of the late Nawâb, by presenting him with the qașba of Sharaqpur as a jâğir, and when the unfortunate youth recounted to the Mahârâjâ the fearful atrocities committed by the Sikhs whilst plundering the town, the Diwan excused himself by stating that he had, on the said occasion, lost all control over the troops, who refused to obey him. But Ranjit Singh ordered, on pain of his sore displeasure, every soldier to disgorge the booty he had brought from Multán, which having been done, he removed the bulk of it to his own treasury, and distributed the rest among the poor.

28. Information having arrived from Kâbul that Fâth Kháñ, the vazîr of Mahmûd Shâh, had fallen into disgrace and been deprived of sight by the Shâhzâda Kâmrân,  

\(^{11}\) Called Bhawândás a few lines previously.
Governor of Hirá, and that a civil war was raging in Afgánistán, the Mahrájá considered this a good opportunity for conquering both Pesháwar and Kashmir, the more so as the latter province was now governed by Jabbár Khán, whom Múhammad 'Ásim had left as his níth, or lieutenant, when he retired to Afgánistán. Ranjít Singh accordingly marched in the direction of Pesháwar, and in a short time crossed the Rávi, the Chináb, and the Jhélam, but when he reached the banks of the Indus, he found no boats, and crossing it without any, in an almost miraculous manner, on horseback, with his army, safely reached the opposite bank, conquered the fort of Khairábíd and then the fort of Jahángir, whereon Fírzy Khán, the chief of the Kháták tribe of Afgán birds came to pay him homage. When Yár Múhammad, the governor of Pesháwar heard of the approach of Ranjít Singh, he forthwith retired to the Yúsufzáí mountains, and the Mahrájá took possession of the fort, appointed Jahándár Khán commander of it, and departed again after a sojourn of only three days. Whilst encamped near Atyák, Ranjít Singh received the offer of a nasárána of a lákh of rupees from Yár Múhammad, who also promised annually to pay a similar sum on condition of being reinstalled governor of Pesháwar, and the Mahrájá consented. Meanwhile news arrived that Yár Múhammad had by the aid of Dost Muhammad nevertheless attacked Jahándár Khán, and expelled him from Pesháwar, of which they took possession. The Mahrájá at once despatched his son, Kharán Singh, with ten thousand men to reduce the two invaders, but the blow aimed at them was avoided by the arrival of the promised and long delayed nasárána, and a profession of allegiance on the part of Yár Múhammad. Having terminated this affair to his satisfaction, the Mahrájá returned with the money he had obtained to Láhór, but as his heart was bent on the conquest of Kashmir he could not rest long.

The army having been got ready in St. 1876 [A.D. 1819] it happened at the same time that Jabbár Khán, who was at that time Governor of Kashmir, had not only dismissed but also disgraced and reduced to penury his Diwán, Pándít Birbar by name, on which the latter hastened to Láhór, breathing vengeance, and urged Ranjít Singh to subjugate Kashmir. The Mahrájá consented to the proposal but apprehended that he would be disappointed in the enterprise, as on a former occasion, unless he could obtain the certainty of being supported by all the chiefs of the country. Accordingly the said Diwán sent letters to the Rájás, inviting them to make professions of loyalty to Ranjít Singh, and in a short time received satisfactory replies from many; and even 'Áz Khán of Bhimbar, who had been an adversary, now promised to support Ranjít Singh, as well as the chief of Rájaúi and the commandant of Púncch:—wherefore the army at once began its march. Devichand received orders to hasten to the town of Rájaúi and there to await the arrival of the Mahrájá; and Prince Kharán Singh was instructed to march with his portion of the army to Jammú, and to await the arrival of the Mahrájá at the foot of the Himálayas, but meanwhile to carry on intercourse with the mountain chiefs, and to make sure of their allegiance. Ranjít Singh went from Láhór first to Amúrésar, where he performed his devotions in the temple of Rámdás, distributed abundant alms among the holy men of that locality, and then quickly marched to Kashmir, where he met with a friendly reception, because he was accompanied by the fugitive Diwán. He nevertheless thought it convenient not to advance further after reaching Bhimbar. Having for some time remained in that pleasant town and concentrated his forces, he ordered Prince Kharán Singh, with Devichand for his lieutenant, to advance, and they marched with friendly chieftains till they reached the Pir Panjáí Rango of the Himálayas, where they encountered the enemy, and an action of several days' duration ensued in which the Sikhs were victorious. Having thus defeated the united Afgán and Kashmir forces they continued their journey with the visit, he pretended that the latter had taken the Sháhzám Múllik Gásim, son of Hóji Firánz-dín, and had entered their harem. So the king put out the wasti's eyes as a punishment. In the Zafárnama the name of the sovereign of Afgánistán is erroneously lithographed Múhammad instead of Múhammad.
intention of conquering Srinagar likewise. Samad Khan and Mihardil Khan, the two principal Afghan officers of Jabbar Khan, the Governor of Kashmir, anxious to impede the further progress of the Sikhs, attacked them, but were again routed, and Mihardil was slain. Jabbar Khan now took refuge in the fort of Sherga, whereon Ranjit Singh, meeting with no further opposition, at once entered the city of Srinagar, accompanied by all the chiefs of the surrounding localities, who paid him homage. After having regulated the administration the Maharaaj intended to attack Jabbar Khan, who had shut himself up in the fort of Sherga, and found that he had evacuated it, but left all his wealth behind, which pleased Ranjit Singh greatly. Having thus conquered Kashmir, the Maharaaj appointed the Diwan Devichand to be Governor of it, spent a couple of weeks at Rajauri, then took the fort of Asinga with its Kashmiri garrison by a single assault and marched back to Amritsar, where he made large presents to the temple of Ramdas, and distributed alms. Lastly the Maharaaj returned to Lahir, where he bestowed robes of honour and other rewards upon his officers and troops, ordered general rejoicings to celebrate the victory, and dispensed hospitality in royal fashion.

29. After the termination of the festivities the Maharaaj sent orders to Devichand to march with all his forces to Mankera to realise by force the tribute which the Nawab of that district had failed to pay. The orders were however countermanded by Ranjit Singh on being informed that the Nawab had made very extensive preparations for resistance, and he marched in person to see what could be done. He crossed the Ravi, and on arriving in the district of the Nawab the army plundered it right and left—the Sardar Hari Singh distinguishing himself especially in his raids upon Matha and Tiwana. Then Ranjit Singh went to Bhakar but found that the garrison of the fort had evacuated it. He then sent Dal Singh to reduce the Parajat and successfully captured several chiefs, but one Nanak by name, who governed Dera Isma'il Khan on behalf of the Nawab, closed the gates of the fort, gave battle to the army, and being routed, abandoned to it all his wealth. Then Ranjit Singh again marched back to Mankera, but the Nawab bolted its gates, and the Maharaaj was under the necessity of laying siege to it for some time, although it surrendered at last.

The Maharaaj received kindly the repentant Nawab in audience, and bestowed upon him the town of Dera Isma'il Khan with the district for a jaga. Hari Singh then entered the fort and laid all the wealth of it at the feet of Ranjit Singh, whereon he was rewarded with a gift of landed estates, and other officers received money. The Maharaaj then crossed the Biyas, marched to Amritsar where he held a darbar, and distributed largesse. He next again went to Multan, on approaching which, his boats were met at a distance of a couple of miles by a deputation of welcome on the part of the city, which he forthwith entered, and received numerous chiefs, who desired to pay him homage. The Hol festival having just begun, he celebrated it with much pomp, gave a royal banquet, and liberally distributed gifts. After the termination of the festivities the Sardars Haridas and Buddh Singh were despatched in the company of the prince Kharak Singh, with sufficient forces to Bahawalpur to compel the Nawab to pay tribute, which he had failed to send for several years. First the Sikhs conquered the fort of Kot Shuja'a, expelling its garrison, and then plundered the district in every direction, although the Maharaaj had not given them permission, and in doing so they allowed themselves such terrible license that the Nawab immediately sent all the money demanded to Ranjit Singh, who thereon praised him, sent out a robe of honour, and at once recalled his troops.

Information having arrived that throughout the whole Hazara country in the neighbourhood of Mount Darband and Tarbila, the Muslim population had rebelled against the Sikh government, and that the inhabitants were ready to sacrifice their lives for their religion, Ranjit Singh ordered Fate Singh the chief of Kapurthala with his troops, and Hali Bakhsh, the commandant of artillery

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23 The town of Mankera is situated about midway between the Indus and the confluence of the Chinnab with the Jhelum.

24 Bhakar is on maps spelt Bakkar, and situated seven miles from the Indus, or about 30 miles N.W. from Mankera.
with his guns, in the company of the prince Shër Singh, to march to the rebellious district, whilst the Dewán Râmílal was to proceed in the same direction with the forces of the government. When the Sikhs arrived in the Hazâra country they met with great opposition, but as soon as their artillery begun to play upon the enemy they gave way and disappeared, whereon the Sikhs unmercifully plundered the district. As soon as the high officials had begun to regulate the administration, Sadá Kaúvar, the mother of Shër Singh, also arrived with her forces, and, being a lady of great resources and much tact (for she was respected as if she had been a man), proposed that the people of Rahtí, a tribe on Mount Darhand, should be attacked, and hostilities renewed for the purpose of subduing them, because in her opinion they would otherwise again cause disturbances. Accordingly the Prince Shër Singh marched to annihilate them with sword and gun, but they resisted most valiantly, and being very numerous, surrounded the Sikhs, who were relieved only after the Diwán Râmílal had come to their rescue, and after putting the rebels to flight pursued them to their stronghold of Rahtí. But whilst on the march, some of the brigands rushed from an ambush to attack him, and although the Diwán fought bravely, prostrating a number of his assailants, they slew him at last. When the Prince Shër Singh was informed of what had befallen the Diwán, he swore to avenge him by exterminating every one of the rebels, and in doing so he burnt all their habitations likewise. When this information reached the Mahárâjá he was so pleased with the exploit of his son, that he wrote to Sadá Kaúvar to be proud of her boy, and to surrender to Shër Singh all her estates, appointing him her successor. The lady, incensed at the proposal, sent back a message to the effect that she was alarmed at Râjít Singh's greed after wealth, as she had given him everything she was possessed of; that when she took Lâhôr with an army from a foe, she had surrendered it to him, protected him, raised him to the throne, and even made him her husband; and that having now become decrepit and old, she was by no means willing to part with her wealth and means of subsistence. When these words were repeated to the Mahárâjá he was much vexed, but his relations with the lady being of so delicate a nature, he said nothing of any intention to punish her. Meanwhile several months elapsed. The Râni Sadâ Kaúvar threw to the winds her loyalty and assumed a hostile attitude, besides placing herself under the protection of the English by surrendering to them her ancestral qâeba Badhâni, where she herself intended to take up her residence after crossing the Satluj. At this news the Mahárâjá immediately summoned the lady to his presence, and reproached her for being in her old age yet attached to the world, and for having injured the interests of her son, who was also his own, by offering her possessions to the English, and threatened to abase her to the dust if she refused to give a share of everything she possessed to Shër Singh. At these words Sadâ Kaúvar heaved a deep sigh, shed a flood of tears, and said never a word, but determined, in order to save her honour, secretly to depart to the English. She executed her design, but, being overtaken by troops sent in pursuit, she was captured, brought back, and put in chains. Moreover, forces were sent to her district to take possession of all her movâle property, money and jewellery, to expel her officials from every locality, and to take forcible possession of her favourite residence, the fort of Mukârî. The forces reached the said fort, but were received with a shower of bullets, and, having no siege artillery at their disposal, were unable to take it, whereon the Mahárâjá sent reinforcements and a sufficient number of guns in command of Dévîchand, whom the Mahârâni Sadâ Kaúvar was compelled to accompany, and to order to devastate the country. At Vatálâ, the first locality of note which this commander reached, he caused rivers of blood to flow, but afterwards endeavoured to console the inhabitants by establishing a regular administration. Then he made raids on all sides and devastated everything till he reached the Biyâs, which he crossed, and hastened to Mukârî, commencing forthwith to distress it by his artillery; but its defenders, faithful to the last, averred they would rather sacrifice their lives than surrender the fort without a written command to that effect from Sadâ Kaúvar, whom alone they obeyed. Accordingly Dévîchand requested the lady to give the needful orders, but she
replied that war was a fair game in which no necessity whatever demanded interference on her part, and that if Dēvchand felt himself strong enough to conquer the fort he was welcome to do so. The Diwān, being naturally displeased with such an evasive answer, determined to starve her, and, accordingly, withheld all supplies of food and drink. Having thus been reduced to the utmost misery, Sadā Kaḥwār at last indited the letter to the commander of the fort, and he thereon opened the gates and admitted the Sikhs, who at once began plundering remorselessly. Dēvchand sent a portion of the booty to Lāhūr, where the Mahārājā forthwith celebrated the victory by a royal banquet. When the troops returned, Ranjit Singh overwhelmed the Diwān with favours, and invested him with a robe of honour, presenting to Shēr Singh the district of Vatālā. Sada Kaḥwār, having been deprived of all she possessed was again thrown into prison, in which she expired a few months afterwards of a broken heart.

Information now arrived that Muḥammad ‘Āṣim had become nawāzī in Kābul, attained to great authority, and intended to reconquer Kashmir, which had been wrested from him by the Sikhs. The Mahārājā accordingly made great preparations to resist the invasion by calling on all his vassals to aid him with their troops, and marched in person, crossing the Rāvī, the Chināb, and the Jhelām, but encamping on the banks of the Indus which was much swollen. There being no boats at hand, a good swimmer was sent across the river to bring news about the enemy, and he returned with the information that great numbers of Afghāns had taken up a position on the Tehri Mountain, but that their commander-in-chief, Muḥammad ‘Āṣim, was still at Naushahra, and that they would march as soon as he joined them. The Mahārājā conceived that it would be best to surprise the enemy, and, immediately crossing the Indus in boats, ordered two of his French officers, the Generals Ventura and Allard, to march to Naushahra and attack Muḥammad ‘Āṣim, whilst Colonel Satgur Sahāi, the commander of the Akālis, with the Sardar Mahān Singh, received orders to attack the mountain. The two last-named officers were at once met by the Afghāns, who killed the first of them together with 200 Sikhs, and wounded the second, whereon the rest began to retreat, but after being reinforced by the Najibs and the Bharmārs they put the Afghāns to flight. The Afghan troops who fought in that action were 3,200, and the Sikhs 2,500 in number. On entering Peshāwar the Mahārājā was humbly received by Yār Muḥammad, who had again supplanted Jahandār Khān as governor of that locality, and Ranjit Singh now confirmed him in his post. On returning with the army, the Mahārājā celebrated his victory with public rejoicings and largesses to the population as well as to the temples and mosques. Then he went to Amṛītīsar, where he held a darbār, ordered the town to be illuminated, distributed alms, and made arrangements for building a masonry wall round the town, which was totally unprotected, expressing his desire that every one of the notables of the town should assist in this undertaking. He also rebuilt the temple of Rāmdās of stone, adorning it with gold and precious gems, enlarging and embellishing, at the same time, the famous sacred tank of Amṛītīsar.

(Miscellanea.

In the inscription of king Bhōjadāva of Kanauj at Dēgārdh, about sixty miles to the south-west of 'Jhansi' in Scindia's Dominions in Central India, published by Gen. Cunningham in the Archæol. Surv. Ind. Vol. X. p. 101 and Plate xxxviii. No. 2, the date from an ink-impress.

11 According to a marginal note there were four pālans of each. Some Hindūstānī Muslims among the Najibs. The Bharmārs had long muskets.
12 The meaning of "water of life," attributed to the word Amṛītīsar in a marginal note by the author, is taken from the Muslim myth of Alexander, who had gone in search of that famous beverage which conferred immortality upon him who could find and drink of it; but the interpretation of "nectar pool" would be more correct. [Amṛītās is simply the "lake of amṛīt."—Ed.] 

Calculation of Hindu Dates.

No. 7.

In the inscription of king Bhōjadāva of Kanauj at Dēgārdh, about sixty miles to the south-west of 'Jhansi' in Scindia's Dominions in Central India, published by Gen. Cunningham in the Archæol. Surv. Ind. Vol. X. p. 101 and Plate xxxviii. No. 2, the date from an ink-impress.
This pillar was finished; seven centuries of years, increased by eighty-four, of the Śaka era; (or in figures) 784."

This gives us, for calculation, Vikrama-Saṅvat 919 and Śaka-Saṅvat 784, both current, according to the literal meaning of the text; the month Aśvayuṭa (September-October); the day of Vṛihaspatī or Jupiter, i.e., Thursday; and the Uttara-Bhādrapadā nakṣatra. The date, of course, is a northern date; but, as the given tithi—the fourteenth, is in a bright fortnight, this point is immaterial.

Taking the given Śaka year 784 as an expired year, Mr. Sh. B. Dikshit has obtained as the English equivalent, by both Prof. K. L. Chhatre's Tables and the Sārya-Siddhānta, Thursday, the 10th September, A. D. 882. The tithi ended 56 ghatīs 37 palas, or 22 hours, 34 min., 36 sec., after sunrise on that day. By the equal-space system of the nakṣatras, the moon was in the Pūrvā-Bhādrapadā nakṣatra up to 53 ghatīs, 31 palas, or 21 hours, 24 min., 24 sec., after sunrise on the Thursday; and she then entered the Uttara-Bhādrapadā nakṣatra; i.e., assuming sunrise at 6 a.m., only 2 hours, 35 min., 36 sec., before sunrise on the Friday. This, however, is a highly improbable hour for the completion, as stated in the record, of the pillar on which the inscription is engraved. But, by the unequal-space systems of the nakṣatras, the Purvā-Bhādrapadā nakṣatra ended at 23 ghatīs, 40 palas, or 9 hours, 28 min., after sunrise on the Thursday; and the moon then entered the Uttara-Bhādrapadā nakṣatra; i.e. roughly about half-past three in the afternoon, leaving ample time, in ordinary working-hours, for the completion of the pillar before sunset.

This inscription, therefore, is of considerable interest, as indicating very plainly that one or other, if not both, of the more ancient unequal-space systems of the nakṣatras,—one or other of which has to be applied in determining the saṅvatottaras of the Twelve-Year cycle of Jupiter mentioned in some of the Early Gupta records,—continued in use, in what had formed a part of the Gupta territory, down to at least the last half of the ninth-century A.D.

Other points of interest in this inscription are (1) its giving, as the leading record of the date, a year of the era which, dating from the tribal constitution of the Mālavas, came afterwards to be called the Vikrama era, but is not called so in this instance. (2) its giving, as an incidental detail, the corresponding year of the Śaka era and thus furnishing an early epigraphical instance of the equation of the two eras, and of a Śaka year quoted with full details for calculation. The Mālava or Vikrama year quoted, is, of course, the northern year. Apart from the locality of the inscription, this is shown by the Śaka equivalent; for the month Aśvayuṭa of the southern Vikrama-Saṅvat 919 would fall in Śaka-Saṅvat 785 expired, not 784; and Thursday, the 10th September A.D. 882, if applied to the southern Vikrama year, represents Aśvayuṭa śukla 14 of the preceding year, Vikrama-Saṅvat 918. And (3) its quoting as current, according to the literal translation, a Śaka year which, for the actual computation of the details, has to be taken as an expired year.

J. F. Fleet.

PROGRESS OF EUROPEAN SCHOLARSHIP.

No. IX.

Half a year of the Revue Critique d'histoire et de littérature.

(a) Nov. 22nd.—This contains a review of M. Sylvain Lévi's paper on the Brihatkathāmanjari of Kasmīndra in the Journal Asiatique, which has already been noticed in these pages, ante, Vol. XVI. p. 111. The notice from the pen of M. V. Henry is very favourable.

(b) Dec. 6th.—There is an article by M. Sylvain Lévi himself on Dr. W. Solf's essay on the Kasmīndra recension of the Panahāṣika. This also has been previously referred to by me, ante, Vol. XVI. p. 282. M. Lévi's opinion is "that so numerous are the points in dispute, that the labour of Dr. Solf has rendered a service to the cause of science. He directs attention to an interesting critical problem, and if he has not definitely solved the question, he has, at least, clearly defined the points in issue."

(c) Jan. 3rd, 1887.—The second edition of the Principien der Sprachgeschichte (Principles of the History of Speech) by Professor Hermann Paul of Freiburg, one of the neo-grammatical school of philologists, is dealt with by M. V. Henry. According to the reviewer Professor Paul has been able to form a theory, and what is better, to abstain from following it to its ultimate consequences with rigorous inflexibility. He has written a book which is already, and which will, let us hope, become still more not only a breviary but

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1 This result is also given by Gen. Cunningham, in Archaeol. Surv. Ind. Vol. X. p. 102. But by his own and Mr. C. Patell's Tables and process, the tithi would fall on Saturday, the 12th September.

2 See Table II. on page 8, ante.

3 The time, all through, is for Ujjain; as I have not the exact longitude of Dēvagah. Taking it, approximately, as 78° 15' E., the time, in each case, will be a little less than ten minutes later.
for philologists, but an indispensable auxiliary to the researches of other students.

(d) Jan. 10th.—Professor Rockhill's Life of Buddha forms the text of a short but favourable review by M. Feer. The same number contains an article by M. E. Geo. Möhl, dealing with the *Etymologisches Worterbuch der slawischen Sprachen*, by the great Slavonic scholar, Professor Franz Miklosich, who is already well-known to the readers of the *Indian Antiquity* for his *Comparative Grammar of the Gipsy dialects*. The present *Etymological Dictionary of the Slav Tongues* is an epoch in the history of Slav philology; for, while it is a concise *résumé* of the progress hitherto accomplished in this direction, it at the same time opens out a vista of new researches, showing clearly what remains to be done, and marking down the points which are doubtful or obscure. As for the purely lexicographical portion of the work, it is developed in the most complete and thorough manner. The vocabularies of fifteen Slav Languages have been abstracted and arranged, and every word compared and analyzed in the most minute detail. Derivatives and compounds are arranged under roots, with a system and clearness which render easy the reading of the longest articles. Omissions are rare and of small importance.

(e) Feb. 7th.—Another member of the neo-grammatical school is dealt with in this number by M. V. Henry, in a review of Professor K. Brugmann's *Grundriss der vergleichenden Grammatik der Indogermanischen Sprachen*. This important *Comparative Grammar of the Indo-Germanic Languages* has attracted so much attention, and been so widely and favourably reviewed throughout the civilized world, that a very brief notice of M. Henry's verdict will suffice here. He concludes his article as follows:—"It will be seen that this work, which has already become a classic, marks a halting place in the Science of Language, of equal importance with the Grammar of Bopp and the Compendium of Schleicher. Its place is allotted in all philological libraries next these venerable monuments, to which we owe every respect, but which no longer fulfil our requirements."

The same number contains a contribution to the dispute between Dr. Zimmer on the one side and Dr. Whitley Stokes and others contra. Surely the *irritabile genus* of scholars seems to flourish more strongly among Celtic philologists than in any other branch of linguistic study. The contagion of the National League and of boycotting has spread even to Old Irish MSS. In the present paper M. H. D'Arbois de Jubainville demolishes Dr. Zimmer's *Glossarium Hibernicarum et codditibus Wirziburgiensi Caroliurbencis aliis editorum supplementum*. Dr. Zimmer is roundly accused of plagiarizing from Dr. Stokes without acknowledgment.

(f) April 25th.—An important article by M. A. Barth in this number deserves a longer notice here than the above. It is a review of Dr. Gustave Le Bon's *Les Civilisations de l'Inde*¹ Dr. Le Bon was despatched two or three years ago by the French Minister of Public Instruction on an archaeological mission to India, the formal result of which took the shape of a report in 5 volumes folio, with more than 400 plates and photographs. The present work is an abstract placed at the disposal of the general public, but an abstract free from dry prose details, a recital animated, often brilliant and frequently discussing general questions in a manner always interesting, though sometimes with doubtful justice.

In these days profusely and handsomely illustrated books about India are by no means rare. In France alone, it is sufficient to mention the travels of MM. Grandier and Rousselet, published by Hachette, of which the artistic portion is irrefutable. But none of these books come near the perfection attained in Dr. Le Bon's volume, either in the number and systematic choice of the plates or in their admirable execution. It is to be regretted that these beautiful illustrations are not accompanied by a real text, and it is tantalizing, as one looks through them, to catch glimpses of the work which it would have been so easy for the author to write, if he had chosen to narrate and describe more.—a work charming, instructive and useful to all, to the specialist and to the general reader, and readily saleable withal, for every one would find therein something interesting. But, adds M. Barth, we are not dealing with the book which Dr. Le Bon could have and ought to have written, but with that which he has written. It is well described by its title. It is an attempt to realize the different civilizations which have succeeded each other in India from the earliest times to the present day. What could have induced him to attempt so great a voyage, furnished as he was, it must be confessed, with rather scanty baggage? Perhaps the lightness of the baggage is itself

one of the reasons. But I see two others. One,—
all to the honour of India and Dr. Le Bon, that
India has evidently made a vivid and profound
impression upon the author. In the presence of
this infinite diversity of men and things, of this
medley of institutions and beliefs, of customs
separated amongst us by centuries, but which live
there side by side, he has had, so to speak, a vision
of the past. The genius of history has come to
speak to him amongst the ruins, and he has felt
himself endowed with the mission of declaring a
revelation. Here we touch on the second reason.
It is that he believes many things to be newer
than they really are. Indianists, he tells us, have
written a great deal about all this, but, as they
have not seen India, they have misunderstood
much... But it is exactly because I value
at least as highly as he does the merits of direct
observation, that I regret the present work, and
wish I could have found a few more personal
reminiscences in the place of what he has been
able to collect hastily from books on his return.
At the same time material errors of omission and
commission are comparatively rare, and one
admires the good fortune, or to be more just,
the tact and true historic feeling, with which he
has been able to avoid snares, and to pass along
the edges of quagmires without falling into them.
He has not succeeded in avoiding being morassed
a little with regard to the Veda. He describes the
Vedic Aryans as knowing neither family nor race.
No intermediary group of tribe, class, or govern-
ment separated them. Neither rich nor poor, all
equal. Religion itself was only the cult of race
and family. Gods were confounded with ancestors,
and the sacrifices to their ancestors, the funeral
banquets, were the centre of this cult. All this
picture is pure fantasy. He has also nearly gone
astray in his dealings with the epic legends.
First he has followed Wheeler in fixing the conquest
of Ceylon by Rama at fifteen hundred years before
Christ, though he subsequently follows better
authorities. He is wrong, too, in denying the
existence of the feudal system in India; but
his description of the clan, borrowed from the
admirable Studies of Sir Alfred Lyall, is excellent.
It would have been still better if he had not con-

founded the Râjpât clan with the Râjpât State,
two things altogether different, even in Râjas-
thân. He has besides estimated below their value
the importance and number of existing inscrip-
tions, and he exaggerates the poverty of India
in historical books; but he has had a clear and
salutary idea of the deceitful mirages which are
presented by the written tradition of the Hindus,
and has not allowed himself to be seduced by the
history drawn from it, which is still current in
some publications.

Coming to the ethnographical portion of the work
M. Barth remarks that the author has deeply
studied the question of races. He has devoted
a special work to it, and has also dealt with it
in his Civilisation des Arabes. According to him
races correspond to species in natural history.
They classify themselves not by nationality, nor
by religion, nor by tongue, nor even by anatomical
characteristics. Their one criterion is an
ensemble of attributes, intellectual and moral,
confirmed by heredity,—a certain mental state
constituting the race-genius, which is indelible.
As regards India it must be observed that these
conclusions do not tally well with the picture
which he presents to us of the races of that
country. They form an abstract theory without
the counterproof of reality,—a sort of programme,
but without the piece. He enumerates many
races in India, but he shows us only one. When
he talks of a mental state, it is only of the mental
state of Hindus in globo; and he could not
do otherwise, for these races are, before all,
linguistic entities. Aryans, Dravidians, Kolars, Tibeto-Burmans, etc., differ continually both
in their traits, and especially in their degrees of
civilisation; but their classification is the work
of linguists working on grammars and vocabularies,
and generally caring little for the
race-genius. Where the criterion of language
fails, there remains sometimes a tradition, rarely
true historic testimony, and where these fail there
opens before us the plain of hypothesis pure and
simple. To Dr. Le Bon, the Kulls of Gujarât are
Kolars, and the Bhils Dravidians. In reality,
nothing is known about it, because these people
no longer speak their own language. As for

it did with us. The sief did not spring from the free-
hold, but it exists almost to the present day, and in its
most characteristic forms, e.g. in regard to immunities.
He speaks of "some inscriptions" for which
the number of those that are catalogued and are of
historical value, alone amounts to thousands. In con-
nection with this, I am bound to say that Dr. Le Bon has
not been just to the efforts of the English Government
and to the Archaeological Survey... That he has
been able to date approximately the greater part of his
monuments, is due to the researches of that Survey.

3 Non quisit hominum contingit adire Constantinum, alas,
Yes! But does Dr. Le Bon not know that at least four-
fifths of these Indianists have not only visited India, but
have lived there, many of them for more years than he
has passed months in that country. There is, however,
a foundation of truth in the reproach. Sanskrit professors
have now and then made for us a singular story of
India, and some chapters of that history have come, de
récéct en récet, and lodged themselves in the very
volume of Dr. Le Bon. It is true, too, that many 'Old
Indians' have been even less discriminating than he has
been.

5 It developed in a different way from that in which
Turians, our author divides them into Turani-Proto-Dravidians, Turani-Dravidians, Turarians come by the Turanian Gate (i.e., the Assam Valley), and Turarians come by the Aryan Gate (i.e., the valley of Kabul). But positive ethnography has nothing to do with all this, for, so employed, the name is a mere word. One point, however, very clearly seen by Dr. Le Bon, and at which he appears to have arrived independently, although he has not been the first to establish it, deserves notice here. It is that the Aryans of India are only brothers of those of the West by language, and that they are deeply mixed with people of an altogether different descent. Whence came these? And who were they? Dravidians, Aborigines, or Malays? We shall perhaps never know, but surely they were not Turarians, as Dr. Le Bon would have us believe, and it is so scarcely more probable that they should have come from the north-east by the Turanian gate, for they have the skin brown or black, the hair curly, the cheek-bones slightly elevated, and the eyes well apart and not placed obliquely.

M. Barth is astonished that the author, who praises Hindu art so highly, should not be more indulgent to its literature. Each is sister of the other. They have the same qualities and the same defects, the same minute finish in detail and workmanship, and the same weakness in the ensemble, for forming which they know hardly any method other than mere piling up. To M. Barth, the Rāmdāyaṇa is the exact counterpart of Kailāsa. India can dazzle us; it cannot, under any conditions contribute to our education. Whatever people may say, before the arrival of the Musalmāns, it had not the art of building. Its own architecture essentially fails in proportion, because it fails in age. It has remained infantine and cyclopaean, although, on the surface, the stone sometimes assumes the appearance of lace.

Dr. Le Bon's theories about Buddhism sharply differ from that found in many books. He shows that it was not a religion without divinities, and that it was not violently extirpated from India by the fanaticism of the priestly caste. He appears to have landed in India believing that Buddhism was an atheistic religion, absolutely distinct from other Hindu cults, and he must have been astonished to find its sanctuaries filled with idols, and sometimes with the same idols as those in Brāhmaṇic temples. The first Buddhism known in Europe was exactly that gross and idolatrous religion which Dr. Le Bon has refuted. Later on, when it was possible to study the system in its texts, and at the source, it was declared to be philosophically atheistic. It is possible that, owing to reaction against the ancient opinions, the latter were subsequently left a little too much in the shade, and, now, subsequently, by the same progress of inquiries, they are again rediscovered. It is perhaps the fault of scholars; but a scholar's opinion is always more or less polemic, and to value it right, it is necessary to know the preceding opinion to which it forms a sequence. But, in affirming that Buddhism, considered as a philosophico-religious sect (and for long it was only that, and in no way a cult) was atheistic, scholars did not dream of denying that it had inherited the Brāhmaṇic pantheon, and that, further, it had fashioned out of it a pantheon, for its own use. The texts known as the Nāpalese, so far as they are published, belong to the class of these writings most penetrated with mythology, and yet they have been unhesitatingly accepted as valuable authorities for the Buddhism of India, and not as peculiar to that of Nāpāl. Those rock-hewn temples of Ellora and Nāpāl, which taught so much to our author, have not been only lately recognised as Buddhistic,—nay, the very grounds of their recognition were the images they contained,—and it is not only to-day that we are in possession of a religious iconography of what is conveniently but not quite correctly called the Buddhism of the Mahāyāna. As regards the violent extermination of Buddhism, it has long been considered as legendary in works of authority, and there is now hardly any one except General Cunningham left to defend it. Can we explain this gradual disappearance of Buddhism, or as Dr. Le Bon puts it, its absorption into Brāhmaṇism, by supposing that the two religions approached each other gradually till they were confounded? M. Barth thinks not. The facts known to us point to nothing of the sort, not even in Nāpāl, and it is not thus that Hindu sects, provided with clergy, ordinarily are extinguished. They change residue of the hordes who have dominated for several centuries in the north-west of India, hordes without doubt greatly mixed, but of which the nucleus appears to have been formed by Tātār tribes. These invaders were certainly very numerous, and probably founded settlements in the country. Resembles of proper names have caused search to be made for their survivors among several nations of the Pānjab and of Hindustān, especially amongst the Jēīs, but as yet we have nothing positive on the subject.
much in their essential attributes; but they die because they no longer gain recruits, and it is probable that such also was the end of Buddhism. If it has survived in Népál, it is, says Dr. Le Bon, that country is to-day in the same phase of evolution as that in which India was in the 10th century. M. Barth doubts this. Peculiar history must be explained by peculiar causes. What peculiar causes have been at work in Népál he does not know, but he suggests one cause which may have exercised some influence, viz., that there are scarcely any true Brâhmans in Népál and it is permissible to suppose that it has been thus for long.

The work concludes with considerations on the India of to-day, and its future. Dr. Le Bon renders homage to the greatness of the work accomplished by England, but M. Barth considers this homage grudgingly given. The author draws back with one hand, with interest, what he has just given with the other. In fact, he is unjust. He admits the grand qualities of honesty, firmness, and dignity in the bulk of British officials, England, better advised than other nations, sending there her picked men, and yet he appears to attribute their ascendancy only to their haughtiness (morgue)! He dares to say that "till the Mutiny the Government of India was the exploitation pure and simple of 200 millions of men by a company of merchants, protected by bands of mercenaries," while he plainly avers that the substitution of the crown for the company was, in reality, only the official consecration of a state of things long since established in fact. He goes further. This régime of exploitation is still to continue; for among the five general rules which, according to him, direct the colonial policy of England, the 3rd is "that a colony should be considered as a property which it is necessary to exploit entirely for the profit of the mother-country." If he means by this to say simply that England does not deal in sentimental politics, that she does not act knowingly against her own interests, it is a truism. No nation would knowingly act so. If, on the contrary, he means that the conduct of England is coldly selfish and without compassion, M. Barth says that it is false, and he regrets, for the sake of Dr. Le Bon, that he has traversed India without perceiving it.

As regards the future, the author poses as a pessimist. According to him England is undermining her own work by the education which she gives to the natives. That work will perish by

the Bâbû. In endeavouring to inculcate our ideas into brains which are not made for them, she is producing mischievous beings to whom it will be necessary, sooner or later, to yield a portion, greater or less, of the power of Government. That will be the commencement of the ruin. That the Bâbû is too often an impertinent and insupportable being, and that the question of public education in India is peculiarly complicated, and even full of perils, no one can doubt. But all this passage, in which (according to M. Barth) one seems to hear the passionate polemics raised in the English and Anglo-Hindu press by the measures of Lord Ripon, is marked with an evident exaggeration. For the last 50 years, and more, the question of education has been under consideration in India; it has been faced on all sides, and many systems have been essayed. What would that of Dr. Le Bon be? Would he have England build a wall of China round her colony? Could she do so? If she could, should she, that she may conform to the anthropological laws, which are not perhaps sufficiently ascertained, given us by the author? The Bâbû is known in other places besides India. He can be found here, in Europe, if wanted; but every native who has received an English education is not like him. * * * The law of races does not perhaps prevent our knowledge being communicated to them, their being taught to apply it, and their being taught gradually the details of public business. Already, in India, there are municipal committees composed of natives, more free in their sphere than town councils in France, and it does not appear that they have turned out badly. Let us hope then, with many well-informed English, that the sons of the Bâbû will be worth more than their fathers, and that England will not have some day to defend her work against another very different enemy. At present she is not seriously threatened from without; but if, as a consequence of events similar to those which have made Austria an Eastern power, Russia has to resign herself to becoming an Asiatic one, from that day the empire of England in India will be in a critical condition.

(9). May 2nd.—This number contains a review written by M. R. Duval of Mr. Budge’s Edition of the Book of the Bee.  This work was written in the 13th century by Salomon, Metropolitan of Basrâ, who in the preface explains that just as the bee manufactures its honey from the nectar of flowers, so he has extracted from the Paradise of holy books, and of the works of the Fathers and

the Doctors, the materials of his work, which commences with the creation of the world, and ends with the Apostles. The book is really a collection of legends founded on the narratives of the Old and New Testament. It is a specimen of the apocryphal literature popular amongst the Jews in the early part of the Christian era, like the Cavera of Treasures brought lately to notice by Dr. Bezold. The Book of the Bee contains nothing original, and this, in the eyes of scholars, is its chief merit. It is a compilation from early apocryphal works, notably the Cavera of Treasures just mentioned. Where it deals with the times of the Patriarchs, Jewish sources are still visible. It contains traditions which were current in the Jewish schools of Palestine and Mesopotamia, and of which the Talmuds, Targums and Midrashim have preserved only a portion. Of course Salomon did not know the Jewish originals, but the Syriac texts on which he founded his compilation, contained the traces. As a specimen of the legends which he preserves may be mentioned the Adventures of the thirty pieces of silver of Terah, the father of Abraham, which finally came into the hands of Judas Iscariot. Mr. Budge is said to have given a very correct text with a faithful translation, illustrated with judicious notes and references. A useful glossary of words not found in Castel-Michaeli’s dictionary or which are insufficiently explained therein, is also added.

(b) May 30th.—M. A. Barth contributes an important review on Prof. Peterson’s edition of the Subhashitavali. The work has already been noticed in this journal, Vol. XV. p. 240 ff., and an account of the contents of the article is unnecessary; but it is worth reading for the many acute and scholarly explanations of doubtful passages.

(i) June 6th.—Dr. Pischel’s edition of the Sringaratalaka of Rudrata and of Ruyysaka’s Sahridayalalika forms the text of a favourable review by M. Sylvain Lievi. The introduction of the work is chiefly devoted to a discussion as to whether Rudrata was author of the numerous erotic verses scattered through his well-known work on Rhetoric. The reviewer considers these twenty-five pages the richest chapter which has yet been written on the history of Indian rhetoric. Dr. Pischel does not content himself with collecting all the information available regarding Rudrata, his family, and his literary career; but, with the help of unpublished texts he fixes the most modern date to which we can assign him, and throws unexpected light on the relative chronology of the oldest rhetoricians known; Bhama, Udha, and Vama. Rudrata could not have lived before the middle of the 9th century; while Udha and Vama belong to the 8th. These bases once fixed, Dr. Pischel essays to prove that all the illustrative verses are the work of Rudrata; but his arguments are insufficient to convey conviction to the mind of M. Lievi.

The Sahridayalalika, published in the same volume is a simple formulary in five pages. Each of the four short chapters is only a list of words. The first, attributes and conditions of beauty; the second, adornments; the third, youth; the fourth, devices for enhancing beauty. The work is perhaps of the 10th century, and is a curious example of its class. The review speaks highly of the execution of the work, and considers that the publication of the text puts us in the possession of a charming poetic anthology; while the preliminary essay of Dr. Pischel, whatever be the value of his conclusions, will henceforth be a document indispensable to Indian scholars.

(j) 20th June.—This number contains a review by Prof. James Darmesteter of M. A. Barthélémy’s edition of the Gujaatka Abalish, or account of a theological conference presided over by the Khalifa Momin (Pahlavi text published for the first time with translation, notes and glossary: Paris, Vieweg, 1887). This is the first work of the author. It is an account of a polemic controversy between Abalish, an apostate from Pashism, and Atar Farnbaq, son of Farrukhazet, Highpriest of the Parsis at Fars. The text is interesting and well edited, and the translation concise and clear.

This is followed by a long review by M. Salomon Reinach on Dr. Penka’s new work, Die Herkunft der Arier, the descent of the Aryans. The work is a continuation of the same author’s Origines Ariacae published in 1887, in which he first suggested the Scandinavian origin of the Aryan family. The favour with which it has been received obliges the reviewer to analyse it in some detail. The author’s ethnological arguments are handled with some severity, and the article concludes ‘M. Penka has been encouraged by enthusiastic criticisms which have saluted his book as “the definite solution of the Aryan Problem;” he will allow us, while rendering every homage to his talent, not to associate ourselves with his errors.’

G. A. Grierson.
THE PROBABLE AGE OF SOME PALLAVA REMAINS.

The history of the Pallavas, one of the mightiest royal families of the South, is still wrapped in obscurity, chiefly because none of their inscriptions are dated in the Śaka or any other well-known era. Besides, the identification of the names of kings which are mentioned in various inscriptions is a very difficult and unsafe task, as the Pallavas used to bear numerous birudas, or surnames, which were interchangeable with their real names. Thus the inscriptions in the first and second storeys of the Dharmarāja Ratha at the Seven Pagodas consist of a string of words in the nominative case, which were hitherto considered as names of deities, which are in fact birudas of a Pallava king Narasimhā; and the inscriptions of the Kālaisanātha Temple at Conjeveram (Kāēchipuram) mention several hundred birudas of king Rājasimha of Kāēchi. The date of the king who founded the Kālaisanātha Temple can perhaps be fixed by comparing the following facts.

I. A Pallava inscription which was published by the Rev. T. Foulkes gives the following succession of princes.—Śīhavishna; Mahēndravarman I; Narasimhavarman II; Mahēndravarman II; Paramēsvaravarman I; Narasimhavarman II; Paramēsvaravarman II; Nandivarman.

II. An unpublished copper-plate inscription mentions the three kings—Narasimhavarman I, Mahēndravarman II, and Paramēsvaravarman I; and calls Narasimhavarman I the conqueror of Pulikēśi.

III. The inscriptions of the Kālaisanātha Temple itself mention three kings,—1. Agraḍandā or Lōkādītiya, who destroyed the army and the town of Rāpasikā; 2, his son Rājasimha, who built the principal part of the Kālaisanātha Temple, which he called Rājasimhāśvara; and 3, his son Mahēndravarman, who constructed an additional building.

IV. An inscription published by Mr. Rice records that the Chālukya king Vikramādiṭiya II. made an expedition into the Tūṇḍākavishya or Tūṇḍai manusjala, defeated the Pallava king Nandi-potavarman, and entered Conjeveram, where he gave heaps of gold to the stone temple called Rājasimhāśvara, which had been built by Narasimhāpotavarman, and to other temples.

From a comparison of Nos. III. and IV. it follows that the founder of the Kālaisanātha, or Rājasimhāśvara Temple at Conjeveram, bore the two names Narasimhāpotavarman and Rājasimha. This king and his son Mahēndravarman might be further identified with Narasimhavarman I and his son Mahēndravarman II. in Nos. I. and II. This is done under the supposition that the names of Rājasimha’s father, as given in No. III., are only birudas, and that his real name was Mahēndravarman I, as recorded in No. I. Thus much granted, we may try to identify Pulikēśi, the enemy of Narasimhavarman I. in No. II., and Raṇarasika, the enemy of Mahēndravarman I. (alias Agraḍandā or Lōkādītiya) in No. III. There were two Chālukya kings of the name Pulikēśi, the first a son of Raṇarāga, and the second a son of Kōrtivarman I. As Raṇarāga and Raṇarasika are synonyms and mean both “fond of war,” we may identify the Raṇarasika of No. III. with the Chālukya Rānarāga, and consequently the Pulikēśi of No. II. with the Chālukya Pulikēśi I.

The Pallava Nandivarman mentioned in No. I. may be the same as Nandi-potavarman, the enemy of the Chālukya Vikramādiṭiya II. in No. IV.; as No. I. gives four generations between Narasimhavarman I. and Nandivarman, while there were five generations between Pulikēśi I. and Vikramādiṭiya II. As the first Pulikēśi’s second son Mangalīśa reigned from A.D. 657 to 610, we may place the Chālukya Pulikēśi I. and his Pallava antagonist Narasimhavarman I. or Rājasimha, who founded the Kālaisanātha or Rājasimhāśvara Temple at Conjeveram, about A.D. 550.

To the same period we may assign the Pallava king Atyantakāma; as the alphabet of his inscriptions at Māmallapuram is closely related to the alphabet of Rājasimha’s and Mahēndravarman’s inscriptions at Conjeveram. Atyantakāma was the founder of the so-called Gāndes Temple, Dharmarāja Maṇḍapa, and Rāmanuṣja Maṇḍapa at Māmallapuram; another inscription of his is found in the third storey of the Dharmarāja Ratha. The characters of Atirāṇaḥaṇḍa’s inscription on the southern wall of the Šālunakuppa Cave somewhat differ from those of Atyantakāma’s inscriptions. As in a verse, which is common to the inscriptions of both kings, Atyantakāma’s inscription contains an erroneous reading, while Atirāṇaḥaṇḍa’s has the correct one, I should place Atirāṇaḥaṇḍa before Atyantakāma. The inscriptions of the Dharmarāja Ratha at Māmallapuram, which as stated above, belong to a Pallava king Narasimha, have been assigned by Dr. Burnell to about the fifth century A.D. for palaeographical reasons. Some Pallava coins, which the Rev. E. Loventhal, of Vellore, has collected at the Seven Pagodas, bear legends in still more archaic characters; three of the legends consist of birudas which are also found in the inscriptions of the Dharmarāja Ratha. It only  

1 From the Madras Mail, 3rd September, 1887.
2 ante, Vol. VIII. p. 2738.
4 South Indian Palaeography, p. 37.
remains to me to remark that, according to one of the three Tamil inscriptions at the so-called Shore Temple at Mamallapuram, this temple seems to have been founded by a Pallava king Kshatriyasimha, about whose age nothing is known.

E. HULTISCH.

BOOK NOTICES.


The first fac-similes of inscriptions from Cambodia were published in 1873, by Francis Garnier, the well-known traveller, in his Voyage d’exploration en Indo-Chine (Paris, 1873). Unfortunately they escaped the notice of Indian scholars. Other fac-similes, however, published in Paris, in 1879 and 1880, by Dr. Harmand, in the Annales de l’Extreme Orient, attracted the attention of Dr. Korn in Leiden, who deciphered them with the help of the Indian and Javanese alphabets, recognised that the language of several of the inscriptions was Sanskrit, and gave an interpretation of them. And, just about the same time, Lieutenant (now Captain) Aymonier, French Resident in Cambodia, being well acquainted with the modern writing and language of that country, was able to decipher similar inscriptions, with the help of the Khmer alphabet, and to interpret some of them, written in the vernacular dialect (Excursions et Reconnaissances, fascicule IV, 1880). He also extracted from the inscriptions in the vernacular, chronological data for the age of the bilingual ones. Captain Aymonier profited by his stay at Phnom Penh, to collect inscriptions in the capital, and in Central Cambodia; and in 1882 he sent to the Société Asiatique de Paris more than twenty inscriptions, making a total of more than 1,500 stanzas, which were examined by a Committee, appointed by the Society, and composed of MM. Barth, Bergaigne, and Senart. The report of the Committee was drawn up by M. Bergaigne (Journal Asiatique, 1882, II. 139-230). With the materials in his hands, M. Bergaigne was enabled to make out a list of the kings of Cambodia, from the end of the sixth century to the beginning of the twelfth. The French Institute, alive to the historical, epigraphical, and philological interest of those monuments, applied to the French Government, in order that Captain Aymonier should be entrusted with an official mission to search for all remains of Cambodian epigraphy; and in 1883 Captain Aymonier sent to Paris 304 squeezes, of which 143 bear Sanskrit inscriptions, many of them containing more than one hundred stanzas. Those documents extend over six centuries and allow us to follow the series of the Cambodian kings, without any interruption, nearly to the time when manuscript history begins. How happy would the Indian epigraphists be, if they had the same good luck with any part of their vast domain! It was decided that those valuable monuments should be published under the auspices of the Académie des Inscriptions et Belles Lettres, and thrown into scientific circulation as soon as possible. The materials sent by Captain Aymonier, were divided between the three members of the Committee. M. Barth has been the first to fulfil his task; and he has done it in the sound and thorough way which was to be expected from so accomplished a scholar.

M. Barth has presented us with the text, translation, and commentary of nineteen inscriptions. The text is given in Roman transcription; but the accompanying book of Plates gives magnificent gravures of the squeezes, after the procédé Dujardin; so that the student has the monument itself in his hands. These inscriptions belong to the oldest epigraphy of Cambodia at present known; though further discoveries, which may always be looked for, as M. Aymonier is still in the field, may bring to light materials older still.

The time has not yet come to draw any general conclusions from the documents thus published. As M. Barth observes, — “Comme il arrive souvent en pareille matière, la préface ne pourra venir ici qu’à la fin du livre. C’est seulement lorsque la série entière des documents accessibles aura été publiée, que l’un de nous pourra essayer d’en retracer l’ensemble; de résumer l’histoire, hier inconnue, qu’ils nous révèlent; d’en coordonner les données parfois si instructives par le jour qu’elles jettent sur le développement social, religieux et littéraire, non-seulement de ces contrées lointaines, mais aussi de l’Inde propre: d’apprécier enfin l’étendue et la force de pénétration de cette vieille culture hindoue que, naguère encore, on souffrait à peine, et qui, pourtant, était ancienne déjà à l’époque de nos premières inscriptions, puisqu’on peut en suivre la trace jusque chez Ptolémée.”

But a few special points in them may be noticed. The Indian inscriptions in Cambodia are as full of rhetoric, and generally as devoid of direct and precise information, as those in India proper. They are most of them written to commemorate the erection of a temple, or of a linga or some religious donation; and expiate on the greatness of Siva, or on the virtues of the king or his
ministers. They at least show us that, as early as the seventh century, the whole religious and philosophical system of classical India, and all its rhetoric and literary habits were naturalised in Cambodia. They show also that Śaivas, Vaishnavas, and Buddhists lived then side by side, and in some sort of promiscuity; though Buddhism has now superseded its two Brahmanical counterparts in Cambodia, as it has been superseded by them in India. Here and there we find some particular and precise detail, which throws an unexpected ray of light on literature or history. Everybody, for instance, knows how difficult it has been to find any testimony of undoubted antiquity about the Rāmāyaṇa and the Mahābhārata. But here we have (p. 30) a fragment of an inscription of the beginning of the seventh century, which informs us that, as early as that time, both epics were considered sacred on the border of distant Laos; and records that king Somaśarman presented a temple with copies of the Rāmāyaṇa, of the Pārīśāgas, and the Bhārata complete, and had them recited every day. Here is an authentic and well-dated counterpart to the mention, in the Kdāmbārī, of the public recitation of the Mahābhārata in temples (ed. Peterson, p. 61): "qui peut prévoir les surprises de ce genre que nous réserve encore l’avenir, quand le sol qui recouvre cette vieille culture aura été mieux fouillé, non-seulement là où en fut le centre, mais aux extrémités, dans toutes les contrées où s’est répandu l’Hindouisme, et qui en ont parfois, mieux que la mère patrie, conservé les vestiges."

Historical inscriptions, also, are not quite wanting. A long inscription at Prea Ngouk (p. 140 fl.) recites the victories of the Śrīvaṃkata Saṅgrama during the Saka years 973-983, in his wars against Aravindaratha, Kaṇva, and Sīvat, — the first of whom appears to have been the king of Champa. The account of those wars is given in a thoroughly epic style, which makes the passage quite unique in Sanskrit epigraphy.

The mention of that mysterious kingdom of Champa, which was hitherto known only from Chinese records and the writings of Marco Polo, occurs frequently in these inscriptions; and lately M. Bergaigne has found in one of them a mention of the very king who reigned in the time of the Venetian traveller Śrī-Jaya-Sīmhavarma Dēna; called in the Chinese Annals Che-li-Té-sya-Siha-po-la-ma-hā-thi-wa; [(Comptes rendus, 1855, page 357.

Champa, as well as Cambodia, fell into the circle of Indian influence, and should also yield a rich harvest of Sanskrit inscriptions. Her epi-

1 Sittings of the Académie des Inscriptions et Belles Lettres, 1st July 1887.
THE BAKHSHALI MANUSCRIPT.

BY DR. A. F. RUDOLF HOERNLE.

The Bakhshali manuscript was found, as probably the readers of this Journal (ante, Vol. XII. p. 89 f.) will recollect, in May 1881, near a village called Bakhshali, lying in the Yusaftai Subdivision of the Peshawar District at the extreme North-Western frontier of India. It was dug out by a peasant in a ruined enclosure, where it lay between stones. After the find it was at once forwarded to the Lieutenant-Governor of the Peshawar who transmitted it to me for examination and eventual publication.

The manuscript is written in Sarada characters of a rather ancient type, and on leaves of birch-bark which from age have become dry like tinder and extremely fragile. Unfortunately, probably through the careless handling of the finder, it is now in an excessively mutilated condition, both with regard to the size and the number of the leaves. Their present size (see Plate) is about 6 by 3½ inches; their original size, however, must have been about 7 by 8½ inches. This might have been presumed from the well-known fact that the old birch-bark manuscripts were always written on leaves of a squashir size. But I was enabled to determine the point by a curious fact. The mutilated leaf which contains a portion of the twenty-seventh sutra shows at top and bottom the remains of two large square figures, such as are used in writing arithmetical notations. These, when completed, prove that the leaf in its original state must have measured approximately 7 by 8½ inches. The number of the existing leaves is seventy. This can only be a small portion of the whole manuscript. For neither beginning nor end is preserved; nor are some leaves forthcoming which are specifically referred to in the existing fragments. From all appearances, it must have been a large work, perhaps divided into chapters or sections. The existing leaves include only the middle portion of the work or of a division of it. The earliest sutra that I have found is the ninth; the latest is the fifty-seventh. The lateral margins which usually exhibit the numbering of the leaves are broken off. It is thus impossible even to guess what the original number of the leaves may have been.

The leaves of the manuscript, when received by me, were found to be in great confusion. Considering that of each leaf the top and bottom (nearly two-thirds of the whole leaf) are lost, thus destroying their connection with one another, it may be imagined that it was no easy task to read the fragments and arrange them in order. After much trouble I have read and transcribed the whole, and have even succeeded in arranging in consecutive order a not inconsiderable portion of the leaves containing eighteen sutras. The latter portion I have also translated into English.

The beginning and end of the manuscript being lost, both the name of the work and of its author are unknown. The subject of the work, however, is arithmetic. It contains a great variety of problems relating to daily life. The following are examples:—“In a carriage, instead of 10 horses, there are yoked 5; the distance traversed by the former was one hundred, how much will the other horses be able to accomplish?” The following is more complicated:—“A certain person travels 5 yojanas on the first day, and 3 more on each succeeding day; another who travels 7 yojanas on each day, has a start of 5 days; in what time will they meet?” The following is still more complicated:—“Of 3 merchants the first possesses 7 horses, the second 9 ponies, the third 10 camels; each of them gives away 3 animals to be equally distributed among themselves, the result is that the value of their respective properties becomes equal; how much was the value of each merchant’s original property, and what was the value of each animal?” The method prescribed in the rules for the solution of these problems is extremely mechanical, and reduces the labour of thinking to a minimum. For example, the last mentioned problem is solved thus:—“Subtract the gift (3) severally from the original quantities (7, 9, 10). Multiply

1 See Proceedings of the Asiatic Society of Bengal, for 1882, p. 108.
2 A transcript and explanation of this plate will be found in note 6, on p. 47, at the end of this article.

Thus at the end of the 10th sutra, instead of the usual explanation, there is the following note: ēkānā stutānaḥ: dīpiṣṭa-patrī tvamālāt. The second leaf here referred to is not preserved.
the remainders (4, 6, 7) among themselves (168, 168, 168). Divide each of these products by the corresponding remainder \( \frac{168}{4}, \frac{168}{6}, \frac{168}{7} \). The results (42, 28, 24) are the values of the 3 classes of animals. Being multiplied with the numbers of the animals originally possessed by the merchants (42 \times 7; 28 \times 9, 24 \times 10), we obtain the values of their original properties (294, 252, 240). The value of the property of each merchant after the gift is equal (262, 262, 262). The rules are expressed in very concise language, but are fully explained by means of examples. Generally there are two examples to each rule (or śūtra), but sometimes there are many; the twenty-fifth śūtra has no less than fifteen examples. The rules and examples are written in verse; the explanations, solutions, and all the rest are in prose. The metre used is the śloka.

The subject-matter is divided in śūtras. In each śūtra the matter is arranged as follows: First comes the rule, and then the example introduced by the word udbhārana. Next, the example is repeated in the form of a notation in figures, which is called sthāpaṇa. This is followed by the solution which is called karaṇa. Finally comes the proof, called pradīpya. This arrangement and terminology differ somewhat from those used in the arithmetic of Brahmagupta and Bhāskara. Instead of simply śūtra, the latter use the term karaṇa-sūtra. The example they call udbhāsaka or udbhārana. For sthāpaṇa they say nyāsa. As a rule they give no full solution or proof, but the mere answer to the problem. Occasionally a solution is given, but it is not called karaṇa.

The system of notation used in the Bakhshali arithmetic is much the same as that employed in the arithmetical works of Brahmagupta and Bhāskara. There is, however, a very important exception. The sign for the negative quantity is a cross (+). It looks exactly like our modern sign for the positive quantity, but it is placed after the number which it qualifies. Thus \( \frac{1}{8} \) means 12 - 7 (i.e. 5). This is a sign which I have not met with in any other Indian arithmetic; nor, so far as I have been able to ascertain, is it now known in India at all. The sign now used is a dot placed over the number to which it refers. Here, therefore, there appears to be a mark of great antiquity. As to its origin I am unable to suggest any satisfactory explanation. I have been informed by Dr. Thibaut of Benares, that Diophantus, in his Greek arithmetic uses the letter ς (short for ἥλαξις) reversed (thus ς) to indicate the negative quantity. There is undoubtedly a slight resemblance between the two signs; but considering that the Hindus did not get their elements of the arithmetical science from the Greeks, a native Indian origin of the negative sign seems more probable. It is not uncommon in Indian arithmetic to indicate a particular factum by the initial syllable of a word of that import subjoined to the terms which compose it. Thus addition may be indicated by yu (short for yuta), e.g., \( \frac{1}{8} \) yu means 5 + 7 (i.e. 12). In the case of subtraction or the negative quantity, riṣa would be the indicatory word and ri the indicatory syllable. The difficulty is to explain the connection between the letter ri (ṛ) and the symbol +. The latter very closely resembles the letter k (क) in its ancient shape (+) as used in the Aṅgāka alphabet. The only plausible suggestion I can make is, that it is the abbreviation (ka) of the word kānita ‘diminished,’ from the root kana, with which the well-known words kanyas, ‘younger’ kanyātthā ‘youngest,’ kanyā ‘maiden,’ kana or kara ‘a small piece,’ etc., are connected. It is the true occurrence of the participle kānita, as far as I am aware, is not authenticated in the existing Sanskrit literature. But it would be a regular formation, and might have been in use in the old North-Western Prākrit of the Buddhists or Jains (see below). Another suggestion is, that the sign represents the syllable nū (Prākrit for nyū), an abbreviation of nyūna, ‘diminished.’ The akṣara for nū (or nu) in the Aṅgāka characters would very closely resemble a cross (+). The difficulty about these and similar suggestions is to account for the retention of an obsolete graphic symbol in the case of the negative sign only. If the sign is really the old symbol for ka, its retention

---

*This word is almost uniformly abbreviated nūl. Owing to the graphic symbols for u and l being indistinguishable, I at first took the word to be complete and read it lūd. But quite lately I found on a fragment, which had hitherto escaped my notice, the word written in full udbhārana.

might perhaps be explained by the fact, that, in its transfer to the Śāradā alphabet, the letter ka has suffered less change of form than many others of the old Aśoka characters. However, for the present, the question must be left an open one.

A whole number, when it occurs in an arithmetical operation, as may be seen from the above given examples, is indicated by placing the number \(^1\) under it. This, however, is a practice which is still occasionally observed in India. It may be worth noting that the number \(^1\) is always designated by the word naḍa; \(^2\) thus saraḍa or naḍāḍhika ‘adding one,’ naḍōna ‘deducting one.’ The only other instance of the use of a symbolic numeral word is the word rasa for ‘six,’ which occurs once in an example in the fifty-third sūtra.

The following statement, from the first example of the twenty-fifth sūtra, affords a good example of the system of notation employed in the Bakhshall arithmetic:

\[
\begin{array}{cccc}
\cdot & 1 & 1 & 1 \\
1 & + & 3 & +
\end{array}
\]

bhā \(32\)

phalaḥ \(108\)

Here the initial dot is used very much in the same way as we use the letter x to denote the unknown quantity the value of which is sought. The number \(^1\) under the dot is the sign of the whole (in this case, unknown) number. A fraction is denoted by placing one number under the other without any line of separation; thus \(\frac{1}{3}\), i.e. one-third. A mixed number is shown by placing the three numbers under one another; thus \(\frac{1}{3} + \frac{1}{3}\), i.e. one and one-third. Hence \(\frac{1}{3} + \frac{1}{3}\) means \(1 - \frac{1}{3}\) (i.e. \(\frac{2}{3}\)).

Multiplication is usually indicated by placing the numbers side by side; thus

\[
\left(\frac{1}{3}\right) \times \left(\frac{2}{3}\right) = \frac{20}{9}
\]

means \(\frac{1}{3} \times \frac{1}{2} = \frac{20}{9}\) or \(\left(\frac{2}{3}\right)^2\), i.e. \(\frac{8}{9}\). Bhā is an abbreviation of bhāga, ‘part,’ and means that the number preceding it is to be treated as a denominator. Hence \(\frac{1}{34} + \frac{1}{2} = bhā\) means \(1: \frac{32}{9}\) or \(\frac{32}{9}\). The whole statement, therefore means \(\frac{27}{9} \times 32 = 108\), and may be thus explained—‘a certain number is found by dividing with \(\frac{27}{9}\) and multiplying with 32; that number is 108.’

The dot is also used for another purpose, namely as one of the ten fundamental figures of the decimal system of notation, or the zero (0 1 2 3 4 5 6 7 8 9). It is still so used in India for both purposes, to indicate the unknown quantity as well as the naught. With us the dot, or rather its substitute the circle (0), has only retained the latter of its two intents, being simply the zero figure, or the ‘mark of position’ in the decimal system. The Indian usage, however, seems to show how the zero arose, and that it arose in India. The Indian dot, unlike our modern zero, is not properly a numerical figure at all. It is simply a sign to indicate an empty place or a hiatus. This is clearly shown by its name śūnya ‘empty.’ The empty place in an arithmetical statement might or might not be capable of being filled up, according to circumstances. Occurring in a row of figures arranged decimally or according to the ‘value of position,’ the empty place could not be filled up, and the dot therefore signified ‘naught,’ or stood in the place of the zero. Thus the two figures 3 and 7, placed in juxtaposition (37) mean ‘thirty-seven,’ but with an ‘empty space’ interposed between them (3 7), they mean ‘three hundred and seven.’ To prevent misunderstanding the presence of the ‘empty space’ was indicated by a dot (3 • 7); or by what is now the zero (307). On the other hand, occurring in the statement of a problem, the ‘empty place’ could be filled up, and here the dot which marked its presence, signified a ‘something’ which was to be discovered and to be put in the empty space. In the course of time, and out of India, the latter signification of the dot was discarded; and the dot thus became simply the sign for ‘naught’ or the zero, and assumed the value of a proper figure of the decimal system of notation, being the ‘mark of position.’ In its double signification, which

* This word was at first read by maṭā. The reading rāṣa was suggested to me by Professor A. Weber of Berlin, and it is, I have now no doubt, the correct one.
still survives in India, we can still discern an indication of that country as its birthplace.

Generally speaking, the terms of an operation are set down side by side; and the particular operation intended is indicated by the initial syllable of a word of that import, subjoined to the terms which compose it. The operation of multiplication alone is not indicated by any special sign. Addition is indicated by *yu* (for *yuta*), subtraction by + (for *kanita* ?) and division by *bhā* (for *bhāga*). The whole operation is commonly enclosed between lines (or sometimes double lines), and the result is set down outside, introduced by *pha* (for *phala*). Occasionally the indicatory word is written in full. Vertical lines are usually interposed between the terms of a proportion or a progression. Thus:—

\[
\begin{align*}
&\frac{5}{1} \times \frac{7}{1} \quad \text{pha 12} \quad \text{means} \quad 5 + 7 = 12 \\
&\frac{11}{1} + \frac{1}{1} \quad \text{pha 5} \quad \text{,,} \quad 12 - 7 = 5 \\
&\frac{5}{1} \times \frac{32}{1} \quad \text{pha 20} \quad \text{,,} \quad \frac{5}{1} \times 32 = 20 \\
&\frac{1}{1} + \frac{1}{1} + \frac{1}{1} + \frac{1}{1} \quad \text{bhā 32} \quad \text{pha 108} \quad \text{,,} \quad (1 + \frac{1}{1}) \times 32 = 108 \\
&\frac{10}{1} + \frac{30}{1} + \frac{1}{1} \quad \text{pha 12} \quad \text{,,} \quad 10 : 30 = 4 : 12
\end{align*}
\]

Regarding the age of the manuscript, I am unable to offer a very definite opinion. The composition of a Hindu work on arithmetic, such as that contained in the Bakhshali MS., seems necessarily to presuppose a country and a period in which Hindu civilisation and Brahmical learning flourished. Now the country in which Bakhshali lies and which formed part of the Hindu kingdom of Kābul, was early lost to Hindu civilisation through the conquests of the Muhammadan rulers of Ghaznī, and especially through the celebrated expeditions of Mahmūd, towards the end of the 10th and the beginning of the 11th centuries A.D. In those troublous times it was a common practice for the learned Hindus to bury their manuscript treasures. Possibly the Bakhshali MS. may be one of these. In any case it cannot well be placed much later than the 10th century A.D. It is quite possible that it may be somewhat older.

The Sāradā characters used in it, exhibit in several respects a rather archaic type, and afford some ground for thinking that the manuscript may possibly go back to the 8th or 9th century. But in the present state of our epigraphical knowledge, arguments of this kind are always somewhat hazardous. The usual form in which the numeral figures occur in the manuscript are the following:—

\[
\begin{align*}
\text{1} & \quad \text{or} \quad \text{0} & \quad \text{3} & \quad \text{or} \quad \text{3} \\
\text{2} & \quad \text{or} \quad \text{3} & \quad \text{or} \quad \text{3} & \quad \text{or} \quad \text{3} \\
\text{3} & \quad \text{or} \quad \text{3} & \quad \text{or} \quad \text{3} & \quad \text{or} \quad \text{3} \\
\text{5} & \quad \text{6} & \quad \text{7} & \quad \text{8} & \quad \text{9} & \quad \text{0}
\end{align*}
\]

Quite distinct from the question of the age of the manuscript, is that of the age of the work contained in it. There is every reason to believe that the Bakhshali arithmetic is of a very considerably earlier date than the manuscript in which it has come down to us. I am disposed to believe that the composition of the former must be referred to the earliest centuries of our era, and that it may date from the 3rd or 4th century A.D. The arguments making for this conclusion are briefly the following:—

In the first place, it appears that the earliest mathematical works of the Hindus were written in the śloka measure:¹ but from about the end of the 5th century A.D. it became the fashion to use the dṛya measure. Āryabhaṭa c. 500 A.D., Varāhamihira c. 550, Brahmagupta c. 630, all wrote in the latter measure. Not only were new works written in it, but also śloka-works were revised and recast in it. Now the Bakhshali arithmetic is written in the śloka measure; and this circumstance carries its composition back to a time anterior to that change of literary fashion in the 5th century A.D.

In the second place the Bakhshali arithmetic is written in that peculiar language which used to be called the Gāthā dialect, but which is rather the literary form of the ancient North-Western Prakṛti (or Pāli). It exhibits a strange mixture of what we should now call Sanskrit and Prakṛti forms. As shown by the inscriptions (e.g. of the Indo-Scythian kings in Mathurā) of that period, it appears to have been in general use in North-Western India, for literary purposes till about the end of the

¹ See Professor Kern's Introduction to the Brāhat Sāmkha of Varāhamihira.
3rd century A.D., when the proper Sanskrit, hitherto the language of the Brahmanic schools, gradually came into general use also for secular compositions. The older literary language may have lingered on some time longer among the Buddhists and Jains, but this would only have been so in the case of religious, not of secular, compositions. Its use, therefore, in the Bakhshali arithmetic points to a date not later than the 3rd or 4th century A.D. for the composition of that work.

In the third place, in several examples, the two words dinura and dramma occur as denominations of money. These words are the Indian forms of the Latin denarius and the Greek drakhme. The former, as current in India, was a gold coin, the latter a silver coin. Golden denarii were first coined at Rome in B.C. 207. The Indian gold pieces, corresponding in weight to the Roman gold denarius, were those coined by the Indo-Soythian kings, whose line, beginning with Kadphises, about the middle of the 1st century B.C., probably extended to about the end of the 3rd century A.D. Roman gold denarii themselves, as shown by the numerous finds, were by no means uncommon in India, in the earliest centuries of our era. The gold dinuras most numerous found are those of the Indo-Soythian kings Kanishka and Huvishka, and of the Roman emperors Trajan, Hadrian and Antoninus Pius, all of whom reigned in the 2nd century A.D. The way in which the two terms are used in the Bakhshali arithmetic seems to indicate that the gold dinura and the silver dramma formed the ordinary currency of the day. This circumstance again points to some time within the three first centuries of the Christian era as the date of its composition.

A fourth point, also indicative of antiquity, which I have already adverted to, is the peculiar use of the cross (+) as the sign of the negative quantity.

There is another point which may be worth mentioning, though I do not know whether it may help in determining the probable date of the work. The year is reckoned in the Bakhshali arithmetic as consisting of 360 days. Thus in one place the following calculation is given:—“If in $\frac{800}{722}$ of a year, 2982 $\frac{4}{727}$ is spent, how much is spent in one day?” Here it is explained that the lower denomination (adhat-ch-heda) is 360 days, and the result (phala) is given as $\frac{1807}{249}$ (i.e. $\frac{2168400}{727} - \frac{800}{727}$).

In connection with this question of the age of the Bakhshali work, I may note a circumstance which appears to point to a peculiar connection of it with the Brahma-Siddhanta of Brahmagupta. There is a curious resemblance between the fiftieth sutra of the Bakhshali arithmetic, or rather with the algebraical example occurring in that sutra, and the forty-ninth sutra of the chapter on algebra in the Brahma-Siddhanta. In that sutra, Brahmagupta first quotes a rule in prose, and then adds another version of it in the dryya measure. Unfortunately the rule is not preserved in the Bakhshali M.S., but, as in the case of all other rules, it would have been in the form of a stoka and in the North-Western Prakrit (or ‘Gatha dialect’). Brahmagupta in quoting it, would naturally put it in what he considered correct Sanskrit prose, and would then give his own version of it in his favourite dryya measure. I believe it is generally admitted that Indian arithmetic and algebra, at least, are of entirely native origin. While Siddhanta-writers, like Brahmagupta and his predecessor Aryabhata, might have borrowed their astronomical elements from the Greeks or from books founded themselves on Greek ‘science, they took their arithmetic from native Indian sources. Of the Jains it is well known that they possess astronomical books of a very ancient type, showing no traces of western or Greek influence. In India arithmetic and algebra are usually treated as portions of works on astronomy. In any case it is impossible that the Jains should not have possessed their own treatises on arithmetic, when they possessed such on astronomy. The early Buddhists, too, are known to have been proficient in mathematics. The prevalence of Buddhism in North-Western India, in the early centuries of our era, is a well-known fact. That in those early times there were also large Jain communities in those regions, is testified by the remnants of Jain sculpture found near Mathurâ and elsewhere. From the fact of

* See note 4 at the end of this article, also note 5.
the general use of the North-Western Prākrit (or the ‘Gāthā dialect’) for literary purposes among the early Buddhists it may reasonably be concluded that its use prevailed also among the Jains, between whom and the Buddhists there was so much similarity of manners and customs. There is also a diffusedness in the mode of composition of the Bakhshālī work which reminds one of the similar characteristic observed in Buddhist and Jain literature. All these circumstances put together seem to render it probable that in the Bakhshālī MS. there has been preserved to us a fragment of an early Buddhist or Jain work on arithmetic (perhaps a portion of a larger work on astronomy), which may have been one of the sources from which the later Indian astronomers took their arithmetical information. These earlier sources, as we know, were written in the śāla measure, and when they belonged to the Buddhist or Jain literature, must have been composed in the ancient North-Western Prākrit. Both these points are characteristics of the Bakhshālī work. I may add that one of the reasons why the earlier works were, as we are told by tradition, revised and re-written in the ārya measure by later writers such as Brahmagupta, may have been that in their time the literary form (‘Gāthā dialect’) of the North-Western Prākrit had come to be looked upon as a barbarous and ungrammatical jargon as compared with their own classical Sanskrit. In any case the Buddhist or Jain character of the Bakhshālī arithmetic would be a further mark of its high antiquity.

Throughout the Bakhshālī arithmetic the decimal system of notation is employed. This system rests on the principle of the ‘value of position’ of the numbers. It is certain that this principle was known in India as early as A. D. 500. There is no good reason why it should not have been discovered there considerably earlier. In fact, if the antiquity of the Bakhshālī arithmetic be admitted on other grounds, it affords evidence of an earlier date of the discovery of that principle. As regards the zero, in its modern sense of a ‘mark of position’ and one of the ten fundamental figures of the decimal system (0 1 2 3 4 5 6 7 8 9), its discovery, or rather its elaboration, is undoubtedly much later than the discovery of the ‘value of position.’ It is quite certain, however that the application of the latter principle to numbers, in ordinary writing, would have been nearly impossible without the employment of some kind of ‘mark of position,’ or some mark to indicate the ‘empty place’ (śāla). Thus the figure 7 may mean either ‘seven’ or ‘seventy’ or ‘seven hundred,’ according as it be or be not supposed to be preceded by one (7 or 70) or two (7 7 or 700) ‘empty places.’ Unless the presence of these ‘empty places’ or the ‘position’ of the figure 7 be indicated, it would be impossible to read its ‘value’ correctly. Now what the Indians did, and indeed still do, was simply to use for this purpose the sign which they were in the habit of using for the purpose of indicating any empty place or omission whatsoever in a written composition; that is the dot. It seems obvious from the exigencies of writing that the use of the well-known dot as the mark of an empty place must have suggested itself to the Indians as soon as they began to employ their discovery of the principle of the ‘value of position’ in ordinary writing. In India the use of the dot as a substitute for the zero must have long preceded the discovery of the proper zero, and must have been contemporaneous with the discovery of the principle of the ‘value of position.’ There is nothing in the Bakhshālī arithmetic to show that the dot is used as a proper zero, and that it is anything more than the ordinary ‘mark of an empty place.’ The employment, therefore, of the decimal system of notation such as it is, in the Bakhshālī arithmetic, is quite consistent with the suggested antiquity of it.

I have already stated that the Bakhshālī arithmetic is written in the so-called Gāthā dialect or in that literary form of the North-Western Prākrit which preceded the employment, in secular composition, of the classical Sanskrit. Its literary form consisted in what may be called (from the Sanskrit point of view), an imperfect sanskritisation of the vernacular Prākrit. Hence it exhibits at every turn the peculiar characteristics of the underlying vernacular. The following are some specimens of orthographical peculiarities:

Insertion of euphonic consonants: of m, in śka-m-ikatam, bhṛitak-m-īkaramdītah; of r, in tri-r-ārāṭā, labhatā-r-āshūṭā.

Insertion of s: in vibhaktan-s-uttarē, kshiyaṭā.
s-traya. This is a peculiarity not known to me elsewhere, either in Prākrit or in Pāli.

Doubling of consonants: in compounds, prathāma-d-idhāntā, ēka-s-sankhyā; in sentences yad-i-sh-adhāhi, ētē-s-samadhanā.

Peculiar spellings: trīśa or trīnā for trināśat.

The spelling with the guttural nasal before ē occurs only in this word; not otherwise, e.g. chatavāśa 40. Again ri for ri in trīśa, kriyāti, viśiṣṭa, kriyāt; and ri for ri in riṇaḥ, drishtaḥ. Again kathayātā for kathayāta. Again the jihvānāliya and the upadrāmiya are always used before gutturals and palatals respectively.

Irregular sandhi: kō sō ra for kau sa ra, devyā kēchi for devayā kē, devyā cha for devyā cha, dvābhū kri for dvābhū kri, dvābhū vi for dvābhū vi, viśiṣṭa for viśiṣṭita asti.

Confusion of the sibilants: ś for sh, in śashti 60, māsakō; sh for s, in dasānāsha, viśāhāṣa; s for s, in dasaṃ, sāyāta; s for sh, in ēsa ‘this.’

Confusion of a and u: utpanna for utpanna; kshayéna for kṣhayéna (s. 27); viniastaḥ for viniastaḥ.

Elision of a final consonant: bhājaye, kēchi, for bhājāyete, kēchit.

Interpolation of r: hrīṣaḥ for hrīṣāḥ.

The following are specimens of etymological and syntactical peculiarities:

Absence of inflection: nom. sing. masc., ēka sa rāsi for rāsiḥ (s. 50), gavān viśēha kārtavyah for viśēha (s. 51); nom. plur., sēya santī for sēya (s. 53); acc. plur., dināra dattavān for dinārin (s. 53).

Peculiar inflection: gen. sing., gatiṣṭa for gatiḥ (s. 15); paraṃ for atm., viśiṣṭa for viśiṣṭe ‘he sells’ (s. 54), atm. for paraṃ, arjasya for arjasya ‘he earns’ (s. 53).

Change of gender: masc. for neut., mālā for mālāni (s. 55); neut. for masc., vartanam for vartan (s. 50); neut. for fem., yuṭiḥ cha kārtavyā for yuṭī (s. 50).

Exchange of numbers: plur. for sing., (bhavēta) lābhaḥ for lābhaḥ (s. 54).

Exchange of cases: acc. for nom., devīyaḥ arjasyaḥ budhaḥ for devīyaḥ (s. 53), acc. for instr., kshayāḥ samānya for kshayāḥ (s. 27); acc. for loc., kiṃ kālaḥ for kṣaṃ kāle (s. 52); instr. for loc., anēṇā kālē for amin kālē (s. 53); instr. for nom., prathamaṇa dattavān for prathamaṇo (s. 53), or ekēṇā yāti

for ekō (s. 15); loc. for instr., prathāmā dattaḥ for prathamāṇa (s. 55), or mānāvā grihaṇā for mānāvāṇa (s. 55); gen. for dat., devīyaṣya dattā for devīyaṣya (s. 53).

Abnormal concord: incongruent cases, āgra praśkṛte for āsmin (s. 52); incongruent numbers, ēka lābhaḥ for lābhaḥ (s. 54), āgrauputro kēchī for āgrauputraḥ (s. 53); incongruent genders, sā kālaḥ for tat kālaḥ (s. 52), viśēha kārtavyah for kartavyah (s. 51), sā rāṣṭaḥ for sa (s. 50), kāryaḥ sthitōḥ for sthitōḥ (s. 14).

Peculiar forms: nivāraṇa for nivṛta, rāja for arjana, divadāḥa ‘one and one-half,’ chatavāśa 40, paunghāśa 50th, chaunghāśa 54th, chaturāśi 84, tri-rāśīti 83, pinyāsa (v. l. pinyasa) for apinyāsaḥ, bhājayaṭa ‘let it be divided’ for bhājayaṭa (s. 27).

Peculiar meanings: yadṛcchahā, or kāmikā for the ‘number one,’ when representing the unknown quantity of which the value is sought.

The following extracts may serve as specimens of the text:

TEXT.
18th Sūtra.

Ādyo viśēshadbhavgaum cha yasnaaḥvibhājitaḥ ।
Rūpaḥkānā tathā kālan gatiṣśaṁyaḥ tadā
dhavēt ॥
Udā ॥
Dravyādṛṣṭichayaḥ chaiva dvīchayatryādikottarataḥ ।
Dravīya cha bhavati paṃthā kēna kālēna
dhāyaṇatāḥ ॥

sthamana kriyate ēkāh $\frac{2}{1}$ $\frac{3}{1}$ pa $\frac{1}{1}$
dvī $\frac{2}{1}$ $\frac{3}{1}$ pa $\frac{1}{1}$ $\frac{1}{1}$ karaṇaṁ ॥ ādyo viśēsha

$tā$ dvī 2

Udā ॥

$\frac{5}{1}$ $\frac{6}{1}$ pa $\frac{1}{1}$ dha $\frac{1}{1}$ karaṇaṁ ādyo viśēsha

$\frac{10}{1}$ $\frac{3}{1}$ $\frac{1}{1}$ dha $\frac{1}{1}$ viśēsha 5 | chayaud-
dhi chayā 6 | 3 3 adīśaḥ 3 dvīgamaḥ
10 uttara-viśēsaḥ 3 vibhaktān 10 sarpaṇ 13
caha padaṁ anēṇa kālēna samadhanā bhavanti ॥
pratyayan 1 ruponakaran 1na phalam 1 dvi 165 1
Ashthadaamasastraam 18 II + II

27th Sutra.
Idani na suvarnakshayaṁ vakshyasi yasyedaṁ sutram 1
Kshayam saṁgunya kanakas tadyutir-bhājayatataḥ 1
Saṁyutair eva kanakair ēkaikasya kshayo hi saḥ 1
Udā II
Ekadvitrichatusamkhyasaunara māshakai ri
nai 1
Ekadvitrichatusamkhyai rabita samabhagatam 1
sthapanam kriyate ēshām 1 1+2+3+4
karanam 1 kshayam saṁgunya kanakādibhi kshayena saṁgunya jataṁ 1 4 9 16 tadyutie ēsha yuti 30 kanakā yuti 10 anēna bhaktvā labdhām

| 10 30 | 1 | pha maśē 3 1 |
| 1 1 | 1 |
| 10 30 | 2 | pha maśē 6 1 |
| 1 1 | 1 |
| 10 30 | 3 | pha maśē 9 1 |
| 1 1 | 1 |
| 10 30 | 4 | pha maśē 12 1 |
| 1 1 | 1 |

Udā II
Ekadvitrichatusamkhyasaunara prōjjhita imā 1
Māsākā dvitītaṁ chaiva chutalpaṁchakarāṁsakaṁ 10 kiṁ kshayam 1
1 2 3 4 5 karanam 1 kshayam saṁgunya 1
| 2 3 4 5 |
kanakā ēsha sthāpyate ē 2 3 4 5
-s-tadyutir-b-bhājayatataṁ 11 tataḥ harasasyē kriyā 1 yutie 163 60 saṁyutaiḥ kanakair bhaktvā
tadā kanakā 10 anēna bhaktam jataṁ 163 600 ēsa ēkaikasyasvārnya kshayam 1 pratyayan 1 traumaśakaṁ kartavyam 1

*Saptaviśākhasūtraam 27 II + II

| 10 163 | 1 | pha 163 1 600 |
| 1 | 60 1 |
| 10 163 | 2 | pha 163 300 1 |
| 1 | 60 1 |
| 10 165 | 8 | pha 163 200 1 |
| 1 | 60 1 |
| 10 165 | 1 | pha 159 1 |
| 1 | 60 1 |

Udā II

Kramāṇa dvaya mābādhi uttarā ēkaṁhatam 1
Suvarṇaṁ mē tu samṛṣīra katthayatam gaṇakottama 1
sthapanam 4+1+5+6+7+8+9+1+2+3+4 5
kshayam saṁgunya jataṁ 20 30 1 42 1 56 1 72 1 90 1 2 1 6 1 163 ēshāṁ yuti 330 kanakānāṁ yuti 45 1 anēna bhaktvā labdhām 330 45 paṁchacha-
dasābhāgī-ś-chhēdā kriyā 1 phalaṁ 7 6 1 ēsa ēkaikamāsakakshayaṁ ē pratyayaṁ traṁraśikēnā 45 330 1 phalaṁ 22 3 ēvaṁ sarvē-
shāṁ pratyayō kartavya 1

50th Sutra.
Yutāhīnaṁ cha-m-ekataṁ 1
hīnō yuthō cha kartavyō II

Udā II

Ko rāśī paṁchayutā mūlādaṁ sā rāśisapta-
hīna mūlada
Ko sō rāśir iti prashṭab 11 II

| 1 1 4 | 1 yu mū 1 1 7 1 mū 1 | karanam 1 |
| 1 1 4 |
yutāhīnaṁ cha-m-ekataṁ 12 taddalam 6 |
dvīhariṇaṁ 4 1 dalaṁ 2 1 yugaṁ 4 1 hīnō |
yutīṁ cha kartavyā 1 hīnaṁ 7 1 anēna yuti 11 ēsa sā rāśī II asya pratyāmayanaṁ kriyaye ē 1

| 1 1 4 | 1 yu 7 1 mū 1 1 7 1 mū 1 |
| 1 1 4 |
Paṁchāśasūtraam II +

* The two first letters (rub) are uncertain, owing to a defect in the texture of the leaf.
  10 Read eka-kṛṣiṇaṁ pāyitvā 1 kiṁ kshayaṁ 1
  11 Read bhājaṁtaṁ.
  12 Here 12 is omitted in the MS., by mistake.
  13 These fragments of the āṣṭara have been restored from what appears to be quotations in the solution.
  14 There seems to be some confusion about this example. The first line as it stands does not scan; moreover instead of kō rāśī, it should be yō rāśī. The second half

line does scan; but the words iti prashṭaṁ seem out of place, as a portion of the verse. Now if we omit iti prashṭaṁ from the verse, the remainder, with a few slight alterations, reads as a correct verse of one line and a half, though in utter disregard of all context.

Thus—
Yō rāśī paṁchayuta mūlādaṁ sā rāśī saptāṁ 1
na mūlada kō sō rāśir iti prashṭab
Perhaps that disregard accounts for the confusion made by the scribe of the MS.
### 51st Sutra.

Gavāṁ viśeṣha kartavyaṁ dhanaṁ chaiva puna

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### 53rd Sutra.

Ahādravyaharāsau taḥ) tadvipāśhāṁ vibhāja-
gat
Yalladhaṁ dviguṣaṁ kālaṁ dattā sama-
dhanā prati

Udā

Trīdīṇe ārjaney paṁcha bhūrakō mākapaṃd-
taḥ
Dvitiyaṁ paṁchadīvase rasam ārjayate budhaḥ
Prathamāna dvitiyasya saptā dattāni... tāḥ
Datvā samadhanā jātā kēna kālena katth-
yatāṁ

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<th>karanāṁ</th>
<th>ahādravyāvīśeṣaṁ</th>
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<td>harāmsau</td>
<td>tat tadviśeṣaṁ</td>
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<tr>
<td>anēna</td>
<td>kālena samadhanā bhavanā pratyaya</td>
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<tr>
<td>trairāśikē kriyate</td>
<td>3 5 30</td>
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<tr>
<td>dattā</td>
<td>7 sēṣham</td>
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<td>43</td>
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Udā

Rējaputro dvayē kēchi niṇpāti-sēvyā santi |
|
Mākāsyahāṁ dvaya-sh-adhāghā) dvitiyasya |
|
Prathamāna dvitikā dasa dināra dattavān |
|
|
| 13 | 6 | 3 | 1 | karanāṁ ahādravya-
viśeṣaṁ cha tatra |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

### Sutra.

Dviguṣaṁ dvitiyasya prathamā...
Prathamā chaṭturguṣaṁ chaiva chaṭturthō |
|
|
|Cha... satām ēkāṁ dvaya-

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| 20 | 20 | pa 4 |
| drīṣhya 200 | sūnyaṁ ḫkayutmā |
| kriyā | 1 | 2 | 3 | prakṣhpāyakyā phalāṁ |
| 20 | 40 | 60 | 80 | evām 200 | ēsha pratayā | 20 |
| 1 | 1 | 1 |

Vadāva prathamē dattaṁ kiṁ pramāṇaṁ... sya cha

| 1 | 2 | 4 |
| dattam 122 |
| karanāṁ | yadṛīchchhāṁ viṇyāḥ sūnyey tādā vargam tu |
| kārayē
t

| 1 | 2 | 4 | 1 |
|  |  |  |  |

| 1 | 1 | 1 | 1 |
| 12 | 2 | 3 | 6 4 |
| prakṣhapāyamaṁ 122 |
| 1 | 2 |
| 6 | 24 |
| prakṣhiptaṁ 33 |
| 122 |
| vartyaṁ jātāṁ 4 | ēsha prathamēṇa |
| dattaṁ 122 atō nyāsah 4 | 8 | 24 | 96 | dattaṁ |
| 122 ēsha vargakramagamitāṁ 2 atsha yutivargam dvā-trīṇāḥbhikasaṁ 2 |
| Kānikanāṁ sūnyavinyastaṁ tādā chaiva kramē |
| gunāṁ |

### Uda

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| 1 | 13 | 30 |
| 1 | 6 | 1 |
| pha 65 |
| 1 | 3 | 30 |
| 1 | 2 | 1 |
| pha 45 |

### Sutra.

Pratayāṁ trairāśikēna

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| 12 | 3 | 12 |
| drīṣhya 300 |
| kāmi-
kan sūnyapinyastaṁ kānikan 1 ēsha nyās-
taṁ prathamaraṇāu tādā chaiva kramēn 
| gunītāṁ | 1 | 2 | 9 | 48 |
| ēṣham yutī prakṣhā-
pāṁ 60 | anēna drīṣhyaṁ bhājitaṁ 60 300 |
| jātā 5 ēsha prathamasya dhanaṁ anēna |

---

19 Read kṣayahāṁ dviraśhāḥgha. The error appears to have been noticed by the scribe of the manuscript.
TRANSLATION.

18th Sūtra.

Twice the difference of the two initial terms, divided by the difference of the (two) increments, and further augmented by one, shall be the time that determines the progression.

First Example.

A person has an initial (speed) of two and an increment of three, another has an increment of two and an initial (speed) of three. Let it now be determined in what time the two persons will meet in their journey.

The statement is as follows:

No. 1, init. term 2, increment 3, period x
No. 2, " " 3, " 2, " x

Solution: "the difference of the two initial terms" (2 and 3 is 1; the difference of the two increments 3 and 2 is 1; twice the difference of the initial terms 1 is 2, and this, divided by the difference of the increments 1, is \( \frac{3}{1} \)), and augmented by 1, is \( \frac{3}{1} \); this is the period. In this time [3] they meet in their journey which is 15).

Second Example.

(The problem in words is wanting; it would be something to this effect:—A earns 5 on the first and 6 more on every following day; B earns 10 on the first and 3 more on every following day; when will both have earned an equal amount?)

17 This line is short by one syllable, and otherwise not regular in scanning. The final question appears to be in prose.
Statement:

No. 1. init. term 5, increment 6, period 2, possession 2.

No. 2. init. term 10, increment 3, period 2, possession 2.

Solution:—"Twice the difference of the two initial terms," etc.; the initial terms are 5 and 10, their difference is 5. "By the difference of the (two) increments;" the increments are 6 and 3; their difference is 3. The difference of the initial terms 5, being doubled, is 10, and divided by the difference of the increments 3, is $\frac{10}{3}$, and augmented by one, is $\frac{13}{3}$. This (i.e. 13 or 4 1/3) is the period; in that time the two persons become possessed of the same amount of wealth.

Proof:—by the rūpēṇa method the sum of either progression is found to be 65 (i.e. each of the two persons earns 65 in 4 1/3 days).

27th Sūtra.

Now I shall discuss the wastage (in the working) of gold, the rule about which is as follows:—

Having multiplied severally the parts of gold with the wastage, let the total wastage be divided by the sum of the parts of gold. The result is the wastage of each part (of the whole mass) of gold.

First Example.

Suvāras numbering respectively one, two, three, four, are subject to a wastage of māshakas numbering respectively one, two, three, four. Irrespective of such wastage they suffer an equal distribution of wastage. (What is the latter?)

The statement is as follows:—

Wastage — 1, — 2, — 3, — 4 māshaka.

Gold 1, 2, 3, 4 suvāra.

Solution:—"Having multiplied severally the parts of gold with the wastage," etc.; by multiplying with the wastage, the products 1, 4, 9, 16 are obtained; "let the total wastage," its sum is 30; the sum of the parts of gold is 10; dividing with it, we obtain 3. (This is the wastage of each part, or the average wastage, of the whole mass of gold.)

(Proof by the rule of three is the following):—as the sum of gold 10 is to the total wastage of 30 māshakas, so the sum of gold 4 is to the wastage of 12 māshakas, etc.

Second Example.

There are suvāras numbering one, two, three, four. There are thrown out the following māshakas; one-half, one-third, one-fourth, one-fifth. What is the (average) wastage (in the whole mass of gold)?

Statement:—

quantities of gold, 1, 2, 3, 4 suvāra.

wastage $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$ māshaka.

Solution:—"Having multiplied severally the parts of gold with the wastage," the products may thus be stated, $\frac{1}{2}$, $\frac{3}{2}$, $\frac{3}{4}$, $\frac{3}{5}$. "Let the total wastage be divided;" the division being directed to be made, the total wastage is $\frac{163}{60}$; dividing "by the sum of the parts of gold," here the sum of the parts of gold is 10; being divided by this, the result is $\frac{163}{60}$; This is the wastage of each part of the whole mass of gold.

Proof may be made by the rule of three:— as the sum of the parts of gold 10 is to the total wastage of $\frac{163}{60}$ māshaka, so the sum of gold 4 is to the wastage of $\frac{163}{60}$ māshaka, etc.

Third Example.

(The problem in words is only partially preserved, but from its statement in figures and the subsequent explanation, its purport may be thus restored):—

Of gold māshakas numbering respectively five, six, seven, eight, nine, ten, quantities numbering respectively four, five, six, seven, eight, nine, are wasted. Of another metal numbering in order two māshakas, etc. (i.e., two, three, four) also quantities numbering in order one, etc. (i.e., one, two, three), are wasted. Mixing the gold with the alloy, O best of arithmeticians! tell me (what is the average wastage of the whole mass of mixed gold)?

Statement:—

wastage: 4, — 5, — 6, — 7, — 8, — 9; — 1, — 2, — 3.

gold: 5, 6, 7, 8, 9, 10; 2, 3, 4.

(Solution):—"Having multiplied severally the parts of gold with the wastage," the products are 20, 30, 42, 56, 72, 90, 2, 6, 12; their sum is 330; the sum of the parts of gold is 45; dividing by this we obtain $\frac{330}{45}$; this is reduced by 15 (i.e. $\frac{33}{3}$); the result is 7 leaving $\frac{1}{3}$ (i.e. 7 1/3); that is the wastage of each māshaka (of mixed gold).

Proof:—by the rule of three:—as the total
gold 45 is to the total wastage 330, so 1 māshaka of gold is to $\frac{23}{2}$ parts of wastage. In the same way the proof of all (the other) items is to be made (i.e. 45 : 330 = 5 : $\frac{10}{3}$; 45 : 330 = 6 : 44; 45 : 330 = 7 : $\frac{104}{3}$; 45 : 330 = 8 : $\frac{176}{3}$; 45 : 330 = 9 : 66; 45 : 330 = 10 : $\frac{220}{3}$).

50th Sūtra.

(The sūtra is lost, but can be partially restored from the solution, and may be thus translated: "The sum of the additive and subtractive numbers is divided by an assumed number; the quotient, lessened by the same number and halved, is squared and added to the subtractive number."

Example.

Which number added to five is a square, that (same) number lessened by seven is a square. Which number is that? This is the question.

Statement: $x + 5 = x^2$, and $x - 7 = x^2$.

Solution: "The sum of the additive and subtractive numbers" is 12; the half of it is 6; lessened by two is 4; its half is 2; its square is 4. "And is added to the subtractive number;" the subtractive number is 7; added to it, it becomes 11 (i.e. $4 + 7$). This is that (required) number.

Its proof is this: $11 + 5 =$ square of 4 (i.e. 16); and $11 - 7 =$ square of 2 (i.e. 4).

(The next sūtra is only a fragment, and I omit it).

53rd Sūtra.

(Having found) the two fractions (indicative) of the daily earnings, divide by their difference what is given towards (producing) equal possessions. The quotient, being doubled, is the time (in which their possessions become equal).

First Example.

Let one hired Paññit earn five in three days; another learned man earns six in five days. The first gives seven to the second from his earnings. Say, in what time, after having given it, their possessions become equal?

Statement: No. I, $\frac{5}{3} =$ earnings of 1 day; No. II, $\frac{6}{5} =$ earnings of 1 day; gift 7.

Solution: "The difference of the daily earnings; the two fractions; their difference;" (here the daily earnings are $\frac{5}{3}$ and $\frac{6}{5}$; their difference is $\frac{7}{15}$; the gift is 7; divided by the difference of the daily earnings $\frac{7}{15}$, the result is 15; being doubled, it is 30; this is the time, in which their possessions become equal.

Proof may be made by the rule of three: $3 : 5 = 30 : 50$, and $5 : 6 = 30 : 36$; "the first gives seven to the second" 7, remainder 43; hence 43 and 43 are their equal possessions.

Second Example.

Two Rājputas are the servants of a king. The wages of one (of them) per day are two and one-sixth, of the other one and one-half. The first gives to the second ten dināras. Calculate and tell me quickly, in what time there will be equality (in their possessions)?

Statement: daily wages $\frac{13}{6}$ and $\frac{3}{2}$; gift 10.

Solution: "and difference of the daily earnings;" here (the daily earnings are $\frac{13}{6}$ and $\frac{3}{2}$; their difference is $\frac{1}{3}$; the gift is 10; divided by the difference of the daily earnings $\frac{1}{3}$, the result is 15; being doubled, it is 30. This is the time, in which their possessions become equal.

Proof by the rule of three: $-1 : \frac{13}{6} = 30 : 65$; and $1 : \frac{3}{2} = 30 : 45$. The first gives 10 to the second; hence 55 and 55 are their equal possessions.

(The following examples form a connected set. The sūtras to which they belong are very imperfectly preserved, nor is there any indication left, how they were numbered. The examples also exist in a too fragmentary state to allow of any translation; but it is possible to restore their purport from what is left of the solution.

The sūtra belonging to the following example is lost. The example itself may be reconstructed thus:—)

The second gives twice as much as the first, the third three times as much as the first, the fourth four times as much as the first. The total gift of the four persons is two hundred.

to divide, so that (tāt-ya) the quotient, being doubled, is the time, that which is given towards equal possessions. Tadveddheṁ und datted are the two accusatives governed by the causal verb vihīdayit.
Tell me now, how much was given by the first, and what is the amount of each gift.

Statement:—A gives \(x\), B 2, C 3, D 4. Total 200.

Solution:—Having filled up the empty place (of \(x\)) with one, (we obtain) 1, 2, 3, 4 (as the several rates); by the application of the sum of the rates we obtain 20, 40, 60, 80, and thence the total 200.

This is the statement of the proof:—

Init. term 20, increment 20, period 4.

By the \(\text{rūpāṇa}\) method the total is found to be 200.

\textbf{Sūtra.}

(Only the first portion of this \text{ṣūtra} is preserved; \textit{viz.} "put into the empty place the number 1 representing the desired quantity, and then make up the series of items." The purport of this rule will be understood from the following examples).

First Example.

(Its purport is:—B gives 2 times as much as A, C gives 3 times as much as B, D gives 4 times as much as C. Their total gift is 132. What is the gift of A?)

Statement:—A gives \(x\), B 2, C 3, D 4. Total 132.

Solution:—"Put 1 in the place of \(x\); then form the series of items" 1, 2, 3 \(\times\) 2, 4 \(\times\) 6, multiplying these several rates, 1, 2, 6, 24, their total is 33; with it divide the given total, thus \(\frac{132}{33}\); the resulting item is 4, and this is the gift of A. Hence the series of gifts is as follows:—4, 8, 24, 96, and the total gift is 132. This is calculated from the series of items, and hence the total of the items is one hundred and thirty-two.

(Here follows what appears to be intended as a modification of the same \text{ṣūtra}, since it is not specialised as a separate \text{ṣūtra}. What remains of it, runs thus:—"the number 1 is put into the empty place, and then (the items) are successively multiplied." The purport of the rule will be again understood from the example.)

Second Example.

(Its purport is:—B possesses 2 times as much as A; C has 3 times as much as A and B together; D has 4 times as much as A, B and C together. Their total possessions are 300. What is the possession of A?)

Statement:—A has \(x\), B 2, C 3 \(\times\) 3, D 4 \(\times\) 12. Total 300.

Solution:—"the desired quantity is put in the empty place;" the desired quantity is 1; this is placed as the first number; then the successive multiplications are made, 1, 2, 9, 48. Their addition gives the sum of the rates 60; with this the given total is divided, thus \(\frac{60}{5}\); the result is 5, and this is the possession of A. With this by multiplication the several rates are obtained, thus 5, 10, 45, 240. Thence the total of the items is calculated to be 300.

(Next follows the fragment of a third example which I omit. After this must have followed a third modification of the same \text{ṣūtra}, which is lost; but the first portion of it, as quoted in the examples, must have run thus:—

\text{Sānyasthānā vūpanā Ṝeta, yutam chaiva guṇam nataḥ. ।

i.e., "having put the number one in the empty place, the (needful) additions and multiplications are then made.""

Fourth Example.

(Its purport is:—A possesses something and \(1\frac{1}{2}\) in addition; B has 2 times as much as A and \(1\frac{1}{2}\) in addition; C has 3 times as much as B and \(3\frac{1}{2}\) in addition; D has 4 times as much as C and \(4\frac{1}{2}\) in addition. Their total possessions are one hundred and forty-four and one half. What is the possession of A?)

Statement:—A has \(x + 1\frac{1}{2}\), B 2 + \(2\frac{1}{2}\), C 3 + \(3\frac{1}{2}\), D 4 + \(4\frac{1}{2}\). Total 144\(\frac{1}{2}\).

Solution:—"Having put one in the empty place," thus \(1 + 1\frac{1}{2}\: "the several additions and multiplications are then made;" in making the additions and multiplications, let the proper order of calculation be observed, (hence by addition) \(\frac{1}{2}\); next comes multiplication; (here) multiply numerator with numerator and denominator with denominator, \(\frac{10}{2} \times \frac{15}{2}\); two and one half are now added, thus \(\frac{15}{2}\); now comes the multiplication with the third number, or three (is multiplied) with seven and one half (\(i.e.\) \(\frac{15}{2} = 7\frac{1}{2}\)); three and one half are now added, thus \(\frac{45}{2}\); now multiply the number four with twenty-six (\(i.e.\) \(\frac{45}{2} = 26\)); the result is \(\frac{206}{2}\); four and one half are now added, thus \(\frac{217}{2}\). The total of these rates is \(\frac{369}{2}\) which is the given total of the possessions. All the rest remains the same; (\(i.e.\) dividing the given
total \( \frac{229}{7} \) by the sum of the rates \( \frac{229}{7} \) we obtain 
1 as the value of \( x \), hence the possessions of 
A, B, C, D are respectively \( \frac{11}{7}, \frac{18}{7}, \frac{14}{3}, \frac{311}{7} \),
the same as the rates mentioned above).

Fifth Example.

(Its purport is:—A gives \( \frac{3}{7} \) plus a certain amount; B gives \( \frac{5}{4} \) plus 2 times as much as A; 
C gives \( \frac{7}{2} \) plus 3 times as much as A and B; 
D gives \( \frac{9}{7} \) plus 4 times as much as A, B and C, 
The total of their gifts is 222. What was the gift of A ?)

Statement:—A gives \( x + \frac{3}{7} \), B \( 2 + \frac{5}{4} \), C \( 3 + \frac{7}{2} \), D \( 4 + \frac{9}{7} \); the joint gift is 222.

Solution:—"Having put the number one in the
empty place," 1 (for \( x \)), the additions and
multiplications are made in their proper
order. The result is the following series of
rates: \( \frac{5}{7}, \frac{13}{7}, \frac{67}{14}, \frac{357}{28} \); the given total is 222.
The addition of the rates yields 222, which is
the same as the given total 222. This practi-
ically finishes the solution.

(Note follows fragment of the sixth example, which I again omit.

Seventh Example.

(Its purport is:—A has \( 1\frac{1}{3} \) plus a certain
amount; B has \( 2\frac{1}{4} \) less than 2 times A; C has
\( 3\frac{1}{3} \) less than 3 times A; D has \( 4\frac{1}{4} \) less than
4 times A. Their total possessions are \( \frac{29}{7} \).
What is the possession of A ?)

(The statement is wanting).

Solution:—"Having put the number one in the
empty place," the addition is made \( \frac{5}{7} \); twice the rate of A less five half is \( \frac{5}{7} \); three
times the rate of A, less seven half, is \( \frac{9}{7} \); 
four times the rate of A, less nine half, is \( \frac{11}{7} \).
The series of these rates is as follows: \( \frac{5}{7}, \frac{9}{7}, \frac{2}{7}, \frac{11}{7} \).
The given total is \( \frac{20}{7} \). The sum of the rates is \( \frac{29}{7} \). Dividing the one by the other, \( \frac{29}{7} \), 
we obtain 1. Multiplying by this, the
same amount is obtained (as the gift of A; viz.
\( \frac{5}{7} \)). The same is the case with the negative
quantities, (i.e. \( B \times (2 \times \frac{5}{7}) - \frac{3}{7} = \frac{5}{7} \); 
similarly \( C \times \frac{5}{7}, D \times \frac{11}{7} \)).

NOTES.
1. In the text, the italicised words are con-
jecturally restored portions. The dots signify
the syllables (akshara) which are wanting in
the manuscript, the number of the dots cor-
responding to the number of missing syllables.
The serpentine lines indicate the fact of lines
being lost at the top and bottom of the leaves of
the manuscript. In the translation the bracketed
portions supply lost portions of the manuscript.
The latter can, to a great extent, be restored
by a comparison of the several examples.
Occasionally words are added in brackets to
facilitate the understanding of the passage.

Two persons advance from the same point. At
starting \( B \) has the advantage over \( A \); but
afterwards \( A \) advances at a quicker rate than
\( B \). Question:—when will they have made an
equal distance? In other words, that period of
the two progressions is to be found where
their sums coincide. The first example is
taken from the case of two persons travelling.
\( B \) makes 3 miles on the first day against 2
miles of \( A \); but \( A \) makes 3 miles more on each
succeeding day against \( B 's \) 2 miles. The result
is that at the end of the third day they meet,
each after has travelled 15 miles. For \( A \) tra-
vells \( 2 + (2 + 3) + (2 + 3 + 3) = 15 \) miles,
and \( B 3 + (3 + 2) + (3 + 2 + 2) = 15 \) miles.
The second example is taken from the case of
two traders. At starting \( B \) has the advantage
of possessing 10 dināras against the 5 of \( A \); but
in the sequel \( A \) gains 6 dināras more on each
day against the 3 of \( B \). The result is that
after 4 1/2 days, they possess an equal amount
of dināras, viz. 65.

3. Sūtra 27. Problems on averages (suma-
abhāgad). Certain quantities of gold suffer loss
at different rates. Question:—what is the
average loss of the whole? The first problem
is very concisely expressed; the question is
understood; some words, like kutō gatā, must
be supplied to samabhāgadā. The reading
rāhitā, however, is not certain.

4. Brahmagupta’s version of the forty-
ninth sūtra, referred to above, (MS., No. 1, B, 6,
Library, As. Soc. Beng., p. 85) is as follows:—
Idānum \( I \)
Yō ráśir ishṭonō vargō bhavati, sō ch’anyē-
śḥayutō varga eva bhavati \( \text{I} \)
Tat-karaṇa-sūtram \( I \)
Yair ūnō yaiś cha yutō rupair vargas tad-
aikyam iṣaṭa-hṛtam \( I \)
Ishṭonām tad-dala-kṛitrī ānabhyyadhiča bha-
vati rāśiḥ \( \text{II} \)
FACSIMILE OF A LEAF OF THE BAKHSHALI MANUSCRIPT.

Containing a portion of Sūtra 25.

Plate I.

Size 8½" by 7".

Obverse restored.
The *karaṇa-sūtra* is translated by Colebrooke (Indian Algebra, p. 371) thus: "the sum of the numbers, the addition and subtraction of which makes the quantity a square, being divided by an arbitrarily assumed number (*śīka*), has that assumed number taken from the quotient: the square of half the remainder, with the subtractive number added to it, is the quantity (sought)." The *sūtra* is followed by a commentary and an example, which differs entirely from that given in the Bakhshāli MS. It will also be noticed, that Brahmagupta’s *sūtra* is in the ārya measure, while the fragments of the *sūtra* in the Bakhshāli MS., as restored from the solution, are in the śloka measure.

5. Unnumbered *sūtras*. Problems on distribution or partition. It may be noted that these examples afford an illustration of what has been before remarked regarding the nature and use of the dot. It will be noticed that the dot • is called śūnya or 'the empty place;' and as the first step of the process of solution the direction is given 'to fill up the empty place with the number 1,' the latter being arbitrarily assumed to represent the unknown quantity of which the value is sought (the *ichhekkha* or *kāmika*).—The meaning of the example of the first *sūtra* is: if a gives 1, B gives 2 × 1 = 2, C 3 × 1 = 3, D 4 × 1 = 4. The sum of the rates is 1 + 2 + 3 + 4 = 10; dividing the given total 200 by 10, we obtain 20, as the gift of A. Hence the gifts of B, C, D are 40, 60, 80 respectively. The rule of the *rūpāṇa* method is not preserved in the Bakhshāli MS. It is given, however, by Brahmagupta in the section of his Arithmetic on Progression. In Colebrooke’s translation of Brahmagupta’s work it is numbered 17 (on p. 290), and runs as follows:—“The period less one, multiplied by the common difference, being added to the first term, is the amount of the last. Half the sum of the last and first terms is the mean amount: which multiplied by the period, is the sum of the whole.” Applying this rule to the present example we have:—the period 4 less 1 is 3; multiplied by the increment 20, it is 60; added to the initial term 20, it is 80. The sum of 80 and 20 is 100; half that sum is 50; and this multiplied by the period 4, yields the total 200. In the original Sanskrit (MS., No. I, B, 6, Library, As. Soc. Beng., p. 86) of Brahmagupta, the rule runs thus:—

Padām ēkahnaṃ uttaraganitaṃ saśyuktam ādānāntyadhanaḥ 1
Ādiyutāntyadhanaḥ madhyadhanaḥ paḍaṇgitaṃ phalaṁ 2

It will be noticed that this is in the ārya measure, and that it is quite differently worded from the same rule in the Bakhshāli MS., which commences with the word *rūpāṇa*, and which must have been in the śloka measure. This confirms a remark previously made, regarding the relation of the Bakhshāli MS. to Brahmagupta.—In the fifth example of the second *sūtra* the rates are obtained thus: A gives $1 + \frac{1}{2} = \frac{3}{2}$; B $2 \times \frac{5}{2} + \frac{4}{3} = \frac{15}{2}$; C $3 \times \frac{4}{2} + \frac{7}{3} + \frac{6}{3} = \frac{317}{3}$; D $4 \left(\frac{5}{2} + \frac{15}{2} + \frac{9}{2}\right) + \frac{2}{3} = \frac{325}{3}$

The sum of the rates is 222; dividing with this the given total 222, we obtain 1 as the value of $x$; which practically finishes the problem; for multiplying each rate with 1, we obtain the same amounts $\frac{3}{2}, \frac{15}{2}, \frac{317}{3}$ for the several gifts of A, B, C and D.

6. The page figured on the accompanying plate reads as follows:—

trī-chatuḥ-paṇcchakā kshayē 1 sapta 2
2. viṁśatī pirāṇyā tridhāntaśēṣaḥ drishtaye 1 kiṁ sarvaṁ vada tatvajña kshayaṁ cha
3. ma kathyaṁ 1 $\frac{1}{2} \frac{1}{4} \frac{1}{5}$ śe 27 karanaṁ 1 kṛitra rūpa-kshayaṁ pārtha $\frac{2}{2} \frac{3}{4} \frac{1}{5}$
4. guṇitaṁ jāta $\frac{2}{3} \frac{1}{5}$ rūpa-kshayaṁ $\frac{3}{2}$ anēna śēṣaṁ bhaktave śēṣaṁ $\frac{27}{2}$ bha
5. [ktaṁ] jātaṁ 45 asya saptaviṇā pātya śēṣaṁ 18 11 ēta kshayaṁ 11 udā 1
6. [pa]rikṣhārya lāhaya tridhāntaṁ pańchamahāraṇaṁ 1 na jñāyate [ta]t-pravṛttitap
7. [na śe]sha pradṛśyaṁ 1 pravṛttitēśeṣaṁ yō pirāṇaṁ kēvalaṁ viṁśatī sīhiṁ 1 a
8. [darśyat]aṁ pravṛttitē śyā kiṁ vā śeṣaṁ vadasva mē $\frac{1}{9} \frac{1}{4} \frac{1}{5}$ kṛitrav[rūpa =]
The lithographed plate, unfortunately, is not quite perfect. The transcript has been made from the original. Ambha-rōba I take to be the Sanskrit abhra-rōba 'lapis lazuli' (cf. Pāli ambha 'a pebble'). For pañchamāsakāna read pañcāhāsanākāna. The purport of the first example is: "of an unknown quantity (piṇḍa) of lapis lazuli, on deducting the loss (in cutting), there remain 3, 4, 1 in three instalments (trīkā-nanta); the sum of the remainders of the three instalments is 27. What was the total, and what is the loss?" Solution: "Subtracting from 1 severally 3, 4, 1, we get 3, 4, 2; these multiplied one another are 2; subtracting this from 1, we get 45; the total remainder 27, being divided by this, we get 18, deducting from this the total remainder 27, we get 18 as the loss." Proof: the total is 45; at the first time of cutting, 1 is got as cut stones; hence the loss (or what is cut away) is 30; the latter is cut once more, and 1 or 7 is got as cut stones, the loss being 22; this is cut a third time, and 1 or 4 is now got as cut stones, the final loss being 18. The produce of the three instalments of cutting, accordingly, is 15 + 7 + 4 or 27. The second example is similar; only that here, besides the original (pravṛtti) total (56), the total produce (jāsha or what remains after deducting the several losses) is to be found (30), instead of the final remainder (pravṛtti-jāsha) which is given as 20. The solution (and proof) may be made exactly as in the case of the first example.

SOMALI AS A WRITTEN LANGUAGE.

No. III.1

BY CAPTAIN J. S. KING, B.A.S.C.

COLLOQUIAL SENTENCES.

English

Somali

18.—How old are you?

or

19.—Will you sell this?

20.—Yes: I will sell it.

21.—Will you buy this?

and I will buy it.

22.—I shall beat you.

23.—Hold my horse.

24.—I will hold it.

25.—What have you brought?

26.—Bring me a good spear.

27.—I want a mat.

28.—Do you know what he says?

30.—Is this knife yours?

31.—Yes: this is mine.

32.—Is much coffee produced in your country?

33.—What is the charge for a camel-load?

34.—Is any fresh water procurable here?

35.—How far is the town from the shore?

36.—I saw you to-day in the bazar.

37.—What were you doing there?

38.—I was buying some food.

39.—I shall come to your house today.

40.—I want some bread and salt.

1 Eratutum in No. II. Somāli. The last sentence in the left-hand column on page 285, Vol. XVI., should be written as follows: "By this method the student is saved the trouble of wading through grammatical rules (which, without practice in their use, would probably not convey much information to his mind), and his attention is drawn only to those points of grammar which arise in the sentences."
41. I wish to buy some ghī and rice.
42. Bring me some milk.
43. Do you drink milk?
44. Yes: I do drink milk.
45. Do you drink coffee?
46. No: I drink water.
47. Do you smoke tobacco?
48. Have you ever been to India?

49. What pay do you require?
50. I will give you ten dollars a month.

Vocabulary and Grammatical Analysis, with Notes and transliteration.


20. Há: wā ibināsā. Há, interj., yes, just so!

21. Adiga wahā mā ibsanaśā. Ibsanaśā, 2nd pers. sing. pres. of ibsā, v. 8, buy. [Note the difference between ibī, v. 3, sell, and ibsā, v. 8, buy.]

22. Wā: ibsanaśā

23. Aniga wā ku gu—dufān. Ku, pers. pron. 2, dative. Gueku, a prep. used with the verb diJa, DiJa, v. 4, always preceded by ku, when meaning to fall upon and beat with something. N. B.—DiJa, without any preposi-
No. 3.—Râjâchâ Mâsthiâ.

In a distant land once lived a great Râjâ who ruled over a vast kingdom. He had large armies at his command. The nobles and chieftains were all at his service, and he had everything that one could desire; but a misfortune marred his happiness, for he had no heir to succeed him after his death. So the Râjâ on this account was very sad, and gave large alms, and other things in charity in the hope that the receivers thereof would pray to God to give him an heir. At last his long cherished desire was fulfilled in his old age, when a son was born to him. The boy grew up very rapidly and was the joy of all his father's house, and of his subjects as well.

Now it happened that about two years afterwards a daughter was also born to the Râjâ, on whom everyone bestowed all care and attention, neglecting the prince, who was not so much as even looked upon,—a fact which he at once observed and felt deeply.

For several years matters continued in this state, and the prince, who had by this time attained the age of discretion, became disgusted. Early in the morning he would rise, take his sword and go out into the jungles, and there ask of the herdsmen (gaunhîdâs) who tended the cows to give him milk, and on this alone he lived. At first he would drink only about a nîr or so, but by degrees he began consuming it by mans. Drinking milk in such quantities made him so strong, that on his way home he would uproot trees and destroy anything, even houses that came in his way.

So he became known throughout the State by the name of Râjâchâ Mâsthiâ. As soon as he came home he would take to his room and never allow any one to enter. The servants would now and again come and tell him to take his meals, but he would tell them to go about their business. Now the princess often saw him coming home from his daily visits to the gaunhîdâs, but did not know that he was her brother. She also saw how he uprooted trees and did other feats of strength.

When the princess became of a marriageable age, the Râjâ, her father, asked her to mention
any person that she would like to take for her husband. And as the princess did not know that Rājāchā Masthiā was her brother, she said:

“I will marry only him, who is so strong as to be able to take up an iron ball twice twelve mans in weight, and throw it at a distance of twice twelve kōs.”

The Rājā agreed, and accordingly sent notices to various Rājās and pardhāns, to the effect that anyone who could lift up an iron ball twice twelve mans in weight and throw it to a distance of twice twelve kōs, should have his daughter in marriage.

Accordingly on an appointed day, an iron ball twice twelve mans in weight was made ready, and a great many Rājās and pardhāns, who had received the notice, came to try if they could lift it up and throw it to a distance of twice twelve kōs, and so get the beautiful princess.

All that had come tried their strength but in vain. Some of them could lift up the ball, but to throw it such a distance was impossible. They tried over and over again till late in the evening, and all despaired of success. Just then Rājāchā Masthiā was coming home from his usual excursion, and it happened that the iron ball of twice twelve mans in weight lay in his way. Not knowing the object of it, and not even paying any attention to all the Rājās and pardhāns that were assembled there, with accustomed ease he took up the ball and threw it at a distance of twice twelve kōs and even more.

The princess was watching from one of the palace windows, and as soon as she saw Rājāchā Masthiā fulfil the condition she had imposed upon the successful suitor for her hand she at once ran to the Rājā, her father, and told him that Rājāchā Masthiā was her choice. All the strange Rājās and pardhāns were astounded at the strength of Rājāchā Masthiā; but at the same time they could not be reconciled to the idea of a sister marrying her brother. Her father and his guests all tried to persuade her of her folly, but she was not to be put off, and she said: “I must either marry him, even if he be my brother, and him alone, or die.”

All were at a loss to know what to do. Nothing could dissuade her from the foolish love. However, they saw no alternative, and said they would make this case an exception, and everything was agreed upon and an early wedding day was fixed upon. Great preparations were made throughout the kingdom to celebrate such a happy occasion with a fitting pomp, and nothing was spared that could lend beauty and grandeur to the ceremony.

As to Rājāchā Masthiā, he was mad with rage when he heard what was going to take place, and he would not agree to it. So a few days before the day appointed for the wedding he took his sword and was sharpening it when one of the Rājā’s servants passed him and greeting him said: “Pardhān Sāhib, all the palace is in a bustle preparing for a wedding, and yet you seem to be taking it easy!”

“For whose wedding?” he asked. “Are they preparing?”

The servant replied: “Why, are you so ignorant as that? It is your own wedding with your sister!”

But Rājāchā Masthiā in an angry tone told him to leave his presence at once, “or,” said he, “I will tear you into a thousand pieces.”

The poor servant, who knew the temper and strength of Rājāchā Masthiā only too well, left the place without another word.

Soon after this another servant was passing by, and said: “What are you doing, Pardhān Sāhib? Where are you going that you are sharpening your sword, while all the palace is busy preparing for a wedding?”

“Whose wedding?” asked Rājāchā Masthiā.

“Why? can I believe that you are ignorant of it, when the wedding is your own with your sister?” replied the servant.

But he was also told to leave his presence by Rājāchā Masthiā, who threatened to tear him into a thousand pieces, and dreading his wrath the man went about his business without uttering another word.

While he was yet sharpening his sword, a third servant came up to him and asked what he was doing while all the palace was making grand preparations for the coming great event, namely his wedding with his sister. Rājāchā Masthiā was furious and flew at him sword in hand, telling him to go away, “or,” said he, “I will tear you into a thousand pieces.” Like the other two servants this servant, too, feared to provoke him further and quietly went away.

Now Rājāchā Masthiā’s sword was of such a nature, that if it rusted he would fall sick, and if it broke he would die. His life lay
in the sword, and consequently he could not dispense with it. So taking his sword and his horse, Rájáchá Masthiá left his house, without informing his father or any one else. They all saw him going away, but they thought that he was only going on his daily excursion, and that he would return as was his wont, little suspecting that he was going for good.

So away he rode, through jungles and forests, and had travelled some distance when he met a hunter who was carrying a gun on his shoulder. Rájáchá Masthiá called out to him: “Hallo, hunter, what is the weight of your gun?”

“You must be a very strong man to carry a gun fifteen mans in weight, continually on your shoulder!” said Rájáchá Masthiá.

“Oh, no!” replied the hunter. “Rájáchá Masthiá is the only strong man, who lifted an iron ball twice twelve mans in weight, and threw it a distance of twelve kes.”

“I am he,” Rájáchá Masthiá replied.

On this the hunter said: “Then I must follow you. I will go with you wherever you go. I will live and die with Rájáchá Masthiá.”

Rájáchá Masthiá now pursued his way followed by his new friend, the hunter; Rájáchá Masthiá riding his horse, while the hunter followed on foot. They travelled in this way for a long time when it struck Rájáchá Masthiá that it was unbecoming that he, though a prince, should ride a horse, while his friend, the hunter, walked. So he let his horse loose to go where he liked, and both made their way on foot. When they had travelled for several days they came on a carpenter who was carrying his saw on his shoulder, and other tools in a bag swung on his back. Rájáchá Masthiá called out to him:

“Hallo carpenter! what is the weight of your saw and the other tools?”

The carpenter replied: “The weight of my saw is ten mans, and that of the other tools is five mans, in all fifteen mans.”

Rájáchá Masthiá said: “Indeed, you are a very strong man, to carry tools fifteen mans in weight, continually about you.”

“Oh no!” said the carpenter. “My strength is nothing compared to that of Rájáchá Masthiá, who lifted up an iron ball twice twelve mans in weight, and threw it at a distance of twelve kes. He is really strong.”

Rájáchá Masthiá said: “I am that Rájáchá Masthiá, who lifted that iron ball twice twelve mans in weight and threw it at a distance of twice twelve kes.”

On this the carpenter said: “Well, then, I will go with you wherever you go. Even to death will I follow you.”

Now these three, Rájáchá Masthiá, the hunter and the carpenter, all travelled together. After many days they came to a city late in the evening, but they were surprised to find that it was deserted, and not a single soul to be seen. All the houses and shops were open.

Rájáchá Masthiá said: “What can be the cause of this? We will remain here for some days and find out what it all means.”

So they put up in a large house. They went to one of the shops, and took what was necessary, laying the proper money on the counter. They then cooked their food, ate it and went to sleep.

Next day Rájáchá Masthiá said to the carpenter: “The hunter and myself are going round the village; you stay at home and prepare the dinner to-day.”

The carpenter agreed and set about his work, while Rájáchá Masthiá and the hunter went to inspect the village. In due time the rice was ready and the carpenter poured it out on a pathrével, when lo! a ránkhas, three palmymas in height, made his appearance and asked for the rice or he said he would swallow the carpenter. The poor carpenter was at a loss to know what to do; but seeing that if he did not give up the rice his life was at stake, he gave it up. The ránkhas having done justice to the rice disappeared. The carpenter set about cooking rice again, but before it was done Rájáchá Masthiá and the hunter came in and asked if the dinner was ready. The carpenter did not like to incur the displeasure of Rájáchá Masthiá, nor did he wish him to know that a ránkhas had come and swallowed the rice he had previously cooked, for fear of being called a coward, and so he made some excuse for the delay in making the dinner ready. All three sat about it and when it was prepared they all had their fill and rested.

On the following day Rájáchá Masthiá told the hunter that it was his turn that day to stay at home and prepare dinner, while the carpenter and himself went out. Thus saying they

1 A plate made of leaves.
both went out, and the hunter having taken what was necessary from the shops, laid the money on the counters, and set about cooking. When the rice was boiled he poured it on a pathrâvell, when the rânhkas made his appearance again and demanded the rice of the hunter. The hunter was a little reluctant at first, but the rânhkas said: "Give up the rice at once or I will make a meal of you instead."

The hunter was terror-stricken at these words, and without any resistance handed the pathrâvell with the rice to the rânhkas, who ate it and disappeared.

Now the hunter hastened to boil some more rice, but Râjâchâ Masthiâ and the carpenter came in and asked for dinner. The carpenter who had had his experience the day before, at once conjectured that the hunter must have met with the same fate as he had, and understood the cause of the delay. The hunter, too, guessed that the carpenter must have also had a visit from the rânhkas but of course he would not tell Râjâchâ Masthiâ what had occurred, and made some excuse to account for the delay. All hands were now busy in preparing dinner, and when it was ready they satisfied the cravings of hunger.

When they rose on the third day Râjâchâ Masthiâ said: "To-day it is my turn to cook. You two go about the village." But the hunter and the carpenter would not allow it. Said they: "It is not becoming that you, a pardhan, should cook and give us to eat. We two will make it our duty to cook every alternate day." They said this, not because they really had any feelings of respect towards Râjâchâ Masthiâ as a pardhan, but because they feared that he would come to learn of their encounters with the rânhkas, and they would thereby be disgraced. Râjâchâ Masthiâ, however, was not to be persuaded, but said: "You had your turn and you did your duty. To-day it is my turn, and I must do my duty. I am a pardhan it is true, but here I do not insist on my dignity. We are equals."

The hunter and the carpenter saw no alternative but to submit. So they went about the village, fully believing that at their return they would be reprimanded for their cowardly conduct on the previous days. As soon as the hunter and the carpenter were gone Râjâchâ Masthiâ went to one of the shops, took rice, ghâ, and other necessaries, put down the proper price on the counter, and set about preparing the dinner.

In a short time the rice was boiled and Râjâchâ Masthiâ poured it over a pathrâvell, when lo! the rânhkas scenting the fine savour of the dinner came to claim his share.

"Who are you?" asked Râjâchâ Masthiâ, "and what do you want here?"

The rânhkas replied: "Do not trouble yourself as to who I am, give up the rice in an instant, or you are my victim. I will swallow both the rice and you."

But our hero was not to be deterred by such threats. "Wait a few moments," he said, "and I will give you the rice." Saying this he went and fetched his sword, and with one stroke he stretched the rânhkas on the ground, where he lay like a great mountain. Having killed him he proceeded to examine this great monster more closely, when his attention was attracted by something very bright at the rânhkas' waist. Approaching the body Râjâchâ Masthiâ took it and found it was a diamond of great size. Now near where the rânhkas lay dead was a tank. As soon as the diamond was reflected in the tank, behold! there a passage opened. Râjâchâ Masthiâ descended by a ladder that he saw, and he came to a splendid palace. Entering it he saw a dams of rare beauty, and chatted with her a long while, and then finding that it was time for the hunter and the carpenter to return for dinner, he left her, though she was very reluctant to let him go. He, however, took good care to take the diamond with him. He came home just a little before the hunter and the carpenter returned, and when they came he pretended that nothing had happened. After they had their dinner, Râjâchâ Masthiâ asked first the carpenter and next the hunter, to tell him the true cause of the delay in preparing dinner on the previous days. They confessed their faults and begged forgiveness. Râjâchâ Masthiâ, who was as kind-hearted as he was strong, knew their weakness and forgave them, warning them, at the same time, not to tell lies again. He then took them and showed where the mountain of a monster lay dead.

The next thing Râjâchâ Masthiâ did was to put up on a lofty post a large flag with the inscription: "All who are of this city need
fear nothing. The monster their enemy is no more. Rājāchā Masthiā has killed him and is now king." The citizens who had migrated into neighbouring places read the inscription with great joy, and once more came and took possession of their shops and houses. All saw with admiration how their enemy lay dead, and blessed their deliverer, Rājāchā Masthiā.

They continued to live in that city for a time, during which Rājāchā Masthiā introduced his friend the carpenter to the fair lady in the subterranean palace. They were so fascinated with each other, that Rājāchā Masthiā had pity on the poor carpenter, and so arranged for their wedding. In due time everything for the marriage was ready, and it was celebrated with great pomp; all the citizens were invited, and the rejoicings lasted for several days.

After living in this city for a year or two Rājāchā Masthiā thought of visiting other countries, and so, making over the charge of the city to the carpenter, he took his leave of him and his fair bride. The citizens did not like to part with him, but they could not keep him back; and before leaving Rājāchā Masthiā gave strict orders that all were to obey his friend, the carpenter, whom he gave them as king in his stead. He also gave the carpenter the diamond that he had taken from the rankhas’ waist, as it was necessary for him to go in and out of the subterranean palace. The carpenter could not bear the idea of parting with his friend, but after much argument he was persuaded to remain. However he said: “My dear parthān, and friend, to part with you is almost death to me, but as it is your desire that I should remain here and be king in your stead, I agree if only to please you. But should anything occur to you how am I to know, so that I can come to see you? Give me some sort of sign by which I could know that you are ill or in danger.” Rājāchā Masthiā gave him a plant and told him to plant it near the palace door. He said: “If this plant should fade, know that I am sick or in danger; if it should die, know that I am also dead.” Thus saying Rājāchā Masthiā left with his friend, the hunter—the carpenter, his bride, and all the citizens shed tears, thinking that they should never see him again.

Rājāchā Masthiā and the hunter now both travelled for several days and came to another beautiful city. They went to an old woman’s house and begged for lodging. The old woman willingly agreed. It so happened that she had seven fair daughters. The youngest and the fairest was, however, next to dead. She was afflicted by a big snake, and if any persons slept near her the snake used to come out of her and kill them. On this account the old woman was very down-hearted. Rājāchā Masthiā inquired of her the cause of her sorrow, and being informed what it was told the old lady to calm herself. He said he would make short work of the snake, if only she followed his instructions. He told her to buy him seven mans of wheat flour, seven mans of sugar, and seven mans of ghī. The old woman readily brought it, and Rājāchā Masthiā made a figure of a man out of them, and in the night he placed it by the side of the youngest daughter, and told the old woman on no account to put her hand, much less come close to the girl. Having done this Rājāchā Masthiā with a naked sword in his hand hid himself close by, waiting for the snake to come out. He had not to wait long before it came out and bit at the figure, and finding it taste sweet, it came out altogether, coiled itself on the wheaten figure, and set to eating it. Rājāchā Masthiā now thought it his opportunity, and with one stroke the snake dropped dead, cut into several pieces. From that moment the girl was cured of her malady, and went about as healthy and fair as the rest of her sisters. The old woman was very pleased and ran to take up one of the pieces of the snake, but Rājāchā Masthiā chopped off her hand, and taking it up left the house.

(To be continued.)

A NOTICE OF THE ZAFARNAMA-I-RANJIT SINGH OF KANHAYYA LAL.

BY E. BEHATSEK.

(Continued from p. 340.)

30. In the Shukran year 1883 [A.D. 1885] it was reported to the Mahārájā that Yār Muhammad was in the possession of a mare, Laillī by name, the like of which, in beauty and in speed, had never been owned by any sovereign. Accordingly he demanded it from
Yār Muḥammad Khān, who sent back the messenger with an evasive answer; whereon Ranjit Singh ordered the Sardār Budhā Singh forthwith to march with troops and artillery to Peshāwar and to take the animal by force. At that time there was a free-booter, Sayyid Ahmad by name, in the vicinity of Peshāwar, who had many Hindustānī Muslim followers, and pretended that he would some day conquer the Pañjāb. Meanwhile, however, he contended himself with besieging a small Sikh garrison which held the fort of Haidrū, and on hearing of this, when approaching with his troops, the Sardār Budhā Singh determined to liberate the said garrison. Sayyid Ahmad, however, learnt that the Sikh troops were far inferior to the number of his own followers, and therefore, surrounding them at some distance, cut off all supplies. The Sardār, who had, with his Sikhs, been thus compelled to fast during several days, sent a courier to demand reinforcements. Accordingly the Mahārājā issued instructions to the Rājā Suchēt Singh, and to the Mahārājā Gulāb Singh of Jammu and Kashmir, to proceed with their armies by forced marches at once to Peshāwar, in order to liberate the Sardār Budhā Singh, whom the Afghāns had encompassed. The prince Shēr Singh received similar orders, as well as the Generals Ventura and Allard, but when they reached Atāk the news arrived that the Sardār Budhā Singh, driven to despair by hunger, had broken the cordón which surrounded him with his troops, and had, after a hot contest, put Sayyid Ahmad to flight.

When Yār Muḥammad became aware of what had befallen the freebooter in whose aid he trusted, he humbly excused himself to the Sardār Budhā Singh, and sent him a nazarānā with rich presents, declaring however that the famous steed Lailī had died. The Prince Shēr Singh reported all this in a letter to the Mahārājā, who thereon replied approving of the valour displayed by the Sardār Budhā Singh, and instructed him to levy tribute from Yār Muḥammad, and to re-instate him as governor of Peshāwar, but that in case it should be ascertained that he had falsely reported the death of the horse, to take it from him by force. The Sardār then returned to Lāhūr and was invested with a robe of honour, but left the troops which had marched there under other commanders at Atāk. Meanwhile the information arrived that Lailī was not dead, but that Yār Muḥammad, who feared to be deprived of the horse, had only removed it to another place of concealment. The Mahārājā therefore ordered the prince Kharaq Singh to depart immediately to Peshāwar, and to offer to Yār Muḥammad any amount of money for the horse, but to remove him from his post of governor if he refused to part with it; and also to purchase at any price from Shēr Muḥammad another celebrated horse known by the name of Shīrin. The prince not only himself obeyed, but took the precaution of marching with all the forces left in Atāk to Peshāwar, where he encamped. Yār Muḥammad, however, immediately fled, leaving him in the possession of the town, where, he made a sojourn of eight months; and purchased from Shēr Muḥammad the horse Shīrin, paying him a lump sum of money for it, and giving him a landed estate the annual revenue of which amounted to 10,000 rupees. He appointed Sultan Khān to be governor of Peshāwar, imposing upon him the obligation of sending annually the required tribute money to Lāhūr. Then the prince marched with the army as far as Atāk, and it remained encamped there whilst he hastened to Lāhūr; whereas Yār Muḥammad, as soon as he learnt that the troops had gone to Atāk, immediately expelled Sultan Khān from Peshāwar. Ventura, who was at that time in Atāk, forthwith sent a courier to the Mahārājā, asking for permission to deprive Yār Muḥammad of the fort. To this Ranjit Singh replied that he desired nothing more from the latter than the horse Lailī and his annual tribute as a loyal vassal; and the General was therefore to give him any price he might ask for the animal; but was to wage war against him if he refused to comply. Ventura accordingly despatched a friendly letter to Yār Muḥammad asking him to sell the horse, and threatening him with hostilities if he demurred.

Whilst Yār Muḥammad was preparing to give Lailī to her Majūn, the report arrived from Peshāwar that the freebooter Sayyid Ahmad had again raised disturbances and was...
plundering, with the intention of conquering the whole of the Pañjāb. Accordingly Yār Muhammad advanced at once and attacked him, but being in want of the needful ammunition, he had to struggle with great disadvantages, fought valiantly, and was slain. Ventura immediately afterwards dispersed the freebooters, took possession of Peshāwar, and wrote to the Mahārājā for instructions, which soon arrived, and were to the effect that if Sultan Khān promised to pay the annual tribute, to remain loyal, and to part with Laill, he should be appointed governor of Peshāwar and enjoy the favour of the Mahārājā: in case, however, of the refusal of Sultan Khān to accept these proposals, Ventura himself was to govern the district of Peshāwar on behalf of Ranjit Singh. The wishes of the Mahārājā having been communicated to Sultan Khān, he promised implicitly to obey them, and at once produced the mare Laill, offered a nazarāna and received a robe of honour in return for it.

The arrival of Ventura in Lāhūr with Laill which he presented to the Mahārājā, was a signal for great rejoicings and the showering of favours upon the General, who, however, was not long there before the news came that, as soon as he had departed from Peshāwar, Sayyid Ahmad had arrived there, and that Sultan Khān, being a coward, had paid him allegiance, so he had left him in his post of governor and continued his depredations, which, if conducted on a more extensive scale, would eventually spread to the Pañjāb unless checked. Accordingly the Mahārājā forthwith despatched the prince Shōr Singh with troops to punish the robbers, and after the latter reached the Hazāra country he issued proclamations to the inhabitants that they ought not to flee and had nothing to fear from the Sikh troops. Then he attacked the enemy, thousands of whom were slain in a single engagement, Sayyid Ahmad himself with his relative and Wazir Maulavi Ismā’īl being among the number. When tranquillity had been completely restored, and the rebels utterly exterminated, the prince again installed Sultan Khān as governor of Peshāwar, and returned with the troops to Lāhūr, when the Mahārājā received him with great honours.

31. Ranjit Singh, who entertained great affection for the king of England, desired to manifest it by sending him the following presents:—Very fine garments of wool and silk; priceless gems, such as diamonds, rubies, and turquoises; a beautiful carpet of Kashmir-wool interwoven with gold; a great tent of woollen cloth, the like of which had never been seen; and various other rarities. The bearer was the great Amīr Faqīr 'Azzūzuddīn, whom the Governor-General received in darbār at Simla, and graciously thanked after he had delivered his message. The presents arrived safely in London, and were highly approved of by the king, who, in his turn, sent various gifts to the Mahārājā, and among them a vehicle called a phaetan with four noble and swift-footed mares, and a beautiful Arab steed. The envoy, Mr. Burnes, who had brought these gifts from England, was received by the Mahārājā with great honours in a darbār at Lāhūr, and Mr. Wade, the Agent of the English Government, who usually resided at Lōdīānā, having arrived, was likewise present. After the termination of the darbār the Mahārājā gave a brilliant state dinner. Then the Sārdār Hari Singh with Faqīr 'Azzūzuddīn and Mōtī Rām, who was also a high dignitary at the court of the Pañjāb, departed to Simla with presents of fine garments and precious stones for the Governor-General, with the request that the Mahārājā, desirous of strengthening the bonds of friendship between the English Government and himself, wished to have a personal interview with His Excellency, whom he begged to point out a convenient and pleasant locality for the meeting. The Governor-General graciously received the three envoys, and, assuring them that the king of England entertained the sincerest friendship for their sovereign, mentioned Rūpar as the place most convenient for the interview. When the three envoys returned with this information, preparations were immediately begun, and all the troops who were to escort the Mahārājā obtained brand new uniforms; the courtiers and high amirs also received notice to make arrangements for appearing in the best manner they could on that solemn occasion; and, all being ready, the Mahārājā started with 10,000 cavalry, 6,000 infantry and ten pieces of artillery, but first proceeded with all these troops to Amritsar, where he spent two weeks, celebrating the Dasahra festival and carousing. He then he marched straight to Kātāgdāh and encamped.
The Governor-General, having been informed of the Maharajah's arrival, likewise started with his officials and troops, taking up his quarters at Rupa, whence he despatched a high officer, Ramsay by name, to welcome Ranjit Singh, who, in his turn, made a complimentary reply. When the said English officer departed, the Maharajah sent his own son and heir—apparent, Kharaq Singh, at the head of a deputation, which consisted of a number of amirs, and among them Sri Maharajah Gulab Singh, the Governor of Jammun and Kashmir, Sardar Hari Singh, Rajah Sangat Singh, 'Atar Singh, and Shiam Singh, to wait upon the Governor-General for the purpose of inquiring after his health. After the prince had crossed the river and approached the Governor-General's tent, His Excellency came out with a number of English gentlemen and took the deputation into the darbar tent, where, after the exchange of compliments and presents, the amirs were invested with robes of honour, and returning informed the Maharajah of the polite reception they had met with. He was highly pleased with their report, but was disquieted by the suggestions of some malevolent persons, who averred that it would have been more safe to have the interview in his own dominions, at Amritsar, where he would have been in perfect security, whereas in this place the English might during the interview easily surround him and make him prisoner. The apprehensions of the Maharajah having somehow been brought to the notice of the Governor-General, he immediately despatched his Secretary to Ranjit Singh to assure him that the English were an upright nation, incapable of treachery, and that nothing but closer relations of amity would result from the meeting. Although the fears of the Maharajah had been almost totally dissipated by the declarations of the Secretary, he nevertheless considered it proper to consult his astrologers on the subject, and summoned to his presence all who possessed a subtle knowledge of the stars, as well as all the Brahmins who had studied the Vedas. They contemplated the rotations of the spheres and calculated the motions of the stars, deeply meditated on the results yielded by their calculations, and at last declared, that fortune being propitious, and the Creator helpful, the Maharajah ought fearlessly to meet the Governor-General, who was his well-wisher, and only observe the precaution to take with him two apples, one of which he must at the time of meeting present to the Governor-General, and immediately consume the other himself.

32. The Maharajah having issued orders to the cavalry to get ready, and to his amirs to dress in silver and gold attire, and to bring out their elephants and gilded howdas, their horses and silver saddles, mounted his howda, while the artillery fired a salute, the bands played, as the drums resounded, as the Maharajah started, flanked by cavalry, and accompanied by his amirs on elephants. When the cortège arrived at the bank of the river, the Maharajah ordered a halt, and desired only 700 cavalry and 200 infantry to accompany him to the other side. They all marched across the bridge followed by Ranjit Singh, who then passed on to the road, one side of which lined by gigantic Parbises and the other by European troops, all drawn up in military order. On this salute of artillery and musketry were fired and military bands played. Then a high English officer came to meet and accompany the Maharajah, and when the procession had reached the Governor-General's tent His Excellency came out, lifted his hat, warmly shook hands with the Maharajah, and seated him on an elevated place in the tent, with the English gentlemen, whose heads were uncovered, on his right, and his own amirs on his left side, all sitting in great dignity with golden turbans but naked feet. After the Governor-General had uttered a few sweet words of welcome to the Maharajah, he ordered the band to play, and whilst the audience was being enchanted with delightful music, the presents intended for the Maharajah were brought forth, laid out on fifty golden trays, displaying turquoises, rubies, dishes full of gold, and wonderful clocks. The Governor-General also presented the Maharajah with an enormous elephant and a golden howda, two fleet horses with costly trappings, and a dinner-service, the plates of which were of silver and gold; and lastly accompanied him to the place of leave-taking.

33. On the same day the Maharajah ordered his son Prince Shahr Singh likewise to pay a visit to the Governor-General, and to request him to condescend on the next day to review the Sikh troops. The invitation having
graciously been accepted, the Mahārājā had a splendid tent pitched with red and gold carpeting, an elevated seat and 30,000 [1] chairs around it. A number of other tents with silver poles and silk ropes surrounded the large one, all guarded by gold-turbaned servants, who had silver lādis in their hands. All the troops having been drawn out, and the line through which His Excellency was to pass arranged, the two princes Shēr Singh and Khārak Singh were sent to inform Lord [William] Bentinck that everything had been got ready; whereon the Governor-General at once proceeded to the bank of the river, whilst the Mahārājā approached it on the other side to meet him, and the Mahārājā’s artillery having fired a salute, they proceeded together to the tent where they took their seats, surrounded by English officers and Sikh amirs. The nazârādīna having been presented, the Governor-General touched it with his hand according to the usual custom, and then a hundred ornamented trays representing boats were brought in, loaded with costly garments, rubies, corals, pearls, diamonds, silver, gold, and various curiosities from Kashmir and Multān, as well as other presents, such as every kind of silk and gold embroidered cloth, heaps of woollen stuffs, necklaces of jewellery, swords, muskets, bows and arrows, pistols, carbines, battle axes and lances. The Mahārājā presented to the Governor-General in addition to the above, four fleet horses with golden saddles, and two mountain-like elephants, for which he expressed his best thanks and then took leave.

34. The Mahārājā having after these two interviews determined to give an entertainment to the Governor-General on the third day, ordered all the preparations to be made, and these consisted in furnishing a splendid tent with elegant carpets. Musicians, singers and dancers of both sexes were ready to enliven the feast, and thousands of chandeliers with crystal pendants were hung up to illuminate it. Food and drink of every variety, with fruits and confectionery, having all been provided in the greatest abundance, and the countless chandeliers, lamps, candles and flambeaux lighted in the evening, the scene presented a magical and fairy-like aspect. Ranjit Singh despatched the Mahārājā Gulāb Singh to apprise the Governor-General that all was ready, who then entered his carriage with his retinue and started immediately. He was met half way by Ranjit Singh, who then conveyed him to the improvised banqueting hall, where the English guests sat on chairs, and the amirs in their usual manner. Then the musical entertainment began with dancing and singing, in which the blooming beauties of the Pañjāb naturally played the chief part. Refreshments were partaken of, and potations indulged in to such a degree that the effect of the latter began to manifest itself at last in an uproar, to drown which the Mahārājā immediately gave orders for the bands to strike up, and when the tremendous noise made by the united kettle-drums, bangles, fifes, trumpets and clarionets ceased, the Mahārājā added to the abovementioned gifts for the Governor-General one more elephant with a golden havālī, with two beautiful horses, and presented to all the English guests shawls, golden turbans, and robes of honour, after which they took their leave and departed.

35. On the evening of the fourth day the Secretary of the Governor-General made his appearance on horseback in the camp of the Mahārājā, and invited him to an entertainment, whereon he left his camp with the amirs of his darbār, and was met on the road by the Governor-General, who took him to a brilliantly illuminated tent in which beautiful English ladies were sitting on one side, and gentlemen on the other. A band played, refreshments were served, and the Governor-General presented the Mahārājā with horses having golden saddles, with Indian and Chinese curiosities, wonderful garments, beautiful turbans, necklaces of diamonds and of other precious stones. Lastly the Mahārājā took his departure.

36. The Mahārājā having, through the Sardār Hari Singh, conveyed to the Governor-General his desire to witness the military exercises of British troops, the latter invited him to be present. According to all the European and Indian troops, cavalry and infantry, were drawn out, and after performing some manœuvres they exhibited some target practice with muskets and artillery. After which the Mahārājā first ordered the Rājā Dhyān Singh, who had some knowledge of the matter, as well as a number of his bodyguard, to show their skill, and they were successful in hitting the target.
Lastly the Mahārājā himself showed his horsemanship and agility by galloping towards a brass vessel set up on a lance for a target and cutting it in two with his sword whilst passing. Then he departed to his camp.

37. The next morning Ranjit Singh ordered all his troops to parade, and sent three of his Sardārs to invite the Governor-General to behold the spectacle. When His Excellency arrived, the troops saluted according to the English fashion, and salvoes of artillery thundered; after this a sham fight was executed, which elicited the applause of the Governor-General, who then returned to his quarters. The next day, being the last of the Mahārājā’s sojourn, he mounted an elephant and paid a visit to the Governor-General for the purpose of taking leave. On this occasion he was presented with two brass cannon and ten Arab horses. After this visit he returned to his own camp to spend a few days more in hunting, because the locality pleased him greatly, and then he went to Amritsar and paid his devotions at the temple of Rāmdās, and after distributing a great deal of money in alms, he marched to Lāhōr.

38. After the Mahārājā had thus strengthened the bonds of friendship between his own and the English Government, certain disloyal vassals again refused to pay the customary tribute. Accordingly he determined first to send to Derā Ghāzī Khān his heir apparent, with the brave Frenchman Ventura, instructing them to regulate affairs there and then to attack the Nawāb of Bahāwalpūr, who, if he paid tribute, was to be confirmed in his post, otherwise he was to be removed therefrom. The heir apparent was then ordered to march also to Sind to realise tribute from the Amirs of that province; whilst the Sardār Hari Singh was to go to Peshāwar to exact the same from the proud Sultān Khān, and, the Yūsufzais of that region being a stiff-necked race, he was told to deal with them severely.

Accordingly Kharak Singh and Ventura advanced with their troops first to Derā Ghāzī Khān, subjugated the rebels and obtained the tribute. When they arrived in the province of Bahāwalpūr, which was likewise in a state of rebellion, the Nawāb became so frightened that he immediately paid the required sum of money. Then the heir-apparent marched to Sind and reached Sakhar (Sukkur) where he likewise collected from the Amirs all the tribute he was able to extort, and returned victoriously to Lāhōr to his father, who congratulated him on what he had accomplished.

A courier now suddenly arrived from Bahāwalpūr with the news that the Nawāb had thrown off his allegiance, and had placed himself under the protection of the English, whose vassal he had become; Mr. Wade having accepted his submission and given him a sanad to that effect: moreover the Governor-General had sent the Indian army to conquer Sind. The Mahārājā was enraged on the reception of this news, but, as he desired to remain on good terms with the British Government, he took no further notice of the matter, and wrote no letter of remonstrance to the Governor-General.

Meanwhile the Sardār Hari Singh had punished the Yūsufzais, but had been waiting four months near Peshāwar hoping that Sultān Khān would at last pay his tribute. The latter’s forces, however, being twice as numerous as those of Hari Singh, he was in no haste to comply, so the Sardār complained to Ranjit Singh, who consulted his darbār on this subject, the members of which arrived at the conclusion, that there being no doubt of Sultān Khān’s disloyalty, and of his sympathy for the Kābul Government, he ought to be attacked and Peshāwar conquered. The Mahārājā accordingly ordered the Prince Naunihāl with Ventura, and another officer named Court, as well as Tōj Singh, forthwith to march with numerous troops to Peshāwar. When they reached the vicinity of that fort, Sultān Khān, trembling with fear, sent an envoy to meet the prince and to express his amazement at the intention of attacking one who was so loyal to the Mahārājā as himself, and not only ready to pay tribute, but prepared to sacrifice his life for him. The prince, however, sent the reply that he was merely the servant of the Mahārājā whose orders he had come to execute, and that if Sultān Khān was willing peaceably to surrender Peshāwar, his life would be spared, but not if he refused to do so. Irresolute whether to yield or to resist, the perplexed Governor of Peshāwar asked in a letter assistance from Dost Muḥammad, but Kābul being at that time in a great state of disturbance, it could not be
given; so he surrendered his treasury, and ceded his post to the prince, who then treated him kindly and himself assumed the Government, carrying on the administration with such leniency towards the Afghanis, that the whole province became loyal to the Maharaja, who for this bestowed a costly robe of honour upon the prince.

(To be continued.)

CORRESPONDENCE.

THE YAVANAS OF ORISSÀ.

To the Editors of the Indian Antiquary.

Sirs,—Sir W. W. Hunter in his work on Orissa refers to the attacks continually made upon the shores of Bengal during the 7th, 8th and 9th centuries by Pirates called Yavanas. Who were these Yavanas? They can have had nothing to do with the Yavanas of the Epics,—the Greeks and their descendants in Bactria, who were not a maritime people, and lived too far away back in space and time to have troubled Orissa at this period. May I suggest that they were Malays from Java? Java we now know from the Camboja inscriptions was subject to the Cambojan kingdom in the 7th century; and as far as the evidence points, and it accumulates rapidly, it received its Hinduism at that very time, not from India but from Camboja; and it would seem to have been a very active period of Malay energy.

Yours etc.,

HENRY H. HOWORTH.

MISCELLANEA.

CURiosITIES OF INDIAN LITERATURE.

A Quaint Blessing.

The following blessings were collected by me in Mithilâ. They are much admired by the Prâjitas:

1. राजीपते परिसुध्‌निवसिते का सयि
    वस्थोरसोऽन्तत्वम्‌ हि ज्वालकलायः
    शे स्वाम्यो हि पवसवरिष्णयुषु:।
    'कात्तिपाके अगतन्या विकेर्दे वहस्त!'

'May he—who sleeps on a mountain (अगतन्या—i.e. Śiva), whose (पवस्वरिष्णयुषु:) beloved is the Daughter of the Mountain (अगतन्या—i.e. Pârvati), whose garment is the ethereal void (आत्मो), whose son is the lord (i.e. Kumāra) of the enemy (i.e. the peacock) of the eaters of air (i.e. serpents), on whose breast (ह्रदे) is the king (राजा—i.e. Vāsuki) of the eaters of frogs (रत्रुपाल्याय—i.e. snakes), whose repast (अनुपस्त) is on the fleshless (उत्पन्न) head (केश) of a corpse, and on the top-knot of whose matted hair (वज्रकलायः) is the moon (चंद्रुः)—give thee abundant prosperity.'

G. A. GRIERSON.

BOOK NOTICE.

Contes et Légendes Annamites, par A. LANDES, Saigon, Imprimerie Coloniale, 1886, pp. viii. 392 in 8vo.

This collection of Annamite tales and legends, published first in the Excursions et Reconnaissances (Nos. 20-23, 25, 26) will be welcome to all students of Folklore, and more especially to those interested in Annamite ideas and manners. Popular tales are the same everywhere; and what is special to the Annamite Folklore is that it is essentially local; every rock, every pagoda has its own legend. M. Landes thinks that the Indo-Chinese popular literature has come from abroad. And several of the tales he has gathered do look more like a summary of a foreign tale picked up by chance, than a national creation. But their strict localisation makes them valuable for a knowledge of the Annamite history and customs.

In this connection, we may aptly notice here the Index des caractères Chinois contenus dans le Dictionnaire Chinois-Anglais de Williams, avec le prononciation Mandarine Annamite par M. Phan-duc-hoa, Saigon. Collège des Interprètes, 1886, pp. 449-193 in 4to.

This index, done by a lettré of the Collège des Interprètes at the suggestion of M. Landes, will be of great practical utility, as it gives for each Chinese character its Chinese Mandarin pronunciation, both according to Williams and the Shanghai Jesuit pronunciation, and its Cantonese pronunciation, as well as the Annamite Mandarin. It will be not less useful for comparative philology, as it will help us to establish the laws of permutation between the Chinese and the Sinico-Annamite, and, by recognising thus better what in the Annamite is of Chinese origin, to sift out the specially Annamite element.
EDIT this inscription from two good rubbings supplied by Mr. W. Hoey, B.C.S., and forwarded to me by Mr. Fleet. The stone which holds the inscription was found by Mr. Hoey at Sét-Mahēṭ, the ancient Srāvasti; "in the Jātavana mound, in the ruins of an essentially Buddhist building with monastic cells; in a stratum which indicated that it had been placed in a restored building."

The inscription consists of 17 full lines, and one short line containing merely the date. The writing covers a space of about 2 3/4" broad by 1' 2 1/4" high, and is throughout well preserved. — The size of the letters is from 3/4" to 1 1/2". — The characters are Dēvānāgari, and there is nothing remarkable about them except that the anusvāra, instead of being written above the akṣara after which it is pronounced, is 11 times written after it, with the sign of virāma below the anusvāra. — The language is Sanskrit, and except for the introductory blessing and the date at the end, the inscription is in verse. The name of the composer of the verses is Udayin (line 17). From a grammatical point of view I may draw attention to the wrong form avamānya, line 1; to the wrong compound tatpānchāmaḥ, line 10; and to the unusual derivatives janāsa, line 7, and udapanaḥkaṇṭha, line 14. — In respect of orthography I would note the employment of the dental for the palatal sibilant in vanava, line 1, saṅga, line 1, vaṅg, line 3, atiṣa, line 3, saka, line 4, vaṅsa line 5, subhāra, line 5, pānchāsava, line 10, vaṅghoṣ, line 15, and praṇastim, line 17; and the fact that ba is throughout denote by the sign for va.

The inscription is dated in the year of the Vikrama era 1276, corresponding to A.D. 1219-20, and is of some interest as showing that Buddhism had not become extinct in northern India in the first half of the 13th century A.D. For it records that a certain Vidyādhara, son of Janaka, and grandson of Bilvasva, of the Vāstavya family, established a convent for Buddhist ascetics at the town where the inscription was originally put up. Janaka, the father of Vidyādhara, is described (line 8) as the counsellor of Gopāla, ruler of Gādhipura or Kānyakubja; and Vidyādhara appears to have held a similar position under the prince Mudana (line 13), probably a successor of Gopāla. The town where the convent was established, is called Jāvrisha (or possibly Ajāvrisha); it is said to have been built by Māñḍhata, of the solar race, and to have had "its protection entrusted to Karkōṭa."

We know that Jayachandra of Kauñj was defeated and Kauñj taken by the Muhammadans in A. D. 1193; and it is therefore interesting that our inscription, like another inscription pointed out by Sir A. Cunningham, Archæol Survey of India, Vol. XI. page 128, should speak "of the Hindu kingdom of Kauñj as if it were still in existence."

The place Jāvrisha (or Ajāvrisha) mentioned in the inscription, I am unable to identify at present. In my opinion, there is just a possibility that it may be Jaunpur or some place close to it. According to Sir A. Cunningham, loc. cit. pp. 103 and 104, Jaunpur had an older name which is as yet unknown; there is near it a fort, overhanging the river which was called Karākōṭ; and "four miles to the south-east of Karākōṭ, on the site of the present Zafarābād, stood the palace of the later kings of Kauñj, with whom this was a favourite residence." But my difficulty is that Jaunpur is about 130 miles distant from the place where the inscription was actually found.

1 Ordinarily written Sāhīt-Mahēṭ; see e.g. Archæol Survey of India, Vol. I. page 333; Beal, Si-yu-ki, Vol. II. page 1; Logro, Pa-kien, page 55. The above spelling I owe to Mr. Hoey, who writes as follows: "Our earliest settlement inquiries found the Jātavana mound named Sāhīt, and the city mound Mahēṭ, Nūţ. This too is the spelling adopted by local Papīta, and by Patwāris who write Hindi. The form Sāhīt-Mahēṭ (सहीत महेठ) is a corruption for the sake of the rhyme. It is curious that some Nepalese who visited the ruins while I was excavating, called the place Mahēṭ (महेठ)."

On the map of the ruins of Srāvasti, Archæol. Survey of India, Vol. I. Plate L, Mahēṭ is given as the name of the Jātavana Monastery mound, and Sāhīt as the name of the town.
TEXT.

1. Ōn namō Vitarāgāya ḫa Mārānastha niyamyayā dikshāv-adhipatīn-āyōjya sat[1]*v-
ādayē durālaṁghyāy(ny)avamanyā Sa(sa)uva(mba)r-rripōr-ājē-ākshharānyā-adītīh ḫuddhatthum yatatē sma yaḥ karuṇayā śrī-Sā(sā).

2. kya-sīmho jaga-de[v(b)b)dhiṁ prāpya eha V(bo)ddhatāṁ-ābhigataṁ sa tvāṁ
parītvētāṁ ḫa Samsārā-ānābhihādi-tārāya Tārāṃ uttāna-lōchanām ḫa vandē
ghīrvaṇa-vāṁnaṁ Bhratīm adhiṇāvētām ḫa

3. Mānḍhātā-ākhyāya śatruc-jīch Cchakra-tulō yōvaśe(sē) Bhānōr-bhānō-tējō-tisā(sā)yī yī nityā-
ānandā sādhu bhōkta trīskhām rājyām-āyāya-āchakravaṃ ḫa [ba]bhuva ḫa
Śvēcchhāṃ bhrāmāyā kādāchit-sara-

4. siruha-rajō-rājī-chitrākṛit-ānābhā sphanyag-drishtāva sarō-ntar-madakala-sa(sā)kuni-vrāta-
rāv-ābhīramyaṃ karttum kiritē-śīvānaṁ sucharita-mudīto mṛdhīrā-āpūrya
yatnāt-Karkḵōṭādhum-rā-

5. kshaṇa sva-puram-śdnam-athō nirmanā Jāvrisē-ākhyāya ḫa Tamsinajahūvān-dhaninō-
tidhanyāḥ śrī-pūrvavā. Vastavya-kula-pradhāpāḥ ḫa ady-āyī yad-vadhāna(sā)-bhavār-
ṣyaśōbhr-ijjagantī su(ṣu)bhrāvar-dhavali-

6. kriyantī ḫa Tēśāmā-abhūd-abhijanē jaladhāv-yīv-ēndur-śdndu-śdntītī prathita-Vi(Bi)-
ivasīv-ābhidhānāḥ ḫa yasya Smarāri-charanāṃṇa(mbu)ja-vatsalaya lakṣhmīr-
dvijēti-sujan-ārthīrjan-āpūrūbē
dvijēti-sujan-ārthīrjan-

7. gyā ḫa Saujān10-āṇu(mbu)nindēr-udār-ṣaryā-ṣaryām-ānāsāḥ sūdhānām-udaya-
aika-dhāma janani-ṣṭhānaṁ śreyāḥ sat[1]*v-bhūh ḫa tasya-āśī ḫa Jānakō janina-
hrīdayaḥ putraḥ satām-

8. graṇḍa-māṇyō Gāḍhīpurū-ādhīpyasa sachīvō Gūpāla-nāṁnāḥ svabhū ḫa Tēṃ-11ōchchhakār-
abhijan-āmvu(mbu)nindēr prasūtā Lakṣhmīr-śvēchhata-vibhūṣhaṇa-kāntā-mūrtiḥ ḫa
ānanda-kanda-

9. nāni janani-kulānaṁ Jījī-ēti saṃbhṛita-kulasthitin-śpayēmē ḫa Tābhīyām12-abhūvam-
tanayāḥ shad-ēva shadēbhīr-mukhair-ēka-tanur-ṛya ēkāḥ śūyān-sutaḥ Pippata-

10. yō dhīmān-īv-Āgni-prabhavāḥ Śivābhyaṁ ḫa Tat12-pañcchamaḥ Pānchasa(ṣa)r-anukāri-
tayos-tandaṭo-tanu-kirtiti-kandaḥ ḫa vidyā-śvavō(bo)dhdān- anukṛtāṭyate yō Vidyā-
dharō nāma yathārtha-

11. nāmā ḫa Rasādhiṁ12-abhīvyāpī Girīṣa-charān-āśrītanāḥ haṁs-ēva mānasaṁ yasya
jahatī sma na Bhratīi Mādhuryām13 mādhunō mūdhā himaruchērānandam-
hidēvārāmitī
dvijēti-sujan-ārthīrjan-

12. thy-sīv-āmvu(mbu)nindēr-ghūbhrīma-ṇgas-tumṛgvam-ādhrē-alamāḥ yasya-aika-guna-
ādhirōhaṇa-girēḥ saujānya-sāṅd-rōl1[*]jasat-pyūh-āika-nindēr-gguṇēṇa guṇinaḥ
gaurvē-py-adhās-ṣkakrē ḫa Yasmā14

13. gaj-āgamara-rāsasya-vidō gajānām-ānandamān kalayatē dhuraṁ-uddhuraīya ḫa bhūpā-
mauli-tilakō Madanaṁ ḫa pradāna-mān-ādbhūth khṣitipatīthi sprīyamān-va(ba)bhuva ḫa

14. layath prathyatāt niyā-klētīṃm uchchhaiḥ pushyavā[1]*-dvijāv-vrajam-ūdētum-alam-
ṣa[b]bhuva yēn-ērījītaḥ draviṇam-ārttajan-ĕpakari jīvāṭu-sambhṛita-mudām-udāram-
ārāmanām ḫa Sat[*]vā-sārtha-pa-

15. ritrāya-kṛitā-kāyaparigrahāḥ abhūdā-bhūtāpūrvō-yaṁ Vō(b)b-dhisat[1]*yāv iv-āparah ḫa
Atmaṣṭātā(ṇa)15-kṛitiyāya[1]*na virgala-rāgūdi-dōsh-āśraya-prōdgacchhan-manasa
vichhārya va(ba)huṁsu(ṣa).
TRANSLATION.

Om!
Adoration to him who is free from passions!

May the illustrious Sakya lion protect you!—he who, having at the rising of truth (first) restrained the eight Maraś, (and then) attracted to himself the lords over the regions, having treated with contemp the difficult-to-be-transgressed words of command of the enemy Śambha, full of zeal through compassion exerted himself to deliver the world; and who, having reached the Boddhi-tree, attained the status of a Buddha!

To cross the ocean of worldly existence, I adore the saving Bhāratī, whose eyes have protruding pupils, the goddess presiding over the utterances of the gods.

(L. 3).—In the race of the Sun there was surpassing the splendour of the sun, the universal sovereign, the first of kings, named Māndhātā, conquering the enemies, equal to Indra, ever gladdening, well protecting the three worlds.

Once upon a time roaming about at his pleasure, he saw a pleasant lake whose waters were variegated with lines of the pollen of lotuses, charming with the cries of flocks of sweeuly singing birds in it; and having strenuously filled it with earth, he, who delighted in good conduct, to make a canopy for his fame, then built this town of his, named Jāvṛisha, the protection of which was entrusted to Karkota.

(L. 5).—In it there were wealthy (and) very fortunate (people), lights of the illustrious Vāstavya family, by the splendid fame of whose race the worlds are rendered white even now.

As the moon (is born) from the ocean, so in their family there was (a personage), shining like the moon, whose name Bīvāsīva was famous; devoted as he was to the lotus-feet of Śiva the enemy of the god of love, his wealth was an object of enjoyment to the twice-born, to virtuous people, and supplicants.

(L. 7).—He, an ocean of benevolence, who was counteracting sin by his noble conduct, had a son Janaka, a unique home of the elevation of the good, a birthplace of fortune, a site of goodness, with a heart kind to people, the foremost of the good, the honoured wise counsellor of the ruler of Gādhipura, named Gopāla.

He, who well maintained the prosperity of his family, married the daughter of a noble race, named Jijjā, who was causing joy to her mother’s family, (and who), inasmuch as her lovely body possessed imperishable ornaments, was like Lakshmi, born from the ocean, whose lovely body beautifies Achyuta (Vishnu).

(L. 9).—From these two there were born less than six sons, just as the intelligent progeny of fire called Pippata, who one, with one
body, is endowed with six faces, (was born), as the elder son, from Siva and his consort.  
Their fifth son of those (six), resembling the five-arrowed (Kāma), (and) the root of no slight name, who is celebrated for his knowledge of wisdom, is named, with an appropriate name, Vidyādhara, 'the holder of wisdom.'

(L. 11.)—Whose comprehensive mind, full of taste (and) attached to the feet of Siva, Bhāratī (the goddess of eloquence) never abandoned, just as the swan never leaves the extensive Mānasā lake, full of water (and) situated at the foot of the lord of mountains (Himālaya).

Vain is the sweetness of honey (and) the proficiency in (creating) joy of the cool-rayed (moon); a sham indeed is the quality of depth of the ocean (and) the height of the mountain; — (but) enough! by the excellent qualities of this mountain for the ascent of every single excellency, of this unique receptacle of the abundant sparkling nectar of benevolence, everything whatever that is endowed with excellent qualities has been surpassed!

Him, who knew the secret doctrine regarding elephants, (and) who, unrestrained, bore the burden of elephants that was causing pleasure (to him), the head-ornament of princes, the lord of the earth, Madana, sought to attach to himself by gifts, honours, and so forth.

(L. 13.)—The wealth acquired by him, who spread his fame aloft by (building) temples,—(wealth) which gave relief to people in distress, (and) filled the bellies30 of those filled with joy at the receipt of food, was sufficient to exceed the multitude of the twice-born supported (by it).

He was as it were another Bādisattva, such as had never existed before, having assumed a human body for the protection of the multitude of living beings.

(L. 15.)—Elevated by the knowledge of the soul, (and) with a mind rising above the attachment to passion and other sins of which he was getting rid, having again and again pondered on the indifference towards the doctrine of Sugata, he, having resorted to the good path, caused to be built and granted to the ascetics, after the manner of convents, a dwelling causing joy, a unique home as it were of (his own) fame.

Taking delight in whatever is dear to him, the unique home of prudence, whose conduct is an object of adoration for people of true knowledge, Udayin, (his) kinsman by association, whose heart is pure like the moon (and who is) wise (and) accomplished (and) becoming prosperous, has composed (this) eulogy.

The year 1276.

THE RUPEES OF THE SURI DYNASTY.


Marsden in the Numismata Orientalia Illustrata gives figures of six Sūri rupees, and Thomas in the text and plates of his Chronicles of the Pathān Kings of Delhi gives figures of seven. So, when some years ago I came across my first Sūri rupee, I determined to collect a complete set from the first year of Shēr Shāh to the return of Humāyūn, i.e., from 946 A.H. to 962 A.H., and in my Supplements to the Chronicles above mentioned, I have already published a rupee of Sikandar Sūr dated 962 A.H., Lahore mint, and an eight anna piece of Ibrāhīm Sūr. I have also published a full rupee of Humāyūn struck shortly after his return at the end of 962 A.H.

None of these coins were my own; but the rupees in the accompanying plates were all collected by me in the bāzārs of the Panjāb, though they, too, are no longer in my own cabinet, but in that of the Government Central Museum, Egmore, Madras. However, Dr. Bidie, who was Curator of that Institution when I parted with them, kindly allowed his artist to draw them for me. And, as few collectors in India possess so complete a set, perhaps the readers of this Journal will be glad to see these Plates, in order that they may observe the variety and beauty of the rupees issued by the Sūrs during the absence of Humāyūn from India, and thus obtain an idea of his wife, Siva's generative energy being cast into the fire.

30 Tat-pañchama is an irregular compound.
32 Udarambharīna, which is not found in the dictionaries, is used in the sense of udarambhari.
the improvements made by these interlopers.

A good history of the Sūrī Dynasty has yet to be written. In Akbār's time they were not only neglected, but were written against, though most of the improvements in coinage fathered on Akbār may with greater truth claim a Sūrī paternity. Without discussing this question now, I would simply state that for many years before the advent of Bābar rupees had not been coined in Indian mints. The Lodi Family coined neither silver nor gold, but mixed silver and copper, weighing about 140 grains; some of their coins having as much as 32 grains of silver in them, while others had only a little more than one. How business with such a coinage was ever transacted, I cannot imagine. And, when Bābar came, he went on striking in India the silver tānḵahs of Turkistān, each of which weighed about 60 grains. His son Humāyūn followed his example before he was expelled the country, and not until his return did he strike rupees;—only two, however, of which are now known, one of 962 A.H. and one of 963. Akbār again at the commencement of his reign struck the old silver tānḵahs introduced by his grandfather. One of them is given by Mr. Thomas, p. 383 of the Chronicles of the Pathān Kings, and I have a fuller one, which gives the place of mintage as Lāhōr. These are the only two known. But he must have soon reverted to the custom of the Sūris, as I have full rupees of every year of his reign beginning with 963 A.H., and ending with his 50th Iḥād year. Thus we see that the rupees reintroduced by Shēr Shāh, became the standard of the Mughal Empire, and also of that of the British Indian Rule.

The rupees depicted in the plates attached to this paper have now become exceedingly scarce, and are seldom met with in any bādzār of the Pañjāb. Lately, during a tour of six months, I obtained but two of Shēr Shāh and two of Islām Shāh. But, by way of compensation, I obtained four rare copper coins of Ibrāhīm Sūr and two of Sikandar Sūr, both of which are extremely rare.

The British Museum has rupees of every year of these kings, and possesses one of Sikandar, a treasure I was never able to obtain. I believe the Madras Museum is the only one in India which possesses a complete set as far as Muḥammad Sūr. No rupee of Ibrāhīm has as yet been found and no gold coin of either Muḥammad or Ibrāhīm or Sikandar has yet been seen. Indeed only one is known of Islām Shāh, and that I found at Amritsar some years ago. It is square, and I parted with it to my old friend, Sir Alexander Cunningham.

There is no proper account of the coins of the Sūrī Dynasty, though their copper coins are of great variety and beauty. They were struck all over the south of the Pañjāb and Hindustān proper, and were imitated by Akbar, Jahāngir and Shāh Jāhān. Their number were so vast that the revenue of the country was estimated in them under the name of ṣāmāre. I hope some day to give a complete description of these copper coins, as my own cabinet is particularly rich in them, and, as, amongst the 400 coins I lately obtained for Government during my tour, are some very rare specimens.

Before sending the rupees now illustrated to Madras, I neglected to weigh them. The weights of them given by Mr. Thomas vary from 163 to 176 grs., and the weights of those I obtained on tour were about 170 grs. each.

The inscriptions on the rupees as far as they can now be deciphered are as follows:—

(a). Sheer Shāh.

No. 1. Obverse: Square area.
Margin: سلطان خلدون الله ملکه ١٩۶٥ شیر شاه
Reverse: Square area. The Kalimāh.
Margin: Probably names and titles of the four Companions of Muḥammad.

No. 2. Obverse: Square area. Same as in No. 1 but year ١٩٤٧ Shīr Shāh
Margin: Illegible.
Reverse: The Kalimāh and
Margin: Illegible.
No. 3. Obverse: Square area. Same as No. 2 but with added.
Margin: Illegible.
Reverse: Same as No. 2.
Margin: Illegible.

No. 4. Obverse: Square area and name in Hindi.
Margin: ئی یئر شاہ
Reverse: Square area. The Kalimah.
Margin: Names and titles of the Four Companions of Muhammad.

No. 5. Obverse: Square area name in Hindi. ئی یئر شاہ
Margin: فرید الدنیا والدن ایواابالظفیر جہن پناہ
Reverse: Kalimah and ملکہ العدل
Margin: ابوعمر عثمان، عثمان، علی، ابوبکر، عمر

No. 6. Obverse: Same as No. 4.
Margin: ایواابالظفیر فرید الدنیا والدن
Reverse: Kalimah.
Margin: ابوعمر، عمر، عثمان، عثمان، علی، ابوبکر، عمر

No. 7. Obverse: Same as No. 4 in double square.
Margin: فرید الدنیا والدن ایواابالظفیر ضرب جارہ
Reverse: Kalimah in double square.
Margin: Same as No. 6 but عثمان دین خان وہرینی

No. 8. Obverse: In circle. Same as in No. 5.
Margin: فرید الدنیا والدن ایواابالظفیر
Reverse: In circle. Calimah.
Margin: ابوعمر عمر عثمان علي السلطان العدل

No. 9. Obverse: In circle. Same as in No. 5.
Margin: فرید الدنیا والدن ایواابالظفیر
Reverse: In circle. Calimah.
Margin: ابوعمر عمر عثمان علي السلطان العدل

No. 10. Obverse: In circle. Same as No. 5.
Margin: فرید الدنیا والدن ایواابالظفیر
Reverse: In circle. Calimah.
Margin: Same as No. 8.

No. 11. Obverse: In circle. Same as No. 5, but no date.
Margin: ضرب سکا نو فرید الدنیا والدن ایواابالظفیر
Reverse: In circle. Calimah.
Margin: Same as in No. 8.

No. 12. Obverse: In circle. Same as in No. 5, but date in margin.
Margin: Same as in No. 11.
Reverse: In circle. Calimah.
Margin: same as in No. 8.

No. 13. Obverse: In square. Same as No. 1 but date 951 name in Hindi.
Margin: Mint obliterated السلطان العدل ایواابالظفیر
Reverse: Calimah, in square.
Margin: Names and titles of Four Companions of Muhammad.

No. 14. Obverse: In square. Same as No. 1 and year 946 name in Hindi.
Margin: فرید الدنیا والدن ایواابالظفیر
Reverse: In square. Calimah.
Margin: ابوعمر، عمر، عثمان، علی
Rupees of the Surí Dynasty.

Plate I.

Indian Antiquary
No. 15. **Obverse and margin:** Same as No. 12 but with year ١٤١٤
Reverse and margin: Exactly the same as No. 12.
These two rupees, Nos. 12 and 15, are 1:32 inches in diameter. They are much larger than any in the British Museum. It is a pity they have no mint on them.

No. 16. **Obverse:** In circle (double). شير شاه سلطان خالد الله ملكه شريف شير شاه
**Margin:** مير مثل والدين عبد المطلب
**Reverse:** In double. Kalimah.
**Margin:** Same as No. 8.

No. 17. **Obverse:** In square. Same as No. 1 but year ١٤١٣
**Margin:** Same as No. 1; mint جلال الدين
**Reverse:** Kalimah.

No. 18. **Obverse:** Same as in No. 1.
**Reverse:** Kalimah.

There are no margins to this coin. I have a strong suspicion that it is of modern manufacture. The square coin in the British Museum is an impudent forgery. There are many gold mohars of Shir Shah in the market, but they are all forgeries.

(b). **Islam Shah.**

No. 19. **Obverse:** In square. السلام خالد الله ملكه ابراهيم
**Margin:** جلال الدين والألب والدين عبد المطلب ضرب لكم
**Reverse:** In square. Kalimah. ١٤١٩ and خ
**Margin:** Names and titles of four Companions of Muhammad.

No. 20. **Obverse and margin:** Same as in 19; same mint, سنغافور. س
**Reverse and margin:** Same as in 19 but year ١٤٢٠ and sign omitted.

Nos. 21, 22, 24, 25, 26, 28 are all of the same type but of years ١٤٠٣, ١٤٠٧, ١٤٠٨, ١٤١٠, and ١٤١٠ respectively.

**Obverse:** In square year, and السلام خالد الله ملكه ابراهيم
**Margin:** In no case legible. But it all reads from the outside. What seems to be ١٤٠٧ is I am persuaded not figures, but words, which are followed by a six-rayed star.
**Reverse:** In square. Kalimah.
**Margin:** Names and titles of the Four Companions of Muhammad.

No. 23. **Obverse:** In square. السلام خالد الله ملكه ابراهيم
**Margin:** Obscure, not like Nos. 21, 22, &c.
**Reverse:** Kalimah, in square.
**Margins:** Only portions visible.

No. 27. **Obverse:** Same as No. 23, but year ١٤٠٧ in different style of figures.
**Margin:** Gives ضرب الكليار
**Reverse:** In square. Kalimah.
**Margins:** Very much cut.

No. 29. **Obverse:** Same as in No. 23.
**Margin:** ضرب نازول partly visible.
**Reverse:** In square. Kalimah.
**Margin:** Same as in No. 27.

(c) **Muhammad Shah.**

No. 30. **Obverse:** In square. شير شاه سلطان ملك ملكه ١٤١١
**Margin:** Obscure, but portions of ضرب نازول visible.
**Reverse:** Kalimah, in square. مير مثل والدين
**Margin:** illegible.
From a careful perusal of the above coins it will be seen that all conform to one type. The name of the king is in the square or circle of the obverse, and is repeated in Nāgarī letters, so that conquerors and conquered might read it. The square coin about whose genuineness I have doubts is the only one without margins, and the rupee of Sikandar has not the name in Nāgarī.

Any one taking up a rupee of the Sūri dynasty should at once recognize its type; and it is the study of typical coins and inscriptions which enables us at once to assign a coin approximately. I write this because in Major Raverty's translation of the Tābaqāt-i-Nāsirī I find he has been imposed upon by some ignorant native author, who has invented a series of coins of the later Kīngs of Ghazni and of the early Pathān Sultāns of Dehli, but who, being ignorant of the types of the coins of these kings, has foisted on the learned translator a number of mongrel inscriptions made up of parts of inscriptions on the coins of Aurangzēb and his successors, and a series of titles made up from his own inner consciousness. Strange to say Major Raverty prefers this work to that of the late learned Mr. Thomas! Had he studied the types given by Mr. Thomas he would have escaped being imposed on.

NOTES ON THE GIPSY TRIBES OF THE NORTH-WEST PROVINCES AND OUDH.

BY WILLIAM CROOKE, B.C.S.

The following notes, in which an attempt will be made to bring together a considerable portion of the scattered information we possess as to the Criminal and Wandering Tribes of the North-West Provinces and Oudh (Avadh), will probably prove of interest to the readers of the Indian Antiquary in connection with Mr. Grierson's laudable efforts to elucidate the vexed question of Gipsy Ethnology.

The first object is to get a workable classification of the more important tribes, and this has been attempted in Captain Dennehy's report contained in the General Report of the Inspector-General of Police, North-West Provinces, for 1863. Captain Dennehy divides them into:

First.—Those who seldom or never devote themselves to agricultural labour. Under this head come the Sāliyās of Sahāranpur, Muzaffarnagar and Bijnur:—the Doms or Domrās of Gōrakhpur, Bāstī and Benares: the Hābdūrs, Kānjars, and Bhēriyās of the Upper and Central Gangetic Dūbāb.

Second.—Those who generally live by robbery and theft, but sometimes practise husbandry, such as the Mēnūs or Mainās, or Mainā Mēnūs, or Mēswāts, of Rājpūtānā and some of the Western Districts of the North-West Provinces: the Bāuriyās of Mērāth, Sahāranpur and Muzaffarnagar: the Bāddhaks of several districts: the Jōgīs, generally distributed through the Provinces: the Ahāriyās of Āḷīgārh, Etāū, Mainpurī and some of the Rāhilkānd Districts: the Bahāliyās of the Central and Lower Dūbāb: the Sahīriyās of Bundelkānd: the Chīrīmārs of Oudh: the Pāsīs of Allahābād, Fatehpur, Oudh and the Eastern Districts generally: the Gaḍjās or Gaḍēlās of the Upper Dūbāb: the Bhara of Gōrakhpur and Bāstī; the Dūsādhs of the Benares Division: the Gājars of the Upper Dūbāb and Rāhilkānd: the Rāṅgaṇs of Sahāranpur: the Bīlāchis of Muzaffarnagar: the Sahvriyās of the Bundelkānd Districts of Lāltipur, Hamlīpur and the Native States of Tehri and Dāttā: the Avadhīyās of Oudh, Allahābād, Jaunpur, Fatehpur and Hamīpur: the Pardēsīs of Āḷīgārh and Gōrakhpur.

This classification, however, is far from complete and leaves out a number of tribes; but we are as yet very insufficiently acquainted with the connection between the different tribes, and many names are no doubt only local. The Inspector-General of Police in his Report for 1867 (page 61) gave as his opinion that “half the thefts in the Provinces are committed by wandering predatory tribes such as Bāuriyās, Bahāliyās, Hābdūrs, Kānjars, Nathās, Ghōsīs, Uṭhāgīrās, Sahvriyās, Barwārs and others.” The distances to which some of these people extend their depredations is extraordinary, and they have probably increased in recent years, owing to the facilities afforded by the Railways. For instance, in the Reports we find cases of Pīndārīs from Barōdā committing a
mail robbery in Ágrá; Mèwàrs committing five dacoities in Ajmèr; Sàvàryiyàs disposing of their plunder in Bengal. Bilúchis from the Muzaffarnagar District were traced to the Bombay Presidency, while individual Jògís can be traced from 'Aligárh to Mirzápur. Pardásets of Gòrakhpur and Dhúlèras of Barèli wander all over India; and Pardásets from below Dànápur thieve in Mathurá. Avadhíyàs and Kàpúryiyàs of Fàtehpur wander all over the Provinces; and a gang of Híráti vagabonds appeared in Ajmèr during the famine. These instances might be almost indefinitely increased.

Captain Dennehy remarks in the Report above referred to that the Mínàs, Bànúryiyàs, Baddhakús, Jògís, Ahàriyàs, Bahéliyàs, Sahàriyàs, Chùmîròs, Pàsís, Arohús, Kànjàrs, Gudélàs, Btars and Dòsàats, "commit habitually every kind of dacoity, robbery and theft, which opportunity may throw in their way. To these tribes and frequently, too, to the castes of Ahírs and Tákhurs belong nearly all the gangs of dacoits organised in different localities in the North-West Provinces. The ranks of the professional poineers are principally recruited from among the Pàsís, Nàsís, Jàrriyà Lódhàs, Ahírs and Ahàriyàs. The Gújàrs and Ràígaàrs, though they occasionaly commit dacoities, are ordinarily cattle thieves. The Bilúchis are practised thieves, and commit offences in the guise of mendicants (faqís) or medicine-men (hakims). The Sàvàryiyàs and Avadhíyàs never join in crimes of violence." The last North-West Provinces Census figures are not satisfactory for this class of the population, as will appear from subsequent notes.

Ahàriyàs—these are a leading criminal class in the Central Jàmmà-Gangetic Dúbh and the adjoining Ròhilkhand Districts. They do not appear separately in the Census returns, and are probably included in the Ahàrs, who number 257,670 souls, as compared with only 104,159 shown in the previous enumeration. They are found principally in 'Aligárh (13,014, Étà (2,225) Murúdàbhàd (37,306), Baddáú (133,085), Barèli (47,386), Pilibhit (13,250), Taráli (2,393), but are practically non-existent in the rest of the Provinces. In the Central Dúbh most of them hold land as a means for concealing bad livelihood. They very seldom commit offences near home, but absent themselves for months at a time on plundering expeditions, and visit for that purpose the Pañjáb and even go as far as Bengal. They are expert burglars, and occasionally form dacoit gangs. In former times horse-stealing was one of their specialties, but this has been practically suppressed. 11

Ahírs—(Sanàskrit Ablùs, a cowherd). The Ahírs according to the last Census number 3,884,185, and are generally distributed all over the North-West Provinces. Their numbers by revenue divisions are Méráth (46,988), Ágrá (430,933), Ròhilkhand (91,460), Allahábád (589,120), Banáras (1,176,593), Jhaís (61,470), Lakhnn (271,251), Sítápur (229,150), Faizábád (353,780), Rá-Barèli (331,381). They are divided into three great tribes—Nándubáns, Jadbáns (Yàdubáns) and Gwàlbáns. In the Western Districts they follow the custom of the Jàts and Gújàrs as regards the re-marriage of elder brothers' widows, but this is not the case in the Central Dúbh. "In the Dúbh territory the Ahírs eat, drink, and smoke in common not only with Jàts and Gújàrs, but also under a few restrictions with Ràjputs. In other places Ràjputs would indignantly repudiate all connection with Ahírs." 12 Their special occupation is cattle-breeding and dairy-farming, and their distinctive crime is cattle-stealing, but as a whole the caste has a bad reputation. They are not nomadic in their habits, and do not seem to wander far from home for purposes of crime. The Ahírs of Gòrakhpur are always ready to join in crimes of violence; 13 and are noted cattle-thieves in the Taráli. 14 The Gázi-pur Ahírs make cattle-lifting excursions into Mirzápur, 15 and the old Nizámat Addálat Reports abound with references to their doings. 16 e.g., a professional poisoner described himself as an Ahír of Farrukkáháb (Bhauán, 19th June 1852.) A band of Mainpuri Ahírs disputed about cattle-theft, killed one man and wounded another with swords (Khumán Singh, 2nd December 1852.) A number of Méráth Ahírs attacked a party of Gújàrs who had tracked

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1 Inspector-General's Report, p. 29.
2 op. cit. p. 54.
3 op. cit. 1883, p. 6.
4 op. cit. loc. cit.
5 op. cit. p. 42.
6 op. cit. 1889, p. 54.
7 op. cit. p. 66.
8 op. cit. loc. cit.
9 op. cit. 1871, p. 96.
10 op. cit. 1876, p. 83 B.
stolen cattle to their village and wished to search (Mehrū, 31st December 1852.) An Ahir widow of Farrukhábād murdered her illegitimate child (Musawāt Surji, 30th June 1852.) A party of Ahirs of Gházipur killed the seducer of one of their relations (Humrūdī, 27 Oct. 1852.) An Ahirin kidnapped a Bráhma’s daughter (Musawāt Shēkūrī, 17th Dec. 1852.) An Ahir was guilty of a cold-blooded murder deliberately planned and deliberately executed, probably through intrigue (Shēkūrī, 23rd May 1853.)

Baddhaks, Baddhaks.—(Skr. Vyādhā, one who strikes) also known as Siyār-marwās or jackal-killers. They bore an evil reputation as Thāgs and dacoits in Oudh and the adjoining districts of the North-West Provinces, and a number of them were colonized some years ago near Górahkpur, but without much success. Their specialty is disguising themselves as Bráhma’s and Bairágis and associating with pilgrims coming from the Ganges. They perform the āsti ceremony and mix dhātārā in the sacred food (parvātā), and have been known to put up a shrine as fājrā and instruct disciples (chelās). They have a slang or argot like the Dúrmās. The Górahkpur Baddhaks still not infrequently absent themselves from the settlement, and a few years ago their specialty used to be illicit distilling.

Banjárās.—(Skr. Vāṇijākā, a trader). They pervade the North-West Provinces, and used to be the great grain-carriers of the country, but this trade has almost disappeared since the introduction of railways. They have their chief habitat in the districts along the Népāl border. In Górahkpur some of the Bhars are known as Banjárās. They are said in some places to worship a famous bandit, who was killed in some notorious way, but of this there is no distinct information. The Banjárās of the Central Ganges Jamnā Dūbāb are a wild class, wear their hair long, use bright-coloured clothes and look something like Kābulis, and are apparently non-Āryan in origin. They are fond of a peculiar kind of gold-carring and have a great taste for wearing jewellery generally. Their chief business is cattle-dealing, and they drive round about harvest-time large herds of oxen which they sell on credit to cultivators. They take no bonds and hardly ever go into the courts, but their appearance and manner are so rough and awe-inspiring that they collect their debts by personally visiting their creditors, and are generally paid punctually. The women do a curious kind of embroidery in coloured wools mixed up with cowries. On the whole they are a violent people, and are specially complained of in the Ėtāwā District. A case is reported in which a number of kidnapped children were found in one of their camps in Ėtāwā. Similarly some of them kidnapped a girl in Ajmer for sale to some wealthy banker. In the old Nizāmat ‘Aṣlānat Reports a Banjára kidnapped a boy aged 10, the son of another Banjára (Bahānī, 2nd November 1852.) A Banjára murdered his brother because he reproved him for idleness (Mehrū, 20th September 1852.) Some Banjáras’ cattle got mixed with those of some villagers, and they attacked the herdsmen, killing one of them (Humrūdī, 18th August 1853.)

In Górahkpur Banjárās are commonly known as Nāiks, which is properly the name for the leader of one of their gangs (Skr. nāyaka, a leader.) Sir H. M. Elliot gives a detail of the sub-divisions of the tribe in his Glossary.

Major Gunthorpe in his Notes on Criminal Tribes in Berar remarks that the Matturiyā and Luhbānā division of the tribe confine themselves to cattle-lifting and kidnapping. The Matturiyās wear the janāth or sacred thread, and the women a blue sārf or sheet. The married women wear their hair tied up in a peculiar knot on the top of the head and fixed there by a button. This is also the case with the women in the North-West Provinces, but they usually wear a sort of small stick stuck perpendicularly into the hair on the crown of the head. The sheet (sārf) is draped over this, and gives them a very remarkable appearance. Major Gunthorpe says the differences between the Luhbānā and Chāran sub-divisions of the tribe is that the women of the former wear the sheet (sārf) and those of the latter the petticoat (lahungā). He gives an elaborate and interesting account of the various means by which they commit dacoities and robberies.

15 Inspector-General of Police, N.W.P., 1889, p. 34. 16 Police Report, 1871, p. 47 A. 17 Ibid. 1879, p. 99 B.
but none of his remarks appear to apply to the tribe in the northern part of India.

Bāwariyās or Bauriyās.—These are one of the most notorious predatory tribes in the North-West provinces. Mr. Ibbetson20 derives their name from the bāwar or noose with which they catch animals. They would thus be analogous to the Pāsīs who take their name from the noose (Skr. pāstra) which they use in climbing toddy trees (tār). The true habitat of the Bauriyās is in the western part of the North-West Provinces and the eastern districts of the Pañjāb, but they wander immense distances on predatory incursions. An unsuccessful attempt to colonise them has been made in the Muzaffarnagar District. In their raids they very commonly assume the garb of faqīrā. I was present at the search of a camp in Muzaffarnagar, when with them there were found the complete apparatus of a faqīr: small brass images, fire tongs, mud-coloured clothes, etc., such as are worn by the common jōrā. The best way of detecting them when disguised is by a necklace of peculiar shaped wooden beads which they all wear, as well as gold pins which they have fixed in their front teeth. Should this fail their mouths should be examined, for under their tongues a hollow is formed by constant pressure from their younger days, in which they can secure from fifteen to twenty silver four-āndā or two-āndā pieces. They are so accustomed to this that they often evade search for money when admitted into jail, and the coins thus concealed do not interfere much with their power of speech. Captain Dennelty says21 that they do not worship any deities of the Hindu pantheon, but in Muzaffarnagar they certainly employ Brāhmaṇ family-priests at marriages, etc. They are very troublesome in the Fatehpur District, where they are said to be all thieves.22 A case is there quoted of a gang of Bauriyās in the service of some Thākurs committing a dacoity in Ajmīr. Seven of them were arrested. In the course of the enquiry sixteen other cases of robbery, burglary and theft came out, and the stolen property was recovered.23 The Thākurs of Mārwār are said to keep Bauriyās in their pay and share in the spoil.24 The Nizāmat 'Adalat Reports swarm with records of their doings. For instance, we have a case of an organised burglary planned by certain chaukādās of the Bauriyā caste and worked out by others, who concealed their knowledge of the offenders and received a share of the proceeds (Mānā and others, 12th January 1852). A gang of fifteen Bauriyās were convicted at Mērāghā on account of being disqualified as Bairāgīs and committing theft (Gulzār and others: 26th September 1857). Recently a gang went from Muzaffarnagar to Barādā and carried off an immense quantity of jewellery belonging to one of the Gaikwār's ladies; and quite lately a gang robbed a Nēpālese General, who came down from the hills, of a large sum in cash and notes. The Gidhiyās of the Bījār District, another gang with a very evil reputation, are said to be closely connected with them, but this is probably incorrect, as the Gidhiyās are more likely to be an offshoot of the great Kanjar tribe of the Upper Ganges—Jannā Dūāb.

Bāriyās or Bhāriyās are a tribe of nomads found in the Central and Lower Gangetic Dūāb. They live in gangs in rude grass or thatched huts. They are very closely connected in manners, character, and physique with the main Habūrā tribe, of which they are possibly only an offshoot. They profess to live by begging and the prostitution of their women, who are taught to dance and sing in a rude way. They really subsist by petty thefts, principally of grain at harvest-time, but they sometimes, when hard pressed, commit more violent crime. Curiously enough many of their gangs are under the leadership of women. Their great meeting-place is on the mounds which mark the site of an extensive ruined city at Nākhkhē'ā, in Pargaṇā Jāla-sar of the Éta District. They assemble there in great numbers in the rains and hold panchbhāyat, at which all caste business, marriages, etc., are managed. What historical connection they have with the place is a curious question, which I have been unable to investigate satisfactorily. Like all these tribes they have a regular argot, which they are very careful in concealing. The women particularly have a very non-Āryan look. They have the small, black, bright eye and the restless expression which is

20 Pañjāb Ethnography, Sect. 575
21 Report 1865, p. 112
22 Police Report, 1868, p. 42.
23 op. cit. 1868, p. 56.
24 op. cit. p. 66.
so characteristic of the aboriginal races. The
Reports do not notice them much, as they have
probably been confounded with the Hābūrās.

Bilūchis or Rinds.—Major Davis in the
Police Report of 1867 thus speaks of these
people—"So far as they have come under the
surveillance of the police they are residents of the
Muzaffarnagar District. They are by caste Muhammadans and, numbering about
sixty men, inhabit some seven towns or villages
in that district. They originally emigrated
from the Pañjab. That they are professional
thieves of a dangerous character is now well
established. They depart on their predatory
tours assuming the character of faqīrīs, physi-
cians of medicine, and teachers of the Qurān,
and carry on their depredations at great dis-
tances, as far southward as Ajīmer and west-
ward as Lāhūr. Some few in the Muzaffaran-
gar District have acquired landed property,
but the rest may be said to have no ostensible
means of livelihood, and to be habitual ab-
sentees. Their mode of robbery is not by violence,
but by picking locks by means of needles. A
house is generally selected, the owner of which
is absent. One thief makes an entry, receiving
two-thirds of the property as his share, while
his confederate, who sits outside to watch,
receives one-third." Mr. Ibbetson calls them
Bilūchis, and says:—"They give their tribal
names as Rind, Lāhūrī, Jaftālī and Kūrāl.
They are found chiefly in Ambālā and Karnāl.
They are described as coarse men, of a dark
colour, living in a separate quarter and with
nothing to distinguish them from the scaven-
ger-classes except a profusion of stolen ornaments
and similar property. They say that their
ancestors once lived beyond Kasūr in the Lāhūr
District and were driven out on account of
their predatory habits. The men still keep
camels, and cultivate a little land as their
ostensible occupation, but during a great part
of the year they leave the women, who are
strictly secluded, at home, and wander about
disguised as faqīrīs or as butchers in search of
sheep for sale, extending their excursions to
great distances and apparently to almost all
parts of India."

Bindas.—These are a tribe mainly found in
Gōrakhpur. In the Census returns they are
apparently mixed up with the Bhurs, whom
they greatly resemble.

Dhōḷārās.—This tribe infests the Barīl
District. They do not appear in the Census, as
they are probably included among the fisher-
men and boatmen (Mallāh). The Police Report
for 1868 says that "the Āriṅās of Gērakhpur
and Dhōḷās of Barīl District are swin-
dlers of a like kind to the Jōgīs of ‘Aligārāh,
and their wanderings would seem to extend
over the whole of India. A good account of
them is given by Mr. Knynvett in the Report
for 1869." He describes them as traditionally
immigrants from the Dakhan. They seem to
have settled in what is now the Barīl Dis-
trict more than 100 years ago. They are of
the Mallāh class, but consider themselves a
degree above the rest of their brethren, and
never wash the dishes of their employers like
the Kahār Mallāhs. They are said to be
called Dhōḷārās, Dūlārās or Dāḷārās because
they make tamarisk (jīhād) baskets (dālīyā).
They steal by day and never by night, like the
Uchaigīrs or pickpocket class. They go
out in parties (sūbāyat) and encamp each
party being under a muqādatarn or headman.
They remain separately encamped till the omens
(shagan) are auspicious; a good omen being
to see a single jackal in the evening, but if two
are seen together it signifies ill-luck, and they
break up their camp and come home. When
the omen is propitious a goat is offered to their
god Gamiyā Dāmī (? ) and then each party,
informed the others of the District which it
has chosen for thieving, moves off. Formerly
they used to infest Oudh, but now they confine
themselves to the North-West Provinces. Very
few are ever convicted. They generally go to
a fair, and the men dress themselves as Brāhm-
ans or Thākurs. Their custom is to keep
an owner of property engaged, while a boy
steals, and if the lad is caught he never gives
his correct name or address. The thief gets
a double share of the stolen property, but most
of their gains are spent in drink. If a boy is
cought, the well-dressed Dūḷārās of the party
intercede for him and try to get him off. They
often get up a quarrel in a baḍārā to give a boy
a chance of robbing something. The Police
Report of 1870 records the conviction of 79 of

25 pp. 94–95.
26 Punjab Ethnograph., sect. 584.
27 p. 15.
28 p. 18 b.
29 pp. 126, 127.
the caste in Barêll for belonging to a gang of thieves.

**Dôms or Dômrâs.**—This is a very curious apparently aboriginal caste and will require some space. The Census figures give the distribution of the castes as follows, by Commissioner's Divisions:—Mêrath 99, Agrâ 120, Rôhil-khând 44, Allahâbad 53, Benares 11,814, Jhânsî nil, Kunnâû 157,042, Lahkhan 2,504, Sîtâpur nil, Farâkabâd 1,060, Râc Barêll 3,879; Total 176,615. The districts which record more than 1,000 of them are 'Azamgâr (1349), Benares (1217) Ghândpur (1873), Gôrakhpur (5951) Amlâr (104,936) Garhwâr (52660) Bârâbânkî (2367) Râc Barêll (3879). They thus fall into two great divisions:— the Eastern Dôms found in Gôrakhpur and the neighbouring districts of the Benares Division; and the Western or Hill Dôms who are enormously in excess of their eastern brethren.

They are in fact apparently two distinct tribes. The Eastern Dôms have a very evil reputation, while the Hill Dôms though menials, are apparently, as a rule, respectable people. It has been suggested with much probability that the word Dôm or Dôrâ is radically the same as the Români of Europe, d and r being interchangeable. If this be true they would be the main basis of the Gîpsies of Europe. Mr. G. A. Grierson's analysis of their argot seems to tend towards the same result. What is possibly a third subdivision of the caste is the Dûm or Dôm Mirâsîs, who are professional musicians. Mr. Ibbetson says the Dûm and Mirâsî must be carefully distinguished from the Dôm or Dôrâ, the executioner and corpse-burner of Hindustân, and the type of all uncleanness to a Hindu; as also from the Dûm of the Hill States, whom I have classed as Dûnnâ and not as Mirâsî, as I understand that the word Dûm is there applied to workers in bamboo. The class is distributed throughout the North-West Provinces, but is most numerous in the Amritsar, Lâbûr, Râwal Pîqûl and Multân divisions of the Paûjâb, and in Bahâvalpûr and the other Stateâs which march with them.

Their social position, as of all the minstrel castes, is exceedingly low, but they attend at weddings and on similar occasions to recite genealogies. Moreover there are grades even among the Mirâsîs. The outcast tribes have their Mîrâsî, who, though they do not eat with their clients and merely render them professional service, are considered impure by the Mirâsîs of the higher castes. The Mîrâsî is generally an hereditary servant like the Bhât, and is notorious for his excursions, which he makes under the threat of lampooning the ancestors of him from whom he demands fees.” “These four were not born on giving day—the Mûllah, the Bhât, the Brahma, and the Dûm.” “The Mîrâsî is almost always a Mussalmân.”

Passing on to the Eastern Dôms,—they have, like many of these servile castes, a tradition of Râjû descent. W. Buchanan says of them:—"The Dômrs who work in bamboo have disgraced themselves not only by their inordinate appetite (!), for they will eat food prepared by anyone except a washerman, but by removing dead carcasses and by being public executioners, while their women do not scruple to confess that they drink spirituous liquors. They are very few in number (76 families). Many allege that they were once lords of the country and that the Dômkastr tribe of military Brahmaus are not in reality different, but abandoned their impurity when raised to the military rank by Mahânânda." At any rate, as Sir H. M. Elliot remarks, it is curious that the names of many old forts such as Dômhiâ and Dômâra testify to their former importance. He also remarks that there are several Dôms or Dômrâs scattered over the western districts of the North-West Provinces and in Bandel-khând and Sâgar, who are engaged in the menial occupations of making ropes, fans, mats, and such-like articles. In Oudh the term Dôm is applied to sweepers, as Bhângî and Chûhrâ are elsewhere.” In the North-West Provinces Gazetteer, Basti District, I gave a tolerably full account of the tribe, with a vocabulary of their argot, which those interested in such matters can consult. Socially the most curious point about the Gôrakhpur Dôms is that, though a regular jungle tribe, they have no aptitude for sport of any kind, and do not seem to use the flesh of wild animals at all. All these Eastern Dôms are collectively

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20 Paûjâb Ethnography, para. 527.
21 Eastern India, Vol. II. 471.
22 Olausæry, a.v.
23 See also ante, Vol. XI. p. 98.
24 p. 929.
classed as Maṅghaiyā or residents of the ancient Magadha kingdom. There are also many sub-divisions of them, but many of these are by a process of fission rising to the dignity of new castes, because of course no one when he arrives at any degree of respectability cares to be called a Döm. Such are the Kāśiwaḷās, who are the most respectable of all. Their special business is setting light to funeral pyres, and many have thereby realised much wealth. They are supposed to have been deputed for that purpose from Kāśī (Benares); hence their name. The men of this sub-division think it a disgrace to set fire to brick kilns. Next come the Bānwaḷs, who are makers of rope from the bān fibre. And the Hēlas, most of whom are Muhammadans and do regular sweepers' work.

The Bānśhōrs or "bamboo breakers" use a particular kind of knife called bānk or jhālā, and make thatches like the Gharāmīs of other parts. Bānśbinwās or "bamboo weavers" make bamboo baskets. The Dharkārs make fly-nets (chīq), stools (mōrkā), &c.; they act as musicians at weddings, where they blow long horns called sīngḥā. The Pātārs make the leaf dishes (pattārī or daunā) used at marriages and by poor people. The Halālkhōrs or "fool eaters," are executioners and scavengers.

Of the Hill Döms the best account I am acquainted with is contained in Mr. E. T. Atkinson's Himalayan Gazetteer, Vol. II. p. 370. He says, "they are correctly enough supposed to be remnants of the original inhabitants. They are of exceedingly dark complexion as a rule, but not more so than the tribe of the same name in the plains and many Chamārs. They have for ages been the slaves of the Khāsiyās, and been thought less of than the cattle, and with them changed hands from master to master. It was death for a Döm to infringe the restrictions of caste laid down by the Hindu laws, such as knowingly making use of a kūqā, or any other utensil belonging to a Rājpūt or Brāhmaṇ. Even the wild Rājī considered the presence of the Döm a source of defilement. The Döms are divided into a number of classes; chiefly according to occupation like the Chamārs of the plains.

In the extreme west we find them on the right bank of the Indus, living in villages apart from the people, and filling the same servile occupations. In Yāśīn, Nagar, and Chittā, they are very numerous, and are of a very dark complexion, coarse features and inferior physique. They are found again in the same position among the Aryan of Kāśī and among the Dōgrās of Jambū. Here again they are noticed for their dark complexion, which unmistakably marks them out from the light-complexioned Aryans. They are smaller in limb, stout, square-built, and less bearded, and altogether exhibit a much lower type of face which centuries of servitude and oppression have not tended to modify, The Dhiyārs or ore-smelters of Jambū, corresponding to the Agūris of these hills and the Bātals of the Kāśī Valley who are carriers and musicians and correspond to the Harāmīs of Kūmārī, should be assigned to the same class. The Bēms of Lādākh occupy a similar position, and are blacksmiths and musicians. In Kūnūr and Kūlāḍū we have them again following the same trades, classed with a tribe of similar occupations called Kōlīs by the people of the lower hills, Chamārs about Rāmpūr on the Satluj and by themselves and the Kūnūrīs Chamāngs. The same remark is made about them here, that they are darker than the Kūnūrs round them. The smiths are called Dōmang in Kūnūr and the carpenters are termed ᪠ōs, and both equally with the Kōlīs considered of impure caste.

In Nēpāl these helot craftsmen are represented by the Nēwārs. Sufficient has been said to show that these Dōms in the Hills are not a local race peculiar to Kūmārī, but the remains of an aboriginal tribe conquered and enslaved by the immigrant Khāsiyas."

The specific crimes of the Eastern Döms are dacoity, robbery, theft, and illicit distillation of spirits. The Hill Döms appear to be greatly addicted to kidnapping children.35

Dōsād or Dūsād.—They do not find a place in the Census. Their habitat is the Eastern Districts of the North-West Provinces, particularly Ghāzīpur, where they are said to number more than 20,000. They seem to be an off-

35 See Report of Inspector-General of Police, 1876, p. 86 B.
FOLKLORE IN WESTERN INDIA.

BY PUTLIBAI D. H. WADIA.

No. XI.—The Two Brothers.

There was once a great Rājā, who lived very happily with his wife and two sons. The two boys were very dutiful and lovable little creatures, and their parents were extremely fond of them. But unfortunately it happened that when they were scarcely seven or eight years old, the queen, their mother, began to show symptoms of a fatal malady. The Rājā did all in his power to restore her to health, but in vain. So at last he was advised by his physicians to remove her to a summer palace belonging to him, which was situated in a remote part of his dominions and enjoyed a congenial and salubrious climate.

Now the windows of the queen’s apartment in that palace looked into the garden, and each day as she lay in her bed she observed a pair of sparrows chirping and twittering amongst the leaves of a tree in which they had their nest, and carrying grains of corn for their little ones in it. It made the poor invalid happy to see the wee little things being taken so much care of, for it took her thoughts to her own dear little boys whom she made so much of; but sorrow filled her heart the next instant when it struck her that one day she herself might be taken from them and they might be left without the loving care and comforting hand of their mother.

This went on for some time, till one day the queen was deeply moved to see the hen-sparrow grow sick and die in a neighbouring bush, leaving the poor cock in the wildest grief and the little ones wondering why she did not come to them so long. The queen felt much for the little ones, and used to scatter seeds from her window to enable the poor stricken cock-sparrow to pick them up for his motherless brood.

And thus it was for some time, till one day another hen-sparrow appeared upon the scene and began to build another nest hard by; and then commenced a trying time for the nestlings, for this hen, who seemed to have taken the place of their mother, grew so jealous of the love the cock-sparrow lavished upon them, that she would not so much as allow him to procure them their food, and took every opportunity to peck at them with her beak and to hustle them about. By degrees the cock-sparrow, too, learned to regard them with disfavour, and joined his new mate in ill-treating them in various ways. On one occasion the hen-sparrow’s jealousy rose to such a pitch that both she and the cock pulled out the feathers of the poor motherless birds, and finally threw them out of the nest down on to the ground. The queen, who had been watching all this with the keenest interest and the greatest grief, burst into tears at the thought that her own boys would one day share the same fate as the little birds, should death remove her from them, as from the nature of her malady she knew it soon must.

The king, who happened to be near at the time, inquired into the cause of her grief, whereupon she told him the whole history of the feathered family, and added that she feared her own dear boys would meet with a similar

37 Ibbetson, Pahājāh Ethnography, sec. 300.
38 Hunter, Statistical Account of Bengal, xi. 332.
fate after her death. The king soothed her to the best of his power, and expressed a hope that she would long be spared to her children; but the Rāṇī was inconsolable, and wanted the king to give her a solemn promise that if ever he married a second wife after her death he would not allow her to ill-treat his sons. In vain the king assured her that he was determined not to marry a second wife and give the boys a step-mother, but the queen would not believe him, saying that she knew better, and that his position in life required that he must have some one to share the throne with him. She entreated him, therefore, to select a good-tempered and kind-hearted woman for his second wife, and to keep her sons as independent of her as possible. The king promised to do all that she desired, and soothed her by kind words and soft entreaties to take heart, and hope for a speedy recovery.

After this the queen's illness took a turn for the worse, and in a short time she closed her eyes for ever with her dear little boys weeping on her breast.

The Rāja was sorely grieved at this, and sought by every means in his power both to comfort his motherless sons and to promote their happiness. He kept them constantly by his side, and spared no pains to make them contented with their lot and forget their mother's loss.

This happy state of things, however, did not last long; for in a couple of years' time the courtiers began to impress upon the king's mind the advisability of a second marriage, so that he was at last persuaded to listen to them and marry the daughter of a neighbouring Rāja.

As soon as the new queen was installed into the palace she began to look with displeasure at the hold the young Princes had on the king's heart, and her displeasure soon ripened into jealousy. She objected so strongly to the boys being constantly in his company that the king had to ask them to avoid being seen with him so often. The boys, who were wise beyond their years, soon saw the awkward position in which their father was placed, and did their best to keep themselves as much out of their step-mother's way as possible. But still the wicked woman went on finding fault with them in one way or other, and kept bothering the king with a thousand complaints about them, so that he became tired of them and it struck him that perhaps he himself had been spoiling the boys with over-indulgence, and with this idea he too began to ill-treat the poor little princes.

One day it happened that the queen was out in the garden by herself enjoying the fresh air and the charming scenery, when suddenly a ball studded all over with diamonds and pearls came rolling up to her feet. She guessed at once that the ball could belong to nobody save her own step-sons, for they alone could afford such costly play-things, and was going to pick it up, when the eldest of the two boys jumped over the wall into the garden and running up to where the queen was sitting took up the ball and ran away with it at full speed. But as soon as he turned his back on her the queen gave a loud scream, and began to weep bitterly, to tear her hair, and to rend her clothes, so that the attendants went running up to her to learn the cause of her grief, and, in reply to their enquiries, she told them that she had been grossly insulted by her eldest step-son. They soon took her into the palace and there she told the king such a black story against his eldest son that in his wrath he began to rave like a madman, and swore that he would never look upon both the boys' faces as long as he lived, and gave orders that they should that very instant be driven out of the palace. But the queen would not be pacified even with this, and threatened to poison herself if the king did not at that very moment pass sentence of death upon both his sons. The king thereupon issued orders to his chief executioner to take the two boys away to some dense forest and, after putting out their eyes, to leave them there to be devoured by wild beasts; and further commanded at the queen's suggestion that their eyes be brought before him as a proof that the cruel sentence had been put into execution.

The executioner, who was an old man, took the poor boys into his custody and set out with them towards a dense forest. But all the way there the young princes entreated him to have pity on them and not deprive them of their eyes; and they pleaded so sweetly for mercy that even the hard heart of the executioner
melted, and he promised that he would not hurt a single hair of their heads.

At this the boys fell at the old man's feet and thanked him for his kindness with hearts full of gratitude. The executioner, however, was at a loss to think where he could procure two pairs of eyes to lay before the queen in place of theirs, for he dared not return without them; so the three hit upon a plan by which to deceive the wicked queen.

They took their bows and arrows and killed a couple of wild fawns, and plucking out their eyes tied them up, dripping with blood, in a handkerchief. The executioner then bade the princes be of good cheer and went back towards the palace with the bundle containing the eyes in his hand. As soon as he was gone the two brothers, overcome with grief and fatigue, went to sleep under a large tree. When they awoke the next morning they felt very thirsty and looked about them for water, but there was none to be had on the spot. So the eldest boy said:

"Sit here a while, my brother, under this tree, while I go to some other part of the forest and get you some water to drink, and, if possible, some wild fruits or roots for food, for as we have been fasting so long, you must be feeling very hungry."

The little boy agreed to this, and sat down under the tree. He waited there for a very long time, but his brother did not turn up, and at last he began to fear that his dear brother had been devoured by some wild beast, when all at once he distinctly heard voices over his head. He looked up and saw that a chakva and a chakvi, who were perched upon one of the branches of the tree, were talking to each other like human beings.

"You may pride yourself as much as you please, Chakvi," the chakvi was saying, "upon the medicinal properties of your feathers; but you could show nothing to equal certain properties I possess."

"Oh, indeed!" replied the chakvi, "pray what is it that is so marvellous about you? Would you not tell me?"

"Well," said the chakvi, "I would never have spoken of it, but I break silence for this once, Chakvi, since you are so eager to know of it, but pray don't tell any one about it."
and said, "Come along, young man, since it has been your lot to be the first to enter these gates this morning we must take you to the queen and see what follows." And so they gave him a horse to ride and escorted him with great haste towards the queen's palace.

Now the reason of this mysterious behaviour on the part of the guards was that the king of the country had recently died without an heir, and the court astrologers had predicted that the heir to the throne would be the first to enter the gates of the city the day after the king's death, and that the sacred court elephant would of its own accord throw a garland of flowers round his neck. The queen had therefore posted the guards at the gates of the city that morning with orders to bring to her the first man that entered them.

When the guards dismounted at the palace with the handsome young prince in their charge, the queen ordered all the nobles of the court to assemble in the court-yard. She then gave orders for the sacred elephant to be brought round and put a garland of flowers on its trunk saying,—"Throw this round the neck of him who is destined by Īśvara to occupy my husband's vacant throne." The elephant looked around for some time and then made towards the place where the young prince was standing and dexterously throw the garland round his neck. At this there arose a loud shout of joy from the assembled multitude, and the newly elected king was taken into the palace and installed on the throne by the chief ādī in of the court. Next day there were great rejoicings throughout the kingdom, and the young prince was proclaimed king with great pomp. The poor lad, however, was not happy at this sudden change in his fortunes, for he thought of his brother whom he had left half-dead from want of food in the forest, and who, he feared, had perhaps died of starvation. He nevertheless despatched messengers in search of him and waited anxiously for their return.

Meanwhile the younger brother, after waiting for a few hours for his brother, put all his strength together and went in search of food and water. He wandered about for some time till chance led his footsteps towards a small stream, and there he refreshed himself with its delicious fresh water and the wild fruit that he found growing on its banks.

This partially restored his strength, and he walked on till he came upon an old potter digging for clay near a clay-pit.

"Shall I help you in digging clay, sir?" said the lad to the potter. "I am in search of some employment and would do anything for you if you would only give me some bread to eat."

The potter had pity on him and said: "Yes, if you are really willing to work you may dig clay for me while I work at the wheel, and in the evening I shall give you a good dinner in return."

So the prince at once set about his task and worked away with such a will that before evening the potter took a liking to him, and taking him home treated him to a hearty dinner.

By degrees the young prince learned the art of making pots, and he so improved upon the old potter's method that in a short time he was able to turn out the finest and most artistically designed pots ever seen, till at last the old potter became famous for the beautiful workmanship of his wares and grew quite rich in a short time.

Now the potter had no children, so he and his wife adopted the good prince as their son, and treated him with the greatest kindness and affection.

After remaining with them for some time, the young prince one day asked the potter's and his wife's permission to go on a journey, saying that though they loved him as their own son and made him want for nothing, he felt very anxious about his brother, and was therefore determined to find out what had become of him since they parted.

The old people felt grieved at the idea of parting with him, but seeing that he was determined, gave him their permission with the greatest reluctance, and once more the young prince set off in search of his brother.

For several years he wandered about from one country to another without finding any trace of his lost brother, till at last one evening he sat down weary and dejected on the doorstep of a poor old woman's cottage, and being very hungry, looked wistfully at some wheaten bread she was baking. The poor woman, when she saw the weary traveller, took pity on him and invited him to enter the cottage and partake of some bread.
The youth went in, but was surprised to see the woman weeping and sighing bitterly as she made her bread.

"What ails you, good mother?" cried he in a kind voice. "Tell me the cause of your grief, and I shall do my best to help you."

Upon this the old woman said—"A fierce ogre has long infested this part of the country, and of late he had been spreading his ravages far and wide, and our king being unable to cope with him was obliged to enter into an agreement to supply him with a cart-load of sweet wheaten cakes, a couple of goats, and a young man every day, in consideration of which the ogre leaves the rest of the inhabitants unmolested. Now the king finds the cakes and the goats himself, but calls upon the inhabitants to supply the young men, and so each family has to give one every day. Tonight it is my turn, and I must send my dear son to be devoured by this monster." So saying the old creature burst into a flood of tears.

"Don't weep, my good woman," said the prince kindly, "but listen to what I say; let me go to the ogre to-night in place of your son, and by the help of Isvara I shall kill the monster."

But the old woman's son, who was also a brave fellow, would not hear of a stranger sacrificing himself, as he thought, to save his life, so an altercation took place between them, which lasted till midnight, when the king's guard came up to the door and demanded her son of the old woman.

The young prince, however, shut him up in a room, and opening the door rushed out and joined the guards. They soon mounted him upon one of the carts they had brought with them full of provisions, and binding him hand and foot drove away.

When they arrived at the spot where they usually left the ogre's meal they stopped, and unyoking the oxen went away with them, leaving the young man there with the goats and the cakes in the carts.

They had hardly gone a few yards when the clever youth managed to extricate one of his arms from the cords with which they were tied, and pulling out a sharp knife from his pocket cut all the cords and set himself free. He then got out of the cart and hid himself under it. Presently the ogre came foaming at the mouth and smacking his lips in anticipation of his favourite meal, when the brave prince dexterously hurled a number of cakes at his feet and as he stooped to eat them he crept unperceived under his body and plunged his sharp bright knife right into his heart! The monster fell back with a groan, and the prince, stepping aside, plunged his knife again and again into his body before he had time to recover from his consternation, and after a sharp encounter succeeded in putting him to death. He then opened the ogre's large mouth, and cutting off his tongue and severing his tail from his body he tied them up in a bundle, made full speed towards the old woman's house, and feeling very tired, soon fell fast asleep in her verandah.

The next morning, when the cart-men went back with their bullocks to fetch the carts as was their wont, they were surprised to see the goats unhurt, the man missing, and the ogre lying dead at some distance.

Now the king of the country had issued a proclamation some time previously to the effect that he would give half his kingdom and his daughter in marriage to any one who would kill the ogre, so the cart-men thought that, as chance had thrown this opportunity of enriching themselves in their way, they should make the most of it, and determined, therefore, to go and tell the king that they had killed the ogre and claim the promised reward.

So they put a hundred pairs of bullocks together and dragged the huge monster towards the king's palace, and loudly proclaimed before the assembled court that they had killed him by the sheer force of arms.

The king, however, disbelieved their story and asked them to produce the weapons with which they had fought the ogre and deprived him of his life.

The poor swains were non-plussed at this, and for a time they could say nothing. At last one of them mustered up courage to say "I wounded him with my knife, Maharaj, while my friend here thrashed him with his club and between us two we managed to despatch him."

"And will you show me the wonderful knife with which you killed such a monster?" said the king.

The cart-man thereupon drew out of his girdle a rusty old blade and showed it to the
king amidst the great merriment of the courtiers, while our young hero, who had been in court all the while watching the proceedings, could not help bursting out into a loud laugh.

At this the king ordered him to be brought before him and asked him what it was that had made him laugh so loud.

Then the young man related to the Rājā all about his adventures with the ogre in such a plain straightforward way that the king was quite convinced of the truth of his narration. His Majesty, however, ordered him to produce the weapon he had used in the encounter, and the prince at once drew out his sharp bright knife and flashed it before the eyes of the assembled multitude.

The cart-men, as might be supposed, made a show of disbelieving the youth's story, and loudly protested against being robbed of their just reward by a stripping like him. Upon this the prince begged of the king to ask the cartmen what had become of the ogre's tongue and tail.

"Oh, perhaps he never had any!" cried the men simultaneously, "for when we killed him we found him without them."

"Then wait till I show them to you," cried the prince, and opening a bundle and taking out the tongue and the tail, he placed them before the king as a convincing proof that it was he who had killed the ogre.

The king at once ordered the cart-men to be ignominiously driven away, and embracing the young prince, hailed him as the deliverer of his country. He then, as promised in the proclamation, transferred the sovereignty of half his kingdom to him and made preparations for his marriage.

The astrologers, having fixed upon the day on which to celebrate the auspicious event there were great rejoicings in the city and the old king sent out numerous invitations to all the neighbouring Rājās to join in the festivities. Among those who accepted them was one young Rājā who was said to have been elected to the throne by a court elephant and who was held in high esteem by his subjects. So our hero was naturally very eager to see him, for he thought that if ever the chakrad's words had come true it must have been his brother who had been made king in this singular fashion. So he looked forward with great interest to the day on which this Rājā was expected to arrive.

The day came round at last, and the young prince's heart leapt within him for joy when he recognized in the royal visitor his long-lost brother. The two brothers greeted each other very affectionately and told each other of all that had happened since they had parted, and so much was the elder affected with the narration of his younger brother's sufferings that he fell upon his neck and the two big men wept like little children.

This unexpected meeting of the brothers lent greater hilarity to the joyful proceedings, and the two spent several happy days in each other's company.

When the wedding festivities were over they resolved to go and pay a visit to their old father. So they got ready a large army and marched with it towards their native country.

After several days' weary marching they reached the place and pitched their camp on the outskirts of their father's capital. The old man, being duly informed of this, trembled to think that some foreign Rājās, more powerful than himself, had come to deprive him of his throne. It was then that he thought of his sons, and regretted very much that they were not living to help him in his old age, having been condemned to an early death owing to the evil influence exercised upon him by his wife, who, as it mentioned, had long revealed herself to him in her true colours. So he thought it best to conciliate the invaders and make peace with them on easy terms, and accordingly sent his prime minister to them with rich presents and offers of more, if they would let him remain in undisturbed possession of his kingdom.

The two Rājās in their turn sent back word that they had not come to his country with any hostile intent, but only meant to pay him a friendly visit. So the old king went out himself to meet them and implored them with clasped hands to have mercy on him in his old age and not to shed the blood of his innocent subjects since his two brave sons lived no longer to protect them.

At this both the brothers fell at their father's feet and begged him to receive back to his heart his long-lost sons, telling him how the good executioner had spared their eye-sight and how they had come to be in the state in which he found them.
The old king could not believe his eyes, so strange it seemed to him, that the sons whom he had mourned as dead should be standing before him.

The brothers then caused their step-mother to be brought before them in order to question her in the king's presence as to the foul charge she had laid at their door.

The wicked woman, however, felt so ashamed of herself that she fell at the young men's feet and confessed her guilt.

The king, who had long seen his mistake, at once ordered her to be driven out of the kingdom, and the father and his two sons then entered the city with great pomp and lived very happily ever afterwards.

A NOTICE OF THE ZAFARNAMA-I-RANJIT SINGH OF KANHAYYA LAL.

BY E. REHATSEK.

(Continued from p. 60.)

When six months after the occupation of Peshawar had elapsed, a courier arrived from Kâbul with two letters from Dost Muhammad, one addressed to the Mahârajâ and the other to the prince. He complimented Ranjit Singh on the great power he had attained, but requested him to restore the Government of Peshawar to Sultân Khân, who had always paid his tribute regularly, and had been tardy only the last year. He moreover promised to march with his own troops against Sultân Khân and to punish him if he should afterwards at any time be remiss in sending the tribute. The Mahârajâ, highly displeased with the presumption of Dost Muhammad, said that he had conquered the Panjâb, and being able to defend the district of Peshawar likewise, he challenged Dost Muhammad to invade it. Then he despatched Gulâb Singh [of Jammû and Kashmir] with a body of troops to Peshawar, and shortly afterwards also followed in person himself; but when he arrived at Rohtas the news came that Dost Muhammad had already reached the Khaibar Pass and would soon attack Peshawar, and that, although the Prince Nau Nihâl, Hari Singh and Ventura were on the spot and ready to defend the province, the Mahârajâ's presence would ensure a speedy victory. Ranjit Singh therefore now went forward with greater speed, and his progress was not interrupted till within a day's journey from Peshawar, when the enemy gathered in force and attempted to block the way. The Mahârajâ ordered Sukhrâj to disperse the rebels who, however, stood their ground and were put to flight only after a contest of several hours. Ranjit Singh entered Peshawar the next day, when the Prince Nau Nihâl with the officers who had already been there for some time received him with great demonstrations of joy. Sultân Khân also desired to pay his respects, but the Mahârajâ wrathfully turned away from him.

Sultân Khân thereon offered his excuses, and succeeded so well, that the Mahârajâ presented him with a jâhir valued at three lâkhs in the Kohât district, and sent Faqir 'Aziuzâddîn as an envoy to Kâbul for the purpose of making friendly overtures to Dost Muhammad, and reproaching him with having assumed a hostile attitude towards himself. The envoy had commenced to hope that he would induce Dost Muhammad to pay a visit to Ranjit Singh, but some of his advisers succeeded in arousing his suspicions, and he granted no more interviews to the ambassador, who was kept under surveillance till the army of Dost Muhammad had reached the Khaibar Pass, where it encamped, and he was then permitted to depart. Hereon the Mahârajâ despatched Harî Singh, with Gulâb Singh, Mahârajâ of Jammû and Kashmir, to attack the Afghâns, but the latter had already disappeared and retired to their own country when the Sikhs arrived. Accordingly Ranjit Singh left a garrison to guard the frontier and marched back to Lâhâr, whence he proceeded to Amritsar, where he ordered the wedding of Prince Nau Nihâl to be celebrated, to which also the commander of the English forces at Firûzpûr, and the Agent, Mr. Wade, who resided at Lâdiânâ, were invited, as well as the Râjas of note. After the festivities, during which large sums were disbursed, the guests received costly presents of silk dresses and jewellery and then took leave. Before, however, the ladies, who had accompanied the English commander, departed, they requested permission from the Mahârajâ to pay a visit to his ladies.
They were accordingly received with much politeness by the Maharani Nakayin, the mother of Prince Kharak Singh, who showed them all the fair ones sitting, in beautiful attire, en one side, whilst they were placed on the other; and after they had conversed for a while, the Maharani presented each of them with some jewellery, and they departed. To give due honour to the English commandant, the Maharajah Gulab Singh was instructed to accompany him to the banks of the Satluj.

News arrived that Dost Muhammad had again sent an army, commanded by one Haji Kakar, from the Khajbar in the direction of Peshawar, and that the Sikh garrison of Jamrud, having been besieged by the Afghans, had been liberated by Sardar Hari Singh, who had marched from Peshawar and beaten the Afghans, but that nevertheless more reinforcements would be welcome. Troops were accordingly despatched the same day, but they had not gone further than Gujar when a courier met them with the information that the Afghans had again advanced from the Khajbar Pass and occupied Jamrud, but that Sardar Hari Singh had expelled them after slaying 500 and pursued them towards the Khajbar. When he had reached Atmardan they had again gathered in force and offered battle, in which the Sikhs defeated the Afghans; but while engaged in plundering, they had left their commander Hari Singh unsupported, and he had been assailed by some of the enemy and killed, whereon the troops marched back to Peshawar. Mahan Singh, the commander of the fort of Jamrud had kept the death of Hari Singh secret, and requested the Maharajah to send troops quickly. Ranjit Singh was greatly affected by this sad news, deplored the loss of his brave general, and consulted his amirs, who were of opinion that if Dost Muhammad heard of Hari Singh's death, he would at once march to Peshawar and conquer it forthwith, and that to forestall him, the Maharajah ought to take the field in person. Ranjit Singh accordingly at once hastened to Peshawar, put to the sword all the opponents he met, restored order, left sufficient troops for the defence of the district, and returned to Lahrur.

39. After his victorious campaign in Peshawar, the Maharajah determined to undertake a hunting expedition on a large scale, and departed with his army to Deri Nana, where he performed devotions, distributed alms, and ordered the cupola of the temple to be rebuilt of stone, gilded, and adorned in every way. Then he departed to Adinanagar, and the locality being very pleasant, he determined to remain there a few weeks. During his stay two envoys, Mr. Macnaghton and Mr. Burnes, sent by the Governor-General arrived, to inform the Maharajah that the English Government was on the point of invading Afghanistan for the purpose of replacing the exiled king Shash Shuja' on the throne, and removing Dost Muhammad therefrom. Being an ally, the Maharajah was invited to send his own forces with the English army, and to allow the latter to march through his dominions to Afghanistan, by way of Peshawar, and as the British troops were also in Sind as far as Shikarpur, to permit them to pass also through that portion of his territories as well. When Ranjit Singh heard the proposals, and considered that he had conquered Sind by main force, he felt unwilling to consent, but as he desired to remain on good terms with the English, he agreed to all they wanted, and promised to send also an auxiliary force of his own, making only one condition, that after his restoration, Shash Shuja' should pledge himself to cast off all rancour towards the Maharajah, become his friend, and renounce all claims upon the possession of Peshawar, Kashmir, Multan, and the Dera. On this occasion a treaty was drawn up between the English and the Maharajah, who thereon accompanied the two envoys to Lahrur, where he entertained them hospitably, giving them presents, till they departed. Then the Governor-General, having brought his army to Firozpur, then on the frontier of the Pathjha, despatched Mr. Wade to the Maharajah with the request to favour him with an interview. Accordingly Ranjit Singh came up with his army, and on arriving near the Satluj, opposite to the English camp, despatched the prince Kharak Singh to inquire after the Governor-General's health, and he was received with much politeness. After Mr. Macnaghton had paid a visit to the Maharajah, the latter went with his courtiers and escort to meet the Governor-General, but he had scarcely crossed the bridge, when the latter advanced
towards him, and the artillery fired a salute. The interview took place with the usual solemnity, and at the end of it the Governor-General offered presents to the Maharaja, the principal of which were a beautiful portrait of Her Majesty Queen Victoria, which was much admired and saluted by the rising and bowing of the whole assembly, whereas the artillery boomed a grand salute, and the Maharaja took his departure. The next day the Governor-General returned the visit, and the day afterwards the Maharaja gave a grand banquet to the Governor-General, and they dined together. On the third day the latter returned the same hospitality to the Maharaja, and at the last interview at Firuzpur, which took place on the fourth day, the Maharaja invited His Excellency to accompany him to Amritsar and to Lahore. The invitation having been accepted, they both marched with their armies, first to the sacred city and then to the capital, but whilst sleeping one night in the latter, the Maharaja was suddenly attacked by a fit of the disease called laqsha. The Governor-General manifested for him the greatest sympathy whilst in Lahore, and the Maharaja, recovered sufficiently to make arrangements for the departure of six thousand troops, one-half consisting of cavalry and the other of infantry, with six pieces of artillery, and commanded by Ventura, to Peshawar. This force was accompanied by Mr. Wade, who had some two hundred men, and four pieces of English artillery with ammunition. When the Governor-General, who, as already stated, was much affected by the calamity of the Maharaja, had seen these arrangements executed, he left Lahore, and returned to Firuzpur.

40. The disease, which lasted several months, had now so enfeebled Ranjit Singh, that only a spark of life remained in his body. His complexion was changed to yellow, his tongue had become mute, his once powerful strength had so vanished that he was unable to turn from one side to the other: he had no appetite, his body was emaciated, the laqsha afflicted him with intense pain, and paralysis deprived him of motion. His court physicians, ‘Inayat-Shah, Nuruddin, and ‘Azizuddin tried their best to cure him, as well as other medical men from the Pañjab, from Multan and from Kashmir, but all to no purpose; and when a celebrated English doctor, whom the Governor-General had sent, arrived, the Maharaja absolutely refused to be treated by him. He continued, however, to swallow the medicines of his own physicians, who administered to him oranges, which augmented his jaundice, sandal, which increased his headache, and almonds, which intensified his thirst, whilst musk and ambergris produced fainting, exhilarant drugs made the heart palpitate, and strengthening potions caused a restless liver! Seeing his end close at hand, the Maharaja now summoned his heir apparent to his bedside, and, appointing him his successor, surrendered the government to him, and made Dhyān Singh his wazir. After that, great numbers of courtiers and servants were admitted, to whom alms were distributed, which were, however, bestowed not only upon persons connected with the service of the court, but included also the poor of the town, and even of one place where Nānak had first seen the light of day, and of another where the remains of the founders of the Sikh religion had found their last resting place. After having thus given away twenty-five lakhs of rupees in alms, Ranjit Singh desired to crown his beneficence by bestowing the priceless diamond Koh-i-Nur as a gift upon the temple of Ram Das, but his heir apparent absolutely refused to permit such prodigality. The condition of the Maharaja now became even worse, his mind began to wander, his fainting fits became more frequent, his breathing more difficult, and he sometimes closed his eyes and sometimes wept bitterly.

When the heir-apparent saw that the last moment had arrived, he spread out a carpet of Indian khinkhab (or goldcloth) and of Chinese brocades with ten lakhs of rupees of alms, and made other arrangements necessary for the impending death-scene. Resting upon this carpet the Maharaja expired, whereas the whole of the Pañjab went into mourning, and lamentations resounded in the palace. Some persons wept aloud, some silently, others struck their breasts, and Dhyān Singh, the wazir of the deceased Maharaja,

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18 Distortion of the mouth and convulsions.

19 The two places are Gurdwārā-Nankshand Nānakā-Dehā.
desired to be immolated on the funeral pyre with the body of his master, but was dissuaded by the other courtiers. The ladies Harvi and Rājī,18 with other handmaids of Ranjit Singh also prepared for the last journey, and expressed willingness to be immolated. The successor caused immediately a golden bier to be prepared in the form of a litter upon which the corpse was placed amidst wailings, and carried from the fort by the army and the population, to which last the nobles distributed money. When the funeral procession reached the burning ground, the corpse having been placed upon a pyre of sandalwood, the faithful Rānis were allowed to stand beside it, and the heir-apparent approaching, set fire to it with his own hands. When the flames shot upwards to the sky, a general shout of lamentation shook the earth, and shortly afterwards an abundant shower of rain fell, whereon the ashes were collected, the remaining ceremonies performed, and all was over. Thus Ranjit Singh died in St. 1896 [A.D. 1839] after a reign of forty years. His burnt bones were by order of the heir-apparent conveyed to the banks of the Ganges, and he ordered a grand mausoleum to be built over them, but did not live to see it completed. The Mahārājā Shēr Singh endeavoured to do so, but it was not finished when he died, and disturbances having arisen in the Pañjāb, the building was altogether neglected. The British Government, however, annexed the country and finished the edifice, which then remained in good condition during a number of years. At last, however, the eight columns which had to support a heavy cupola, began to give way and to break, whereon the author of this work added, by order of the Government, eight columns more, making the total number sixteen, and strengthened them with iron-hoops, so as to insure their stability for a long time to come.

After the demise of Ranjit Singh, his successor Khaḍar Singh ascended the throne and assumed the reins of government as soon as his season of mourning had expired. Dhīyān Singh, who had been wazīr during the previous government remained in his former position, but was after a short time neglected in favour of Chait Singh, an ambitious and intriguing

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sardār whom the new Mahārājā henceforth consulted on all occasions, although he possessed no experience in the administration. The amirs of the darbār were so displeased with Khaḍar Singh's choice that they waited upon his son Nau Nihāl Singh, who was according to our text a very intelligent and sweet-spoken young prince, and represented the matter to him. Accordingly he went to his father and informed him, but Khaḍar Singh who was a good-natured man and void of all ambition to govern, paid not the least attention to the warnings of his son, who thereon took his place on the throne with the approbation of the darbār, and as Chait Singh, his father's wazīr, still desired to monopolise authority, he slew him with his own hands. The murder of his wazīr greatly affected Khaḍar Singh who had already given up the administration and now altogether retired, but when he heard that Nau Nihāl Singh had been formally installed by the darbār on the throne, he fell sick and shortly afterwards died. His funeral was solemnized with great pomp. Alms were largely distributed, the corpse was borne to the river-bank on the shoulders of Nau Nihāl and some amirs, and on its being committed to the flames, two Rānis, widows of Khaḍar Singh, were likewise burnt on the pyre, with nine of his handmaids.

After the cremation Nau Nihāl Singh performed his ablutions in the river, and afterwards returned with the crowd of amirs to the fort, but on entering the first gate, a stone detaching itself from the top of it fell on his head, and suddenly extinguished the lamp of his life. Now the wazīr who is, by the author, stated to have been both a politician and a warrior, desired to place the prince Shēr Singh upon the throne, but was opposed by the Rāni Chand Kanwar the mother of Nau Nihāl Singh, who being supported by the Sardāra Ajī Singh, 'Atar Singh, and Lahnā Singh, all of whom were of the family of Sindhiwāla, assumed the reins of government. After the lady had been placed upon the throne, the wazīr abstained from appearing in the darbār, and, departing from Lāhōr, retired to Jamnābāh, his ancestral home. In his absence the Rāni enjoyed her power a few
months undisputed, but the military party was
dissatisfied, and believed that a woman could
do not possess the valour, the knowledge, and the
tact required for governing, although a solitary
element in which these qualities are united, is
existing in the world, in Queen Victoria, who
is, however, guided by the wise counsels of her
ministry! Shér Singh, having accordingly
been invited to assume the reins of Govern-
ment, marched with his forces from Vatálá,
but on arriving at the gates of Láhóër, found
them closed. He then occupied the town and
laid siege to the garrison, which he attacked
and compelled to surrender three days after-
wards, chiefly through the instrumentality of
the Mahárájá Gúlab Singh, who had returned
just in time from Jammun, and brought the
negotiations to a satisfactory issue.

42. When Shér Singh attained the supreme
power, the opposing Sindhánwáliá faction
was dismayed, and its chiefs forthwith sought
refuge in the British territory. Meanwhile the
new sovereign was endeavouring by the aid of
his faithful wasir Dhyán Singh, to restore
security, to regulate the administration, and to
promote the welfare of his subjects, and trying
also, by dispensing justice and by a liberal dis-
tribution of presents, to gain their affections.
After two years had elapsed in this manner a
serious estrangement arose between Shér Singh
and his wasir, the breach being widened by
malevolent persons who suggested new causes
for disagreement to both. The chief cause
appears to have been the anxiety of the Mahá-
rájá for reconciliation with the Sindhánwáliás
which the wasir disapproved of, and as
will appear further on, rightly so, because it
cost both of them their lives. Nevertheless
the Mahárájá invited many of the said faction
to return to the Párrjáb, appointed them to
high stations, bestowed upon them jágrás, and
sought to please them in every way. Out-
wardly they were thankful and friendly, but
that all this loyalty was feigned, appeared
plainly when the Sardár Ajít Singh, Sindhán-
wáliá, took aim at Shér Singh as he sat in
darbár, at Sháhddán near Láhóër, and shot him
dead. On the same occasion also Káñwar
Partáb Singh, the little son of the Mahárájá

Shér Singh, was slain in a dastardly manner
by the Sardár Lahńá Singh, Sindhánwáliá.
The turbulent faction then marched into
Láhóër, and Rájá Dhyán Singh the wasir, was
slain in the fort by the abovemented Ajít Singh,
who fired at him, whilst defending himself
on horsepower against the invading crowd.
When the conspirators had gained supremacy,
they indulged for several days in revelling, and
the population, dreading worse consequences,
trembled with fear. The Rájá Hirá Singh,
who was at that time with the army, and had
heard what had taken place, appealed to the
Khálaí—troops to aid him to avenge the
murder of his father Dhyán Singh, as well as that
of the Mahárájá Shér Singh, and to place upon
the throne Dalip Singh, a son of the Mahárájá
Ranjít Singh. This appeal having been eagerly
responded to, the troops marched to the fort
and opened a cannonade upon it which lasted
the whole day, and the enemies having no
ammunition began to evacuate the fort during
the night, but it was surrounded by the troops,
who succeeded in capturing, among others,
three of the chief miscreants, namely, Ajít
Singh, who had killed the Mahárájá, Lahńá
Singh who had murdered the son of the latter,
and Misr Ghasíl, a close ally of the Sindhán-
wáliá Sardárs. These three men were at
once executed, their bodies dragged by ropes
through the bázárs and streets of the city, and
then left to be devoured by beasts and birds.

43. When the Rájá Hirá Singh had wreaked
vengeance upon his foes, by making free use
of the sword, the prince Dalip Singh was
placed upon the throne. Hirá Singh went to the
darbár, and was considered worthy to remain
wasir, but his counsellor the Panídt Jallá, an
honest intelligent Bráhman and a good admin-
istrator, made use of severity in the execution of
his duties, in which he pressed so hard upon the
amírs by extorting money from them,
that he exasperated them. Moreover Jawáhir
Singh, one of their number, who relied upon
his position as maternal uncle of the Mahárájá
Dalip Singh, and was the first to rebel against
the haughty counsellor, was thrown into prison
by the wasir. Incensed at the presumption of his
thus summarily dealing with her brother, the

86 Literally meaning "pure, select," because those
troops consisted only of Sikhs. The word is of Arabic
origin but is used in all the Muhammadan languages.

87 [If the above abstract correctly represents the text
this is a new version of these well-known events.—Ed.]
Mahârâni Chandâ, unknown to the dominant faction, despatched a message with great secrecy to the Râjâ Suchêt Singh, brother of the late Dhyân Singh, informing him that the whole government had fallen into disorder, that as the sovereign was a child and his vazir young, Jallâ had usurped the supreme power and extorted untold sums of money, and that therefore she invited the Râjâ to introduce order into the administration by once more accepting the post of plenipotentiary vazir, and becoming the lieutenant of the Mahârájâ. Suchêt Singh immediately started with his troops from Jammūn in compliance with the invitation, and hastily advanced towards Lâhîr till he reached the banks of the Râvi, where he left his troops and crossed the river with an escort of only a hundred men, marching till he reached the tomb of Shêkh Kallâna at a distance of three miles from Lâhîr, where he encamped, and hoped his nephew Hirâ Singh together with Pandit Jallâ would meet and welcome him. His expectations, however, proved futile, because Hirâ Singh, now fully aware for what purpose his uncle had so quickly arrived from Jammûn, was determined to repel him, and, on being informed of his approach, forthwith harangued the Sikh Khalsâ troops, promising a gold batki to every man who would follow him to attack his uncle. Suchêt Singh had been encamped only one day when the Khalsâ troops arrived, surrounded the tomb, and at once not only destroyed it and the adjoining buildings and their tenants the faqirs with their artillery, but exterminated to a man the whole escort of Suchêt Singh, as well as himself.

After this action Hirâ Singh manifested grief for the loss of his uncle, but afterwards honestly paid the golden batki he had promised to each soldier, although the sum was so large that the government treasury suffered very considerably. When a month had elapsed after this affair, one of the Sindhindwâlaâ chiefs and malcontents, 'Aatar Singh by name, who had not been slain with the others—when the Khalsâ troops avenged upon them the murder of Shêr Singh, and placed Dalip Singh on the throne,—but had escaped to the British territory, being determined to wrest from Râjâ Hirâ Singh the power he enjoyed, and to take vengeance, had recourse for this purpose to Hirâ Singh faqir who dwelt on the Satîuj, and enjoyed great reputation for sanctity as a gurî, as well as considerable influence with the army; and induced him to address it, in order to obtain its aid to overthrow the government of the Râjâ. When Hirâ Singh was informed of these machinations, he summoned a pâneh (pânehayaâl) of petty officers commanding a company of soldiers, to his presence—because they were able to influence the privates much more than the higher officers could, whom they also greatly exceeded in numbers—distributed money among them, and thereby so alienated them from the gurî, that they attacked his domicile with musketry. He was killed by a stray bullet and 'Aatar Singh was also routed with his adherents. Some months afterwards, the uncle of the Mahârájâ, Jawâhîr Singh, whose imprisonment does not appear to have been very strict, found opportunity to bribe a number of the officers of the army, by promising to each of them a necklace of jewellery, and holding forth to each trooper the reward of a nâm to win them over to his cause. He succeeded so well that the officers despatched a memorandum to Hirâ Singh, promising to remain loyal to him if he agreed to deprive his counsellor Jallâ of power, who had by his tyranny incurred universal reprobation, but threatening him with death in the contrary case. When Hirâ Singh became aware of his danger, he swore that he would never betray his friend, and would remain faithful to him even at the risk of his own life, but when he perceived that it was actually in peril, he mounted an elephant, and fled from Lâhîr with a few trusty followers intending to take refuge in Jammûn. The news of his flight spread quickly, and he had just reached the Râvi when he was overtaken by thousands of Sikhs, who at once attacked him; whereon he alighted from his elephant, and defending himself with his handful of trusty mountaineers, fell sword in hand. On the same occasion also Jallâ was slain with Sôhan, the young son of the Mahârájâ Gulâb Singh of Jammûn, whereon the Sikhs returned victorious to Lâhîr.

44. Jawâhîr Singh, the maternal uncle of Dalip Singh, now assumed the reins of

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82 Shêkh Iimâl, known as Miân Kallâna.
83 Name of a gold coin five rupees in value.
government, and faithfully kept his promise of presenting the Sikh troops with golden necklaces, but after one lakh of them had been distributed the treasury was empty; whereas the troopers plundered all the government property they could get hold of. Jawahir Singh then despatched a force to invade Jammu, but only one encounter took place, in which the Sikh Sardar Fateh Singh lost his life. Then Gulab Singh held out bribes to the troops and marched with them to Lahore, where he fulfilled his promise. The prince Peshaura Singh, a son of the Maharajah Ranjit Singh, who likewise entertained the ambition of becoming master of the Punjab, marched with his adherents to Atak, and took possession of the fort; whereas Jawahir Singh despatched troops in command of Chhatar Singh Atariwalla with other forces from Deria Islam'ul Khani, and they besieged the prince, who then represented to them, that being a son of Ranjit Singh equally with Dalip Singh, he ought not to be treated as a rebel, but should be received into favour after promising to be loyal to the existing government. After this declaration had been communicated to Jawahir Singh, he learnt that the troops sent against the pretender were favourable to his claims, and accordingly devised the stratagem of presenting him with a jagir of a lakh of rupees, on condition of his surrendering the fort. The prince Peshaura Singh then opened the gates, and Jawahir Singh having been apprized that he had fallen into the trap, at once indited a letter to his faithful partizan Fateh Khan, who commanded a portion of the forces, to slay the prince, for fear he might again lay claim to the throne. This order no sooner arrived than it was executed, and Fateh Khan, besides obtaining a large sum of money, was rewarded also by being appointed governor of the Hazara district. When it became generally known that the prince had been killed at the instigation of Jawahir Singh, not only his adherents, but the whole army manifested such exasperation, that the mother of the Maharajah Dalip Singh was frightened, and made efforts to propitiate it, but in vain. The general reply was that he who had encompassed the murder of Ranjit Singh's son had thereby forfeited his own life, and Jawahir Singh was summoned to present himself before the troops to offer excuses, if he had any to make. The amirs of the court trembled with fear, and arrived themselves, after consultation, at the conclusion that they would confront the danger with Jawahir Singh, the Maharanis, and the Maharajah Dalip Singh, which last was to plead for the life of his uncle, uniting his request to the prayer of his mother. When the exalted party arrived in the camp, and the troops perceived Dalip Singh, they unanimously saluted him, took him down from the elephant, but forthwith cut to pieces Jawahir Singh who had remained in the hauz, On beholding this scene, Dalip Singh wept bitterly, and the Maharanis broke out in loud wailings, but took charge of her brother's corpse, which was conveyed to the fort, and afterwards received the honours of a funeral. The army now became so demoralized that no one any longer kept authority, and much disorder ensued. The paich of petty officers, apprehending no coercion, began to plunder in all directions, maltreating the rich and frightening the poor. No trace of subordination and discipline remained, and every common soldier fancied himself an officer, and obeyed only his own inclination. This state of affairs having become unbearable to the nobles of the court, they were most anxious to put an end to it at any price, and at last arrived at the conclusion that the only way to rid themselves of the excesses of the army would be to goad it on to wage war against the English, who would be sure to vanquish it, though there was no other power in existence strong enough to do so. Accordingly the ringleaders of the army were requested to come to the palace, and when the crowd of disorderly paiches arrived, the Rajah Lal Singh harangued them, praised them as lion-hearted valiant Khalsas—the epithet most flattering to them—and told them that the English had taken possession of the gaska of Muran on the banks of the Satluj, and would, unless checked, be sure to encroach upon this side likewise. It was therefore their duty boldly to wage war against the English, and afterwards it would be their pleasure to enjoy supreme power over the country, there being no forces in existence able to cope with the Sikhs. The vanity and ambition of the troops having thus been brought into play, and raised to the highest pitch, the proposal was accepted with acclama-
tion; the general impression being that the English, who were only Franks and could not prevail against the Khâlsâs, would be conquered, unmercifully destroyed, and thus deprived of Hindustân.

45. After having made some preparations for a campaign the turbulent army marched to the Satluj, whilst all the Pûrbiâs and white soldiers advanced towards them from the other side, led by their Commander-in-Chief and by the Governor-General himself, who sent first a memorandum to the Sikh army to the effect that the British Government had always been on friendly terms with Ranjit Singh, and that there being no occasion for hostilities, the troops ought to return to their homes. This advice remaining unheeded the contest began, and the first action took place at Mûdkî, in which 30,000 Sikhs took part with 32 pieces of artillery, the Commander-in-Chief being Lal Singh, who was outwardly a friend to the Sikhs, but inwardly their worst enemy. The Sikhs who made the attack fought valiantly and caused rivers of blood to flow. The English advanced and the noble (political) agent Broadfoot was with them till the evening, when he was slain on the battle-field, which event emboldened the Sikhs. Nevertheless Lal Singh began to retreat, and the Sikhs perceiving this, followed his example, whereas the English were not slow in pursuing them, taking also possession of their artillery. The next action took place at Firûzpûr* where ten regiments and the full paltans of the Sikhs fought, and having also 100 pieces of artillery at their disposal, they boldly advanced to open the battle. The English had two noble officers, one Hardinge, the valiant amîr and Governor who was a lion of war, and the Commander Gough celebrated for his courage. They ordered the troops to make a simultaneous onslaught, one side of the plain being occupied by the white soldiers who rained cannon balls upon the Sikhs, whilst from the other Hindustâní troops attacked them. When the fight was at its hottest, and the ground had become a tulip-field of blood, Râjâ Tûj Singh, the commander of the Sikhs, found it unsuitable to hold his ground any longer, and retreated; whereas the whole Sikh army fled, and on this occasion the treasure with all the ammunition and 72 pieces of artillery fell into the hands of the English.

(To be continued.)

MISCELLANEA.

CURiosITIES OF INDIAN LITERATURE.

Some Quaint Blessings.

The following blessings were collected by me in Mithilâ. They are much admired by the Paîdits:—

II.

विष्णुपत्री महाभिसंगीति
कुमारात: बाणिखंडभारी |
तुकुर्मम्मुखिंतपापप्रप: |
पावानानारि: परगन्धी न: II

This is capable of either of two interpretations as follows:—

‘May the Supreme Lord without beginning (Siva)—who is mounted (गो) on the lord of cows, (i.e. a bull), who is the destroyer of the pains of the Daughter of the Mountain (Pârvati), who is the father of Kumâra, who bears the crescent of the moon and the lotuses of whose feet were worshipped by the Lord of Lanka (Râvana),—protect you.’

The other interpretation is obtained by cutting off the first syllable of all the above epithets as follows:—

‘May the Supreme Lord without beginning (or found by omitting the beginning of the above epithets) (Krishna),—who is mounted on the lord of birds (गो + ह्रो i.e. a peacock), the destroyer of the pains of the elephant (गोभिर), the father of Mârâ (मारात), who is decorated with a peacock’s tail (कंठाण्डारि), and the lotuses of whose feet are worshipped by Késa,—protect you.

III.

विष्णुभार नवरत्रेंश्राम समुचकसरम।
पूर्वो तथ दशहृदों परंपरे तव वेदनात् II

‘May the first half (मृत्यु i.e. death) of the four syllabled name (मृत्युप्रयतन) of the enemy of Pradyumna, be in the house of thy enemies, and the second half (धर्म i.e. victory) in thine.

Here बि = a bird. बिन = Garuda. विष्णु = Pradyumna.

* [Really at Fêrûshâr or Ferozeshah, eight miles from Firûzpûr on the Lôdîkâl Road.—Ed.]
ALTHOUGH the latest in that long series of numismatic relics, which form our main documents for the history of the Greek and Scythic rulers of Bactria and India, the coins of the Turushka kings, are perhaps the most important for the student of Aryan antiquities. Their extremely varied reverses exhibit in well-executed designs and clearly legible characters the figures and names of numerous deities, many among which, as already recognized by the first observers, bear an unmistakably Zoroastrian character. These representations are, in fact, almost our only contemporary documents for that most obscure period in the history of Zoroastrian worship which intervened between the fall of the Ancient Persian Empire and the Sassanian revival. The identification of the types represented must therefore be considered a task of the first importance for the student of the Iranian Religion. On the other hand, Historical Grammar can attach scarcely less importance to the elucidation of the legends, considering that they are clearly written phonetic specimens of the language, which can be dated, with something like chronological exactness, since the late Mr. Fergusson's ingenious discovery has revealed the identity of the Saka era (starting from A.D. 78) with the era employed by the Turushka kings of our coins in their Indian inscriptions.

The philological enquiry into the types and legends of the Indo-Scythic coinage has made but comparatively slow progress since the days of Prinsep and Lassen; but perhaps it may now be resumed with some chance of success, since Dr. von Sallet's exhaustive monograph, based on true historical criticism, and more recently Prof. Percy Gardner's excellent catalogue of the rich collection under his care, have placed us in full possession of the numismatic facts. At the same time, the great advance made in our knowledge of Zoroastrianism, through the more extensive study of its sacred literature, enables us to utilize, with a clearer view of the issue, the fresh evidence of the coins. We shall attempt here to collect, in a condensed form the information which that remarkable coinage affords on the state of Iranian religion and speech in the centuries preceding the Sassanian epoch.

For the historical facts connected with the rule of the Yueh-chi or Kushans in India we can refer our readers on the present occasion to the above-named publications of von Sallet and Prof. Gardner, and to the excellent account contained in the late Prof. von Gutschmid's article on Persia in the 9th Ed. of the Encyclopaedia Britannica. They afford, however, but little material for the solution of the question that mainly interests the Iranian scholar—viz., how and where these tribes of evidently non-Aryan descent became so deeply penetrated with Zoroastrian influences. But from Chinese annals we are able to fix the date of the invasion, which brought the Yueh-chi under King Kadphises south of the Hindu-Kosh, at about B.C. 55, and a century later we meet with distinct traces of Zoroastrianism among them. King Kanishka (on the coins KANHPKI), whom Buddhists in their traditions claim as the great patron of their church, and with whom the Saka era originated (A.D. 78), is the first known to employ Iranian types and "Scythic" legends on his reverses. His successor was OOHPKI (Huvishka), whose inscriptions range from the year 33 to 51 of the Saka era (A.D. 111-129); and his very numerous coinage, from which Greek legends have now definitely disappeared, adds some new types of Iranian deities to the already large pantheon of Kanishka. The issues of Huvishka are the last of the Indo-Scythic coinage with which we are concerned on the present occasion, as the much inferior coins of a later king, who bears the name of BAZOΔΗΟ (Vasudēva in the inscriptions), are restricted in their types to the more or less barbarous representations of a few non-Zoroastrian deities.

In the Plate which accompanies our remarks

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1 Adapted with additions from the Oriental and Babylonian Record, August, 1887.
on the various types are represented well-preserved specimens of Indo-Scythian coins in the British Museum, for the casts of which we are indebted to the kindness of Prof. Gardner. This obviates the necessity of noticing in detail the characteristic designs of the types and the not less peculiar writing of the legends. The highly original treatment which the Greek characters have received at the hands of the Indo-Scythian die-cutters deserve special investigation from epigraphists; but for our present object it may suffice to call attention to the general clearness and fluency which distinguishes very favourably this apparently barbarous writing on the gold coins of Kanishtha and Huvishka from the cramped and ill-shaped legends of their Scythic predecessors.

In the large assembly of Zoroastrian deities, which the coins of their Scythic worshippers bring before us, Mithra, the God of Heavenly Light, may well claim precedence, from the important position he occupies in Avestic mythology as well as in Eastern cult generally.

The Iranian Mithra has been long ago recognized in the very characteristic type of the Sun-god, that on the rare Greek coins of Kanishtha bears the name of HAIIOC. Not less varied than the representations of the god himself are the forms in which his Iranian name appears. MIPO and MIPO (figs. i. and ii.) are the most frequent readings, and represent but slightly varied pronunciations of the same form Mihr, which the Avestic name must have assumed at a comparatively early date through the regular phonetic change of th into h. Mipo corresponds to the Indianized form mihira (mihir), with the well-known interposition of a secondary vowel before r; MIPO represents mihir, and gives us a clear instance of the phonetic rendering of h by O (as in OOHPKI=Huvishka), to which we shall have to refer in the further course of our enquiry. The closing O, which recurs at the end of almost all Iranian names of the coins, cannot as yet be accounted for with any certainty. The historical study of the Iranian language leads us to believe that the final vowel of Zend and Old Persian words was lost in their transition into the phonetic state of Middle Persian or Pahlavi; but as the latter is in its main characteristics reflected by the legends of the Indo-Scythian coinage, this closing O cannot well be considered a representative of the old thematic vowels. We may, however, look for some connexion between this O and the sign which is added to so many Pahlavi words with consonantal ending, and is generally transcribed by ā.

Besides the above forms, we meet with numerous variants of the same name, viz.—

MEIPO, MIYPO, MYIPO, on Kanishtha coins, and MIYPO, MYPO, MIPO, MIPO, MIYPO, MOPO, on those of Huvishka. Some of these forms may be viewed as individual attempts to give a phonetical equivalent for the difficult aspiration; others, like MIPO, MOPO are scarcely more than mere blunders of the die-cutters.—

From this list of forms the supposed MIPO has been justly eliminated by von Sallet, as this archaic form can nowhere be read with any clearness, and would, in fact, not well agree with the general phonetic character of the names represented.

It is of considerable interest to compare with the Scythic name of Mithra the various forms in which the name of the Iranian month Mihr appears in the list of Cappadocian months. This list has been preserved for us in a chronological table, which compares the calendars of different localities, found in numerous Greek MSS. of Ptolemy’s Canones. It has been carefully examined by Benfey,* and proved to contain the names of the months in the Zoroastrian calendar, as still in use in Cappadocia under the Roman rule. Now Iranian months are designated by the names of their respective tutelary deities, and as some of the latter are represented on the Scythic coinage, the Greek transcriptions of their names thereon (which are found, too, in a much later form in the lists of Persian months given by Isaacus Monachus and other Byzantine chroniclers) will give us much valuable help for the identification of the Scythic forms.

* See Prof. Gardner’s Cat. pp. 131, 134; and von Sallet, Nachfolgen, p. 197.
* See Uber die Monatenamen einiger alter Volker, Berlin, 1836, p. 76, sqq.—(I regret that I have not yet been able to commit an article by Prof. De Lagarde on this subject, in his Abhandlungen, to which Prof. Hoffmann of Kiel has kindly drawn my attention since my arrival in India.)
COINS OF THE TURUSHKA KINGS.
The MSS. of the Homerologium, in which are contained the Cappadocian names, are divided into two classes. One of these presents us with the forms Mmp, Mmp, Man, Mma, which all correspond with more or less accuracy to the original Mhdr, the MioPo, Miopo of our coins; the other gives the older form Mnp, which may have been taken from an earlier compilation. The later lists of Byzantine origin represent the Persian mhdr by Mhp or Mhp.

The representation of the god makes it sufficiently evident that the Avestic Mithra, already closely connected with the Sun, had by that time become completely identified with it. None, however, of those numerous symbols, proper to the Western Deo Invicto Soli Mithrae, are to be found on the types of Miopo.

The type of Miopo appears also in conjunction with the not less characteristic representation of his heavenly brother the Moon-god, Mao, on a coin of the British Museum. The types of the latter resemble in all important features that given in fig. iii., and agree well with the masculine conception of the Avestic Moon-god, called māo (=Skr. mās) or (with thematic stem), māsha. His name becomes Māh in Pahlavi and modern Persian, and this is the form which is represented by Mao of the coins: but whether the o corresponds to h as in Miopo, or is merely the closing o discussed above, cannot be decided. On two coins of the British Museum we find the fuller transcription Maoa, which probably must be read māhā, and on a Greek coin of Kanishka10 the usual male figure of the moon deity is accompanied by the legend Салнн.

We may here conveniently notice a comparatively rare type of Kanishka (fig. iv.), representing a bearded god with a treading horse beside him, as, on account of the legend, we have to identify this deity with another, but less known, inhabitant of the ethereal regions in Avestic mythology. Although the former reading Ἀρώοαςθνα had to be abandoned in favour of Αρώοαςθνα on the evidence of the well-preserved specimens examined by von Sallet and Prof. Gardner12, the substantial identity of the word with Zend Auruvašspa, first proposed by Windischmann, can scarcely be doubted. The Avestic word, which literally means "swift-horsed," is the common epithet of both the sun (hevaekshad) and the god Apām-napāt, "the Son of the Waters," whose original character as an old Aryan personification of the Fire, born in the clouds, i.e., the Lightning,13 can still be traced in Avestic passages. But having already observed that the Sun-god became merged with Mithra into the single type of Miopo, we may safely conclude that the Αρώοαςθνα of Kanishka is "the High Lord Apām-napāt, the swift-horsed" of the Avesta. The puzzling initial o of the Scythic legend may be explained with Prof. Hoffmann18 as the first trace of the phonetic process, by which Auruvašspa, the name of King Vishtūt's father, was turned into Lōhārōsp, Lōhārōsp, in Pahlavi and Persian. This process, itself, however, is by no means clear, especially as we find the phonetically correct representative of the Zend auruvašspa still preserved in the name Arvandāsp which is mentioned in some genealogical lists as that of King Vishtūt's grandfather. If Αρώοαςθνα is to be considered as the link between the Zend form and the modern Lōhārōsp, it must probably be read *Lōhāsp, the second o representing the sound h, to which ṭ was reduced in due course by its position between two vowels.

The type of the Iranian Wind-god (running bearded figure with loose hair and floating garment) is very frequent on the bronze coins of Kanishka (fig. v.),14 and is, artistically, perhaps the most original conception of the whole series. In his highly characteristic figure and the legend ΟΑΔΟ it was not easy to mistake Vāta the "strong Mazda-created Wind" of the Avesta. The form ΟΑΔΟ is of great interest to the grammarian, as it proves most conclusively that the change of intervocal ṭ into d,15 which is ignored in the artificial spelling of Pahlavi (sād), was an accomplished fact as early as the first century of our era.

11 Comp. the Apām-napāt of Vedic Mythology.
13 See Cat. p. 135.
14 See Cat. p. 135.
15 See Cat. p. 135.
The flames rising from the shoulders of the god, whose most common type is given in fig. vi., would clearly proclaim him a personification of the Fire, so important for the Zoroastrian cult, even if the legend were open to any doubt. ΑΘΡΟ, with the variant ΑΘΡΟ ΡΟ on a gold coin of Huvishka,\(^{16}\) which represents the god in the very characteristic type of Άρης with hammer and tongs, is directly derived from the Zend ārā, the weak form of stem ārār “fire,” and is, therefore, substantially identical with the Pahlavi ātār\(^{17}\) and the Persian adhar “fire.”

The latter form has survived side by side with the more common ātā (a descendant of the ancient nominative ātār), chiefly as the name of the 9th Zoroastrian month, which is transcribed by Issacaeus Monachus and other Byzantine chronicologists as āīp. In the Cappadocian list of months, again, we find there is the older form āēp, which is, in fact, a close approach to ΑΘΡΟ of our coins. Ātār, “the son of Ormazd, the most great and beneficent Deity,” is, in accordance with the all-important part which the sacred fire plays in the Zoroastrian cult, frequently addressed in the hymns and prayers of the Avestic ritual; and there is, besides, a special supplication (Nydish V.) devoted to him. The tongs, with which ΑΘΡΟ is always represented, are mentioned among other instruments, required for the proper care of Ormazd’s fire in a passage of the Vendīdīdā (xiv. 7).

In a god of apparently similar character (fig. vii.), who on the gold coins, especially of Huvishka,\(^{18}\) is frequently represented as holding fire in his hand, Prof. Hoffmann has very properly recognized a representation of “the mighty kingly glory,” the kāzān garenō of the Avesta. This deity’s name reads ΦΑΡΟ or ΦΑΡΟ and corresponds to the Persian farr, both forms being derived from farnā, which is the phonetic equivalent of the Zend garenō in the Ancient Persian of the Achaemenian inscriptions. The Zend viṃda-gaṃna, “winning glory,” thus becomes, as a proper noun, ViṃDa-farīna, “brahmanī” in Old Persian, and ΥΝΔΟΦΕΡΗΣ on the coins of an Indo-Parthian ruler. Similarly, the Pharmaco-

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\(^{16}\) See Cat. p. 123, and Pl. xxvii. 8.
\(^{17}\) Comp. μένα for *μέναρχος.
\(^{18}\) Comp. Cat. pp. 150-153.
coupled in all formulas and invocations of the Avesta with that of Verethraghna. We prefer this explanation all the more to the hitherto accepted theory, which identified OANINΔA with the star Vanaθ (a male deity!), as it disposes effectually of the two difficulties involved by the latter. Both the female representation of OANINΔA and the vōta of the name are now easily accounted for; the former by the feminine gender of vanaθi (vaparātī) and the latter by the well-known phonetic influence of epenthetic ɨ.

The type shown in fig. x. presents us with unusual difficulties. It is found only on a unique gold coin of Huvishka, now in the British Museum, and is accompanied by a legend, which has sorely puzzled numismatists by its curiously contracted characters. The late Mr. Thomas identified the figure with an archaic representation of Artemis, but the supposed resemblance to the type of a gold coin of Augustus has been disputed by von Sallet. The bow and arrow in the hand of the deity are, however, unmistakable and may give us, perhaps, some clue to its true character. Scanning the ranks of Zoroastrian deities, we cannot help being reminded of Tishtrya, the star Sīrīus, whose later name, Tir, in Paḥlavī and Persian actually means “arrow.” That the word in this second meaning is etymologically derived from the Zend tīhhr, is on the one hand certain; on the other, there are very great grammatical objections against a direct derivation of Tir, “Sīrīus,” from the Avestic word Tishtrya. We are thus led to suspect a replacement of the genuine derivative of tīhhr by the more common word for “arrow,” which, in popular conception, was evidently an attribute of the star. In a passage of the Tir-Yasht (viii. 37) we find the swift flight of the star Tishtrya directly compared with that of an arrow.

The legend of our coin, to which we must now turn, has been read ZEPO by Mr. Thomas, and, with greater accuracy, MEPO by Herr von Sallet. As, however, the latter’s reading supposes a ligature between M and the following EI, which is unpardoned on Scythic coins, we shall scarcely be blamed for not surrendering at once on this particular point even to so great an authority. Taking the combined characters EI, which are indeed perfectly clear, for granted, and viewing the preceding strokes as a single independent character, we have no difficulty in recognizing the letter T. Its rounded shape is in perfect keeping with the general character of Scythic epigraphy, and the explanation of its having so long escaped discovery is contained in the fact that T is exactly one of those few letters which by chance have not yet occurred on the Turushka coinage.

In order to obtain the link which is wanted in the chain of evidence for the identification of the god, whose name we now read TEPO, we must once more to recur to the list of Cappadocian months. There we find the name of Tir, the fourth Zoroastrian month, rendered in the two best MSS. of the second class by Tēpēi, a form to which the variants of the other two MSS. Tēp and Tēd (for *TEIP) may easily be reconciled. Whatever explanation we shall have to give in future of Tēpēi or Tēpē, the reading of the first class of MSS. and probably a much older form, it will not affect the conclusive evidence we derive from Tēpēi for the substantial identity of TEPO with Tir. It will be an object for future research to determine the exact phonetic stage in the transition from tīhhr to Tir, which has been recorded by the curiously identical spelling of the Cappadocian and Scythic forms.

In view of the philological evidence given above for the identity of TEPO with the later name of Tishtrya, we need not attach much importance to the difficulty presented by the apparently female character of the type. The latter is evidently a mere reproduction of the Greek Artemis, which was a type ready at hand for an Indo-Scythian die-cutter wishing to exhibit in his type the characteristic emblems of the Deity, bow and arrow.

If the god who appears in figs. xi, xii., and in similar types on the gold coins of Huvishka has hitherto completely escaped recognition, it was certainly not owing to want of clearness in the legend or of dis-
tinctive character in the type. The latter presents us in all its variations with the well-modelled figure of a warrior in full Greek armour, with helmet, spear, and shield; which last, on a single specimen in the British Museum, is replaced by a weapon resembling a hook. The legend reads on all well preserved specimens with uncommon clearness PAOPHOPO (see fig. xi), with the exception of Huvishka 106 (fig. xii), where we find the variant PAOPAOP. No attempt has yet been made to interpret this remarkable name either with the help of Iranian or Indian philology; but the application of a phonetic law, long ago recognized in other instances, will enable us to identify PAOPHOPO with the well-known name of a Zoroastrian deity.

In our opening remarks we had already occasion to mention KANHPKI and OOHPKI as the Scythic equivalents on the coins for the names Kanishka and Huvishka of the inscriptions and later texts. A comparison between these double sets of forms shows at a glance that Scythic Π represents necessarily the same letter as the sh of the Indian forms. That this Scythic sound, which in the Greek writing of the Scythic coins was rendered by Π, really bore the phonetic character of sh, can be conclusively proved in the case of a third doublet, KOPANO = Kushan, which was first identified by General Sir Alexander Cunningham as the name of the ruling Indo-Scythian tribe. KOPANO, on the obverses of the Turushka coins, follows immediately upon the name of the king, and corresponds in this position to XOPAN of the legends of Kadaphos (one of Kanishka's Scythic predecessors), which in the Arian-Pali of the reverses is actually translated by Kushanada. That the latter form represents the genuine native pronunciation of the name cannot be doubted, since we have, as to the sh, the independent testimony of the Chinese transcript in the annals of the second Han Dynasty, which tell us that all the peoples under the Yneh-chi (Indo-Scythian) rule, when speaking of their sovereign, call him the King of the Kuei-shuang —i.e. Kushans.

If we suppose that the phonetic or graphic rule of Π representing sh, which is so evident in the case of the Scythian words KANHPKI, OOHPKI, KOPANO, applied as well to the corresponding sound sh in the Iranian elements of the legends, we shall have no further difficulty in identifying PAOPHOPO with the third amesha-spenta or archangel of the Zoroastrian creed, whose Avestic name, Khshathra-vairya, “perfect rule,” becomes by ordinary phonetic changes Shahhrvaar in Pahlavi and Persian. Of this latter form of the name PAOPHOPO is an exact transliteration. For the first O representing h we can adduce the evidence of MIOPO and perhaps LPOOACIO, and for the second O = va we have that of OPAANO and the still more convincing proof of the variant PAOPHOPA (see fig. xii), which actually presents us with the fuller spelling of the last syllable var.

Shahhrvaar appears already in the Avesta, what he is par excellence in later Zoroastrian tradition, the genius of metals; and the representation of PAOPHOPO, in full metal armour, with Greek helmet and shield, is therefore in signal agreement with the cosmologic character of the Zoroastrian deity.

The MSS. of the Heremelogium give the name of the 6th Cappadocian month (corresponding to the Parsi Shahhrvar) in various forms, Zawari (4 MSS.), Zawari, Jawari, Jawari, Jawari, etc., all of which show a much closer approach to the original Khshathra (Zawari, Jawari-vairya (wipe i.e., *Upiri, wipe), than Shahhrvaar = PAOPHOPO. Jawari is of peculiar interest as marking the transition from the Zend form, of which it still keeps the z and t, to Shahhrvar = PAOPHOPO. It may, however, be doubted whether the apparently more antique character of these Cappadocian forms is not merely due to learned archaicism, as in the case of the form shat(t)-varo, which is used in Pahlavi texts differently with the genuine shahrvar.

Late Greek transcripts of Shahhrvar are Σαχροπο of Isaeus Monachus and Sαχηροπο. PAOPHOPO, however, is not the only puzzle of the Indo-Scythic legends that finds its simple solution by the assumption that the character P may also represent the sound sh.

24 Pl. xxvii. 19.
25 For a wholly barbarous reproduction, see Br. Mus. Cat. Huvishka 104.
26 Comp. Cat. p. 123.
28 See above, p. 90.
29 See Hyde, op. cit. p. 191.
For although it is actually on the obverses of Kanishka and Huvishka that we meet with the most convincing examples of P-šā (KANHPKI = Kanishka, OOHPKI = Huvishka, KOPANO = Kushan), nobody seems to have yet thought of utilizing their evidence for the enigma in the rest of the legend!

The full legends on the obverses of the Turushka coins vary merely in the name of the king. They are found on the gold coins of Kanishka: PAONANO PAO KANHPKI KOPANO (fig. xiii.) and on those of his successor Huvishka: PAONANO PAO OOHPKI KOPANO (fig. xiv.)

The only variants of any importance occur in the spelling of KANHPKI (once with the ending KO) and OOHPKI (written sometimes OOHPKO, OOHPKE, OYOHPKI), and can easily be ascertained from the catalogue of Prof. Gardner. The bronze coins of Kanishka bear the short inscription PAO KANHPKI; but those of Huvishka bear a legend, which is materially identical with that of the gold coins, but, being written in a rather barbarous fashion, was formerly misread into PAONANO PAO OOHK KENORANO.34

The corresponding legend of the rare Greek coins of Kanishka BACILYŁC BACILYŁWN KANHPKOU leaves no doubt as to the meaning of PAONANO PAO. It has been considered an established fact since the days of Prinsep that Scythic PAO represents "King" and PAONANO the plural of the same word, but no satisfactory etymology of these forms has yet been offered. The proposed identification of PAO with the Indian rāja does not require a detailed refutation. We can neither suppose that the Scythians, so careful in their transcripts, should have persisted in ignoring the palatal j, nor that the quite modern Indian form rādī should have appeared at that date in the Pāli vernacular, in which the inscriptions of the very same Turushka kings still exhibit the full forms mahārāja rājādirāja.

As the simple PAO evidently expresses BACILYŁC (comp. the legend PAO KANHPKI of the bronze coins), we must look in PAONANO for a genitive plural, corresponding to BACILYŁWN of the Greek legend. However, not only does Indian grammar not account for the peculiar form of this case-ending, but also the construction of the phrase is distinctly un-Indian.35 The order of its elements (genitive plural + nom. sing.) is, on the contrary, exactly that observed in the Persian title shāhan-shāh (Old Persian khexāyathīyōndām khexāyathīya), of which BACILYŁ BACILYŁ is the regular representative in Greek.

PAO and PAONANO PAO, i.e. *šāh and *shāhanānōšāh, are, in fact, identical with the Iranian titles Shāh and Shāhan-shāh, which we can prove from other sources to have been the distinctive appellations of the Indo-Scythian rulers. Thus, in the Mathurā inscription36 of the (Śaka) year 87 Vāsudvēva, the BAZO-ΔΗΟ of our coins, is called Mahārāja Bājartirāja Shāhī. Again, in the daceputra shāhī shāhanashāhī ēka, mentioned in the Allāhābād inscription of Samudra Gupta, General Cunningham has long ago recognized a direct reference to the Turushka kings, called daceputra, "the sons of heaven," in their inscriptions. And, lastly, we find a late, but very distinct reminiscence of these Scythic titles in the Jain legend of Kālakāchārya,37 which calls the princes of the Śakas, the protectors of the saint, Śāhlī (Shāhī), and their sovereign Lord Sāhāṇāshāhī.

The form shāhī (Prākrit śāhī) still preserves in its final i a trace of the old ending ya (in khexāyathīya), which has disappeared in the modern Persian form shāh. The latter form is represented by our PAO, which, after the analogy of MAO = māh, we read shāh.

The Indian transcripts of the fuller title may furnish us with valuable help for the determination of the grammatical ending in PAONANO, which evidently forms a link between the ancient khexāyathīyōndām and the shāhan of the Persian title, and here we find the Prākrit sāhāṇāshāhī of the Jain legend even more interesting than the sāhāṇāshāhī of the newly discovered inscription at Mathurā, which is dated "in the 7th year of the Mahārāja Bājartirāja Shāhī Kanishka."

34 Comp. Cat. p. 112. 35 See Cat. p. 120. 36 Comp. Prof. Oldenberg's Note: ante, Vol. X. p. 215. 37 Published by General Sir A. Cunningham, Archaeological Survey of India, Reports, Vol. III. p. 35 and Plate xv. 18. Since the present paper has been sent to the press, M. Drouin has drawn attention (Académie, March 17, 1888) to what he calls "une délicate confirmation de la lecture sāhāṇānō sāhī," furnished by a
Sanskrit inscription. Prof. Jacob has already pointed out the striking analogy between the form sāhāmu and the first part of the compound devāṉuṣṇiṇiya, which is the Prākrit form in the Jain texts for the Pāli devānuṣṭhiṇiya (Sanskrit devānuṁṣṭhiṇo), “dear to the gods,” the well-known epithet of Aśoka. By this analogy, which proves the Prākrit-āṇu to be the representative of the older ending -ānāṁ of the genitive plural, when placed in the middle of a compound, we are carried back from sāhāmu to an older form, *sahāṁuṇāṁ. This form differs substantially from PAONANO only in the quantity of the second syllable, which in the Sceythic form must be read ha not hā, as for the latter we had to expect A (comp. MAACHI = Skr. mahanā). This variation, however, which was necessary in order to give to the Iranian word the grammatical appearance of an Indian genitive plural, is of special interest, as it gives a distinct hint as to the grammatical character of the ending in PAONANO. It is, in fact, the genuine Iranian ending of the genitive plural of thematic stems, -ānām in old Persian, but -anām in Zend, which we know to have been turned at a later stage of the language into the general plural termination -ān. As this form and use of the ending occurs already in the earliest Pahlavi documents, the inscriptions of Shāpūr I. (A.D. 240-276), we should feel some difficulty about explaining the preservation of a much older form of the case-ending in PAONANO, if we could not refer our readers to the similarly archaic forms, which the Cappadocian list of montes has preserved of Aban, the name of the 8th Zoroastrian month. The plural form ābān (Pahlavi āpān) designates the “waters,” to which this month is sacred, and must be derived from a thematic form of the genitive plural in Zend, *apānā. Benfey’s MS. II., from which we have already quoted Šaṇso(k) as the nearest approach to PAOPHOPO, gives us here, too, the best preserved form; ’Alpomomū represents undoubtedly *apānām māh.\(^{39}\)

As the same list contains the comparatively modern form Māpār, corresponding to MIIPO, it cannot date back to a much earlier stage of the language than that represented on our coins. We are therefore fully entitled to see in vēnu essentially the same ending as in NANO of our legend. In both cases, the preservation of the full ending was probably due to its being protected by the following word (PAO, māh, resp.), which formed, in fact, with the preceding genitive a compound of the class called juxtaposed by French grammarians. Most of the other MSS. read ’Alpomomū, ’Alpomomā, and similar forms, in which the transposition of v and m is easily accounted for by palaeographic reasons. Nor does the final NO of the ending [PA]ONANO, as compared with the m of the Zend ending -anān, offer any special difficulty, as various indications of Zend phonetics lead us to believe that the final m had in reality been merged into the nasal sound n, to which the m of our MSS. was added only for orthographic reasons.\(^{40}\) This sound n, the Indian ū or un, is fully represented by ANO.

After the fresh evidence we have given above for the representation of sh by P, we should still be unable to explain this remarkable fact if we could not supplement our philological arguments by an epigraphic observation. It refers to the fact (nowhere noticed in numismatic accounts, but easily ascertained from the coins themselves) that the character uniformly read P is actually found in two different forms on our coins. One is the ordinary Greek P, in its minuscule form, and may be seen e.g. in MIIPO, ΦAPPO (figs. ii. viii.); the other bear, a slight upward stroke, and, in this shape rather resembles an Anglo-Saxon þ. The latter form (which for brevity’s sake we shall designate þ) seems constantly to be used for the sh of the obverse, but appears also sometimes in legends like OPLAΓNO (fig. viii.) ΑΘPO (fig. vi.); where its value as r can scarcely be doubted, and where, therefore, the occurrence of b=sh could be explained only by the assumption of a partial confusion of two characters, so similar in their appearance.

A minute examination of a larger number

\(^{39}\) Comp. Prof. Darmesteter’s Études Iraniennes, I. 124.

\(^{40}\) Comp. ’Ašepma = ābān māh of Isaacus Monachus,
of coins will, perhaps, supply us with distinct evidence as to the origin of this remarkable character ὓ. I think I have found its prototype in the Greek ἵν or sampi. This ancient sibilant, which survived in the later Greek alphabet only as the ἀξίωμα for ἴν, was, in fact, the only Greek character available for the expression of the sound ἵ in the Indo-Scythian legends. ἵ, which we know from Herodotus (i. 132) to have been a letter peculiar to the Dorians, denoted in their dialect apparently a softer pronunciation of s, perhaps approaching that of sh. The very name ἵ, evidently derived from the Semitic šin, suggests for ἵ a phonetic value similar to sh (compare the correspondence between name and sound in ἀξίωμα = ἱν). Our identification of the Indo-Scythian sh with the character ἵ rests, however, in the main on clear paleographic evidence. The earliest form of ἵ is M, found in Dorian inscriptions (Thera, Melos, Corinth). Coins of Messenobia and an inscription of Halicarnassus present us with a later form of ἵ in the shape of T. As a numeral it appears in Greek papyri of Ptolemaic times in the form of T or m, from which the oldest minuscule form of sampi, ὓ, and the almost identical form of the Indo-Scythian sh can be derived with equal ease. The latter character may be seen with special clearness on the coins represented in figs. xv., xvi., xvii.

The Indo-Scythian coinage generally exhibits very cursive characters, which, in the absence of historical evidence (inscriptions of Kanishka and his successors date from A.D. 87-176), we should be inclined to assign to a much later period. The almost perfect identity of the Indo-Scythian sh with the early minuscule form of ἵ is, therefore, easily accounted for. In the Indo-Scythian legends we had always ample proof of the fact that Greek writing remained in current use in India long after the destruction of the Greek kingdoms, but the vitality of Greek writing in the far East was, perhaps, never brought more forcibly before us than by the observation that the obsolete ἵ was revived to denote the ō of the foreign conquerors. In future we shall have to read the names of the Indo-Scythian "Kings of Kings" as ἸΑΝΗΚΙ and ὍΟΗΚΙ and their royal title: ἸΑΝΑΝΟ ΠΑΟ ΚΟΠΑΝΟ.

Both the forms Π and ὜ are distinctly represented in the legend hitherto read ἸΑΝΑΧΙΠΟ, which accompanies a female type, holding cornucopias, frequent on the coins of Kanishka and Huvishka (figs. xv. and xvi.). And the first Π appears always in the ordinary Greek shape, the second always like ὜. We must, therefore, all the more regret that the real name of this evidently very popular goddess has not yet been ascertained. Her identification with Ashis-vahini, the Avestic goddess of Wealth and Fortune, is strongly recommended by the evidence of the type, which closely resembles that of the Greek Tyche; but we see as yet no way to reconcile her common name in later Zoroastrian tradition, Ashishvong or Ardishvong (both forms derived from Avestic ahsis vahini), with the form ἸΑΝΑΧΙΠΟ. Nor do the occasional variants of the coins, all of them with ὜ in the second place, afford any clue to this remarkable legend.

The same ὜ is twice met with in the legend ἈΠΕΙΧΙΠΟ, which we read on a rare type of Huvishka representing a male deity with radiating disk like MIPO. The name, when read with due regard to the peculiar character of the two Π, might well remind us of the second Zoroastrian archangel, the personification of the "holy order" and the genius of the sacrificial fire, whose Avestic name, Asha-vahishta, appears in the substantially identical forms Ashavahishto and Ardavahishto (Ardibahisht) in later Zoroastrian literature. The latter form of the name is represented in the Cappadocian list by *Aṣṭešrī = *Aṣṭeštīrī. We should, therefore, not hesitate to identify ἈΠΕΙΧΙΠΟ, i.e. *ashtehishlo, with ashtehishto of the Pahlavi, if any satisfactory daughter of Ahura, is nowhere met with in Zoroastrian literature.

42 See Athenaeus, xi. § 30.
43 Compare the latter Dr. I. Taylor's Alphabet, ii. page 95.
44 This and the preceding paragraph appeared as part of a letter to the Academy, Sept. 16, 1887.
45 First suggested by Prof. Hoffmann; his explanation of ἸΑΝΑΧΠΟ, however, is untenable, as the supposed original form of the name, Ashis ahurzhd, i.e. Aṣṭešrī, appears again as Aṣṭ in Pahlavi: comp. Pahl. aṣṭ for Zend aṣṭešrī.
47 See fig. xvi.; Cat. p. 136.
48 For Pahlavi rd-Zend šh see Note 45.
evidence could be found for the phonetic change of śīt into khāh, apparently involved by this explanation.

In the ranks of Zoroastrian deities the goddess **NANAK**, very frequent on the coins of all Turushka kings (see fig. xviii.), cannot fairly claim a place. Although her cult is found in various localities of Iran, as over a large part of Western Asia, there can be little doubt as to her non-Iranian origin. She was certainly never recognized by the Zoroastrian Church, and the few instances of her amalgamation with the Avestic Anāhitā, in the West and in a syncretistic age, are by no means sufficient to prove that her worship in Indo-Scythia was in any way connected with the Zoroastrian cult. It evidently preceded and outlasted the latter. Her name is found in the form of **NANAI** on the coins of an earlier king, who makes use of the type of Encratides, and it still occupies a prominent place on those of Vāsūdeva, from which all true Zoroastrian types have already disappeared.

We cannot enter here into a discussion of those few types, which cannot as yet be assigned to any of the various mythologies represented on our coins. The most puzzling amongst them is perhaps the four-armed figure with the legend **MUNAOBAO** (see fig. xix.), for which a satisfactory interpretation has still to be found. More Zoroastrian in appearance are the similarly obscure and rare types of Huvishka with the legends **ONIA**? (Nos. 6-70), **OΔIO** (90), **PIOM**? (169), and **UPON** (138, 139).

A comparatively large number of fresh types has been found during recent years on very scarce, sometimes even on unique specimens. We are, therefore, fully entitled to hope that further finds of Turushka coins, like that at Peshawar, may yet reveal to us some new representations of Zoroastrian deities.

The testimony of the types and legends examined above is, however, in itself sufficient to establish the important fact that Iranian language and traditions, as well as Zoroastrian religion, were introduced into India by its Indo-Scythian conquerors. The eloquent and most authentic evidence of the Turushka coinage thus furnishes a safe starting-point for all future inquiries into that fascinating epoch in the history of the Aryan nations which witnessed the interchange of the Buddhist and the Magian influences between India and Iran.

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**A NOTICE OF THE ZAFARNAMA—I-RANJIT SINGH OF KANHWAYA LAL.**

BY E. REHATSEK.

(Concluded from p. 88.)

The third action was fought at **Aliwal**, where the Sikhs first stood firm, but being afterwards completely routed and flying in the direction of the river, had the sword in their rear and water in front. They attempted to cross, but thousands found their grave in it, and all the accoutrements they had left on the bank were taken by the enemy. In the fourth battle, which took place at **Sabhrāwañ (Sobraon)**, the celebrated warrior and commander **Shām Singh** fought bravely, but was slain, on which a panic overcame the Sikhs and they fled in dismay. The Governor-General now ordered the army to cross the water and to encamp at Kasur; and when this news reached Lāhūr, the **Mahārājā Gulāb Singh** was sent to meet the Governor-General, who received him with much kindness. A treaty of peace was concluded, to the effect that henceforth the territory situated between the Satluj and the Biyās was to belong to the English, to whom the Mahārājā (Dalip Singh) was also to pay one hundred lādks in ready money, but, in case of his inability to do so, to cede also Kashmir and the mountain districts adjoining it, retaining only the Pānjāb, on condition of remaining friendly to the English.

The treaty of peace having been concluded, the Governor-General marched to Lāhūr, and the more interesting as it comes from researches pursued in a different direction, that Prof. Darroch has recognized in the **Makabharata** legends of clearly Iranian origin, the introduction of which he traces to the Indo-Scythian period. See his paper in the *Journal Asiatique*, July-August, 1887, pp. 83-78.
At this time difficulties arose with Mūlraj, the Governor of Multān, who delayed paying tribute to the English. Accordingly Sir Frederick Currie, the Resident at Lāhōr, despatched two English gentlemen, Vans Agnew and Anderson, with Kāthon Singh to collect the tribute; but Mūlraj, who was foolhardy enough to meditate war against the British Government, had them killed three days after their arrival. The troops of the Sikh darbār as well as of the British Government marched immediately, and besieged Multān. Among the first named, however, the Sardār Shōr Singh Aṭāriwālā proved a traitor, and intended with the forces under his command to join Mūlraj, who was, however, either too wary or too proud to accept the proffered aid. Shōr Singh then hastened to Peshāwar to meet his father, Chhatar Singh Aṭāriwālā, and the English, not minding his defection, continued the siege of Multān, which was, however, not taken till reinforcements had arrived from Karachi. The reason for the diversion Shōr Singh Aṭāriwālā had taken in his departure soon appeared, because he devastated the Hazārā and the Peshāwar districts, joining with his father in extorting money everywhere from the wealthy and distressing the poor. Great numbers of turbulent and disaffected vagabonds also swelled the army of the rebels to such a degree that they were enabled to make prisoners of several English officers and to besiege Colonel George Lawrence. A considerable force of Afghāns had also arrived from Kābul to aid Chhatar Singh, who was near the Indus when his son joined him; and his forces having, in a short time, increased to double their number, emboldened him to occupy Aṭāk and to present a bold front to the English, but meanwhile he plundered the country. The British forces encountered Chhatar Singh at Rāmmagar, where a great battle took place, in which many thousands of Sikhs lost their lives; but General Cureton was also killed. The second action was fought at Sa’dullah and the third at Chilīnāwāla, in both of which the Sikhs were defeated, and in the fourth, which took place at Gujrat, they abandoned to the English forces 65 pieces of artillery, and threw away also all their muskets in the flight. The rebels, having thus been vanquished and dispersed, were no longer in a

**Multān fell in 1848 after a stout resistance.**
position to continue their depredations, and even their Afghan allies fled in dismay to their own country, whilst numbers of fugitive Sikhs, whose lives had been spared, left the Pañjáb and found a new home in British India. After the English had thus for the second time restored peace in the Pañjáb, the Governor-General, who found it nevertheless impossible to trust the Sikhs with an independent government, decided on dethroning Dalip Singh, and accordingly deprived him in St. 1905 (A.D. 1848) of his kingdom and his wealth. Being young and friendless, the nobles of his court quickly severed all connection with Dalip Singh, who was henceforth left alone. He remained a few years more in India, and was afterwards at his own request taken to England, where he is now established, enjoying wealth and dignity by the favour of Her Majesty Queen Victoria, who is as kind to him as a mother.

THE VICISSITUDES OF THE BUDDHIST LITERATURE OF CEYLON.

BY THE REV. T. FOULKES.

The great influence which the historical books of Ceylon have had in the formation of the prevailing views of some, portions of the ancient history of India, and especially of its chronology, makes it very desirable that as much as is possible should be known of the history of the literature to which they belong. The recent rapidly accumulating additions from other Buddhist literatures have taken the books of Ceylon out of the isolation in which they formerly stood, and help to throw light upon the legends of the Sinhalese; and they themselves contain an incidental record of the many vicissitudes to which this particular literature was exposed in the midst of the political and religious changes which mark the history of the island. The object of this paper is to bring together that scattered information, and to gather from it whatever it may teach us of the history of this interesting literature.

The authorities here referred to are the Dīpavaṃsa, the Mahāvaṃsa, the Rājārattākari, the Rājāvali, and some other works which are occasionally quoted below, but need not be separately named here. Of these the Rājārattākari and the Rājāvali are written in the Sinhalese language, and are of comparatively recent date. The Dīpavaṃsa and the Mahāvaṃsa are in the Pāli language, and have both been supposed to belong to the 5th century, A.D. But while there is good evidence in support of the claim of the Dīpavaṃsa, in its original form, to that early date, there are strong reasons for regarding the Mahāvaṃsa as a work of a considerably later period. Turnour erroneously regarded these two books as identical, and was unable to throw off the idea, although he subsequently had the Dīpavaṃsa in his hands, and made an analysis of its contents. The text and an English translation of the Dīpavaṃsa were published in 1879 by Professor Oldenberg; and a retranslation of a portion of it by Mr. Donald Ferguson appeared in this journal, ante, Vol. X: p. 33ff. Oldenberg has shown that the Dīpavaṃsa quoted by Buddhaghōsa in the 5th century, A.D., differed in some details from the existing work of that name; still there is sufficient probability on the side of the supposition that the existing recension is at least a close recast of the original work. We have the Mahāvaṃsa in two different recensions; one of them is an English translation edited by Upham in 1833, and made for Sir Alexander Johnston, a former Chief Justice of Ceylon; and the other, published in 1837, by the Hon. George Turnour, of the Ceylon Civil Service. Turnour's translation has the great advantage of being accompanied by the Pāli text; but it extends only as far as the 38th chapter, bringing the history down no later than A.D. 477; while the Upham recension contains eighty-eight out of the hundred chapters of which the work consists, and brings the history down to A.D. 1319. The unpublished chapters continue the history down to the latter half of the 18th century.

The traditions to be considered in this

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1 See Journal of the Bengal Asiatic Society for 1835, Vol. VII. 619 ff.
2 Turnour's Synopsis, Introd. p. xci. 277.
As this is the first appearance of the Pāli language in the record, it deserves to be noted that it is brought in here quite by mistake. The Upahm recension of the Mahāvamsa and the Rājāvastukara repeat the tradition with the addition of a few amplifying words; unless the words “for want of the Pāli books which contained them” in the former of these two authorities mean that these books had formerly existed and had been lost. By the 13th century this legend had acquired a still more distinct form. “The Buddha’s doctrines, being written in the Pāli language, which aforetime had been borne by heart by those great learned priests, had been committed to books at the time of the king Walagam-abha.”

And out of this has ultimately grown the still later tradition, 
that this king Vaṭṭagāmaṇi was the inventor of the art of writing.

The tradition of the exclusively oral transmission of the whole of the Buddhist canon during the first five centuries after the death of Buddha belongs to the legends of the Southern Buddhists alone, which have their ultimate source in Ceylon: and assuming the Dīpaniṣaṇa, quoted by Buddhaghōṣa, to be substantially the same as Oldenberg’s, this tradition was prevalent in the 5th century of the Christian era. Now these scriptures are about twice the size of our Bible, and contain 1,327,000 verses of thirty-two syllables each, occupying 78,871 lines of talipot leaf manuscript from 1 ft. 7 in. to 3 feet in length.

The enormous memory which the retention of this immense quantity of matter involves presents no difficulty to the Buddhists themselves, who attribute it to the supernatural powers possessed by their teachers during their age of miracles. Amongst European critics, Hardy14 declined to credit the statement, and, together with Prof. Max Müller,15 proposed to distribute the contents of the books among many memories. Turnour himself declared that it was “founded on superstitious imposture.” Professors Rhys Davids16 and Oldenberg accept the tradition.

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12 Upahm, III. 39.  
18 Eastern Monachism, 185, 186, 187.  
19 Sacred Books of the East, X. Introd. p. xxv.  
20 Turnour, Introd. p. xiv.  
On the other hand, the traditions of the Northern Buddhists, including their Chinese offshoot, regard their canonical scriptures as a written literature preserved in books from Buddha's own days downwards. Buddha himself was a highly educated man according to the manner of the princes of his times.\(^{11}\) Instances are given of his epistolary correspondence.\(^{22}\) He was, moreover, an accomplished Sanskrit scholar,\(^{22}\) and learned in the philosophies of the Brāhmaṇas. Although his teaching consisted largely of popular oral discourses, it by no means follows that he did not commit anything to writing; and there is actually one record, albeit a solitary one, of a manuscript being found at his death which had been written with his own hand.\(^{25}\) We cannot ignore the statements which speak of written books in the time of Aśoka in the 3rd century B.C. and even earlier, nor set aside the long stream of indirect evidence which all along assumes and sometimes declares the existence of written books from the beginning. The legends of the Sinhalese themselves are not without some substantial evidence of a more direct kind to the existence of this early written literature,\(^{26}\) though it is subversive of the general drift of their other traditions; for it is stated in one of their principal historical books that religious books formed a portion of the complimentary presents which Aśoka sent to the king of Ceylon;\(^{26}\) and the names of some of these books, or of some others which Mahinda, the convertor of Ceylon, then brought with him, and the use which he made of them in the course of his teaching, are distinctly mentioned.\(^{27}\) The same authority\(^{27}\) also refers to the existence of a portion of the Śūtra-pitaka in Ceylon in a written form in the middle of the 2nd century B.C. It tells us that on a certain occasion king Daññagāmaṇi assumed the preaching chair and "began to read the book Mahāyāna-śūtra," with a large assembly of monks for his audience; and it also tells us that this prince possessed other manuscripts besides

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\(^{11}\) Hardy's Manual of Buddhism, 147; Rajendra Lal Mitra's Lāliṭa-viśāraṇa, 236, 213; Bell's Romantic History of Buddhism, 93, 825; Rockhill's Life of the Buddha, 19.

\(^{22}\) Kūros Tibetan Grammar, 164; Rockhill, 59.

\(^{25}\) Hardy, Man. Bud., 164ff; Max. Müller's Hist. of Ancient Sanskrit Literature, 261; Weber's History of Indian Literature, 281; Bignandet's Life of Guandama, 63; Rom. Hist. Bud., 156ff; Rockhill, 727; Mutu Cōonara Swamy's Dīrghatāmaṇa, 23; Fyfe's Burma, II, 132.

\(^{26}\) On the Buddhist canon; for he "saw once amongst the writings of his ancestors a prediction delivered to his grandfather, king Dēveshniyattisva by the priest Mihind-mahāteruvahânse." Again the Dīpavāna\(^{29}\) has a list of eminent Buddhist nuns on the continent of India, who were well versed in the Vinaya and other scriptures, from the foster-mother of Buddha downwards, and another similar list, headed by Saṅghamittā, king Aśoka’s daughter, who came from India to Ceylon, and taught the whole of the Buddhist canon in Anurādhapura, from the 3rd century of the Buddhist era down to the days of king Abbaya in the dawn of the Christian era. It would be extremely difficult to understand this tradition on any other supposition than that the Pīṭakas existed during the whole of this time in a written form, and that these written books were in the hands of these learned female teachers.

In the presence of this amount of direct and indirect evidence, which has, moreover, all natural probability on its side, we may be justified in regarding the improbable legend of the exclusively oral transmission of the Tripitaka as a fable put into a form which was calculated to satisfy the faith of the friendly and to silence the taunts of the unbelieving, invented to account for the earliest known traces of written books in Ceylon in the first century B.C. We may further regard the books originally brought to Ceylon as having been lost or destroyed at some time between the death of Mahinda and this date, through the carelessness of the local monks, or the hostility of the foreign rulers of the island, or both combined; for the legend itself admits the increasing ignorance and inaccuracy of the monks, and the history records the local trials of Buddhism during this interval. The Dīpavāna, in which we first meet with the fable, was not written even in its earliest form until about five centuries after the times of which the legend speaks; and its plausibility would

\(^{29}\) Kumpfner's History of Japan, I, 245.

\(^{29}\) Soc. e.g. Journal As. Soc. Beng., VII, 282, 922; Up- ham I, 63, 37, 38; Ward's Hinduism (3rd edition), II, 211; Bignandet, 120, note, 350 note, 360 note; Sacred Books of the East, X. Introd. p. xii.

\(^{29}\) Ward's Hinduism, I. e. sup.

\(^{29}\) Upham's Mahāvamsa, I. 83; Lindsay's Fa Hian, 37, 42.

\(^{29}\) Ibid. p. 200.
receive additional support from the well-known circumstance that in all ages both the students of the Vedas and the disciples of Buddhism alike received their only legitimate teaching from the living voice of a master, even when written books were abundantly accessible.

The legends regarding the translations of the commentaries on the Tripitaka in the Sinhalese language, and more particularly the additional Aṭṭhakathā of Mahinda himself, belong to this period of the history of this literature. This tradition appears in the notice of Buddaghōsā in the Turnour recension of the Mahawansa:—"The Sinhalese Aṭṭhakathā are genuine. They were composed in the Sinhalese language by the inspired and profoundly wise Mahindo." But the other authorities do not mention it at all. The more modern tradition is thus stated by Turnour:—"The Pīṭakattaya, as well as the Aṭṭhakathā, professed up to the period of the third convocation in India, were brought to Ceylon by Mahindo, who promulgated them orally here—the Pīṭakattaya in Pāli, and the Aṭṭhakathā in Sinhalese, together with additional Aṭṭhakathā of his own. His inspired disciples and his successors continued to profuse them also orally, till the age of inspiration passed away, which took place in this island (as already stated) in the reign of Vattagāmini, between B.C. 104 and B.C. 76. They were then embodied into books, the text in the Pāli and the commentaries in the Sinhalese language. The event is thus recorded in the thirty-third chapter of the Mahawansa, p. 207:—'The profoundly wise, &c. In the reign of the Rāja Mahānāmo, between A.D. 410 and 432, Buddaghōsā transposed the Sinhalese Aṭṭhakathā also into Pāli. The circumstance is narrated in detail in the 37th chapter of the Mahawansa, p. 250. This Pāli version of the Pīṭakattaya and the Aṭṭhakathā is that which is now extant in Ceylon, and it is identically the same with the Siamese and Burmese versions." The tradition is thus made to rest upon two passages in

Period II.

From the 1st century B.C. to the 5th century A.D.—This period opens with the restoration of the legitimate king Vattagāmini, Valakan-abha, or Valagamba, in B.C. 83, after a period of usurpation by the Tamils of Southern India, following a time of civil and religious commotion. The loss of the earlier literature may safely be attributed to these disturbances; and the rise of the new literature, which now replaced it, was one of the results of the royal patronage of the succeeding monks of this king's new Monastery of Abhayagiri. The origin of this new literature is thus stated in the Dīpavaṃsa:—"At this time the Bhikkhus, who perceived the decay of created things, assembled; and in order that the religion might endure for a long time, they recorded the three Pīṭakas and their commentaries (aṭṭhakathā) in written books." The text of the corresponding passage of Turnour's Mahawansa, as stated above, is precisely the same, with the exception of an unimportant particle, as the text of Oldenberg's Dīpavaṃsa: as also apparently were the equivalent texts of Upam's Mahāvamsa and the Rājaratnākari before the glosses were worked into them. The language in which these books are assumed to have been written in those glosses is

sake of uniformity, from Turnour's Introduction, Appendix, p. lxxvii. 31 See also Upam, I. 322. 32 The Rājārata (Upam. II. 224 with 220) puts his date considerably later. 33 Oldenberg's Dip. 267, 211: Upam, I. 218: II. 43, 224: Turnour, 207, and Intro. p. xxi. All the dates in this paper, unless specially mentioned, are taken for the
Pali; but this, as already pointed out,\(^42\) is
due to a palpable error. It is, moreover, at
variance with the subsequent traditions that
the Ceylonese \textit{atthakath\={a}} were written in the
Sinhalese language, into which Mahinda had
translated them. The language of the books of
this \textit{Abhayagiri revival} cannot be determined
at present; though the drift of the present evi-
dence points rather strongly towards Sanskrit,
and the sources from which the new recension
of the \textit{Pit\={a}kas}\footnote{\textit{Pit\={a}kas}: the earliest known Buddhist literature, possibly written by Mahinda.} and their commentaries was
made must also remain over for future inves-
tigation.

The \textit{Raj\={a}vali} has no reference whatever to
this remarkable event of \textit{Vat\={a}\textasciicircum{gama\={n}}\={a}'s reign;}
although it relates the principal circumstances
of his reign much like the other authorities.
But, if the legend is a corrupted survival of
the same tradition, it transfers the transaction
to the reign of \textit{Vat\={a}\textasciicircum{gama\={n}}\={a}'s successor, and
converts it into the more commonplace forma-
tion of a central library, into which he gathered
a good many Buddhist religious books, which
were heretofore scattered abroad. "The
next king was \textit{Maha Dile\={a}yaw Tissa Rajah}.
He entertained five hundred rahatoons, and
causd the books concerning the religion of
Buddha to be collected and deposited in one
place."\(^43\) The \textit{Dipaw\={a}n\={a}s\={a}} and the \textit{Madu\={a}n\={a}s\={a}}
do not mention this library, and the \textit{Raja-
ratn\={a}k\={a}ri} omits this king's reign.

It is quite possible that some of these books
were recovered from the monasteries of the
southern and eastern districts of the island, into
which the power of the invaders did not
penetrate at this time, and that others were
obtained from Southern India. However this
may be, we are here clearly in contact with
the earliest written books of Ceylon, of which
the local memory had any cognizance at the
time when these legends were written in their
present form.

To this period belongs the thrice-repeated
destruction of the books of the \textit{heretical Vai-
tulyas}, the first occasion being in the begin-
ing of the third century A.D.\(^44\) They made
head and in the succeeding half century, and
their books were again committed to the
flames.\(^45\) From the way they are spoken of,
these books seem to have been numerous; but
there is no clue to the language in which they
were written.

The \textit{Rajaratnak\={a}ri}\(^46\) states that king \textit{Mah\={a}s\={a}na}, A.D. 275 to 302, caused a complete copy
of Buddha's sermons to be written, which
occupied 30,000 volumes; and that he deposited
these books in a chest or bookcase made
purposely to contain them. He also brought
a learned monk from a foreign country to
Ceylon, with a retinue of thirty-five com-
panions or disciples, for the purpose of in-
structing the monks of his own monasteries in the
\textit{Vinaya} and the Pali language. None of the
other authorities mention this legend. This
circumstance takes something out of the weight
of the record; and it may possibly be only
an anticipation of the legend of Buddhag\={o}sha,
placed by mistake in the reign of Mah\={a}s\={a}na, instead of in that of \textit{Mahanama}.

\textit{(To be continued.)}

\textbf{FOLKLORE IN SALSETTE.}

\textbf{BY GEO. FR. D'PE\={E}NHA.}

\textit{(Concluded from p. 54.)}

On the following day, disguised as a \textit{vaid}, he
came near the old woman's house and said
aloud that he could heal any sort of wounds,
replace hands, and cure diseases. One of the old
woman's daughters heard him and stopped him,
and running to her mother told her that there
was a \textit{vaid} outside who said he could replace
hands cut off. The old woman told her
daughter to call in the pretended \textit{vaid}, who
came and after setting the hand in its place
applied some stuff or other and the hand was
again whole like before. \textit{Raj\={a}ch\={a} Masthi\={i} then
discovered himself to the old woman. She
came at his feet in gratitude and asked him to
name his reward. \textit{Raj\={a}ch\={a} Masthi\={i} said: "In
reward for the services I rendered you I do
not ask for gold or silver, but the hand of her
whom I cured for my friend here," pointing
\footnote{\textit{Upham, II. 234.}}\footnote{\textit{Upham, I. 231; II. 61, 65ff.}}
\footnote{\textit{Ibid. I. 294; II. 65. Turnour's recension (p. 227, \textit{St.} 232) records the repeated suppression of this sect; but it does not mention the books.}}
to the hunter who was there. The old woman gladly consented, and in due time the wedding of the hunter with the old woman's youngest daughter took place.

After living there for several months Rājāchā Masthiā said he must take leave of them to visit other countries. The old woman and others were loth to part, with him, and more so the hunter. Nothing, however, could persuade Rājāchā Masthiā to change his mind. Thereupon the hunter said: "My dear parāḥāe and friend, if you must go, leaving me here, I agree only to please you. However, you must give me also some sort of sign, like the one you gave to our friend the carpenter, by which I can know if anything befall you and come to your aid if necessary." Rājāchā Masthiā gave him also a plant, and told him to water and take care of it. He said: "If this plant withers know that I am ill; and if it dies know that I am also dead." Thus saying he bid a loving farewell to the hunter and his bride and everyone else that had formed his acquaintance, to their great regret.

Thus the carpenter and the hunter were settled, and Rājāchā Masthiā now set out alone, his sword his only companion. He travelled for many days and then he came to another desolate city. There in the centre of the city he saw a huge kulai filled with oil boiling over a great oven. Rājāchā Masthiā thought: "I must wait and see what this means." He hid himself in a bush close by. He was not long there before he saw a tremendous big rānkhās, seven palmiras in height, come with a large kāwārī on his shoulders, filled with men. When he neared the kulai of oil he threw all the men into it, and when they were all fried he ate them all one after another. When he had swallowed the last Rājāchā Masthiā came out of his hiding place and presented himself before the rānkhās. As soon as he saw him the rānkhās said: "Oh what a mouthful you would make. I only wish I had seen you before. However, though I have had enough, I must yet make a meal of you." On this Rājāchā Masthiā waxed wrathful, and with one stroke he stretched him on the ground where the rānkhās lay like a great mountain. On close examination Rājāchā Masthiā found on this rānkhās' waist a huge diamond.

In this city, too, there was a large tank, and suspecting that in this tank also might be a palace, Rājāchā Masthiā held the diamond to the water, and, lo! a passage opened. He saw a ladder, and by it he descended and found a very beautiful palace, and in it was a maiden of such beauty as never before met human eyes. Rājāchā Masthiā very soon formed an acquaintance with her, and they were so much taken up with each other's beauty that they resolved upon being married. The same day he left the subterranean palace and put up on a high post a large flag with the words: "All the inhabitants of this city that have fled on account of the rānkhās can now come and live in their own houses unmolested. Rājāchā Masthiā has killed your dread enemy, the monstrous rānkhās." Now it must be known that the fame of Rājāchā Masthiā's prowess had reached this city long before he had left his father's house, though the citizens had never seen him before. As soon then as they saw the flag with Rājāchā Masthiā's name and the news that he had killed the rānkhās they all leaped for joy, and once more settled in their own country and houses. The city now looked beautiful and lively.

Some time after this Rājāchā Masthiā gave out publicly his intention of marrying the fair lady in the subterranean palace, and the whole of the citizens said that it was the most proper thing for him to do, for they knew that his marriage would make him a permanent resident, and they would not to have to fear any more rānkhāses, if there should be any. Grand preparations were going on for over a month, and then the wedding of Rājāchā Masthiā with the beauty of the subterranean palace took place with all possible grandeur. All the inhabitants of the city were invited to the feast, and the rejoicings lasted for several days.

The newly married couple were next asked by the citizens to be their king and queen, which honour Rājāchā Masthiā and his bride gladly accepted.

They lived happily for some years, but, unfortunately for Rājāchā Masthiā, he was so taken up with his wife and the government of his kingdom that he forgot all about his

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1 Two baskets suspended at the end of a pole, and carried on the shoulders.
swords. It began to rust and Râjâchâ Mâsthia began to feel ill, and was daily losing his strength. The trees also he had given to his friends, the carpenter and the hunter, began to fade. All the care bestowed by them had no effect, and they made certain that something was wrong with Râjâchâ Mâsthia.

The carpenter at once set out in search of his friend, with the object of giving him some help if possible. After travelling several days he came to the city where the hunter had married and settled. He saw him also preparing to go on the same errand as himself and so they set out together. On the way the hunter told the carpenter how he had come to settle in that country, and thus they walked and walked for many days, and at last reached the city in which Râjâchâ Mâsthia was. But the difficulty was how to find him. So they both disguised themselves, the hunter as a chandâ-kurnurâvîlâ, and the carpenter as bângriwâlâ. In this disguise they went from house to house, and tried to gain some clue as to the whereabouts of Râjâchâ Mâsthia. At last, after great trouble and much delay, the carpenter (as bângriwâlâ) got the necessary information from an old woman. Accordingly the carpenter and the hunter put aside their disguises, and, with the aid of the diamond possessed by the carpenter, they soon made their way into the palace of Râjâchâ Mâsthia.

They reached there just in time to be of use to him. He had become very weak and in a day or two he would have been no more.

Their first care on entering the subterranean palace was to inquire of Râjâchâ Mâsthia as to what they could do to alleviate his sickness. He remembered his sword and told them to clean and sharpen it. They lost no time, but at once set about it, and as soon as the rust began to disappear Râjâchâ Mâsthia gained strength, and as soon as the sword was sharp and bright Râjâchâ Mâsthia stood up and walked about with his usual vigour, as if nothing was the matter with him.

The carpenter and the hunter after some months expressed a desire to Râjâchâ Mâsthia to live with him. Râjâchâ Mâsthia, too, could not bear the idea of parting with them again; so he told them to go to their respective countries and come back with their wives. They therefore went, and, taking their wives, bid a parting adieu to their many friends and acquaintances who regretted them very much.

When they reached Râjâchâ Mâsthia’s country again they were appointed his highest officers in the State. And Râjâchâ Mâsthia, the hunter and the carpenter and their wives, lived together very happily for many many years like brothers and sisters, and were loved and respected by all the citizens, and when they were no more they were long remembered by them as their deliverers and benefactors.

Râjâchâ Mâsthia.


* Gram and parched rice hawker.

* Bangale hawker.
கാണി രാജാ മസ്തിഷ്കയാണ്‌

"ആണ്‌ ഇത്ര ഭരണപ്രാപ്തി, പുനാസി ക്ഷാരാണ്‌ ഉദയം കൊണ്ടാണ്‌ നാം സങ്കരം. ജാമി ഇത്ര ജീവിണ്ട് ത്രിശിസിന്‌

ജീവിച്ച് നിന്ന് കണ്ടു വിളമ്പം ഇതോത് പൂർത്തി കണ്ടു വിളമ്പം

അവിഷ്കരം മാനേണ്ട മാനേണ്ട

ഇതോത് പൂർത്തി കണ്ടു വിളമ്പം

"ഇതാണ്‌ വാരസ്വാം ചെറിയ ശ്രേഷ്ഠരുടെ വിധാനം ശ്രേഷ്ഠരുടെ വിധാനം

"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

"പൂർത്തി കണ്ടു വിളമ്പം

"നാം സങ്കരം നിന്നാണ്‌

"ആണ്‌ ഇത്ര ഭരണപ്രാപ്തി, പുനാസി ക്ഷാരാണ്‌ ഉദയം കൊണ്ടാണ്‌ നാം സങ്കരം. ജാമി ഇത്ര ജീവിണ്ട്

"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

"ഇതോത് പൂർത്തി കണ്ടു വിളമ്പം

"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

"പൂർത്തി കണ്ടു വിളമ്പം

"നാം സങ്കരം നിന്നാണ്‌

"ആണ്‌ ഇത്ര ഭരണപ്രാപ്തി, പുനാസി ക്ഷാരാണ്‌ ഉദയം കൊണ്ടാണ്‌ നാം സങ്കരം. ജാമി ഇത്ര ജീവിണ്ട്

"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

"ഇതോത് പൂർത്തി കണ്ടു വിളമ്പം

"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

"പൂർത്തി കണ്ടു വിളമ്പം

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"പൂർത്തി കണ്ടു വിളമ്പം

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"ആണ്‌ ഇത്ര ഭരണപ്രാപ്തി, പുനാസി ക്ഷാരാണ്‌ ഉദയം കൊണ്ടാണ്‌ നാം സങ്കരം. ജാമി ഇത്ര ജീവിണ്ട്

"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

"ഇതോത് പൂർത്തി കണ്ടു വിളമ്പം

"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

"പൂർത്തി കണ്ടു വിളമ്പം

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"അവിഷ്കരം മാനേണ്ട മാനേണ്ട

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থাভানঃ নানাম পার্থি, ভারতীয় মাস্তি একে কারণ হীন । তাহ চাক্র্য স্বাধীনতায় গুণ তরু থাকিয়া আঁকে বলিভ। তাহাতি মঠগ্রহণ হওয়া । নিঃশেষ নাহিন তাহীদের নানামণীয় একাদশ অনুসারী।

অথবা রাজাভারাম ছিল । মানুষ হওয়া অকলা পালন হইয়া অনিঃশ্বাসিত দ্বিতীয় থাকিয়া হীন । সুধীর বিভিন্ন জিনিঃ পূর্ব স্বাধীন মাননাম রক্ষা করিবার হীন ।

সাহায্য বহু যে রাজাভারাম পার্থি একে কারণ হীন । সুনাম সরায় ।

রাজাভারাম পার্থি সুখীর । তাহ একে সন্নাম পার্থি একে কারণ হীন ।

তাহাতি মঠগ্রহণ হওয়া । নিঃশেষ নাহিন তাহীদের নানামণীয় একাদশ অনুসারী।

Thirome dhissi uthunsim Rajachh Mashiilal bodhila: “Az tumuni dhogai zai firrava, az manji palai raolhalchani.” Pardhi ani suuthar bodhila: “Pardhan Sahiil, amalaa barama nahn dhille guc tumin raolhunisi amalaa khavallai dheevanai; thiatho amiin dhogai palai karuni ek dhis az raolhav.” Ehe asaan bodhile kaam thiinana khabar guc Rajachh Mashiilal rankhalala bagil the thiinana saram holi; pun Rajachh Mashiilal bodhila: “Miin pardhan hind the khari vartha pun tumchil pali aili thavaun tumun tucham kai kela, az manji palai hai ani miizin raolhavai pajei. Aiaan miin pardhan nahn, apurn thigai sarkle, thar tumun zai firrava.”

Pardhi ani suuthar bagithan guc kaah biza upai nahn thavaun dhogai jelj firrava. Rajachh Mashiilal jela ek dhukanavar, thanisim dhal, thup, ani jemi ka bizaam piazhith hotham them jethaun ani raolhav lagi. Dhun siiluvar ek pathrradivilac richivilaa, ani aissi ka gas ethwa rankhasaila ani dhun mungun lagi.

Rajachh Mashiilal vichiraunilai: “Kon haisa tuun, ani ka pajei tulal?”

Rankhas bodhila: “Miin konu hain the tum vichiraun nakok pun dhon dhaw ek dam, nahn the paiala tulal khaan.”


Athau maghsim Rajachh Mashiilalun ek miththa uneh bantua garila ani thi bautiavvar livilaun: “Sare lokh je ka jelas i i gavannisat thiianzun bidhaaisthin iavaunani thiinchan gharaneri riavain. Thiunzun dhusin, rankhas, marla Rajachh Mashiilalun ani tho athau zhaila raza i gaavachha.” Thanche gakunaranziun the sabath vaaniththa kusai zhaiil aani uumis apilas gharan reuni lagi. Sare lokhouzen tho mirdhu rankhsasch bagunsel ajeban bharle ani Rajachh Mashiilal sikh ani mithai lithaith maungun lagi.


Igavamanin dhonak varsaan reuniin Rajachh Mashiilalun eujuilin guc zavaun biji gau bagava; thiatho thiaun suurhalasun ani thiatho bai-kosiin ajdus koli. Thanche manans kusai nithim guc Rajachh Mashiilalun zavaun, pun thiachan thialal hodallrvathi niobhaun.

Zavache puun Rajachh Mashiilalun hukum keli guc sare thi gaavanchh lokhouzen suurhalal manavaun thiachch raja parman. Thiaunzun thari thi suurhalal tho hirai dila kaun guc thialal garaz hoti thiachi thi thalaimani ghar


dávar máñșáñiñ bhalií áñi thía máñșáñ thiañÚñ gháthliñ thía kálañmáñ áñi eká inagári ék såguñiñ khaláñ. Thiañh áváçhá máñás khálá thavañ Rágáchá Másthiaá énúñiñ

Káin thé hôphái ani Rájčhá Masthiáziün sárë ráithólō sángtháthaun guę thíáché khúsí hái varákává thiái thócháncé sókrśișá, ani sári ráith thiari khúsí zháií kán guę thó smazáli guę Rájčhá Masthiá varákává thè thó gáv sórün thó kadhún záváhá náthis, ani ékháðhí ábhádáhá bízá ránkhas aálá thari thíán lán káin dhásthi nóthin parthi kán thé Rájčhá Masthiá thialál máthhái. Tháianzún kúb tharśiüní murád dhis thavań varákává kánviáli, thén varák mótho khúsáli karavá. Sáre lókháli áñúñhilam ani murád dhis thasañ sáriáziní khálám pilián ani haus móź kélí.

Maghsúin thiái gáváchá lókházán Rájčhá Masthiápar ani thíáché baikápar mángnah mángathiánaun guę thíánzun hováu náñkí ani ráñkí thiái gávávichí, ani thiái dhógañ thiari kabul zhaiilí.


Mótúh násib Rájčhá Masthiáché guę thiái vókthávó póóchhái kán thé thó hóthá ándhi marnáché kántávó, ani kónzáí ekó dhóñ dhíssí némálstá.

Thé dhógaí, súthár hí ni párphái póóchhái bárábór pailá khabar káiłá Rájčhá Masthiápar guę thíáncháni káií úpái karváva kái thǽcché ázár bárá karvávthó. Thavań Rájčhá Masthiála viádh parli thiái tharwáríchi ani thíán lá sángtháthaun pásválá. Thábońthóh dhógaí ghán-sarlé ani tharwár pásválá lágló. Zaisí thi tharwár sáp hóvála lágló tháissá Rájčhá Masthiáčhé roğh halká hóvála lágló, ani tharwár ándhi tharwár sáp hóthús thó thari útilá ani chálóñ lágló zaisán kái káisá náhin vichláma thíálá.

- Súthár hí ni párphái tharwár máiné tháián rénnúin Rájčhá Masthiála bótóló guę thíáché khúsí hái thíáché möré ñórvalá. Rájčhá Masthiála thari murád bhárańi vástúün lágláni thíáná sórvalá, tháthóh thíánzún sángathiáni thíáná ghará jáválá ani thíánché bálido ámbhá jéthi jálvalá.
CHINGHIZ KHAN AND HIS ANCESTORS,
BY HENRY H. HOWORTH, F.S.A.

IVA.

This chapter was unfortunately lost in transmission to India. It has been re-written and ought to be inserted between chapters IV. and V.

I have mentioned how Yessugei on his deathbed summoned Munlik and bade him tell his brothers and other relatives what had happened. That faithful servant first went to bring Temujin home, the boy having stayed behind with Dai Setzen, the father of his betrothed, when her father set off home again. He did not disclose his master's death to Dai Setzen; it might have been dangerous to do so. He determined to keep silence about it until he had informed Yessugei's own relatives and merely said that Yessugei was very anxious about his son Temujin and had sent him to fetch him.

During the spring of the same year, while the two widows of Hanbakhi or Anbakhai, named Orbo and Sokhatai, were offering sacrifices to their ancestors, Khoilun Yessugei's widow arrived too late and was not presented with any of the sacrificial meats. Khoilun complained of this, claiming that as her husband was dead and her children infants, she was entitled to share in the meats and by refusing

her they were cutting her off from the family. Orbo and Sokhatai resented her language, saying she only spoke in this way because Anbakhai was dead, and suggested that they should abandon her.

The next day Tarkhtuai Kiriltukh and Todoyan, Girte raised the camp and abandoned Khoilun and her children. The old servitor, Charakh, agreed with them, but Todoyan said, "The deep water has dried up and the precious stone is broken. Wherefore should we cling together?" They not only did not heed Charakh's words but they thrust a spear into his back.

Temujin went to visit Charakh when lying wounded in his house. The latter said to him: "They have carried off the people collected by thy father, when I expostulated with them they wounded me." Temujin wept and then withdrew. Khoilun now mounted her horse, and having put her standard at the head of a lance went in pursuit. She managed to stop half the fugitives, but this was only for a short time, for they speedily left her and went and joined the Taijuts.

Khoilun, being thus deserted, shrewd zeal and endurance in bringing up her children, collecting fruit and digging up roots to feed

1 Yuan-ch'an-pi-shi, p. 37.
2 i.e. to those of the Royal family.
3 These sacrifices were great bonds between members of the same family or tribe, and the meats offered at them were sanctified by having been partaken of by the spirits of their ancestors, and were duly divided among those at the feast. i.e. unable to defend them.
4 They are called Anbakhai's sons in note 85 to the Yuan-ch'an-pi-shi. Rashid'd-din makes Tarkhtuai the son of Adal Khan, son of Kadan Taishi son of Anbakhai; D'Ohsson, 1-32 note. The same author explains the Kiriltukh to mean covetous and envious, while Abdulhaz, who calls him Barghutai Kiriltukh, explains the latter word as meaning an old man who is becoming decrepit, Erdmann, p. 218, note 3. Todoyan is called Todjan Khorekin in the Huang Yuen, Tod Kunja in Hilton's translation of the Yuan-shi and Tudan Khorjui by Rashid'd-din. According to the latter he was the son of Kadan Taishi and was therefore the brother of Adal Khan. Erdmann, 218, 259 and note 38.
5 i.e. Munlik, called Jarkheh Abgum by Rashid'd-din; Chalakh in the Huang Yuen. In the previous chapter I have written his name Jarakh.
them with. When they were grown up they all had indications that they belonged to a royal lineage, and, although scantily fed, grew up strong and were famous wrestlers. We are further told they made a fishing rod of thorns, and also made nets with which they caught fish for their mother in the river Onon. On one occasion when Temujin was fishing with his brothers Khasar, Bektur and Belgutei, he secured a golden-coloured fish. Bektur and Belgutei took it away from him, and Temujin and Khasar complained of this to their mother. She remonstrated with them for quarrelling thus, and remarked that beyond their own kin they had no friends, just as a horse has no lash but his own tail, adding that if they continued to quarrel they would not be able to revenge themselves on the Taijuts. Temujin and Khasar were offended that their mother did not side with them, remarking that if they were to be always treated thus, how were they to live together? Both brothers then threw the door-curtain violently aside. Bektur at this time sat on a hillock pasturing his horse. His two offended brothers crept up to him, one from before and the other from behind, and determined to shoot him. Bektur saw them, and asked them if in lieu of the necessity of revenging themselves on the Taijuts they were going to treat him like you would a hair in the eye or a mole on the face. He entreated them at least to spare Belgutei, and then drew himself together, sitting with his feet drawn up and awaited their arrows. They shot at him from before and behind, until he was dead. When Khoilun heard of what they had done she remarked: "You, Temujin, at your birth held a clot of black blood in your hand; you two are like dogs biting your own ribs, like hawks falling on the rocks, lions boiling with unconquerable hatred, serpents swallowing your prey alive, eagles swooping at a shadow, great fish which devour their prey silently, mad camels biting the heels of their own young, wolves seeking their food in snow and wind, ducks who, unable to drive away their young ones, eat them, tigers whose ferocity you cannot restrain. What

10 Yuan-chan-pi-chi, 37, 38.
11 The Altan Topchi says that on another occasion Bektur took a bullfinch which Khasar had shot.
12 Altan Topchi says he was looking after eight goldings.

have you done? How came you to act thus when you ought to have been thinking of revenging yourselves on the Taijuts?" Thus did Khoilun rebuke her sons. Some time after this Tarkhutai Kiriltuk remarked that Temujin and his brothers who had been abandoned by himself and his people had grown up like wild animals, and taking some companions with him he went out to ascertain what had become of them. Temujin and his mother on their approach were afraid and went into the forest, where he made an arbour out of some branches for a residence while he hid his two little brothers and sister, Khachuen, Temuge and Temulun in the cleft of a rock. Khasar was out shooting and encountered the Taijuts, who shouted to him: "We only want your eldest brother, the others we do not want." Temujin overheard this and fled into the wood. The Taijuts went in pursuit as far as the hill Terguneh. Temujin disappeared in the thick of the wood which was thereupon surrounded by the Taijuts. After he had passed three days there he determined to leave it, but as he was setting out the saddle fell off unexpectedly, upon which he said to himself, "Granting that the saddle will sometimes fall off when the girths are tight—How can it do so when fastened with a breastband also?" The misfortune made him think that heaven was against his trying to escape. He turned back again and stayed another three days, but just as he was leaving the wood again he noticed that a large white stone, the size of a yurt or tent, had fallen down and closed his path. This seemed another interposition of providence, so he turned again and spent another three days. All this time he had eaten nothing. Finally he determined to go out rather than die there. He accordingly took his knife with which he made arrows and cut a path round the stone which had fallen across the road, along which he led his horse and descended the hill. The Taijuts who were on the lookout caught him and carried him off. Tarkhutai ordered that the Chinese wooden collar known as the cangue was to be put upon him, that he was to be taken round to all the various encampments, and

12 Chinese ducks are the symbols of fidelity.
14 Yuan-ch’ao-pi-chi, p. 38-40; Seanaug Setzen, p. 65; Altan Topchi.
kept 24 hours in each. In this way he passed the time till the 16th day of the 14th month which was a celebrated holiday; on that day the Taijuts feasted on the banks of the Onon. At sunset, when they scattered to their several houses, they ordered a weak-headed lad to keep watch over Temujin. The latter seized the opportunity and struck the boy with the cangue or wooden collar, knocked him down and then ran away. Having reached a wood by the Onon he entered the river and concealed his body, keeping his face only above water. The Taijuts having learnt of his escape, commenced to search for him in the clear moonlight. Meanwhile Sorkhan Shira of the Sinduz tribe, who was one of the searching party, noticed him and said to him: “It is be-
cause you show sagacity like this that the Taijuts hate you—I will not betray you.” He passed on and presently as the Taijuts returned he said sarcastically to them: “You have lost a man in the daylight and now you try and find him again in the dark! Let us search the ground where we have not already been, and if we don’t find him let us renew it again tomorrow. Where can a man go who is encumbered with a cangue.” During this second search Sorkhan Shira again passed close to Temujin and said to him: “We are finishing our search for the night and shall renew it to-morrow. Take advantage of this and go and find your mother, and if you meet any one don’t say you have seen me.”

(To be continued.)

CORRESPONDENCE.

PAMER—BOLOR—OXUS.

Sir,—Regarding the significations of the words Pamer, Bolor and Oxus given in note 737 of Vol. IV. of the Indian Notes and Queries, I should like to make the following remarks:—

The word Pämir or Pämër seems to signify, at present at least, an uninhabited highland Steppe, and is perhaps a Turko-Tartaric word. The Bäm-i-dunyâ, roof of the world, contains several pâmërs; for instance, there are the Great, the Little, the Yashil, the Khargush, the Riangkul and other pâmërs. If pämër be an Indo-Germanic word, it should be considered that bâm, Persian for roof, was, in old Persian, bâh; and regarding the word or for mountain, old Persianara, Zend hara, Pehlevi har, “it must remain doubtful whether the Zend hara, which is only used for the great mountain which surrounds the world is an Indo-Germanic or Semitic word.” The Turko-Tartaric word or, or, also means ‘high,’ and its derivatives form height, column, hill, hump, &c. Is Pämir then from Indo-Germanic or Turanian?

The word Bolor is not, as the note 737 says, “another name of the lofty plateau;” it is the name of a mountain chain further east and the name of a district, south or south-west of it. The name however is not known to the natives, or only to a few, who are Dards, and who call Baitistân Bolor. If Bolor be an Indo-Germanic name it could hardly be bala + or; bala in old Persian was probably barda, in Zend it was barza; (cf. Alburz, the modern form of Hara-berezaiti), Is Bolor therefore Indo-Germanic or Turanian?

It seems to be generally accepted that Turanian appellations for localities in the Pamir region cannot date before the 6th century of our era, if therefore the names Bolor and Pämër can be found at that time we might suppose them to be Indo-Germanic.

The old Persian name for the Oxus was Wakh, Wakhsh, Wakhshā (pronounced Okschal?), Wakhshāb, and Wakhshāb, actual names of tributaries of the Oxus. Wakhshā was the name of a part of Badakhshān; it joined Khatān and was famous for its horses. Wakh, Wakhan, is the name of a district east of Badakhshān. Ostaš is the Greek transcription of the Indo-Germanic Wakhshā; Polybius (10, 48) writes it Oxas; Strabo, Ptolemy, and many other writers write Ḍασα. Áqš (white water) is a modern Turanian appellation of a small tributary of the Oxus.

The Bolor Chain is the Qızıl-Yart Chain of Hayward, at the eastern end of the Pamirs, and runs meridionally from the Tham-shan on the north, to the Kunlun on the south; it is also called Būl-dāgh, the Cloud-mountain, its northern base, the Mus-dāgh, the ice-mountain, joins the Thian-than; its southern part is called Tsunling (Onion-mountain). The district Bolor is placed by the Ts. shui-tao-ki about 44° west of Peking and in Lat. 37°, 12 days west of Sari-Kol and 20 days from Kābul. Its southern part was Balti, the present

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1 Spiegel, Einfluss der Semitischen auf das Avesta, p. 36.
2 Cunningham, Leiden, 84.
4 A. von Humboldt.
5 Col. Yale, J.B.A.S. VI. 107, calls it “the somewhat mythical Bolor.”
A NOTE ON JUDEO-PERSIAN LITERATURE.

Sir,—The Jews of Persia, scattered about in Yezd, Kermân, Shiráz, Isfahân, Kashân &c., do all their writing and correspondence in the Persian language but in the Hebrew character.

They have in this way preserved some Persian works not otherwise now to be met with. So far, however, I have found little else than stories and tales in the Persian language written in the Hebrew character. The Jews have the Dibâdîs of Háîzî, Sa'dî, the Khamsâh of Nizâmî, and the prose and metrical works of other popular Persian authors in their own character. They also have a Persian metrical translation of the Pentateuch, which they say was written by order of Nâdir Shâh; and a few other works in Persian and Hebrew combined. I hope to communicate the result of further investigation in this subject.

S. J. A. Churchill.

Teheran.

PERSIAN LITERATURE UNDER THE QAJARS.

Rustem ul Hukema.1

One of the most prolific, and yet but little known, contributors to the Literature of the early troubled dawn of the dynasty which has for over a century now successfully assumed the sovereignty of the once mighty empire of the Persians, is Muhammed Hâshim-ul-Musavi-us-Safavi, styled Rustem-ul-Hukema.

Few biographical details relating to this writer have been discovered. Almost all that is known of him is that which is gleanable from his own literary remains, according to which we learn that in A.H. 1203, in his twenty-third year, he undertook a journey to Bukhârâ in order to visit his maternal uncle, Háji Bâbâ Khan, the Divân Begi; an undertaking which he does not appear to have carried out in its entirety. The Rustem-ul-Hukemâ adopted Asef as his takhallus, or poetical nom de plume. His father’s name was Amir Muhammed Hassan, and the family originated from Shirâz, where Asef was born.

He has a Dibâdî containing gâshâs in honour of Karân Khan, the latter Land rulers and Fâth Ali Shâh, etc. It begins:

آی گای جلال دان
وی مالک بی وزیر و‌دهن

I expect there is a mistake, or rather a clerical error, in the second hemistich, which should read Nâzîr instead of vâzîr.

1} Cf. the Bûyûn of Ptolemy, VI. 13, 3.

2} See Yule, J. E. A. S. VI. 114.

3} Dr. Bethell, J. R. A. S. X. 259.

4} Kingsmill, J. R. A. S. X. 287, XIV. 78.

Some gâshâs begin:

ای گای جلال نوازایین طارم دیتا
بیشک بی پرها در چگونا ارگ و‌ذال

The Dibâdî also contains qat’âhs, tâyâvens, and rubâ’îs. Following the gâshâs is a prose tract, in which the author states that in A.H. 1208 he was in his sixty-eighth year, which is no doubt a clerical error for twenty-eighth year. In this tract he further mentions that he collected together his poetical effusions composed prior to this period, and named the Dibâdîs كلامه الفقّهی. The collection was made at Isfahân.

Besides this work the Rustem-ul-Hukemâ composed the following gâshâh, which can scarcely be described better than in the author’s own words:

خالصه اواخر و نواهی یکی آسایی یعنی صمّح
و زند و پرزند و ترویت با پرگات و ترجیل جلیل
و زبور پرور و فرحان مظهر کرم صادق و خالصه
علم خدایی علم معطیت و علم طب و علم دین
و علم تمجید و علم تمبری در آن مکور و مندرج
است بطریقه سوال و جواب

In his fourteenth year he composed a شرح فارسی الفقهی. One of his more important works

1} [This writer’s transliteration remains as he writes it at his own request. It differs from that adopted in this journal generally.—Ed.]
A LIST OF WORKS PRINTED IN PERSIA IN THE ARmenIAN LANGUAGE.

All the following were issued from Presses which existed or exist at Julfa, the Armenian suburb of Isfahan. The dates vary from A.D. 1641 to 1887.

1641.—The Lives of Our Holy Fathers; printed in special type, on fine paper, in the time of the Archbishop Khachatour the First.

1642.—Prayer Book (same period).

1642.—Psalter; printed by Johannes Vartabed, disciple of Archbishop Khachatour the First, from a new press, with new characters.

1647.—Calendar; written by Simeon Vartabed, printed by Johannes Vartabed. A Bible was commenced, but remained incomplete.

1687.—The Armenian Dogma, and the introduction of schismatic ideas; printed in the time of Archbishop Stephanos.

1687.—"The Book of Discussion;" an apology for the faith; by Alexander Vartabed; printed in the time of Archbishop Stephanos.

1888.—A résumé of arguments against those who believe in the dual nature of Christ; printed in the time of Stephanos.

The above is the only list I have been able to make of the earlier printed books. Since 1872 the following have been published:—

Alphabet; Spelling Book; An abridged Armenian History; A Catechism by Mesar; Elements of Armenian Grammar; History of the Holy Books; The Duties of a Christian; Description of Ceremonies; History of New Julfa, Vol. I. and II.; Biography of the late Archbishop Thaddeus, with a poem on his death; Reader for children; Prayer Book; Biography of Mary Haroutunian and her husband; Book of the Mass; Book of Assemblies; Copies of the first Bulls of Macar, the true Catholicos of Armenians; (now in the press) Evidences of Christianity.

Besides the above some Annual Calendars have been published since 1872; I believe to the number of 11 or 12.

I believe the above two lists are far from perfect, but so far they are all that I have been able to get.

SIDNEY J. A. CHURCHILL.
SANSKRIT AND OLD-KANARESE INSCRIPTIONS.

By J. F. Fleet, Bo.C.S., M.R.A.S., C.I.E.

(Continued from Vol. XVI. p. 256.)

No. 172.—Kalas-Budrukh Plates of Bhilama III.—Saka-Samvat 948.

THIS inscription, which was first brought to my notice by me in this Journal, Vol. XVI. p. 43ff., and is now published in full for the first time, is from some copper-plates that came to my notice in 1886. I edit it from the original plates, which I obtained, for examination, though the kindness of Mr. G. Waddington, Bo.C.S. They were found in a plot of land belonging to Gaṅgādhār Trimbak Kuṅkargī—in whose possession, I presume, they now are,—at the village of Kalas-Budrukh, about three miles east by south of Akōlēm, the chief town of the Akōlēm Talukā or Sub-Division of the Ahmadnagar District in the Bombay Presidency.

The plates, of which the first and last are inscribed on one side only, are three in number, each measuring about 11½ by 7½. The edges of them were fashioned somewhat thicker than the inscribed surfaces, with corresponding depressions inside them, so as to serve as rims to protect the writing; and the inscription is in a state of very good preservation throughout. The plates are thick and substantial; and the letters, though fairly deep, do not show through on the reverse sides of them at all. The engraving is fairly good; but, as usual, the interiors of some of the letters show marks of the working of the engraver’s tool. The plates are numbered: the first, just before the opening symbol of the inscription; the second, on the second side of it, just before the beginning of line 31; and the third, half-way down, opposite line 55. In the first plate, the ring-hole was first made at the top; but it was then filled in again, and a fresh hole was made at the bottom, according to the usual arrangement.—The plates are held together by a roughly circular ring, about 5/8 thick, and 2½ in diameter. It had not been cut when the grant came into my hands. The ends of the ring are secured in the thicker end of a pear-shaped mass of copper, about 2½ high and with a circumference of about 5½ at the largest part, in the upper half of which there is, in relief, a small image, about 1½ high, apparently of Gaṅgādha, squatting full-front, with his hands joined in front of his chest, and with a bird’s, head and beak. The image is too much worn, to be reproduced with the lithograph of the plates.—The weight of the three plates is 333½ tolas, and of the ring and image, 41½ tolas; total, 375½ tolas.—The average size of the letters is about ½.

The characters are those of the South-Indian Nāgari alphabet of the period. The decimal signs for 1, 2, 3, 4, 5, 6, 7, 8, and 9, occur in the numbering of the plates, and in the date, in line 15.—The language is Sānkhī throughout. Except for the opening words Oṁ Oṁ namaḥ Sarvaḥjaya, the inscription is in verse as far as line 14. From there, to the end, the formal part of it is in prose; with the introduction of some of the usual benedictory and imprecatory verses in lines 22 to 27, 48 to 53, 55 to 59, and 60-61; and with a final verse in line 61-62, recording the name of the writer of the charter. In respect of orthography, we have to notice—(1) the general use of the anusvāra, instead of the proper nasal, e.g. in dīṅgī, line 1; chaṅkara, line 2; dīkṣ ānta, line 2-3; paṅkha, line 16; maṃkha, line 46; though the proper nasal occurs in sāṅmanta, line 10; ananda-ekaḥkhaḍra, line 12; apophāyantā, line 24; maṃkha, line 36; and other places;—(2) the use of v for b, throughout, e.g. in ṣava, line 16; pravara, line 19; and vṛkṣaṇaḥ, line 39;—and (3) an occasional use of s for ś, e.g. in saṃvṛtta, line 8; saṅvatā, line 20; and parāśara, line 23.

The inscription opens with an invocation of the god Śiva under the name of Sarvaḥjaya (line 1), followed by a verse in praise of Brahman, Viśṇu, and Śiva, under the names of Hiranyagarbha (1 2), Aciyuta, and Chandramani. It then relates that, in the lineage of Yadu (1 3), there was born a ‘king’ named Śeṣucharā. His son was
Dhādiyappa (l. 5). His son was Bhillama I. His son was Rāja (l. 6), or perhaps Śṛiśrāja. His son was Vaddiga (l. 7). And his son was Bhillama II. (l. 8); whose wife was Laksmd (l. 9);* "who illuminated the Yādava and Rāṣṭrakūṭa families." Their son was Vēṣū (l. 10), "a very jewel of a Sāṁanta." And his son was Bhillama III. (l. 12), whose capital was Sindinagara (l. 13).

The inscription then records (l. 48) that, in Śaka-Saṁvat 948, the Krōdhana saṁveṣasara, the Mahāsāṁanta Bhillama III,—who had attained the pāchamahākābdā (l. 16); who was born in the Vīshñuvāsā or lineage of Vīśau (l. 17); and who had the biruda of Yādava-Nārāyaṇa,—bearing in mind the precepts (l. 18-27) of Parāsāra (l. 28), Daksha, Kutsa, Áṅgirasa, Gātama, Manu, Yājñavalkya, and other great sages,—having bathed in the river Dēvanadī (l. 32), which adorned the city of Sindinagara (l. 29-30) just as the Mandākini or heavenly Ganges adorns Amara- vati or the city of the immortal,—having offered a libation to the pītrī, or manes of his deceased ancestors (l. 33); having presented an arghya-offering of water, mixed with red water-lilies, to the Sun (l. 34); having done-worship to the god Śaṅbhū; and having duly performed the rites of a hōma-sacrifice,—poured water (l. 39) into the hands of the Mahā- pradhāna Maṇamānāyaka (l. 38), the great-grandson of Śrībhaṣṭa who came originally from the bhāṭa-village of Takkārikā in the Madhyadesa or Middle Country (l. 35) and belonged to the Mahāyānāma śākhā and the Bhāradvāja gōṭra, and into the hands of twenty-five other Bhārmaṇas (l. 39) who resembled him in merit, but whose names are not given, and presented to them the village of Kalasa (l. 45), which was granted on the east by the village of Saṁgamīkā (l. 39), on the south, by the village of Tamraprastara (l. 40), on the west, by the village of Thūha, and on the north, by the river Pāyōdharā (l. 41). The terms and conditions of the grant are detailed in lines 41 to 45. Lines 45 to 61 contain an order that no obstacle shall be raised to the enjoyment of the grant by Maṇavva and the other Bhārmaṇas; followed by the customary benedictive and imprecatory verses and precepts. And the concluding verse, in lines 61-62, records that the charter was written, at the command of Bhillama III, by Harichandra, the son of Rudrapāṇḍita.

Of the places mentioned in this inscription, Sindinagara, the capital of the family, is evidently identical with the Sindinērā* mentioned in line 6 of the inscription of Śeṇapandira II, of Śaka-Saṁvat 991, ante, Vol. XII, p. 119ff. Sindinērā has been identified by Dr. Bhagwanlal Indrāji with the modern Sinnar,* the chief town of the Sinnar Tālkū or Sub-Division of the Nāsik District. And this identification is fully borne out by the record in the present inscription that Sindinagara was adorned by the river Dēvanadī. Dēv, i.e. Dēvanadī, is the name of a small river or stream which unites with the Śiv, i.e. Śivanadī, close below the town of Sinnar,* the two together, under the name of Dēvanadī, flow on and join the Gōdāvarī about five miles south-east of Nāndūr-Madh&sāwar, passing on the way a large village named Dēvapura, Kalasa, the village granted, is the modern Kalas-Budrūkh,* three miles east by south of Akōlē, and about twenty-one miles south by east of Sinnar. Saṁgamīkā, which bounded it on the cast, is evidently the modern Saṁgamīnēr,—through the form Saṁgamānagāra,—the chief town of the Saṁgamīnēr Tālkū in the District. And ‘Nōner,’ in the Nāsik District, about twenty-three miles west of Mālāghaum, seems to represent either Nōner (nau-nagāra) or Nōneri (nau-nagāra).* ante, Vol. XII, p. 124.

* The ‘Sinnar’ of the Indian Atlas, Sheet No. 38; Lat. 19° 56' N.; Long. 74° 3' E.—With the further corruption here of uṣa into uṣa, we may compare the name of Jannar in the Poon District. A note in the Bombay Gazetteer, Vol. XVI, Nāsik, p. 648, tells us that ‘Sinnar’ is almost invariably called Sindar by the peasants.


2 I.e. the larger, senior, older, or original, Kalas, as opposed to Kalas-Khanj as just on the north of it, on the other side of the river Pravari.
Ahmadnagar District. The village of Tamraprastara, which bounded it on the south, has now disappeared. Thutha, which bounded it on the west, is the modern Thugraum-Budrakh, two miles to the west by north. Payodhara, the river which bounded it on the north, must be the old original name for the modern Pravar, which flows by just to the north of Kalas-Budrakh, and joins the Mahalangi or Malangi at Saingannor.

The full details of the date, which, in line 14f., is recorded both in words and in decimal figures, are, by literal translation, "in nine centuries, increased by forty-eight, of the years that have gone by from the time of the Saka king; or, in figures 948; on the occurrence of an eclipse of the sun in (the month) Kārttika (October-November) of the Krōdhana saṁvatasa." The saṁvatasa in question is one of the years of the Sixty-Year Cycle of Jupiter. And, by the Southern System of this cycle, the Krōdhana saṁvatasa, current, was identical with Saka-Saṁvat 947 expired, and 948 current. With the basis of Saka-Saṁvat 947 expired, and according to the Amānta southern arrangement of the lunar fortnights, I find, from Prof. K.L. Chhatre's Tables, that the given tithi, viz. the new-moon tithi of the month Kārttika of Saka-Saṁvat 948 current, ended on Tuesday, the 23rd November, A.D. 1025, when there was an eclipse of the sun; and, as the tithi ended, approximately, at 4 ghati, 40 pallas, or 1 hour, 52 minutes, after mean sunrise at Bombay, there would be nothing in the time to prevent the eclipse being visible at Bombay and to the east of it. By the Northern System of the cycle, the Krōdhana saṁvatasa was current, according to the Tables, at the commencement of Saka-Saṁvat 946 current (A.D. 1023-24); and, from some Tables and rules drawn up by Mr. Sh. B. Dikshit, I find that it commenced on Thursday, the 22nd November, A.D. 1022, and was followed by the Kshaya saṁvatasa on Monday, the 18th November, A.D. 1023. But there was no eclipse of the sun, on the given tithi, in this period; nor after it, before the 23rd November, A.D. 1025. It is evident, therefore, that in this record we are concerned with the Southern System of the Sixty-Year Cycle; and, since the English equivalent of the given tithi of the Pārmiṇīta northern Kārttika would be about a month earlier, when there was no solar eclipse, with the Amānta southern arrangement of the lunar fortnights. Also, unless we choose to assume a mistake in the number of the given year, in deliberately writing the year 948 instead of 947, in words as well as in figures—which assumption is quite unnecessary, since, even to the present day, in some parts of Southern India the reckoning of the Saka era is the system of current years—this record furnishes a clear instance of the quotation of a current Saka year. It is true that an eclipse of the sun occurred again on Saturday, the 12th November, A.D. 1026, which answers, again in accordance with the Amānta southern reckoning, to the same tithi of Saka-Saṁvat 949 current, or 948 expired. But the chief guide as to the period in which we have to find the eclipse, is given by the name of the saṁvatasa; and, as we have said, the Krōdhana saṁvatasa, by the Southern System, was Saka-Saṁvat 947 expired, and 948 current, equivalent to A.D. 1025-26 current. If we were to accept the eclipse of the 12th November, A.D. 1026, which would be the correct one for Saka-Saṁvat 948 as an expired year, we should have, either to understand that the Krōdhana saṁvatasa also is intended to be taken as expired, which would be, to say the least, an absurd way of quoting it; or else to correct the name of the saṁvatasa from Krōdhana into Kshaya, which is in itself hardly justifiable, and is in fact wholly unnecessary, because, as we have seen, a suitable eclipse of the sun did occur, on the given tithi, in the Krōdhana saṁvatasa. It is also true that the word aittita occurs in the compound Saka-āripa-kaal-aitita-saṁvatasa-satēsha; and that it is not always easy to decide whether the use of it in this and similar compounds does, or does not, qualify the exact number of the year. In some cases, indeed, unless we assume the omission of a separate word meaning "having expired," it would seem that the use of it in the compound really is intended to mark the exact given year as an expired year. But the word

*a See Indian Era, p. 214.
*b See a "Note on the Epoch of the Saka Era," which will appear shortly in this Journal.
TEXT.  

First Plate.

1 Óm Ôñ Namàô Sarvavijñāya || Sanatanâ. Áṅgàś-tridāś-anàt-anàhrayô Hiranya
garbh-Añchynta-
2 Chañdramagnà(mañya)layah ||(i) upattih-rakṣh-pralay-aika-hētavô niḥśēsa-viśvasya-sūvaṁ
dīsāṁ.
3 tu vâh || Śrīmâṃ=asti samasta-viśa-mahītaḥ Śrīyān=Yaḍô-ranvayass-tasmin=Sūna-
chañdra ity-anupamô jātaḥ pratāpī nripaḥ || tasmāt-sūnu=anuṁ-kiritir=ajani śrī-
5 Dhâdāyapp-sūvarṇa vidhavast-āhuḥ-saṁhathir=marapatir=jñatasa=tatô Bhillamâh
6 dīc=abhisātu-bhūri-guṇ-ānavadyaḥ śrī-Rājâ-nāma naradēva-vaṇḍaṁ \ jñatasa=tatāh sūnu=
arati-tô.
7 la-dvânapaṭá Vaddiga-bhūnipālaḥ || Tasmād=înduḍhva-mahāraṇgaiva=iva saṣṭi viśvaṁ sa-
mudbhāsyaṁ-sūna=sau(ñau)raṇa-rasasya Bhillama-nripaḥ sa ṣāgraṇa-Râmô=bhavat \(i\)
tasya=śāja-je-
9 gad-archhānaya-charitā 
Lakṣhmîr-mnandā-prêyas! \ yā śrî-Yâdava-Râṣṭrackû-
kula-vr̥jata-
10 tā samudyōti nî Vēśū-nâm-anupama-mahīma tapasya sāmanta-ratnaṁ dharmam
dhīmān=sama-
11 jatō Bhillamasya-ātha tasyāṁ \ tasya=āpy-āsīd-asama-suṣṭīt vikramī nyak-
krit-ārī.
12 ṛ putraḥ pratâpî vīṣa-dâya-sūnas niṣṭimān=Bhillam-ākhyatā || Āṇandaṇā-s=chandra
daiva prajañāṁ
13 yaśaḥ pratāpī savit=v(Sra)ya reji \(i\) tapasya prasiddhā bhuvī rájadhanī vibhāt
Śi[ñ]\(i\)dinarāj-āsīdhanō\(i\) ||
14 || Ata || Saka-nripa-kâl-āttita-samvatsara-satēshu navasv-āṣṭāchavāri-
\[nu\]s=ad-adhik[6] sbh=saṁka-
15 tō-πi || 948 || Kr̥dhana - samvatsara || Kārtākka - saṁjāt - ādityagrahane-

Second Plate; First Side.

16 Samadhīgatapañchamahāsadvda(bda)mahāsāmam-ākṣaṁkhaṇḍadhanvanāvirīta bhuvanāṅta
rāla.
17 śrīVishvakarmāsprāṣuta - ṬādavaNārāyaṇa - ādi - rājavall - virājita - śrī Bhillama - rā-
18 jaḥ || Asarattāṁ saṁsārasya \ asduratarāṁ yauvanasya \ khaṇikatāṁ vibhnasya \ visha-viṣha-
19 māṭāṁ vishaya-sukhasya \ prava(ba)la-pavanavaśa-chalita-tarur-sīkharat-gata-parinata-phā-

12 From the original plates.
13 This ôm is represented by a symbol; the repetition of it is in ordinary writing.
14 Metre, Śloka (Amaśtubha).
15 Metre, Sārddāvikritita.
16 Metre, Indravajrā.
17 Metre, Sārddāvikritita.
18 Metre, Mandākrantā.
19 Metre, Upājāti of Indravajrā and Upendravajrā.
20 Read bagaihādāṃ.
21 Between this mark of punctuation and the following, there stands a circle divided into four parts by two lines crossing each other at right angles in the centre.—The same symbol, but with a smaller abheda above it, occurs in line 62, at the end of the whole inscription; and a somewhat similar one in line 61.—A symbol of the same kind, in a Gwāllor inscription, has been reproduced, ante, Vol. XV. P. 292.
22 The ra was first engraved between the tea and the ring-hole, and then, not being satisfactory, was repeated.
23 Read badhārita.
20 la-van-nīchita-patanatāṁ jivitasya cha-ākalayaṁ kovalaṁ dharmma āva sū(ā)śvata-
ārmanapē
21 sampadyata iti niyamat-avadhārya cha tathā Kṛita-Trāṭa-Dvāparēbhyaḥ Kalau
dānam-ēva pra-
22 śaṁsanti munayaḥ || Na  
23 hur-ddānam-ēkaṁ Kalaṁ yugō || Agrnięcie aptayaṁ prathamaṁ suvarṇaṁ
bhūr-Vvaishpavī sūryaṁ-sūtāṁ cha gaṁāḥ
24 lōka-trayaiṁ tēna bhavet-pradattaṁ yaḥ kāñčhanaṁ gāmcha mahāṁ cha,
25 dadyat || Āśphāyanti || pita-
26 naṁ su-pātrēsuh su-tīrthēsaṁ su-parvvasaṁ || agādh-apārā-sunśāra-saśārā-ōttaranaṁ
bhavēta(t) ||
27 Dhavalānāy=atapatraṇi daṁtinaṁ=cha mad-ōdhdhatāḥ bhūmi-dānasya pushpaṁ
phalāṁ svargaṁ Purandaraṁ ||
28 Ity-ādini Parāsaśa-Dakṣa-Kuts-Aṅg irasa-Gotama-Manu-Yājñavalkya-prabhriti-
mahāmunī-vacha-
29 nāmi samyag-avagamya mātāpiitṛō=ātmaṁās=cha sakala-nīja-vaṁśasya cha ārēyasō ēri-Sī-
30 ndinagar Āmarāvatī vibhūṣhāyāṁ = Airāvaṁ = ānuṅkūrī varaṇa kaṭaṭhala galita-

Second Plate; Second Side.

31 mada-gaṇḍha-rāṣṭīyaṁ nariṇa-ma-vaśīrārika-dev-ārchehan-ō chīta-vikach-rājiva-rōṇ-rā-
32 ji-rājita-punyam-punjāyita-jalayāṁ prathita-sūtīrthāyayān Mandākiniyāṁ-iva Dēvanāyām
33 kṛita-yathāvidhēḥ(dhi)-saṇāṁ vihitā-pitrī-ṭarppoṇo rakta-kamala-miśrēṇa vārīṇa datyārgha
34 mādiyāya bhakti-śāhīdpīja śantibhāṁ pravihitā-hūna-kāryāḥ su-kṛitiḥīḥ
pradhāna-parṇaṁ pa-
35 rivritō grihitā-gurumāntūjaḥ ēri-Madhyañō-āntaḥpāti-Takkārikiḥbhaṭṭagrāma-
vīrīngga-
36 ta-Mādhvaṇiṇāsākha-Bhāradvājagōtra-Śrībhāṣṭṭabhīdhāna-vipra varā-pranapte ēri-
Padmaṁāha-
37 nāptrē ēri-Srīvatasaṁyaka-sutāya svādhīnya-saṇāna-dāna-paṁchabhūtayajū-ādi-
38 ṣaṁthāna-ratayā mahāpradhāna-pada-virajitāya ēri-Maṇamv-śāhīdhāna-nāyakāya tad-
gupalī pa[m*]
39 cha-viṁśatibhaṁ su-vrā(brā)maṇapaiḥ saha parama-bhaktyā hast-ōdakāṁ kṛitvā
pūrvvabhāga-gata-Saṅgamīkā-
40 grāmaṁ daksahīpabhāga-gata-Tānvrā prastara-ṁ prāmaṁ paśchimabhāga-gata-Thūha-
grāmaṁ=ttarabhāga-stha-
41 Payōdharā-nadikaṁ chatur-āgāḥ-ōpalakṣitaṁ s-ōdrāgaṁ s-[ō*]parikaraṁ sa-saṁ-
paryantaṁ sa-vyākha-mā-
42 la-kulaṁ sa-trīṇa-kāśṭhaṁ sa-prabhṛṭīk-ānuka-vishyā-ārṣayaṁ sarid-vāpi-kūpa-kūpiṭ-
tadāga-
43 dirghikā-jālasṭhala-khany-ākara-mrid-vanaunadhī-prasāda-gōpur-ōpēṇaṁ sarvī-āyasthāna-
sahitaṁ
44 namasyaṁ=a-kara-vāt-ōttaram putra-paun-ādy-anvay-ōpabhōgyaṁ=a-chāta-bhaṭa-pravēṇaṁ
pūrvvadatta-dvija-
45 dáya-dēvalāya-varjījaṁ vasad-bhūja-vṛttiṁ Kalasa-nāmaṁānā grāmaṁ pradadu i

Tad-ēśām

** Metre, Ślokā (Anuṣṭubh).
** Metre, Indravajra.
** Metre, Ślokā (Anuṣṭubh); and in the next two verses.

** Read puranādara.
** These two sylables, ēri, probably owe their course and blurred shape to some latent fault in the copper.
** Read tāmra.
Another noteworthy event of this period is the production of a medical work in the Sanskrit language by king Buddhadasa, who reigned in the middle of the 4th century A.D., which was still extant when the Mahavansa was written. The special significance of this book dividing; a part, a fragment; or for thab, 'preserving, preservation; auspiciousness; a prayer for the welfare of another.'
is, that its royal author, living at a time when, with this single exception, the existence of Sanskrit books in Ceylon is not mentioned by the native authorities, should have chosen this language for a book whose practical subject shows that he wrote it for more or less public use. It affords reason for the conclusion that, whether known or unknown to the chroniclers, the Sanskrit language was cultivated in Ceylon at this time, and that books written in that language were sufficiently well-known there in the 4th century A.D.

Both recensions of the Mahāvamsa attribute to this king's reign translations of some unmentioned portions of the sacred books of Buddhism into the vernacular Sinhalese language. The Upham recension adds that these translations were made from Pāli texts; but the Turnour recension and the Rājāratnākari do not uphold this latter statement; and, if Buddhaghōṣa's Pāli texts were the earliest appearance of books in that language in Ceylon, that statement cannot be accepted. The Rājācaiti does not mention these translations; but it states that this king provided books and preachers for the villages in his dominions.

We have now reached a very interesting epoch in the history of this literature, namely, the visit of the Chinese Buddhist pilgrim Fa-Hian and the famous Pāli scholar Buddhaghōṣa. Fa-Hian went to Ceylon in A.D. 411 by the sea-route, from the mouth of the Ganges, and spent two years in the island. He had come to India from China by the long land-route to the north of the Himalayas, in order to search for an authentic copy of the Vinaya, one of the three great divisions of the Buddhist canonical scriptures; and although he had visited many monasteries in his route, he had been unsuccessful in his search until, after five years' wanderings, he reached Pātaliputra, the modern Patna, the home of the great Aśoka and his missionary son Mahinda, where he found in one of its monasteries a venerable copy of that work in the Sanskrit language, which had originally belonged to Buddha's own famous Jethavana monastery at Śrāvasti. He remained three years at this place studying the Sanskrit language, reading Sanskrit books, and copying this great work and other Buddhist books in the same language which he found there. He subsequently spent two years at Tāmralipti, copying similar books and sketching Buddhist images, and he then embarked for Ceylon.

It is important to remark here that the very ancient copy of the Vinaya, which Fa-Hian found in the capital of the Magadha country—the supposed home of the Pāli language, "the speech of Magadha," and the alleged vernacular of Buddha's own discourses—was written in the Sanskrit language, as were also the other Buddhist scriptures which he found there. It is equally clear that such imperfect portions of the Vinaya as had reached China before Fa-Hian started on this journey were also written in that language, and the books which he subsequently copied in Tāmralipti and Ceylon were in the same language; all of which he "edited" on his return home, with the assistance of the Chinese Sanskrit scholars of Nankin.

All this may not be absolutely decisive of the question of the original language of the Buddhist canonical scriptures: but it has considerable importance in the investigation of that question, especially as no equally trustworthy evidence has yet been discovered of the existence of any portion of the Buddhist canon in the Pāli language as early as this period.

It is also worth while pausing to remark that Fa-Hian found the teachers of the Buddhist monasteries of Mongolia, Afghanistān, the Pañjāb, and North-Western India, as far down as Pātaliputra, teaching their pupils the standard works of their religion by word of mouth; although it was from these same countries that the books which they so taught of Hien Tsian; and also Dr. Edkings' Chinese Buddhism, p. 401 ff.

Fa-Hian, chap. XL.

The supposition that Pāli books existed in China, which originated in an error of Gutalaff (Sketch of Chinese History, I. 250, and another work quoted in Fortune's Wanderings, p. 156), may now be regarded as exploded. [See Murchi's China, its State and Prospects, p. 306, and Edkings op. cit. sup. p. 402.] It seems also high time to discard the idea that the Pāli of the Southern Buddhists was at any time the spoken language of Magadha.

Fa-Hian, chap. XXXVI.
had been brought to China during the previous four centuries, and copies of them were still in existence in Pāṭaliputra, Tamralipti and Ceylon at this very time. This circumstance affords to my mind a sufficient solution of the Sinhalese paradox of the exclusively oral transmission of these books down to the 1st century B.C. The kind of oral teaching which Fa-Hian had himself passed through in his youth in China, and which he now found in use amongst the northern Buddhists, while the books were there also, may be accepted as the practice which we still find in all indigenous Hindu schools, and which has existed in them at all times; but at no time did this kind of teaching necessarily presuppose the contemporaneous or previous non-existence of the books which were so taught.

Fa-Hian made some important additions to his previous literary acquisitions during the two years which he spent in Ceylon, and he expressly states that the books which he found there were written in the Sanskrit language, and that these books were large portions of the Tripitaka. Moreover, though the argument from silence is not to be pressed beyond its value, he does not appear to have seen any books there in the Pāli or any other language but Sanskrit.

The visit of Buddhaghosha followed soon after that of Fa-Hian, according to the date which is commonly assigned to him. Various dates, however, have been given to him, ranging from B.C. 307 to A.D. 607. All the details also in the descriptions of his visit differ largely in the different authorities respecting the place from whence he came and the country to which he returned, what his connections were during his stay, and what his object and motive for going to Ceylon, whether he enriched the existing literature of the island by additions which he brought with him, or borrowed from its books to enrich the literature of his own country, or wrote original works of his own. The account which has been commonly received of him is that which is given of him in Turnour's recension of the Mahāvamsa. This account, however, not only stands alone and unsupported, and differs materially from the statements of the other authorities, but its elaborate details strongly suggest that it is the interpolated work of some later commentator rather than the original words of the continuator of the Mahāvamsa. To enter fully into these conflicting statements would occupy too much space here, but that which arises out of the spirit of the whole of the traditions regarding him is the predominating circumstance of his intimate connection with the traditions of the Pāli language.

He appears also to have been the first to present the Buddhist canonical scriptures in the Pāli dress in which they have since his time been preserved by the Southern Buddhist nations. The Turnour Mahāvamsa makes his work to be a translation of these scriptures into Pāli, from a version made into Sinhalese by the royal monk Mahinda in the 3rd century B.C.; but this statement does great violence to the whole current of the other more consistent traditions. We shall not be in error probably in supposing the books which he found in Ceylon to be the very same, or similar, Sanskrit books as Fa-Hian had seen there so recently before, and that Buddhaghosha's special work, apart from his original compositions, consisted in transliterating the Tripitaka and its commentaries out of the Sanskrit language into the more amenable form of the Pāli Prākrit, and so adapting them for popular use. The practical service which he would thus have rendered to all future generations of his co-religionists would be amply sufficient to secure for him the high position which he has ever since continued to occupy in their traditions as one of their foremost literary benefactors.

Period III.

From the 5th to the 11th Century A.D.—Very little remains on record on the constructive side of the literature during this period. Soon after Buddhaghosha's visit a succession of twelve irruptions of the Tamils of the opposite continent of India commences, which form the special subject of the Rājāvali, resulting, notwithstanding some alternating revivals, in the overthrow of the ancient monuments and monasteries of the island, and the

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54 He was able to recite the Skanda Sūtra from memory on the spot where Buddha had delivered it (P.-Hian, chap. XXIX.) before he learnt Sanskrit

55 P.-Hian, chap. XL.

56 See ante, p. 163.
repeated suppression of Buddhism, and culminating in the dispersion of its monks and the complete destruction of its ancient literature.

After one of these catastrophes king Dhātu-sena, A.D. 459 to 477, inaugurated a restoration of the old religion by convening a council, after the example of Assaka, to settle anew the text of the canonical books. He also caused the Dīpavamsa to be publicly read on the site of Mahinda’s funeral pyre, in order to stimulate the religious zeal of his people.

Towards the middle of the sixth century, the book of the heretical Vaitulyas were publicly burnt for the third time. And then a long barren period succeeds down to the middle of the 9th century, which is only broken by the appearance of the Lankavistariyage, a Sinhalese work which Sir Emerson Tennent attributes to the 7th century, and by the despatch of a Brāhma priest, in A.D. 746, by the king of Ceylon, on an embassy to the emperor of China, bearing, together with other royal presents, a copy of the great Prajñā-sūtra.

The poet-king Mutwale-Sena, A.D. 838 to 858, explained the Sātra-pitaka in public, according to the legend of the Upham Mahāvamsa. The Rājaratnākari, however, from the traditions of a different school, states that this king, under the influence of a heterodox monk from India, was turned away from the orthodox creed, and “rejected and laid aside the precepts taught by the books and sermons of Buddha, and adopted the maxims of other systems of religion.”

His successor, Kasyapa IV, or Madisen-Sena, A.D. 858 to 891, did his best to counteract this evil. He “encouraged the priests of Buddha to re-establish their religion and to oppose the false religion throughout all his dominions. caesed the coasts of the island to be diligently watched to prevent the approach of Buddha’s enemies, and reigned as a good king; but, notwithstanding all this precaution, it was only like enclosing a field of corn after driving oxen into the same to eat it up, for a number of unbelievers were already in the island.”

The end was not far off now. The Mahāvamsa states that at the close of this period the “religion” was overthrown by the Malabars during the term of eighty-six years. The Rājaratnākari similarly states that during the nineteen reigns which preceded that of Mahalul-Vijayabahu, in A.D. 1071, “the Malabars kept up a continual war with the Ceylonese, and had filled by this time every city and village in the whole island,” and that these Malabars, “as far as they did prevail, abolished the laws and religion of Buddha.” So also the Rādāvali states that they “vanquished Ceylon and subverted the religion of Buddha.”

Soon afterwards, in the reign of Udaya II., A.D. 926 to 937, the open wickedness of this immoral sect attracted the attention of the king, who, after an examination of their books, “shut them all together in a house, with their books, and, setting fire to the same, burnt the whole to ashes.”

In the latter half of the 10th century the rich and learned king Kasyapa VI., A.D. 954 to 964, caused the Abhidharma-pitaka to be engraved on golden plates and adorned it with precious stones.

Period IV.

From the 11th to the 13th century A.D.: king Mahalul-Vijayabahu, A.D. 1071 to 1126, vanquished these Malabars, and “united the three kingdoms of Ceylon under the same banner;” and he then set about the restoration of Buddhism. At this time “there were not five monks left” in Ceylon, or, as the Rādāvali more emphatically says, “the Malabars had completely extirpated the priests of Buddha, so that a yellow robe was no more to be found.”

He therefore sent large presents to the king of Aramana, on the coast of Coromandel, and obtained from him a mission of twenty or twenty-nine monks, to confer ordina-
tion on the ministry of the revived church; and these foreign monks brought with them their books to form the nucleus of its new literature.

Sir Emerson Tennent guesses that this kingdom of Arama may be a part of the Indo-Chinese Peninsula, probably between Arracan and Siam; and Turnour had already, without giving any authority, fixed it in Arracan; but the passages in the Rājavarṇākara, the Rājavarṇa, and the Mahāvamsa, in which it is mentioned, clearly locate it on the Coromandel coast; and, as it is not Pāṇḍya nor Chōla, the only part of that coast which remains is that which lies between Chōla and Kāliṅga, namely, the old dominions of the Pallavas.

It is possible that the following passage in General Fytche’s Burma may in some way be connected with this Ceylonese legend:— “In 1080 A.D. [which falls in the reign of Mahāla Vijayabāhu] the Talangs were conquered by Anaurata, the Burmese king of Pagan, who burnt and sacked Thatun, and took away with him to Pagan the Buddhist scriptures brought by Buddhaghōsa, as also the most learned of the priesthood; since, besides the coincidence of time, the name of this Burmese king corresponds with that of ‘the foreign king,’ ‘Anoorudda,’ the friend of Vijayabāhu, as given in the Mahāvamsa version of the tradition.”

His son Parākramabāhu, A.D. 1153 to 1186, maintained this revival on the orthodox basis of the Tripitaka, even in the midst of the excitement of rebellions, invasions and counter-invasions; he provided two libraries in the palace which he erected for the head of the Mahāvīra monastery, and restored a hundred and twenty-eight libraries elsewhere. The Abhidhānappadicā, a Pāli dictionary, was compiled in his reign.

His queen, Līlāvati, was a Pāṇḍyan princess and a patroness of learning; and during her triple reign, A.D. 1197, 1209, and 1211, she specially patronized the author of the Dīṭṭhāvamsa. This work is mentioned in the Turnour recension of the Mahāvamsa; and, that being so, the date of this recension of the Mahāvamsa has to be brought down to some time later than the reign of queen Līlāvati in the 12th and 13th centuries, instead of standing in the 5th century A.D. as its commentator tried to persuade his readers. A commentary on the Sanskrit grammar of Chandragāmi glosses on the Samantapudālikā commentary on the Vinaya and on a commentary on the Anguttara, the Vinaya-saṅgāha, and other works in the Pāli and Sinhalese languages, were written in her reign, which was a period of unusual literary activity, her Pāṇḍyan friends probably contributing their share of materials for it.

Pāṇḍit Vijayachakka, A.D. 1186, was a learned prince and a Pāli scholar, and he composed poems in that language. Hardy doubtfully supposes this king to be the author of a commentary on Buddhaghōsa’s Vinuddhimagga, but his short reign precludes the supposition that he could have written a work of that magnitude while he occupied the throne. Perhaps it belongs to the reign of one of the other Vijayachakkas.

The new life which had thus been given to Ceylonese Buddhism was not destined to last much longer; a series of weak reigns, with a fresh series of invasions from the continent of India, followed rapidly upon each other from A.D. 1196 to 1255; and these invaders “began to destroy both the country and religion;” the monks were “hunted from place to place and had lost all their books by the Malabars;” and, to crown the destruction, the last of these invaders made the reigning king prisoner, put out his eyes, “and exterminated the established religion.” The recently resuscitated literature of the island naturally fell in for its share of these calamities; and at length “all the books which had been written [from the time of Valagam Abhayā] had been from time to time destroyed by the Malabars,” so that on

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18 Upham, I, 345. 19 Upham, I, 346, note.
22 Upham, I, 296. 23 ib, II, 170.
24 Upham, I, 293. The intermediate reign of Vikramabāhu, A.D. 1127, is passed over lightly in the legend. His daughter is the heroine of the Ratnāvali (Wilson, Hindu Theatrical, II. 344.) [Thayre, History of Burma, p. 37, dates that Anaurata is said to have communicated with Ceylon direct, and that he invaded Arracan (pp. 37, 46).—Ed.]

25 Upham, I, 296. 26 Upham, I, 312.
27 Turnour, Introd. p. xxxvii.
29 Dīṭṭhāvamsa, Introd. p. xix, 36.
30 Upham, I, 313. 31 Man, Bud., 512.
their recall "the priests for want of books to remind them of their duty had forgotten to know good from evil."\endnote{92}

**Period V.**

From the 13th century A.D. to the present time.—Kalinga Vijayachakka, A.D. 1235 to 1266, succeeded in rescuing Ceylon from these usurpers,\footnote{92} and he made great efforts to revive its old theology and to restore its lost literature.\footnote{93} He caused copies of the *Tripitaka* to be made at great expense, and placed one of them in every village throughout the island; he employed the more learned to teach the younger and more ignorant of his monks, and he sent to India for ten monks to confer ordination in his new church.\footnote{94} Thus a complete re-establishment of Buddhism was effected in his dominions after its complete extirpation in the preceding reigns. This new order was once more built upon a foreign basis, and its new literature, which may be regarded as the nucleus of all the present literature of the island, was in the first instance obtained from the Chōlas of Southern India, who had by this time annexed the Pallava and Eastern Chālukya provinces on the coast to their original dominions in the basin of the Kāverī.

His valiant son, **Parākramabahu III.**, A.D. 1266 to 1301, maintained and greatly extended his father's work; he procured learned monks from the Chōla country to teach the *Tripitaka* to his people; he obtained books also from Southern India, and he settled a new local canon of the Buddhist scriptures.\footnote{95} Moreover, he himself taught his brother the orthodox doctrines of his religion, and caused him to teach them to the monks in his monasteries, and he still further popularized the revival by causing several portions of the scriptures to be translated into (apparently) the vernacular Sinhalese.\footnote{96} The *Pūjavallya*, one of the Sinhalese historical authorities, was written in his reign,\footnote{97} so also was the continuation of the *Mahāvamsa* from the reign either of Mahāśēna or of Mahā-

nāma down to the present reign,\footnote{98} and I do not see any reason to suppose that he did not, at the same time, at least recast the earlier portions of that work.

**Bhuvaṇekabahu I.**, A.D. 1303 to 1314, made the contents of the *Tripitaka* still more widely known by multiplying copies of it and distributing them to all the monasteries of his kingdom,\footnote{99} and another legend\footnote{100} states that the copies which he so multiplied were of two only of the three *Piṭakas*, while a third legend\footnote{101} confines them to the *Sūtrasūtāsūtra* alone.

Upon his death the old clouds began again to roll up darkly over the island; a Pāṇḍya army landed upon its shores, and began to lay waste the country and extirpate the religion of Budha."\footnote{102} This time, however, the troubles lasted but a short time, and the new king, **Parākramabahu IV.**, A.D. 1314 to 1319, succeeded in making peace with the enemy.\footnote{103} This prince's tutor taught him to be interested in the *Jātakas*, or legends of Buddha's numerous incarnations; he had them translated into the Sinhalese language, and, after the translation had been revised by competent scholars, he distributed copies of these legends throughout his dominions, placing the original in the custody of his chief priest.\footnote{104}

For nearly a century after the close of this king's reign the Ceylonese legends are barren of all literary notices, with the single exception of the appearance of the *Nikāya-saṅgraha*, one of the minor historical authorities in the Sinhalese language, which is assigned\footnote{105} to the reign of Bhuvaṇekabahu IV., A.D. 1347 to 1361.

In the 15th century **Parākramabahu VII.**, A.D. 1410 to 1462, caused new commentaries to be written upon the Buddhist scriptures, apparently in the Sinhalese language, and he rewarded the authors of these expositions with grants of land and promoted them to higher orders.\footnote{106} Possibly these may be the Sinhalese commentaries on Buddhaghoṣa's *Visuddhi-mārga*: if, as is probable, they were

\begin{footnotes}
\footnote{92} Upwah, I. 318, 319, 322, 323; II. 98, 95, 97, 98, 256, 257, 259.
\footnote{93} Upwah, I. 319; II. 94, 257.
\footnote{94} Upwah, I. 322; II. 97ff., 258.
\footnote{95} Upwah, I. 324; II. 98, 106, 257, 259.
\footnote{96} Upwah, I. 339, 331; II. 106, 261.
\footnote{97} Upwah, I. 344.
\footnote{99} Turnour, Intro., p. ii.
\footnote{100} Upwah, I. 354; III. 354.
\footnote{101} Upwah, II. 197.
\footnote{102} Upwah, II. 250.
\footnote{103} Upwah, I. 555; II. 108, 263.
\footnote{104} Upwah, I. 555; II. 108.
\footnote{105} Upwah, I. 356: Upwah's *History of Buddhism*, 32.
\footnote{106} Turnour, Intro. p. ii.
\footnote{107} Upwah, II. 113.
\end{footnotes}
written at this time. The Saddharmālāṅkaṇa also belongs to this king’s reign.

There are no indications in these books that Ceylon derived any of its literature from India at a later date than this; the last embers of Buddhism were then fast expiring there. The more recent sources of this literature were the Buddhist countries to the east of the Bay of Bengal, which had originated their religious books from Ceylon. There was a constant commercial intercourse with these countries from early times, frequent interchanges of complimentary and religious embassies also took place between their sovereigns, and their canonical scriptures are identical with those of Ceylon. The monasteries of the maritime districts of the island enriched their libraries from time to time by fresh additions of manuscripts brought to them by ship; and it is still in these seaside monasteries alone that the Tripitaka is to be found complete. Some of these contributions were probably enough a restoration of some of the lost books of Ceylon, which had been carried to those countries by the Ceylonese monks when fleeing from their persecutions at home, and others were copies of the older manuscripts transcribed in the characters of their new homes. Professor Oldenberg has informed us that all the manuscript copies of the Dīpavaliṣa which he used for his work bear marks of having been derived from one and the same Burmese original; and the first discovered copy of that work was written in the Burmese character, and was found by Mr. Turnour amongst some manuscripts which had been brought to Ceylon from Siam. It was also from that collection of Siamese manuscripts that he obtained a reliable copy of the commentary on the Mahāvagga which he used for his translation of that work. The Colonial Library of Ceylon contains manuscripts which were presented by the king of Burma, and the monastery-libraries of the island possess manuscripts which were "brought from the Camboja country," written in the character which is used there. The Mutaliyar, George Nadoris, brought back to Ceylon a valuable collection of Pāli books on his return from Siam in A.D. 1812. Previous to this time an embassy of Buddhist priests from Siam arrived in Ceylon in A.D. 1758, bringing presents of books with them, and similar earlier religious missions from that country brought similar complimentary presents with them.

FOLKLORE IN WESTERN INDIA.

BY PUTLIBAI D. H. WADIA.

No. XII.—The Artist’s Stratagem; or the Princess who was resolved never to marry.

Once upon a time there lived a great Rājā, who had an only daughter. She was very beautiful and highly accomplished, and numbered amongst her other favourite pursuits that of hunting. She frequently went long distances on hunting excursions with a number of attendants, and penetrated the deepest recesses of the forest in search of sport.

One day, as she was galloping after a fine buck, she all of a sudden found herself in a dense forest, and saw that she had ridden considerably ahead of her followers. So she waited for a time and then climbed up a tree to try if she could see some signs of them in the far distance or find some way out of the forest; but on gaining the topmost branch she was appalled to see a great fire in the distance,—evidently a part of the forest in flames.

The poor princess was, as it were, nailed to the spot at this awe-inspiring sight, and stood there watching for hours the fork-tongued monster wrapping trees and shrubs, as well as the haunts and homes of numberless birds and beasts in his fiery embrace, and destroying everything that came in its way. She could

111 Hardy, Man. Bud. 512. 112 ibid. 518.
120 Oldenberg’s Dīpavaliṣa, Introd. p. 19.
121 Upham, III. 171, 185.
123 Turnour, Introd. p. ii.
see whole herds of deer and cattle running about in a mad frenzy at their inability to find their way out of what seemed to them to be certain death, and birds of strange and varied plumage, suffocated by the thick smoke and unable to fly in the heavy atmosphere, charged with flying embers from the great fires around, uttering piercing screams of anguish before yielding to their inevitable doom.

In the midst of all this scene of woe the good princess was deeply moved to see a pair of wild geese straining every nerve to save their young ones from the clutches of the fire. Their difficulty was enhanced by the facts that the poor little creatures had as yet no wings, and were therefore totally unable to take care of themselves, and that it was beyond the old birds' strength to carry them in their beaks, as they tried hard to do, away from the closely pressing flames. So they flew about distractedly here and there, not knowing what to do, till the fire came too near to leave them any hopes of saving either themselves or their young ones. Just, however, as the flames were about to catch the nest, the old male bird, not wishing to sacrifice his own life, since he was unable to save those of his family, made a last desperate attempt, and with one effort found himself safe out of the reach of danger; while at the self-same moment the poor mother goose, as if resenting his selfish conduct, threw herself like a canopy over her unfortunate brood, and, with a wild scream of anguish, suffered herself to be burnt in the flames that just then closed over her and her innocent offspring.

The princess, who had watched all this with growing interest, was deeply touched at the sight. "Ah," said she to herself, "how selfish and false these males are! I am sure they are the same all the world over, whether they be birds, beasts or men! I shall therefore neither have anything to do with them, nor trust them; may I shall continue single all my life rather than marry one of them."

Hardly had the princess formed this rather rash resolve when she perceived her attendants coming towards her. They had come there to look for her, and when she got down and joined them they were highly delighted, for they had given her up for lost.

But from this day forth our heroine wore a grave look, shunned the society of all her male friends, and declared to her parents her firm determination never to enter the bonds of matrimony. This caused the old people great grief, and they implored her to tell them what had made her form so unwise a resolution. But the princess remained silent and would give them no explanation, so at last everybody came to believe that the king's daughter was not for marriage, and the number of suitors for her hand consequently fell off.

One day it happened that a great and renowned artist paid a visit to the great Raja's court, and by His Majesty's command executed some very rare paintings for the royal palace, and when the time came for his departure he begged of the beautiful Princess to give him a few sittings, to which she agreed after great hesitation, and allowed him to draw upon canvas a faithful likeness of her "fairy face and figure. In a few days the picture was finished, but the artist, instead of handing it over to the princess, quietly went out of the city with it.

Now, the artist knew of an old Raja, who was a great connoisseur of paintings, so he went straight up to him with the princess's portrait, and sold it to him for a large sum of money. The picture was duly hung up in the great hall of audience, where it soon became the cynosure of all eyes and the topic of universal admiration, and all who looked upon it were struck with the enchanting beauty of the fair subject, and wondered very much who the original could be.

A few days after this it happened that the king's only son and the heir to his throne, who was away hunting when the picture was purchased, returned to the capital, and as soon as he saw the picture fell heels over head in love with the lovely image on the canvas, without even taking the trouble of inquiring who the original was. He gave up all enjoyment, shunned all pleasure, and moped away in silence in a corner of the palace, to the great grief of his aged father, who, when he learned the cause of his son's sorrow, felt very anxious about his health, and sent messengers in search of the artist, with a view to find out who was the subject of his picture. But all search proved fruitless, for the artist had long left the country and gone away, nobody knew where.
This vexed the young prince still more, and told so very badly upon his health and his temper that he grew highly capricious and headstrong, and regarded everyone with the greatest disfavour. One day the prime minister, an old and trusted servant of the State, happened to arouse him by mistake from a reverie into which he had fallen, and he lost his temper to such an extent as to sentence the poor old man to death there and then. Now, in the old Rājā’s palace the young prince’s word being law, the old man saw nothing for it but to submit to his doom. As he was, however, being led away to execution the old Rājā heard of it, and summoning his son into his presence, prevailed upon him to grant the old man a remission of his sentence for a few days, so that during that period he might make over charge of his public and private duties to other hands. To this the prince, after some difficulty, consented, and the old prime minister was allowed to go home to his family for the time.

He was resolved not to distress his family by telling them of the doom that awaited him, but they soon suspected from his pale and careworn look that something was wrong with him. They dared not question him, however, for some time, till his youngest daughter, who was a great favourite, at last put together all her courage, and, by her winning and persuasive ways, succeeded in learning from him the cause of his sorrow.

Now this young lady was very clever and full of resource, so she soon found a way of getting her father out of the difficulty. She went in person to the young prince, and, having succeeded in getting an audience, begged very hard of him to spare her old father’s life till such time as she herself could go abroad and make an effort to find out who the original of that wonderful painting was, and in what part of the world she lived.

This pleased the prince very much, for in the scheme which the young lady unfolded to him he saw some prospect of realizing what was to him at the best a dream. He therefore readily withdrew his terrible mandate, and the good old prime minister was once more welcomed by the Rājā, who gladly restored him to his former high position.

Soon after this the prime minister’s daughter began to prepare for her journey. At first she set to work and drew a faithful copy of the great artist’s picture, and then, dressing herself in male attire, set out on her travels as an artist bound to some distant country. She had an arduous task before her no doubt, for she hardly knew which way to go and where to inquire about the princess, but filial affection lent her courage, and she firmly resolved either to find out the princess or perish in the attempt.

So she travelled on and on for many months, and showed the picture wherever she halted, and to all she met, in the hope that it would be identified, but all to no purpose. At last, after more than a year’s weary wandering, she arrived at a very distant and, to her, a very strange country, and there, to her great joy, everyone who saw the picture pronounced it to be a true and speaking likeness of the daughter of the Rājā of the country: “she,” they said, “who is determined never to marry.”

“Never to marry!” said the fair artist in surprise, “and what has made her form such a strange resolve?”

“Nobody can tell,” was the reply, “even her parents do not know it.”

This news somewhat damped the ardour of the prime minister’s daughter, for it was quite an unforeseen emergency, and she was at a loss to know how her mission could be successful with one who was thus determined never to enter the bonds of matrimony.

Nevertheless, she took heart, and, hiring a house in close proximity to the Rājā’s palace, opened her studio there. Each day she sat there near a window which commanded a view of the palace, and worked away with her paints and brushes, till at last the Rājā’s attention was drawn towards her. So one day the Rājā summoned her into his presence, and, after closely examining all her pictures and other works of art, extolled them highly and honoured her with a commission to execute some paintings for a palace which he was then building for the special use of his favourite and only daughter. The fair artist willingly obeyed the king’s command, having in the meanwhile seen the princess several times with her own eyes, and made sure that she was no other than the original of the picture which had
driven her prince well-nigh out of his senses. Accordingly, when the palace was ready, she went there and set to work painting the most artistic and lovely designs she could imagine on the walls, under the arches, and in every likely place. The Raja and all the nobles and even the ladies of the court paid occasional visits to the palace, and they all, with one voice, admired both the workmanship of the artist and his choice of subjects. Each picture seemed to be a study in itself, and each had a history of its own which the artist related in a most interesting and winning manner. This latter fact drew a number of other female visitors to the palace, amongst whom were the ladies in immediate attendance on the princess, and these the artist thought were the persons most likely to know and tell her the reason why the princess shunned the society of men, and why she was determined never to enter into wedlock.

So she soon set to work and won them over to her with her persuasive arts and delightful ways, and succeeded in learning from one of them, to whom the princess had confided her secret, the true story of her adventure in the forest and her consequent determination.

This was all the artist desired, and directly afterwards she drew on one of the walls of the drawing-room a picture just the reverse of what the princess had seen in the forest—a picture representing the infidelity of the female and the devotion of the male. For the geese she substituted a pair of antelopes, while in place of the princess she made to stand a very handsome young prince, so young, so brave, and so handsome, as to win the heart of any woman.

When this picture was ready our artist persuaded all the lady friends of the princess to request her to come and have a look at it, and at last one day, to her great joy, the princess honoured her with a visit, and going from picture to picture highly admired the artist's skill. When, however, she at last came to the picture of the antelopes and the prince she seemed greatly surprised and stood for a while lost in thought. Then, turning to the artist, she said:

"What is the history of this picture, my good friend?"

"O! fair princess!" replied the disguised daughter of the prime minister, "this picture represents an adventure the prince of our country had some time ago in a forest—perhaps it might not interest you much, madam, though it concerns us, loyal subjects of his father, very nearly, as this very episode in our prince's life has brought a change over his whole existence, for since that time he has shunned all thoughts of marriage, as he believes that the fair sex are all false and faithless and that it is of no use to trust them. This determination of his son and heir causes our good old Raja great grief, and has thrown a gloom over his whole court."

"How strange!" cried the princess, interrupting the artist, "can males then be faithful and females false? I, for one, always believed it was the males who were false and faithless everywhere on earth; but now I see that there are two sides even to this question. I have as yet observed but one instance, and have since then been labouring under a false impression, but I shall not judge men so harshly hereafter."

"O! I am so glad to hear you say so, good princess," cried the artist in delight; "how I wish our good prince too would see his mistake as you do yours."

"Some one should point it out to him, I think," said the princess, "and perhaps, like me, he too might change his mind. As I have benefited by an episode in his life so he might profit by one in mine, and therefore you are at full liberty to relate my case to him and see what effect it has on him."

"Surely I shall, with the greatest pleasure, when I get home," replied the artist, her little heart fluttering with joy at this unexpected success in her undertaking.

Now, from this day it became known all throughout the Raja's dominions that the fair princess had conquered her aversion to matrimony, and was once more open to offers of marriage, and there was again a crowd of eager aspirants to her hand. But the princess studiously discarded all their attentions, and seemed to derive no pleasure from their company. Her chief delight was in looking at the pictures the artist had painted in the new palace, and talking to her solely about the young prince, in whom she felt greatly interested.
The fair artist, thereupon, to secure the interests of her Râjá's son, fanned the flame by telling her strange and vividly-coloured stories of his manliness, valour and virtues, till at last she inspired her with such a love for him that one day, being unable to contain herself, the princess expressed an earnest desire to see him. This was the very thing the clever young lady desired, and she readily promised to go back to her country and do all in her power to bring her prince to the feet of the fair princess by telling him her story and thereby creating in him a desire to see her.

Great was the joy both of the old prime minister, her father, and the gallant young prince when our fair artist returned home after a long absence, and related to them the successful termination of her mission. The old man hailed her as the saviour of his life, and the young prince loaded her with honours and precious gifts.

Immediately afterwards the prince set out with a grand cavalcade and a magnificent train of followers for the court of our fair heroine's father, and, needless to say, he was soon accepted as a worthy suitor for the fair princess's hand, and in the course of a few days their union was celebrated with due éclat and rejoicings.

CHINGHIZ KHAN AND HIS ANCESTORS.

BY HENRY H. HOWORTH, F.S.A.

(Continued from p. 114.)

When the Taijuts had withdrawn, Temujuin said to himself: "Lately, when I was taken round from one encampment to another, while I stayed in the house of Sorkhan Shira, his sons, Chinbo and Chilaoun,\(^{13}\) shewed me sympathy. At night they removed the wooden collar and allowed me to rest at ease. To-day Sorkhan himself has concealed my whereabouts from his companions and has done so more than once. I will go to him. Assuredly he will protect me." He accordingly went along the Onon looking for Sorkhan's yurt, which could be recognised from afar by the noise made by the machine for making kumis (the Altan Topchi says the noise made in mixing the milk for making arrak) which went on from morning till evening.

Guided by this noise Temujuin found the yurt, and when he entered it Sorkhan said to him: "I told you to go and seek out your mother and brothers, why have you come here?" His sons, Chinbo and Chilaoun, said: "When a small bird is chased by a hawk it hides itself in the grass. If we do not offer shelter to a man who flies to us we shall be behaving more ungraciously than the grass." They then removed the cangue and buried and hid him in a load of sheep's wool which was standing at the back of the yurt, and told their sister Khadaan\(^{14}\) to look after him, and to say nothing about it. The Altan Topchi says they told her to lie down beside him.

\(^{13}\) Called Chimbai and Chilaghun by Saanang Setzen.
\(^{14}\) Called Shilungkhan Khatakan by Saanang Setzen

On the third day the Taijuts said to one another: "Has not some one hid Temujuin? Let us search our camp." They accordingly began a search, and they looked over Sorkhan's yurt, his kibitka and under his couch. They then went to the cart loaded with wool and commenced to throw the wool out. When there remained only the back part to be searched, Sorkhan said:

"Could a man in such a hot season exist under this wool?" They then left off their search and left. When they were some distance off Sorkhan said to Temujuin: "You have nearly been my destruction; you have nearly blown the fire out of the ashes.\(^{15}\) Gg nowand search out your mother and your brothers." He thereupon gave Temujuin a māre which had never foaled, which had a yellow body and a white face, and unfastened its strap, as is customary still among the Mongols when presenting a horse. He also gave him a fat roasted lamb which had been fed with the milk of two ewes,\(^{16}\) some mare's milk in a skin, and a bow with two arrows, but not an instrument for making fire.\(^{17}\)

This quaint saga is reported at length in the Yuan-ch'ao-pi-shi and also in the Altan Topchi and by Saanang Setzen. The two latter authorities call the Sulduz who helped Temujuin Torghan Shara. I have, in one or two different passages, where the Chinese Editor of the Yuan-ch'ao-pi-shi seems to have misunderstood his author, used the version in the Altan Topchi.

\(^{14}\) The Altan Topchi says a two years old kid.
\(^{15}\) Yuan-ch'ao-pi-shi, pp. 43 and 44.
The story is also told with very slight variation by Rashiduddin in his account of the Suldun tribe, and also by El Benaketti. Rashiduddin also tells us that while Temujin was a prisoner and encumbered with the heavy wooden collar an old woman named Taiju Igeon, who had married a Merkit, treated him with kindness, combed his hair and put a piece of soft felt over a sore which had been caused on his neck by the rubbing of the collar.

Temujin now set off to find his family, he passed the site of his recent adventures, and then went along the Onon. Having reached the river Khinkha or Taimurki, which we are told falls into the Onon on the west, he noticed some footmarks on its banks. He went up this small river. Near it we read there is a hill called Beter, opposite which is another small hill called Khorechiku. Here he found his mother and his brothers, with whom he moved to the mountain Burkhan.

There is there, says the Yuan-ch’ao-pi-shi, a mountain called Gulialgu, whence flows the river Sangur (doubtless the Sungger, an affluent of the Kerulon). Near this river is the small mountain called Kharachirgu and a green lake. Further on the same author calls it Kukunnr, and the Chinese commentator Si Sun suggests that it may refer to lake Kukashe, if this is not too far off.

Here Temujin built himself a yurt, and caught moles and steppe mice, on which he fed himself.

Some time after this some thieves stole eight of Temujin’s horses. They left him a light yellow one, on which Belgutei had ridden off to catch these animals. On his return with a number of moles he had caught Temujin told him what had happened. Belgutei and Khasar both volunteered to go in pursuit of the robbers, but Temujin said he would go himself. He accordingly went off, and in three days came upon a drove of mares, among which was a boy milking, whom he asked if he had seen the stolen horses. He replied that before sunrise they had been driven past there and offered to show him the direction. He allowed Temujin to fasten his horse, and also allowed him to change it for a white horse with a black band on its back. He then hid the skin and leather milking gear in the grass and said to Temujin: “You are quite tired with your journey; I will be your companion and help you to recover the horses. The troubles of young men ought to be shared. My father is called Nakhboyan, I am his only son, my name is Burechu.” The two rode together for three days along the track made by the horses’ feet. At length they reached an enclosure inside which were the eight horses. The Altan Topchi says a number of Taijuts who were on guard around had fallen asleep. Temujin wished to enter the enclosure alone, but Burechu insisted on accompanying him in his dangerous work. They succeeded in driving away the horses. The kidnappers now gave chase, one of them, seated on a white horse, held a lasso in his hand and had almost overtaken them, when Temujin turned to shoot at him, whereupon he fell back, and as it was getting evening the robbers drew away.

The two boys now made for the residence of Nakhboyan. Temujin then said to Burechu: “Without you I could not have recovered the horses; let us divide them; which will you have?” Burechu replied that he had accompanied him because he saw he was weary, and he did not see why he should ask for what was not his. “I am the only son of my father, and there is enough wealth for me, I don’t want yours. If I were to demand anything from you how should I be your comrade?”

When they entered the yurt of Nakhboyan they found him in tears for the loss of his son, and on seeing him again he scolded him. Burechu explained the cause of his absence, and then rode off to fetch the leather skins and apparatus with the milk which he had hidden. He killed a fat lamb which had been fed on the milk of two ewes, filled a leather skin with mare’s milk, and gave them all to Temujin for his journey. Nakhboyan said to them: “You are both young. Mind you remain friends, and in the future do not forsake each other.” Temujin now set off home again, and in three days reached the banks of the Sangur, where his mother and his brothers were delighted to see him again. According to the Yuan—

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99 So called because she was a Taijut.
100 Erdmann, Temujin, 210-211.
101 i.e. to the Kutei.
102 The Altan Topchi says they were Taijuts.
chiefl or biographical part of the Yuan-shi, Burchu belonged to the tribe Arlat or Arulat. The Altan Topchi calls him Kuluk Borguchi, son of Lakhun-boyan. Saanang Setzen calls him Kuluk Boghorji, son of Nagho Boyan of the tribe Arulad. Gaubil calls him Porgi. Rashidud-din calls him Baghurjin or Burguji, and also tells us he belonged to the tribe Arlat or Arulat.

He also reports another occasion on which he befriended Temujin in his young days. A party of a dozen Tajuts having suddenly appeared Temujin found himself with only Baghurjin and Buraghal or Burgal Noyan of the tribe Hushin, called Baghural of the tribe Ugashin by Saanang Setzen. He advanced bravely to meet the enemy. They shot twelve arrows together at him, and he was struck in the neck and the mouth and fainted through pain. There was much snow about, and Baraghul warmed a stone with which he melted some of the snow and held his mouth over the steam which arose, so as to soften the clotted blood in his throat to enable him to breathe more freely. As the snow fell thickly Baghurjin took off his own mantle and held it over his friend to keep the snow off, and continued doing so till the snow reached up to his own girdle. He eventually took him to his house. In the Yuan-ch’ao-pi-shi this incident is also referred to, Burchu alone being mentioned. It is said that he held his felt cloak over Temujin until dawn, only once changing from one foot to the other. The locality where it happened is said to have been Talannemurgesi, near the Tatar country. In the Yuan-shi the incident is attributed to Burchu and Mukhuli. A third saga of a similar kind is reported by Rashidud-din. He says that once, when Temujin was far from his people and pressed by the enemy, Baghurjin and Buraghul sought in mountain and plain for food for him but found none. They had a fishhook with them, with which they fished in the river and caught a great fish. Baghurjin Noyan wished to draw it out, but failed on account of his terrible hunger and faintness and fell down. Temujin noticing how weak and worn out he was, and that he had no flesh on his thighs, sighed aloud and said to Baghural Noyan: “Be not sorrowful and despairing; I will take good care your legs are again covered with flesh.”

Temujin was always faithful to his friends, and Baghurjin became eventually commander of the right wing of the Mongol army and the first subject of the Empire. Baghural was successively promoted to the post of bukauil, i.e., chief cook; bazar, i.e., a kind of chamberlain; centurion of the body-guard; millenarian, chief of a tusan, i.e., of 10,000 men; and, lastly, second to Baghurjin in command of the right wing. He was killed in a fight with the Tumeds.

To return to Temujin. As we have seen, he had left his betrothed in her father’s house on his return home at the time of his own father’s death. We are told in the Yuan-ch’ao-pi-shi that he now set off with his brother Belgutei to fetch her home. He rode down the Kerulon until he reached the valley between the mountains Chekcher and Chikburku, where the father of his bride, Daï Setzen, lived. He was pleased to see him, and said he feared he might not see him again, since the Tajuts had taken such a dislike to him that it might have gone badly with him. He now gave his daughter Barté to him for his wife, and he and his wife Sotan accompanied them on their way home again as far as Urakhbehel on the Kerulon. At that point he turned back, but his wife Sotan went with the young couple right to their very home and then returned. This was in accordance with the Mongol custom, which prescribes that the relatives, except the father, shall accompany a bride to her new home. Temujin now wished to have Burchu as a companion and he sent Belgutei for him. Without telling his father he set off at once on his hump-backed tawny horse and wearing his black fur skin, and thenceforward he was Temujin’s constant companion. The latter now struck his tent on the river Sangur and moved to the upper valley of the Kerulon and planted himself at the foot of the Burgi.

Erdmann, p. 206.
I.e., the Birghadaba, a branch of the Kentei, south-east of the source of the Kerulon.
RAJIM STONE INSCRIPTION OF JAGAPALA OF THE KULACHURI YEAR 896.

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

This inscription, which I edit from two fairly good rubbings supplied by Sir Alexander Cunningham, and sent to me by Mr. Fleet, was first brought to public notice in 1825, when Mr. (afterwards Sir) Richard Jenkins presented to the Asiatic Society of Bengal a copy of it, together with a translation prepared with the assistance of the Pandits, from which Prof. H. H. Wilson published a Dévanágarí transcript and a kind of translation, in the Asiatic Researches, Vol. XV., page 512 ff.

It has last been referred to by Sir A. Cunningham, in the Archæol. Survey of India, Vol. XVII., page 18.

The inscription is on a wall of the temple of Rámacandra at Rajim, a town in the Ráypur District of the Central Provinces, on the right bank of the Mahánadi river, about twenty-four miles to the south-east of Ráypur. It consists of 19 lines. The writing covers a space of about 2¾ to 1¾ inches high, and appears to be well preserved throughout. The size of the letters is from ¾ to ½ inch. The characters are Dévanágarí.

The language is Sanskrit, and, excepting the first and about half of the second line, a portion of line 15, and lines 17-19, containing the names of the composer and of the engraver, and the date, the inscription is in verse. It was composed by the Thakkura Jasáñanda, son of the Thakkura Jásádhara, of the Ayódháyapuriya family; written, as well as engraved, by the artizan Ratnapála.

In respect of orthography, the observance of the rules of euphony, and of grammar generally, the inscription is full of mistakes of every description. As regards orthography, the dental is frequently put for the palatal sibilant, and ha is denoted by the sign for va everywhere except in mahásabha, line 1. Besides, the dental is put for the guttural ā in alankríta, line 1; for the palatal ā in anuvanjaka, lines 2 and 17, pancha, line 5, satyanamcha, line 10, and saúdhiháscha, line 16; and for anuvapra in Paúchaka[ha]sra, line 2, cinna, line 5, and vanē, line 13. On the other hand, the lingual ṇ has taken the place of the dental n in nihanyēt, lines 7 and 8, and even in purna=space, line 12. Khya we have for khya in víkṣhyātī, line 5; gha for ha in śivghnē, line 8; jya for yā in bhavējyayya (for bhavēd=yasya), line 2, bhavājyayya (for bhavād=yasya), line 7, and in prāmukhājyayya (for prāmukhād=yasya), line 8. A superfluos and altogether wrong visarga we find in Sāhīla-nāmā, line 2, sahā, line 4, rātā, line 6, savrādā, line 14, nāmah, line 15, and even in the midst of compounds, in kṣhatriyākula, line 8, Ratnadevā-nirpa, line 9, and sābhā-sāhīlīkīrthān, line 14. On the other hand, the sign for the visarga has been omitted after pattana, line 4, manḍalāvārdā, line 7, and gajā, line 8. In other places which it is unnecessary to point out separately, we have visarga, where by the rules of euphony it ought to have been either dropped or changed to ṭ, or where final ah ought to have become ə. And elsewhere again, as e.g. in anujj potā, line 5, Kaunčāyā satyair, line 12, final ah has been changed to ə, where that change ought not to have taken place.

To set the grammar right in every particular, it would be necessary to rewrite nearly the whole inscription, or to append more remarks to it than the inscription deserves. But to give an idea of the author’s want of proficiency, I may point out some of his errors. The Potential mood he employs for the Imperfect tense in ādhipatyāṁ bhavējyayya (for ādhipatyāṁ=abhavād=yasya), line 2; ātīyānājyo=abhavēd=(for bhavēd=) bhūtā, line 3; Bhūyājan cha bhavētputṛā (for Bhāyīlā-v ch=abhavat=putṛā), line 3; and nihanyēt (for nyāhan), line 7. Neither Accusative forms he most frequently uses instead of masculine or Nominative forms. Thus we find grāmān, ēkān, putṛān, vikramān, virān and many others used as Nominative cases, for grāmāḥ, dēśāḥ etc.; prādān kāriti=maṁ, in line 14, as a Nominative, to express the meaning ‘this temple was caused to be built’; śādhitān=cha vasundhārā, in line 16, for śādhitā cha vasundhrā. For the word dhāvīn our author uses dhāvēna, of which he forms the Nominative Sing. either dhāvīn, line 7, or dhāvēnaṁ, line 16. The Nominative Sing. of mahābāhu is mahāvēdo, line 6; that

1 See Grant, Gazetteer of the Central Provinces, page 425.
of bhagavat, bhagavantae, line 15. In line 3 we have ripava kshaya-kariṇam, for ripanaha kshaya-kari or ripuṇaha kshaya-kariṇam; in the same line the Genit. teśhān for the Instr. taitih; in line 4 navasataḥ grāmāḥ for navakānaḥ grāmāḥ; in line 6 eśhāṁ putro, probably for anayāṁ putro; in line 18 mahātāri for mahākari, etc. Where an author has so imperfect a command of the language, it is sometimes difficult to guess what he really means to say; and, in the present case, this difficulty is occasionally increased by the loose way in which the several sentences or portions of sentences are connected with each other, or by the actual omission of important statements. Thus, to mention only one instance, we are obliged to guess that the lady Udayā, who is introduced to us in line 5, was married to one of the chiefs mentioned in the preceding lines; and it is not at all clear whose wife she was, and who therefore was the father of the chief Jagapāla, for whose glorification the whole eulogy was composed.

The inscription is dated, in lines 18 and 19, on Budhadina or Wednesday, the eighth lunar day, called rathāśṭrami, in the bright half of the month Māgha, in the Kalachuri (or Kulachuri) year 896. And it records (line 14) that a personage named Jagapāla, also called Jagaśīnaha (line 10), in honour of Rāma, had established “this temple” (presided over at the time by the venerable, the illustrious Muktātman, line 15), evidently the temple of Rāma-chandra, where the inscription still is, and had assigned, for the naivedyam or offerings of estabiles to the idol, the village of Salmaliya.6

I have elsewhere* tried to show that the right equation by which to ascertain the corresponding English date for a date recorded in the Chedi or Kulachuri era, is A.D. 248-49=0, or A.D. 249-50=Chedi-saṅvat 1; and applying this equation in the present case, I have found by Professor Jacobi’s tables that the 8th lunar day of the bright half of Māgha, 896, corresponds to the 3rd of January 1145 A.D., which was a Wednesday, as required. On that day, at sunrise, the 8th Tithi of the bright half was current, and it ended 10h 59m after mean sunrise. By way of confirmation, I may be allowed to add that, as there was a solar eclipse about noon on December 26th, 1144, the following 3rd of January, under ordinary circumstances, would have been the 8th day of a bright fortnight. Why this 8th of the bright half of Māgha should here be described as rathāśṭrami, I have no means of ascertaining. In the works at my disposal, as, e.g., in the Dharmasāṅkhya, the 8th of the bright half of Māgha is styled Bhūkāśīkhaṇim, and it is the 7th of the bright half of the same month, that is called rathasaṃptami.8

By far the greater portion of our inscription is taken up with the genealogy of Jagapāla, and with a recital of his own military exploits, as well as those of his ancestors; and, apart from the manner in which it is dated, the inscription is valuable as furnishing a comparatively large number of names of places and districts, most of which still await identification, and because of the references which it contains, to the reigns of the princes Jājalladēvā, Ratnadēvā and Prithvidēvā, known to us also from other inscriptions.

As regards the genealogical and historical portion, the inscription opens by describing (lines 1 and 2) the Thakkura, the illustrious Sahilla, the illustrious Rājamāla race, which gave delight to the Pañcha-haṁāsa race, as having gone forth from the Vadhara country, and as having been gladdened by the attainment of the Pañca mahāśābha, and furnished with a banner the flag of which had the lustrous appearance presented by a fiery sitting on a golden jar(?)

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* In the present inscription the spelling Kalachuri appears to me to be certain; in an unpublished inscription of the year 926 the word is spelt Kalachuri; and it is written both ways in the Kumblie copperplate of Gosaladivi, published in the Jour. Beng. As. Soc., Vol. XXXI. page 116.

* See Asiatic Researches, Vol. XV. page 501.—* The Pandeha say that there was formerly a village of that name not far from Raju, which was appropriated to the temple, but that the village has been since deserted, and in lieu of it a village called Rohma, erected not far from the ancient site of the former, was subsequently granted, and is still held by them.”

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* See Nachrichten der Ges. d. Wissenschaften, Göttingen, 1888, pp. 31-41.

8 [So also the rathasaṃptami of the month Māgha is mentioned in the Sāmāṅga grant of Dantiurga, of Saṅka-Saṅvat 673 (ante, Vol. XI. p. 112, line 31). As regards the modern practice, Kero Laksman Chattor, Gopal Krishnaji, Kapi Deva Shastrti, the Chahā-Palchā (Jhūpur), and Pandit Umacharan Muhatnam, all give Māgha śākta 7 as rathasaṃptami and Māgha śākta 8 as Bhūkāśīkhaṇim. But the Sāgara-Palchāng, and another Indik almanac, while agreeing with the above in giving Māgha śākta 7, as rathasaṃptami, allot the Bhūkāśīkhaṇim to the amāna Māgha or purīmānta Phalguna krishna 8.—J.F.F.]
This Sāhilla, who made valorous chiefs tremble and became lord of the land which he acquired on the battle-field, had a younger brother named Vāsuḍāva, and three sons, Bhāyila, Dēsala, and Śvāmin, who conquered the Bhāṭavila (or Bhāṭavala) and Vihaṛa countries. Śvāmin had two sons, of whom the elder one, named Jayadēva, acquired the district of Dāṇḍhora, while Dēvasaiṁha, the younger son, took the Kōmō maṇḍala. In line 5, the inscription goes on to mention a noble lady the Thakkurājī Udayā who, to judge from the way in which she is introduced, must have been the wife of one of the two last-named chiefs, and the mother of Jagapāla, whose exploits are described in lines 6-11. Afraid of him, the valorous Māyurikas and the Savantaḥ, who are called lords of maṇḍalas, betook themselves to the mountains. Moreover, during the reign of the illustrious lord Jājalladēva, Jagapāla conquered a country the name of which I am unable to make out; and, during the reign of the illustrious prince Ratnadēva, he acquired the Talahāri country and another district, about the name of which I likewise am doubtful. But Jagapāla’s chief exploits appear to fall within the reign of the prince Prithvidēva, when he not only took the forts Saraharāgadh and Mavakāśihāna-vāla, and conquered the Bhramaravardhra country, but also took Kantāra, Kusumabhōga, Kandēsa[hva]ra, and the district of Kakayara. Jagapāla would seem to have founded or rebuilt the town Jagapalaputra, which is mentioned in line 12, in a verse which I am unable to explain properly. From lines 15 and 16 we learn that he had two younger brothers, Gājala and Jayatsaiṁha; and, if I understand the words rightly, we are finally told that, during the reigns of the three princes mentioned above, the post of prime-minister was held by Dēvāraṭa, together with whom the three brothers Jagapāla, Gājala, and Jayatsaiṁha subdued the earth.

From this brief abstract it will appear that, as was seen already by Sir A. Cunningham, Jagapāla and his ancestors were petty chiefs, generals or feudatories of the Ratnapura branch of the Chōdi rulers, whom they helped to extend their territory. Most of the places and districts mentioned (some of which are mentioned also in other inscriptions) must undoubtedly be looked for in the eastern portion of the Central Provinces, but I have not succeeded in identifying more than one or two on the maps at my disposal. Kākayara has by Sir A. Cunningham been shown to be the modern Kāṅkēr, which in the Gazetteer of the Central Provinces is described as a chiefship situated to the south of the Rāypur district; and it is possible that the concluding portion of the name which I read Kandēsa[hva]ra, may be identical with Sāhāwā or Sīhōa, situated to the east of Kāṅkēr. Saraharāgadh I take to be the modern Saranghar, to the east of Rāypur; and, if this identification be right, the name Bhramaravadhra would appear to have survived in Bāmṛa, the name of a feudatory state attached to the Sambalpur district, to the east of Saranghar. The tribal name Rājamāla of Jagapāla has by Sir A. Cunningham been adduced to explain the origin of the name of the town Rājim, where the inscription is, and where Jagapāla or his ancestors may be supposed to have resided.

Of the fairly numerous inscriptions of the Chōdi rulers of Ratnapura, a memorandum of which was furnished by Sir R. Jenkins as early as 1825, only a single one (besides the one here re-edited) has been hitherto published, by Dr. Rajendraśal Mitra, in the Journal Beng. As. Soc. Vol. XXXII. pp. 280-287; but the contents of several of them have been referred to in the volumes of the Archaeological Survey of India. To show the genealogy of the earlier rulers of Ratnapura, and what place must be assigned in it to the three princes Jājalladēva, Ratnadēva, and Prithvidēva, mentioned in the present inscription, I shall give here the necessary data also from three other inscriptions, the text of which I shall publish elsewhere from rubbings supplied by Dr. Bargess.

1.—A Ratnapura inscription of Jājalladēva, dated Saṉvä 866, Mārga śi. di. 9, Ravaṇa, = Sunday, 8th November, 1114, A.D., contains the following genealogy:—The Moon, Kārtikeya, Haihaya, the Haihaya princes,—Kōkalla, ruler of Chōdi, had eighteen sons, of whom the eldest was ruler of Tripuri, while

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*b* Asiatic Researches, Vol. XV. page 565 and 566. Some of the inscriptions mentioned by Sir R. Jenkins have since then suffered in the most deplorable manner.
the others became lords of mandalas. In the line of one of these younger sons was born—
(1) Kalingaraja, who conquered Dakshina-pakōsala, and made Tunmna his capital. His son was—
(2) Kamalaraja, who begat—
(3) Ratnaraja (Ratnēśa), the founder of Ratnapura. He married Nōnallā, the daughter of Vajjika, chief of the Komō mandala, who bore to him—
(4) Prithuvisa (Prithvīdeva). This prince married Rājallā, from whom he had a son—
(5) Jājallā (Jājalladēva). [Saṅvat 866 = A.D. 1114].
2.—The present Rājim inscription, dated Kulachuri-saṅvatsara 896 = A.D. 1145, mentions in the order here shown:
(5) Jājalladēva [Saṅvat 866 = A.D. 1114].
(6) Ratnadēva.
(7) Prithvidēva [Kulachuri-saṅvat 896 = A.D. 1145].
3.—A Malhār inscription of Jājalladēva, dated Saṅvat 919 = A.D. 1167-68, contains the following genealogy: The Moon—
(6) Ratnadēva.
(7) Prithvidēva [Kulachuri-saṅvat 896 = A.D. 1145; and (according to Archeol. Survey of India, Vol. XVII. Plate XX.) Kalachuri-saṅvatsara 910 = A.D. 1158-59].
(8) Jājalladēva, described as ruler of the country Tunmna, [Saṅvat 919 = A.D. 1167-68].
4.—A Ratnapur inscription of Prithvidēva, dated [Vikrama-]Saṅvat 1247 (?) = A.D. 1190-91 (?), contains the following genealogy: The Moon—
(8) Jājalladēva [Saṅvat 919 = A.D. 1167-68].
(9) Ratnadēva [according to Archeol. Survey of India, Vol. XVII. page 43, line 4 from the bottom, and plate XX., Chēdi-saṅvat 933 = A.D. 1181-82].
10.) Prithvidēva [Vikrama-]Saṅvat 1247 (?) = A.D. 1190-91 (?).
This last inscription is the one edited by Dr. Rājendralāl Mitra, according to whose account it is dated in [Vikrama-]Saṅvat 1207 = A.D. 1150-51. Accepting that date as correct,

* Archeol. Survey of India, Vol. XVII. page 76.

Sir A. Cunningham has placed the inscription before the Malhār inscription of Jājalladēva, and has identified the three princes mentioned in it with the princes (3), (6), and (7) of the above list. But, in the first place, it is by no means certain that the figures on the stone (scratched on it rather than properly engraved, and perhaps added some time after the inscription itself was engraved?) are really 1207; on the contrary, on the rubbing before me the figures decidedly look more like 1247 than 1207. And secondly, it is perfectly certain that the inscription, which was written and engraved by the very persons, Kumārapāla and Sāmpula, who wrote and engraved the Malhār inscription, was composed by the son, Dēvagāpa, of the man Ratnasimha, who composed the Malhār inscription, and that this Dēvagāpa had his father's composition before him, when he composed his own inscription. Taking further into consideration that the inscription eulogises five of the grandchildren of Ratnasimha, the composer of the Malhār inscription, and that moreover we have for a prince Ratnadēva the date Chēdi-saṅvat 933 = A.D. 1181-82, which cannot possibly refer to the Ratnadēva (6) of the Rājim and Malhār inscriptions, but must refer to a prince of that name who came after Jājalladēva (8), I feel convinced that the inscription has certainly been composed after Chēdi-saṅvat 933 = A.D. 1181-82 = Vikrama-saṅvat 1233, and I think it probable that the figures at the end of it are really Vikrama-saṅvat 1247 = A.D. 1190-91, and that these figures, by whom and whemsoever added, furnish a true date for the last Prithvidēva in the above list.

As regards the three rulers mentioned in the inscription here published, Nos. (5), (6), and (7) of the above list, nothing of any historical importance is mentioned of Ratnadēva and Prithvidēva, in other inscriptions known to me. Regarding Jājalladēva, we are told in the Ratnapur inscription of Saṅvat 866, that he was allied (?) with the ruler of Chēdi, and on friendly terms with the rulers of Kanyakubja and of Jōjābhuktika; that he captured in battle [but subsequently released ?] one Sōmēsvīra; and that the chiefs of the mandalas...[Dakshinapakōsala, Andhra, Khi...



18. t-kivi-kīkāṅṣaṇa lakṣaṇāṇa vinī-thakkurā-śrī-Asāṇandēna kṛita prasaṇa[š]ta[ś] [b] 11[1*] Likhitā [chā]yaṁ rāpakara-śrī-Ratnapalēna utkṛṣṭa-āpi vah 21 II K[u]jachuri-

19. pakṣha rath-āṣṭamāṃ[ṃ] [v]ju(bu)dha-dinā likhitā itti 28-29
CALCULATIONS OF HINDU DATES.

No. 8.

In this Journal, Vol. XVI. p. 109 ff., I have already referred to the date in the Haidarabād copper-plate grant of the Western Chalukya king Pulikṣaṇa II. in which the details for calculation are—Saka-Saṅvat 534 expired, the month Bhādrapada (ordinarily August-September), the new-moon tithi, and an eclipse of the sun. And on that occasion I arrived at the conclusion that the solar eclipse in question is that of the 23rd July, A.D. 613.

This result, however, was in consequence of a mistake as to the English equivalent of the indicated current Šaka year, due to the manner in which the Tables are arranged for expired years without any distinct indication to that effect, and by no means confined to myself. As regards the record in question, Šaka-Saṅvat 534 expired, and 535 current, is really equivalent to A.D. 612-613. In this period, there was an eclipse of the sun on the 2nd August, A.D. 612; which was the new-moon tithi of Bhādrapada according to the Pārśvaṇāta northern arrangement of the lunar fortnights.¹

Mr. Sh. B. Dikshit finds, however, by the Sārja-Śiddhānta, that the given tithi ended at 35 ghatīs, 46 palas, after mean sunrise, i.e. about 2 hours, 18 minutes, after mean sunset, at Bāḍāmī—the locality to which the record refers itself; and, consequently, that this eclipse, occurring in the night, was not visible in India.

Accordingly, it is doubtful whether the record really refers to the eclipse of the 2nd August, A.D. 612; or whether we have here a genuine instance of a mistake in the year that is quoted, and the eclipse that is really intended is that which occurred, fully visibly at Bāḍāmī under very impressive circumstances,² on the 23rd July, A.D. 613, which date again, as shown by me on the previous occasion, answers to the new-moon tithi of the natural Bhādrapada according to the

¹ See Indian Eras, p. 216.
² See the Table, ante, Vol. XVI. p. 143.
³ See the details given on the previous occasion.
⁴ See my remarks at page 117 above, on the use of altīs in the compound Saka-nripa-kāl-āṭīta-saṅvataraṇaṃga.
northern arrangement, on Friday, the 17th March, at about 28 ghaṭaś, 2 palas.

With the basis, however, of Śaka-Saṁvat 726 expired, the given tithi, Viśaṅka krishṇa 5 of Śaka-Saṁvat 727 current, ended, by the Amānta southern arrangement, on Friday, the 3rd May, A.D. 804, at about 49 ghaṭaś, 37 palas; but, by the Pārvimānta northern arrangement, on Thursday, the 4th April, A.D. 804, at about 15 ghaṭaś, 45 palas.

And this result is in perfect agreement with the name of the given sanvatsara, Subhānu. For, though by the Southern System of the Cycle, if it had really been started at that time, the Subhānu sanvatsara had expired before the resulting English date, yet, from some Tables drawn up by Mr. Sh. B. Dikshit, I find that according to the so-called Northern System, and the only really astronomical, of the Cycle, the Subhānu sanvatsara commenced on the 17th June, A.D. 803, which is in due accordance with the result from Varāhamihira’s rule in the Brihat-Saṁhitā, viii. 20, 21, that this sanvatsara was current at the end of Śaka-Saṁvat 726 expired, i.e. at the commencement of 727 current; and was followed by the Thraṣṭa sanvatsara on the 12th June, A.D. 804. Therefore, the Subhānu sanvatsara was current on the given date, as recorded.

Accordingly, this record proves—(1) that, at any rate up to A.D. 804, even as far down in Southern India as the banks of the river Tungabhadra, to which locality the record refers itself, the Pārvimānta northern arrangement of the lunar fortnights was still used in connection with the years of the Saka era;—and (2) that, up to the same date, and in the same part of the country, it is the Northern System of the Sixty-Year Cycle of Jupiter that was in use, at any rate, in connection with the years of the Saka era.

No. 10.

In the Sirūr stone inscription of the Rāṣṭrapāla king Amogha-varshha I, from the Dhārward District, the date (ante, Vol. XII. p. 219, line 15th) is—Śaka-uripā-klilāśtha-sanvatsara-sarangal eś-nir-bhāvatt-ṣaṁhema Vyāya-yaṁ embā sanvatsara-nya pravartīś śrīmad-Amogha-varshha-Nripatunagam-āni-ṝkti-vijaya-rājya-pravardhānā-maṇa-sanvatsara-sarangal ayvat-eradum uttar-ṭṭaraṁ rājya-ābhivṛddhi salutt-ire ;—Jyeṣṭha-māsād-āniṣeṇyād Ādityāvāram āge śrīya-graṇāhd-eṣu, “when the sanvatsara named Vyāya is current, which is the seven hundred and eighty-eighth (of) the years that have gone by from the time of the Śaka king; (and) while there is current, with perpetual increase of sovereignty, the augmenting year fifty-two of the victorious reign of him who is marked with the glorious name of Amogha-varsha-Nripatunga; . . . . . . when it is the new-moon tithi, and Sunday, of the month Jyeṣṭha (ordinarily May-June); at the time of an eclipse of the sun.”

Here again, whether by the literal meaning of the text the given year, Śaka-Saṁvat 788, is quoted as current, or as expired, is not quite certain. But correct results can be obtained only by taking it as an expired year. Thus, in Śaka-Saṁvat 788 current (A.D. 865-66), there was no eclipse of the sun, on the given tithi. Also by the Southern System of the Cycle, the Vyāya sanvatsara coincided with Śaka-Saṁvat 789 current (A.D. 866-67). And, by the Northern System, it commenced in Śaka-Saṁvat 788 current, on the 23rd September, A.D. 865, and was followed by the Sarvajit sanvatsara in Śaka-Saṁvat 789 current, on the 29th September, A.D. 866; and thus, as will be seen, by either system it was current on the given date, the English equivalent of which is the 16th June, A.D. 866.

With the basis of Śaka-Saṁvat 788 expired, the given tithi, Jyeṣṭha krishṇa 15, belonging to Śaka-Saṁvat 789 current, ended, by the Pārvimānta northern arrangement of the lunar fortnights, at about 1 ghaṭaś, 49 palas, on Saturday, the 15th May, A.D. 866, when there was no eclipse of the sun; but, by the Amānta southern arrangement, at about 20 ghaṭaś, 5 p. on Sunday, the 16th June, A.D. 866, when there was an eclipse of the sun, which, as the tithi ended at about 2-2 p.m. (for Bombay), might be visible in India.

Accordingly this record proves that, by A.D. 866, the Amānta southern arrangement of the lunar fortnights had been applied to the years of the Saka era, in Southern India, or at any rate in the particular part of the country to which this inscription belongs. And a comparison of the results for the grant of Śaka-Saṁvat 727 current, No. 9 above, shows that this change in the calendar was made between A. D. 804 and 866.

As the Subhānu sanvatsara was current on the given tithi according to both the Northern and the Southern Systems of the Cycle, this record

* From the use of Mr. Sh. B. Dikshit’s Tables, I find that, for the purposes of such rules as that of Varāhamihira, the Śaka years have to be treated as commencing with the Māsā-Śaṁkrānti, and not with Chaitra

† See Indian Eras, p. 212.
furnishes no evidence in that direction. But my impression is that further inquiries will shew that the Southern System of the Cycle is always coupled with the Amunta arrangement of the lunar fortnights; and the Northern System, with the Paragmanta arrangement.

J. F. Fleet.

THE ACACIA OF PERSIA AND ARABIA.

Referring to note 797, Vol. IV. Indian Notes and Queries, regarding the magical properties of the Acacia when travelling in Southern Persia (between Kermán and Bender 'Abdás) in 1879, I frequently had occasion to hear that the keret, a kind of acacia with dark leaves, was an unlucky tree. People who go to sleep under it are said to fall ill; or, according to some, will never wake up again. Another acacia with lighter coloured foliage and growing in the same neighbourhood, is called kihār, and considered healthy and lucky.

The medical dictionary Makhzan-al-adviyeh, s. v. qarg (Arabic), keret (Persian) says: "It is a fruit like that of the ṣum-i-gheilān, whose juice is called aqāqā, and is the gum arabic of commerce; the tree yielding the qarg is a thorn and some say that its leaves are the salam and its fruit the ṣanq; its wood is hard, and when old gets black like ebony, with whitish marks. The people of India and Bengal use it for joinery. Its seed is like that of tamarinds, but smaller and greener, getting red when ripe. Its flowers are white or yellow and sweet-scented. Its leaves and seed are used for tanning leather and are called jelid-al-qarg (bark of qarg)." The Burāhān-i-qata' describes the qarg as a fruit resembling the Syrian kharītā (a large kind of mulberry), but whiter and more insipid.

Aqāqā, from the Greek ἀκακά, is according to the Makzan, the juice of the qarg, the fruit of the ṣanq tree, and the gum arabic of commerce. The ḍaqāq collected from the unripe fruit is red before drying and greenish after drying; that which is collected from the ripe fruit is blackish green and better than the other, also harder and heavier. The best way to obtain the gum is to collect the pods when ripe and to pound them into a mass, which is to be put over a gentle fire till coagulation sets in, when it is to be poured into forms and dried. Many people mix the juice of the leaves with that of the fruit and prefer to let the mass coagulate by the heat of the sun.

Umm-i-gheilān, generally muqheilān in Persian, is the name of the tree which yields the gum arabic, it is the old ṣpina egypitaca, a kind of acacia, probably the same as the ṣanq.

Sant, also called sāmt, the shittah of Scripture, originally sāntah, from Egyptian shont or shonti (Gesenius), old ṣpina egyptitaca, muqheila or acacia nilotica, acacia vera, giving the gum arabic; it abounds in Egypt, Arabia and Syria. Its wood is very hard and almost imperishable and gets black, like ebony, with age; its fruit is the arabic qarg, hence Bīlād-al-qarg, the qarg country, Arabia Felix, from the number of trees growing there, the Persian keret. Other Acacias yielding gum arabic are acacia serissa of Egypt and acacia veyal of Egypt and Sinaj.

A. Houtum-Schindler.

Tehran.

A NOTICE OF THE CHEHĀR MAQALEH.

The Chehār Maqaleh (ṣālūl ḫārī) of Ahmed bīn 'Umer bīn 'All u'd-Nizāmī 'Arūzī-us-Samarqandī has just been published in lithograph at Tehrān; the colophon bearing A.H. 1305 as the date of publication. This work owes its title to its division into four maqālehs, or chapters. Four classes of men: muṣḥālī (dabīr), poets, astrologers and physicians being indispensable to the well-being of a state. Nīzāmī-ul-'Arūzī wrote the present work, containing anecdotes of the most famous in each class, who preceded him, or who were contemporary with him. This work is much quoted by biographers of the early poets and philosophers. In it is the story of 'Umer Khayyām, in which he foretells that flowers shall be strewn over his last resting-place. Nīzāmī-ul-'Arūzī met Khayyām in A.H. 506 at Balkh, and there heard him say that his tomb would be in a place where annually two falls of flowers would lie strewn on his grave. In A.H. 539 Nīzāmī-ul-'Arūzī passed through Nishāpūr and asked to be shown the resting-place of the great rubā'ī writer, whom he looked on as his master; and he was shown a place in the grave-yard by a wall, over which, from a neighbouring garden, a couple of fruit trees shed their blossoms, completely hiding the poet's last abode. Nīzāmī-ul-'Arūzī mentions A.H. 547, after this passage, as a year already past.

One of the earliest notices of this author and poet will be found in the very rare Lwdb'ul-Ahdb of Muḥammed 'Arīfī, and therein he placed amongst the poets of Mawer-un-nahr who panegyrised the Šīfūs. He was a panegyrist of the Gūrī Amīrs, of whom he mentions more particularly 'Alī-ud-Din Abd 'All ul-Husain Bul-Husain, in whose service and in that of his predecessors he had spent forty-five years. He is said to have travelled much, and to have been well

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1 cf. Pliny, xxxiv. 27.
2 Sprenger, Oude Catalogue, p. 4, No. 56.
skilled both in Astrology and Medicine. In poetry he was the disciple of Amir Mu‘izz, Dolet Shāh, in his Tashrekh mentions the Chehār Maqālekh; and adds that the poet also composed a metric version of the romance of Vais u Ramn. Hamdu’llah Mustafā in his Tārikh Engelekh (apparently copied in the Habīb-us-Siyyar, Vol. II Jus. 4) mentions a Majma‘un-Nevedd as also by him. In the Haft Iqlim in the description of Samarqand, it is stated that he composed two prose works: the present work and the Majma‘un-Nevedd. Háji Khalfheh (Vol. II, p. 656) mentions the Chehār Maqālekh, and in Vol. V, p. 405 also mentions the Majma‘un-Nevedd. In this second notice he calls the author Nizām-u’d-Dīn Abā’l-Hasan Ahmed bin ‘Umar bin ‘Ali ‘ul-Mekki ul-‘Arūzī us-Samarqandi. The Shams‘Anjuman (p. 451) mentions both works. In the preface to the Majma‘ul-Fasehd of Rezā Qoll Khān, the Majma‘un-Nevedd is mentioned as one of the sources of that work. A notice of the poet will be found in the Majma‘ul-Fasehd, Vol. I, p. 635. The Atash-kedekeh also contains a notice of the author of the Chehār Maqālekh.

S. J. A. C.

THE BOOK OF THE FALCON.

Timur Mirzā, the author of the work called the Mā’lūj Báz Nāmeh, is better known to English readers as one of those concerned in the attempt to place his father, Husain ‘Ali Mirzā, Fīrūr-Firūdī, on the throne of Persia in succession to Fath ‘Ali Shāh. The attempt proving unsuccessful, Timur Mirzā and his five brothers fled from Fārā to Baghādād, and subsequently went on to Europe and England. One of the Princes, Najef Qoll Mirzā, wrote an interesting account of the events which followed the death of their grandfather, Fath ‘Ali Shāh, and of their adventures in consequence. This work was translated into English, and printed in London by W. Tyler (undated), for private circulation only, in 2 volumes, under the Title: “Journal of a Residence in England of their Royal Highnesses Reza Kooles Meerza, Najef Kooles Meerza, of Persia; to which are prefixed some particulars respecting modern Persia and the death of the late Shāh.”

Timur Mirzā, after thirty years’ exile at Baghādād, returned to Persia. Being a great sportsman he was in constant attendance at the shooting excursions of Nāṣir-u’d-Dīn Shāh, the present ruler of Persia. No one knew better than he how to train and keep the different varieties of hawks used by the Persians in their hunting expeditions. The present treatise was written in A.H. 1285, and has been lithographed at Tehrān undated. Its author died on the 13th Rabi II, A.H. 1291.

S. J. A. C.

BOOK NOTICE.


We noticed the first volume of this convenient reprint ante, Vol. XV, p. 216, and expressed a hope, which we are sorry has not been fulfilled, that the numbers would be issued more frequently. Volume II., of which the first number was issued in September 1885, was only completed in January 1888. At this slow rate of progress the reprint is not likely to be of much use, nor will subsequent volumes find many subscribers. We trust the publishers will be able to expedite the issue of the rest of this reprint of a valuable and rather rare series of volumes. In the present handy and cheap form the work ought to be welcome to many persons, but its value is seriously injured by delays which will spread the reprint over a quarter of a century. The letterpress of Vol. II. appears equal to that of the first volume, and faithful in every respect. The Tables which form pp. 157 and 158 in the original edition, have, however, been treated in a very clumsy manner. Although their reduction from the original size to the reduced scale of the reprint would have presented no difficulty of any sort, they have been reproduced in the same size as in the original; the result is cumbersome and unwieldy, and the entire volume is disfigured. The volume begins with the Fourth, Fifth and Sixth Anniversary Discourses delivered by the President in February 1878, 1879 and 1879; and includes papers read before and communications made to the Asiatic Society in Bengal, the earliest of which is dated 3rd March 1784, and the latest February 1790. The article numbered V. (pp. 62-85), in which the President, Sir William Jones, describes his visit (on his way to India in 1783) to the “Island of Hinzuan or Johamna,” one of the Comoro islands, is not a little curious. Davis’s article dated 15th February 1789, “On the Astronomical computation of the Hindus,” (pp. 225 to 226), is still, we believe, worthy of study. An article of general interest is No. X, VII., “an account of the Kingdom of Nāpāl,” written by the Capuchin Father Joseph, Prefect of the Catholic Mission in that country, in which he resided several years about the middle of the last century.
METHODS AND TABLES FOR VERIFYING HINDU DATES,
TITHIS, ECLIPSES, NAKSHATRAS, ETC.

BY HERMANN JACOBI, PH.D.; PROFESSOR OF SANSKRIT IN THE UNIVERSITY OF KIEL.

THE Tables which are now placed before the public, are intended for the use of those who wish to verify dates of Indian documents, inscriptions, manuscripts, etc., chronicled according to the Intricate Luni-Solar Calendar of the Hindus. The working of these Tables will be found easy, requiring only the computation of a few figures; and the operation to be gone through is almost mechanical, and will yield correct results, if the rules, to be explained in the sequel, be strictly adhered to. Nevertheless, to render more intelligible the process of calculation, it will be well to place before the reader the frame and outlines of the Luni-Solar Calendar.

PART I.—ON THE LUNI-SOLAR CALENDAR.

On the Lunar Months, Pakshas, and Tithis in general.

A lunar month is the time of one lunation. It consists of two pakshas, or fortnights,—the bright (śukla, sūdha) fortnight, or the time of the waxing moon; and the dark (krishna, bahula) fortnight, or the time of the waning moon. In the North, the dark fortnight precedes the bright fortnight; in the South, it follows it. But the bright fortnight is always the same, both in the South and the North of India. The lunar month takes the name of that solar month, in which occurs the true new-moon forming the commencement of the bright fortnight of the lunar month under consideration. The new-moon (the first if there are two) in solar Chaitra, (or Karttika for some eras) forms the beginning of the luni-solar year. Each paksha is divided into 15 tithis. A tithi is the time required by the combined motions of the sun and moon to increase (in the bright fortnight) or to diminish (in the dark fortnight) their relative distance by twelve degrees of the zodiac. The names of the tithis are the Sanskrit ordinals,—prathama, deviśa, etc. The first tithi of either paksha is also called pratipada or pratipadā; the last tithi of the bright fortnight is also called pūrṇima, as it ends with the moment of full-moon; and the last tithi of the dark fortnight, amavasyā, as it ends with the moment of new-moon. The tithis furnish the names of the civil days, inasmuch as the civil day (being accounted to begin with true sunrise) is named after the tithi that ends in it. Thus, Māgha 9 is the usual abbreviation equivalent to "the civil day in which ended the 9th tithi of the dark fortnight of the lunar month Māgha." On Mean and True Lunar Months and Tithis.

The sun and the moon do not move with an even motion; i.e. they do not always move in the same time through the same space of the firmament. Yet, for the sake of calculation, it has been found convenient by astronomers to assume that the motion of all the heavenly bodies is proportional to time. This motion is called the mean motion, to distinguish it from the true motion.

The place in which the sun or moon would be, if they had the mean motion, is called their mean place. In the same way, mean lunations and mean tithis are spoken of. But, in the Hindu Calendar, only true lunations and true tithis are used; i.e. true, not as would be found by actual observation, but as calculated according to the astronomical theory of the Siddhāntas. A mean lunation, or lunar month, is about 29 days, 13 hours; while the true lunar month varies in length between 29 days, 40 minutes, and 30 days, 1 hour, 15 minutes. The duration of a mean tithi is about 23 hours, 37 minutes; that of a true tithi varies between about 20 and 26 hours. It is very easy to according to the elements and theory of the Sārga-Siddhānta as will be explained at the end of this paper.

I have to thank Dr. Peters, Professor of Astronomy in Kiel, now in Königsberg, with whose kind assistance I have come to a thorough understanding of the construction of Largenteau's Tables.

1 Tables 5 to 11 are constructed on the plan of those of Largenteau, first published in the "Connaissance des temps" for 1846. By the Tables of Largenteau, the true place of the moon in relation to the sun can be found with a high degree of accuracy according to the lunar and solar theories of modern astronomy. In order to

2 Compare the scheme, ante, Vol. XVI. p. 143.
calculate a mean date; but it is of course more difficult to find the true one.

On Intercalary and Expunged Months.

It sometimes happens that two new-moons occur in one solar month; all solar months being longer than 29 days, 40 minutes; some by more than one or two days; some by a fraction of a day only. In that case there will be, accordingly, two lunar months of the same name; of these two months the first is considered as the intercalated (adhika) month of that name, the second as the proper one (niṣa); or, in Northern India, the adhika month is inserted between the two pakṣas of the niṣa month.

On the contrary, occasionally there occurs no new-moon within one solar month; in that case, the lunar month, synonymous with the solar month in question, is altogether omitted (kṣaya); or else, according to Warren, the name of that month is compounded with that of the following one.

Example.—If new-moon occurs on, or between the limits of, the first and last days of the solar Karttiķa, there will be two lunar months Karttiķa; the first of which is adhika Karttiķa, the second niṣa. On the contrary, if no new-moon occurs in the solar Pausha, there will be no lunar Pausha in that year; Pausha being in that case an expunged or kṣaya month.

On Repeated and Expunged Tithis.

If two tithis end on the same civil day, that tithi which both begins and ends on that same day, is accounted to be expunged (kṣaya); that is to say, though in the strict lunar reckoning the kṣaya tithi is extant, yet in the civil reckoning, which is the only one used for dating, it is neglected. For instance, if of the tithis 11, 12, 13, the 12th ends on the same day with the 11th, that day is called the 11th according to the usual rule; but the following day is called the 13th; the 12th tithi being expunged, and there being no day to take the number of it. If, on the other hand, a tithi begins on one day, runs over the next, and ends on the next but one, that day on which no tithi ends, takes the same number as the preceding day, which is thus repeated (adhika). For instance, if the 12th tithi began on one day and ended on the next but one, the corresponding days will be numbered 11, 12, adhika 12, 13.

It will be obvious that we cannot speak of repeated and expunged tithis, unless we understand by tithi the civil day corresponding to a tithi. Nor of repeated and expunged days, unless we mean by it the number given to the day by the tithi. Intercalation or expunction does not affect the week-days, which run on continuously uninterrupted.

On Solar Months.

From the preceding definitions, it will be evident that, in order to convert a Hindu-solar date into one of the English calendar, we must ascertain:

1. The space of time corresponding to the eponym solar month;
2. The day on which the new-moon occurred within that space of time;
3. The day on which ended that tithi after which the day given in the Hindu date is named.

The last two questions can be accurately answered with the help of Tables 5 to 11; the first approximately only. But, in most cases, an approximate answer to the two first questions will be sufficient. Only where it is doubtful whether there was an intercalary month,—i.e. when the new-moon falls on the approximate initial day of the solar month indicated by our lunar Tables,—the exact limits of that solar month should be ascertained by Tables 1 to 4. To ascertain the exact time of the solar months, four Tables are wanted, one for each of the four years of our intercalary cycle; which Table applies, is shown by the superscription of those Tables. They give, under the name of each solar month, the year A.D. in which the initial date of that month advanced by one day. The corresponding English date will be found by adding to the date written immediately below the name of the solar month, the number of days found in the first (or last) column on the same horizontal line with the year in question. Thus, we find, e.g., by Table 2, that in A.D. 574 the solar Vaishāka began on the 20th March (Old Style). The 20th

* These Tables give the same result as Warren's Tables I. III. and V. They are based on the Ārya-Siddhānta.
March continued to be the initial day of Vaiśākha till A.D. 690, for all years which, divided by four, leave as a remainder 2. The day thus found is, however, the civil beginning of the solar month, the day on which the astronomical beginning of the month, i.e., the Saṃkrānti, or entrance of the sun into a zodiacal sign, is usually celebrated. The true instant of the beginning of a solar month occurred, in any year entered in the Table, at or shortly after sunset of the day preceding the civil beginning of the solar month of that year; every four years it advances by 50 minutes. For example, the solar Vaiśākha in A.D. 574 began astronomically on the 19th March at sunset in Laṅkā, or 12 hours Laṅkā time; and in A.D. 622, which year is separated from 574 by 48 (i.e., 12 × 4 years), 12 × 50 minutes = 10 hours later, i.e., on the 19th March, 22 hours, Laṅkā time. The moment thus found is some minutes later than the true one, but this degree of accuracy will be found sufficient. The astronomical limits of the solar month are wanted for determining the name of the lunar months in cases where the true new-moon occurs near those limits. The initial days of the solar months are also the days of saṃkrānti; 1st Vaiśākha, that of Mēsha; 1st Jyaiśāthi, that of Vṛishabha; and so on (see at the foot of Table 7). The 1st Māgha is the first day of the uttārāyana, or the period during which the sun is moving from south to north; and the 1st Śrāvaṇa, that of the daksināyana, or the period during which the sun is moving from north to south.

**PART II.—USE OF THE TABLES.**

**Description and Explanation of the Tables.**

In Tables 5 to 8, the value of four quantities, a, b, c, d, for different periods is given; e.g., in Table 5 we find that in A.D. 1801 (on the 1st January) a = 5138, b = 566, c = 6, d = 479. For calculating tithis, however, only a, b, c are wanted; and we shall therefore, for the present, speak of a, b, c only.

The quantity a (plus the constant quantity 200)* gives the mean lunations expressed in 10,000th parts of the unit; or the difference of the mean longitudes of the sun and the moon expressed in 10,000th parts of the circle. And the value a = 5438 denotes that, at the moment in question, 0.5438 of the current mean lunation was gone.

b and c give, in thousandth parts of the unit, two other quantities on which depends the difference of the true longitudes of the sun and moon, which we shall denote by A. With b and c turn to Tables 9 and 10; there, for the value of b, and c as arguments, is given the equation which, added to a, gives A. E.g., for b = 566, we find by Table 9, as equation, 84; for c = 6 we find, by Table 10, as equation, 58. Adding 84 and 58 to a = 5138, we get A = 5280. The value of A shows which tithi was current at the moment under consideration, as presented in the following table:

<table>
<thead>
<tr>
<th>Tithi</th>
<th>A is between</th>
<th>Krishna-paksha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5001 &amp; 5333</td>
<td>5334 5666</td>
</tr>
<tr>
<td>2</td>
<td>5667 6000</td>
<td>6966 6333</td>
</tr>
<tr>
<td>3</td>
<td>6334 6666</td>
<td>7000 7333</td>
</tr>
<tr>
<td>4</td>
<td>6667 7000</td>
<td>7334 7666</td>
</tr>
<tr>
<td>5</td>
<td>7001 7333</td>
<td>7666 8000</td>
</tr>
<tr>
<td>6</td>
<td>7334 7666</td>
<td>8000 8333</td>
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<tr>
<td>7</td>
<td>7667 8000</td>
<td>8333 8666</td>
</tr>
<tr>
<td>8</td>
<td>8001 8666</td>
<td>8666 9000</td>
</tr>
<tr>
<td>9</td>
<td>8334 9000</td>
<td>9000 9333</td>
</tr>
<tr>
<td>10</td>
<td>8667 9333</td>
<td>9333 9666</td>
</tr>
<tr>
<td>11</td>
<td>9001 9666</td>
<td>9666 10000</td>
</tr>
<tr>
<td>12</td>
<td>9334 10000</td>
<td>New-moon A = 0 or 10000</td>
</tr>
</tbody>
</table>

Subtractive in another.

*a* has been subtracted from the exact value of the mean lunation, in order that all corrections to be applied to it for finding the value of the true lunation shall be additive quantities, and not additive in one case, and

1. b is the mean anomaly of the moon; and c, the mean anomaly of the sun.
A. = 5280 denotes, therefore, that, at the moment in question, the first tithi of the dark fortnight was current.

In Tables 5 to 7, the column superscribed w. contains the figures 0 to 7, which serve to find the day of the week, as will be shown below.

Table 5 gives the values of a, b, c, d, for all the years of the 19th century. If the year in question is not contained in the 19th century, the corresponding year of the 19th century has to be taken; i.e. the year of the 19th century which is separated from the given year by complete centuries. To find the corresponding year, add the last two figures of the given year to A.D. 1800; e.g. the corresponding year of A.D. 484 is A.D. 1884.

Table 6 gives the values of a, b, c, d, for the centuries intervening between the given year and the corresponding one of the 19th century. To find them, subtract the given year from the corresponding year of the 19th century; e.g. A.D. 1884 - 484 = 14 centuries.

Table 7 gives the value of a, b, c, d, for the hour 0 or sunrise at Laxka, of all days of the English year, and the three first months of the next year. The days of the month are entered in two columns. In the first twelve subdivisions of Table 7, for January to December, the first column applies to common years, and the second to leap-years. In the continuation of this Table for the following year, the arrangement is different. In January and February, the first column applies if the English year, preceding that to which these months belong, was a common year; the second, if it was a leap-year. In March, the second column applies if the English year, in which that month occurred, was a leap-year, or followed after a leap-year. The first column applies to the remaining years of our intercalary cycle. These last three Tables are to be used for the last part of the Hindu year; viz. for that part of the Hindu year which falls in the English year following that in which the beginning of the Hindu year fell. Table 8 gives the values of a, b, c, d, for hours and minutes.

All the quantities taken from Tables 5 to 8, are to be summed up in due order; then the equation of the sum of b and that of the sum of c (Tables 9 and 10), are to be added to the sum of a. The result will be the A. for the moment in question, which is to be interpreted according to the tithi Table.

An example will set this in a clearer light. Let it be asked, what tithi was current on the 21st June, A.D. 484. We have w. a b c

| Table 5 | A.D. 1884 | (3) | 765 | 746 | 2 |
| Table 6 | 14 cent... | (5) | 4626 | 734 | 67 |
| Table 7 | 21 June... | (4) | 8245 | 242 | 471 |

Leap year.—

(12) 3636 722 540

Table 9 arg. b. 722, eq. = 3
Table 10 arg. c. 540 eq. = 76

A. = 3715

As A. is between 3667 and 4000, it follows from the tithi Table that the 12th tithi of the bright fortnight was current.

The Week-Day can be found from the sum of w. 12 (put in brackets). Rule:—If w. is smaller than, or equal to 7, the number indicates the week-day, counting from Sunday as 1. If w. is larger than 7, retrench 7; if larger than 14, retrench 14. The remainder, in both cases, indicates the week-day, counting from Sunday as 1. In our example w. = 12; subtract 7; remainder, 5 = Thursday.

If it be required to know when the 12th tithi ended, subtract 3715 from 4000; the remainder is 285. With this remainder, 285, apply to Table 11, in order to find approximately the difference in time between the time when A. was = 3715 and when it was 4000. We find 200 = 14 hours, 10 minutes; 85 = 6 hours, 1 minute; so, 285 = 20 hours, 11 minutes; therefore the 12th tithi ended about 20 hours, 11 minutes, after sunrise in Laxka.

If this approximation should not be considered sufficient, we add to the above found sums of a, b, c, the value of a, b, c, for 20 hours, 11 minutes, from Table 8. We have found:

a b c

| 21st June AD. 484 | 3636 | 722 | 540 |
| 20 hours (Table 8) | 282 | 30 | 2 |
| 11 min. | 3 | 0 | 0 |
| 3921 | 752 | 542 |

arg. b. 752 ........... 0
arg. c. 542 ........... 76

A. = 3997
The difference between 4000 and 3997 being 3, shows (by Table 11) that the end of the titthi occurred 13 minutes after 20 hours, 11 minutes; or at 20 hours, 24 minutes, after sunrise at Laukâ. Therefore, as the 12th titthi ended on the 21st June, A.D. 484, that day was su di 12.

If we want to know the name of the month of which the 21st June, A.D. 484, was the su di 12, we count 12 days back from the 21st June; the day obtained, the 10th June, was the beginning of the month; and, accordingly, the preceding day, the 9th June, was the day of new-moon, always supposing that there was no kshaya or adhika titthi between new-moon and su di 12. Now, turning to Table 4, we find that the 9th June, A.D. 484, falls in the middle of the time assigned for the solar Āshādhā (20th May to 20th June). Therefore, as the new-moon of the same month to which the su di 12 under consideration belonged, fell within the solar Āshādhā, we conclude that the 21st June, A.D. 484, was su di 12 of the lunar month Āshādhā.

On the Verification of Lunisolar Dates.

Having shown how the Tables are worked, I shall now explain how, by their help, the most usual problem, that of converting a lunisolar date into one of our Calendar, can be solved. Let us suppose we had to verify the date A.D. 484, Āshādhā su di 12, Thursday. We first compute the a. b. c. for the beginning of A.D. 484, viz.:

\[
\begin{array}{ccc}
  a & b & c \\
  1884 & 765 & 2 & Table 5.
  14 cent. & 4626 & 734 & 67 & Table 6.
\end{array}
\]

A.D. 484 (8) 5391 480 69

On the day su di 12, A. must be near, but something less than 4000 (such being the equivalent for the end of the 12th titthi). Subtracting 5391 from 4000, or, as this would leave a negative quantity, from 14000, we have,

Mr. Sh. B. Dikshit (ante, Vol. XVI. p. 120) has calculated the same moment according to the modern Tables of Chatre, the Śrīga-Siddhānta, and the Siddhānti-Sūrya. He found,—Chatre, 48 ghaṭa 12 peala; Śrīga-S. 51 gh. 11 p., Siddh-Sir. 53 gh. 21 p. Converting 20 hours, 24 minutes, into ghaṭas and pealas we get as the equivalent amount 51 gh. Our result, therefore, agrees nearly with that calculated by Mr. Dikshit on the basis of the Śrīga-Siddhānta.

As, by our Tables, only those Hindu dates can be converted into English ones, of which the concurrent English year is known, we are here concerned with the verification of the day only. However, in practice, the year will often be doubtful. In such cases, all years which come in question must be tried till that one is found in which the day fits in all particulars. Instead of calculating the date for all possible years, it will save time if we try the years according to the approximative method (Perpetual Lunar Calendar) which will be explained below.
of the titthi, we must add the a. b. c. of the 22nd June to the a. b. c. of the beginning of A.D. 484.

<table>
<thead>
<tr>
<th>a.</th>
<th>b.</th>
<th>c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.D. 484 (see above)</td>
<td>53</td>
<td>480</td>
</tr>
<tr>
<td>22nd June ............</td>
<td>5</td>
<td>8583</td>
</tr>
</tbody>
</table>

---

A. = 4050

A., being larger than 4000, the end of the 12th titthi must have occurred before the beginning of Friday, the 22nd June. Table 11 shows that our surplus, 50, is equal to 3 hours, 33 minutes. Hence the 12th titthi ended on the 21st June (at about 20h. 27m.); and accordingly A.D. 484, Āśāṭha śu di 12, was the 21st June.

It should be borne in mind that the time of any particular instant is reckoned from the mean sunrise at Laṅkā. For any other place in India, two corrections are necessary:

1. The difference in time between the place in question and the meridian of Laṅkā (on which lies Ujjain, 5 h. 3 m. 27 s. east of Greenwich), is to be added to or subtracted from the result found by my Tables, according as that place lies east or west of the said meridian. Table 15 serves for converting Laṅkā time into local time, for the principal places in India as explained in the note to that Table.*

For instance:—if a titthi ended at Laṅkā at 10 h. 54 m., it ended in Calcutta at 11 h. 44 m., in Multān at 10 h. 37 m.

If the place under consideration is not contained in my List, take the most important one that is nearest to it.*

2. The time at which the sun, at that place and on that day, rose before or after the completed sixth hour after mean midnight of that place.

The amount of this correction, for any given place and time, can be calculated with the help of Table 16. That Table shows how many minutes before or after sunrise at Laṅkā (0 hour of my tables) the day began at places situated on the meridian of Laṅkā or Ujjain at a Northern latitude of 5 to 30 degrees, on the days entered in the first and last columns of the Table. For places and days not entered in the Table, the amount may be calculated by a proportion. But it must be stated that the date may be wrong by one or two days.

The process by which we have obtained the result may be reduced to the following rules:—

1. Find the a. b. c. of the given year, by summing up the quantities for the corresponding year and the intervening centuries.

2. Find the Index of the new-moon days by subtracting from 10000 the a. of the given year.

3. Find the Index of the given titthi, by adding its equation (from the titthi Table) to the Index of new-moon.

4. Find the new-moon falling in the given solar Hindu month, by adding to the c. of the given year, the c. of the new-moon days in the English months corresponding to the given solar Hindu month. The footnote of Table 7 shows which new-moon day is to be selected. In doubtful cases determine the limits of the solar month, from Tables 1 to 4.

5. Try the day indicated by the Index of the titthi. If A. comes out larger than the equivalent of the proposed titthi (see titthi Table), it ended before sunrise; if smaller, after sunrise.

6. Apply the corrections due to the geographical site of the place, if necessary.

2nd Example.—In order to give a sample of the calculation, we shall convert into the corresponding English date, A.D. 1261, Jyaishtha ba di 4, Gurau. I give the calculation without further remark:
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>b.</td>
<td>c.</td>
<td></td>
</tr>
<tr>
<td>A.D. 1861... (3) 6257 896 4</td>
<td>$a = 10000-9133 = 867$.</td>
<td>4th Tithi krishna paksha(1) 6333-9133 or 6333+867 = 7200</td>
<td></td>
</tr>
<tr>
<td>6 Cent ...... (4) 2876 135 47</td>
<td></td>
<td>Jyaishtha about 1st May $a = 636$: $c = 329 + 51 = 380 &gt; 364$.</td>
<td></td>
</tr>
<tr>
<td>A.D. 1261... (7) 9133 31 51</td>
<td></td>
<td>4th Tithi a 7200 about 20th May: $a = 7070$.</td>
<td></td>
</tr>
<tr>
<td>20th May ... (6) 7070 45 381</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(13) 6264 76 432</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arg. b. 76 204</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arg. c. 432 35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ A = 6503 - 6333 = +170 \text{ (or } 100 = 7\text{ h. 5 m.}, 70 = 4\text{ h. 58 m.}) \text{ 12 h. 3 m. before 20th May.} \]

The 4th tithi of the krishna paksha ended on the 19th May, which was a Thursday, about 11h. 57m.

3rd Example.—I select the following date because its calculation offers matter for some consideration:—

Vikrama-Samvat 1288, Phalguna $\text{in } di\text{ 10}$, Wednesday.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.D. 1831... (7) 5528 213 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Cent ...... (4) 2876 135 47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.D. 1231... (11) 8404 348 51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The new-moons which come in question are to be looked for in January and February. But there are two Januaries and two Februaries in our Table 7. In this case, the Tables for the January and February at the end of Table 7 apply; those at the beginning of Table 7 applying to the same months of the preceding Christian year, i.e. to that part of A.D. 1231 which precedes the Hindu year. It will be seen that new-moon fell on the 24th January and 23rd February (or the preceding day), as the $a$. of these days is nearest to, but smaller than, 1596 (the index of new-moon). On the 24th January, the $c$. is $62 + 51 = 113$, which is near the $c$. required for Phalguna, viz. 114. It is therefore doubtful whether the lunar month, determined by the new-moon of the 24th February, is Magha, or Phalguna. Turning to the 23rd February, we find $c. = 195$; i.e. it is near the $c$. required for 1st solar Chaitra (196). Hence it is likewise doubtful whether a new-moon on the 23rd February inaugurated the month Phalguna or Chaitra.

In order to fix with more definiteness the beginning of Chaitra, we must have recourse to Table 4 (for the date in question falls in the leap-year, A.D. 1232).

We find that the solar Phalguna ran from the 25th January to the 23rd February, astronomically from 24th January 13 h. 40 m. to 23rd February 8 h. 50 m. As will be remembered, we have only approximately determined the dates of new-moon; we must now calculate them accurately.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.D. 1231 8404 348 51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24th Jan. 1389 81 62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 hours. 183 20 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 min. 9 1 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9985 450 114</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arg. 450 184</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arg. 114 20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$189 = 13$ hours, 23 minutes.
Accordingly new-moon occurred 13 h. 23 m. before solar Phālguna, and belonged therefore to Māgha. We calculate 0 Chaitra:

<table>
<thead>
<tr>
<th>A.D. 1231</th>
<th>8404</th>
<th>348</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>23rd Feb.</td>
<td>1548</td>
<td>169</td>
<td>144</td>
</tr>
<tr>
<td>8 hours</td>
<td>127</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>50 min.</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>91</td>
<td>532</td>
<td>196</td>
<td></td>
</tr>
</tbody>
</table>

\[ \text{arg. 532} = 112 \]
\[ \text{arg. 196} = 2 \]
\[ 205 = 14 \text{ hours,} 31 \text{ minutes.} \]

Accordingly, new-moon occurred 14 h. 31 m. before 0 solar Chaitra, and belonged therefore to Phālguna. In order to find 4u 10, we proceed, as usual, by adding, to the \(a. \ b. \ c.\) of A.D. 1231, the \(a. \ b. \ c.\) of that day after the 22nd February, the \(a.\) of which is next below 4929 (or the index for 4u 10).

<table>
<thead>
<tr>
<th>A.D. 1231</th>
<th>(11) 8404</th>
<th>348</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd March</td>
<td>(0) 4556</td>
<td>496</td>
<td>169</td>
</tr>
<tr>
<td></td>
<td>(11) 3000</td>
<td>844</td>
<td>220</td>
</tr>
</tbody>
</table>

\[ \text{arg.} \ b \ 844, \ \text{eq.} \ 24 \]
\[ \text{arg.} \ c \ 220, \ \text{eq.} \ 1 \]
\[ A. = 3025 = 1 \text{ h.} 46 \text{ m.} \]

As \(A.\) for 4u 10 is between 3000 and 3333, we see that the 10th titihi was running at the beginning of the 3rd March. That it ended in the same day, is evident from the fact that the \(a.\) of the 4th March, viz. 4935, is, by itself, larger than the index for 4u 10, which we have found to be 4929, and will become still more so by adding the equations of \(b.\) and \(c.\)

Let us calculate also the 4th March:

<table>
<thead>
<tr>
<th>A.D. 1231</th>
<th>8404</th>
<th>348</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th March</td>
<td>4935</td>
<td>532</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>3339</td>
<td>880</td>
<td>222</td>
</tr>
</tbody>
</table>

\[ \text{arg.} \ b \ 880, \ \text{eq.} \ 44 \]
\[ \text{arg.} \ c \ 222, \ \text{eq.} \ 1 \]
\[ A. = 3384 \]

Subtract 3333; the remainder 51 = 3 h. 37 m. Hence the 10th titihi ended 3 h. 37 m. before sunrise at Laṅkā, on the 3rd March, which was a Wednesday, as required. The end of the 10th titihi being near the beginning of the day, we must now consider whether the result may be influenced by the geographical position of the locality to which the record belongs; \(v i z.,\) Girnār being about 21 minutes (of time) west of the meridian of Laṅkā (or Ujjain), the day begins there about 21 minutes later than on the meridian of Ujjain. Hence the 10th titihi ended about 3 h. 58 m. before the end of the 3rd March. Again, the sun rises, before the 21st March, later on the circle of latitude of Girnār, than on the equator, on which Laṅkā is supposed to be situated. The difference still more removes the end of the 10th titihi from the end of the 3rd March, as compared with the same moment at Laṅkā. The date, as we have found it, stands, therefore, proof against all doubts which can be raised against it. As regards the week day, the (11) shows that it was the fourth day or Wednesday as required.

2nd method. In calculating the date, we can also start from A.D. 1232, the Christian year in which the date fell. But, in that case, we must make use of the first part of Table 7. We shall sum up the figures for the 3rd March A.D. 1232:

<table>
<thead>
<tr>
<th>A.D. 1832</th>
<th>(1) 9128</th>
<th>460</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Cent</td>
<td>(4) 2876</td>
<td>135</td>
<td>47</td>
</tr>
<tr>
<td>3 March</td>
<td>(6) 995</td>
<td>250</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>(11) 2999</td>
<td>845</td>
<td>220</td>
</tr>
</tbody>
</table>

Comparing this result with that found above, we see that \(a.\) is smaller, \(b.\) larger, by one, than found above.\(^{10}\) This difference is caused by our neglecting fractions below \(\frac{1}{2},\) and counting them as 1 if larger than \(\frac{1}{2}.

4th Example.—An intercalary month. As a month is intercalated when two new-moons occur within one solar month,—one soon after the beginning, and the other shortly before the end, of the solar month,—all that is required to decide any case, is, to calculate the phase of the moon on the beginning and the end of the solar month. If the moon was waning at the date in question is later than March of the succeeding English year.

\(^{10}\) The last method must be followed in cases in which the Hindu year begins in Kārttika (Sept.-Oct.), and the
beginning, and waxing at the end, of the solar month, a month was intercalated.

In the year 958 of the Chêdi era, which has been identified with A.D. 1207 (the Academy, 14th January, 1888) there was an intercalary Ashâdha. We must first ascertain the astronomical limits of solar Ashâdha from Table 3. In A.D. 1199 Ashâdha began on the 26th May,

We calculate A. for both instants:

<table>
<thead>
<tr>
<th>A.D. 1807..</th>
<th>7080</th>
<th>81</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Cent......</td>
<td>2876</td>
<td>135</td>
<td>47</td>
</tr>
<tr>
<td>A.D. 1207...</td>
<td>9956</td>
<td>216</td>
<td>51</td>
</tr>
<tr>
<td>26th May....</td>
<td>9102</td>
<td>262</td>
<td>397</td>
</tr>
<tr>
<td>13 hours....</td>
<td>183</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>40 min......</td>
<td>9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>9250</td>
<td>499</td>
<td>449</td>
<td></td>
</tr>
</tbody>
</table>

arg. 499 ...... | 140 |
arg. 449 ...... | 41 |

A. = 9431

This calculation shows that the beginning of solar Ashâdha occurred before, and the end after, new-moon (A. = 0 or 10000), i.e. two new-moons fell within solar Ashâdha. Accordingly there was an intercalated lunar Ashâdha as required.

5th Example.—A Sraukrâti :

Śaka 1126 (A.D. 1204) Pausha śu di 2, Saturday, at the uttarādyaṇa.

The uttarādyaṇa begins with the solar Mâgha. That month began, according to Table 4, in A.D. 1204, on the 25th December. Our calculation stands thus:

| A.D. 1804 (1) | 5940 306 | 4 |
| 6 cent. ... (4) | 2876 135 | 47 |
| 25 Dec. ... (2) | 1569 29 983 |
| (7) | 385 470 | 34 |

arg. 470 | 166 |
arg. 34 | 47 |

A. = 593

Accordingly the 25th December was a Saturday, its v. being 7; and, the second tithi ending in it, it was Pausha śu di 2, as required.

Before leaving this part of our subject, I will add a few remarks that may prove useful. It is obvious that every lunar date can be converted into the corresponding English one; but such lunar dates only can be verified, i.e. shown to be correct notations of real and particular moments of time, which are coupled with some other chronological item not purely or chiefly derived from the position of the moon. In most cases the concurring notation will be the week-day. As the verification of the week-day is a much simpler process than, and can be done simultaneously with, ascertaining the date of the tithi, it will save time to calculate at once the correct week-day. Let us do so with our first example. We have found (8), 5391, 480, 69, as the (v.) a. b. c. of the 1st January, A.D. 484. As the figure (8) of the week-day is above 7, subtract 7, and put (1) instead of
On Mean Intercalations.

It is highly probable that in ancient times mean intercalations were used, i.e. a month was intercalated when two mean lunations fell within one mean solar month. As the mean lunation is smaller than the mean solar months, there could be no expunged months while mean intercalations were used. My Tables give the moment of mean new-moon with great accuracy. Mean new-moon happens when the sum of \( a + 200 = 0 \) or 10000. But the beginning of a mean solar month is less accurately defined by \( c \), which remains unchanged for many hours. The increase of \( c \) in a mean lunar month being 80-89, and in a mean solar month 83-33, it follows that a mean intercalation is due when, at the time of mean new-moon, \( c \) is equal to, or larger by one or two than, the \( c \) required for the beginning of the given mean solar month, as shown in the following Table:

<table>
<thead>
<tr>
<th>Vaish.</th>
<th>236</th>
<th>Bhadr.</th>
<th>619</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jyai.</td>
<td>369</td>
<td>Ashvi.</td>
<td>702</td>
</tr>
<tr>
<td>Ash.</td>
<td>452</td>
<td>Kartt.</td>
<td>786</td>
</tr>
<tr>
<td>Sraw.</td>
<td>536</td>
<td>Marg.</td>
<td>869</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chaitr.</td>
</tr>
</tbody>
</table>

However, the calculation gives not absolutely reliable results; for it is just possible that, instead of the month that is actually obtained, the preceding or the next one was intercalated.

On Eclipses.

The \( d \) of my Tables gives the equivalent for the distance of the sun from the nodes of the moon's orbit. The amount of \( d \), therefore, shows whether, on the days of new-moon and full-moon, a solar or lunar eclipse was likely to occur. For any other days but those of new-moon or full-moon, \( d \) is of interest for chronological purposes only when the correction for the moon's latitude is to be ascribed as explained under the Correction due to the Moon's Latitude.
The occurrence of an eclipse is ascertained by the following rules:

At new-moon \( \{ \) certain if \( d \) is between 924 and 1000, or 0 and 76.
\( \) doubtful \( \) 894 \( \) 924, or 76 \( \) 106.
\( \) impossible \( \) 106 \( \) 894.

At full-moon \( \{ \) certain if \( d \) is between 950 and 1000, or 0 and 50.
\( \) doubtful \( \) 930 \( \) 950, or 50 \( \) 70.
\( \) impossible \( \) 70 \( \) 930.

Example.—Was there a lunar eclipse in Srīvaṇa, A.D. 1144?

\[
\begin{array}{cccc}
\text{a} & \text{b} & \text{c} & \text{d} \\
\hline
\text{A.D. 1844} & 3352 & 526 & 3 \ 97 \\
\text{7 cent...} & 4345 & 585 & 50 \ 822 \\
\text{A.D. 1144} & 7697 & 111 & 53 \ 919 \\
\text{17 July, l.y. 7049} & 186 & 542 & 142 \\
\text{eq. b.} & & 274 & \\
\text{eq. c.} & & 95 & \\
\text{A.} & & 5115 & \\
\end{array}
\]

Full-moon occurred about 8 h. 13 m. before the beginning of the 17th July; or on the 16th July, about 15 h. 47 m. The increase of \( d \) in eight hours being 2, 2 must be retrenched from 61. The remainder is 59. Therefore, as 59 falls within the limits of a doubtful lunar eclipse, it is likely that there was a small lunar eclipse; as will be found to be the fact by referring to the “Canon of Eclipses,” the great work of Oppolzer (Denkschriften der Kaiserl. Akademie der Wissenschaften in Wien 1887, which has superseded the “L’art de vérifier les dates,” from which is extracted Cunningham’s List of Eclipses in his Indian Eras.) The example just given shows at once the advantage and the disadvantage of my method. The advantage consists in this,—that by the same calculation we come to know the moment of

11 For calculating such or any other particulars connected with solar eclipses, the reader is referred to Schram’s Tables (Denkschriften d. K. A. d. W. Wien 1886) which are supplementary to the “Canon of Eclipses.” With the help of these two works all problems referring to eclipses can now be solved by an easy calculation.

12 It must be remarked, that eclipses, especially solar ones, instanced in historical documents, were, in many cases, not actually observed eclipses, but calculated ones. For the smaller solar eclipses, if not calculated beforehand, would pass unobserved; since even the larger ones (say up to 7 degrees) are seen only under favorable circumstances, as when the sun is setting or rising, or is seen through a fog or thin cloud. Therefore eclipses mentioned in inscriptions are generally to be interpreted as calculated, not as actually observed. As the result of a calculation of an eclipse varies with the different Siddhāntas, and as it is correct only for a period within a few centuries off the composition of the Siddhānta used, it will be safest to identify the eclipses mentioned in inscriptions such as actually occurred, but keeping in mind the eventuality that within and near the limits of a possible eclipse, the Hindus may have predicted an eclipse when none did occur, or vice versa.
On Karanás.

"Half the portion of a titthi is established as that of the karana;" (Sūrya-Siddhānta, ii. 69). There are, therefore, 60 karana in one lunar month. Their names and numbers are given in the following table:

<table>
<thead>
<tr>
<th>Karana</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kīnstughna</td>
<td>1</td>
</tr>
<tr>
<td>Bava</td>
<td>2, 9, 16, 23, 30, 37, 44, 51</td>
</tr>
<tr>
<td>Bālava</td>
<td>4, 11, 18, 25, 32, 39, 46, 53</td>
</tr>
<tr>
<td>Kaulava</td>
<td>5, 12, 19, 26, 33, 40, 47, 54</td>
</tr>
<tr>
<td>Taittīla</td>
<td>6, 13, 20, 27, 34, 41, 48, 55</td>
</tr>
<tr>
<td>Gara</td>
<td>7, 14, 21, 28, 35, 42, 49, 56</td>
</tr>
<tr>
<td>Bānij</td>
<td>8, 15, 22, 29, 36, 43, 50, 57</td>
</tr>
<tr>
<td>Viṣhti</td>
<td>58</td>
</tr>
<tr>
<td>Śakuni</td>
<td>59</td>
</tr>
<tr>
<td>Nāga</td>
<td>60</td>
</tr>
<tr>
<td>Chatushpada</td>
<td>60</td>
</tr>
</tbody>
</table>

As we know how to calculate a titthi, we shall have no difficulty in verifying a karana. For instance, suppose it be stated in a document—śū dī 5, in the karana Bālava. Bālava, the tenth karana, ended at the same moment with the 5th titthi; being in fact the latter half of it. We therefore calculate, as explained above, the end of the 5th titthi. The karana in question was the time of about 11 to 12 hours preceding the moment found by our calculation for the end of the 5th titthi.

On Nakshatras and Yōgas.

The nakshatras, in which the moon is at any given moment, can, by the help of my Tables, be found with sufficient accuracy. The yōga, an astrological element, will be found by the same operation required for the nakshatras. We treat, therefore, of the nakshatras and yōgas at the same time.

Rule for finding the Nakshatra.—From the c. of the date in question subtract 279.4 augmented by the tenth part of the equation of c. If c. is smaller than the sum to be subtracted, add 1000 to c. (This is the true longitude of the sun expressed in thousand parts of the circle). Add to this, the tenth part of A. for the date in question. The result, taken as Index, shows, by Table 17, the nakshatra in which the moon is at the given moment.

Rule for finding the Yōga.—Add to the result, just found, the true longitude of the sun, calculated according to the above rule; the sum indicates as Index the yōga, current at the moment in question, by the same Table.

Example.—Find the nakshatra and yōga for sunrise on the 11th May, A.D. 1824:

<table>
<thead>
<tr>
<th>A.D. 1824</th>
<th>9646</th>
<th>416</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 May...</td>
<td>4361</td>
<td>754</td>
<td>359</td>
</tr>
<tr>
<td>4007</td>
<td>170</td>
<td>362</td>
<td>+ 279.4</td>
</tr>
<tr>
<td>eq. b.</td>
<td>263</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eq. c.</td>
<td>13</td>
<td>1-3</td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td>4283</td>
<td></td>
<td></td>
</tr>
<tr>
<td>428 + 81,</td>
<td>509,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index of nakshatra, viz. Chitāra</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>509 + 81,</td>
<td>590,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index of yōga, viz. Siddhi</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

And in the Ravi-Paṁchāṅgām (Warren's Kala-Sankalita, p. 317) we find that, on the 11th May, A.D. 1824, the moon was in the nakshatra Chitāra, and that the yōga Siddhi continued for 5 ghaṭā after sunrise.

If it is required to know more accurately the beginning of a nakshatra or yōga, the Table for Differences must be applied. For instance, we found 590 as Index of the yōga. Subtracting 590 from 594 (the beginning of Vyati-pāta), we get as the remainder 4. The Table for Differences shows that the 4 is equal to about 2 h. 27 m. Accordingly, the yōga Vyati-pāta began about 2 h. 27 m. about 6 ghaṭā after sunrise at Laṅkā.

This calculation is not very accurate, as an error of one unit in the Index makes a difference of above half an hour. But, for chronological purposes, this degree of accuracy will be all that is wanted.

There is another method of reckoning yōgas in use, for the particulars of which the reader is referred to Colebrooke, Miscellaneous Essays, Vol. II. p. 363 (new edition, p. 319).

In some inscriptions (e.g. ante, Vol. XII. pp. 18, 254.) the nakshatra is mentioned together with the date. But, on calculating the date, I have found that the nakshatra in which, by my method, the moon must have been at that time, does not agree with the nakshatra given in the inscription. Nor does the week-
PART III.—THE PERPETUAL LUNAR CALENDAR.

Many chronological questions can be more readily solved if the whole lunar year, together with the corresponding English year, is expressed to our view. However, this cannot be done without a sacrifice of accuracy; i.e., we must rest satisfied with approximate results. Where no more than such an approximation is wanted, the Perpetual Lunar Calendar, exhibited in Table 12, will be found useful. In Table 12, every day is entered with a Roman cypher, the Epact, and one of the seven letters _a_ to _g_, the Dominical Letter. To begin with the latter, the Dominical Letters serve to show on what day of the week fell any given date of any year, in which the week-day of one date is known. For instance, let us suppose that, in a certain year, the 6th March was a Wednesday. As the 6th March has the Dominical Letter _a_, we know at once that all days having the same Dominical Letter _a_, were Wednesdays. What were the week-days of the remaining Dominical Letters, will be found by the subsidiary Table 12, which needs no explanation. If no week-day is known from other sources, the week-day of the 1st March, or the value of the Dominical Letter _d_, can easily be found by help of Table 14, which gives the value of the Dominical Letter _d_ from A.D. 0 to 2000, Old Style. The Epacts are arranged in such a way, that the same phase of the moon approximately occurred throughout one English year and the first four months of the next, on all days having the same Epact. For instance, if of some given year the 10th March, having the Epact _X_, was the day of a new-moon, a new-moon occurred on all days having the Epact _X_, throughout the year, i.e., on the 9th April, 8th May, etc. As the initial date of the lunar month immediately follows the day of new-moon, the initial day of all lunar months will be found by adding one to the Epact of the new-moon day of the year under consideration. As Cunningham's Table XVII. gives the initial day of the lunisolar years, the date taken out from that Table serves to find the beginning of all lunar months. But Cunningham's dates are, in many cases, apt to mislead; for they are calculated for mean midnight of Ujjain; whereas, in civil reckonings the days are accounted to begin with sunrise. Therefore, if the mean new-moon falls between midnight and sunrise, Cunningham couples it with the following day, whereas, actually, it belonged to the preceding one. Hence a fourth part of Cunningham's dates is a day too late. To find with perfect accuracy the date of mean new-moon, my Tables may be used thus,—

Add 200 to the _a_ of the corresponding year, then add the _a_ for the intervening centuries. Subtract the _a_ thus found from 10000. The remainder is the _a_ on which the mean new-moon occurred throughout the whole year. For instance, in A.D. 1468 we have 10000—(1800 + 200 + 9936) = 10000—1936 = 8064. Hence, mean new-moon occurred, e.g., late on the 23rd March, as that day has the next lower _a_ (7768), and Chaitra _A_ _d_ _i_ 1 fell, i.e., ended, on the 24th March. For the reasons stated above, Cunningham gives the 25th March for the beginning of the lunisolar year.

However, without reference to the Tables, the day of new-moon in March can be found for any given year, and, at the same time, for a good many years preceding and following it, by Table 13.

The second Part of this Table gives the date in March on which new-moon occurred in the years A.D. 304 (0) to 379 (75); the fraction gives the complete quarters of the day, after which the conjunction took place. The same dates, in the same order, are valid for the next 76 years; but a quarter of a day must be subtracted from each; after 152 years two quarters must be subtracted; after 228 years, three quarters, and after 304 years (in A.D. 668 etc.) a complete day must be retrenched from the date found.13

The correctness of these rules can easily be demonstrated by the above Tables. The difference of the relative positions of the sun and the moon after 76 years, is found by subtracting the _a_ of A.D. 1891 (5135) from that of A.D. 1875 (5229). The remainder 84 is nearly equal to the fourth part of the increase of _a_ for one day.

---

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Therefore, to find the date of new-moon in March for any year, e.g. A.D. 1468, subtract from it the next lower figure under I. in Part the first (1216), and put down apart the subtractive quantity in parenthesis (—3; see Table 13, example). From the remainder (252) subtract, if it is greater than 76, the next lower figure under II. of Part the First (228) and put apart the subtractive quantity. The second remainder (24) is to be looked out in Part the Second in the column y. From the date thus found (274), subtract the sum of the subtractive quantities (31) set apart; the result will be the date of mean new-moon in March for the year in question. By adding or subtracting 141/2 we get the day of mean full-moon. Augment the date of new or full moon by one, to find the Epact of the beginning of the śukla or krishṇa paksas. If the Epact turns out to be above 30, deduct 30 from it, to find the correct Epact. Knowing the beginning of the month, it will be easy to verify, approximately, any day of it, by counting onwards, making the śukla paksas consist of 15 days, and the krishṇa paksas of 14 days and 15 days alternately, as done by Cunningham. The result, thus arrived at, is the same as that arrived at by Cunningham's method, if the initial day of the year falls in March. If it falls in February, there is sometimes a difference. For, if the date to be verified falls in a series of 30 Epacts, my date will be one day earlier than Cunningham's date; but if the date falls in a series of 29 Epacts, Cunningham's method and mine yield the same result.

It remains to ascertain the names of the Indian months, the initial days of which are indicated by the Epact as explained above. The name of the lunar month depending on the solar month in which new-moon occurred, all that is required, is, to know on which days the solar months commenced. This information is furnished by the following arrangement of my Table 12. The names of the solar months are placed above those of the English months in such a way that the first part of the Sanskrit name is written above the latter part of the English name of that English month in the later part of which (below the horizontal stroke) the solar Hindu month commenced. For instance, the solar Śrāvaṇa begins in June and ends in July. The initial date of the solar month is marked by a number (4 to 19) placed between the Epact and the Dominical Letter. These numbers indicate the century A.D. in which, approximately, the solar month commenced on the day marked by the number of the century; thus Śrāvaṇa, in A.D. 600 to 700, began on the 23rd June, that day being marked by 6.

It will be noticed that January and February in the large Table, and March and April in the Continuation-Table, have two columns; one is to be used for common years, and the other for leap-years, as indicated by the headings of the column.

An example will set the application of my Table in a clear light. On what day, in A.D. 807, fell Pausha śu ṭi 1? Cunningham's Table XVII. gives as the initial date of the Hindu year, Sunday, the 14th March. This day is marked XIVc. in my Table. The Epact XIV occurs in December, on the 5th; this day is Pausha śu ṭi 1, because it fell in the solar Pausha which in A.D. 700 to 800 ran from the 23rd November to the 22nd December, as indicated by the number 7 placed after the Epact of those days. The 5th December has the Dominical Letter e, just as the 14th March, which was a Sunday. Therefore, in A.D. 807, Pausha śu ṭi 1 fell on Sunday, the 5th December.

An additional advantage of my method, as will have been remarked, is, that no regard is taken of intercalary or expunged months intervening between the initial day of the Hindu year and the date to be verified.

I conclude with a practical hint. If a list of eclipses is at hand, some new and full moons of every year may be taken from it. For the day of a lunar eclipse is, of course, a full-moon day, and a solar eclipse coincides with new-moon. Taking the Epact of the date of an eclipse, may serve to check a result arrived at by starting from the initial day of the Hindu year as given in Cunningham's Table XVII.
PART IV.—THE CONSTRUCTION OF TABLES 5 to 11.

As stated above, my Tables are those of M. Largenteau, adapted to the doctrines and elements of Hindu astronomy, especially those of the Sārya-Siddhānta. The inaccuracy of the elements of Hindu astronomy becomes perceptible in calculations for long intervals of time; but, if the interval of time is only a few years, the result of the Hindu calculation may be considered correct for all practical purposes. Therefore Table 7, which gives the increase of a. b. c. for the 366 days of the year, could be adopted from the original Tables, without any change beyond omitting two columns not wanted, and adding one, \( \text{etc.} \), for finding the weekday. But Tables 5 and 6 had to be entirely recalculated. I shall explain how this was effected, in order to show that my Tables must yield correct results.

The epoch of Hindu astronomy is the beginning of the Kaliyuga; according to the Sārya-Siddhānta, at midnight, at Lāṅkā, of the 17th of February, Old Style, B.C. 3102. As the civil day is usually reckoned to begin with sunrise at Lāṅkā, the beginning of the Kaliyuga according to the Sārya-Siddhānta may be stated as B.C. 3102, 17th February, Old Style, 18 hours, Lāṅkā time. (According to the Ārya-Siddhānta, the Yuga began 6 hours later, or on the 18th February, 0 hour, Lāṅkā time.) At that epoch, according to the Sārya-Siddhānta, the mean moon and sun were in the initial point of the Hindu zodiac; the longitude of the moon’s perigee was 9 signs; and the sun’s perigee was practically at the same place as at present, i.e. \( 257^\circ 17' \) of the initial point of the Hindu zodiac. Accordingly a. or the difference of the mean longitudes of the sun and the moon, was \( \text{nil} \). But we must subtract the constant quantity 200.5 by which the difference of the longitude of the sun and the moon is diminished, in order that the equations of \( b. \) and \( c. \) may be always additive, and not additive in some cases, and subtractive in others.

Hence, \( a. \) was \( 10000 - 200.5 = 9799.5 \).

\( b. \) or the moon’s mean anomaly, was \( 90^\circ = 0.250 \) of the circle, or in my notation 250.

\( c. \) or the sun’s mean anomaly, was \( 102^\circ 52' \), or in my notation 235.8.

Instead of starting from this epoch and adding the increase of these quantities for the time elapsed between the epoch and the given date, as would be more in accordance with the practice of the Hindus, we start from the 1st January of the corresponding year of the 19th century, for the hundred years of which the value of \( a. b. c. \) had to be calculated. Suppose the correct value of \( a. b. c. \) for the corresponding year to be known, the same for the given year can be found, by subtracting the increase of \( a. b. c. \) for the complete elapsed centuries. But to convert the subtractive increase into an additive quantity, we subtract the increase from 1, and add the remainder. This remainder is entered in Table 6 as \( a. b. c. \). In the way thus explained, the \( a. b. c. \) for the 1st January of any year can be found. For any other date, we add to the \( a. b. c. \) for the 1st January the increase up to the given day as registered in Table 7.

According to the rules just laid down, we will now calculate the \( a. b. c. \) for the beginning of the Kaliyuga, the amount of which quantities has been specified above according to the Sārya-Siddhānta.

The corresponding year of B.C. 3102 (beginning of the Kaliyuga) is A.D. 1899, the interval being 5000 years. Adding to the \( a. \) of Kaliyuga 0, the increase of \( a. \) in 5000 Julian years, we get the \( a. \) for A.D. 1899, 17th February, 18 hours, Old Style, or 1st March, 18 hours, New Style. Our Tables serve, however, for the inverse problem; thus, we start from \( a. \) for A.D. 1899, and add to this, \( a. \) for 5000 years, and \( a. \) for the 1st March, and \( a. \) for 18 hours. The two last positions are equal to the increase of \( a. \) for 59.75 days. Now we have the proportion:—As the synodical revolution of the moon in a Yuga is to the increase of \( a. \) in 5000 years, so the days in a Yuga are to the days in 5000 years; viz. —

\[
\text{increase of } a = \frac{1525250 \times 55333330}{157791773} \approx 61842.65628
\]

in 5000 Julian years.

Hence, increase in 1000 years is 12368.53126, and increase in 100 years is 12368531.26. In the same way the increase of \( a. \) in 59.75 days will be found to be 2023326.

Now rejecting complete revolutions, and subtracting the fraction from 1, the remainder is to be used as \( a. \) for 5000 years, viz. 3437.2; \( a. \)
for 1000 years, viz. 4687.4; a, for 100 years, viz. 1468.7.

Our calculation will be as follows:—

| A.D. 1899 | 6129 |
| 5000 years | 3437.2 |
| 59.75 days | 233.26 |

Kaliyuga 0...9799.45

The difference from 9799.5 being smaller than can be expressed in my Tables, the calculation has proved that the a, for A.D. 1899 is correctly given.

From the a, of A.D. 1899 the a, for the remaining years of the 19th century was found by subtracting the increase of a, for the interval between A.D. 1899 and the particular years, rejecting the fraction, or counting it as 1, according as it was less or greater than a half. The a, in Table 6 was found as stated above. But, for 3 and more centuries, the increase of a, for 12 complete days, 4064, is to be added on account of the difference between the Old and the New Style: e.g. 10 cent. = 4687 + 4064 = 8751.18

In an analogous manner was found the b, of Tables 5 and 6. The proportion holds:—As the anomalistic months in the Yuga are to the increase of b, in 5000 years, so the days in the Yuga are to the days in 5000 years; viz.—

\[
\text{increase of } b, = \frac{1832250 \times 57963133}{257917688}, = 66277.5056
\]

in 5000 Julian years.

Hence the increase in 1000 years is 13255.501; in 100 years, 1325.501; and in 59.75 days, 2168.4. And b, for 5000 years is 494.4; for 1000 years, 498.9; and for 100 years, 449.9. Therefore, as above:—

| A.D. 1899 | 587.2 |
| 5000 years | 494.4 |
| 59.75 days | 168.4 |

Kaliyuga 0 250.0

Accordingly b, for A.D. 1899 is 587.2. But, as the fraction is smaller than 1, we reject it.

The remaining operations are the same as with a.17

For determining c, we say:—As the anomalistic revolutions of the sun in the Kalpa is to the increase of c, in 5000 years, so the days in the Kalpa are to the days in 5000 years; viz.—

\[
\text{increase of } c, \text{ in } 5000 \text{ Julian years } = \frac{1832250 \times 57963133}{257917688} = 13772175526000 = 4999.8796.
\]

Hence the increase in 1000 years is 9999.9759; in 100 years, 9999.976; in 59.75 days, 0.163; and c, for 5000 years is 1204; for 1000 years, 241; and for 100 years, 24.

Therefore, as above:—

| A.D. 1899 | 12 |
| 5000 years | 1204 |
| 59.75 days | 163.6 |

Kaliyuga 0 285.8

Accordingly c, for A.D. 1899, viz. 2, is too large by only 0.2.

Tables 9 and 10 are calculated according to the rules of the Sûrya-Siddhânta, on which we need not enter here.

Possible Error.

As in the Tables fractions are neglected or counted as 1, according as they are less or larger than 1, the absolute error in every quantity may amount to ±0.5. Usually the plus and the minus of the different figures will compensate for each other; but in extreme cases the neglected fractions may sum up to ±2.5 or ±3.5, according as five or seven figures are summed up to find A., and the error in time will be 10 or 14 minutes respectively. In the same way, the error in the sums of b, and c, may mount up to ±1.5, or ±2.5, according as three or five figures are summed up. But the effect of these errors on the equations of b, and c, and through them on A., is not the same, but can be ascertained, in every case; generally, it is very small.

18 In the way indicated Table 6 may easily be extended beyond the limits I have chosen, which were selected because the calendar now in use was not introduced before that time.

17 Some centuries ago a bija or correction was introduced, by which the b, of Table 5 would be diminished by 5. This correction should be applied in dates of the last three or four centuries.
### TABLE 1.

**Initial Dates of Hindu Months.**

**The year divided by 4 leaves remainder 1.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Mar.</td>
<td>1489</td>
<td>1381</td>
<td>449</td>
<td>361</td>
<td>441</td>
<td>437</td>
<td>385</td>
<td>397</td>
<td>453</td>
<td>413</td>
<td>505</td>
<td>413</td>
</tr>
<tr>
<td>17 Apr.</td>
<td>605</td>
<td>497</td>
<td>565</td>
<td>567</td>
<td>557</td>
<td>553</td>
<td>501</td>
<td>513</td>
<td>569</td>
<td>529</td>
<td>621</td>
<td>529</td>
</tr>
<tr>
<td>19 May.</td>
<td>721</td>
<td>613</td>
<td>613</td>
<td>673</td>
<td>669</td>
<td>617</td>
<td>629</td>
<td>685</td>
<td>645</td>
<td>737</td>
<td>655</td>
<td>761</td>
</tr>
<tr>
<td>19 June.</td>
<td>837</td>
<td>729</td>
<td>797</td>
<td>725</td>
<td>789</td>
<td>733</td>
<td>741</td>
<td>801</td>
<td>761</td>
<td>853</td>
<td>761</td>
<td>834</td>
</tr>
<tr>
<td>21 July.</td>
<td>949</td>
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**N.B.**—Centuries 1 and 2 yield the date in the New Style; the other Centuries in the Old Style.

### Equations for converting Hindu years into years A. D.

Kaliyuga-Saṅvat; — 3101. Vikrama-Saṅvat; — 56. Śaka-Saṅvat; + 78.

These equations give the commencement, A. D., of the expired Hindu year, i.e., more properly, of the current year next after the expired year for which the equation is applied.
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**Notes:**
- 1 Jyaśaśtha c. about 354
- 8 Vṛsha-saṅkrānti
- 9 Śrāvaṇa c. about 536
- w: 1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 or 0 = Saturday.
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1 Bhādrapada c. about 622  || 1 Aśvina c. about 708  || 1 Kārttika c. about 791

Note: 1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 or 0 = Saturday.
### Table 7—continued.

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4 Dhanuḥ-saṃkrānti.
5 Makara-saṃkrānti.
6; 1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 or 0 = Saturday.
### TABLE 7—continued.

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1. Phālguna c. about 114
4. Note.—Divide the Christian year in which the date falls by 4; the remainder shows which index applies.
### Table 8

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Correspondence of Dominical Letters and Week-Days.

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*S = Ravi, Sûrya-vâra.*

*Mo = Sôma, Chandra.*

*Tu = Bhauma, Mângala.*

*W = Budha.*

*Th = Guru.*

*Fr = Šukra.*

*Sat = Šani.*
### TABLE 12.

**Perpetual Lunar Calendar.**

*Containing the Epacts and Dominical Letters.*

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<td>XXVII 1 g</td>
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### Table 12—continued.

#### Perpetual Lunar Calendar.

*Continued for the year following.*

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<td>Chaitra</td>
<td>Vāśākha</td>
</tr>
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<td>XIV f</td>
<td>XIII 19 f</td>
<td>XIV g</td>
</tr>
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<td>XIV e</td>
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<td>XVII b</td>
<td>XVII e</td>
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<td>XVIII c</td>
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<td>XVIII d</td>
<td>XIX e</td>
</tr>
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<td>XIX e</td>
<td>XX a</td>
</tr>
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<td>XXI f</td>
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<td>XXIX 14 g</td>
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<td>30 I 5 a</td>
<td>XXXIX a</td>
<td>XXX b</td>
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<td>II b</td>
<td>XXX b</td>
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<td>I 6 g</td>
<td>III 8 c</td>
<td>I c</td>
<td>II d</td>
</tr>
<tr>
<td>21</td>
<td>II 7 a</td>
<td>IV 9 d</td>
<td>II d</td>
<td>III e</td>
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<td>22</td>
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<td>V 10 e</td>
<td>III e</td>
<td>IV f</td>
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<td>VI 11 f</td>
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<td>V g</td>
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<td>VII 12 g</td>
<td>V g</td>
<td>VI a</td>
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<td>VIII b</td>
<td>VIII c</td>
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<td>IX 14 g</td>
<td>X 15 e</td>
<td>VIII e</td>
<td>IX d</td>
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<td>VIII d</td>
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<td>..........</td>
<td>XI f</td>
<td>XII g</td>
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<tr>
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<td>..........</td>
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TABLE 13.

For finding the date of new-moon in March.

**Part the first.**

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</tr>
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<td>1216</td>
<td>(−3)</td>
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<td>(−4)</td>
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<tr>
<td>1824</td>
<td>(−5)</td>
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</table>

**Example.**—To find the day of new-moon in March, A.D. 1468.

\[\text{1468}\]

From I \(\ldots\) 1216

Remainder \(\ldots\) 252 \((−3)\)

From II \(\ldots\) 228 \((−4)\)

Remainder \(\ldots\) 24 \((−3\frac{1}{2})\)

From second part \(24 = 27\frac{1}{2}\)

Subtract \(\ldots\) 3\frac{1}{2}

\[\text{23}\frac{1}{2}\]

New-moon: in the last quarter of 23rd March.

Chaitra \(\text{tu} \text{di} 1\) on 24th March. Epidot XXIV.

**Part the second.**

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<tr>
<th></th>
<th>y</th>
<th>d</th>
<th>y</th>
<th>d</th>
<th>y</th>
<th>d</th>
<th>y</th>
<th>d</th>
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### TABLE 14.
Tables giving the week-day of the 1st March (Old Style) = d. From A.D. 0 to 2100.

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<td>15</td>
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<th>(25 to 49.)</th>
<th>Years</th>
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<td>9</td>
<td>16</td>
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<th>(50 to 74.)</th>
<th>Years</th>
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<th>(75 to 99.)</th>
<th>Years</th>
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## TABLE 15.

Longitudes and Latitudes of principal places.
Latitudes in degrees and first decimal. Longitude in minutes of time, being the difference in time between Lankā and the place in question.

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<th>Long. m.</th>
<th>Place</th>
<th>Lat.</th>
<th>Long. m.</th>
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<tr>
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<td>Dhulisa (Dhuśana)</td>
<td>20°9</td>
<td>-4</td>
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<tr>
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<td>+16</td>
<td>Dwārakā</td>
<td>22°2</td>
<td>-27</td>
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<tr>
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<td>43°0</td>
<td>-13</td>
<td>Ellóra (Vélāpura)</td>
<td>29°0</td>
<td>-3</td>
</tr>
<tr>
<td>Ahmadnagar</td>
<td>19°1</td>
<td>-4</td>
<td>Ellóra (Vélāpura)</td>
<td>29°0</td>
<td>-3</td>
</tr>
<tr>
<td>Ajanta</td>
<td>20°5</td>
<td>-10</td>
<td>Farakhābād</td>
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</tr>
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<td>Ajmer</td>
<td>29°5</td>
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<td>Gayā</td>
<td>24°8</td>
<td>-37</td>
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<td>Ghāzipur</td>
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<td>-31</td>
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<td>+24</td>
<td>Ghāzipur</td>
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<td>-31</td>
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<td>Girān</td>
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<td>-21</td>
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<tr>
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<td>-4</td>
<td>Gōrākhīpur</td>
<td>26°7</td>
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<td>Anhilwād</td>
<td>23°9</td>
<td>-15</td>
<td>Gōtīpur</td>
<td>27°9</td>
<td>+34</td>
</tr>
<tr>
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<td>12°9</td>
<td>+14</td>
<td>Gōtīpur</td>
<td>27°9</td>
<td>+34</td>
</tr>
<tr>
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<td>Gōtīpur</td>
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<td>+34</td>
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<tr>
<td>Bādāmi</td>
<td>15°9</td>
<td>-10</td>
<td>Gōtīpur</td>
<td>27°9</td>
<td>+34</td>
</tr>
<tr>
<td>Balagāmī or Balagānume</td>
<td>14°4</td>
<td>-2</td>
<td>Gōtīpur</td>
<td>27°9</td>
<td>+34</td>
</tr>
<tr>
<td>Banawāsi</td>
<td>14°6</td>
<td>+3</td>
<td>Haidarābād (in the</td>
<td>23°3</td>
<td>+10</td>
</tr>
<tr>
<td>Bardhwān</td>
<td>22°2</td>
<td>+48</td>
<td>Haidarābād (in Deccan)</td>
<td>17°4</td>
<td>+11</td>
</tr>
<tr>
<td>Baroda (Bājōda)</td>
<td>22°3</td>
<td>-10</td>
<td>Haidarābād (in Sindh)</td>
<td>25°4</td>
<td>-26</td>
</tr>
<tr>
<td>Bārāi</td>
<td>18°2</td>
<td>-0</td>
<td>Hardā (in Gwāliōr)</td>
<td>22°3</td>
<td>+5</td>
</tr>
<tr>
<td>Belgaum</td>
<td>19°9</td>
<td>-5</td>
<td>Hardār (in Gwāliōr)</td>
<td>23°3</td>
<td>+5</td>
</tr>
<tr>
<td>Benares</td>
<td>25°5</td>
<td>+29</td>
<td>Hardār (in Gwāliōr)</td>
<td>23°3</td>
<td>+5</td>
</tr>
<tr>
<td>Bāhūgalpur</td>
<td>25°3</td>
<td>+45</td>
<td>Hardār (in Gwāliōr)</td>
<td>23°3</td>
<td>+5</td>
</tr>
<tr>
<td>Bharatpur</td>
<td>27°2</td>
<td>+7</td>
<td>Indōr</td>
<td>20°7</td>
<td>-4</td>
</tr>
<tr>
<td>Bhēlsā</td>
<td>25°5</td>
<td>+8</td>
<td>Jēbāpur</td>
<td>23°2</td>
<td>+16</td>
</tr>
<tr>
<td>Bhēpūl</td>
<td>23°3</td>
<td>+6</td>
<td>Jēbāpur</td>
<td>23°2</td>
<td>+16</td>
</tr>
<tr>
<td>Bihār or Behār</td>
<td>25°2</td>
<td>+39</td>
<td>Jēbāpur</td>
<td>23°2</td>
<td>+16</td>
</tr>
<tr>
<td>Bījāpur</td>
<td>16°8</td>
<td>-0</td>
<td>Jagannathapuri</td>
<td>19°8</td>
<td>+40</td>
</tr>
<tr>
<td>Bijnagar or Hampē</td>
<td>15°3</td>
<td>+3</td>
<td>Jagannathapuri</td>
<td>19°8</td>
<td>+40</td>
</tr>
<tr>
<td>Bīkārī</td>
<td>28°0</td>
<td>-10</td>
<td>Jaypur</td>
<td>26°9</td>
<td>+0</td>
</tr>
<tr>
<td>Bombay</td>
<td>18°9</td>
<td>-12</td>
<td>Jhānā</td>
<td>25°5</td>
<td>+11</td>
</tr>
<tr>
<td>Broach (Bhriguṣākha)</td>
<td>21°7</td>
<td>-11</td>
<td>Jōńghāpur</td>
<td>26°3</td>
<td>-11</td>
</tr>
<tr>
<td>Bundi</td>
<td>25°5</td>
<td>-1</td>
<td>Jōńghāpur</td>
<td>26°3</td>
<td>-11</td>
</tr>
<tr>
<td>Burhānpur</td>
<td>21°3</td>
<td>+3</td>
<td>Jōńghāpur</td>
<td>26°3</td>
<td>-11</td>
</tr>
<tr>
<td>Calcutta</td>
<td>22°8</td>
<td>+50</td>
<td>Kalingapataṃ</td>
<td>18°3</td>
<td>+33</td>
</tr>
<tr>
<td>Cambay or Kham-bhāt (Shambhavati)</td>
<td>23°5</td>
<td>+8</td>
<td>Kalyāṇ in Bombay</td>
<td>19°2</td>
<td>-11</td>
</tr>
<tr>
<td>Cawnpore (Kānpur)</td>
<td>26°5</td>
<td>+18</td>
<td>Kalyāṇ in the Nizām's Dominions</td>
<td>17°9</td>
<td>+4</td>
</tr>
<tr>
<td>Cochin</td>
<td>10°9</td>
<td>+2</td>
<td>Kanaujj</td>
<td>27°0</td>
<td>+16</td>
</tr>
<tr>
<td>Dacca (Dākā)</td>
<td>23°7</td>
<td>+58</td>
<td>Kanaujj</td>
<td>27°0</td>
<td>+16</td>
</tr>
<tr>
<td>Dehli</td>
<td>28°6</td>
<td>+6</td>
<td>Kālekhālī or Conjeveram</td>
<td>8°2</td>
<td>+5</td>
</tr>
<tr>
<td>Dēvagārī or Danūpābād</td>
<td>20°0</td>
<td>-2</td>
<td>Kālekhālī or Conjeveram</td>
<td>8°2</td>
<td>+5</td>
</tr>
<tr>
<td>Dhārā</td>
<td>22°6</td>
<td>-2</td>
<td>Kālekhālī or Conjeveram</td>
<td>8°2</td>
<td>+5</td>
</tr>
<tr>
<td>Dhārāwād</td>
<td>15°5</td>
<td>-3</td>
<td>Kālekhālī or Conjeveram</td>
<td>8°2</td>
<td>+5</td>
</tr>
<tr>
<td>Dhōlpur</td>
<td>29°7</td>
<td>+8</td>
<td>Kālekhālī or Conjeveram</td>
<td>8°2</td>
<td>+5</td>
</tr>
</tbody>
</table>

Note.—In order to convert Lankā time into local time, add or subtract from the former the minutes of Longitude of the place in question as indicated by the sign of plus or minus in the above list.
TABLE 16.

Showing how many minutes the day begins in any place (from 0 to 30 degrees Latitude) before or after Sunrise at Laṅkā (or 0 hour of the previous tables).

<table>
<thead>
<tr>
<th>The day begins before Sunrise at Laṅkā</th>
<th>Degrees of Latitude</th>
<th>The day begins after Sunrise at Laṅkā</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Style</td>
<td>5° 10° 15° 20° 25° 30° New Style</td>
<td></td>
</tr>
<tr>
<td>21 March... 23 Sept....</td>
<td>0 0 0 0 0 0</td>
<td>23 Sept.... 21 March</td>
</tr>
<tr>
<td>26</td>
<td>1 1 2 3 4 5</td>
<td>23 Sept.... 16</td>
</tr>
<tr>
<td>31 March</td>
<td>1 3 4 6 7 9</td>
<td>3 Oct.... 11</td>
</tr>
<tr>
<td>5 April</td>
<td>2 4 6 9 11 14</td>
<td>8 ..... 6</td>
</tr>
<tr>
<td>10</td>
<td>3 6 9 12 15 19</td>
<td>13 ..... 1 March</td>
</tr>
<tr>
<td>15</td>
<td>4 7 11 15 19 23</td>
<td>19 ..... 23 Feb....</td>
</tr>
<tr>
<td>21</td>
<td>4 9 13 18 23 28</td>
<td>24 ..... 18</td>
</tr>
<tr>
<td>27 April</td>
<td>5 10 15 21 27 33</td>
<td>29 Oct.... 12</td>
</tr>
<tr>
<td>3 May</td>
<td>6 12 18 23 31 38</td>
<td>5 Nov.... 6 Feb....</td>
</tr>
<tr>
<td>10</td>
<td>7 13 20 27 35 43</td>
<td>12 ..... 30 Jan....</td>
</tr>
<tr>
<td>18</td>
<td>7 15 22 31 39 49</td>
<td>18 ..... 23</td>
</tr>
<tr>
<td>25</td>
<td>8 16 25 34 43 54</td>
<td>25 Nov.... 17</td>
</tr>
<tr>
<td>29 May</td>
<td>9 17 26 36 46 57</td>
<td>1 Dec.... 12 Jan....</td>
</tr>
<tr>
<td>23 June</td>
<td>9 18 27 37 48 60</td>
<td>21 Dec.... 21 Dec....</td>
</tr>
</tbody>
</table>

To convert Old Style into New Style:

Between add days.

400 & 500 " 1 "
500 " 600 " 2 "
600 " 700 " 3 "
700 " 900 " 4 "
900 " 1000 " 5 "
1000 " 1100 " 6 "
1100 " 1300 " 7 "
1300 " 1400 " 8 "
1400 " 1500 " 9 "
1500 " 1700 " 10 "

Note.—The days in this Table are registered in New Style, whereas in the previous Tables Old Style is used. Hence a date in Old Style must first be converted in the corresponding one in New Style.
### TABLE 17.
Table of the Nakshatras and Yōgas.

<table>
<thead>
<tr>
<th>No.</th>
<th>Nakshatra.</th>
<th>Index.</th>
<th>Index for the ending-points of the nakshatras according to</th>
<th>Yōga.</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brahma S.</td>
<td>Garga.</td>
<td>Vishkambha</td>
</tr>
<tr>
<td>1</td>
<td>Ásvini</td>
<td>0—37</td>
<td>37</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Bharañi</td>
<td>38—74</td>
<td>55</td>
<td>56</td>
<td>Pṛti</td>
</tr>
<tr>
<td>3</td>
<td>Kṛittikā</td>
<td>75—111</td>
<td>91</td>
<td>93</td>
<td>Ayushman</td>
</tr>
<tr>
<td>4</td>
<td>Rōhini</td>
<td>112—148</td>
<td>147</td>
<td>148</td>
<td>Saubhāgya</td>
</tr>
<tr>
<td>5</td>
<td>Mrīga or Mṛiga-sīrsha</td>
<td>149—185</td>
<td>183</td>
<td>185</td>
<td>Śūbhana</td>
</tr>
<tr>
<td>6</td>
<td>Ardrā</td>
<td>186—222</td>
<td>201</td>
<td>204</td>
<td>Atigānda</td>
</tr>
<tr>
<td>7</td>
<td>Punarvasu</td>
<td>223—259</td>
<td>258</td>
<td>259</td>
<td>Sukarman</td>
</tr>
<tr>
<td>8</td>
<td>Pushya</td>
<td>260—296</td>
<td>293</td>
<td>296</td>
<td>Dhṛiti</td>
</tr>
<tr>
<td>9</td>
<td>Āśāśāhā</td>
<td>297—333</td>
<td>311</td>
<td>315</td>
<td>Śūla</td>
</tr>
<tr>
<td>10</td>
<td>Maghā</td>
<td>334—370</td>
<td>348</td>
<td>352</td>
<td>Gaṇḍa</td>
</tr>
<tr>
<td>11</td>
<td>Pārvā-Pālguṇī</td>
<td>371—407</td>
<td>382</td>
<td>389</td>
<td>Vṛiddhi</td>
</tr>
<tr>
<td>12</td>
<td>Uttarā-Pālguṇī</td>
<td>403—444</td>
<td>439</td>
<td>444</td>
<td>Dhruva</td>
</tr>
<tr>
<td>13</td>
<td>Hasta</td>
<td>445—481</td>
<td>476</td>
<td>481</td>
<td>Vyāghāta</td>
</tr>
<tr>
<td>14</td>
<td>Chitrā</td>
<td>482—518</td>
<td>513</td>
<td>518</td>
<td>Harahaṇa</td>
</tr>
<tr>
<td>15</td>
<td>Svāti</td>
<td>519—556</td>
<td>531</td>
<td>537</td>
<td>Vajra</td>
</tr>
<tr>
<td>16</td>
<td>Viśākhā</td>
<td>557—593</td>
<td>586</td>
<td>593</td>
<td>Siddhi (Asri)</td>
</tr>
<tr>
<td>17</td>
<td>Anurādhā</td>
<td>594—630</td>
<td>622</td>
<td>630</td>
<td>Vyātapta</td>
</tr>
<tr>
<td>18</td>
<td>Jyeṣṭhāhā</td>
<td>631—667</td>
<td>641</td>
<td>648</td>
<td>Varīyas</td>
</tr>
<tr>
<td>19</td>
<td>Mula</td>
<td>668—704</td>
<td>677</td>
<td>685</td>
<td>Parīgha</td>
</tr>
<tr>
<td>20</td>
<td>Pārvā-Ashādhā</td>
<td>705—741</td>
<td>714</td>
<td>722</td>
<td>Śiva</td>
</tr>
<tr>
<td>21</td>
<td>Uttarā-Ashādhā</td>
<td>742—778</td>
<td>768</td>
<td>778</td>
<td>Śiddha</td>
</tr>
<tr>
<td>22</td>
<td>Sravaṇa</td>
<td>779—815</td>
<td>817</td>
<td>815</td>
<td>Sādhyā</td>
</tr>
<tr>
<td>23</td>
<td>Śravishṭhā, or Dhanishtīhā</td>
<td>816—852</td>
<td>853</td>
<td>852</td>
<td>Śubha</td>
</tr>
<tr>
<td>24</td>
<td>Śatabhishaj, or Satātārakā</td>
<td>853—889</td>
<td>872</td>
<td>876</td>
<td>Śukla</td>
</tr>
<tr>
<td>25</td>
<td>Pārvā-Bhadrapadā</td>
<td>890—926</td>
<td>909</td>
<td>908</td>
<td>Brahman</td>
</tr>
<tr>
<td>26</td>
<td>Uttarā-Bhadrapadā</td>
<td>927—963</td>
<td>963</td>
<td>963</td>
<td>Indra</td>
</tr>
<tr>
<td>27</td>
<td>Rēvati</td>
<td>964—1000</td>
<td>1,000</td>
<td>1,000</td>
<td>Vaidūrīti</td>
</tr>
</tbody>
</table>

### Table for Differences.

<table>
<thead>
<tr>
<th>Δ</th>
<th>Naksh.</th>
<th>Yōga</th>
</tr>
</thead>
<tbody>
<tr>
<td>H. M.</td>
<td>H. M.</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0—39</td>
<td>0—37</td>
</tr>
<tr>
<td>2</td>
<td>1—19</td>
<td>1—13</td>
</tr>
<tr>
<td>3</td>
<td>1—58</td>
<td>1—50</td>
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<tr>
<td>4</td>
<td>2—38</td>
<td>2—27</td>
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<td>5</td>
<td>3—17</td>
<td>3—14</td>
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<td>6</td>
<td>3—56</td>
<td>3—41</td>
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<td>7</td>
<td>4—36</td>
<td>4—21</td>
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<td>8</td>
<td>5—16</td>
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<tr>
<td>9</td>
<td>5—55</td>
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<td>10</td>
<td>6—34</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>13—8</td>
<td>5</td>
</tr>
<tr>
<td>30</td>
<td>19—42</td>
<td>18</td>
</tr>
</tbody>
</table>

**Note.**—Sometimes an extraordinary nakshatra, Abhijit, is inserted between Uttarā-Ashādhā and Sravaṇa. In that case, Abhijit has as Index 769—782. The Index for the ending-point of the nakshatras according to the Brahma-Siddhānta system, is 780.
GURJARA INSCRIPTIONS, NO. III.
A NEW GRANT OF DADDA II. OR PRASANTARAGA.

BY G. BÜHLER, PH.D., LL.D., C.I.E.

The subjoined inscription¹ is engraved on two copper plates, found some years ago at Bagumrā, in the Pālsāpa Talukhā of the Nausāri District in the Baroda State. I acquired them with some others, published in this Journal, Vol. XII. pp. 179-190 and Vol. XIII. pp. 65-69, by myself and Dr. E. Hultsch, through the kind mediation of Rao Sahib Mohanlāl R. Jhaveri. The circumstances of the find have been mentioned in the former paper.

The measurements of the plates are about 10½ by 7½, and 1½ thick. The massive rings are preserved and in their proper position. To the right-hand ring the seal is attached; it shews, like those of the published grants of the same king from Umētā and Ilāo, the legend śrī Dada and a square emblem the character of which is not clear. The engraving has been done well. The letters are deeply cut and distinct. Only a few have suffered seriously or been destroyed by verdigris. The characters resemble those of the other two grants very closely. The word vāsakāt (l. 1) shows, as in the latter, the cursive form of va, which looks like na. The royal signature (l. 32) is written in the antiquated Naγarî letters, which the Umētā grant also exhibits. The spelling and the grammar of the Sanskrit text are as slovenly and faulty as in the other two grants, with which the wording of its first portion agrees almost literally. But it must be noted that, though the character of the mistakes is the same, they do not always occur in the same words. Thus, in l. 1, U. reads vāsakāt,² B. and I. vāsakāt; in l. 4, U. and B. read samayo and phalādgyāmā, I. samaya, and phalādgyāmā; ibidem U. reads nistreiṣa B. and I. nistreiṣa; in l. 4, U. reads didhiṭi, B. and I. didhiṭi. In other cases B. alone has a faulty form and in one case, l. 4, where the context requires kīṣṭha, each grant shows a peculiar mistake, U. reading sīṣṭha, B. sīṣṭha, and I. chīṣṭha. These facts prove that all three grants were prepared according to the same model form, but that the writers were, as the documents themselves assert, three different persons, all three distinguished by carelessness and ignorance of the classical language.

The contents of this new grant are as follows:—The ‘supreme king of great kings,’ the illustrious Dadda II., who had obtained the five mahādrādas and who was the son of the illustrious Jayabhāṣa and the grandson of the illustrious Dadda I., presents the village of Tatha-Umārā to a Brāhmaṇ on the occasion of an eclipse of the sun, which happened on the new-moon day of the month Jyaistha, when 415 years of the Śaka king had elapsed. The village was situated in the āhāravālī or district of Tatha-Umārā. Its boundaries were, to the east the village of Ushilathāṇa, to the south Iši, to the west Saṅkiya, and to the north Jaravādra. The donor was Bhaṭṭa Gūvinda, the son of Bhaṭṭa Mahādhara, who belonged to the community of the Chaturvedins of Kanyakubja, i.e. to the Kauṭyāja Brāhmaṇas of Gujaraṭ, to the Kauṭik Gōtra, and to a school of the adherents of the Chhandogā-Sākhā. He received the village in order to defray the expenses of the five so-called great sacrifices and of other religious ceremonies. The conditions of the grant are the usual ones. The charter was written by the royal servant Rāvādita, or, as the correct form of the name would be, Rāvāditya, the son of Dāmādara. Like the other two grants, it is dated from the victorious camp or cantonment (viṣhēṃ), situated at the gates of the town of Bhūrukaschchha.

The date and the geographical names are the only new points contained in the inscription, which require further remarks. The former seems to contain a mistake in the

¹ A German paper on this inscription has been published in the Sitzungsberichte der Wiener Akademie der Wissenschaften, Vol. CXIV. p. 809.
² In order to save space I call in the sequel the Umētā grant, U., that from Ilāo, I., and the new one, B.
³ To my remarks on the word dāhara, ante, Vol. VII. p. 71, I may now add that it occurs also in Budhistic Literature. In a note to Sacred Books of the East, Vol. XI. p. 31, Dr. Rhys Davids addsuce for the word sahaṇam the commentary the explanation sahāṇaḥ. The meaning of dhāra or śrīdhāra is not clear to me. Possibly the word is a corruption of dhāra and intended to indicate that the śrīdhāra included twelve villages.
name of the month. According to Dr. Schram's calculations the new-moon day of Jyaśiṣṭha, Saka-Saṅvat 415, corresponds to May 31, 493 A.D. On that day there was no eclipse of the sun, which, as the inscription asserts, occurred on the day when the grant was made. But on the next new-moon day, June 29, there was an annular eclipse, not visible in India. (See also Th. v. Oppolzer, Canon der Finsternisse No. 4037 and Blatt. 81 where the astronomical details regarding the eclipse are given.) It seems probable that this eclipse is meant. The discrepancy in the name of the month may have been caused by a mistake of the writer or by an erroneous interpolation. However that may be, the date possesses little importance for the history of Dadda II.; as the oldest of his other grants (U.) is dated fifteen years earlier, and the latest (I.) two years later than our inscription. The date of the former is the full-moon day of Vaiśākha, Saka-Saṅvat 400; and that of the latter, the new-moon day of Jyaśiṣṭha, Saka-Saṅvat 417.

More interesting are the geographical names. With the help of the map of the Trigonometrical Survey, Gujarāt Series, No. 34, it is possible to identify nearly all the places mentioned. The village of Tatha-Umbārā is the modern Bagumrā, where the plates were found. For the boundaries are—

According to the Inscription.

to the west Saṅkhiya.
to the south Ishi.
to the north Jaravandra.
to the east Ushilathana.  

According to the Map.

to the west Sanki.
to the south the old site of Isī.
to the north Jōlva.
to the east a deserted site with an old village-tank.

Though the fourth village cannot be traced in its proper position, the names of the other three suffice in order to prove the identity of Tatha-Umbārā and Bagumrā. As regards the latter two words, the modern umbārā and umbār are corruptions of Sanskrit uḍumbarakā, a thicket of Ficus glomerata. This word is still frequently used for naming villages and the maps show in the districts close to the Tapti a full half dozen of villages, called Umbrā. It is, therefore, very probable that the syllables Tatha and Bag have been prefixed in order to distinguish this Umbrā (Umbrā) from other homonymous places. What the meaning of Bag may be I am unable to guess. But Tatha may possibly be a corruption of the Prakṛta tittha and Sanskrit tīrtha. The value of the above identifications is that they prove the dominions of the Gurjara princes to have extended south of the Tapti. I must confess that formerly I believed that the southern boundaries of the Gurjara state had been identical with those of the present Collectorate of Broach, and I find that all other scholars, who have touched the question, have expressed the same opinion. On looking over Nos. 34 and 35 of the map of the Trigonometrical Survey (Gujarat Series) I have, however, discovered that the Umbrā grant confirms the information which that of Bagumrā furnishes. The villages, named in the former, are likewise traceable, and lie a few miles to the north-east of those mentioned in the latter.

According to U., plate II. l. 11, the village granted was Niguda, which belonged to the 116 villages of the bhakti of Kamaḷiya. This is the modern Nagōd, which lies at a short distance west of the town of Kamrēj. For its boundaries are—

According to the Inscription.

to the east Vaghauri.
to the south Phalahavandra.
to the west Vidhāna.
to the north Dahithali.

According to the Map.

to the east Ruhvārā.
to the south [Moṭi] Phālōḍi.
to the west Vidhān.
to the north Diṭhali.

Thougth a village, the name of which corresponds to Vaghauri, is not found, the close resemblance of the remaining names suffices to

1 This name, too, survives. For north-west of Bagumrā the map shows the village of Chaitana. This is probably a new settlement, founded by the inhabitants of Ushilathana when the site to the east of Bagumrā was abandoned. Similar re-settlements of villages occur frequently.

2 Kamrēj is also mentioned in Mr. H. H. Dhruva's Bābhar inscription, (Zeitschrift der Deutschen Morgenländischen Gesellschaft, Vol. XL. pp. 322-323, 325) as Kamrṇāṭja and in Dr. Bhagvānḍaḷ's Chalukya grants from Gujarāt (Verhandlungen des siebenten Int Or. Congresses) as Kārmāṇya. Dr. Bhagvānḍaḷ declares the latter to be identical with Kāmāḷ, ten miles east of Surat, which, I suppose, is the Kamrēj of the Map.

3 I consider it not improbable that this name is a mistake for Vaghvārā, caused by the resemblance of the syllables ruḍā and vaṅgh if written with Gujarātī characters. Vaghvārā might be the representative of Vaghauri.
make the proposed identification incontrovertible. It is, therefore, certain that according to U. and B. the northern portion of the Surat District and the adjacent Gaikwāḍ district territory formed part of the Gurjara kingdom.

More important even than this result is the fact that the discovery of B. permits us to assert with full confidence the genuineness of U. and I., which has been disputed by Dr. Bhagvānālāl and by Mr. Fleet. But before I try to show the bearing of B. on this question, it seems to me advisable to subject the arguments, brought forward against U. and I., to a careful consideration. It seems to me that they are by no means so strong as the two eminent epigraphists suppose, and that a good deal may be said against them, even without extraneous assistance.

In order to accomplish this task, I must begin with a short review of the gradual development of our knowledge and of the theories regarding the Gurjara dynasty.

The name of the Gurjaras first became known through Dr. Burns' four Khēdā plates which mention (1) the illustrious Śāmanta or feudal baron Dadda I., (2) his son the illustrious Jayabhaṭa-Vitarāga, and (3) his son the illustrious Dadda II. or Praśāntarāga, all of whom were worshippers of the sun or adherents of the Saum sect.

Their dates, Śaṅvat 380 and 385, were taken to refer to the so-called Vikrama era, until a third grant, Dr. Bhāṇḍārkar's Haṭ plate, was discovered. The latter likewise has three princes, (1) the illustrious Dadda I., (2) the illustrious Jayabhaṭa-Vitarāga, and (3) the illustrious supreme king of great kings Dadda II.-Praśāntarāga. Relying on the identity of the names and of the birudas, Dr. Bhāṇḍārkar assumed that the princes of I. were the same persons as those mentioned in Khē. I. and II. But, as the date of I. was clearly the year 417 of the Śaka era, and as the eclipse of the sun, stated to have occurred on the new-moon day of the month of Jyaśiṭha, corresponded, according to Professor Kērō Lakṣmaṇ's calculation, to that of June 8, 495 A.D., he transferred the three Gurjaras princes from the fourth to the fifth century and assumed that the dates of Khē. I. and II. referred to the same era.

I accepted these combinations in my articles on the Kāvi and Umēṭa grants, which next came to light. The historical contents of the latter fully agree with those of I. Its date, full-moon day of Vaiśākha, Śaka-Śaṅvat 400, fitted in well with those already known, which apparently lay between the years 380 and 417 of the same era. Kā., of which only the second part has been preserved, names only one prince, the illustrious lord of feudal barons Jayabhaṭa, who vanquished a king of Valabha. I identified him with the Jayabhaṭa of the other grants and referred the date, Śaṅvat 486, tenth day of the bright half of Āśāṭha, a Sunday, to the Vikrama era, and thus arrived at the year 429 A.D., which was not too early for the father of Dadda II.

These views were considered to be right for several years and were utilised by Mr. Fleet in his article on the Indian eras, ante, Vol. XII. p. 291 and by General Sir A. Cunningham in his Book of Indian Eras, pp. 48-49. But matters changed when Dr. Bhagvānālāl published his important inscription from Nausārī. This document mentions four princes,—(1) the illustrious Dadda I.; (2) his son the illustrious Jayabhaṭa I.; (3) his son the illustrious Dadda II.-Bāhunṣahāyaṇ, an ardent devotee of Śiva; and (4) his son the illustrious Jayabhaṭa II., an ardent devotee of Śiva. Of Dadda I. it narrates that he protected a prince of Valabha against the supreme lord (paramēśvara) Śrīharṣadēva. Its date is Monday or Tuesday, the full-moon day of Māgha, Śaṅvat 436, at the time of an eclipse of the moon. The mention of the supreme lord Śrīharṣadēva and the lucky discovery of some grants of the Chalukyas of Gujārāt with dates according to two different eras enabled Dr. Bhagvānālāl to offer an altogether new theory regarding

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* Published by Dr. R. G. Bhāṇḍārkar, Jour. Bo. Br. R. A. Soc. Vol. X. pp. 19ff. and with facsimile by Mr.
* Published with facsimile, ante, Vol. VII. pp. 61ff.
* ante, Vol. XIII. pp. 70ff; called hereafter Na.
the Gurjaras of Broach and their inscriptions. He very naturally identified Śrīharṣhadēva with Śrīharsha-Harshavahdharana, the famous king of Thāpēśvar and Kanauj, who ruled from 606 to 648 A.D. over the greater part of Northern and Western India. If this identification was to stand, the reign of the first Dadda, mentioned in Na., must fall in the first half of the seventh century A.D. The possibility of proving this was given by the inscriptions of three nephews of Pulikēsin II. of Bādāmi (610-634 A.D.), viz. Śilāditya, Maṅgalarāja and Pulikēsin, sons of Jayasītharvarman, who ruled over southern Gujarāt as feudatories of the Western Chalukyas. Their grants being dated Saṅvat 421, 443, Saka-Saṅvat 633 and Saṅvat 490, it followed that an era, simply marked by the word Saṅvat and beginning shortly before 250 A.D., was used in Gujarāt during the seventh and eighth centuries. Fixing its initial date conjecturally in 244-45 or 245-46, and assuming that the date of Na., Saṅvat 456, referred to it, Dr. Bhagvānlāl obtained for the latter the year 700 or 702 A.D., and thereby the probability that the first Dadda, the third ancestor of the donor of Na., reigned between 600-625, or even somewhat later. As Khē. I., Khē. II. and Kā. likewise bear dates simply marked Saṅvat, it became probable that the era intended was the same as that of Na. With this supposition Saṅvat 380 corresponded to 624-626 A.D. and Saṅvat 335 to 629-631 and it appeared that the donor of the Khē dés grants, Dadda II.-Praśāntarāga, was the same person as the first Dadda of Na. The Kāvi date, Saṅvat 486, on the other hand, being no equal to 730-731 A.D., its Jayabhaṭa, the lord of great feudal barons, had to be considered as identical with the donor of Na. By means of these highly ingenious combinations, the probability of which Dr. Bhagvānlāl believed to be increased by epigraphic arguments, he obtained the following pedigree of the Gurjara dynasty: (1) Dadda I., the feudal baron, (2) Jayabhaṭa I.-Vitarāga, (3) Dadda II.-Praśāntarāga, Saṅvat 380-385, or 624-631 A.D., a contemporary of king Śrīharsha, 600-648 A.D., (4) Jayabhaṭa II., (5) Dadda III.-Bāhusāhāya, (6) Jayabhaṭa III., Saṅvat 456-486, or, 700-2 to 730-2 A.D. As the statements of U. and I. which placed Dadda II.-Praśāntarāga in the fifth century, did not seem to agree with these results, Dr. Bhagvānlāl declared them to be spurious and contended that they must be forgeries, (1) because U. and I. in spite of the alleged interval of seventeen years resemble each other so much that they must have been written by the same person, (2) because they closely resemble a spurious grant of Dhārāsena II. of Valabha,12 which has been fabricated by the same forger, (3) because it is alleged that I. has been written by the same writer Rēva, who drew up Khē. I. and II. He thought it, however, not impossible that the spurious grants might contain correct dates for the reign of Dadda II., if it might be assumed that the forger had only made a mistake with respect to the era.

A portion of Dr. Bhagvānlāl’s conjectures was apparently confirmed by a discovery of Sir A. Cunningham, which Mr. Fleet published in a postscript to the article. The nearness of Dr. Bhagvānlāl’s initial date 244-246 A.D. to 249-50 A.D., the supposed beginning of the Chē dés era which the Kulachuri or Haibha kings of Tripura used, led Sir A. Cunningham to suspect that the latter might be the Saṅvat occurring in the Gurjara and Chalukya inscriptions. Calculating on this supposition the date of Na., “Monday or Tuesday, 15th day of the bright half of Māgha of Saṅvat 456, at the time of an eclipse of the moon,” he found that it corresponded to February 2, 706 A.D., a Tuesday, on which date an eclipse of the moon actually happened. On the same supposition the week-day of Kā. had been given correctly. For Chē dés-Saṅvat 486, 10th day of the bright half of Ashāḍha, corresponds to June 24, 736, which was a Sunday. Sir A. Cunningham also calculated the date of I. on the supposition that Saka-Saṅvat had been written erroneously for Chē dés-Saṅvat. The result was that though no eclipse happened in the month of Jyaishṭha of the exactly corresponding year 666, this was the case in the preceding one, 665 A D, when the new moon of Jyaishṭha fell according to the Purvarākṣa reckoning on April 21. Hence the possibility that the date of I. was, as

12 See my article, ante, Vol. X. pp. 377ff.
Dr. Bhagvânñālāl thought, a genuine one, could not be denied. In his later article on the Ilāo grant, Mr. Fleet added two new arguments against the genuineness of U. and I. to those brought forward by Dr. Bhagvânñālāl. First he pointed out that the description of Dadda I. given in Khē. I. and II. agrees literally with that of Dadda II. in U. and I.; and that the latter grants show some corrupt readings not occurring in the former. Hence he inferred that the author of U. and I. must have known the Khēdā plates and have copied from them. As the Khēdā plates had been shown to belong to the seventh century, U. and I. could not possibly have been written in Śaka-Saṁvat 400 and 417, or 473 and 495 A.D. Secondly, he remarked that no weight could be attached to the apparently correct mention of the solar eclipse of June 8, 495 A.D., in I., because it was not visible in India and for this reason would not be noticed by an Indian astronomer.

Of late, the correctness of Sir A. Cunningham’s view regarding the initial date of the Chêdī has been disputed. Dr. Kiellhorn’s calculations of the numerous week-days mentioned in the grants of the Chêdī kings tend to show that it began not in 249, but in 248 A.D. This alteration makes no difference for the week-day and the lunar eclipse mentioned in Na. They agree with either assumption. In the one case the year 456 has to be taken as current, in the other as elapsed. But the complicated data in Kā., which alleges that the grant was made in Saṁvat 486 on Śāhāḷha śu di 10, when the sun had entered the sign of Karkaṭaka, offer a difficulty which Dr. Kiellhorn has not yet found it possible to solve.

Nevertheless, I believe that among the various inferences drawn by Dr. Bhagvânñālāl from the contents of Na., and from the Chalukya dates, the following may be considered as correct. (1) Na. is certainly dated according to the Chêdī-Saṁvat; and the supreme lord Śrīharṣhadēva, mentioned as the contemporary of its first Dadda, is the same person as Śrīharsha-Harshavardhana, alias Śrīlāditya. (2) It seems most probable that Kā., too, belongs, not as I thought formerly, to the fifth, but to the eighth century A.D. Dr. Bhagvânñālāl’s further inference that Na. and Kā. have been issued by the same Jayabhaṭa, may be also accepted provisionally. The interval between their two dates is not too long for one reign. But the possibility that the donors may be different persons, between whom another Dadda reigned, is not altogether excluded. Dr. Bhagvânñālāl’s assertion that the close resemblance of the characters of the two inscriptions and of their form or wording show them to belong to the same reign, says too much. The characters of two grants, only thirty years apart, will not show any great difference, whether they were issued by one or by two different kings of the same dynasty. The wording of the two documents does not at all agree. The descriptions of Jayabhaṭa in Na. and Kā. have only two words in common, samadhiṣatapaññaḥmahāśabda and śrī, and the enumeration of the conditions of the grant shows many discrepancies. And (3) I must also agree with Dr. Bhagvânñālāl in his assumption that Khē. I. and II. belong not to the fifth but to the seventh century, though I am unable to accept his arguments. He said “the characters of the Kairā, Nausārī and Kāvī grants are all precisely of the same type and as like each other as can possibly be the case of inscriptions, the actual engraving of which was done by different men. On the other hand, the characters of the Umātā and Ilāo grants are identical with each other and differ entirely from those of the four grants.” These sweeping assertions are not quite borne out by the facts. Even a superficial comparison of the facsimiles shows that the characters of Khē. I. and Khē. II. do not fully agree, and that they agree still less with Na. and Kā. On the other hand, Khē. I. frequently agrees with U. and I. Thus the signs for ju, ba and ca are exactly the same in U. I. and Khē. I. The

Sāṁvat is identical with that of the Traikūṭakas. In his paper on two new Chalukya inscriptions, published in the Verhandlungen des siebenten Inter. Or. Congresses Aisische Section, he made pp. 210-222 some very ingenious suggestions as to its origin. He conjectured that Śaka-Saṁvat 170 or 248 A.D. was its initial point.

See Dr. Kiellhorn’s letter in the Academy of Jan. 14, 1888.
ba with a notch in the top line occurs in none of the other inscriptions, the ja with the same pecu-
liarity only in Kä., and the va in the shape of an isoceles triangle, only occasionally in Na.
and Kä. Again the form of ve agrees through-
out in I. U. and Kä., while a different sign is used once in Khé, I., more frequently in Khé.
II. and throughout in Na. Similarly the peculiar cha of U. and I. occurs in Kä., while Khé.
I., Khé. II. and Na. have a very different sign.
These instances will suffice to prove that Dr.
Bhagvánálél’s grouping of the grants on palaeo-
graphic principles is not tenable. If I nevertheless accept his conclusion, my reasons are (1)
that, if a Gurjara inscription of Sañvat 456 is dated according to the Chédí era, it is most
probable that those of Sañvat 380 and 385 refer to the same era, (2) that hitherto no certain
cases from the older times have become observ-
able in which the word Sañvat stands for Śaka-
Sañvat or Śakapipakāla.

Dr. Bhagvánálél’s remaining inference,
that U. and I. are forgeries, seems to me
untenable. His first argument, the assertion
that their perfect agreement in characters and
form shows them to have been written by one
and the same person, rests, it seems to me, on
an insufficiently accurate comparison of the two
documents. It is no doubt true that they are
very similar. But their resemblance is just
such a one as might be expected in the case of
two grants written by a father and son in an
archaic alphabet, not in daily use. The main
features mostly agree, but in the details various
small differences are observable. Thus in U.
the left hand stroke of the ta is drawn down
much further than in I.; the top of the ta shows
in I. frequently, e. g. in makuṣ (l. 4) ghatā
(l. 6) sphaṭika (l. 8) etc. a straight horizontal
line which is wanting in U.; the use of the
superscribed mātrā and of the prishthamātrā
does not agree in the two documents; finally
the signature of the king shows in U. cursive
Nágari characters and in I., the same alphabet
in which the rest of the inscription is written.
Again, as regards the wording quite a number of
discrepancies occur. It has already been
pointed out above that, though the character
of the numerous mis-spellings and mistakes is
the same, they do not always occur in the
same words. There are further some more
or less important various readings, such as,
sampatka (U. pl. I. l. 12) against sampamna
(I.), charhitānasamannata (U.) against charhitānasamannata; and very considerable
deviations in the description of the boundaries
of the villages granted (U. pl. II. l. 2-3 and
I. pl. I. l. 15). The natural explanation of
these facts is, I think, that the two grants were
written by two different persons. Of course,
they may also be reconciled with the theory
that both belong to one forger. But it seems
to me impossible to assert that the agreement
of the inscriptions is such that they must be
considered the work of one hand.

The same remarks apply to Dr. Bhagvánálél’s
second argument, that the plates must be forgeries, because they closely resemble the
admittedly forged grant of Dharsénā II.,
dated Śaka-Sañvat 400, and have been evidently
fabricated by the forger of the spurious Valabhl
inscription. The latter again shows a number
of very striking peculiarities in the alphabet
not found in U. and I. The upper end of the
superscribed mātrā has a strongly marked
curve and the same flourish appears at
the lower end of the left limb of ta. Further,
in the syllables na, n and fā the
ś-stroke is marked by a vertical line turned
upwards. Moreover the subscribed ṣa in sam-
dājñāpayati (pl. I. l. 16), yuṣma (pl. II. l. 2)
and ajāñā (pl. II. l. 12) resembles that of Skand-
gupta’s Kāhānā inscription, not that of
U. and I. Again, in the letter pha the little
tail, drawn through the bottom line, which U.
and I. show, is wanting. Finally in the groups
beginning with s, e. g. sta, sva, sma, etc., the
lower letter is invariably attached to the right-
hand vertical of sa, while in U. and I. it is con-
ected with the left-hand limb. These very
striking differences in the characters, as well as
numerous various readings in the otherwise
similar portions of the texts, and some very
peculiar grammatical mistakes, make it, to my
mind, most improbable that the spurious Vala-
bhl grant was done by the same person as
U. and I. On the contrary, they prove that
the forger was acquainted with at least one of

17 Compare e. g. (ante, Vol. X. pp. 233-234) pl. I.
l. 3. nirmanā, l. 6 karanā and nispurā; l. 8 kiranā;
l. 14 dhishavo; l. 15 bhaṇḍā and grāmaṇā.

18 Compare e. g. the first word suṣṭī in the three in-
scriptions.
these documents, but that in using it as his model he failed to catch and to reproduce all its striking peculiarities. Dr. Bhagvânâlî’s last argument, that the writer of I. is stated to be the same person as that of Khê. I. and II. rests on an identification for which there is absolutely no good reason. The writer of the latter two grants was “the minister for war and peace Rêva,” and that of I., “the minister of war and peace Rêva, the son of Mâdhava.” As in Khê. I. and II. the father’s name is not given, and as among the Gujarâti Brâhmans the name Rêva, or Rêvâsînkar as we should say at present, is as common as Jack or George among Englishmen, it is not in the least necessary to consider the two writers as the same person. Consequently, it is not possible to contend with Dr. Bhagvânâlî, that I. is proved to be a forgery; because it contains the assertion that its writer is the same person as the writer of Khê. I. and Khê. II.

The additional arguments, brought forward by Mr. Fleet, seem to me likewise inconclusive. It is perfectly correct that the description of Dadda I. in I. and U. agrees literally with that given in Khê. I. and II. of Dadda II. It is further true that the latter inscriptions offer in this passage at least three better readings than I. and U.—sakalaghanapatatalavirnigaratarajnikara,19 ‘the full moon that comes forth from a bank of clouds’ is grammatically less correct than sajalaghanapatatalavirnigataraja-

19 See, below the text, Pl. I. 1. 1. I have formerly con-
strued sakala erroneously with ghana.
20 See below the text Pl. I. 1. 2 and 3.
21 A carelessly made nd would nearly look like pâ, and chha (not chhha, as Khê. I. and II. read) might easily be read as pha.
23 See ante, Vol. XII. p. 138, and Vol. V.

ikara, ‘the moon that comes forth from a bank of water-laden clouds.’ For the first adjective sakala ought on account of its position to qualify ghana, not the remote rajani-
ikara. Nevertheless the Kâryas and the inscriptions offer numerous instances in which the position of the parts of compounds is not always the natural one. If one part of a compound is a short word and the other a longer one, it happens frequently that the natural order is inverted. The short word is usually placed first. The sense of the reading of I. and U. is preferable, because it yields an

additional compliment for the king. As regards the variæ lectiones “yasa-prâta-pathagita-
tanabhômaṇḍalaḥ” and “phalâbdhyâmana”20 for “yasa-prâta-nâsthagita-nabhômaṇḍalaḥ” and “che-
halâbdhyâmana,” their sense is certainly not good, and it looks as if they had been caused by misreading of the old aksharas nd and chha.21 Finally, it is absolutely certain that “arthijanâkliśtha” (U.) and “arthijanâkliśtha” (I.) are mistakes for “arthijanâk-

23 The first inscription reads, श्र ब्रह्मचैव धन यस्मिन्निषेण हरस्य यस्य कषो भुक्तया समस्तकृत्यृ॥
24 This is simply nonsense. The second has merely one mistake, caused by the pronunciation, श्र ब्रह्मचैव भास जयानिषेण करस्य कषो भुक्तया समस्तकृत्यृ॥

formerly, forsooth, (customary to note as) an instance the reign of (king) Bali, during which all men enjoyed prosperity; now, however, (they name) on earth (that) of this king." The king, to whom this compliment is paid, is Karka I. In the grant of 749 it is inserted in the description of Karka II., the sixth descendant of Karka I. Again, verse 9 of the grant of 734 is identical with verse 34 of the grant of 749. In the former it refers to Kṛishṇa I., in the latter to Karka II. It has never occurred to any one to declare the Valabhi grant of Śaivism 441 and the Rāṣṭrākūṭa grant of Śaka-Śaivism 734 to be forgeries, because later ones of the same series show better readings in the identical passages, or because verses, describing an earlier king, refer in a later grant to one of his successors. Thence, it is not permissible to use these points as arguments against the genuineness of I. and U. and to assert that they prove these plates to have been engraved after Kṛṣṇa I. and II. On the contrary, if one closely examines the wording of the two sets of documents, it seems to me evident that it proves I. and U. to be the older ones. For their Vanāśāvalī has throughout the same character. Each of the three kings is described by a few epithets, mostly long Bahnūrīhi compounds. The Vanāśāvalī of Kṛṣṇa I. and II. on the other hand, shows a curious incongruity. The first Dadda and Jayabhāta are described in highly artificial language, by a string of rather common-place but extravagant comparisons. With Dadda II, the style changes and the description becomes simple and shorter. This disparity seems to indicate that the court-poet, who composed the Vanāśāvalī, tired, when he had shown his art in praising two kings, and copied the rest of his work from the older model form.

With respect to the eclipse of the sun, I cannot agree with Mr. Fleet in his opinion that a Hindu astronomer or astrologer would not notice an invisible eclipse. The great majority of the eclipses mentioned in the inscriptions were no doubt visible, and the reason is that on the occasion of a visible eclipse fasting, bathing and gifts are according to the Brāhmaṇical law highly meritorious, may absolutely necessary. On the occurrence of a calculated eclipse of the sun which falls in India before sunrise, or of an eclipse of the moon which falls in India before sunset, these observances are not required. The medieval Nibandhas, known to me, agree on this point, and some of them adduce passages of rather doubtful Śrīmānas, such as the ŚrīnatŚrīmani22 as their authorities. The restriction of obligatory gifts to visible eclipses, however, does not preclude the possibility that kings who wished to make gifts chose intentionally, in case no visible eclipse was close at hand, the day of an invisible one, and that they still believed to have secured for themselves the great rewards promised for a gift made grahaṇapatrāṇi. In such a case the invisible eclipse would of course be entered in the grants. And there is yet another circumstance, which, as Dr. Schram has pointed out to me, would explain the occasional mention of invisible eclipses. According to him the methods for the calculation of eclipses, known to the older Hindī astronomers, were so rough and primitive, that they made it very difficult to determine with certainty whether an eclipse would be visible in any given place. He thinks that errors on this point must have frequently occurred, and that such errors may have easily escaped detection, in case the eclipses were partial and occurred during the rainy season, when the sky is not rarely clouded for weeks. Under such circumstances an invisible eclipse would of course be treated like a visible one. For though an eclipse, believed to be a visible one, is not actually observed, the sky being covered by clouds, the prescribed observances are yet obligatory.22 It would, therefore, seem that the eclipse, mentioned in the Ilāo grant which fell in June, the beginning of the rainy season in Western India, may have been considered to be a really visible one and have been treated as such.

These remarks will suffice to show that the arguments, brought forward against the genuineness of I. and U. are by no

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22 [The opinion is, of course, one which I am quite ready to abandon, if good reasons for doing so are shown. But it will be necessary to examine the circumstances of a fair number of eclipses in many undoubtedly genuine records as can be referred to.—J. F. F.]

23 Nirṣayaśīndhu, Par. I. fol. 32b, l. 11-12. Nirṣayaśīndhu, Par. I. fol. 35a, l. 6—fol. 36a l. 11.
means conclusive. On the other hand, there are various reasons which speak against the assumption that they are forgeries. (1) The characters in which they are written are certainly ancient. (2) The statement that the first was written by Madhava, the son of Gilaka, and the second by Rêva, the son of Madhava, is of some importance. A Hindu forger would hardly think of such a collateral circumstance. And (3) their historical contents, taken by themselves, are perfectly believable. There is no reason why we should deny the existence of a Gurjara kingdom during the fifth century A.D., and the interval of seventeen years, at which they are stated to have been issued, is not too long for the reign of one king. If Dr. Bhagvânâlal felt unable to reconcile their contents with those of Kâhe I and II. his difficulty was, I think, merely a self-created one. Though both sets of documents name three homonymous kings, two of which receive also the same birudas, it by no means follows that the same persons are meant.21 The pedigree of the Gurjaras which Dr. Bhagvânâlal gave, ante, Vol. XIII. p. 73, according to the Khâcâ and Nausâri grants, and which I too consider to be correct, shows that these kings during six generations contended themselves with the two names, Dadda and Jayabhaâta. Dr. Bhagvânâlal also gave the correct explanation of this curious fact. He added that the Hindus very commonly name the grandson after the grandfather. I see no reason why we should deny that this practice had prevailed for a longer time, and that in the fifth and sixth centuries each Dadda was succeeded by a Jayabhaâta and each Jayabhaâta by a Dadda, as regularly as during the seventh and eighth. Nor is the repetition of the same birudas anything unheard of or even extraordinary. There are other instances of the same kind. Thus among the Râshtrakûtas,22 Gûvinda (III.) surnamed Jagattûnga is succeeded by an Amâghavarsha and the latter by a Krîshaâ (II.) called Akalavarsha. Then follows another Jagattûnga (II.) one of whose sons bears the name Amâghavarsha, and the son of the latter is again a Krîshaâ with the biruda Akalavarsha. Under these circumstances it seems impossible to suspect the

information, conveyed by the Gurjara plates, that one Dadda-Praśântarâga, the son of a Jayabhaâta-Vitarâga, ruled in the fifth century, while the reign of another prince, who bears the same name and the same honorific title and likewise was the son of a Jayabhaâta-Vitarâga, fell in the seventh century. This view gains, I think, a great deal more probability by the find of the Bagumra inscription. For, instead of two, we have now three documents which fully agree in their historical contents, which all three show ancient characters and show as close a relationship to each other as may be expected from their belonging to the short period of seventeen years. The larger such a group of grants becomes, the less is it possible to deny their genuineness. For they mutually protect each other, since the contents of the one confirm those of the others. With every additional document, the hypothesis that we have to deal with the works of a forger, requires more and more complicated suppositions and hence becomes more difficult. I believe it to be unnecessary to point out these difficulties in detail; and I turn to the more important task of attempting a systematic arrangement of the historical information which the Gurjara grants yield, and of supplementing it by the statements of some other documents.

Assuming, as we now must do, the three grants, U. B. and I. to be genuine, we obtain from the seven sets of plates, the following pedigree of the Gurjara princes of Broach:

<table>
<thead>
<tr>
<th>Dadda I. [circter 430 A.D.]</th>
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<tbody>
<tr>
<td>Jayabhaâta I.-Vitarâga I. [circter 455 A.D.]</td>
</tr>
<tr>
<td>Dadda II.-Prâśântarâga I. [Shaka-Sañvat 400]</td>
</tr>
<tr>
<td>415, 417, or 478-495 A.D.]</td>
</tr>
<tr>
<td>Dadda III. [circter 530 A.D.]</td>
</tr>
<tr>
<td>Jayabhaâta II.-Vitarâga II. [circter 605 A.D.]</td>
</tr>
<tr>
<td>Dadda IV.-Prâśântarâga II. [Chôdi-Sañvat 380, 385, or 628-29 to 633-34 A.D.]</td>
</tr>
<tr>
<td>Jayabhaâta III. [circter 655 A.D.]</td>
</tr>
<tr>
<td>Dadda V.-Bûhushâya (circter 680 A.D.)</td>
</tr>
<tr>
<td>Jayabhaâta IV. [Chôdi-Sañvat 456 to 458, or 706 to 734-35 A.D.]</td>
</tr>
</tbody>
</table>

reasons for not identifying them.


22 ante, Vol. XIII. p. 73.
In fixing the approximate dates of the kings of whose times we have no inscriptions, I go on the assumption that the duration of a generation is about twenty-five years. The gap between Dadda II. and Dadda III. was probably filled by the reigns of two Jayabhättas and of one Dadda between them. The period of about 80 years is just long enough for three reigns.

With a single exception all the complete inscriptions call the princes enumerated above, secons of the Gurjara race; and Khê. I. and II. highly extol the greatness and wide extent of this family. Na. alone names the Mahârâja Karpa as their ancestor. With respect to this personage it is for the present impossible to say whether the famous hero of the Mahâbhârata may be meant, or some real historical king. But the name Gurjara makes it evident that this dynasty belonged to the great tribe which is still found in Northern and Western India and after which two provinces, one in the Bombay Presidency and one in the Pâñjâb, have been named. The Gurjaras or Gujars are at present pretty numerous in the western Himâlaya, in the Pâñjâb and in Eastern Râjpûtâna. In Kachh and Gujârat their number is much smaller. It would, therefore, seem that they came into Western India from the north. Their immigration must have taken place in early times, about the beginning of our era or shortly afterwards. In Western India they founded, besides the kingdom of Broach, another larger state which lay some hundred miles further north. Hiuen Tsâng mentions in his travels the kingdom of Kiu-che-lo and its capital Pi-lo-mi-lo. It has been long known that the former word corresponds to Gurjara. But the name of the town has been incorrectly connected by the French scholars with Bâlmâr in the Jêsalâmr territory, and his identification has been accepted in Mr. Beal’s new translation of the Siyuki. As I have stated already, following Colonel J. Watson, Pilomilô corresponds exactly to Bhîllâmâla, one of the old names of the modern Bhîhmâl or Srîmâl in southern Mârvâd close to the northern frontier of Gujarât. Another work, which was composed a few years before Hiuen Tsâng’s visit to Gujarât, contains likewise a notice of this northern kingdom of the Gurjaras. The astronomer, Brahmagupta, who completed his Siddhânta in Sâkñ-Sâvatî 550 or 629 A.D., calls himself Bhîllâmâlakâkâshâyì, ‘the teacher residing in Bhîllâmâlaka,’ and is called so by his commentator Prithûdaksavâmin. He further states that he wrote under king Vyâghramukha who was ‘an ornament of the Châpâ race.’ This family, whose name recurs in the Hâddfâ grants of Dharanâvârâha, prince of Vâdhvâp, thus seems to have been the reigning house of Bhîllâmâla. It is most probably identical with the Chânâd, Chavâtâk before Châpottakas, who from 756 to 941 A.D. held Añhilvâp and still possess various small districts in northern Gujarât. The Gurjaras are without a doubt an offshoot of the larger State in the north, and it may be that its rulers, too, belonged to the Châpâ family.

The capital of the southern Gurjara State seems to have been always Broach, which town has possessed since remote times a very great importance. U. B. and I. are dated from a vikâresta, probably a cantonment, situated at the gates of Broach; while in Khê. I. and II. Nandivîr is named as the place of issue. The latter name refers, as I have shown formerly, Bhîllâmâlakâshâyì; in the second which occurs in the commentary on the Kâmakâshâyâsa, we have Bhîllâmâlakâshâyì, a slightly corrupt reading. This latter varia lectio occurs also in other MSS., see Weber, Indisch. Streifen, Vol. III. p. 90, and has given rise to erroneous suppositions regarding Brahmagupta’s home. The Gujarât Jâhîs still preserve the tradition that Brahmagupta was a native of Bhîhmâl.

Beal, Siyuki, Vol. II. p. 239. Hiuen Tsâng assigns to the northern Gurjara State an extent about double of the given for the kingdom of Broach.

ante, Vol. VI. p. 63.

Bhîllâmâla is etymologically ‘the field of the Bhîl’ and Srimâla ‘the field of Sri,’ the latter name must also be ancient, as the Srimâl Bhîhâma are called after it. The Jainas narrate various, of course incredible, legends, which explain how Srimâla came to be called Bhîllâmâla. Mûrântâna says that kings Bhôja invented the latter name, because the people of Srimâla let the poet Mâgha die of starvation. According to another authority the town had a different name in each Yuga. It is in India very common for ancient towns to have two or even more names. Thus Kanañj was called, Kanyakubjâ, Gâdhipura, and Mahâdâya.

See Professor A. Weber, Die Sanskrit und Prakrit Handschriften der Berliner Bibliothek vol. II. pp. 297, 298. In the first passage the MSS. offers incorrectly
to an ancient fort which once rose east of Broach close to the Jhad-svar gate. Na. and Kà. give no definite information on this point, as the former grant was issued during a royal progress at Kàyāvatâra, probably a tirtha, and as the first half of the latter is missing.

The Broach kingdom included, according to the testimony of the inscriptions, the whole of central Gujarât and the northern part of southern Gujarât, i.e. the present Broach District, the Tâlukâs of Òlpâd, Chórâš and Bârdôli of the Surat District, as well as the adjoining parts of the Baroda State, of the Râvâkâñâthi and of Sàdhâli. Its northern frontier was probably the river Mahi; and the southern one the river Ambikâ. For, U. B. and I. grant villages in the Tâlukâ of Aâłkâlîsâvar and in the Gaikwâdi districts south of the Tapti. Khê. I. and II. both refer to the distribution of the village of Sirshapadra, the modern Sâdrâ, in Aâłkâlîsâvar. The villages named in Na, Sâmipadra, Gōlijâ and Dâhâdatta, were situated in the pathaka or Tâlukâ of Kàrorilâ. The latter place has been correctly identified by Dr. Bhagvânâlî with Kàrâl on the northern bank of the Nârmadâ, in 21° 50' N. Lat. and 73° 15' E. Long. Kàrâl was still in the beginning of this century the chief town of a Gaikwâdi Pargañâ (Forbes, Râsâ Midâ, p. 390, 2nd edition). The village of Sâmipadra, to the territory of which the granted field belonged, is probably Sàdhâli, north of Kàrâl (Trig. Surv. Guj. Ser. No. 31). I identify Dâhâdatta with the Dâhât of the map (Trig. Surv. Map. Guj. Ser. No. 30) north-west of Samrâ, because the road from Sâmipadra to Dâhâdatta formed the western boundary of the field. The home of the donee, the âgrâhâra of Sàddhâli, is certainly the village of Sâdhrâ, situated according to the map north of Sâdhrâ. I cannot find any trace of Gōlijâ. The villages mentioned in Kà. are found, as I have shown in my paper, ante, Vol. V. p. 112, in the north-western corner of the Jambâsâr Tâlukâ, south of the Mahi. The names of the political divisions of the Broach kingdom occurring in the inscriptions, are the vishaya or province of Bharukâchchha (Kà.), which seems to have included the whole northern half of the Broach District, i.e. the Tâlukâ of Jambâsâr, Amôd, Wâghâ, and Broach, and possibly the adjoining Gaikwâdi Pargañâs. It is not improbable that it was divided into a number of āhâras and pathakas; and that the pathaka of Kàrorilâ (Na.) belonged to it. Further south we have the vishaya or province of Akrûrâsvara (Khê. I. II.) or Aâłkâlîsâvar (I.) which comprised the large Tâlukâ of Aâłkâlîsâvar and possibly pieces of the Râvâkâñâthi. Its southern boundary was no doubt, as at present, the Kân river. For we shall see further on that the Òlpâd Tâlukâ and the Gaikwâdi districts, north of the Tapti formed the Kâsâkâla vishaya. Immediately south of the Tapti lay the Kâmapâya bhukti, which included 116 villages (U.) or the Kârâmapâyaâhâra (Chaluâkya inscr.)

3 Dr. Bhagvânâlî's conjecture, ante, Vol. XIII. p. 37, according to which Nândipâlî has to be identified with Nândîpâlî, is not tenable. The word Nândîpâlî has nothing to do with Nândipâlî, but is derived from Nândâpadra. The town Nândîpâlî is of modern origin and has no claim to any great antiquity. An examination of its temples which I made in 1875, showed this; and the Brâhmans acknowledged it.

3 Dr. Bhagvânâlî, loc. cit., thought that Kâyâvatâra is the modern Kâvi. Against this identification speaks the fact that according to the phonetic laws of the Prâkrit dialects Kâyâvatâra cannot become Kâvi, as well as the circumstance that according to the Râther inscription of Saka-Sañvat 749 the old name of Kâvi was Kâpikâ, which latter word is just the Sanskrit prototype we should expect. Kâyâvatâra, literally "the incarnation of a son or descendant of Ka or Prâjâpati," probably was a place of pilgrimage on the Nârmadâ.

31 See above, p. 212. With reference to the villages named in I., I have to offer the following remarks:—The village granted, Râśâ, is the modern Râśâ in the Tâlukâ of Aâłkâlîsâvar, in 21° 52' N. Lat. and 73° 55' E. Long., as the resemblance of the names and a comparison of the boundaries according to the inscription and the Trig. Surv. Map. Guj. Ser. No. 13 show. The boundaries are

according to the inscription. according to the map.
east Vânaârâ. east Vânaârâ.
south the river Varanâj. south the river Varanâj.
west Sûphavâdakâ. west Sûphavâdakâ.
north Arâlûa. north Arâlûa. 32
and further south-east the dhára of Tatha-Umbará (B.) or Bagumrá.

The extent of the kingdom was, therefore, in its best times not very large; and it was reduced very considerably, as will be shown further on, in the seventh century. With this assumption agrees the fact that its princes were feudatories of some larger power. In Khe. I and II, Dadda III, is called Sámanda, 'or feudal baron' and the same title is found on the seal where it apparently refers to Dadda IV - Prásántaraga II, the donor of the grant. The position of Jayabhaṭa IV. seems at first sight to be a little higher, as he calls himself in Ká. Sámandaḥhipati, 'the lord of great barons.' But he has also the title samaṭhigata pavanaḥmahá. sáda, 'he who has obtained the five maháśabhas,' and the latter indicates that he was only a feudatory. The same epithet is also given in U., Ba. and I, to the Mahárájádhiraja Dadda II. - Prásántaraga I., whence it may be inferred that he, too, in spite of his high sounding title obeyed or had obeyed some time or another, a paramount sovereign. The most probable explanation of the apparent contradiction between his two designations is, I think, that he had among his vassals one or several who bore the title Mahárája, which, as e.g. the earlier Valabhi inscriptions show, was sometimes bestowed by paramount sovereigns on distinguished chiefs. In favour of this supposition speaks the fact that Jayabhaṭa IV., too, ruled over Rájas, as he addresses his commands in Na. 1 to Rájas, Sámantas and so forth. It is, of course, not absolutely impossible that Dadda II. - Prásántaraga I. was at first a vassal and later gained independence, but nevertheless continued to use the epithet which he might have dropped. If that were so, it would be necessary to assume that the Gurjaras rose for some time to greater power. The period cannot have been a long one, because Dadda III. was again a Sámanda. The question to whom the rulers of Broach owed allegiance, cannot as yet be answered with full confidence. It is not unlikely that at first they were vassals of the Gurjaras of Bhillamálá. Later their over-lords probably changed from time to time, as many kings of Central and Southern India tried to get a hold of the much coveted garden of the West, and some among them succeeded, each for a shorter or longer period.

If we now turn to a consideration of the historical facts from the reigns of the several kings mentioned in the inscriptions, we must confess that we learn nothing of Dadda I., except the name.

Of the second prince, Jayabhaṭa I. - Vítaraga I., it is said that he displayed in the highest degree all the sportive qualities of the elephants of the quarters by expeditions in the forests growing on both shores of the ocean. As I have pointed out formerly, the expeditions in the forests on both sides of the sea refer in all probability to wars in Gujarát and in Káthiávár. For, when a Gujarátí speaks of the sea, he naturally thinks of the Gulf of Cambay. It seems therefore, that the relations between the chiefs of continental and peninsular Gujarát were as strained in the fifth century A.D., as we shall find them to be in the sixth and the seventh, Jayabhaṭa's epithet Vítaraga, literally 'he whose passions have disappeared,' further indicates that he was an adherent of one of the philosophical systems whose aim is the suppression of the human passions and the attainment of final liberation. He may have been a Védántist or a follower of the Śāṅkhyá or even of the Śáiva or Bhágavatá dárkána. It is worthy of note that his bhruda has hitherto not been found in the case of any king of another dynasty.

The surname of his son and successor, Prásántaraga, 'he whose passions have been extinguished,' permits us to make the same inference which may be drawn from the epithet Vítaraga. Dadda II., no doubt, likewise inclined to the teachings of the ascetics. In his case this conclusion is confirmed by two other statements of the inscriptions. It is said of fit only the sterile districts on the sea coast, the so-called Bil, not the rich and fertile soil of the Káñam. The name Po-lu-tie-ch'ep'po corresponds, I think, to Bharukachchhá, not to Bharukachchhéra, as the usual transliteration is.

4 Sir A. Cunningham assumes, Ancient Geography, p. 327, that the kingdom of Bharukachchhá was somewhat more extensive, and he chiefly relies on Hiuen Tsang's statement, Síyukít, Vol. II. p. 239 (Beal), according to which Po-lu-tie-ch'ep'po was 2400-2500 li or about 400 miles in circuit. But this estimate is very vague, as the form of the figure is not stated. The description of the country in the Síyukít seems to be inaccurate. It would
him, that “he illumined the world of the living by his pure precepts” and that “he possessed the supreme knowledge.” The second phrase leaves no doubt that he had studied one of the philosophical systems, supposed to lead to moksha. The assertion that he illumined the world by his pure precepts, may mean that he himself had composed a philosophical work or had caused one to be written in his name. It may, however, also refer to his zeal for the spread of his doctrines and indicate that he established mathas and made the ascetics preach his and their faith among his people. In addition we learn from the inscriptions that he occupied the throne between the years 478-495 A.D. and that he assumed the title Mahārājā-dhiraja, the probable meaning of which has been discussed above.

Dadda III., the first king named in Khē. I. and II., seems to have been a great warrior. The inscriptions say (ll. 3-4), that he conquered the hostile family of the Nāgas, and (ll. 9-10) that “the lands lying at the foot of the Vindhyas hills gave him joy as if they were his wives carrying beauty on their high bosoms.” Dr. Bhagavanlal has called attention to the fact that the first passage contains an allusion to a historical event, and he has also stated that it is difficult to decide which Nāgas are meant. Nāgavānasas ruled in Northern and in Central India, in Rājputāna and even in the South. In the absence of any specification the choice is difficult, and we must wait for further documents before we can come to a decision. As regards the interpretation of the second passage, which hitherto has not been noticed, it indicates without a doubt that Dadda III. made conquests out of Gujarāt. The Vindhyas hills do not extend to the latter province, but end in the neighbouring Mālva, and it is probably a piece of the latter country which Dadda III. added for a time to the dominions of the Gurjars. Whenever the rulers of Mālva were weak and those of Gujarāt felt strong, an attack from the Gujarāt side was the invariable consequence, and it sometimes was successful and led to temporary conquests. The position of Dadda III., viz. his being only a Sāmanta, has been mentioned above.

The description of the next king, Jayabhāṣa II.-Vitarāga II., yields no historical information. His biruda probably indicates that his religious inclinations were of the same kind as those of Jayabhāṣa I.

A great deal more is known about Dadda IV.-Prasāntarāga II. The inscriptions Khē. I. and II. show that he occupied the throne during the years 628-633 A.D., which, as the dates of Kā. and Na. show, fell in the commencement of his reign, and that he was an adherent of the Sauras or worshippers of the Sun. Na. adds that he gained great fame by protecting the ruler of Valabhi against the supreme lord Śrīharshadēva. The latter is, of course, Śrīharsha-Harshavardhana of Thāpēsar and Kanauj, who ruled over the whole of Northern and Central India during the greater part of the first half of the seventh century 606-648 A.D. At first sight it seems difficult to understand how the king of Valabhi whose capital lay west of Broach, could be attacked by a Central-Indian power before Broach had been subdued, and it seems still less intelligible how the ruler of a very small state, a mere Sāmanta, could afford protection against the armies of one of the most powerful kings of India. The first difficulty is, however solved by the Valabhi inscriptions. For a grant of Dharasēna II., dated Sāvat 65 or 588-59 A.D., grants a village in the Khē. Kāhāra, the district of Khē. Ī, and thus proves that Gujarāt, north of the Mahī, had been annexed to Valabhi before the end of the sixth century. Hence the princess of Valabhi were in the seventh century the immediate neighbours of Mālva, which latter country was according to the Śrīharsha-charita a dependency of the great central empire. Śrīhrasha was, therefore, able to send an army against Valabhi without touching the Broach territory. The ancient road from Central India and Mālva to Khē. Ī leads through the pass of Dōhād (Dadhipadra). The second point, too, finds its elucidation partly through the Valabhi inscriptions and partly through some remarks in the writings of Hiuen Tsiang. As Khē. I. and II. say nothing about the deed which reflected according to Na. great glory on Dadda IV., it appears that it was performed after 633-4 A.D. Between these

See below the text I. 11. 11 ante, Vol. VII. p. 70 ff. 44 Śrīharsha-charita, p. 188, Kashmir edition.
years and the end of Śrīharsha’s reign, two princes ruled in Valabhi, Dhrusvaśena II., who issued a grant in [Gupta-Valabhi]-Śaṅvat 310 or 628-9 A. D. and his son, the ārakamaḥārajaḥdhirājaḥparvamsvarcakavartin Dharasena IV., who, as his titles show, was the most powerful king of the dynasty. It is thus evident that Śrīharsha must have attacked one of these two princes. The remarks of Huien Tsang leave no doubt that it was Dhrusvaśena II., who had to fly before the armies of the great king of Kanauj. He says, Siyuki, II. p. 267 (Beal), in his account of Valabhi,—

“the present king is of the Khatriya caste, as they all are. He is the nephew of Silādiyavājasa of Mālaw, and son-in-law of the son of Silādiyā [i.e. Śrīharsha] the present king of Kanyākubja. His name is Dhrusvabhāṣata” (Ṭa-lu-k’o-po-tu). He is of a lively and hasty disposition, his wisdom and state-craft are shallow. Quite recently he has attached himself sincerely to faith in the three precious ones.”

Again in the account of the great religious meeting, which Śrīharsha convened in 643 A. D. at Prayāga, Tu-lu-po-pa-tch’ a, ‘the king of Southern India,’ is enumerated as one of the princes attending at Śrīharsha’s command. Finally the same work informs us that Pa-tch’ a together with Kumāra and other kings accompanied Huien Tsang on his departure from Śrīharsha’s camp.

Huien Tsang’s notes leave no doubt that Dhrusvaśena II. occupied the throne of Valabhi at the time of his visit, and that he was connected with Śrīharsha by marriage and was his vassal. Taken together with these facts, the statement of Na. that Dadda IV. (Praśāntarāga II.) protected the king of Valabhi who had been defeated by the supreme lord Śrīharshadeva, becomes both intelligible and perfectly credible. It is now easy to see that Śrīharsha extended,—some time between A. D. 633-34, the date of Khē. II., and 640, the approximate date of Huien Tsang’s visit to Gujarāt,—his sway to Western India. He directed his attack, as a

matter of course, against Valabhi, the largest and most powerful state in Gujarāt, and defeated its ruler Dhrusvaśena II. Dhrusvaśena fled after his defeat to Broach and was sheltered by Dadda IV. From his place of refuge he made peace with and his submission to his great foe, and was restored to his throne as a feudatory of the latter. The peace was cemented, as has happened in many similar cases, by a marriage of Dhrusvaśena with Śrīharsha’s granddaughter. With this supposition the magnitude of Dadda’s feat is somewhat reduced, but it loses the appearance of absurdity which it has at first sight. Huien Tsang’s statement that Dhrusvaśena had quite recently attached himself to Buddhism, probably indicates that the subjugation and marriage of the king of Valabhi had occurred only a short time before his visit. Dhrusvaśena’s conversion to or inclination towards Buddhism has probably to be attributed to the influence of his connection with Śrīharsha, who, as is well-known, was possibly himself a Buddhist, or at least, a great patron of that sect.

A consideration of other Valabhi inscriptions and of the grants of the Gujarāt Chalakyas, teaches us that the reign of Dadda IV. was filled by more events than the Gurjar grants mention. These events were all untoward ones and led to a temporary annihilation and to a permanent weakening of the Gurjar kingdom. The friendly relations with the rulers of Valabhi do not seem to have lasted long. For we possess two grants of Dharasena IV., the son and successor of Dhrusvaśena II., which were both issued in the autumn of the year 648 A. D., from “the victorious camp situated at Broach.” This date leaves no doubt that Dharasena had made war on the king of Broach and had occupied his capital. The silence of Na. on this point proves nothing, as Indian inscriptions very rarely confess to a defeat of the princes by whose orders they were made. As the dates of Khē. I. and II. fall in the beginning of the reign of Dadda IV., it is very probable that he in person received this

The title ‘king of Southern India,’ which is here given to Dhrusvabhāṣata may be explained by the circumstances that Śrīharsha did not reign over the Dekhan, and that Valabhi was one of the southernmost states subject to his control.

The form Pa-tch’a, which appears also on p. 254 the representative of Bhata, an abbreviation of Dhrusvaśena, made bhāmāvat.
extraordinary return for his kindness to Dhruvasena II. The occupation of Broach by the ruler of Valabhi, however, cannot have lasted long; for Ka and Na prove the continuance of the Gurjara dynasty and their holding the province of Broach. Moreover a great political catastrophe seems to have happened in Valabhi soon after 648 A.D. The grants of this year are the last, as far as we know at present, Dharasena IV. issued. In Saunvat 332 or 650-51 A.D., Dhruvasena III, his youngest cousin twice removed, occupied his place. Dharasena IV. must, therefore, have died shortly after the issue of the two grants dated from Broach. As the youngest member of another branch of his family succeeded him, it is probable that he lost his life in consequence of an internal revolution. Such an event would, of course, present a favourable opportunity for the Gurjaras to regain their lost possessions.

About the same time as the conquest of Broach by Dharasena IV., or perhaps a little earlier, happened the second misfortune which the Gurjaras had to suffer. This was the loss of the southern half of their dominions to the Chalukyas. We know at present of five Chalukya grants, belonging to the second, third and fourth quarters of the sixth century and to the second quarter of the seventh century, which show that during this long period the districts immediately north and south of the Tapti, the British Talukda of Olpad and the Gaikwad district of Kamraj and Nausari, belonged to branches of the great Chalukya dynasty of Badami. These documents are (1) the Khedga grant of Vijayaraja or Vijayavarman, dated Saunvat 394, (2) the Nausari grants of the Yavvaraja Silditya-Sryasraya, dated Saunvat 421, (3) the Surat grant of the same prince, dated Saunvat 443, (4) the Balsar grant of Mangalaraja, dated Saka-Saunvat 663, (5) the Nausari grant of Pulakesivallabha-Janarsraya, dated Saunvat 490. After what has been said by Dr. Bhagyvanlal and General Sir A. Cunningharn, it may be considered certain that all these inscriptions, excepting the fourth, are dated according to the Chedi era, and that their dates correspond to the years 642-3, 669-70, 691-92, 731, and 738-39 A.D. As regards the family of the donors, Vijayaraja calls himself a Chalukya, and names a Jayasinha as his grandfather. His connection with the main line of Badami is not stated. But the date of his grant makes it probable that his grandfather was the Jayasinha-Dharasraya who is named in the Nyapar grant, and who was a younger brother of Pulakeshin II. of Badami. The donors of the other four grants are brothers and sons of a younger son of Pulakeshin II. of Badami, who was also called Jayasinha-Dharasraya (see the Pedigree of the Chalukyas of Badami and Gujarath, on page 199). This Jayasinha received, as the grants hint, the province of Gujarath from his brother Vikramaditya I. of Badami, and handed over the administration to his son and heir-apparent Silditya-Sryasraya, who, it would seem, died before his father. Afterwards the succession to the Chalukya possessions in Gujarath devolved on Jayasinha's second son Maungala or Mahagalarasaraja, surnamed Vinayaditya-Yuddhamalla, and later on Pulakesivallabha-Janarsraya. All these kings remained feudatories of the kings of Badami in the Dakhana.

The village given away in the Khedga grant of Vijayaraja is Pariyana, which lay east of the village of Sandhiyara and belonged to the province of Kasakula. Pariyana is the modern Pariya in the south-eastern corner of the Taluka of Olpad; and Sandhiyara is now called Sandhier which lies a few miles further west on the local-fund road from Sayan to Olpad. The fact that the district on the northern bank of the Tapti was called Kasakula is also established by Dr. Bhagyvanllal's Rathi grant from Antroli-Chhordi, which village is called in the inscription Sthavara-pallikia and is stated to belong to the province of Kasakula. The Nausari grant of Sryasraya-

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20 A grant of Dhruvasena III. bearing the date given, was in the possession of Dr. Bhagyvanllal Indraki, to whom I owe the knowledge of its existence.
21 The only reliable edition of this grant is Mr. Fleet's, see ante, Vol. VII. p. 248 ff.
23 Grants Nos. 3 and 5 have been published by Dr. Bhagyvanllal Indraki in the Verhandlungen des Siebenten Int. Orientalisten Congresses in Wien, Arische Abteilung, p. 219 ff. The fourth grant has been described by the same scholar, ante, Vol. XIV. p. 75 and in the Journal of the Oriental Archæological Society, Vol. XVI. p. 105.
27 The identification of Chhordi with Sthavara pallikia has been made by Dr. Bhagyvanllal. He omitted to mention that the village of Khairlana is represented by the modern Khorwa and the town of Khoshakhpiri by Khisphere. All these places are to be found in the sheet of the Trig. S. Map. No. 14 in 21°, 11-20 N. Lat. and 72°, 55-73° E. Long.
Śilāditya was issued at Navasārikā or Nausāri itself and disposes of the village of Asatiṭṝgāma, probably the modern Astgām, south-east of Nausāri. Still more important is the geographical information of the Surat grant of Saṅvat 443 or 691-92 A.D. It was written in the vice-regal camp at Kārmaṇḍā or Kamrēj, and alienates a field of the village of Ōsumbhalā, west of Allūraka. Ōsumbhalā, is the modern Umbhēl south of Kamrēj; and Allūraka is still called Alurā. It is thus evident that the Chalukyas had conquered the northern bank of the Taptī as early as 642-3 A.D. That indicates, just as Śilāditya's grants prove it clearly that the districts south of the Taptī were likewise lost to the Gurjaras. The date of Vijayarāja's inscription shows that this loss happened probably a little earlier than Dharasēna's invasion, and the long continuance of the Chalukya rule in southern Gujarāt proves that it was permanent.

If we now turn to the history of the remaining Gurjara princes, we learn about Jayabhaṭa III. nothing beyond the name.

His son, Dadda V., is called in Na. Bāhussahāya, 'he whose only helper was his arm,' and a paramamāhāēvara, i.e. 'a most devout worshipper of Śiva.' His birūḍa indicates that he was a warlike prince and confirms the further statement that he bravely encountered in battle the lords of the East and of the West. The latter foe probably was the ruler of Valabhi; and the lord of the East may have been the Chalukya sovereign of Bādāmi. We can easily understand that both tried to annex the remainder of the Gurjara kingdom. Another assertion in the inscription, that Dadda V. studied the teachings (pravaschana) of the great sage Manu, need not be taken too literally. But it is of interest, as it proves the popularity of the famous lawbook during the seventh century.

The last king of the Gurjara dynasty, known to us, Jayabhaṭa IV. ruled according to Na. and Kā. between 705 and 734-35. The former inscription teaches us only that he was a paramamāhēśvara, like his father. The second

asserts that he quieted the impetuosity of the lord of Valabhi. The feud between Broach and Kāthiavāḍ thus appears to have continued. Jayabhaṭa's opponent was either Śilāditya V. or Śilāditya VI. The grant of the first is dated (Gupta-Valabhi) Saṅvat 404 or 722-23 A.D., that of the latter was issued towards the end of his reign, in Saṅvat 441 or 759-60 A.D. In Jayabhaṭa's reign fell also, it would seem, the great invasion of the Tājikas or Arabs, during which, as the grant of the Gujarāt Chalukya Pulakōśīn states, the enemy conquered, besides Sindh and Kachh, Kāthiavāḍ and the whole of Gujarāt as far as Nausāri. The Gurjara king is especially mentioned as one of the subjugged princes.

Regarding the further fate of the kingdom of Broach, we can surmise now with more confidence than formerly that it continued to exist until the complete conquest of Southern and Central Gujarāt by the Rāthōr Gōvinda III. about the year 800 A.D. The Rādhānpar grant of the latter says that 'on Gōvinda's approach the Gurjara fled in fear into some (unknown hiding-place) and did not even dream of meeting him in battle.' The Barōḍā and Kāvi grants add that Gōvinda III. presented the province of Lāṭa, the country between the Mahī and the Taptī, to his brother Indra, whose descendants continued to hold it, as other inscriptions prove, against many foes for more than a hundred years. During Indra's reign the Gurjaras stirred once more and he gained, as verse 29 of the Kāvi plates says, victories over them. I was formerly (ante, Vol. V. p. 145) inclined to identify these Gurjaras with the Chāndās of Aṇhīlīvāḍ. It seems now more likely that the dispossessed rulers of Broach are meant, though it is possible that they may have been assisted by their northern clansmen. The latter appear later without doubt as the foes of the Rāṭhōrs. If the Bagumā inscription of Dhrūva III. asserts that this prince had to encounter the powerful Gurjaras, nobody but the king of Aṇhīlīvāḍ can be meant.

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88 Trig. Surv. Map, Guj. Ser. No. 34, 21° 11' North lat. and 73° 1' East long.
90 Verhandlungen des Siebenten Orientalisten Con-
PEDIGREE OF THE CHALUKYAS OF BADAMI AND GUJARAT.

(Compiled from Mr. Fleet's Dynasties of the Kanarese Districts
and Dr. Bhagvân-lîl Indrâjî's grants.)

A.—Bâdâmi or main line.

Jayasimha I.

Râgarâpa.

Pulikôsin I.

Kirttivarman I. Mangaliśa.

(567 A.D.)

(567-610 A.D.)

? Satyāräya-Indrarvarman

(610 A.D.)

Pulikôsin II. Vishnuvardhana I. Jayasimha-Dharśraya.

(610-634). ( founder of the

Eastern branch).


Vijayarâja.

(642-3 A.D.)

C.—Second Gujârat branch.

Ádityavarman. Chandrâditya. Vikramâditya I.

(670-860 A.D.)

Jayasimha-Dharśraya.

Vinâyâditya. Śilâditya-Sryārâya.

(681-696 A.D.)

(689-692 A.D.)

Mângala, or, Pulakôsivallabha-

Maṅgalarâja. Janârâya.

Vinâyâditya-

Yuddhamalla.

(731 A.D.)

TEXT.

First Plate.

1 ओ शासित वै यज्ञविषे ग् भक्तमयद्वारावासस्यायं सकलवनतपतविफल्विनार्गरफर जननरकावोबोधितः

2 [कृ] सुरधरविषदमतस्वस्थितसमयीमूलनितिभक्तिमयकास्वस्तसंख्यायुक्तारसंस्कारः

3 मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः प्रवेदति मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः

4 मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः प्रवेदति मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः

5 मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः प्रवेदति मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः

6 प्रवेदति मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः प्रवेदति मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः

7 मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः प्रवेदति मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः

8 मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः प्रवेदति मात्रामयसघनेतक्षेत्रशिरस्मिति सलिनेन्द्रसाग्निः

L. 1, read ओ; ओ in ओतकालः looks like न; read थ-।।
L. 2 कृ in कृष्णः is indistinct; read गुप्तः

L. 3, read समयः; प्रमाणः
L. 4, read बलः; शिल्पिः; कुजः; रा दमः; घाणतः; धितः

L. 5, read रचयोः; पितः; महायः; सच्चः;—L. 6

read गुर्जः; मुर्जः; महादीकः

L. 7, read निच्छः;

L. 8, read किरीणः; निधिकः; नुङः;

बनेशः;—
Second Plate.

17. Bheemayaghya
18. Purush Udyotayasim Samgraha
19. Yuvam Pashyam Udrasthita
20. Sanyasaanandita
21. Brumadhvaanakopamaharaj
22. Raghuvanaaya, Prakaara, Varta, Vandana, Sambhavita
23. Prathaasthitam Pratimayaga
24. Sthiraayutya
25. Panchasara
26. Sauravasita
27. Paramgupta
28. Vairagi
29. Nigamayaya
30. Gandhravaaya
31. Raghavaaya
32. Pravartitaya

REMARKS.

I add no translation, as the grant is so very similar to those Ilão and Umétá.

The only alterations in my former translation of the Vairāgīsāvitali which I think necessary, are:

(1) L. 1. Sakala" must be construed with rajanikara and be translated by 'full.'

(2) L. 7. Nisthrikha-vikrama means with reference to the lion 'the pitiless paw,' not 'the pitiless jump.'

In the preamble of the grant I propose to read "niyuktakārdhikamahattarādhiḥ" and to translate the last two words by 'the kamis the elders and so forth. The insertion of t at the end of "adhiṣṭ, i.e. "aḍhīṣṭ, is caused by the following sa and is archaic.
TWO INSCRIPTIONS FROM TERAI; [VIKRAMA-] SAMVAT 960.

BY PROF. F. KIELHOEN, C.I.E., GÔTTINGEN.

Mr. Fleet has supplied me with rubbings, received from Sir Alexander Cunningham, of the two short inscriptions, which I shall mark here A. and B., mentioned in Archaeological Survey of India, Vol. XXI. p. 177. The import of these inscriptions is clear enough, and it is very different from what it has been supposed to be; but only the rubbing of A. suffices for editing the inscription in full.

A.

According to Sir A. Cunningham, this inscription is on a prostrate pillar, near a temple outside 'Térañi', a village on the 'Mohwar' river, in the state of Gwâliâor, Long. 75° 1' E., Lat. 22° 3' N., Indian Atlas, quarter-sheet 52 N. E. It consists of 5 lines. The writing covers a space of about 1' 3" broad by 4" high, and appears to be well preserved. The size of the letters is about \( \frac{1}{8} \)". The characters are Dêvanâgari; and the language is Sanskrit.

The inscription is dated in the year 960, expressed by decimal figures only, on the fourth day of the dark half of the month Bhâdrapada, on Śani or Saturday. And it records that, on that day, there took place "here, on the Madhuveni", or the stream Madhu, a fight between the mahásûmanâbdhipati, the illustrious Guñarājâ and the illustrious Undâbhañjâ, in which the koṭtapâla, or guardian of the fort, the illustrious Chândiyâna, an adherent or follower of Guñarâjâ, was killed. The inscription closes with an Anushâthub verse suitable to the occasion.

Referred to the Vikrama era the date, 960, taken as the year expired, or 961 current, Bhâdrapada va. di. 4, calculated by Dr. Schram's and Prof. Jacob's tables, corresponds to July 16th, 903 A.D., which was a Saturday, as required. On that day, at sunrise, the fourth tithi of the dark half was current, and it ended about 14h. 53m. after mean sunrise. In 903 A.D. the solar month Bhâdrapada lasted from about sunrise of July 26th to about sunrise of August 26th, and since within that time there were two new-moons, one about 1h. 17m. before sunrise of July 27th, and the other about 7h. 35m. after sunrise of August 25th, there were in 903 A.D. two lunar months Bhâdrapada, and July 16th was the fourth of the dark half of the first of these two months. The fourth of the second, or adhika, dark fortnight of Bhâdra andhava would have been Monday, August 15.

By a singular coincidence, I have lately received from Dr. Burgess an impression of that "huge inscription," existing "somewhere in the state of Gwâliâor," which was mentioned in 1862 by Dr. F. E. Hall, in the Jour. Beng. As. Soc., Vol. XXXI. p. 6, and which has been re-discovered by Dr. Burgess at Sérôñ (or Siyaşôñ, as it is called in the inscription itself), a place in the Lalitpur district of the North-Western Provinces, Long. 75° 23' E., Lat. 24° 50' N., Indian Atlas, quarter-sheet 70 N. W., about 27 miles S.E. of 'Térañi.' And I am thus enabled to state that one of the two mahásûmanâbdhipatis, spoken of in the present inscription, is mentioned also in the Sérôñ inscription. For, in lines 4-6, that inscription records that during the reign of the paramâbhâtârakâ mahârâjadhirâja paramâdvarâ Mahândrapalâdêva, who meditated on the feet of the p. m. p. Bhôjâdêva, in the year 964 (expressed both in words and by decimal figures) on the third of the dark half of the month Mârgâsûra, the illustrious Undâbhañjâ, who is described as mahâprâthârâ-samadhigâtaścamahâśâhâda-mahâsûmanâbdhipati, being in residence at Siyaşôñ, made certain religious grants at that place. This statement is interesting, because it proves the correctness of my reading of the year of the present inscription, 960 (not 910), and because it shows that Undâbhañjâ was a general or feudatory of the paramount sovereigns of the country, the rulers of Kanyakubja. On the other hand, the date of the present inscription shows that the dates of the Sérôñ inscription must undoubtedly be referred to the Vikrama era.

The river Madhu or Madhuveni, mentioned in the present inscription, I take to be the river 'Mohwar' of the maps, on which 'Térañi' is situated.

B.

This inscription also is on a prostrate pillar, near the pillar which contains the inscription A. It consists of 5 lines. The writing covers a space of about 1' 3'' broad by 3'' high, and
it is, judging from the rubbing, not well preserved. The size of the letters is about \( \frac{\text{\textdegree}}{} \). The characters are Dēvanāgarī; and the language is Sanskrit.

Like A., this inscription also begins with a date, of which the words and figures Saṁ 960 Bhādrapadva da 4 Sanaicharadini are clear, but in which the figure 4 for the day is preceded by another figure which may be 1 or 2, and which may either have been struck out or may possibly have reference to the fact that in the year 960 Bhādrapada, as I have shown above, was an intercalary month. Undoubtedly the inscription refers to the fight, spoken of in the inscription A., of the illustrious Gunaṛāja and Undabhaṭa, whose names occur here in line 1, and it records the death in battle of another warrior, whose name ends in varman and who, in line 2, appears to be described as a sāmanta and a kapatī. The inscription also contains, in lines 2 and 3, the Anasūbh verse with which the preceding inscription ends, and which is followed here, in lines 3-5, by another verse (?), the exact words and import of which I am unable to make out from the rubbing.

TEXT OF INSCRIPTION A.¹

1 [Ōm]² Saṁ [u?]³ 960 Bhādrapadva va 4 Saṁana || Ady-cha Madhuvanyam mahásāmāntā.  
2 dhīpati-śri-Gunarāja-Undabhaṭayoh parasparam-bhaṇḍanā saṃjatā [\( \star \)Ta-  
3 tra cha śri-Gunarāja-pādadvam-ōpajīvī kūṭapāla-śri-Chāṇḍiyaṇa  
4 nāma(ma) vyāpādaḥ || Jitēna⁴ labhyatē lakṣhmi[?r?] =mṛṭen-āpi surāṃgana || kha-  
5 na-vidhvaṃsini(ni) kāyē kā chiṅtā maranē raṇē ||

FOLKLORE IN SOUTHERN INDIA.

BY PANDIT S. M. NATESA SASTRI, M. F. L. S.

No. XXV.—Chandralēkha and the Eight Robbers.

There was an ancient city named Kaivalayam, in the Pāṇḍiya country, and in that city there lived a dancing girl named Mutṭumuḥanā. She was an excellent gem of womankind, for though born of the dancing-girl's caste, she was a very learned and pious woman, and never would she taste her food without first going and worshipping in the temple to Śiva. She moved in the society of kings, ministers and Brahmans, and never mingled with low people, however rich they might be. She had a daughter named Chandralēkha, whom she put to school along with the sons of kings, ministers and Brahmans. Chandralēkha showed signs of very great intelligence, even when she was beginning her alphabet, so that the master took the greatest care with her tuition, and in less than four years she began her lessons and became a great panditā. However, as she was only a dancing-girl by birth, there was no objection to her attend-

¹ From the rubbing.  
² Expressed by a symbol.  
³ This may be a sign of punctuation, or it may possibly be the akṣara \( \text{sa} \), struck out.  
⁴ Metre, Ślokā (Anasūbha).—The first akṣara of jitēna appears to have been altered to ji, and one certainly expects jitēna for jitēna. Compare the well-known verse of the Padmaśastra:

Mrṣitaḥ saṁprāyayate svargā jīvadbhāḥ kṛttvā kṛttvām ||  
Tad saṁprāyaṁ śāradāh guruṇaṁ na durābhāva ||  
[The reading, however, is jītēna in inscriptions in Southern India also; e.g. in two śāra or monumental tablets of heroes at Bālagāvī and Surabat Māpur; Pāli, Sanskrit, and Old-Kannarese Inscriptions, Nos. 212, 225.—J. F. F.]}
hand, to be presented along with the money. The servants placed the baskets before the master and stood outside the house, while Chandralekha took the dish of betel-leaves, nuts &c., and humbly prostrated herself on the ground before him. Then, rising up, she said:

"My most holy guru (master), great are the pains your holiness undertook in instructing me and thus destroying the darkness of my ignorance. For the last eight years I have been a regular student under your holiness and all the branches of knowledge hath your holiness taught me. Though what I offer might be insufficient for the pains your holiness took in my case, still I humbly request your holiness to accept what I have brought."

Thus said she, and respectfully pushed the baskets of mokars and the betel-nut platter towards the Brahman. She expected to hear benedictions from her tutor, but in that we shall see she was soon disappointed.

Replied the wretched Brahman: "My dear Chandralekha do you not know that I am the tutor of the prince, the minister's son and several others of great wealth in Kaivalyam? Of money I have more than enough. I do not want a single mokar from you. But what I want is that you should marry me."

Thus spoke the shameless teacher, and Chandralekha's face changed colour. She was horrified to hear such a suggestion from one whom she took till then to be an incarnation of perfection. But, still hoping to convince him of the unjustness of the request, she said: "My most holy master! The deep respect I entertain towards your holy feet is such that, though your holiness's words are plain, I am led to think that they are merely uttered to test my chastity. Does not your holiness know the rules by which a preceptor is to be regarded as a father, and that I thus stand in the relationship of a daughter to your holiness? So kindly forget all that your holiness has said, and accepting what I have brought in my humble state, permit me to go home."

But the wretched teacher never meant anything of the sort. He had spoken in earnest, and his silence now and lascivious look at once convinced the dancing-girl's daughter of what was passing in his mind. So she quickly went out and told her servants to take back the money.

At home Muttumohan was anxiously awaiting the return of her daughter, and as soon as Chandralekha came in without the usual cheerfulness in her face, and without having given the presents, her mother suspected that something had gone wrong, and enquired of her daughter the cause of her gloom. She then related to her mother the whole story of her interview with her old master. Muttumohan was glad to find such a firm heart in her daughter, and blessed her, saying that she would be wedded to a young husband, and lead a chaste life, though born of the dancing-girls' caste. The money she safely locked up in her room.

Now, the Brahman, in consequence of his disappointment, was very angry with Chandralekha, and, that no young and wealthy gentleman might visit her house, he spread reports that Chandralekha was possessed by a demon (kufthichadhti). So no one approached Chandralekha's house to gain her love, and her mother was much vexed. Her great wish was that some respectable young man should secure her daughter's affections, but the master's rumours stood in the way. And thus a year passed and the belief that a kufthichadhti had possessed Chandralekha gained firm ground.

After what seemed to these two to be a long period a sage happened to visit Muttumohan's house, and she related to him all her daughter's story. He listened and said, "Since the belief that a demon has taken possession of your daughter has taken firm hold of the citizens, it is but necessary now that she should perform (pújá) worship to the demon-king on the night of the new-moon of this month in the cremation-ground. Let her do this and she will be all right, for then some worthy young gentleman can secure her affections.

So saying the sage went away, and his advice seemed to be reasonable to the mother. She very well knew that no such demon had possessed her daughter, but that it was all the master's idle report. But still, to wipe away any evil notion in the minds of the people she publicly proclaimed that her daughter would perform pújá in the cremation-ground at mid-

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1 There would of course be no real marriage between a dancing girl and a Brahman. Hence the insult.
night at the next new-moon. Now, it is always the rule in such rites that the person who is possessed should go alone to the cremation-ground, and, accordingly, on the night of the next new moon, Chandralekha went to the burning-ground with a basket containing all the necessary things of worship and a light.

Near Kaivalyam, at a distance of five kos from it, was a great forest called Khagdavam. In it there dwelt eight robbers, who used to commit the greatest havoc in the country round. At the time when Chandralekha proceeded to the cremation-ground, these eight robbers also happened to go there to conceal what they had stolen in the earlier part of that night. Then, being relieved of their burden, they determined to go to some other place to plunder during the latter half of the night also. When Chandralekha heard the sound of footsteps at a distance she feared something wrong, and, covering up her glittering light by means of her empty basket concealed herself in a hollow place. The thieves came and looked round about them. They found nobody, but, fearing that some one might be near, one of them took out an instrument called kannakkol, and, whirling it round his head, threw it towards the east. This kannakkol is the instrument by which these robbers bore holes in walls and enter buildings, and some robbers say they get it from a thunderbolt. During a stormy day they make a large heap of cow-dung, into which a thunder-bolt falls and leaves a rod in the middle, which is so powerful that it can bore even through stone-walls without making any noise. It has also the attribute of obeying its master’s orders. So when the chief of the eight robbers threw his kannakkol towards the east, true to its nature, it came into the hole in which Chandralekha was lurking, and began to pierce her in her back. As soon as she felt it, she dragged it out by both her hands without making the slightest noise, and, throwing it under her feet, stood firmly over it. The robbers, having concealed the eight boxes of wealth they had brought with them in the sands near the cremation-

ground, went away to spend the remaining part of the night usefully in their own fashion.

As soon as the robbers had left the place Chandralekha came out, and, taking possession of the robbers’ rod, took out the eight boxes that the robbers had buried. With these she quickly hastened home, where her mother was awaiting her return. She soon made her appearance, and related all that had occurred during the night to her mother. They soon removed the contents of the boxes and locked them up safely. Then, taking the empty boxes, she filled them up with stones, old iron and other useless materials, and, arranging them two and two by the side of each leg of her cot, went to sleep on it.

As the night was drawing to a close, the robbers, with still more booty, came to the ground, and were thunderstruck when they missed their boxes. But as the day was dawning they went away into the jungle, leaving the investigation of the matter to the next night. They were astonished at the trick that had been played upon them and were very anxious to find out the thief who had outwitted thieves. Now they were sure that their boring-rod, which they had aimed against the unknown person who might be lurking in the smañnam (cremation-ground), must have wounded him. So one of them assumed the guise of an ointment-seller, and, with some ointment in a cocoanut-bottle, began to walk the streets of Kaivalyam city, crying out “Ointment to sell. The best of ointments to cure new wounds and old sores. Please buy my ointment.” And the other seven thieves assumed seven different disguises and also went wandering round the streets of the city. A maid-servant of Chandralekha had seen that her mistress was suffering from the effects of a wound in her back, and never suspecting a thief in the medicine-seller, called out to the ointment-man, and took him inside the house. She then informed Chandralekha that she had brought in an ointment man, and that she would do well to buy a little of his medicine for her wound. The clever Chandralekha at once recognised the thief in the

great way down the river, takes the box and wishes to run away with the girl inside, he is torn to pieces, as a fit reward for his evil intentions, by the beast. But here the story takes a different turn.

5 From this point up to the end we shall find the story to be similar to "Ali Baba and the Forty Thieves" in the Arabian Nights, though the plot is different.
they opened the boxes to sort out their booty, astonishing of astonishments, their eyes met only broken pieces of stone, lumps of iron and other such rubbish. Every one of them placed his forefinger at right angles to the tip of his nose, and exclaimed:—“Ah! A very clever girl. She has managed to deceive us all. But let this day pass. We shall see whether she will not fall into our hands to night.”

Thus, in wonder and amazement, they spent the whole day. Nor was Chandralékha idle at her own house. She was sure she would again see the robbers in her room that night, and, in order to be prepared for the occasion, she made a small sharp knife out of the robber's rod and kept it beneath her pillow, in the place where she was accustomed to keep her purse containing a few betel leaves, nuts, chunam, &c., to chew. The night came on. Early Chandralékha had her supper and retired to bed. Sleep she could not, but she cunningly kept her eyelids closed and pretended to sleep. Even before it was midnight the eight thieves broke into her room, saying to themselves:—“This clever lady-thief sleeps soundly. We will do her no mischief here. Let us range ourselves two and two at each leg of her cot and carry her away unconscious to the woods. There we can all ravish her and kill her.”

(To be continued).

MISCELLANEA.

A NOTE ON THE EPOCH AND RECKONING OF THE SAKA ERA.

General Sir A. Cunningham's Tables,1 and Ganpat Krishnaji's and Kero Lakshman Chhatre's almanacs, shew the period from the 5th April, A.D. 1886, to the 24th March A.D. 1887, as corresponding to Saka-Saṅvat 1808. So, also, the Sāyana-Pañchāṅg shews the same period, as corresponding to Saka-Saṅvat 1808, as the ordinary nirayana luni-solar year; the period covered by Saka-Saṅvat 1808, as a sāyana year, being from the 6th March, A.D. 1886, to the 22nd February, A.D. 1887. For all purposes of calculation, however, this Saka year has to be taken as “the year 1808, expired,” even if we were working out the very first day of it, Chaitra śukla 1. The Tables are intended for this application of the number; and there are, in fact, no salwār纳斯 of the two cycles of Jupiter; leaving it to anyone who has to make a particular calculation, to take the preceding year as the basis of his work. And, in ordinary writing, the current Hindu years should certainly be quoted with the current Christian years.

1 The proper method of applying his Tables may perhaps be inferred from his remarks (e.g. Indian Eras, pp. 5, 48, 52) that the numbers of the years in Hindu dates refer to years actually elapsed; and that the Hindu count only by completed years. But I am speaking of the meaning which the Tables present to a general reader, at first sight. Thus, anyone turning to his Table XVII. p. 191,—to which there is not attached a note that the Hindu years given therein are expired years,—in order to ascertain the Saka equivalent of A.D. 1886-87, finds Saka-Saṅvat 1808; and naturally takes it as a current year. So, also, with any similar Tables: e.g. those in Mr. C. Patell's Chronology. Such Tables would be much more useful for general purposes, if they showed the current Hindu years opposite the current Christian years, as is done in the case of the āśāha-Saṅkṛanti.

2 Unless with Tables based on the Mōsha-Saṅkṛanti, or entrance of the sun into Aries, as Prof. K. L. Chhatre's Tables are; in which the Saka year is practically treated as commencing with the day of the Mōsha-Saṅkṛanti. With such Tables, for any titthi connected with Saka-Saṅvat (1808 current and) 1809 expired, up to the titthi that coincided with the solar day on which the Mōsha-Saṅkṛanti occurred, we must work with the basis of even one year still earlier, viz. Saka-Saṅvat 1897 expired.
grounds for doubting that the above period really
equivalent to Śaka-Saṅvat 1808 expired, and
1809 current. But it is quoted, for all ordinary
purposes, simply as Śaka-Saṅvat 1808. And, if a
Hindu were converting “Saturday, the 1st January,
A.D. 1887,” into its corresponding Hindu
date, he would write down, as the result, “Śakē
1808 Pausha śukla saptami Śanivāra;” in which,
not only does he abstain from including any word
meaning “expired,” but he actually uses, instead
even of the crude form Śaka, the Sanskrit
locative Śakē, which literally means “in Śaka
(1808),” i.e. “while Śaka 1808 is current;” and
this is the meaning which the mention of the
year presents to any Hindu who is not an
astronomer,
and who is not acquainted with the
technical application of the number of the year.
So, also, the same expression is used in the
almancs themselves; thus, in the first two
almancs mentioned above, “Śakē 1808 Vyaya-
āma-saṅvatsaras,” on the title-page; and “Śakē
1808 Chaitra-śukla-pakshah,” on the top of the page
which exhibits the bright fortnight of the
month Chaitra; and, in the Śayana-Pañchāg, “Śali-
vāhana-Śakē 1808 Vyaya-āma-saṅvatsaras,” on
the title-page, and elsewhere “amāntah Chaitra-
śukla-paksha Śalivāhana-Śakē 1808 Vyaya-
āma-saṅvatsaras.” In the same way, I find,
for the same period, “Śakē 1808 Vyaya-āma-
saṅvatsaras” on the title-page of an almanac
published at Pandit Umacharan Muhatmim’s
Press at Gwālior; and for the period from the
17th March, A.D. 1885, to the 4th April,
A.D. 1886, “Śalibāhāna-Śakē 1807,” on the
title-page of the Jodhpur Chaudū-Paṅchāg for
that year, and Śrī-Saṅvat 1942 Śakē 1807
Chaitra-śukla-pakshah,” in Bapu Deva Bhastra’s
almancs, prepared at Benares and published at
Lakhmān.

Again, in the preliminary passages that
introduce the saṅvatsara-phala or “(astrophysical)
results for the year,” and other similar matter, Ganpat
Krishnaji’s and K. L. Chhatre’s almanacs
contain the passage—atha-gata-Kalī 4987, śēsha-
Kalī 427013; Svasti; śrīman-nripa-Vikrama-
maṇi-aṭita-saṅvat 1942, Hēmalamba-āma-
saṅvatsaras; tathā śrīman-nripa-Sālivāhana-Śakē
1808, Vyaya-āma-saṅvatsaras; asmin varshā rājā
chandrab,—“now the expired (portion of the

3 i.e. saṅvatsaras, or saṅvatsarasā. It is curious that here the Vikrama year should be
distinctly specified as expired, while the Śaka year is
not qualified in the same manner; as if a distinction
were being made in the method of reckoning the two eras.

4 i.e. saṅvatsaras, or saṅvatsarasā. The figures here,
and in the Gwalior almanac, 1943, differ from those in
Ganpat Krishnaji’s and K. L. Chhatre’s almanacs, 1942,
because the latter quote the southern reckoning, by
which each Vikrama year commences with the month
Kārttika, seven lunations later than the same year in
the northern reckoning; consequently, at the commencement
of Śaka-Saṅvat 1808 (expired), on the first day of the
bright fortnight of Chaitra, Vikrama-Saṅvat 1942
was still running, by the southern reckoning.

5 i.e. aṭṭśa saṅvatsaras, or aṭṭśha saṅvatsarasā.” The
context is "at the beginning of Chaitra, the
king (is) the moon," a little further on. The intervening
matter is by way of a parenthesis.
up to (the expiration of) 46 ghatâs, palas (from sunrise) on Tuesday, the fourteenth lunar day of the dark fortnight of Asvina, in Śaka 1808; after that, the Vikâra samañvataśra is to be used in writings,—at the beginning of Chaitra, the king (is) the Moon.” Passages of a similar kind with those quoted above, occur at the end of each almanac, in connection with the Sāvâkranâti.

In the same passages for the sâyana year, Śaka-Saṅvat 1808, the Śayana-Pañcânhag does not confine itself to any indefinite expression, but explicitly quotes the Śaka year as a current year; thus — Kaliyugaya samañhvādâ śatâḥ, Śâlivâhana-Śak-ârañbhâkâ-paryântamâ, Nandâ-dr-Indu-guna-(3179)-mitâhâr saura-varshâhâm-attâtîni; pravartamâna-Śâlivâhana-Śak-Abâlha ashvôttar-âsâhâdâsâ-(1808)-mitâhâr; amun saṁvatâsaṛam Narmaâdâya dakshîna-bhâgâ Vya-yanium vyavaharantâ, uttara-bhâgâ cha Vilambinî-nâmnâ; atâh-āsmin varahâ râjâ Śaniñy—“from the commencement of the saṁvâda of the Kaliyuga, up to the time of the commencement of the Śâlivâhana-Śaka, there expired solar years which are measured by the (nine) Nandas, the (seven) mountains, the (one) moon, and the (three) qualities, (3179); and the current year of the Śâlivâhana-Śaka is measured by eighteen hundred, increased by eight, (1808); on the north side of the Narmaâdâ, they distinguish this saṁvatâsara by the name of Vya-yâ; and, on the north side, by the name of Vilambin; now, in this year, the king (is) Saturn.” But, in the corresponding passage in the same almanac for the preceding year, Śaka-Saṅvat 1807, after giving in the same words the number of the solar years that had expired from the commencement of the saṁvâda of the Kaliyuga up to the commencement of the Śaka era, the text runs—tâtô vartamâna-vatsarārañbhâkâ-paryântaṁapsr̥ttar-âsâhâdâsâ-satā (1807)-mitâhâr varshâhâm-âtâtî; amun vartamâna-saṁvatâsaram Narmaâdâya dakshîna-bhâgâ Pârthiva-nâmnâ vyavaharantâ, uttara-bhâgâ cha Hêmalamba-nâmnâ; atâh-āsmin varahâ râjâ Bhurâma—“from then, up to the commencement of the current year, there have expired years which are measured by eighteen hundred, increased by seven, (1807); on the south side of the Narmaâdâ, they distinguish this current saṁvatâsara by the

* saṁvâda, which is usually translatable by ‘morning or evening twilight,’ means, as applied to any of the four ages, a long period that runs at the commencement of each, before the full development of the age itself. The saṁvâda of the Kali age is one hundred divine years, equivalent to 36,000 years of men; so that we are still only in this period. The age itself will run for 300,000 years of men. And it will end with a saṁvâdâhina of 36,000 years of men. These figures make up the total of 432,000 years in the age.

* Except for reading amun vartamâna-vatsaraṁ, and

name of Pârthiva; and, on the north side, by the name of Hêmalamba; now in this year, the king (is) Mars.” In passing, therefore, from Śaka-Saṅvat 1807 to 1808, a verbal distinction, at least, was made between expired and current years; and the phraseology adopted in the almanac for Śaka-Saṅvat 1808, has been repeated in each almanac for the next year, 1809. In one instance, A.D. 1835-86, the Pârthiva or Hêmalamba saṁvâtaśra, each current, was treated as equivalent to Śaka-Saṅvat 1807 expired; while, in the other, A.D. 1836-87, the Vyayâ or Vilambin saṁvâtaśra, each current, and each the next in the cycle after respectively Pârthiva and Hêmalamba, is treated as equivalent to Śaka-Saṅvat 1808 current. What were the reasons for this change, I do not know; and I will leave it to Mr. Sh. B. Dikshiti one of the editors of the almanac, to explain them. But, by the literal interpretation of the phraseology for A.D. 1835-86, and in accordance with the principles of the Tables, that period was equivalent to Śaka-Saṅvat 1807 expired, (and 1808 current); and A.D. 1836-87 should have been described as being represented by Śaka-Saṅvat 1808 expired, (and 1809 current).

I have now to quote the fact that, in Madras, the same English period, A.D. 1886-87, is actually called Śaka-Saṅvat 1809, with the same saṁvâtaśra of the Sixty-Year Cycle, Vyayâ, attached to it. There are, it is true, two somewhat varying practices to be found in Southern India. Thus, the Telugu Siddhânta-Pañcânhgam, published, I think, in the Arcot District, gives the luni-solar period from the 5th April, A.D. 1886, to the 24th March, A.D. 1887, as being the Vyayâ saṁvâtaśra, and as corresponding to Śaka-Saṅvat 1808 expired; and, at the commencement, it quotes the expired years throughout; thus—“Kaliyugâ-gat-Abâlha 4937; Śâlivâhana-Śaka-gat-Abâlha 1808; Vikramârka-Śaka-gat-Abâlha 1943.” But, on the other hand, the Telugu Calendar, published at Madras, gives the same luni-solar period, from the 5th April, A.D. 1886, to the 24th March, A.D. 1887, as being the Vyayâ saṁvâtaśra, and as corresponding to Śaka-Saṅvat 1809, Kaliyuga-Saṅvat 1888, and Vikrama 1944, which are not specified as either current or expired, but can only be

omitting atha before asmin varahâ, the text is exactly the same in Bapu Deva Shastri’s almanac for Śaka-Saṅvat 1807. I have not been able to obtain a copy of his almanac for the next year.

10 I had drawn Mr. Sh. B. Dikshiti’s attention to the circumstances of the case. And I now find that, in their almanac for Śaka-Saṅvat 1810 (expired) (A.D. 1888-90), the editors of the Śayana-Pañcânhgam have reverted to the phraseology used in their almanac for Śaka-Saṅvat 1809 (expired).
intended as current. And, in the same way, the Tamil Siriya-Paṇchaṅgām, for the following year, published at Madras, gives the solar period from the 12th April, A.D. 1887, to the 11th April, A.D. 1888, as being the Sarvajit saṅvat-sara, and as corresponding to Saṅka-Saṅvat 1810, Kaliyuga-Saṅvat 4989, and Vikrama-Saṅvat 1935, which, similarly, are not specified as either current or expired, but can only be intended as current. And, from other indications, there seems to be no doubt that, of these two practices of Southern India, thus illustrated, the popular and generally current one is the latter one, by which the period A.D. 1886-87, is quoted as Saṅka-Saṅvat 1809; the reckoning, in this and the other eras, being thus, at first sight, one year in advance of the customary reckoning of Northern and Western India.

The difference, however, is only an apparent one; and is due to the evident fact that the Madras reckoning has preserved the system of current years, while the other is regulated by expired years. But it is almost always the reckoning of Northern and Western India that is now quoted. And the years of it, though really expired years, are not distinctly and habitually quoted as such. And hence there is a general understanding that, as between the Saṅka and the Christian eras, the additive quantity, to be applied to the former, is 78-79, and that the epoch or year 0 of the Saṅka era, is the period from the 3rd March, A.D. 75, to the 20th February, A.D. 79, both included; and its commencement, or first current year, the period from the 21st February, A.D. 79, to the 10th March, A.D. 80, both included. This, however, really gives current Christian years, equivalent to expired Saṅka years. It is evident from the details given above regarding Saṅka-Saṅvat 1808 and 1809, that, according to the reckoning of the era as fixed by the early astronomers, and as preserved to the present day, the true epoch is A.D. 77-78, and the period from the 3rd March, A.D. 78, to the 20th February, A.D. 79, is in reality the commencement, or first current year; and that, to obtain current Christian years, equivalent to current Saṅka years, the true additive quantity is 77-78. But, of course, there is always the possibility that, if ever we obtain a date, with full details for calculation, in a very early Saṅka year, or in one of the very earliest of the regnal or dynastic years which afterwards developed into the Saṅka era, this exact equation may not hold good; in consequence of the date belonging to a period anterior to the adoption of the era by the astronomers.

The Saṅka era is emphatically one of the eras that originated in an extension of regnal or dynastic years. The chief Hindu tradition about it, is, that it was founded in celebration of a defeat of the Saṅka king by the king Vikrama or Vikramāditya who is also the supposed founder of the Vikrama era, commencing a hundred and thirty-five years earlier. This tradition is earlier than the 14th March; whereas the difference should be only eleven days. Mr. C. Patell (Chronology, p. 96) does not give the initial day of the epoch, but gives, in the same work, the period from the 18th February, A.D. 79, to the 8th March, A.D. 80, for the first year.

Another tradition (e.g. Prinsep's Essays, Vol. II. Useful Tables, p. 154) is that the era is contemporary with the birth of Śālīvāhana, king of Pratisahana, who opposed Vikramāditya, king of Ujjainī. But the introduction of the name of Śālīvāhana in connection with the era, is of comparatively modern date, the earliest instance that I have succeeded in obtaining, being one of the thirteenth century A.D.; and the epigraphical instances speak of the year as having been 'established, settled, or decided' (nirūpa) by Śālīvāhana, but not as running from his birth (see ante, Vol. XII. p. 214f.—A passage to the latter effect has been quoted by Prof. Max Müller (India : What can it teach us? p. 100 f.) from the Mahārājaśevasamandarāṇya of Nārāyana, which means "in the year measured by three, the (nine) numerals, and the (fourteen) Indras, from the birth of Śālīvāhana (i.e. in Saṅka-Saṅvat 1403), in the month Tapas (Māgha), this Māranda was composed." As Prof. Max Müller has pointed out, in his comments on this passage, it is not exactly wrong to speak of the era as the Śālīvāhana-Saṅka or Śālīvāhana era; for there are ample instances in which the Hindus give it that name, in epigraphical records of authority and of some antiquity. At the same time, those instances were only in comparatively early times that the name of Śālīvāhana came to be connected with the era. And in all discussions respecting early dates, it is an anachronism, and a mistake, to call the era by his name.
mentioned by Alberuni; but he saw through it so far as to remark “since there is a long interval between the era which is called the era of Vikrama-mādiya and the killing of Śaka, we think that that Vikrama-mādiya from whom the era has got its name is not identical with that one who killed Śaka, but only a namesake of his.” And the tradition has now been quite exploded by the Bādami cave inscription of the Chalukya king Mangalīśa, which is specifically dated “when there have expired five centuries of the years of the installation of the Śaka king (or kings) in the sovereignty.” It is certain, from this record, that the real historical starting-point of the era, is the commencement of the reign of some particular king, or kings, of the Śaka tribe; and, therefore, that the years were originally regnal or dynastic years. Now, such years must run on for a considerable time, before they can develop into a recognised era; and this is undoubtedly the reason why we find the earlier years of every such Hindu era quoted simply by the term sarvāḥ or saṅvatāra, ‘a year,’ without any dynastic appellation. Again, such regnal or dynastic years can only come to be quoted as expired years, when they have actually developed into an era which has become recognised, or is sought to be applied, by astronomers for astronomical processes; up to that point, the years, being wanted only for quasi-private dynastic purposes, would certainly be quoted as current years. It is impossible to believe that the first Śaka king decreed, immediately after his coronation, that a new era had been established from that event; that it was to come at once into general use; and that, for the convenience of astronomers, the first year, then running, was to be quoted as an expired year, which, in fact, it would be rather difficult to do. If it were sought to fix the exact chronological position of any public act performed in that first year, it might be referred to the expired years of an earlier era; e.g. of that of the Kaliyuga. But, for any reference to the regnal year alone, that act would be recorded as being performed “in the year one,” “in the first year,” or “while the first year of the reign is current,” as, for instance, “in the first year; while the Mahārājādhirāja, the glorious Tārāmaṇa, is governing the earth,” in line 1 f. of the Āraṇ inscription, Corp. Insr. Ind. Vol. III. No. 36, page 153. This custom would continue as long as the years were simply dynastic years; and perhaps, during the whole of that period, the years might remain purely dynastic years, each of them having for its initial day the anniversary of the original coronation from which they started, irrespective of the initial day of the years of the astronomical era still continuing in use. When, however, astronomers came to adopt them as an astronomical era, they would establish an exact epoch by reckoning back from the dynastic year then current to the last year of the Kaliyuga that had expired when the first current dynastic year commenced; in the course of which they would simplify matters by allotting to the dynastic years the same scheme, as regards the starting-point of each year, and the arrangement of the fortnights of the months, which belonged to the Kaliyuga in their part of the country. Thus they would fix all the data necessary to enable them to use the new era for astronomical purposes. All that would remain, would be to use its expired years, in accordance with the custom and necessities of their science. The substitution of the Śaka era for the Kaliyuga, for astronomical purposes, seems to have taken place after the time of Āryabhata (born A.D. 476), who used the Kaliyuga, and in or just before the time of Varāhamihira (died A.D. 597), who used the Śaka era; and probably the apparent difference of one year in the reckonings of the Śaka era will be found to have originated not far from Śaka-Saṅvat 500. Let us assume that this adoption of the Śaka era was made in Śaka-Saṅvat 500, equivalent to A.D. 577-78. The astronomers would take it, at starting, as “Śaka-Saṅvat 499, expired,” and, in quoting it and several subsequent years, would probably be careful to connect with each year a word distinctly meaning “expired.” In course of time, however, such precision of expression would come to seem superfluous to them; and, in issuing their almanacs, they would drop the word “expired,” and would write, for instance, simply “Śakē 101 Chaitra-māsa-śuklapakṣa-ah.” It would cause no difference or inconvenience to them; because any initiate would know that this really designated the bright fortnight of the month Chaitra of Śaka-Saṅvat 511, current, after Śaka-Saṅvat 510 had expired. The people at large, however, including persons who would use the almanacs for practical purposes without being properly initiated into the application of them, would be thrown back in their reckoning by a year; and doubtless at first a good deal of inconvenience and confusion might result. But this would soon be forgotten; or might, for the sake of convenience, be inten-
tionally put aside. And thus they would very quickly arrive at the understanding, by which, in Northern and Western India, Śaka-Saṅvat 1898 answers, popularly, as a current year, not as an expired year, to the period from the 5th April, A.D. 1886, to the 24th March, A.D. 1887.

J. F. Fleet.

CALCULATIONS OF HINDU DATES.

No. 11.

In the Nepāl stone inscription of Mānadeva, of the Śuryavāmśi or Liṅkhadhva family of Mānagriha, on the lower part of a broken pillar placed to the left of the door of the temple of the god Chānga-Nārāyaṇa, about five miles to the north-east of Khātmāṇḍu, the date (from Dr. Bhagwanlal Indrājī's published text and lithograph; ante, Vol. IX. p. 163, line 17) runs—saṅvat 300 80 6 Jyeshṭha-m[a]sa-śukla-pakṣe pratiṣṭa 1 [Rōhiṇī] nakshatra-yukt[188] chandramasi m[u]hurt[ê] prāṣaste=Bhijiti,—"the year 300 (and) 80 (and) 6; in the bright fortnight of the month Jyēṣṭha, on the first tithi or lunar day, (or in figures) 1; the moon being in conjunction with the Rōhiṇī nakṣatra; in the excellent mūhūrta (named) Abhijit."

The Nepāl inscriptions were first brought to notice by Dr. Bhagwanlal Indrajī, in this Journal, Vol. IX. p. 163ff.; and his view of the historical results of them was given in Vol. XIII. p. 411ff. My own view has been published in Vol. XIV. p. 342ff. And all that it is necessary to state here, is, that the earliest inscriptions disclose the use of two eras; viz., the so-called Gupta era, and the Harsha era. At the time, however, when Dr. Bhagwanlal Indrajī wrote, the fact that the Gupta era was used in some of these records, was not apparent. And it only became clear on Mr. Bendall's discovery of the Gōmādhīṭhōl inscription of the Mahādāja Śivadeva I. of Mānagriha, which he published originally in this Journal, Vol. XIV. p. 97ff., and has given again with a slight correction in the reading of the date, in his Journey in Nēpāl and Northern India, p. 72, and Plate viii. This inscription is dated in the year 316, without any specification of the era. But the clue to the interpretation of the date is given by its mention of the Mahādājana Mahāśāṃ vat, as the contemporary of Śivadeva I. Amśūvarman's approximate date, viz. about A.D. 637, was very well known from Hiuen

1 This is also recorded in the other inscription of Śivadeva I., No. 5 of Dr. Bhagwanlal Indrajī's Nēpāl series; ante, Vol. IX. p. 168ff. But, unfortunately for the general chronological results arrived at by him from those inscriptions,—which involved the application of the Viṣṇumā era for the interpretation of such of the Nēpāl dates as belong really to the Gupta era,—the date of Śivadeva Tsiang's mention of him. And, as the Nēpāl series included three inscriptions of Amśūvarman himself, dated in the years 34, 39, and 44 or 45 of an unspecified era, and another, of Jishnugupta, dated in the year 48, and mentioning Amśūvarman, Dr. Bhagwanlal Indrajī very properly referred these dates to the era running from the accession of Harshavardhana of Kanauj, and commencing in A.D. 606. This much being quite certain, it follows that the date of the year 316 for Śivadeva I., the contemporary of Amśūvarman, must of necessity be referred to a starting-point just about three hundred years before the Harsha era. And the era which exactly meets the requirements of the case is the Gupta era; for, 316 + A.D. 319-20 = A.D. 635-36; which is in due accordance with the recorded dates that we have for Amśūvarman in the Harsha era, representing from A.D. 639 to 649 or 650.

As regards the present inscription of Mānadeva, its paleography, as well as a general consideration of the historical results, shews that the year 386, quoted in it, belongs to the same series with the year 316, that is quoted in the Gōmādhīṭhōl inscription of Śivadeva I. And accordingly, this record gives us, for calculation, Gupta-Saṅvat 386, current; the month Jyēṣṭha (May-June); the bright fortnight; the first tithi or lunar day; the Rōhiṇī nakṣatra, or lunar mansion; and the Abhijīt mūhūrta or thirtieth part of the day and night. And the given tithi should belong to Gupta-Saṅvat 386 + 242 = Śaka-Saṅvat 628 current (A.D. 705-706); and the calculation should be made with the basis of Śaka-Saṅvat 627 expired. This is on the analogy of the results obtained from the Ėraṅ pillar inscription of Budhaugupta, of Gupta-Saṅvat 165, and the Verāval inscription of the Chaulukya king Arjunadeva, of Valabhi-Saṅvat 945. In each instance, the approximate year for calculation was arrived at by following Albērēni's most specific statement regarding an even difference of two hundred and forty-one years between the Gupta-Valabhi and Śaka eras; and it was then found that correct results were obtained only by taking the resulting Śaka year as an expired year. Thus, in the Ėraṅ record, the result was obtained with the basis of Gupta-Saṅvat 165 (current) + 241 = Śaka-Saṅvat 406, expired; and, in the Verāval record, with the basis of Valabhi-Saṅvat 945 + 241 =
Šaka-Saṅvat 1186, expired. And from this it is evident that, in following Albéroni's statement and adding two hundred and forty-one, what is really accomplished is the conversion of a given current Gupta-Valabhi year into an expired Śaka year, by which we define the basis that is wanted for working out results by Hindu Tables, viz. the last Śaka year expired before the commencement of the current Śaka year corresponding to a given current Gupta-Valabhi year; and that the running difference between current Gupta-Valabhi and current Śaka years, is two hundred and forty-two.

Making the calculations by the Sūrya-Sid-dhāta, and applying the results to the longitude of Khāṭmāṇḍu, Mr. Sh. B. Dikshit finds that, with the basis of Śaka-Saṅvat 627 expired, the given tithi, belonging to ŚakaSaṅvat 698 current, ended on Tuesday, the 28th April, A.D. 705, at 57 ghaṭā, 12 palas, after sunrise; that there was the Kritikā nakha-hatra up to 11 ghaṭā, 3 palas, after sunrise, and then the Rōhini nakha-hatra, which continued up to 11 ghaṭā, 18 palas, after sunrise, on the next day, Wednesday, and that, consequently, the Abhijit mukhārta, being the eighth in order among the mukhārta, and beginning after the expiration of fourteen ghaṭās after sunrise, occurred, as required by the record, while the Rōhini nakha-hatra was current. He also finds that the same conditions of the nakha-hatra and the mukhārta did not occur, if the given tithi is treated as belonging to Śaka-Saṅvat 627 or 629 current. The result, therefore, answers fully to the conditions of the record; and to the circumstances under which it was to be calculated.

No. 12.

The Mōrbi copper-plate grant of Jāinκa, from Kāṭhiawād, published by Dr. R. G. Bhandarkar in this Journal, Vol. II. p. 257f., includes two dates. In line 16f., in connection with the making of the grant, we have (from the published lithograph)—paníchā-sāityā yuṭā-tītē samāmnāh sāta-panchakē; Gōptē dadāv-adā nṛpihā s-ōparā-gē-rkka-mañjalē 11, "five centuries of years, together with eighty-five (years), having passed by, the king gave this (charter) at (the village of) Gōptē, when the disc of the sun was eclipsed;" in which the year is expressly coupled with a word meaning "expired." And in line 19f., in connection with the writing of the charter, we have—saṅvat 585 Phālguna suṣunā di 5, "the year 585; the month Phālguna; the bright fortnight; the (civil) day 5," without any indication whether the year is an expired one, or current. The eclipse is also mentioned in line 3, in the words—mārttaṇja-manjāl-āsrayiṇi Svarbhānō (read Svarbhānānu)—"while Svarbhānō (i.e. Rāhu, the personified ascending node) is resting on the disc of the sun."

There is some difficulty in disposing finally of the whole bearing of this record; owing to the fact that the first plate was lost sight of, without being procured for examination at all; and now, even the second plate also, the published one, has been mislaid and is not forthcoming. And I have to point out that, in the second part of the verse, Dr. R. G. Bhandarkar read Gauptē, instead of Gōptē; and translated "five hundred and eighty-five years of the Guptas having elapsed." The lithograph, however, shows distinctly that the original has Gōptē; and it is only by the correction of ṭ into as that the name of the Guptas can be introduced into the passage. But, even then, the adjective Gauptē occupies an irregularly detached place, which any skilful composer would have avoided, from the noun, sāta-panchakē, which it qualifies. While, on the other hand, I have shown, in my remarks on the nomenclature of the era, that we have no reason at all to look for the use of such an adjective as Gauptē, belonging to the Goptas; and, if we maintain the original reading of Gōptē, we have a locative case, which we have every reason to expect in immediate connection with the verb dadau, 'he gave,' which will then give us the name of the village at which the grant was made. And, until the original first plate of the grant is produced, to prove that Gōptē was not the name of the village, or otherwise to explain the passage, this is the reading and interpretation that I adopt.

In accordance, however, with the palaeography of the grant, I see no reason for referring the date to any except the Gupta-Valabhi era; irrespective of the question whether the era is mentioned by name, or not. This record, therefore, gives us, for calculation, an eclipse of the sun, which took place on some unspecified date in Gupta-Saṅvat 586 current, as the original

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* We might easily find its present representative in the modern name of Gōptē, which occurs in the case of a village, in Kāṭhiawād, about seventy-five miles southwest of Mōrbi; twenty-five miles south of Navnagar or Jāmna; and fifty miles east of Dhiniki, where there was found the copper-plate grant of Jāmna, which purports to be dated in Vikrama-Saṅvat 794.
text specifies that the year 585 had expired. And, on the analogy noted under No. 11 above, the eclipse should be found in Gupta-SaṆvat 586 + 242 = Śaka-SaṆvat 828 current, somewhere between the 10th March, A.D. 905, and the 27th February, A.D. 906. Also, it should presumably, be visible at the place at which the grant was made on the occasion of it. And, though there is nothing, in the existing remnant of the record, to indicate with certainty the exact locality to which it belongs, still there is nothing against the supposition that it really belongs to Mōrbi itself, or to that neighbourhood. We have, therefore, to look for a solar eclipse, occurring in Śaka-SaṆvat 828 current, and visible at Mōrbi, or near that town, in the north of Kāṭhiāwād.

Gen. Sir A. Cunningham's Table\(^1\) mentions no solar eclipse as having occurred during the period defined above. But, by calculations from Prof. K. L. Chhatre's Tables, Mr. Sh. B. Dikshit finds\(^2\) that there was an eclipse of the sun, on Tuesday, the 7th May, A.D. 805, corresponding to the new-moon tithi of the Pārśvaṁata northern Jyāshtha of Śaka-SaṆvat 828 current, which fully answers the required conditions.\(^3\) It was visible at Mōrbi; over almost the whole of Southern India; and in Ceylon. The magnitude, at Mōrbi, was one ninth of the sun's disc; and, in the southern parts of India, greater than this. And the middle of the eclipse, at Mōrbi, was at 12°9 midday of the Mōrbi mean civil time. This eclipse, accordingly, was very distinctly visible at Mōrbi; even if it was not known beforehand from calculations. And this result answers fully to the conditions of the record; and to the circumstances under which it was to be calculated.

In respect of the given civil day for the writing of the charter, viz. the fifth civil day in the bright fortnight of the month Phālguna (February-March), as the name of the weekday is not given, the only test that we can apply,—if, indeed, it does really amount to a test,—is the proper phrasing, that the running number of the lunar tithi is the same as that of the civil day, i.e. that the fifth lunar tithi ended on the fifth civil day of the fortnight. If the year 586, connected with this civil day, is to be taken as expired, as in connection with the eclipse, this should be the case in Śaka-SaṆvat 828 current. And, by calculations for that year from Prof. K. L. Chhatre's Tables, Mr. Sh. B. Dikshit finds that the preceding new-moon tithi, which was that of the Pārśvaṁata northern Phālguna, or the Amanta southern Māṅgaha, ended on Monday, the 27th January, A.D. 906; and the fifth tithi of the bright fortnight of Phālguna ended on Saturday, the 1st February, which was the fifth successive civil day. If this date is accepted, then the charter was written nine months after the making of the grant.\(^4\) On the other hand, if the year 586 is here to be taken as current, there should be the same agreement of the lunar tithi and the solar day in Śaka-SaṆvat 827 current. And, for this year, Mr. Sh. B. Dikshit finds that the preceding new-moon tithi ended on Thursday, the 7th February, A.D. 925; and that the fifth tithi of the bright fortnight of Phālguna ended on Tuesday, the 12th February, which was again the fifth successive civil day. If this date is accepted, then the charter was prepared two months before the actual making of the grant.

It may perhaps be argued, hereafter, in opposition to my results for the exact epoch of the era, that all the Gupta-Valabha dates are recorded in expired years, whether the fact is distinctly stated or not; and, consequently, that it is as an expired year, not current, that the year 165 of the Ėran pillar inscription is equivalent to A.D. 484-85 current, and that the year 585 expired, of the present record, is equivalent to A.D. 904-905 current. In that case, the solar eclipse would have to be found in Gupta-SaṆvat 585 + 242 = Śaka-SaṆvat 827 current, somewhere between the 21st March, A.D. 904, and the 9th March, A.D. 905. During this period, there were two eclipses of the sun;\(^5\) on Saturday, the 16th

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\(^1\) Of course, as it could only take place at a new-moon conjunction, it did not occur on the given civil day for the writing of the charter. The limits within which we must look for it, are the first and the last days of Śaka-SaṆvat 828 current, as given in Indian Eras, p. 167.

\(^2\) See Indian Eras, p. 213.

\(^3\) For his calculations, which are based on the apparent longitudes of the sun and the moon, he has taken the latitude and longitude of Mōrbi, which I was not then able to supply to him, as 23°49' N. and 70°53' E. I now find that, in Thornton's Gazetteer of India, the figures are 22°49' N. and 70°53' E. Mr. Sh. B Dikshit states, however, that the difference will not palpably affect his results.

\(^4\) So also Prof. K. L. Chhatre himself obtained the same eclipse; see Dr. R. G. Bhandarkar's 'Early History of the Dekhan,' p. 99, where, with a slight difference of

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\(^5\) There is nothing in the record itself, to indicate whether the writing of the charter proceeded, or followed, the making of the grant. The Rājīm grant of Pīvāndā, Corp. Inscr. Indic. No. 81, page 201, furnishes another similar instance. In that instance, the grant was made on the eleventh tithi of Jyēshtha (May-June); while the charter was written, or assigned, on the eighth civil day of Kārtika (October-November); and there is nothing to show specifically whether it was the following, or the preceding, Kārtika. That charter may have been written, or assigned, either five months after, or seven months before, the making of the grant recorded in it.

\(^6\) See Indian Eras, p. 167.

\(^7\) id. p. 213.
June, A.D. 904, corresponding to the new-moon tithi of the Pâraśimāṇa northern Ashāḍha of śaka-saṅvat 827 current; and on Saturday, the 10th November, A.D. 904, corresponding to the new-moon tithi of the Pâraśimāṇa northern Mārgaśīra of the same śaka year. In respect of the first of them, Mr. Sh. B. Dikshit finds that it was not visible anywhere in India; but only in the more northern parts of the earth. This, therefore, cannot be the eclipse intended. In respect of the second of them, he finds that it was visible at Môrbî; over more than half the northern part of Kâthiâwâd; and, to the south, along the coast, as far as Surat, one hundred and seventy miles south-east of Môrbî, and in the interior, a little farther still. And, at Môrbî, the middle of the eclipse was at 11:54 A.M. of the Môrbî mean civil time. At Ahmedâbâd, one hundred and twenty miles east by north from Môrbî, one twelfth of the sun’s disc was eclipsed; and, in the more northern parts of India, a considerably greater surface. But, at Môrbî itself, the magnitude of the eclipse was very small; extending there to only one twenty-fifth part of the disc. This eclipse, therefore, setting aside all other considerations, is not in any way as satisfactory as that of the 7th May, A.D. 905.

J. F. Fleet.

A NOTE ON THE LOKAKÂLA RECKONING.

In the course of his remarks on the Lôkakâla or popular reckoning by cycles of a hundred years, in mentioning the “roundabout way” in which the Hindus computed the date (in January, A.D. 1026) of the destruction of Sûmâthpâtaṇ by Mahaârâja of Ghazni, which event took place “in the year of the Hijra 416, or 947 śaka-saṅvat,” Albérûni tells us that they first wrote down 242, then 606 under it, and then, again, 99; with the result, by addition of the figures, of śaka-saṅvat 947, which, as an expired year, brings us to the period A.D. 1025-26 current, inclusive of the month of January, A.D. 1026.

This passage follows very closely after his account of the Guptâ-Valabhi and other eras. And the first figures of this process, which is manifestly connected directly with the Guptâ-Valabhi reckoning, would seem, at first sight, to indicate that, in this calculation, the epoch of the era was treated as being when

Šaka-saṅvat 242 had expired, which brings us to the period A.D. 320-21.

Albérûni, in fact, expresses himself as being inclined to think that the number 242 indicates the years which preceded the time when the Hindus commenced to use the cycle of a hundred years, and that they adopted this cycle together with the Guptâ era; also that the number 606 represents the completed cycles, viz. six, “each of which they must reckon as 101 years”; and that the number 99 gives the expired years of the current cycle. He goes on to say that the rule, as found by him in the writings of Durlâbha of Multân, was, to write down 848, and add the Lôkakâla; the sum of which would give the śaka year. But, in proceeding to apply this rule to śaka-saṅvat 953 (expired), as corresponding to the year 400 of the era of Yazdajîrî, which he had already used as a “gauge-year,” he points out that, subtracting 848, there remained 105 for the Lôkakâla, while the destruction of Sûmâth-pâtaṇ would fall in the 98th year of the cycle.

There are subsidiary difficulties here, which cannot at present be fully cleared up. One of them is, the reference of the destruction of Sûmâth-pâtaṇ to both the ninety-eighth and the ninety-ninth years of a Lôkakâla cycle; with the addition, moreover, that the ninety-eighth year is indicated as current, and the ninety-ninth is inferred to be expired. Another is, that, according to the only Lôkakâla reckoning of the nature of which has been fully explained, viz. that used in Kâsmîr,—which, Albérûni tells us, had been adopted by the people of Multân a few years before his own time,—the event in question would fall in the first current year of a cycle.

Thus, Kâlhana, in the Rûjatarângiṇi, i. 52 (Calcutta edition, p. 3), makes a very explicit statement regarding the year of the śaka era and the Lôkakâla of Kâsmîr. His words are—

Laukîkâ-âsârd chatur-viśē
Śaka-kâlaśya sâmpratânaḥ
Saptâ-âtyâdhikatâ yâtâṃ
Sahasraṃ parivartsarâh

“At this present moment, in the twenty-fourth laukîka (or popular) year, there have gone by one thousand years, increased by seventy, of the śaka era.” In this passage, he quotes the śaka year as expired, in accordance with the practice of astronomers; but the Lôkakâla year as current,

1 This era dates from the accession of Yazdajîrî III., a Sasanian king of Persia, in A.D. 632, (see Prinsep’s Essays, Vol. II. Useful Tables, p. 302 and note.). The “gauge-year,” 400, selected by Albérûni for the comparison of dates, is equivalent to A.D. 1031-32, and is one year ahead of that in which he was writing.

2 By Gen. Sir A. Cunningham, in Indian Eras, p. 6 ff.
as would naturally be the case in using a popular reckoning of that kind. He was writing, therefore, in Lōkakāla 24 current, and when Śaka-Saṅvat 1070 had expired; which is equivalent to A.D. 1148-49 current. And this gives Lōkakāla 1 current of the same cycle, as corresponding to Śaka-Saṅvat 1047 expired; which is equivalent to A.D. 1025-26 current.

Now, that the scheme of each year of the Kasmirī Lōkakāla cycle was identical with the scheme of the Śaka years of Northern India, commencing with Chaitra śukla 1, is shewn by Albérūnī's statements, and by the notes put together by Gen. Sir A. Cunningham in his exposition of this reckoning. And it follows that the first year, current, of each Kasmirī Lōkakāla cycle coincides exactly with the forty-seventh year expired, and the forty-eighth, current, of each century of the Śaka era, and with part of the twenty-fifth and part of the twenty-sixth years, current, of each century of the Christian era. The month of January, A.D. 1026, therefore, fell in Lōkakāla 1 current, of Kasmir, which coincided with Śaka-Saṅvat 947 expired, and extended from the 3rd March, A.D. 1025, to the 21st March A.D. 1026. And it is difficult to see how, in the application of a Lōkakāla reckoning introduced from Kasmir, an event occurring in that month can be correctly referred even to Lōkakāla 99 expired; and, much more so, to Lōkakāla 98 current. To suit the former case, we require a cycle commencing one year later than the Kasmirī cycle; and to suit the latter case, a cycle commencing three years later than the same. And, that there were varying starting-points of this kind, as well as a want of uniformity in respect of the scheme of the years, is indicated by Albérūnī's remark that the totally different accounts of the Lōkakāla reckonings, given to him, rendered him unable to make out the truth about it.

One point, however, seems clear. As to the number 606, given by Albérūnī in his first illustration, it is impossible that a centenary cycle can consist of a hundred and one years. And Albérūnī himself had previously said distinctly, "if a centenarium is finished, they drop it, and simply begin to date by a new one." It is plain, in fact, that the odd six years do not belong to the cycles of the Lōkakāla. To that reckoning, only the six even centuries belong. If we add the odd six years to Śaka-Saṅvat 241 expired, —as representing the epoch of the Gupta-Valabhi era, which really was A.D. 319-20 current, and might be quoted either as Śaka-Saṅvat 241 expired or 242 current,—we obtain Śaka-Saṅvat 247 expired, or 248 current, equivalent to A.D. 325-26 current; and this, as we have just seen, would coincide with the first current year of a Lōkakāla cycle, as reckoned in Kasmir. But it is one year too early for the first current year of any cycle of a reckoning, in a subsequent cycle of which the event in question belonged to the ninetieth year expired and the hundredth year current.

Now, I suppose that we must assume that Albérūnī has quoted Durlabha correctly. And, if so, then the first current year of each cycle in the Multān reckoning really was one year later than in the Kasmirī reckoning; and coincided with the forty-eighth year expired, and the forty-ninth current, of each century of the Śaka era, and with part of the twenty-sixth and part of the twenty-seventh years, current, of each century of the Christian era. And, if the introduction of the reckoning, at Multān, could be carried back so far, it commenced with Śaka-Saṅvat 248 expired, and 249 current. This year might have been obtained by adding seven to Śaka-Saṅvat 241 expired. But the real use of Śaka-Saṅvat 241 expired is only for obtaining the basis with which Gupta-Valabhi dates have to be calculated; and it only brings us to the beginning of the Gupta epoch. The difference between Gupta-Valabhi and Śaka years, both treated as current for purposes of comparison, is 242. And Śaka-Saṅvat 242 expired brings us to the beginning of the first current Gupta year. This is the starting-point that was really wanted for a process of the kind shewn to Albérūnī. And this is why that year was selected as the apparent basis of the computation; the true basis being Śaka-Saṅvat 448 expired.

It is evident, therefore, that the process illustrated by the figures given to Albérūnī does involve a method of adapting the Lōkakāla reckoning to the Gupta era; or, more properly, of converting Lōkakāla dates into Śaka dates through the Gupta reckoning. So far, however, from the figures tending to support any inference that the Lōkakāla reckoning was introduced by, or in the time of, the Early Guptas, the fact that Durlabha of Multān would deduct 448, with a remainder, in the particular instance, of 105, or one complete Lōkakāla cycle and five years over, seems to indicate very clearly that the use of this reckoning in that part of the country commenced with Śaka-Saṅvat 448 expired, equivalent to A.D. 926-27 current. Had it been otherwise, Durlabha's rule would surely have been worded in such a way that, in the particular instance, 948 must be deducted, with a remainder of only 5 years over.

J. F. Flett.

*See Indian Eras, p. 171.*
THE EPOCH OF THE KALACHURI OR CHÉDI ERA.

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

In the Central Provinces of India there are found a large number of inscriptions, which have reference to the Chédi rulers of Tripuri, Ratnapur, and other places. A few of them have been edited by Dr. F. E. Hall; a list of the Ratnapur inscriptions was given as early as 1825, by Mr. (afterwards Sir) R. Jenkins; and the contents of most of them have been referred to in the volumes of the Archaeological Survey of India. Many are dated in years, sometimes called Chédi-Sañvat, or Kalachuri-Sañvat'sara, which, on historical and palaeographical grounds, cannot be referred to the Vikrama, or to the Śaka era; and it was Dr. Hall who first suggested that they should be referred to an unknown era, the initial point of which must be sought somewhere near the middle of the third century A.D. Afterwards, Sir A. Cunningham stated that the dates of these inscriptions referred "to a period close to A.D. 249 as the initial point of the Kalachuri, or Chédi-Sañvat"; and the same scholar subsequently, in his Indian Eras, felt satisfied that A.D. 249 = 0, and 250 = 1, is "the true starting-point of the Chédi era."

Having prepared for publication editions of several of the Ratnapur inscriptions, I have for some time suspected the conclusion, thus arrived at by Sir A. Cunningham, to be slightly erroneous. At present, from an examination of all the years from A.D. 201 to A.D. 280, by means of excellent Tables, which have been constructed by Prof. Jacobi, of Kiel, and placed at my disposal before publication, I am able to state with confidence that the only equation which yields correct weekdays for those Chédi inscriptions in which the week-day is mentioned, is—

Chédi-Sañvat 0 = A.D. 248-49
and
Chédi-Sañvat 1 = A.D. 249-50;

and that, if we wish to work out the dates by a uniform process, we must take the Chédi year to commence with the month Bhāḍrapada, and must, accordingly, start from July 28, A.D. 249, = Bhāḍrapada sū. di. 1 of the northern Vikrama year 307, current, as the first day of the first current year of the Chédi era.

Starting from these propositions, I have obtained the following results:

1.—Regarding the date of the Benares copper-plate inscription of Karnadéva, which was first brought to public notice by Wilford, in the Asiatic Researches, Vol. IX. page 108, Sir A. Cunningham, in Archaeol. Survey of India, Vol. IX. page 82, wrote as follows:—"The copper-plates, which were lost for a long time, were re-discovered about 1862, when through the kindness of Mr. Griffith, Principal of the Benares College, I received a carefully made impression of the inscriptions, with a translation by one of the pupils of the College. During my stay in England, I made over to Professor Hall both the impression and the translation, and I have now with me only a few of my own notes to refer to. From these I am able to state that the record was dated in 'Sañvat 783 Phālguṇa badi 9 Some,' which were the last words on the plate. This date was quite distinct, and it was not possible to read the figures 983 in any other way."
It is true that the same scholar, in order to obtain the proper week-day, in his *Indian Eras*, page 61, has come to the conclusion that he may perhaps have misread 793 for 792; but (disregarding the fact that 792 *expired* would after all be 793 *current*) I believe that any one obliged to choose would certainly accept Sir A. Cunningham's first statement, and reject his subsequent conjecture. And assuming the plate to have really been dated — *Saṅvat 793 Phālguna ba. di. 9 Sōmē, i.e., the year 793, the 9th of the dark half of the month Phālguna, on a Monday,* the corresponding date is **Monday, January 18, 1042.** On that day, at sunrise, the 9th *tithi* of the dark half was current, and it ended 17th 2m after mean sunrise. [According to von Oppolzer's *Canon der Finsternisse*, there was a solar eclipse, and consequently, a full-moon, on January 9, 1042, 4h 10m Greenwich time, or at Laṅkā about 9 A.M.]

2.—A Ratnapur inscription of Jājalladēva I. of which a good rubbing has been supplied to me by Dr. Burgess, is dated — *Saṅvat 866, Mārga su. di. 9 Ravaṇu, i.e., the year 866, the 9th of the bright half of the month Mārgāśīra, on a Sunday.* The corresponding date is **Sunday, November 8, 1114.** On that day, at sunrise, the 9th *tithi* of the bright half was current, and it ended 19th 54m after mean sunrise. [Calculated by Paul Lehmann's *Tables for calculating the phases of the moon*, there was a new-moon, at Laṅkā, on October 30, 1114, about 3 p.m.]

3. The Rājim inscription of Jagapāla, of which a good rubbing has been supplied to me by Mr. Fleet, is dated — *Kulachurī-sāṁvatsarā 896 Māgha māsi śukla-pakṣhī rathāsh-ṭāmāṇyaḥ Bhudhānī, i.e., in the Kulachuri year 896, on the eighth lunar day (called rathāsh-ṭāmāni) in the bright half in the month Māgha, on a Wednesday.* The corresponding date is **Wednesday, January 3, 1145.** On that day, at sunrise, the 8th *tithi* of the bright half was current, and it ended 10th 59m after mean sunrise. [According to von Oppolzer’s *Canon der Finsternisse*, there was a solar eclipse, and consequently, a new-moon, on December 26, 1144, 6h 59m Greenwich time, or at Laṅkā, about noon.]

4.—A Sōḍriniāyana inscription, according to Sir R. Jenkins, *Asiatic Researches*, Vol. XV. page 505, is dated *Saṅvat 898, Ashwin Shudh Saptami*; according to *Archæol. Survey of India*, Vol. IX. page 86, *in the Kulachuri Saṅvat in the year 898, Aswin stiti some*; and page 111, *898 Aswina stiti 7, Monday.* A photograph in *Archæol. Survey of India*, Vol. XVII. Plate xxii. gives only part of the date, thus: *Kulachurī-sāṁvatsaras 898*; and Sir A. Cunningham, in his *Indian Eras*, page 61, states that *a fresh examination has shown* the date to be *Āśvina su. di. 2* (and not *Āśvina su. di. 7*). I therefore take the date to be *Kulachurī-sāṁvatsaras 898 Āśvina su. di. 2 Sōmē,* i.e., *in the Kalachuri year 898, the 2nd of the bright half of the month Āśvina, on a Monday.* The corresponding date is **Monday, September 9, 1146.** On that day, at sunrise, the 2nd *tithi* of the bright half was current, and it ended 21h 54m after mean sunrise. [Calculated by P. Lehmann's *Tables*, there was a new-moon, at Laṅkā, about 2 hours before sunrise of September 8, i.e., on September 7, 1146].

5.—A Tēwār inscription, according to Sir A. Cunningham, *Archæol. Survey of India*, Vol. IX. page 111, and *Indian Eras*, page 61, is dated — *902, Āsāṣādu su. di. 1, Sunday*, a statement about which I am somewhat doubtful, and which, at any rate, I am unable to verify. Supposing it to be correct, the corresponding date would be **Sunday, June 17, 1151.** On that day, at sunrise, the first *tithi* of the bright half was current, and it ended 2h after mean sunrise. [Calculated by P. Lehmann’s *Tables*, there was a new-moon, at Laṅkā, shortly before noon on June 10, 1151].

6.—The Bhēra-Ghāṭ inscription of Alhanadēvi, which has been edited by Dr. F. E. Hall, in the *Journal American Or. Soc.*, Vol. VI. page 499, and of which we have a photograph in *Archæol. Survey of Western India*, No. X. page 107, according to the published version, is dated — *Saṅvat 907, Mārga su. di. 11 Ravaṇu, i.e., the year 907, the 11th of the bright half of the month Mārgāśīra, on a Sunday.* This reading of the date I have hitherto taken to be correct. At present, however, I strongly incline to accept the suggestion of Mr. Fleet, based upon a more careful examination of the lithograph than I had given to it, that the number of the day is 10, and either that the engraver first formed 11, and
corrected it into 10, or that, in forming the 0, his tool slipped, and thus gave to the 0 a partial appearance of 1. And taking the day to be the 10th, I find that the corresponding date is **Sunday, November 6, 1155.** On that day, at sunrise, the 10th *tithi* of the bright half was current, and it ended 2h 8m after mean sunrise. Should the number of the day on an examination of the stone itself, which is now in America, after all, prove to be 11, the year 907 would have to be regarded as an expired year, and the corresponding date would then be **Sunday, November 25, 1156.** On that day, at sunrise, the 11th *tithi* of the bright half was current, and it ended 1h 54m after mean sunrise. [According to von Oppolzer's *Canon der Finsterneise* there was a solar eclipse, and consequently, a new-moon, on November 26 (i.e. 20 days after November 6), 1155, 11h 22m Greenwich time, or at Laṅkā, about 5 p.m. And there was another solar eclipse, and consequently, a new-moon, on November 14, 1156, 22h 32m Greenwich time, or at Laṅkā, 3h 35m a.m., of November 15, i.e. on November 14].

7.—The *Lāl-Pahār* rock inscription of Narasimhadēva, according to the rough photozincograph published in the *Archaeol. Survey of India*, Vol. IX. Plate ii, is dated — Saṅvat 909 Śrāvaṇa su. di. 5 Budhā, i.e. 'the year 909, the 5th of the bright half of the month Śrāvaṇa, on a Wednesday.' The corresponding date is **Wednesday, July 2, 1158.** On that day, at sunrise, the 5th *tithi* of the bright half was current, and it ended 16h 26m after mean sunrise. In A.D. 1158 the solar month Śrāvaṇa lasted from about sunset of June 26 to about sunrise of July 28, and it contained two new-moons, one on June 27, 19h 5m after sunrise, and the other on July 27, 4h 53m after sunrise. The year therefore contained two lunar months Śrāvaṇa, and July 2 was su. di. 5 of the adhika Śrāvaṇa; su. di. 5 of the niṣa Śrāvaṇa would have been Friday, August 1. [Calculated by P. Lehmann's *Tables*, there was a new-moon, at Laṅkā, shortly after midnight on June 26, i.e. on June 27, 1158].

8.—According to Sir A. Cunningham, *Archaeol. Survey of India*, Vol. IX. page 111, and *Indian Eras*, page 61, a *Bhēra-Ghāṭ* inscription is dated '928, Māgha ba. di. 10, Monday.' I confess that I have no means whatever of verifying this statement, but supposing it to be correct, the corresponding date would be **Monday, December 27, 1176.** On that day, at sunrise, the 10th *tithi* of the dark half was current, and it ended 13h 40m after mean sunrise. [Calculated by P. Lehmann's *Tables*, there was a full-moon, at Bhēra-Ghāṭ, about 2 a.m. of December 18, i.e. on December 17, 1176].

9.—The Tēwār inscription of Jayasimhadēva, which has been edited by Dr. F. E. Hall, in the *Journal American Or. Soc.*, Vol. VI. page 512, and of which we have a rough photozincograph in *Archaeol. Survey of Western India*, No. X. page 110, is dated — Saṅvat 928 Śrāvaṇa su. di. 6 Rava Hastē, i.e. 'the year 928, the 6th of the bright half of the month Śrāvaṇa, on a Sunday, the moon being in the asterism Hasta.' The corresponding date is **Sunday, July 3, 1177.** On that day, at sunrise, the 6th *tithi* of the bright half was current, and it ended 7h 39m after mean sunrise. In A.D. 1177 the solar month Śrāvaṇa lasted from about 2h before sunrise of June 27 to about 3h before sunset of July 28, and it contained two new-moons, one on June 27, 15h 34m after sunrise, and the other on July 27, 1h 51m after sunrise. This year too, therefore, contained two lunar months Śrāvaṇa, and July 3 was su. di. 6 of the adhika Śrāvaṇa, and on that day the moon was in the asterism Hasta. Su. di. 6 of the niṣa Śrāvaṇa would have been Monday, August 1, when the moon was (not in Hasta, but) in Jyēṣṭhā. [Calculated by P. Lehmann's *Tables*, there was a new-moon, at Laṅkā, about 1 a.m. on June 28, i.e. on June 27, 1177].

10.—A Sasāspur inscription, according to the photozincograph published in *Archaeological Survey of India*, Vol. XVII. Plate xxii, is dated — Saṅvat 934 Kārttika su. di. 15 Budhā, i.e. 'the year 934, the 15th of the bright half of the month Kārttika, on a Wednesday.' The corresponding date is **Wednesday, October 13, 1182.** On that day, at sunrise, the 15th *tithi* of the bright half was current, and it ended 13h 57m after mean sunrise. [Calculated by P. Lehmann's *Tables*, there was a full-moon, at Laṅkā, on October 13, 1182, in the evening].

To the dates given under 5 and 8, I at present attach, for the reasons stated, very little value. Of the other dates, two have been
taken from good impressions, four from photogravures, and for the remaining two we have the somewhat emphatic statements of Sir A. Cunningham, the correctness of which I see no reason to doubt. And, if my calculations be at all correct, it is a fact, that of all the years from A.D. 201 to 280, only the year 248-49, taken as the epoch of the Chédi era, yields correct week-days for every one of these eight dates, and at the same time places the moon in the asterism mentioned in one of these dates. Whether there are historical reasons for which the epoch of the Chédi era should be placed before A.D. 201 or after A.D. 280, others will be more competent to say than I am; but I may mention one or two facts, which render either alternative extremely improbable, I may say, impossible.

From an Alha-Ghât inscription, of which we have a photolithograph in Archaeol. Survey of India, Vol. XXI, Plate xxviii, we learn that Narasimhadéva was reigning in [Vikrama-]Saîvat 1216 = A.D. 1159. The same Narasimhadéva (together with his younger brother Jayasimhadéva) is mentioned, as reigning prince, in Alha-Ghât’s inscription of [Chédi-]Saîvat 907. Supposing, then, the Chédi era to have commenced, e.g., in or before A.D. 200, Narasimhadéva would have reigned in or before A.D. 907 + 200 = 1107, i.e., already at least 52 years before A.D. 1159, the year in which we know him to have reigned.

Again, from the Rôwah copperplate inscription of the mahârâjâka Sâlakhañâvarma-déva which is mentioned in Archaeol. Survey of India, Vol. XXI, page 146, and of which I owe an impression to Mr. Fleet, we know that Vijayadéva was reigning in [Vikrama-] Saîvat 1253 = A.D. 1195. And from a Têwar inscription we learn that his father, Jayasimhadéva, was reigning in [Chédi-]Saîvat 928. If, then, the Chédi era had commenced as late as, e.g., A.D. 270, not to mention A.D. 280, Jayasimhadéva would have reigned in or after A.D. 928 + 270 = 1198, i.e., at least three years after his own son, which clearly is impossible. On the other hand, starting from A.D. 248-49, we obtain for the three princes mentioned the following dates, which may speak for themselves:

- Chédi-s. 907 + 248 = A.D. 1155.
- Chédi-s. 909 + 248 = A.D. 1157.
- Vikrama-s. 1216 = 57 = A.D. 1159.
- His younger brother Jayasimhadéva,—
  Chédi-s. 926 + 248 = A.D. 1174.
  Chédi-s. 928 + 248 = A.D. 1176.
- His son Vijayasimhadéva,—
  Chédi-s. 932 + 248 = A.D. 1180.
- Vikrama-s. 1253 = 58 = A.D. 1195.

Narasimhadéva’s father and predecessor was Gayakârma-déva. That prince issued the Jabal-pur copper-plate grant, of which one plate, containing the date, unfortunately has now been lost, but regarding the contents of which we know from a transcript that Gayakârma made a grant of a certain village, “having bathed in the Narmadâ at the time of the Makara-sâmkârtan, on Monday, the 10th of the waning moon of Mâgha in the year **.” Supposing Narasimhadéva to have reigned in 907 + 248, i.e., as I have shown above, A.D. 1155, the Makara-sâmkârtan must have taken place on a Monday, the 10th of the waning moon of Mâgha, in some year before, but at such a distance from A.D. 1155, as would suit the relation to each other of father and son. And it is again a fact that the year, which fulfils these conditions, is A.D. 1122. For in that year, the tenth of the waning moon of Mâgha, by the northern reckoning, fell on December 25, which was a Monday, and in the same year that the Makara-sâmkârtan took place shortly before sunrise of, or, for practical purposes, on Monday, December 25, as required. I may add that on that day the 10th tithi of the dark half was current, and that it ended 9h 43m after mean sunrise.

In Archaeol. Survey of India, Vol. XXI, Plate xxviii, Sir A. Cunningham has given a photolithograph of an inscription from Bó-sáni, the date of which he reads “Saîvat 958 prathamâ Ashâdha su. di. 3,” and from the

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8 Saîvat 1216 Bhâdra sn. di. pratipadâ Ravau = Sunday, August 16, 1139.
9 The exact date I shall give, when editing the inscription.
10 Alha-Ghât’s inscription.
characters of which he concludes that the era used must be that of Kalachuri or Chödi. The meaning of the date is 'the year 558, the third of the bright half of the first month Áśāḍha,' which shows that in the year mentioned Áśāḍha was an intercalary month. If I am right in assuming that the Chödi era began about July-August A.D. 249, the month Áśāḍha must have been intercalary about June, A.D. 1207. And Áśāḍha was intercalary in A.D. 1207. For in that year the solar month Áśāḍha lasted from May 26, about 1h 40m after sunset, to June 27, about 4h after sunset, and during that time there were two new-moons, one on May 28, 9h 30m after mean sunset, and the other on June 26, 23h 41m after mean sunset.

The Réwah copper-plate inscription of the mahárñaka Kértivarman, which is mentioned in Archaeol. Survey of India, Vol. XXI, page 145, and of which I owe an impression to Mr. Fleet, is dated — sañvat 926 Bhádrapada-másñ śukla-pakša chaturthiyán tithau Gurudiné, i.e. 'the year 926, in the month Bhádrapada, in the bright half, on the fourth tithi, on Gurudina or Thursday.' Judging from the style of the letters, and from the fact that the paramount sovereign of the grantor was the lord of Tikaliuṅga, Jayasimhaideva, whom from a Téwáir inscription mentioned above we know to have reigned in Chödi-Sañvat 926, this date is clearly to be referred to the Chödi era. With the epoch A.D. 248-49, and a year commencing with any of the six months from Chaitra to Bhádrapada, the corresponding date must belong to A.D. 1174, or, if by chance the year 926 should be the year expired, to A.D. 1175. In 1174 the fourth tithi of the bright half of Bhádrapada ended 17h 9m after mean sunrise of August 3, which was a Saturday, and therefore evidently not the day intended. And in 1175 the same fourth tithi commenced 8h 9m after mean sunrise of Thursday, August 21, and ended 10h 4m after mean sunrise of Friday, August 22. Looking to the wording of the date, I see no reason why the grant should not have been made during that portion of Thursday, August 21, 1175, when the fourth tithi was current; on the contrary, the tithi in question being the Gañéśa, chaurṣthi, the religious ceremonies and the gifts to Brāhmaṇa connected with them, certainly ought, so far as I know, since the tithi commenced about 8 hours after sunrise, to have been performed on the Thursday, although civilly that day was the third of the bright half of Bhádrapada. 18 I therefore regard the result as satisfactory;17 and will only add, that the same result for the commencement of the tithi, Thursday, August 21, 1175, would be obtained, with the epoch A.D. 248-49, for the Chödi year 926 current, if there were any authority for making the year begin with the month Ásvina. (See note 5 above.)

Three other inscriptions, the dates of which have been referred to the Chödi era (whether rightly or wrongly, I must leave it to others to decide), are mentioned ante, Vol. XIII, page 77.

Of these, the Iáô grant, which has been edited by Mr. Fleet, ib. page 115, is dated — Śaka-nṛipa-kál-ātīta-sāṁvatsara-sāta-chaturashtiyá śap-tasañ-ādhiká Jyéṣthi-āmávatsyá-súryagnáhí, i.e. according to Mr. Fleet's translation, 'in (the year) four hundred, increased by seventeen, of the centuries of years that have elapsed from the time of the Śaka king, at (the time of) an eclipse of the sun on the new-moon day of

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18 An exactly similar date, recorded in the Réwáir era, about the epoch of which, as I shall occasion to show in a future paper, there can be no doubt whatever, we have ante, Vol. IX, pp. 185-189. The wording of it is — Sáṃvat 737 Phálguna-másñ śukla-pakša dawaiyáh tithau Árdrá para-pámaśarva-akñhára Áyusñáná-yóga Bháhrava-pat-páthi, i.e. 'the year 737, in the month Phálguna in the bright half, on the tenth tithi, (the moon being) first in the akñhára Árdrá and afterwards in Pámaśarva, in the yóga Áyusñáná, on a Thursday; and the corresponding date, undoubtedly is Thursday, March February 23, A.D. 1637, on that day, at sunrise, the moon was in Árdrá, and on that day it was in Pámaśarva; and the current yóga was Áyusñáná. Civilly, Thursday, February 23, was the 9th of the bright half of Phálguna; but the day is, nevertheless, the right day and the wording of the date is literally correct, because the ninth tithi ended and the tenth tithi began, 5h 49m after mean sunrise. The religious cere-
(the month) Jyēṣṭha.' Assuming, for reasons which it is unnecessary to mention here, the date to have been recorded in the Chêdi era, and taking that era to commence, as we have done hitherto, about July-August A.D. 249, the year corresponding to the Chêdi year 417 expired, would be A.D. 667. In that year, the new-moon day of the month Jyaishtha fell on April 29, and on that day there was no solar eclipse; nor was there one in April or May of the preceding year A.D. 666. 19 On the other hand, taking the date to be recorded, as stated in the grant itself, in the Saka era, the corresponding date is May 10, A.D. 495 and on that day there was a solar eclipse 10h 39m Greenwich time.

The Nausâri grant, which has been edited by the late Dr Bhagvanlal Indrajî, ib. page 70, is dated — 456 (expressed both in numerical symbols and in words), Mâgha-śuddha-pañchadasâyâm chandr-ôparâgê, i.e. 'on the 15th lunar day of the bright half of the month Mâgha, on the occasion of an eclipse of the moon,' on a day of the week which, owing to the damaged state of the plate cannot now be given with any certainty. Assuming the date to have been recorded in the Chêdi era, and taking that era to commence about July-August A.D. 249, the corresponding date must be either Wednesday, January 14, 705, or Tuesday, February 2, 706, according as the figure 456 denotes the current year or the number of years expired. According to von Oppolzer's Canon der Finsternisse there was no solar eclipse on January 14, 705, but there was one on February 2, 706, 16h 37m Greenwich time or at Lahkâ, 9h 40m P.M.

For the date of the Kâvi grant, which has been edited by Dr. Bühler, ante, Vol. V. page 109, and of which I owe a photograph to Dr. Bühler and an impression to Mr. Flett, we have two data, one in lines 15 and 16, and the other in lines 24 and 25, of which the latter, unfortunately, owing to the state of the plate, is not absolutely certain. In lines 15 and 16 we read

L. 15 . . . . . . Šivâbhâsa-sud[dbh]adayâsam[yâm p?]
L. 16 Karkaṭaka-r[â]śau sa[m]krânt[â p?]

19 In A.D. 665 there were two solar eclipses, one on March 11, and the other on September 4; and in A.D. 667 there were also two solar eclipses, one on February 28, and ravaupuṇya-tithau . . . . . . . . . . . . . . . . i.e., 'on the tenth [lunar day] of the bright half of (the month) Āśâdhâra, the sun having entered into the zodiacal sign of Cancer, on (this) auspicious tithi' i.e., as I take it, after consultation with Dr. Bühler, on the occasion of the sun's entering the sign of Cancer, or on the Karkaṭa-saṁkrânti. In lines 24 and 25, of which the former is incomplete at the end and the latter at the beginning, we read—

L. 24 . . . . . . sa[m]yâtsara-sâta-chatush-trayê [sha?] x x x x x
L. 25 x x x x [sa?]m 400. 80. 6. Āśâdhâra śu [10?] Ādityavârê 11 . . .

The sâta at the end of line 24 is distinctly visible, but there are certain marks below it, both in the impression and, more clearly still, in the photograph, which would render it possible to read the whole akshara sâta, i.e. to regard it as the beginning of the word 'śâdīti (88), not of 'sâdīti (86), were it not that in the following line the numerical symbol for the unit is distinctly 6, and not the similar symbol for 8. In line 25 the numerical symbol following up śu is decidedly indistinct. What is clearly seen, both in the impression and in the photograph, is the symbol for 10, as it occurs, e.g. at the end of the Valabhi grant of Dharasena II., ante, Vol. VIII. page 303, minus the curved line on the right; but there are indications that that curved line had been engraved and that therefore 10 was intended. It is more difficult to say, whether certain marks after the symbol for 10 are accidental scratches or intended to denote the unit 1 or 2. Here the actual mention of the tenth in line 15 is a prior facie argument in favour of the former and against the latter alternative.

In all probability, then, the grant is dated—486, on the 10th lunar day of the bright half of the month Āśâdhâra, on a Sunday, on the occasion of the sun's entering into the zodiacal sign of Cancer. But there is just the possibility, that the grant was made on the occasion of the Karkaṭa-saṁkrânti, on the 10th tithi of the bright half of Āśâdhâra, and recorded on a Sunday, the 11th or 12th of the bright half of Āśâdhâra. Under any circumstances the

the other on August 25. In A.D. 665 there was a solar eclipse on the new-moon day of the first Jyaishtha, which was April 21.
date, if falling within the 8th century A.D.,
must, generally speaking, fall on or after June
22, the approximate day of the Karkaṣṭa-saṅkranti.

Supposing the date to be recorded in the
Chēdi era, and taking that era to commence on
July 28 (or, possibly, on August 26), A.D. 249
the corresponding year would be either A.D.
735 or 736, according as the figure 486 denotes
the current year or the number of years expired.
In A.D. 736 the Karkaṣṭa-saṅkranti took
place on Thursday, June 23, which was the
13th of the dark half of a month, while the
10th of the bright half of Āshāḍha had fallen
already on Sunday, June 5, i.e. no less than
eighteen days before the Saṅkranti. Neither
of the two days can be the intended.

In A.D. 736, on the other hand, the Karkaṣṭa-
saṅkranti took place about 8 hours after sun-
rise of June 22; and the tenth tithi of the
bright half of Āshāḍha began 21 minutes after
mean sunrise of June 22, and ended 1h 21m
before mean sunrise of June 23. The tithi
therefore, in all probability, was a kshaya-tithi,
but, under any circumstances, the Karkaṣṭa-
saṅkranti, in A.D. 736, did take place
during the tenth tithi of the bright half of
Āshāḍha. June 22, however, was a Friday,
not a Sunday; and the nearest Sunday, June
24, was the 12th of the bright half of
Āshāḍha, because the 12th tithi of the
bright half ended on it, 20h 37m after mean
sunrise.

Now, taking into consideration that in the
whole century from A.D. 676 to 775, there is
not a single year in which the Karkaṣṭa-saṅ-
kranti fell on any Sunday which was the tenth
of the bright half of Āshāḍha or of any other
month, I believe that, if the date must really
be referred to the Chēdi era, we have to resort
to the other possible interpretation of the date
which I have spoken of. And assuming the
grant to have been made on the occasion of the
Karkaṣṭa-saṅkranti, on the tenth tithi of the
bright half of Āshāḍha, and recorded on a Sun-
day, the 12th of the bright half of the same
month, June 22 and Sunday, June 24, A.D.
736, satisfy the requirements of the case;
and if the tenth tithi was a kshaya-tithi, which
I have good grounds for believing that it was,
the reason why the grant should have been made
and recorded on different days, is perhaps not
far to seek.

Regarding the Chēdi year, I may finally
state that the calculation of the only two
available dates in dark fortnights; viz. that of
the Benares copper-plate inscription of Karṣa-
ḍēva (above, No. 1), and that of the Bhārā-
Ghāṭ inscription of the year 928 (above, No. 8,
to which however I can attach only little im-
portance), shows the Chēdi year to have been
a northern year, with the regular pūrṇimāta
northern arrangement of the months. This is
also proved (as was first remarked to me by
Mr. Fleet on Mr. Sh. B. Dikshit's authority),
by the record in the Jaipaipur grant of Gaya-
kṛṣṇadēva, mentioned above, of the occurrence
of the Makara-saṅkranti in the dark fort-
night of Māgha. For, since the first day of the
solar month Māgha must precede the first day of
the bright half of the lunar Māgha, the Makara-
saṅkranti, which introduces the solar Māgha,
may well take place in the dark half of the
lunar Māgha when the latter, as is the case in
the northern year, precedes the light half; but
it cannot do so in the southern year where the
dark half of the lunar Māgha follows upon the
light half of the same month.

In conclusion, I have to thank my friend
Professor Jacoby for having allowed me the
use, before actual publication, of his Tables, by
the construction of which he has rendered a
service of the utmost importance to all who
take an interest in Indian inscriptions.

STORY OF THE MURDER OF 'ALI 'ADIL SHAH I, FIFTH KING OF
BIJAPUR, AS TOLD BY CONTEMPORARY HISTORYIANS.

BY CAPTAIN J. S. KING, Bo.S.C.

No detailed account of the death of 'Ali
'Ādil Shāh I. has yet been published in
English. In the Bijāpur volume of the Bombay
Gazetteer\(^1\) this event is disposed of in the fol-

\(^1\) Vol. XXIII. p. 419.

owing words:—"In 1580 'All was assassinated
in a brawl with one of his servants."

Farishta\(^2\) gives the following account of
it:—"In the year 987 (A.D. 1579-80), as the

king had no son, he appointed his nephew Ibrāhīm, son of his brother Shāh Tahmāsp, his successor, and the following year he was assassinated by a eunuch, whom he had forced against his inclination to come to his Court from Āhmadābād Bidar."

Briggs, in a note on this passage, says:—

"A more detailed account of this transaction is given by Farishta in the History of the Kings of Bidar. He evidently avoids the subject in this place, in order not to give offence to Ibrāhīm 'Ādīl Shāh II., the nephew of 'Ali Ādīl Shāh, under whose patronage he wrote. The cause of the king's death is most disgusting and offensive, and it is by no means attempted to be palliated by Farishta when he mentions it. A modern author of the history of Bijāpur, however, has set forth reasons in defence of Ali Ādīl Shāh's conduct, and endeavours to prove that Farishta has traduced his memory."

Farishta's "more detailed account" above referred to, is thus translated by Briggs:—

"In the year 987 (A.D. 1579), Murtażā Nizām Shāh made an attack upon the remaining part of the Bidar territories, and laid close siege to the capital itself. 'Ali Barīd, thus straitened, sent an envoy to 'Ali Ādīl Shāh, who replied that if he would make him a present of two eunuchs, whom he named, he would send him assistance. 'Ali Barīd assented; and two thousand Bijāpur Cavalry marched to raise the siege of Muḥammadābād Bidar."

"Murtażā Nizām Shāh, hearing of the approach of the Ādīl Shāhs, and also of the rebellion of his brother, Bābur Nizām Shāh, at Ahmānadagar, retreated to his capital, and left Mīrzā Yādgār with a body of Qutb Shāhs, who had joined from Gulkunda, to prosecute the siege; but as soon as the Bijāpur detachment arrived within a few miles of the place, Mīrzā Yādgār retreated, and 'Ali Barīd delivered over the two eunuchs, contrary to their own inclination, to the Bijāpurīs. These two youths were so stung with shame on being transferred from one king to another, that shortly after their arrival at Bijāpur, one of them put 'Ali Ādīl Shāh to death, as we have before seen in this history."

Khāfir Khān, who enjoys the reputation of being the most impartial of Indian historians, gives the following account of the murder of 'Ali Ādīl Shāh:—

"In the year 987 (A.D. 1579-80) he nominated his nephew, Muḥammad Ibrāhīm, son of his brother, Shāh Tahmāsp, as his successor, and gave him full power, whilst he gave himself up to sensual enjoyments."

"When it came to his ears that 'Ali Barīd had two handsome eunuchs, one of whom in beauty, and the other in delicacy, was a reproach to the sun and the moon, he conceived an intense longing to become possessed of them, and, accordingly, sent a message (to 'Ali Barīd) asking for them. 'Ali Barīd at first was firm in refusing; but afterwards, on account of his excessive entreaty, he sent them both to 'Ali Ādīl Shāh. Each of these eunuchs knew why he had been sent for; and the elder one, who had a hankering after evil, concealed a knife in the waist-band of his drawers, and awaited the opportunity for the infliction of punishment."

"At last, one night, 'Ali Ādīl Shāh summoned him into his private apartment, and endeavoured to lie with him. The eunuch, on getting the opportunity, plunged that knife into his hypochondria with such force as to put to all sensual desire; and in the year 988 (A.D. 1580) 'Ali Ādīl Shāh hurried from this world to his permanent abode; and, in retribution for the crime of one, the two eunuchs were put to death."

The next account of this occurrence I extract from a very rare Persian MS. history of the Ādīl Shāhī dynasty of Bijāpur, entitled Basātinu'-s-Salātīn, by Muḥammad Ibrāhīm az-Zuhairī, completed, as the author himself informs us, in A. H. 1240 (A.D. 1824). General Briggs published his translation of Farishta in 1829. From these dates, and from the fact that the copy of this MS. now in the Royal Asiatic Society's Library belonged to General Briggs, I conclude that this is the history to which he alludes in his footnote already quoted; but before making any further remark on the subject, I shall proceed to translate the passage:—

"'Ali Ādīl Shāh's twin sister (ham-shira), named Tānibāl Sultan, had been married to

Abnādābād Bidar, as above.

* So in Briggs' text, but the more usual appellation is
king and feeling his pulse, cried out:—'Alas! Dust is on our heads!' Then, raising the king, we laid him on a couch, and went outside. The murderer had remained in the private apartment, and some one wished to enter it and bring him to punishment, but he had fastened the door on himself. However, next day he received the punishment due, and the other eunuch was put to death by the slaves on the same day.

"The people of the city, hearing of the death of the king, rushed in crowds to the gate of the fort that night. The nobles, grandees and amirs also, both superior and inferior, assembled at the gate, but did not obtain admission.

"After morning prayers, some one came to the gate and cried out:—'All the Ministers and nobles are assembled at the gate, and, with compliments, send this message to the prime minister, Afzal Khân:—'We have passed the whole night here, like fish without water, in disquietude and anxiety, and we are all anxious to know from you what arrangements have been made for carrying on the government.' Afzal Khân replied:—'I await the good pleasure of my colleagues; whatever they advise, and whomsoever they may confirm in the sovereignty, they are free to do as they please.' The nobles, on hearing this, held council, and confirmed with oaths the promises as to the hereditary succession. They then sent Mir Murtaza Khân Anjû, who went near the gate, and proclaimed the decision of the council, saying:—'Shâh Kamâlu'd-dîn Fathu'llâh, being râkid on your part, with the approval of all the nobles has agreed that we shall confirm in the sovereignty the king's nephew, Prince Ibrâhîm, who is the rightful heir, and whom the king during his lifetime appointed and educated as such. Also that you shall be Prime Minister, as formerly; and the other offices be filled by whomsoever you may please.' Afzal Khân replied:—'I cannot undertake this important affair; appoint someone else.' Murtaza Khân said:—'At all events, you and the nobles can assemble in council, and whatever you determine upon will be confirmed.' Afzal Khân said:—'A great crowd is assembled here, and if we open the gate there will be a rush of the common people, and

* Taskirât'ul-Mulâk.
perhaps a disturbance may arise. The best plan is for you with only three or four selected persons to come inside.'

"Then Shāh Kamāl ud-dīn Fathullah, Kamāl Khān, Murtazā Khān and Manjan Khān, youngest son of Kishwār Khān, and son-in-law of Kamāl Khān, went inside, and, after taking counsel together, went to the door of the haram, and, bringing forth Ibrāhīm Ādil Shāh, took him to the summit of a tower; and, seating him with much more ceremony, raised over his head the gold-embroidered umbrella."

According to Mirzā Rafi'ud-dīn Shirāzi, author of the Taṣkīrātul-Mulūk (who was an eye-witness of the occurrence), 'Alī Ādil Shāh I. was murdered on Monday, the 24th of the month Safar, A.H. 968, at the eighth hour of the night, which corresponds to 2 a.m. on the 19th March 1550.

The above detailed account of what followed immediately after the murder is interesting, and probably true in every particular; but in relating the circumstances which led to the murder, Rafi'ud-dīn seems to me to have failed to remove the stigma cast on the memory of 'Alī Ādil Shāh I. by Farishta and Khālī Khān.

FOUR REWAH COPPER-PLATE INSCRIPTIONS.

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

In the Archæol. Survey of India, Vol. XXI. pp. 145-148, Sir A. Cunningham has given an account of four copper-plate inscriptions from Rówah (properly Riwān or Rimān) in Central India. At Mr. Fleet's request, I shall edit here three of those inscriptions, and give extracts of whatever may be important in the fourth, from excellent impressions supplied by him. In a concluding paragraph I shall furnish, from the four inscriptions together, a genealogical list of the Mahārāṇakas of Kakkarōdikā (Kakrarōdikā, or Kakarōdī), the chiefs by whom the donations recorded in these copper-plates were made. Following Sir A. Cunningham, I denote the four inscriptions by the letters A., B., C., and D.¹

A.—Copper-Plate Grant of the Mahārāṇaka Kirtivarman.

The (Chōdi) year 926.

This inscription is on a single plate, measuring about 13'' by 9½'', and inscribed on one side only. The surface of the plate itself is smooth; but, for the protection of the writing, strips of copper about 1/4'' broad are fastened by rivets along the edge of the top and the two sides; and the bottom edge was originally protected in the same way, but the strips here have been torn off and lost. The preservation of the inscription is perfect; and there is hardly any letter which is not clear and distinct in the impression.—In the upper part of the plate, and secured by a strong rivet passing through the plate, there is a thicker and broader strip of copper, which, towards the end projecting above the plate, is turned over so as to catch and hold a plain copper ring about 3/4'' thick and 2 3/4'' in diameter. There are no indications of any seal having been attached to the ring.—The weight of the plate, with the ring, is 164½ tolas.—The average size of the letters is between 3/4'' and 7/8''.—The characters are Dēvanāgari of about the 12th century A.D. The formation of the letters betrays some want of skill, and I may particularly note that the sign for ha is often badly formed, and that it is sometimes difficult to distinguish between the palatal and dental sibilants, and between the signs for cha and va.—The language is Sanskrit, employed by a person who was either very careless or ignorant. The most glaring mistakes against the rules of syntax will be pointed out in the notes on the text. Wrong forms are, e.g., the Genitive dēvī-dūthīnā for dēvī-dūthinā, in line 8, the Singular Dvandva-compound chaṃdhra-ārka-māḍinā, in line 15, and the Past Pass. Participle utkṛṣṭa-māṇ, in line 19.—In respect of orthography, I may note that ba is throughout written by the sign for va, and that the dental sibilant is occasionally used for the palatal sibilant; thus we have paramāsvara, line 2; māhāsvara, line 3; Kausika,

¹ [No information is forthcoming as to the circumstances under which the plates of these four inscriptions were originally discovered. They will eventually be deposited in the British Museum; having been placed in my hands for that purpose by the Rāja of Rówah.—J. F. F.]
which the inscription is dated, must be referred to the Chédi era.

It is more difficult to explain the exact significance of every one of the epithets used with reference to Jayasimhadéva and his relatives. As to the title 'lord over the three Rágás,' etc., it may suffice to state that the Chédi rulers share it with some of the Ráthor princes of Kanauj. And regarding the expression Trikaliyadhipati 'lord over the three Kaliyas,' I agree with Sir A. Cunningham in considering the term Trikaliyad to denote, or to be an older name of, the province of Télínga, and I may mention that the same title Trikaliyadhipati occurs also in lines 3 and 43 of the copper-plate inscription from Kapálévara, in Orissa, published ante, Vol. V., pp. 55-57. But I am unable, at present, to explain properly the phrase "meditating on the feet of the paramabhattäraka mahárájadhírája paramésvara, the illustrious Vámadéva," which is used of Jayasimhadéva and his elder brother, as well as of his father and son. In accordance with ordinary usage, that expression ought to mean that Vámadéva was one of the ancestors of the princes who are said to meditate on his feet, but none of the inscriptions of the Chédi rulers of Tripuri or Ratnapur which are known to me, mention a prince Vámadéva in the genealogical lists which they contain.

As regards the date, I have shown, ante, page 219, that the corresponding European date, which in my opinion satisfies the requirements of the case, is Thursday, August 21, 1175.

In line 4, our inscription goes on to state that in the town of Kakkarédkák there was once a Maháráñaka Jayavarman (line 6), born in the Kaurava vase. His son was the Maháráñaka Vatsarájá (line 7); and his son again was the devout worshipper of Mahésvara (Siva), the Maháráñaka Kirtivarman (line 9). This chief, who clearly owed allegiance to the Chédi ruler Jayasimhadéva, on the date mentioned, and on the occasion of making the funeral oblations in honour of his deceased father Vatsarájá (line 14), granted the village of Ahadapáda, situated

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* Ib. Vol. IX. plate II.
* See ante, Vol. XV. p. 9, note 52.

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* Ancient Geography of India, p. 519. —The Chédi rulers spoken of were styled 'lords over Tri-kal-ná;' their capital was Tri-puri; and according to Pandit Bhagvanlal Indrājī the Chédi era is identical with the era of the Trikárkas, a name derived from Tri-kára. This may be accidental, but it may as well be pointed out.
in the Khāḍagāhā pattendā, to two Brāhmans, the Thakura Mahādītya and the Thakura Śīlaṇa, sons of the Thakura Chaturbhujā, son's sons of the Thakura Gayādhara, and son's son of the Thakura Trilochana, of the Kauśika gōtra, and whose three pravaras were Audala, Viśvāmitra, and Dēvarāta.

Lines 15-18 contain some of the customary benedictory and imprecatory verses; and lines 18 and 19 state that the inscription was written, with the consent of the Thakura Ratnapāla, by the Thakura Vidyādhara, son of Mālhē, son's son of Dhūrēśvara, and son of the son's son of Rājēśvara, and engraved by the workers in iron Kūkē and Kikaka.—In all this part of the inscription, from line 4 to 19, there is nothing which calls for any particular remark.

The town of Kakkarodīka is the modern Kakrehi, Long. 81° 17' E., Lat. 24° 56' N., "a large place on the table-land at the head of the principal Pass, the Mamani Ghāt, leading to the west towards Banda and Kālanjar and Mahōba." The village granted, and the pattendā in which it was situated, I am unable to identify on the maps at my disposal.

**TEXT.**

1 Ōn. svasti II Amōdās-cha pramōdā-cha sumukhā dūrmukhas-tadā(tha) t avighnō vigaha-kartā cha Hēlamvō(ṃbō) Gaṇa-

2 nāyakā II Paramabhāṭara-mahārājādhirājā-paramāṃsava(ṣva)ra-āsrī. Vāmadēva-āṣa-ānudhyāta-parama(bha) ṛṭaraka-

3 mahārājādhirājā-paramāṃsava-paramāṃsāvita(ṣva)ra-Trikalēngādhipati-nīja-bhujā-opārijit-

4 āṣvapati-gajapati-narapati-raghavā 

5 nagaryā[mā] Kaurava-[va]nya[man]ā-saṁbhūta upaṁjako āśeṇa-ṛajagun-alāṁkarta-

6 saṁrā ṭarama-śravakṣaḥḥā anēka-saṁgrāma-bhūmā kari-gaṭa-kumbha-visavaṇa-

7 paṁchānaṁ saṁasta-kasyatriya-garva-ḥridhabhiḥ 1 mahārājaka-āsrī-Jayava-

8 rm[ase] nāma āsta I (II) Ētasya putro dūrvrā-vairī-vāraṇa-[saṃva]rttaḥ I Kārṇa-

9 ētasya putro mahā-mahāsvarāḥ kulprakṣhavat dvijā-ṛathīṁ māṁ vāṁchita-phala-

10 prudō-ṛjuna iva ohāpēn-ekṣuḥ(shu)-kōti-saṁśvetātṛā-ārāti-ku-

11 lo mahārājaka-ṛṣi-Krittvāmar Kausi(ṣi)ka-gōtrasva=Andula-Viśvāmitra-Dēvar[a],

12 triḥ-pravartabhyaṃ yajna-yajam-anādhyayan-[ṣu] dhya-

13 pana-dāna-pratigraha-satkarman-ābhbhayāḥ śaḥkura-āsrī-Trilochana-prapautoṛbhīyaḥ śa

14 thakura-āsrī-Gayādhara-puruṣottayaḥ śaḥkura-āsrī-Chaturbhun-

15 ja-putrābhyaṁ śaḥkura-āsrī-Mahādītya-Śīlaṇa-vṛṛ(ḥ)maṇāśbhāyāḥ Khāḍagāhā-

16 pattalayāṁ Ahaṇāpada-grāmāḥ svā-sī

17 mā-paryantās-va(chac)ur-ṛgha-vasidddhāḥ sa-ja-la-ṭhalaḥ s-āmra-madhukaḥ

18 sa-lavānakaraḥ sa-gartī-śaḥ(chac)raḥ sa-nirga-

19 ṛma(ma)-pravṛśaḥ(saḥ) sa-gṛpaṃkaraḥ sa-nidhirṇi(ṇu)kshēpāḥ kalyāṇa-dhanaḥ sa-karō-

20 mātā-pitrō-ārmaṇaḥ sa-ānāma(ṇa)ḥ(pri)-punya-yaśo-vīrddhīyaḥ

21 saṃvat 926 Bhādrapada-maṣe sūkla-pakṣe va(chac)turthyaḥ tithau Guru-

22 dinō rāṇaka-āsrī-Vatsaratāṣaya


* From the impression.

† From the impression.

‖ Expressed by a symbol.

†† Metre, Ślōka (Anuṣṭubh).

* Vishā[ṛīta] I take to be used in the sense of viśā[ṛīta].

† This appears to be a mistake for gururavgīya 'excellent teachers.'

* Here and in other places below, which it is unnecessary to point out separately, the sign of punctuation is superfluous.

†† This aksaḥra was intended to be ma, Vīśvaras appears to be used in the sense of viśā[ṛīta], 'a lion to tear open.'

Head=brh.}

14 Originally =īrāt. 15 Originally =samuṣṭārit.
16 On the top-margin we have the aksaḥra 9s, in what appears to be a more modern handwriting, with an intimation that it should be inserted here. Kritisvarna is thereby changed to the Instrumental Krittvāmar, which must be construed with sampradattos in line 15, but which does not agree with the preceding Nomina- tive cases.
17 This aksaḥra appears to be tṛs, altered to ṭa. Compare Āvalyagnas-trautasvīra, XII, 14, 2.
18 Read ēṛta.
19 Here and in the following the Plural ending ḍbhyaḥ is put wrongly for the Dual ending ḍbhīyaṁ.
Rewah Plate of the Maharanaka Kirtivarman.—The Year 926.
B.—Copper-Plate Grant of the Mahārānāka Salakahānavarmadēva.

The (Vikrama) year 1253.

This inscription, again, is on a single plate, measuring about 153" by 9", and inscribed on one side only. The plate is quite smooth; the edges of it being not fashioned thicker, nor turned up, nor protected in any way. As the result, the preservation of the inscription is only fairly good; for, the surface of the plate is a good deal worn, especially in the proper left half, down to about line 14, and, in the right half, from about line 8 to 14, so that some akṣaras here are only faintly visible, and a few others are altogether illegible. At the same time, all that is historically important, is clear and distinct; and, so far as the actual decipherment is concerned, not in the least doubtful.—In the upper part of the plate, there is a ring-hole; but the ring, with any seal that may have been attached to it, is not now forthcoming.—The weight of the plate is 192½ tolas.—The average size of the letters is about ½." The characters are Dēvānāgarī of the 12th century A.D., and very similar to those of the grant A.—The language is Sanskrit, employed by a person of little knowledge, and therefore disfigured by serious grammatical blunders. Thus we find, in lines 7 and 8, the construction sō = ham .... samājāpayati vādhyati cha ‘I ... command and inform’; in line 9 and elsewhere, a number of crude forms used instead of Nominative cases; in line 15, the construction yat = pradattām ... pālanyā rakṣhashyāṁ cha; in line 6, the compound suta-deva ‘two sons’ for suta-devanam.

or deu sauta;33 and in line 14, mātripītrōḥ for the very common mātripīṭhōḥ.—In respect of orthography, I may note that ba is written by the sign for va, except in babhūva,31 line 5, and that the palatal and dental sibilants are often confounded, even in ordinary and well-known words. Thus, we have sārman, for sārman, several times in lines 10-12, yasā and sāvanatoḥ in line 14, vāsagaḥ in line 15; and on the other hand, we have sūkṣmā, for sūkṣmaḥ, in line 2, suta in line 6, śuvarṇam in line 19; and the same wrong use of sa for sa has caused the employment, in line 6, of eśrēmah—Chhalakṣaṣaṇā for eśrēmat—Salakṣaṇa. Carelessness on the part of the writer or engraver is responsible also for the wrong verse in honour of Bhāratī in lines 1 and 2, for the mutilated verse in line 16, and for the occasional employment of the dental for the lingual nasal, of va for cha, of na for va, and for other mistakes which will be pointed out in the text.

Opening with the words ‘Ōm, may it be well!’ and two verses in honour of the god Brahman and of Bhāratī, of which the first occurs also at the beginning of the inscriptions C and D, our inscription refers itself, in lines 2-4, to ‘the auspicious reign of victory of the paramabhaṭṭāraka mahārājādhirāja paramēśvara, the devout worshipper of Mahēśvara (Śiva), the illustrious Vījaya二者, the lord over Tīrakalīṅga, who by his own arm had acquired the (title of) lord over the three Rājas, (viz.) the lord of horses, the lord of elephants, and the lord of men,—and who meditated on the feet of the paramabhaṭṭāraka mahārājādhirāja paramēśvara, the devout wor

31 Originally tri.
32 Originally bṛhādīm.
33 See note 3, page 8, note 3.
34 In this particular word, the proper sign for ba has been preserved also in other inscriptions, in which ba is otherwise denoted by the sign for va. See Hultsch, in Zeitschrift D. M. Gesellschaft, Vol. X1. p. 50.
shipper of Mahēśvara (Śiva), the illustrious Vāmadēva.” And the inscription is dated, in line 13, “the year of years 1253 (expressed in decimal figures only), on the seventh titki or lunar day, in the dark half in the month Mārgāśira, on Śukra-dīna or Friday.”

With the exception that Vāmadēva is styled here ‘the devout worshipper of Mahēśvara (Śiva),’ which is sufficient to prove that Vāmadēva cannot be Śiva himself, the epithets here applied to Vijayadēva are the same as those applied to Jayasimhadēva in the inscription A. And as the date of the inscription must clearly be referred to the Vikrama era, there can be no doubt that the Vijayadēva here spoken of is the son of Jayasimhadēva of the inscription A. Vijaysimha, the Chāghi ruler of Tripuri, of whom we possess the Kumhī copper-plate inscription of the (Chāghi) year 932 = A.D. 1180-81.

As regards the date, the 7th of the dark half of Mārgāśira, of the Vikrama year 1253 current, by the northern reckoning, corresponds to October 27, A.D., 1195, which was a ‘Friday,’ as required. On that day, the seventh titki of the dark half ended about 7h 35m after mean sunrise.

From lines 4-6 of the inscription we learn that at the capital of Kakarōḍi there was once a personage named Dhamhilla,22 who was an object of respect for all princes. After him came Vajjika, Dandhika, Khōjika, and Jayavarman, whose exact relationship to Dhamhilla or to one another cannot be determined from the present inscription. Jayavarman’s son was Vatsarajī; and that chief had two sons, head-jewels of Sāmanta or feudatory chiefs, Kirtivarman and Salakṣaṇavarman-

dēva (or Salakṣaṇavarmanadēva, as the name is written afterwards), of whom the former succeeded his father, while he himself was succeeded by Salakṣaṇavarmanadēva.

In lines 7-14 the chief Salakṣaṇavarmanadēva, who had attained the five mahādādas, and who evidently owed allegiance to the Chāghi ruler Vijayadēva, informs the people and the officials concerned; that on the date mentioned above he gave the village of Chhīḍaudā, in the Kūvīlspalīsa pattalā, to certain Brāhmanas, son’s sons of the son (or sons) of the Thakura Mādhava, of the Kausīla gōtra, and whose three pravaras were Kausīla, Viśvāmitra, and Dēvarāta (?). The village thus granted was divided into five padas23 or shares, of which two were given to Rāmāsaran, Gāthāsaran, and Dāmasarasaran, sons of—(?), while one share went to—sārman (?), the son of Chithu, one to Paitēsaran, the son of Pithana, and one to Haridattasaran, the son of Śrīdhara.

Lines 14-19 contain the usual admonition to give to the grantees whatever might be due to them, and to protect them in the possession of their property, and some of the customary benedictory and imprecatory verses. And the concluding line 20 appears to say that the inscription was engraved by Kākē and his son, and to contain some statement, which I do not understand, concerning the quantity of grain necessary for sowing the fields granted.

There in nothing in lines 4-20, which calls for any further remarks. I have only to add that I am unable to identify the village and the pattalā, mentioned in the inscription, on my maps.

TEXT.24


22 See Arch. Survey of India, Vol. XXI. page 146.
23 Not Gāthāsara.
24 For the word pada, in the sense of ‘a share,’ see ante, Vol. XV. p. 59, verse 75.
25 From the inscription. 26 Mētra, Śloka (Anuṣṭubh).
27 This verse looks like an Aṣṭū, but its construction is very irregular.
28 This sign of punctuation is superfluous.
Rewah Plate of the Maharana of Malwa—The Year 1253.
4 śva[pa]ti gajapati-narapati-rājatray-ādhipati-śrimad-Vijayanēva-kalyāna-vijaya-rājyē 1\(\text{tt}\) ka[ka]rēdhyā[m] rā[\text{ju}]dhānyām Dhāhi[llō nām=āḥ] bhavaṭ a cha mā-
5 [nyō]=bhavat=sarvva-narāsvarāgamaḥ [1\(\text{st}\)] Tasmād-Vajūkō Daṇḍūkasaḥ=ch-āpi [kra-mataḥ f]\(\text{fo}\) Khōjōkō Jayavarmmā cha bhahāva tad[a=nantarab] \(\text{h}\) [1\(\text{st}\)] [Athā]
Jayavarmmādevyā=āpa ṭyãm Vatsaraḥ-[su]-
6 tō=bhava[t l] sāmanta-śrīrātrūa[n]e yēna jātāu śu[ta]tu-dvau 1 Kirttvārmmā
suptō jēśthathā prāpta-prītippadaṃ\(\text{tt}\) sva[tah]\(\text{tt}\) śrīmacha-Chha[lt̑ka]nāvarmmā-
[delō\(\text{vo}\)=pi kramād=rā-
7 jyam=avāpa yaḥ \(\text{a}\)=nām samasta-sa[p]rū-s[ḥ]eṣeṣa-samudhigata-pa[ṃ]chamahāsavbd[bd] alāṅkāra-virājamāna-śri-Salakhanāvarummādevō vijaya 1\(\text{tt}\) Kūyṣavapālīsa-
8 pāṭalāyām Chhiḍau[ḍ]a-grāma-nivāsīmaḥ samastā-prajā-lōkān=anyāmīs=cha yathāsthān-
ādhiśriṣṭiṃ samajñāpayati\(\text{tt}\) vō(bō)dhāyati\(\text{tt}\) cha \(\text{h}\) Viditam=astu [bha]v[ta]m\(\text{tt}\)
gra-\(\text{a}\).
9 mō=yaḥ=asambhiś=chaturāgrhātaviśuddha=\(\text{tt}\) sajassthala-sāmramadhuha-sagarttōshara-nidhi-
nikṣēp=ākāsātptati-su(sva)simāpyṛyanta-sa[v]a[ṃ]pāyaṃ[ṃ]pāyaṃṣprapakshikam-
10 gōchāraparyantaḥ \(\text{h}\) Kauśīla\(\text{tt}\)=gōtriya Kauśīla-Viśvāmitra-Dēvāra[ḥ]a(ta ?)-tri-pravāraya \(\text{h}\) tha \(\text{tt}\) Mādhava-prapaṇa[ṃ]trāya Māh[=]
[na]-putrāya [Rāma]sa(ś)rammaḥ vrā(brā)hmanāya ta-
11 thā Gā[thē]sā(ś)rammaḥ vrā(brā)hmanāya ta thā Dāmarasa(ś)rammaḥ vrā(brā)hmanāya 1 etēśamāḥ pada 2[1\(\text{st}\)] thā Mādhava-prapaṇa[ṃ]trāya[Ch[\(\text{y}]=]\(\text{h}\) putrāya\(\text{m}=-m=\)
[na]sā(ś)rammaḥ vrā(brā)hmanāya pada 1[1\(\text{st}\)] thā 1
12 Mādhava-prapaṇa[ṃ]trāya Pātīsā(ś)rammaḥ vrā(brā)hmanāya pada 1[1\(\text{st}\)] 
tha Mādhava-prapaṇa[ṃ]trāya Śrīdhara-putrāya Haridattasa(ś)rammaḥ vrā(brā)-hmanāya pa-
13 da 1 [1\(\text{st}\)] ēvaṃ grāmasya pada 5 [1\(\text{st}\)] saṃvatsaraṇāṃ sa(ṃ)vata(\(\text{t}\)) 1253
Mārygāraś-aśe kṛishṇa-pakṣaḥ saptaṃyām tithaṃ Sukra-śinā Kaka-
rēdyām sthānā snatvā Śivaḥ pra-
14 pūjya mātri(ta)pitṛar-sātmans=cha punya(nya)-yas(ō)[s]o-vivṛiddhayē et[\(\text{a}\)=]bhūyō vrā(brā)-
hmaṇāi(n)bhūyō grāmō=yaṃ sā(ś)sa[n]atvē\(\text{tt}\) pradattāḥ \(\text{h}\) Matv=ai[va]m=ā[ṃ]h[\(\text{a}\)=]
vidhēyibhūya sarvavām-ē-
15 tōbhyaḥ pradattavyaṃ 1 yat=prada[ṃ]tũ[ṃ] maṃ māṃ ājjāvasa(ś)ga[ṃ] sāmata-
ādibhir=api pālanīya(ṃ) rahastānyāya (yaṃ) chētī ti \(\text{h}\) Bhavanti chṣaṭra
punya-loklōkāḥ 1
16 Sarvān\(\text{tt}\)=ā[nt[n] bhāvinaḥ pārthiv-āṬrā[nt]bhūyō bhūyō yāchita 1 Rā ṭ samāṇ[y]=ē
yaṃ dharmmaḥ sa tu nṛpāṃ nākālō pālanīyaḥ \(\text{tt}\) \(\text{h}\) Śaṁkhaṃ\(\text{tt}\)
17 chha[t\(\text{e}\)=]itraṃ var-āśaṭ varā-vāraṇāṃ yam yamāṣya vi(chi)h[ṇ]i|[ṃ let=] Puraṇādara \(\text{h}\) V(a)bh[hu]bhīr=yaṃ tē ṭājaḥ[ā]
ṛjabhīṣ Śagar-āṭbhīṣḥ \(\text{h}\) yasya
18 yasya yadā bhūmīs-tasya tasya yan-bhūmīs yāḥ pratigṛhīmah[ṃ]hā[ṃ]ḥ yas[e]-cha bhūmīm prah-[m]hā[ṃ]ḥbhau taw punya(nya)-karmmacau
niyatau svargga-gā-

\(\text{fo}\) After this there is a sign of punctuation which has been struck out.
\(\text{fr}\) This passage and others below reveal the concluding words of Anuśṭabh's treatise.
\(\text{fr}\) Perhaps altered to padaḥ.
\(\text{fr}\) i.e. Salakhasana, wrongly for Śaṁkha.
\(\text{fr}\) Here and in other places belatedly to point out separately, this is superfluous.
\(\text{fr}\) Here the third person has been omitted through carelessness.
\(\text{fr}\) Metro, Sālīna.
2 Dhyan—aikatān[a*]—manasō vigata-prasā(sā)raḥ paśyanti yaṁ kīm-āpi nirmalam advitiyaṁ Ājnān-ātmane vighaṣṭ-ākhyiṁ
3 la-va(ba)ndhanāya tasmai namō bhagavatē Purushottamāya ॥ Jayanti॥ Vā(ba)—nāsura-mahī—lītahāya kach-āsya-chuḍāmaṇaṁ
5 tāraka-mahārājādhirāja—paramāvarta—paramamāhēṃāsva(vra)ṣa-śrīmad—Vāmadēva—pāṭu—ānu-
dhyāta[2*] paramaḥṣatāraka-mahārājādhirāja—paramāvarta(va)pa-ramaṁhēśvaram-Trijkalingādhipati-nīva-bhuj-ōpārijitāśvapati-gajapati-naraṇapati—rājatrayāadhipati-śrīvat-Trīkāliyavarmmadēvavai-kaḷayā#
8 ṇīyāḥ vivu(bu)dhā dig-vid-vivād-dhānīka-sāvaita-bhavana-tulita-ganamamān-dalāḥ vāpī-kūpa-taḍāg-ōttamagadāvatayatanaprap-ā
lōkan-āśvāsta-pāntha-sārtha-vīṣrāma-bhūmiḥ ghanavana-giri-gahvar-ōdara-dīr-sarala-tara-la-tala-tamāla-saṅkalps[=]ta-sī
9 mūntāḥ vividha-vēda-dhvanī-dhavasta-samastakalmashaḥ ॥ Kakarōḍikā nāma nagari ॥(II) Ėtasāyām nagarāyām[=]Kaurava-vaiṇ[a*]—samudbhūto aśeḥa[=]guṇa
10 gaṇ-ālaṅkṛita-sārīrō dēva-dvija-guru-su(ṣu)ra[r]ah-ānuraktaḥ ativa śaktaḥ Pāravī-taptapamakṣaj-ārādhana-aikchitrakaḥ ॥ paramamāhē
dvāra-mahārāṇaka-śrī-Dhāhīlē-nām-ābhavat ॥(II) Tasya putrō vividha-vīyā-ṣīnōda-rasikaḥ kāminijānā-mānasā-rājāhaṁśaḥ
13 ṇīvita-jaga(tsek)riṭtih dalit-ārāti-varggaḥ prakāṣita-sauḥgrāma—sauḥ(r[au])ryaḥ ॥ Durjayaḥ nāma vā(rā)jyaśapatō bhubahā ॥(II) Ėṣy-atmajā dōrdanāda
19 kram-ākṛnta-bhūmāṅdalarḥ tu[m]udhajah-ramanag—vadana-ārāvindā—makarāṃda—[ma]hu-karaḥ din-anātha-manārath-ōdharaṇa-dhūraṇdharaḥ sadā Śiva
21 pād-ānuraktaḥ mahārāṇaka-śrī—Jayavarmmā—nām-āṣītaḥ ॥(II) Ėṣya sūnul sakala-kalēkva(kau)lita-tattvalḥ[7*] pratidālita-dṛipt-ārī—va
22 rggaḥ pratidīnā-dīyamāna—dāna-gita-kīrttiḥ Pār[vva]tīramāna—charaṇāvārinda—shat-
padaḥ mahārāṇaka-śrī—Vatsarāj[e] [ha]
22 bhūva ॥ Ėṭat-putraḥ samabhatat—saṣjan—ānāda—kārī vidvajjan—ōpānita-nītīśāstra-
ācārā—chārī saunādītaryada—ōdhdhata—Kāmīda
23 rpa—darp—āpahārī karatal-ākālita—ādhiṣyāmāṃkā—kōdaṇḍa—chaṅdīm—ākhaṃādi—ārāti—saṁ-
ghāḥ kāya-vāk-chītārādhita
25 Śanakara-charaṇa-yugal—āvamāṛkti—ōtāmāṇgāḥ mahārāṇaka-śrī—Salashanavarmma-
dēvō bhubahā ॥(II) Ėṭatājātah sa-
22 kala-jana—nayana—ānāuda—kārī ॥ dikchak-ākramāṇ—ōpānita—tṛṭhis—ārīṭhi-pathīkaś[=][a*]ṛtha[=] vīṣrāma—śaṃśī paśūdita-vīṃḍā sāna[(ma)da-pra-

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8 Metre, Vasantaśilākā.
9 Metre, Varāśastha.—The verse is taken from Bēra’s Kādambarī, Bo., Ed., page 1, v. 2. In the second Paṇa, the proper reading is Dādāya, i.e. Bēraṇa, not nachāya, nor, as the grant D. has it, krodaya.
10 Originally ṣabhdāy.
11 Here and in other places below, which it is unnecessary to point out separately, the sign of punctuation is superfluous.
12 The grant D omits this ēraṃ; and I believe that kram.—śasanam—ādhyāmādṛśad—ārāma is the right reading.
13 Read ṣītha.—
14 The grant D also has vāyopīḍā.
15 In the grant D the epithet prauḍha-tuṛag-dāgāhā-na—śaṃśī Priyaṃ(ṣa)ta—Rēvantaḥ is applied to the chief Kirtivarman.
16 This is the reading also of the grant D: but as that grant, below, in reference to another chief, has the epithet sakala-kāḷa—kāḷa—kāḷitakṛt, the right reading here may be sakala—kāḷa—kāḷita—tanaḥ (not—tattā).
The aksharas in these brackets have been struck out.

I have the name of the chief to be known as Kumarpāla or Kumarpāla, but the mistake in the most important name of the whole inscription appears extraordinary, especially as the inscription otherwise contains comparatively few mistakes. `Ya' is engraved for ra also in vijjāpatā, line 13.

This word might be read Vasa, but D has distinctly Vadhān. Here and in the following two lines there are several expressions which I am unable to explain. We have enclosed in square brackets every akshara, about the reading of which there can be any doubt.

Or pippala. According to the Dictionaries, pippala, as a masc., means 'the holy fig-tree,' and, as a noun, 'the berry of that tree.' In the present instance, pippala or pipala is perhaps related to pippa, pipplak, pipplita, 'an ant,' and may mean, therefore, 'an ant-hill.'

This word is here, and in the sequel, particularly clear in the impression, and it is not Kumārapa. I cannot anywhere find a Kumālapīya gōtra. Mandgalya we have, e.g., in the Śaivaśastra, line 13.

Read tripīra. This word is here, and in the sequel, particularly clear in the impression, and it is not Kumārapa. I cannot anywhere find a Kumālapīya gōtra. Mandgalya we have, e.g., in the Śaivaśastra, line 13.
This inscription is on two plates, of which the first is inscribed on one side only, and the second on both sides. The first plate measures about 12\(\frac{1}{2}\) by 9\(\frac{1}{2}\); and the edges of it are bent up all round into a rim which is from \(\frac{1}{2}\) to 1\(\frac{1}{2}\) high, so that the second plate, which measures about 12\(\frac{1}{2}\) by 9\(\frac{1}{2}\) can lie within the protection of this rim. The inscription is well preserved; and almost every letter is perfectly clear in the impression.—There is no ring-hole in either of the plates; and no emblem engraved on the plates.——The weight of the two plates is 182\(\frac{1}{2}\) tolas.—The average size of the letters on the first plate and in the upper lines of the first side of the second plate is between \(\frac{1}{2}\) and 1\(\frac{1}{2}\). Lower down the letters gradually become somewhat larger, and the spaces between the lines decrease so that the first side of the second plate holds six lines less than the first plate.——The characters are a nāgarī, written by an expert writer. Excepting kṣapī, the palatal and dental sibilants, the letters are very distinctly formed, and hardly to be confounded with another language is Sanskrit, and on the nature of the script.——In line 31 we have the unusual word chaṭuṣṭaṅgā, at the end of a compound, apparently in the sense of chaṭuṣṭaṅgā ‘a collection of four.’——In lines 31 and 32 the crude forms sāja, sajālāsthaḷaḥ, etc., instead of the customary Nominative, sajālāṣṭhaḷaḥ, etc.; in line 35 the Dātṛ Karava ṭaṁmāṇēbhyaḥ, for ṭaṁmāṇēbhyaḥ; in the wrong compound māṭripīṭhāḥ, for māṭripīṭhaḥ; and in lines 50 and 51 the Prākrit term visud.——As regards orthoepy, the signa for vā is except in bāḥvāva, lines 13, 18 and 21, and in the wrong brāhmaṇēbhyaḥ, line 33; the dental sibilant is used instead of the palatal sibilant in (for māheṣvara, māheṣvara), line 5,
Chêdi princes into the possession of the Chandella rulers. It was not that, unfortunately, most of the photolithographs of inscriptions in Vol. XXI. of the Archael. Survey of India are somewhat too trying to ordinary eyes, it might be possible to obtain from them some definite information regarding the history of the later Chandellas and their relation to the Chêdi rulers, for the name of Trailokyavarman occurs in the inscriptions E., G., and J. from Ajaygarh, and other inscriptions make mention of Chêdi and of its capital Tripuri. As it is, I can, for the present, only say that Sir A. Cunningham is very probably right, and draw attention to the singular fact that the titles of the Chêdi princes, including the reference to Vâmadêva, have here been simply transferred to a Chandella prince.

The contents of lines 7-28 of our inscription may be given in a very few words. In the town of Kakarêdika (line 10), so we are told, there was once a Mahrâbanaka, named Dhâhilla (line 12), born in the Kaurava vasâka. His son was the ruler Durjaya (line 13); his son, the Mahrâbanaka Shôjavarmadêva (line 15); his son, the Mahrâbanaka Jayavarman (line 17); his son, the Mahrâbanaka Vatsaraja (line 18); his son, the Mahrâbanaka Maharâbanaka Maharâbanaka Maharâbanaka Kumârapaladêva (line 21); his son, the Mahrâbanaka Harirajadêva (line 25); and his son, the Mahrâbanaka Kumârapaladêva (line 28). The town of Kakarêdika and all these chiefs, devout worshippers of Śiva, have each a string of high-sounding epithets applied to them, which do not furnish any information whatever.

In line 28-36 the chief Kumârapaladêva, who, it may be assumed, owed allegiance to Trailokyavarman, informs the people concerned that, on the above-mentioned date, he gave the village of Rêhi, in the Vadharâ pattalâ, to the Rûnas Sûmogô, Sûhâda, Mahâîta, Ramasîha, Sômivijhû, and Sûvantašarman, sons of the Rûnas Añavapâla, son's sons of the Thakkura Lâha, and son's sons of the son of the Thakkura Sélhâ, Brâhmañ, who followed the Yajurvedâ, who were of the Manûdlâya gotra, and whose three pravaras were Manûdlâya, Ângirasa, and Bârhaspatya. The village was bounded on the north by Haladû, on the east by the pippalâ (or pipyalâ) of Pâvâpasalâka, on the south by Nandâjharâ and madhâka trees, and on the west by Vâdasamâghalikâ (?); "in the middle of the village (there were)———(?) and mango trees, a pond and madhâka trees; also in the village four lotus-pools." There are several expressions in lines 30 and 31, concerning the boundaries of the village and the objects given together with it, which I do not understand; and I am unable to identify any of the places mentioned.

Lines 36-44 contain the usual admonition to protect the grantees in the possession of their property, and seven benedictory and imprecatory verses. And lines 44-49 add that this tâmaraka or copper-plate grant was drawn up (akâri) by the Kâyastra Muktasimihâ, "by whom the reign of the child-prince was made a prosperous one and his fame spotless"; and that it was written by Mâlādhrâ, the son of Śripati, grandson of Mahâpati, and great grandson of Sômallâ; engraved by the artisan Ajayasimhâ and by Pratapasisimhâ; and acquired by the Rûnas Sûvanta.

The second side of the second plate, lines 50-55, contains the name of the six donees, the Rûnas Sûvanta, Sûmogô, Sûhâda, Mahâîta, Ramasîha, and Vîlhûka, as they are called here, each followed by the word visâ and certain figures, apparently intended to indicate the extent of the proprietary right of each donee in the estate granted to them.}

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**TEXT.**

First plate.

1 Óm* ä om siddhiḥ || Nirggannaṁ* vyâpakaṁ śāntaṁ* śivaṁ parama-kârpaṇāṁ bhâva-grāhyanām paraṁ jyōtis-tasmiṁ sad-Vra(gra)hmane namāḥ ||

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* ib. plates xiii., xiv., and xv.

* According to the definition of the term bina, given in Sir H. M. Elliot's Supplementary Glossary, Vol. II., p. 26, the total of these figures should amount to 30, and this is actually the case in the grant D below. In the present grant, the total of the first figures following upon the word visâ is only 18; and I conclude therefore that the second figure 2, indicates a subdivision of 30 and that 12 of these minor portions were equal to 2/30 or 1/15 of the estate granted.

* From the impression.

* Expressed by a symbol.

* Metre, Sûka [Anuštubh].

* Instead of śāntaṁ, the grants B and D have nityom.
2 Dhyān*–aikatān[a*]–manasā vigata-prāśa(sā)rāḥ paśyanti yaṁ kīṁ-sūpi nirmalam= 
advityaṁ | jñān-ātmānaṁ viṣhāṭ-ākhi-
la-va(ba)ndhanāya tasmai namō bhagavatō Purushottamāya || Jayanti** Vā(ba)-
ṇāsura-mauli-lālitaḥ kach-āśya-čchāmāma,

3 nī-chakra-chumvi(mbi)ṇaḥ | sur-āsur-ādhiṣa-śikhānta-āśayino bhava-čchhidas= 
Tryamva(nba)ka-pāda-pānā(mō)yaḥ || Svastī[ī*] Paramabha-
ṭāraka-mahārājadhirāja-paramēsvara - paramamāhēsā(śya)ra-ārāya-śāmad- Vāmadēva - pād-ānū-
dhyāṇa" || paramabhaṭārakā mahārājadhirāja-paramēsvara-va(pa)-

4 ramamāhēśvara-Trikaliṅgādhipati-nīja-huñj-oparjīj-āśva-pati-gajapati - narapati - rājatra-
ādhipati-śrīmat-Trailōkya-vamadēvamādyā-kālaya-

5 ṇa-vijaya*–rājya* 11) Asty-anēka-guṇa-grāma-dhāma-ta[ṛn]a-panna-mahā-brha[ma]-brha-
maṣa-janita-śram-ōpāsram-āśram*–āsambhūram*=[a*]rāma-rama-

6 niyā | vivu(bu)ḥa dig-vidita-vividha-dhanikajana-dhavalita-bhavana-tulita-gaganamaṇ-

7 dāla | vāpī-kūpa-tadājg-ōttumgadēvatāya-stama-prap-

8 lōkan-āsvāṣita-pāntha-sārtha-viśrāma-bhūmiḥ | ghanavana-giri-gahvar-ōdara-dārśar-sarala-

taralata-tāla-tamāla-saṃsūkli[ṛta]-śi-

9 māntā | vividha-vēda-dhvani-dhva-stama-samata-kalmahā | Kakařeqīka nāma [gauri 11) Ėtasây ānagrayaṁ Kaurovava(mba*–)samudbhūto aśēśa.-guna-

10 gaṇ-ālakṣkita-śarōḍ ādeva-dvīja-guru-ṣu(ṣu)śar[ṛ]u[ṛ]ja-anuraktaḥ | ativa śaktaḥ | Pārvv-at-
pādpamāṇika-ārādhan-āikatīṭaḥ | paramamāhē-

11 śvara-mahārāṇaka-śri-Dehihila-nāma-ābhatvat 11) Tsaya putro vividha-vidyā-vinōda-

12 raisiḥ | kāminijanā-mānasā-rājāhaṁsāḥ,

13 vidita-jaga(ṛk)[k]ārttib | dalit-ārati-vargaḥ | prakaṭita-saṅgrāma-sau[sau]ryaḥ | Durjyō | nāma vā[r]ṛjyapālī babhūva 11) Ėsya-ātmājō dōrdhaṇa-

14 chanḍīṁ-āṛjita-bhūpa-bhūmi-vidhūtya[ṛ]a[ṛ]a[ṛ]hṛta-va[vi]-jñāna-vilās dūrdhṛha-rípua-pa(va)na-
dahanā-dāvānāla lalita-yuvatiya-ānāmā-śāmā-dīrhaḥ 11) prau̲dh̑a-

15 turag-āva(pa)ga-va[ṛ]jāvagahaṇa-vidānvi(mbi)ra-Rōvanat[ṛ]a 11) mahārā[ṛy]a-śr[ā]-Shōja-
vārmmadēvō dina[kṛ]de[v]-ābhavat 11) Ėtad-ātmajō nīja-vi-

16 kram-ākrānta-bhūmaṇḍalāḥ | tu(m)[nu]jgadha-rāmaṇ-ārāvinīdha-makaraṇa-[ma]dhu-

17 karah[ṛ]a din-aṇāth-mahārāṇa-ōṅdhaṇaḥ dhurāṇdhaṇaḥ sādā Śiva-

18 pād-anuraktaḥ | mahārāṇaka-śrī-Jaya vārmnā-nāma-siṭa(ṛ) 11) Ėsya sūnuḥ sakala-kaṇ-

19 kala[ka]lita-tatvaḥ 11) pratidita-dripti-ārī-va-


21 bhūva 11 Ėtad-putraḥ samabhavat-sajjan-ānauṇda-kāri | vidvaijan-ōpānita-nitiśāstr-

22 ačchara-čhari | saṃudrāya-darp-śādha-kaṇḍa-

23 rpa-śādha-arhar | karaṭal-ākali-ādhiṣy-ōddamanda-kōdanda-chanḍīṁ-ākhaṇḍī-ārati-saṃ-

24 ghāḥ | kāya-śāch-śāč-rañčhaṁta-

25 Śaṅkara-charṣan has-yugal-āvanumṛkṣit-āttamāṅgah 11 mahārāṇaka-śrī-Salashanavarm-

26 dēvō babhūva 11) Ėtad-mājī jātah sa-

27 kala-jana-nayan-ānauṇda-kāri | dīcchak-ākramaṇ-ōpānita-tṛthi-ārthi-pathika-s[a*]ṛtha. 11) viśrāma-saṭṣiḥ | paṃḍita-vṛṇīsān-śān[a]m[ā]da-pra-

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* Metre, Vasantaśīlāka.
** Metre, Vasantaśīlāka.—The verse is taken from Beke’s ‘Kādambarī,’ Bo. Ed., page 1, v. 2. In the second Pāda, the proper reading is Daśaṇa, not kāchāṇya, nor, as the Grant D. has it, kavāṣya.
*** Originally ‘ādhyāt.’
*** Here and in other places below, which it is unnecessary to point out separately, the sign of punctuation is superfluous.
**** Originally ‘vījaya.’
***** The grant D. omits this śārma; I and believe that śram-ōpānita-dămābhindm-ārāma is the right reading.
****** Read ‘śāhā.’
******* The grant D. also has vījya-paṭī.**
******** In the grant D. the epithet prauha-turag-vagadaṇa-va-śānvi(mbi)ra-Rōvanat[ṛ]a is applied to the chief Kṛtivarna.
********* This is the reading also of the grant D.; but as that grant, below, in reference to another chief, has the epithet sakala-kalā-kalita-kalidaṇaḥ, the right reading here may be sakala-kalā-kalita-kalidaṇaḥ (not -tañkā).
********** This word might be read sarva; but the grant D. has sāriha.
FOUR REWAH COPPER-PLATE INSCRIPTIONS.

23 kaţita-guna-gráma-yógya-déya-dáyī | sat-pátr-ópantha-nitishu-vyavahára-karṇādáháraḥ | vidagdhá-vanitá-parimalita-

24 vividhá-surahta-vyáparah | karpúra-dhólí-dhavalita-púgaphala-[pha ṣya][r] | sattat-ápúrita-

25 kha- sharpen óddhata-vairi-varggaḥ | mahárápaka-srí-Harájádédó | Harir = asit || Étad-

26 jháta-tat[ṣ]yaḥ | Parvavataputriká-priya-charanakamala-samarádhana-tatparaḥ | gô-hiranya-

Second plate; front side.

27 prakhyá(ksha) lita-vámêta-kara-prakòsthāḥ | dórëddanda-chandimá(ma)-viahájñita-ripu-

28 cha-kalasa-kumínkum-ákshita-vakshásthalaḥ | mahárápak-sr[1]-Kumávapaladévó vi-

29 palákasya pippaláṃ | simā | dakshhipasyáṃ disi(si) | Vadhára- pattaláyāṃ | Róti-gráma-niváśinaḥ | samastá-pra-

30 mè dharmáshána[ñga]jú | ámurāś-cha | vápi madhukáśa-cha | tathá grámé-

31 yáyu(ju) | vréviihipáya | vēda-védadángā-parágebhyo | bráma-páybyaḥ | svaha-svadhá-

32 sa-lavaya-trīṇa-pakshi-mi(ni)kśhépadhana-gocharápanyataḥ | Mañjújilya-gotrebbhyāḥ | Mañjújilya- Ángirasá-Vá(bá) rhaspatya-trí pravar[jé]bháya

33 thákura-srí-Láha-paurtrebbhyāḥ | rántu-srí-Āna[va]pála-pútrebbhyāḥ | rántu-srí-Sámgá

34 láha | Maháita | Kamashá | Sómivi-

35 jhú | rántu-srí-Sávantaśarmanebyáṣa-cha | saptanavya-adhíkā dvádasá-sata-

36 sannidhan mátríprtrór-sámanas-cha | puñya-yásô-viyároddhyáḥ | sá(sá) sanatsvá-

37 ch-ápi dharme-niratá bhuví bhávi-bhúpáḥ | tē pálayanu mma dharmam-idaṃ | samastáṁ tēśháṁ viráchtá oṃ mahá-ajálarjēśa murdhāni [ni][n]

38 Yáitá | yátā mahábhujah kahitíma|má bhúyê|pi yásyantí tê | nó yátā na cha

39 dhará | Rámo Dása(ṣa)rathí Rágh-úttama-k[u*]śa| samyáchaté bhúmipán matvá-

40 rtayaḥ | Va[ba]hubbhír|vasvadad bhukta rájabhíh Sagar-ádiabhíh | yasya yasya

41 svayaṁ kárayitub paróča chítte[na] tushṭe[na] | tathā-númamantuḥ | sáháyya-kartuṣa-cha

42 vadanti | Bhúmiṃ | yāḥ pratigrinbha(hp)ti yās-cha bhúmí prayachchhah | ubhau

"The aksharas in these brackets appear to have been struck out."
"Read Shámshkha, i.e., Kártikáya.

"I believe the name of the chief to have been Kumávapaláda or Kusápadá, but the mistake in the most im-
portant name of the whole inscription appears extra-
ordinary, especially as the inscription otherwise contains com-
paratively few mistakes. Yá is engraved for ra also in
váyá, pá, and so on.

"This word might be read Váserd; but D has
distinctly Vadhára.

"Here and in the following two lines there are sev-
eral expressions which I am unable to explain. I have
enclosed in square brackets every akshara, about the
reading of which there can be any doubt.

"Or pippalu. According to the Dictionaries,
pippala, as a masce, means 'the holy fig-tree,' and, as a

neut., 'the berry of that tree.' In the present instance,
pippala or pippala is perhaps related to pipala, pipplaka,
pipplika, 'an ant,' and may mean, therefore, 'an ant-hill.'"

"This word is, here and in the sequel, particularly
clear in the impression, and it is not Kauśánapa. I can-
not anywhere find a Mañjújila gōtra. Mandalya we
have, e.g., in the Áśvadáyana-sautásutta xi.2, 13.

"Read tripéra.

"Read mādhavirāchá

"Metro, Áshanatithá

"Metro, Sárdolavikránta.

"Metro, Anushñubhù."
Dattāṁ para-dattāṁ va yō harēt(ta) vasu[sthā]rāmā; sa vishyā(ṣhthā)yāṁ
krīmśrāḥ-bhūtāḥpitṛiḥ sāhā maṣjāyī || Gām-eṣāṁ svārṇām-eṣāṁ
mu(n)ḥ bhūmēr-asyaḥ eṣām-aṃgulām; harān-narākam-āyātī yāvad-āhūtasaṃplavaḥ ||
Rājaṁeṁ yēna śīrōn-akāri niṣpatēḥ praṇāhita ya-;
śo nirmalaṁ yō va dharma-kathā-rater-anudinaṁ viśrāma-bhūmiḥ paraṁ(rā) ||
kāyasthaṣya vibhūtayaḥ pratidinaṁ yasyārthi-;
ne nirmitā[śr]eṁ tēn-ākāri vu(bu)dhēna tāmvr(a)kam-idaṁ śrī-
Muktasimēna vai || Likhitau[ś]e Mālādharēga-aivaī(ṇ) tāmvr(a)kam-śrāvaṁ pu-
ṇya-varddhaṇaḥ || sukha-santāma-siddhyarthāṁ śubhaṁ Śrīpati-sūnuṇaṁ || Sōmalla-
prapātrēgā paṇtrēnā Ma-
hīṭeḥ putrēgā Śrīpatēś-tāṁvra(mṛa)m liṅkitaṁ Mālādharēga vai || Utkīrtiṇaṁ
silpinā A-
jayasiṁhēna Pratapasiṁhēn-āśi || Upārjitaṁ rānta-Sāvantēna ||

Second plate; second side.

D.—Copper-Plate Grant of the Mahārāṇaka Harirājadēva.

The (Vikrama) year 1298.

This inscription, again, is on two plates, of which the first is inscribed on one side only, and the second on both sides. The arrangement of the plates is the same as in the case of grant C. The first plate measures about 11 1/2" by 7 3/4"; and the edges of it are turned up all round into a rim about 1 3/4" high, within which lies the second plate, measuring about 11 1/2" by 7 3/4". In addition to this, thin strips of copper about 1/2" broad are fastened by rivets all round the edges on the front side of the second plate. The inscription is well preserved; and there are only a few letters the actual reading of which is at all doubtful in the impression.—There is a ring-hole in the lower part of the first plate; and another in the upper part of the second. But the ring, with any seal that may have been attached to it, is not now forthcoming.—The weight of the two plates is 174 1/2 tolas.—The average size of the letters is about 1/4". The characters are Divānāgari; and the language is Sanskrit. Both the writer and the engraver have done their work carefully, and the inscription therefore contains a rather large number of mistakes of grammar and orthography.

As the inscription, down to line 28, in the introductory verses and the epithets applied to the town Kakarējikā, and to the several chiefs mentioned, and also in the imprecatory verses, from line 36 to line 45, agrees very closely with the inscription C, it would be useless to publish its full text. The extracts which will be given below, contain everything which may be at all important.

Beginning with the words “Om, success!” and the same verses in honour of Brahman, Purushottama, and Tryambaka, which occur at the beginning of the inscription C, followed by the word seasti, the inscription refers itself, in lines 4 and 5, to “the reign of victory of the Mahārāja, the illustrious Trailōkyaśālī, endowed with the three kingly titles commencing with paramabhāṣṭāraka” (i.e. paramabhāṣṭāraka mahārājāḥdhirāja paramēśvara)”; and the inscription is dated, in line 36, “in the month Māgha, the year 1298,” expressed by decimal figures only, and corresponding, as a year of the Vikrama era, to A.D. 1240-41. As this date is only one year later than that of the inscription C, I follow Sir A.

Metre, Śārdaśāvikrāṭita.
Metre, Śālīka (Anushṭubh); and of the following verse. Both verses offend against the metre.

See Mr. Fleet’s note in Journal Bombay Branch Roy. As. Soc., Vol. XVI. p. 112; and Archæol. Survey of India, Vol. XI. plate xcviii, inscription from the pillar at Bēlkāra.
Cunningham\(^2\) in regarding the prince Trailökyamalla to be the Chandölla Trailökyavarmadöva of that inscription.

In lines 5-18, our inscription furnishes the same genealogical list of the Mahäränakas of Kakarödikä, from Dhähilla to Vatsaräja, which is contained in the inscription C. From lines 18-29 we learn that Vatsaräja had two sons, the Maharänaka Kirtivarman, and the Maharänaka Salashaçavarmadöva; and that the latter again had two sons, the Maharänaka [V]äha[da] varmadöva, and the Maharänaka Hariräjadöva.

In lines 29-36, the last of these chiefs, Hariräjadöva, informs the people concerned that, at the time mentioned, he gave the village of Agasëyi, in the Vadharä pattalö (mentioned also in the inscription C), to the Räutas Sängë, Sähaça, Mahäditya, and Sämanta, sons of the Räuta Añavä, and to Rämäsiinä, son of Kiritä, son’s sons of the Thakkura Lähada, Brähmanas of the Mauñöläya götra, and whose three parvaras were Mauñöläya, Aigiräsì, and Bärhaspatya. The estate granted is stated to comprise 20 visudä, of which 2 were given to Sängë, 4 to Sähaça, 3 to Mahäditya, 8 to Sämanta, and 3 to Rämäsiinä. With the exception of Vijnäka, who is omitted here, the donees are the persons mentioned as donees in the grant C.

Lines 36-45 contain the same benedictory and imprecatory verses which are given in C, only differently arranged; and lines 45-48 add that this tamraka or copperplate grant was written by the karanäka, or writer of legal documents, the Thakkura Udayasiinä, son of Tanapasiinä, grandson of Kamalasiinä, and great grandson of Sömla, born in the family of the Mahäthakkura Dhärësvära; and engraved (unmilitiam) by the son of Kükëin, the grandson of the worker in iron Gän gö.

The difficulty presented by this inscription is that it purports to record a grant, made in the [Vikramä] year 1298 by the chief Hariräjadöva, while, from the preceding inscription, it would appear that Hariräjadöva already in 1297 had been succeeded by his son Kumärä-

päläöva. If the document D be genuine and its date correctly given, it might possibly be suggested that Hariräjadöva was alive in 1297-1298, and had permitted his son, Kumäräpäläöva to share in the management of his state, or made over to him a portion of his dominions.

But such a suggestion could hardly be reconciled with the statement in the grant C, according to which “the reign of the child-prince (Kumårärälädöva) was made a prosperous one” by Muktaśiinä, and which appears distinctly to intimate that Kumärärälädöva succeeded to the government of Kakarödikä, while he was still a child.

The inscriptions C and D furnish the following genealogical list of the Mahäränakas of Kakarödikä:

1. Dhähilla.
2. Durjayä.
5. Vatsaräja.


[Vikramä S. 1298.]


[Vikramä S. 1297.]

Of these, 4, 5, and 6 are mentioned also in the inscription A., with the date [Chödi-] Samvat 926 = A.D. 1175 for 6, Kirtivarman.—And the inscription B. has the names 1, and 4—7, (with the date [Vikramä-] Samvat 1253 = A.D. 1195 for 7, Salashaçavvarman, or Salashaçavvarman, or Salashaçavvarman), while, in the place of 2 and 3, it has the three names Väjäka, Dändäka, and Khöjäka. Of these, I feel no hesitation in identifying Khöjäka with 3, Shójavarman, and I think it probable that Väjäka and Dändäka were two brothers, of whom one was also named Durjayä.

**EXTRACTS FROM THE TEXT.**

First plate.

1 Íñm siddhiha 1100

4 Ṣvasti(ši) 1 Paramabhañtērak-étātāi-rā


\(^3\) From the impression.

\(^100\) Here follow the same three verses in honour of Brahman, Vishṇu, and Śiva, which are contained in the grant C.
Thus thinking, the eight thieves ranged themselves at the side of the four legs of the cot, and, without the slightest shaking, removed the cot with the sleeper on it outside the town. Their joy in thus bringing away their enemy was very great, and, not fearing for the

105 Read Pârvatâ. 110 Read prádatta iti.
106 Read truṣṭhâ†ta. 111 Read prâvañjâkar-, and compare note, Vol. XV. p. 10, note 55.
112 The last figure appears to be undoubtedly 8, as it was read by Sir A. Cunningham: but the figure 8 is differently formed above, in line 55.
113 Here follow the same beneficent and imprecatory verses, which are found in the grant C, but differently arranged.
safe custody of their prisoner, they marched to their cave. Meanwhile Chandralekha was not idle on the cot. The way to the jungle was through a long and fine avenue of mango trees. It was the mango season, and all the branches were hanging with bunches of ripe and unripe fruit. To make up for her weight on the cot she kept plucking mango bunches and heaping them on it, and as soon as a quantity which she thought would make up her weight was upon the cot, she without the slightest noise took hold of a branch and lifted herself up from off it. The thieves walked on as before, the weight on their heads not apparently diminishing, leaving our heroine safely seated on a mango branch to pass the few remaining ghatikas of that anxious night there. The thieves reached their cave just at daybreak, and when they placed their burden down their eyes met only bunches of ripe mangoes, and not the lady they looked for. “Is she a woman of flesh and blood or is she a devil?” asked the chief of the next in rank.

“My lord! She is a woman fast enough, and if we search in the wood we shall find her,” replied he, and at once all the eight robbers after a light breakfast began to search for her.

Meanwhile the morning dawned upon Chandralakha and let her see that she was in the midst of a thick jungle. She feared to escape in the daytime as the way was long, and she was sure that the robbers would soon be after her. So she resolved to conceal herself in some deep ambush and wait for the night. Before she left the cot for the mango branch she had secured in her hip the small knife she had made for herself out of the robbers’ rod and the purse containing the materials for chewing betel; and near the tree into which she had climbed she saw a deep hollow surrounded by impenetrable reeds on all sides. So she slowly let herself down from the tree into this hollow, and anxiously waited there for the night.

All this time the eight thieves were searching for her in different places, and one of them came to the spot where Chandralakha had sat in the tree, and the dense bushes near made him suspect that she was hidden there; so he proceeded to examine the place by climbing up the tree. When Chandralakha saw the thief on the tree she gave up all hopes of life. But suddenly a bright thought came into her mind, just as the man up above saw her. Putting on a most cheerful countenance she slowly spoke to him: “My dear husband, for I must term you so from this moment, since God has elevated you now to that position, do not raise an alarm. Come down here gently, that we may be happy in each other’s company. You are my husband and I am your wife from this moment.”

So spoke the clever Chandralakha, and the head of the thief began to turn with joy when he heard so sweet a speech, and, forgetting all of her previous conduct to himself and his brethren, he leapt into the hollow. She welcomed him with a smiling face, in which the eager heart of the robber read sincere affection, and gave him some betel-nut to chew and chewed some herself merrily. Now redness of the tongue after chewing betel is always an indication of the mutual affection of a husband and wife among the illiterate Hindustani people. So while the betel-leaf was being chewed she put out her tongue to show the thief how red it was, letting him see thereby how deeply she loved him: and he, to show in return how deeply he loved her, put out his tongue too. And she, as if examining it closely, clutched it in her left hand, while with her right hand in the twinkling of an eye cut off the tongue and nose of the robber, and taking advantage of the confusion that came over him she cut his throat and left him dead.

By this time evening was fast approaching, and the other seven robbers, after fruitless search, returned to their cave, feeling sure that the eighth man must have discovered Chandralakha. They waited and waited the whole night, but no one returned, for how could a man who had been killed come back?

Our heroine, meanwhile, as soon as evening set in, started homewards, being emboldened by the occasion and the circumstances in which she was placed. She reached home safely at midnight and related all her adventures to her mother. Overcome by exhaustion she slept the rest of the night, and as soon as morning dawned began to strengthen the walls of her bedroom by iron plates. To her most useful pocket-knife she now added a bagful of powdered chilies, and went to bed, not to sleep, but to watch for the robbers. Just as she expected, a small hole was bored in the east wall of her
bedroom, and one of the seven robbers thrust in his head. As soon as she saw the hole our heroine stood by the side of it with the powder and knife, and with the latter she cut off the nose of the man who peeped in and thrust the powder into the wound. Unable to bear the burning pain he dragged himself back, uttering "ňa, ēna, ēna, ēna," having now no nose to pronounce properly with. A second thief, abusing the former for having lost his nose so carelessly, went in, and the bold lady inside dealt in the same way with his nose, and he too, dragged himself back in the same way, calling out "ňa, ēna, ēna, ēna." A third thief abused the second in his turn, and going in lost his nose also. Thus all the seven thieves lost their noses, and, fearing to be discovered if they remained, ran off to the forest, where they had to take a few days' rest from their plundering habits to cure their mutilated noses.

Chandralékha had thus three or four times disappointed the thieves. The more she dis. appointed them the more she feared for her own safety, especially as she had now inflicted a lifelong shame on them. "The thieves will surely come as soon as their noses are cured and kill me in some way or other. I am, after all, only a girl," she thought to herself. So she went at once to the palace and reported all her adventures with the eight robbers to the prince, who had been her former class-mate. The prince was astonished at the bravery of Chandralékha and promised the next time the robbers came to lend her his assistance. So every night a spy from the palace slept in Chandralékha's house to carry the news of the arrival of the robbers to the prince should they ever go there. But the robbers were terribly afraid of approaching Chandralékha's house after they came to know that she had a knife made out of the boring-rod. But they devised among themselves a plan of inviting Chandralékha to the forest on the pretence of holding a náčh and sent to her house a servant for that purpose. The servant came, and, entering Chandralékha's house, spoke thus to her: "My dear young lady, whoever you may be, you have now a chance of enriching yourself. I see plainly from the situation of your house that you are one of the dancing-girls' caste. My masters in the forest have made a plan to give a náčh to their relatives on the occasion of a wedding which is to take place there the day after to-morrow. If you come there they will reward you with a karój of mohars for every nimisha (minute) of your performance." Thus spoke the servant, and Chandralékha, knowing that the mission was from the thieves, agreed to perform náčh, and, asking the man to come and take her and her party the next morning to the forest, sent him away.

In order to lose no time she went at once to the prince and told him all about the náčh. Said she, "I know very well that this is a scheme of the thieves to kill me, but before they can do that we must try to kill them. A way suggests itself to me in this wise. To make up a náčh girls' party more than seven persons are required. One must play the drum; a second must sound the cymbals; a third must blow upon the nágavara pipe, etc., etc. So I request you to give me seven of your strongest men to accompany me disguised as men of my party, and some of your troops must secretly lie in ambush in readiness to take the robbers prisoners when a signal is given to them."

Thus Chandralékha spoke, and all her advice the prince received with great admiration. He himself offered to follow her as her drummer for the náčh, and he chose six of the ablest commanders from his army, and asked them to disguise themselves as fiddlers, pipers, etc., and he directed an army of a thousand men to follow their footsteps at a distance of two ghatikās' march, and to lie in ambush near the place where they were going to perform the náčh, ready for a call. Thus everything was arranged and all were ready by the morning to start from Chandralékha's house.

Before the third ghatikā of the morning was over, the robbers' servant came to conduct Chandralékha with her party to the forest where the prince and six of his strongest men disguised as her followers, were waiting for him. Chandralékha with all her followers accompanied him, but as soon as she left her house a spy ran off to the army, which, as ordered by the prince, began to follow her party at a distance of two ghatikās.

After travelling a long way Chandralékha and her party reached the náčh pavilion at about five ghatikās before sunset. All their hosts were without their noses, and some still had their noses bandaged up. When they saw
that Chandralekha’s followers had a fine and prepossessing appearance, even the hard hearts of the robbers softened a little.

"Let us have a look at her performance. She is now entirely in our possession. Instead of murdering her now, we will witness her performance for a ghatikā," said the robbers to each other; and all with one voice said "agreed," and at once the order for the performance was given.

Chandralekha, who was clever in every department of knowledge, began her performance, and by the most exquisite movement of her limbs held the audience spell-bound, when suddenly tā tāi, tōm clashed the cymbals. This was the signal for the destruction of the robbers, as well as the sign of the close of a part of the nāch. In the twinkling of an eye the seven disguised followers of the dancing-girl had thrown down the thieves and were upon them. Before the servants of the robbers could come to the help of their masters the footsteps of an army near were heard, and in no time the prince’s one thousand men were on the spot and took all the robbers and their followers prisoners.

So great had been the ravages of these robbers in and round Kaivalyam that, without any mercy being shown to them, they and their followers were all ordered to be beheaded, and the prince was so much won over by the excellent qualities of Chandralekha that, notwithstanding her birth as a dancing girl, he regarded her a gem of womankind and married her.

"Buy a girl in a bāsār" (kanniya kadaiyir kol) is a proverb. What matter where a girl is born provided she is chaste! And Chandralekha by her excellent virtue won a prince for her lord. And when that lord came to know of the real nature of his teacher, who was also the teacher of Chandralekha, he banished him from his kingdom, as a merciful punishment, in consideration of his previous services.

CORRESPONDENCE.

AN ORIGIN FOR THE WORD "GIPSY."

Str.—Numerous derivations of this word have been suggested from time to time: some very far-fetched.

In Appendix A to Vol. XIII, Part II. Bombay Gazetteer, p. 711 Mr. James M. Campbell has given an able summary of nearly all the then available information regarding the origin of the Gipsies, and his notes will serve as a valuable index for those who wish to study the subject minutely. But he, as well as other writers, appears to have overlooked one origin of the name Gipsy, which, if well-founded, is far more probable than any other which has yet been published. The derivation I refer to is contained in the following paragraph, which I quote from the Transactions of the Bombay Geographical Society, Vol. VI, page 89:—

"The origin of the Gypsies of Europe has been ascribed, with different degrees of probability, by various persons, to Egypt, India and the Western Coast of the Red Sea; but it appears to have been overlooked that the Amharic name for Egypt is still Giptzi, and for the natives of that country Giptzis. The same people (the Gipsies) are called Zingaros, or Zinganos by the Italians. The Persians apply the term Zangi to all the natives of the north-east portion of Africa, including the Abyssinians; thus, it is not improbable that these people emigrated from the Abyssinian Coast, acquired the name Gypsy or Giptzi from having entered Europe through Egypt, and that they were called Zinganos by the Italians and people of the adjacent countries, from the Persian name Zangi, an Ethiopian, an inhabitant of North-Eastern Africa." J. S. King.

MISCELLANEA.

CALCULATIONS OF HINDU DATES.

No. 13.

In the Muddyant copper-plate grant of the Bāna king Brvadhūvallabha-Malladēva-Nandivarman, from the Kālār District in

1 Remarks on the North-East Coast of Africa, and the various Tribes by which it is inhabited. By Lieut. C. P. Rigby, 16th Regt. Bo., N. L., March, 1843.

2 I have not my ink-impressions at hand to refer to.


But I satisfied myself at the time that there is at least no substantial error in the published reading.

3 Read uttara-kāla-dvayā Śak-ābdah pravarddhamānā ātmana-trayō-vinhātī varSHA.

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[August, 1888.

ąśukla-pakahē trayódāśyām Sōmavārē Aśvīnīyām nakshatra,-—" in the Śaka year two hundred, increased by sixty-one, in his own augmenting twenty-third year; in the Vilambin saṃvatsara, which is current; in the dark fortnight of Kārttika; on the thirteenth tithi; on Monday; under the Aśvīni nakshatra.

This gives us, for calculation, Śaka-Saṅvat 261, current according to the literal meaning of the text; the Vilambin saṃvatsara of the Sixty-Year Cycle of Jupiter; the month Kārttika (ordinarily October-November); the dark fortnight; the thirteenth tithi or lunar day; Sōmavāra, or Monday; and the Aśvīni nakshatra.3

As, however, some objection may be taken to the use of āśukla to designate the dark fortnight, and it may be urged that we should correct Kārttikāśukla into Kārttikā-śukla, the calculation will be made also for the same tithi in the bright fortnight. And the tithi in the dark fortnight will be calculated according to both the Pārśvaṭā and the Amānta arrangements.

By the Southern System of the Sixty-Year Cycle, the Vilambin saṃvatsara was coincident with Śaka-Saṅvat 261 current (A.D. 338-39); or as shown in the Tables, 260 expired. And for this year, with the basis of Śaka-Saṅvat 260 expired, the results, by Prof. K.L. Chhatrē's Tables are—(1) the Pārśvaṭā Kārttika krishṇa 13 ended on Thursday, the 28th September, A.D. 338, at about 21 ghūte, 11 palas, after mean sunrise at Bombay;—(2) Kārttika śukla 13 ended on Friday, the 13th October, at about 13 gh. 42 p.; and (3) the Amānta Kārttika krishṇa 13 ended on Friday, the 27th October, at about 45 gh. 28 p.

If it should be argued that the given year Śaka-Saṅvat 261 is to be taken as the expired year, in which case the given date belongs to Śaka-Saṅvat 262 current (A.D. 339-40), and the name of the saṃvatsara must be altered from Vilambin into Vīkārīn, the results are—(1) the Pārśvaṭā Kārttika krishṇa 13 ended on Wednesday, the 17th October, A.D. 339, at about 26 gh. 50 p.;—(2) Kārttika śukla 13 ended on Wednesday, the 31st October, at about 59 gh. 33 p.; and (3) the Amānta Kārttika krishṇa 13 ended on Thursday, the 15th November, at about 52 gh. 19 p. These results are in accordance with the statement of the Tables that, in Śaka-Saṅvat 262 current, the month Āsvayuja was intercalary, before Kārttika. On the assumption that, according to any more ancient system of intercalation, the intercalation was in some month after Kārttika, the results are— (1) the Pārśvaṭā Kārttika krishṇa 13 ended on Tuesday, the 2nd October, A.D. 339, at about 14 gh. 29 p.;—(2) Kārttika śukla 13 ended on Tuesday, the 18th September, at about 1 gh. 38 p., and consequently with the possibility that calculations by the Śiddḥantas themselves might make it end on the preceding day, Monday;— and (3) the Amānta Kārttika krishṇa 13 ended on Wednesday, the 17th October, at about 26 gh. 50 p., being of course identical with the Pārśvaṭā Kārttika krishṇa 13 of the previous calculation.

If it should be argued that we should take the Vilambin saṃvatsara of the Northern System, it was current, by the Tables, at the commencement of Śaka-Saṅvat 267 current (A.D. 344-45); and, by Mr. Sh. B. Dīkshīt's Tables, I find that it actually commenced in Śaka-Saṅvat 266 current, on Tuesday, the 1st November, A.D. 343, and it was followed, in Śaka-Saṅvat 267 current, by the Vīkārīn saṃvatsara, which commenced on Saturday, the 27th October, A.D. 344. The day on which the Vilambin saṃvatsara commenced, actually was the Amānta Kārttika krishṇa 13 of Śaka-Saṅvat 266 current; the tithi ending at about 52 gh. 51 p. This therefore, as the week-day was a Tuesday, disposes of another possible equivalent of the given date. But, in addition to this, the day on which the Vīkārīn saṃvatsara commenced was, approximately, Mārgaśīrṣa śukla 4 of Śaka-Saṅvat 267 current. Consequently the Vilambin saṃvatsara included, at its end, the whole month of Kārttika, both Pārśvaṭā and Amānta, of Śaka-Saṅvat 267 current. And the results, here, with the basis of 266 expired, are—(1) the Pārśvaṭā Kārttika krishṇa 13 ended on Friday, the 21st September, A.D. 334, at about 13 gh. 26 p.;—(2) Kārttika śukla 13 ended on Saturday, the 6th October, at about 44 gh. 12 p.; and (3) the Amānta Kārttika krishṇa 13 ended on Saturday, the 20th October, at about 53 gh. 36 p.

Thus, in no way whatever can the result of Monday, in accordance with the record, be obtained directly from the Tables. And there is only a possibility of a Monday in one instance; in which to obtain it, we must deliberately, and unjustifiably, alter the name of the given saṃvatsara from Vilambin into Vīkārīn.

These results, therefore, furnish the strongest possible corroboration of the opinion already expressed by me,7 that this grant is a spurious grant. Also, since the record evidently intends the Vilambin saṃvatsara of the Southern System, and since I have already shown, under No. 9 of,

3 As the record belongs to Mālār, in no case can the ending-time of the tithi be earlier than the time for Bombay.

these Calculations, that the Northern System was still used in Southern India up to A.D. 804, the fabrication of this grant cannot be placed earlier than the commencement of the ninth century A.D.

No. 14.

In the Tanjore copperplate grant of the Western Gaṅga king Arivarman, or more properly Harivarman, published by me in this Journal, Vol. VIII. p. 212 ff., with Plate, the date (lines 10 f., 18 f.) is—Śaka-kālā nav-ottara-shaṅ spokesperson śaṅ-tir eka-śata-gatēsuḥ 1 Prabhava-saṁvatsara-ākhaṇantarē Ṛgavī-nakṣatratrē Vṛiddhi-yogē Vṛisha-bha-laghu;—"in the Śaka era, when there have gone by one hundred years increased by sixty raised by nine; in the Prabhava saṁvatsara; on Bhṛguvāra, which is the new-moon tilthi of (the month) Bhṛguṇa; under the Ṛgavī nakṣatra; in the Vṛiddhi yoga; in the Vṛishabhā lagha.

This gives us, for calculation, Śaka-Saṁvat 169 expired, and 170 current (A.D. 247-48); the Prabhava saṁvatsara, current; the month Bhṛguṇa (ordinarily February-March); the new-moon tilthi, i.e. the fifteenth tilthi of the dark fortnight; and Friday. Also, the Ṛgavī nakṣatra; the Vṛiddhi yoga; and the Vṛishabhā lagha; but, in the face of the results for the weekday, I have not thought it worth while to get these details worked out.

By the Southern System of the Cycle, the Prabhava saṁvatsara was Śaka-Saṁvat 170 current (A.D. 247-48), in agreement with the record. In this year, however, with the basis of Śaka-Saṁvat 169 expired, the given tilthi, Bhṛguṇa kṛishṇa 15, ended according to the Pārśimaṇḍa northern arrangement of the lunar fortnights, on Saturday, the 12th February, A.D. 248, at about 13 ghritis, 8 palas, after mean sunrise, for Bombay; 2 and, by the Amānta arrangement, on Sunday, the 12th March, at about 48 gh. 11 p.

If it should be argued that the given year, Śaka-Saṁvat 169, is wrongly quoted in the record as an expired year,—in which case, however, the name of the saṁvatsara would have to be altered from Prabhava, the first saṁvatsara of one cycle into Kahan, the last of the preceding cycle,—then the given details have to be calculated, with the basis of Śaka-Saṁvat 168 expired, for 169 current (A.D. 246-47). In this year, however, the given tilthi ended, according to the Pārśimaṇḍa arrangement, on Sunday, the 24th January A.D. 247, at about 19 gh. 51 p.; and, by the Amānta arrangement, on Monday, the 25th February, at about 51 gh. 50 p.

If it should be argued that the details of the Śaka year are wrong, owing to a confusion between the Northern and Southern Systems of the cycle, and that we have to take the Prabhava saṁvatsara of the Northern System, then the given details have to be calculated, with the basis of Śaka-Saṁvat 175 expired, for 176 current (A.D. 253-54); since, by the Tables, the Prabhava saṁvatsara was current at the commencement of Śaka-Saṁvat 177 current; and, by Mr. Sh. B. Dikshit's Tables, it actually commenced in Śaka-Saṁvat 176 current, on Sunday, the 20th November, A.D. 253, considerably before the month Bhṛguṇa. In this year, however, the given tilthi ended, according to the Pārśimaṇḍa arrangement, on Sunday, the 5th February, A.D. 254, at about 23 gh. 12 p.; and, according to the Amānta arrangement, on Monday, the 5th March, at about 46 gh. 57 p.

In no way, therefore, can a Friday be obtained, as required by the record. And this result gives the strongest possible confirmation of the opinion expressed by me when editing this inscription, and previously by Dr. Burnell, 3 that this is a spurious record. For the reasons given under No. 13 above, in connection with the Mudyanur grant, the fabrication of it cannot well be placed earlier than A.D. 804. And Dr. Burnell's opinion was, that it should be referred to about the tenth century, A.D.

J. F. Fleet.

**HAKIM QAĀNĪ.**

Hakim QAĀNĪ is one of the most popular of the modern Persian poets. His name is Mirzā Habībullah, poetically styled QAĀNĪ. Originally the poet styled himself Ḥabīb, but was induced to change his takhallus to QAĀNĪ in honour of Aūktā Qān Mirzā, one of the sons of Husain 'Ali Mirzā, Shu’ja‘uddaulah, who specially patronized the poet. The biographical work called Ganj Shāyagān, 1 p. 362, calls his father Mirzā Abd-Ḥasan, poetically styled Gulshan, but the Majma‘ul-Fasēh, in the biographical notice of QAĀNĪ, calls his father Mirza Muḥammed 2

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1 Read nav-ottara-shaṁtya-adhir-aika-śata-gatēsu varahśa guṭlaḥa.
2 Whatever may be the opinion held as to the exact locality to which this record belongs, and as to the meridian for which the details quoted in it should be computed, of course the time will not in any instance be earlier than the time for Bombay.
3 South-Indian Palaeography, p. 34.
1 The Ganj Shāyagān is a biography of the poets who emigrated to the Sanr 'Āzam, Mirzā Aḥṣā Khan Nūrī; and was compiled in A.H. 1272 by Mirzā Taher, poetically styled Shī‘ārā, and otherwise known as the Dibācheh Nīqār. This work was lithographed at Tehrān shortly after it was compiled.
'Ali, and under "Gulshan" repeats this statement, its author adding that he knew Gulshan personally in Shíráz. The family apparently belonged to the Zanjehne tribe of Kermánsháh, the poet himself being born at Shíráz. Fátih 'Ali Sháh, appreciating his talents, gave him the title of Majídch-e-sháh-Sháh, which title was changed by Fátih 'Ali Sháh's successor to that of Hisánsánul-A'jam. Qáhání died in A.H. 1270, leaving an imitation of the Gultáštân of Sa'dl called Peršdán, in which he states that it was composed in A.H. 1252, when he was a few months short of 30 years of age. This work has been lithographed separately at Tebráz, illustrated, A.H. 1271.

The poet's complete poetical works, with the Peršdán has been lithographed at Tebráz 1274, 1277, 1293 and 1308. The complete works have been lithographed at Tabrız 1273, Bombay 1273, 1277 and 1298. The biographical notice from the Gwaj Shdygán is included in most of these editions. Biographical notices of the poet will also be found in the Nigardátán Subhán, p. 81, and in the Mhdúih Mhdvanjíyeh.

Included in most lithographed editions of the works of Qáhání is a collection of ghasels, by Mírzá 'Abbás bín Āghá Mshá Bóstámí, preceded by a notice of this poet, whose takhlús was Frághí.

Originally the poet called himself Maskín, but finding a patron in the Sháh-ud-dál, Huísain 'Ali Mirzá, by desire of that prince he adopted the nom de plume of Frághí, after the title of the prince's son, who was styled Frághí-ud-dál. Frághí Bóstámí, who is not to be mistaken for his distinguished contemporary Frághí Isfahání, was born at Kerdán in A.H. 1213 and died in A.H. 1274. His father, a courtier of the cruel founder of the Qájár dynasty—Āghá Muhammed Kháán—was elder brother of Fátih 'Ali Sháh's treasurer, Dášt 'Ali Kháán, Moýer-ul-Móamélk.

Besides the above, the lithographed Kallíyyát of Qáhání has also, bound up with it, some selections from the poems of one of Qáhání's patrons, Jelál-ud-dín Mirzá, poetically styled Jélá, and author of the epistle of Persian history, called Nánákh Khorasaní, lithographed at Tebráz, illustrated, in 3 vols., A.H. 1285-88, and also in Vienna. The publication of the diván of Qáhání and Frághí is due to this prince, and the edition of 1274 is known by his name.

Prefixed to Mulla Mánúd Khwándará's edition of Qáhání's works—dated Tebráz 1302—will be found the Treatise on Prosody called Hadáš-uss-Shrír of Rashíd Abrít.v.

A. S. J. C.

BOOK NOTICE.


This unpretending little pamphlet gives the brief history of a new and most interesting experiment now being tried in Madras.

Mr. T. M. Venkatesa Sastri, a devoted student of music, desirous of instructing the female youth of his native city in the art, being moreover urged thereto by friends and acquaintances, opened last year three schools for music for girls in Madras, all conducted on a small scale. But he was met at the outset with a peculiar prejudice:—The people of Mailapur (the locality of the largest school) did not approve of their daughters being taught music! However he persevered, and by the end of the year had 56 pupils in his schools.

The music apparently taught is not described, but it seems to have been mainly vocal: the parents insisting on their children learning only "religious and moral compositions." The dread of their becoming as dancing-girls if taught anything else, seems to peep out here. Small beginnings have, however, been made towards teaching instrumental music, especially playing on the víná.

It is moreover extremely gratifying to learn that, owing to the absence of books from which to teach his girls, the enthusiastic founder of these schools intends publishing primers and progressive works in Hindu music, and that he has almost completed a graduated series of textbooks.

It is to be hoped that this new departure in domestic education will not prove to be what is so expressively called in Hindustán shakhí kám, and die when its chief promoter can no longer guide it. But there can be no doubt that it is not yet out of its difficulties; for the accounts show that the expenditure was Rs. 339, out of which the founder gave Rs. 265; only Rs. 74 being received as fees; and nothing from his friends and sympathisers. Schools cannot live long on this principle.

In addition to his money Mr. Venkatesa Sastri has given his time very freely. And we give his experiment our heartiest greeting and our best wishes; for, not only will his teaching improve the girls fortunate enough to come under it, but it also, as hinted above, distinctly makes for domestic morality.

* See ante, Vol. XVI. p. 362.
THE chief difficulty in arriving at a final settlement of the true period to which we should refer the rise and duration of the Early Gupta power, was, that, according to M. Reinaud's translation of Alberuni's statements (see ante, Vol. XV. page 189), the establishment of the so-called Gupta era commemorated the extermination of the Gupta dynasty.

As Alberuni's further statements showed that the era,—the commencement of which is now known to have been in A.D. 320,—evidently dated from a point in or very close to A.D. 319, this translation seemed to fix that point of time for the termination of the Early Gupta sovereignty. And this is the view that was adopted by one class of students of the subject.

This rendering of the leading historical item, however, from the first attracted special attention; because of the prima-facie improbability of the fact that an era, specially named after a certain dynasty, should date from the downfall of that dynasty. And, from time to time, various attempts were made to find an explanation for it; and with very conflicting results.

That the true solution was to be found, not in wrong information given to Alberuni or in a mistake made by him in reporting correct information, but in an erroneous interpretation of his meaning, was first indicated to me by Mr. Rehatsek, who, in December, 1886, gave me, from M. Reinaud's published text, the following literal rendering of the crucial passage:—"(as regards) the Gupta era, it was, as is said, a nation wicked (and) strong; and when they perished, dating was made according to them." Such a rendering as this, would enable us to give to Alberuni's words a meaning perfectly clear and consistent with the usual order of things; viz. that the Gupta, though wicked and inferentially unpopular, yet had exercised so powerful a sway that, even when their dynasty came to an end, the era, that had been used by them, still continued to be used.

So also, somewhat later, Mr. H. C. Kay, translating the words by "dating was made by (or, according to) them," added the following remarks on the interpretation of them:—"The author's meaning is not clear. But, taking the words as they stand, I think they can most consistently be understood as signifying an adoption or continuation of the method of dating that had been used by the Guptas. The preceding words 'when they came to an end' suggest the possible meaning that the dating ran from that event. But it seems to me that this construction can be properly preferred, only if there be something else in the context, or in the known facts of the case, that would make it obligatory; or, at least, that clearly points to it."

The essential error in M. Reinaud's translation.—"the era which bears their name, is the epoch of their extermination,"—is due to the introduction of the word 'epoch,' which does not exist in the original text, and the use of which gives his translation a fixed obligatory meaning that, at any rate, a literal rendering of the original does not compel us to adopt.

And, in proof of this, I am glad to be able to publish the following transliteration, with interlinear word-for-word rendering and translation, which Prof. William Wright, of Cambridge, has been kind enough to give me, from Prof. Sachau's published text, of the original of the whole passage in question:

 TEXT AND LITERAL RENDERING.

\[
\begin{align*}
\text{\{ Wa-li-dhālikā } & \quad \text{a'raḍū } \quad \text{\text{'an-hā } \quad \text{wa-jā’ū \tik}} \\
\text{\{ And for this } & \quad \text{they have turned away} \quad \text{from them and have come to} \\
\text{\{ tawārīkh } & \quad \text{Shrī-Hrish } \quad \text{wa-Bigarmāditā } \quad \text{wa-Shaśā } \quad \text{wa-Bilāba} \\
\text{\{ the eras of } & \quad \text{[Srī-Harsha] } \quad \text{and } \quad \text{[Vikramāditya] } \quad \text{and } \quad \text{[Śāka] } \quad \text{and } \quad \text{[Valabhī]}}
\end{align*}
\]

1 Similarly, some thirteen years ago, Mr. Blochmann (see the Jour. Beng. As. Soc. Vol. XLIII. Part I. page 338) proposed to translate—"as regards the Guptakāl, they were, as is related, a people wicked and powerful, and when they were cut off it was dated in them (the era commenced?)."—This translation, however, is spoilt by the bracketed words "(the era commenced?)"; the use of which shows why Mr. Blochmann, though giving a translation capable of a totally different meaning, expressed himself as not able to see any fault in M. Reinaud's translation.
THE INDIAN ANTIQUITY. [September, 1888.

{ wa-Kúbita. Wa-ammā ta’rikh Balba
{ and [Gupta]. And as regards the era of [Valabhi]

wa-huwa saḥīb mādinat Balbah wa-hiya janūblyah ‘an
{ and he lord of the city of [Valabhi] and it south from

mādinat ‘Anhlwārah bi-ka’rib min thālāthīn jozhān fa-’inna

the city of [Anhila-vāda] by near to thirty [yōjana] behold

‘auwala-hu muta’akkhīr ‘an ta’rikh Shk̡ bi-mi’atāin
{ the first of it posterior to the era of [Śaka] by two hundred

wa-iḥdā wa-’arba’īn sanah. Wa-musta’milū-hu yada’sūn Shg-kāl
{ and one and forty years. And the users of it put down [Śaka]-era

wa-yankūsūn min-hu majmū‘ mukā’sub ‘as-sittah wa-murabbā‘
{ and lessen from it the sum of the cube of six and the square of

al-khamsah fa-yabzā ta’rikh Balba. Wa-khaba-n-hu ‘atīn
{ five and remains the era of [Valabhi]. And his history is coming

ff mauḍī’i-hi. Wa-ammā Gūbt-kāl fa-kānū kamā ḫīla
{ in its place. And as regards [Gupta]-era they were as is said

kauman ‘ashūrān ‘akwiyyā’a fa-lammā ‘inḵaraḏū ‘urrikha
{ a people wicked strong and so after they perished it was dated

bi-him. Wa-ka’-anna Bib kān ‘akhrā-hum. Fa’inna
{ by them. And as if that [Valabhi] was the last of them. And behold

‘auwala ta’rikhi-him ‘aḏaṇ muta’akkhīr ‘an Shg-kāl
{ the first of their era also posterior to [Śaka]-era

241. Wa-ta’rikh al-muṇaḏḏimīn yata’akkhār har ‘an Shg-kāl
{ 241. And the era of the astronomers is posterior to [Śaka]-era

587 wa-‘alā-hi buniya zīj Kndkātik li-Bhrmgūpt
{ 587 and on it is built the canon [ Khándakātaka] by [Bṛhma-gupta]

wa-huwa ‘al-ma’ruf ‘inda-nā bi’t-Arknd.
{ and it the known with us (chez-nous) by (the name of) Al-Arkand.

Fa-‘idhan sinū ta’rikh Shṛl-Harish li-sanati-nā
{ And so then the years of the era of [Śrī-Harsha] to our year

‘al-muṇaḏḏimal bi-hā 1488 wa-ta’rikh Bkrmāt 1088
{ that is used as an example 1488 and the era of [Vikrama-dītya] 1088

wa-Shg-kāl 953 wa-ta’rikh Balba ‘alladhi huwa ‘aḏaṇ
{ and [Śaka]-era 953 and the era of [Valabhi] which it also

Gūbita-kāl 712.
{ [Gupta]-era 712.

TRANSLATION.

"And for this reason they have given them np,¹ and have adopted the eras of Śrī-Harsha, Vikrama-dītya, Śaka, Valabhi, and the Guptas. And as regards the era of Valabhi,—who was the ruler of the city of Valabhi, which was south of the city of Anhilvāda by nearly thirty yōjanas,—its beginning was later than the Śaka era by two hundred and forty-one years. Those who use it put down (the year of) the Śaka era, and subtract from it the

¹ i.e. the eras of the Bhārata war and of the Kaliyuga, and certain other methods of reckoning time, just previously detailed by Alberdi, who states that they had been abandoned because of the very large numbers involved in the use of them."
sum of the cube of six and the square of five, and there remains (the year of) the era of Valabhi. His history is recorded in its proper place. And as regards the Gupta era,—(the members of this dynasty) were, it is said, a race wicked (and) strong; and so, after they became extinct, people, dated by them. And it seems as if Valabhi was the last of them. And so the beginning of their era also is later than the Śaka era (by) 241 (years). And the era of the astronomers is later than the Śaka era (by) 587 (years); and on it is based the astronomical canon (named) Khandakātyaka, by Brahmagupta, which among us is known by (the name of) Al-Arkan. So, then, 1488 years of the era of Śrī-Harsha are in correspondence with the year (of Yazdajird) that we have taken as a gauge; and 1088 of the era of Vikramāditya; and 953 of the era of Vikramāditya; and 712 of the era of Valabhi, which is also the

The essence of the whole matter, of course, lies in the precise meaning that is to be given to the words which follow the statement that the Guptas were wicked and powerful. Prof. Wright states that, in the original, we have a vague impersonal passive, meaning “it was dated by them,” “there was a dating by them,” or “people dated by them;” but that this certainly does not expressly imply that this dating took place from the year of the extension of the Gupta power, and in consequence of that event. That such an interpretation might, if found on other grounds to be justifiable, be given to this expression, may be admitted. But it is at the least equally open to us to interpret the expression as meaning that the Guptas had been so powerful that, even when they were dead and gone, people still used their era to date by. And we have to determine, from an examination of the details of the recorded Gupta and Valabhi dates, which of these two possible interpretations is the one that must be adopted.

And here I will only add, for the present, that the calculation of the dates in question,—and, in particular, of those in the records of the Parivṛţajaka Mahārājas, where we have an expression which shews distinctly that, at the times mentioned, the Gupta sovereignty was still continuing, and that the dates belong to the identical era that was used by the Early Gupta kings themselves,—has proved conclusively that they all belong to one and the same era, running from the epoch of A.D. 319-20; and that, irrespective of the question whether the era was actually established by the Early Guptas, we must refer the rise of the Early Gupta power to somewhere about A.D. 319, instead of placing the period of their supremacy anterior to that year, and their downfall in it.

There is also one other point in the revised translation, to which special attention should be paid. Prof. Wright's rendering, “(the year) 712 of the era of Valabhi, which is also the Guptan era,” is essentially different, in its ultimate bearing, from M. Reinaud’s, “the year 712 of the era of Ballabha and of that of the Guptas.” It shews very clearly that Alberini was speaking of absolutely one and the same era under two names; not of two different eras, with the same, or almost the same, epoch.

As regards the origin of M. Reinaud’s erroneous rendering of Alberini’s statement, it is clearly to be traced to Mr. James Prinsep’s treatment of the Kāhāni pillar inscription of Skandagupta, in 1838, in the Journ. Beng. As. Soc. Vol. VII. p. 36 ff.; which contains the first reference to the Gupta era that I can trace; or, at any rate, the first suggestion of the existence of an era connected with the Guptas, apart from any general reference to the chronological period to which they might be referred. By his rendering of this record, it was dated (id. p. 37) “in the year hundred and thirty-three after the death of Skandagupta;” on which he remarked (id. p. 38) “the death of this prince is here employed as an epoch in a somewhat enigmatical way.” The supposed enigma refers to the actual manner in which the total of 133,—or, more properly, 141, as shown by subsequent examinations of the record,—is arrived at. As regards the other point, the reference of the years to the death of Skandagupta is due only to a mislection of the last word in line 2 of the text. The real reading there is śānti, the locative

“The reference appears to be to the story of the fruit-seller Rākha and the king Vāllabha in Chapter XVII.,
singular of śānta, in apposition with rājyaḥ in the same line, and the real translation is “in the tranquil reign of Skandagupta; . . . . . in the one hundredth year, increased by thirty and ten and one” (Corp. Inscrip. Indic. Vol. III. No. 15, page 67). Mr. Prinsep, however, read śāntah, the ablative or genitive singular of śānti, ‘quiet, tranquillity, calmness, rest, repose; ’ and, with this reading, it was, of course, hardly possible to do otherwise than translate it by “after the decease,” “of the repose, i.e. death,” and “after the death,” of Skandagupta, and to make the years that were recorded run from that event. No discussion of the question was then entered into. But Skandagupta then was, and still is, the last known king of the direct succession of the Early Gupta dynasty. And it is evidently the above rendering, which first suggested the idea of an era dating from the extermination of the Gupta power at the death of Skandagupta.

When, in 1845, M. Reinaud republished collectively, under the title of Fragments Arabes et Persans, certain extracts, with French translations, from works relating to India, which he had previously published separately in the Journal Asiatique, in September and October, 1844, and February-March, 1845, he rendered Albérüni (id. p. 143) as stating distinctly that the Gupta era dated from the extermination of the Guptas. I do not find that he makes any reference to Prinsep on this specific point. But he shews, throughout, so good an acquaintance with Prinsep’s writings, as also with those of other English scholars, that he must certainly have read Prinsep’s translation of, and comments on, the Kahiuna inscription. And, though he may not have intentionally allowed himself to be guided by Prinsep’s views, it can hardly be doubted that he had a reminiscence of the purport of them, when he was translating Albérüni’s remarks. In fact, in the face of Mr. Rehadtek’s, Mr. Kay’s, and Prof. Wright’s versions, it is difficult to see how M. Reinaud can have arrived at the exact words used in his translation, except under some such predisposing influence.

THE EPOCH OF THE NEWAR ERA.

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

“The Newar era is peculiar to Nepal, where it was introduced in A.D. 880 by Rāja Rāghava Dēva.” “The year begins in October, and 951 years had expired in 1831.” From these statements of Sir A. Cunningham, with the substance of which the incidental remarks of other scholars agree, it appears that the epoch of the era spoken of is considered to be A.D. 879-80, and that the first year of that era is supposed to have lasted from about October A.D. 880 to about October 881. The expression that the year begins in October suggests the idea, the correctness of which has not been hitherto proved by documentary evidence, that the Newar year begins with the month Kartika; and stating more accurately the opinion of those who have written about the matter, the first day of the first current year of the era, according to their view, should be taken to be the day 2,042,739 of the Julian period, = 8th October A.D. 880 = Kartika śukla 1 of the (northern) Vikrama year 938, current.

In order to arrive at some settlement of the question as to whether or to what extent the Hindus, during the middle ages, were in the habit of dating their documents in expired years, I have examined, amongst others, almost every available date recorded in the national era of Nepal; and in the course of the necessary calculations I have incidentally come to the following conclusions regarding the Newar era:

(1.) The epoch of the Newar era is A.D. 878-79, and the first day of the first current year of that era is really the day 2,042,405 of the Julian period,—20th October A.D. 879 = Kartika śukla 1 of the (northern) Vikrama year 937, current.

(2.) As regards the arrangement of the two lunar fortnights, the dark half of a month follows upon the bright half of the same month, or, in other words, the scheme of the months is the amanta scheme of the southern Vikrama year. And from (1) and (2) together it follows that—

3 Indian Eras, p. 74.
(3.) For calculating dates of the Néwár era by means of Dr. Schram's most handy Tables, in order first to obtain the current (northern) Vikrama year, we must add to the expired years of the Néwár era 937, when a date falls within any of the five months from Kárttika to Phálguna, and 938, when a date falls within any of the seven months from Chaitra to Áśvina.

To prove these statements, I shall place before the reader twenty-five Néwár dates, together with the corresponding European dates. Six of them are taken from the late Pandit Bhagvanlal Índrajî's Inscriptions from Népál, ante, Vol. IX. p. 163ff., two from Mr. Bendall's Journey in Népál and Northern India, and the remaining seventeen from the same scholar's Catalogue of Buddhist Sanskrit Manuscripts. I shall begin with four dates (1-4), in which the years mentioned are distinctly described as expired years. After these I shall give nineteen dates (5-23), in which the figures for the years likewise denote expired years, although this is not actually stated in the dates themselves. And I shall conclude with two dates (24 and 25), in which the figures for the years must be taken to denote, exceptionally, current years.

A.—Dates in which the years mentioned are described as expired years.

1. Bendall's Catalogue, p. 187:—

Shat-ttārē (sic) pañcā-pāsṭē gatē sbbē Népālikē māsī cha Chaitra-saṃjiṣṭē

Krishna-pakṣē Madan-abhidhāyaṁ tithau Śāśāṅkātāmach-vāsara cha

Data:—The year 506 expired, the month Chaitra, the dark half, the tithi Madana, i.e. the thirteenth lunar day, Śāśāṅkātāmach-vāsara, or Wednesday.

The corresponding northern Vikrama year is 506 + 937 = 1444 current; and the corresponding European date is Wednesday, March 28, 1386. On that day, at sunrise, the 13th tithi of the dark half was current, and it ended 20h 41m after mean sunrise. [If the epoch were A.D. 879-80, the corresponding date would be Tuesday, April 16, 1387].

2. ib., p. 30:—

Dvādāsā-uttara-pañcā-sātaṁ prāyatē vihāyasē (?)

Paunsha-ākāśa navamayācha saṃputra ( !)

Guru-vāsara ( !)

Data:—The year 512 expired, the month Paunsha, the bright half, the ninth lunar day, Guru-vāsara, or Thursday.

The corresponding (northern) Vikrama year is 512 + 937 = 1449 current; and the corresponding European date is Thursday, January 4, 1392. On that day, at sunrise, the 9th tithi of the bright half was current, and it ended 15h 22m after mean sunrise. [If the epoch were A.D. 879-80, the corresponding date would be Monday, December 23, 1392.]

3. ante, Vol. IX. p. 183:—

Saṁvat-Népālak-ākhyē tribhuvanaka-dahanē Kāma-bāṇē prāyatē Māghē sūklē cha Kāmē tithi...viditē priti-yogē cha punyē

Vārē Pūsh-āhīṭhānē makara-ravi-gatē yugma-rāsānā śaśāṅkē

It should be noted that the same year, 533, which here is called an expired year, immediately afterwards, p. 184, where the date is repeated in the more business-like manner—

Saṁvat 533 Māgha-ākāśa-trayōdaśi punarvasu-nakshatra priti-yogē Āditya-vārē—

is called simply “the year 533.”

Data:—The year 533 expired, the month Māgha, the bright half, the thirteenth lunar day, Āditya-vāra or Sunday, the nakshatra Punarvasu, and the yogī Priti.

The corresponding (northern) Vikrama year is 533 + 937 = 1470 current; and the corresponding European date is Sunday, January 15, 1413. On that day, at sunrise, the 13th tithi of the bright half was current, and it ended 11h 25m after mean sunrise. Moreover, at sunrise, the moon was in the nakshatra Punarvasu, and the current yogā was Priti. [If the epoch were A.D. 879-80, the corresponding date when they become more widely known. It is for this reason that, in the following, I have first converted the Néwár dates into dates of the northern Vikrama year, instead of converting them, as might otherwise appear more natural, into dates of the southern Vikrama year.

In the following I shall give the dates exactly as given in the works from which I take them, and I shall not attempt any corrections except where it may be absolutely necessary.
would be Friday, February 2, 1414, nakṣatra Pushya, and yōga Saṁbhāga.

4. Bendall’s Catalogue, p. 147:—

Yātē Naipālīka-varshē tri-yugmā-randhra-saṁyudē
Mārgāśīrṣhē 5āṭa-pakṣhē daśaṁyāṁ Ravi-vāsārē

Data:—The year 923 expired, the month Mārgaśīrṣha, the dark half, the tenth lunar day, Ravi-vāsara or Sunday.

The corresponding (northern) Vikrama year is 923 + 937 = 1860 current; and the corresponding European date is Sunday, December 19, new style, 1802. On that day, at sunrise, the 10th tithi of the dark half was current, and it ended 18 hours after mean sunrise. [If the epoch were A.D. 879-80, the corresponding date would be Thursday, December 8, new style, 1803.]

B.—Dates in which the years mentioned must be regarded as expired years, although they are not described as such in the dates themselves.

5. Ib., p. 151:—

Paṅcabhṛtiṁs-ādhiṅkē 5bdē śatatama praśaṁ-tē (?) Chaitra-māsē hīmāhē
Vikhyātē 5smīn daśaṁyāṁ—Danūjē (? Danuḷa)ripuguraṁ vāsārē saṁpraśaṁtē

Data:—The year clearly is 135, but the expression praśatē following upon śatatama is unintelligible; Mr. Bendall hesitatingly suggests the reading praṅgatē (‘elapsed,’ see Palaeographical Introduction, p. xxv. note), which, he admits, offence against the metre. The remaining data are,—the month Chaitra, the bright half, the tenth lunar day, Danuḷa-ripugurā-vāsara or Thursday.

Taking 135 to be the year expired, the corresponding northern Vikrama year is 135 + 938 = 1073 current. In that year, Chaitra was an intercalary month, and the corresponding European date, for the adhika Chaitra, would be Thursday, March 3, 1015, when the 10th tithi of the bright half ended 4h 2m after mean sunrise; and for the nīva Chaitra, Friday, April 1, 1015.

As the former date is evidently the one intended, the result of the calculation suggests the reading—
Paṅcabhṛtiṁs-ādhiṅkē 5bdē śatatama itare Chaitra-māsē, “in the 135th year, in the other, i.e., adhika month Chaitra,”—

Which both from a grammatical and a metrical point of view is unobjectionable. [Taking 135 to be the current year, the date corresponding to Chaitra śukla 10, with the epoch A.D. 878-79, would be Sunday, March 14, 1014; and in that year there was, of course, no intercalary month.]

6. Ib., p. 168:—

Saṁvat 188 Bhāḍrapada-śukla-paṁsāmāyaḥ śukra-dīnē.

Data:—The year 188, the month Bhāḍrapada, the bright half, the full-moon day, Śukrada or Friday.

Taking 188 to be the year expired, the corresponding northern Vikrama year is 188 + 938 = 1126 current; and the corresponding European date is Friday, August 15, 1068, when, at 2h 15m Greenwich time, there was a lunar eclipse. [With 188 current, and the epoch A.D. 878-79, the corresponding date would be Monday, August 17, 1067, when, at 5h 31m Greenwich time, there also was a lunar eclipse.]

7. Bendall’s Journey, p. 50:—

Tribhir-varshaṁ samāyukte saṁvatsara-śata-dvayē
taisaṅkha-śukla-śaptamyāṁ Buddhē pushy-ōdayē śubhā [II]

Data:—The year 203, the month Vaisākha, the bright half, the seventh lunar day, Buddha or Wednesday, the nakṣatra Pushya.

Taking 203 to be the year expired, the corresponding northern Vikrama year is 203 + 938 = 1141 current; and the corresponding European date is Wednesday, April 26, 1083, when, at sunrise, the moon was in the nakṣatra Pushya.

Vaisākha. Civilly, Wednesday, April 26, was su. di. 6, but the 7th tithi, mentioned in the date, began as early as 4h 7m after mean sunrise. [With 203 current, and the epoch Vaisākha, and ceremonies in honour of that event must be performed on that civil day on which the saptami is current at midday. The inscription, from which the above date is taken, simply records the setting up of an image in honour of the Sun, and contains no allusion to Gaṅgā.—According to a general rule given in the Dharmasaṁhitās, any rites whatever of the 7th tithi must be performed on that civil day on which the 7th tithi meets with the 6th tithi.
A.D. 878-79, the corresponding date would be Friday, April 8, 1082, nakshatra Pushya.

8. Bendall’s Catalogue, p. 182:—


Data:—The year 285, the month Srāvaṇa, the bright half, the eighth lunar day, Aditya-dina or Sunday.

Taking 285 to be the year expired, the corresponding northern Vikrama year is \(285 + 938 = 1223\) current; and the corresponding European date is Sunday, July 18, 1165. On that day, at sunrise, the 8th titki of the bright half was current, and it ended 12 hours after mean sunrise. [With 285 current, and the epoch A.D. 878-79, the corresponding date would be Wednesday, July 29, 1164.]

9. Ib., p. 155:—


Data:—The year 336 (?), the month Pausahaan, the dark half, the eighth lunar day, Vṛihhaspati-vāśara or Thursday, the nakshatra Viśakhā.

Taking 336 to be the year expired, the corresponding (northern) Vikrama year is \(336 + 937 = 1273\) current; and the corresponding European date is Thursday, January 14, 1216. On that day, at sunrise, the 8th titki of the dark half was current, and it ended 5h 32m after mean sunrise. Moreover, at sunrise, the moon was in the nakshatra Viśakhā. The result of the calculation thus shows that the figures for the year, 336, about which Mr. Bendall is somewhat doubtful, because the date has been retouched, and because “the day of the week and month” were supposed “not to tally for the year 336,” are quite correct. [With 336 current, and the epoch A.D. 878-79, the corresponding date would be Friday, December 26, 1214, nakshatra Svāti.]

10. Ib., p. 84:—

Samvat 505 Kārttiika-ṣukla ashṭāmyām tithau Saniṃvara-vāśara.

Data:—The year 505, the month Kārttiika, the bright half, the eighth lunar day, Śaniṃvara-vāśara or Saturday.

Taking 505 to be the year expired, the corresponding (northern) Vikrama year is \(505 + 937 = 1442\) current; and the corresponding European date is Saturday, October 22, 1354. On that day, at sunrise, the 8th titki of the bright half was current, and it ended 16h 52m after mean sunrise. [With 505 current, and the epoch A.D. 878-79, the corresponding date would be Tuesday, November 3, 1353.]

11. Ib., p. 191:—

Samvata 509 Jyaistha-ṣukla dasāmyām tithau Śukra-vāśara.

Data:—The year 509, the month Jyaistha, the bright half, the tenth lunar day, Śukra-vāśara or Friday.

Taking 509 to be the year expired, the corresponding northern Vikrama year is \(509 + 938 = 1447\) current; and the corresponding European date is Friday, June 4, 1389. On that day, at sunrise, the 10th titki of the bright half was current, and it ended 1h 8m after mean sunrise. [With 509 current, and the epoch A.D. 878-79, the corresponding date would be Saturday, May 16, 1388.]

12. Bendall’s Journey, p. 83:—


Data:—The year 512, the month Vaiśākha, the dark half, the Sixth lunar day, the karaṇa Gara, the muhurtā Viśva, the nakshatra Śravaṇa, the yōga Indra, Aditya-vāšara or Sunday.

Taking 512 to be the year expired, the corresponding northern Vikrama year is \(512 + 938 = 1450\) current; and the corresponding European date is Sunday, May 12, 1392. On that day, the 6th titki of the dark half commenced about sunrise, and the first half of that titki, i.e. the time from about sunrise to about sunset, was the 41st karaṇa, called Gara. And at sunrise, the moon was in the nakshatra Śravaṇa, and the current yōga was Indra.

[With 512 current, and the epoch A.D. 878-79, the corresponding date would be Tuesday, April 25, 1391, the 42nd karaṇa, called Baṇḍ, nakshatra Uttarā Āṣāḍhā, and yōga Sukla.]

13. Bendall’s Catalogue, p. 155:—

Samvata 532 Māgaśīra-ṇikta saṃptaṃyām tithau satavṛṣia-nakshatā harashaṭha-prara (?)-vajra-yogā Aditya-vāśara.

Data:—The year 532, the month Māgaśīras,

* The published version has karakarṇe, supposed to be the Hindustani صر كونلي, and rendered “by order of Government.” My calculation of the date renders it certain that the reading garā-karaṇe is right.
the bright half, the seventh lunar day, Ādityavāsara or Sunday, the nakṣatra 'Satavyaśa,' i.e. evidently Satabhishaj, and the yōga Harṣaṇa and Vajra.

Taking 532 to be the year expired, the corresponding (northern) Vikrama year is 532 + 937 = 1469 current; and the corresponding European date is Sunday, November 22, 1411. On that day, at sunrise, the 7th titthi of the bright half was current, and it ended 13h 36m after mean sunrise. Moreover, at sunrise, the moon was in the nakṣatra Satabhishaj, and the current yōga was Vajra.

[With 532 current, and the epoch A.D. 878-79, the corresponding date would be Wednesday, December 3, 1410, nakṣatra Pūrvā-Bhadrapadā, and yōga Vyāṭīpatā.]


Samvat 532 Āśādha-kṛishṇa 1 ēkadaśyām ithau 1 kārttika-gaṭhiti 20 ṛoḥiṇi-nakṣatra 1 gaṇaṇa-gaṭhiti 6 vṛIDDVi-yōgē 1 Sōma-vāsara 1

Date:—The year 532, the month Āśādha, the dark half, the eleventh lunar day, Sōma-vāsara or Monday, the nakṣatras Kṛitiṅka and Ṛoḥiṇi, and the yōgas Gaṇaṇa and Vṛiddhi.

Taking 532 to be the year expired, the corresponding northern Vikrama year is 532 + 937 = 1470 current; and the corresponding European date is Monday, July 4, 1412. On that day, at sunrise, the 11th titthi of the dark half was current, and it ended 21h 20m after mean sunrise. Moreover, calculated by Prof. Jacobis's tables, the moon at sunrise was in the nakṣatra Ṛoḥiṇi, and the current yōga was Vṛiddhi. [With 532 current, and the epoch A.D. 878-79, the corresponding date would be Thursday, July 16, 1411, nakṣatra Mṛiga, and yōga Vyāghāta.]

15. Ib., p. 183:—

Samvat 749 Jyēśaṭha-kṛishṇa amāvāsyā sūrya grāsa-sa...

Data:—The year 749, the month Jyēśaṭha, the dark half, new-moon day, a solar eclipse.

Taking 749 to be the year expired, the corresponding northern Vikrama year is 749 + 938 = 1687 current; and the corresponding European date is June 11, 1629. On that day, 3h 56m Greenwich time, or at Laṅkā about 9 a.m., there was a total solar eclipse, visible in India. [With 749 current, and the epoch A.D. 878-79, the corresponding date would be June 21, 1628; and on that day there also was a solar eclipse; but this eclipse was not visible in India.]

16. a.e., Vol. IX. p. 185:—


Data:—The year 757, the month Phāḷgaṇa, the bright half, the tenth lunar day, Bhīṣaṣpati-vāsara or Thursday, the nakṣatras Ādṛā and Punarvasu, and the yōga Āyushmat.

Taking 757 as the year expired, the corresponding (northern) Vikrama year is 757 + 937 = 1694 current; and the corresponding European date is Thursday, February 23, 1637, when, at sunrise, the moon was in the nakṣatra Ādṛā, and, from 13 to 14 hours later, in Punarvasu, and when the current yōga was Āyushmat. Civilly, Thursday, February 23, was śu. di. 9, but the 10th titthi mentioned in the date began 5h 49m after mean sunrise,7 [With 757 current and the epoch A.D. 878-79, the corresponding date would be Sunday, March 6, 1636, nakṣatra Pushya, and yōga Atigana.]

17. Ib., p. 188:—

Saṁvat 769 Phāḷgaṇa śukla shashtyām iti tathau anurādhā-nakṣatrab harṣaṇa-yōgē Bhīṣaṣpati-vāsara.

Data:—The year 769, the month Phāḷgaṇa, the bright half, the sixth lunar day, Bhīṣaṣpati-vāsara or Thursday, the nakṣatras Anurādhā, and the yōga Harṣaṇa.

Assuming these data to have been given correctly, the corresponding European dates are,—for 769 expired (= 769 + 937 = 1706 Vikrama current) Wednesday, February 7, 1649, the 6th titthi of the bright half ending 20h 6m after mean sunrise, nakṣatra Bharaṇi (No. 2 instead of No. 17), and yōga Brahman (No. 25 instead of No. 14); and for 769 current, Saturday, February 19, 1648, nakṣatra Bharaṇi and yōga Vaidṛīti (No. 27 instead of No. 14). These days evidently are

dhāraṇa, fato, etc., of the 10th titthi should take place on that day on which the 10th titthi meets with the 9th titthi.
wrong; and a satisfactory result is obtained only, if we take the word śūkla of the date to have been put, either in the original inscription or by the editor, erroneously for the word krīṣṇa. For the European date corresponding to the sixth lunar day of the dark half of Phālguna, 769 expired, is Thursday, February 22, 1649, when the 6th tithi of the dark half ended 12h 7m after mean sunrise, and when, at sunrise, the moon was in the nakshatra Anurādhā, and the current yōga was Harṣaṇa.

18. Ib., p. 191:—


Data:—The year 777, the month Māgha, the bright half, the seventh lunar day, Ravidina or Sunday, the nakshatra Rēvati, and the yōga Siddhi (!).

Taking 777 to be the year expired, the corresponding (northern) Vikrama year is 777 + 937 = 1714 current; and the corresponding European date is Sunday, January 11, 1657, when the 7th tithi of the bright half ended 22h 11m after mean sunrise. Moreover, at sunrise, the moon was in the nakshatra Rēvati. As to the yōga, the result calculated by Prof. Jacobi’s tables would be Śādhyā; and as this yōga (No. 22) is next to Siddha (No. 21), not to Śiddhi (No. 16), I feel certain that the word siddha of the date has been put by mistake for siddha. [With 777 current, and the epoch A.D. 878-79, the corresponding date would be Wednesday, January 23, 1656, nakshatra Āśvinī, and yōga Śukla.]

19. Ib., p. 192:—


Data:—The year 810, the month Kārttiaka, the dark half, the second lunar day, Ravi or Sunday.

Taking 810 to be the year expired, the corresponding (northern) Vikrama year is 810 + 937 = 1747 current; and the corresponding European date is Sunday, October 20, 1659. On that day, at sunrise, the 2nd tithi of the dark half was current, and it ended 7h 35m after mean sunrise. [With 810 current, and the epoch A.D. 878-79, the corresponding date would be Tuesday, October 30, 1658.]

20. Bendall’s Catalogue, p. 142:—

Sambat 820 Kārttiaka-māsya-śūkla-pakṣē trayōḍasyāṁ tīthau rēvati-nakṣatratē vajra-yōge . . . . Vṛhaspati-vāsara, and other particulars which I omit here.

Data:—The year 820, the month Kārttiaka, the bright half, the thirteenth lunar day, Vṛhaspati-vāsara or Thursday, the nakshatra Rēvati, and the yōga Vajra.

Taking 820 to be the year expired, the corresponding (northern) Vikrama year is 820 + 937 = 1757 current; and the corresponding European date is Thursday, October 26, 1699. On that day, at sunrise, the 13th tithi of the bright half was current, and it ended 12h 45m after mean sunrise. Calculated by Prof. Jacobi’s tables, the moon, at mean sunrise, was in the nakshatra Āśvinī, the nakshatra following upon Rēvati, and the current yōga was Siddhi, the yōga following upon Vajra. [With 820 current, and the epoch A.D. 878-79, the corresponding date would be Sunday, November 6, 1698, nakshatra Bharaṇi, and yōga Parigha.]

21. ante, Vol. IX, p. 193:—

Abō Rāma-prajēśvarāśya-vasubhir-Māghē sitē pakṣakē śūle chōottaraphalgunque Šāsadharē varē dvitiyā-tīthau i.

Data:—The year 843, the month Māgha; the bright half, if the word following upon the word Māghē is taken (as it has been taken by the editor of the inscription) to be sitē, but the dark half, if the same word is taken to be asitē (Māghē asitē); the second lunar day, Šāsadharavāra or Monday, the nakshatra Uttarā-Phālgunī, and the yōga Sūla.

With 843 expired (= 843 + 937 = 1780 Vikrama current) the corresponding European date for the bright half of Māgha is Sunday, January 27, 1723; and with 843 current, the corresponding date, also for the bright half, is January 8, 1722, which was a Monday, but on which the moon was in the nakshatra Śravishthā (No. 23 instead of No. 12), and when the current yōga was Vyātiḍā (No. 17 instead of No.).

* Not 778, as given by the editor of the inscription.
Both days clearly are wrong, and a satisfactory result is obtained only for the dark half of Māgha; for the date corresponding to the second of the dark half of Māgha, 843 expired.—is Monday, February 22, 11, 1723, when the 2nd tithi, of the dark half ended 6h 6m after mean sunrise, and when at sunrise the moon was in the nakshatra Uttarā-Pārśu, and the current yōga was Sūla. [With 843 current, and the epoch A.D. 878-79, the corresponding date, for the dark half of Māgha, would be Tuesday, January 23, 1722.]

22. Bendall’s Catalogue, p. 5:—

Nāipālik-ābdē bhujā-parvata-vasu-saśyutē 1 māśē Āsvinī 2 śaiṭē 1 trayōdaśāmita-tīthau 1 tārā chitrā priti-yōgē 2 Bhāskaraputra-vāsarē 3.

Data:—The year 872, the month Āsvina, the dark half (Āsvinī śaiṭē), the thirteenth lunar day, Bhāskaraputra-vāsara or Saturday, the nakshatra Chitrā, and the yōga Pṛiti.

Taking 872 to be the year expired, the corresponding northern Vikrama year is 872 + 938 = 1810 current; and the corresponding European date is Saturday, November 4, new style, 1752, when the 13th tithi of the dark half ended 17 minutes after mean sunrise. Calculated by Prof. Jacobi’s Tables, the moon, at sunrise, was in the nakshatra Chitrā, and the current yōga was Āyushmat, the yōga following upon Pṛiti.—As the reading Āsvinī śaiṭē might be considered doubtful, I have calculated also the 13th of the bright half of Āsvina, with the result—Saturday, October 21, new style, 1752, nakshatra Rēvatī (No. 27 instead of No. 14), and yōga Vajra (No. 15 instead of No. 2), which shows that the day intended must be the 13th of the dark half. [With 872 current, and the epoch A.D. 878-79, the corresponding date would be Sunday, October 6, 1751, nakshatra Hasta, and yōga Vaidūrīti.]

23. Ib., p. 40:—

Saṁvat 995 miti Bāisākha kṛishṇa 2 Śanī- śvara-vāra.

Data:—The year 995, the month Bāisākha, the dark half, the second, Śanivāra or Saturday.

Taking 995 to be the year expired, the corresponding northern Vikrama year is 995 + 938 = 1933 current; and the corresponding European date is Saturday, May 22, new style, 1875, when the 2nd tithi of the dark half ended 9h 30m after mean sunrise. [With 995 current, and the epoch A.D. 878-79, the corresponding date would be Sunday, May 3, 1874.]

C.—Dates in which the years mentioned must be regarded, exceptionally, as current years.

24. Ib., p. 172:—

Samvat 157 Vaiśākha-śukla-tṛītyāyām Śukra-dīnē.

Data:—The year 157, the month Vaiśākha, the bright half, the third lunar day, Śukra-dīnē or Friday.

Taking 157 to be the current year, the corresponding northern Vikrama year is 156 + 938 = 1094 current; and the corresponding European date is Friday, April 2, 1036, when the 3rd tithi of the bright half ended 9h 21m after mean sunrise. [With 157 expired and the epoch A.D. 878-79, or with 157 current and the epoch A.D. 879-80, the corresponding date would be Thursday, April 21, 1037; and with 157 expired, and the epoch A.D. 879-80,—Monday, April 10, 1038.]

25. Ib., p. 148:—

Samvat 927 Vaiśāsava-māśa-śukla-pakṣē chaturdāśāyām tīthau chittā-nakshatrā vaja-yōgē 2 Vṛhaspati-vāra.

Data:—The year 927, the month Vaiśāsava, the bright half, the fourteenth lunar day, Bṛhaspativāra or Thursday, the nakshatra Chitrā, and the yōga Vajra.

Taking 927 to be the current year, the corresponding northern Vikrama year is 926 + 938 = 1864 current; and the corresponding European date is Thursday, May 1, new style, 1806, when the 14th tithi ended 19h 25m after mean sunrise. At sunrise, the moon was in the nakshatra Chitrā, and the current yōga was Vajra. [With 927 expired and the epoch A.D. 878-79, or with 927 current and the epoch A.D. 879-80, the corresponding date would be Wednesday, May 20, new style, 1807, nakshatra Svātī, and yōga Varṣīyās; and with 927 expired and the epoch A.D. 879-80,—Monday, May 9, new style, 1808, nakshatra Svātī, and yōga Vyatiπātā.] An examination of these 25 dates will show that, as regards the settlement of the true epoch of the Nēwār era, the most important of them
are the first four and the last two dates. If we had only the 19 dates, from 5 to 23, the years mentioned in them might of course be taken as current years, and in that case the results as regards week-days, etc., would be the same with the epoch A.D. 879-80. But that epoch will absolutely not do for the dates 1-4, which distinctly give expired years, nor for the dates 24 and 25; and, unless we are prepared to assume an error in every one of those six dates, the only epoch that leads to satisfactory results for them, and generally for every one of the 25 dates, is A.D. 873-79, or, more accurately, that epoch by which the era began on 20 October, A.D. 879. And this, again, shows that the years given in the dates 5-23, beginning with the Névār year 135 and ending with 995, must undoubtedly be taken as expired years, although the dates contain no such word as atta, gata, yata, or any other synonymous expression.

As regards the commencement of the Névār year, a comparison of date 22, which gives the 18th day of the dark half of the month Āśvina, with date 10, which gives the 8th day of the bright half of the month Kārttika, and of which the former requires the addition of 938 and the latter the addition of only 937 for the attainment of the current northern Vikrama year, clearly shows that the year commences on one of the ten days intervening between those two dates; in other words, that it undoubtedly does begin with the first day of the bright half of Kārttika, the day on which it is reported to begin.

And that the arrangement of the two lunar fortnights is the amanta arrangement of the southern Vikrama year, is clearly proved by the dates 1, 4, 9, 12, 14, 15, 17, 19, 21, 22, and 23; for those eleven dates give days in dark fortnights, which, as I have taken care to ascertain, in every instance, work out satisfactorily only with the amanta scheme of the month.

Finally, I may draw attention to the dates 7 and 16, because in them the words saptamāṃ, 'on the seventh (tithi),' and dākṣyānāṃ tithau, 'on the tenth tithi,' clearly do not mean 'on the day on which the 7th tithi ended' and 'on the day on which the 10th tithi ended'; but mean exactly what they signify, and thus happen to denote, in the first date, the 6th day, and in the other, the 9th day of the lunar fortnight. The fact is that, when a tithi begins on one day and ends on the next, the ceremonies prescribed for it must, under certain circumstances which are fully described in such works as the Dharmasindhusāra, be performed on the civil day on which the tithi commences, and not on the civil day on which the tithi ends; and it is highly desirable that somebody should compile, for easy reference, a short and clear tabular statement, showing the tithis which are liable to be treated in this way, and the exact conditions under which, for religious purposes, they must be connected with the civil day on which they commence. Anyhow, it is clear that, in calculating dates, it may sometimes be necessary to ascertain the beginning as well as the end of a tithi, a process which now has been rendered more than easy by Professor Jacobi's Tables.

SOME SPECIMENS OF SOUTH INDIAN POPULAR EROTIC POETRY,

BY PANDIT S. M. NATESA SASTRI, M.F.L.S.

Love Songs in Southern India are as numerous as elsewhere, and large numbers of books exist everywhere containing them. Very few,

Arranged in the sequence of the months, the 25 dates would stand as follows:—

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<th>Date</th>
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<td>17</td>
<td>Phāguna</td>
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Date 5, Ghaṭra-adhikā, sukla 10.
Date 1, Ghaṭra, kṛśṇa 13.
Date 24, Vaiśākha, sukla 3.
Date 7, Vaiśākha, sukla 7.
Date 25, Vaiśākha, sukla 14.
Date 23, Vaiśākha, kṛśṇa 2.
Date 12, Vaiśākha, kṛśṇa 6.
Date 11, Jaiśāhva, sukla 10.
Date 13, Jaiśāhva, kṛśṇa 16.
Date 14, Āsvaṅga, kṛśṇa 11.
Date 8, Śravasī, sukla 8.
Date 6, Bhādrapada, sukla 15.
Date 22, Āśvina, kṛśṇa 13.
erotic verse from the lips of the people themselves, I give three ordinary love songs in the following pages, which are good ones of their kind.

In addition to what may be called the general love songs of the people, there exists a very large number of songs and ditties which are sung at ceremonies connected with marriages, some of which are curious and well worth preserving. Of these the Nalángupáṭṭu are of great interest, and I give below six specimens. At an ordinary infant marriage when the ritual is over it is customary to seat the bride and bridgroom (both children) opposite each other on a fine carpet or mat, and to make the bride do mock obeissance to her husband. The boy is then made to sing some formal song of acceptance thereof. This ceremony, which is entirely a female one—no adult male being present—is called nalaṅgu, and hence the name (nalaṅgu-páṭṭu) of the songs connected with it. Sometimes a ball made of flowers is rolled between the bride and bridgroom, sometimes the bride has to adorn the ankles of the bridgroom and vice versa, while sometimes scented flowers are scattered about. These details, of course, vary with each locality, the songs which accompany them complying with each variation.

In addition to the above occasion every formal visit that the bridgroom makes to the bride’s house and vice versa before the real marriage comes off is made an excuse for a nalaṅgu, but it is never practised after they have once lived together.

When girls attain puberty it is, or rather has been, customary for all the young girls of the village to collect and to sing songs of the most obscene nature! Males are on such occasions rigidly excluded. In the present day, however, this revolting custom has practically died out, being continued only in remote villages off the usual lines of communication, I have naturally given no specimens of these.

Ephithalamia are exceedingly common in the south of India, and are there known as “Open-the-door Songs.” I give one specimen. After the final nuptial ceremonies are over the bride and bridgroom are conducted to the nuptial chamber and are locked in. The ladies of their respective families then collect outside the door, and sing songs, generally descriptive of the amours of some god. In these the goddess is usually represented as scolding the god with having gone astray with some other female. They get their peculiar name because they are invariably followed by the request, “Open-the-door.”

As far as I have been able to ascertain, the songs and customs above alluded to date no further back than the time of the introduction of Vaishnavism into Southern India, especially those which celebrate in verse the amorous adventures of Kṛṣṇa with his gopīs.

LOVE SONGS.

Song No. I.

Alagité Bhagyamāyā.

Chorus.—Alagité bhagyamāyā mariēmi vād—
Alagité bhagyamāyā ॥

I.

Taliru-bonōrī vāni dānājučha galadā ॥
Alagité bhagyamāyā, ṣc.

II.

Aračompu mātālādē vānīki ne
varuninō mańchi dānanayēnda
Sarasaku rādāya nākīvarō nāmōmu
Tirigī tūdačēmō dēvāṇumādā ॥
Alagité bhagyamāyā, ṣc.

III.

Bālılēdīkan-ela nāti bandu
tulīyābōlu santōshamāya
-nilānānāni kātavugādēnō
Nīlāvēńrī nāti nenarintunkalēkanā ॥
Alagité bhagyamāyā, ṣc.

IV.

Bāla prēyamunādē bhramayōčchi nannu
Vādrēlīna suddulennēnu galanu
Chāla nātō bōsalu čēsindēbō
Bālarō Musungpādu appādu vādu ॥
Alagité bhagyamāyā, ṣc.

If he is displeased with me.

Chorus.—If he is displeased with me, then so my happiness has been only so much. If he is displeased.

I.

Ladies! How can I punish him?
If he is displeased, &c.

1 i.e. it is over.
II.
How can I be to his liking who does not come to me to toy with me, but only to talk. O! friends! I do not know that he will ever look on my face again. God alone can protect me!
If he is displeased, &c.

III.
Ladies! Why does he not speak to me often? All my pleasure is over! Perhaps I am not as much to his liking as you are. O ye dark-haired ladies! He has forgotten all his sincerity in those good old days towards me.
If he is displeased, &c.

IV.
He captivated my heart when I was young, and there are several things, many things could I say of our dalliance! Many kinds of pleasure he has given me! Young ladies, where is my Muvagopala now?
If he is displeased, &c.

Song No. 2.

Akkaro, Yoryani yaru Sarasadu.

Chorus.—Akkaro yoryani varu sarasadu gaddani yuddukondé dásokonéru

I.
Mrokkadignawani nudumatuvalavani
Muvagopaladanimi yevarainagéni
Akkaro, &c.

II.
Bána vání dalachinapude ravika krikkiriśi gubba
lómo rommella nimudë vání māpamte
Ná manasu pai pai nimudë vání zuñitë
Navanithlu abbinatlahuniké yevarainagéni
Akkaro, &c.

III.
Mitró vádiyadú vachchi velamí gangilíchité
Yeitó badalika diruva vaisunu gání
Kántu taptam tisaldarum yintkaduná
Santasamella jikvunne yevarainagéni
Akkaro, &c.

IV.
Páni Muvagopadúdu painí chëyi vesite ná
Ména pulakaluppa tissam ná tamiríca
Váliké biralu chelluné vání gúdina
Manasam ento ranjilluné yevarainagéni
Akkaro, &c.

Well, Sisters! If some speak ill of him.

Chorus.—Well, sisters! If some speak ill of him, let them keep their opinion.

I.
My Muvagopálásamí is worthy of my worship and is sweet of speech.
Well sisters, &c.

II.
Ladies, if I just think of him my gown is torn to tatters. My breasts rise up and fill the whole space round about, and my mind soars higher and higher. If I but get a glimpse of him, I think I have obtained the nine kinds of wealth.
Well sisters, &c.

III.
If he just comes to me and exchanges kisses, how much of happiness comes upon me. All my heart becomes cooled (refreshed). Not only this, all my pleasure comes from the mere sight of him.
Well sisters, &c.

IV.
If my Muvagopálalu place his hand lovingly on my body I begin to perspire with joy. He alone is able to please me, and my mind in his company feels ever delighted.
Well sisters, &c.

Song No. 3.

Adaríné Móvi.

Chorus.—Adaríné móvi tanakutáné vadaliné níei

I.
Madiléná vájëmó mantrínchegád Élu
Sudati Muvagopálalu zúchindé modalu
Adaríné móvi, &c.

II.
Iti yémó mágya chiluka vachchi bëdiriíchí pòyá.
Nidura kutikirúka ninndalannefí
Chedaríné chittamnu chelíqa yémí sétu
Adaríné móvi, &c.

III.
Appudé konima nannuuddadapíçchnamma
Voppaka mávaraluraka usúfá zíchí
Yuppatíčhi vádu surusaréndénmó
Adaríné móvi, &c.

* For not being amorous enough.

* i.e. my body swells so with emotion.
IV.
Lālatōnindu vachchi tağitiçēnē, mandu
Bālarō Muvvagōpāla nanauguḍa
Nilāgunēmēdo jālannī jēsantī
Aḍarīnē movī, ūc.

MY LIPS DANCE.

CHORUS.—My lips dance and of itself the knot of my garment becomes loose.*

I.
He sowed enchantment in my mind, O Lady, from the moment I saw my Muvvagōpāla.
My lips dance, &c.

II.
This has surely been some enchantment. The parrot came to me and left me after confusing my mind. Sleep by visiting my eyes has troubled me since last night. My heart breaks! Friend, what shall I do?
My lips dance, &c.

III.
Ladies! Even then only he wanted to kiss me, and seeing that my people were a hindrance to it he went away in great anger.
My lips dance, &c.

IV.
He came here in sport and has sown the seeds of love in me! Young Ladies! Muvvagōpāla has played a great trick upon me.
My lips dance, &c.

BRIDAL SONGS. (NALANGUPATTU).

Song No. 4.

NALUGIĐA PILACHE JANAKĪ NINNU.

Chorus.—Nalugida pilache Jānāki nīnnu
Nalugida pilache Jānāki nīnnu

I.
Nalugida-pilache-nαku-mōhanānī
Kokīla-vānī-nalugida-pilache-Jānāki-nīnну
Nalugida pilache, ūc.

II.
Attaru-panīrī-aladava-gandhamu
Ghumu-ghumu-vēsara-tīyaga-nēnu
Nalugida pilache, ūc.

III.
Rāvē Rukmanī-dēvi-Kājīvānētri
Rāvēati-guṇa-sālī Rāvē mōhanānī
Nalugida pilache, &c.

* See above note.

IV.
Muddu-kumāra-mukhamuddu bāvē
pōddu pāyana puttādī nī rāve
Nalugida pilache, &c.

V.
Gajīyālu, vanjīlu, ghēlu ghēlānī rāvē
Rāvē ati guṇa sālī rāvē mōhanānī
Nalugida pilache, &c.

O JĀNAKĪ, HE CALLED YOU.

CHORUS.—O Jānāki, he called you to decorate your feet.
O Jānāki, he called you to decorate your feet.

I.
O Jānāki, of captivating limbs, of speech resembling the voice of the kōkīla (cuckoo), he called you to decorate your feet.
O Jānāki, he called you, &c.

II.
As I was taking 'atar of roses, scented water, sandal and strong scents smelling ghum ghum.
O Jānāki, &c.

III.
O Jānāki, &c.

IV.
Give a kiss on the face of Muddukumāra.1
Come, O thou intelligent one, it is getting very late.
O Jānāki, &c.

V.
Come, walking slowly, that the small pendants of your anklets and armlets may sound ghal ghal. Come, O thou of the sweetest nature, and of captivating body.
O Jānāki, &c.

Song No. 5.

NALANGIDAVATT."
II.
Tārāru-taśalalla tavaṅgi sammetanu,
pulau surulu jata banduku tōtēra
Nalaṅgiḍa vayya, &c.

III.
Nalaṅgiḍa raḷa nā sāmi voyyāra
Nalaṅgiḍa raḷa nā sāmi nāthka
Nalaṅgiḍa vayya, &c.

IV.
Ākāṣa-mārgamuna-sikhala Rāmayya Rāma
Nikulu jatalu pulu tōtērā
Nalaṅgiḍa vayya, &c.

V.
Parimala ganghamulalana ghum ghum
vēsana pai alaṇa kadda
Nalaṅgiḍa vayya, &c.

Decorate my feet.

Chorus.—Decorate my feet, O thou son of Nanda. Why should you be shy in sporting with Rukmaṇī? O thou truthful Hari, ever fond of stealthy dalliance.

I.
O thou that art adorned with a fine garland of the nine-valued gems, enough (of your shyness) come knit your hands in your (female) friends' and take your seat in front of me.

Decorate my feet, &c.

II.
Come and decorate me with tāvaru, tasala, and tavaṅgi. I give my consent. Adorn me also with flowers, gurul, jata and banduku.

Decorate my feet, &c.

III.
Come, decorate my feet, my most noble lord.
O come decorate my feet, thou lord of my person.

Decorate my feet, &c.

IV.
The peacocks from the path of the sky decorate. O Rāmayya, O Rama! with jata, flowers and ornaments,

Decorate my feet &c.

V.
Come rub over my body with sweet scents,
with sweet things that smell strongly.

Decorate my feet, &c.

Song No. 6.
SEI RAMA JAYA.

I.
Śrī Rāma jaya Sīra-manohāra-karunāyakār-
karunā-nījaya

II.
Bhāvinchi-chūdarāma-Vasudēvaki-dēvulanu

VICTORY TO RĀMA.

I.
Victory to Rāma, the prosperous, the captivatory of Śīla's heart, the stronghold of mercy, and the home of generosity.

II.
Be favourable to this son of Vasu and Dēvaki.

Song No. 7.
JANDLETTYADANE SEI RAMACHANDRA DU.

Chorus.—Jandletiyādaṇo Śrī Rāmachan-
dra du

I.
Pūla Jandletiyādaṇo mana Chinni-Krish-
ṇadu.
Madana-Janakuḍu-Mahānu prabhāruṇu.
Kundlu-malya-pulu-chendlu-cheta-katti
Jandletiyādaṇe, &c.

II.
Aṇḍa-janakuḍu-danḍavirāṅgadu.
Kundlu-malyapuluchendlu-chēta-katti
Jandletiyādaṇe.

SEI RAMACHANDRA TOOK UP THE BALL AND ROLLED IT.

Chorus.—Śrī Rāmachandra took up the ball and rolled it. Little Krishṇa took up the flower ball and played with it.

I.
The awakener of passion the most famous,
took up in his hand the ball made of kundla-
malaya (jasmine) and other flowers.
Śrī Rāmachandra took up, &c.

II.
The creator of the world, the extractor of respects from others took it up in his hand.
Śrī Rāmachandra took up, &c.

invoked to grant favour to the newly married bridegroom, who is compared to Vasudeva.
In the Huts of Poor Neatherds.

In the huts of poor neatherds, the brother of Prabalatha (Kṛishṇa) sported amorously in the pools of delight. Turn your face and listen, O thou elder sister-in-law. He decked the younger sister-in-law with silken cloths and broke her teeth. He bade her put on garments ornamented with emeralds. He entangled her in a net of garlands of ippopū flowers. He adorned her nose with the best of pearly rings. He presented her with a fine mat (to sleep on) and remained with her for a very long time.

1 Spoke angrily.
FOLKLORE IN SOUTHERN INDIA.

BY PANDIT NATESA SASTRI, M.F.L.S.

XXVI.—The Conquest of Fate.

In the Dakshinadā there lived a Brāhmaṇ boy who from his childhood was given a very liberal education in Sanskrit. He had read so much in philosophy that before he reached the sixteenth year of his life he began to despise the pleasures of the world. Everything which he saw was an illusion (mithyā) to him. So he resolved to renounce the world and to go to a forest, there to meet with some great sage, and pass his days with him in peace and happiness.

Having thus made up his mind, he left his home one day without the knowledge of his parents and travelled towards the Daṇḍakāranya. After wandering for a long time in that impenetrable forest, and undergoing all the miseries of a wood inhabited only by wild beasts, he reached the banks of the Tuṅgabhadrā. His sufferings in his wanderings in a forest untrodden by human feet, his loneliness in the midst of wild beasts, his fears whether after all he had not failed in his search for consolation in a preceptor to teach him the higher branches of philosophy, came up one after another before his mind. Dejected and weary, he cast his glance forward as far as it could reach. Was it a reality or only imagination? He saw before him a lonely cottage of leaves (parṇāśīlā). To a lonely traveller even the appearance of shelter is welcome, so he followed up his vision till it became a reality, and an aged hoary Brāhmaṇ, full fourscore and more in years, welcomed our young philosopher.

“What has brought you here, my child, to this lonely forest thus alone?” spoke in a sweet voice the hoary lord of the cottage of leaves.

“A thirst for knowledge, so that I may acquire the mastery over the higher branches of philosophy,” was the reply of our young adventurer, whose name was Subrahmanya.

“Sit down my child,” said the old sage, much pleased that in this Kaliyuga, which is one long epoch of sin, there was at least one young lad who had forsaken his home for philosophy.

Having thus seen our hero safely relieved from falling a prey to the tigers and lions of the Daṇḍakāranya, let us enquire into the story of the old sage. In the good old days even of this Kaliyuga learned people, after fully enjoying the world, retired to the forests, with or without their wives, to pass the decline of life in solemn solitude and contemplation. When they went with their wives they were said to undergo the vānapraśtha stage of family life. The hoary sage of our story was undergoing vānapraśtha, for he was in the woods with his wife. His name while living was Jñānanidhi. He had built a neat parṇāśīlā, or cottage of leaves, on the banks of the commingled waters of the Tuṅgā and Bhadrā, and here his days and nights were spent in meditation. Though old in years he retained the full vigour of manhood, the result of a well-spent youth. The life of his later years was most simple and sinless.

“Remote from man, with God he passed his days;
Prayer all his business, all his pleasures praise.”

The wood yielded him herbs, fruits and
roots, and the river, proverbial for its sweet waters, supplied him with drink. He lived, in fact, as simply as the bard who sang

"But from the mountain’s grassy side
A guiltless feast I bring;
A bag with herbs and fruits supplied,
And water from the spring."

His faithful wife brought these, while Jñānanidhi himself devoted his whole time to the contemplation of God.

Such was Jñānanidhi—the abode of all knowledge—to whom the boy-philosopher, Subrahmaṇya, resorted. After questioning each other both were mightily pleased at the fortune which had brought them together. Jñānanidhi was glad to impart his hard-earned knowledge during his leisure moments to the young student, and Subrahmaṇya, with that longing which made him renounce the city and take to the woods eagerly swallowed and assimilated whatever was administered to him. He relieved his mother—for such he regarded his master’s wife—of all her troubles, and used himself to go out to bring the fruits, herbs and roots necessary for the repasts of the little family. Thus passed five years, by which time our young friend had become learned in the many branches of Āryan philosophy.

Jñānanidhi had a desire to visit the source of the Tungabhadra, but his wife was eight months advanced in her pregnancy. So he could not take her; and to take care of her he had to leave behind his disciple, Subrahmaṇya. Thus, after commending the old lady to Subrahmaṇya’s care, and leaving for female assistance another sage’s wife, whom he had brought from a distant forest, Jñānanidhi went his way.

The time for confinement was fast approaching, and the old lady even felt the pangs of labour. Her attendant remained with her inside the cottage, while Subrahmaṇya sat outside anxiously waiting to hear that his master’s wife had been safely brought to bed.

Now, there is a strong belief among Hindus that Brahmā, the great creator, writes on everyone’s head at the time of his birth his future fortunes in life. He is supposed to do this just at the moment of birth, when the child leaves the womb of its mother and enters the world. Of course, the great God when he enters the room to discharge his onerous duty, is invisible to all human eyes. But the eyes of Subrahmaṇya were not exactly human. The supreme knowledge which Jñānanidhi had imparted to him made it easy for him to discern at once a person entering most impolitely the room in which his master’s wife was being confined.

"Let your reverence stop here," said the disciple angrily though respectfully. The great God shuddered, for he had been in the habit of entering hourly innumerable buildings on his eternal rounds of duty, but never till then had a human being perceived him and asked him to stop. His wonder knew no measure, and as he stood bewildered the following reprimand fell on his ears: "Hoary Brāhmaṇ sage (for so Brahmā appeared), it is unbecoming your age thus to enter the hut of my master, unswallowed by me, who am watching here. My teacher’s wife is in labour. Hold your steps!"

Brahmā hastily—for the time of inscribing the future fortune on the forehead of the baby to be born was fast approaching—explained to Subrahmaṇya who he was and what had brought him there. As soon as our young hero came to know the person who stood before him he rose up, and, tying his upper cloth round his hips as a mark of respect, went round the Creator thrice, fell down before Brahmā’s most holy feet and begged his pardon. Brahmā had not much time. He wanted to go in at once, but our young friend would not leave the God until he explained what he meant to write on the head of the child. "My son!" said Brahmā, "I myself do not know what my iron nail will write on the head of the child. When the child is coming into the world I place the nail on its head, and the instrument writes the fate of the baby in proportion to its good or bad acts in its former life. To delay me is merely wrong. Let me go in."

"Then," said Subrahmaṇya, "your Holiness must inform me when your Holiness goes out what has been written on the child’s head." "Agreed," said Brahmā and went in. After a moment he returned, and our young hero at the door asked the God what his nail had written.

1 Gaṅgā suṇā Tuṅgā pāṇa. The Ganges for bath and Tuṅgā (Tuṅgabhadra) for drink.
"My child!" said Brahmā, "I will inform you what it wrote; but if you disclose it to anyone your head will split into a thousand pieces. The child is a male child. It has before it a very hard life. A buffalo and a sack of grain will be its livelihood. What is to be done? Perhaps it had not done any good acts in its former life, and as the result of its sin then it must undergo miseries now."

"What! Your supreme Holiness, the father of this child is a great sage. And is this the fate reserved to the son of a sage?" wept the true disciple of the sage.

"What have I to do with the matter? The fruits of acts in a former life must be undergone in the present life. But, remember, if you should reveal this news to anyone your head will split into a thousand pieces."

Having said this Brahmā went away, leaving Subrahmanya extremely pained to hear that the son of a great sage was to have a hard life. He could not even open his lips on the subject, for if he did his head would be split. In sorrow he passed some days, when Jñānaniḍhī returned from his pilgrimage and was delighted to see his wife and the child doing well, and in the learned company of the old sage our young disciple forgot all his sorrow.

Three more years passed away in deep study, and again the old sage wanted to go on a pilgrimage to the sacred source of the Tuṅga-bhadra. Again was his wife pregnant, and he had to leave her and his disciple behind with the usual temporary female assistance. Again, too, did Brahmā come at the moment of birth, but found easy admittance as Subrahmanya had now become acquainted with him owing to the previous confinement. Again did Brahmā take an oath from him not to communicate the fortunes of the second child, with the curse that if he broke his oath his head would split into a thousand pieces. This child was a female, and the nail had written that her fate was to be that of a courtezan! She would obtain her living after her attaining maturity by prostitution. Extremely vexed was our young philosopher. The most shameful and sinful life of lives was to be the lot of a daughter of a most holy sage. The thought vexed him to such a degree that language has no words to express it. After worrying a great deal he consoled himself with the soothing philosophies of the fatalists that fate alone governs the world.

The old sage in due course returned, and our young disciple spent two more happy years with him. After a little more than ten years had been thus spent the boy reached five years and the girl to two. The more they advanced in years the more did the recollection of their future fate pain Subrahmanya. So one morning he humbly requested the old sage to permit him to go on a long journey to the Himālayas and other mountains, and Jñānaniḍhī, knowing that all that he knew had been grasped by the young disciple, permitted him with a glad heart to satisfy his curiosity.

Our hero started, and after several years, during which he visited several towns and learned men, reached the Himālayas. There he saw many sages, and lived with them for some time. He did not remain in one place, for his object was more to examine the world. So he went from place to place, and after a long and interesting journey of twenty years he again returned to the banks of the Tuṅga-bhadra, at the very place where he lived for ten years and imbited philosophical knowledge from Jñānaniḍhī. But he saw there neither Jñānaniḍhī nor his old wife. They had long since fallen a prey to the lord of death. Much afflicted at heart to see his master and mistress no more, he went to the nearest town, and there after a deal of search he found a coolie with a single buffalo. The fate which Brahmā's nail had written on his master's son rushed into the mind of Subrahmanya. He approached the coolie, and, on closely examining him from a distance, our hero found distinct indications of his master's face in the labourer. His pain knew no bounds to see the son of a great sage thus earning his livelihood out of a buffalo. He followed him to his home, and found that he had a wife and two children. One sack of corn he had in his house and no more, from which he took a portion every day and gave to his wife to be husked. The rice was cooked, and with the petty earnings of a coolie, he and his family kept body and soul together. Each time the corn in the sack became exhausted he used to be able to save enough to replenish it again with corn. Thus did he, according to the writing of Brahmā's nail, pass his days. Kapāli was the name of this coolie, the sage's son.
"Do you know me, Kapâli?" said our hero, as he remembered his name.

The coolie was astonished to hear his name so readily pronounced by one who was apparently a stranger to him, but he said, "I am sorry that I do not know you, sir."

Subrahmanya then explained to him who he was and requested him to follow his advice. "My dear son," he said, "Do as I bid you. Early morning to-morrow leave your bed and take to the market your buffalo and the corn-sack. Dispose of them for whatever amount they will fetch you. Do not think twice about the matter. Buy all that is necessary for a sumptuous meal from the sale-proceeds and eat it all up at once without reserving a morsel for the morrow. You will get a great deal more than you can eat in a day. But do not reserve any, even the smallest portion of it. Feed several other Brâhmaṇs with it. Do not think that I advise you for your ruin. You will see in the end that what your father’s disciple tells you is for your own prosperity."

However, whatever the sage might say, Kapâli could not bring himself to believe him. "What shall I do tofeed my wife and children to-morrow if I sell everything belonging to me to-day?" Thus thought Kapâli and consulted his wife.

Now she was a very virtuous and intelligent woman. Said she, "My dear lord, we have heard that your father was a great mahâânu. This disciple must equally be a mahâânu. His holiness would not advise us to our ruin. Let us follow the sage’s advice."

When Kapâli’s wife thus supported the sage he resolved to dispose of his beast and sack the next morning, and he did so accordingly. The provisions he bought were enough to feed fifty Brâhmaṇs morning and evening as well as his own family. So that day he fed Brâhmaṇs for the first time in his life. Night came on, and after an adventurous day Kapâli retired to sleep, but slept he could not. Meanwhile Subrahmanya was sleeping on the bare verandah outside the house, and he came to the sage and said, "Holy sage, nearly half of the night is spent and there are only fifteen ghatikás more for the dawn. What shall I do for the morrow for my hungry children? All that I had, I have spent. I have not even a morsel of cold rice for the morning."

Subrahmanya showed him some money that he had in his hand, enough to buy a buffalo and a sack of corn, and the great God did not help him, and asked him to spend that night, at least the remainder of it, in calm sleep. So Kapâli with his heart at ease retired to rest.

He had not slept more than ten ghatikás when he dreamt that all his family—his wife and children—were screaming for a mouthful of rice. Suddenly he awoke and cursed his poverty which had always made such thoughts prominent in his mind. There were only five ghatikás for the lord of the day to make his appearance in the eastern horizon, and before this could happen he wanted to finish his morning bath and ablutions, and so he went to his garden to bathe at the well. The shed for the buffalo was erected in the garden, and it had been his habit daily before bathing to give fresh straw to his beast. That morning he thought he was spared that duty. But, wonder of wonders! He saw another buffalo standing there. He cursed his poverty again which imagined things impossible. How could it be possible that his beast should be standing there when he had sold it the previous morning? So he went into the shed and found a real buffalo standing there. He could not believe his eyes, and hastily brought a lamp from his house. It was, however, a real buffalo, and beside it was a sack of corn! His heart leapt with joy, and he ran out to tell to his patron, Subrahmanya. But when the latter heard it he said with a disgusted air, "My dear Kapâli, why do you care so much? Why do you feel overjoyed? Take the beast at once with the corn-sack and sell them as you did yesterday."

Kapâli at once obeyed the orders and changed the money into provisions. Again fifty Brâhmaṇs were fed the next day too, and nothing was reserved for the third day’s use. Thus it went on in Kapâli’s house. Every morning he found a buffalo and a sack of corn, which he sold and fed Brâhmaṇs with the proceeds. In this way a month passed. Said Subrahmanya one day, "My dear Kapâli, I am your holy father’s disciple, and I would never advise you to do a thing prejudicial to your welfare. When I came to know that you were the son of the great sage, Jñânândi, and were leading so wretched a life, I came to
see you in order to alleviate your miseries. I have now done so, having pointed out the way to you to live comfortably. Daily must you continue thus. Do as you have been doing for the past one month, and never reserve anything, for if you reserve a portion all this happiness may fail, and you will have to revert to your former wretched life. I have done my duty towards you. If you become ambitious of hoarding up money this fortune may desert you."

Kapâlî agreed to follow the advice of the sage to the uttermost detail and requested him to remain in his house. Again said Subrahmaṇya, "My son! I have better work before me than living in your house. So please excuse me. But before leaving you I request you to inform me as to where your sister is. She was a child of two years of age when I saw her twenty years ago. She must be about twenty-two or twenty-three now. Where is she?"

Tears trickled down the eyes of Kapâlî when his sister was mentioned. Said he, "Do not, my patron, think of her. She is lost to the world. I am ashamed to think of her. Why should we think of such a wretch at this happy time?"

At once the inscription made by Brahmâ's nail rushed into Subrahmaṇya's mind and he understood what was meant. Said he, "Never mind; be open and tell me where she is."

Then her brother, Kapâlî, with his eyes still wet with tears, said that his sister, the daughter of the sage Jânanidhi, was leading the worst of lives as a courtesan in an adjoining village, and that her name was Kalyâṇî.

Subrahmaṇya took leave of Kapâlî and his wife, after blessing his little children and again warning his friend. He had conferred what happiness he could upon his master's son, and now the thought of reforming his master's daughter reigned supreme in his heart. He went at once to the village indicated and reached it at about nightfall. After an easy search he found her house and knocked at the door. The door was at once opened, for Kalyâṇî's profession was such that never did wait for a second knock. But on that day she was astonished to see a face such as she could never expect to approach her house.

"Do you know me, Kalyâṇî?" said Subrah-
are very few people in this world who could afford to give you a measure full of pearls every night. So, he that brought you the pearls last night must continue to do so every night, and he shall be hereafter your only husband. No other person must ever hereafter see your face, and you must obey my orders. You must sell all the pearls he brings you every day and convert them into money. This money you should spend in feeding the poor and other charities. None of it must you reserve for the next day, neither must you entertain a desire to hoard up money. The day you fail to follow my advice you will lose your husband, and then you will have to fall back on your former wretched life."

Thus said Subrahmanya, and Kalyāṇि agreed to strictly follow his injunctions. He then went to live under a tree opposite to her house for a month to see whether his plan was working well, and found it worked admirably.

Thus, after having conferred happiness, to the best of his abilities, on the son and daughter of his former master, Subrahmanya took leave of Kalyāṇि, and with her permission, most reluctantly given, he pursued his pilgrimage.

One moonlight night, after a long sleep, Subrahmanya rose up almost at midnight, and hearing the crows crowing he mistook it for the dawn and commenced his journey. He had not proceeded far, when on his way he met a beautiful person coming before him, with a sack of corn on his head and a bundle of pearls tied up in the end of his upper cloth on his shoulder, leading a buffalo before him.

"Who are you, sir, walking thus in this forest?" said Subrahmanya.

When thus addressed the person before him threw down the sack and wept most bitterly.

"See, sir, my head is almost become bald by having to bear to Kapālli's house a sack of corn every night. This buffalo I lead to Kapālli's shed, and this bundle of pearls I take to Kalyāṇि's house. My nail wrote their fate on their respective heads, and by your device I have to supply them with what my nail wrote. When will you relieve me of these troubles?"

Thus wept Brahma, for it was no other personage. He was the Creator and Protector of all beings, and when Subrahmanya had pointed out the way for his master's children and they had conquered fate, Brahma too was conquered. So the great God soon gave them eternal felicity and relieved himself of his troubles.

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MISCELLANEA.

CALCULATIONS OF HINDU DATES.

No. 15.

In the Harālī stone inscription of the Kālamba kings Permāṇi-Bivaschittā, and Vījaya-kīrtiya-Viṣṇu-chittā, from the Belgaum District, published by me in the Jour. Bo. R. As. Soc. Vol. IX. pp. 262, 278 ff., the first date (line 18 f.) is—sannivṛtti Kāḷē Ḍā Ḍā Kha-saptān-dvipa-pañchānāṁ tad-rājyē trāyōvinaśē Vīrōdhini saṁvatsāra Śuchau māsē darsē vārē Vrihaspatē daksināyana-saṁkrāntan—"when there has expired, in the Kali era (the year that is numbered by) the sky (0), (the numeral) seven, (the numeral) two, and the oceans (four); in the augmenting Vīrōdhini saṁvatsāra, which is the twenty-third (year) in his reign; in the month Śuchi; on the new-moon tithi; on the day of Vrihaspati; at the time of the sun's entrance into his progress to the south." And the inscription goes on to record a grant of the village of Sindavalli by Permāṇi-Sivachittā, in this the twenty-third year of their joint reign.

This gives us, as the basis of the calculation, Kaliyuga-Saṁvatsar 3207 expired, which by the Tables is equivalent to Śaka-Saṁvatsar 1026 expired; and the details of the Vīrōdhini śaṁvatsāra, current, of the Sixty-Year Cycle of Jupiter; the month Śuchi, which, from the sāṁkrānti that is mentioned, denotes Āśadhā (ordinarily June-July); the dark-fortnight; the new-moon tithi; Vrihaspatīvāra, or Thursday; and the summer solstice, which we have to take as represented by the Kārka-Saṁkrānti or entrance of the Sun into Cancer.

By the Southern System of the Cycle, which, from the locality and period of the record, is of course the system that ought to apply, the Vīrōdhini śaṁvatsāra did coincide with the given as a name, not of a month, but of the hot season, including the two months Jyēṣṭha and Āśadhā.
indicated current year, Kaliyuga-Saṅvat 4271, equivalent to Śaka-Saṅvat 1092 (A.D. 1169-70). And, with the basis of Śaka-Saṅvat 1091 expired, from Prof. K. L. Chhatre’s Tables I find that, by the Amānta southern arrangement of the lunar fortnights, which is of course the arrangement that is required by the locality and period of the record, the given tithi, Aṣṭādaḥa kṛṣṇa 15, ended, as required, on Thursday, the 26th June, A.D. 1169, at about 28 ghauts, 46 palas, after mean sunrise (for Bombay); and the Karka-Saṅkṛaṇti occurred on the same day, at about 27 gh. 40 p.

No. 16.

In the same Halai stone inscription, the second date (line 34f.) is — saṁnvirṛtā Kalēkā śva'-sapa-dvi-payōnīhau pravardhamānē tad-rājē pañcvānīne samē Kharē Māghe cha śudhe-dvāśāyāmānē vērē Vṛhaspatē gāmhrē Vaidhritau yōgē.—“ when there has expired, in the Kali era, (the year that is numbered by) the Aśvina (two), (the numeral) seven, (the numeral) two, and the oceans (four); in the augmenting Khara (saṁvatsara), which is the twenty-fifth year in his reign; and in the month Māgha; on the twelfth tithi of the bright fortnight; on the day of Vṛhaspati; when the Vaidhritī yōga has arrived.” And the inscription goes on to record a grant of some lands at the village of Bhalika or Bhalikā by Vījayaśīvantī-Viṣṇucchita or Vījayaśāntī I., in this the twenty-fifth year of the joint reign of him and his elder brother Permājī-Śivachita.

This gives us, as the basis of the calculation, Kaliyuga-Saṅvat 4272 expired, which by the Table is equivalent to Śaka-Saṅvat 1092 expired; and the details of the Khara saṁvatsara, current, of the Sixty-Year Cycle; the month Māgha (ordinarily January-February); the bright fortnight; the twelfth tithi; Vṛhaspativāra, or Thursday; and the Vaidhritī yōga.

By the Southern System of the Cycle, the Khara saṁvatsara did coincide with the indicated current year, Kaliyuga-Saṅvat 4273, equivalent to Śaka-Saṅvat 1093 (A.D. 1271-72). But, with the basis of Śaka-Saṅvat 1093 expired, I find that the given tithi, Māgha śūkla 12, ended, not on a Thursday, but on Sunday, the 9th January, A.D. 1172, at about 50 ghauts, 21 palas, after mean sunrise (for Bombay). And it is evident, therefore, that there must be some mistake in this record; unless the record itself is spurious;

for which assumption, however, there are no prima-facie grounds whatever.

Now, the given tithi, while still belonging to the twenty-fifth regnal year, might fall in either the preceding or the following Kaliyuga (or Śaka) year; though, to meet either of these two cases, we should have to take a considerable liberty with the text, in altering the name of the saṁvatsara itself, as well as in making a change in the number of the Kaliyuga year. A correct result, however, cannot be obtained in this way. For, in the preceding year, with the basis of Śaka-Saṅvat 1092 expired, the given tithi, Māgha śūkla 12, ended on Wednesday, the 20th January, A.D. 1171, at about 42 gh. 59 p.; with no possibility of the Thursday being deduced from any other Tables. And, in the following year, with the basis of Śaka-Saṅvat 1094 expired, the given tithi, Māgha śūkla 12, ended on Saturday, the 27th January, A.D. 1173, at about 37 gh. 5 p.

The next idea that occurs, is, that the mistake is in respect of the name of the month; and that, instead of Māghé, we should have Mārgé, “in (the month) Mārga” (ordinarily November-December). And this seems to be the real state of the case. For, with the basis of Śaka-Saṅvat 1093 expired, the given tithi, taken as Mārgaśīraśa śūkla 12, ended, as required, on Thursday, the 11th November, A.D. 1171, at about 15 gh. 17 p. This, therefore, is probably the date that was intended. And it is easy to see that the composer of the record may have been compelled, by metrical exigencies, to use the locative case of the rather unusual abbreviation Mārga, unusual at least in Southern India; and that, in the writing of the record on the stone, possibly from dictation, Mārgē may have been carelessly changed into Māghē. I should state, however, that Mr. Sh. B. Dikshit informs me that the Vaidhriti yōga can never occur on Mārgaśīraśa śūkla 12; and that it did occur on Māgha śūkla 12 in A.D. 1172, on Sunday, the 9th January. His suggestion is that, in the text, which is perfectly legible and free from doubt, Vṛhaspatē should be altered into any such word as tvishānpatē, which would give “(on the day) of the sun,” i.e. “on Sunday.” But I do not see my way to accepting this alteration of the text. And, on the strength of Prof. Jacobi’s remarks about the sakshatras at page 156-57 above, I do not think that the non-occurrence of the given yōga is necessarily fatal to accepting Thursday, the 11th November, A.D.

2 Read kalēśćvi.—When I published this inscription, I read here kaiśi kha; and thought that the composer of this part of the record had carelessly copied the words expressing the year in the first date, without reflecting that two years had elapsed since then. But I find now that the of kaiśi was not engraved; and that the fol-
1171, as the real English equivalent. This date, however, is one that might advantageously be subjected to further examination.

No. 17.

In the Dēgāṅṅe stone inscription of the Kādamba king Permāḍī-Sivachitta, from the Belgaum District, published by me in the Jour. Bo. Br., R. As. Soc. Vol. IX. pp. 262, 284ff., 287ff., the date (line 33f. in the version in Nāgarī characters, and line 42ff. in the version in Old-Kanarese characters) is—

pāṇi chasaptay-adhika-dviśat-ottara-chatuḥ-sahasrā-sṛṣṭu Kaliyuga-saṅvatsarasāha prāryātītābhya pravrātāsane cha śri-Kādamba-Sivachitta-Vira-Permāḍīdēvāya pravardhamāna-vijaya-rājya-saṅvatsaraś ashtāvinīse Jay-āhavāyā Mārga-śīrshā amāvāsāyān Bhumavāra śṛyayagrananaparvanī,—" when there have expired four thousand years of the Kaliyuga, increased by two hundred raised by seventy-five; and while there is current the twenty-eighth year, having the appellation of Jaya, of the augmenting victorious reign of the glorious Kādamba Śivachitta-Vira-Permāḍīdēva; in (the month) Mārgaśīrṣa; on the new-moon tithī; on Tuesday; at the conjunction of an eclipse of the sun." And the inscription goes on to record a grant of the village of Dēgāṅṅe by Permāḍīdēva’s chief queen, Kamalādēvi, in this twenty-eighth year of his reign.

This gives us, as the basis of the calculation, Kaliyuga-Saṅvat 4275 expired, which by the Tables is equivalent to Śaka-Saṅvat 1096 expired; and the details of the Jaya saṁvatsara, current, of the Sixty-Year Cycle; the month Mārgaśīrṣa (ordinarily November-December); the new-moon tithi, i.e. the fifteenth tithi of the dark fortnight; Bhumavāra, or Tuesday; and an eclipse of the sun.

By the Southern System of the Cycle, the Jaya saṁvatsara did coincide with the indicated current year, Kaliyuga-Saṅvat 4276, equivalent to Śaka-Saṅvat 1097 (A.D. 1174-75). And with the basis of Śaka-Saṅvat 1096 expired, and by the Amduta southern arrangement, I find that the given tithi, Mārgaśīrṣa kriṣṇa 15, ended, as required, on Tuesday, the 26th November, A.D. 1174, at about 13 āsāti, 12 pālas, after mean sunrise (for Bombay); and on this day there was an eclipse of the sun, which was visible in India.

J. F. Fleet.

CATALOGUE OF COINS OF SOUTHERN INDIA.

We have received a very interesting circular, signed by Messrs. Sewell, Thurston, and Tufnell, names well known in all matters connected with antiquarian and archaeological studies in Madras, designed to promote the "systematic cataloguing of private collections of the ancient coins of South India."

"Private collectors," of course, vary, from the learned numismatic, who has made coins the study of the leisure of a lifetime, to the gentleman who collects coins as he collects everything else that is curious and that comes within his reach. Such dilettante antiquarians as this last are much more common than many suppose, and much more frequent than might be expected. They possess treasures of the real value of which they have no conception. If the gentlemen above-mentioned can manage to get the collections of such persons sufficiently within their grasp to be able to catalogue and publish them, they will have conferred a real benefit on numismatology.

The dilettante collector may be properly styled an enemy to coins; but coins have, widely spread all over India, much worse foes. We mean those ladies and gentlemen who delight in wearing "funny old coins" as personal adornments. In this Journal (ante Vol. XIV. p. 325) there has been published a coin found on a sleev-link (!); and the present writer on one occasion discovered a valuable coin on a watch-chain. However, try as they may, it is to be feared that the promoters of the scheme under consideration will succeed in capturing but very few of this class of "collector!"

Messrs. Sewell, Thurston, and Tufnell, have set about their business in a thoroughly systematic manner, and have accompanied their appeal to collectors of coins by an intelligible and simple form to fill in, together with a very practical paper of "instructions," from which we take the following easy method of taking a rough rubbing—

"Circular holes a little larger than the coin should be cut in strong cardboard. A piece of strong thin paper should then be placed over the coin and pressed down tight by means of the card. The paper should then be gently rubbed with a hard blacklead pencil, not cut to a point, but just rounded off."

The only point in the scheme that we would deprecate being carried out, is the proposal to start a new periodical devoted to this work. There are plenty of widely circulated magazines and journals of Societies in existence already, that would gladly publish whatever the promoters might send them as the result of their efforts. Indeed, so great are the calls on the purses of the scientific men of the day in the matter of

* See von Oppolzer’s Canon der Finaternisse, pp. 228, 229, and Plate 114.
subscriptions to periodicals and Societies connected with their studies, that the best of them are loth to add to the already too long list. So that, unless a scientific subject is sufficiently wide in its scope to demand a journal to itself, the danger of starting a new journal is that its circulation will be very small and fail to reach those who would make the best use of its contents. It is, we submit, better for the South-Indian numismatists to use the pages of any established and widely circulated journal they may think best suited to them, than to start a journal of their own.

With this one criticism, we have much pleasure in giving the scheme our welcome and heartiest support.

WHALE AND AL-UWAL.

I have no reason to suppose that the usual derivation of the word whale, from the Anglo-Saxon hweal is incorrect; but the word used for this animal by the old Arab traveller, Mas’udi (A.D. 1601-1603), in his Meadows of Gold and Mines of Gems, is curiously similar, and I do not think that attention has previously been drawn to it. The following is a translation of one of the passages in which it occurs:——

"There is a fish in this sea called al-Uwâl (whale), which is from four to five hundred ‘Umarî cubits long; these are the cubits in use in this sea (the Sea of Zang-îr, Zâli’î). The usual length of this fish is one hundred ‘Umarî cubits. Frequently when it swims through the sea only the extremities of the two fins are to be seen, and it looks like the sail of a ship. Generally the head of the whale is out of water, and when it powerfully ejects water it gushes into the air more than one bowshot high. The vessels are afraid of it by day and night, and they beat drums (dabâdab) and wooden poles to drive it away. This fish drives with its tail and fins other fish into its open mouth, and they pass down its throat with the stream of water. When the whale sings God sends a fish about one cubit long, called ash-Shak (اش-شک); it adheres to the root of its tail, and the whale has no means to make itself free from it. It goes therefore to the bottom of the sea and beats itself to death; its dead body floats on the water and looks like a great mountain. The fish called ash-Shak adheres frequently to the whale. The whales, notwithstanding their size, do not approach vessels, and they take flight when they see this little fish, for it is their destruction."

A little further on the author mentions an island called "Whale Island" (جزیرة الاراول), but I am unable to identify it.

The word dabâdab, used for a drum in the above passage, corresponds to the Old English "dub-a-dub," to beat a drum. Also, the blow on the drum: "The dub-a-dub of honour,"—"Rub-a-dub and dub-a-dub the drummer beats away."

As this word probably owes it origin to an imitative sound, the similarity even in two widely different languages is not surprising.

J. S. KING.

TABSERET-UL-AVAM.

This work, the full title of which is تصبیر العواام فی معروف مختلفة الأماک, has been lithographed for the first time in Persia, at Tehran, and bears A.H. 1304 in the colophon as the date of publication. It is sold bound up with the Qisas-ul-Ulam of Muhammad bin Sulaiman Tenekâbâni, and is an Exposition of the principal Creeds of the East. Its author, a zealous Shi‘ah, is Sayyid Murtezâ, styled ‘Alem-ul-Huda. In a MS. copy which once passed through my hands the author was called Murtezâ Râzî-ul-Husainî. The Qisas-ul-Ulam which precedes it contains (page 314) a notice of Sayyid Murtezâ-ud-Dâ’î ar-Râzî-ul-Husainî, and it makes him out to be the author of the Tabserah. At the same time it gives an anecdote of his relations with Abû Muhammad bin Muhammed al-Ghazâlî-ut-Tâbi (born A.H. 450, died A.H. 503), whilst Sayyid Murtezâ in his own work, in the chapter on the doctrines of the second sect of Islam, those who call themselves Shi‘ahs (page 65, line 27 of the edition under notice), mentions that Fakhri Râzî was of late times—that is to say modern in comparison with himself. Fakhri Râzî died A.H. 606.

Besides the present work, Sayyid Murtezâ translated a genealogy of some of the Imams from the Arabic, a work written after A.H. 538, and entitled Ansâb Nâmeh.


1 Gulf of Aden?

S. J. A. C.

A TABLE FOR THE ABDAPA, TITHI-SUDDHI, AND TITHI-KENDRA.

In using Prof. K. L. Chhatre's Tables for calculating the week-days, ending-times, and English dates, of Hindu tithis, some inconvenience is entailed by the number of the quantities that have to be taken, at starting, from his Table I. For instance, in calculating a date with the basis of Saka-Sanvat 1134 expired, we have to take out, under the three columns of the Abdapa, the Tithi-suddhi, and the Tithi-kendra, the quantities for the years 0, 1000, 100, 30, and 4, or altogether fifteen sets of figures, and also to work out from Table II., by proportion, the correction in the Tithi-suddhi and the Tithi-kendra, before the operation is started by addition, in their respective columns, of all the quantities thus obtained.

The object of the accompanying Table for the Abdapa, Tithi-suddhi, and Tithi-kendra, is to simplify this part of the work. The quantities given in it are all complete, including the kshaya or additive quantities for Saka-Sanvat 0 expired. And, in working, in fact, with the expired year quoted above, all that is necessary is to take out, from the body of the Table, the quantities for the year 1130, with the corrections for the same year (21 l. p., and 1 gh. 19 p.) as being a sufficiently close approximation, and to add the difference for four years from the subsidiary Table at the bottom of the page.

One revolution of the moon's kendra is completed in 27 tithis, 59 ghatis, and 33-36 palas. But, to save trouble on the part of the calculator, it is taken to contain 28 tithis, in adding the quantities of the Tithi-kendra for the several component parts of a given Saka year; no sensible error being introduced thereby in the ultimate results. In preparing the Tables, however, one revolution of the kendra is taken to contain, not 28, but the correct number, viz. 27 ti. 59 gh. 33-36 p. Thus, for example, the variation in the Tithi-kendra for 4 years is given (7 ti. 9 gh. 42 l. p. x 4 = 27 ti. 59 gh. 33-3 p.) 0 ti. 39 gh. 15 p. (see Kala-sdhana Table I. p. 10, last column) and, in preparing the accompanying Table, I have thought it desirable to follow the correct way. Thus, the Tithi-kendra for Saka-Sanvat 1150 expired is 2 ti. 57 gh. 16 p. in my Table; while, by adding the quantities for the Saka years 0, 1000, 100 and 50, and taking the remainder over the multiple of 28, it would have been 2 ti. 55 gh. 56 p. Accordingly, the figures of the Tithi-kendra in my Table will differ a little from those that would be obtained from Prof. Chhatre's Tables; but the change is, it must have been seen, on the correct side. And the ultimate results worked out from my Table will sometimes be more correct than those obtained from Prof. Chhatre's Tables by about seven palas.

There is another point of difference. The correction in the Tithi-suddhi and Tithi-kendra given in Prof. Chhatre's Kala-sdhana Table II. p. 12, is too vague, being for the interval of each thousand years. This Table II. is based on the correction in the moon's mean longitude and mean anomaly given in Table IV. p. 89, in which that correction is given for the interval of each hundred years. It is evident, therefore, that the correction in the Tithi-suddhi and Tithi-kendra, calculated from the figures in Table IV. p. 89, will be more accurate. I calculated it accordingly, and have given it in the accompanying Table. This correction becomes nil in Saka-Sanvat 1622 expired; and in other years from Saka-Sanvat 1500 to 1700 expired, it is less than one pala with respect to the Tithi-suddhi, and less than five palas in the Tithi-kendra; the latter causing a difference of half a pala at the utmost in the ultimate results. The correction for these years, therefore, is neglected in the accompanying Table.

The present Table, thus prepared from the details in Prof. K. L. Chhatre's Table I., with the modifications explained above, extends from Saka-Sanvat 0 to 1690, both expired. Table VII. in his book gives the required quantities for every year from Saka-Sanvat 1700 to 1800, both expired. And the two Tables together will render it quick work to calculate any date in the first eighteen centuries of the Saka era.

SH. B. Dikshit.

1. Kala-sdhana, pp. 10 to 36, Kala-sdhana Tables I. to XI.


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**DIFFERENCE FOR INTERMEDIATE YEARS.**

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BOOK NOTICE.

PROF. WEBER’S EDITION OF THE PARASRUPAKASA. A Pārśaḥ Pārṣkās of Vēdāṅga Rāya (Bēdāṅg Rāy) has been known to scholars since the publication of Garcin de Tassy’s History of the Language and Literature of Hindūdīn, in page 519 of the first volume of which, an account is given of it. This work was written for Shāh Jahan about the middle of the 17th century, and according to Garcín de Tassy described the manner of counting the months, &c., adopted by Hindus and Muslimāns. Prof. Weber now introduces us to an older and apparently more complete Persian-Sanskrit Glossary written in the latter portion of the 16th century for the emperor Akbar. The work bears the same name, the Pārśaḥ-Prakāśā, and was written by a Śākadvipya Brāhmaṇa named Krishṇadhāsa.

In his introduction to this edition, Prof. Weber gives an account of the traces of the relations between India and Persia which can be gathered from Sanskrit literature. First, there are reminiscences of a common Perso-Āryan and Indo-Āryan period in the Vēda. Next we have the historical record of Indian Auxiliaries with the Achaemenides in their struggles with the Greeks. From this time dates the introduction of words like Yavana, Bāzbērū (Babylon), and Mudrē. The last word Prof. Weber connects with the cuneiform Mudrāya, the ancient name for Egypt. Again, perhaps the Nṛṣīnḥa of the Vaishnavas may be referred to man-headed lions of Nineveh, Perspolis, &c. The word Bahlī (first met in the vṛttī, to Pāṇini, 4, 2, 99) is also referred to the old Persian Bakhtāri (Bactria).

The Magas, the representatives of the worship of Mithra, are, Prof. Weber thinks, perhaps related to the Brāhmaṇa Mayo of Ptolemy, at any rate we have Varāhamihira’s authority thata Magian colony had long before his time obtained a secure foothold in India; and the modern Śākadvipya Brāhmaṇas refer to that tribe their origin.

The Gupta inscriptions disclose intimate relations with the Pahlavas or Parthian Arsacids, and with the Pārāsikas or Persian Sasanides. And from this period date a whole series of words of a political and of a military character used in Sanskrit, such as Shāhānshahi, Kshatrāpa (a Satrap), pīū (an elephant, शिक्षाधी), and (?) taravāra (a sword).

The Muhammadan invasion was the means of introducing many foreign words, especially Arabic and Turkish, into Sanskrit. Such were several astronomical and medicinal terms, and also, curiously enough, many words used in the game of chess, though it is undoubtedly of Indian origin.

Lastly, several foreign words have crept into the collections of fables from the popular idiom. And to these may be added many foreign words borrowed and then transformed into possible Sanskrit terms through the influence of popular etymology. Examples of this last are Suratrēnā, ‘Sultān’; Mauśula, ‘Muslim’; Mudgala, ‘Mughul’; Śēka (Śēkha), ‘Sikh’; Miśra, ‘Mirza’ and so on.

I may perhaps be permitted to carry on this a step further. I have a Sanskrit translation of the Arabian Nights in my possession, entitled the Árabya-Yāmīnī. The translator has borrowed the Arabic names of places and persons as they stand, transliterating them into Nāgari, and then giving them, in the commentary, Sanskrit derivations!! Examples of this licentious word-play are Sahalīyāra (सहलीयारा), which he derives from Saha, ‘strength,’ rd, ‘wealth,’ and dra, ‘a corner,’ i.e. ‘he in whose inmost recesses are power and wealth.’ The name of the town of Samarkand (समारकंद) is explained as follows: ‘samaraśyā yuddhāya; kanda (घास) to cry, श्वासन यत्रा देति, sa Samarakandah. The meeting between the queen and her lover Maś’ud (मसूद) is thus described: ‘paramaḥ rājāṃ hāsīḥ kartaṇā lārājanā pradhānapurāhavan ‘Māsūda Maś’udāḥ ty uktā haṁsaḥ kriyataḥ, to which is added the following piece of etymology, ‘Māsūda iti Mā ita Lakshmir eva; sūdaḥ pachakah; iti Maś’udah!!’

Prof. Weber next gives a sketch of the history of the Śākadvipya Brāhmaṇas, and shows the probability that in ancient times Iranian strangers entered India from Śakadvipa and were admitted directly into the ranks of the Brāhmaṇas. I may mention here that, in Bihār, at the Śrēdha ceremony all Brāhmaṇas may be fed by the performer, except Śākadvipa. Even Jyotishā Brāhmaṇas who are below the Śākadvipa in caste, are fed, but never the latter.

The Pārśaḥ-prakāśā consists of about 260 slokas, in which 1065 Persian words are explained. As a rule, each quarter-verse explains a different word; but this is not universal. The Persian word is given in the nominative, and the Sanskrit meaning usually in the locative. It is written in the customary kosa form with tenargas, but the

1 I have never seen Bēdāṅg Rāya’s work, but judging from its being noticed by Garcin de Tassy, I presume it was in the Vernacular. Prof. Weber, who knows it well, can no doubt give us further information on the subject.
names of these latter only partially agree with their contents.

The following account of a portion of the first (swargavarga) will act as a specimen of the whole. The author begins, as a Śākdvāpiya Brähman, with the names of the sun (here the influence of Akbar's Ilahi religion shows itself) and then gives the names of God and of the evil spirits, viz. dēvatā, paramāsura and asura, corresponding to īlāh, nārād, khasda, viśeva and kātāna respectively. He mentions neither Allah, nor Brähman, nor Vishnu, nor Śiva. Yama, aparaṇa and ṛśkha, are given as the equivalents of Yavruta (the angel Gabriel.), pari and ḍādam-khāra. Then we have neotar (piyāsa) and the kalpataru, corresponding to dhāraya and tārī, Paradise is swarga (siva). HELL is naraka (dājakha), and Adam and Eve are Manu and his gṛhītavāri (!).

The Persian with which the author deals is the Persian (or rather the Ürdū) of Hindustān, full of Arabic and Turkī words, and sometimes even of words of Hindu origin. Specimens of the latter class, which are given by the author as Persian, are words like vairakta (the rains), jharokhā (a window), tamurā (a tent) and so on.

Owing to the Persian words being transcribed in the Nāgari character, difficulty has been experienced by the editor in identifying some of them, especially as the Sanskrit translations were often by no means clear. One or two of these doubtful words are capable of being explained by a reference to the modern vernacular; e.g. (15) tākah ḍālpāγ. The latter word is new to Professor Weber, and he compares it with ḍālpā, 'a row of lamps'; tākah he fails to identify. It is the Arabic ṭakā, 'a recess in a wall.' The ṭakā is used especially for putting a lamp into, and hence it is also called ḍāldr or ḍālī, a corruption of ḍālpāga, 'lamp-house.' ḍāldr does not occur in Hindustāni dictionaries, being confounded with the Persian dēvdār, 'a wall.' It is, however, in common use.

(295) hujraḥa tu ḍhiphādān rdīs. As Professor Weber accurately points out, ḍhiphādān means 'a court-yard;' regarding ḍhiphādā it says, 'it is as yet unknown in Sanskrit, cf. Marāṭhī ḍhiphādā, an arbour, a bower, a cavern, a cave.' He suggests that ḍhiphādā in Sanskrit means 'a court-yard.' I would suggest that ḍhiphādā in Sanskrit must have meant 'a cave,' cf. guhā, which is apparently a Prākritized form of it, or else guhā is a falsely resuscitated Sanskrit manufacture from (the apparently Prākrit) guhā. Anyhow, ḍhiphādā in

medieval Hindi means 'a cave,' and nothing else. How is it then the equivalent of hujara, 'a court-yard'? I think the answer will be found in the fact that Krishnānāsā dealt with the Persian of India, In colloquial Hindustāni I have only met the word in one sense,—equivalent to the slang use of the English 'den.' It is used in phrases like the following,—'tum ān rāt hujare mē ghush rrāhē hā,' of a man who boorishly or sulkily shuts himself up in his house, and refuses to see any one,—'You remain day and night hidden in your den.' The metaphorical use of this word may well be explained by the Hindi guphā. (!)

(313) jīnah prārhanā. Prof. Weber says that the use of prārha (i.e. prārhanā) in the sense of 'saddle' is unsupported by other authorities. Here, I think, we have another instance of the author building-up a pseudo-Sanskrit word from the vernacular. Parōhan in Hindi means anything on which a person rides. Thus, in a well-known proverb, a donkey is called the washerman's parōhan (see Bihar Peasant Life § 393.) The word as explained by natives would include the meaning of 'saddle.' In 605, pārāsha also is given as the equivalent of jīna. The reading of G. pālāna is instructive as giving the form used by Vidyāpati Thākur, who wrote in the vernacular, A.D. 1400. Vidyāpati has given a verbal root pālāna ‘to saddle.’(!)

(385) Khrāsnaḥ kavīudārskyu rasakṣeṣu cha.— Prof. Weber suggests kāṇḍa (pl.) as meaning 'itching places;' and rasaka (also in the plural) as 'moist itching wounds.' In Bihar both words are still used, to express different varieties of the same disease. Kāṇḍa is 'dry itch,' and rasak is 'moist itch.'

(478) vālīpāsas tu tālikā. Baldāphis is 'an outer garment.' The Sanskrit dictionaries give tālikā as meaning 'a mattress filled with cotton.' The meaning of 'outer garment' is not given. Again the missing link will be found in the vernacular. In south-east Bihar tārdī means a light quilt containing less than a pound of cotton. These quilts are always worn as outer garments. Cf. Bihar Peasant Life, § 731.

I regret that time does not permit me to make more than these few suggestions, which, I need hardly say, are offered with the heartiest admiration for the learning and acumen displayed in this most useful book. Prof. Weber is to be congratulated on a work which, if possible, lends an enhanced lustre to his great reputation.

G. A. Grierson.

1 [Hujra in the Punjab is used as the 'abode,' i.e. a dark mud hut, of a Muhammadan ascetic.—R. C. T.]

2 [Bīd. 89, 3, bālāha dādā jē bāsaka pālāna, 'inasmuch as he has saddled his bullock with a tiger's skin.'

3 [Bīd. 605, pālāna also is given as the equivalent of jīna.]
THE BAKHSHALI MANUSCRIPT.

BY Drs. A. F. RUDOLF HOERNLE.

(Continued from p. 43.)

No. II.

The page, figured on Plate II, is the obverse of the leaf the reverse page of which is figured on Plate I, previously published. It contains another portion of sūtra 25, and reads as follows:

The page figured on the lower half of Plate III is the same as that figured on Plate I. That figured on the upper half is the reverse (not "obverse" as stated on the Plate) of a leaf which contains the concluding portion of sūtra 53 and the beginning of sūtra 54. It reads as follows:

1. The transcripts are again made from the original, as the lithographs are not quite perfect. The statements on the plates which reverse the position of the two pages are incorrect.
2. The two pieces at the upper right-hand corner have got displaced. The lower of the two pieces should be reversed, and joined on to the top of the upper of the two pieces, and then the joint-piece should be brought down to the main piece.
The total number of its examples is fifteen (see p. 34 above).

**TEXT.**

25th Sūtra.

Kṛteśa rūpakshhayam pārthaṁ dhāntasaṁ-
guṇanaṁ tataḥ 1
Pravṛtti-r-guṇanaṁ bhaktvā vi-
nirvidiṣet 2

Udā 11

Yasya tanmayatā chakṣuḥ...
vida 11

| 3 | 4 | 5 | 1 |

Vāda 11

apahṛtaśulkapindau 24 11 kara-
ṇaṁ 11 kṛtvā rūpakshayaṁ pāṣa
| 2 | 3 | 4 | 5 | jātu
| 3 | 5 | 1 |
sāṁguṇya jātaṁ 2 3 5 1 5 1 
| 3 | 4 | 5 |
| 4 | 5 | 5 | 5 | 5 |

Saṁguṇya jātaṁ 2 3 5 1 5 1 
| 3 | 4 | 5 |
| 4 | 5 | 5 | 5 | 5 |

Udā 11

Guḍapindau jñātatyūvō chatuṛi...

Vey
gudau 11

Trīchatushaṁchaḥṣadvyṛddhyāḥ chatvarīn-
śa vē khayaḥ... 11

Udā 11

Ajñāta-r-ambhalōhasya trīchatushaṁchaḥkaḥ
kṣayē 1
Saptaviṁśati piṇḍasya trīdhaṁtaśeṣhya dhri-
shyatā 11
Kīṁ sarvaṁ vada tatvajña khayaṁ cha

| 3 | 4 | 5 | 1 | 27 |

Mūrṇa katthyatāṁ 11

| 3 | 4 | 5 | 1 | 27 |

Karaṇaṁ 1 kṛtvā rūpakshayaṁ pārtha
| 2 | 3 | 4 | 5 | guṇitau jātaṁ 2 5
| 3 | 5 | 1 |
rūpakshayaṁ 3 5 annaṁ śēṣhaṁ bhaktau śē-
shaṁ 27 bhaktau jātaṁ 45 asya saṭapāvinaśa

3 The preceding portion is not on the plate. It has been added from another leaf for the sake of completeness.
4 The original has the upadhamāṇa in "chatuṣhaṁ-
chār".
5 The original spells it with the guttural nasal conso-
ant.
6 Read paṁchaṁḍuṣṇakāśi.
7 The original has the fihvamālīya.
FACSIMILES OF LEAVES OF THE BAKHSHALI MANUSCRIPT.

A. Portions of Sūtras 53–54. Plate III.

1
2
3
4
5
6
7
8

Obverse.

B. A portion of Sūtra 25.

1
2
3
4
5
6
7
8

Obverse.

Size 8½" by 7".
Eleventh Example.
(This example is too fragmentary to be translated. Its purport may be inferred from the solution to have been somewhat as follows:—Of a certain quantity of goods, a merchant has to pay, as duty, one-third, one-fourth and one-fifth on three successive occasions. The total amount of duty he thus pays is 24. What was the original quantity of his goods?)

The statement is partially wanting, but the whole of it may be easily restored thus: — \( \frac{1}{3}, \frac{1}{4}, \frac{1}{5} \) (is the series of rates); the total duty taken is 24.

Solution:—“Having subtracted the series from one,” we get \( \frac{2}{3}, \frac{3}{4}, \frac{4}{5} \); these multiplied altogether give \( \frac{5}{2} \); that again, subtracted from one, gives \( \frac{2}{5} \); with this, after having been divided, \((i.e. \text{inverted}, \frac{5}{2})\), the total duty (24) is multiplied, giving 40; that is the original quantity.

Proof: \( \frac{2}{5} \) multiplied with 40 gives 16 as the (ultimate) remainder; (to this add the total duty) 24; hence (the original quantity) is 40.

Another proof of it: 40 multiplied with \( 1-\frac{1}{3} \) and \( 1-\frac{1}{4} \) and \( 1-\frac{1}{5} \) gives the result 16 (or in notation): \( 40 \times [(1-\frac{1}{3}) \times (1-\frac{1}{4}) \times (1-\frac{1}{5})] = 16 \); the deduction is 24; hence (the total is) 40.

Twelfth Example.
[I cannot venture to translate the example, as it is only preserved in a fragmentary state, and all the rest that might have explained it—statement, solution and proof—is entirely lost. The following does not pretend to be more than a guess at its purport:—A merchant possesses a quantity of molasses of a certain weight; he makes, on four successive occasions, additions thereto of one-third, one-fourth, one-fifth and one-sixth; the difference (between these additions and the original quantity) is forty. What was the original quantity, and what is the final total amount?]

Solution:—One added severally to \( \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6} \); \( \frac{1}{3} \) gives \( \frac{4}{3}, \frac{5}{4}, \frac{6}{5}, \frac{7}{6} \); these instalments multiplied together give \( \frac{7}{3} \); subtracting 1 from \( \frac{7}{3} \), we get \( \frac{4}{3} \); with \( \frac{4}{3} \) divided (or inverted, \( \frac{5}{4} \)) the difference 40 is multiplied, giving \( \frac{10}{3} \) or 30; hence the original quantity was 30, and the final amount is 70).

Thirteenth Example.

Of an unknown quantity of lapis lazuli, one-third, one-fourth and one-fifth go in loss; the (total) loss of the quantity, accruing in three instalments, is found to be twenty-seven. Say, O wise man, what is the total, and let me also be told the difference (between the total and the loss, i.e. the remainder)?

Statement: \( \frac{1}{3}, \frac{1}{4}, \frac{1}{5} \) are the rates of loss; the (total) loss is 27.

Solution:—“Having subtracted the series from one,” we get \( \frac{2}{3}, \frac{3}{4}, \frac{4}{5} \), which being multiplied give \( \frac{2}{5} \); subtracting this from one, we get \( \frac{3}{5} \), by this the loss is divided; the loss is 27; dividing this by it, we get 45; out of this the loss is twenty-seven; hence the difference (or remainder) is 18.

Fourteenth Example.

Of waste iron there are three instalments, of which one-fifth is the last rate.\(^{13}\) The original amount is not known, nor is the wastage declared; but the remainder of the original amount is only twenty. Now let the original amount be shown, and tell me what shall be the wastage.

Statement: \( \frac{1}{3}, \frac{1}{4}, \frac{1}{5} \) (is the series of rates of wastage).

(The solution and proof are wanting; but after the analogy of those of the preceding examples, the solution would run thus:—“Subtracting the series from one,” we get \( \frac{2}{3}, \frac{3}{4}, \frac{4}{5} \); multiplying these, we get \( \frac{2}{5} \); dividing with this the remainder 20, we get 50 as the original amount; hence the wastage is 30).

54th Sūtra.

With the sale the purchase should be divided; then divide it again (after being) diminished by one; then multiply it with the profit; (the result) is then the capital.

Example.

One who purchases seven for two, sells six

\( \text{mahājānak} (i.e. \text{paśchama-mahājānak}) \) 'having one-fifth as a (final) part.' But it may be also suggested to be an error for \( \text{paśchamāntakānak} \), 'having one-fifth as its final (rate).'}
for three. Eighteen is his profit. Say now, what was his capital?

Statement: \( \frac{7}{17} \) and \( \frac{6}{9} \) (are the rates of purchase and sale); 18 is the profit.

Solution (may be thus restored):—"With the sale (the purchase should be divided);" the rate of purchase is \( \frac{7}{17} \); that of sale is \( \frac{6}{9} \); dividing with the latter, we get \( \frac{\frac{7}{17}}{\frac{6}{9}} \) or \( \frac{7}{17} \times \frac{9}{6} = \frac{7}{12} \); subtracting 1 from \( \frac{7}{12} \), we get \( \frac{3}{12} \); this, being divided (or inverted), becomes \( \frac{1}{4} \); with this multiplying (the profit 18), we get 24; this is the capital.

Proof of this by the rule of three:—If seven are got for two, then how much (is got) for twenty-four, or in notation 2: 7 = 24: 84. This (i.e. 84) is sold. If for six are again got three, then how much (is got) for eighty-four, or in notation 6: 3 = 84: 42; (hence) the original amount was 24, and the remainder of the property is 18; that is the profit.

NOTES.

1. On the terms pártha, dhánta, pravritti, bhaktvá.—The term pártha occurs very frequently in the fifteen examples of the 25th sūtra. It is sometimes spelt pāstra (as on Plate II), which spelling indeed occurs as often as pártha. Once I also found the spelling pāstra. Neither of the three words is found in any Sanskrit dictionary accessible to me. But it seems clearly to appear from the context that the meaning of the word must be 'series,' i.e. the series of the rates or proportions. I take pártha to be a synonym of párthakya (which is given in the dictionaries), and a derivative of pṛthá in the sense of 'several' (like pṛthak).

The form pāstra, if it is not an error for pártha, I would take to stand for ápātra (apa-asta), 'what is thrown away,' 'deduction.' It will be observed that the series of instalments often refers, in the examples, 'to deductions made (by way of 'wastage' or 'duty') from the original amount. This may explain, why pāstra might be occasionally substituted for pártha. The form pāstra, I am disposed to think, is simply an error for pártha, or for pāstra if the latter form be also admissible.—The term dhánta is derived from the suffix dhá and anta, and means literally 'that which ends in dhá,' (as dvídá, trídá, &c.).' It hence comes to be equivalent to our 'instalment.'—The term pravritti is explained in the solution of an example to the 26th sūtra to 'mean the original amount, the stock or capital.' In that example the 'original amount' is required to be found, and it is then shown to be 81, to which is added the remark ēsa pravritti ity arthāt, 'this is the original amount, that is the meaning of it.' In this sense of the 'original amount,' the word pravritti does not appear to be noted in any Sanskrit dictionary. The meaning, however, is readily deducible from the root of the word.—The term bhaktvá, 'having divided,' (or bhajé or bhágá) is technically applied to a fraction, when it is to be used as a divisor, and directs the 'inversion' of the fraction. For example, if 24 is to be divided by \( \frac{3}{7} \), the direction given is,—'divide \( \frac{3}{7} \) and multiply it with 24,' where we might say,—'invert \( \frac{3}{7} \) and multiply with 24;' that is, \( \frac{7}{3} \times 24 = 40. \)

2. Examples of sūtra 25. In the 11th example the original quantity is 40; of this \( \frac{1}{4} \), or 13 \( \frac{1}{3} \), is paid as duty; the remainder is 26 \( \frac{1}{3} \); of this \( \frac{1}{4} \) or \( \frac{6}{3} \), is paid as duty; the remainder is 20; of this \( \frac{1}{3} \) or 4, is paid as duty, the remainder is 16. The three instalments of duty, \( 13 \frac{1}{3} + 6 \frac{1}{3} + 4 \), amount to 24. And 16 + 24 = 40.—The 13th example is similar to the 11th. The arithmetical process had been given correctly in my previous note (p. 48 above); but, on reconsideration, I think, the exact meaning of the example is as now given. It is not the 'loss,' but the 'remainder,' that is required to be found. The method of the 25th sūtra is based on the following considerations:—The original quantity is assumed to be one; then the remainder, after the first instalment of duty is paid, is \( 1 - \frac{1}{3} \) or \( \frac{2}{3} \); if the quantity on which the second instalment of duty is paid, be assumed to be one, the remainder after paying that instalment is \( 1 - \frac{1}{4} \) or \( \frac{3}{4} \); but the quantity on which it is really paid is \( \frac{2}{3} \); hence the proportionate remainder is \( \frac{2}{3} \times \frac{3}{4} \) (i.e. 1 : \( \frac{3}{4} = \frac{3}{3} : \frac{23}{24} \)); similarly if the quantity on which the third instalment is paid, be assumed to be 1, the remainder, after paying that instalment, is \( 1 - \frac{1}{5} \) or \( \frac{4}{5} \); but the quantity on which it is really paid is the previous...
remainder \( \frac{2}{3} \times \frac{2}{3} \); hence the proportionate final remainder is now \( \frac{2}{3} \times \frac{3}{4} \times \frac{2}{3} \times \frac{4}{3} \) (i.e. \( 1: \frac{4}{3} = \frac{2}{3} \times \frac{3}{4} \times \frac{3}{2} \times \frac{4}{3} \), or \( \frac{2}{3} \); and if the original quantity be assumed to be 1, the loss must amount to \( \frac{2}{3} \) or \( \frac{3}{5} \). Now, if the amount of the loss is given, it follows that the proportionate original quantity is found by dividing the given loss with \( \frac{3}{5} \) or (as the rule says) by ‘dividing’ (i.e. inverting) \( \frac{3}{5} \) (i.e. \( \frac{2}{5} \)), and multiplying the given loss with it; for \( \frac{2}{5} : 1 = \) given loss: original quantity. On the other hand, if the final remainder is given, the original quantity is found by dividing the given remainder with \( \frac{3}{5} \); or by ‘dividing’ (i.e. inverting) \( \frac{2}{5} \) (i.e. \( \frac{5}{2} \)) and multiplying the given remainder with it (for \( \frac{5}{2} : 1 = \) given remainder: original quantity).

WEBER'S SACRED LITERATURE OF THE JAINS.

TRANSLATED BY DR. HERBERT W. SMYTH.

(From the Indische Studien, Vol. XVI, pp. 211-479, and Vol. XVII, pp. 1-90.)

According [211] to the conception of the modern Jains, their collective sacred texts date back to the first Jina, Rishabhadeva. The first trace of this view appears to be found in the concluding paragraph of the Nandi, in which the apunna (anunja) is referred to Usahavesa, the 12 akgas having in the passage just before mentioned as bhadrapunna and in an earlier passage, in which 8,490,000 painnas are attributed to Vadhamagaasa, the scholium substitutes Rishabhavksam. The statements (in four 436 in Nemicandra's Pravachanasabdhyara 36, composed in Pankri, in tiththauchchhlea (in four verses inserted between 435 and 436), are, to a certain extent, in agreement with the above. These verses are a detailed explanation of the state-

ments in v. 434, which are rather general in character and obscure; and assert that during the eight jinmatayas: Usahaji-namudü jà Suvih, i.e. from Usaha 1 to Suvihti 9, there existed only eleven akgas, without the ditthivada, which stands in the twelfth place: mrttinu dhihitvayyam khyanti itkara 'iva akgasam. During [212] the following seven jinmatayas: Suvihijina jà Sanati, from Suvihti 9 to Sanati 16, all twelve akgas were vuchchhinna. But during the last eight jinmatayas: Sanatiyinà jà Viranü, from Sanati 16 to Viran 24, they were not vuchchhinna.

The ditthivada was a second time lost: vuchchhinna dhihitvada tahiina. These statements are, it is true, obscure, yet become clear by means of verse 434, which they are designed to explain. According to this verse, all three statements

\[ \text{v. 434, which are rather general in character and obscure; and assert that during the eight jinmatayas: Usahaji-namudü jà Suvih, i.e. from Usaha 1 to Suvihti 9, there existed only eleven akgas, without the ditthivada, which stands in the twelfth place: mrttinu dhihitvayyam khyanti itkara 'iva akgasam. During [212] the following seven jinmatayas: Suvihijina jà Sanati, from Suvihti 9 to Sanati 16, all twelve akgas were vuchchhinna. But during the last eight jinmatayas: Sanatiyinà jà Viranü, from Sanati 16 to Viran 24, they were not vuchchhinna. The ditthivada was a second time lost: vuchchhinna dhihitvada tahiina. These statements are, it is true, obscure, yet become clear by means of verse 434, which they are designed to explain. According to this verse, all three statements} \]
are valid merely for the interval between the Jinas. Their significance is as follows:—At the time of Usabha all twelve aṅgas were extant; between Jinas 1-9 only the first eleven; between Jinas 9-16 all twelve were lost; and under or between Jinas 16-24 they were all extant. The twelfth aṅga was however lost again after Jina 24.

Though these statements appear to establish the fact that the 12 aṅgas are said to have existed as early as the time of Usabha, nevertheless it becomes perfectly plain, from a consideration of their nature, that this claim rests upon an insufficient foundation. The commentator characterizes the degree of the vucchhād during the jināntaras, which existed between Suvih, to Saṁti, as follows:—araḥdhipurusa-vārta ʻpi tatra naṣṭā; a peculiar testimony, we may remark in passing, to the result of the activity of each of the seven saints 9-15.

In reference [213] to the vucchhād of the twelfth aṅga (i.e. the diṣṭhīvāda) which happened again after Mahāvīra, we have additional information derived from tradition.

The fourteen so-called pūrveśi, cf. Hēm. 246-247, which, according to the statements handed down to us, formed a part of this aṅga and which Mahāvīra is said to have transmitted to all his pupils (though only one of these, Sudhāman by name, transmitted them to a pupil of his own, Jambu, the last Kēvalin) are said to have existed for only six generations longer. In consequence of this the seven patriarchs in question, namely:—Prabhava 3, Sāvyānmā 4, Yasōbhādra 5, Sambhutivijaya 6, Bhadrabāhu 7, and Sthūlabhadrā 8, had the honorary title of āryaśāśvādhitā, or chaṇḍaṇa-puṣvi (in the Nandis.), chatur-āsyaśāśvādhitā, ʻpucchād.9

The following seven patriarchs:—Mahāgiri, Suhastin to Vajra (Hēm. v. 35), knew only ten of the whole number, inasmuch as tradition asserts that with Sthūlabhadra the knowledge of the 4 last pūrveśi10 (11—14) ceased. In consequence of this they are called dasapuṣvi (cf.

[15] Il cite this article as Klätt's.
[16] Išat cha tasmin dushkāle kārāle kālarātrivāt |
In opposition to this information is the fact, that not only in āṅgika 4 and in the Nandiśūtra, do we find a detailed table of contents of the whole dītthivāsa, including the 14 pūrvas, but also that partly in the just-mentioned places, partly in several other texts (Mahānāthīkha, Ānyogadāvatā, Āvākhyā, nīja.) the dvālasānosisūn ganaṇidigama is repeatedly mentioned; consequently the Dīthivāsa appears to have still existed at the date of those texts, and moreover to have been still intact, since there is no mention of any imperfection. The Bhadrabāhu, to whom the above-mentioned legend has reference, died, so says tradition, 170 after Vīra, whereas in two of the texts, which mention the dvālasānosisūn ganaṇidigama, there are contained dates which refer to a period later by 400 years. The whole legend appears to me, after all, to be nothing more than an imitation of the Buddhist legend of the council of Aśoka etc., and thus to have little claim to credence.

Be this as it may, the legend manifests a direct opposition between the 11 āṅgas and the pūrvas. And in fact from the scholium on āṅgika 4 we must conceive their inter-relation to be as follows: the Tīrthakara, i.e. Mahāvīra — here is no thought of Rishabha, — first recited to his Gaṇadharas the contents of the pūrvagatasūtras (whence the name pūrvāsī); whereupon the Gaṇadharas on their part brought14 the contents of the pūrvagatasūtra into the form of the āṅgas: āchāra etc. According [216] to another view the Gaṇadharas first brought the pūrvagatasūtran after its recital by the Arhat, into a textual form, and afterwards directed their attention to the āṅgas: āchāra etc.15 Later on we shall return to the explanation of the name pūrva and the difference between āṅgas 1-11 and āṅga 12.

In full agreement as we find here that the actual contents have been ascribed to the Arhat, i.e. Tīrthakara (cf. Āv. 2, 13), but the external

form to the Gaṇadharas, so likewise in the Ānyogadāvarsūtra we find that the āṅga is divided into atta, ānunāta and paraunāna, i.e. (1) original doctrine, (2) doctrine that has been received immediately from its author and (3) traditional doctrine. The first category belongs to the Tītthagaras (plur.) alone unconditionally; to their pupils, the Gaṇadharas, it belongs only so far as the suttam (text) is concerned, while the Gaṇadharas, as regards the atta (contents), possess the ānunāta alone. The pupils of the Gaṇadharas possess, as regards the suttam, the ānunāta, as regards the atta, they have only the paraunāna. And after them only the latter (paraunāna) exists; there is no longer atta or ānunāta. According to the commencement of the avachārī of the Oghanivṛtī, [217] the activity of the daṇḍāpurēṇa was already limited to the composition of saṅgrahāni15 to the upāṅgas etc.

We must however not omit to remark that for some texts of the Āgama distinct authors are named, part of whom, at least, are even considerably later than the daṇḍāpurēṇa. Upāṅga 4 mentions as its author Ajīja-Sāma, characterizing him as “the 23rd” (i.e. “saint” after Vīra11) and as one who possesses wisdom ripened through listening to the pūrvas, as being therefore in unison with the dītthivāsa.

The name of Jīnabhadda (Āv. 14) belongs perhaps to a much later date. We have, however, no information of an exact nature in reference either to him or to Vīrabhadra, who was probably author of pāïna 1. Siṣjāmbhava, presumably author of the third mūlasūtra and Bhadrabāhu, to whom chhedasūtra 3-5 and other texts are ascribed, belong to the chaturaṇāpurēṇa, but not to the immediate pupils of the Gaṇadharas, and consequently can lay claim to the paraunāṇa alone. Nevertheless their works, as those just mentioned, are included in the existing āgama. We must therefore accept the conclusion, that
we have to deal with it in a very multifarious character. And this is vouchsafed also by tradition itself. The council of Pañatiputra, which the account of Šārvaśiddhāntakaṇāna places in the immediate neighbourhood of the date of Aśoka, had, as we have seen above, been able to collect the 11 aṅgas only in a rather indifferent fashion, by acquiring one portion from one quarter, another from another (yaḥ aṅgadhyayanūddhēṣādy āsā yasya); and of the twelfth aṅga had been able to acquire only a part from Bhadrabāha. The existence of what had thus been collected, was, as time went on, endangered from the fact that its transmission was only oral; for which, according to tradition, writing was not substituted till eight centuries later, in the year 980 Vīra. This was effected by a council in Valabhi under the presidency of Dēvārdhīnacakaṃpadāvramaya; though others state that this ensued 13 years after (993 Vīra) at the hands of a council in Mathurā under śri Skandilāchārya. In connection with this the statement may be placed that in the year 980 the Valabhi king Dhrāvasena commanded that the Kalpasūtras should be recited publicly. Herein a special participation of the king in the work is indicated, be it in that of Dēvārdhīnacaka or in that of Skandila, to whom by this act he gave decisive support.

If, then, as a matter of fact in the interval of 800 or 1000 (980) years after Vīra, the doctrines whose contents were promulgated by him (though the form of the doctrines is ascribed to his pupils and not to the master himself) were handed down by oral tradition alone—and in unison with this assumption is the fact that in the older portions of the text we find the introductory formula [219] savyaṁ ma ōunam, tāni bhagavyaḥ tave akkhaṃ yam as well as for the single sections the concluding formula ti bēmi—then we may well be astonished that the existing Siddhānta contains so many traces of antiquity as is the case. What knowledge would we possess of Christ if the New Testament had existed in an unwritten form till 880 A.D.19 and if we were limited to a codification of traditions under Pope Sylvester II., which was based not on written, but on oral transmission!

Truly, in this interval the cultivation of the sacred text had not been entirely abandoned. So, for example, to the 19th patriarch, Vajra, is ascribed particular solicitude in its behalf20 cf. Kup. 811 (21). According to the statement of the Digambaras, cf. Jacobi, Kaḷpas. p. 30, the written codification of their sacred texts had been effected by Pushpadanta A.V. 633–683, 11300 years before the date above mentioned. The sacred texts alluded to are not the same as the usual Siddhānta, which belongs to the Śvetāmbaras, cf. Wilson, Rel. W. I. 279 & 281 ed. Rost.

In the aṅga which we possess, writing plays a very important rôle; so that [220] it becomes clear that writing had, at the time of the written codification of the Siddhānta, long been extensively used for literary purposes. Indeed the very lateness of the above-mentioned date necessitates already this conclusion, A. V. 980, corresponding to the middle of the fifth, or the beginning of the sixth, century A.D.21 A distinct proof for this extensive use of writing is the expression bhamki livi frequently used in aṅgas 4, 5, upāṅga 4 etc., to denote the “sacred writing.” Furthermore, the characterization of its most important part, the aṅgas, as dveḍaśaṅgaṇa gaṇipidagaṇa makes for the same conclusion.22 Lēham (writing) always stands at the head in the enumeration of the 72 kalas, which we meet with in aṅga 4 and frequently elsewhere. The material of which the MSS. are made: pattaya, pōṭhayaliḥiham, is spoken of distinctly in the Anuyāya-devadāsita. In aṅga 4 and up. 4, eighteen different kinds of writing are mentioned, bhamki and javanāliya (yavanā) is so self-contradictory as to baffle explanation on my part. Also the double statement in reference to the year of Vikramaditya’s birth, ibid. 470 A.V. and 683 A.V. remains a riddle. The Pushpadanta mentioned aṅga 4, 75, 86 is the 9th Jina. 

19 Cf. also the accounts which exist in reference to aṅga 1, 1, 9.

20 Jacobi’s statement the whole of the aṅgas was lost after Pushpadanta; he reduced the sacred law to writing
being placed first. Herein we may observe a close connection with the similar enumeration in Lalitavistara. Moreover all 18 are mentioned as used for the Śambhā bhūti. The 46 māyākkharaṇī in aṅga 4 ought to be mentioned here in this connection.

Jacobi (Kalpas. p. 16a) has called our attention to the peculiar synchronism of the activity of Dēvāraddhigani (or of Skandila), with the contemporaneous activity of Buddhaghosa as regards the drawing up in writing of the Pāli canon. Since this latter is, furthermore, several decennia older (almost a century older than Jacobi’s “adjusted date” of A.V. 380), we must conclude that in any case he must have been followed in the wake [221] by his Jaina colleagues and not vice versa. A great difference is manifest, it must be confessed, between both parties. While Buddhaghosa did not change the linguistic make-up of the Pāli texts, the redactor of the Jaina texts adapted to the requirements of his own age the Māgadhi language, in which, it is probable to suppose, they were originally composed (cf. in aṅga 3, 2, 1, the salutation Māgahā! see Bhag. 2,250) and in which they had been in all likelihood allowed to remain by the council of Pātaliputra. The character of the language of the redactor of the Jaina texts is incomparably younger than Pāli, and consequently its official name adhika-Māgahā bhāṣā (in up. 1, 4, and elsewhere) or ardhika-Māgadhi (with the Jain grammarians) bears traces of this late date. In fact, of the Māgadhi only a few remnants, especially the Nom. Sing. Masc. of the 1 Decl. in ṣ, have been retained, while even these disappear gradually in the course of time. In general the language may be characterized as a very much younger sister of Pāli. The reason for this fact must probably be sought in local influence, whether it be Valabhi or Mathurā, where the written codification was made; at least such is a safe assumption. To the dialect of either Valabhi or Mathurā these ancient texts, composed originally in Māgadhi, had to accommodate themselves.

The Council of Pātaliputra, it is supposed, [222] limited its functions to the collection of the aṅgas; the written codification of Dēvāraddhigani, it is claimed, embraced the entire ārdravīpa; aṅga, the sarvārṇa grānthaṇī of this Aṅga. See Jacobi, i. e. p. 115—117. What position have we here to assume? In aṅga 3,4,1 we find aṅgabāhīrya texts expressly recognized as different from the aṅgas, and as paññātuṇḍi of this the names of upāṅgas 5—7 are mentioned, together with a fourth name, which is that of a section in upāṅga 3. In aṅga 3,10 ten dāsā texts, each comprising 10 aṅjīhayanās, are enumerated, of which we possess only four, as aṅgas 7-10, and a fifth, as chhādaniṣṭara 4. In aṅga 4 there are mentioned, besides the 11 (or 12) aṅgas, the names of the 36 sections of the first mūlaśutra, and three other texts, which are no longer extant; the last occur only in a statement in reference to the number of their aṅjīhayanās. A real enumeration of those texts, which besides the aṅgas belong to the svāma (śrūtan) is not found in the aṅgas, but in the Nandisūtra, a work that is probably a production of Dēvāraddhigani himself. See below. In this work the sacred texts are divided into two groups: (1) the aṅgapavīṭha, i.e. the 12 aṅgas, and (2) the anāṅgapavīṭha texts. A further subdivision shows that under anāṅgap there are 60 single texts enumerated, 27 of which prove to be names of existing parts of the Siddhānta; the other names appear either to be merely titles of sections of single texts of this number [223] or, and this is the majority of cases, are not found in the Siddhānta, though aṅga 3,10 is acquainted with some few of them. A repetition of this enumeration in the Pāṭalavīṣṭara adds at the end to the latter category four additional texts, the former existence of which can be proved from another source. Inasmuch as this proof is as entirely free from suspicion as it is surprising I deem it fit to

19 kūt kāla bhārīriṣya jī nāmi adhika-Māgahā bhādē bāhī sahī, jathā yaṃ vān bāhī tiśā paratāt. Also according to upāṅga 1, 56 (see Leumann, Anupāpa, p. 6) Mahāvira himself already preached in Ardhika-Māgadhi. Accordingly we read in the quotation given by Hēmachandra IV. 297: pāṇḍāgānaśhābhāhāhānityānaṁ hṛtī vaṁtām; cf. Piel’s note on this passage in his translation, p. 160. The ordinary term for that idiom with Hēmachandra is ārshām.

20 Other synonyms are śruta, svātra, grahnā, śāsana, ājāṭa, vaṃsana, upāḷa, prajñapaṇḍita. Such is the enumeration in the Anuyogāpa. (But in Prākrit.)
21 Where the texts in question are called anāṅgabhāṇika.
22 Or ‘ śrī ’? they seem to have been mentioned also by the original MS., commented on by the bhāšā of the Calcutta edition of the Nandis.; see the explanation of the five names in that edition p. 410 (after Vāṃśīkṣa).
discuss this matter already here in some detail.

In the Viśhīrpaṇṇā, called briefly Viśhī-
prapāṭha, (Jinaprabha in Kōsala; likewise author
of the sukaadvayavahashadhī) composed Sāvat
1363 (A.D. 1307) in Pārāśīrṣ, the above mentioned
equation of the anaigapavāṭṭa texts is found,
with the addition of the same four names as in the Pāskhikasūtra. To these four
there are added two more names. On this
occasion we now find there, inserted between
aṅgas and uṇāṅgas, the following remarkable
statements in reference to that state of advance-
ment in which the student is to study the single
texts. The statement occurs in a passage
where the author describes in detail the diurnal
occupation necessary to learn the single texts of
the Siddhānta. The passage is as follows: —

īthha cha dakkhaṁ parājyānaṁ tivaśā āyārapak-
pañā vājijā vājijā ya, ēvaṁ chaūvāsa sūpay-
ḍuḥ, pāṅchavāśo dasākapppavavahārā, attha-
vaśām thāṇasamavā, dasavāsā bhagavaṁ(वṛi,ī),
ikkārasavāsas khudōyāvimṇāḥ (nādiṇī) paṁcā
\'jhāvāṇe, vārasavāsā arūṇāvāṇā(ā)jō}[224]
paṁcā \'jhāvāṇe, tērasavāsā uṭhānasuyā
(\'yādīni) chaūrījāvāṇe, chaūddāsā-aṭēhāra-
śantavāsā kāmēṇa āśīvivāhāvaṇa-dīthhivivāhā-
vaṇa-chāma - nābavāṇa - mahāsūmapābāvāṇa-
tānyisagge, ēgūnavivāsā dīthivāyō, sam-
punavivāsā savasuttajjogā tti. The same
statements recur in an older form (cf. the name
vidvāha for aṅga 5 and not bhagavaṁ) in Śāntichan-
dra's Comm. on uṇāṅga 6 in 7 verses, the first two
of which are found in Abhayādevā on aṅga 3: —
tivarisaparājyaggusa u āyārapakappanāmām
ajjhyāyaṇaṁ
chaūvāsassy sa sammaṁ sūpayḍuḥ nāma
aṅgaṁ tāll 1 2

dasākapppavavahārāsuvācchharaṇapagadi-
kkhyāṣe 'va 1

thānaṁ samavāčchhiya aṅgī ēta 2 atthavāsasā
tt 2 1

dasavāsāsā vivāho, ēgārasavāsāgagasa ya imō
u 1
khudōyāvimāna-mālī ajjhyāyaṇa paṁcīa
nā-
vāvā tgli 3 1

28 The MS. has dakkha. But Vīsyma is of course here inappropriate. Is dakkha (dikkha) the correct
reading?
29 aṅgī masculine or ēte neuter; see imō ajjhyāyaṇa in
v. 6.
30 aṣṭaṇasāga is, according to another passage of the Viśhīrpaṇṇā, another name of the Gōśala book in the
bārasavāsasā tahā aruṇāvāyā paṁcīa ajjha
yaṁ 1

tērasavāsāsa tahā uṭhānasuyāya chaūrī ṭī 4 ṭī-
chaūdāsavāsāsā nāma āśīvivāhāvānā jō
bhiṇī 1

pannarāsavāsāgaga ya dīthhivivāhāvānā
sa taha ya tti 5 ṭī

sōlasavāsāsā sa yā ēguttaravācchhiya jahasaana-
kaṁ 21 2 6 ṭī
cūrābhāvāna - mahāsūmapābhāvāna-tānyis-
agge 21 tti 7 ṭī

ēgūnavāsāgagasa dīthivāo duvālāsuṇghaṁ
sampunnavivāsāvāso aṅuvāo savsasutta ṭī

This enumeration is exceedingly noteworthy,
from the fact, that of the texts which now
belong to the Siddhānta, only nine are men-
tioned (six aṅgas and three chhēdāvātras), whereas
the other eight names, to which reference will
be made later on when we examine the Nandī,
are at present not found therein. The question
[225] arises: are we justified in placing the
composition of these verses at a period in
which the remaining portions of the present
Siddhānta were as yet not embraced therein,
their place being occupied by the eight lost
texts, which are mentioned in the enum-
ration? In any case the enumeration cannot be
otherwise than ancient, since at the date when
it was composed, the dīthhīvāṇa manifestly still
existed, and in fact the highest in the order of
gradation.

If we now return to a consideration of the 60
anaigapavāṭṭha texts of the Nandī we shall find
that we have to deal with a rich literature of
which nearly half has probably been lost. On
the other hand, among these 60 texts we miss not
only at least six names which are now enum-
merated as portions of the Siddhānta; but
all the titles of those groups are lacking,
in which the Siddhānta is at present divided.
These 60 names are enumerated without any
reference whatever to any definite order in
groups, and in a succession entirely different
from the present order. Does this state of
things permit us to conclude that neither the
texts which are not mentioned in the enumera-

Bhagavati, the latter in its turn being dasavāsāsā :
tion nor the present groupings or titles of groups existed at the date of the Nandi?

At present the entire Siddhältänta embraces the following 45 texts33 divided into the following six groups: 1. eleven (or twelve) aīgas: [226] Āchāra, Sūtrakṛtāna, (‘kṛti), Śīhāna, Samavāya, Bhagavati, Jñātādharmakathā, Upāsaka-daśās, Antakrapādāsas, Anuttarapapātikādāsas, Praśnavyākaraṇam, Vipāka, (Dṛṣṭiśivāda, no longer extant),—2. twelve upāyaga: Auapākān, Rajapraśnāyan, Jivābhigama, Prajñāpanā, Jambudvīpa-prajñāpā, Chandraprajñāpā, Sūryaprajñāpā, Nirayāvali [or Kalpikā], Kalpavatānākā, Pushpikā, Pushpačhālikā, Vṛṣṇigādāsā,—3. ten paśmas: Chatutṣaraṇa, Saṅśāra, Aturapratyākhyānam, Bhaktaparipā, Taṇḍulavaiyāli, Chandvi, Devendrastava, Gaṇivāla, Mahāpratyākhyānam, Virastava,—4. six chhēdāśtras: Niśītham, Mahāniśītham, Vyāvāhāra, Daśāśrutakhandha, Bāhutakalpa, Pañcakakalpa,—5. two sūtras without a common name, Nandī and Anayogavadāram,—6. four mūlasūtras: Uttarāsūkhyayānam, Āsvāyakam, Daśāsvātikām, and Piṇḍanirukti. This division is that of Bühler, (see Jacobi, Kalpas. p. 14), with an exception in the succession of up. 5–7, where I have deviated from his arrangement on the strength of the Vīdhāprāpa and the scholiast on up. 6. The same division is found also in Ratnasāgara (Calc. 1880) except that there groups 3 and 4 have changed places with 5 and 6, not to mention some minor differences. It is a very remarkable fact that in Rājendrā Lāla Mitra’s Notices of Sanskrit MSS. 3. p. 67 (Calc. 1874)—on the authority of a definite source of information, the Siddhältānta dharmasāra,—we find an enumeration34 varying materially from the above. First a very different grouping may be noticed; [227] secondly, there are a few additional names (60 instead of 45) and finally remarkable variations in the names themselves. The first two groups of aīgas and upāyaga are identical, although

33 These are probably the “45 ágamas,” which the patron of the writer of a MS. (Savvaṭ 1866, A.D. 1609) of the Vāyuśāstras (Berlin MS. or fol. 1698) had copied; see v. 10 of the statements at its end.

34 These names, both as regards form and signification are either of doubtful explanation, or are involved in obscurity.

35 Related in the “Report on the Sanskrit MSS. examined during 1890-81” addressed to the Government of the Paṭjāh, by Pāpīt Kashinath Kunte. He has given aūga 10 has changed place with aūga 11, and the name of upāyaga 12 having fallen out, in its stead another name (Kappiyāśutra) has been introduced in the ninth place.35 The four Mūlasūtras appear as Group 3, and of these two have different names (2. Viśeṣānavyāka, 4. Pālāshita). Group 4 bears the title Kālapasūtras and consists of five texts, viz.: mūlas. 1, chhēlas. 1 and 3, Kālāsūtra (part of chhēlas. 4) and Jītakalāsūtra. Group 5 embraces 6: chhēla-sūtras, of which the first three alone are perhaps identical with chhēlas. 1; the fourth corresponds to mūlasūtra 4 of Bühler. The names are: 1, Mahāniśīthavīrāvācchānā, 2. Mahāniśīthalahaghūvāchānā, 3. Mahāniśītha (not in Rājendrā Lāla Mitra, but in Kashinath Kunte) Madhyamavāchānā, 4. Piṇḍanirukti, 5. Aghanirukti, 6. Paryushaṇākalpa. Group 6: the ten paśma or paśma texts, but in a different order. The Marṣaṇamadāhīśūtra, which is in the eighth place, takes place of paśma 10. Nandīsūtra and Anayogadvārasūtra, counting separately as groups 7 and 8 respectively, conclude the list. If, now, [228] after a consideration of the above, it is manifest that even the parts of the Siddhältānta are at present uncertain, we have herein a sure proof of the unsettledness and uncertainty which attaches to the entire writings of the Jains. As a matter of fact it is apparent that the oldest portions of their literature are in reality nothing but disjecta membra, that they are very unequal and, as regards the date of their composition, separated from each other by extensive periods.

In the aīgas and upāyagas we may observe groups, which are well defined, individual, and united through criteria which prove their interconnection. These groups were in a later age brought into connection with the other groups of like nature.

On the other hand, it cannot be denied that a hand, aiming at unification and order, has been brought to bear especially upon the aīgas and the report twice with tolerable similarity.—Jan. 24, 1881 (p. 4-7) and June 6, 1881 (p. 6–9).

35 Here Kashinath Kunte deviates from Rājendrā Lāla Mitra, adding the common name of up. 12, but in the ninth place. A further variation is that in the place of the Chandapanavati he adduces the Mahāpamavat, which is found in the list of the anuṣṭhapasyāsī texts in the Nandī. The Mahāpamavat, is characterised as “obsolete and extinct” by Kashinath Kunte.
upāṇgas. This is clear from the many remarks in reference to the redaction (Bhāgav. 1, 389), which consist partly of the parallel references of one text to another, partly of kārikās which are placed at the beginning to serve as a general introduction or inserted in the middle or subjoined at the end. The linguistic character of those redactionary remarks can be readily distinguished from that of the text. Among those parallel references, there are doubtless many, which are to be ascribed, not to the redactor but (cf. below) to the copyists; and among the kārikās may be contained many additions of a decided secondary stamp. If now we do not discuss at length the problem as to whether we are to consider all the 45 āgamas of Bühler’s list as collected by Devarddhigaṇi, [229] as is the belief of Jacobi, Kulpaś, p. 16, we must accept this as a fact: that their present state cannot be that to which they were possibly brought by him. Despite the firm foundation erected by his activity, and despite the care which the Jains especially have, even from the earliest times, devoted to the restoration of their MSS., nevertheless both the constitution and condition of the Siddhānta text have been subject to most important modifications. Jacobi, p. 16, 17, has called attention to the numerous pāthas (various readings) recognized in the Scholia, and has expressed it as his conviction that it is impossible to restore Devarddhigaṇi’s recension or text. There exist however other differences between the original and the present Siddhānta text. Not only have there been lost passages or sections of the text, which were extant at the date of the older commentaries, but also there have been inserted large interpolations which are apparent; and furthermore the text, according to all probability, has even suffered complete transformations. I conjecture that the reason of these changes may be sought in the influence of the orthodoxy of the Seśaṭhumbara sect, which became more and more unbending to the various divisions of sectaries. The existing Siddhānta belongs exclusively to the Seśaṭhubaras. The loss of the entire dhṛsti-vāda (cf. below), is doubtless principally due to the fact that it had direct reference to the doctrines of the schismatics. This point of view may afford us an explanation for the omissions, additions and transformations in the constitution of the other āṅgas. The [230] rigour of the polemic against the annatīthiya, anyatīthika, parāparṇaṇa and against the nihāya, nihāvas, is so sharp and cutting, that we are justified in drawing interior conclusions, which are of significance for the history of Jain literature.

Thus we have seen above, page 222f, that of works mentioned in āṅgas 3 and 4 with special reference to their contents and extent, eight are no longer extant, as is also the case with some 30 of the 60 anahayopavītta texts mentioned in the Nandiśūtra, etc. Again, it is a definite and certain conclusion that the mahāprāmnā chapter of the first part of āṅga 1 long formed an integral part of that āṅga before it was lost, as is at present the case. The nihāvahayātan, which originally belongs to the second part of that āṅga, has been removed thence and given an independent position, that is to say, it exists, according to all probability, as chhēyāstūtra 1. Some verses, which originally had their place at the end of the first chapters of upāṇga 5 and 7, and which the scholiast ascribes to that place, are now not extant. On the other hand, there is no lack of insertions:—At the date of the fourth āṅga (§84) the fifth had not yet attained the half of its present extent (84,000 instead of 184,000 padas). The addition of certain portions called chādās (protuberances), is expressly recognized by tradition as having taken place partly in āṅga 5 (vividhahācīlā) partly in āṅga 1 and 12 as also in mūsāsūtra 3. In the case of chhēyāsūtra 4 we have a certain instance of a growth out of manifold constituent parts. Besides these changes, be they omissions or additions, there are traces of evident textual transformations. The statements in āṅga 3,19 in reference to the contents of āṅgas 8–10, are drawn from a text quite different from our own. Furthermore [231] the statements in reference to the extent and division of all the 12 āṅgas, to be found in a detailed discussion of the subject partly in āṅga 4, partly in the Nandi, are oftentimes in unison neither with each other nor with the actual constitution of the text. Even the modern representation of the Vidyāprapā, dating from

37 A patent example of this inflexibility is to be found in the Kulapṛabhaṃśāṭhītya.
the commencement of the fourteenth century, shows extensive variations in the case of aṅga 6. It is furthermore to be noticed that chapter 16 of the first part of aṅga 2, has a title which does not comport with the character of its contents. The same may be affirmed of aṅga 10, the commentary to which refers to a textual division no longer in existence; nor does this aṅga contain the same dialect as the others. Finally, the name of the second upāṅga does not harmonize with its traditional explanation, which, in turn, stands in no genuine relation to the contents of the upāṅga. In this latter case there exists perhaps some connection with a Buddhistic text of similar denomination, to which we may, in the last instance, ascribe some influence in bringing about the transformation of the text. We have seen that the constituent parts of the text in general have been exposed to modifications of the most varied character; and the same, we can confidently assume, has been the case with the state of the text itself. The peculiar style of these works in the first instance is to be held responsible for this result. The massiveness and ponderosity especially of the presentation by means of continual repetitions and constantly recurring stereotyped forms, has often sorely tried the patience of the Jain clergy. All the precautions which were taken by the division of the text into grināthas, that is to say, groups of 32 syllables and by counting the latter by hundreds or by thousands, which precautions according to Jacobi, Katpā, p. 24 emanated from Dévardhīgāni himself, have not been able to protect the text against the insertion of single words, or against abbreviations and omissions. The latter were then made good by reference to the parallel passages in other texts, cf. p. 228. All this, together with the dangers accruing from the constant copying of the MSS., has produced a state of confusion which is utterly irredeemable. Often the catchwords alone, the skeletons of the page so to speak, are left, and that which must be supplied is to be found in the preceding, which was identical in tenor. The omitted portion was thus left to oral delivery or to oral instruction. The allusions to certain stereotyped descriptions, the epiθeta ornantia, the so-called vannā, varṇaka, are doubtless to be referred to the period of the redaction.

So the text itself, as we see, has met with enormous losses in the course of time; also the form of the words has suffered equally. I do not refer here to the frequent pāthas, of which mention has already been made and which were intentionally changed from reasons of the most various character, but to the form of the words itself. The Prākrit of these texts was, as we have seen, page 221, afflicted in the very beginning with "a thorn in the flesh." Its origin is to be sought in the East of India, in Magadha, and it was therefore provided at the start with those peculiarities, or at least with a good part of them, which belonged to the Māgadhi dialect, according to the testimony of the old inscriptions and of the tradition of the later grammarians. These texts were collected for the first time by the Council of Pājāliputtra probably in that dialect, and after 800 years' transmission by word of mouth, if we trust the voice of tradition, were codified in writing in Western India. In this codification the attempt was doubtless made to preserve a part of the ancient grammatical form, particularly the termination of the Nom. Sing. Masc. of the 1st decl., in ē not in ē. Such was the ancient colouring of the language of the "Scriptures," as the texts were now called. But, aside from this attempt at preserving an ancient flavouring, it may be stated as a general proposition that the texts were written down in that form, which the language assumed at the time and place where the written codification took place. In the case of those texts which were then not merely collected or compiled from ancient material, but newly created by the sole assistance of this ancient material, the desire to preserve the ancient form held good merely as regards the ancient citations. The remainder of the contents, including the notes of the redactor and his additions, was at the outset, composed in the new form (e.g. Nom. in ē, not in ē). This then remained for the future the only authoritative form which, as far as can be discovered, was imperfect and contaminated by the most varied defects. No reference was paid to a substructure of grammar, and the flexibility of the rules as regards flexion or non-flexion recalls the latitude which

38 Also called iloka or amushbhh. See Ind. Streifen, III. p. 212.
the Prakrit grammarians of a later age \(^{23}\) ascribed \(^{24}\) to the \textit{Apabhraśka} in this particular. In compounds the single members are either entirely without Sandhi, or the case termination is lacking in the latter member, so that it stands, like the other members, in its pure thematic form. The pure theme especially is frequently found instead of the inflected forms in the \textit{kārikās}, which are inserted into the \textit{aṅgas}. The gender and number of the words which are associated, do not agree in a very large number of cases.\(^{25}\) The insertion of an inorganic \(m\) in the middle of compounds and at the end of a word, is a recognized practice. Corresponding occurrences or rather beginnings of such a use are found even in ancient times, and in fact in the \textit{Veda} (cf. \textit{ṣatamūti}). The use of the particles \textit{tō} (from \textit{atī}) and \(\text{ō}, \text{tu}\) and \(\text{u}\) as mere expletives, is exceedingly common. The indiscriminate variation of \(i\) and \(u\) with \(\text{ē}\) and \(\text{ē}\) before double consonants makes many passages obscure and difficult. If to these considerations we add the so-called \textit{yaṅrūti} it is apparent what a wide field is opened up for the disfigurement of words. There is, however, one circumstance more, and that of a very peculiar nature. By reason of the falling out at any time of a \(t\) in the frequently recurring forms of the 3rd pers. Singul. Pres., and of the Part. Perf. Pass., a misunderstanding arose in the minds of the copyists, which is only to be explained from the fact that there was no absolutely established grammatical use. This misunderstanding arose from the belief of the grammarians that \(t\) was a sound \(^{23}\) that could be omitted or inserted at pleasure. The insertion of such an inorganic \(t\) in time gained ground so extensively, that the recognition of the original form becomes a matter of exceeding difficulty. As a matter of fact it can be proved that this situation of affairs led even at quite an early date to grotesque misunderstandings\(^{26}\).

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\(^{23}\) A perfect analogy is presented by the peculiar Sanskrit of the North Buddhist texts \textit{Lalitaavatara}, \textit{Mahabharata}, etc.

\(^{24}\) Just as in the texts of the \textit{Acesta}, especially the \textit{Vedas}, which were collected about this period.

\(^{25}\) All sorts of false forms which had no claim to existence came gradually into use in this way. An interesting case of this, which, if my conception is correct, transplants us into a period before \textit{Vedānga} A.D. 204-287, will be found in the name of the metre \textit{vastikāyika} in \textit{aṅga} 2, 1, 2. The title of the first \textit{upāṅga} is incorrectly stated to be \textit{upapādika} instead of \textit{dīka}. The name \textit{Mātṛgya} (\textit{Mātṛgya}) became \textit{Mātṛgya}, the

common form. In my treatise on the \textit{Sasthrabhāsya} \textit{Māh.} p. 3, 4, when I had no knowledge of this inorganic \(t\), I conjectured \textit{Mātṛgya} to have originated from \textit{Mātṛgya}. The \textit{Svasthrabhāsya}, etc. 7 has, it must be confessed, \textit{Mātṛgya}. Furthermore the later Jains have been guilty of all sorts of wild misconceptions in reference to their own language; as for example, the completely erroneous explanation of the name \textit{niśtha} by \textit{niśtha}. In this category we may perhaps place \textit{Līchhihā} for \textit{Līchcaffā}.

\(^{*}\) So also in \textit{aṅga} 3. In \textit{aṅga} 4, 7 probably in an interpretation. The names of the \textit{naksṭātras} appear, we may notice in passing, here only in their secondary form, thus: \textit{pūṣya}, \textit{bhādrapada}, etc.
the foreign, non-Aryan peoples, [237] which are frequently referred to in the aṅgas and upāṅgas. This enumeration transplants us with tolerable certainty to a period from the second to the fourth century A.D., which is the most ancient period in which the enumeration can originated, though the present texts may be much later. The mention made of the Arribans among the list, in the form ārava, which has yet not been discovered as occurring elsewhere in India, might lead us to suppose that we had to deal with a period far posterior to that delimited above. This could, however, be the case only on the supposition that the Arribans of Islam are referred to. It is my opinion that a reference to an ante-Islamic period (in which Arabia and India were closely connected by commercial ties), is as fully justified as a reference to the Islamic period. From the mention of this peculiar denomination of the Arribans, which as before said appears here for the first time in the history of Indian literature, I conclude that the first author of the enumeration in question lived in a part of India in which the commercial connections with Arabia were very close, that is to say, on the west coast. The mention made of the seven schisms in aṅga 3, the last of which occurred in the year 584 Vīra, compels us to regard the second century A.D. as the extreme limit à quo for the composition of the texts of the Siddhānta. We have therefore to conclude that the period from the second to the fifth century is the period to which their composition must be relegated.

The other dates, which we can extract from the texts, are in agreement with this delimitation of the period of their origin; of special importance are the references in the aṅgas to the corpus of Brāhmaṇa secular literature [238] which existed at that time, see Bhagav. 1, 441; 2, 446-8. Then too the use of the word aṅga to denote the oldest portions or the chief group of the Siddhānta 66 deserves attention, and makes probable the assumption that the period of their origin is the same as that to which belong the Brāhmaṇical aṅgas and upāṅgas, often alluded to in their most ancient portions. The second of these two names (upāṅga) has been adopted by the Jains as the title of the second chief group of their texts. I have already called attention to the close connection between the astronomical doctrines of the aṅgas and those of the "Jyotisha" vēdāṅga. Finally may be mentioned (see Bhagav. 1, 383) the solemn composition in the ārṣa measure" of verses which are cited in the Siddhānta either or inserted therein. This measure must at the time of the redaction of the Siddhānta have enjoyed especial authoritativeness, otherwise it had never been made so exclusive a vehicle of composition. We must however call attention to the fact that the oldest metrical portions of the texts are not composed in gāthās but in ślokas; thus aṅga 2, the metrical portions of the chhēḍāsūtras and those of mūlasūtras 1 and 3 [239] are composed in ślokas, while the niṣīdita and chūrimi belonging to those mūlas, are in gāthās. In aṅga 2 we find also the vaṅīlīga measure. The name of this metre (cf. ad loc.) which exists even in the "Chandras" vēdāṅga, appears to have been caused 66 by a misunderstanding of the name of a chapter of this aṅga, brought about by the insertion of an inorganic t. The existence of the name of this chapter of the aṅga would receive by this supposition a valuable attestation, inasmuch as it dates far back to a very remote period. In ślokas and vaṅīlīgas are composed the verses of the Dhammapada of the Buddhists, with which several portions of this aṅga, as well as of mūlasūtras 1 and 3, are very closely connected.

We come at this point to a question, which I will here merely mention. What is the relation of the Siddhānta of the Jains to the sacred writings of the Buddhists, both northern and southern? A few sidelights of this character will be brought into use as the course of our investigation progresses. The solution of the question can only then be successfully

66 The Buddhists in the case of the chief group of their own scriptures make use of the word sūtra to denote a class of literature of somewhat ancient date. The word sūtra occurs also in the colophons of the Jaina-Siddhānta and plays a very important rôle in the Scholias; yet is never used in the texts themselves with the same significance as among the Buddhists, if we except the Anuya-gadāsūtras and Asthāni niṣīdita together with that section of aṅga 12 which has the specific title of vaṅīlīga. See Bhag. 1, 441, 2, 196, 247 and Furtet, über Ind. Lit.

66 The style of some of the oldest parts of the Siddhānta reminds us in a very slight degree of that of the later Brāhmaṇical sūtra. In reference to the connection of somewhat problematic character, between śāstras or śārīrakīrti and śārīrakīrtikās, see later on under aṅga 1, or in Utpadākhyā. 16.

66 There is frequently a great lack of metrical correctness in these verses.

66 The metre in question existed earlier as may be seen from its use in the Dhammapada.
undertaken, when we are in a position to compare the texts themselves.

The following review of the contents of the *Śiddhānta* endeavours, in the first place, to disclose to us the actual constitution of the texts which are at the present day reckoned as belonging to the *Śiddhānta*. In this review I follow the order adopted by Bühlcr (see above, page 226). Secondly, it purposes from the dates contained therein to cast light upon the most important points for the date of the composition of each single division, and for the life of the founder [240] of Jainism, as far as this is possible for me in this first assault upon its literature, remarkable not less for its immensity than for its monotony and intellectual poverty.

The more exact details will be found in the second part of my catalogue of the Sanskrit and Prākrit MSS. of the Royal Library of Berlin, which is at present in the press.* The fact that the tradition in reference to the founder of Jainism deals partly with another personality than Buddha Śākyamuni himself—with the name of a man who in the Buddhistic legend is mentioned as one of the contemporary opponents of Śākyamuni—this fact, I say, does not, in my opinion, militate against the conclusion that Jainism is merely one of the oldest of the Buddhistic sects. It appears to me that the conception of the founder of Jainism as an opponent of Buddha can well be regarded as an intentional disavowal of religious opinion which took its rise in sectarian hate. The number and the significance of common features in both Buddhistic and Jain traditions in reference to the life and labours etc. of each

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* Of this new catalogue Vol. I. has since appeared under the title: Die Handschriften-Verzeichnisse der königl. Bibliothek zu Berlin, Vol. V. Part II. Vol. I. [552 pages; see ante, 1887, p. 316], Vol. II. [p. 333-388] which, in particular devoted to the sacred Jain Literature, is nearly ready.—L.

* This view (which in Europe has apparently persuaded only M. Barth of Paris) will scarcely be maintainable any longer, since Prof. Bühlcr has discovered inscriptive proofs for the authenticity of the old Thēra lists given by the Kulpāsṭhātra see the two papers by Bühlcr in the Wiener Zeitschrift für die Kunde des Morgenlandes.

of their founders outweigh any arguments that make for the contrary opinion. If we reflect—and I here repeat what I have said on page 219—that the Jain texts were, as the Jains themselves claim, codified in writing 1000 years after the death of the founder of Jainism, then it is really marvellous [241] that they appear to contain so much that is original. How large the number and how influential the character of the events which occurred in the interval, is for the present veiled in obscurity, although the information emanating from the Jains themselves (or more particularly from the Śvetāmbaras with whose literature we have specially to do) in reference to the seven schisms etc.* affords us at least some slight base of operations. One fact, for example, is noteworthy:—that the nakedness, which is adduced by the Brahmins (e.g., also by Varāhasūrya 58, 45, 59, 19) as a chief characteristic of the Jains, and which according to Buddhistic statements, was resolutely opposed by Buddha, assumes an unimportant position in the aṅgas and at least is not regarded as a matter of necessity, see Bhag. 2, 187, 239, 314. Later the necessity of appearing naked was introduced as a dogma by a sect of dissenters. If we take into consideration the hate which the Śvetāmbaras, who played the rôle of the orthodox sect, manifested so vigorously against the Digambaras in particular* (Kup. 797 7), it is no rash conjecture to assume that many prescriptions or traditions in regard to this point have been removed from the Śiddhānta of the Śvetāmbaras. Even the orthodox do not deny that the Jinas themselves went naked;* they assert merely that, what was permissible then is no longer permissible at the present day.

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a. The 11 (or 12) aṅgas.

We have seen above on page 211 ff. that, according to tradition, at the time of the first Jina all 12 aṅgas were extant; that then be-


* According to v. 43 of Dhammadhāra’s Kālaśātvari: tērasaśāchāṁ (1300) Viśā bhūtiyo apāgahā mayāvībhāvā! bāmadhānti jīvā jīvā bahāhā kanakāhā mohāpāhā ।

* dēśavisvānādindō vārayālaśeṇa bhuḥānāhां२

* See Wilson Set. 1, 294 ed. Rost in reference to the nakedness of Mahāvīra: cf. also the characterization of his doctrine in aṅgam 3, 9 fn. as aṅglo.
between Jinas 2-9 there existed only eleven i.e. all except aṅga 12; that between Jinas 9-16 those eleven also were lost, whereas in the time of, or between, Jinas 16-24, all twelve were extant, and that the 12th afterwards was again lost. If we exclude the mythical first Jina from our consideration, the essence of this tradition is perhaps this: the number of the aṅgas was at first eleven, to these a twelfth was joined, which twelfth aṅga was again lost. This assumption corresponds to the conclusions to be derived from the Sīddhākṣaṇa itself.

In the aṅgas themselves and in the upāṅgas too, only eleven aṅgas are as a rule mentioned. The principal exception to this assertion is the fourth aṅga, where at the very outset we find a short enumeration (which can easily be shown to be of secondary addition) of the single parts of the dvīlalasanaṅga gaṇipidagam; alike in §§18, 46, 88, some declarations in reference to aṅga 12; and finally at the end a detailed exposition of this subject, in which the dvīlalasanaṅga gaṇipidagam is glorified as having existed eternally in the past and as destined to exist forever in the future. This laudation of aṅga 12 is very surprising, and may well be explained as an intentional polemical assertion to satisfy all doubts that might arise. According to all probability this last section, which is found almost verbatim et litteratim in the Nandī, composed probably by Dēvarddhīgaṇī himself, [243] is to be regarded as a later addition to aṅga 4, whether it was borrowed from the Nandī itself, or, if this cannot be the case on account of some few differences between them, from a common source. Besides this mention in aṅga 4 and some other references, which eventually may also be of secondary origin (e.g. aṅga 5, 20, 8) the dvīlalasanaṅga gaṇipidagam is mentioned only in those portions of the Siddhākṣaṇa which do not belong to the aṅgas.

The later origin of the passages in question is manifest from the form in which they are referred to.

When anything is said of the eleven aṅgas,

they are always characterized as "beginning with the sāmbāyika," in case the statement is not merely limited to this number itself, but when the first one is specifically referred to by name. When, on the other hand, anything is said of twelve aṅgas, in which case the titles of each and all are generally cited, the first aṅga is not called sāmbāyika, but dhārāra (e.g. also aṅga 5, 20, 8); the latter name is found in the MSS. and elsewhere up to the present day. This direct variation between the two forms of denotation is peculiar and surprising, but may perhaps be explained as follows:—The word sāmbāyika was perhaps originally a synonym of dhārāra. I derive it from samaya and hold that it is equivalent to the Brahmātical sāṃyāyikārīka (see M. Müller, Hist. Anc. S. Lit. p. 206 fg.) which here appears probably [244] in the term sāṃyāyikā (see Uttarajī. 26). This may be regarded as a counterpart of sāṃyāyikārīka.

In upāṅga 1 at the end of the first part, the dhārma of Mahāvīra is designated in a general way as sāmāyika or as agadāsāmāyikā dharmā and āgadāsāmāyikā. The use of the word in this universal signification in a legend is attested for Mahāvīra's predecessor Pārśva; see Bhagav. 2, 184. Besides this wider signification there was developed a second more restricted use (see the reference just quoted) viz.—the first member of the six so-called āṇavikaras i.e. necessary observances, the treatment of which forms the chief subject of the Anuyogadeśasūtra and of the sūtra text, on which the Āṇavikaraśūtra is based. In both these works and in the Nandī, which in turn also makes special mention of the six āṇavikaras with sāmāyika at the head, the dvīlalasanaṅga gaṇipidagam with dhārāra at the head is principally spoken of. Consequently it is easy to conjecture that the use of the word sāṃyāyika occurring here in its pregnant sense as the title of the first āṇavikara, has been the cause of the dropping of this denotation for the first aṅga (in order to avoid any misunderstanding), and the reason of the choice of the title dhārāra for this aṅga, [245] a title which is perfectly clear.

Jains themselves affect several etymologies, and generally regard sama as the first member of the compound. See also Bhag. 2, 186.

These form the first of the ten groups of the āṇavikara, see Uttarajī. 26.

It is very peculiar that in Āṇavikara, aṅga 2, 8 sāṃkī appears as the title of the first āṇavikara and only six verses later on in 2, 14 as title of the first aṅga.

The change may have been favourd by the union of both words in the Brahmātical term samayikārīka.
Furthermore transitional stages may be found. In *Avady*, niji. 2, 14 we read śāmāia-m-dīna svanājanā jīva bīdāsāvī. Here the first aṅga is still entitled śāmānā although twelve aṅgas are treated of; bīdāsāvī is the title of the fourteenth pūrṇa or of the concluding section the third part\(^{109}\) of the twelfth aṅga. In *chhēdas*, 2, 3 the same is said of the dvālasamsānā suvanājanā: that it is śāmāiyanā-m-dīna vāyabhināśusāgara (śārā!?) putravasāyanā.\(^{110}\)

If now the passages, in which eleven aṅgas with śāmāqiṣa at their head are spoken of, are older than those in which reference is made to twelve aṅgas with dvēbrā at their head, it becomes self-evident that the twelfth aṅgam has been united to the other eleven as a secondary addition. According to tradition and to the actual state of the case, the twelfth aṅgam did probably not long assert this secondary position which it had acquired; and at present at least is no longer extant. Doubtless it was lost long ago (cf. page 213). From this circumstance alone we may conjecture that there existed a species of opposition, an actual incongruity between it and the other eleven aṅgas, which led to its loss. For the confirmation of this assertion we still have proof. In both the works, which we have just found to be the two principal witnesses for the existence \(^{246}\) of the dvālasamsānā gāripiṣāgam, viz. in the *Avady* and in the *Avady*, niji., the twelfth aṅgam under its title dīṭhivināa drīṭhiśrīvāda, is placed in direct opposition to the other eleven aṅgas, which are there included in the collective title of kāliyaṇa svanā kālikaṇa rūtām. This occurs in the *Avady*, in the section parimāṇasamaḥkā, where the means are explained by which the sacred text is assured through counting its constituent parts. Common subdivisions are ascribed to both its above mentioned parts, but for the chief sections the titles sadēmga, ajhayaṇa, sukhahātha, aṅga are given to the kāliyaṇa, the titles pāhuḍa, pāhuḍā, pāhuḍapāhuḍā, vattu however to the dīṭhivināa. According to this (and the other statements in reference to the division of the dīṭhivināa are in agreement herewith) there existed between both these groups of texts a fundamental difference in the designation of their chief divisions. This may probably be referred to a different origin or to a different treatment of the subject matter of both.\(^{108}\) In the *Avady*, niji. 8, 54 two other texts are mentioned (isibhāṣiṣai and vārāparānāt) besides kāliyaṇam and dīṭhivināa. Of these the first is lost, the second has found lodgment among the existing upāngas. Its agreement with the dīṭhivināa in its division into pāhuḍa, leads us to conclude that it must have some connection with it. Finally of special importance is a notice, found but a short distance from this in the same text (8,40), according to which \(^{247}\) up to the time of Ajja Vayara, that is, of Vajrasvāmin, asubhā (apribhaktavam) kāliyaṇaṇasā exist. and the puhattā (pribhaktavam) "kāliyaṇa dīṭhivināa a" had found entrance later on: tēṣārēṣa, tata ārataḥ.—(To be continued.)

**MISCELLANEA.**

**PANDIT BHAGVANLAL INDRAJI.**

By the premature death of Pandit Bhagvanlāl Indrājī, which occurred on the 16th March last, Indian epigraphists have lost an enthusiastic and able fellow-worker, whose place it will be difficult to fill, and many among them a valued personal friend, whose interesting and sympathetic communications they will greatly miss. Short was as was the period during which it was permitted to him to stand forward as an independent scholar, his indefatigable zeal and rare ingenuity have contributed materially to the progress made of late years in the field of Indian epigraphy and history. His career as a scholar is a most remarkable one, and deserves to be described much more fully than I am able to do with only an imperfect recollection of the particulars of its earlier portion, which he communicated to me during our pro-

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\(^{199}\) On the authority of such passages the pravahanaṃ is explained by śāmāqiṣa-bīdāsāvasāyantam in later works, e.g. in the commentary to Dharmagīhā's *Jītaśaṅga*;—also in the *Nandil-śikṣa*, see ed. of the *Nandaś*., p. 390.—L.

\(^{110}\) In the tradition referred to on page 315 the priority of the pūrṇas over the aṅgas is claimed. Their position in the last aṅga, at the conclusion of the others, is however not in harmony with this claim. The title pūrṇa has rather reference in the last instance to the contents. See below on aṅga 12.—It must however be taken into consideration that the old accounts on the rise of the Jain schism mention only the pūrṇa and not the aṅga; see my paper " Die altere Berichte von den Schismen der Jainas," *Ind. Stud. Vol. XVII.* pp. 107 and 112.—L.
longed intimate intercourse in India. Yet I comply with the request of the Editors of this Journal to write a notice of his life, because I trust that I shall at least be able to do justice to his character, to his scientific attainments, and to the results which he achieved.

Pandit Bhagvânâlâ belonged to a highly respectable Brahman family of Junâgadh, which like many others for a long time has received support or employment from the Musulman rulers of Sûrât. An elder brother of his used to be the head of the Sanskrit school, maintained by the Darbâr, and is, as I hear, still in the service of H. H. the Nawâb. As is usual with the children of those Brâhmans who cultivate the hereditary learning of their caste, Pandit Bhagvânâlâ was taught Sanskrit from his childhood, in addition to the subjects of the ordinary curriculum of the vernacular schools. He acquired a fair knowledge of its classical literature, but he cared little, as he has repeatedly told me, for the abstruse lore of the Sûtrâs. Like other compatriots of his who live in the shade of the Gîrnâr Mountain, he felt more attracted by the historical traditions of his native province, which, as a matter of necessity, are kept alive by its numerous ancient buildings and epigraphic monuments. His taste and aptitude for antiquarian researches showed itself very early. When still a boy, he used to pay visits to the venerable rock, on the road to Gîrnâr, on which the edicts of Aśoka and the inscriptions of Rudrâdâmanâ’s and Skandagupta’s lieutenants are incised. A little later he studied their ancient characters with the help of a copy of Prinsep’s tables of the Indian alphabets, and tried, availing himself of the transcripts of the earlier epigraphists, to decipher their contents. These attempts, which were not altogether unsuccessful, came to the notice of Mr. Kinloch Forbes, the generous patron of native talent in Gujrat; and he recommended the young amateur to Dr. Bhâât Dâjî, who was on the look-out for a Pandit, able to assist him in his epigraphic researches. Pandit Bhagvânâlâ eagerly availed himself of the chance which offered, and in 1861 entered Dr. Bhâât Dâjî’s service, in which he continued during more than twelve years. These years were his Lehr- und Wanderjahre, the period of his apprenticeship and travels. The introduction to the paper on the Rudrâdâmanâ and Skandagupta inscriptions (Jour. Bo. Br. R. A. S. Vol. VII. p. 113), as well as that to the article on the Ajanta inscriptions (ibidem, p. 33ff), tell us how Dr. Bhâât Dâjî worked with his assistants, and how he trained them. It appears Pandit Bhagvânâlâ prepared, sometimes alone and sometimes checked by another copyist, eye-copies and rubbings of the documents intendent for publication. The texts, thus obtained, were carefully examined and considered by Dr. Bhâât Dâjî and an able Pandit, Mr. Gopâl Pânâdurang Padhîyâ, who was a thoroughly good Sanskrit scholar. For doubtful passages the originals were compared afresh. Pandit Bhagvânâlâ had again to visit the sites and to seek the solution of the remaining difficulties. Sometimes he had even to wait there for criticisms on his new proposals, and to pronounce on the possibility of readings proposed by his master. As a matter of course, Dr. Bhâât Dâjî consulted for his own articles the writings of the earlier epigraphists and the translations of the Greek and Chinese accounts of ancient India. He by no means confined himself to works written in English, but had prepared for himself MS. translations of some of the most important French and German books, such as Burnouf’s Introduction à l’histoire du Bouddhisme, the appendices to the Lotus de la bonne loi, St. Julien’s Life and Travels of Huen Tsâung, and Lassen’s Indian Antiquities. In the conferences with his assistants, he naturally brought forward the views of the most eminent among his predecessors in the same field; and showed how the notes of the ancient travellers might be utilised. Pandit Bhagvânâlâ thus not only received a good training in the method of treating inscriptions, but also became acquainted with the history of the science in which he worked, and learned to appreciate the great importance which the notes of foreign visitors possess for the history of India. This training laid the foundations of the position as an epigraphist which he later gained. The aptitude and the zeal which he showed, induced Dr. Bhâût Dâjî to confide to his assistant the duty of transcribing all the numerous land-grants which he purchased or received on loan, and to employ him on a kind of epigraphic survey which, beginning in the Bombay Presidency, was gradually extended over the greater part of India. Pandit Bhagvânâlâ’s journeys through Gujrat and Kâthiâvâd, and those to Ujjain, Vîdas, Allahbâd, Bhitârî, Sâmth and Nêlâ, as well as some of their results, are incidentally mentioned in Vols. VII., VIII., IX. and XI. of the Journal of the Bombay Br. R. A. S. But these short notes give by no means an adequate idea of the enormous extent of his travels, and the very great amount of work which he performed. In Western India, he travelled not only through the northern half of the Bombay Presidency, but also through the greater portion of eastern and western Râjputânâ, including the desert as far as Jaisalmer. In Central India he explored, besides Mâlvâ and Bhopâl, also Scindik’s territory, a part of the Central Provinces, and the Agrâ; Mathurâ,
Allahābād and Benares Districts. In Eastern India, he repeatedly visited Bihār, both north and south of the Ganges, a part of Bengal Proper and the caves of Orissa. In the North he went as far as Shāhābāzgarh in the Yashavēhi District, and as far as Nēpāl at the other extremity of the Himalayan range. On these journeys, which were not made continuously, but with intervals of rest at Bombay, he took copies, mostly ink-impressions and paper rubbings, of all the more important known inscriptions, and of numerous unknown ones which he discovered. He also collected hundreds of coins and MSS., and gathered much curious and important information regarding the ancient monuments, and the castes and religious sects of the districts through which he travelled, as well as many historical traditions. With respect to the inscriptions and coins, he by no means confined himself to the mechanical work of collecting and taking copies. He made transcripts and translations into Gujarāṭī, arranging them in their proper order and drawing up tables of the various alphabets. In 1875 and 1876 I saw in his library a number of large carefully indexed volumes which contained the results of his work performed at home and on his journeys. During this period he also learned a little English, just sufficient to read the scientific works on India and Indian matters, and studied Prākṛit with a Jainī Gorji, who for some time was in the employ of Dr. Bhāū Dājī. These extensive and varied researches completed his education as an epigraphist; and made him fit for his career as an independent scholar, which soon after he was forced to begin.

Just about the time of his return from Nēpāl, his connexion with Dr. Bhāū Dājī was brought to an end by the death of that gentleman, which occurred on the 29th May, 1874. The circumstances of the family were not such as to permit their employing Paṇḍit Bhagvānīlāl any longer, or their thinking of a publication of the accumulated materials. But they allowed him to keep the facsimiles and transcripts which he had prepared, and thus gave him an opportunity of accomplishing what his master had failed to carry out. Though the revival of epigraphic studies had then begun in Western India, and though Dr. Burgess would have gladly welcomed a contributor of Paṇḍit Bhagvānīlāl’s attainments, the seclusion in which he had been kept from all contact with European Sanskritists, his precarious worldly position, and his inability to express himself in English, prevented him from coming forward at once. It was fully two years later that his first article was sent by me to the Indian Antiquary, and others were laid by Dr. O. Codrington before the Bombay Br. R. A. S. Paṇḍit Bhagvānīlāl first visited me in the spring of 1875, while I was temporarily staying in Bombay for some official business. He told me, among other matters, that he had made some discoveries on the value and the origin of what then used to be called the cave-numerals. My journey to Kasīrī prevented my paying at once serious attention to this affair. But when, after my return, he came again, showed me the drawing of his plate, and explained his theory, I felt such an admiration for his ingenious and important discoveries that I offered to put his notes into shape and to get the article published. We prepared it together, and Dr. Burgess printed it in the February number of the Indian Antiquary for 1877. In the meantime, the Paṇḍit had been introduced to Dr. O. Codrington, then Honorary Secretary of the Bombay Br. R. A. Soc., who lent him his assistance for the preparation of four short papers on coins, inscriptions and numeral signs (Journ. Bo. Br. R. A. S. Vol. XII. p. 404). Shortly after the appearance of his first publications, Paṇḍit Bhagvānīlāl was elected, in April 1877, an honorary member of the Bombay Asiatic Society on the motion of the late Mr. J. Gibbs; the proposal being seconded by myself and Dr. Codrington. This first recognition of his merits greatly encouraged him, and was of great importance for his career, as it gave him the free use of the Asiatic Society’s Library. He amply repaid the obligation under which the Society had laid him, by many excellent contributions to its Journal, and he fully justified the honour shown to him by his incessant literary activity, which continued uninterruptedly almost to the hour of his death. The total number of his published articles is twenty-eight, besides which he has furnished large contributions to some volumes of the Bombay Gazetteer and smaller ones to Sir A. Cunningham’s Archaeological Reports. They contain many discoveries which will be of permanent value, and will cause his name to be remembered as that of one of the most successful students of Indian epigraphy and history.

In paleography, he finally settled the values of the signs of the ancient numerical system. It is an undeniable fact that since the appearance of his plates in the Indian Antiquary and in the Journ. Bo. Br. R. A. S., the vacillations in the readings of the dates, expressed by “cave-numerals,” have disappeared, and that now differences on such points are rare among competent epigraphists. His theory that the “cave numerals” are letter-numerals has been disputed, but makes way more and more. This much seems now indisputable, that, whatever the origin of these signs may be,
they have always been considered by the Hindus of historical India as syllables, and that the changes which they show in various documents, in the main depend on the character of the alphabet used. In the interest of truth I cannot suppress the remark that Pāṇṭjī Bhagavānīlī’s name ought to have been mentioned by Dr. Bhād Dājī in his article on the cave-numerals. I have strong reasons for the belief that at least a considerable share of the results, at which Dr. Bhād Dājī arrived, is due to Pāṇṭjī Bhagavānīlī’s industry and ingenuity. Another service which he has rendered to palæography, is the discovery of the real value of some signs of the most ancient Southern and Northern alphabets. He first recognised the ṭā on inscriptions of Radhādāman and of Pulumāyī. His transcript of the first rock-edict in the Sāhlabāzgarhī version, Ind. Ant. Vol. X. p. 107, for the first time rendered the signs for thī and mīra correctly. The discovery of the ṭhā was made simultaneously by Dr. Hoerner. To his skill, finally, we owe some of the finest facsimiles of inscriptions, among which the Nāsik series in Volume IV. of the Archæological Reports of Western India deserves a special mention. Pāṇṭjī Bhagavānīlī’s services to historical research are very numerous and varied. The fragment of Aśoka’s eighth rock-edict, which he found at Sāpirā, shows that the great Maurya held the western coast of India as well as the eastern one, and explains the occurrence of a later Maurya dynasty in the Konkan. Equally important is his discovery of an era of the Maurya kings in the Udayagirī inscription of Khārāvēla. In my opinion, it is now probable that, though Aśoka dates according to regnal years, the Mauryas had and used an era of their own; and I hope that, when the now absolutely necessary excavations at Paṇṭna have been made, records will be discovered which will furnish a real and full account of the beginning of the historical period of India. The same paper on the Hathigumba inscriptions, which makes us acquainted with the Maurya era (Actes du Sixième Congrès Int. des Or. Vol. III. pt. 2, p. 132) gives also the first account of the ancient Chēta dynasty which ruled Kalinga in the second century B.C. It also shows that king Khārāvēla was the contemporary of one of the early Sātakaṇṭha of the Andhra dynasty, and thus establishes a valuable synchronism, the full importance of which will, however, only appear when the beginning of the Muriyarājakaḷa has been definitively settled. Pāṇṭjī Bhagavānīlī’s researches have also in other respects materially advanced our knowledge of the history of the Andhras. He first recognised the value of the Nāṃgāhāṭ inscriptions, and did much for their interpretation (Jour. Bo. Br. R. A. Soc. Vol. XIII. p. 303) and for that of the Paṇḍu Lēṇa inscr. (Bombay Gazetteer). He discovered two new kings of this dynasty, Mādhārīputra-Sākṣaṇē or Siriṣaṇē and Vāsīthīputra-Chaturupaṇa (?) (Jour. Bo. Br. R. A. S. Vol. XII. p. 407 and Vol. XV. p. 306). By his article on the Andhrabhṛtya coins (ibidem, Vol. XIII. p. 303) he contributed much towards settling the sequence of some of the later kings. As regards the later Indian dynasties, he has been the path-finder in the history of Nēpāl, for the explanation of which his twenty-one inscriptions (Indian Antiquary, Vol. IX. p. 163, and XIII. p. 411) have laid the foundations. The pedigree of the Rāṣṭrapātīs of the Dekhan has been lengthened by his discovery of the Elāra inscriptions (Arch. Surv. W. I. No. 10, p. 92). The recognition of the existence of a once powerful Traikāṭīka dynasty in Western India is solely due to his revised edition of Dr. Bird’s Kanheri plate (loc. cit. p. 57), and to his paper on the grant of king Dāhraṇē (Jour. Bo. Br. R. A. S. Vol. XVI. p. 346). The elucidation of the history of the Śīlākara chieftain of the Dekhan and of the Konkan, owes much to his two papers in the Jour. Bo. Br. R. A. S. Vol. XII. p. 329, and Vol. XIII. p. 1, and to his contributions to Vol. XIII. Pt. II., of the Bombay Gazetteer. The history of the Gurjara and Chalukya princes of Gujarāt has gained an altogether new aspect, in consequence of his article in the Indian Antiquary, Vol. XIII. p. 80, and in the Verhandlungen des Siebenten Int. Or. Cong. Arische Section, p. 211. I hold it to be now evident the Gurjara Sāmantas of Broach were not an ephemeral dynasty, counting only three kings, but that they ruled over Central Gujarāt during four or five centuries. The great difficulties which the Khēḍā plates of the Chalukya Vijayārāja used to cause, have disappeared since it has been shown that they belong to a late period when the Dekhan Chalukyas had grown powerful and extended their sway to the western coast. Moreover, it has now become certain that feudatory Chalukya kings ruled in Southern Gujarāt for several centuries, down to the conquest of the province by the Rāṭhōras. These results are chiefly due to Pāṇṭjī Bhagavānīlī’s discovery that an era, which began in the middle of the third century A.D., was extensively used in Gujarāt during the seventh and eighth centuries. He was enabled to furnish convincing proof of this fact, because, fortunately, he had kept a copy of the for the present inaccessible grant of Mangalarāja, the second prince of the Chalukya dynasty of Southern Gujarāt, who used the Śaka era, while his elder and younger brothers preferred the later one. Sir A. Cunningham and Mr.
Fleet then showed that the era in question was the Chedi-Sainvat used by the Haihayas of Central India, in which identification Panjít Bhagvánáláı acquired. His latest attempt to account for the occurrence of the Chedi era in Gujarát, by the assumption that it was established by the Ábhíra king Iśvaradatta, and by the identification of the Ábhíras of Gujarát and Násik with the Traikúṭakas and the Haihayas of Chédi, is for the present nothing more than an ingenious speculation. But his combinations are, though very bold, yet by no means improbable; and it is very likely that his extensive unpublished paper on the Kañratapas of Western India, which will be published in the Journal of the Bombay Sanskrit Society, will show them to be well founded. Another work on which he was engaged until his death, is a history of Gujarát from the earliest times until 1300 A.D. In addition to his services to the political history of India, those rendered by him to the history of the religious sects, especially of the Jainas, deserve to be mentioned. Panjít Bhagvánáláı was always a staunch adherent of the theory that the Jainas are an independent community, the latest development of which dates from the times of Buddha. He fully agreed with me on this point when I told him, in 1876, that I had found notices of the Tirthánkara Mahávira in the Buddhist Scriptures. Later he has shown that the Jainas were the, or one of the, ruling sects in Kalinga during the times of the Chéta dynasty, just as at the period of Húen Tsiang’s visit; and that the Udayagiri and Hathigumpha inscriptions belong to patrons of the Jainas. He also brought to notice the important Jaina inscription from Mathurá, which clearly proves the existence of Jaina temples in that city during the first century B.C., and he first recognised that the Káshúm pillar, erected according to its inscription in Gupta-Sainvat 141 or 460-61 A.D., is a Jaina monument. On the Sáiva and Vaishñava sects, he has only made occasional remarks. These show distinctly, what he also has often told me in private conversation, that he did not agree with those who consider the religious movements in India to consist of the successive development of what is sometimes called Védism, Bráhmanism, Buddhism, and Hinduism. He held the view, at which every careful student of the real historical documents must arrive, that the Hindus have not proceeded in so systematic a manner; but that many of the modern creeds existed almost in the same form at the beginning of the historical period of India, and that many currents of religious thought and life have run on side by side since very early times. His papers contain also many valuable notes on the geography of ancient India, and numerous perfectly certain identifications of towns and villages mentioned in the inscriptions. His essays on the antiquities of Supárá and Padápá, and on the Pañcú Lénapá and the Hathigumpha inscriptions, show that he had directed his attention to archaeology, and prove an intimate acquaintance with the various styles of architecture and ornament. The famous discovery of the Supárá Stépa, which he made together with Dr. J. MacNabb Campbell, will perpetuate his name as that of an able and lucky archaeological explorer.

The great services which Panjít Bhagvánáláı rendered to Oriental learning found also further ready recognition. In 1883 the University of Leiden granted to him, on the recommendation of Professor Kern, the honorary degree of Doctor of Philosophy. Shortly afterwards he was made an Honorary Member of the Koninklijk Instituut voor de Taal-, Land- en Volkenkunde van Nederland, and of the Royal Asiatic Society of Great Britain and Ireland. In 1886 the Chiefs of Káthivád originally selected him as the delegate to the Seventh Int. Or. Congress. He was, unfortunately, compelled to decline the offer on account of a very serious illness. Many of the most eminent Orientalists in India and Europe entered into correspondence with him, and honoured him with their friendship. Since, of late years, the annual migrations of European Sanskritists to India became the fashion, his house at Walkeshwar was one of the points of attraction for them in Bombay. All those who visited him, left him full of respect for his learning, and enchanted with the readiness with which he showed his treasures, and gave them advice and assistance in their researches. He, on his part, valued these visits more than any other honour shown to him. Only a few months ago, on January 6th, he wrote to me a warm letter of thanks, expressing his gratitude for my having procured him the pleasure of acquaintance with our illustrious colleague, M. E. Senart. Of my own personal intercourse with him, I have kept the most agreeable remembrances. After his natural shyness and his distrust of Europeans, which, I think, had been implanted artificially, were overcome, he became a most amiable companion, perfectly unreserved and truthful even in matters on which the majority of Hindus find it difficult to speak with full candour. In the autumn of 1876, and again in July and August, 1879, we worked daily from 6 to 9 in the morning—the only time I could spare—at the translation of his papers on the Numerals and the Nepalese Inscriptions. Our work was both times unduly protracted, because very frequently antarākathás, as we used to call our incidental conversations, drew us off from our
main purpose. We used to discuss not only the
chief profly as results of antiquarian and
literary research, but also the social, political, and
religious condition of modern India. In these
corversations, I was often struck with the fairness
and impartiality of his remarks on men and
matters. He never showed any jealousy of the
merits of others, but freely acknowledged what
was worthy of praise in their work and character;
nor did he allow his judgment to be clouded by
national vanity. A point which did him great
honour was his feeling towards his former master,
Dr. Bhaţ Djâ. Though fully conscious of the
weaknesses of the latter, he felt for him as only
an Indian pupil can feel for his Guru. He was
still devoted to him, 4asa and saa, with the same
devotion which he had shown so often during
Dr. Bhaţ Djâ’s lifetime. On literary, historical,
and linguistic questions, we often differed very
considerably. His bearing in such discussions was
always perfectly self-possessed and gentlemanly.
It was not easy to induce him to give up an idea
which once had taken root in his mind. But in
spite of a great sensitiveness he always openly
acknowledged a defeat. Though he had, as was
only right and just, a very good opinion of himself,
and of the ability of his countrymen, he
more than once made the apparently sincerely
meant remark, that the Hindus did not possess the
same mental strength as the Western nations,
and he never found the least difficulty in admitting
the fact that their ancestors had borrowed
much from the Greeks and other foreigners with
whom they came into contact. Of the social,
political, and religious life of modern India, especi-
ally in the Native States, he gave me more
trustworthy accounts than almost any other of
my numerous Hindu acquaintances, whose state-
ments were only too often biased one way or the
other. His amiable frank character, his keen
intelligence, and his extensive learning, made him
very dear to me. I shall never forget the plea-
sant days, when I used eagerly to look forward to
the announcement that the Paññit had come;
and I gladly acknowledge now, as I have done
already on special occasions, that I have learnt a
great deal from him.
His worldly circumstances were unfortunately
never very satisfactory. When I made his
acquaintance, he was engaged in business with, or
was working in the office of, a native merchant in
Bombay. I believe he kept this connection up
also later, though he was temporarily employed
by Dr. Burgess and by Dr. J. M. Campbell, the
compiler of the famous Bombay Gazetteer.
During my stay in India, I repeatedly tried to
secure for him a permanent place in the Govern-
ment service. But I failed, partly because he did
not possess a sufficient knowledge of the English
language, and partly because his terms were
rather high, and he claimed a certain indepen-
dence in his position. He was, however, by
no means quite neglected. Besides the no
doubt liberal pay for the work which he did
for Drs. Burgess and Campbell, he received
generous assistance from the Kâthiâwar Chiefs
and other patrons, as well as, on the com-
pletion of his inscriptions from Népâl, the whole
savings, nearly one-half, of the original Govern-
ment grant of Rs. 2,000. With such occasional
help, he seems to have been able to live not
uncomfortably, except in the last months of his
life, when he became very infirm. In his last
letter, dated the 27th January, 1888, he, for the
first time, complained of his circumstances. He
told me that, after suffering more or less during
four years, he had become for the last two
months so weak in body as to be unable to leave
his bed, and that, though, only 49 years of age, he
was quite an old man and unable to work for his
livelihood. He asked me, therefore, to apply to
the Divân of Junâgâdhâ for a pension. I fulfilled
his request at once, and the courteous reply of
Mr. Haridâs Behâridâs leaves no doubt that Pañ-
nit Bhagvânâlî would have received help, if he had
not died so soon. In spite of his bodily weakness
and his cares, he continued his literary work to
the last. In the letter of the 27th January last, he
added, after describing his infirmity,—"But my
mental power is, on the contrary, good. I have
engaged a graduate [of the University.] Having
taught him with great trouble, I make him write
[my] articles (pêjâro lakkhâvân ekhwân.)" Some
time before his death he made a will, bequeath-
ing his coins and copper-plates to the British
Museum, his papers and MSS. to the Asiatic
Society of Bombay. Mr. Vajeshankar G. Ozhâ of
Bhâunâgar has informed me that Pañnit Bhag-
vânâlî’s admirers in Kâthiâwar intend to raise a
fund in order to perpetuate his name by the
endowment of a scholarship in connection with
the Bombay University. I trust that all Euro-
pean Orientalists will join with his compatriots
in order to do honour to the memory of their dis-
tinguished colleague who spent his whole life in
the pursuit of disinterested scientific work.

G. Bühler.

Vienna, May 18th, 1888.

CALCULATION OF HINDU DATES.

No. 18.

In the Kâtâr stone inscription of the
Kâdamba king Jayakâsin III., from the Bel-
THE INDIAN ANTIQUARY.

[October, 1888.

gauṃ District, published by me1 in the Jour. Br. R. As. Soc. Vol. IX, pp. 263, 304ff., the first date (lines 3, 12f.) runs—Kaliyuga-sanvatsaraṃ 4289 sandadādādhiaḥ-āgni śrī-Vira-Jayakēśeaḥ-arasaara varshaṇaka(ad) ṣaṃ-
neya Du[r]*]masti-sanvatsaraṇaḥ Adhāraḥ śud(aḥ)*ja-asṭaṁ-8-Adi-鸞-
andu—"the Kaliyuga year 4289 (is) the moment; 2; coming from that (point), 3; on the first day (i.e. on Sunday), the eighth tiṭhi, (or in figures) 8, of the bright fortnight of (the month) Adhāraḥ of the Durmata sanvatsara, which is the 15th of the years of the illustrious king Viras-
Jayakēśedeva." And the inscription goes on to record a trial by ordeal, in a dispute about some land, between Śivasakti, the Adhāraḥ of the god Kallēvara of the well called Attibāvi at Kittur, and Kalyānasakti, the Adhāraḥ of the Mulaśthāna god of the same locality.

The above is the date on which the dispute was formally opened for trial. In line 25f. it is recorded that—tatt-advaitasaaraḥ Adhāraḥ-bahula-7-saptamā-Adi-advaita-aduṇa; 4; i.e. "on the first day (Sunday), 7, (or in words) the seventh tiṭhi, of the dark fortnight of Adhāraḥ of that same sanvatsaraḥ,"—the ordeal was undergone; Kalyānasakti taking an oath, apparently with some sacred symbol or image on his head; 5 and Śivasakti taking an oath, with a heated plough-
share in his hand. 6 And finally, in line 30f. it is recorded that—bahula-8-Sōmavāra de(d)ivasas, i.e. "on Monday, the 8th (tiṭhi) of that same dark fortnight,"—the adjudicators, viz. all the Mahājanas, of the neighbouring village of Dēgāvā, convened in an assembly in the sabhāmanyopasa, examined Śivasakti's hand, 7 and, evidently finding it uninjured, decided that he had won his case, and that the land in dispute really belonged to the god Kallēvara.

This gives us, apparently as the basis of the calculation, Kaliyuga-Sanvatsara 4289, which, if it should be taken as expired, is equivalent by the Tables to Śaka-Sanvatsara 1110 expired; and the details of the Durmata sanvatsara, current

1 For a lithograph, see, when issued, Indian Inscriptions, No. 33.
2 Here sandu seems to be the noun, meaning a fissure, crack, opening; a lane, narrow street; an interval of time; not the past participle of satita, to be current; to pass (as time). Compare the fuller word sandukatu, an opportunity; a crisis, an ominous interval of time.
3 The intervening passage, in lines 3 to 12, contains only the long string of titles and epithets of Jayakēśin III.
4 Read aduṇa.
5 In line 21 we have ṣaṃ Kalyānasakti śrī-adhūḥyaḥ-āgni-bhāye-ṛtyaṃ(s) ṣaṃvatsarāḥ, "that same Śivasakti, having become standing on the head, (made an oath to the following effect)." And in line 29f. we have [Kalyānasakti Ālokamā-kṛyi Mulaśthāna-devadaraṃ śrī-] saṃvatsarāḥ, "that same Kalyā-

of the Sixty-Year Cycle of Jupiter; the month Adhāraḥ (ordinarily June-July); (1) the eighth tiṭhi of the bright fortnight, coupled with Adi-वāra, or Sunday; (2) the seventh tiṭhi of the dark fortnight, coupled with Adi-वāra, or Sunday; and (3) the eighth tiṭhi of the dark fortnight, coupled with Sōmavāra, or Monday.

But, if the apparent application of the given Kaliyuga year is accepted, we should have to assume some very considerable error in the record; for the given year, whether it is taken as current, or as expired, does not agree with the name of the sanvatsara according to either the Southern or the Northern System of the Cycle.

Thus, by the Northern System of the Cycle, I find from Mr. Sh. B. Dikshit's Tables that the Durmata sanvatsara commenced in Kaliyuga-Sanvatsara 4298 and Śaka-Sanvatsara 1119, both current (A.D. 1196-97); on Friday, the 5th Novem-
ber, A.D. 1196; and it was followed by the Dundubhi sanvatsara in Kaliyuga-Sanvatsara 4299 and Śaka-Sanvatsara 1120, on Tuesday, the 4th November, A.D. 1197. And here, with the basis of Śaka-Sanvatsara 1119 expired, from Prof. K. L. Chhatro's Tables I find that the results are,—(1) Adhāraḥ śūkla 8 ended on Tuesday, the 24th June, A.D. 1197, at about 42 ghatā, 3 palas, after mean sunrise (for Bombay);—by the Prāṃjanta northern arrangement of the lunar fortnights, (2) Adhāraḥ-क्रिष्णa 7 ended on Sunday, the 8th June, at about 55 gh. 22 p.; and (3) Adhāraḥ-क्रिष्णa 8 ended on Monday, the 9th June, at about 59 gh. 35 p.;—and, by the Ambanta southern arrangement, (2) Adhāraḥ-क्रिष्णa 7 ended on Tuesday, the 8th July, at about 32 gh. 56 p.; and (3) Adhāraḥ-क्रिष्णa 8 ended on Wednesday, the 9th July, at about 37 gh. 8 p. Thus, if we could admit the exceptional use in Southern India, at this period, of the Northern System of the Cycle and the Prāṃjanta northern arrangement of the fortnights, the correct week-day is obtained in two cases out of the three; and it might be thought that either the writer or the engraver of the inscription, saying 'this (culturable land named) Ānikodikeyi is the property of the Mulaśthāna god,' became standing on the head.' The word śrī-adhūḥyaḥ, or, in its full Sanskrit form, śrī-adhūḥyāyaḥ, can hardly be intended to be taken in its literal sense. But I have not been able to obtain any certain explanation of the meaning that is to be given to it here.

6 In line 26f. we have ṣaṃ Śivasaktiṃ pāla-dīvyaṃ bhāyade-ṛtyaṃ sādi-ṛtyaṃ, "that same Śivasakti having said, 'I will hold the plough-share';" and in line 27, ṣaṃ Śivasaktiṃ pāla-dīvyaṃ bhāyade-ṛtyaṃ sādi-ṛtyaṃ, "that same Śivasakti, holding the plough-share, made an oath to the following effect." Pāla is a corruption of the Sanskrit phalum, a plough-share; and phalā-dīvya is one of the ten oracles given by Mantrī-Williams in his Sanskrit Dictionary, s. v. dīvya, an oracle.
7 Ā Śivasaktiṃ pāla-dīvyaṃ bhadraṃ nāti; line 31.
inscription simply made a mistake, and transposed the figures 9 and 8, and thus gave Kaliyuga-Sanvat 4289, instead of 4298 (as an expired year). But the week-day in the third case, differing by two days, renders it impossible to accept these results and this explanation. And I shall show that the figures 4289 are really correct; though they have not the application which suggests itself at first sight.

By the Southern System of the Cycle, the Durmatti saṁvatsara coincided with Kaliyuga-Sanvat 4903 and Śaka-Sanvat 1124, both current (A.D. 1291-1292). Here, with the basis of Śaka Sanvat 1123 expired, the results, in all three cases, work out quite correctly; thus:—(1) Ṝāṣṭīḍha sukla 8 ended, as required, on Sunday, the 10th June, A.D. 1201, at about 52 gh. 59 p.; and, by the Amānta southern arrangement of the fortnights, (2) Ṛāṣṭīḍha krishna 7 ended on Sunday, the 24th June, at about 36 gh. 37 p.; and (3) Ṛāṣṭīḍha krishna 8 ended on Monday the 25th June, at about 20 gh. 19 p.

These results are exactly in accordance with those obtained under Nos. 15, 16, and 17 above. And they show that, as was in fact to be assumed from the locality and period of the record, the real guide in calculating the details is the name of the saṁvatsara according to the Southern System of the Cycle.

It only remains to explain the apparent discrepancy between the given Kaliyuga year and the saṁvatsara. As we have seen, the results are correct for Kaliyuga-Sanvat 4903 current. By the record, the period from Ṛāṣṭīḍha sukla 8 to krishna 8 of this year, was in the fifteenth year of the reign of Jayakēśin III. Accordingly, the period from Ṛāṣṭīḍha sukla 8 to krishna 8 of the first year of his reign, was in Kaliyuga-Sanvat 4289 current. And, differing from the way in which it has to be applied in Nos. 15, 16, and 17, the given Kaliyuga year is evidently here used as giving, not the basis of the computation of the details of the dates, but simply the period from some point in which there commenced the first year of the reign, of which there is quoted the fifteenth year, with those details referred to it. This is rather an exceptional use of the leading item in a date. But, two exactly analogous instances are furnished by Nos. 19 and 20 below.

We may also note that the similar use of Kaliyuga-Sanvat 4288 expired in No. 19, shows that in the present case we distinctly have the quotation of a current Kaliyuga year.

No. 19.

The preceding result enables us to deal conveniently with the Halsi copper-plate grant of the same Kādamba king Jayakēśin III., from the Belgaum District, published by me in the Jour. Bo. Br. R. As. Soc. Vol. IX. pp. 231 f., 241 ff., in which the date (line 66 ff.) is—sāṣṭī-śātāvadya-varāḥikēśu chaturvahu sahaśrēṣhu Kaliyuga-saṁvatsaraḥ purāvavīteha śrī-Śaptakōṭśīvraḥ labdha-vara-prasāda-śrī-Śākambra-Vira-Jayakēśīdeva-vijaya-rājya pravartamānā trayādaśe Śiddhārthi-saṁvatsaraḥ Chaitra-śuddhādvādaśa-Guruvārē damaṇāropana-samanantaram, —“when there have expired four thousand years of the Kaliyuga, increased by two hundred together with eighty-eight; while there is current the Śiddhārthi saṁvatsara, which is the thirteenth (year) in the victorious reign of the glorious Kādamba Vira-Jayakēśīdeva, who has acquired the excellent favour of (the god) the holy Śaptakōṭśīvra; on Thursday, the twelfth tithi of the bright fortnight of (the month) Chaitra; immediately after the damanāropana (ceremony). And the inscription goes on to record a grant of the village of Kiruvvalaśīgā by Jayakēśi III., in this the thirteenth year of his reign.

This gives us, apparently as the basis of the calculation, Kaliyuga-Sanvat 4288 expired, which by the Tables is equivalent to Śaka-Sanvat 1109 expired; and the details of the Śiddhārthi saṁvatsara, current, of the Sixty-Year Cycle; the month Chaitra (ordinarily March-April); the bright fortnight; the twelfth tīthi; and Guruvāra, or Thursday.

But, if the apparent application of the given Kaliyuga year is accepted, here again we should have to assume a very considerable error in the record.

Thus, by the Northern System of the Cycle, the Śiddhārthi saṁvatsara was current at the commencement of Kaliyuga-Sanvat 4297 and Śaka-Sanvat 1118, both current (A.D. 1195-96).

While, by the Southern System of the Cycle, the Śiddhārthi saṁvatsara coincided with Kaliyuga-Sanvat 4301 and Śaka-Sanvat 1122, both current (A.D. 1199-1200). As we have seen in the four preceding instances, this is the period for which we must expect to obtain a correct result. And, as the Mōṣha-Saṁvatantā of Śaka-Sanvat 1122 current occurred on Thursday, the 25th March, A.D. 1199, on which day there ended the twelfth tithi of the dark fortnight of Chaitra, the calculation has to be made with the basis of Śaka-Sanvat 1120 expired. With this basis, I find that the given tithi, Chaitra sukla 12, ended, as required, on Thursday, the 11th March, A.D. 1199, at about 23 gh. 26 p.

Here again, as in No. 18 above, we find that the given Kaliyuga year is used as giving, not the basis of the computation of the details.
of the date, but simply the period from some point in which there commenced the first year of the reign, of which there is quoted the thirteenth year, with those details referred to it. And this record seems to fix the commencement of the reign of Jayakésin III, as falling on some date between Chaitra sukla 1 and 12 of Kaliyuga-Saṅvat 4289, equivalent to Śaka-Saṅvat 1110, both current, or between approximately the 13th and the 24th March, A.D. 1187.

From what I have said above regarding the expired Śaka year with which the result had to be calculated, it is clear that, though for purposes of astronomical calculation the Māsha-Saṅkṛānti has to be taken as the starting-point in the years of both the eras, this record proves that, for the denotation and computation of tithis according to the civil reckoning, the years of the Kaliyuga era have to be taken, like those of the Śaka era, as commencing with Chaitra sukla 1. For otherwise, e.g. if Kaliyuga-Saṅvat 4301 current had to be taken as not commencing, for civil purposes, till the Māsha-Saṅkṛānti which occurred on the 25th March, A.D. 1199, then the given tithi would belong to 4300 current, and the record would have given us 4287 expired, instead of 4288 expired. It is also evident that the same starting-point, Chaitra sukla 1, has to be taken as the initial day of each saṅvatsara according to the Southern System of the Cycle, at any rate for the civil reckoning. For otherwise the given tithi would belong to the preceding saṅvatsara, Kālayukta.

No. 20.

In the Goa copper-plate grant of the Kādamba king Shashṭhadēva-Sīvachitta or Shashṭhadēva II, published by me in this Journal, Vol. XIV. p. 288ff., the date (line 29ff., i.e. as Śaṭhachāvatavīrūṣād-ādhiṣṭā-śatārēśu chatur-śaharēśu) Kaliyuga-saṅvatsarēśu parāyṛrēśu satatā svaśṛjy-ānūmarē-kālē pāṛchāmā Śādharāṇa-saṅvatsara tasya-Śāvōyūja-sūdha-brahmiṣṭapadi Budhavāre tulā-rāśiṃ upagāvatavi bhagavatii bāhūkāre vishvwā-saṁkrāntau māhā-punyakāla-kāla{""}—when there have expired four thousand years of the Kaliyuga, increased by three hundred raised by forty-eight; in the Śādharāṇa saṅvatsara, which is the fifth (year) in the time of his own enjoyment of sovereignty; on the first tithi of the bright fortnight of (the month) Āśvāyuja of that (saṅvatsara); on Wednesday; when his radiance the Sun has come to the sign Tula; at the saṁkrānti of the equinox; at this very meritorious time." And the inscription goes on to record a grant of some land by Shashṭhadēva II, in this the fifth year of his reign.

This gives us, apparently as the basis of the calculation, Kaliyuga-Saṅvat 4348 expired, which by the Tables is equivalent to Śaka-Saṅvat 1169 expired; and the details of the Śādharāṇa saṅvatsara, current, of the Sixty-year Cycle; the month Āśvāyuja (ordinarily September-October); the bright fortnight; the first tithi; Budhavāre, or Wednesday; and the (autumnal) equinox, occurring at the Tula-Saṁkrānti or entrance of the Sun into Libra.

But here again, if the apparent application of the given Kaliyuga year is accepted, we should have to assume an error in the record.

Thus, by the Northern System of the Cycle, I find that the Śādharāṇa saṅvatsara commenced in Kaliyuga-Saṅvat 4347 and Śaka-Saṅvat 1168, both current (A. D. 1245-46), on Sunday, the 16th April, A. D. 1245, and the given month and tithi fell of course in the same year; the following saṅvatsara was Virōdhikriti, which commenced in Kaliyuga-Saṅvat 4348 and Śaka-Saṅvat 1169, on Thursday, the 12th April, A. D. 1246. Nor is there any possibility of this being the period intended; as might be argued if we assumed that Kaliyuga-Saṅvat 4348 expired is only a mistake for 4347 current or 4346 expired. For, with the basis of Śaka-Saṅvat 1167 expired, find that the given tithi, Āśvāyuja sukla 1, ended, not on a Wednesday, but on Saturday, the 23rd September, A. D. 1245, at about 4 ghatsa, 10 palas, after mean sunrise (for Bombay); five days before the Tula-Saṁkrānti, which occurred on Thursday, the 28th September, at about 4 gh. 23 p.

As in the previous instances, we must apply the Southern System of the Cycle; by which the Śādharāṇa saṅvatsara coincided with Kaliyuga-Saṅvat 4352 and Śaka-Saṅvat 1173, both current (A. D. 1250-51). And this is the period in which we have to look for a correct result. In this year, Āśvāyuja was intercalary. And,—partly from the absence in the record of any expression indicating the intercalated month; partly because of the general prohibition against the performance of religious rites, &c., in intercalated months,—we should expect to find the details work out correctly for the natural month; i.e., according to the present custom of both Northern and Southern India, for the second Āśvāyuja.

Here, with the basis of Śaka-Saṅvat 1172 expired, the results are—(1) in the first, the intercalated month, the given tithi, Āśvāyuja sukla 1, ended on Monday, the 29th August, A. D. 1250, at about 57 gh. 27 p.; thirty days before the saṁkrānti;—

and (2) in the second, the natural month, the given tithi, Āśvāyuja sukla 1, ended, as required, on Wednesday, the 28th September,
A.D. 1250, at about 18 gh. 10 p.; and the Tula-Samkṛanti occurred on the same day, at about 22 gh. 1 p.

Here again, as in Nos. 18 and 19 above, we find that the given Kaliyuga year is evidently intended to give, not the basis of the computation of the details of the date, but simply the period from some point in which there commenced the first year of the reign, of which there is quoted the fifth year, with those details referred to it. But in this instance there seems to be a mistake, either in the regnal year, or more probably in the Kaliyuga year. For, by the record, (the natural) Āśvayuja śukla 1 of Kaliyuga-Sanvat 4352 current, was in the fifth year of the reign of Shaśadhāva II. Consequently, Āśvayuja śukla 1 of the first year of his reign, was in Kaliyuga-Sanvat 4348 current. And the given expired Kaliyuga year ought, apparently, to be 4347 instead of 4348.

J. F. Fleet.

ARABIC ORIGIN OF "BOSH."

Sir,—This highly expressive English slang word, though in everyday use by all classes, is omitted in all the dictionaries which I have had an opportunity of consulting, except one. Nuttall, defines it:—"Outline; figure; in pop. lang., nonsense, folly," but he gives no clue to its derivation. In thinking over the origin of the word lately, it occurred to me that many years ago, in reading an English story, the scene of which was laid in Asiatic Turkey, I had seen the word bosh frequently used by a Turk, in Turkish sentences, and, apparently, in the same sense as in English. I then referred to a Turkish dictionary, in which the word ۋىش bōsh is defined as empty, useless. These meanings, though somewhat unsatisfactory, are not inconsistent with the idea that the word under discussion is borrowed directly from the Turkish language. I shall now endeavour to trace this Turkish word back to the Arabic.

Everyone (whether acquainted with Arabic or not) who has touched at any of the Egyptian ports or Aden must remember hearing the expression ماد-فی shai, and means literally:—"There is not any thing." Both in Yaman and Egypt the expression is frequently used as a simple negation,—"not,"—but when used in this sense in the Maghribi, or Egyptian, dialect it is usually corrupted into ماد-فی shai, while in

Yeman it remains unaltered. Thus, an Egyptian would say:—هذَا ماد-فی hdha māsh tābil, "This is not good;" while a Yaman! Arab would say:—هذَا ماد-فی hdha mād-fī shai, simply, hdha māsh tābil.

While residing in Aden and in the Somáli Country I frequently noticed an interchange in the letters m and b, especially in proper names. I regret that I did not note examples at the time; but I remember one instance, which occurs in the name "Idris 'Umēsh," one of the leading citizens of Zaila" (زیلا). He always signed his name in Arabic characters:—"هادرس عمیش," though he was commonly called in the town: "Idris 'Ubēsh." On questioning him and others about this difference, I was informed that both modes of spelling were correct, because m and b were often considered one and the same letter.

A similar interchange of these letters occurs in the name of the river Narmada, which, I believe, is always so written in the vernacular languages of India, though better known to Europeans as the Nerbudda.

This completes the chain in the somewhat complicated derivation of the popular English word bosh from the Arabic mād-fīsh. I offer the suggestion with some diffidence, and shall be glad to hear the opinions of others on the subject. The derivation here suggested has at least the merit of originality.

J. S. King.

As to the origin of the word bosh, the New English Dictionary, s. v., says "slang or colloquial.—A Turkish word ۋىش bōsh, empty, worthless; the word became current in English from its frequent occurrence in Morier's novel Ayesha (1834) which was extremely popular, especially in the Standard Novels Edition, 1848."

Thence the great Dictionary traces its use in the senses of "contemptible nonsense, stuff, trash; foolish talk or opinions" up to the present day. And in the senses of "Stuff and nonsense! humbug!" it says that it was first heard of in Dickens, Bleak House, 1852.

Yule, Anglo-Indian Glossary, s. v., says "this is alleged to be taken from the Turkish bōsh, signifying 'empty, vain, useless, void of sense, meaning, or utility' (Redhouse's Dictionary). But we have not been able to trace its history or first appearance in English."

R. C. Temple.
BOOK NOTICE.

Prof. Weber on Ahalya and Αχάλλης.

On the 10th November 1887, Prof. Weber read before the Royal Prussian Academy of Science a short but suggestive paper on the above subject.

The popular story of Ahalya is well known. She was Gautama's wife, and was seduced by Indra, who presented himself to her in the form of her husband. Her indignant spouse condemned her under a curse to become a stone till she was touched by Rama's feet. The latter touched the stone with his feet on his way to Viṣvāmitra's hermitage. She came to life, and went to heaven after seeing Rama. The early portion of the story, it may be added, is alluded to in Vedic literature. Professor Weber sets himself to solve the question as to what is the under-meaning of this legend of the beloved of Indra, whom he won so basely? A clue, he thinks, may be found in a legend of the Jainas, in which she appears in an altogether different connection. She is there classed with Sitā, Draupadi and other women, who were the cause of mighty wars. Her name appears there as Ahiṭṭiya, Aiḥilīya, Ahiḷīya, Ahilā, and Aiḥiṇukā. This leads to the conjecture that Ahalya may be connected with Āhanyā, and may mean 'clearness,' 'light,' 'Aurora.' Indra, the god of the bright heaven would be therefore simply the 'lover of the light' (Ahalyāyai jārā, of the Subrahmanya ritual). So also he is called in another variant of the same ritual vacsurjārā, 'lover of his sister,' i.e. vakṣaṇa jārā, 'lover of the Aurora.'

Her husband was Gautama or Gōtama = [Gomattama (?)] 'very rich in cows,' which may be a reference to the Sun cows, whose race is so often referred to in the old mythas. Gōtama may therefore be the 'thousand-rayed cow' of the Veda, i.e. either the sun or the moon, and Ahamā or Ahalyā would fitly appear as his spouse.

If now, instead of using the picturesque expression 'lover of the light,' it were desired to express Indra with the help of a suffix meaning 'longing for,' we should get from ahaṇ or ahaṛ the forms *ahaṇyu, *ahaṇyus, *ahaṇyus, and the last would agree in form with 'Αχάλλης, which would therefore appear to signify 'longing for the light,' 'for the day,' or 'for the Aurora.'

There are several points of resemblance between Indra and Achilles. In the Mahābhārata, Arjuna or Phalgunas was an incarnation (or son) of Indra, and is continually and closely associated with his friend and protector Krishna. In the Jaina version of the Krishna legend, we find that he was vulnerable in the foot, and that it was there that he was struck by the fatal arrow.

Further, neither Krishna nor Achilles (both of whom were the greatest heroes in their respective armies) took any share in the fighting of the side on which he appeared. The grounds of abstention were different, it is true. Achilles stays away in anger, and finally joins in the combat, while Krishna is bound by an agreement to abstain, though he helps the Pāṇḍavas by his advice. Is this symbolic of the slow gradual development of the storm-conflict, whose aim is the recovery of the ravished daylight?

These considerations lead to the discussion as to how much the Mahābhārata owes to Greek influence, and to the Homeric poems. We find in it that the Yavana king Bhagadatta was an old friend of Yudhishtīra's father; that the Yavna king Kasārumānt, in whose name we seem to see traces of the word karṇa, was killed in battle by Krishna; that the mighty Kāla-Yavana met the same fate; that the Yāvanas joined in the battle between the Kuru and the Pāṇḍavas, beside the Śakaas and the Pahlavas (the last word only dating from the 2nd century A.D.): and we cannot doubt that the present text of the Mahābhārata belongs to a period in which the names of Greeks, Indo-Seythians, and Parthians were well known, and had wide influence.

As evidence regarding the gradual growth of the Mahābhārata it is of interest to know that Al-Berānī, in his description of the contents of that epic, omits all mention of the first book, the adīparana, commencing with the suddāparan as the first.

Prof. Weber winds up this portion of his argument by explaining that the question is a very wide one, and is in no way confined to the Homeric poems, but extends over the whole range of fables, tales, and myths. It is often impossible to say whether India has borrowed or has lent the original legends, and this can only be decided in each particular case on its own merits. As regards the Achilles-Krishna myth, he is unable to give a definite reply one way or another.

The author concludes his interesting essay with the text of the Jaina legend in which Ahalyā is mentioned in connection with other heroines as already pointed out.

G. A. Grierson.

1 Ahalyā, 'Αχάλλης, und Verwandte, Von Albr. Weber.
2 In medieval and modern Hindi she is called Ahilā or Ahiḷīya.—G. A. G.
3 I may mention one thing in connection with Indra's seduction of Ahalyā. She is according to tradition one of the typical sinners saved by Rāma, and her typical sin was dasyu, 'laziness.' Her laziness consisted in her not observing that, when Indra came disguised as Gautama, he cast no shadow. This is of course a common property of all Hindū gods, but the fact is significant in its present connection.—G. A. G.
CHAPTER II.

THE COLUMNAR EDICTS.

Upto the present date we possess five columns (or lāts) on which are engraved edicts emanating from Piyadasi:—

1.—The one which has been longest known, and which is the most important, is the Dehli column, commonly known as the Lāt of Fīrūz Shāh (D), because it was that prince who had it removed to Dehli from its original resting-place. This is the one which bears the most complete set of edicts. It is, I think, most convenient to follow the enumeration of the edicts suggested by General Cunningham, and I shall therefore say that this pillar carries seven edicts inscribed in four groups, on each of its sides. An eighth, engraved below, surrounds the shaft in several lines.

2.—Another pillar exists at Dehli, where it was also transported by Fīrūz (D'). It is the one called by General Cunningham the Mērūth (Mirāt) pillar, from its original site. It only preserves a short fragment of the 1st edict, the whole of the 2nd and 3rd, and portions of the 4th and 5th. The 6th to 8th edicts are altogether missing from it.

3.—The Allahābaḍ column (A), comprising edicts I. to VI. Only the two first are complete. One line remains of the 3rd; and of the others, fragments of greater or less extent. It is characterised by the presence of two fragments which we do not find elsewhere, and which are unfortunately in bad condition; one, previously known to Prinsep, has been named by General Cunningham, 'the Queen's edict,' the other, which was reproduced for the first time in the Corp. Inser. Indic. Vol. I. Plate xxii., is addressed to the officers of Kanāmbi. They form a necessary appendix in our revision of this class of edicts.

The two last columns were discovered in sites at short distances from each other; and each contains the first six edicts:—

4.—One is that at Radhia (R), which General Cunningham prefers to call Lauriya Arārāj.

5.—The other is the column of Mathia (M), which has received in the Corp. Inser. Indic. the name of Lauriya Navandgarh.

I do not propose to dilate upon the description and history of these monuments. I could only repeat facts already dealt with by Prinsep and General Cunningham, to which I have referred in a general way in the Introduction. It will be sufficient to recall to mind that the different texts are essentially identical in all common portions. I have therefore taken, as a basis, the longest and only complete text, that of the pillar of Fīrūz Shāh. This is the text which I transliterate, giving in foot-notes the variations of the other versions when they differ.

The orthographical or palaeographical peculiarities which this set of inscriptions presents to view are not such as to offer any peculiar difficulties in translation. I therefore neglect them here, and shall revert to them when I examine the philological and grammatical questions as a whole. I may add that I have considered myself authorised, by the experience acquired in the minute analysis of the Fourteen Edicts, to pass over in silence irregularities of detail which can lead to no misunderstanding.

1 In former volumes (IX. p. 382 ff. and X. pp. 83 ff. 180 ff. 269 ff. 399 ff.) of this Journal, there have been published extracts from Chapter I. of M. Senart's valuable studies of the Piyadasi Insigns. We now propose publishing translations of his further studies in the same direction, forming the 2nd volume of his Piyadasi Insigns. For this publication the texts have been revised by him with the assistance of the better fac-similes which have become available since the original French edition was issued. For mechanical fac-similes, prepared under the direction of Mr. Fleet, of the edicts on the Lāt of Fīrūz Shāh or the Dehli Siwālik Pillar, and on the Allahābaḍ Pillar, see ante, Vol. XIII. p. 304 ff.—EDITORS.

2 The text of D, and also that of A (see below), seem to have now become, as far as possible, conscienciously established by the fac-similes of Mr. Fleet, from which a reading was published by Prof. Bühler, ante, Vol. XIII. p. 306.

3 The transcription in the original character, and the variants, are omitted in this translation. The latter are no longer necessary, now that the text of D is established.
FIRST EDICT.


TEXT.

1. Dēvānaṁpiyē Piyadasī lāja hēvaṁ āhā [ ] saḍvisati
2. vasa abhisēna1 mē iyaṁ dhaṁmaipi likhāpitā [ ]
3. hidatapālatē duṣaṁpaṭipādayē aṁnata agāyā dhaṁmakāmatyā
dhānaṁpākha dhāmaṇmakāmatā cha suve suve vadhāita vadhāsati chēva [ ]
5. agēna usāhēna [ ] ēsa chu kū2 mama anuvahāniyā
6. dhaṁmaṇpākha dhaṁmakāmatā cha suve suve vadhāita vadhāsati chēva [ ]
7. puliṣa pī ca mē uksā ca gēvaya3 cha majhēma cha anuvahāniyāni
8. saṁpaṭipādayānti cha aḷaṁ chapalaṁ4 samadapayitaṁ hēmēva aṁta
9. mahāmāṭa pī [ ] ēsa pī vidhi yā iyaṁ dhaṇmaṇa pālanā dhaṇmaṇa vidhanē
10. dhaṇmaṇa sukhiyāṇa dhaṇmaṇa gōṭiti [ ]

NOTES.

1. The sign [ ] was formerly considered as representing ḍaḍ; Dr. Kern (Ind. Stud. XIV. 394) has rightly identified it as the sign [ ] followed by the mark of the virāma. No one will hesitate to read, with him, saḍvisati.
2. I have on a former occasion (I. 232) indicated en passant what I believe to be the true derivation of the words hidata and pālata. Burnouf (p. 655) identifies them with two adverbs; idhātra (with double locative suffix) and paratāra, "used together, by an abuse of language common to popular dialects, as two neuter nouns." We escape from all the difficulties of such a conjecture,—difficulties on which it is needless to insist,—by taking the two members as abstract nouns, derived by the suffix tā from the words hidā (idhā) and para. The latter word can even be referred to para, in allusion to the Buddhist expression pārah gantūri, 'to cross to the other side.' The two words are here joined in a neuter dvandva, hidatapālatānā. A further process of derivation gives us the adjectives hidatikā, pāratikā, which we find at Kapur di Giri (X. 22; XIII. 11) as pāratikā (not pāratikā); the feminine pāratikā in its turn gives an abstract substantive (cf. Mahāvastram. I. 522) exactly equivalent to our pāratā. Dusampatipādayē is certainly the participle, for "pādiyē, pādiyām. This exceptional resolution of dya into daya is found elsewhere; e.g. Dhammap. V. 33, where we have dunnidvayyam for dunnidvayam (cf. in this edict itself gēvayā for grāmya). Moreover, A. evidently read "pādiyē, for it is thus that we must restore the apparent "pādāyē. As for the sense, it is important to determine the exact shade of meaning. If, with Burnouf, we trans- late it 'difficult to obtain,' we run the risk of contradicting the general intention of the edict. Whenever we come across the verb patipādayati, sampatipādayati in our inscriptions (cf. e. g. the detached edicts of Dh. and J.) it has the causal meaning indicated by the form. We must therefore translate 'Happiness here below and happiness in the other world are difficult (not to obtain but) to provide.' The king does not address himself to his subjects in general, but, as appears from the sequel, to his officers of all ranks, whom he charges with the moral and religious oversight of his people. It is to them, and to the cares of their office that the qualities next enumerated are indispensable. In fact this interpretation exactly agrees with the thought and intention manifested at the end of the VIIth (rock) edict, in very analogous terms, and it will be recognised that the conditions indicated, parīkshā 'alertness in oversight,' bhaya, 'fear' of the king (cf. edict VIII. below) apply infinitely better to the officials in question, than to subjects in general.
3. The phrase chu kū does not indicate, as Burnouf thought, a consequence, 'also, for.' It indicates, as is shown by the evidence of the synonym tu kū (e.g. G. IX. 5, 7) and the various passages where it is employed (e.g. G. IX. 8, 3, below VIII. 9, &c.), a slight opposition, 'but, now.' The conditions of which the king speaks are necessary and difficult to find; but, thanks to his instructions, they develop from day to day. It is necessary to read anuvahāniyā as one word, as an instrumental. With regard to the use of suvē suvē in the meaning of 'every day,' 'from day to day,' cf. Dhammap. V. 229.
4. Burnouf's identification of gēvayā with grāmya, appears to me as certain as it is ingenious.
The neighbourhood of the epithets ukasā and majhīma proves that the word should be taken, not in its etymological, but in its secondary sense of 'low, inferior, lowest.' Analogous examples will be found in the dictionaries, and I add the passage of the Lal. Vist. (540, 10), where grāmya is, in this sense, placed between kina and pārtha ganika. Regarding anuvīdhyānti, cf. I. 232.

5. There can be no question of dividing the sentence before alanā, nor is it necessary to change samādapyātā, as proposed by Burnouf. Samādapyāti is in Buddhist language used in the sense of 'to convert;' the infinitive is governed by alanā, and the whole phrase forms a development explanatory of sampatipādayānti. From the well-established use of this verb, it follows that chaṭḍālañ cannot be taken as an abstract neuter. It must designate collectively men who are thoughtless, easily led away (cf. Dhammap. V. 33; chaṭḍālañ chittāna). It is possible that anuvīdhyānti and sampatipādayānti have as an object anuvāthānti, understood from the anuvāthānti of the preceding sentence; but we shall see below, especially in the detached edicts of Dhauλi and of Jangada, sampatipādayati or paṭipādayati employed absolutely; so also we shall find the phrase dhaunāṃnupatipatītā anupatipajjati (below, VIII. 3), but more usually paṭipajjati or sampatipajjati used absolutely. Hence, the translations 'to be, to walk in the good way,' and for the causal, 'to place, to cause to walk in the good way' appear to me to be those which best render the exact meaning of the verb.

As regards hēmāvī, i.e. īvān eva, which we meet subsequently in other edicts and also in the detached edicts of Dh. and J., cf. Hēma chandra, Ed. Pischel, I. 271. The parallel versions prohibit us from supposing, with Burnouf, that anything is missing from the end of the line, to be completed as aṅtavā [mash]; moreover this word would not suit the sense. The text is certainly complete here, but this certainty does not relieve us of any difficulty. If we consider the reading as entirely correct, we must consider aṅta māhāmaññatā as a compound signifying officials stationed at the frontiers; and, as a matter of fact, the Vth of the Fourteen Edicts tells us of mahāmādas charged with the duty of watching the border-populations. It is also natural that Piyadasi, always intent on extending his charitable cares beyond his own kingdom, should expressly mention, after the officials of all ranks of the interior, those whose actions extended beyond (cf. Dh. IInd det. ed.) Nevertheless, I have some doubts about this. The XIIth edict speaks positively of mahāmādas charged with the oversight of women, and, according to the Vth, the dharmamahāmādas had to busy themselves with the domestic affairs of all the members of the royal family. If we only changed aṅta into aṅta, and the correction is an easy one, we should find an allusion to these 'domestic officials.' The agreement of all the versions in reading ta nevertheless compels me to decide in favour of the first interpretation.

6. The phrase yā iyañ occurs again in the VIIIth edict, l. 7, in the same meaning, i.e. as equivalent to the Pali phrase yad idam 'to wit.' Although iyañ is often employed in our inscriptions as a neuter, I do not think that we are obliged to take yā iyañ as actually identical with yad idam. In the two places where it occurs, the first substantive which follows the pronoun is feminine, here pālānti, below dayā, with which it perhaps agrees. It is more difficult to fix with the necessary accuracy, the precise shade of meaning of the word vidhi. The word 'règle' (rule) appears to be the most exact equivalent in French. This translation agrees well with the sense properly given by Burnouf to the vidhāna which follows.

To sum up, here is the translation which I propose:—

**TRANSLATION.**

Thus saith the king Piyadasi, dear unto the Dévas:—In the twenty-seventh year from my coronation did I have this edict engraved. Happiness in this world and in the next is difficult to provide, without (on the part of my officials) an extreme zeal for the Religion, a strict oversight, an extreme obedience, a very lively sense of responsibility, an extreme activity. But, owing to my instructions this care of the Religion and this zeal for the Religion increase and will increase [among them] from day to day. And my officials, superiors, alternates, and those of middle rank, themselves conform to and also direct [the people] in the Good Way, so as to keep steadfast the fickle-minded; so also, the overseers of the frontier countries. Now the rule is this; government by the Religion, law by the Religion, progress by the Religion. security by the Religion.
SECOND EDICT.
Prinsep, l.c., p. 582 and ff.; Burnouf, l.c., p. 666 and ff.

TEXT.

10 Dévânanâpyâ Piyadasi làjâ
dhâvaù âhâ [.] dhâmâmâ sâdhû [.] kiyàm[.]
11 sîmâmâmâ tî [.] apàsinavé bahukayânê
12 dayâ dànê sâcchê sôchâyê cha kha[.] dànê pi mê bahuvishhê diîmâmâ dupada
13 chatupâdósan pakhvîhîchâlânà vîvîdhi mî anugahà kâtê âpâna
14 dàkhînâyê aûmânâmî pi cha mî bhaûnî kayânàni kâtâni [.] ètûtê mî
15 at'hâyê iyàm dhammalipi likhápitâ hévam anûpatipajantâ chilàù
16 thitikâ cha hôtâtî tî [.] yê cha hévam saûpapajîasati sâ sakaùmâ kachaîtî [.]

NOTES.

1. The last facsimile, by Mr. Fleet, gives the reading kiyàm, not kàyàm. Even this form I can only analyse as equivalent to ké iyàm. Iyàm would be used for the masculine, which is in no way extraordinary in monuments in which the same form is constantly employed both for the feminine and the neuter, and in which the difference between the neuter and the masculine, in the singular, is almost obliterated by the extension of the termination ê to the former. This explanation appears to me much more probable than the comparison with the Sanskrit kiyat. It is not intended to determine the extension of the dhamma, but to indicate its nature.

2. Burnouf has well explained apàsinavé in a general way. Only I do not think that we should look upon ásînavâ as a form which is independent of, although synonymous with, the ordinary ásîrâva. It would be too isolated, an example, and, moreover, the word is easily explained by a simple mechanical process ásîrâva can, in our dialect, become ásîlava as we have in Pâli, silûka, silêsvnà, silâvñhî tiilòsa, &c. Ásîlava can again be changed into ásînava, like the Pâli nàngâla, nàngula, for the Sanskrit làngâla, làôngula (cf. Kuhn, Beiträge zur Pâli Gramm., p. 44). The versions of Radhiau and Mathiâs help us to correct the word sôchâyê at the end of the sentence. It is necessarily incorrect, and should be sôchâyê, i.e. kauçhâyçam, a normal form. The iti of these two versions, comes naturally after an enumeration, but its presence is not absolutely necessary. In any case, we cannot, like Burnouf, begin the next sentence with cha khû, or even with iti cha khû. The latter phrase would be, in itself, possible at the beginning of a proposition; but, putting the sandhi of sôchâyêti or rather the enclitic form iti, which would be inadmissible at the commencement of a sentence, out of the question, the pi, which follows dànê would no longer be possible after this accumulation of particles. Cha khû or iti cha khû, finishes and winds up the enumeration; pi takes up a new order of ideas; ‘Also have I given many alms.’

3. There are two ways of understanding the expression apànàdàkhînâyê, if we take pâna as representing in Sanskrit prâça, or if we take it as representing pâna. Burnouf decided in favour of the former, ‘Des favours leur (aux hommes et aux animaux) ont été accordées par moi, jusqu’au présent de l’existence.’ Such a manner of speaking appears to me unnatural. The expression ‘jusqu’à,’ ‘even to’ (â) leads one rather to contemplate the indication of a favour so particular, so unexpected, that it constitutes a refinement of liberality. I would add that the term anugahà does not, in fact, appear to declare so bounden a service as the gift of life, but rather some work of supererogation. But above all, according to the context, the benefit must be applicable both to men and beasts (dupadachatupâdâsan). Now, we shall see that Piyadasu pi put certain limits to the slaughter of animals, that he pardoned some men condemned to death, but nowhere does he speak of a general abolition of the death-penalty. I hence conclude that the only satisfactory interpretation consists in taking pâna in the sense of ‘drink,’ ‘water;’ ‘even to securing them water;’ and that the king alludes to a work which he has several times mentioned with legitimate satisfaction, to the sinking of wells along the road sides (cf. G. 1st Edict). We shall see below (VIII. 2-3) with what visible complaisance the king enlarges on this point. This comparison may perhaps even suggest an altogether different
analysis. In this passage, the king boasts of having established many ḍāṇās, insns or caravanserais, and ḍāṇā can be taken as a word in itself. At the same time, one does not see exactly why the king should mention only this class of benefactions. The former construction has this advantage, that it implies many others, as we should expect from the use of the phrase vīvidhāḥ anugāḥ. For the meaning of joyaḥ, which we propose here, we may perhaps compare artha-adhaśyaḥ bhavatu, of the third line of the Wardak inscription (J.R.A.S., xx., 1861); this, at least, is the reading proposed by Dowson. Unfortunately, the interpretation, and even the deciphering of this monument are too imperfect and too hypothetical, for the comparison to have much weight.

4. With regard to the spelling dhīthīdā of several versions, compare the analogous orthographies which I have collected in Buddhist Sanskrit, e.g. Mahāvastu I., p. 595. I need scarcely remark that we should read hōṭiḥ, the ti having been erroneously engraved twice.


TRANSLATION.

Thus saith king Piyadasi, dear unto the Dēvas:—The Religion is excellent. But, it will be asked, what is this Religion? [It consists in committing] the least possible ill; [in doing] much good, [in practising] mercy, charity, truth, and also purity of life. Also have I given alms of every kind; amongst men and four-footed beasts, birds and inhabitants of the water have I performed varied benefits, even so far as securing them drinking water; many other meritorious actions have I also done. It is for this purpose that I have had this edict engraved, in order that men may follow it and walk in The Good Way, and in order that it may long remain in existence. He who will thus act, will do that which is good.

A BUDDHIST STONE-INSRIPTION FROM GHOSRAWA.

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

This inscription was discovered in March 1848, by Captain M. Kittoe, in a mound from which the people were then digging bricks, at a village about 7 miles south-east of the town of Bihār, in the Patna district of the Province of Bengal; and it was first edited, with an English translation by Dr. Ballantyne, remarks by Captain Kittoe himself, and a note by Mr. J. W. Laidlay, in the Journal. Beng. As. Soc., Vol. XVII. Part I., pp. 492-501. The exact spelling of the name of the village where the inscription was found, has been somewhat difficult to make out with certainty. In Captain Kittoe's remarks, l. c. p. 495, the place is called 'Pesserawa,' but this must be an error. For, in the Hindi heading of the Sanskrit text, p. 492, we have 'Gusarāna,' and in Mr. Laidlay's note, p. 500, 'Gusserawa' instead; and in the volumes of the Archaeol. Survey of India and in Sir A. Cunningham's Ancient Geography of India, Vol. I., p. 44, as well as in a paper by Mr. A. M. Broadley, which will be mentioned below, the name of the village is given as either 'Ghosrawa' or 'Ghosrawan. According to information which I owe to Mr. E. H. Walsh and to Mr. Grierson, the name of the place, in all the village-papers etc., is written पोसरावण, but it is invariably pronounced पोसरावण, i.e. Ghosrawān.

The importance of the inscription for the later history of Indian Buddhism was fully recognised by Captain Kittoe, who assigned it to the 9th or 10th century A.D.; and Mr. Laidlay rightly identified some of the places which are mentioned in the inscription. Captain Kittoe removed the slab on which the inscription is, to Bihār, where he took facsimiles, and returned it afterwards to the village, where he had it fixed in a niche in the outer wall of a modern temple, having first engraved in English on the margin the date of its being recovered and set up (by Captain Kittoe) for preservation on account of Government.¹

Afterwards, the inscription was prominently referred to by Sir A. Cunningham, in his Reports the margin:—"Recovered and placed here by Captain M. Kittoe on part of Government, March 30, A.D. 1848."
for 1861-62 and 1871-72, *Archaeol. Survey of India*, Vol. I. p. 38, and Vol. III. p. 120, as well as in his Ancient Geography of India, Vol. I. p. 44. But the original edition and translation, as well as these references to them, appear to have entirely escaped the attention of Mr. A. M. Broadley; for, in a paper on 'the Buddhistic remains of Bihār,' which he published in the *Journ. Beng. As. Soc.*, Vol. XLII. Part I., and in which on pp. 268-274 he gave two transcripts and translations of this very inscription, one by Dr. Rājendrañāl Mitra and the other by Dr. R. G. Bhāṇḍārkar (accompanied by a rather useless photozincograph), he treated the record as if it had never been brought to public notice before. One cannot wonder at the somewhat severe tone, caused by the entire omission of Captain Kittoe’s name by Mr. Broadley, which pervades Sir A. Cunningham’s latest remarks on the antiquities of Ghāsrāwā, in *Archaeol. Survey of India*, Vol. XI. p. 171 ff.; here it is sufficient to say that the stone containing the inscription, which no longer bears Kittoe’s name, has been transferred to the Bihār Museum, where it is at present.

Though the inscription has been edited and translated three times, a critical edition of it appears still to be desirable, and I therefore re-edit it, at Mr. Fleit’s request, from an excellent impression supplied by him.

The inscription contains 19 lines. The writing covers a space of about 1’11” broad by 1’2” high, and it is in a state of perfect preservation almost throughout. The average size of the letters is about 7/8”. The characters belong to the northern class of alphabets, and they present a further development of the characters which we meet, e.g., in the Bōdhis-Gāyā inscription of Mahānāman, of which a photo-lithograph has been given ante, Vol. XV. p. 358. This is clearly shown by a general comparison of the forms of the consonants and the signs for the medial vowels; and it is proved in particular, e.g., by the form of the initial ā in *dchārya*, line 7, and of the conjunct ry in *dchārya-varya*, in line 7, and *audaryam* and *vṛyam*, in line 16 (but not in *sthāryaḥ*, in line 11), compared, e.g., with the initial ā of *āmradeśa* in line 9, and with the *ry* of *uyāryatāḥ* in line 7, of the Bōdhis-Gāyā inscription. Exactly the same alphabet appears to be employed, e.g., in the short Nālandā inscription of Gopāla, of which a photozincograph is given in *Archaeol. Survey of India*, Vol. I. p. 15; and a still further development of the same alphabet we have in a short inscription of Mahāpāla, which is in the Bihār Museum. As regards the present inscription, I may also perhaps draw attention to the forms of the final *t* and *n* (followed by the sign of *vṛyam*) in *nāmir*, line 17, *sakalā*, line 7, and *bhikshū*, line 9, and to the exceptional denotation of *tta* by the sign for *tu*, in *sanābbhināḥ*, line 5, and *kṛtī*, line 13.—The language is Sanskrit, and, except for the opening symbol representing *va*, the inscription is in verse throughout. In line 6 we find the wrong form *abhyupātāḥ* (for *abhyupātām*), which is also met with elsewhere; otherwise the grammar calls for no particular remark. As regards lexicography, I would point out that the *kṛtī* has in line 17 been employed in the sense of ‘an edifice’ or ‘a temple,’ a meaning which has been assigned to the word *kṛtī* by Hēmachandra.

As regards orthography, *v* has throughout been used for *b*; instead of *anuvadāra* the dental *n* has been employed before the dental sibilant, and the guttural *n* before the palatal sibilant, in *samsāra*, line 1, *dhevanī*, line 18, *vaññā*, line 4, and *vānśu*, line 17; and the rules of *saṅhāki* have been neglected in *bhikshūṃ* *kṛtī*, line 9, and in *sāmāniṇa*, line 12, and *vāmaviśkhyā*, line 17.

The inscription is a Buddhist inscription; and it records (line 14) the erection, probably at the place where the stone containing the inscription was found, of an edifice for a *vajra-vana* or diamond-throne, by a personage named *Vīrādeva*, an account of whom takes up by far the greater part of this record. *Vīrādeva*, the
son of Indragupta and his wife Rajjājākā, was born in a noble Brāhmanical family, at Nāgarahāra (in the Jalalābād valley) in Uttarāpatha (or Northern India). Anxious to follow the teaching of Buddha, he went, after he had studied the Vēdas and the Sāstras, to the great Kanishka vihāra (in the neighbourhood of the modern Pēshāwar), where he became the disciple of the teacher Sarvajñānaṃī, and, as it appears, formally embraced the Buddhist faith. He subsequently visited the diamond-throne at Mahābodhi (or Bodh-Gaya), and from there went to a vihāra, called Yasovarmanapura, the town of Yasovarman, where he stayed for a long time, enjoying the patronage of the king Dēvapāla. Viradēva erected two chaityas on the hill Indrasaila (or Giriyl, about 5 miles south-west of Ghōsrāwā); and he was elected by the saṅgha, or assembly of monks, probably in succession to a monk named Satyabodhi, to preside over the monasteries at Nālandā (the modern Barangon, about 9 miles west of Ghōsrāwā).—It is hardly necessary to say that, with the exception of Yasovarmanapura, which by Sir A. Cunningham has been identified with the town of Bihār, but which may be an older name of Ghōsrāwā itself, all the places mentioned here are well known from the records of the Chinese pilgrims. Nor need I point out what valuable proof is furnished by the above short narrative, in support of the fact that Buddhism was still flourishing in the famous localities mentioned, when this inscription was composed.

Unfortunately, the inscription is not dated, and we therefore are left to determine its age approximately from the characters in which it is written, and from the statement contained in it, that Viradēva was patronised by a king Dēvapāla. The test of the characters is, under any circumstances, a vague one; and although there can be no doubt that the Dēvapāla spoken of is the Pāla king of that name, one of the more immediate successors of that Gōpāla of whom we have a short inscription at Nālandā, the chronology of the earlier rulers of the Pāla dynasty is still so doubtful that even a seemingly valuable statement like the mention of one of their numbers, in the present instance, leads to no very satisfactory result. I therefore can only repeat here, what has been stated already by Captain Kittoe, that our inscription was probably composed some time between the middle of the 9th and the middle of the 10th centuries A.D. Judging merely from the characters, the forms of which appear to me considerably earlier than those of an inscription of Mahīpāla, of which I have an impression before me, I would assign it to the latter half of the 9th century, and the latest researches by Dr. Hoernle,2 on the chronology of the Pāla dynasty would rather bring it down to about the middle of the 10th century. I do not think that the inscription can possibly be later.

**TEXT.**

1 Šrīman—not saṃsāra jayati sat[*]va-hitā-pravṛtt-ta-saṃ-cāsadhīgata-tat[*]va-nayo Munindraḥ kiśet-ātmanāṃ durita-nakra-durāsad-āntaḥ sansā(mā)ra-sāgara-samut-ta
draḥ i

2 raṇ-aika-sātuḥ i Asy[*]uśmad-guravā va(ba)hūvur-a-(baj)lāḥ sambhūya hartrūn


4 sarva-rājā viśvam-āśeṣham-āt-tad-asvataḥ-Vā(ba)dhānā Sa-vajrisinghaḥ i Asy[*]uṣta-Uttarā-pathha-vibhūshaṇa-bhūta-bhūmipriśāni-śīḥ

5 hīnyā yuktō rājā parivarte-kathā pariśivānānu samkṛtōnāya prathamam-ēva karoti yasyaḥ i Tābbhaṃ-nājā

6 yata sutārāṁ vivōkī yō va(ba)la eva kalitāḥ para-lōka-vu(baj)dhyāya sarvāvopabhōga-subhagā-pi grihe vihātā[pravṛttajjya(y)aya Šugata-sūṣanam-ahyunpē(pai-

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1 See ante, Vol. XIV, p. 164. The Dēvapāla of the Pāla dynasty, and his date, Vīräma

2 From the impression. 

3 Metre, Vasantaṭīlakā. 

4 Metre, Śradālaviśvīkṛśita. 

5 Metre, Vasantaṭīlakā; and of the next four verses, this akṣara, uṣ, was originally omitted, and is engraved below the line.
7 tuñ || Vēdān-adhitya sakalān krīta-sāstra-chintah śrīmat-Kanishkam-upagamya māhā-vīhāram13 || āchārya-varyam=atha sa prāsaṁa-prāsasyam Sarvavājašāntīṁ= anugamya
8 tapaśechahāra || Sōya=yan viśndha-guṇa-sambhrīta-hūri-kṛttēḥ śishyō snurūpa-guṇa-śīla-yāso-bhirāmaḥ || vā(bā)lōndu-vat=kalī-kalakhā-vimuktā-kāntī=vandha
10 purān vihāram16 || Taiśhtān̄16=aθē sahürām pratipatti-sāraḥ āri-Dēva17 pāla-bhunāyādhāpāvīda(bīha)-pūrāj || pṛāptā-prabhā pratinīd-ōdaya pūrīt-āṣāḥ pūṣ= ēva dārita.
11 tamāḥ-prasara rājā || Bhikshōr18=ātma-samaḥ suhṛd-bhuja iva āri-Satya-vō(bō)dhe=nījō Nālandā-paripālenā nīyataḥ saṅgītha-sthitērēya sthitōḥ || yēn=āitau sruha.
12 tam-Indraṣaila-mukta-āri-chaitya-chhāmanī śrāmānī-vrata-saṁ(m) vṝtēṇa jagataḥ śṛyōsūtīm=uttāhīta|| Nālandāya cha paripālita=ēha satyā śrīma.
13 d-viḥāra-pariḥāra-vibhūṣit-āṅgyā 1 udbhāṣito=pī va(ba)hu-kīrttī-vadhū-pātīvē yāḥ sādhnu saṁdhrītī śādhu-janaïṇaḥ praṣataḥ || Chintā-jvarām āsmanāt ārta-jana.
14 sya dṛṣṭiyē Dhanvantārī=apī hi yēna hataḥ prabhāvaḥ iva saṣ-ṣoṣit-ārtha paripārya-manorathēṇa lōkēna kalpatu-tulayatā gṛhitatā || Tēn=aūtad-a.
15 tra kritam-ātma-manō-vadhuchār-vajrāṣānasya bhūvānī bhūvan-ōttamasya iva saṃjñayōt yad-ahbhivyēka vimānānām Kailāsa-Mandara-mahīdhāra-sīnīkā || Sarvva-
16 svr̄d-janayeṇa sa[v]t[ś] va-suhṛdam-andāryam-abhyasyatā samvō(bō)dhu vihitā-sphītān saha guṇair-viparṇaṁ viyān=tathā || aṭāstheṇa nījē nījaś=vēha vr̄(b)j̄h=pat-puṇy-ādīkārē
17 sthitē yēnē svēna yāso-dhvajēṇa ghāśtān vāśā(śā)va=Udichiṣṭpathō || Sōpāna.
18 mārgām=iva makti-p[uras]ya kṛtītīm=ētām(ō)n=vidhāya kuśalam=ya[d]=upāttam= asmat ||
19 kṛtva=aśādita sa-pitaram guru-vargam=asayā samvō(bō)dhiṁ=ṣṭa jana-rāśir=aśāḥ eva || Yāvat[ś]=kūrmō jalaṇā=viṣavālāṁ bhūta-āđāṭhī vī(b)bhartī dhvānta-dhvānaṁ(ṛṣṇī)
20 tapati tapanō yāvad-śv=ōgra-rasṁī || yāvat=tāvat=āśādita jayatō bhuvanē snigdō-ālkōṣ śiṁśa-mahāsa yāmavatīyaḥ=ca- Virādevāyā subhāḥ ||

TRANSLATION.

Oh!

(Line 1).—Triumphant is that glorious chief of sages (Buddha), who with his excellent mind, striving for the welfare of the beings, found out the system of truth; (and who), to those whose nature is affliction, (is) the one bridge for crossing the ocean of worldly existence, (a bridge) the ends of which are difficult of approach for (those) alligators—evils!

13 The two aksharas vihā were originally omitted and are engraved below the line.
14 Metro, Indrayaja.
15 Perhaps this sign for t has been struck out, so that the akshara would be ś, not śī.
16 Metro, Vasantatilaka.
17 Originally Dēgōda.
18 Metro, Śārīlavikṛṣṭīta.
19 Metro Vasantatilaka, and of the next two verses.
20 Metro, Śārīlavikṛṣṭīta.
21 Metro, Vasantatilaka. 22 Metro, Mandakrāntā.

(L. 2).—May the glorious (Buddha), who has his diamond-throne by the Bōdhī tree, 33 protect this whole universe!—he, from whom the mind-born (Māra) drew far aloof, thinking, as it were, that if his betters had, united, been powerless to captivate the mind of (Buddha), why need he blush for failing in strength, single-handed, against the Lord of the three worlds?

(L. 3).—There is an excellent country, known

33 See Beal, Si-yu-kī, Vol. II, p. 115: 'In the middle of the enclosure surrounding the Bōdhī tree is the diamond throne (Vajrasana).... It is composed of diamond... On this the thousand Buddhas of the Bhādra-kalpa have sat and entered the diamond (Samādī); hence the name of the diamond throne. It is the place where the Buddhas attain the holy path.'

34 See, e.g., the opening verses of the Nīpānam, Boyd’s Translation, pp. 1 and 2.
by the name of Nagarahāra, the land of which is an ornament to Uttarāpatha (the northern region). There, in a family which had risen higher and higher, was born a twice-born, Indragupta by name, a friend of the king.

(L. 4.)—As the moon with its spotless digit, so shone that meritorious distinguished twice-born, united with his wife Rajj[i]ka, of whom people make mention in the very first place, when they ponder on tales of devotion to husbands.

(L. 5.)—To them was born a son, highly endowed with discernment, who, even as a child, was filled with thoughts concerning the other world. He gave up his attachment to his home, though it was blessed with every enjoyment, in order that, by going forth as an ascetic, he might adopt the teaching of Sugata.

(L. 7.)—Having studied all the Vēdas (and) reflected on the Śastras, (and) having gone to the glorious great Kanishka vihāra, he then, following the excellent teacher Sarvajñāsānti, (who was) praiseworthy for his quiescence, gave himself up to asceticism.

(L. 8.)—This Viḍrādeva, (being) thus the disciple of one who by his pure qualities had accumulated great fame, (and) pleasing by the fame of corresponding qualities and natural disposition, (was) always, like the new-moon, an object of adoration, even to sages, inasmuch as his loveliness was free from the stain of the Kali-age.

(L. 9.)—To adore the diamond-throne, he then once visited the glorious Mahābodhi. From there he went to see the monks of his native country, to the vihāra, the glorious Yaśōvarmapura.

(L. 10.)—Then staying here for a long time, he, the quintessence of intelligence, being treated with reverence by the lord of the earth, the illustrious Devapala, shone like the sun, endowed with splendour, filling the quarters with his daily rising, (and) dispelling the spread of darkness.

(L. 11.)—He who, (being) a friend (dear) like his own self, being as it were the own arm of the holy monk Satyabhodi, by the decree of the assembly of monks (sāṅgha) was permanently appointed to govern Nalanda; (and) by whom, engaged in the vow of a Śramaṇa, there were erected for the welfare of the world these two holy chaityas, clearly two crest-jewels in the diadem of Indraśaila.

(L. 12.)—And who, on becoming the lord of the lady Great Fame, grasped though he already was here by Nalanda, governed (by and) true (to him and) decorated by a ring of famous vihāras, was well praised by good people as a good man:

(L. 13.)—Who, by (his mere) sight allaying the fever of anxiety of people in distress, verily eclipsed the power of even Dhanvantari, and whom people, whose wishes he fulfilled by (granting to them) the objects desired, took to be equable to the tree of paradise:

(L. 14.)—He erected here the diamond-throne, the best thing in the world, this habitation, lofty like his own mind, the sight of which causes those moving in celestial cars to suspect it to be a peak of the mountain Kaḷaśa or of Mandara.

(L. 15.)—Practising the generosity of those who are friends of the beings, by offering up his all, as well as manliness, eagerly directed towards the attainment of perfect wisdom and with the present town of Bihār (see Archaeol. Survey of India, Vol. III. p. 120 and p. 135; and also Vol. VIII. p. 76), and it would be very tempting to take vihāra, in the above passage, as a proper name and to translate: ‘From there he went . . . to Bihār, the town of the glorious Yaśōvarman.’ I nevertheless believe that the word has been used in its ordinary sense, and that Yaśōvarmapura was the name of the vihāra visited by Viradeva. I do not deny that Yaśōvarmapura may have been a name of Bihār; but I consider it equally possible that it may have been the name of the very Ghasāvā, where the inscription has been found.

The beginning of the verse might also be translated: He who, (being dear) to the monks like their own selves (and being), as it were, the own arm of the holy Satyabhodi, Satyabhodi may have been Viradeva’s predecessor at Nalanda.

Nalanda has by Sir A. Cunningham been shown to be the modern Baragun, and Indraśaila identified with the hill Giyék.—Ancient Geography of India, Vol. I. p. 469.

22 The dictionaries do not give this word parshātra; but parśa means "a type of cloth".

23 The physician of the
men, headed by the circle of his elders (and) including his parents, attain to perfect wisdom! (L. 18).—As long as the tortoise bears the ocean-girded mother of all beings; as long as the sun with its fierce rays is shining, dispelling the darkness; as long as the nights present a pleasing appearance with the cool-splendoured (moon)—so long may the bright fame of Vîrâdêya be triumphant in the world.

THE TWELVE-YEAR CYCLE OF JUPITER.

BY SHANKAR BALKRISHNA DIKSHIT; BOMBAY EDUCATIONAL DEPARTMENT.

(Concluded from p. 7.)

In the preceding remarks, my object has been to explain concisely the system of the Twelve-Year Cycle of Jupiter that is based on his heliacal risings; and the three methods for determining the nakshatras with which the heliacal rising takes place. I have now to make a few observations of a more general kind; and to introduce the other authorities of which I have spoken at page 2 above. Before doing so, however, I must refer more fully to another system, which also has been incidentally mentioned, of naming the sanvatsaras of the Twelve-Year Cycle according to Jupiter’s passage from one sign of the zodiac into another, with reference to his mean longitude.

The rule for which I have named the mean-sgn sign system, is thus given by the first Áryabhata in his Árya-Siddhânta or Áryabhaṣya, Kâlakriyâpâda, verse 4. — Guru-bhagaṇâ râṣi-guṇâs tv-Ásvayuj-ādya- Gûrûr ābhâd — “the revolutions of Jupiter, multiplied by the signs (twelve), (are) the years of Jupiter, the first of which is Áśvayuj.” And it is given, in very similar words, by Brahmagupta, in his Brahma-Siddhânta, adhyâya xiii. verse 42. — Guru-varshây-Áśvayujâd dvâdaṣa-guṇâtâ Gûrûr bhagaṇâh. In this rule, the revolutions (bhagaṇa) are meant to be taken from the beginning of the Kalpa, or of a Mahâyâna. But, for practical purposes, we need not go back so far. One Twelve-Year Cycle is completed in one revolution. And, therefore, we can determine the sanvatsara for a given year, or for any given date in it, by taking Jupiter’s signs, including the current sign, of the current revolution, and counting from Áśvayuj. In this system, the signs are intended to be taken, and in practice are taken, according to Jupiter’s mean longitude. Now, suppose that on a certain day Jupiter’s mean

1722 expired; A.D. 1150-51). Its date, therefore, lies somewhere between these two limits. In the first verse of it, the author calls himself Áryabhata; and his work, a Siddhânta, without Laghu or any other epithet. In a manuscript copy of it, I find that it is named Mahâ-Siddhânta at the end of some chapters, and Laghu-Árya-Siddhânta at the end of others. For the sake of distinction and convenience, it is better to call the authors of these two works, the first and the second Áryabhata. The numbers of the revolutions of the planets, &c. given, as belonging to the Árya-Siddhânta, in the Rev. E. Burgess’ Translation of the Sûrya-Siddhânta, and in some instances those given by Prinsep (Prinsep’s Essays, Vol. II. Useful Tables, p. 153) as belonging to the same author(s), belong really to the second Áryabhata. But, from internal evidence, I find that it is the Brahma-Siddhânta of Brahmagupta.
longitude is 9 signs and 12 degrees; i.e., that he is in the tenth sign. Then, counting from Aśvayujña, we have Aśādhā, as the current saṅvatsara for the given day.\(^5\)

The names of the saṅvatsaras of the Sixty-Year Cycle, also, — according to that which is usually called the northern system, but which is, in reality, the only truly astronomical system of it, and was current, as is shown by many epigraphical quotations of it, in Southern India also, — are determined by Jupiter’s mean place. And the rule is thus given in the Sūrya-Siddhānta, i. 55,—dvādaśa-ghnā Gūrū yāta-bhagānā vartamāṇakā 1 śaṅbhī śaṅhitā śuddī śaṣṭhī syur Vijāy-ādayāh \(\text{I}\), — the expired revolutions of Jupiter, multiplied by twelve, (then) increased by the current signs (of the current revolution), (and then) divided by sixty, are (i.e. the remainder is) (the saṅvatsaras counted from) Vijaya as the first." In fact, the Sixty-Year Cycle, and the Twelve-Year Cycle of the mean-sign system, are quite identical with regard to the day of the commencement of each saṅvatsara, and consequently, with regard also to its duration, which, according to Jupiter’s mean motion as given in the Sūrya-Siddhānta, is 361 days, 1 ghaṭī, 36 palas. The Twelve-Year Cycle of the mean-sign system, therefore, with regard to its other details, may be most properly described with the Sixty-Year Cycle, which I shall treat of fully on a separate occasion. And I have introduced the present brief mention of it, only because references to it are unavoidable in the following observations.

The other authorities for the heliacal-rising system, in addition to the Brāhmaṇa-Saṁhitā, of which I have spoken, are as follows:\(^1\)

(1) Parāśara says—Kṛṣṭikā-Rūhilīṣṭ-ūdīṭa

\(^5\) In his treatment of the Twelve-Year Cycle (Indian Éroïc, p. 20 ff.), Gen. Sir A. Cunningham opens the subject by quoting Kern’s translation (see page 1 above, note 1) of the same verse in the Brāhmaṇa-Saṁhitā which I give for the same purpose. But, for the rest, he altogether ignores the force of the reference to Jupiter’s rising, and treats the subject as if the heliacal-rising system, described by me, did not exist at all. What he has deduced from the verse, is only the mean-sign system, which the verse does not really refer to at all; and in respect of which he is wrong in making the epicycle of both the Twelve-Year and the Sixty-Year, begin and end with the lunar years. The rules that he applies give, at the best, only the same results as the Twelve-Year Cycle by the mean-sign system, and of the Sixty-Year Cycle, that are current at the commencement of a given solar year; they do not provide for the essential point in both the cycles, viz., the determination of the exact day on which a given saṅvatsara of either cycle commences. — I have not had an opportunity of seeing the writings of Davis and Warren on this subject. But, with all due deference, I may safely say that the Twelve-Year Cycle by the heliacal-rising system, has hitherto remained quite unknown to European scholars. — I would take this opportunity of remarking that I can find no authority for the introduction, in Kern’s translation, of the bracketed words ("during which Jupiter completes a twelfth part of his revolution"). Jupiter completes a twelfth part (\(\text{rāśi}\)) of his revolution in about three hundred and sixty-one days; while the interval between two of his heliacal risings is about four hundred days.\(^6\)

\(^6\) From this, it appears that the saṅvatsaras of the Sixty-Year Cycle also were originally determined by the heliacal risings of the planet. And corroborating of this is afforded by a verse of Varāhamihira, quoted further on. The above verse of Kāyapa, evidently applies to the Twelve-Year Cycle only. — I have taken this, and the preceding five quotations, from Utpala’s commentary on the Brāhmaṇa-Saṁhitā.
appears to be a little different from that of all the other authorities; though the general features are the same. And, for this reason, though the work is one of the earliest, I have quoted it last. The rule is given in the verse—

Vaiśākh-ādīshu kṛṣṇe ca yōgāḥ paśchāt daśāḥ tithau | Kārttiκik-adīni varṣhāpi Gurūr aṣṭoṣdāyāḥ tathāḥ।—"and the years Kārttiκika and others (that follow) are to be named from the rising, after setting, of Jupiter," according to the occurrence (of Kārttiκikā and other nakṣatras) on the fifteenth tithī in the dark fortnight of Vaiṣākha and other months (that follow)." The application of this rule seems to be thus:—The years are to be named, according as Kārttiκikā and other nakṣatras,—evidently those in which the sun and the moon stand,—occur on the anusvādaya of Vaiṣākha and others immediately preceding or following the day on which Jupiter rises; that is, on whatever day Jupiter may rise, the nakṣatras on either the preceding or the following anusvādaya gives the name to the satvatara. This rule seems to have been alluded to, though not in the name of the Sūrya-Siddhānta, by Uṭpala; but it is rejected by him. It may possibly have been occasionally in use; but it certainly does not apply to the Gupta records.

Now, all these quotations distinctly refer, in some form or another, to the rising of Jupiter; which it is impossible to understand as meaning anything but his heliacal rising. And, if the rising referred to is the heliacal rising, then no astronomer can deny that, in the period of about twelve solar years, there are only eleven conjunctions of Jupiter and the sun, and consequently eleven heliacal risings of the planet. And, this fact being established, the interval of about four hundred days between two successive risings,—the same period, for the duration of each satvatara,—the omission of one satvatara in each cycle of twelve years,—and all the other points described by me,—follow of necessity.

It will, doubtless, have been noticed that I have not been able to give any quotations from the first Āryabhata (born A.D. 476) or Brahmagupta (born A.D. 598), in support of the heliacal-rising system. And it might be objected to base some argument against its existence, on the grounds that these two early authorities, who moreover may be said to be the originators of two of the three schools of astronomers in India, are silent about it, though they do give the mean-sign system. But the facts only prove the early existence and use of the mean-sign system; which I do not seek to deny. They do not prove either that the heliacal-rising system did not exist; or that, having existed, it had gone out of use in their time. To take another instance, the first Āryabhata and Brahmagupta give no rule for finding the satvataras of the Fifty-Year Cycle; but, to say that this cycle was not known to either of them, would hardly be sensible. The mean-sign system for the Twelve-Year Cycle is undoubtedly early. But the heliacal-rising system is earlier still. Among the authorities quoted above, the Sūrya-Siddhānta is as early a work as the Ārāyahatiṁga, if not earlier. And that Parāsara, Garga, and Kaśyapa, are earlier than Āryabhata cannot be denied. Uṭpala quotes a verse of Garga, which, with some proposed emendations, I give as it stands in my manus such compounds as nupti-thithī, 'having arisen from sleep'; id., 'having slept and then having risen.'—J. P. F.

* These words, in connection with yūgāḥ, have to be supplied from the preceding verse, in which the result exhibited in Table I, page 3 above, is given.

* Which of the two, cannot be determined from the context; and I can find no commentator who has explained the point properly. I myself think that the following anusvādaya is intended. But it seems that Uṭpala, in his allusion to this rule, takes the preceding anusvādaya.

* In his note on the Sūrya-Siddhānta, xiv. 17 (see the Rev. E. Burgess' Translation, p. 271), Prof. Whitney says that Jupiter "would set and rise heliacally twelve times in each revolution, and each time about a month later than before." But this is evidently a mistake.

* To say that the Sūrya-Siddhānta is a work of Varāhmiha is simply a mistake. I cannot enter into this point at present; but would refer any who hold that view, to Varāhmiha's Pañca-Śiddhāntikā, and to Korn's Preface to his edition of the Brāhmatantra.
script copy,—ēvām Āsvayujana chaiva Chaitra chaiva Brihaspati śaṁvatsara (puna) nāma (pā) sati ādatā (?) satpata-abda-satā-dhikē. This verse seems to refer to the mean-sign system; though I can say nothing definitely about it, without seeing the context; of which I have not the opportunity at present. But, supposing that it does refer to the mean-sign system, still it is not unfavourable to the heliacal-rising system; for the same Utpala also quotes a verse of the same Garga, given in a preceding paragraph, in which Garga says:—"when Jupiter, after dwelling together (with the sun), rises and walks along with a nakṣatra, then commences the year of Jupiter, of which the first part (of the name) is the (name of that) nakṣatra."

Not only the heliacal-rising system is very early, but that it alone is the original system of the Twelve-Year Cycle, is self-evident. The heliacal rising of Jupiter is a natural phenomenon. No scientific apparatus is needed for the observation of it; nor are any calculations required. But such is not the case with the passing of Jupiter from one sign of the zodiac into another, with regard to his mean longitude. No kind of apparatus can determine Jupiter's mean longitude. It is to be found only by calculations, the rules for which must have been established after observations carried on during a very long time; to lay down the means of determining Jupiter's mean yearly or daily motion, is not a thing that can be accomplished in a few years. It seems, therefore, quite evident that the system of naming the śaṁvatsara after the nakṣatras in which Jupiter rises, i.e. the heliacal-rising system, is the only original one.

So much as regards the antiquity of the heliacal-rising system. Let us now look into its somewhat later use. Varāhamihira is later than the first Āryabhata. And his verse, with which I have opened my account of the Twelve-Year Cycle, undoubtedly refers to this system. So, also, another of his verses, in the Brhat-Saṁhitā, viii. 27, points to the same thing. It runs—ādyāna Dhanishtāṁ samābhirpatrampaṇaḥ Māgha yaś-ādya-udayaṁ Sūra sympathetic-abda-pūrvaḥ Prabhavaḥ sa namā prapadyaḥ bhūta-hitas tad-abhaṁ,—"when Jupiter, having come to the first (nakṣatra) Dhanishta, attains (his) rising in (the month) Māgha, then commences that year, beneficial to beings, which is named Prabhava, the first of the sixty years." Now, in eighteen centuries from the beginning of the Saka era, the Prabhava śaṁvatsara has occurred thirty times. And, by approximate calculations, I find that Varāhamihira in other parts of India, the śaṁvatsara are named as Chaitra-Varsha, Vaisākha-Varsha, &c.; the system adopted in that Pañcāḥga, how that Pañcāḥga, however, for naming the śaṁvatsara, is the mean-sign system.

The phenomenon, moreover, is one to which much attention has always been paid in India. Even in the present day, almost all the Hindu Pañcāḥga gives the dates of the heliacal rising and setting of Jupiter. This is for religious purposes; since, when Jupiter is invisible, some duties and ceremonies, such as visitation with the sacred thread, marriage, pilgrimages, &c., are not to be performed; and the dates in question are necessary, in order to know when he is visible, and when he is not. In Pañcāḥga printed in Mahārāṣtra, the custom of naming the śaṁvatsara after the months is not in use; in fact, the Twelve-Year Cycle is now almost unknown to the people at large of the Deccan. But in a Pañcāḥga prepared by Jwārāpāti Siddhānti, and printed in the Jñānātāriṇvyāsa Press at Madras, I find that the author, in the śaṁvatsara-phala, after giving the two śaṁvatsara of the Six-Year Cycle of the northern and the southern reckoning, goes on to say—śaṁvatsara Gour-adya-vātī (Chaitra)-abda prithu, "all over (India) a (certain) year (i.e. such śaṁvatsara as Chaitra-Varsha, &c.), which depends on the rising of Jupiter, is to be taken, from which it is evident that some such rising-system as that described above is followed in this Pañcāḥga from Madras. Also, in the Chaitra-Pañcāḥga, prepared for the meridian of Jōhpur in Māravij, and used there and by
mihira’s assertion, though not quite correct, is nearly so by the heliacal-rising system. Out of the thirty occasions, Jupiter rose, according to the Amānta southern arrangement of the fortnights, twenty-six times in the month of Māgha; three times early in Phālgunā; and once in Pausā, nearly at the end of it. And on many occasions he rose in the Dhanashītha nakṣatra; and on some, in Śrāvaṇa. The assertion, however, is not correct for the mean-sign system. According to that system, at the commencement of the Prabhava saṅvatsara, which always begins when Jupiter, by his mean longitude, enters Kumbha or Aquarius, he evidently always stands in the middle of Dhanashītha. But the Prabhava saṅvatsara may begin, and as a matter of fact I find by calculation that it has begun, in any of the twelve months, as will be shown when I treat of the Sixty-Year Cycle. It is evident, therefore, that the verse in question supports the heliacal-rising system. Moreover, the word udaya itself is used in it. It might be argued that Varāhamihira’s rule (Bṛhatsāmhitā, viii. 22; ēk-aikam abheda nav-āhatsān, &c.) for finding the nakṣatras of Jupiter, has reference to his mean longitude; and, consequently, that it gives the mean-sign system. But it is absurd to suppose that so learned anastronomer as he, stating the rule that a saṅvatsara is to be named from the nakṣatra in which Jupiter rises, did not know that the nakṣatras, at the time of his rising, can be determined only from his apparent longitude. The reason why he gives a rule for finding the mean longitude only is, in my opinion, this:—Anyone conversant with Hindu mathematical astronomy, knows how tedious a task it is to find the mean longitude of a planet from the āhārpaṇa, or number of elapsed days, counted from the beginning of the Kalpa or of a Yuga. But, when once it has been found, it is much less tedious to calculate, from it, the apparent longitude by the general rules. So, Varāhamihira, I think, gives a simple rule for finding the mean longitude of Jupiter on a given day, and leaves to the astronomers the calculation of the apparent longitude. Or, it may also be said, as the difference between the mean and the apparent longitudes of Jupiter, on the day of his heliacal rising, is not very much,—sometimes about five degrees and sometimes nearly nil, as I have found from several calculations,—Varāhamihira gives the simple rule for rough practical purposes only; leaving it to the astronomer to make more detailed calculations, when absolute accuracy is required. But, even supposing that the said verse of Varāhamihira implies the mean-sign system, it will only prove that he gives both systems.

Let us now turn to the more modern period. Of the authorities quoted above in support of the heliacal-rising system, the Muhūrta-Tattva and the Jyotishadarpāṇa are comparatively modern. The author of the first is the father of the well-known Gaṅgaśa Dāivaṭa, the author of the Čāraḥādāgaha; and, therefore, its date is about Śaka-Saṅvat 1420 expired (A.D. 1498-99); and it was written at Nandgaun on the western coast, about forty-five miles south of Bombay. The date of the second, as I have determined from certain data in it, is Śaka-Saṅvat 1479 expired (A.D. 1557-58); and it was written at Konḍapalli, somewhere in the Karṇaṭaka country. And, in addition to these two, a third reference to the heliacal-rising system has been given in note 5 above, from Raṅganātha’s commentary on the Śūrya-Siddhānta. The date of this commentary is Śaka-Saṅvat 1525 expired (A.D. 1603-604); and it was written at Benares. These details suffice to show that the heliacal-rising system is referred to in works of a modern period, and belonging to different parts of the country.

It is true that the use of the Twelve-Year Cycle is rare. This is shewn by the fact that some astronomical works do not refer to it in either system, though it would not have been beyond their sphere to do so; and by the fact that, out of many hundreds of inscriptions, only seven have been found, mentioning the saṅvatsaras of it. But, if the use of the heliacal-rising system is rare, the use of the

Pūrvā-Bhadrpadā. 15 viz. the five records of the Mahāprajā Hastin and Saṅkhaṭih, belonging to the Early Gupta period and territory; and the two grants of the Kadamba chieftain Mitraśavarman (vide, Vol. VII. p. 35, and Vol. VI. p. 24) from the Belgaum District.
mean-sign system is still more so. The *sauhatasaras* mentioned in the four records of the Early Gupta period, which give full details for calculation, are proved to belong to the heliacal-rising system. And, while I have been able to quote no less than eleven authorities referring to that system, a distinct reference to the mean-sign system is to be found in only two; viz. the first Aryabhatā and Brahmagupta, as quoted above. If to these we add an interpolated verse in the *Siddhānta-Sirṛmāṇi*, and also hold that Garga and Varāhamihira give the system, even then the number comes to only five. And in about eight of such works as would be expected to refer to the system, of a date later than A.D. 1478, which I have examined, I find a reference to it in none at all.

**CONFUCIUS AND HIS MISSION.**

BY DR. EDKINS; PEKING.

There is no spot in China held more sacred than the tomb of Confucius. It lies midway between Peking and Shanghai, and is about 400 miles distant from each of these cities. The lineal descendant of Confucius resides here, and attends to the sacrifices and to the careful preservation of the various antiques which are here deposited. The country is flat, but sixteen miles away is a small hill called Ni-shan. In the year 552 B.C. the wife of a provincial scholar, respectable in station, might have been seen approaching this hill to worship. She offered a prayer to the spirit of the hill and returned. She was dressed in a somewhat rough-looking grey silk robe. The sleeves were deep and full, covering her hands. The left portion of the robe was made full enough to cross under the neck over the right portion of the robe and was held in its position by a girdle tied in front. The feet were completely covered. The next year a son was born to this lady, and his parents gave him the name Kien, or 'hillock,' in remembrance of the prayer. Two days before his birth, it is said, a beautiful unicorn was seen near to the house called the *chi-lin*. This creature being seen is an omen that a sage is about to be born. He resembles a deer in shape but has scales like a dragon and fleshy horns, and never appears but as a portent of some great event.

At six years of age Confucius shewed great fondness for imitating ancient ceremonies, and persuaded his companions, instead of any rougher play, to join him in mimicking observances connected with worship and with funeral rites. He went to school at seven years of age, and his schoolmaster's name is recorded as Ping-chung, who was a magistrate acting at Tung-ni, a place still in existence, and its name preserved on the map of the province of Shan-tung. In pictures, the master sits under a tree, and a few scholars, the school companions of Confucius, are seated on stools irregularly placed near to the master's table.

At the age of seventeen Confucius accepted a post which required him to be in charge of the market-bargaining with the people. He inspected articles and prices of goods brought to market, and decided upon the correctness of weights and measures. He married the daughter of his superior in office in his nineteenth year. When his eldest son was born, the ruler of the Loo kingdom, under whose jurisdiction he had been acting as an officer of markets, sent him but I do not find it in the *Brahmānīdā* of Śrīpati.

A verse containing a reference to the system is given as belonging to Śrīpati in Pandit Bāpūr Dēva Shastri's edition of the *Siddhānta-Sirṛmāṇi*, p. 13, note;
as a present a carp, and Confucius therefore named his son Li, that being the Chinese word for 'carp.' Native artists represent the sage as standing at his door with folded hands, prepared to receive the platter of fish from the servant, who accompanied the official messenger of the prince.

Confucius, while still young, was a diligent inquirer into ceremonies, and it is mentioned that he visited the ancestral temple of the sovereign of Loo to enquire into the details of worship. The harp, the bell, and the musical stone, the vases in which the offerings were placed, and the other implements used in sacrificing, were all in turn the subjects of his questionings. The intense interest shown by him in ceremonies was one of the reasons why he attained, while comparatively young, the reputation of a sage. In one of a hundred scenes engraved in China to accompany biographical notices of Confucius, may be seen the master seated at a table with his pupils around him. Two new disciples are just entering. They are grave men coming to consult the sage. They do so because they have been recommended by their instructor, just deceased, to rely in future on the aid of Confucius in their studies. In the Great Instruction, the first among the Four Books, there is a sentence which has become very popular—"Let justice be your profit." In a kingdom, gain is not to be considered as gain. Its gain will be found in justice. That is, the aim of men must be to do justly and to regard this as prosperity. These were, it is said, the words of a forefather of the dying statesman, who recommended his pupils to follow the teaching of Confucius. With him they would be morally safe. This sentence from the Great Instruction—"Gain will be found in justice"—is a great favourite, and is frequently seen written on the doors of tradespeople in China in interchange with such sentences as "Those who are loyal and filial will long maintain their family prosperity." At the present time the same sentence is often quoted by the Chinese in defence of their conservative policy. If they are advised to adopt railways and the foreign method of working mines, in order to increase the material prosperity of their country, they reply that this would be to invert the teaching of the sages by putting gain above justice. When statesmen use this language they mean that they prefer to hold firmly to Confucianism, but it is not unjust to say that the real cause of their want of willingness to inaugurate improvements is that they possess too much indolence, timidity, and narrowness of view, to allow of their making any decided progress, willingly at least.

Confucius went on a visit to the Chow country, the imperial domain. He is usually represented as travelling in a carriage drawn by two horses, the gift of his sovereign. He would proceed westward for ten or twelve days to reach the old capital of the Chow emperors. He there saw the founder of Taoism, known as Lau-tan. In the modern engraving contained in the hundred pictures of the life of Confucius above referred to, Lau-tan is an old gentleman, sitting at a table on which a harp lies. This he plays. He has a high forehead deeply marked with the lines of age. Confucius is 51 years old, grave, intelligent and polite. He asks information as to the ceremonies of the Court. Lau-tan, being an officer of many years' standing, is well able to answer his enquiries. On parting he said to his visitor,—"Not being rich, I have no valuable things to present to you. The good man, when parting, speaks his thoughts. It is robbery for me to claim to be good, but I speak my thoughts; and this I say, that with intelligence you distinguish deeply and are bold to advise even if death be near. Your views are broad; and even when dangerous to yourself you will expose men's crimes. As a son, you regard yourself as entirely belonging to your father and mother; as a subject, as entirely belonging to your prince." This interview is mentioned in the life of Confucius, written about 100 B.C. by Ss-ma-tsien. In the extant sculpture of this visit made about the year A.D. 180, Lau-tan stands leaning on a staff. Confucius presents him with a bird as a gift, and another bird flying near is added as an ornament. Both the sages wear a flat-crowned hat with turned-up brim. There are no characteristic features, nor any attempt to express the greatness of the two sages. The merit of the sculptured group is that of representing the customs of the time. The costumes, the usages, the stamp of Chinese antiquity are there. In the artist's mind the two sages are
grandees of the Cheu dynasty and nothing more. In the hundred pictures the conception of the Sung dynasty appears, and here the accessories are in keeping. Art was then improved. The philosophy of the tenth, eleventh and twelfth centuries, had followed the poetry of the seventh, eighth and ninth. Together they had completed the ideal of antiquity. Men such as Confucius and Lao-tze obtained a conventional treatment in accordance with their historical importance. Here lies the difference between the Confucians of the Han dynasty artist, and that of the Sung dynasty.

Another of the hundred pictures represents Confucius as enquiring respecting ancient music from an officer of the Chow kingdom, named Chang-hung. Confucius is on the right, as guest. Behind the host is a table on which are placed a musical stone and a bell. To the right of Confucius is a boy with a harp. Near to him two pupils of Chang-hung are placed by the artist to fill the picture on that side. They are listening to the conversation. Another pupil adjusts the musical stone. The remainder are variously occupied on the left with a harp or a book. The conversation convinces Chang-hung that Confucius is a sage of the highest rank. He mentions his opinion to a friend, and remarks that the ancient kings were in manner complaisant and obliging. "They sought knowledge from every source and carefully retained it. They searched into the nature of things without ever resting. Is not Confucius a sage of the same rank as they?" To this his friend replied, "The good usages of the ancient sages were sunk into disrepute. The ceremonial and the music of Yau and Shun were in a state of decay. The aim of Confucius was to restore them." Confucius heard this and said, "I am not a sage. I dare not take to myself this honour. I am only one who is fond of ceremonies and music." In the Chow dynasty the chief musician was also the chief educator. It was, therefore, natural that Confucius should attribute to music a first-class importance. When he heard performed the ancient music of the emperor Shun, it is said that he was deeply affected. For three days afterwards he could not distinguish the special flavour of animal food. The fact is that the traditions which had reached China, of the rule of wise kings of antiquity, were pervaded by the notion of the mild force of example and the power attendant on a good and pure life. The ancient kings renovated their contemporaries by music as well as by moral teaching, and their high character as regenerators of society is understood to spring from the possession of a mild harmonizing genius of which the musical faculty was the outward sign. The ancient idea of a model government is, with the Chinese, neither commercial nor military, but moral. The ideal Governor is a civilizer, who wins the hearts of the nation by justice and benevolence.

After serving the State as Chief Minister until he was 57 years of age, Confucius retired, and occupied himself with editing the classics. In the ancient poetry one found the glorious example of Wen-wang carefully elaborated. The body of words were combined in this ideal with high moral wisdom. Such a man might be a model for prince and people. So also were Yau and Shun, Yu and Tang, examples of the highest class as men, as kings and as sages. Confucius felt his mission to be the preservation of the words, works, and historical significance of these men, for the benefit of posterity. His eye rested on the past. He was by temperament conservative. He felt a supreme dislike for bad moral conduct, for tyranny, for crime and all breaking away from good tradition. With this in his mind he undertook to edit the classics. His official life and his travels had prepared him for this. He had good opportunities, and he did what he could with the documents he was able to consult.

When Confucius undertook to edit the classics, with the purpose of perpetuating the good example and teaching of the great men of antiquity, he found that there were five subjects to be treated. These were history, poetry, ceremonies, music and divination. The history he had to preserve was the royal chronicle of the time of Yau and Shun, 2356 to 2205 B.C.; the chronicle of the Hia dynasty, 2205 to 1766 B.C.; that of the Shang dynasty, 1766 to 1122 B.C.; and that of the Chow dynasty, 1122 B.C. to his own times. The poetry he found in existence was partly royal, or official, and partly popular. So far as it was official, it was written by official poets, for use on occasions of sacrifices, banquets, marriages and
other state occasions. Chow-kung wrote a part of the local songs, and the other portions of these songs were made official by their reception into the royal collection. Whether Confucius rejected some or not, is a debated question. Yuen-mei says no. Chau-yi says he rejected more than 200. Both of these learned scholars belonged to the last century. Legge thinks Confucius did nothing to the book. But, however that may be, it has many sweet pictures of early manners. It has high praise for sages and for the virtuous. It sings of battles, of the harvest field, of the hunt, the banquet, and the sacrifice. It boasts of no epic grandeur, but it has idyllic scenes, which please a refined taste in love with the primitive and the antique. Confucius also discoursed on the importance of ceremonial observances for the king, the officer and the private man. There are three classical works on ceremonies. They describe in detail the laws, the grades and duties of office, the rules for marriages and for funerals; in short, all the ancient institutions and customs of the land. But how far Confucius had his hand in them is not known. Nor can we now learn what he did in preserving the ancient music. This, however, we know, that in one of the three classical books first mentioned there are preserved a few notes of very ancient sacrificial melodies, enough to tell us that such music as they then practised was slow and solemn, and consisted of four or five notes only. The lute, the panpipe, the bell and the musical stone, were the favourite instruments. Dancing accompanied the music, and this was also slow and solemn. The object of both was to inspire all persons with reverential feelings suitable to a religious service. Confucius had to decide on all these things, and, lastly to edit the Book of Divination. When he grew old, he made this his chief study. It was supposed to contain the most profound results of the teaching of the sages. In it also there was much of a frivolous nature. This, however, he allowed to remain. To tell fortunes by straws, is not a very dignified occupation. Yet the sages of China had to countenance it, and to read with respect a multitude of recorded instances of divination, because they were enshrined in a book belonging to the ancient sages and possessing their authority. On the other side, it should be said, that there are many good moral statements in this old book. As a picture of what the Chinese thought in the twelfth century before Christ it is indeed invaluable.

This book and the others constitute the Bible of the Chinese. The great credit of Confucius amongst his countrymen is based on his repute as an Ezra in fixing the canon, besides being generally their chief guide in education, statesmanship and morality. If we take this book which comes down or dates from the age of Eli and Samuel of Hebrew history, and turn over its leaves,—a book, let it be remembered, which 200,000,000 of our fellow men regard as their most sacred treatise,—what do we find? Let it be the forty-eighth oracle. It is the oracle of the well. Under the figure of a well the words are,—"When you change a city, you do not change the well. The water grows no less nor does it increase. To those who come and those who go, the well is still the well. They draw up water. When the rope is yet not at the top, if the bucket breaks it is unlucky." In the figure itself, the idea is that of wood going into water. The lesson drawn is the need of care in government to avoid a catastrophe. Cities change, but monarchy and law continue to rule. Other ideas similar to these are drawn from the oracle. This example gives a very good notion of the most admired of the Chinese classics, of its antiquity, and the style of comment with which for 3000 years the Chinese have been accustomed to discourse upon it. A good portion of this ancient manual of divination is even older than 3000 years. It is, therefore, very full of interest, since there is no country, except the land distinguished by the Christian revelation, which has retained a literature fortified by historical and chronological data uninterrupted during the flight of so many ages. This was the kind of book that Confucius studied when he was advanced in age. Perhaps he admired in it not so much its oracular ambiguity as the clear moral sentences and a certain breadth of view which the reader meets with here and there when the authors are throwing glances at the outer universe. A philosophy of nature here comes upon the scene which was destined to exert an immense influence and to have a
Scenes in the life of Confucius.
long career. It aims to reduce all existence into groups, to embrace nature, in all her aspects, in one comprehensive whole, and to bring the universe, by means of steady and profound thought, under the control of the sage. It was in this field of thought that Confucius loved to expatiate when he was in the maturity of his powers. With it harmonized, not unsuccessfully, the philosophy of the Chung-yung, that is of the Invariable Mean, a book published by his grandson, which contained in it the philosophical principles held by Confucius.

The portrait of Confucius here given,—from a drawing (taken from Chinese wood-cuts) by a lady friend of the writer,—is not of the Han dynasty tradition, but that of the Sung dynasty, the result of later criticisms. When Buddhism led the Chinese to be in love with idolatry, they made pictures and images of various Tanist gods, and at last it occurred to them to make use of images in the temples of Confucius. At the time of the invention of printing, the art of wood-engraving became common, in the eleventh and twelfth centuries. In memoirs of Confucius, and in books containing an account of his temple and tomb in his native city, it became a common thing to introduce a portrait of the sage. This was ideal rather than real; and it represents what the Chinese of the middle ages thought Confucius ought to have been in feature and in dress.

In the last scene the sage is standing before a tombstone, pencil in hand, inscribing the name of an ambassador from the Woo country, who was buried there, and whom Confucius praised for his economy in the expenses of his own funeral and for his acquaintance with the mysteries of philosophy.

MISCELLANEA.

PROGRESS OF EUROPEAN SCHOLARSHIP.

No. X.

Zeitschrift der Deutschen Morgenländischen Gesellschaft (Journal of the German Oriental Society.)

(a) Vol. XL. Part III. (1886):—

Professor David Kaufmann opens the part with an article on Ibn Saruk's Hebrew Dictionary, Menachem. He urges the necessity of critical editions of Hebrew works of the middle ages. He takes the Menachem as his text, and shows the great differences between the printed text of Filipowski (London, 1854) and the available MSS. The article is a purely critical one and cannot be summarized.

Signor L. Morales follows with an interesting paper on the book of the Entertaining Stories of Bar Hebræus. The MS. containing this, forms a portion of the Syriac Codex No. 173 of the Vatican Library, which was written in the year 1333 A.D. The collection contains about 700 sayings and anecdotes, some of which Bernstein has published in his Chrestomathia Syriaca. The work is divided into the following chapters; from each of which the author gives extracts (text, translation and vocabulary).

Chapter I. Useful sayings of Greek Philosophers.

" II. Useful sayings of Persian wise men.

" III. do. of Indian do.

" IV. do. of Jewish do.

Chapter V. do. of Christian anchorites.

" VI. do. of Muhammadan kings and wise men.

" VII. do. of doctors and the learned.

" VIII. do. of Arabian ascetics and reverends.

" IX. Anecdotes of physicians, and of what is connected with them.

" X. Selected Fables concerning the speech of irrational animals.

" XI. Anecdotes concerning those who interpret dreams and deal in magic.

" XII. Anecdotes concerning rich and magnanimous and generous men.

" XIII. Anecdotes concerning covetous and avaricious men.

" XIV. Anecdotes concerning men of business.

" XV. Merry anecdotes concerning mimes and players.

" XVI. Anecdotes concerning boorish and stupid men.

" XVII. Anecdotes concerning fools and madmen.

" XVIII. Anecdotes concerning thieves and robbers.

" XIX. Wonderful anecdotes and adventures.

" XX. Physiognomical signs mentioned by the wise.
To Indian readers the third chapter will naturally be the most interesting, and the following extracts are therefore taken from it:—

(Leaf 90.) "It is said that when any one dies in the house of an Indian his friends arm themselves, go before his door, and say, 'Show us him who hath slain thy beloved, that we may slay him.' If reply is made, 'The unconquerable invisible is his murderer,' they say, 'Grieve not all too much over something against whose power neither thou nor we can fight.' In this manner console they the mourners."

"One of them (the Indians) said, 'The wound of the spear healeth quickly, but wounding by the word is unhealable.'

"Another said, 'The appetites of this world are like the water of the sea, no matter how much a man may drink thereof, his thirst remaineth ever as great.'

"Another said, 'Wine hath four properties which it giveth to those who drink it. First, it hath the property of the peacock, i.e. his (the drinker's) colours and motions become beautiful; then the property of the ape, for he beginneth to joke with everyone; then the property of the lion, for he trusteth in his strength and becometh proud; and lastly, the property of the pig, inasmuch as he maketh himself inordinately drunk, walloweth in the mire and finally speweth out filth.'

(Leaf 91) "Another was asked, 'What does a woman without a man resemble?' and he answered, 'A river without water.'

One more example, taken from the tenth chapter of this old Syriac collection of folk-lore, may be given on account of its close connexion with a well-known Indian fable:—

(Leaf 115) "The wolf, the fox, and the lion joined in partnership, and caught in their hunting a goat, a doe and a hare. Then said the lion to the wolf, 'Divide them amongst us.' The wolf said 'The goat for thee, the doe for me, and the hare for the fox.' When the lion heard this he waxed wroth and sprang on the wolf and killed him. Then said he to the fox, 'Do thou divide them.' Replied the fox, 'The goat for your breakfast, the hare for your dinner, and the kid for your supper.' Then said the lion to him, 'From whom didst thou learn this fair division?' The fox replied, 'From the wolf, your Majesty, who lieth before thee.'"

Dr. Adolf Baumgartner follows with a paper on the Armenian work on Rhetoric, entitled the Book of the Chrisie, by Moses of Choren. The rhetoric of this author, written in the tenth century, consists of ten books and an appendix. Each book is devoted to a distinct rhetorical artifice, and commences with a definition, followed by a number of examples of the artifice dealt with. The titles of each book are given in Armenian; the following are the Greek translations:—

1. περὶ χρείας.
2. περὶ γνώμης.
3. περὶ ἀνασκεψ.
4. ὁρὸς χορωδίων τόθων.
5. ὁρὸς εὐχαρίστης.
6. περὶ ψώμου.
7. ὁρὸς συγκεραστῶν.
8. ὁρὸς ἑθοσκοινοιας.
9. ὁρὸς εὐφρατών.
10. ὁρὸς βίοσ.

The work is an imitation of the Progymnasmata of Aphonius, or of Theon, or of both. The subjects of the origin and contents of the work are dealt with at considerable length.

Dr. M. Heidenheim contributes a controversial article on a new edition of the text of I. Samuel.

Dr. Adolf Fr. Stenzler gives an interesting note on the अर्धनारिकताम which is mentioned in the 15th book of the Raghuvamśa, in the Kathā-Sarit-Sāgarā, and in the Pañcachitra. Mallinātha's commentary on the first passage is quite unsatisfactory, but Dīnākara's supplies the needful explanation. He says एकतः वन्धन वत्सरायो मधे कहूँ निर्भर खातां वष अनुपत्तिः शायण तत्त्वद्वारात्ततम्; 'if a woman and a man on one and the same bed place a sword between themselves, and so remain in chastity, it is called the vow of the sword-blade.' This is borne out by the Old German custom mentioned by Jacob Grimm in his Deutsche Rechtsalterthümer, p. 168:— 'It was an ancient custom, if a man slept by a woman, whom he did not wish to touch, for him to place a sword between them, and to lay himself down.' He then quotes numerous examples. K. Weinhold (Die deutschen Frauen, I, 348; II, 9) relates a similar custom.

Dr. Stenzler concludes, 'It would not be too rash to conclude from the above coincidence, that this custom, like many others, has been preserved from the most ancient times in various branches of the Indo-Germanic stem. That Mallinātha does not appear to have known more about it, can be explained by the custom having disappeared in his country in the far south, and being no longer there remembered.'

* In a subsequent note (p. 771 of the same volume) Dr. Stenzler mentions that it has been brought to his notice that this expression has been previously dealt with by Professor Weber in his treatise 'Über eine Episode des Jaimini-Bīhārī. The vow is there called the ari-pattavatam.' (I may note that the same custo
A short note by Professor O. Böhthlingk suggests a textual emendation to Vasishtha I. 22; and in connexion with id. II. 32, quotes some curious instances of false etymology.

Dr. G. Bühler contributes a reply to a former article of Dr. Böhthlingk’s on Apsambha. The paper principally deals with questions of textual criticism.

Dr. Ernst Kuhnert gives us an interesting paper on Mídas in Legend and Art. He examines the Mídas myth from its earliest form to its latest development, and concludes that it is a mixture of the ancient Silenus myth with reminiscences of an actual powerful king of Phrygia named Mídas. He then traces the various known specimens of ancient art representing episodes in the legend.

The number concludes with a notice by Signor Ign. Guidi of a short Syriac life of the Patriarch Sabhrísho (596-604 A.D.). The text is given in full. The MS. from which it is taken is Cod. Vatic. Syriac. 183, fol. 367 a. 2.

The number concludes with the historic-heroiic poem of Ibn Al Mu’tazz entitled Mu’taziz as Prince and Regent. The text with full commentary and translation into German is given by Dr. Lang. The text is founded on the MS. of the Bibl. Nat. at Paris, No. 1439, written in the year 1007 A.H. The poem sings of Abú’l Abbás bin Al-Muwaaffa from his first appearance (266 A.H.), to his death (289 A.H.). The entire text, and a portion of the commentary and translation, are here given.

Dr. M. Klamerroth concludes his interesting paper on the Greek physicians mentioned by Al Ya’qūbī.

Dr. Philippi next deals with the pronunciation of the Semitic letters usually represented in the Roman character by w and y, and in the Arabic character by ụ and ḫ. After a minute comparison of the use of these letters in a number of Semitic languages, the author comes to the conclusion that we may assume that originally they were only spoken as consonantal vowels and like other consonants were written, and that also u or i in the so-called diphthongs eu and ai were represented by these letters, but that when these diphthongs were contracted to ọ or ơ respectively, the consonantal u or i could be omitted, as has happened in Phoenician; while in Hebrew they have remained as signs for the long sonant vowels ọ and ơ.

To Anglo-Indians, the most important paper in this number is a continuation of Dr. P. von Bradke’s important essays on Ancient Indian Religion- and Language-History. The professor takes as his text the German word garten ‘a garden,’ which he identifies with the Sanskrit griha, ‘a house,’ through the Gothic gards ‘a house,’ instead of connecting it with the Greek χερος and the Latin hortus as has been done by Kluge in his Eymologisches Wörterbuch der deutschen Sprache. This derivation necessitates the reference of griha to an older form *grīha, instead of deriving it from the root *grah or *grah.

From this he leads on naturally to his next (fourth) essay:—‘On Sanskrit h, equivalent to Indo-Germanic dh, bh, and the place of the Vedic language amongst the Indo-Aryan Dialects.’ The author endeavours to formulate the rule according to which a Sanskrit h is to be referred to an original (Indo-Germanic) dh or bh. He first gives all the instances with which he is acquainted in which this is certainly the case. I give them here in an extremely condensed form:—

1. The suffix of the 1st pers. plu. med.-máhī; Greek -μεθα.

2. The suffix of the 2 sg. imperat. act. hi or dhi; Greek ὄ.

3. hita from dhā, beside dhita (-dhītā) as second member of a compound (su dhāta, &c.). Cf. on the other hand ahīta, purahīta, &c.

4. rōhīta, ‘red,’ beside rūdhīra; Gr. ῥοδός.

5. rūh, rōhati, ‘to mount,’ ‘to increase’ = rūdh; rōdhāti; Zend, rud, rōdhati, ‘to increase.’

6. griha = Gothic gards.

7. grāh, grīḥ = grābbh, grībh; Zend barew.

8. kakūḥa (RV), beside kakūh (RV), kakūbha (VS); Gothic hauβ(h) (?).

In only two of the above instances (Nos. 1 and 6) do both forms not occur in the oldest Indian language. Dr. von Bradke finally comes to the conclusion that from the above examples, or from those cases in which a Sanskrit dh or bh appears without a corresponding h, it is impossible to formulate any rule depending either upon accent or position. He next considers the following pairs of Sanskrit forms, which are most probably of Indo-Germanic origin:—


2. hvar, hru—dhrav, dhrū, cf. druh.

3. har—bahr (cf. also bhar).

4. spārh (sprihavati RV) beside spardh (spar-dhātā).

5. nah—nadh.

6. harash—bharash in bhrihṭi.

(7) har, hriñtē—bhar, bhrīndāti.
(8) har, haryati—dhar.
(9) gūh—gādhā, gāḍhēl, aghukhāt, jagukhātās (RV); Zend. gōz; Indo-Ger. gūgh or gūh.

These also refuse to lend themselves to any general rule, and the author concludes that we must also give up this attempt to explain by any sound law the peculiar Indian forms with ʰh beside old ᵈh, ᵇh.

If we venture on a further investigation, the point arises whether these double forms may not be explained by the influence of other Indo-Aryan dialects. He therefore proposes to himself the three following questions:

(1) Do general considerations forbid the idea of the influence of other Indo-Aryan dialects on the language of the Vedic poems, or the idea of the existence of such dialects?

(2) Do we find, with reference to the phenomena which we have just been considering, clear traces of other Indo-Aryan dialects in the Rig-Veda as handed down to us? In other words, do we find in the Rig-Veda, as sporadic instances, sound-changes the same as, or analogous to, those which regularly occur in such popular Indo-Aryan dialects as we know, and which belong to a much later time?

(3) Is the change of an intervocalic ᵈh or ᵇh to ʰh one of the sound-tendencies, which are specially frequent in the later Indo-Aryan dialects?

If, says the author, we can answer the first question in the negative, and the second and third in the affirmative, we shall have some right to refer the phenomena hitherto dealt with to the influence of the oldest popular dialects.

The discussion of the answers to these questions would well deserve complete translation, but space forbids more than a close abridgment of the heads of the arguments.

With regard to the point No. 1 we must first consider if the language of the Rig-Veda is contemporary with or later than the entry of the Aryans into India.

The Hymns of the Rig-Veda are no folk songs, their language is no popular dialect. They are not in an undeveloped speech which has to struggle at every step for adequate means of expression. Nay, the greater number are in a formal shape, and the ideas, often already not original, are cast in a fixed poetic mould. The oldest Indian poetry must have been left far behind, before it had arrived at this stage of progress, although there are, it is true, fragments in the Rig-Veda, perhaps even whole poems, which may have been handed down from antiquity. The Vedic Hymns were certainly considered holy, and sanctity was ascribed to the priests, but the people had not yet arrived at that stage when, owing to worship of ancestors, every word and syllable of half-understood songs was considered a holy thing in itself. That stage was not reached till the holy tradition began to be unintelligible and it was no longer possible to compose other hymns like those handed down, or even to alter those which were already possessed. Then only was it that the necessity of fixing the forms of the words and of sounds, became apparent, and that every letter was endowed with sanctity. Till then the oldest songs must have been handed down by word of mouth from generation to generation, and must have been altered in the process, till they were fixed for ever by the Vedic collection, just as has happened in the case of Luther's German translation of the Bible, although this has been, to a certain extent, protected from the grossest class of alterations by the fact of its being printed. It is, therefore, not the time of the beginning or of the bloom of the oldest Indian poetry, but that of its decline, which gives its characteristic colour to the collection as handed down to us.

In considering these changes, an important factor is the spoken language. So long as a literature is living, it can never entirely withdraw itself from that influence, and the ancient Rishis were the less able to protect themselves from, either in the traditional rendering of old or in the composition of new hymns, because the preserving power of writing was unknown to them. We may assume that, besides the literary speech in which they sang and held mutual converse, they also spoke the local vernacular dialect. In this way it became impossible to avoid the introduction into the holy language of dialectic variations,—especially in the case of isolated forms, or of words of daily life,—and the nearer the dialect was to the literary language, the more impossible it was. If a man talked to his wife about his grītha, or said to his daughter śī, 'come,' it might easily happen for him to use the same words in the 'correct' speech; and his son would not hesitate to introduce these gradually adopted forms into poetry. In fact the circumstance that we find comparatively modern forms, due to dialectic influence, in the oldest hymns, no more argues against either the ancientness of the hymns or the modernness of the forms, than the finding of modern forms in a German Bible, printed in the present century, would be considered as proof against the age of Luther's translation, or against the modernness of these forms.

If, therefore, we are entitled to assume that by the time of the collection of the hymns of the
Rig-Veda, popular dialects had developed by the side of the Vedic literary language, there is every possibility that the former have influenced the latter.

But are we, in fact, entitled to assume the existence of Indo-Aryan popular dialects at so early a period?

If, as it has been attempted to prove above, our Rig-Veda collection belongs to a late period of the oldest Indian lyric poetry, it must follow that it belongs to a period long posterior to the time when both the Aryan branches formed one people. This is borne out by other independent considerations, such as the retrogression (and, in the case of Dyaus, the disappearance) of the older divinities before the newer gods. But if we may assume that, between the separation of the Aryan brotherhood and the collection of the Rig-Veda hymns, a considerable period elapsed, it is a priori probable that during this period dialects were formed, closely related, it is true, to the literary language, but still distinct from it. From these and other reasons, the possibility of the existence of popular dialects, clearly distinct from the Vedic language, before the final editing of the Rig-Veda as we have it now, must be unreservedly admitted. But only the possibility; and not till clear traces of dialectic influence are proved to exist in the Rig-Veda, or till we can point out in the later Indo-Aryan dialects forms of Indo-Germanic origin which must necessarily be referred beyond the Rig-Veda, shall we be in a position to consider as proved, the simultaneous existence of the Vedic language, and of other Indo-Aryan dialects. In that case we must look upon the former as a perfected literary language, and it is at least possible that it differed from the contemporary dialects not so much in its inflexions or in its vocabulary, as in its being already in a state of formalness and ossification.

This brings us to the second question Do we find clear traces of other Indo-Aryan dialects in the Rig-Veda as handed down to us? Before answering this, it is necessary to consider generally the relationship which the middle and modern Indian dialects bear to Classical and Vedic Sanskrit. The following is a brief outline of the considerations advanced by the author:

1. Without doubt, Pali stands nearer to Vedic than to Classical Sanskrit in many important points.

2. The same appears to be the fact in regard to the middle and modern Indian dialects.

The following goes to prove this:

(a) The manner in which words are dealt with in a sentence can hardly be explained by the sanādhī rules of Classical Sanskrit.

(b) Pali and Prakrit agree with Vedic Sanskrit in a whole series of sound and inflexion forms,—in which they differ from Classical Sanskrit; e. g. the change in Pali of intervocalic $d$, $dh$ to $l$, $lh$; the Aor. form $dha$ = Ved. $ahara$; the Infinitive have beside $um$; the nom. pl. of $a$-stems in $dē$, compared with Vedic $dēas$; the Prakrit $Abstr.$ suff. $-tāsā = Ved. -teāna$.

If, moreover, we consider that Classical Sanskrit, as the language of the learned and of literature, must have continually influenced the remaining Indian dialects, and that in these dialects forms which stand specially near classical Sanskrit, may also be loan-words from that language, then we shall be but slightly inclined to treat Classical Sanskrit as the mother of the middle and modern Indian languages. But does it therefore follow that these languages are derived from Vedic Sanskrit?

We find from the oldest literary records of the Greeks, Germans, and so forth, that in their time the languages existed each in several dialects. So, it is reasonable to suppose, was the case in India. This accounts for double forms like $ābhis$ and $ais$, $dēas$ and $dē$, and the like. It is difficult in many cases to separate the older portions of the Rig-Veda from the new; for the whole, as we have it, is presented to us in the conventionally coined speech of one special period of Indian lyric poetry. A great portion of the hymns were written already in that lyric language; and even such songs as were perhaps originally sung in purer dialect, have scarcely been able fully to escape the influence of this literary language. The language of the Rig-Veda is closely approached by that of the other Vedic writings. That of the more modern Vedic writings gradually approaches that of Classical Sanskrit, in which the ancient literary speech of India has preserved to the present day its final form.

It would be no more reasonable to assume that the mediaeval and modern Indian dialects are sprung from the Vedic literary language, than that the Grecian dialects are sprung from the language of Homer. It would be much more reasonable to search for the older stages of the modern Indo-Aryan dialects, in those dialects from which the Vedic literary language may have sprung. But even such an assumption is unnecessary. The probability is that the mediaeval and modern dialects are sprung from other ancient dialects, and that the dialects from

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The author in a subsequent communication refers to ref. A. Weber’s Indische Studien, II., 110 ff; and 86 ff.

More fully given above.
which the Vedic Literary language was developed, or at least some of them, died out at an early date.

The author next quotes Professor E. Kuhn (Beiträge zur Pali-Grammatik, p. 10), in support of the view above advanced. He then considers examples of Pāli, Prākrit, and modern forms which must be referred back, not to the language of the Rig-Veda, but to the popular dialects which developed contemporaneously with it. Examples of this kind have been given by Kuhn, but some are doubtful. But, at any rate, the Pāli rukkha appears to go back to an Indo-Germanic by-form besides the Sanskrit vṛkṣa. So also the Pāli suṇoti, suṇati, appears referable to a form ēruṇotī, older than the Sanskrit kṛṣṇotī.

It is well known that already in the Vedic language there are appearances which remind one of Prākrit. A complete and systematic examination of these is desirable, but would exceed the bounds of the essay. He, therefore, proceeds only to collect a series of Vedic forms, which run contrary to the sound-tendencies, as hitherto known to us, of the language of the Hymns, and to examine whether the forms comply with the sound-tendencies of later Indo-Aryan dialects, or at least are in accordance with the general direction of these tendencies. This may enable us to answer the question now under consideration.

He begins with a few isolated forms, which appear to be loan-words in the Vedic language.

(1) In Vedic and Classical Sanskrit, s in certain cases becomes š. In the later dialects the three sibilants of Sanskrit are treated as one,—usually the dental. Now there are Vedic forms like rūksa, busa, bhrasya. These may be considered as loan-words from other Indo-Aryan dialects. Indeed the s, if it represents an Aryan ś, and perhaps also the b, may, point to Iranian influence. Cf. further Rig-V. priṣanta, priṣatti, besides priṣini, Greek pρειςος; Ath.-V. rukṣant, beside Rig.-V. rusk.

(2) Vedic and Classical Sanskrit usually preserve medial consonants, while the later Indo-Aryan dialects often drop intervocalic medial consonants; cf. tilaiti, ‘a sieve,’ prṣūga (Rig.-V.) ‘a fore-yoke,’ which are probably loan-words from other Indo-Aryan dialects. The former the author connects with *tak, and the latter he refers to *prṣyuga.

(3) In the later Indian dialects there is a tendency to change an intervocalic tense, and tenuis aspirata, into a media and media aspirate, respectively. Cf. Rig-V. nddh in nddhamina, nddhita, nddhasa with the rarer nāth in nāthita, and nātha. In the Ath.-V. nāth (nāthita, nāthas) is the more common. Other documents (Vedic as well as Classical Sanskrit) appear to know only nāḍh (except perhaps in vaṛṇaḍhā). Pāli has likewise ndha, Prākrit has ndh and ndha. Here it seems probable that the Pāli and Sanskrit have preserved the older form, while the Rig-V. prefers a form influenced by a popular dialect. Again, cf. Rig.-V. arbhaga with arbhakṣa; tujit, tuji (RV) with tuṣ, tuṣa, &c.; karta (RV, AV) with garta (first appearing in the Brāhmaṇas).

(4) In the old literary language, a dental became a cerebral only under the influence of certain special sounds. A dental explosive became cerebralized through the influence of a preceding original s, *zh, or *ñl. The dental nasal was also cerebralized under the influence of a preceding r-sound. In the more modern dialects, the cerebralization of a dental occurs under a much wider range of circumstances. Dental explosives are cerebralized under the influence of an r-sound also, and even without any apparent reason, beyond the tendency of some dialects towards cerebralization. Still more prominent is the general tendency to cerebralize the dental nasal. This kind of cerebralization of a dental can in the cases of certain words be pointed out in the Rig-V. We find kitā (Prākrit form of karta), katya; na, cf. nāḷi (later nala); Pāli, nāḷa, nāḷi, nāḷi, nāḷi, nāḷa, beside nada; again kēcata (Rig.-V.); aevata (Ath.-V.), beside aevata (RV); markaṭa (VS, TS); in all of which there is possibly a change of dental (suffix sa) to a cerebral. These changes are still more frequent in the later language; cf. bhān beside (RV) bhan; at beside (RV) at; nāt beside nart, nātī. The conjecture is not unreasonable that the forms in which the cerebral appears have arisen from the influence of Indo-Aryan popular dialects.

(5) The old literary language of India, the Classical as well as the Vedic Sanskrit, retained, we know, the old r vowel in its entirety. The remaining Indo-Aryan languages agree, on the contrary, in endeavouring to rid themselves of it, in consequence of which the r-sound usually entirely disappears, and another short vowel, a, i, or u, enters into its place. We find analogous examples in the Rig-Veda; e.g. gāh beside gṛhā; ēdh, ēdhaṭ, beside ardha, rīdha; so also perhaps ēiḥ, beside (jrambha) jrambha (cf. jrambha) and (RV) ētṛ, to be referred to *śṛṣṭih. Here ðṛ is represented by i, and not by a, i, or u. The later dialects, however, sometimes have ē; thus (Pāli and Prākrit) gēha, beside gīha, gharā; edh occurs in Pāli, beside idh, ijhati, iddhi, Prākrit idžhi; ēḥ appears in Pāli and Prākrit regularly as hēṣ. If ēh in Rig-Veda is to be referred to
*jribh, jrimbh, Prākrit has preserved the fuller form jivābh, jivabh (z-jrimbh): cf. also Pr. genkh = Skr. grīvāvati, beside the Pāli gānha; Pāli, gosha, ‘greed,’ ‘desire,’ Skr. garbh, griddh beside gidh, gījhatti, giddhin, ‘greedy’ cf. gijhā, gaddha, ‘vulture’ in Prākrit veṇa, talāvanta beside Skr. vrinta, tālavinta, Pāli, vaṇa, talāvanta.

The author then proceeds to discuss the conditions of this change of *yī to ə, which appears to him to probably depend upon the near presence of the letter h. Moreover, the e appears to have been originally short.

He then continues, that, although some of the forms above quoted may be the subject of discussion, most of them should be accepted as loan-words into Vedic or Classical Sanskrit, taken from other Indo-Aryan dialects. There are other words also which occur in the Rig-Veda, which the author enumerates, which may also be similarly explained, though without the same amount of evidence, and he finally concludes this portion of his essay by answering his second question in the affirmative.

This brings us to the third and last question, ‘Is the change of an intervocalic dh or bh to h one of the sound-tendencies which are specially frequent in the later Indo-Aryan dialects?’

In Pāli dh and bh usually remain unchanged, though forms with h are not uncommon. In Prākrit the change to h is much more common. In the modern dialects it is the rule. He takes the following typical cases:

**Vedic Sanskrit**—

1. The case endings, bhīs, bhīyas (bhīys), bhīyd (bhīyām) added to a vocalic stem termination.

2. The words, nabhā, rībhu, surabhī, ndvī, sabbhā, ibhā, ubhā, abhī, ādāna, vadhū, śadvadhi, adhī, adhāna; adhara, adhama.

3. The suffix-bha, e.g. in rishabhā, vrishabhā.

**Pāli**—

1. -hi, rarely -bhī.

2. nabhā, surabhī, ndvī, sabbhā, ibhā, ubhā, ubhaya, abhī; vadhū, osadhi, adhī, adhāna, adhara, adhama.

3. nabhā, vasabhā.

**Prākrit**—

1. -hi, his.

2. See Hōmākhanda, I. 187. A., Kalpasūtra, (a) naha and nabhā, surabhī (‘hi), ndvī, sabbhā, ibhā, ubhā, ubhaya, abhī; (b) ahi, ahe, araha. B., Hāla, (a) naha, surabhī and surabhī, nbhi, uhaa, ahi; (b) vaikā, osaha, ahi, araha. C., Sātubanda, (a) naha, surahī, nbhi, sabbhā, ubhā, ahi; (b) vahā, vahā, ahi, ahi, araha.


B., uṣaha, vasaha. C., vasaha.

In the forms, in which in the Rig-Veda h = old dh, bh occurs, we find in Pāli and Pr. regularly h. To the forms quoted above (-naḥ, -mahī; -hi beside -dhi; hita beside dhā and -dhīta; rūkha beside rudhīra; rūhā, beside rudhā, viruddhā; grīhā, (Gotthic) gards; grah—grabh; kakūkha—kakūkha, may now be added nah—nadh; ghī—gaddhā; gahu—gabhīra; and (?) jēh—jrimbha. Here it is interesting to observe that in those forms in which Sanskrit has preserved the old dh, bh, the mediæval dialects often show h. Rarest again in Pāli, where we have rudhīra beside rohīta, virūdhanaka beside rūkha; but also indeed dakhāt (dadhātī). In Prākrit we find gahīra beside gaśīrha, rudhīra = Skr. rudhīra. After dealing with possible objections, the author concludes that at least it is not rash to affirm that the occurrence of h in the Veda for an old dh, bh, is due to the influence of contemporary popular dialects. There are, however, various considerations which prevent our making any more positive statement, and these he proceeds to discuss. This portion I omit, to save space. The author can only hope that he has pointed out the direction in which the truth may be found.

This article is followed by some remarks by Professor Bühler on Dr. Bohtlingk’s articles on Vāsilṭha. The paper deals with textual criticisms and with the translation of certain doubtful passages.

This is followed by a short paper by Dr. Bartholomæ on the transcription of Indo-Iranian sibilants. He argues for a systematic and uniform treatment of these letters in Sanskrit and Zend transliteration.

Dr. A. Hillebrandt discusses the translation of the eighth verse in Rig-Veda, X. 18. The hitherto accepted translation has been—

‘Raise thyself, O woman, to the world of life;  
Thou liest before (or by) him whose breath hath flown: Come;  
Who once clasped thine hand and wooed thee,  
The wedlock of thy spouse hast thou now accomplished.’

The author says that the only possible literal translation is—

‘Raise thyself, O woman, to the world of the living,  
By a dead man liest thou here. Come hither; ’
'He who hath wedded thee and wooded thee,
Here hast thou obtained the wifehood of thy spouse' (i.e. thou hast become his wife).

Dr. Hillebrandt maintains that the corpse referred to is not the woman’s dead husband. The verse, he considers, refers to a portion of the ritual of a human sacrifice, in which a woman lays herself down by the dead man, in order to obtain symbolic fruitfulness.

Dr. A. Ludwig contributes two short papers. The first on three passages in the Rig-Veda.

(a) Rig-Veda X., 38, 5, mushkayōr baddhah, usually translated ‘testicula vinctus.' Dr. Ludwig shows that mushka must mean ‘fist,’ cf. the Hindi mushkō bāndha, ‘to tie the hands behind the back.’

(b) X., 73, 9, payō gōaḥ ādadah āhadhikaḥ. The question is, why has ādadah the uddāta? It depends on the translation, which should be literally, ‘thou gavest the milk to the cow-resembling vegetables.’ In order to show the isolation (rendered necessary by the metre) of ādadah from its object, payah, and also the splitting asunder of one complete expression gōaḥ āhadhikaḥ, the collectors of the text furnished ādadah with an uddāta.

(c) X., 95, 1, hayō jāgō mana‘aḥ tiśthā ghūrē. Why has tiśṭha the uddāta? Similarly it is explained by taking jāgō as 1 sing. with mana‘aḥ, and translating, “Ha! I come to recollection, stand still, O terrible one.”

The second article deals with the meanings of special Vedic words.
The Part next contains reviews of


(2) The Masorah compiled from manuscripts alphabetically and lexically arranged by Christian D. Ginsburg. Reviewed by Dr. S. Baer.

(3) Bihār Peasant Life. Review by Dr. Pischel.

(4) Hans Schäflberger’s Reisebuch. Reviewed by Dr. F. Liebrecht.

(5) Merz, Proben der syrischen Ubersetzung von Galenus-Schriften über die einfache Heilmittel. Notes by Dr. Inmanuel Löw.

Prof. A. Müller forwards a communication from Dr. Vollers regarding the Catalogue of the Arabic Manuscripts at Cairo.

Dr. Roth contributes a note on the Bibliotheca Indica, and urges the completion of the Sainkhita of the Black Yajur Veda, and of the Taivānīya Brahmana.

G. A. Grierson.
latter gives a day of the dark half of the same month Mārgaśīrsha, would further prove, if such proof were at all necessary, that we have to deal with a southern year, with the regular amanta arrangement of the lunar fortnights. Considering that the MS. was written in Gujarāt, this is only what we should expect.

Taking the years 1546 and 1546 as expired years, the corresponding European dates for (2), (3), (5), (6), and (7) are:

(2) Sunday, September 13, A.D. 1489; the 3rd tithi of the dark half ended 2 h. 29 m. after mean sunrise.

(3) Sunday, October 4, A.D. 1489; the 10th tithi of the bright half ended 6 h. 40 m. after mean sunrise.

(5) Friday, November 6, A.D. 1489; the 13th tithi of the bright half ended 4 h. 53 m. after mean sunrise.

(6) Friday, December 4, A.D. 1489; the 12th tithi of the bright half ended 29 h. 45 m. after mean sunrise.

(7) Tuesday, December 15, A.D. 1489; the 8th tithi of the dark half ended 22 h. 11 m. after mean sunrise (and it commenced 1 h. 25 m. before mean sunrise).

As regards (4), I find that the 4th tithi of the bright half of Kārthika, of 1546 expired, ended 30 minutes before mean sunrise of Wednesday, October 28, A.D. 1489; but considering that the tithi ended so near sunrise, and that the day required would come, under ordinary circumstances, nine days before Friday, November 6, the day of date (5), I have no doubt that, in Gujarāt, Wednesday, October 28, A.D. 1489, was the 4th of the bright half of Kārthika.

But I am unable to make out how the date mentioned under (1) should have fallen on a Wednesday. For in A.D. 1489, the 10th tithi of the bright half of Śrāvana began 9 h. 13 m. after mean sunrise of Wednesday, August 5th, and ended 7 h. 16 m. after mean sunrise of Thursday, August 6th, and the date corresponding to Śrāvana śū. di. 10 accordingly should be Thursday, August 6th, not Wednesday, August 5th. Or can it be shown that, for any reason unknown to me, the case should have been otherwise?

F. KIELHORN.

Göttingen.

AN ORIGIN FOR THE BIBLICAL NAME RHAGES.

Sir,—An interesting note on the origin of Rai—called Rhages in the Bible will be found in the "Buhdu-i-Qāde"; printed edition of Calcutta A.D. 1818, page 418, under the word ʃa (Raj) and page 442 under the word ʃa (Raj). According to this note it appears that it is a district near Sābzwār and that a town was founded there by two brothers called Rai and Rāj, and that when completed they quarrelled as to which of them should give the place his name. Finally it was decided that the place should be called Rai after one brother and its people Rāj after the other.

S. J. A. CHURCHILL.

Sir,—In page 370, Vol. II. of the Indian Antiquity (December, 1873), I find that a correspondent, Padma Nāb Gholāl, in attempting to prove that Calcutta is a place known from remote antiquity, and that the modern name is a corruption of "Kalikshetra," quotes the following, in a footnote, without citing his authority:

"Dakhinashak maravya yabacha Bahoola pooree Kalikshetram bejanayath," &c.

Will any of your numerous readers and correspondents give the full text and correct reading of the quotation, and the name of the purāṇa or other book from whence it is taken?

NILCOWAL BASAK.

16, Churruckdangā Street Calcutta.

MAKHZAN UL ADVİYEH.

Sir,—General Hontum-Schindler in his note on the Acacia ante, p. 143, mentions the medical dictionary called Makhzan-ul-Advıye the author of which is Mir Muhammed Husain Khān ul-'Aqīl ul-'Alavi son of Hakim Muhammed Hādi Khān ul-'Aqīl ul Khurāsāni, residing at Shīrāz. Muhammed Husain Khān, apparently, wrote the portion treating of simple medicaments himself. He first, in A.H. 1183 commenced the work in Arabic, but certain obstacles to its completion arising in A.H. 1188, at the request of his master, Mir Muhammed 'Alī ul Husain, he began the present work in Persian. The first volume, on simples, is divided into a muqaddimeh of 14 fasāls and the subject matter in alphabetical order, followed by a khatimeh containing a glossary of the technical terms. According to fasāl 14 of the introduction to this volume, Muhammed Hādi Khān would appear to be the author's grandfather, and his father would appear to be Hakim Mir Muhammed Hāshim styled Mo'atamde ul-Muluk 'Alavi Khān; although it may more probably be that Muhammed Husain Khān is the son of Muhammed Hādi Khān whose father is Muhammed Hāshim Khān, whose father may possibly also have been called Muhammed Hādi Khān. This volume has been lithographed by itself at Bombay A.H. 1273.

Muhammed Husain Khān, at the request of his master, the same Mir Muhammed 'Alī, collected the notes of his grandfather, Mir Muhammed
Hāshim styled Mo'atamed ul-Mulāk, on compound medicaments and compiled a qarābdāna, called:  قربان مجمع أعمال ونخاذل القرايب divided into a magaddimeh subdivided into 20 fasle, and the dictionary of compound drugs in alphabetical order in twenty-eight kitābs, or books.

The Makhzan-ul-Adviye and the Qarābdāna, the two volumes in one, were lithographed at Teheran in 1277 A.H. The Qarābdāna has been twice printed in India (Calcutta ?) A.H. 1248-49 and 1254-55.

S. J. A. C.

NOTES AND QUERIES.

SUPERSTITION AS TO CIRCUMCISION AMONGST THE MALAYS.

Among the Malays, if an uncircumcised boy is eating with a party of men and the gizzard of a fowl, in some dish or other, falls to his share, it will at once give rise to remark. He will be told not to eat it lest his skin should be tough and he be caused extra suffering when he submits to the rite of circumcision.

W. E. M.

GENERAL INDEX TO THE REPORTS OF THE ARCHAEOLOGICAL SURVEY OF INDIA, VOLS. I. TO XXIII.


We regret that we have not been able to notice before now Mr. V. A. Smith's most valuable addition to the Reports of the Archaeological Survey of India, in the shape of a General Index to Vols. I. to XXIII,—the whole series of Reports issued by, or under the direction of, General Sir A. Cunningham,—with a Glossary and General Table of Contents.

As remarked by the Compiler of this Index in his Preface, everyone who has had occasion to consult the Reports in question must have felt the want of a General Index, such as has now been made available. "The Reports contain a vast mass of valuable information, but it is presented in such an undigested form that much of it is practically inaccessible. Each volume is certainly provided with an Index, but these Indices are, with two exceptions, extremely meagre, and of very little service." Under these circumstances the present Index was undertaken, with Gen. Sir A. Cunningham's approval. And we find every reason for congratulating Mr. V. A. Smith on the results of his work, which will greatly enhance the utility and value of the series of Reports.

The Index does not aim at giving a reference for every proper name mentioned in the Reports, or for every topic discussed in them. For instance, Mr. V. A. Smith has very wisely passed over, with but very little notice, "the crude and unscientific speculations of General Cunningham's assistants, which waste so much space in several volumes of the Reports," and which ought, in fact, never to have been allowed to appear in print at all. But, excluding matter of this kind, and bearing in mind that the large number of reports to be indexed in a single volume rendered it necessary to avoid many minor entries, such as subordinate and almost unknown dynastic names which must be traced by referring to the dynasties concerned, the Index appears to render easy for the first time a reference to nearly everything in these Reports that is worth turning up. And by no means the least important feature in it, is, that, with the help of maps and gazetteers, the Compiler has remedied in almost every instance what was a most serious and inconvenient defect in the Reports themselves, viz., the omission to give full and definite details, by reference to districts, sub-divisions, &c., as to the exact localities at which epigraphical, architectural, and other remains are to be found, if still in situ, or as to the exact places at which such remains, and especially coins, were originally found, though, having been since removed into public and private collections, they are not now to be looked for there.

The short Glossary, at the end of the book, is intended to explain Oriental words, used in the Reports, for the benefit of readers who have not resided in India, and whom therefore they would ordinarily be unintelligible; and, as far as it goes, it is a serviceable addition.

One of the most useful parts of the book is the General Table of Contents, pp. vii. to xviii. which reproduces, with some additions, the Table of Contents of each separate volume, and thus shows almost as a glance where we have to look for the detailed accounts of the various places described in each Reports.
THE USE OF THE TWELVE-YEAR CYCLE OF JUPITER IN RECORDS OF THE EARLY GUPTA PERIOD.

BY J. F. FLEET, B.C.S., M.R.A.S., C.I.E.

In the determination of A.D. 319-20 as the epoch, and A.D. 320-21 as the commencement or first current year, of the so-called Gupta era, one of the most interesting and important subjects of inquiry is the use of the Twelve-Year Cycle of Jupiter in the dates of some of the records of the Early Gupta period.

These dates are found in the inscriptions of the Parivrajaka Mahārājas Hastin and Saṅkhshobha, Corp. Inscr. Indic. Vol. III. "The Guptian Inscriptions," No. 21, page 93, to No. 25, page 112. And the extreme value of the records, from the present point of view, is due to the fact that in each instance, except in the Bhumārā pillar inscription, No. 24, page 110, the date is directly connected with an expression which shows explicitly that, at the time mentioned, the Gupta sovereignty was still enduring; and, consequently,—since the figures of the years are naturally referable to the same uniform series with the years quoted in the records of the Early Guptas themselves; and since the palaeography of the inscriptions is entirely in favour of such a reference,—which shows also that the dates are recorded in the identical era that was used by the Early Gupta kings.

In connection specially with the epochs of A.D. 166-67, proposed by Gen. Sir A. Cunningham, and of A.D. 190-91 proposed by Sir E. Clive Bayley, the evidence derivable from these records has hitherto been completely misapplied; in consequence of the adoption of the view that the duration of any saṅvatsara or year of this cycle, is the same with that of the years of the Śaka era, from Chaitra śukla 1 to the pūrṇimānta Chaitra krishṇa 15; and that the means of exactly determining the saṅvatsara of this cycle are provided by the last remainder obtained from certain rules given by Varāhamihira and others, which in reality only shows what saṅvatsara of the Sixty-Year Cycle of the same planet according to the so-called northern system, and of the Twelve-Year Cycle according to the mean-sign system, is current at the commencement of any given Śaka or Kaliyuga year, and which does not provide for the determination of the saṅvatsaras on any other given date in the year.8

The correct theory of the cycle, according to the requirements of the heliacal-rising system actually applied in the records now under consideration, with the proper method of determining each of the saṅvatsaras, has now been demonstrated by Mr. Sh. B. Dikshit, in his paper which is published at pages 1ff. and 312ff. above. And, by calculations based on the Sārya-Sidhānta, he has worked out all the results required for a full treatment of the dates in question; giving the full English and Hindu dates throughout, in order that both European and Hindu astronomers may be in a position to easily check his results. In publishing his results, I am confident that no essential errors can be established in them; even though it should be shewn, by more exhaustive calculations, that his longitudes for the heliacal risings of Jupiter are capable of slight corrections. And, as will be seen, his results show that, with the epoch of A.D. 319-20, with the running difference of two hundred and forty-two years between current Gupta and current Śaka years, and with the treatment of the Gupt

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1 This inscription is a joint record of the Parivrajaka Mahārājas Hastin, and of the Mahārājas Sarvanātha of Ucehakalpa, defining one point of the boundary between their territories. And the understanding that, while the Parivrajaka Mahārājas were feudalatories of later members of the Early Gupta dynasty, the Mahārājas of Ucehakalpa, whose territories evidently lay more to the east and south-east, were feudalatories of early kings of the dynasty which eventually came to be known as the Kalaschuri dynasty of the Chedi country in Central India, would explain, at once why no era is quoted in this record; the reason being that the feudalatories of the two rival dynasties could not agree as to which of the two rival eras,—the Gupta era, and

2 See, for instance, Indian Eras, p. 26 ff. This interpretation of the rules in question leaves unutilized, and unexplained, the first remainder, obtained from the division by 3720 according to Varāhamihira's rule, and by 1875 according to the rule of the Jyotishāvas. In connection with the Jyotishāvas rule, however, Warren has shown (Kalas-Sabakidā, p. 262) how this remainder gives the means of determining the actual commencement of each saṅvatsara.

3 See, e.g. note 11 below.
year as a northern Śaka year commencing with Chaitra śukla 1, in each instance, by the heliacal-rising system, the given saṅvat-sara actually was current on the given date.

That the other system of the Twelve-Year Cycle, the mean-sign system, according to which the saṅvat-saras are determined by the passage of Jupiter from one sign of the zodiac into another, does not apply to the dates in these records, with the epoch of A.D. 319-20, is shown by the fact, as will be seen from the details for this system given below, that it gives correct results in only two cases out of the four by which any absolute proof can be established; viz. in the case of the grant B. dated in Gupta-Saṅvat 163, and in the case of the grant C. dated in Gupta-Saṅvat 191.

For the proof that Gen. Sir A. Cunningham’s and Sir E. Clive Bayley’s proposed epochs cannot be supported, either by the heliacal-rising system, or by the mean-sign system, which is the one that they sought to apply in support of their theories, I must refer to the fuller treatment of these dates in Corp. Inscr. Indic. Vol. III. Introduction, page 101ff. The object of the present paper is only to shew how successfully the heliacal-rising system works out for these dates with the epoch of A.D. 319-20; and that the mean-sign system does not apply.

A.—The Khōh Grant of the year 156.

The first inscription is one of the Khōh grants of the Mahārāja Hastin, Corp. Inscr. Indic. Vol. III. No. 21, page 93; in which the date (line 1ff.) is—śatapataṃkā-śatāre-bda-śatē Gupta-nṛpā-rājya-bhuktan Mahā-Vaiśākha-saṅvat-sara Kārttika-māsa-śukla-paksha-trītyā-yām,—“in a century of years increased by the fifty-sixth (year); in the enjoyment of sovereignty by the Gupta kings; in the Mahā-Vaiśākha saṅvat-sara; on the third lunar day of the bright fortnight of the month Kārttika.”

This gives us, for calculation, the Mahā-Vaiśākha saṅvat-sara, as current on the third tiṭhi or lunar day of the bright fortnight of the month Kārttika (October-November) in Gupta-Saṅvat 156 current. And, on the analogy of the Varāghā inscription7 of Valabhi-Saṅvat 945, this should be the case in Gupta-Saṅvat 156 + 242 = Śaka-Saṅvat 398 current;8 in which year the given tiṭhi corresponds to Sunday, the 19th October, A.D. 475.

Mr. Sh. B. Dikshiti finds (see the accompanying Table, Col. A) that Jupiter’s rising,7 next before the given date, took place on Kārttika śukla 1 of the same year, Śaka-Saṅvat 398 current, corresponding to Friday, the 17th October, A.D. 475; or, by the English calendar, on Saturday, the 18th October.6 His longitude then was 19° 52’ 24”. By both the systems of unequal spaces for the longitudes for Ujjain, 70° 43’, taken from Keith Johnston’s Atlas, that is used by Mr. Sh. B. Dikshiti for his calculations and for the Śrīśaṅga’s Pancharthā) be taken into consideration, of course the week-days of the two places are absolutely identical, one for the time in Sethnath 8 seconds, or 2 ghata 22 23 palas, at the end of the Hindu week-day; during that time, while at Ujjain a Hindu Thursday, for instance, is still running, at Greenwich the week-day will be Friday. Owing to this there may sometimes be a nominal discrepancy in the resulting English week-day for a given tiṭhi; but the instances will be few and far between; as very few tiṭhis will be found to end so late after sunrise; and the discrepancy will be confined mostly to such occurrences as the rising of Jupiter.—Jupiter’s daily rising, next after his becoming capable of rising heliacally, takes place about forty-four minutes before sunrise, and therefore in the period during which the Hindu and the English week-days are not identical. In the present case it took place at the time in question before sunrise on the English Saturday, the 18th October. Kārttika śukla 2 did not end till after sunrise on that day. Consequently, as current tiṭhis are not quoted, unless under certain very exceptional conditions not applicable to such occurrences as this, the tiṭhi which he rose on Kārttika śukla 1. And this tiṭhi, ending after sunrise on the Friday (and before sunrise on the Saturday), has to be coupled with Friday, the 17th October, as its week-day. Hence the apparent, but actual, difference of a day, according as we take the Hindu or the English calendar. And a similar discrepancy runs through all the dates of the heliacal risings given below.
## Sanvatsaras of the Twelve-Year Cycle of Jupiter

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<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>196</td>
<td>245</td>
<td>435</td>
<td>497</td>
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</table>

### Notes
- **Gupta year, current:** 1988
- **Saka year, current:** 490
- **The given sanvatsara:** Bhringa 1225
- **The corresponding date:** 18th October A.D.
- **English date:** 6th April A.D.
- **Position:** 17th October A.D.
- **The sanvatsaras, which then began, was:** Mahā-Kṛṣṇa

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## Jupiter's Preceding Rising

- **Corresponding to:** 17th October A.D.
- **Date:** 6th April A.D.
- **Longitude:** 135° 24′
- **Sanvatsara:** Mahā-Vaśiṣṭha

## Jupiter's Following Rising

- **Corresponding to:** 13th November A.D.
- **Date:** 10th May A.D.
- **Longitude:** 225° 35′
- **Sanvatsara:** Mahā-Jyeṣṭha
of the ending-points of the *nakṣatras* (see page 3 above, Table II), he was then in Viṣākha; and the *sauvatsara* which then began (see page 3 above, Table I), must have been named *Mahā-Vaiśākha.* Jupiter's next following rising took place on Mārgaśīrsha śukla 13 of Śaka-Saṅvat 339, corresponding to Monday, the 15th November, A.D. 476; or, by the English calendar, on Tuesday, the 16th November. His longitude then was 225° 35'. By the Brahma-Siddhānta system of unequal spaces, he was then in Ṣyēṣṭhā; and the *sauvatsara* which then began, must have been named Mahā-Jyēṣṭhā. While, by the Garga system of unequal spaces, he was then in Anurādhā; and the *sauvatsara* which then began, must have again been named Mahā-Vaiśākha; which shows that, by this system, there was at this period a repetition of a *sauvatsara.* This difference as to the following *sauvatsara*, however, does not affect the given date. By both the systems of unequal spaces, with the running difference of two hundred and forty-two years between current Gupta and current Śaka years, the *Mahā-Vaiśākha sauvatsara* was current on the given date. And the result gives Śaka-Saṅvat 339 current (A.D. 475-76), as the equivalent of the given current Gupta year.

In connection with the results for this record, the following two points may be noted here. In the first place, Mr. Sh. B. Dikshit has described three systems of fixing the ending-points of the *nakṣatras*; one of equal spaces; and two of unequal spaces. An examination of Jupiter's longitudes, as given in the accompanying Table, for each rising next before the given dates, will show that, in all the remaining instances, the current *sauvatsara* is proved by all three systems; the only variation is that, in the case of E 1, Jupiter's position, at his rising next before the given date, was, by the system of equal spaces, in Aśāḷasā; but, even then, the current *sauvatsara* would be named Mahā-Māgha, as also by the two systems of unequal spaces. So, also, it may be seen that, by all three systems, we have almost the same results in respect of the following *sauvatsara*; the only variation is that, in the case of E., Jupiter's position, at his rising next after the given date, was by the system of equal spaces in Bhaṛagū, and, accordingly, the *sauvatsara* which then began, would again be named Mahā-Āśvayuja; which shows that, by this system, there was a repetition of a *sauvatsara* at this period; but this does not affect the *sauvatsara* current on the given date. So far, therefore, as those dates are concerned, the correctness of the records might be proved by any of the three systems. The same, however, is not the case in respect of the present record. By the system of equal spaces, Jupiter's position, at his rising next before the given date, was in Śvāti; the *sauvatsara* which then began would be named Mahā-Chaitra; and the Mahā-Vaiśākha *sauvatsara* would not begin till Jupiter's rising next after the given date, when, by the same system, his position was in Anurādhā. Accordingly, the system of equal spaces could be applied to the present record, only with a running difference of two hundred and forty-three years between current Gupta and current Śaka years; which would be in contradiction with the fact that, to prove the *sauvatsara* of all the remaining records, it must be applied with the running difference of two hundred and forty-two years. It is evident, therefore, that, in dealing with these records, the system of equal spaces is not the correct one; and that we have to apply one or other of the systems of unequal spaces. This, however, is only natural; for they are both more ancient than the system of equal spaces; and, the older the system, the greater the certainty that it is the one in use in the Early Gupta period. Also, the Dēṇḍa inscription of king Bhūjādēva of Kamuj, dated Śaka-Saṅvat 784, indicates very plainly that one or other of the systems of unequal spaces, if not both of them, continued in use, in what had formed a part of the Early Gupta territory, down to at least the last half of the ninth century A.D. 10 Of the

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10 See page 23 f. above.

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8 I have not been able to obtain the original authority for the use of the prefix māhā (mahāt), 'great.' And it does not occur in connection with the two *sauvatsaras* mentioned in the Halēf grants of the Kadamba chieftain Mrīgāśavarman; viz. the Paṇḍha *sauvatsara*, in line 8 of the grant dated in his third year (ante, Vol. VII. p. 52), and the Vaiśākha *sauvatsara*, in line 19 of the grant dated in his eighth year (ante, Vol. VI. p. 34). I use the prefix, however, throughout, in accordance with the custom of the original records now under examination.
two systems of unequal spaces, whether we are to apply the Brahma-Siddhānta system, or the still more ancient Garga system, cannot at present be decided; since the only variation between them is in respect of the saṅvatsara following the saṅvatsara which was current on the given date of the present record.

The other point is, that, as the following saṅvatsara did not commence till Mārgaśīrṣa śukla 13 of Saka-SAṅvat 399, the Mahā-Vaiśākha saṅvatsara was still current on the given date, Kārttika śukla 3, in Śaka-SAṅvat 399, as well as in 398, which is the real equivalent for the Gupta year. So, also, it will be seen that, in the case of D., the Mahā-Āśvayuja saṅvatsara was still current on the given date, Chaitra śukla 13, in Śaka-SAṅvat 452, as well as in 451, which is the true equivalent for the Gupta year of that record. Consequently, these two dates, A. and D., might be used to support a running difference of two hundred and forty-three years between current Gupta and current Śaka years, as well as the true running difference of two hundred and forty-two years. But, apart from the fact that we have not obtained anything else to support such a result, there is no such alternative in respect of B. and C.; the saṅvatsaras of those records are proved only with the running difference of two hundred and forty-two years. All the four cases together, therefore, not only answer to, but also prove the running difference of two hundred and forty-two years between current Gupta and current Śaka years.

By the mean-sign system, the Mahā-Vaiśākha saṅvatsara did not commence till Vaiśākha śukla 5 of Śaka-SAṅvat 399 current, corresponding to Wednesday, the 14th April, A.D. 476; and consequently it was not current on the given date. The saṅvatsara then current was Mahā-Chaitra, which commenced on Jyēṣṭha kṛṣṇa 13 of Śaka-SAṅvat 398, corresponding to Saturday, the 19th April, A.D. 475.

B.—The Khōh Grant of the year 163.

The next inscription is the other Khōh

grant of the Mahāraja Hastin, Corp. Inscr. Indic. Vol. III. No. 22, page 100, in which the date (line 1 f.) is — tri-shaṭhy-uttarā-bda-śatē Gupta-nripa-rāja-bhaktau Mahā-Āśvayuja-saṅvatsara Chaitra-māsa-śukla-paksha-dvityyā-yan,—“in a century of years, increased by sixty-three; in the enjoyment of sovereignty by the Gupta kings; in the Mahā-Āśvayuja saṅvatsara; on the second lunar day of the bright fortnight of the month Chaitra.”

This gives us, for calculation, the Mahā-Āśvayuja saṅvatsara, as current on the second tithi or lunar day of the bright fortnight of the month Chaitra (March-April) in Gupta-SAṅvat 163 current. And, on the analogy of the Varāhā inscription of Valabhi-SAṅvat 945, this should be the case in Gupta-SAṅvat 163 + 242 = Śaka-SAṅvat 405 current; in which year the given tithi corresponds to Sunday, the 7th March, A.D. 482.

Mr. Sh. B. Dikshit finds (see the Table, Col. B.) that Jupiter's rising, next before the given date, took place on Vaiśākha kṛṣṇa 6 of the preceding year, Śaka-SAṅvat 404 current, corresponding to Sunday, the 5th April, A.D. 481; or, by the English calendar, on Monday, the 6th April. His longitude then was 4° 21'. By both the systems of unequal spaces, he was then in Aśvini; and the saṅvatsara which then began, must have been named Mahā-Āśvayuja. Jupiter's next following rising took place on Jyēṣṭha śukla 8 of Śaka-SAṅvat 405, corresponding to Wednesday, the 12th May, A.D. 482; or, by the English calendar, on Thursday, the 13th May. His longitude then was 40° 34'. By both the systems of unequal spaces, he was then in Rōhiṇī; and the saṅvatsara which then began, must have been named Mahā-Kārttika. Therefore, by both the systems of unequal spaces, with the running difference of two hundred and forty-two years between current Gupta and current Śaka years, the Mahā-Āśvayuja saṅvatsara was current on the given date. And the result gives Śaka-SAṅvat 405 current (A.D. 482-83), as the equivalent of the given current Gupta year.

13 These calculations are not absolutely accurate; but the margin is so wide that there is no necessity for exact precision in this case. If there should be any differences at all between Jupiter's longitudes as found by Mr. Sh. B. Dikshit, and as capable of being determined with exact precision, it will amount only to a few minutes of arc; and the actual risings of Jupiter could differ from what he gives, only by one or two days; with the result that Jupiter may have risen, in this instance, on Vaiśākha kṛṣṇa 5 or 7.

14 Also by the system of equal spaces; but see the remarks under A. above. This point need not be noted in the following instances.
In this instance, the given saṅvatsara was not current on the given date in either the preceding year, Śaka-Saṅvat 404, or the following year, Śaka-Saṅvat 406. The result, therefore, not only answers to, but also proves the running difference of two hundred and forty-two years between current Gupta and current Śaka years.

By the mean-sign system, the Mahā-Aśvayuja saṅvatsara commenced on Chaitra śukla 8 of Śaka-Saṅvat 404 current, corresponding to Tuesday, the 24th March, A.D. 481; and it was followed by Mahā-Kārtika on Chaitra śukla 15 of Śaka-Saṅvat 405, corresponding to Saturday, the 20th March, A.D. 482. Accordingly, by this system also the Mahā-Aśvayuja saṅvatsara was current on the given date.

C.—The Majhgawām Grant of the year 191.

The next inscription is the Majhgawām grant of the Mahārāja Hastin, Corp. Inscrip. Indic. Vol. III. No. 23, page 106, in which the date (line 1 f.) is — ēka-navaty-uttara-bda-ākāte Gupta-nṛjija-rājya-bhukta śrīmati pravardhamaṇa-Mahā-Chaitra-saṅvatsarā Māgha-māsa-bahula-paksha-tritiyāyām,— "in a century of years increased by ninety-one; in the enjoyment of sovereignty by the Gupta kings; in the prosperous augmenting Mahā-Chaitra saṅvatsara; on the third lunar day of the dark fortnight of the month Māgha." And at the end, in line 21, the date is repeated as — Māgha di 3 — "(the month) Māgha, the (civil) day 3."

This gives us, for calculation, the Mahā-Chaitra saṅvatsara, as current on the third tithi or lunar day of the dark fortnight of the month Māgha (January-February) in Gupta-Saṅvat 191 current. And, on the analogy of the Verawal inscription of Valabhi-Saṅvat 945, this should be the case in Gupta-Saṅvat 191 + 242 = Śaka-Saṅvat 433 current; in which year the given date corresponds to Monday, the 3rd January, A.D. 511.

Mr. Sh. B. Tikhsit finds (see the Table, Col. C.) that Jupiter’s rising, next before the given date, took place on Āsvina śukla 11 of the same year, Śaka-Saṅvat 433, corresponding to Wednesday, the 29th September, A.D. 510; or, by the English calendar, on Thursday, the 30th September. His longitude then was 177° 47'. By both the systems of unequal spaces, he was then in Chitrā; and the saṅvatsara which then began, must have been named Mahā-Chaitra. Jupiter’s next following rising took place on Mārgaśīrsha kṛishṇa 7 of Śaka-Saṅvat 434, corresponding to Saturday, the 29th October, A.D. 511; or, by the English calendar, on Sunday, the 30th October. His longitude then was 207° 41'. By both the systems of unequal spaces, he was then in Visākhā; and the saṅvatsara which then began, must have been named Mahā-Vaisākha. Therefore, by both the systems of unequal spaces, with the running difference of two hundred and forty-two years between current Gupta and current Śaka years, the Mahā-Chaitra saṅvatsara was current on the given date. And the result gives Śaka-Saṅvat 433 current (A.D. 510-11), as the equivalent of the given current Gupta year.

In this instance, again, as in B above, the given saṅvatsara was not current on the given date in either the preceding year, Śaka-Saṅvat 432, or the following year, Śaka-Saṅvat 434. Here again, therefore, the result not only answers to, but also proves the running difference of two hundred and forty-two years between current Gupta and current Śaka years.

By the mean-sign system, the Mahā-Chaitra saṅvatsara commenced on Mārgaśīrsha śukla 1 of Śaka-Saṅvat 433 current, corresponding to Thursday, the 18th November, A.D. 510; and it was followed by Mahā-Vaisākha on Mārgaśīrsha śukla 8 of Śaka-Saṅvat 434, corresponding to Monday, the 14th November, A.D. 511. Accordingly, by this system also the Mahā-Chaitra saṅvatsara was current on the given date.

D.—The Khōh grant of the year 209.

The next inscription is the Khōh grant of the Mahārāja Siṃkhasūba, Corp. Inscrip. Indic. Vol. III. No. 25, page 112, in which the date (line 1 f.) is — navottara-bda-sata-dvaya Gupta-nṛjijā-rājya bhuktum śrīmati pravardhamaṇa — vijaya-rājya Mahā-Aśvayuja-saṅvatsarā Chaitra-māsa-sūkla-paksha-trādyāyām.— "in two centuries of years increased by nine; in the enjoyment of sovereignty by the Gupta kings; in the glorious augmenting and victorious reign; in the Mahā-Aśvayuja saṅvatsara, on the thirteenth lunar day of the bright
fortnight of the month Chaitra." And at the end, in line 24, the date is repeated as—Chaitra di 20 7—"(the month) Chaitra, the (civil) day 20 (and 7)."

This gives us, for calculation, the Mahā-Āsvayuja saṁvatsara, as current on the thirteenth tithi or lunar day of the bright fortnight of Chaitra (March-April) in Gupta-Saṁvat 209 current. And, on the analogy of the Verāval inscription of Valabhi-Saṁvat 965, this should be the case in Gupta-Saṁvat 209 + 242 = Saṁvat 451 current; in which year the given tithi corresponds to Sunday, the 19th March, A.D. 528.

Mr. Sh. B. Dikshit finds (see the Table, Col. D.) that Jupiter’s rising, next before the given date, took place on Chaitra śūka 12 of the same year, Saṁvat 451, corresponding to Saturday, the 18th March, A.D. 528; or, by the English calendar, on Sunday, the 19th March; i.e. at the dawn immediately before the making of the grant.12 His longitude then was 34° 45’. By both the systems of unequal spaces, he was then in Rāva; and, the saṁvatsara which then began, must have been named Mahā-Āsvayuja. Jupiter’s next following rising took place on Jyēṣṭha śūka 3 of Saṁvat 452, corresponding to Thursday, the 26th April, A.D. 529; or, by the English calendar, on Friday, the 27th April. His longitude then was 24° 36’. By both the systems of unequal spaces, he was then in Kṛṣṭīkā; and the saṁvatsara which then began, must have been named Mahā-Kṛṣṭīkā. Therefore, by both the systems of unequal spaces, with the running difference of two hundred and forty-two years between current Gupta and current Saṁvat years, the Mahā-Āsvayuja Saṁvatsara was current on the given date. And the result gives Saṁvat 451 current (A.D. 528-29), as the equivalent of the given current Gupta year.

As a matter of fact, the Mahā-Āsvayuja saṁvatsara was still current on the given date, Chaitra śūka 13, in the following year, Saṁvat 452; as well as in Saṁvat 451, which is the real equivalent for the given Gupta year. Consequently, this record might be used to support a running difference of two hundred and forty-three years between current Gupta and current Saṁvat years, as well as the true running difference of two hundred and forty-two years. But this possibility has been disposed of in my remarks on the date of A. above.

By the mean-sign system, the Mahā-Āsvayuja saṁvatsara did not commence till Āsvina śūka 3 of Saṁvat 451 current, corresponding to Saturday, the 2nd September, A.D. 528; and consequently it was not current on the given date. The saṁvatsara then current was Mahā-Bhādrapada, which commenced on Bhādraśaka kṛṣṭiṣa 11 of Saṁvat 450, corresponding to Tuesday, the 7th September, A.D. 527.

E.—The Bhumāra Pillar Inscription.

The last inscription of this series is the Bhumāra pillar inscription of the Mahā-rājas Hastin and Sarvanātha, Corp. Inscr. Indic. Vol. III. No. 24, page 110; in which the date (line 7 ff.) is—Mahā-Maṅgha saṁvatsara Kārttika-māsa divasa 10. 9,—"in the Mahā-Maṅgha saṁvatsara; the month Kārttika; the (civil) day 10 (and) 9."

This gives us, for calculation, the Mahā-Maṅgha saṁvatsara, as current on the nineteenth civil day of the month Kārttika (October-November); but the current year of the Gupta era is not given. The only guide, therefore, in determining the approximate Gupta year, for which the calculations should be made, is the fact that this inscription shows that the Parivraja Mahārāja Hastin was, at the time of this record, contemporaneous with the Mahārāja Sarvanātha of Uchchakalpa. For the Mahārāja Hastin, we have the extreme recorded dates of Gupta-Saṁvat 156 and 191; while, for the Mahārāja Sarvanātha, we have similarly the dates of the years 193 and 214; and for his father, Jayanātha, the latest date of the year 177, all of which may have to be referred to the Gupta era. If so, the Mahā-Maṅgha saṁvatsara in question,—on the assumption that what should be its regular place in the series was not affected by any omissions and repetitions subsequent to the Mahā-Vaiśākhā saṁvatsara which was current on Kārttika śūka 3 in Gupta-Saṁvat 156,—must be found in or about Gupta-Saṁvat 189 or 201; with a preference

12 For this same reason, probably, the given date was specially selected for making the grant; since, the commemoration of a saṁvatsara is regarded by Hindus as a very auspicious occasion.
favour of the year 189, because of the early date of the year 156 for the Mahârâja Hastin.

For Gupta-Saivat 189 + 242 = Śaka-Saivat 431 current, the given date, viz. the nineteenth day of the month Kârttika, corresponds to Monday, the 13th October, A.D. 508. Mr. Sh. B. Dikshit finds (see the Table, Col. E 1) that Jupiter’s rising, next before the given date, took place on Śrâvaṇa śukla 15 of the same year, Śaka-Saivat 431, corresponding to Monday, the 28th July, A.D. 508; or, by the English calendar, on Tuesday, the 29th July. His longitude then was 117° 4’.

By both the systems of unequal spaces, he was then in Maghâ; and the saivatsara which then began, must have been named Mahâ-Mâgha. Jupiter’s next following rising took place on Āśvina krîṣṇa 13 of Śaka-Saivat 432, corresponding to Saturday, the 29th August, A.D. 509; or, by the English calendar, on Sunday, the 30th August. His longitude then was 147° 49’.

By both the systems of unequal spaces, he was then in Uttârâ-Phalguni; and the saivatsara which then began, must have been named Mahâ-Phâlagna. Therefore, by both the systems of unequal spaces, in Gupta-Saivat 189, with the running difference of two hundred and forty-two years between current Gupta and current Śaka years, the Mahâ-Mâgha saivatsara was current on the given date. And this result gives Śaka-Saivat 431 current (A.D. 508-509), as the equivalent of the possible current Gupta year.

Again, for Gupta-Saivat 201 + 242 = Śaka-Saivat 443 current, the given date, viz. the nineteenth day of the month Kârttika, corresponds to Friday, the 2nd October, A.D. 520. Here Mr. Sh. B. Dikshit finds (see the Table, Col. E 2) that Jupiter’s rising, next before the given date, took place on Bhâdrapada śukla 3 of the same year, Śaka-Saivat 443, corresponding to Sunday, the 2nd August, A.D. 520; or, by the English calendar, on Monday, the 3rd August. His longitude then was 121° 30’.

By both the systems of unequal spaces, he was then in Maghâ; and the saivatsara which then began, must have been named Mahâ-Mâgha. Jupiter’s next following rising took place on Āśvina krîṣṇa 1 of Śaka-Saivat 444, corresponding to Friday, the 3rd September, A.D. 521; or, by the English calendar, on Saturday, the 4th September. His longitude then was 152° 17’.

By both the systems of unequal spaces, he was then in Uttârâ-Phalguni; and the saivatsara which then began, must have been named Mahâ-Phâlagna. Therefore, by both the systems of unequal spaces, in Gupta-Saivat 201 also, with the running difference of two hundred and forty-two years between current Gupta and current Śaka years, the Mahâ-Mâgha saivatsara was current on the given date. And this result gives Śaka-Saivat 443 current (A.D. 520-21), as the equivalent of the possible current Gupta year.

The results for these two years, Gupta-Saivat 189 and 201, answer, as is required, to the running difference of two hundred and forty-two years between current Gupta and current Śaka years. But they do not, in themselves, prove it; for the reason that the current Gupta year itself is not mentioned in the record. The important point is, that in neither of these two cycles was the Mahâ-Mâgha saivatsara omitted.

If the dates in the grants of the Mahârâjas of Uchchakalpa are to be referred to the Kâla-churi era, then the Mahâ-Mâgha saivatsara of this record will be earlier by either one or two cycles than the first of the two years given above. Here, again, in respect of the actual epoch no absolute proof can be derived from this record; and the only important point is, to ascertain that the Mahâ-Mâgha saivatsara was not omitted in either of the two cycles in question. Mr. Sh. B. Dikshit finds that, in Gupta-Saivat 165 + 242 = Śaka-Saivat 407 current, Jupiter’s rising took place on Śrâvaṇa śukla 10, corresponding to Thursday, the 19th July, A.D. 484; or, by the English calendar, on Friday, the 20th July. His longitude then was 108° 19’.

By both the systems of unequal spaces, he was then in Āśvîśâ; and the saivatsara which then began, and which was current through the whole month of Kârttika in the same year, must have been named Mahâ-Mâgha. Again, in Gupta-Saivat 177 + 242 = Śaka-Saivat 419 current, Jupiter’s rising took place on Bhâdrapada krîṣṇa 13, corresponding to Wednesday, the 24th July.

† See note 1 above.
A.D. 496; or, by the English calendar, on Thursday, the 25th July. His longitude then was 112° 48'. By the Brahma-Siddhánta system of unequal spaces, he was then in Maghá, and by the Garga system, in Āśāśāh; and, by both systems, the saṅvatsara which then began, and which was current through the whole month of Kárttika in the same year, must have been named Mahá-Māgha. Therefore, by both the systems of unequal spaces, in Gupta-Saṅvatsarā 165 and 177 also, with the running difference of two hundred and forty-two years between current Gupta and current Śaka years, the Mahá-Māgha saṅvatsara was current on the given date, and was not omitted. And these results give either Śaka-Saṅvatsarā 407 current (A.D. 484-85) or 419 current (A.D. 496-97), as the equivalent of the possible current Gupta year.

By the mean-sign system, in Gupta-Saṅvatsarā 166 + 242 = Śaka-Saṅvatsarā 408 current, the Mahá-Māgha saṅvatsara commenced on Chaitra śūkla 5, corresponding to Thursday, the 7th March, A.D. 485; and it was current through the whole month of Kárttika in the same year; being followed by Mahá-Phālguna on Chaitra śūkla 12 of Śaka-Saṅvatsarā 409, corresponding to Monday, the 3rd March, A.D. 486. Again, in Gupta-Saṅvatsarā 177 + 242 = Śaka-Saṅvatsarā 419 current, the Mahá-Māgha saṅvatsara commenced on Phālguna krishṇa 12, corresponding to Thursday, the 16th January, A.D. 497; and it was current through the whole month of Kárttika in Gupta-Saṅvatsarā 178; being followed by Mahá-Phālguna on Phālguna śūkla 4 of Śaka-Saṅvatsarā 420, corresponding to Monday, the 12th January, A.D. 498. Again, in Gupta-Saṅvatsarā 189 + 242 = Śaka-Saṅvatsarā 431 current, the Mahá-Māgha saṅvatsara commenced on Pausha kṛṣṇa 3, corresponding to Wednesday, the 26th November, A.D. 508; and it was current through the whole month of Kárttika in Gupta-Saṅvatsarā 190; being followed by Mahá-Phālguna on Pausha kṛṣṇa 9 of Śaka-Saṅvatsarā 432, corresponding to Sunday, the 22nd November, A.D. 509. And thus, by this system also, in Gupta-Saṅvatsarā 186, 178, and 190, the Mahá-Māgha saṅvatsara was current on the given date. But this was not the case in the next cycle. In Gupta-Saṅvatsarā 201 + 242 = Śaka-Saṅvatsarā 443 current, the Mahá-Māgha saṅvatsara commenced on Kárttika śūkla 9, corresponding to Tuesday, the 6th October, A.D. 520, and falling four, five, or six days after the nineteenth day of the month; and it was followed by Mahá-Phālguna on Kárttika kṛṣṇa 1 of Śaka-Saṅvatsarā 444, corresponding to Saturday; the 2nd October, A.D. 521, and falling seventeen, eighteen, or nineteen days before the nineteenth day of the month. And thus, though the given saṅvatsara was not omitted, the given day did not fall within the limits of its duration.

WEBER'S SACRED LITERATURE OF THE JAINS.

TRANSLATED BY DR. HERBERT WEIR SMYTH.

(Continued from p. 292).

For the present at least it is quite uncertain how we are to understand this peculiar notice, or how we are to bring it into harmony with the position, which Vajra holds elsewhere in tradition, that is, as the last daśāpūrva—knower of (merely) ten pūrvas. After him there were only naśāpūrvas, and the knowledge of the pūrvas gradually decreased until it finally ceased altogether (p. 213). We can determine at least this with certainty—that a thorough-going difference existed between aṅga twelve and the

other eleven. The hostility of the great Bhadrabāhu, who is held to be the real representative of the drishtīdā, to the sacred saṅgha is apparent from other sources and from the late notice in Hēmāchandra's pariśīla pāravane (above, p. 214). The reason for this enmity can be clearly discerned in the statements, which have been preserved in reference to the twelfth aṅga. It may be permitted here to refer to the discussion of the same later on. According to these statements, the first two of the five

this is in no greater agreement with the information derived from the Siddhānta itself (see above, p. 215) than with the above statements in reference to Vajra's activity in the case of the dīśāvāda. See above, page 215.
parts in which it was presumably divided, dealt with the views (drishti) of the heterodox sects, the dyasa and the tadvata besides treating of other subjects [248]. The name drishtivada may perhaps be explained by reference to this fact. The third part consisted of the so-called 14 purvas, the contents of which was probably not in entire harmony with the sect of the Sc德拉baras, which had gradually arrogated to itself the position of being the representative of orthodoxy. This then is perhaps the reason for the loss of the twelfth aṅgam.

The remaining extant eleven aṅgas by no means represent a unit, since they fall into several groups, the single members of which are marked by certain formal peculiarities, which prove a connection closer in the case of some than in that of others.

The first of these groups is formed by aṅgas 1—4, all the larger divisions of which close with the words ti bēmi, iti baveini; and according to the scholia, Sudharman, Mahāvira’s pupil, is regarded as the one who gives utterance to this formula. The prose portions begin with the formula: suyaṁ me dūsanath ālamā bhaogayāvām abhāgyam. “I have heard, O long-lived one! Thus has that saint spoken.” Sudharman is the speaker, according to the Scholia. In this formula, which characterizes the contents as the oral transmission of the utterances of Mahāvira, a scholar of Sudharman, i.e. Jambu, is the one addressed. This introductory formula is found also in other texts of the Siddhaṇta at the commencement of the prose sections; and with this the closing formula ti bēmi is generally connected. From this it appears to me that an immediate connection of these prose portions with the first four aṅgas is here eo ipso indicated, in so far as in all probability [249] all bear the traces of a unifying hand. In regard to the especial connection of aṅgas 1—3 with one another, this fact deserves mention: that in aṅga 4, 57 they appear as a group which belongs by itself or as the “three ganipidagas” (ćhārya-ya sarvasva-bhāsyamāni) karī tēvaḥ. Aṅga 4 is nothing but a continuation of aṅga 3, and in the very beginning is styled to be “the fourth aṅga.”

A second group is formed by aṅgas 6—9 and

11, which in a common introductory formula refer on the one hand their contents directly to Suhamma or Jambu, and on the other are shown by other statements to have been united by one hand. See the remarks at the commencement of aṅga 6.

Aṅgas 7—9 appear to be connected by an especially close bond.

The fifth aṅga and the existing redaction of aṅga 10 are not embraced in either of these groups. Aṅga 10 belonged originally to the second group. It exists in a form demonstrably later and is composed in another dialect (Nom. Sing. in 0). The fifth aṅga takes a separate position, and begins in a very peculiar way. It possesses however one point of similarity with aṅga 6: ċkrikās, which state the contents of what is to follow, are found with each larger section. These sections do not have in the case of this aṅga the title ojhayya, but are called sāya, sātā. The title of the aṅga itself has some connection with the titles of upaṅgas 5—7, and this fact makes plain that there is an inner connection between them.

That the reader may obtain a ready survey, I add the statements in reference to the extent of each of the aṅgas which are found [250] in the MSS. of each at the end. As stated above, page 231, the texts are divided into hundreds and thousands of granthas, i.e. groups of 32 syllables, and these are marked at the proper place (either by thousands or by five hundreds) or the collective number of the granthas is stated at the end. As a matter of fact the statements of the MSS. in reference to the number vary very frequently; which is to be referred to the greater or smaller number of omissions which have been made therein. We shall refer further on, under aṅga 4, to this matter again. The following are the numbers in question:

1.2554 gr., —2.2300, —3.3750,—4.1667, —
5.15750, —6.5375, —7.812, —8.890,—9.192, —
10.1300,—11.1316.

In the case of several aṅgas at the close there are special statements in reference to the number of days necessary for the study or for the recitation of the aṅga—see Bhagav. 1, 377-8,—

the 14 pūrvas—(śikṣasāti, v. 37).

22 This is explained in very different ways.
a subject which is treated of at great length in the 
Vidhiprapā. I now proceed to an examination of each of the āṅga texts.

I. The first āṅga has, in its existing form, the name āyāra, dharma, or āyārapakṣapam and treats [251] in two sukkhakanidas, ērutasankhandhas of the manner of life of a bhikkhu. The first ērutasak., bhākhrachārāṇi, brahmacharyāṇi, contains at present eight ājīvanayas with 44 uddesgasas, the second: 16 ajjh. and 34 udd. It is however definitely stated that the first ērutasak. contained previously not 8 but 9 ajjh. and the whole āṅga consequently not 24, but 25 ajjh. and not 78, but 85 udd, Cf. especially in āṅga 4 § 25 and § 28 and the detailed rěsumé of the 12 āṅga found both there and in the Nandā. In § 25, where the titles of the 25 ajjh. are enumerated one by one, we find the name mahāparināma, belonging to this ajjh. which is no longer extant, placed in the ninth place between 1,8 and 2,1; and the same circumstance may be noticed as occurring in Āvāśya 16, 113 fg. More exact information is found in the Vidhiprapā according to Āvāśya 8, 46-49. Here we find that Vajrasvāmin (presumably 584 Vīra) extracted from it the ājājasangamini vijjā; and from the fact that it contained exaggerations (śādityattatēna; according to Leumann, on account of the excellence of this extract) it was lost, or rather continued to exist only in the niyuttī. It was the opinion of Śilāṅka (A.D. 876) that it occupied not the ninth but the eighth place. This latter statement is incorrect, for [252] in the existing commentary of Śilāṅka the mahāparināma, which at and probably long before his time had been lost, is placed, not between 1, 7 and 1, 8, but between 1, 6 and 1, 7—that is to say in the seventh place. In the Vidhiprapā there is probably a confusion with Abhayadēva, in whose commentary on āṅga 4—as also in the anonymous comm. on the Nandā—the mahāparināma keeps, it is true, the eighth place. The niyuttī then, which manifestly was still extant at the time of Jinaprābha, is probably identical with that niyuttī, of which the author of the Āvāśya, niyuttī declares (2, 5) that he is himself the composer; and which served especially as a basis to the comm. of Śilāṅka. The scholia everywhere preserve a knowledge of the ninth chapter. Furthermore the comm. on chādās. 1 in its opening still mentions nine bhākhrachārāṇi.

The titles of the 8 extant ajjh. of the first ērutasakhandha (V = Vidhiprapā) are:
1. satthaparināma, saṣṭaparinijāna, with 7 udd.;
2. in udd. 1 jīvatsaṅga, jīvāstiṣṭvaṁ sāmānyena, in 2—7 viśeṣaḥ prthivīdevayogastaveṇa. There are many references of a polemical nature to the Sākyas, or Baññhas, in 2, 3. according to the scholiast.
3. lōgavijaya, lōkāsāravijaya, with 6 udd.; mokṣhāvāpithahūtahāna chārītaramaṇa.
4. siśaśāntiaj (śuti), sīlahūtayam, with 4 udd.; pratiśāmanulōmapakhirabābāhaḥ.
5. sammaṭṭha, [253] samayaktvam, with 4 udd.; samayavādabhiḥbhūtārthika matavichārānaḥ.
6. lōgāsāra, in āṅga 4, 25, in Āvāśya. niyij, in the schol. on Nandā.: aubabā, according to the words of the commencement, with 6 udd.; sānyamaḥ mokṣhaḥ cha, munibhāvaḥ.
7. dhūyaḥ (dhūyaṁ V), dhāta, with 5 udd.; nījakarmāsārīprakaraṇa .. v īd āh aṁ nā nā nā niḥsaṅgaṇātā.
8. viṁśāva, viṁśkāsa (?), with 8 udd.; samayag nīryāpānaḥ.

8. dhānapuṣyān (uva² V), upadhānāsrutam,

65 The names of the single ājīvanaṇa and the number of the uddēsagas etc. are specifically enumerated in the Vidhiprapā: āṅga 1; 50 days; 2, 30; 3, 18; 4, 18; 5, 77 (a second statement, it seems, allot three months 6 days) 33; 7, 14; 8, 12; 9, 7; 10, 14; 11, 24. In like manner the author examines and states the number of days necessary for certain work; ājāvaṇa (8 days), dhāvāga (15) uṣṭaraṇa (39), nishka (10), daśakappamvakāra (20 or 22), mahākṛṣna (45). A recapitulation "in 68 āyāsās" concludes the discussion: jāvagvānaḥ nāna payyaraṇam.

66 See above, p. 223, 224; this is to be studied in the third year after the ādīkha.

67 Teaching sacred observances after the practice of Vaisāhika (!) and other saints, Wilson, Sel. works 1, 254 ed. B. Foss.

68 According to Malayaṅgir and the Prākṛti authority quoted by him (Nandā. p. 425) between 1, 7 and 1, 8 (ōdānā).—I.

69 From this it seems as if its contents touched upon the subject of magic. Was this the cause of its removal? cf. the analogous case in āṅga 10. According to the Granadhārādhibasota V. 29 (see p. 371) Vajraṇav. borrowed the dāyā, vijjā from namahājānaṇa purva rather than from the ninth ajjh. of the first ērutasak. of the āṅga 1.

70 nava-mahājayaṇa vāche sākṣhināṁ, taṁ cha mahāpaśaṇ ṛmnā itī kho ājājāsagamini vijjā Vairasmin auddhāryaṁ, eti tī sāsāvaṭṭaṁ vāche sākṣhināṁ niyuttimānī dihitā; Śilāṅkāyāsāṃsāpa puna ēsā māyā, vācakhaṇḍayaṇaṇa sattamā, uṇahāsāyanām navamānaṁ ti.

71 It would suit if Malayaṅgir were concerned, see the last asterisk note.—I.

72 In the opening of ājīvanaṇa 7 we read:—adhaṅna saptāmādhyayanaṁ mahāpariṇākhyayaḥ vāsaras, taḥ cha vivaḥchinnam āhī śāntiśarāvadāḥ prajāḥ āhīmānāṁ vācakhaṇḍaḥ vāchvāb.
with 4 udd., treats of Vira Vardhamānasvāmin who himself practised the course enjoined in ājīh. 1 to 7.

This first ārta is exceedingly difficult to comprehend and belongs, as Jacobi, from whom we expect an edition, informs me in a letter of March 14th 1880, "without doubt to the oldest portions of Jaina literature." Even the commentaries very often do not understand the text, since from pure force of explanation they fail at reaching any explanation of the sense. The restorations, which must frequently be made, are in fact prodigious. This shows that we have to do with the method of explanation found in the later Brahmanical sūtras (treating of ritual, grammar, philosophy), the difficulty of which is here increased from the fact that Prākrit is the language used, and that the MSS. are uncertain. The second ārta is characterized by the epithet attached to it: āgr, ārta (āgr having the meaning of "later" here) as a species of supplement to the first. This is in harmony with the peculiar designation of the four sections of which it consists according to the scholia, viz.: ājīh., i.e. "pudding," "excrescence," used figuratively here: uth̄aśhānuddānī ājīh. The first is formed by ājīh. 1–7, the second by ājīh. 8–14, the third by ājīh. 15, the fourth by ājīh. 16. The scholia state that a fifth ājīh belongs to these, which is called nīśhādhyaṇam, being no longer reckoned as a part of the āchāra but placed among the chhedaśuta as the first of them. It belonged however to the āchāra at the period of ānāga 4, 25, where the nīśhājhyayam is expressly designated as "25th ājīh.," of the āchāra—i.e. as the last of the 25 ājīh. enumerated there. The impression is made upon us as if this ājīh. alone was called ājīh. The āchāra is there expressly designated as sāchūlīyā, but

in §57, where only 24 ājīh. are ascribed to it, the three ānāgas (1–3) which are there treated of, are designated as āvadānīyavanī; a statement, which as far as I can see, is to be explained with tolerable certainty only in the above way. Also [255] at the time of the āvadi, niyā, 16, 114, the niśhājhyā was still regarded as a part of the āchāra, and in fact plays a greater rôle there than in ānāga 4, 25. It is counted as having 3 ājīh. so that not 25 but 28 ājīh. enumerated there. Even the Viśhīpī ṛādī still designates the niśhājnīhyayam as the pañcāmasī chūlī of the second ārta.

It consists manifestly of different constituent parts, which originally existed independently of each other, but at a later period were brought into conjunction. They begin almost always with the same formula: sē bhikkhu vā bhikkhu vā abhikkhū. . .

In the Nandī, the ānāgāchūlīya is expressly enumerated among the anaśayapravīttha texts. This is not in harmony with the position of our āchāra either at §§ 25, 57, 85 of ānāga 4 nor with the detailed treatment of the 12 ānāgas in ānāga 4 nor in the Nandī itself, since there the second ārta, with its āchāra is invariably regarded as a part of ānāga 1. In ānāga 3, 10 the ānāgāchūlīya is mentioned as third ājhyayamam of the sākhēvīya dasāma. Consequently reference is made to a text entirely different from these āchāra.

The 7 adhyayas of the first ājīh have the following titles:

1. piṇḍasāṇā, piṇḍaśaṇā, with 11 udd.—"collection of the necessities of life" (see Dasavatā 5) or "rules for eating."
2. sājīh, sājīh with 3 udd., "conch."
3. śrīyā, [256] śrīyā, with 3 udd., "conduct of the krama when he goes out piṇḍa-vasatyartham."
4. bhāsaśaśījyā, bhāsaśaśījyā with 2 udd., "what he has to say and what not to say.

7, ājīh., otherwise there would be in all 26 and not 25 ājīh.; as a matter of fact 20 names are adduced, mahāpiṇḍa in the ninth place. Perhaps sajīhīryā is counted as but one ājhyayana.

18 Abhyās, it must be confessed, understood as āchārāchūlīya: sarvādikṣaṇa, añāhyavānā, añāhyavān āhāryam, niśhādhyaṇam prasthānānātāvatvāhā āhāryam (i); the latter statement is however in too direct contrast to § 25.

. . . bhāvyavānimuttu || 118 || ughāyam uguhāyam śrīvaśīvāvānā śrīvaśīvāvānā śrīvaśīvāvānā śrīvaśīvāvānā vā || 114. Here we find the correct number of adhyayanas for both ārta; for śrīv. 1, 9, for śrīv. 2, 10.
5. vatkhasana, vastraishana, with 2 utes, vastra-grahapavadih.
6. padasana, patraishana, with 2 utes, "vessel for the pinna."
7. uggapaapadin, avagrahapratin, with 2 utes, on possession in general.

The second chhda likewise embraces seven adhyayas, each of which has only one ute, whereas its peculiar name: sattika, satikka, explained by saptakakas. They existed in conjunction with one another originally, and formed a whole before they were placed here. Their names are:
8. thasasti, satyastikka, etrahnasaptakakak.
9. niishithav, niishithik (also niishha); begins: se bh, va bh, va abhikahkhi niishithyam gamaand.
Very brief.
10. ushahsasparasana (Cprasaraavana).
11. suddhastikka, sakdha.
12. dawatan, dariana; rivesastikka, satyam.
13. Without any specific title, accord. to V. parakirikayastikka, ravidvashotpathithi, tapatirasadh.
14. Without any specific title (saptamah saptaka), accord. to V. annamukiriyasaastikka; anyonayakriya niishdhayate.

Since it appears that here in the second (ninth) ajjh, the same subject is briefly treated of as in the fifth chhda, see page 254, [257] the latter must be regarded as an amplification. The constant explanation of the word is deserving of special mention: niishha, niishhyam explained by niishtha (niishha), niishthik. From this one might readily be led to assume that by this explanation the subject was intended; and the introductory words (see above) are capable of being so explained. According to the scholiast, however, the contents appear to be of a different nature: tasya uddhahyabhaam (as it is described in ajjh. 8) yad videsyam yac cha na videsyam. The use of these two words in other passages, especially in the Arathy, Nijj, and the contents of the first chhda, svitra itself which bears this name (see later on), point rather to niishtha than to niishha. In the traditional conception as niishha we have to deal with a direct misunderstanding, which is without prejudice to the remaining points of identity between niishha and niishtha.

The third chhda, bhavaajjhavanam V. with but one ute., has reference to the observance of each of the 5 bhavan, as conditions of the five mahavatas; and, as an introduction, gives the legends of the birth etc. of their teacher Mahavira.

The fourth chhda, vimsati, also having but one ute., consists of only eleven jayati-verses.

The table of contents of aonya 1, found in aonya 4, and in the Nandi is as follows: se am taam an ajar? ajar naam sannayaam nigranthayaam ajaragayyati" vinaya-vagayaththama" gamaand-chhakana-pamaanaj-jagaunjanam-balihamsmiti-guttii saayoy"vahi"bhatta-paana-ugamama-uppaayamsaasai-visi-ouddhaasuddha-gahaana" vany.secondam-tavosvaham-supasamatham ahyaa[258]; sa samasaai pamaahavih pannate: tam jahe: nayaayar damaanajayar charattiyayar tavayaayar viriyayaayar. From this we derive but little information concerning details or for the grouping of the contents. Following upon the table of contents are statements in reference to the division into 2 savyakka, 25 ajjh, etc.; this is also the case with the following aonyas.

I have before me a commentary on aonya 1, which was probably composed Saka 798, A.D. 876, and which at the end of the first part is designated as Nirvityakahsaar Salayaaharya. Tattvabhikayaparanamaa Vahirasahusaharya krita; at the end of the second part as dcharya Silaahkavinchat. This commentary is also a commentary on a Praakrik niirvukt, composed in the dary measure.

In the opening the author refers to other works and to a stasaparajnadivaraanaa Gandhahastikritam, the sanas of which he claims to

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11 According to Z. D. M. G. 33, 478, it was composed Sambhat 551; but see KL 247b, where it is noted that the verse, which contains the date is added after the "colophon of the M." and consequently of no great weight in all probability. It is as follows: Sakavrishey krita (†8.) asvatnasaatate slave sankaraasakravyaayiyati th yatahaah, vratii.
12 saayam apahiti.
13 saayyatinu udgamanaliv-suddhyam uddhaamam udhahnah cha grahaanam.
have excerpted. He states furthermore⁶⁰ that the arhadvachananīyoga⁶¹ is divided into four groups: dharmakāsthanīyoga utterādhivayana- dikā, gaṇitānityogaḥ sāryaparṇānyayadikā, dravyānityogaḥ pārvāy sammatyadikā;⁸ cha, charitrakaraṇānyogaḥ chā, charādikāḥ;⁸⁰ the last is pradhānatamaḥ, śāśāḥsam tadarthātāv. These statements are all essentials a reproduction [259] of those in Av. nī. 8, 54 where utterādhy. is represented by isibhāsīyūn, which the commentator however explains by uttāra; see on anīga 4, 44.

II. The second anīga, sūrayaṇa, sūtrakṛita, destined for the fourth year of study, see p. 223f, likewise treats in two śrutasankalpas (of which the first is composed in śālokā and other metres,⁶⁸ the second in prose with the exception of a small portion: anīga 5, 6) of the śāṅkha-chāra, the right course of action; and is at the same time chiefly polymorph in character.⁶⁹ According to anīga 4 and Nandi,⁶⁸ 363 heterodox opinions annađītiyiya (anīga 4, pānaṇgyi N) are here combated; viz.: those of 180 kriyāvā, kriyāvā, 84 akriyāvā, akriyāvādīn, 67 an-nāyāvā, an-nāyāvā, 32 vepalvā, veṇayāka.⁷⁰ In consequence of this the commentary frequently cites the names of Chārvāka, Śākya, Baudhā, Sāṅkhyā, Vaiśeṣika, as those who are to be understood by the ṇād cited in the text as opponents. These are also referred to in the texts as jānāya, explained in the comm. by paśitamāyā Vauḍāhāk. But as the root jnā is elsewhere used by the Jains chiefly in a good sense,⁸ I should at least give expression to the conjecture that by these jānāya the Vaidēha king Janaka was meant,⁸⁰ [260] concerning whom and his guru Yājñavalkya all sorts of statements are preserved in the legends of the twelfth book of the Mahā Bhārata, representing either the king or both the king and his guru as having affiliations with Buddhism. See Ind. Stud. 1, 482.¹⁰ Jacobi, whom I consulted in the matter, proposed (April 6th, 1880) that yānaka (cf. hānaya, mahānaya) might be thought of in connection with jānāya.

The titles of the 23 ajñayavyas of the śūtrakṛita are enumerated in the fourth anīga § 28 (= 8) in their present order; also in Āvāyi. 16, where, however, the sixteen anīgā of the first śrutasankalpa are apparently placed after the seven anīgā of the second śrūt. In v. 65, 66 in the first place the first sixteen are enumerated by themselves and in v. 102 the seven others by themselves; but after sālivānum—the last one—we read sūlasāvin cha tāvēvān. It is, to be sure, not impossible that these words sūlasāvin cha are a mere reference to the earlier enumeration in v. 65, 66; but, at any rate, we should have expected that this reference would occur before the first of these seven names, and not after the seventh. Also in the Viśhupāpā (= V), the names are singly enumerated; they are:

a. First śrutasankalpa.
1. samaya, with 4 udd., 89 vv.; bhūtaśād-dinatamā nirñākiyāv; — udd. 1 closes:

Another explanation of the term jānāya applied to the Buddhā may perhaps claim preference when the one ventured in the text by Prof. Weber. We know that the founders of religious systems in India as well as elsewhere were as a rule called by epitheta orrenuata (such as buddha jīva māhāvīra, &c. &c.). Two of these epitheta as applied to Śākyamuni in fact to the Buddhās in general in Buddhist texts are janānā and priyechchhaka i.e. "knower" and "asker" (see for instance Divesāvānaka, ed. Cowell and Neil, pp. 194 & 299; by the editors rendered by "general interrogator"!!). Most probably those two epitheta refer to the suppression prevailing not only Buthistic but also Jain texts that the founder of the religion knew everything, but nevertheless, when conversing with any one, as he asked if he knew not. Now it might well be that the Jain author of the above metrical passage of anīga 2 chose in metre—as he would perhaps not have done in prose—a term not very common but still perfectly clear to his contemporaries for referring to his adversaries of Bahddhā’s party, the terms janaka and priyechchhaka being not found (as others are e.g. buddha jīna &c.) with reference to Māhāvīra in either of the two literatures, of Buddhās and Jains. — L.¹⁰³ The legend of the six false teachers found in the Buddhist texts, (see my Vorles. üb. dem Ind. L.-G. 304 (240, 1) Burnouf, Lotus, p. 485, Weber’s Ind. Streifen, 3 564), is told of Janaka and Yājñavalkya. For the peculiar use of the word Viddha or vidda among the Jains (see page 261n.) the reader is referred to Bhīṣaev. 2, 594, and to my treatise on the Śatr. Māhā. p. 20.
which is a proof of the antiquity of the text—
the scholiast mentions the various reading:
je viññā (vidus), yo vidvān. The latter is
probably an intentional change of a secondary
nature or perhaps a removal of the original.
At the conclusion of udd. 3, which is com-
piled in prose, we read:—evam sē udāhu aputtaramāgi aputtarādanaṃ aputtarādanaaṃ udāhu
dhārā arahā Nāyaputtai bhagavān Vēsāli
viyāhie (vyākhyāvān) tti bémi. The scholiast
illustrates Jñānaputra strangely enough by
Vardhamānavaṃi Rishabhavasmī vā and
explains Vēsāli in the first case (i.e. when Jñā-
aputra means Vardham) by Viṣṇū-nāgāryām,
in the second (i.e. when Jñātop. means Rish.)
by viśālikah (viśālakulūlobhavaṇattvād). In any
case this epithet, which is probably a nominative,
is of extreme interest in this connection.
Abhayadēva, too, [263] on Bhag. 2, 1, 12, 2
explains Viṣṇū by Mahāvīra and in fact as
a metronymic (!!): Viśālā Mahāvīrajanan.
The Viṣṇū-saṃyoga appear elsewhere in the
Jaina legends, but—and herein is to be found
a divergence from the Buddhist legend—in
a favourable light; see Bhagav. 2, 197, 249; 1, 440.
3. uvasaggarāpārinnā, upasargaparījāna with 4
udd., 83 vv.; pratikulāḥ and anukulāḥ upasa-
gāb, tais chā 'dhvātmaṃ visbhadāha.
4. itthiparinnā, tilpaś V, striparījāna, with 2
udd., 53 vv.; striparīshāh jocā; conclusion
in prose: ichchēv evam āhu sē Vīrē dhuyara... 
tti bémi.
5. naramvivihatti, niraya V, naramavibhakti
with 2 udd., 52 vv.; striṣatgusya naramapadak
tatra cha yuddhīṣy vedanāh. "I asked the
kāvadā māhaṭi"—thus the author, according
to the scholiast: Sadharmavasmī, begins
his recital. "Thus questioned by me, Kāsavē
dvapannā (dēnprajñā) i.e. Vīra, spoke."
6. Viratthā, Mahāvīrastava, with 29 vv.; it
begins: "The samaṃs and māhāraṃ, the āgarins
and the parśattiyas (Śākyādaya) asked about
the doctrine and life (nāgaṇ, dānasaṃ, śilaṇ) of
the Nālā." (To be continued.)

101 According to the legend Vīra first descended into the
womb of the Brāhmaṇi Devadāsā, wife of the Brāhma-
nān Uṣabhadāta (Kūlābhadāta), in Kundagāma: thence
into the womb of the brāhmi Śīla (Kūlābhadāta), of the race of the
brāhmi called Nāya, in the same plane; Vīra is there-
fore called their son. Cf. also (see page 285) the state-
ments of Abhayadēva: Viṣṇu Mahāvīrājanan! He is
designated both as Nāya Nāyaputtai Nāyakulahadhē and

102 With inorganic t: vētālamaggam agā at the con-
cclusion of udd. 1 is explained by karmanām vasarbrikām
viddārpaṇamānām pāram. "exploitation in the name of the
davān" is explained quite differently.
103 The derivation from vētāla (Ind. Stud. 8, 165, 178)
would then be overturned.
104 Buddha seems to have made use of this metre, since
it is used in the Dhammapada, etc.
No. XXVI.—The Reign of Lakshmi.

Far from any city, in a retired and unfrequented wood, there lived a hermit who had long taken to a retired life. Little occupation had he, except meditation and contemplation.

One day the Goddess of Prosperity, Lakshmi, stood before him and said, "Holy Sir, I have come to reign in you."

"Who are you?" said the sage.

"Lakshmi," said the goddess.

"Of what use are you to me, who have renounced the world?" asked the sage.

"I must abide with you for some time. It is so written in your destiny. Therefore accept me," spoke the goddess.

"If so," said the sage, "as you came to me after giving me intimation of your visit, you ought to inform me before you leave me, when the term of your reign over my destiny is closed."

"Agreed," said the Goddess of Prosperity, and remained within the sage.

The holy hermit being thus assured that the reign of prosperity had commenced in him, proceeded to test the truth of the statement of the goddess. He at once went to the town near which he lived, and, advancing to the assembly in which the king was sitting with his ministers and other officers of state, lifted up his right leg and kicked the monarch on the head.

"Cut down that impertinent wretch," said many voices, but at the same moment from under the fallen crown a venomous serpent with its hood spread was discovered. It was Lakshmi herself, for she had appeared there in that form to save the sage. And as soon as this great wonder was discovered, every one in the hall exclaimed, "This is a great sage who knows the secret of the Three Ages (Prakritiśaśa), and perceiving that a serpent was lying concealed in the king's crown he kicked it down."

The king, too, was extremely delighted at this saving of his life, and at once gave the sage the post of the prime minister with full powers; while our hero, on his part, owing to Lakshmi continuing her reign in him, discharged his duties most satisfactorily. After two years the sage again wished to know whether Lakshmi still continued in him, and to test her work, notwithstanding her promise that she would inform him before she left him. So on one occasion at midnight he entered the king's harem. As he was prime minister, the guards, though in their proper places, did not dare to prevent him, and without any hindrance he went into the chamber where the monarch was sleeping with his queen. He laid hold of both of them and proceeded to drag them, while yet asleep, out of their room. Of course they awoke and were highly annoyed at this impertinence; but were unable to extricate themselves from his grasp. However, what was their wonder when the roof of the chamber in which they had been sleeping suddenly fell in. Every one praised once more the sage minister, as one who knew the secret of the Three Ages. After this occurrence, the king reposed the greatest confidence in his minister, and so did every one in the State.

A year after this second test of the presence of Lakshmi in him the minister started with the king on a hunting expedition. The party was very large and the chase occupied a long time. Towards the end of the chase a stag suddenly appeared to the king and his favourite minister and drew them away from the party. Long did the king and minister pursue it, but found themselves unable to overtake it. Looking back they found themselves separated from their party and alone in the thick jungle. The lord of day was just over their heads, and darting his rays fiercely. The king was utterly worn out and proposed to the minister that it would be better for both of them to give up their quarry to rest a while before they returned to their followers; and the minister agreed to his master's wishes. So they both got down from their steeds and leaving the animals free to find grass and water sat down under the shade of a big banyan tree. Close by, there was a clear rivulet at which they quenched their thirst, and the king then prepared to go to sleep, asking the minister to sit with his legs folded, so that he might place his head on his right thigh and sleep comfortably. While the king was thus snoring away the day at ease, a great garuda,
the king of birds, perched upon a bough of
the tree exactly over the king's head and fell
to praying upon a venemous serpent which it
had brought from a great ant-hill. A drop of
poison from the serpent dropped on the king's
throat and our hero the minister perceived it.
Thinking that the poison might cause the
king's death if it found its way inside the body
through the pores of the skin, he took out a
small knife which he had with him to gently
remove the fatal drop. Just at this moment
the goddess Lakshmi, true to her promise,
stood before him and asked his permission to
go. He permitted her to do so and placed the
knife on the king's throat. The king suddenly
awoke and finding the minister with a knife
at his throat upbraided him with treachery.

"If I had thoughts of killing you, my lord,
I could have done it long ago. Look at the
king of birds up above you, and also look at
the serpent he is feasting upon. A drop of
poison fell from the mouth of that deadly
reptile on your Majesty's throat and for trying
to remove it, I am abused. But there is no
use in my remaining any longer with you."
Thus spoke the minister and explained to the
king how up to that moment Lakshmi had
reigned in him. Continued he, "As the god-
ess Lakshmi remained in me up till now even my impertinent acts have met with your
Majesty's approval. When I kicked at your
lordship's crown and when I dragged your
Majesty and your queen out of your bed-cham-
ber, Lakshmi it was that saved me by taking
the shape of a serpent from under your crown,
and by pulling down the roof of the room.
Now that she has abandoned me but a moment
ago even a good act has been misunderstood."

He then requested the king to allow him to
continue in the forest to perform penance.
But the king, not to be out-done in liberality,
gave him again the minister's place. Our hero,
however, fearing that after Lakshmi had left
him it would be unwise to accept any appoint-
ment, preferred to remain in the woods.

The moral drawn by natives of South India
from this story is, that only as long as the
Goddess of Prosperity reigns in us we can
expect to be in good circumstances.

No. XXVII.—It is for the best.

In a certain country there lived a king who
had a peculiar minister, and whatever the king
consulted him about he always replied, "It is
for the best." In a word, this minister was
what would now be called an optimist.

One day the king lost one of his fingers in
handling a sharp instrument, and, sending for
the minister, he showed him his hand and said,
sorrowfully, "See what a calamity has hap-
pened to me; I have lost one of my fingers."

The minister coolly replied, "It is for the
best."

Greatly was the monarch enraged. "Vile
wretch! Do you dare to say that the loss of
a finger is for the best? You shall see the
result of your stupid motto. You shall live in
prison for a score of years," said the king.

But again the minister merely replied, "It
is for the best."

"What impertinence!" said the king, and
sent the minister off to jail; and so our hero
had to undergo imprisonment.

The day after this affair the king went to
the forest to hunt, to which amusement he was
in the habit of taking his minister along with
him. But as he had imprisoned him he had
go all alone, and, after a long and tiring
hunt, he rested under a tree for a short sleep.
Before long he heard the roar of a lion and
considered himself as good as dead, for the
lord of the beasts had seen the lord of men and
had marked him down for his prey. The king
went off into a dead faint. Now, it is a belief
among the Hindüs, that lions do not eat a man
who is deformed, or who sleeps. And so when
the lion examined the fainting king and came
to the mutilated hand he went away, spurning
the monarch as useless for his prey as long as
a finger was wanting.

When the king awoke, he thought within
himself: "The words of my good minister have
proved to be true, when I showed him my
deformed hand yesterday and he said, 'It is
for the best;' but I, in the love of my
own self, took his words in a wrong sense and
imprisoned him. Now, had it not been for my
lost finger I would have fallen a prey to the
lion. So my loss has worked for my good.
But what good can possibly result from my
imprisonment of my minister? He said it
was for the best, and I shall ascertain from
his own mouth what he meant."
So thinking the king returned, and at once ordered the minister to be released and to be brought before him. He came and stood before his lord accordingly, and the king explained to him all about the lion and how his words had proved to be true so far. "But how can my sending you to jail be for the best?" said the king.

Replied the minister, "My most noble lord! Had it not been for my imprisonment in the jail I would have accompanied you to the forest and fallen a prey to the lion. After rejecting you for being deformed he would have taken me away for his feast. So I should have died. Therefore even my having 'lived' in the jail for a day was for the best."

The king was extremely pleased with the reply and received his minister into still greater confidence.

**MISCELLANEA.**

At a very early period of this settlement, perhaps a few centuries before our era, the city of Bēsnagar must have been founded. Its site was about two miles from the Sānchi hill. Greek and Buddhist coins, ploughed up every rains, testify to its antiquity. Moreover, its remarkable position and selected means of defence, stamp it to have been contemporary with the ancient cities of Ērān, Dāhār, and Śīhr, similarly situated and defended. It was placed between the rivers Bēs and Bētwā, above their point of junction, within a triangle formed by a curve of the latter river and completed by an artificial communication between the two rivers. The earth excavated was formed into a high rampart, topped with brick; and thus, surrounded by deep rivers and high banks, good defence and an ample supply of pure water were assured. This circumscribed area of not more than two square miles must have been subsequently much extended. There are ruins across both the Bētwā and the Bēs, extending to the modern Bhēlsā on the east, to the Udigiri hills on the west, and to the spot where General Sir A. Cunningham dug up the kalpa-druma and the statue of Māyādevī on the north. A great, rich and populous city must have stood here for centuries, perchance for a thousand years,—a focus of civilization and a centre of wealth.

The sculptured kalpa-druma (wishing-tree) and the statue of Māyādevī (the mother of Buddha), which adorned columns in this city, are now in the Calcutta Museum. But the interesting sculptured ancient caves of the Udigiri hill, still untouched by the hand of time, are full of interest. Scattered around are remnants of capitals and columns enough to enrich a museum, and buried beneath mounds probably lie interesting, and perhaps invaluable, stone records of the ruined city and temples.

From the above account it will be understood that Bēsnagar was built between two rivers. But the sister city of Ērān, fifty miles to the north-east,
The bed of the Ancient Lake of king Bhoja near Bhopal.
in the Sāgar District, was efficiently defended by a single loop of one river, the Būrā, and an artificial trench and rampart, while their contemporary, Dhār, in south-western Māla, was on an island surrounded by a ring of lakes, each connected with the other by deep ditches covered by lofty ramparts, which still tower forty or fifty feet above the plain. Sīhūr was defended on a smaller scale, but in a like manner to Bēnsagar. The Midland Railway runs between Sāhīch and Bēnsagar, with the great tepee on its right and the Udigirī hill on its left; and after crossing the Bētwā it passes close by the ruined city to the Bhēlsā Station.

Twenty miles east of Bhēlsā, around the modern town of Gyārispur, lie some most beautiful ruined temples. One, indeed, affords a sublime sight, owing to its noble proportions, and the grandeur of its site and surroundings. I allude to the magnificent shrine on the extreme point to the east of the hill behind the city. Its site and platform beautifully sculptured were boldly carved out of the hill crest. On the spot, a temple of noble proportions and exquisite detail was erected, in such a manner that it appears to be a part of the cliff under which it nestles, perched 500 feet above the plain. There are few more impressive spots, and the view from the temple platform over fertile fields of green wheat, in the cold weather, is one not easily forgotten. I remember this temple, though with a damaged exterior, yet with its interior shrine intact. Treasure-seekers have now wrecked the statues and destroyed the floors, but even at the present time the view of the interior, when a flood of light enters through the eastern door from the rising sun, is very beautiful; at all other times it is dark, and can only be seen by the aid of torches. In no temple have I seen a more curious effect than that of the entry of the rays of the rising sun into the inner shrine of this one. To the ancient worshippers it must have been a supreme moment, when the Sun-god kissed into seeming life the beautiful goddess at the shrine.

At the base of the hill, not far from the high road between Bhēlsā and Gyārispur, are two rare and interesting temples, the Bajranāth shrines, which will well reward close inspection; as also will the exquisitely carved roofless columns.

About thirty-four miles north of Bhēlsā stands the rare and beautiful temple of Udayēśvara within the town of Udayapura. This is the only ancient image in the neighbourhood, that escaped desecration or destruction at the hands of the Muaīmān conquerors. Built not long before the invasion of Muhammad Tughlaq, it was ordered to be blown up by him on his conquest of the city. Bags of powder were heaped inside and under the tower; but, watered possibly by the power of priestly gold, the powder would not burn; and the emperor, in acknowledgment of the miracle, ordered the preservation of the temple, compromising with his conscience by turning one of the two Vēda reading-halls in front and rear of the building into a mosque, dividing it by a wall from the heathen structure, and recording the fact on the archways of the entrance. This has preserved the temple to the present day, alike from the iconoclast Aurangzēb as from the occasional outbursts of fanaticalism of the Mānu kings of Māla. The temple is of perfect proportions and of noble form, covered with very fine sculptures. It is most strikingly harmonious, and is a perfect gem of art, not only as a whole, but in its several parts. The tapering spire, unusually lofty, is seen from afar, though, such is its perfect proportions, that its great height is not noticed when viewed near. There are three entrances, each covered by a grand porch, and the interior is even more strikingly perfect than the exterior; but, unfortunately, it is so dark that it can be only seen with the aid of torches, when it will be observed that at one time the Jains must have possessed themselves of the temple, though probably it was originally a Brāhmaṇical shrine. It is a curious fact that the oil for the temple lights is and has always been supplied by the family of Agra Būkara, who are Punwā Rājpūts, and claim descent from Rāja Bhōj, of Dhārā, in whose reign, or by whose family perhaps, the temple was erected. This is interesting, though General Sir A. Cunningham has been unable to trace any probable descendants of that famous king.

Twenty miles further east are to be found, in and round about the modern Pathārī, most interesting and rare remains. The most striking is the famous stone column or lāt, the largest and most massive in the district, though far less beautiful than the slender graceful monolith of Ėrā, twenty miles to the north. Around it are many interesting ruins fully described in the Archeol. Survey of India, Vol. VII. But the most beautiful and extensive is the ruined temple of Gadarīm, situated on the banks of a tank about a mile and a half from the present town in a picturesque position, near well-wooded but rugged hills, originally constructed after the manner of that of Udayēśvara. This temple was overturned and then was put together again unskilfully by the Jains with little order or symmetry. The exquisite tōrā or gateway must have escaped, for, though half-ruined by neglect, it is still singularly beautiful, and is worth travelling far
to see. This unique gate, tottering to complete ruin, ought to be carried away to a place of safety, together with the finely sculptured and richly carved life-size basso relievo of the mother of Buddha and her infant. The temple is in Sindhia's dominions, and there would be no difficulty in obtaining permission for the removal of the gate. There are many Jain temples scattered about, some dating from the seventh century.

Twenty miles north-east are the remains of the Éran temples, so famed for their graceful columns and valuable inscriptions. On a high bank of the Bhná river, the beauty of the situation adds a charm to these beautiful and romantic ruins.

(Returning towards Bhójpur, twenty miles south of the city are the remains of the city of Bhójpur, not far from which is situated the ruined or uncompleted temple of Bhójpur,) famed far and wide on account of its gigantic lióna. This temple is remarkable on account of being probably the only one in India which, remaining unfinished, presents the earthen ramp up the easy slope of which were rolled, after the manner of the most ancient builders (as portrayed on Egyptian and Assyrian sculpture) the immense stone blocks for the walls and roofs. This fact, apart from its grand internal proportions, attaches great interest to this temple, which, though in a ruined condition, is still used for worship, and owing to its gigantic polished quartzite lióna, has wide local fame. I do not think the inscription on the lintel of the door has ever been carefully copied and translated. The temple evidently was built some little time subsequently to the formation of the lake on the shore of which it stands, and most likely after the city of Bhójpur had become a place of importance. The ruins of this large town stand close by. It seems to have fallen into decay in the fifteenth century, on the destruction of the dam and subsidence of the waters of the lake.

The great Bhójpur lake, just alluded to, was without doubt the largest and most beautiful sheet of fresh water in India; indeed, the only one worthy of the name of lake as we understand it. It covered a valley which presents the most remarkable feature that, though it is so extensive, only two breaks occur in its wall of hills,—one a little more than one hundred, the other about five hundred yards wide. Both of them were spanned by very remarkable dams, consisting of an earthen central band faced on both sides, outer and inner, with immense blocks of stone laid one on the other without mortar, but fitting so truly as to be watertight, the two faces sloping inwards from the base. The lesser opening was closed by a band 87 feet in height, and 300 feet thick at the base, or even more; the greater, by one in places 40 feet high, and about 100 feet broad on the top; and, though the first-mentioned band is now a complete wreck, the latter is intact and still continues to turn the river Kálisàot into the Bétvā, and from its top the old bed of the stream is recognisable. The lesser but higher band was broken by Sháh Hussain, the greatest of the Mándu kings, for the purpose of utilizing the bed of the lake; and, though tradition relates that he never personally benefited by this act, the fact of the present fertility of the valley, still growing the best wheat in the country, proves his practical statesmanship, however much we may regret the loss of a water storage of such rare size and beauty for India. The Gonds who live in the thick jungle still surrounding this valley, tell us that it took an army of labourers three months to destroy the dam, while three years elapsed before the lake was emptied, and thirty before its bed was fit for human habitation.

I do not know that the story of the construction of this lake by Rája Bhój of Dhārás has ever been written. It is an interesting tradition. It runs that Rája Bhój was stricken with a severe illness, some say leprosy, which the court physicians failed to remedy. He therefore had recourse to a holy recluse, who lived at a distance, but was widely famed for his miraculous cures. The monk, after considering the ease and performing many incantations and examinations of signs and omens, gave the following oracular decree:—that the king would die of the disease, unless he was able to construct a lake so great as to be the largest in India and fed by 365 streams, or a stream for every day in the year. By bathing in such a lake, on a certain day, at a certain hour, he would be cleansed, not otherwise. The king, it is related, gathered together men learned in all the sciences, and settled in his capital by reason of his liberal patronage, and consulted them. They recommended that skilled engineers should be sent along the valleys east and west of the Vindhyán range, which lie near Dhār, to explore the country and report upon the feasibility of such a lake being constructed. And it is said that, after a long and weary investigation and many hopeless failures and immense expenditure, they discovered the valley, subsequently enclosed, in which there happened to be the head-waters of the holy river Bétvā. But alas! only 359 springs and streams fed the waters flowing through the valley. The difficulty was however, eventually overcome by Kálisàot, a Gond chief, pointing out the missing river, which with its tributaries, made up the number, and was
accordingly named, to this day, Kālia's river, or the Kāliasāt.

This tradition preserves two important facts, viz.:—(1) That the drainage area of the sources of the Bētvā was insufficient to fill the valley through which it flowed and which it was intended to enclose. (2) That the lake thus formed was of unusual size for an Indian lake. A study of the local topography and the remains of the works, clearly proves that the engineers of those days undoubtedly understood that the drainage area of the Bētvā and its tributaries was insufficient for their purpose, and that they skillfully supplied the deficiency by turning into the Bētvā valley the waters of another river, which, rising twenty miles to the west, and flowing naturally outside the hill-enclosed valley, would increase the drainage area by at least five hundred square miles. This was accomplished by the creation of the magnificent cyclopean dam on which stands the old fort of Bhōpāl, and which, previous to the Bhōpāl dynasty, was covered with finely sculptured Jain temples. From the storage lake thus obtained, a river flowed at right angles to its former course around the hills into the Bētvā valley, and became a most valuable feeder to the constructors of the great lake, because it carried the surplus waters of the storage lake into the larger lake for three full months after the close of the rains. This river is the Kāliasāt.

To test the tradition as to the lake's unusual size, emphasized by the local saying, tāl ho to Bhōpāl tal, sab dāre talya—"if there be a lake it is Bhōpāl lake; all others are ponds,"—a line of levels was run from the waste weir or ancient outfall to the Bhōpāl railway levels, and thence other lines were projected. These, when plotted on sheets 16, 17 and 26 of the Bhōpāl-Mālwa Topographical Survey Maps, proved that the ancient lake covered the valley to the extent of two hundred and fifty square miles,—its bellying as shown in the accompanying map,—and must have formed the largest, as it did the most beautiful, lake in the peninsula of India, giving one unbroken sheet of water save where islands added to its beauty. It was in places a hundred feet deep; and on all sides it was surrounded by high hills covered with verdure to the water's edge, except at the clearings around the town that soon sprung up on its shores. A rambler among these discovers that the wavelets of five hundred years have left their marks; and one is struck by the many inlets and picturesque outlying swamps, which, when filled with water, must have appeared almost like separate lakelets and must have been of weird beauty.

The waste weir, discovered by the writer in one of these rambles, lies buried in almost impenetrable jungle, and is certainly worth a visit. It is a cutting through the solid rock of one of the lower hills on the east side. It is at the blunt apex of a triangular valley, opening from near the great dam, and is probably two miles from it in a direct line. Its position, so far from the dam, affords another proof of the practical ability of the Hindu engineers of the time; for any error in levels would have quickly destroyed the dam, which, though stone-faced on both sides, was filled in by earth, and could not long have withstood an overflow. There are signs on its rocky and unbroken sides which show that high-water mark was within six feet of the top.

The second and lower but longer baud already mentioned was thrown across the only other opening of this remarkable valley, and by its construction the Kāliasāt was turned off from its course at right angles into the Bētvā. It is so covered with jungle that it escaped even the keen eyes of the Topographical Survey Officers. It is constructed in like manner to the other one, but is still unbroken. Its top is used as part of the high road from Bhōpāl to Kāliakkērī.

On the ancient shore at Bhōjpur the Gōnjás point out more than one group of large flat stones,—two upright and one horizontal,—like Keltic remains, and revered because they were used by Rāja Bhōj as his boat-houses. Sitting on one of these, and gazing afar over a perfectly flat valley bounded by the hills forming the western shore, it is not difficult to fancy an actual sea taking the place of the sea of waving green wheat, or to hear, in the rattling of the pippal leaves overhead, the lapping of the wavelets under the morning breeze on the rocks below. It is most interesting to listen to the Gōnjás telling their old-world tales of the ancient sea; how Rāja Bhōj, whose name and memory seems beloved beyond all others in Central India, used to sail over to the opposite shore every morning for his early orisons among the Buddhist caves,—perhaps then still a monastery on the top of Bhimbēt hill,—and then returning for his noon-day meal. They tell of the traditions of the lakes—now in ruins, of the spirits of the deep that interfered with the completion of the great temple, and many other tales of old connected with the mighty fort of Gōnar, away on the mountains beyond the western shore. They relate with awe how the fort's deep dyke of defence, carved out of the solid rock, was cut in a single night; and how the prophecy concerning a still mightier in days to come has been verified, in their simple ideas, by the great rock cuttings of
the Bhōpur State Railway under the neighbouring mountains. Regarding this Gōnd fort and its curious defences and its adjoining ruins, I may have stories to tell at another time. It is most probable that, during the existence of the Bhōpur lake, the local climate was much affected, particularly to the east as far as Bhōlsā. The hot winds blowing over this city must have been tempered by the mass of water to windward. The evaporation also must have been so great that the waste weir can only have had water flowing late in the rains, and only for a short while then, and therefore for some distance the water in the Bētwā must have been during the dry season only a fraction of what it is at the present time; and floods, frequent now, must have been then of rare occurrence. This probably explains the fact that a great deal of the city of Bhōlsā is built below the present flood level and is subject to disastrous inundations. It was possibly built when the lake existed; indeed, on conversing with the representative of one of the oldest families of Jain merchants, he assured me he had records to prove that, when his family settled in Bhōlsā, the Bētwā was, as he expressed it, a dry river, and, in consequence of the difficulty of procuring water in the hot season, the members of his and other families had excavated the numerous tanks and wells, the remains of which are to be found around the city. The destruction of the lake rendered their use unnecessary; and the wells were never repaired, and the tanks relapsed into fields. It is possible that the date of the total abandonment of Bēsmār was hastened by the drying up of its principal defence and reservoir.

Before concluding, it is worth noting that the name of Dīp, a village on a small hill about half-way between Bhōpur and the Narmadā, and on the northern borders of the valley,—now a station on the Bhōpur State Railway,—first attracted my attention to the traditions of the great age of the lake, which had been considered by Europeans to be much exaggerated. If the name meant anything it must mean 'island,' being a corruption of the Sanskrit depa; and if the hill on which the village stands was an island, then the traditions only testified to what was true. The surveys I have alluded to, prove that the entire hill on which Dīp stands really was an island, perhaps two miles in length, and that the northern shore closely touched the hills which alone separated the larger lake from its storage lake—

the present lake around the modern city of Bhōpur. I am of opinion also that the name of this city is derived in the manner related by Gōnd tradition; viz. Bhōj-pāl, 'the pāl or band of Rāja Bhōj.'

And the reason why this band became to recent generations more famed than the great pāl near the city of Bhōpur, is, I take it, that the Bhōpur pāl, constructed exactly like the others, but immensely broad for its length and height, became a holy shrine of Buddhist temples, constructed on its broad top, which temples were all no doubt ruined when the founder of the Bhōpur family wanted materials for the construction of the fort and walls of the citadel. The city of Bhōpur probably rose so rapidly, from its salubrious position to importance, that it gave its name to the great lake which really was the cause of its existence.

I think there are few European visitors to these ruined cities who have not longed for a glimpse of the once beautiful lake, or a sail on its broad waters on a hot day in May over to the Buddhist ruins on Bhūmbēt, or a run up the romantic waste-veir valley, at the close of the rains, to hear the thunder of the overflow as it plunges down in broken cascades to the Bētwā, 100 feet below, or an early morn or sunset sail among the isles and up the lovely bays on the western shore, some of them so enclosed as to appear separate lakes, surrounded by mountains nearly 1000 feet high and clothed to the water's edge by tropical verdure. Now, right through the old bed of the lake the iron rail is laid, the whistle of the engine is heard over the plain, and even penetrates the distant glens; and never again can the waters lie on the bosom of the valley which they fertilized whilst beautifying.

The iron horse protects it, whilst it opens the scene I have endeavoured to portray to the western pilgrim; roads and rest-houses follow its track; and the beautiful Sāschi tope, now restored by Government, the superb Gārispur, Udayesvāra,—a veritable sculptured story,—the romantic Pathári, and the picturesque Eru, all lie close to the new railway which will perhaps be, before the close of next year, the through route to convey all travellers to the north of India from Bombay.

W. KINCAID.

PROGRESS OF EUROPEAN SCHOLARSHIP.

No. XI.

Tranactions of the Eastern Section of the Asiatic Archæological Society, Vol. II., Parts I. and II.

Meeting Feb. 9th, 1887.

Sir, the attention of Baron von Humboldt to the fact that coins of the first Uxbārī amirs and other later Sultāns are on sale in Constantinople.
N. N. Pantusov sent a Chinese inscription with a translation.

N. P. Ostroumof sent a manuscript collection of popular songs of the Sarts.

S. M. Georgievski communicated the results of his examination of the Chinese manuscript exhibited to the Society by N. M. Yadrintsev. According to his opinion it was written thirty years ago, and its object was to spread Muhammadanism in China. There is no historical information in it, only legends intended to exaggerate the antiquity of Muhammadanism in that country.

V. A. Zhukovski read his paper on the Persian sect, 'Ahl-i-Haqq'.

V. S. Golenistchev described the inscriptions found by him during his travels in the Wadit Hammanat. He also exhibited some fragments of papyrius and parchment with Egyptian and Arabic texts.

D. A. Chwolson arranged the inscriptions of Semirechia, according to their styles and dates. He decided that the word atia met with in the date of the inscriptions was really a Syriac word and corresponded to the Turkish iu, i.e. dragon, also to be found in them.  

(b) Meeting March 16th 1887.

N. P. Ostroumof sent reprints from the Turk estanaska Vedomosti, containing essays in the Sart language on local traditions and instruction in various trades and professions.

A. A. Tsagareli read a paper on the Georgian inscriptions found and collected by P. A. Sirku. These inscriptions are to be published.

(c) Meeting April 27th 1887.

Baron von Rosen gave an account from the Arabic newspaper Samaratul-fundun, of nine marble sarcophagi recently found at Sidon.

A. A. Harkavy gave an account of a Hebrew version of the story of Alexander the Great which he found during his last visit to Egypt and Palestine, differing in many points from those previously known. He assigned the MS., which was unfortunately imperfect, to the sixteenth century.

Baron von Rosen communicated the contents of a work of an Arabian writer of the tenth century, Ibn Roße (= Ibn Dasti). It contains a curious description of Constantinople, particularly some customs of the Byzantine Court, described by an Arab, named Härün Ibn Yahya, who was taken prisoner by the Byzantines. There is, besides, the itinerary of the same person from Constantinople to Rome, and a description of the noteworthy objects of the latter city.

(d) The sect of the True People, or the 'Ahl-i-Haqq in Persia. V. Zhukovski, the writer, while studying Kurdish dialects at Shiráz in the Spring of 1886, came in contact with a man who struck him by his severe remarks on the Musalmán, and who acknowledged that he drank wine and ate swine's flesh, not thinking it to be sin. The man turned out to be a member of the Kurdish sect, called 'The People of Truth.' Although he was at first reserved, yet the author succeeded in taking down from his recitation a strange 'Confession of Faith,' which is here given in the original with a translation. To the north-west of Shiráz, at the distance of about three or four verst, are some villages inhabited by these sectaries, who belong to the Kurdish race of the Guráns. The Guráns are very interesting as having a special dialect. They furnish the greatest contingent to the sect here described, and are hated by the Musalmán, who call them Shariátí. They style themselves 'People of the Truth' ('Ahl-i-Haqq) and are very favourably disposed to the Christians, whom they consider almost as their co-religionists. They eat swine's flesh and drink wine, but esteem drunkenness a great disgrace. In some respects they conform to the outward rites of the Musalmán to avoid persecution. They do not, however, observe the fast of Ramazán. They never shave, nor cut their moustaches, probably because they have some superstitious ideas about the power communicated by the hair. The native who furnished information to the writer about the sect, upon being asked what his co-religionists thought of Muhammad replied, 'According to our traditions, it appears certain that Muhammad cut his moustaches, and therefore could not be a proper judge of or understand the truth. They pretend to take their faith from a certain Muhammad Ibn Nasir, the contemporary of 'Ali, the son-in-law of Muhammad. The sect seems to possess no religious books, but they offer sacrifices, which may consist of anything, provided it be edible, beginning with a little sugar to a sheep or cow; but there are fixed offerings on fast days, the birth of a child, or the admittance of a new member into the bosom of 'Truth.' The writer of the article disposes of their religious belief at considerable length. On leave to Mazendarán from Tehran he passed through two villages, Bumén and Rudéin, the first of which is partly and the second entirely settled by Kurd-bachê or 'Ahl-i-láhí, who do not entirely coincide with the people above mentioned, but very much resemble them. He was told by a man of 'the Truth' that the only point of difference was the time for beginning the fast, which is three days later with

\* See Rieu's Catalogue of Persian MSS. in the British Museum.
the Kurd-baché; but this does not prevent them from being present at their assemblies and partaking of the sacrifices. M. Zhukovski was struck with the neatness and order to be seen in these villages.

(e) A Journey to Susinjan.—In this article M. Vselorski describes a journey which he undertook to this place with the view of exploring a kurgan. It is situated about 70 versets from Taashkand. The name signifies 'the parting of the waters.' The kurgan was not found to yield anything of especial interest, and the chief value of the article lies in its description of the surrounding localities.

(f) A Hoard of Coins found at Chistopol.—There have been many finds of Kufic coins in Russia, but those belonging to the second half and the end of the tenth century are the rarest, especially those of the Buveyyids or Béyis. T. S. Saveliev described a hoard, found in the Government of Kazan in the year 1885, consisting of dirhams of the Béyis, who in fact ruled Bagdad for more than a hundred years (933-1058). Their coins are noted for the abundance of inscriptions on them. There is a work on these coins by the Danish scholar Lindberg, *Essai sur les monnaies confisquées par les Emirs de la famille des Bouïides et les princes de leur dépendance.* In 1856 some more of these coins were found in the village of Maklashyerkha, in the district of Spasskoe. Most of the coins, however, have unfortunately disappeared, with the exception of one secured by M. Likhachev. There was another find in 1862 in the village of Ballmera, also in the district of Spasskoe. From this hoard the author succeeded in obtaining 48 dirhams. They were chiefly of the dynasty of the Béyis. In February 1886 some Eastern coins were exhibited in the windows of a money-changer at Kazan. These he purchased. They were found in the district of Chistopol and had been sold by a Tatar to the money-changer. The find consisted of 52 dirhams. The earliest belonged to year 303 of the hijra (= 915-16 A.D.); the latest 384 of the hijra (994 A.D.). They are as follows: (1) Samanis; two of Nasr, son of Ahmad; two of Nāh, son of Nasr; seven of Nāh, son of Mansur. (2) Béyis; three of Azādū'ddaula; nine of Muvayyadu'ddaula (none of these coins have been previously described); seven of Fakhru'uddaula; four of Khusraw Firuz. (3) Dilâmis; one of Bistân, two of Qabds.3

To this article a note is added by Tiesenhausen on six other coins of this dynasty, which as yet have not been described. The first five of these were found in a large hoard of silver coins discovered in 1878 in the village of Molodi, in the district of Pakov. They are now in the Hermitage at St. Petersburg, and the sixth is in the collection of General A. V. Komarow.

2. A dirham struck at Al-Masqamatâ in year 950 hijra (949-950).
3. A dirham struck at Astarâbâd in year 366 hijra (976-77).
4. A dirham struck at As-Sirjân in the year 366 also.
5. A fragment of a dirham of Azâdû'ddaula without the name of place or year.
6. A dirham, struck at Shirâz in 398 year of hijra (1007-08).

(g) Inscriptions obtained in an Expedition to Wâdi Hammamât, by F. Golenischev. The journey was undertaken in the winter of 1884-1885. The author went from Kupt (the ancient Coptos) to Wâdi Hammamât, which lies between the Nile and the Red Sea, where the rocks abound with inscriptions. They refer to all periods of Egyptian history, from the earliest to the days of the Persians and Greeks. They have been collected and published for the most part by Lepsius.4 The author then describes his journey, from which we select some salient points. At Kusar-al-benât he found several graffitti and was astonished to see among Greek, Coptic and Arabic inscriptions some in characters like those found in the peninsula of Sinai. Up to this time none of these have been found on the African Continent.5 Further on his journey on the rock called by the Bedouins Jabal-Abu-Kuâ some very old hieroglyphics were met with. The first relates to the time of the king Amanil'tôtep IV, the great religious innovator. A disk of the sun is figured with six rays, ending in a representation of hands. The author then gives some examples of inscriptions not included in Lepsius, and then an inscription of one H'annu, who visited the Valley Hammamât in the times of Pharaoh Spanchkara of the eleventh dynasty. After a somewhat lengthy prelude he proceeds to describe his visit to Wâdi Hammamât. Another older inscription, relating to the second year, the fifteenth day of the month Faodi of the king Mentutotep, records the exploits of an Egyptian named Amen-em-h-at. A third inscription records the difficulty which an Egyptian named Antef had in reaching the valley. "My lord, i.e. (Pharaoh) sent me to the place Ro-hanna to bring him a beautiful

3 Throughout these lists one is struck with the large number of coins which have not been previously described.
4 Denkmaler aus Egypten und Ethiopianen.
5 These are given on one of the seventeen plates with which the article is illustrated.
block of the valuable stone, like which there has been nothing produced since the time of a god. There was no one to act as my guide to the quarry, and I could not reach it, and I was altogether occupied in seeking it. I spent eight days in the search in this mountainous country, and I did not know where I was. Then I fell down before the god Khem, the goddess Maut, the goddess Urt-kheka and all the gods of the place and offered them sacrifices." There are also hieratic graffiti and rude representations of animals on these rocks.

(h) The Embassy of Spafar.—The text is given by A. Ivanovski, consisting of forty-one pages in the Manchú-Tatár language. Notes are added on various readings but nothing explanatory. The original seems to refer to some relations between Russia and China as far back as the reign of Alexios Mikhailovich (1645-1676).

(i) Buddhist Prayers, by I. Minayev.—A hymn to Avalokítésvara, taken from a collection of various prayers and hymns brought by the author from Népal. The text is written in the usual Népalí alphabet on a long leaf folded in the shape of a book. As the Buddhists in Népal often do not understand Sanskrit at all, or know it badly, the texts of these hymns are sometimes in a very corrupt state. Besides the above-mentioned manuscript the writer has made use of two others belonging to the Cambridge University Library. At the conclusion the author of the hymn is called Charpa, of whom Târânâtha speaks and who is perhaps the same as the Buddhist magician and poet.

Avalokítésvara, to whom Charpa composed the hymn, is prayed to in all Northern Asia, in Népal, Tibet, China, Mongolia, and Japan. Millions of voices every minute reiterate his prayer—Oui mani padme hvā. Millions of hands have written and still write this great sentence of six syllables on the walls of temples, on flags and on rocks. Millions believe that the repetition of these words is sufficient for salvation. In the biography of Huien-Tsang and in the travels of Fa-hian we have examples of the efficacy of prayer to Avalokítésvara.

Minayev cites a legend of how Avalokítésvara cured a sick Brähman in the city of Viśāla, who was learned, but an unbeliever. This legend is told in one of the redactions of the Sūrya-nāthā purāṇa (pp. 37-39) an extract from which work is given. He always appears in splendour to believers. He has a million eyes and a hundred thousand hands. Whosoever his splendour has touched, that person is filled with blessed joy. In the Fifth, Sixth and Seventh Centuries Avalokítésvara was honoured throughout all India. His greatness and mercy are spoken of in the Suddhakarṇamahāpurṇa, that is, in the book translated from Sanskrit into Chinese between 265-313 A.D. The representation of Avalokítésvara and many legends concerning him are found in Elura, Aurangâbâd, and Kanbérî.

According to a legend Avalokítésvara first appeared on Mount Pâtala, a mountain, in all probability, somewhere in the Dakhan, some however place it outside of India, in China or in Tibet. In Hlasa at this time still lives the incarnation of Avalokítésvara in the person of the Dalai Lama. There the merciful one shows himself to thousands of worshippers and addresses a few words to the richer and more eminent of them. He is also the Creator of the world. From his eyes rose the moon and sun, from his forehead Mahêsvara, from his shoulders Brahmâ, &c., from his heart Nârâyaṇa, from his teeth Sarasvatî, from his mouth the wind (Vāyu), from his feet the earth, from his stomach Varuṇa, from his navel, fire, from his left knee, Lakshmi, from his right Sûrya. And many other gods arose from his body for the use of the world, and they are all subject to Avalokítésvara. In China he is sometimes represented in the form of a woman (Ḳwanyin). Many suggestions have been made as to the origin of the cultus of Avalokítésvara, by Professors Vasiliev and Beale among others. Prof. Kern finds in it traces of a solar myth. Perhaps it is impossible to answer the question in a satisfactory way for want of materials.

(j) Miscellaneous Notes.

(1) On the graves of three Sultans in Kasimov who died in the seventeenth century.

(2) The khatba of the Harîjî Abû-Hamza. In the chief work of the Arabian polyhistor Jâhiz, among other curious specimens of Arabian eloquence, is included a khatba or sermon of the Harîjî Abû-Hamza.

(3) Archæological discoveries in Sidon.—A very interesting discovery has recently been made of which information has been communicated by a correspondent from Beyrouth, who writes as follows:—"Two weeks ago, the Director of the Museum, Hamîdi Bey, arrived from Constantinople . . . . . . . with a commission to transfer the monuments which have been found here to that place. The discovery has been made in a cave, cut in the rock, lying about half an hour's

* i.e., since the time the gods ruled Egypt.

distance to the east of Saida (Sidon). Its depth is about 15 metres below the level of the earth. This artificial cave had not to all appearance any doors or exit, since the inner walls, formed of the rock itself, remained undisturbed. When it was accidentally opened men were let down from above, through the opening by means of a rope, for which a wooden staircase has now been substituted by Hamdi Bey. The bottom of the cave exhibits the form of a square room, surrounded on all sides by a number of niches, also cut in the rock, in which were found magnificent sarcophagi of white marble and unusually elegant workmanship. With the exception of some of Phoenician origin, the sarcophagi are Greek. Three of the latter are very remarkable:—The first of these was found in the eastern niche and has the form of a mausoleum of white marble, on the side of which are carved eighteen figures of weeping women, and on the lid the ceremonial of a funeral. The two others were found in the southern niches. One of them is conspicuous by the incomparable beauty of its sculptures:—groups of warriors fighting carved on the sides, some coloured with red paint. Another is a large mausoleum, weighing about 15 tons, and a similar one is hardly to be found in the museums of the whole world. The lid is of a convex shape and exhibits groups of horses prancing and female figures. On one of its sides sphinxes are represented. The sarcophagi are all of solid marble, but nothing has been found in them. In order to get them out Hamdi Bey proposes to construct a tunnel and they are to be sent to Constantinople by a special ship. Subsequent intelligence has been received that at Saida another sarcophagus has been found of black marble.

(5) Criticism and Bibliography.

(1) The Fall of Constantinople, by Nestor Iskander of the XVth Century. Edited by the Archimandrite Leonidas. St. Petersburg, 1886. Written in Old Slavonic by a man who witnessed the taking of Constantinople by the Turks in 1453. It contains many Turkish and Arabic words.

(2) K. P. Patkanov.—Some Remarks on the Dialects of the Gipsies beyond the Caucasus. As yet we have only received information about the European Gipsies. Although the gipsies are undoubtedly of Indian origin, yet to which of the Indian races do they belong? Why did they leave their country? At what time did their migrations begin and by what routes did they go?

The language of such a despised race would naturally be rude, and we accordingly find that they have borrowed largely from the vocabularies of the countries through which they have passed. Miklosich has done much for the philology of the European gipsies, but the Asiatic have been neglected. The first chapter of the work treats of the gipsies generally; the second of the Caucasian races, Bosha, Karachi and Moutriup; the first of which are Christians, the second Shilas, and the third Sunnis. Of the Bosha language he gives 46 phrases and 238 words. It shews very strong Armenian influences, for the case inflections and vowel forms are Armenian. The dialect of the Karachi is more interesting: in this we have 101 phrases, a short tale and 268 words. In contradistinction to that of the Bosha it shews many independent forms, and there are no traces of the influences of Persian or any other language. The writer of the review analyses the grammatical forms and decides that the dialect is rather Armenian than Indian. He concludes with a list of some of the most valuable Russian works on the Gipsies, and congratulates M. Patkanov on this highly useful contribution to philology.

(3) Peter Pozdysiev. The Dervishes among the Musalmans. Orenburg, 1886. Reviewed severely by V. Kosen. Most of it taken from John Brown's The Dervishes, or Oriental Spirituality. London, 1883. The book is without scientific value. The author pretends to know Arabic, but his ignorance is shown by many blunders.


(5) Pestchurov. A Chinese-Russian Dictionary, contains about 6000 Chinese characters. The editor gives a warm welcome to this valuable little book, the first of the kind which has appeared in Russia.

(6) Dr. H. Fritsche. On Chronology and the construction of the Calendar, with special regard to the Chinese computation of time compared with the European. St. Petersburg, 1886. Herr Fritsche was for sixteen years director of the Observatory at Pekin, and for some time taught astronomy in a school founded by the Chinese Government on the European model. This work is based upon the lectures delivered there. The information concerning the Chinese Calendar and computation of time is taken chiefly from Chinese

11 [But see ante, Vol. X. and XVI.—Ed.]
12 The tale is here given, with elaborate philological annotations by K. Z., the anonymous author of this highly interesting review.
13 By the well-known P. Lessar. Both the name of the translator and the place of publication are noteworthy.
14 Title in English.
sources and specially from Van-nian-shu (the Calendar for Ten-thousand Years), from recent calendars, astronomical journals and other publications of the Tribunal of Astronomy at Pekin, called Tsien-tian-chieh, and Chinese maps of the heavens, included in the work Da-chieh-hui-\v{d}ian, which extends to sixty volumes and is the Encyclopedia of the Manchurian Dynasty. Herr Fritzsche has also made use of Ideier's work, Die Zeitcherung der Chinesen. At the end of the book is given a chronological list of the Chinese dynasties and Emperors.

(7) *J. Haag. Deutsch Chinesisches Conversations-

(8) *G. Deneria. La frontière Sino-Annamite.* Description géographique et ethnographique d'après des documents officiels Chinois, traduits pour la première fois. Paris, 1886, with maps. This valuable work contains plans of the various provinces from Chinese and other sources, and is a mine of information on the country and its inhabitants.

(9) *Notice sur le livre de Barlaam et Josaphak, accompagnée d'extraits du texte grec et des versions arabe et ethiopienne, par H. Zotenberg.* This work deserves the fullest attention of orientalists and students of church history generally. The object of the author is to ascertain exactly the time and place of the Greek version of this celebrated romance, the Indian origin of which admits of no doubt. Having carefully analysed the language and contents of the romance he arrives at the conclusion that the Greek redaction was made in Syris, in the first half of the seventh century, and that the belief, widely spread originally and recently reasserted by Max Müller (Selected Essays, London 1881), that St. John Damascenus was the author of the romance, will not stand the test of criticism. From the Greek version all the subsequent translations and imitations were made. The author analyses very carefully what he calls le système théologique of the romance in some chapters which show his intimate acquaintance with patristic divinity. He refers its composition to the first half of the seventh century, and judging from some special dogmatic portions, probably to the time between 620 and 634. In Chapters vi. and viii. the author speaks of the Indian sources of the tale and discusses the route by which it was brought from India to Jerusalem, traces the importance of the Monastery of Saint Sabbas in the history of the Church and finally comes to the translations of the romance into the Eastern languages. The so-called Christian version in Arabic appears to be a verbatim translation of the Greek and he thinks it already existed at the beginning of the ninth century and served as a foundation for the poetical imitation of the romance by the poet 'Abdu'l-Hamid. The Musul\m{\m}m\m{\m}n version in Arabic is also based on the Greek. He then goes on to speak of the Hebrew and Ethiopic, and briefly of the Armenian versions. To arrive at a complete knowledge, however, we still want a thorough examination of all the Greek texts and especially those preserved in the Synodal Library at Moscow. So also up to the present time our knowledge of the Arabic Musul\m{\m}m\m{\m}n version is but scanty and it cannot well be judged of by the Hebrew imitation. V. R[osen] the writer of the review goes on to show from the valuable work recently published by A. A. Tsagareli in Russian, Notices concernant les monuments de Georgian Literature, of which the first part appeared at St. Petersburg last year, that it is quite probable that an early Georgian version of this romance existed, and believes that he finds its name among some of the works translated by St. Euthymius. Perhaps after all it was translated from Georgian into Greek. That the name of Barlaam was known pretty early in the Caucasus we find from the Georgian lives of St. Barlaam, preserved on Mount Athos (see Tsagareli). The editor concludes by expressing a wish that some of the Georgian scholars in Russia would edit and translate the lives of St. John and Euthymius according to the manuscript of the year 1074 and also the two existing lives of St. Barlaam. By translating these documents they would confer a great benefit on science.

(10). *Ous\d{\d}ma Ibn Mounkhidh, un \d{\d}mir Tyrien au premier S\d{\d}cle des Croisades (1095-1183) par Hartvig Deroenbourg; Deuxi\d{\d}me partie. Texte arabe de l'autobiographie d'ous\d{\d}ma publié d'apr\d{\d}s le manuscrit de l'Escrivier.* Paris, 1887.

The Amir wrote his autobiography towards the end of his life, when he was ninety years of age. The work is of no great value from the historical point of view; importance consists in the fact that it gives a graphic picture of the life of the period. There is no chronological order in the book and the events are narrated very confusedly. The author is fairly impartial and does not deny merit to the infidels—only the longer they have lived among Musul\m{\m}m\m{\m}ns the more civilized he finds them! He has some good stories to tell as to how some of them adopted Musul\m{\m}m\m{\m}n habits. The event of his life which he deplores the most, is the loss of his library, consisting of 4,000 volumes. Everywhere the fatalism of the author breaks out. The reviewer V. R[osen] expresses his
thanks to M. Derenbourg for the book and thinks historians who are not orientalists will give it a hearty welcome, but regrets that the editor did not give a photographic reproduction of the manuscript, which is unique. By comparing the page of facsimile given with the published text it is seen that the editor has made some serious mistakes.

(11.) Dr. Friedrich Wilhelm Schwarzoise. Die Waagen der alten araben aus ihren Dichtern dargestellt, Leipzig 1886. The reviewer V.R.[[esen]] thinks that the author ought to have consulted one of the Hadises. The book however is very learned and full of information.

(12.) Recueil de textes relatifs à l'histoire des Seljoucides, par M. Th. Houtsma, Vol. I. 1886.—This is the first volume of a work, in which are to be given the most important texts on this subject in the Arabic, Persian and Turkish languages. It contains the Persian texts of the history of the Kirmán Saljqs, compiled by a certain Muhammad Ibrahim, who lived at the beginning of the seventeenth century. The text is given according to the only MS. known, unfortunately incomplete, belonging to the Royal Library at Berlin. We find in it part of the history of Chakir Beg and Tughril Beg; and the history of the Kirman Saljqs from Qâard (433-66) the founder of the Kirman dynasty, till its last representative, Muhammad Shah (A.H. 579-82). Also the history of Malik Dinarr (A.H. 591) the prince of Ghazza, who overthrew the dynasty of the Saljqs, and finally a short sketch of the fate of Kirman till the year A.H. 619 when the power of the Qarikhatais was firmly established there.

(13.) New Publications of the Pali Text Society (London).—The publications have been delayed a whole year on account of the illness of the chief editor, Mr. Rhys-Davids. In the Journal of the Society we have the story how Buddha gives six of the hairs of his head to some arhats who asked him for something belonging to himself. The Sandhiya Katha, edited by Prof. Minayer; some interesting Notes and Queries by Rev. R. Morris, and a valuable excursus on Dvarvadatta (Death Messengers), somewhat overloaded with references to general European folklore.


W. R. MORRILL.

NOTES AND QUERIES.

NOTE ON THE DERIVATION OF GUTTA-PERCHA.

Gutta-percha. "The unknown person who first rendered the Malay word gétah (sap, gum, bird-lime) by the Latin word gutta deserves credit for some ingenuity. The accidental resemblance of the two words and the adoption of the latter by botanists may, however, be misleading as to the true derivation of the term Gutta percha. Gétah, in Malay, is the generic term for any kind of sticky stuff which exudes from trees, plants, leaves or fruit; percha means a rag, bit, or strip of any stuff. Gétah percha would thus mean gétah in strips or pieces (after being boiled) as opposed to the semi-liquid and sticky condition of the raw substance."—W. E. Maxwell, in Journal, Straits Branch R. A. S. No. 12 (1883) p. 207.

Gutta percha. Crawford in 1849 wrote as follows:—

"Malay, gatta-percha, the gum of the Parcha tree. I was at first disposed to think that the last part of the word was parcha, but this word, ending also in an aspirate, is Persian, and by no means likely to enter into the name of an indigenous plant, the product of which had not been an object of foreign trade." See Journal of the Indian Archipelago, Vol. IV. p. 134. Against this there is the fact that the real gutta percha is produced by a tree called tabas (misprinted tabas in Yule's glossary, p. 309) so that if the name is derived from that of a tree, it is one which produces "a spurious article." (Dr. Oxley in Journ. Ind. Arch., Vol. I., p. 22). But it has yet to be proved that there is a gutta-producing tree called Percha by the Malays. The Isanandra or Dichopis is called by them taban. Percha does not appear as the name of a tree in the Malay dictionary of Marsden. Favre has percha, as the name of the tree, differing from other lexicographers by inserting a final aspirate.

Pijnappel and Klinkert, authors of Malay-Dutch dictionaries, say that percha is the name of the tree which produces gutta-percha, but give no botanical name. Von de Wall in his Malay-Dutch Dictionary (edited by Van der Tunk, 1877) gives percha as the name of the tree which produces the best gutta-percha, and tabas as that of a tree which produces an inferior sort? The gum collected by Malays is boiled by them before it assumes the appearance which it presents as an article of commerce, and my experience is that they give the name of percha to that kind of gétah tabas which hardens into strips in boiling. These are stuck together and made into bales for export.

W. E. MAXWELL.
SUMMARY OF RESULTS REGARDING THE EPOCH AND ORIGIN OF THE GUPTA ERA.

WHILE treating more fully and systematically of the question of the so-called Gupta era in my Introduction to "The Gupta Inscriptions," Corpus Inscriptionum Indicarum, Vol. III., I have given from time to time portions of the discussion, and the results of the calculations of the dates, in this Journal. And for this reason, as also because many readers of this Journal, who are interested in the subject, will possibly not be in possession of the volume of inscriptions, it seems desirable to give here the concise statement of the final results arrived at by me.

The Epoch of the Era.

Albèrúni tells us\(^1\) that there was an era, known both as the Gupta era and the Valabhi era, the years of which were to be converted into years of the Saka era by adding, according to his most explicit statement, two hundred and forty-one years to the Guptav-Valabhi dates. This fixes the starting-point of the era, approximately, as having occurred when Saka-Sahvat 241 had expired, and, by the epoch of the well-known Saka era,\(^2\) when A.D. 319-20 was current; leaving only the determination of the exact epoch by the calculation of recorded dates. And, as regards a special point in his statements, of extreme importance, with the help of Prof. Wright, we have now obtained a translation which,—if it does not actually mean only that the Early Gupta kings had exercised so powerful a sway that, even when their dynasty came to an end, the era that had been used by them still continued in use,—is yet fully capable of that interpretation. At any rate, this translation frees us from the obligation under which we lay, by reason of M. Reinard's rendering of the same passage, of connecting the establishment of an era with the extermination of the dynasty, and of placing the period of the Early Gupta supremacy anterior to A.D. 319, and the termination of it in that year. And the most that can be said against it, is, that it is the literal rendering of an ambiguous original, the real meaning of which must be determined by extraneous considerations.

The Mandasör inscription of Mālava-Sahvat 529 expired shews\(^3\) that we must look to somewhere about A.D. 319 for the starting-point of the era in which are recorded the dynastic dates of Kumáragupta and the other kings of the Early Gupta dynasty (see the accompanying genealogical Table),\(^4\) and any others that are to be referred to the same uniform series with them.

The dates in the records of the Early Guptas themselves, as far as the time of Skandagupta, do not afford details for computation. But, clearly belonging to the same uniform series of years, is the date contained in the Ėrān pillar inscription of Budhagupta.\(^5\) And, converting this date into a Śaka date, in the manner indicated by Albèrúni, we have found that, the resulting Śaka year being taken as an expired year, the details work out quite correctly.

Such dates, also, are those contained in the records of the Parivṝjaka Mahārājas; which, moreover, include a specific declaration that the Gupta sovereignty was then still continuing. And, calculating them in precisely the manner that is indicated by the results for the date in the Ėrān pillar inscription, we have obtained equally correct and uniform results.\(^6\) Also, the latest of these records, the Khāh grant of the Mahārāja Saṅkhshōbha, Corp. Ins. Ind. Vol. III. No. 25, page 112, shows that the Gupta sovereignty continued for at least two hundred and nine years. And this fact is amply sufficient to explain why,—whatever may have been its historical origin,—the era

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\(^1\) See page 243 ff. above.  
\(^2\) See page 265 ff. above.  
\(^3\) ante, Vol. XV. page 191 ff.  
\(^4\) In this Table, below the unbroken succession, I insert the names of Budhagupta and Bhāṇagupta; because there is at least a strong possibility that they were descended from the same stock, though their connection with each other, and with Skandagupta, has not as yet been made clear; and because the date of Budhagupta, at least, has always been accepted as bearing on the chronological question. For the bhrūdas or second names given in brackets under the names of Chandra-gupta I. and Samudragupta, and for a few other points, I must refer to my remarks in Corp. Ins. Indic. Vol. III. Introduction, page 18.  
\(^5\) ante, Vol. XVI. page 151 f.  
\(^6\) Page 331 ff. above.
used in all these records should eventually come to be popularly known as the Gupta era.

Such dates, again, are those contained in the inscriptions of Śivadéva I. and Mánadéva of Népál. And, that the first of them is recorded in the era in question, is shown by the dates, in the Harsha era, for Aññúvarman, the contemporary of Śivadéva I.; while, with the same treatment, the details of the second of them work out quite correctly. 8

Such another date is that contained in the Mórbí grant of Jánika. And the details of this, again, work out correctly with the same treatment. 9

Such a series of dates, too, is that contained in the records of the Valabhi family. And, with a slight modification, due to a change in the scheme of the year, easily explainable, the same treatment gives correct results for the date in the Kaira grant of Dharaséna IV. of this family, of the year 330; 10 the only one, at present, that affords exact details for calculation. Also, these records give us a succession of twelve generations, 11 commencing with the Sénápatis Bhátárka, and ending with king Śiládítáya V.II., with dates ranging from the year 207 to the year 447. For the first six or seven generations, the members of this family were only feudatory Sénápatis and Mahárájas, without the authority to establish an era of their own. And, as a matter of fact, the date of the year 207 for the Mahárája Dhrusáséna I., in the second generation, proves that the era did not run from the rise to power of his father Bhátárka, the founder of the family, but must have been adopted from some outside source. While, on the other hand, the long duration of this family, coupled with the fact that several of their charters were issued from the city of Valabhi itself, 12 and all of them belong either to that vicinity or to the neighbouring parts of Gujarát, is amply sufficient to explain why the era used by them should eventually come to be popularly known, in those parts, as the Valabhi era.

And, finally, undeniable instances of the actual use of an era known as the Valabhi era, as late as the thirteenth century A.D., are furnished by the Veráwal inscriptions 13 dated in Valabhi-Saínvat 927 and 945. For the details of the earlier of these two dates, correct results can be obtained by applying the same slightly anomalous treatment that applies to the date in the Kaira grant of Dharaséna IV. of the year 330. The latter of them, however, goes far beyond this. Not only does it fix the epoch of the era approximately, and in accordance with Albérui's statement, through the concomitant mention of the equivalent Vikrama and Hijra years; but also the details of it are such as to prove that the epoch of the era was exactly when Saka-Saínvat 241 had expired, and A.D. 319-20 was current. And it has furnished, in fact, the exact analogy, in accordance with which all dates in the Gupta-Valabhi era, that follow the true and original northern scheme of its years, have to be tested.

All this uniform agreement of results cannot be attributed to mere coincidence. But we must take it now, as a settled matter, that all the dates in question belong to one and the same era, running from the epoch of A.D. 319-20. And, irrespective of the question whether the era was actually established by the Early Guptas themselves, we must refer the rise of the Early Gupta power to somewhere about A.D. 319, instead of placing the period of their supremacy anterior to that year, and their downfall in it.

A few concluding words, however, seem necessary as to the exact years of the Christian era, which represent respectively the epoch or year 0, and the commencement or first current year, of the Gupta-Valabhi era.

8 Page 210 f. above.
9 Page 211 ff. above.
Genealogy of the Early Gupta Kings.

Gupta,

Mahārāja.

| Ghatotkacha,
| Mahārāja.

Chandragupta I.,

(Vikrama I., or Vikramāditya I.),

Mahārājādhirāja.

Married to Kumāradēvi, of the Liechchhavi family.

| Samudragupta,
| (Kācha),
| Mahārājādhirāja.

Married to Dattadēvi.

| Chandragupta II.,
| Vikrama (II.), Vikramāditya (II.), or Vikramāṅka,
| Paramabhaṭṭāraka, and Mahārājādhirāja.

Married to Dhruvadēvi.

[Gupta-Saṅvat 82, 88, 93, and 94 or 95.]

| Kumāragupta,
| Mahēndra, or Mahēndrāditya,
| Mahārājādhirāja.

[G. S. 96, 98, 129, and 130 odd.]

| Skandagupta,
| Kramāditya.

Paramabhaṭṭāraka, and Mahārājādhirāja.

[G. S. 136, 137, 138, 141, 144, 145, 146, 148, and 147 or 149.]

Budhagupta.

[G. S. 165, 175, and (?) 180 odd.]

Bhāṇugupta.

[G. S. 191.]
Taking the years quoted in the records without qualification, as current years, we have obtained the following results: 14—
By the Ėraṅ pillar inscription of Budhagupta, Gupta-Saṅvat 165 current = A.D. 484-55 current; 15—
By the Parivrajaka grants, 156 current = A.D. 475-76 current, 16 163 current = A.D. 482-83 current, 17 191 current = A.D. 510-11 current, 18 and 209 current = A.D. 528-29 current; 19—
By the Nēpāl inscription of Mānadeva, 386 current = A.D. 705-06 current; 20—
And by the Verāwal inscription of Arjunadeva, 945 current = A.D. 1264-65 current. 21 And all these equations give the uniform result of
Gupta-Valabhi-Saṅvat 0 =
A.D. 319-20 current,
or more precisely, by the Saka year, the period 22 from the 9th March, A.D. 319, to the 25th February, A.D. 320; and
Gupta-Valabhi-Saṅvat 1 current =
A.D. 320-21 current,
or more precisely, by the Saka year, the period from the 26th February, A.D. 320, to the 15th March, A.D. 321.
The results obtained from the Kairā grant of the year 330 and the Verāwal inscription of Valabhi-Saṅvat 927, differ slightly from the above, and are — Gupta-Valabhi-Saṅvat 330 current = A.D. 648-49 current, 23 and Valabhi-Saṅvat 927 current = A.D. 1245-46 current. 24
In these two instances the difference is due to a local alteration of the true and original scheme of the Gupta year; made in such a way that each subsequent year commenced with the Kārttiika śukla 1 immediately preceding the true commencement of the year with Chaitra śukla 1. And for these two dates, and any that may be found hereafter to belong to the same class, we have to apply the equations of Gupta-Valabhi-Saṅvat 0 =

14 I exclude the Bhumār pillar inscription, as proving nothing definite, because the Gupta year is not given in it.
15 Or, more precisely, by the Saka year, as commencing with Chaitra śukla 1, the period (see Indian Era, p. 138) from the 14th March, A.D. 484, to the 2nd March, A.D. 485. These dates given in these notes are quoted as approximately correct; they may, or may not, be the exact dates.
16 Or, in the same way, the period from the 21st February, A.D. 475, to the 11th March, A.D. 476.
17 Or, in the same way, the period from the 6th March, A.D. 482, to the 22nd February, A.D. 483.
18 Or, in the same way, the period from the 25th February, A.D. 510, to the 15th March, A.D. 511.
19 Or, in the same way, the period from the 8th March, A.D. 318-19 current, or more precisely, by the southern Vikrama year, the period 25 from the 12th October, A.D. 318, to the 30th September, A.D. 319; and Gupta-Valabhi-Saṅvat 1 current = A.D. 319-20 current, or more precisely, by the southern Vikrama year, the period from the 1st October, A.D. 319, to the 18th October, A.D. 320.

These two instances, however, are purely exceptional ones. And, in the case of all dates in the era referable to the true and original scheme of its years, we have to apply the epoch of A.D. 319-20, and to treat the years of the era as northern years, commencing with Chaitra śukla 1.

The equation between the epoch of the Gupta-Valabhi era and the Christian era, is not intrinsically dependent on any reference to the Saka era; it could be established directly by European Tables. In this inquiry, however, it has been established through results that have been worked out from Hindu Tables which are arranged for the Saka era according to expired years; and in order to use those Tables, the given Gupta-Valabhi years had to be converted into expired Saka years. The process, however, has not converted the given Gupta-Valabhi years themselves into expired years. But what has been done has simply been, first, by the addition of a uniform running difference, to obtain the current Saka year corresponding to each given current Gupta-Valabhi year; and then, in the usual way, to take the immediately preceding Saka year as the expired year that is required as the basis of the calculation. Thus, the details of the date in the Ėraṅ pillar inscription of Budhagupta, which really belong to Gupta-Saṅvat 165 + 242 = Saka-Saṅvat 407 current, have been calculated with the basis of Saka-Saṅvat 406 expired; and the details of the other dates in the same way.

A.D. 528, to the 24th February, A.D. 529.
20 Or, in the same way, the period from the 1st March, A.D. 760, to the 20th March, A.D. 760.
21 Or, in the same way, the period from the 1st March, A.D. 1245, to the 19th March, A.D. 1255.
22 Here I owe the initial and ending dates, which it was desirable to have exactly, to Mr. Sh. B. Dikshit.
23 Or, more precisely, by the southern Vikrama year, as commencing with Kārttiika śukla 1, the period (see C. Patell’s Chronology, p. 123) from the 24th September, A.D. 648, to the 12th October, A.D. 649.
24 Or, in the same way, the period from the 23rd October, A.D. 1245, to the 12th October, A.D. 1246.
25 Here, again, I owe the exact dates to Mr. Sh. B. Dikshit.
Now, in the case of an era used specially by astronomers for their technical processes, as the Saka era was, since we have to work with expired years, it is natural enough that the Tables should be arranged accordingly. And possibly, after a certain period, and in certain parts of India, we may have to interpret any given year of such an era as an expired year, whether it is expressly denoted as such or not. But the same rule does not hold good in the case of eras that are not actually used for astronomical processes, though they are quoted in connection with details fixed by such processes. Such an era is the Vikrama era. And, though the expired years of this era might be quoted, as is shewn, for instance, by lines 19 and 21 of the Māndakor inscription of Mālava-\Saṅvat 529 expired, Corp. Inscr. Indic. Vol. III. No. 18, page 79, and by line 21 of the Kaḍal grant of Jāyantasiśhına of Vikrama-\Saṅvat 1280 expired, yet that, occasionally at least, the current years were used, is proved by the Gwālior Śābabhā temple inscription of Mahāpāla, in which we have first in words the number of years expired, 1149, and then, partially in words and fully in figures, the number of the current year, 1150. Such an era, again, is the Gupta-\Saṅvat era; or, at least, we have not as yet obtained the slightest indication of its ever having been used by astronomers as the basis of calculations. And in the absence of the use of any word meaning "expired" in connection with the year in a Gupta-\Saṅvat date, it is only reasonable that we should follow the ordinary rules of interpretation, and render the original passage as denoting a current year.

In one instance only, among the Gupta-\Saṅvat dates at present known, is a word meaning "expired" used in connection with the year. This exceptional instance is the Mōrbi grant of Jāiṅka, in which an eclipse of the sun is recorded as having occurred when the year 585 had passed by. Unfortunately, the month and tithi, in and on which the eclipse occurred, are not specified; nor even the week-day. And, as we have seen at page 212, above, it might be possible to identify the solar eclipse of this record with that of the 10th November, A.D. 904. In that case, the given year 585 expired, and the indicated year 586 current, would be equivalent to A.D. 904-905 current. It would then be as an expired year, not a current one, that the year 165 of the Āraṇ pillar inscription of Buda-\gupta is equivalent to A.D. 484-85 current; and so on with all the other dates. And we should have to apply, in the case of all dates in the era referable to the true and original scheme of its years, the epoch of A.D. 318-19 current, or more precisely, by the Saka year, the period from the 18th February, A.D. 318, to the 8th March, A.D. 319; and, in the case of dates belonging to the same class with those of the Kaïra grant of the year 330 and the Verāwal inscription of Valabhi-\Saṅvat 927, the epoch of A.D. 317-18 current, or more precisely, by the Vikrama year, the period from the 23rd September, A.D. 317, to the 11th October, A.D. 318. But we have also seen that the solar eclipse in question can be far more satisfactorily identified with that which occurred on the 7th May, A.D. 905; to do which, we have to take the given year 585 expired, and the indicated year 586 current, as equivalent to A.D. 905-906 current. And this record, therefore, furnishes strong and instructive corroboration of my view that, in the absence of any distinct specification to the contrary, we must interpret the years in Gupta-\Saṅvat dates as current years.

The Origin of the Era.

In taking A.D. 318-19 as the date of the rise of the Early Gupta dynasty, and either as the epoch or as the commencement of the era,—a result which, in respect of the second point, was only one year or two years different from the truth,—Mr. Fergusson's theory was that

28 A clear instance of this is furnished by the date in the Dēṅgāḷ inscription of Bhōjadeva (see page 200, above). By the literal rules of translation, the given Saka year, 784, has to be interpreted as a current year; but, for the calculation, it has to be applied as an expired year.

29 The present Tables of this era, however, seem to be arranged, like those of the Saka era, according to expired years. And some of the almanacs quoted at page 206ff. above, give them in the same way.
the era did not date from the accession of a king, or from any particular historical event. And he selected this particular year on the assumption, — based apparently on a suggestion thrown out by Dr. Bhan Daji\textsuperscript{33} in 1864, — that the commencement of the era was regulated only by the completion of four of Jupiter’s Sixty-Year Cycles from the commencement of the Saka era, in order that there might be always an even and convenient difference of two hundred and forty years between the Saka and Gupta dates. This, however, could be arranged only by applying the Sixty-Year Cycle as used now in Southern India, where it is not in reality an astronomical cycle at all; since there the cyclic years run on in regular succession, without any adjustment of them to the motion of the planet, with reference to his sign-passing or his heliacal rising, by the omission of a year on certain occasions, and are taken, for the civil reckoning, as commencing and ending with the luni-solar years. According to the present southern luni-solar system, Saka-Saṅvat 1 current (A.D. 78-79) was the Bahudhānya saṅvatsara; and Saka-Saṅvat 241 current (A.D. 318-19) was again the same cyclic year, Bahudhānya; and, by this means, some justification might be found for Mr. Fergusson’s view. But I have now shown that the real epoch of the Gupta era was A.D. 319-20, which does not correspond to Saka-Saṅvat 241 current; so that there was, in reality, a completion of four cycles and one year, even by the southern luni-solar system; and this, alone, is fatal to his view on this point. And, in addition to this, amongst other inscriptions, the Wanj grant of the Rāṣṭrakūta king Gōvinda III., which records\textsuperscript{34} that in Saka-Saṅvat 733 the Vyaya saṅvatsara was current on the full-moon day of the month Vaiśākha (April-May), and the Rādhānur grant of the same king, which records\textsuperscript{35} that the Sarvajit saṅvatsara, the next in the cycle, was current on the new-moon day of the month Śrāvaṇa (July-August) in the same year, show very plainly that the present arrangement was not the original one, even in Southern India; as also, still more pointedly, does another grant of the same king, dated in Saka-Saṅvat 726 (expired), the full bearing of which has been explained at page 141 f. above.

If the Sixty-Year Cycle was in use at all at the time of the commencement of the Gupta era, then, in Northern India, and in connection with a northern era, — which the Gupta era emphatically was, — the only system that can have been followed is the regular mean-sign system, according to which the cycle is truly an astronomical cycle, and the saṅvatsaras are regulated entirely and only by the passing of Jupiter from one sign of the zodiac into another. By Mr. Sh. B. Dikshit’s calculations, from the Śūrya-Sūḍūhānta, at the commencement of Saka-Saṅvat 1 current (A.D. 78-79), the saṅvatsara was Sukla, the third in the cycle; and it was followed by Pramūḍa, the fourth, on the full-moon day of the month Pausha, in December, A.D. 78. And, at the commencement of Saka-Saṅvat 241 current (A.D. 318-19), the saṅvatsara was Aigirās, the sixth in the cycle; which was followed by Śrimakha, the seventh, on the ninth lunar day of the bright fortnight of the month Phalguna in February, A.D. 319. Thus, four complete cycles, and three saṅvatsaras over, passed between Saka-Saṅvat 1 and 241; and the epoch of the Gupta era, unless it were placed three years earlier, in A.D. 315-16, could not be determined by any consideration of this kind.

Nor can it have been determined by the Twelve-Year Cycle of Jupiter, the years of which may be regulated either by the passing of Jupiter from one sign of the zodiac to another; or, as was the more ancient custom, by his heliacal rising in a particular lunar mansion.\textsuperscript{36} Taking first the mean-sign system, Mr. Sh. B. Dikshit finds that, at the commencement of Saka-Saṅvat 1 current (A.D. 78-79), the saṅvatsara was Mahā-Āśvayujj, the twelfth in the cycle; which was followed by Mahā-Kārttikeya, the first of the next cycle, on, as before, the full-moon day of the month Pausha, in December, A.D. 78. While, at the commencement of Saka-Saṅvat 241 current (A.D. 318-19), the saṅvatsara was Mahā-Pausha, the third in the cycle; which was followed by Mahā-Māgha, the fourth, on, as before, the ninth lunar day of the bright fortnight of the

\textsuperscript{34} ante, Vol. XI. p. 159, line 40 f.
\textsuperscript{35} ante, Vol. VI. p. 68, line 53 f.
\textsuperscript{36} See Mr. Sh. B. Dikshit’s paper, published at pp. 1 ff. and 312 ff. above.
month Phálguna, in February, A.D. 319. And, by the heliacal-rising system, at the commencement of Saka-Sańvat 1 current (A.D. 78-79), the sańvatsara was Mahá-Bhadrapada, the eleventh in the cycle; which was followed by Mahá-Aśvayuja, the twelfth, on the twelfth lunar day of the bright fortnight of the month Vaśákha, in April, A.D. 78, soon after the commencement of the year. While, at the commencement of Saka-Sańvat 241 current (A.D. 318-19), the sańvatsara was Mahá-Pañsha, the third in the cycle; which was followed by Mahá-Mágha, the fourth, on the sixth lunar day of the bright fortnight of the month Srávașa, in July, A.D. 318. Thus, between Saka-Sańvat 1 and Saka-Sańvat 241, there had expired twenty complete cycles and three sańvatsaras over by the mean-sign system, and twenty cycles and four sańvatsaras over by the heliacal-rising system; and the epoch of the Gupta era could not be determined by any consideration connected with this cycle, unless it should be placed in A.D. 315-16 or A.D. 314-15.

It is thus evident that the so-called Gupta era is not one which, due originally to some event occurring only in approximation to A.D. 318, 319, or 320, had its exact epoch determined, for convenience of comparison with the Saka era, by adopting the expiration of an even number of cycles of the planet Jupiter, either of the Twelve-Year or of the Sixty-Year system. And no other chronological or astronomical considerations suggest themselves, for the selection of the exact epoch that has been proved. Its origin, therefore, must be found in some historical event, which occurred actually in A.D. 320, or so closely to that time that, when the scheme of the northern Saka year was applied, the reckoning of the era was not affected to any appreciable extent. And here, though the point is not conclusive either way, we must bear in mind that, as I have shown fully in Corp. Indic. Indic. Vol. III. page 19 ff., in the epigraphical references to the era there is nothing at all, at any early period, to connect the name of the Early Guptas with it, especially as the founders of it; and nothing to connect the name of Valabhi with it, until at least nine centuries after its establishment.

We must also bear in mind that it is certain that the era cannot have been established by any member of the Valabhi family; the reasons for this being— (1) that, for the first six or seven generations, the members of this family were mere feudatory Sénapatis and Mahárájs, without the authority to establish an era of their own;— and (2) that the date of the year 207 for the Mahárája Dhruvasena I., in the second generation, proves that the reckoning runs from long before the first rise to power of his father, the Sénapati Bhaṭärka, by whom the family was founded.

In the same way, the first two members of the Early Gupta family, Gupta and Ghaṭotkacha, held only the feudatory rank of Mahárája, and had not the authority to establish an era. The first paramount sovereign in the family was Ghaṭotkacha’s son, Chandragupta I. And, if a Gupta era, truly and properly so called, was devised in his time, then as its starting-point there would have been selected the commencement of his reign, not the date of the rise to power of his first recorded ancestor, the Mahárája Gupta; as was done in the case of the Harsha era, which disregards, not only three generations of Mahárájas at the commencement of the genealogy, but even the reigns of two kings, Prabhákaravardhana and Rájyavardhana II., and runs from the commencement of the reign of the third paramount sovereign, Harshavardhana himself. So, also, when the Western Chálukya king Vikramádiya VI. established a new era under the name of the Chálukya-Vikrama-Kála, he disregarded the reigns of all his ancestors, and made the era date from his own accession to the throne. The dates in the Early Gupta records shew clearly that the Gupta era cannot, under any circumstances, run from the accession of any member of the dynasty later than Chandragupta I. And there are essential difficulties, under any normal conditions, in the way of making the era date from the commencement of his reign; i.e. of taking A.D. 520-21 as his first current year. For his great-grandson, Kanaágupta, we have dates in the era, ranging from the year 96 to the year 130 odd, which may take, as the latest

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certain one, \(30\) that of the year 129, recorded in the Mankuwar inscription, \textit{Corp. Inscr. Indic.} Vol. III. No. 11, page 45. And, as we ought to assume that Chandragupta I. was at least twenty years old when his reign commenced, this gives us a period of a hundred and forty-nine years, which, spread over four generations, gives to each a duration of thirty-seven years and a quarter, or nearly half as much again as the usually accepted average maximum rate of twenty-five years for a Hindu generation. This, too, is only dealing with the question of generations. If we take the period of a hundred and twenty-nine years only, from the commencement of the reign of Chandragupta I. to nearly the end of that of Kumāragupta,—which gives an average of thirty-two years and a quarter for each of the four reigns,—then, as compared with the average duration twenty years at the outside, of a Hindu reign, the excess is still more remarkable. And almost exactly the same results are obtained, if, instead of considering four generations and reigns, down to the end of the time of Kumāragupta, we take the latest certain date\(40\) of Chandragupta II., \textit{viz.} the year 93 given in the Sāñchi inscription, \textit{Corp. Inscr. Indic.} Vol. III. No. 5, page 29, and spread the period of ninety-three years over three reigns, or, on the same assumption as regards the age of Chandragupta I., the period of a hundred and thirteen years over three generations. On the question of generations, I will not base any particularly special objection. An analogy for an abnormal average rate might be deduced from the Western Chālukya genealogy,\(41\) in which we have Saka-Sainvāt\(42\) 930 for the commencement of the reign of Vikramāditya V., and Saka-Sainvāt 1060 for the end of the reign, and it may safely be assumed the death, of Sōmeśvara III. in the third generation after him. If we take it that Vikramāditya V. was twenty years old in Saka-Sainvāt 930, we have one hundred and fifty years for the four generations, or an average of thirty-seven years and a half for each. But, from Saka-Sainvāt 930 to 1060, there were six reigns; with an average of twenty-five years, or seven less than we should have to allot to each of the four Early Gupta kings in question. And even this result is due chiefly to the extraordinarily long reign of Vikramāditya VI., for fifty-two years, from Saka-Sainvāt 997 to 1048. If we take the whole period of the Western Chālukya dynasty, covering one hundred and ninety years, from Saka-Sainvāt 895, the first year of Taila I., down to Saka-Sainvāt 1084, as the end of the reign and the death of Taila I.,\(43\) we have ten reigns, with an average duration of just nineteen years each. An average of thirty-two years for four successive reigns of Hindu fathers and sons, seems, from every point of view, an impossibility. And this prevents our making the Gupta era run from the commencement of the reign of Chandragupta I. We must, therefore, accept it as certain that the Early Guptas only adopted the era of some other dynasty. And we must look for its origin to some extraneous source.

Now, it is evident that the Early Guptas rose to power first as feudatory Mahārājas, the third of whom, Chandragupta I., while holding that same rank, established his independence; so that, his successors maintaining the same position, the paramount titles, and not his original feudatory title, are always coupled with his name in the genealogical passages in their records. And, from the Mahārája Gupt down to Kumāragupta, we have two feudatory governments and four reigns; which, at the average rate of twenty years, almost fill up the period indicated by the latest certain date for Kumāragupta, and, by a coincidence, place the commencement of the government of the Mahārája Gupt very near to A.D. 320. If, then, we could determine the paramount sovereign of whom the Mahārája Gupt was a feudatory, we should have in him the founder of the era; provided we could only shew that his successors also

\(30\) And it must be very nearly his latest date; for he had then been reigning for at least thirty-three full years, and we have the date of the year 138 for his son and successor, Skandagupta. — The selection of any later date would, of course, only intensify the force of the argument.

\(40\) The silver coins (see ante, Vol. XIV. p. 65f.) seem to give the year 94 or 95; but the latest absolutely certain date is the one that I quote. Here again, the adoption of a later date would only strengthen the argument.

\(41\) See my \textit{Dynasties of the Kanarese Districts}, p. 18, Table.

\(42\) The exact year was doubtful when I wrote the book referred to in the preceding note; but it has now been established by the Kauṣānva grant (ante, Vol. XVI. p. 15f.).

\(43\) I exclude the short reign of Sōmeśvara IV., from Saka-Sainvāt 1104 to about 1111, because there had been meanwhile an interruption of the Western Chālukya power by the Kalachuri of the Dekkan.
dated their records in it. And the only difficulty then remaining would be,—When Chandragupta I. and his descendants had asserted themselves as independent sovereigns, by rebellion against their masters, why should they continue to use a purely dynastic era, which had only been running for a short time and had certainly not become an astronomical era, and which would always remind them of the originally subordinate status of their ancestors; instead of establishing a new era of their own, or instead of adopting some well-known era, of general use, which could evoke no reminiscence of a humiliating kind? 44 The Early Gupta records, however, throw no light on this point; nor can we expect any, unless we obtain inscriptions of the time of the Mahārājās Gupta and Ghatotkacha, or of the early years of Chandragupta I. And at present, in connection with India itself, we know of no king the commencement of whose reign can with any certainty be referred to A.D. 320; and of no historical event to which we can safely allot that date. Nor, while the Early Gupta sovereignty continued, is there any indication of the Gupta era having been used in India by any other independent dynasty. The nearest approximation to the year in question that we have, is in the case of the Kalachuri dynasty of Central India; in respect of which certain points in the records of the Parivrājaka Mahārājās and the Mahārājās of Uchchakalpa do tend to support the actual existence, in the Early Gupta period, of a Kalachuri era, and, consequently, of Kalachuri kings under some earlier name. 45 The Kalachuri dates, however, certainly cannot be referred to the Gupta epoch. And circumstances indicate that the dominion of the Kalachuri kings at that time was confined entirely to the more eastern parts of Central India; so that they were only contemporaries of the northern dynasty of which the Early Guptas were at first the servants. Mr. Ferguson’s opinion, 46 again, was in the direction of the era being established, with the foundation of Valabhi as a new capital of Western India, by the Andhra king Gōtāmiputra, whom he placed between A.D. 312 and 333; the Mahārājās Gupta being a vassal of him or of one of his immediate successors. But the chronology of the Andhras,—who, at the best, seem to have been too essentially a western and southern dynasty to be concerned in any leading way with the history of Northern India,—still remains to be finally determined. And Dr. R. G. Bhandarkar, who has given more consideration to the subject than anyone else as yet, places Gōtāmiputra about two centuries earlier, 47 in the period A.D. 133 to 154; and, according to his view of the early chronology, we should have to refer the establishment of the Gupta era to some event connected with either the downfall of the Kṣatrapas of Saurāśṭra or the history of the Rāshtrakūṭas of the Dekkan. The Kṣatrapas, however, certainly did not use the Gupta era; and there is not the slightest particle of evidence that the Rāshtrakūṭas ever had an era of their own. There can be but little doubt that the real paramount lords of the Mahārājās Gupta and Ghatotkacha, and at first of Chandragupta I. himself, were some of the later Indo-Scythian kings of Northern India, whose duration is certain at any rate up to the time of Samudragupta. These Indo-Scythian kings must have used the Saka era. But this era, again, had not then become an astronomical era; 48 and there was, therefore, no special inducement for the Early Guptas to adopt it; but, on the contrary, there was an objection of the kind already indicated. Further, the Vikrama era was not an astronomical era; and the use of it, in those days, under the name of the Mālava era, was probably confined to the different sections of the Mālava tribe, and to territories of which no part was brought under the Early Guptas sway until the time of Samudragupta. And, finally, the Kaliyuga era in all probability was used only by the astronomers of Ujjain for purely technical purposes; and was not known at all in the territories in which the Early Guptas first rose to power. In fact, in India itself there was no already existing era which

44 An objection of this sort does not apply to the use of the Gupta era by the Valabhi family. The Sūdrakọhi Bauhārika drove out the invaders who had overthrown the Gupta sovereignty in Western India; and may possibly have himself been the founder of some descendant of the original Gupta stock. And when Dharasana IV. became a paramount sovereign, it was on the disruption of the

45 See page 331 above, note 1.


47 Id. p. 129.

48 Early History of the Dekkan, p. 27.

49 See page 209 above.
would recommend itself to the Early Guptas. And we have next to inquire whether there may have been any such era beyond the limits of India proper.

By a comparison of the dates of Sivadēva I. and Aśūvarman, at page 210 above, I have already shown, in a general way, that the Gupta era was in use beyond the northeastern frontier of India in Nēpāl; a fact which is duly corroborated by the results for the date in the inscription of Mānadeva of the year 386. We must, therefore, now see what more particular information can be gathered from the epigraphical records of that country.50

In the Corp. Inscr. Indic. Vol. III. Appendix IV., I have given an account of such of the inscriptions from Nēpāl as have any bearing on the question now under consideration; this account being recast and enlarged from my original paper on "The Chronology of the Early Rulers of Nēpāl," published in this Journal, Vol. XIV. page 342ff., a reference to which will suffice for present purposes. The actual dates of them range from A.D. 635 to 854; and give a fairly clear idea of the history of the reigning families of the country during that period. They show two separate houses, ruling contemporaneously, and mostly on equal terms; and each preserving certain distinctive characteristics of its own. One of

50 And here we may note that the Kings of Valabhi can have had nothing to do either with the introduction of an era into Nēpāl, or with the borrowing of an era from that country. As I have already occasion to remark, the members of the Valabhi family, for the first six or seven generations, inclusive of Bhūrta, were feudatory Sthāyapaṇī and Mahārājas; and these members of the family, at any rate, cannot possibly have conquered Nēpāl, or even have extended their territory up to the confines of that country. The first of the family who claimed to be a paramount sovereign is Dharasena IV., with the dates of 320 and 330; and with the titles of Paramākṣatarka, Mahārāja, and Paramēśvara, in common with all his successors; and also with that of Chakravarti, which, not being assumed by any of his successors, may perhaps indicate that his power was more extensive than theirs ever was. Now, in passing, if we refer his first date of 320 to the epoch of A.D. 319-20, the result, A.D. 645-46, brings us to a very suitable period indeed for him to assume the position and titles of a paramount sovereign; viz. to the commencement of the anarchy which, as Manwadīnāi tells us (Note, Vol. IX. p. 29), attended the death of Harshavarman, "the warlike lord of all the region of the north." It ended in the complete disruption, for the time, of the kingdom of K$aṃ. Aśūvarman became paramount in Nēpāl, and Aśīṣaṇa in Magadha; and the opportunity was of course taken advantage of by Dharasena IV. to assert his independence in the west of India. But, to say nothing of the improbability of the thing on other grounds, the fact that Aśūvarman became king of Nēpāl is in itself enough to prevent our admitting the possibility of a conquest of that

them was a family, the name of which is not mentioned in the inscriptions, but which in the Vaiśāvali is called the Thākuri family, issuing its charters from the house or palace called Kālāsakūṭahavanā, and uniformly using the Harsha era. The other was the Liechhavī family, distinctly so named in the inscriptions, and in the Vaiśāvali allotted to the Sūryāvāsā or solar lineage, issuing its charters from the house or palace called Mānagiri, and uniformly using an era with the Gupta epoch.

That the Liechhavī clan or tribe was one of great antiquity and power, in the direction of Nēpāl, is shewn by the writings of Fa-hsien and Hiuen-Tsang,51 which connect them with events that preceded the niraśa of Buddha. No exception, therefore, need be taken to the general outlines of the long account in one of the inscriptions, which, so far as the Nēpāl branch of the tribe is concerned, gives us the first really historical member of it in the person of Jayāda V., who, by the ordinary allowance of time for each Hindu generation, must be referred to the period A.D. 330 to 355.

Proof of friendly relations between the Early Guptas and the Liechhavīs, at an early time, is given by the marriage of Chandragupta I. with Kumārādēvi, the daughter of Liechhavī or of a Liechhavī king,

country by Dharasena IV. Referring the same date of 320 to the earlier proposed epoch, we have successively A.D. 403, 492, and 516. For these periods there is, perhaps, no particular objection to our assuming, for the sake of argument, that Dharasena IV. may have extended his power over a considerable portion of Northern India, in the near parts to Kārshī and Gujarāt. But the Valabhi charters, in which a conquest so extensive as that of the whole of Northern India up to Nēpāl, or inclusive of that country, would most certainly have been recorded, give not the slightest hint of any such event at any time in the history of the family. In fact, with the exception of the allusion to the overthrow of the Maṭhukras by Bhūrta, they give absolutely no detailed information at all in connection with any of the successes claimed by the members of this family; which tends to shew very plainly that, from beginning to end, the Valabhi power was purely local. And, in connection with the earlier proposed epochs, even if Dharasena IV. did conquer Nēpāl, or Northern India up to the frontier of Nēpāl, and did introduce there the era of A.D. 319-20, the question still remains, and cannot be answered,—Why should he act with such extreme inconsistency as to introduce this era, which, according to those who have sought to establish those epochs, was not brought into actual use in his own territory; instead of the Gupta era, which he himself and his successors continued to employ for all the official purposes of their own kingdom?

And, that the Lichchhavis were then at least of equal rank and power with the Early Guptas, is shown by the pride in this alliance manifested by the latter; exhibited in the careful record of the names of Kumárdévi, and of her father or family, on some of the gold coins of Chandragupta I., and by the uniform application of the epithet, "daughter's son of Lichchhavi or of a Lichchhavi," to Samudragupta in the genealogical inscriptions. Again, the Allahábd pillar inscription shows that, even if Samudragupta did not make Népál a tributary province, his kingdom extended up to the confines of that country.

There can be no doubt that the Early Gupta kings must have known the nature and origin of whatever era was being used by their Lichchhavi connections in Népál. And the period established for Jayádéva I. approximates so closely to A.D. 320-21, that it needs but little adjustment to place the commencement of his reign actually in that year. This arrangement would give a perfectly intelligible reason for the origin of the era, which was clung to so persistently by his descendants that they continued the use of it for at least two centuries after the introduction of the Harsha era into Népál, and its acceptance by their immediate neighbours, the Thákuri family of Kaiásakútabhavana. And no objection could be taken by the Early Gupta kings to the adoption of the era of a royal house, in their connection with which they took special pride. I think, therefore, that in all probability the so-called Gupta era is a Lichchhavi era, dating either from a time when the republican or tribal constitution of the Lichchhavís was abolished in favour of a monarchy; or from the commencement of the reign of Jayádéva I., as the founder of a royal house in a branch of the tribe that had settled in Népál. But the question of the origin of the era is one, of course, on which further discoveries, especially if any can be made in Népál, may be expected to throw more light.

BOOK NOTICE.


This is a book which should be in the hands of all those who really wish to obtain an insight into the speech of the peoples inhabiting the North-West Provinces and Oudh; but as it has been issued by the Government Press and is a purely Government publication, such is not likely to be its fate. It is printed and got up in the severely uninviting style peculiar to Government publications, and no one has any particular interest in its circulation; so it will probably be distributed to a few officials, some of whom will use it, but most of whom will pigeon-hole it, while the majority of scholars and others to whom it will be specially valuable will never hear of it.

However, it deserves a far better fate than this. It is the result of immense labour and research at first-hand, and is simply loaded with philological and folkloric information of the most valuable kind. The size of the book, or the length of an article in it, is no criterion of the labour bestowed on it. Its accuracy, moreover, is guaranteed by the author's name. Let us take an example at random.

"Chidhna [Skr. chapa, charpa] — (1) [barakat ki mitt, barháván, charáp, chattar, gobarabah, gobarbandh, gobarbanad, gobar, thádp], a piece of wood, etc., on which is an inscription in moist clay put on the heated grain to keep off the evil eye and avoid theft. The inscription on it is usually 'aqabat bá kháir bíd, — in án ki sádmátt = invocation against dishonesty. — Upper Duáh.

(2) The ceremony performed at the threshing-floor at the time of forming the grain into a heap for winnowing. — Upper Duáh."

Here every synonym given for the name of this ceremony means so much separate research, which shows only in one word at a time. The value, too, of unearthing such customs and their localities will be appreciated by every student of folklore and custom.

The book is further full of proverbs and saws, illustrating the life of the people and their habits of thought. Mr. Crooke claims originality of research here, having purposely avoided all reference to Fallon's Hindustani Proverbs, ed. Temple.

Illustrations of the severely practical type accompany certain articles not otherwise explainable. And lastly Mr. Crooke has used all the authorities procurable, including those invaluable mines of information about India — the Settlement Reports.

In a notice like this we cannot attempt to criticise the individual articles — indeed, for the vast majority we have nothing but praise. However, that on "Gágá, Gágápur," might have been enlarged with advantage from Temple's Legends of the Paíjáth and from Paíjáth Notes and Queries. With this one criticism we commend to the perusal of all who are interested in the philology, folklore, and ethnology of Upper India this very valuable addition to the anthropological literature of those parts.
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