

manner were assumed as the weight of a *man* in that district. The Dihlí paisá, coined till 1818, was twelve máshas or one tolá in weight.

The Table at page 62 contains such a list of copper coins as the scanty materials at hand enables us to supply. Most of the native paisá contain more copper in proportion to their value than the present Company's coin, which was, however, originally one tolá in weight, and was gradually reduced to one hundred grains (as shown in the table); it is at present in fact a government token, worth, intrinsically, less than its nominal value.

Within the Ceded Territories the native coins still predominate, but the Company's paisá is now gradually spreading to westward, and the Sagar mint has for several years been employed in converting the native copper money into Benáres or trisúli paisá of one hundred grains weight, and sixty-four to the rupee. At Bombay, the old paisá have been bought up by Government, for the purpose of removing them entirely from circulation, and substituting the new coin (described in page 4). The Bengal Government have also recently adopted a measure tending to withdraw the trisúli paisá (see page 8) from circulation, in consequence of their becoming much depreciated in public estimation from a large admixture of spurious coin, and other causes; the Calcutta mint being ordered to grant sixty-four new paisá for seventy-two trisúlis, for an amount not under twenty rupees in value brought for exchange.

## SYMBOLS ON SHAH 'ALAM COINS.

It may naturally be asked, how the multitude of coins, gold, silver, and copper, included in the following lists, are to be recognised by any but a professed money-changer, since, as has been observed before (page 19), most of them bear the mere name and distich of Sháh 'Alam, and the place of coinage, being the lowermost word of the inscription (page 2), will seldom be found on the face of a coin showing, as is generally the case, only a small portion of the die. Many mistakes have doubtless been made in fixing the localities of coins, from this abundant source of error, and it is much to be regretted, that it has not on all occasions been made a primary point to ascertain the distinguishing mark of every specimen collected for examination.

Some rupees (as the Sálimsáhi, etc.) appear to be only distinguished by the peculiar imperfections of the Persian character they bear; others have but a few discriminating dots, like the private marks of our own mints; but the majority have a well distinguished symbol, the same on silver and on copper, by which they may be readily known on inspection. There is a further advantage in con-

sulting such marks, for they enable us at once to class together various coins as having been issued by the same authority. A list and plate of these symbols, confessedly imperfect, follows the catalogue of coins, but it may be convenient to assemble together here a few of the groups, whose connection is otherwise confirmed by the preceding remarks on the Bundelkhand and Rájputána mints.

The coins of Lukhnow, Fatehgarh, Azimgarh, Bareilly, Najíábád, Benáres, and other places under the súbah of Oudh, bore the symbol of a rohu fish. The Agra paisá has a pistol.

The coins of Rohilkhand, Bhartpúr, Narwar, etc., a dagger.

Those of Nágpúr, Chanda, Haidarábád, Aurangábád, etc., a sword, hence called 'shamshíri.'

Those of Sagar, Jálau, Srínagar, Kálpí, Tahrí, (the Bálásáhlí) have a trident or trisúl with a cross bar.

The coins of Bhopál, Bhilsá, and Ráthgarh are easily known by a rude figure resembling a coat of mail.

The Kotá, Búndí, and Pratápgarh coins have a triple bow or knot, sometimes varied: the inscription of the latter rupee is in Nágarí.

The Saronj, Vazírsáhlí, Jhánsí, Gokul, Balúgarh, and Gwálár moneys have a cinque-foil or star of five triple-pointed leaves, placed, as most of such devices are, in the loop of the letter *ج* in *جلوس* *in س*.

The Ajmír, Oudipúr, Sálímsáhlí, old Chitor, Bhilárá, and Krishnagar coins; and, with some modification, those of Jaipúr and Mattra, have a *جہاز* *jhár*, 'sprig' or six-leaved branch.

Those of Madras, Arkát, Chandor, Sháhpúr, have a small lotus or trefoil.

The Jodhpúr, Kocháman, Bapúsáhlí, and Páli rupees have a kind of small sceptre following the *alif* of the word *شاه* *sháh*.

The Indor rupee is well characterised by the solar effigy of the Suraj-vansí princes; the Maheswarí of Holkar by the symbol of Mahádeva; while the Srisáhlí of Ajmír has the word *श्री* *sri* on the field.

The Jabalpúr rupee is distinguished by bearing the san or year of reign in Nágarí characters. That of Ujjain has merely four squares, or a kind of chequer.

The crescent and star are common emblems on many coins.

Of the Nepálese, Assamese, and other peculiar types, a better idea will be formed from the outlines in the accompanying plate: but the following memoranda<sup>1</sup> of the symbols on the pagodas of Southern India will be useful, as we have no specimens whence to delineate them:

<sup>1</sup> Extracted from a note of Mr. Wilson's 'Cabinet Specimens.'

## DEVICES ON COINS OF SOUTHERN INDIA.

Madras pagoda,	}	The figure of Venkateswara, and Alamelu and Mangamā his two wives.
Pulk Bunder do.		
Venkatapati do.		
Harpanhāli, Scott,	}	A rude figure of Nrisinha, Lakshmi Nrisinhā, and on some also Pratāpa Krishna.
Portonovo, Sravanorī,		
Sāhibarī, Jamsheri,		
Ikkerī, Contarāi, Maisūr, the figure of Umā Maheswara.		
Haidari, Sultāni, Bangalore, etc.—the letter $\text{ح}$ .		
Dūrgī, Chitaldrūg, the lotus. The Shūli pagoda ;—the trisūl.		
Tanjore, Gapālli, Gattī, the Kattār or dagger.		
Virarāi, Panchakal, Giriye ; a gun.		
Chakrī, a Tripati coin ; a diagram on one side and Tripundra on the other.		
Gulgi fanam ;—a plough.		

## TABLES OF BULLION IMPORTED, EXPORTED, AND MINTED.

As a matter of curiosity rather than with a view of furnishing data for calculating the numerical amount of the circulating medium of the provinces under the Bengal Presidency, a statement has been added in two tables<sup>1</sup> of the quantity of gold and silver bullion coined at the mints of Calcutta, Benāres, Farrukhābād, and Sāgar respectively, from the year 1800, to the 30th of April, 1833, inclusive; and also a statement of the imports and exports of bullion at Calcutta, extracted from Wilson's report on the commerce of the port, printed in 1828, the years since expired being added from the same official records. It will be remarked that of the whole bullion minted, a large proportion has been 'on account of Government.' This has chiefly consisted of the re-coinage of worn-out rupees or the conversion of native coins, remitted from the different treasuries, into Government standard. The same process must be continually going forward, inversely, with the English coin in all the native states, so that it becomes impossible to estimate correctly the quantity in actual circulation.

The total value of the coinage at the four mints for the period of thirty-one years has been 53,322,600 rupees.

The bullion importation, <i>viā</i> Calcutta, from 1813-14	
to 1831-32 is valued at .....	sikkā Rs. 355,837,644
From which deducting the exports for the same period,	65,391,544

---

Leaves bullion disposed of in the country ..... sikkā Rs. 290,446,100

<sup>1</sup> [These are omitted as the totals and results are incorporated in the succeeding observations.]

The coinage of the several mints for the same term of eighteen years was as follows :

Calcutta mint.....	203,615,962	4	5
Benáres mint .....	88,329,359	0	6
Farrukhábád mint.....	47,252,842	9	11
Ságar mint .....	4,324,775	9	9

Making altogether, fractions omitted..... 343,522,940

Being an excess of one-fifth above the import, or ..... Rs. 53,076,840

The coinage of the native mints may be jointly estimated at one-half of our own, which will give a rough total of 50 karors of rupees for 18 years, or three karors per annum for the coinage of the Bengal Presidency ; being 150,000 per diem for 200 working days.



TABLE of the Gold Coins of India.

Denomination.	Weight in grains.	Assay in car. grs.	Touch or pure gold in 100 parts.	Pure contents in grains.	Intrinsic value of 100.		Remarks.
					In Calcutta Gold Muhlrs.	In Madras or Bombay gold rupees	
MUHR.			car.grs.				[1750.
Ahmad Sháh ....	207.00	W. 1 2¼	85.1	176.27	93.937	105.874	Coined at Dihli,
Akbar .....	159.00	B. 2 0	100.0	159.00	84.732	96.361	ditto at Agra, 1560
Akbar, jaljaláli ..	186.60	B. 2 0	100.0	186.60	99.430	113.089	ditto at Láhor.
Assam .....	173.50	W. 5 0½	70.0	121.54	64.769	73.662	
„ old .....	173.00	W. 2 2½	81.0	140.11	74.666	84.921	
Benáres .....	168.44	B. 1 1	96.9	163.17	86.956	98.896	
Batavian, 1783...	242.60	W. 3 1½	77.9	188.90	100.665	114.479	Dutch E. I. Comp.
„ 1796...	243.60	W. 4 0	75.0	182.70	97.361	110.725	
„ 214.25	243.60	W. 5 0	70.8	173.01	92.198	104.857	
Bombay, old .....	177.00	B. 0 3½	95.4	168.70	89.903	102.243	
„ later .....	174.99	W. 2 0	83.3	146.82	77.709	88.377	
„ new std. 1800	179.00	B. 0 0½	91.9	164.68	87.759	99.807	Legal exchange
„ do. 1830	180.00	standard	81.7	165.00	87.929	100.000	value, 15 Bom. Rs.
Calcutta, old std.	190.804	B. 1 3½	99.2	189.40	100.934	114.786	Still coined here.
„ new std.	204.710	standard	91.7	187.65	100.000	113.727	Legal value, 16 Rs.
Dihli .....	167.00	B. 1 2½	98.2	163.96	87.373	99.364	Date not given.
Haidarábád .....	172.18	B. 1 0½	96.1	165.45	88.171	100.263	
Jainagar .....	174.99	B. 0 2	93.7	164.05	87.428	99.398	Struck at Jaipur.
Lukhnow .....	166.00	B. 1 3½	99.2	164.70	87.771	99.820	Pure contents as in silver coin.
Madrasgoldrupee	180.00	standard	91.7	165.00	87.929	100.000	Legal value, 15 Rs.
Puna muhr .....	159.55	B. 2 0	100.0	159.55	85.023	96.694	
Rási .....	167.50	B. 0 3½	95.1	159.21	84.845	96.486	
„ another	121.65	W. 4 3½	71.1	86.48	46.087	52.325	
Sháh 'Alám, 1770	190.25	B. 1 2½	98.2	186.80	99.547	113.212	From Kelly.
„ another	191.00	B. 1 2½	98.7	188.50	100.453	114.236	Current in Súrat
Sunamula .....	178.26	W. 0 4	91.1	162.47	86.582	98.465	[and Gujarát.
Súrat (average) ..	178.00	standard	91.7	163.17	87.307	99.307	
Sháh Jahán .....	168.00	B. 1 3½	99.8	167.60	89.315	101.575	Having signs of the zodiac—rare.
PAGODA, HÚN, or VARÁHA.							[still coined.
Anandrái .....	52.46	W. 4 3½	71.1	37.30	19.876	21.708	Travancore Rájá,
Bangalor. ....	52.87	W. 2 2½	81.0	42.82	22.818	25.952	Under Haidar.
Baháduri (Haidar)	52.71	W. 1 2½	84.6	44.61	23.775	27.032	At Seringapatam, 1700
Dharwár .....	50.52	W. 3 3	76.0	38.42	20.473	23.280	In Karnátic, scarce
Darbári .....	50.53	W. 2 2½	81.0	40.96	21.830	24.827	Maisúr.
Durgi pagoda ...	51.55	W. 2 1	82.3	42.42	22.606	25.714	Coined at Chital-
„ another	51.46	W. 4 0½	74.7	38.46	20.496	23.315	drug.
Farrukhí (Calcutt)	52.90	W. 1 1½	85.7	45.32	24.153	27.466	Coined by Tipú.
Harpanháli, old.	50.76	W. 3 2½	76.8	39.00	20.783	23.633	Former Rájá.
„ new	51.10	W. 3 0	79.2	40.45	21.558	24.520	Current at Bellary
Ikkeri, old. ....	52.40	W. 2 1½	81.5	42.71	22.762	25.884	Coins of Maisúr and
„ new .....	52.50	W. 1 3	84.4	44.30	23.606	26.851	Bednor mints so called
Jamshari .....	52.00	W. 1 3	84.4	43.87	23.380	26.589	Trichinopoly.
Madras .....	45.83	standard	91.7	42.01	22.387	25.464	Exchange at Ma-
„ double .....	91.64	standard	91.7	84.00	44.764	50.927	dras, 3½ rupees.
„ star, average	52.40	W. 2 2	81.2	42.55	22.780	25.907	
Muhammadsháhi old .....	50.53	W. 2 3½	79.4	40.14	21.388	24.327	{ Coined by Mah. 'Alí Khán, Nawáb of Karnátic.
„ new	45.30	W. 4 0	75.0	33.97	18.104	20.585	

Denomination.	Weight in grains.	Assay in car. grs.	Touch or pure gold in 100 parts.	Pure contents in grains.	Intrinsic value of 100.		Remarks.
					In Calcutta Gold Muhrs.	In Madras or Bombay gold rupees	
Naidí.....	52.82	W. 1 3	84.4	44.57	23.752	27.010	[Khán Chitor.
Pedatolá.....	52.50	W. 1 2½	84.9	44.57	23.751	23.599	By Fateh Ulla
Paliampatpagoda	51.80	W. 8 3	55.2	28.60	15.240	17.332	Near Trichinopoly
Porto Novo.....	52.21	W. 7 3½	58.8	30.73	16.390	18.640	A Portuguese coin
Palkbunder.....	51.50	W. 1 2	85.4	43.99	23.442	26.655	Same as Madras.
Sadakt, double...	105.75	W. 1 2	85.4	90.33	48.136	54.748	
Sattári.....	50.00	W. 3 3	76.0	38.02	20.262	23.042	Coincd at Sattára.
Shir Kháni.....	49.50	W. 1 3	84.4	41.77	22.257	25.316	
Scott.....	52.23	W. 6 3	63.5	33.19	17.686	20.119	Same as Porto Novo
Sravanur.....	50.46	W. 2 0¼	82.6	41.65	22.196	25.247	
another.....	51.50	W. 4 0	75.0	38.62	20.583	23.406	
Star (see Madras)							[Maliapur.
St. Thomé.....	75.33	B. 0 3½	95.1	71.60	38.159	43.399	Double pagoda of
Súbári, ¼ pagoda	26.20	W. 1 1½	86.2	22.58	12.030	13.692	
Sultáni.....	52.40	W. 1 2½	84.7	44.35	23.635	26.873	Coincd by Tipú.
Travancore.....	51.00	W. 2 1½	81.8	41.76	22.224	25.270	Anandrái, still coincd
Venkatapati.....	51.47	W. 3 3	76.0	39.14	20.856	23.724	At Venkatagiri.
PANAM OR FANAM							[their purity.
Aparanj.....	2.68	W. 0 2	89.6	2.44	1.279	1.517	So called from
Arialur.....	5.34	W. 11 2	43.7	2.33	1.244	1.415	Near Tanjore.
Chakri.....	5.31	W. 16 0	25.0	1.33	0.708	0.805	Tripati coin.
Contarái.....	5.85	W. 8 0	58.3	3.41	1.819	2.068	Ikkeri or Maisúr.
Gattí.....	5.39	W. 11 1½	44.3	2.38	1.271	1.445	Tripati—Chitavel.
Gulgi.....	5.62	W. 10 1	48.9	2.15	1.465	1.666	Marked with a rose
Gopáli, old.....	5.15	W. 16 2	22.9	1.18	0.629	0.715	At Madhyargun,
„ new.....	5.15	W. 16 0	25.0	1.29	0.686	0.783	near Kudalur.
Káliam, or Káli.	5.44	W. 13 2	35.4	1.92	1.026	1.166	Anandrái fanam.
Panchkol.....	5.61	W. 10 2½	46.6	2.65	1.410	1.603	Coimbatore.
Salem.....	4.69	W. 15 1½	27.9	1.31	0.696	0.792	Coincd at Salem.
Suli.....	5.15	W. 16 0	25.0	1.29	0.686	0.780	Tinivelly.
Tanjore.....	5.46	W. 15 0	29.1	1.59	0.848	0.964	
Viraráya.....	5.85	W. 10 3½	46.6	2.72	1.452	1.651	Malabar.
Wodiar.....	5.44	W. 11 2	43.7	2.38	1.267	1.441	Ditto.
FOREIGN GOLD COINS.							
Doubleloon Spanish	416.50	W. 0 2	89.6	373.11	198.834	226.125	3312.575
„ 1786 to 1826	417.00	W. 1 0½	87.0	362.70	193.286	219.825	3220.145
„ Chilli, 1823	417.00	W. 1 0½	87.3	363.79	193.865	220.473	3229.791
„ Colurabial 1826	417.00	W. 1 3	84.4	351.4	187.552	213.296	3124.646
„ Peru.....	417.00	W. 1 0½	87.0	362.0	193.286	219.825	3220.145
Ducat, Dutch.....	53.50	B. 1 2½	98.2	52.3	27.996	31.844	466.413
Guinea, English..	129.50	standard	91.7	118.70	63.258	71.945	1053.879
Sovereign, ditto..	123.25	standard	91.7	113.10	60.271	68.544	1004.115
20 franc, French	99.57	W. 0 1½	90.0	89.62	47.757	54.313	795.632
Johannese, Portug.	222.50	W. 0 0½	91.4	203.38	198.381	123.258	1805.628
Moidore, ditto..	124.00	standard	91.7	113.67	60.673	68.885	1009.146
Sequin, Venetian	52.40	B. 1 3½	99.7	52.27	27.853	31.673	464.031
Tomán, Persian..	73.00	B. 1 0½	96.1	70.15	37.382	42.511	622.785
Copang, Japanold	273.00	W. 1 2	85.5	233.20	124.806	135.272	2079.266
„ new.....	201.75	W. 6 0	60.7	134.50	71.676	81.555	1194.123

(To convert the decimals into ánas and pá's, see Table, page 12; for explanation of the present table, see page 36.)

## SUPPLEMENTARY TABLE OF GOLD COINS.

Since the Table of Gold Coins, page 43, went to press,<sup>1</sup> an opportunity has been afforded of adding largely to its contents, from the examination of a remittance of 725 old gold muhrs sent from the general treasury to be melted and re-coined. On a laborious scrutiny of them, many pieces of all the emperors of Dihlí, since the time of Akbar, were discovered; and a few anterior to that monarch: besides a large store of Bhopál, Jaipúr, and Kotá or Búndí, muhrs, easily recognised by their respective symbols. The whole were weighed and assayed, and the results are given in the present supplement, arranged in two classes, the first, in the order of the emperors; and the second, alphabetically, in that of the localities. As there was considerable difficulty in recognizing many of them, in which part of the name was wanting, it may be convenient here to accompany the table with a catalogue of the inscriptions most commonly met with on the gold coins of each monarch, from Akbar downwards. Some of them, as will be seen, have two or three different forms, which is very perplexing to the examiner. The term *Sáhib-kirán*<sup>2</sup> (lord of the *kirán*, or 'fortunate conjunction of the planets') was first applied to Taimúr; afterwards to Sháh Jahán, as *Sáhib-kirán Sání* (the Second); and lastly to Muhammad Sháh.

It is worthy of remark, that most of the gold muhrs in the present table agree very nearly together in weight and value: and the average value of 100 may be taken as equal precisely to 100 Bombay and Madras new gold muhrs (or gold rupees as they are anomalously styled). The Calcutta gold muhr has no equivalent in the list: it would therefore be no innovation, but rather a restoration of the former system, which prevailed for three hundred years unremittedly, to abolish the Calcutta gold muhr of 204.71 grains, and adopt in its place the 180-grain muhr of Southern and Western India for the standard of the Bengal Presidency. Thus, were the *sikká* rupee abolished, there would remain but one gold and one silver coin throughout British India, both containing the same weight of precious metal, so that the relative value of gold and silver would be at once known; the present nominal rate of sixteen rupees<sup>3</sup> might still continue the legal equivalent of the muhr, since the value of gold is permanently risen nearly to that extent.

<sup>1</sup> [I have allowed this to stand as it appeared in the original, as it did not seem that any material object would be gained by an incorporation of the two Tables.]

<sup>2</sup> صاحب قران

<sup>3</sup> [The old muhr sells at 17.8, its legal rate being 16 rupees. The influx of Australian gold has of late considerably reduced the relative value of that metal in the bazárs of India.]

## INSCRIPTIONS ON MUHRS OF THE MOGHUL EMPERORS.

## AKBAR.

Obverse :

جلال الدين محمد اكبر بادشاه غازي

'The glory of the faith, Muhammad Akbar, the victorious emperor.'<sup>1</sup>

Reverse : The Kalimah.

This inscription, though apparently so common, is not mentioned in Abú'l Fazl's list of the royal coins; the specimens vary in date from 972 to 985 A.H.

## JAHÁNGÍR.

جهانگیر شاه ابن اكبر بادشاه ضرب برهانپور امان الله

'Jahángír Sháh, son of Akbar Bádsháh. Struck at Burhánpúr, May God preserve him.'

## SHÁH JAHÁN.

(a) A plain disc—

Obverse: the Kalimah,

لا اله الا الله محمد الرسول الله ضرب برهانپور سنه الهی ۸۲

'There is no God but God, etc. Struck at Burhánpúr in Ilahí year 82.'

Reverse :

شهاب الدين محمد شاهجهان غازي صاحبقران ثاني

'The bright star of the faith, Muhammad Sháh Jahán, Ghází Sáhíb-kirán the second.'

(b) The chaháryári muhr—

Obverse : A square centre, containing the Kalimah; around which are the names of the four companions of the prophet, Abubakr, 'Omar, 'Osmán, and 'Alí.

لا اله الا الله محمد الرسول الله ابوبكر عمر عثمان علي

Reverse : Same as before : 'San jalús v.'

(c)

Obverse : A lozenge shield, containing the Kalimah, around which, 'Zarb Allahábád, san 1031.'

Reverse : As in the other specimens.

## AURANGZÍB.

Obverse :

در جهان سكه زد چون مهر منير شاه اورنگت زييب عالمگیر

'Sháh Aurangzíb 'Álamgír issued coin, brilliant as the sun.'

<sup>1</sup> غازي is more properly 'a warrior of the faith,' and in this sense we must understand its application on these coins.]

Reverse :

ضرب مستقر الخلافة اکبر آباد سنہ جلوس میمنت مانوس

'Minted at the seat of the Khilāfat, Akbarābād, the year of the reign of fortunate associations.'

BAHĀDUR SHĀH.

Obverse :

سکہ مبارک شاه عالم بہادر بادشاہ غازی سنہ ۱۱۲۳

'Auspicious coin of Shāh 'Alam Bahādur, Bādshāh Ghāzī. A.H. 1123.'

Reverse :

ضرب تجستہ بنیاد سنہ جلوس ۵

'Struck in the favored city, year of the reign 5.'

JAHĀNDĀR SHĀH.

Obverse :

سکہ زد بر سیم و زر چون مہر و ماہ

ابوالفتح جہان دار شاد غازی بادشاہ ۱۱۲۴

'The father of victory, the Emperor, Jahāndār Shāh Ghāzī, struck coin in silver and gold, resembling the sun and moon. A.H. 1124.'

Reverse : As in Aurangzīb's coins.

FARRUKHSIR.

Obverse :

سکہ زد از فضل حق بر سیم و زر فرخ سیر بادشاہ بہر و بر

'By the grace of God, the monarch of sea and land, Farrukhsir, struck silver and gold coin.'

Reverse :

سنہ ۶ جلوس میمنت مانوس ضرب دارالخلافة شاه جہان آباد

'The sixth year of his prosperous reign. Minted at the seat of the Khalāfat, Shāh Jahānābād (Dihli).

MUHAMMAD SHĀH.

(a)

Obverse :

سکہ مبارک محمد شاہ بہادر بادشاہ غازی سنہ ۱۱۷

'Auspicious coin of Muhammad Shāh, the victorious emperor, 17th year.'

Reverse : As usual ; sans 2 to 17.

(b)

The same inscription with the addition of صاحب قران ثانی chiefly of the year 12 ; a debased coin.

<sup>1</sup> [ This legend is ordinarily peculiar to Ahmad Shāh.]

(c)

Obverse :

سکه زد بر سیم و زر چون مهر و ماه  
ابوالفتح غازي الدين محمدشاه

'The father of victory, defender of the Faith, Muhammad Sháh, struck silver and gold coin resembling the sun and moon.'

Reverse : As in (a) ; and of various years.

AHMAD SHÁH.

Obverse : Same as the coin of Farrukhsír, with exception of name :

سکه زد بر سیم و زر از فضل حق احمد شاه سنه ۱۱۴۱<sup>۱</sup>

Reverse : As usual.

'ÁLAMGÍR II.

There are also three varieties of inscriptions on his coins (the reverse of all being as usual).

(a)

Obverse :

سکه مبارک بادشاه غازي عالم گیر ثاني

'Fortunate coin of Bádsháh Ghází 'Álamgír the second.'

(b)

Obverse :

ابوالعدل عزيز الدين شاه عالم گیر بادشاه غازي خلد الله ملكه  
سنه ۳

'The father of justice, chosen of the faith, Sháh 'Álamgír II. Bádsháh Ghází. (May God perpetuate his kingdom!)' Sans 2 and 3.

(c)

Obverse :

سکه زد بر هفت کشور تابان همچون مهر و ماه  
عزيز الدين عالم گیر ثاني بادشاه

'Chosen of the faith, 'Álamgír the second, struck coin in the seven climes, shining like the sun and moon.' A.H. 1170 to 1173. Sans 3 and 6.

SHÁH 'ÁLAM.

Obverse :

سکه زد بر هفت کشور سایه فضل اله

Reverse :

حامی دین محمد شاه عالم بادشاه

The same as on the Company's coin, explained at page 2. All later than the 19th san, bear the symbol of a royal umbrella.

<sup>1</sup> [ I distrust this reading ; but not having the original coin to refer to, I do not venture to amend the attribution.—E. T.]

[I cannot well afford the space requisite to complete the list of the coinage of the Moghul Emperors of Hindústán; but I venture to insert the legend of perhaps the most interesting coin in the whole series; together with two novelties, hitherto, I believe, unpublished.

I. Silver coin of Núr Jahán Bigam. Struck by order of Jahángír, A.H. 1034.<sup>1</sup>

Obverse:

زنام نور جهان بادشاه بیگم زر سنه جلوس ۲۰

Reverse:

بحکم جهانگیر شاه یافت صد زیور ضرب لاهور ۱۰۳۴

A second coin in the British Museum of the same date is seen to have been minted at Ahmadábád.

II. Silver. Murád Bakhsh. Three coins in the British Museum. No date.

Obverse: Square area—The Kalimah.

Margin—The names of the Four Companions of the Prophet.

Reverse: Square area,

محمد مرآد بخش بادشاه غازی

Margin:

ابوالمظفر تاج الدین ضرب سورت

III. Silver. Raff'ud-darjât. Five coins in the British Museum. A.H. 1131.

Obverse:

سکه زد با هزاران برکات شاهینشه بحرو بر رفیع الدرجات ۱۱۳۱

Reverse:


ضرب سنه احد جلوس میمنت مانوس

Other specimens bear the names of Lâhor with *مستقر الخلافة*; and Dihlî under the style of *دار الخلافة شاه جهاناباد*.—E.T.]

<sup>1</sup> [Marsden, p. 635; Anquetil du Perron, p. 221;—Lâhor, A.H. 1035.]

## Supplementary Table of Indian Gold Coins.

(The letters (a) (b) and (c) refer to the inscriptions in pages 46 to 48.)

Denomination.	Weight in grains.	Assay in car. grs.	Touch or pure gold in 100 parts.	Pure contents in grains.	Intrinsic value of 100.		Remarks.
					In Cal. gold mthrs.	In Mad. or Bom. gold rs.	
Jalāl-ud-dīn .....	163.80	B. 0 2 $\frac{3}{4}$	94.5	154.84	82.516	93.843	A. D. 1288 ?
'Alā-ud-dīn .....	166.50	B. 0 2 $\frac{3}{4}$	94.2	156.96	83.645	95.128	Abū'l Muzaffār.
Taimūr Shāh.....	167.40	B. 0 3 $\frac{1}{4}$	95.1	159.12	84.795	96.435	A. D. 1396, Dihli.
Akbar, average .....	162.44	B. 2 0	100.0	162.44	86.565	98.448	A. D. 1556, Dihli.
single.....	165.60	B. 1 1 $\frac{1}{2}$	97.4	161.29	85.951	97.750	Injured by solder of ring.
Jahāngir .....	166.90	B. 2 0	100.0	166.90	88.942	101.152	At Barhānpūr.
Shāh Jahān (a)...	168.65	B. 1 1 $\frac{1}{2}$	97.4	164.26	87.534	99.550	Plain field.
(b) chabār-yārī..	168.20	B. 1 3 $\frac{1}{2}$	99.8	167.76	89.402	101.674	Square shield.
" .....	168.40	standard.	91.7	154.37	82.263	93.551	Vitiated by solder?
(c) lozenge shield	165.58	B. 1 3 $\frac{1}{2}$	99.5	165.15	88.008	100.090	Struck at Allahābād.
Patna .....	170.70	B. 1 3 $\frac{1}{2}$	99.7	169.37	90.256	102.647	Supposed from symbol 39.
doubtful *	164.70	W. 2 2	81.3	133.82	71.313	81.102	Probably forged.
Aurangzib, plain..	168.68	B. 2 0	100.0	168.68	89.890	102.230	Several.
sans 5 to 51 ..	168.29	B. 1 2	98.0	164.78	87.812	99.867	Dihli, A. H. 1076.
Agra .....	162.00	B. 2 0	100.0	162.00	86.330	98.182	1100, these vary
Etāwa .....	168.20	B. 2 0	100.0	168.20	89.634	101.939	only in the place
Dihli .....	167.65	B. 2 0	100.0	167.65	89.371	101.606	of coinage.
Lāhor .....	167.60	B. 0 2 $\frac{3}{4}$	94.5	158.43	84.430	96.021	
Sūrat .....	170.20	B. 2 0	100.0	170.20	90.700	103.152	
san 29 * .....	164.00	W. 2 3 $\frac{1}{2}$	79.7	130.69	69.644	79.204	No place of coinage, others Dihli.
Aurangābād..	164.67	B. 2 0	...	164.67	87.756	99.803	A. H. 1097, Lāhor?
Khujistāh							
bunīād.....	165.60	B. 1 0	...	158.70	84.572	96.182	
Multān .....	168.55	B. 1 3 $\frac{1}{4}$	...	167.23	89.119	101.353	
Bahādur Shāh ...	168.35	B. 1 1 $\frac{1}{2}$	97.4	163.53	87.145	99.108	Shāh 'Alam I.; struck at 'Khu-jistāh bunīād,' (Dihli), in 1123.
Jahāndār Shāh ...	167.25	B. 2 0	100.0	167.25	89.128	101.364	Struck at Jonpūr, 1124.
Farrukhsir, san 6.	167.33	B. 1 0 $\frac{1}{2}$	96.4	161.23	85.922	97.717	Dihli, A. H. 1125.
Lāhor .....	168.00	B. 1 0 $\frac{1}{2}$	96.4	161.87	86.263	98.106	
Muham. Shāh (a)	167.12	B. 1 1	96.9	161.90	86.278	98.122	Struck at Dihli.
(b) sans 2 to 17...	168.07	B. 1 1	97.4	163.69	87.235	99.200	(Average.)
Agra .....	164.79	B. 1 3	99.0	163.07	86.900	98.830	
Allahābād ...	166.70	B. 1 3 $\frac{1}{4}$	99.2	165.40	88.141	100.241	
(c) Arkāt .....	166.30	B. 1 0 $\frac{1}{2}$	96.4	160.24	85.391	97.113	San 1.
Beuāres .....	167.30	B. 2 0	100.0	167.30	89.155	101.394	San 20. See p. 21.
Islāmābād ...	168.30	B. 1 3 $\frac{1}{4}$	99.2	166.98	88.987	101.203	? Dacca or Dihli.
Ujjain .....	160.90	B. 1 2 $\frac{1}{2}$	98.5	164.29	87.551	99.571	
Etāwa .....	167.90	B. 1 3 $\frac{1}{4}$	99.8	167.46	89.241	101.493	
(c) san 12 .....	164.70	W. 1 0	87.5	144.12	76.800	87.344	Ill-executed, Dihli marked 

The coins marked thus \* appear to be forgeries; there are twenty-seven of them bearing the superscription of Aurangzib, badly executed, and nine having that of Farrukhsir, and the date A. H. 1126, with the same san, Jalā 29, although the latter emperor only reigned six years.

<sup>1</sup> This debased muhr is very peculiar:—it was probably coined under Marāthi influence—there were eighty-three of the sort, all of the same date.



Denomination.	Weight in grains.	Assay in car. grs.	Touch or pure gold in 100 parts.	Pure contents in grains.	Intrinsic value of 100.		Remarks.
					In Cal. gold muls.	In Mad. or Bom. gold rs.	
Ahmad Sháh .....	167.65	B. 1 3	99.0	165.90	88.410	100.547	
Barhánpúr ...	169.80	B. 2 0	100.0	169.80	90.487	102.909	
'Alamgir II. san 1	167.30	B. 1 3 $\frac{1}{4}$	99.2	165.99	88.458	100.602	Struck at Dihli (a).
san 3 .....	167.78	B. 1 3	99.0	166.03	88.478	100.624	Inscription (b).
A. H. 1170-1173 .....	167.50	B. 1 2 $\frac{1}{2}$	98.4	164.88	87.867	99.929	Inscription (c).
var. sans .....	168.00	B. 1 3	99.0	166.25	88.595	100.757	Struck at Siwái.
Sháh 'Alam, Dihli	167.41	B. 1 1 $\frac{1}{2}$	97.4	163.05	86.890	98.818	Present inscription. See page 2.
sans 3 to 15 $\frac{1}{2}$							With the chhata.
sans 19 to 34	166.31	B. 2 0	100.0	162.85	86.783	98.696	Same as old Bom.
Barhánpúr ...	169.50	B. 1 3 $\frac{1}{2}$	99.5	168.62	89.857	102.192	? Average of 16.
Farrukhábád ..	165.75	standard.	91.7	151.94	80.968	92.084	Under the Nawáb.
Lukhnow .....	166.80	B. 1 3 $\frac{1}{2}$	99.2	164.07	87.435	99.438	Same as old Bom.
Súrat, san 19.	170.15	B. 1 3 $\frac{3}{4}$	99.8	169.71	90.438	102.853	With dagger.
Akbar II. ....	166.60	B. 2 0	100.0	166.60	88.782	100.970	
<i>Local Gold Coins.</i>							
Agra .....	164.79	B. 1 3	99.0	163.07	86.900	98.830	Muhammadsháhi.
Allahábád <sup>1</sup> .....	162.00	W. 10 0	50.0	81.00	43.165	49.091	Debased? false.
Arkát, M.S. san 1.	166.30	B. 1 0 $\frac{1}{2}$	96.4	160.24	85.391	97.113	Muhammadsháhi.
Benáres, san 20 ...	167.30	B. 2 0	100.0	167.30	89.155	101.394	"
Bhopál, san 27 ...	167.50	B. 1 0 $\frac{1}{2}$	96.4	164.01	87.402	99.400	Average of 149.
Barhánpúr .....	169.50	B. 1 3 $\frac{1}{2}$	99.5	168.62	89.857	102.192	Same as old Bom.
Etáwa .....	167.90	B. 1 3 $\frac{1}{2}$	99.8	167.46	89.241	101.493	Muhammad Sháh and Farrukhsir.
Farrukhábád .....	165.75	standard.	91.7	151.94	80.968	92.084	Company's new standard.?
Islámábád, Dacca?	168.30	B. 1 3 $\frac{1}{2}$	99.2	166.98	88.987	101.203	Muhammadsháhi.
Jaipúr, san 8 .....	166.60	W. 2 0	100.0	138.83	73.985	84.141	? False money.
san 22 .....	168.11	B. 2 0	100.0	168.11	89.589	101.888	These are averages
san 23 .....	167.94	B. 2 0	100.0	167.94	89.498	101.784	of many, all
san 24 .....	168.12	B. 2 0	100.0	168.12	89.590	101.889	new coins of the
var. sans .....	167.80	B. 2 0	100.0	167.80	89.421	101.697	Jaipúr mint.
Siwái, san 18.	168.10	B. 1 3 $\frac{1}{2}$	99.2	166.79	88.881	101.088	Has the same symbol.
Kotá, sans 1 to 18.	167.08	B. 1 0	95.8	160.12	85.329	97.043	Known by the
San 19 .....	166.72	B. 1 2 $\frac{1}{2}$	98.2	163.68	87.225	99.199	Kotá and Búndi symbol.
Lukhnow, old ...	165.80	B. 1 3 $\frac{1}{2}$	99.2	164.07	87.435	99.438	Machhlisáhi.
new .....	165.65	B. 1 2 $\frac{1}{2}$	98.5	163.07	86.898	98.828	Shirsáhi.
Ujjain, san 2 .....	166.90	B. 1 2 $\frac{1}{2}$	98.5	164.29	87.551	99.671	Muhammadsháhi.
Patna, Sháhjahán	170.70	B. 1 3 $\frac{1}{2}$	99.2	169.37	90.256	102.647	? (From symbol 39, p. 67.)
Ságar? marked सग	164.70	B. 0 0 $\frac{1}{2}$	92.2	151.83	80.912	92.019	This monogram is unknown.
Ságar, Srinagar? ..	166.25	B. 1 2	98.0	162.79	86.750	98.659	With the trisul.
Súrat, san 19 .....	170.15	B. 1 3 $\frac{1}{2}$	99.8	169.71	90.438	102.853	Old Bombay.
Pesháwar .....	164.00	W. 8 1 $\frac{1}{2}$	56.7	93.10	49.615	56.424	Khurshid Sháh.

(For explanation of the several columns of this table see page 36; and for converting decimals into *ánas* and *pá'is*, see the Table at page 12.)

<sup>1</sup> The inscription on this coin, of which there are three specimens, is very badly executed; the pieces are most probably forged.

*Table of the Silver Coins of India.*

(To find the value in sikká rupees, deduct one-sixteenth from the value in Farrukhábád rupees: the latter are the same as Madras and Bombay rupees. For the value in £ sterling, divide by 10.)

Name.	Weight.	Assay.	Touch.	Pure contents.	Intrinsic value of 100.	Remarks.
	Grains.	Dwts.		Grains.	Fd. Rs.	
Agra rupee .....	171.62	Br. 7	94.5	162.33	98.381	Struck at Agra by ?
Ahmadábád old ...	178.00	Wo. 4.5	89.8	159.83	96.864	Gujarát and Cutch.
old ...	179.92	Wo. 17.5	84.4	151.81	92.004	Formerly coined.
new ...	180.75	Wo. 15	85.4	154.39	93.568	Present currency.
hálí ...	174.77	Br. 12	96.7	168.94	102.390	Coined for city currency.
Ahmad Sháh .....	177.25	Br. 15	98.0	173.70	105.272	(Equal to Dihlí standard, 1750.)
Ahmadnagar, old...	174.50	Br. 14.5	97.7	170.57	103.376	Same as Dihlí rupee.
Ajmír, old ? .....	168.60	Wo. 11	87.1	146.82	88.982	Srí sáhi, emn. currency introduced by Tantia.
Srí sáhi ...	168.17	Wo. 27.5	80.2	134.89	81.751	or Bápúsáhi?
32nd san ..	168.00	Wo. 21	82.9	139.30	84.428	Coined in 1792.
Allahábád .....	172.03	Stand.	91.7	157.70	95.573	Sans 18, 21, and 26, (1778-86).
'Alamgír II. 1759.	179.50	Br. 16	98.5	176.51	106.974	Equal to the Sá.rup.
Anásáhi .....	176.25	Wo. 7.5	88.5	156.05	94.578	Coined at Kaira, Gujarát.
" .....	177.25	Wo. 14.5	85.6	151.77	91.982	Coined at Pitlad, do.
Ankusi, old .....	172.00	Br. 3.5	93.1	160.17	97.075	Standard of Puna,
new .....	173.50	Br. 2.5	92.7	160.85	97.484	also called Chinsuri.
Aracan, (Mug.) ...	162.38	Wo. 81.5	57.7	93.71	56.793	
Arkát, (Company's)	176.40	Br. 7.5	94.8	167.26	101.340	Coined in Calcutta
1759 .....	177.25	Br. 10	95.8	169.86	102.948	for the Dacca and
1782 .....	174.00	Br. 11	96.2	167.47	101.500	Katak districts,
1788 .....	177.25	Br. 11	96.2	170.60	103.396	also the old currency of Madras.
old .....	172.39	Br. 4.5	93.5	161.25	97.729	The Súrat Arcot,
1766 .....	171.47	Br. 3.5	93.1	159.68	96.775	mentioned in Reg. XXXV. 1793.
new .....	188.00	Wo. 4.0	93.3	169.20	102.545	The Madras dol. ru.
Katak .....	173.89	Br. 9.0	95.4	165.92	100.556	Formerly cur. here.
French .....	173.13	Br. 9.5	95.6	165.55	100.334	Coined at Pondicherry.
Garnáli .....	172.20	Br. 7	94.6	162.88	98.716	Uncertain (from Chitagong).
Phurshí .....	172.78	Br. 7.5	94.8	163.78	99.258	'Forshi' of Reg. XXXV. 1793.
uncertain .....	169.33	Wo. 17.5	80.2	142.88	86.592	Probably forged.
Jaházi .....	173.573	Br. 7.5	94.8	164.53	99.716	Brought to Chitagong by sea.
Assam, mixed .....	174.05	Br. 8	95.0	165.35	100.215	Current in the valley
Rudra Singh...	173.20	Br. 15	98.0	169.59	102.782	of Assam and the
Siva .....	173.40	Br. 13	97.1	168.34	102.025	neighbouring districts: coined at
Pramatta .....	169.90	Br. 12	96.7	164.24	99.537	Rangpúr and Jorhat.
Rájendra .....	173.90	Br. 12.5	96.9	168.47	102.100	
Lakhsmi .....	173.50	Br. 13	97.1	168.44	102.084	
Gaurináth .....	174.20	Br. 10	95.8	166.94	101.177	Restored to throne
" .....	174.00	Br. 6	94.1	163.83	99.303	in 1793.
Bharat .....	174.75	Br. 11.5	96.5	168.56	102.159	
Ashásáhi .....	176.50	Wo. 11	87.1	153.70	93.153	Anásáhi? Gujarát, Baroda, Kaira, etc.

Name.	Weight.	Assay.	Touch.	Pure contents.	Intrinsic value of 100.	Remarks.
	Grains.	Dwts.		Grains.	Fd. Rs.	
Aurangábád.....	170.86	Wo. 23.5	81.9	139.89	84.787	Coined by Govind Bakhshí, (Haidar-ábád), see Govind Bakhshí.
Bábásáhi .....	177.00	Wo. 14.5	85.6	151.56	91.849	Coined at Baroda, from san 4 to 18.
Bagalkotá .....	172.30	Wo. 5	89.6	154.35	93.546	Mulharásáhi (Holkar).
Bálásáhi .....	169.21	Wo. 8.5	88.1	149.12	90.426	Old coinage of Sagar,
	162.14	Wo. 5.5	89.4	144.92	87.828	current in Gurráh
	169.00	Wo. 6	89.2	150.69	91.328	and Bundelkhand.
Barellí .....	171.90	Br. 4.5	93.5	160.80	97.453	Cur. in Rohilkhand.
	169.28	Br. 5.0	93.7	158.61	95.945	Average of 4 lakhs.
Baroach, old.....	177.06	Br. 7.5	94.7	167.84	101.720	Now disappearing.
new .....	177.50	Wo. 8.5	88.1	156.42	94.801	Present currency (1821).
Baroda .....						See Bábásáhi.
Batavia, 1763 .....	199.00	Wo. 20.5	83.1	165.41	100.254	Coined by the Dutch
1803 .....	204.00	Wo. 30.5	79.0	161.07	97.621	East India Comp
Bhatúr .....	171.30	Wo. 10.0	87.5	149.89	90.841	Near Ahmadnagar.
Bilápúr .....	171.82	Wo. 14.5	85.6	147.12	89.165	Current at Pána, in Concan, etc.
Benáres, old.....	175.00	Br. 12	96.7	169.17	102.525	Under native daroga.
old stand. ....	175.00	Br. 11.6	96.5	168.875	102.348	By Reg. II. 1812, oblique milling.
since 1800.....	174.76	Br. 9.5	95.6	167.00	101.285	Average of rupees brought for re-coinage.
1819-1829.....	180.234	standard	91.7	165.21	100.134	The late Farrukhá-bád rupee: mint abolished in 1830.
Bhikanír .....	174.00	Br. 11	96.2	167.47	101.500	Current in Ajmir.
Bhilára .....	168.90	Wo. 21.5	82.7	139.69	84.663	Mint under Bhopál
Bhilsa, old .....	169.62	Wo. 12.5	86.5	146.65	88.882	Nawáb.
another .....	169.01	Wo. 16.5	84.8	143.31	86.901	Reformed in 1827.
new .....	173.61	Br. 6.5	94.4	163.47	99.299	Coined at Bhopál.
Bhopál .....	171.38	Wo. 6	89.2	152.82	92.616	(Reformed in 1827, see 'Bhilsa.')
another .....	169.25	Wo. 6.5	89.0	150.56	91.249	Average of many lakhs.
Bhartpúr .....	171.86	Br. 10	95.8	164.70	99.819	Old Súrát rupee.
Bindrában .....	156.67	Wo. 19.5	83.5	130.89	79.325	Ditto debased.
Bombay, old.....	178.33	Br. 12	96.7	172.39	104.282	Coined at Bombay
	178.75	Wo. 2.5	90.7	161.99	98.176	and Calcutta.
1800 .....	179.00	Br. 0.5	92.0	164.68	99.200	Present standard.
1829 .....	180.00	standard	91.7	165.00	100.000	Current in Ajmir and Bundelkhand.
Búndí, 1819.....	171.56	Wo. 7	88.8	152.26	92.273	Brazilian dollar.
1825 .....	172.82	Br. 7	94.6	163.46	98.622	
Brazil, Pataka .....	407.99	Wo. 5	89.6	365.49	221.514	
Brodera, old.....	178.50	Wo. 1.5	91.1	162.51	98.490	
new .....	178.50	Wo. 7	88.8	158.42	96.011	
Balabsáhi .....	175.56	Wo. 15	85.4	149.957	90.880	Coined at Baroda.
Bunder, tukshál .....	163.79	Br. 85	95.2	155.93	94.502	
Garnáfi .....	174.66	Br. 9	95.4	166.66	101.005	
Barhánpúr .....	178.80	Br. 8.5	95.2	170.23	103.171	Also called 'Parkí,' coined by Sindia in Khándesh.
Basra .....	250.00	Wo. 11.7	42.9	120.17	72.828	Persian Gulf.
Calcutta, old.....	179.666	Br. 15	98.0	175.923	106.620	The old Murshidábád 19th san sik-ká rupee.

Name.	Weight.	Assay.	Touch.	Pure Contents.	Intrinsic value of 100.	Remarks.
	Grains.	dwt. Stand.		Grains.	Fd. Rs.	
Calcutta, new .....	191.916	Stand.	91.7	175.923	106.620	By Reg. XIV. 1818. <sup>1</sup>
present ..	192.00	Stand.	91.7	176.00	106.666	By Reg. VII. 1833, all receivable at par.
Cambay .....	178.00	Wo. 15	85.4	152.04	92.167	Current in Nawáb's district.
Caláni .....	172.66	Wo. 24	81.7	141.01	85.460	
Ceylon .....	134.00	Wo. 24	81.7	109.43	66.323	The rix-dollar of 1s. 9d. <sup>2</sup>
	138.32	Wo. 5	89.6	123.91	75.074	
Chambagondí .....	171.00	Wo. 15	85.4	146.06	87.917	Discount of 2 per cent. with Ankusi rupee.
Chanda .....	166.42	Wo. 13	86.3	143.54	86.991	Current in Nágpur and the Nabaddá
1819-24 ...	169.70	Wo. 4	90.0	152.78	92.563	
1825 .....	165.15	Wo. 16.5	84.8	152.72	92.559	
Chandéri .....	173.00	Br. 1.5	92.3	159.66	96.766	One of Sindia's mints
Chandoli .....	170.15	Wo. 14.5	85.6	145.69	88.299	Gwálár rupee.
Chandúri .....	172.00	Br. 1	92.1	158.38	95.989	Khándesh standard, current in N. Con- can, at par with Ankusi rupee.
another ..	168.70	Wo. 2.5	90.7	152.88	92.656	
another ..	169.70	Wo. 1	91.3	154.85	93.849	
Chandrapúr .....	163.00	Wo. 19	83.8	136.51	82.735	Average.
	166.50	Wo. 5	89.6	149.16	90.397	
Chinsuri .....	172.50	Br. 3	92.9	160.28	97.140	Same as Ankusi of Puna.
Chitor .....	169.57	Wo. 28.5	79.8	135.31	82.004	Current in Ajmír
Chaurási .....	171.75	Wo. 3.5	90.3	154.94	93.901	Ikkeri.
Chaundá .....	164.85	Wo. 13	86.3	142.18	86.171	Same as Chanda ?
Chandausi, san 29.	171.10	Wo. 9.5	95.6	160.57	95.497	Coined by Zābita-khān in Rohilkhand.
Chalani .....	160.71	Wo. 27	80.4	129.23	78.324	Haidarābād.
Suluki .....	169.47	Wo. 28.5	79.8	135.22	81.954	
Chappá .....	172.50	Br. 6	94.1	162.44	98.447	
Katak .....	172.18	Br. 6.5	94.3	162.33	98.380	Arkāt rupee coined at Calcutta.
Cālpí .....	169.07	Wo. 11.5	86.9	146.88	89.021	Bundelkhand.
Chatrapúr .....	169.00	Wo. 8.5	88.1	148.93	90.261	Rājā Pratāp Singh, Bundelkhand.
Dacca .....	179.30	Br. 12	96.7	173.32	105.044	Same as the sikkā rupee.
Deig .....	169.70	Wo. 7.5	88.5	150.25	91.064	Near Bhartpūr.
Dihlī .....	172.40	Br. 13	97.1	167.37	101.437	See Sonāt, and the various súbahs ?
Muhammad Sháh..	173.30	Br. 12.5	96.9	167.88	101.806	
38th san	172.80	Br. 3	92.9	160.56	97.309	
	173.00	Br. 6.5	94.4	163.27	98.951	
Dollar, <sup>2</sup> Spanish ...	417.60	Wo. 4.6	89.7	374.87	227.194	Since 1772, by law.
	415.68	Wo. 4.5	89.8	374.27	226.830	Average in England.
	415.00	Wo. 5	89.6	372.21	225.584	Since 1812, average of Calcutta assays.
N. American	416.00	Wo. 6	89.2	371.25	225.000	By United States law.
Dutch guilder .....	161.00	Wo. 1.5	91.1	144.53	87.503	By law, 162 grs.
English shilling ...	87.28	Br. 2	92.5	80.70	48.909	(Previous to 1830 nearly 3 dwt. Br.)
crown .....	436.36	Br. 2	92.5	403.63	244.624	
Etáwa .....	171.80	Br. 1.5	92.3	158.56	96.095	In the Doáb.
French 5-franc ...	385.85	Wo. 4	90.0	347.26	214.360	By French law.
	384.60	Wo. 4.5	89.8	345.25	209.242	By Calcutta assays.

<sup>1</sup> The standard of 1818-1830 was really a pennyweight too fine, in consequence of an error in the old standard plate of England, to which the assays of India were referred. The proper correction has now been introduced in both countries: and it has been to the assays in this table made prior to 1830.

<sup>2</sup> The dollars of the independent states of Mexico, Bolivia, Chili, and Peru, are of the same weight and value as the Spanish dollar; they varied during the revolutionary period.

Name.	Weight.	Assay.	Touch.	Pure contents.	Intrinsic value of 100.	Remarks.
	Grains.	dwt.		Grains.	Fd. Rs.	
Fath 'Ali shāhī ...	157.71	Br. 7	94.5	149.17	90.406	Late king of Persia, died in 1833.
another ...	143.39	Br. 9.5	95.6	137.12	83.100	
A.H. 1244	105.60	Br. 4.5	93.5	98.64	59.810	Struck at Hamadān. <sup>1</sup>
1245-48 ...	105.12	standard	91.7	96.36	58.400	Struck at Shirāz.
Farrukhābād 39 san	169.40	Br. 6	94.1	153.23	97.073	Old native currency, average.
Company's.....	173.00	Br. 9.2	95.5	165.215	100.144	45th san Likhnow Rs. of Reg. XLV. 1803
new standard...	180.234	standard	91.7	165.215	100.144	By Reg. XI. 1819.
present .....	180.00	standard	91.7	165.00	100.000	By Reg. VII. 1833.
Generally .....	167.20	Wo. 8	88.3	147.69	89.511	Gārnālī Arkāt.
German crown.....	433.00	Wo. 20	83.3	360.84	218.691	Legal value by convention of 1763.
	430.45	Wo. 20.5	83.1	357.81	216.855	By Calcutta assays.
Ghatsan rupee.....	173.31	Br. 9	95.4	165.37	100.222	29th san Reg. III. 1806
Goa .....	168.50	Wo. 12	86.4	145.58	88.230	Imported at Bombay as bullion.
Gohursāhī .....	174.43	Br. 11.5	96.5	168.25	101.971	Shāb 'Alam? Benāres mint; <i>chaurā</i> , broad
1 to 15 san... }						<i>Thumkā</i> , stumpy or
chaurā .....						broad; all current
thumkā .....	174.18	Br. 7	94.5	164.74	99.833	in Ghāzīpūr district at par with Benāres rupees.
16th san .....	174.52	Br. 8.5	95.2	166.16	100.702	See Bundī.
trisūlī .....	173.05	Br. 4.5	93.5	161.87	98.110	Equalized to the Indian standard.
Gokul rupee.....	172.80	Br. 3	92.9	160.56	97.309	Madras.
Gomansāhī, 1819...	171.25	standard	91.7	156.98	95.139	Haidarābād Bāgh chalanī.
1825 ...	172.98	Br. 5	93.7	162.17	98.283	" Shahr chalanī.
Gopāl sāhī .....	172.50	Br. 3	92.9	160.28	97.140	" Hukm chalanī.
Gurumatkal, 1.....	172.30	Wo. 24.5	81.5	140.35	85.063	Aurangābād Bāgh chalanī.
	172.00	Wo. 18.5	84.0	144.41	87.520	Do. Shahr chalanī.
	170.00	Wo. 39.5	75.2	127.85	77.487	Do. Hukm chalanī.
Govind bakhshī, 1...	170.80	Wo. 20	83.3	142.33	86.262	See Shamshīrī, paid to troops at 120 per 100 Fd. or By. Rs.
	171.50	Wo. 25	81.2	139.3	84.451	The best of Sindia's coins.
	170.50	Wo. 19	83.7	142.79	86.542	Debased Bālāsāhī.
1832...	169.38	Wo. 25	81.2	137.62	83.406	See Puna, Ujjāin, etc.
Gwālīār .....	171.30	Br. 6	94.1	161.31	97.763	Coined by Holkar at Indor?
Gurrahkotā .....						Coined at Marech.
Hākī .....						Called Hākī in Mālwa
Hatras .....	171.60	Br. 9	95.4	163.73	99.27	Bāgh chalanī, 'palace currency.'
Holkar sāhī.....	168.60	Wo. 1	91.3	153.84	93.240	Shahr chalanī, 'city currency,' see p. 25.
Hukarī .....	172.60	Wo. 22.5	82.3	152.03	86.082	Hukm chalanī, 'ordered currency.'
Hurda .....	172.59	standard	91.7	158.20	95.881	Coined at Calcutta.
Haidarābād, 1.....	174.10	Wo. 17	84.6	147.03	89.106	Bāgh chalanī.
	173.50	Wo. 17	84.6	146.75	88.942	Shahr chalanī.
	173.50	Wo. 18.5	84.0	143.15	86.757	Coined at Calcutta.
1823.....	173.38	Wo. 18	84.2	145.93	88.440	Bāgh chalanī.
1832.....	172.66	Wo. 21	82.9	143.16	86.765	Shahr chalanī.
	170.20	Wo. 35	77.0	131.19	79.511	

<sup>1</sup> Average of one thousand six hundred and eighty, melted in 1833. The Persian coins are struck in many different towns, the principal mint being at Shirāz.

Name.	Weight	Assay.	Touch.	Pure contents.	Intrinsic value of 100.	Remarks.
	Grains.	dwt.		Grains.	Pd. Rs.	
Imámí .....	175.24	Br. 10.5	96.0	168.31	102.003	Struck by Tipú Sul-tán, rare.
Inder, 1819 .....	172.00	Br. 7.5	94.8	163.04	98.813	Proper weight 174.5, current through-out Málwá at par with English rup.
1832 .....	172.90	Br. 6	94.1	162.81	98.674	See Sálímsáhi.
Jaláon .....	168.80	Wo. 12	86.6	146.29	88.662	Rája Pratáp Singh of Srinagar, es-tablished 1809, abolished in 1826.
Jhánsi .....	170.00	Wo. 15.5	85.2	144.85	87.790	Bundelkhand, abo-lished 1826.
Jhínd .....	168.50	Wo. 19	83.8	141.12	85.526	Doáb.
Jodhpúr .....	174.00	Br. 9.5	95.6	166.39	100.841	Current in Málwá.
	168.30	Wo. 26	80.8	136.04	82.450	Similar to Srisáhi.
Jamkandí .....	175.00	Br. 2	92.5	161.87	98.104	Exchange 2 pr. cent. under Ankúsi.
Jabalpúr .....	167.38	Wo. 6	89.2	149.25	90.455	In 1800, 11 máshas; 1803, 10 máshas; 1813, 9 máshas, 6 rupees: at par with Nágpúr.
Jagádhari .....	165.30	Wo. 12.5	86.4	142.92	86.615	Coined at Nasuk,
Jaripatká .....	171.60	Wo. 1	91.2	166.58	94.896	Khándesh.
Jaidur .....	173.50	Br. 6	94.1	163.38	99.017	Jaigarh? Dihli dis-trict.
	172.00	Br. 5.5	93.9	161.61	97.944	
Jainagari .....	172.68	Wo. 3	90.4	166.10	94.608	Current in Ahmad-nagar and Gujarát.
						Present currency.
Jaipúr .....	174.00	Br. 12	96.7	168.20	101.939	See Náráyani.
Kachar .....						
Kárhána .....	172.80	Wo. 18	84.2	145.44	88.145	
Kerauli .....	171.37	Br. 8.5	95.2	163.16	98.877	
Kittor-shápuri .....	174.00	Wo. 12.5	86.5	150.44	91.175	Original Shápuri (q.v.)
Kocháman .....						Jodhpúr, Bápúsáhi.
Korá, san 8 .....	168.76	Wo. 5	89.6	151.18	91.623	1769, full wt. 170.5
san 12 .....	168.73	Wo. 10.5	87.3	147.29	89.269	current in Allahá-bád: mostly melted up and recoined.
san 20 .....	168.36	Wo. 14	85.8	144.51	87.581	
Kosí .....	167.05	Wo. 18	84.2	140.60	85.212	Haidarábád (1832).
Kosá .....	171.64	Wo. 32	78.3	134.45	81.485	Near Bhartpúr.
Kúmhír .....	171.00	Br. 8	96.0	162.45	98.454	
Kotá, old .....	172.65	Br. 13.5	97.3	167.97	101.803	Kotá Rája has mints also at Jatrapatan and Gágraun.
1825 .....	174.02	Br. 14	97.5	169.67	102.830	
Katch kaurí .....	72.15	Wo. 73.5	61.0	43.56	26.400	Coined at Anjar, Katch.
Lálágorá .....	171.50	Wo. 6.5	89.0	152.15	92.210	Coined by Gen. Lally?
Lárin .....	74.50	Br. 11.5	96.5	71.86	43.553	Of Persia and Arabia
Lassa .....	58.00	Wo. 30.5	79.2	45.91	27.827	Chah Chin coin or Tsang-pahu.
Lukhnow, old .....	172.33	Br. 12	96.7	166.58	100.957	Coined by the Na-wáb Vazir.
(Fd. sd.) 45th san. ....	173.00	Br. 9.2	95.5	165.21	100.127	Called Machhlisáhi.
Srí sháhi .....	172.12	Br. 11	96.2	165.67	100.405	By King Asaf-nd-daulah.
1824 .....	172.12	Br. 6	94.1	162.08*	98.231	This year's coinage; inferior. (A.H. 1239-40.)
1831 .....	172.10	Br. 11	96.2	165.69	100.413	
Má dipúr .....	173.75	Wo. 6	89.2	154.98	93.895	Or Nousee; (Kelly).

Name.	Weight.	Assay.	Touch.	Pure contents.	Intrinsic value of 100.	Remarks.
	Grains.	dwt.		Grains.	Fd. Rs.	
Mádairí .....	174.28	Br. 5.5	94.0	163.75	99.240	
Madras, old .....	176.40	Br. 6.5	94.4	166.48	100.895	Old Arkát rup. bylaw
Rájápúrí .....	175.00	Br. 7	94.6	165.52	100.315	Coined at Rájápúr.
rupee of 1811... ..	186.70	Wo. 5.5	89.4	166.48	100.895	Coined from Spanish dollars.
half pagoda ... ..	326.73	Wo. 5.5	89.4	291.34	176.570	= 1½ Arkát rupee.
5-fanam .....	71.51	Wo. 4	90.	64.36	39.008	By Calcutta assay.
2-fanam .....	28.75	Wo. 5	89.6	25.76	15.609	"
1-fanam .....	14.31	Wo. 4.5	89.8	12.85	7.785	"
double rupee ... ..	370.89	Wo. 4.5	89.8	333.03	201.834	"
rupee .....	187.48	Wo. 4.5	89.8	168.34	102.024	"
new standard... ..	180.00	Standard	91.7	165.00	100.000	1818; present currency.
Madhusháhi .....	174.05	Br. 12.5	96.9	168.61	102.188	New Holkar, Indor,
Maheśwarí .....	173.25	Br. 7.5	94.8	164.23	99.530	Coined at Maheśwar by Holkar; same as Ujjain and Indor.
Muhammadsháhi... ..	173.30	Br. 8.5	95.2	165.00	100.000	Dihli Muhammadsháhi?
Mámúsáhi .....	177.75	Wo. 5.5	89.4	158.86	96.281	Baroda.
Malabar .....	172.84	Br. 3.5	93.1	160.96	97.549	
Mámúsáhi .....	169.50	Wo. 2.5	90.7	153.61	93.096	Current in Ahmadnagar and Gujarát. (Old) from Madras.
Máshirábád .....	171.40	Wo. 6.5	89.0	152.47	92.409	
new .....	168.20	Wo. 2.5	90.6	152.43	92.382	
Marech hakári.....	172.60	Wo. 17.5	84.4	145.67	88.287	Coined at Marech. Bijápúr.
Mullasáhi .....	172.40	Br. 8	95.0	163.78	99.260	Súrat?
Malhasáhi .....	165.87	Wo. 6.5	89.0	147.55	89.425	Súrat (Noton).
.....	165.88	Wo. 6	89.2	147.91	89.642	Current in Málwá.
Mudhól .....	173.00	Wo. 82	57.5	99.47	60.284	Coined by Málíji Rao in 1790.
Murshidábád .....	179.666	Br. 15	98.0	175.923	106.620	Old sikká rupee (See Calcutta.)
Mag rupee .....	152.80	Wo. 14.9	29.6	49.31	29.886	Average of 1400, assayed in 1833.
Makansáhi .....	176.62	Wo. 10.5	87.3	154.17	93.439	Coined at Baroda.
Malharsáhi .....	172.30	Wo. 5	89.6	154.35	93.546	Coined at Bagalkotá (Holkar).
Mulkápúr .....	173.20	Wo. 46.5	72.3	125.21	75.884	Near Burhánpúr.
Mangalsáhi .....	178.50	Wo. 7	88.8	158.41	96.012	(Kelly.)
Mutysáhi .....	173.30	Br. 8	95.0	164.73	99.833	Achmuty, collector, Allahábád.
Mathurá .....	167.30	Wo. 13.5	86.0	143.95	87.241	
Mysore .....	174.28	Br. 7.5	94.8	165.20	100.125	Maheśwar? Holkar's.
Nágpúr, old.....	168.65	Wo. 0.5	91.5	154.24	93.481	Nishándár, before 1817.
new .....	166.53	Wo. 13.5	86.0	143.28	86.838	Náldár, after 1817.
1824 .....	166.53	Wo. 28.5	79.8	132.87	80.530	Debased until 1824.
present ... ..	166.20	Wo. 17.5	84.4	140.23	84.988	Reformed in 1824.
Náráyani .....	142.23	Wo. 22	86.7	117.34	71.116	The Kachár rupee;
.....	142.17	Wo. 30	79.2	113.34	68.690	current in Rangpúr, etc. assayed
.....	137.15	Wo. 25.5	81.0	111.15	67.364	in 1832.
Náráyanpat .....	170.90	Wo. 32	78.3	133.17	80.707	Haidarábád rupee, coined at Náráyanpat
" .....	172.50	Wo. 26	80.9	139.55	84.557	By Noton full weight
Narwár.....	170.00	Wo. 95	87.7	149.10	90.366	[Pádasháhpúr.
Nepáni .....	178.00	Wo. 38.5	75.7	130.96	79.383	A Maráthi coin, 1803

Name.	Weight.	Assay.	Touch.	Pure contents.	Intrinsic value of 100.	Remarks.
	Grains.	Dwts.		Grains.	Fd. Rs.	
<b>Nepál</b> .....						These are coins of the Gerkha dynasty of Nepál princes, Gírván Yúdh and the present Rájá Rájendra Vikrama Sáh. They are the average of a number assayed in 1832. The coins of the old or Newar dynasty are of the same standing. They are called muhrs, see p. 32.
A.D. Saka.						
1808 1731	85.00	Wo. 21	82.9	70.48	42.714	
1810 1733	83.75	Wo. 32	78.3	65.60	39.760	
1811 1734	84.67	Wo. 28	80.0	67.73	41.050	
1813 1736	84.40	Wo. 37	75.1	64.35	39.003	
1815 1738	84.58	Wo. 50	70.9	59.92	36.316	
1817 1740	85.05	Wo. 43	73.7	62.72	38.014	
1818 1741	84.96	Wo. 43	73.7	62.65	37.973	
1819 1742	83.77	Wo. 55.5	68.5	57.42	34.799	
1820 1743	84.66	Wo. 33	77.9	65.96	39.977	
1822 1745	85.57	Wo. 26	80.8	69.17	41.922	
1823 1746	85.23	Wo. 24.5	81.5	69.43	42.078	
1824 1747	85.47	Wo. 31	78.7	67.30	40.790	
Average	84.76	Wo. 35.3	76.8	65.23	39.522	
<b>Najibábád</b> .....						Current in Rohilkhand and Murádbád. Received at 106 per 100 Fd. Rs., see p. 32.
sun, 20 to 29	173.00	Br. 12	96.7	167.23	101.353	
30 to 40	171.00	Br. 6	94.1	161.02	97.591	
41 to 43	169.30	Br. 1	92.1	155.90	94.483	
<b>Nasúrábád</b> .....	170.20	Br. 6	94.1	160.27	97.134	Sindiasáhi? Mewár. Average of 100. See Maheswar. Struck by Sindia.
<b>Udipúr</b> .....	167.45	Wo. 32.5	78.1	130.82	79.285	
<b>Ujjain, 1832</b> .....	174.64	Br. 4	93.3	162.99	98.783	
<b>Oukarí</b> .....	175.00	Wo. 17	84.6	148.02	89.710	(Kelly's Cambist). Ikkerí.
<b>Panálí, old</b> .....	170.60	Wo. 68	63.4	108.16	65.552	1760. Struck by Rájá Kárwikar.
<b>Pánipat</b> .....	171.20	Br. 0.5	91.9	157.29	95.327	Dihlí district.
<b>Patna</b> .....	177.50	Br. 11.5	96.5	161.21	97.705	Company's mint, 1793.
<b>Parkaní, Nepání</b> ...	173.00	Wo. 38.5	75.7	130.96	79.384	By Sidhojiná'ik 1803
<b>Sembho</b> .....	172.75	Wo. 28.5	79.7	137.76	83.491	Current in S. Máráthí states.
Old ditto .....	174.00	Wo. 4.5	89.7	156.16	94.646	By Bhusla family, 200 years ago.
<b>Mudhol</b> .....	173.00	Wo. 8.2	57.5	99.47	60.284	By Maláji Rao, 1790, rare.
newest .....	177.90	Wo. 7	88.7	157.88	95.684	Coined in the Sáwant state.
<b>Persian rupee</b> .....	177.25	Br. 16	98.4	174.30	105.634	See Fath 'Alí.
	178.00	Br. 19.5	98.2	174.66	105.856	[sáhi.
<b>Pratápgarh</b> .....	170.40	Wo. 9.6	87.6	149.27	90.466	Noton. See Salim-
<b>Phulchari</b> .....	174.81	Br. 9.5	95.6	167.58	101.565	Phulshahri?
<b>Phúlshahrí</b> .....	171.70	Br. 1.5	92.3	158.46	96.039	Ankusi rupee struck at Phúlshahr.
<b>Pondicherry</b> .....	175.35	Br. 9.5	95.6	167.68	101.625	French Arkát.
	173.98	Br. 10	95.8	166.73	101.048	
old ... ..	173.61	Br. 11	96.2	167.09	101.269	[under Purnyá.
Rájá .....	176.16	Br. 8	95.0	167.30	101.390	Struck at Maisúr,
Pultí fanam .....	5.60	Br. 5.5	94.0	5.26	3.190	
<b>Puna, old</b> .....	176.00	Br. 12.5	96.9	170.50	103.333	Old currency. See Ankusi.
sri sikká .....	172.50	Br. 1.5	92.3	159.20	96.486	For present standard
háli .....	174.75	Br. 11.5	96.4	168.46	102.096	Coined for mercantile purposes.
<b>Porebunder kaurí</b> ...	74.50	Wo. 52	70.0	52.15	31.606	Coined at Porebunder, Katch.
<b>Rájgarh</b> .....	173.75	Br. 11	96.2	167.23	101.353	



Name.	Weight.	Assay.	Touch.	Pure contents.	Intrinsic value of 100.	Remarks.
	Grains.	dwt.		Grains.	Fd. Rs.	
Báj-muhri .....	.....	.....	.....	.....	.....	See Assam rupee.
Rájsáhi .....	169.73	Wo. 14	85.8	145.69	88.295	
Ráichur 1 .....	173.00	Wo. 4.5	89.8	155.34	94.144	(Madras table).
2 .....	175.00	Wo. 5.5	89.4	156.41	94.792	
Ráthgarh .....	168.35	Wo. 11	87.1	146.60	88.851	One of Sindia's mints
Rikábi .....	172.00	Wo. 10	87.5	150.50	91.212	
	172.00	Wo. 12	86.6	149.07	90.343	
Ságar .....1815	170.10	Wo. 8.5	88.1	149.90	90.849	See Bálásáhi; std. 80 rati silver 10 r. alloy; established in 1782; received at 120 per 100 Fd. Rs.
1819	170.48	Wo. 9.5	87.7	149.52	90.624	
new, 1824	180.00	standard	91.7	165.00	100.000	The Fd. rupee.
Saháranpúr .....	171.00	Br. 4.5	93.5	159.96	96.943	Mint abolished in 1806.
Sálimsáhi .....29	168.11	Wo. 34.5	77.3	129.93	78.748	Struck at Pratápgarh, Ajmir, and current throughout Málwá.
san, 45	168.55	Wo. 27	80.4	135.54	82.148	Jurmuria, (Macdonald's rept., 1823).
oldest, ...	168.50	Wo. 6.5	89.0	150.00	90.909	Murmuria, ditto.
1810	168.50	Wo. 13.5	86.0	145.00	87.878	Melá, ditto.
1820	168.50	Wo. 25.0	81.3	137.00	83.030	Dihli district.
Shámli .....	170.10	Wo. 1.5	91.1	154.86	93.855	
Sandoara .....	171.30	Br. 1	92.1	157.74	95.599	Sárowi of Ajmir.
Sarura .....	165.00	Wo. 22	82.5	136.12	82.500	Bigam Samrá?
Sardhana .....	171.20	Br. 2	92.5	158.36	95.975	Málwá.
Saronj .....	168.35	Wo. 16.5	84.8	142.75	86.516	
	170.91	Wo. 4	90.0	153.82	93.226	
Sháhpúrí .....	174.00	Wo. 10	87.4	151.98	92.118	Current in Belgaum, Ajmir, etc.
Shamshirí .....15	172.37	Wo. 26.5	80.6	138.89	84.130	Current in Aurangábád.
san 21	171.51	Wo. 31.5	78.5	134.80	81.693	Assayed in 1833, see Govind bakshi and Haidarábád.
san 28	172.00	Wo. 28	80.0	137.60	83.395	See Udiপুর.
Sindiasáhi .....	.....	.....	.....	.....	.....	Established in 1810, current in Nerbadda.
Sohágpúr .....	166.90	Wo. 24	81.7	136.30	82.607	
Sonát, Dihli .....	178.77	Br. 15.5	98.1	175.41	106.313	The years 1 to 19 inclusive.
sábik .....	177.57	Br. 10.5	96.0	170.54	103.358	Same as sikká rupee.
san 1 to 19 .....	179.12	Br. 16	8.3	176.13	106.747	See Puna.
Srí sikká .....	.....	.....	.....	.....	.....	See Ajmir, 1815.
Srisáhi .....	.....	.....	.....	.....	.....	In Naná Govind's state. Est. 1794, principal currency of Bundelkhand.
Srinagar .....	170.06	Wo. 6.5	89.0	151.28	91.686	See Jáláon.
old .....	167.50	Wo. 16	85.0	142.37	86.289	
Sunámalla .....	173.54	Br. 0.5	91.9	159.44	96.632	Súrat.
Súrat .....	174.50	Br. 5.5	93.9	163.96	99.367	Under the Nawáb.
old .....	176.60	Br. 16	98.4	173.66	105.246	Old Dihli standard.
	176.25	Br. 1	92.1	162.30	98.363	Depreciated, see p. 24.
1800 .....	178.32	Br. 2	92.5	164.94	99.966	Chosen as Bombay rupees.
Támbasáhi .....	169.90	Wo. 8.5	88.1	149.72	90.742	Nickname from copper?
Thanna .....	170.80	Wo. 2	90.8	155.14	94.026	

Name.	Weight.	Assay.	Touch.	Pure contents	Intrinsic value of 100.	Remarks.
Ti-másha or (three máshas) .....	Grains. 34.30	dwt. Br. 3	92.9	Grains. 31.87	Fd. 19.315	Coined in Nepál? current in Srínagar.
of Ladakh .....	28.10	Wo. 51	...	15.62	9.467	Ditto, debased.
Topisáhi .....	40.00	Br. 12.5	96.9	38.75	23.484	Coined at Lassa.
Toragál Nílkant ...	165.12	Wo. 22.5	82.3	135.88	82.354	
Toka .....	170.00	Wo. 71	62.0	105.40	63.873	Struck by Bálá Sáhib, 1788 B.
Tukásáhi .....	172.24	Wo. 27	80.4	138.51	83.944	Aurangábád, (1832).
Trinámáli .....	173.16	Br. 5.5	94.0	162.77	98.648	Current in Ahmadnagar. (Noton).
Venkatapati .....	176.50	Br. 8	95.0	167.67	101.618	Karnátic.
Vazirí .....	172.72	Br. 11	96.2	166.25	100.766	Ditto.
Vazirsháhi .....	168.62	Wo. 11.5	86.9	146.49	88.783	Sohágpúr, in hilly tract E. of Jabal-púr.
Wabgaum .....	170.00	Wo. 13	86.3	146.62	88.864	
Yeswanti .....	172.55	Wo. 0.5	91.5	157.88	95.684	Current in the Dakhan. (Noton).
Zu'lfákr .....	174.95	Br. 7.5	94.8	165.84	100.500	Struck by Jeswant Ráo Holkar, 1806 <sup>1</sup>
	174.10	Wo. 17.5	84.4	147.03	91.06	See Haidarábád.

(To convert the decimals of the last column into ánáś and pá'ís, see the Table at page 12. For explanation of the present Table, see page 36.)

<sup>1</sup> This curious and handsome coin (for a specimen of which I am indebted to Major Stacy), might be mistaken for an antique from its bearing the following Sanskrit inscription in well-cut Nágari characters, on the obverse and reverse respectively.

श्री इन्द्रप्रस्थस्थितो राजा चक्रवर्त्ती भूमण्डले ।  
तत्प्रसादात् कृता मुद्रा लोकेस्मिन् वैविराजिते ।

श्री लक्ष्मीकान्तपद्मभोजधमराजितचेतसः ।  
येश्वन्तस्य विख्याता मुद्रया पृथिवीतले ॥  
शके १७२८

*Sri. Indraprasthasthito rāja chakravartti bhūmandale,  
Tatprasādāt kṛtā mudrā lokeśmin vaivirājite,*

*Sri. Lakshmikāntapaddmabhōjabhramardjitachetasah,  
Yesawantasya vikhyatā mūdrāishā prithivītale.*

"By the permission of the Rájá of Indraprastha (the king of Dihli), the Emperor of the world, this coin has been struck by the renowned Yesawant (Jeswant Ráo Holkar), whose heart is as the black bee of the lotus foot of Lakshmikánt,—to circulate throughout the earth. An. Sakæ 1728" (= A.D. 1806).

## ASSAY of Bullion generally, brought to the Calcutta Mint.

Denomination.		Assay.	Intrinsic of 100 tolas in Fd. Rs.	Produce in sikká rupees.
South American bars marked .....	24 din.	Br. 20	109 091	102.273
	11 22	Br. 17.5	107.954	101.207
	11 17	Br. 14	106.364	99.716
	11 10	Br. 8	103.636	97.159
Plata pina recovered from amal-gamation .....	.....	Br. 17.5	107.954	101.207
China cakes, large: <i>hdithi khuri</i> (elephant-hoof) .....	.....	Br. 16	107.273	100.569
Ditto, small <i>ghord khuri</i> (horse-hoof) .....	.....	Br. 14.5	106.591	99.929
Calcutta refined cakes, called Madrasí .....	.....	Br. 15.5	107.045	100.355
" Murshidábádí .....	.....	Br. 15	106.818	100.142
" Dacca .....	.....	Br. 12	105.454	98.863

## ASSAY of Ava Silver Cakes.

Burmese denomination.*	Meaning of Ava Assay Report.	Touch.	Calcutta Assay Report.	Touch.	Value of 100 tikals in Fd. Rs.
Ban (supposed to be pure) ...	pure silver .....	100	Br. 16.5	98.6	161.57
Kharoobat (shell circled) .....	5 pr. ct. under do.	95	Br. 6.5	94.3	145.16
Dain, ta kyat det .....	10 pr. ct. above st.	93.5	Br. 2	92.5	142.28
" ko moo det .....	9 pr. ct. "	92.6	standard	91.7	141.00
" sheet moo det .....	8 pr. ct. "	91.8	Wo. 4	90.0	138.44
" kwon, neet moo det ...	7 pr. ct. "	90.9	Wo. 3	90.4	139.08
" nga moo det .....	5 pr. ct. "	89.7	Wo. 5	87.6	137.79
Madain (alloyed dain) .....	?	...	Wo. 42	74.1	114.08
Yowetnee (red flowered or star)	Ava standard	85.0	Wo. 4	90.0	138.44
" kyat gé .....	10 pr. ct. alloy	77.3	Wo. 14	85.8	132.03
" tshay nga kyat gé .....	15 pr. ct. "	73.9	Wo. 38.5	75.6	116.32
" nheet tshay gé .....	20 pr. ct. "	70.8	Wo. 34	77.5	119.21
" thoun tshay gé .....	30 pr. ct. "	65.4	Wo. 72	61.6	94.85
" le tshay gé .....	40 pr. ct. "	60.7	Wo. 77	59.6	91.65
" nga tshay gé .....	50 pr. ct. "	56.7	Wo. 88	55.0	84.60
" kyounk tshay gé .....	60 pr. ct. "	53.1	Wo. 109	50.4	71.14
" khwon nheet tshay gé. ...	70 pr. ct. "	50.0	Wo. 107	51.3	72.42
" sheet tshay gé .....	80 pr. ct. "	47.2	Wo. 112	49.3	69.22
" ko tshay gé .....	90 pr. ct. "	44.7	Wo. 116	43.5	66.65
Yowetnee gyan .....	½ yowetnee, ½ alloy	42.9	Wo. 131	37.0	57.04
Rangoon yowetnee .....	5 per cent. better than Ava stand.	90.0	Wo. 4	99.0	138.44

(A deduction of 1 per cent. should be expected from the produce of Ava bullion, on account of the vitreous coat of litharge which adheres to the lumps).

This table is abstracted from the examination of thirty-five specimens of silver specially prepared in Ava, in presence of the Resident, for the comparison of the Burmese with the English assay.

\* See page 34.

TABLE of *Copper Coins.*

(Where not otherwise mentioned, the name tells the place of coinage and circulation. Since 100 grains is the weight of the present paisá, the column of weight also expresses the intrinsic value of 100 of each sort in Company's paisá.)

Name.	Weight in troy grains.	Usual rate per rupee.	Where current. Remarks.
Agra paisá .....	148	60	Current in the Agra district.
Akbari, old .....	300	30	Ditto, but scarce.
Allahábád .....	141	...	
Almorah .....	83	...	
American cent .....	167	...	[208 grs.)
Azimgarh .....	170	...	One cent, 1810: (by law of 1790, should be Square, Hindi inscription.
Bálasáhi .....	255	...	Throughout Kalpi, Sagar, etc.
Bareilly .....	149	40	
Bahár .....	101	64	See Patna.
Benáres .....	98½	64	By Regulation X. of 1809, Trisulí paisá; also Reg. VII. 1814. (See page 8 and 32.)
Bhilára .....	307	...	
Bhilsa .....		...	
Bhopál .....	225	...	
Bishennáth .....		...	
Bombay, 1797 .....	212	48	Marked '48 to one rupee, 4 V. E.I.C.' and arms.
1804 .....	200	50	Coined in England; device, arms, and scales, 'Adl.'
1832 .....	100	64	New coinage, with the same device.
Bhartpúr .....	275	32	
Bundí .....	274	32	
Calcutta, 1782 .....	52½	192½	First pá'i struck by contract at Pulta.
1792 .....	40	?	Marked 'o. V. c. 1792,' and on the reverse a shield and crest.
1795 .....	180	64	Quarter-áná, reduced on the 4th May, 1796,
1796 to 1809 .....	135	64	to 12 ánás weight, and afterwards in 1809,
1809 to 1817 .....	101	64	to 9 ánás, the weight of the Bahár paisá.
1817 .....	100	64	Present standard weight by Reg. XXV. of 1817
half áná .....	200	32	{ By Regulation III. of 1831. (See page 4.)
one pá'i .....	33½	192	
Ceylon .....	137	...	Coined in England, device an elephant, 'two stivers;' the one-, and the half-, stiver in proportion.
Chikna .....	240	30-32	The Madhusáhi worn smooth: throughout Banda.
Chinawa .....	190	...	Chinania? In Láhor, near Kangra.
China .....	660	...	Brass coin with square holes, various sizes.
Chalan .....	240	32	Same as Chikna, current in the Decc.
Dihli .....	17½	44-50	Coined until 1818, weight one tolá, or 80 to the ser.
Dutch .....	230	...	Square lump, marked 'two str.'
" .....	120	...	Tranquebar, rude coin marked 'one str.'
English penny .....	412	...	Old penny-piece.
new .....	290	...	New penny, legal weight 291.6 grains.
French sous .....	150	...	Brass, five centimes, legal weight 154 grains.
Farrukhábád .....	284½	26	Prescribed by Reg. III. 1806 (not coined).
1816 .....	100	64	Established by Regulation XXI. of 1816.
Gokula or } .....	110	70	Current from Mathurá to Mainpúri.
Gandasáhi }			

Name.	Weight in troy grains.	Usual rate per rupee.	Where current. Remarks.
Gorakhpur .....	186	26-36	Benâres district, former standard paisâ.
Gwâliâr, old.....	146	62	Marked Muhammad Akbar Shâh.
Hâdewâ .....	296	...	Near Nâgpûr.
Hâtras .....	280	34	Current in Nâgpûr.
Indor .....	116	...	In Mâlwa generally.
Jalâon .....	262	40 ?	Bandalkhand, the Bâlâsâhî paisâ.
Java, 1814 .....	172	...	Marked '1st. B.V. E.I.C.'
Jhânsî .....	260	...	Current in Bandalkhand.
Jabalpur .....	260	...	Narbaddâ valley.
Jaipur .....	280	32½	Agra and Jaipur districts.
Kukureti .....	252	40-48	Near Pannâ in Bandalkhand: bears a device, resembling a Hanumân—3120 per man.
Khetri .....	252	...	? Kukureli or Kukureti.
Karoli .....	281	36	Current at Dihli and Karoli.
Madras, 1803 .....	180	...	XX.-kâs piece, coined in England.
1808 .....	120	...	Three fâlûs, or one falam khurd (little fanam).
1832 .....	100	64	Equalised with Bengal and Madras paisâ.
Kotâ .....	275	34	In Kotâ, Ajmîr, etc.: a square coin.
Lukhnow, old .....	195	...	Machhlîsâhî, } Current in Oudh and Kanouj
new .....	185	46	Shîrsâhî, } to Mainpurî.
1806 .....	284½	26½	See Farrukhâbâd.
Madhusâhî .....	270	35-40	Chief currency of Allahâbâd and the Doâb, formerly of Benâres and Mirzapûr.
Maiwâr .....	34	378	A very small coin.
Marwar .....	330	...	
Muzaffarâbâd .....	190	...	
Mansûrî .....	169	58	In Agra, etc.
Mathurâ, old .....	147	46½	
new .....	135	68	} Agra, Mathurâ, Bindrâban, etc.
double .....	270	34	
Nazir Shâh .....	131	...	Son of Ghîas-ud-dîn Shâh: ancient square paisâ of Sâgar district.
Nepâl .....	207	...	Current in the Turâi.
„ paisâ .....	164	80	Bahâdursâhî, coined and current in Nepâl.
Najibâbâd .....	243	40	In Barelli and Rohilkhand.
Nagar .....	176	...	Marked 'Nagar 5221,' device, a rude elephant; some have 'Pan, Patan,' or Zarb-i patan.'
Narwar .....	107	...	In the Narbaddâ Territories.
Nawâsâhî .....	197	47	Old Lukhnow, so called.
Patna, old .....	240	32 ?	Of native fabrication.
1817 .....	101	64	Coined at Patna and Calcutta.
Penang .....	133	...	One hundred to the dollar: and halves. Coined in England. Current in Penang, Singapore, and the Malay peninsula.
Patîâlâ (Râjâsâhî) .....	170 ?	...	Current in Patîâlâ, Dihli, etc.
Râjgarh .....	274	36	
Râjmahal .....	109	...	Coined at Râjmahal.
Rewâsâhî .....	220	46	In Rewâ? device, a kind of Nâgarî figure one
Sâgar ? .....	...	...	See Bâlâsâhî.
Supûr .....	173	...	The 'Nagar' paisâ, so called by the natives.
Sahâranpûr .....	255	35 ?	Also called Âlamsâhî.
Tari .....	254	42½	? Tehri.
Tehri .....	260	43	In Bandalkhand, equal to Jhânsî.
Tilingâ .....	150	...	Telinga, or Southern India.
Tranquebar .....	120	...	Dutch, marked 'I St.' (one stiver).
Udipur .....	65	160	About double the Maiwârî.

The weights, unless otherwise stated, are taken from specimens collected chiefly at Benâres.

## SYMBOLS, ETC. ON MODERN INDIAN COINS.

Before giving the Catalogue of Symbols figured in plate xlv., it will be convenient to direct the reader's attention to plate xlv., which gives such samples of the modern coins of India as will enable him to recognise their principal varieties at sight. Those of Népál, Assam, Kachar and Lassa, are sufficiently distinct from the Nágari, Bengálí, and Tibetan characters on them; the pagodas, also, of South India cannot be mistaken. The Nágari coin of Kotá may be classified from its Lotus symbol, although it is otherwise difficult to decypher the inscription. But the great majority of coins treated of in the foregoing remarks and Tables are similar to figures 2, 8, 9, 10, 11, and 12, which exhibit portions only of a Persian inscription, generally of very imperfect execution. These can only be known by the signs or symbols of the various States inserted in some conspicuous part of the impression: thus, No. 11 is known to be of Indor, from the Solar effigy. The following particulars of the coins in plate xlv. will save the necessity of any further general remarks, in addition to those already made at page 40.

## 1. THE 19TH SAN SIKRÁ RUPEE.

Now [and up to 1835] coined at the Calcutta mint; bearing the Sháh 'Alam distich, explained in page 2. All the Company's silver and gold money of Bengal, up to the present day, is of the same style, containing the whole inscription, of which parts only are visible on most of the native coins.

## 2. THE OLD SÁLIMSÁHÍ RUPEE.

Current in Málwá, and coined by the Rájá of Pratápgarh. The words visible on the

Obverse:

شاه عال حامی

(intended for *Sháh 'Alam hámí ud-dín*, etc.) and the Hijra date, 1199, which, however, does not correspond with the year of reign on the

Reverse:

سند جلوس میمنت ۲۹ مانوس

'29th year of the prosperous reign.'

This is the earliest year of the coinage of these rupees; those of the 45th san were in course of coinage in 1823. They were issued to the troops at the exchange of 122.8 per 130 Farrukhábad rupees.

## 3. THE BAJRANGGARH RUPEE.

(Near Kotá Bundí) known by the Lotus symbol; coined by a petty zamíndár; much debased. In the Bhákhá dialect,

Obverse:

श्री रामचपरासी पवनपुत्र बलपायन

*Srī rāma chapraśī pavanputra bala-pāyan* 'All-powerful son of the air (Hanumān) servant of Rāma.'

Existing Coins of India.



Reverse :

यसपर हापा में राजा जयसिंह के २१ अयनगर ।

*Is par chhapa men rajā Jay Singh ke 21 Jayanagar.* 'On this coin is imprinted the 21st (year) of Rājā Jay Singh at Jaynagar.'

The initial and final letters are imperfectly visible on the coin; the purport shews it to be struck at Jaynagar, a village near Bajranggarh.

4. THE NEPĀL RUPEE, OR HALF RUPEE.

Obverse :

श्रीश्रीश्री प्रताप सिंह साहदेव १६८६

*SriSriSri Pratāp Sinh Sāh Deva* (titles of the Rājā) 1686.

Reverse :

श्रीश्रीश्री गोरखनाथ

*SriSriSri Gorakhdh,* (the principal god worshipped by the hill people, whence their name of 'Gorkhas' is derived.)

Centre :

श्रीश्रीश्री गुह्येश्वरी

*SriSriSri Guhyeswari,* 'the omniscient goddess Devi.'

5. AN ASSAMESE RUPEE.

Of an octagonal form. The inscription is in the Bengālī character, but in the Sanskrit language.

Obverse :

শ্রী শ্রী হর গৌরী পদ্মভূজ মধুকরস্য

*SriSri Hara Gauri paddmbuja madhukarasya,* 'The sipper of the honey of the foot of Sri Hara Gauri.'

Reverse :

শ্রী শ্রী মত্ স্বর্গ দেব রুদ্র সিংহস্য শাকে ১৩৩০

*SriSri mat Swarga Deva Rudra Singhasya.* *Sake* 1630, 'The blessed and celestial Rudra Singh.' The Śāka date corresponds to A.D. 1708.

6. A KACHAR RUPEE.

In this the Bengālī letters are connected together by parallel lines.

Obverse : The inscription is not intelligible.

Reverse :

শ্রী গিরীশ চন্দ্র নারায়ণ ।

*Sri Girīś Chandra Nārāyaṇa* (the Rājā's name).

7. CHINESE-TIBET SILVER MONEY.

Coined at Lassa (*vide* page 33). On the obverse, in the Tibetan character, *gtsang pahu*, 'pure money,' *chah hehlin* (name of the Chinese Emperor). On the four corners of the margin of another coin similar to the one depicted, are the four letters *nyi hu rtsa lna* (25) meaning the twenty-fifth year of the cycle of sixty years (= A.D. 1881) : the date on the coin in the plate is not decypherable. The Chinese

<sup>1</sup> The plate states it to be a Pratāpgarh rupee, as it was labelled in the Assay-office cabinet; but on reference to Major Stacy, at Nasirābād, it turns out to be as above. The inscription was read by a pandit at that place, who makes the last words, '*Jayasingh ke raj Jayapur men*;' but I consider the above more consistent with the specimen in my possession.



inscription on the reverse consists of four words, *ka-hen poo-chung*, 'the Emperor Ka-hen's<sup>1</sup> precious money.'

#### 8. THE ARKÁT RUPEE.

The full inscription of this (the Madras) coin is given in page 3. It is known by the part of اركات visible, and by the groups of four dots and the lotus or lily.

#### 9. THE SÁGAR RUPEE.

In this the Sháh 'Alam distich can barely be traced. The trident, star, and flag of Siva are its distinguishing marks.

#### 10. THE NÁGPÚR RUPEE.

This coin bears the inscription of Muhammad Sháh. *Sikka mubárik bád(-sháh Ghází Muhammad Sháh)* only recognizable by the two final letters of the Emperor's name. It is known to be of Nágpúr by the *ن* *bh* (or *ك* inverted?) which may stand for Bhunsla, the name of the reigning Rájás of Nágpúr; the '*t*' (*zarb-i ...t*) may be the final letter of Hingan Ghát, the place of coinage.<sup>2</sup>

#### 11. THE INDOR RUPEE.

Parts of the words *Sháh 'Alam bádsháh* are here visible, and the usual year of the reign: the solar disc distinguishes the coin.

#### 12. THE SHÍRSÁHÍ, OR NEW LUKHNOW RUPEE.

Besides the absurd armorial bearings, constructed of two tigers, two fish and a dagger, surmounted by a royal umbrella; this rupee bears the following inscription:

Obverse:

سکه زد بر سیم و زر شاه زمن غازي الدين حيدر عالي از فضل  
رب ذوالمنن سنه ۱۲۳۸

'The king of the world, Ghází-ud-din, Haider 'Alí, by the grace of the Lord of Glory, has struck coin in silver and gold, A.H. 1238.'

Reverse:

ضرب سنه ۵ جلوس میمنت مانوس دار السلطنة صوبه اوده  
'In the 5th year of his illustrious reign, at the capital of the súbah of Oudh.'

#### 13. AN ANCIENT GOLD HÚN;

with part of an inscription in the Sanskrit character on one side, and a single image on the other.

#### 14. A MODERN DOUBLE PAGODA.

Struck at Madras, showing the character of the former English currency of that presidency.

#### 15. THE COMMON BHARTPÚR PAISÁ.

Shewing that the copper coins may be also recognised by their ap-

<sup>1</sup> The late Emperor of China, written 'Kea-king' in the Anglo-Chinese Kalendar, reigned from 1781 to 1821.

<sup>2</sup> I have since been informed that the symbol on the Nágpúr rupee is intended for 20 the Maráthi numeral equivalent to 41.

*Symbols on Indian Coins.*



propriate emblems. The inscription will be seen to be part of the Muhammad Sháh legend.

## 16. MADRAS COPPER COIN.

Struck in England for circulation at Madras (see page 4). The same coat of arms will be found on the Bombay and Penang copper currency.

## CATALOGUE OF SYMBOLS ON MODERN INDIAN COINS.

## (PLATE XLVI.)

[Taken from specimens in the Assay Office or in the author's possession. In some cases (marked ?), it is probable that the specimens have been misnamed from their being found current in other districts with different names.]

- |  |                                     |
|--|-------------------------------------|
| VARIETIES OF THE PHÚL, ('FLOWER')                      | 31 Madras, Sháhpúr, 'Alínagar.      |
| STAR, AND DOT.   | 32 New Madras.                      |
| 1 Company's rupee. Gokula rupee?                       | 33 Garnáli rupee (Arkát).           |
| 2 Saronj rupee.  | 34 Chandur.                         |
| 3 Islámábád muhr of Aurangzib.                         | 35 Gokula, or Gandasáhi paisá.      |
| 4 Vazirsáhi rupee, san 9. Bálásáhi?                    | 36 Kálpí.                           |
| 5 Súrat & old Bombay (with a crown).                   | 37 Oujein new. Chanda: common.      |
| 6 Korah (in Allahábád) with 21.                        | 38 Kálpí.                           |
| 7 Srinagar, with 45. Ságur with 45.                    | 39 Patna? Muhr of Dihlí?            |
| 8 Jhánsi. Also 10.                                     | 40 Bhartpúr paisá (see plate xlv.). |
| 9 Saháranpúr: common.                                  | 41 Old paisá found in Ságur.        |
| 10 Jhánsi: with 5 leaves, Gwáliár.                     | VARIETIES OF THE TRISÚL, BALÁ, OR   |
| 11 Ságur with 45. ( <i>vide</i> plate xlv.)            | 'TRIDENT.'                          |
| 12 Murshidábád.  | 42 Mathurá. Jáláon, Ságur.          |
| 13 Barelli, with 30.                                   | 43 Srinagar, with 7.                |
| 14 Saháranpúr, with 9.14½ Old Assam.                   | 44 Old Ságur, Kálpí.                |
| 15 Old Súrat muhr.                                     | 45 „ Jáláon, etc.                   |
| 16 Jalwan or Jáláon?                                   | 46 Kálpí paisá, with 43, etc.       |
| 17 Siwái gold muhr, Aurangzib.                         | 47 Nepál muhr. (see plate xlv.)     |
| Nágpúr, with 94. Gokula, with 78.                      | 48 Bhopál, Bhilsá, Báthgarh.        |
| 18 Common: Ujjain, with 93 or 37.                      | 49 Telínga paisá?                   |
| Udipúr.  | 50 Ganjam.                          |
| 19 Arkát. Chilki Arkát, etc.                           | 51 Old Dihlí & Farrukhábád: common. |
| 20 Private mark of Benáres mint (centre dot enlarged). | Nágpúr of Jeswant Ráo.              |
| 21 Kora or Corah, with 6.                              | 52 Nasir Sháhi, old Narbaddá paisá. |
| 22 Ujjain.   | 53 Sultán Muhammad, „               |
| 23 Old Farrukhábád rupee and muhr.                     | PHÚL, PADAM PHÚL, 'FLOWER, KNOT.'   |
| 24 Bharatpúr. (see plate xlv.)                         | 54 Kotá rupee—and with 57.          |
| 25 Chinawa rupee (Arkát).                              | 55 Kotá rupee.                      |
| 26 Bhikanír, with 62, 63.                              | 56 Bundi. Kotá.                     |
| 27 Maisúr, common; Chandausi.                          | 57 New Kotá, with 56.               |
| VARIETIES OF THE PADAM, 'LOTUS' OR                     | 58 Hardá (Narbaddá).                |
| 'TREFOIL.'   | 59 Kotá variety. Bajranggarh.       |
| 28 Indor, old, with 29.                                | 60 Benares, old, small with 80.     |
| 29 Ditto.  | 61 Bhikanír, with 26, 62, 63.       |
| 30 Barelli, with 13.                                   | 62 „ reverse.                       |
|  | 63 „ „                              |

**BARCHHÁ, 'SPEAR' OR 'SCYTHIAN,' GUDÁ,  
OR 'MACE.'**

- 64 Jodhpúr. Páli.  
65 Kocháman, with 92. Bopúsáhi.  
66 Jodhpúr. Nágur.  
67 Bareilly? Urchá? Páli.

**JHÁR, THÚHAR; 'BRANCH OR SPRIG.'**

- 68 Bhilárá.  
69 Jaipúr-Siwái gold muhr.  
70 Ajmír.  
71 Chitor, Krishnágarh.  
72 Sálimsáhi? (Jaipúr).  
73 Jaipúr rupee and muhr.  
74 Bandarsela?  
75 Mathurá. Jaipúr.  
76 Chinsúr, with 100. Udiipúr, Chitor old?  
77 Barhánpúr?

**VARIETIES OF THE ROHÚ, OR 'FISH.'**

- 78 Gokula paisá.  
79 Oudh, Lukhnow old rupee.  
80 Ditto, Bareilly. Old Benáres.  
81 Machlisáhi of Lukhnow.  
82 Benáres old.

**SÚRAJ, 'THE SUN.'**

- 83 New Indor rupee and muhr.  
84 Indor.—Ujjain.  
85 „ copper coin.  
86 *Bel pattá*, Maheswar, with 87.  
87 *Lingam*, Maheswarí rupee.  
88 *Paták*, 'flag or standard of Siva :'  
Ságar rupee (pl. xlv.). Nágpur.

**VARIETIES OF THE 'SWORD : ' SHAMSHÍRÍ.**

- 89 Chanda, Gwálfár,—common.  
90 Haidarábád, of Kásim 'Alí.  
91 „ Govind-bakhshí.  
92 Common shamshíri.  
93 Kocháman, with 64.  
94 Nágpur, with 17. Katmandu (see p. 31). Balkh.  
95 (Pistol) Ágra paisá.

**VARIETIES OF THE KATÁR, OR 'DAGGER.'**

- 96 Akbar II. of Dihlí—small.  
97 Narwar.  
98 Bhartpúr. (see plate xlv.)  
99 Siwái gold muhr of Muhammad Sháh, with 13 : small.  
100 The *Ankus* of Puna.—Chitor.

**NUMERALS AND LETTERS.**

- 101 (10) Hálí sikká of Puna, Nágpur.  
102 (9 or 1?) Rewá paisá. Bhilsá?  
103 (76) Jabalpur.  
104 (55) Ságar.  
105 (75) Indor old rupee.  
106 a (4½) Old Nágpur :  
b (9) New do.<sup>1</sup>  
107 Tehri, Bandakhand, illegible.  
108 (श्री *eri*) Srisáhi rupee of Ajmír.  
109 (ह *h*) Haidarí of Maisúr.  
110 (ग *ga*, 'cow') Chitor; from the proverb regarding the slaughter by Akbar: "*gáo mare ke pap*."  
111 (स *sa*) Gold muhr, unknown?  
112 (न *na*) Debased Dihlí gold muhr, san 29.

**MISCELLANEOUS.**

- 113 (shell) Bhátgáon in Nepál.  
114 (*Panja*, 'fists') Almorah.  
115 Sálimsáhi, date 1199. (see plate xlv.)  
116 „ Varieties.  
117 „  
118 Mewári paisá.  
119 Kukureti, near Pannáh in Bandal-khand (the god Hanumán?)  
120 (elephant.) Nagar, Patan, Sopúr? Struck by Tipú?  
121 (*Ohhata*, 'the royal umbrella') on some of Muhammad Sháh and Sháh 'Alam's Dihlí coins.  
122 Variety of „  
123 Etáwa muhr.  
124 Jhánáí.  
125 The *swastika* emblem of the 7th Jina, found on some coins.

<sup>1</sup> The distinguishing symbol of the old Nágpur rupee, struck at the Chanda and Hingan Ghat mints was as above, a Maráthí 4½. When Bachá Ráo and Dr. Gordon had charge of the mint, their mark was a flag (88). The new Nágpurí since 1825 has the figure 9 above this flag. Other minor varieties are marked as follows:—the Yeshwant Ráo Nágpurí, by +; the Man-Bhat-Sáhi, by =; the Ugao-Sáhi, by a Maráthí 10 (fig. 101); the Rámji Tántia has a half moon ☾; the Narsingh Ráo the same with a dot in the centre •; the Siva Ráo, the same with a dot on one side ◡. There are many more, but they are not considered *chalan* or 'current.'

## NOTE ON THE HISTORY OF THE GOLD AND SILVER CURRENCIES OF INDIA.

[As the general subject of metallic currencies is just now attracting the serious attention of the European public, it may be useful that I should recapitulate briefly the facts to be gathered from the detached notices of the coins of the various kingdoms and diverse epochs illustrated in the preceding pages, which throw light upon the little known history of Indian mintages; and further, that I should complete the review by exhibiting the action of our own civilization on the circulating media of these later days, especially in reference to the important question of the institution and organization of the gold coinage as a legal tender, and its eventual supersession as such in 1836.

I have elsewhere expressed an opinion that the people of Hindústán, in very early times, had independently achieved considerable progress in the art of coining; even before Greek civilization reached them through the influence of Alexander's expedition, and the subsequent settlement in India proper of the Bactrian-Hellenes. Indeed, we are able to trace by the produce itself, each phase of mint development and each successive effort of invention tending to the production of a perfect coin. The earliest movement is seen in the fabrication of irregularly outlined flat pieces of silver or copper, of fixed weights, whose currency is marked by the symbols of consecutive dynasties, punched at hazard on their surfaces. Next, we remark a more careful rounding off of the metal, and the application of a single die over the whole of one surface, the other being left blank. As we proceed, we meet with complete coins; but these are cast in moulds, and may possibly indicate separate and independent progress. Successive modifications and improvements are observable in either class, which it is not necessary to follow more at large in this place: and, finally, we arrive at excellent specimens of an issue of fairly coined money, seemingly local in Northern Hindústán,<sup>1</sup> which there is good reason to assign to a period prior to the advent of the Greeks. Coins of these epochs have been found in silver, copper, bronze, and lead; the non-discovery of any examples in gold does not necessarily lead to the inference that the metal was not used for coining purposes; but merely amounts to the fact that, if used, it was of rare occurrence.

<sup>1</sup> Coins of the Behat type. Article X.

The Bactrian-Greeks, as far as their Indian provinces tell the tale, would appear to have restricted themselves to a currency of the two metals, silver and copper. Their successors, the Indo-Scythians again, discontinued the issue of a silver currency, and supplied its place by a gold coinage; increasing, simultaneously, the weight of the copper pieces. There is some uncertainty as to the dates of succeeding dynasties; but we find the Guptas,—who imitated the devices of the Indo-Scythian money,—in possession of a copious gold currency in their eastern provinces on the Ganges, aided by a limited silver, but sufficient copper medium of exchange; while their dominions towards the Western coast were supplied almost exclusively with a silver coinage based upon the mintages of the Sáh kings of Saurashtra (Gujarát); who in their own case had previously copied the style of the Greek hemi-drachmas of Apollodotus and other sovereigns. Here we must pass over centuries, and present our next tableau in the time of the Bráhma kings of Kábul and the Panjáb (about the 10th century A.D.). In this instance also the currency is confined to silver and copper. Mahmúd, and his successors of the Ghazní dynasty, employed gold in addition to the lower metals. At the period immediately preceding the Muhammadan occupation of India (A.H. 587, A.D. 1191) the northern provinces of Hindústán were furnished with a currency composed of a combination of silver and copper mixed in uncertain proportions: while the Rahtor monarchs of Kanauj still continued to issue gold. The former coins, which were entitled after the capital, Dilliwáls (دلیوال),<sup>1</sup> were adopted by the Pathán Sultáns of India, and a middle currency of such incorporated metals remained in use up to the time of Báber (A.H. 930, A.D. 1523-24). Simultaneously with the retention of this type of the local money, the Muhammadans introduced modified forms of dirhams and dínárs, of equal weights (174 grains). At what relative proportion these stood to each other we are left to conjecture, as history is silent on the subject, and the coins themselves afford us no means of instituting a comparison. The lower currency was completed by a copper coinage, which in some cases extended to so minute a division as 17.4 grains.

The celebrated Muhammad bin Tughlak (A.H. 725, A.D. 1324-5) introduced an infinite variety of new coins of all descriptions, and evidently remodelled the rates, together with the weights of his currency. The gold coinage was raised from 174 to 200 grains, and the silver reduced from the former amount to 140 grains. But his grand effort at finance seems to have been reserved for the production

<sup>1</sup> Inscription of A.H. 587 (A.D. 1191) on the Mosque of the Kutb at Dihli; the original reads preferably Dillíál, but the Táj ul Máasir determines the word as دہلیوال.

of a scheme of a representative currency (founded on the Chinese paper credit system) in which copper and brass tokens were stamped with an authoritative impress of value, whether as the equivalent of gold or silver; and in addition, parallel representatives of the ordinary subdivisions of each, were issued to complete the currency. This attempt, after producing countless troubles, and resulting in utter failure—even under the guidance of an absolute and unscrupulous tyrant—was abandoned definitively before the expiration of three years from the first promulgation of the ordinance. I need not notice the minor incidents of Muhammad bin Tughlak's mint administration, further than to note a seeming reversion to the previous system of weights in the latter part of his reign. Nor need I more fully advert to the state of the currency under his successors, beyond remarking that Báber seems to have designed to substitute his Central Asian scheme of coinage in place of the then existing local distribution of the currency. However, when Shír Sháh had driven Humáyún out of India (A.H. 949, A.D. 1541) he entered upon a general reform of the coinage, which had the effect of introducing the now universal rupee, and abolishing the unsatisfactory compound of mixed metals; in addition to simplifying the lower coinage, by its reduction to a fixed and determined standard of pure copper,<sup>1</sup> representing the *dám*, which we must suppose had previously been minted in billon.<sup>2</sup>

At length we reach an epoch when we have no longer to depend upon the coins as our only data, but are able to cite written and contemporary authority for the illustration of our subject. Akbar's minister, Abú'l-fazl, has preserved to us a full and complete record of his master's mint arrangements; from this we discover that the authoritative standard of the day was copper, based upon the *dám*, which is defined as "a copper coin, in weight 5 tanks, or 1 *tolá*, 8 *máshas*, and 7 *ratís*, in value the 40th part of a rupee." The text of the '*Ayín-i Akbari*' goes on to declare the weight and value of the gold and silver coins, the equivalents of each being expressed in *dáms*, and their relative exchangeable value *inter se* being for the moment altogether ignored.<sup>3</sup> In this same measure of value all the revenues of the empire are estimated, indeed, it would appear from an incidental notice in connexion with the subject of relative values, that the definition of the worth of

<sup>1</sup> I have estimated this coin at 323.5 grains; pieces now in existence weigh as high as 322 grs. (See '*Numismatic Chronicle*,' xv, 1852.)

<sup>2</sup> "The *dám*," says Abú'l-fazl, "was formerly called *pysah* and also *Bahloli*."—Bahlol Lodi's mixed coinage contributes isolated specimens that might well represent the requisite value, as tested by present assays; but there is an absence of uniformity in the general results that forbids our recognising any specific class of higher or lower equivalents.

<sup>3</sup> Gladwin's '*Ayín-i Akbari*,' i. p. 37.

gold by any silver estimate, was—like the rupee itself—a novelty.<sup>1</sup> The materials afforded by the text of the 'Ayin-i Akberī,' whether tested by the valuation in dāms, or by the equivalents subsequently given of the rupee correspondents of the several descriptions of muhrs, equally establish the result that gold stood to silver as 1 to 9.4. The rupees, it will be seen, were themselves of various standards, ranging from the 39 dāms of the old round rupee, to the 40 dāms of the square jalālī; and, in fact, it is acknowledged in one place that even the estimated rates were uncertain in their application, and that the silver coin was left to find its own level in the market.<sup>2</sup>

I now arrive at the period when British influence is felt upon the the currencies of India, and as this is a subject connected with which much misunderstanding and some misrepresentation have taken place, I secure myself from any possible prejudice or favor by permitting the Government to state its own case, in extracts from the legislative enactments promulgated from time to time. The history is unsatisfactory in its earlier portions, and incomplete towards its end, where, it is clear, much remains intentionally untold.

REGULATION XXXV. of 1793.—PREAMBLE.—“A Regulation for re-enacting, with amendments, the Rules passed on the 20th June, 24th October, and 31st November, 1792, and subsequent dates, for the reform of the Gold and Silver Coin in Bengal, Behar, and Orissa; and for prohibiting the currency of any Gold or Silver Coin in those provinces, but the 19th Sun Sicca Rupees and the 19th Sun Gold Mohurs.”

“SEC. 1. . . The sicca rupee of the 19th sun is the established silver coin of the country, and the rupee in which the public revenues are payable. It was with a view to render it the general measure of value, that Government determined in the year 1773, that all rupees coined in future should bear the impression of the 19th sun or year of the reign of Shah Alum. . . . “The rules by which the gold coin has been regulated have been productive of evils, similar to those which have prevailed with regard to the silver coin. Under the native administrations, and until the year 1766, the gold mohur was not considered as a legal tender of payment in any public or private transaction, nor was the number of rupees for which it was to pass

<sup>1</sup> When Azad-al-daulah “was sent to Kandes, Rájá Tudermull made the price of gold mohurs to be estimated in rupees:” i. p. 39. The original Persian text is somewhat obscure in this passage; and the MS. copies vary in the wording of the sentence; but Gladwin seems to have fathomed the real meaning.

<sup>2</sup> “Although the market price is sometimes more or less than 40 dāms, yet this value is always set upon it in comparative calculations.”—Ayin-i Akberī, i. 36. The original passage is quoted in the body of note <sup>2</sup> p. 5, *supra*.



current ever fixed by the Government. It was struck for the convenience of individuals, and the value of it, in the markets, fluctuated like other commodities: silver being the metal which was the general measure of value throughout the country. In the year 1766, the value of the gold coin, with respect to the silver, was first fixed, and the former coin declared a legal tender of payment. A gold mohur was struck, and ordered to pass for fourteen sicca rupees. But as this coin (calculating according to the relative value of the two metals) was much below the worth of the silver, in the number of rupees for which it was ordered to pass, it was found impossible to render it current, and it was accordingly called in; and a new gold mohur, being that now current, was issued in 1769, which was directed to pass as a legal tender of payment for sixteen sicca rupees. The intrinsic worth of this coin was estimated to be equal to the nominal value of it, or as nearly so as was deemed necessary to render it current at the prescribed rate." [The Regulation then goes on to enumerate the difficulties attendant upon giving free currency to these coins,<sup>1</sup> and proceeds to say:] "The means which appear best calculated

<sup>1</sup> Sir James Steuart, in his work, entitled 'The Principles of Money applied to the present state of the Coin of Bengal' (A.D. 1772), gives us some interesting details as to the aim and object of the original establishment of the gold currency of Bengal, and the want of success that attended the measures of Government, confessed to in the above Regulation. He says: "It has been observed, that this coin, called gold mohurs, had been formerly coined at Dehli, of the same weight and fineness with the sicca rupee of Bengal and other countries of Hindostan; but that they passed conventionally, having no legal denomination . . . In 1766, . . . it was proposed, as an expedient for augmenting the currency of specie to make a coinage of gold, . . . and the directors of this operation, pitching upon fifteen Arcot rupees as the value of one gold mohur, instead of estimating the value of these fifteen Arcot rupees by the fine metal contained in them, estimated them by their current value, which was above the proportion of their intrinsic worth. Not satisfied with this first deviation from principles, they added to the mohur (already over-rated in its proportion to the fifteen silver Arcot rupees) no less than 8 per cent. extra-denomination, entirely arbitrary. So when this gold currency came abroad, it proved to be no less than 17½ per cent. worse in payments than silver rupees of Bengal, Madras, Bombay, and Surat," pp. 26, 27.

"The people of that country (Bengal) had been so long accustomed to silver coin, that they never would, except when forced to it, receive the mohurs in payment. So the Company was obliged to make a new regulation in 1769, little better than the former. At last the gold currency fell all together to many per cent. below its intrinsic value, according to the saying, *Dum vitant stulti, vitia in contraria currunt*."

Sir J. Steuart, at p. 30 *et seq.*, gives us the weight and standard of these coins:—

The 1766 mohur was 20 carats fine, or 20-24ths: full weight, 179·66 grs., proportion of fine gold, 149·72 grains: issued as the equivalent of 14 rupees.

The rupee being 179·66 grs. in full weight, and containing 175·92 grs. of fine silver.

The mohur of 1769, full weight 190·773 grs., contained 190·086 grs. of fine gold: the value being fixed at 16 rupees: the silver currency remaining as before.

Our author continues: "Now if we go upon the supposition we have hitherto adopted, viz., that the proportion of the metals in India was supposed to be at 14 to 1½ then in this coinage of 1769, the gold was over-rated nearly 5½ per cent."

to render the gold mohur generally current, are to declare it receivable at all the public treasuries, and in all public payments throughout the provinces, at the rate of sixteen sicca rupees."

SEC. 2. defines weight and standards, or—

"Gold mohurs, 190·894 troy grs.: Assay, compared with English standard gold, better, 1 car.  $3\frac{1}{4}$  grs.

"Sicca rupees, 179 $\frac{3}{4}$  grs.: Assay, compared with English standard silver, better, 13 dwts."

SEC. 3. specifies that those gold mohurs "are to be considered a legal tender of payment in all public and private transactions . . . at the rate of sixteen sicca rupees;" and further defines penalties for their refusal by the native Treasurers; and to complete the authoritative currency, it is even declared in Sec. 20, that "no person shall recover in any court of judicature . . . any sum of money, under a bond or other writing, or any agreement, written or verbal, entered into after the above-mentioned date, by which any sum of money shall be stipulated to be paid in any species of rupees, excepting sicca rupees or gold mohurs of the 19th sun, or the halves and quarters of each."

REG. VI. of 1794 postpones to 10th April, 1794, the operations of Secs. 18, 19, 20, and 23 "as regards the silver coin."

REG. LIX. of 1795 further postpones the operation of these Rules to 20th April, 1796.

REG. LXI. of 1795 refers merely to the amount of loss which is to be held to reduce these rupees below the standard.

REGS. I. of 1797, V. of 1801, and XXXVIII. of 1803 relate to exemption from duties of gold and silver coins.

REG. XLV. of 1803 gives effect to the arrangement for the mintage of Lucknow or Furrukkábád rupees, of the "same size and form as the 19th sun sicca rupees"; weight and standard to be hereafter determined.

SEC. 25 is, in effect, to the same tenor as Sec. 20 of Reg. XXXV. of 1793, except that gold mohurs are not alluded to; but Sec. 42 explains, that "whereas the gold coin, denominated gold mohurs, has never obtained an extensive circulation in the ceded provinces, in consequence of silver having been the general measure of value in those provinces, from time immemorial; and whereas, during the government of the Nawab Vizir, the value of the gold mohurs in circulation, with relation to the silver coin, was never fixed; and, whereas the coinage of gold mohurs has been long discontinued by the Native Government of the said provinces, as well as the adjacent foreign states; it is not, therefore, judged necessary, at present, to establish a gold coinage in the provinces in question. The gold

mohurs shall be permitted to be circulated in the ceded provinces as heretofore, according to the value which individuals receiving and paying the same shall determine; but, gold mohurs shall not be considered to be a legal tender of payment in any public or private transaction, nor shall they bear any fixed rate of value, compared with reference to the silver coin . . . established by this Regulation."

SEC. 43 *et seq.* provides for the copper coinage.

REG. LIV. of 1803 postpones the operation of Sec. 20, Reg. XXXV. of 1793, to 16th August for the province of Chittagong.

REG. XII. of 1805, Sec. 13, declares that after a fixed date, "no money will be received in payment of the public revenue (in Cuttack), excepting Calcutta sicca rupees or gold mohurs of the 19th sun."

SEC. 15 extends the penal provisions of Sec. 20, Reg. XXXV. of 1793 to the same province.

REG. III. of 1806 specifies the weight and standard of the Lucknow sicca rupee, introduced by Reg. XLV. of 1803, viz.: 173 grs. troy. Touch, or parts of fine silver, in 100, 95·5; alloy, 4·5.

REG. IV. of 1807 refers to rupees alone, and determines the rates at which rupees of sorts shall be received and issued in the ceded provinces. Sec. 8 makes the same applicable to Cuttack.

REG. XIII. of 1807 rescinds the penalties named in Secs. 20 and 21, Reg. XXXV. of 1793, and in parallel sections applicable to local divisions of the country; it being admitted that in many cases, "the penalty of non-recovery by judicial process is not only a hardship to the individual, but is repugnant to the ends of justice."

REG. II. of 1812 defines duties on the coinage of bullion.

SECS. 10 and 11 specify the weight and value of the Benares rupee as 175 grs. troy. Touch, or pure silver, 168·875; alloy. 6·125.

REG. XVII. of 1817, Secs. 9, 10, and 11 prescribe punishments for counterfeiting, debasing, etc.

REG. XIV. of 1818.—The preamble states, "The high standards established for the gold mohur and sicca rupee, having been found productive of many inconveniences, both to individuals and the public, . . . [but] as a reduction in the value of the sicca rupee, from its being in a great measure the money of account, both in private and public transactions, would necessarily change the terms of all existing contracts, and might be productive of embarrassment and trouble, it has been determined to leave the rupee unaltered in this respect; and the new Calcutta sicca rupee will consequently contain the same quantity of fine silver as that heretofore struck, and, being of the same intrinsic value, will circulate on the same terms. The mint proportions of silver and gold, being, it is believed, inaccurately estimated at present, and it being also desirable that an uniformity in this

respect should be introduced at the three Presidencies of Calcutta, Madras, and Bombay, it has been thought advisable to make a slight deduction in the intrinsic value of the gold mohur to be coined at this Presidency, in order to raise the value of fine gold to fine silver, from the present rates of 1 to 14·861 to that of 1 to 15. The gold mohur will still continue to pass current at the rate of sixteen rupees. For the purposes and objects above enumerated" it is enacted, etc.

SEC. 1, par. 2nd.—"The weight and standard of the Calcutta sicca rupee and gold mohur . . . shall be as follows":—

Gold mohur ... weight 204·710 grs. ... fine gold 187·651 ... alloy 17·059
Sicca rupee ... weight 191·916 grs. ... fine silver 175·923 ... alloy 16·993

REG. V. of 1819 refers to mint and bullion details.

REG. XI. of 1819 discontinues the coinage of the Benares rupee, and limits "the legal currencies in the territories subordinate" to Bengal "to two, namely the Calcutta and Furruckabad rupee." The latter is specified at—Weight, 180·234 grs.; pure silver, 165·215; alloy, 15·019 = 11·12ths pure and 1·12th alloy.

SEC. 10 secures an equitable arrangement for bonds, etc., "not expressed in Furruckabad rupees."

REG. V. of 1821 regulates the rates at which Benares and Furruckabad rupees shall be received in payment of revenue.

<sup>1</sup> To exemplify how Governments keep their own laws, I extract from 'Allen's Indian Mail' of 1854, a statement of manifest authenticity regarding certain mint operations sanctioned during the continued currency of this Regulation:—"The market of Calcutta has invariably exhibited a great difference of price between the pure gold mohurs of old standard and those of the new one-twelfth alloy standard. For seven years—that is, from 1818 to 1825—the Calcutta mint coined nothing but new-standard gold mohurs; but in 1825-26, the Government having had a large receipt of gold from the Burmese, and having obtained also a considerable remittance of gold from Madras, consequent upon the substitution of rupees for pagodas in the currency of that presidency, this *Government gold was, for the sake of the profit, coined* into gold mohurs of the old standard,—Regulation XIV. of 1818 prescribing one-twelfth alloy for the Calcutta gold, notwithstanding. There were above four lacs of old gold pieces struck in the Mint, and sold at the general Treasury at the price of the day. But it was only in 1829 that a similar privilege was conceded to private bullion-merchants. The consequence, however, of conceding to them the privilege of obtaining coin of the old standard was, that in the six years from the date when it commenced to 1835, when the new Act took the privilege away, nearly as much private gold bullion was brought to be coined as in the eleven preceding years: and when the privilege was taken away, there was a very limited coinage of the new gold coin, and that coinage was principally of Government gold."—After the passing of the Act of 1835, the mint speculations would seem to have been less successful; at least, if we are to credit the following, which is affirmed under similar authority with the passages just quoted:—"The difference of price even of unstamped pure gold, as compared with stamped one-twelfth alloy coin was such, that the Mint Committee of Calcutta, in the year 1836, applied to Government, and obtained leave to sell the Government bullion in its possession instead of coining it. The calculation of profit was based on a comparison, not with the par fixed for receipts into the Government treasury (viz. fifteen of silver for one of gold), but with the price at which the same gold would sell as a coin; showing evidently that our stamp gave no additional value, but the contrary."

REG. II. of 1824 abolishes the mint at Furruckabad.

REG. VII. of 1833 alters the weight of the new Furruckabad rupee, and assimilates it to the legal currency of the Madras and Bombay Presidencies, and adjusts the weight of Calcutta sicca rupees thus:—

Calcutta sicca rupee	...	weight 192 grs.	...	fine 176	...	alloy 16
Furruckabad rupee	...	weight 180 grs.	...	fine 165	...	alloy 15

The tola or sicca weight 180 grs., introduced (as stated in detail at p. 7, *supra*).

ACT XVII of 1835, Sec. 7 declares, “and be it enacted, that the under-mentioned gold coins only shall henceforth be coined at the mints within the territories of the East India Company:—

1st.—A gold mohur or fifteen rupee piece of the weight of 180 grs. troy, and of the following standard, viz.: 11-12ths, or 165 grs., of pure gold; 1-12th, or 15 grs. of alloy”: with proportionate subdivisions.

SEC. 8 defines the devices these coins are to bear.

SEC. 9. “And be it enacted, that no gold coin shall henceforward be a legal tender of payment in any of the territories of the East India Company.”<sup>1</sup> (Passed 17th August, 1835).

ACT XXI. of 1835 defines the weight and value of the copper currency, in the Presidency of Bengal, as follows:—

“1.—Pice, weighing 100 grs. troy.

“2.—A double-pice, 200 grs. troy.

“3.—A pie, or 1-12th of an anna piece, 33½ grs.”

SEC. 2 enacts that “the said pice shall be a legal tender for 1-64th of the Company’s rupee, and the said double-pice for 1-32d of the Company’s rupee, and the said pie for 1-192d of the Company’s rupee.” (Passed 7th December, 1835).

ACT XIII. of 1836 directs that the Calcutta sicca rupee shall cease to be a legal tender from the 1st January, 1838; but shall be received at public Treasuries by weight, subject to one pie for re-coining: and further limits the circulation of certain local copper coins.

ACT XXXI. of 1837 merely refers to devices.

ACT XXI. of 1838 authorises the “coinage and issuing of any silver coins of a value represented in even annas, or sixteenths of the

<sup>1</sup> As there are no Preambles to the Acts, we are left to discover the reasons which led to this abrupt announcement. ‘The Minutes of Consultation in Council’ might perhaps disclose the guiding motive. In this instance, however, silence need not be taken for discreet reticence, for many good and valid reasons suggest themselves as warranting the course pursued. And in regard to the new aspect that the gold discoveries have since given to the comparative values of the precious metals, it is to be remembered that at the moment of the passing of this Act, gold stood relatively to silver at *over* 15 to 1 in the local markets.

Company's rupee," of the same standard as the higher denominations.

Act XXXI. of 1839 prescribes punishment "for drilling, defacing, or debasing current coin," etc.

Act XIII. of 1844 is an Act for the withdrawal from circulation of the Trisoollee pyce in the province of Benares.

Act XXII. of 1844 merely extends Act XXI. of 1835 to all "the territories of the East India Company."

Act VI. of 1847 refers to the copper currency of the Straits' Settlements.

To complete the series of Government documents, I append to the more formal legislative enactments, the substance of the notification of the 22nd of December, 1852; which, in its opening paragraph, likewise sufficiently explains the nature of the intermediate order of 1841.<sup>1</sup>

"No. 26. FORT WILLIAM, FINANCIAL DEPARTMENT, 22ND DECEMBER, 1852.—NOTIFICATION.—By Sec. 9, Act XVII. of 1835 of the Government of India, it was enacted, that thenceforward no gold coin should be a legal tender of payment in any of the Territories of the East India Company; and, accordingly, gold ceased from the date of the passing of the Act to be a legal tender of payment in the Company's Territories in India."

"But, by a Proclamation issued on the 13th January, 1841, officers in charge of public treasuries were authorized freely to receive gold coins, struck in conformity with the provisions of the same Act XVII. of 1835, at the rates indicated by the denomination of the pieces, until they should have passed certain limits of lightness, set forth in a table published with the Proclamation, or until further orders; and gold coins have been thus received in liquidation of public demands up to the present date."

"Notice is now given . . . that on and after that date [1st January, 1853,] no gold coin will be received on account of payments due, or in any way to be made to the Government<sup>2</sup> . . .

<sup>1</sup> I have not failed to examine this Proclamation. It specifies the devices (*Reverse*: "A lion and a palm-tree") for the new gold coinage, "in conformity with Act XVII. of 1835"; and proceeds: "officers in charge of public treasuries are hereby authorized freely to receive these gold coins at the rates, until further orders, respectively denoted by the denomination of the pieces, until they shall have passed the limits of lightness allowed for wear, laid down in the annexed table, when they will only be receivable as bullion, and be subject to a deduction of one per cent. for seignorage."

<sup>2</sup> I do not ordinarily permit myself to criticise the acts of the Government of India; but these orders seem fairly to demand a passing notice. Viewing the peculiar element of suspicion of motives so strong in Asiatic minds, and the importance the natives of India attach to every varying phase of the dealings of their rulers, it is clear that the "Resolution" of 1852 was neither wise nor politic; it is doubtful whether, under the circumstances, it was just. The reservation of "until further orders," so clumsily inserted in the Proclamation of 1841, might convey its special meaning to the ear of an English lawyer, but it is not likely to

Gold will continue as heretofore, to be received into any of the mints . . . for coinage, under the Act and Rules at present in force for the coinage of gold, but Mint certificates for gold coins will be discharged in gold only, and no such certificate for gold will be accepted in any public treasury in liquidation of public demands, or on account of any payment to the Government whatever."<sup>1</sup>

The Madras and Bombay Governments seem to have pertinaciously abstained from legislating on coinages and currencies, and their Statute Books are altogether silent on these subjects, until the action of the Supreme Government is brought to bear on them in 1835. Such being the case, I am unable to elucidate the measures of Mint progress in the minor Presidencies.

have borne its full significance to the intelligence of the Native banker: apart from this, it is clearly a question whether the tenor of the Proclamation itself did not imply an understood obligation on the part of Government, to receive back the gold coined and issued under its provisions, coupled as those provisions were with the inducements held out to aid the circulation, that the officers of Government were enjoined "freely to receive these gold coins at the rates" etc.; the only obvious restriction, beyond the formal "until further orders," being that the pieces should not have "passed the limits of lightness allowed for wear" etc.

<sup>1</sup> The same writer in 'Allen's Indian Mail,' 1854, who clearly has had access to official documents, thus elucidates the motive and object of the Order of 1852:—"We have explained the condition of the gold coin of India, and the erroneous principles adopted for its manufacture. Things continued in this state when the gold of California and Australia began to affect the market, and to change the relative value of that metal to silver. The first considerable increase in the import of gold at Calcutta was in the year 1848-49, and a large portion of it was sent to the mint, in that and the following years, for conversion into low-standard lion-device pieces, [XVII. of 1835]. The sending of gold to the mint at this period was in reality a mere sale of the metal to Government for silver, at the par rate of 15 to 1, which then began to prevail as the market rate. The Mint certificates, obtained for gold delivered, were immediately paid in at that par, in satisfaction of Government dues, or were negotiated at the banks, where silver was always claimed upon them under the option then given of receiving the amount in rupees at the par in question. The gold thus, when coined by the Mint, remained as a dead balance in the Government treasury, not being issuable at the par of 15 to 1, in the condition of base standard coin, to which it had been manufactured. Besides this process of gold accumulation through deliveries at the Calcutta Mint, low standard coin, previously issued, began also to be paid into the treasury, at the established par rate in ordinary transactions [under the Proclamation of 1841]; so that out of a total amount of lion-device gold mohurs, not exceeding in value seventy lacs of rupees, which was the value of the coinage up to that date, as before shown, more than fifty lacs were, in 1852, in deposit in the Government treasury as a dead unserviceable balance. It was at this time that the Government of India began to contemplate measures for converting its entire 5 per cent. Debt into Stocks at 4 per cent. The prospect, therefore, of having the balance to which the Government looked for the means of completing this operation rendered unserviceable for the purpose by the substitution of gold coin, not a legal tender, for the rupees claimable by the public creditors who might elect to receive payment in cash, was by no means agreeable. A prompt remedy was necessary, and the question being referred to the Court of Directors, the desire to adhere still to their old principles suggested that the low standard gold coin, not being a legal tender, the receipt of it by Government should be altogether stopped; and this was accordingly done in 1853, by public notice in the *Gazette of Calcutta*."





TABLE of Silver Coinage in the Provincial Mints.

	Benáres.	Farrukhábád.	Ságar.
From 1804-5 to 1832-3, incl.	11,14,79,898 6 6	7,74,66,519 3 11	58,99,282 8 6
Of which sum private bullion...	6,67,85,549 13 8	3,10,18,509 10 5	7,89,496 2 4
Government ditto .....	4,46,94,348 8 10	4,64,48,009 9 6	46,09,786 6 2
Value of copper coinage up to the same period. ....	13,90,140 0 0	75,594 12 3	2,83,388 0 0
Total	11,28,70,038 6 6	7,75,42,114 0 2	56,82,670 8 6

Coinage at the Calcutta Mint .....	Sikká Rs.	33,71,31,778
Coinage at Benáres.....	"	10,58,15,663
Coinage at Farrukhábád .....	"	7,26,96,732
Coinage at Ságar .....	"	53,27,508
Total Coinage of the Bengal Presidency from 1801-33: Sikká Rs.		52,09,70,676

[It will be seen that the totals in the preceding Tables are given in sikká and in Farrukhábád rupees. Act XVII. of 1835 introduced the Company's rupee as the one uniform currency of all India; this coin is composed of 165 grains of silver and 15 of alloy, and stands the declared equivalent of the old Bombay, Madras, Farrukhábád, and Sonát rupees—being defined as corresponding in value to  $\frac{1}{16}$ th of the superseded Calcutta sikká rupee. All Government accounts, subsequent to the date of the passing of this Act, are therefore made up in the new or standard Company's rupee.

TABLE of the value of Gold and Silver Coined in the Mints of Calcutta, Madras, and Bombay in each year from 1833-34 to 1854-55.

(From Official Returns at the India House.)

	CALCUTTA.		MADRAS.		BOMBAY.		TOTAL.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
	Value in Co.'s Rs.	Value in Co.'s Rs.	Value in Co.'s Rs.	Value in Co.'s Rs.	Value in Co.'s Rs.	Value in Co.'s Rs.	Value in Co.'s Rs.	Value in Co.'s Rs.
1833-34	26,48,593	1,23,47,561	39,58,800	43,11,500	...	10,83,156	66,07,393	1,77,42,217
1834-35	16,84,838	1,33,10,055	28,75,200	35,21,000	...	50,78,286	45,60,038	2,19,06,341
1835-36	11,97,344	1,62,49,960	...	...	...	64,34,704	11,97,344	2,26,84,724
1836-37	68,145	2,98,14,302	...	...	...	82,71,877	68,145	3,80,86,179
1837-38	2,54,265	2,09,34,103	The operations of the Mint were suspended from 1835 to 1841.		...	1,09,48,686	2,54,265	3,18,82,739
1838-39	3,44,706	2,67,63,743			...	1,17,72,822	3,44,706	8,85,36,565
1839-40	7,91,557	2,15,77,576			...	98,28,901	7,91,557	3,14,00,477
1840-41	5,67,720	1,64,10,686	...	...	...	1,20,34,235	5,67,720	2,84,48,922
1841-42	2,31,015	2,51,26,312	...	25,85,978	...	51,75,329	2,31,015	3,28,87,619
1842-43	...	2,06,11,864	...	16,40,203	...	1,07,95,678	...	8,80,47,785
1843-44	1,66,335	2,17,66,075	...	42,28,459	...	2,07,32,497	1,66,335	4,67,27,031
1844-45	1,79,760	2,83,35,602	98,595	31,72,430	...	1,54,60,180	2,63,355	4,69,68,212
1845-46	1,54,535	2,25,82,882	1,00,545	22,32,281	30,390	1,36,00,807	2,91,470	3,84,25,420
1846-47	4,27,335	1,64,78,122	...	60,84,016	...	66,46,956	4,27,335	2,92,09,094
1847-48	1,62,930	1,61,19,938	3,00,000	84,95,301	...	42,07,369	4,62,930	1,78,22,596
1848-49	7,04,700	1,34,08,269	...	12,98,676	...	1,11,92,701	7,04,700	2,57,92,646
1849-50	3,24,585	1,35,97,117	...	8,64,872	15,300	96,50,554	3,89,825	2,41,12,043
1850-51	12,17,890	1,21,81,697	...	19,54,271	19,350	1,20,78,996	12,87,170	2,61,64,274
1851-52	6,25,500	1,78,90,191	...	86,27,082	...	2,08,97,949	6,25,500	4,24,05,322
1852-53	...	2,73,66,206	...	39,35,171	...	2,37,96,471	...	5,50,99,848
1853-54	14,56,785	2,81,82,702	...	67,50,846	...	2,26,00,817	14,56,785	5,25,34,365
1854-55	26,760	70,43,170	...	28,68,429	...	37,47,416	26,760	1,36,69,015
	1,32,35,168	41,66,81,963	73,18,140	5,25,68,015	71,040	24,60,99,288	2,06,24,343	71,55,49,286

TABLE of Imports and Exports of Treasure (Gold and Silver) in each of the Presidencies of India, from 1813-14 to 1853-54, at 2s. the Rupee.

YEAR.	BENGAL.				MADRAS.				BOMBAY.				TOTAL.			
	Imports.	Exports.	Net Imports.	Net Exp.	Imports.	Exports.	Net Imp.	Net Exp.	Imports.	Exports.	Net Imports.	Net Exp.	Imports.	Exports.	Net Imports.	Net Exp.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
1813-14	684,403	4,275	680,128	.....	142,143	30,756	111,387	.....	207,822	181,043	26,779	.....	934,368	216,074	718,284	.....
1814-15	1,038,634	15,462	1,053,182	.....	100,897	10,064	90,833	.....	297,170	63,168	232,002	.....	1,466,711	90,694	1,376,017	.....
1815-16	1,303,407	1,575	1,301,832	.....	111,701	10,755	100,946	.....	604,738	7,743	597,045	.....	2,519,896	20,073	2,499,823	.....
1816-17	3,168,298	16,900	3,185,198	.....	174,227	24,416	149,811	.....	801,274	4,316	797,058	.....	4,160,699	45,532	4,115,167	.....
1817-18	3,202,702	31,782	3,170,920	.....	172,849	4,577	168,265	.....	1,166,683	26,417	1,140,268	.....	4,542,229	62,719	4,479,510	.....
1818-19	4,719,329	27,563	4,691,766	.....	237,966	8,808	229,158	.....	1,831,408	5,763	1,825,646	.....	6,788,627	53,524	6,735,103	.....
1819-20	4,004,692	869,682	3,134,710	.....	180,595	13,925	166,670	.....	705,903	61,639	644,264	.....	4,361,106	390,459	4,000,641	.....
1820-21	2,861,723	1,133,936	1,727,788	.....	223,446	1,425	225,871	.....	670,231	46,024	624,207	.....	3,219,201	161,985	3,105,216	.....
1821-22	2,145,453	1,239,639	905,814	.....	253,499	16,989	236,510	.....	46,790	473,477	426,687	.....	2,919,238	1,303,427	1,615,801	.....
1822-23	1,706,845	1,594	1,705,251	.....	312,173	15,296	296,877	.....	560,593	35,014	525,579	.....	2,579,611	65,894	2,513,717	.....
1823-24	1,990,542	756,582	1,233,960	.....	123,989	70,229	53,760	.....	697,940	156,652	541,288	.....	1,921,471	983,465	1,138,006	.....
1824-25	940,294	164,082	776,212	.....	100,185	217,681	.....	.....	715,708	63,235	650,408	.....	2,086,082	443,865	1,642,217	.....
1825-26	1,040,997	13,570	1,027,427	.....	224,785	505,000	.....	280,265	1,132,874	13,597	1,119,251	.....	2,398,610	512,467	1,886,143	.....
1826-27	1,228,832	11,857	1,216,975	.....	283,162	70,223	212,939	.....	904,594	26,619	877,975	.....	2,476,588	208,345	2,268,243	.....
1827-28	1,413,958	448,098	965,860	.....	251,888	391,331	.....	139,513	1,250,190	70,327	1,179,863	.....	2,916,016	908,906	2,007,110	.....
1828-29	655,852	176,319	479,533	.....	147,880	110,308	37,581	.....	1,270,492	200,094	1,070,398	.....	2,914,233	486,721	2,427,512	.....
1829-30	961,025	164,082	796,943	.....	109,305	540,123	.....	430,818	1,102,200	229,746	872,454	.....	2,192,530	983,901	1,208,629	.....
1830-31	601,314	330,503	270,711	.....	113,755	112,776	979	.....	1,015,312	161,938	853,374	.....	1,730,281	606,217	1,124,064	.....
1831-32	351,463	1,144,547	.....	790,064	154,637	301,468	.....	166,871	735,586	203,514	532,072	.....	1,182,254	1,738,947	555,708	.....
1832-33	517,178	247,553	270,711	.....	154,637	301,468	.....	86,858	491,961	183,827	308,134	.....	1,146,706	1,270,648	123,943	.....
1833-34	568,476	737,353	390,924	.....	153,115	106,377	46,738	.....	1,183,438	115,848	1,068,000	.....	1,876,441	564,385	1,312,156	.....
1834-35	645,224	66,554	578,670	.....	112,760	31,328	81,232	.....	1,093,683	21,808	1,071,875	.....	1,808,028	194,739	1,613,289	.....
1835-36	687,108	56,599	630,509	.....	112,760	31,328	81,232	.....	1,346,586	13,981	1,332,605	.....	2,146,464	108,108	2,038,356	.....
1836-37	612,597	161,431	451,166	.....	75,958	72,615	3,343	.....	1,347,681	80,001	1,267,680	.....	2,086,166	263,933	1,772,233	.....
1837-38	1,048,863	398,450	650,413	.....	128,542	106,431	22,111	.....	1,462,675	98,790	1,363,885	.....	2,640,100	340,455	2,299,645	.....
1838-39	1,319,081	162,760	1,156,321	.....	131,134	91,237	39,897	.....	1,600,754	98,908	1,501,846	.....	3,010,919	847,906	2,163,013	.....
1839-40	1,298,766	200,347	1,098,419	.....	112,406	127,446	.....	15,040	606,071	143,059	463,012	.....	1,945,263	470,523	1,474,741	.....
1840-41	918,807	146,266	772,541	.....	68,146	80,351	.....	11,154	794,298	130,979	663,319	.....	1,945,263	366,485	1,578,778	.....
1841-42	988,617	159,155	829,462	.....	67,600	130,481	.....	112,921	794,298	130,979	663,319	.....	1,945,263	366,485	1,578,778	.....
1842-43	1,048,711	72,984	975,727	.....	79,413	25,317	54,096	.....	1,456,494	175,438	1,281,056	.....	1,841,333	515,074	1,326,259	.....
1843-44	1,752,376	186,794	1,565,582	.....	115,240	21,600	93,640	.....	2,027,060	117,545	1,909,515	.....	3,443,890	215,796	3,228,094	.....
1844-45	1,581,305	306,543	1,274,762	.....	188,561	65,053	123,508	.....	1,982,545	615,243	1,367,302	.....	4,794,676	746,075	4,048,601	.....
1845-46	991,005	287,079	703,926	.....	172,297	65,764	106,533	.....	1,382,655	463,184	919,471	.....	3,752,471	1,106,839	2,645,632	.....
1846-47	1,336,228	285,404	1,050,824	.....	147,189	68,169	79,020	.....	1,456,494	300,295	1,156,199	.....	2,985,957	818,027	1,677,930	.....
1847-48	747,223	905,071	.....	157,848	132,153	733,848	.....	82,109	1,094,014	306,704	787,310	.....	2,493,921	713,968	2,226,053	.....
1848-49	1,414,865	780,878	633,987	.....	117,199	793,262	.....	616,649	1,025,015	306,704	787,310	.....	4,204,598	1,426,363	2,778,235	.....
1849-50	1,214,865	354,205	860,660	.....	121,437	72,637	48,800	.....	2,060,505	544,400	1,516,105	.....	3,965,807	971,242	2,994,565	.....
1850-51	1,180,483	276,328	904,155	.....	280,110	104,160	175,950	.....	2,363,214	160,818	2,202,396	.....	3,811,808	541,287	3,270,521	.....
1851-52	2,306,470	476,375	1,830,095	.....	287,398	215,768	81,630	.....	2,448,190	452,732	1,995,458	.....	5,191,968	919,088	4,272,880	.....
1852-53	3,888,987	476,375	3,412,612	.....	576,854	36,332	540,522	.....	2,890,536	842,472	2,148,064	.....	6,881,377	1,056,229	5,776,148	.....
1853-54	2,083,986	437,913	1,646,073	.....	577,490	115,687	461,803	.....	2,208,479	929,726	1,278,753	.....	4,871,954	1,483,295	3,388,659	.....

The figures entered in the preceding Official Return, so far as they relate to the commerce of Bengal from 1813-14 to 1832-33, will be found to differ from those originally published by Prinsep. It may be necessary to explain, that his Tables exhibited the imports and exports of the isolated Presidency of Bengal, and, as such, comprehended not only the trade with the United Kingdom and foreign countries, but likewise the traffic of the Port of Calcutta, etc., with the coast and the other Presidencies. In the present return, the local port to port trade is properly excluded.<sup>1</sup>

It will be seen that the foregoing Table does not discriminate the relative amount of gold and silver imported or exported in each year, nor do the official documents at command admit of the separation of the two items earlier than 1846-47; subsequent to which, the proportion runs as follows, for the three Presidencies:—

	GOLD.			SILVER.		
	Imports.	Exports.	Remains.	Imports.	Exports.	Remains.
	£	£	£	£	£	£
1846-47	851,738	2,890	+ 848,848	2,088,183	710,978	+1,377,205
1847-48	1,048,778	9,661	+ 1,039,117	924,612	1,416,376	- 491,764
1848-49	1,401,748	52,829	+ 1,348,919	2,802,755	2,486,913	+ 315,842 <sup>a</sup>
1849-50	1,160,661	64,868	+ 1,095,793	2,236,146	906,374	+1,329,772
1850-51	1,155,310	2,016	+ 1,153,294	2,656,498	539,273	+2,117,225
1851-52	1,338,778	71,165	+ 1,267,613	3,713,280	847,923	+2,865,357
1852-53	1,335,164	168,805	+ 1,166,359	5,496,214	886,424	+4,609,790
1853-54	1,101,136	17,265	+ 1,083,871	3,770,821	1,466,030	+2,304,791
	9,393,313	389,499	9,003,814	23,688,509	9,260,291	14,428,218

The proportions of each metal absorbed by the several divisions of

<sup>1</sup> [The delay that has occurred in the printing of this sheet enables me to add parallel returns for the year 1854-55. The Madras and Bombay totals hereunto subjoined are derived from official sources; the Bengal return is taken from Bonnaud's 'Commercial Annual,' as the formal statements relating to that Presidency have not yet been received at the India House:—

	IMPORTS.	EXPORTS.	NET IMPORTS AND EXPORTS.	
			Net Imports.	Net Exports.
	£	£	£	£
Bengal .....	803,154	1,072,194	.....	469,040
Madras .....	194,221	521,814	.....	327,593
Bombay .....	1,188,913	353,654	835,259	.....
Total .....	1,986,288	1,947,662	38,626	.....

<sup>2</sup> [The unimportant discrepancies that may be detected between the lower figures of these totals and those entered at the end of the Table in page 82 and elsewhere, are explained to have arisen from the varying results of working in gross and in detail, and the exclusion of fractions of rupees and the rejection of unit figures, to convert the rupee into sterling money at different stages of the arithmetical process.]

the Indian empire, during the eight years in question, are embodied in the annexed table :—

REMAINS.	CALCUTTA.		MADRAS.		BOMBAY.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
	£	£	£	£	£	£
1846-47	215,530	+ 835,294	27,561	+ 51,469	605,757	490,442
1847-48	362,554	— 520,402	48,558	— 130,667	628,005	159,305
1848-49	416,947	+ 216,097	33,173	— 649,826	899,799	749,571
1849-50	275,543	+ 585,117	55,091	— 6,291	765,169	750,946
1850-51	317,998	+ 595,154	32,868	+ 123,097	802,428	1,398,974
1851-52	401,243	+ 1,654,639	76,069	+ 5,561	790,301	1,205,157
1852-53	575,351	+ 2,342,261	49,121	+ 491,353	541,887	1,776,176
1853-54	481,756	+ 1,166,317	86,719	+ 375,115	515,396	763,359
£	3,045,922	+ 6,874,477	409,160	+ 259,811	5,548,732	7,293,930

In appropriate supplement to these Tables, and to enable my readers to judge of the comparative importance of the bullion traffic with India, I annex a statement from Col. Sykes' paper 'On the External Commerce of British India,' published in the 'Journal of the Statistical Society,' for June, 1856, and further brought up to the present date, which exhibits the relative values of goods and bullion imported and exported during the six years from 1849-50 to 1854-55.

*Abstract of Imports and Exports of Goods and Bullion from 1849-50 to 1854-55.<sup>1</sup>*

Years ended 30th April.	Total amount of Goods imported into the three Presidencies.	Total amount of Goods imported into the three Presidencies.	Excess of Goods exported.	Net import of Bullion.	Excess of Exports of Goods, deducting Net import of Bullion.	Bills drawn upon India by the Directors.	Final Balances of Trade in favor of India adjusted by other means.
	£	£	£	£	£	£	£
1849-50	10,300,000	17,312,000	7,012,000	2,425,000	4,587,000	2,936,000	1,651,000
1850-51	11,559,000	18,164,000	6,605,000	3,270,000	3,335,000	3,236,000	99,000
1851-52	12,240,000	19,879,000	7,639,000	4,133,000	3,506,000	2,777,000	729,000
1852-53	10,071,000	20,465,000	10,394,000	5,776,000	4,618,000	3,317,000	1,301,000
1853-54	11,122,000	19,295,000	8,173,000	3,389,000	4,748,000	3,850,000	934,000
1854-55	12,442,000	18,298,000	5,856,000	38,000	5,818,000	3,669,000	2,149,000
Total...	67,734,000	113,413,000	45,679,000	19,031,000	26,648,000	19,785,000	6,863,000
Average	11,289,000	18,902,000	7,613,000	3,171,000	4,441,000	3,297,000	1,143,000

The Bengal return for the year 1854-55 is taken from Bonnaud's 'Commercial Annual,' as the official papers have not yet been received from that Presidency.

As the statements in the above Table are understood to have been

<sup>1</sup> [ Mr. Low's Circulars furnish us with the actual shipments of treasure for India

prepared from official Custom-House returns, they may be accepted as *pro-tanto* authentic; and as the Government of the East India Company adhere to the highly primitive system of levying duties upon exports, the totals thus obtained are probably as trustworthy as the corresponding entries of imports.

As intimately connected with the subject of the demand for silver bullion in India, I also append a full return of the responsibilities undertaken by the East India Company on account of railways in course of construction. I have not been able to obtain exact statements of the several amounts actually expended in India—comprising the sums repaid by the Government in silver coin in return for the gold deposited in the treasury in Leadenhall Street—but the difference between the totals “paid in” and “re-issued in England” will furnish an approximate estimate of what the liability amounts to.

by the Peninsular and Oriental Company's vessels, during the years 1855, 1856, and 1857, amounting to the subjoined totals:—

## 1855.

UNITED KINGDOM, <sup>a</sup> (January to December).		OTHER PORTS (11 months).	
Calcutta.....	Gold £ 350 Silver £ 2,299,235	Silver £ 603,141	
Madras .....	„ 17,789 „ 177,173	„ 289,014	
Bombay.....	„ 1,232 „ 2,267,400	„ 51,344	
	£ 19,371	£ 4,743,808	£ 943,499

The grand total shipped for the East in 1855 was—From the United Kingdom: Gold, £948,272; Silver, £6,409,889. Other Ports: Gold, £243,239; Silver, £1,524,240.

## 1856.

UNITED KINGDOM.		OTHER PORTS. (including Dec., 1855).	
Calcutta.....	Gold £ 719 Silver £ 3,417,091	Silver £ 433,303	
Madras .....	„ 28,523 „ 213,781	„ 327,494	
Bombay.....	„ 7,906 „ 4,748,631	„ 163,216	
	£ 37,148	£ 8,379,503	£ 924,013

Total exports for the East from the United Kingdom for 1856: Gold, £404,749; Silver, £12,118,985. Other Ports: Gold, £74,039; Silver, £1,989,916.

## 1857.

UNITED KINGDOM.		OTHER PORTS.	
Calcutta... Gold, £ 36,040 Silver, £ 5,689,015		Gold, £30,896 Silver, £ 893,407	
Madras ... „ 97,788 „ 403,646		„ 15,300 „ 400,710	
Bombay... „ 30,565 „ 5,275,950		„ 16,161 „ 523,966	
	£ 164,393	£ 11,368,611	£ 62,357
			£ 1,888,073

Total exports for the East from the United Kingdom: Gold, £269,275; Silver, £16,795,232. Other Ports: Gold, £259,986; Silver, £3,350,689.

<sup>a</sup> [There were no shipments for either of the three Presidencies in January, and only £68,871 for Bombay in February, 1855.]

It may be necessary to add that the payments into the Company's Treasury on account of Railways commenced in 1848-49, and that the rate of exchange for Indian subscribers was permanently fixed at 1s. 10d. per Company's rupee.<sup>1</sup>

TABLE exhibiting the sums paid into the East India Company's Treasury, in London, on account of Railways in India, up to 30th Sept., 1856.

Names of Companies.	Capital sanctioned.	Total paid in.	Re-issued in England.
	£	£	£
East Indian.....	10,731,000	6,219,733	3,094,126
Great Indian Peninsula .....	4,000,000	2,525,113	866,263
Madras .....	4,000,000	1,926,354	1,027,805
Sind.....	500,000	265,614	92,480
Bombay and Baroda .....	500,000	334,511	58,891
	19,731,000	11,271,325	5,139,565 <sup>a</sup>

<sup>a</sup> Of this total the sum of £ 869,301 has been disbursed as Interest on Capital.

Another important item bearing upon these details still remains to be noticed—that of the comparative value of the uncurrent silver coin received into the mint, as contrasted with the amount of bullion

<sup>1</sup> [The rate of exchange thus permanently established, irrespective of intrinsic value or any possible scheme of commercial par, has necessarily had the effect of insuring that nearly all the funds required for railways should be raised in England to the exclusion of Indian subscribers. The second Table at page 14 will indicate the intrinsic value of the Company's rupee, and its details will exemplify how the exchangeable value of that coin is liable to be affected by external influences; but, under ordinary circumstances, the par value may be fairly taken at 2s.; now, under this permanent and immutable arrangement, whatever the commercial rate of exchange might chance to rule at, Indian contributors to their own local railways had to pay 218 Company's rupees for every £20 share, or about 9 per cent. more than the nominal value of the stock, while under favorable rates of exchange, such as we have experienced of late, by remitting the money to England, the £20 share could be purchased for about 184 Company's rupees, making a total difference of no less than 17 per cent! In a similar degree have our Eastern speculators reason to complain of the comparative rates of interest; for while the Home Government was undertaking these millions of railway debts, and guaranteeing a *minimum* rate of profit at 5, and never less than 4½ per cent., the Government of India was endeavouring to persuade its obedient subjects that 4, and even 3½ per cent. (28th October, 1853) was quite as much as their money was worth; and the latter rate was not to form an ascending minimum like the railway guarantee, but a maximum, liable, on the contrary, to reduction at any favorable moment, after the manner of the extinguishment of the 5 per cents. in 1853 and their conversion into *fours*, the consentient holders of which were startled by the opening of a new loan at the former rate, in less than fourteen months after the completion of this—to use the words of the Governor-General—"not the less successful" operation. To sum up these contrasts, it is necessary to bear in mind the relative value of money in the two countries; which may be justly tested by the index until lately afforded by the legal rate of interest in each—that of India being 12, while that of England was 5 per cent.]

brought for coinage by individuals unconnected with the State :<sup>1</sup> the one indicating the amount of the old currency replaced by new coin, the other disclosing the increase made to the circulating medium; though this latter is liable to be affected by too many varying influences to be received as any criterion of the total permanently available to meet the monetary wants of the country.

I limit the present returns to the rupee or standard currency;<sup>2</sup> commencing with those of the year 1833-34, in order to embrace the entire period comprised in the parallel Table at page 81.

<sup>1</sup> [Notwithstanding his remark on the subject at page 41, Prinsep omitted to discriminate in his Table of the Coinages of the Calcutta Mint the separate amounts derived from each source. In the returns of the Provincial Mints (page 81) the difference is duly marked.]

<sup>2</sup> [The coinage of gold may be gathered, from the previous Tables, to have been in proportion to that of silver :

In the Calcutta Mint,	from 1801-2	to 1832-33	as 3.18	to 30.19
	from 1833-34	to 1854-55	as 1.32	to 41.68
Madras	from 1833-34	to 1854-55	as .73	to 5.25
Bombay	from 1833-34	to 1854-55	as .007	to 24.

No gold was coined in the European mints of the North-Western Provinces.]

*Assay produce of Silver Bullion received into the Mints of Calcutta, Madras, and Bombay, in each year from 1833-34 to 1854-55; and of the value of the Silver Coinages for the same period.*

	CALCUTTA MINT.			MADRAS MINT.			BOMBAY MINT.		
	Assay produce of Silver received from Individuals.	Value of uncurrent coins received from Treasury officers.	Silver Coinage.	Assay produce of Silver received from Individuals.	Value of uncurrent coins received from Treasury officers.	Silver Coinage.	Assay produce of Silver received from Individuals.	Value of uncurrent coins received from Treasury officers.	Silver Coinage.
1833-34	Rupees. 1,14,14,455	Rupees. 64,08,247	Rupees. 1,23,47,561	Rupees. 19,66,073	Rupees. 20,15,465	Rupees. 43,11,500	Rupees. 10,03,869	Rupees. 79,287	Rupees. 10,83,156
1834-35	83,08,557	36,99,588	1,33,10,055	16,93,848	17,57,313	35,21,000	47,55,928	3,19,458	50,75,286
1835-36	80,88,265	1,36,85,562	1,62,49,960				54,88,186	9,46,578	64,34,764
1836-37	66,55,749	2,01,44,738	2,98,14,302				59,36,244	23,35,633	82,71,877
1837-38	1,30,96,273	1,17,80,627	2,09,34,103				60,44,627	59,04,008	1,09,48,636
1838-39	1,41,26,786	99,74,839	2,67,63,743				58,21,565	59,51,257	1,17,72,822
1839-40	1,25,58,732	90,22,939	2,15,77,576				66,53,727	31,75,174	98,28,901
1840-41	1,04,76,082	56,52,719	1,64,10,686				61,68,870	68,69,366	1,20,38,236
1841-42	97,71,487	84,49,140	2,51,26,312				43,74,350	77,02,971	51,75,329
From China	64,66,215			4,77,640	25,72,885	25,85,978			
1842-43	1,76,80,544	19,75,137	2,06,11,864	9,11,236	8,07,271	16,40,203	39,51,850	20,98,840	1,07,95,688
1843-44	1,93,12,790	39,23,306	2,17,66,075	11,93,613	36,17,818	42,28,459	1,48,90,842	19,65,848	2,07,32,497
1844-45	1,86,63,022	92,63,633	2,83,35,602	3,96,322	20,31,130	31,72,430	1,65,67,857	8,19,571	1,54,60,180
1845-46	94,00,729	70,18,940	2,25,32,332	5,31,824	25,51,079	22,32,281	1,26,71,208	47,71,270	1,35,60,807
1846-47	95,64,692	68,33,535	1,64,78,122	2,01,602	52,38,762	60,84,016	56,45,965	19,98,206	66,46,956
From China	24,17,314								
1847-48	44,90,831	34,44,763	1,01,19,938	1,03,186	28,95,526	34,95,301	16,21,861	24,76,891	42,07,359
1848-49	92,10,387	52,69,827	1,33,03,269	1,76,611	12,11,847	12,96,676	Returns not obtainable.		1,11,92,701
1849-50	1,08,14,857	34,11,031	1,35,97,117	2,39,889	9,48,888	8,64,372	88,24,597	13,26,050	96,50,554
1850-51	95,77,598	33,33,354	1,21,31,097	11,96,864	19,15,784	19,64,271	1,19,45,874	47,13,940	1,20,78,906
1851-52	1,97,62,183	18,56,809	1,78,80,191	15,16,247	13,53,124	36,27,082	1,60,77,378	62,78,588	2,03,97,949
1852-53	2,71,48,980	27,57,583	2,73,66,206	53,20,920	7,78,360	39,35,171	2,20,43,730	13,51,825	2,37,98,471
1853-54	1,43,66,179	30,60,547	2,31,82,702	49,23,033	6,80,475	67,50,846	1,35,36,376	42,83,536	2,26,00,817
1854-55 <sup>1</sup>	12,79,622	43,95,048	70,43,170	9,10,176	4,00,710	28,68,429	25,75,235	13,15,423	37,47,416
	27,41,57,349	14,54,51,618	41,68,31,983	2,17,61,784	3,07,76,437	5,25,68,015	17,56,00,538	6,56,83,863	24,60,99,268
	41,96,08,967			5,25,38,221			24,12,84,208		

<sup>1</sup> The diminished coinage in 1854-55 is attributed (authoritatively) to the decrease in the imports of silver bullion in that year.



It will be seen from the above figured details, that, during the last twenty-two years, the grand total of the coinage of silver in the East India Company's mints has reached no less a sum than 71,55,49,286 rupees, or £71,554,928: towards this amount 24,19,11,918 rupees were contributed by the old metal of the worn or recalled currencies; and 47,15,19,671 rupees constituted the proportion of bullion brought for coinage by individuals. It may be instructive to test a section of these returns in connexion with the statistics furnished by the bullion trade of India, illustrated at page 83. To select the same eight years for which the figures have been tabulated in that statement (*i.e.* 1846-7 to 1853-4), it is to be observed, that the total amount of silver bullion—in excess of the returned coin—minted at the three Presidencies, during the period, was over 20 crore of rupees, or twenty millions sterling;<sup>1</sup> while the balance of silver bullion remaining in India, on the traffic of the same interval, is seen to amount to 14,42,82,180 rupees, or less than fourteen and a half millions sterling. The results of the two returns are not so directly dependent on each other, that their non-accordance need cause surprise, nor is there any reason why the five and a half millions of surplus coin may not have been re-exported in that shape, in the ordinary course, even if we did not know that the Company's rupee has hitherto supplied much of the circulating medium of Ceylon, the Mauritius, and the Straits settlements. There is no ground for supposing that any quantity of the silver bullion, used for Mint purposes, is at this time supplied by India itself—though it contributed not unimportantly to the local mints up to 1832-33.<sup>2</sup> We may fairly, therefore, take the ebb and flow of bullion, in the every-day transactions of commerce, as a momentary

<sup>1</sup> [*Detail of Silver Bullion, over and above the recalled coin, minted at the three Presidencies.*]

For the years	Company's Rupees.	
1846-47 .....	1,78,29,573	5,28,11,792, excluding Bombay for 1848-49.
1847-48 .....	62,15,878	
1848-49 .....	93,86,998	
1849-50 .....	1,93,79,343	14,74,15,861
1850-51 .....	2,27,20,336	
1851-52 .....	3,73,55,808	
1852-53 .....	5,45,13,630	
1853-54 .....	3,28,26,087	
	<b>Co's Rs. 20,02,27,653</b>	
Bengal total .....	10,68,53,021	
Madras total .....	1,36,78,352	
Bombay total .....	7,96,96,280	
	<b>Co's Rs. 20,02,27,653 —</b>	

<sup>2</sup> [See Table, page 81.]

index of the amount of coin removed by sea-transport; though such a test would by no means demonstrate either the maximum or minimum of that drain in exceptional instances. The inland or conterminous absorption of coined money, on the other hand, is far beyond the reach of the boldest speculation; but, with an existing frontier line extending from Mekrán to the Straits of Malacca, and with the various imperfectly civilized races on our borders all seeking eagerly for the precious metals, we may imagine that the outgoing in these directions can scarcely be inconsiderable. However, even admitting that India temporarily retains the full 14.4 millions of the 20 coined for her in eight years, the amount can by no means be said to be excessive,<sup>1</sup> nor is it to be expected—while the monetary laws remain as at present constituted—that the demand should be proportionately lessened; and, as much has been written regarding the undue absorption of bullion by India at large, it may be fitting that I should observe that, whatever may have constituted the attracting magnet, or wherever the ultimate resting-place of the precious metals may have been, in olden times; there is now good and sufficient reason why silver should continue to flow towards our Eastern dominions. Not to touch upon the obvious commercial necessities of our trade as of late balanced, it is to be remembered that India has advanced considerably in material prosperity: not only is there enhanced security of life and property, together with a manifest and natural increase of the population, but the facilities of traffic and real wealth have progressed with equal strides under our rule. There is now but little object in hoarding, less in secreting; the palpable value of money is better understood; and even its conversion into ornaments has comparatively ceased since the introduction of the more extensively alloyed rupee, the hardness of the metal of which neither workers

<sup>1</sup> [The population returns, though most minutely accurate for some portions of India, are but mere guess-work for others. The following is the latest return I have been able to obtain at the East India House. This will give for British India a return of 1.1 rupee per head of increase to the currency in eight years:]

## POPULATION OF INDIA.

Under direct administration of the Governor-General (including the Panjáb, Nagpore, and Oude) .....	23,055,972
Under Lieut.-Governor of Bengal .....	41,212,562
Under Lieut.-Governor of North-West Provinces.....	33,216,365
Under Governor of Madras.....	22,437,297
Under Governor of Bombay.....	11,109,067
 Total British Possessions.....	 131,031,263
Total Independent and protected Native States.....	48,423,630
Total Foreign States (French and Portuguese).....	517,149
 Total	 179,972,042 —]

nor wearers approve. Equally have the advantages of direct money payments reached the comprehension of the masses, for not only, as has been remarked,<sup>1</sup> do the landholders no longer pay the Government demand in kind, but, more important still, the adherence to that primitive mode of liquidation has been generally discontinued among the village communities in their internal apportionment of responsibilities.

I may be permitted, in conclusion, to remark, in regard to the proposed re-introduction of a gold coinage, that I am altogether opposed to such a measure. A metal that must be expected progressively to fall in value—whatever the immediate needs of Europe may seem to evidence to the contrary—is not calculated to be favorably received by the people of India, especially as its market rate has already been sensibly affected in that country by the gold discoveries of Australia.

However, on the other hand, I am confident that much of the threatened difficulty might be met by a well-devised scheme for a paper currency, to consist of Government Notes duly notified as legal tenders, and definitively recognised as receivable in payment of the State revenue; but, in such a case, there must be no reservation of “until further orders,” as in the Gold Proclamation of 1841; nor must there be permitted to exist a possibility of any future Administration reducing the One Hundred Rupee Note into one of the current value of eighty,<sup>2</sup> as was effected, in regard to all the securities involved, by the conversion of the old five per cent. stock. Possibly few nations could be met with, better prepared than the people of India, to accept a sound and carefully elaborated plan for a representative currency. As contrasted with their conventional morality, whether religious or social, their commercial faith and probity stand out in prominent relief. What they respect among themselves, they revere in their rulers; and, in spite of some awkward incidents in the history of British India, the English name still stands exalted with the mass of the population, who have concerned themselves less about

<sup>1</sup> [Col. Sykes, *supra cit.*, p. 84.]

<sup>2</sup> [The Government orders of 1853–54 directly affected the interest alone of the funds assailed—reducing it from 5 to 4 per cent.—the selling price of the securities remaining little below par; but the opening of the 5 per cent. loan of 1855 depreciated the market value of the principal of the converted stock, in proportion to the relatively enhanced rate of interest offered under the new loan. In the one case, the public naturally inferred that the Government was acting in good faith, and justified—by knowledge inaccessible to the non-official world—in the reduction enforced; a feeling that was still further confirmed by the distinctive proclamation of the closing of all open 4 per cent. loans, and the invitation of subscriptions at 3½ per cent. In the second instance, those who had relied upon the equity, superior information, or prescience of the Government, discovered their error.]

the acts and policy of the Central Government, than the immediate rule of the high-principled gentlemen whom this country has ordinarily sent to administer in detail the local sections of our Eastern empire. In similar relative degree to their advancement and civilization, does their knowledge of the intricacies of banking and exchange strike our European perceptions; so that, whether under the aspect of confidence in our probity, or comprehension of our measures, the Indian public may be said to be fully prepared to welcome an improved and enlarged system of state finance. But, as I desire to confine myself to the record of facts, and ordinarily abstain from speculation or argument, I bring these observations to a somewhat abrupt close.—E.T.]

[As Prinsep's Useful Tables are now definitively associated with his Numismatic Essays, it will be expedient to amplify the former by any information regarding Indian coinage equivalents or monetary values that may chance to be readily accessible; I therefore append a few notes on these subjects, extracted from that admirable work, Sir H. M. Elliot's 'Glossary of Terms used in the North-Western Provinces of India.'<sup>1</sup>

"DUMREE, **دُمِرِي دَمِڑِي** damri. . . . Dumree is commonly known as a nominal coin, equal to  $3\frac{1}{8}$  or  $3\frac{1}{4}$  Dams; or between 2 and 3 Gundas—so that a Dumree varies from 8 to 12 Cowrees, according to the good will and pleasure of the money-changers. It may be useful to subjoin from the 'Dewan Pusund' a table showing the value of Dumrees and Dams:—

1	Dumree,	...	...	...	...	$3\frac{1}{4}$	dams.	
2	Dumrees,	...	...	...	...	$6\frac{1}{2}$	dams, .....	1 chhudam.
3	Dumrees,	...	...	...	...	$9\frac{1}{2}$	dams.	
4	Dumrees,	...	...	...	...	$12\frac{1}{2}$	dams, .....	1 adhela.
5	Dumrees,	...	...	...	...	15	dams.	
6	Dumrees,	...	...	...	...	$18\frac{1}{4}$	dams, .....	$\frac{1}{4}$ puesa.
7	Dumrees,	...	...	...	...	22	dams.	
8	Dumrees,	...	...	...	...	25	dams, .....	1 puesa.
9	Dumrees,	...	...	...	...	28	dams.	
10	Dumrees,	...	...	...	...	$31\frac{1}{4}$	dams, .....	$1\frac{1}{4}$ puesa.
11	Dumrees,	...	...	...	...	$34\frac{1}{2}$	dams.	
12	Dumrees,	...	...	...	...	$37\frac{1}{4}$	dams, .....	$1\frac{1}{2}$ puesa.
13	Dumrees,	...	...	...	...	40	dams.	
14	Dumrees,	...	...	...	...	44	dams, .....	$1\frac{1}{4}$ puesa.

<sup>1</sup> [To those who are curious in the science of numbers and would study the progressive arrangement of popular totals, I would recommend the perusal of the elaborate article, 'Chaurāsi,' p. 151.]

15 Dumrees,	...	...	...	47	dams.
16 Dumrees,	...	...	...	50	dams, ..... 1 tuka.

The table is given with some slight variations in the 'Zoobdutu-l-Quwaneen,' but in neither are the smaller fractional amounts given with correctness.

"DAM, دام دَام dām. . . . The Dam in the Ayceen-i-Akberec, and in most Revenue accounts, is considered to be the 40th part of a rupee; but to the common people it is known as the 50th part of a Tuka: 25 therefore go to a Pysa, and 12½ to an Adhela.

"CHHUDAM, چھدام छदाम chhadām. . . . Literally, six dams; equal to two dumrees. The proper amount is six and a quarter dams, but by abbreviation it is called Chhudam.

"GUNDA, گنڈہ गंडा gandā. . . . Like the Dam, the Gunda of account and the Gunda of practice do not coincide. Gundas of account are but little used in the North-Western Provinces, except in Benāres and the Dehra Doon, and, in consequence of its former subjection to Oudh, the Nuzurāna accounts of Rohilcund are frequently drawn out in Gundas. This Gunda is the 20th part of an Anna. The Gunda known to the common people is not of stable amount; sometimes four, and sometimes five, and sometimes even six, go to a puka Dunree, or Chhudam, according to the pleasure of the money dealers, or the state of the market. Notwithstanding this variable amount, as a Gunda is equivalent to four Cowrees, 'to count by Gundas,' signifies to count by fours, or by the quaternary scale, to which the natives are very partial;—in the same way as to count by gahees, or punjas, is to count by fives, or by the quinary scale. As four Cowrees make one Gunda, so do twenty Gundas make one Pun, and sixteen Puns make one Kuhāwun. But there are grades of monetary value even below that of Cowree; for the Hindūs seem as fond of dealing with these infinitesimal quantities, as they are with the higher numbers, as exemplified in the article Crore. Thus 3 Crant, or 4 Kak, or 5 But, or 9 Dunt, or 27 Jou, or 32 Dar, or 80 Til, or 800 Suno are each equivalent to one Cowree. These are not in practical use in the North-Western Provinces, but are entered in several account books, and many of them appear to be employed in the Bazar translations of Cuttack and parts of Bengal. See Rushton's 'Gazetteer,' vol. i., p. 182, 1841. The Cowree shell, the Cypræa Moneta, has been subject to strange diminution of value, in consequence of the facilities of commerce, by which their worth has been depressed below that of the precious metals. In 1740, a rupee exchanged for 2,400 Cowrees; in 1756, for 2,560 Cowrees; and at this time as many as 6,500 Cowrees may be obtained for the rupee. Cowree in Persian is translated by Khur-mohra, literally, a 'jackass's' or 'mule's' shell; because mules are ornamented in that country with trappings of shells, as a Gosain's bullock is in this country. In Arabic it is known by Wuda, which Ibn Batuta says is carried in large quantities from the Maldivé Islands to Bengal, where it is used as coin; and therefore there can be no doubt that the Cypræa Moneta is meant. The Kamoos adds

تعلق الدف العین that it is suspended from the neck to avert the evil eye, as it is in India to this day,<sup>1</sup> provided the neck shell is split or broken. Among European nations, excepting the English, these shells are known by the name of Porceli,

<sup>1</sup> ["Gunda is also the name applied to the knotted string which is suspended round a child's neck for the same purpose; but not, apparently, because it has any connection with the Cowree Amulet."]

Porcelain, Porcellanen, and Porcelaine, on account of the fancied resemblance of their shape to that of the back of a little pig, whence we have the Chinese porcelain, of which the glaze, or varnish, is similar to that of the Cowree.

"CRORE, <sup>کرور</sup> कड़ोड़ karor . . . . Ten millions. The names of the higher numbers are thus given in the 'Zoobdut-ool-Quwaneen.' 100 Crore = 1 Urub; 100 Urub = 1 K,hurub; 100 K,hurub = 1 Neel; 100 Neel = 1 Pudum; 100 Pudum = 1 Sunk,h; 100 Sunk,h = 1 Uld; 100 Uld = 1 Unk; 100 Unk = 1 Pudha." ]

## BRITISH INDIAN

### WEIGHTS AND MEASURES.

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The system of Weights established by Regulation VII. of 1833, is founded on the same unit as the rupee of the equalized monetary system of British India, it having been found that the weight of the Madras, Bombay, and Farrukhábád rupee, already very generally used throughout Upper and Western India, as the foundation of the Ser and Man, could be substituted for the sikká weight of Bengal by a very slight modification of the latter, which would be hardly perceptible in commercial dealings. Other palpable advantages of the introduction of the new weight were pointed out,<sup>1</sup> of which it is only necessary here to allude to the three following:—

1. That the *man* formed from the modified weight would be precisely equal to one hundred English troy pounds; and

2. That thirty-five *seers* would also be precisely equal to seventy-two pounds avoirdupois:—thus establishing a simple connection void of fractions, between the two English metrical scales and that of India.

3. The weight of the new unit nearly accorded with the average weight of many of the native tolás sent home for examination at the London mint, by order of the Honourable Court of Directors; as well as with that of Akbar, deduced from the weight of many coins of that emperor.

We shall begin the present division of our subject, as in the case of the Indian coins, by setting forth in the first instance the present legal system, and afterwards providing a brief descriptive catalogue of the many other weights prevailing throughout the Company's provinces, with comparative tables for the conversion of one denomination into the other.

The unit of the British Indian ponderary system is called the tolá. It weighs 180 grains English troy weight. From it upwards

<sup>1</sup> *Vide* a paper on the subject in the 'Journal of the Asiatic Society of Bengal' for October, 1832, vol. i., p. 445.

are derived the heavy weights, viz.:—*Chhaták*, *Ser*, and *Man* (or *Maund*); and, by its subdivisions, the small or jeweller's weights, called *Máshas*, *Ratís*, and *Dhás*.

The following scheme comprehends both of these in one series:—

Man.	Panseri. <sup>1</sup>	Ser. <sup>2</sup>	Chhaták. <sup>3</sup>	Tolá. <sup>4</sup>	Másha. <sup>5</sup>	Ratí. <sup>6</sup>	Dhán. <sup>7</sup>
1	8	40	640	3200	38400	307200	1228800
	1	5	80	400	4800	38400	153600
		1	16	80	960	7680	30720
			1	5	60	480	1920
				1	12	96	384
					1	8	32
						1	4

The *man* (or that weight to which it closely accords in value, and to which it is legally equivalent in the new scale) has been hitherto better known among Europeans by the name of 'bázár maund,' but upon its general adoption, under Regulation VII. of 1833, for all transactions of the British Government, it should be denominated the British Maund (in *Hindí*, *Angrezi Man*), to distinguish it at once from all other weights in use throughout the country.<sup>8</sup>

The *Panseri* is, as its name denotes, a five-ser weight, and therefore should not form an integrant point of the scale; but, as its use is very general, it has been introduced for the convenience of reference.

The *Ser* being the commonest weight in use in the retail business of the bázárs in India, and being liable, according to the pernicious system hitherto prevalent, to vary in weight for every article sold as well as for every market, is generally referred to the common unit in native mercantile dealings, as, "the ser of so many tolás," (or *sikkás*, *barís*, *takás*, etc.). The standard or bázár ser being always 80 tolás.

The *chhaták* is the lowest denomination of the gross weights, and is commonly divided into halves and quarters (called in *Bengálí*, *kachecha*) thus marking the line between the two series, which are otherwise connected by the relation of the ser, etc. to the tolá.

The tolá is chiefly used in the weighing of the precious metals and

<sup>1</sup> *Panseri*, پانسری from پانچ or پنچ, पञ्च "five," and सिर "a ser."

<sup>2</sup> *Ser*, शेर शेटक (Shakespear सेटक), سير.

<sup>3</sup> *Chhaták*, छटाक from स. षट्, "six," and चक "a mark."

<sup>4</sup> *Tolá*, तोला .

<sup>5</sup> *Masha*, माष माषा, ماشه .

<sup>6</sup> *Ratí*, स. रति, रती, रتی, रत्निका. <sup>7</sup> *Dhán*, धान्य 'grain, rice.'

<sup>8</sup> In the same way the *Madras*, *Bombay*, *Farrukhabad* rupee (when the *sikká* rupee is abolished, and an English device adopted), may be called "the British rupee," and in the native languages *Rúpya Angrezi*.



coin; all bullion at the mints is received in this denomination, and the tables of bullion produce (as seen in the foregoing pages) are calculated per 100 tolás. It is also usual at the mints to make the subdivisions of the tolá into áná's (sixteenths) and pá's, in lieu of máshas and ratís.

Máshas, ratís, and dháns, are used chiefly by native goldsmiths and jewellers. They are also employed in the native evaluation by assay of the precious metals; thus, '10 máshas fine' signifies 10-12ths pure, and corresponds to '10oz. touch' of the English assay report of silver. There is a closer accordance with the English gold assay scale, inasmuch as the 96 ratís in a tolá exactly represent the 96 carat grains in the gold assay pound, and the dhán, the quarter-grain. As it is sometimes necessary to convert the assay report from one denomination into the other,<sup>1</sup> the following comparative table is here inserted.

TABLE of the Correspondence of English and Indian Assay Weights.

ENGLISH ASSAY.		HINDU ASSAY FOR BOTH METALS.	ENGLISH ASSAY.		HINDU ASSAY.	ENGLISH ASSAY.		HINDU ASSAY.
Silver.	Gold.		Silver.	Gold.		Silver.	Gold.	
Touch.	Touch.	Fine.	Touch.	Touch.	Fine.	Touch.	Touch.	Fine.
oz. dwts.	ct. grs.	msh. rat.	oz. dwts.	ct. grs.	msh. rat.	oz. dwts.	ct. grs.	msh. rat.
12 0	24 0	12 0	11 0	22 0	11 0	10 0	20 0	10 0
11 17½	23 3	11 7	10 17½	21 3	10 7	9 17½	19 3	9 7
11 15	23 2	11 6	10 15	21 2	10 6	9 15	19 2	9 6
11 12½	23 1	11 5	10 12½	21 1	10 5	9 12½	19 1	9 5
11 10	23 0	11 4	10 10	21 0	10 4	9 10	19 0	9 4
11 7½	22 3	11 3	10 7½	20 3	10 3	9 7½	18 3	9 3
11 5	22 2	11 2	10 5	20 2	10 2	9 5	18 2	9 2
11 2½	22 1	11 1	10 2½	20 1	10 1	9 2½	18 1	9 1

(To find the corresponding decimal assay, see the tables in pages 10, 11. The English assay report is generally 'so much worse (or better)' than standard, but the touch is easily known therefrom, the standard being 11 oz. for silver and 22 carats for gold; or 11 máshas, Hindú reckoning.)

The correspondence of the Indian system of weights with the troy weight of England, and with the 'système métrical' of France, may be best shown by a table. The coincidence of the former is perfect: in the latter, the másha nearly accords with the gramme, and the ser with the kilogramme.

BRITISH INDIAN WEIGHTS.	ENGLISH TROY WEIGHTS.			FRENCH WEIGHTS.
	lbs.	oz.	dwts. grs.	grammes.
One Man .....	= 100	0	0 0	= 37320.182
One Ser .....	= 2	6	0 0	= 933.005
One Chhaták .....	= 0	1	17 12	= 58.310
One Tolá .....	= 0	0	7 12	= 11.662
One Másha .....	= 0	0	0 15	= 0.972
One Ratí .....	= 0	0	0 1.875	= 0.122

<sup>1</sup> Especially in the translation of Regulations concerning the mints, the English expressions being unintelligible without explanation.

For the conversion of English troy weights into those of India, the following scale will suffice, since the simplicity of their relation renders a more detailed table unnecessary.

Lb. Troy.	Oz.	Dwt.	Grain.	Tolás and Decimals.	
1	12	240	5760	=	32.000
	1	20	480	=	2.6666 etc.
		1	24	=	0.1333 etc.
			1	=	0.0055 etc.

The accordance of the *man* weight with the 100lbs. troy of England affords a ready means of ascertaining its relative value in the standards of other countries employed in weighing the precious metals, since tables of the latter are generally expressed in lbs. troy. The following are a few of the valuations for the principal weights of Europe, etc. extracted from Kelly's 'Cambist,' p. 222. The weights in troy grains have been converted into tolás by dividing them by 180.

TABLE of Comparison of the Told and Man with the Gold and Silver, or Troy, weights of other countries.

PLACE AND DENOMINATION.		Weight of a single lb. mark, etc. in tolás.	Number equal to 1 man, or 100 lbs. roy.
ALEPPO.....	Motical.....	0.405	7890.410
BASRA .....	Miscal .....	0.450	8000.000
CAIRO .....	Rottolo.....	36.965	86.594
CALICUT .....	Miscal .....	0.383	8347.826
CHINA .....	Tael .....	3.221	993.446
CONSTANTINOPLE...	Chequec .....	27.538	116.195
DAMASCUS.....	Ounce .....	2.600	1252.173
DENMARK.....	Mark .....	20.183	158.546
ENGLAND .....	Pound .....	32.000	100.000
FRANCE .....	Kilogramme.....	85.745	37.320
GERMANY .....	Cologne mark .....	20.044	159.645
HOLLAND .....	Mark .....	21.100	151.658
ITALY .....	Florence and Leghorn libra ..	29.111	109.923
MOCHA .....	Vakia .....	2.655	1205.020
PEGU.....	Tical.....	1.138	2427.307
PERBIA .....	Dirham.....	0.839	3812.297
PORTUGAL.....	Mark .....	19.675	162.642
PRUSSIA .....	Mark .....	20.050	159.600
ROME .....	Libbra .....	29.077	110.049
RUSSIA .....	Pound .....	35.102	91.161
SPAIN .....	Mark .....	19.725	162.230
VENICE .....	Mark .....	20.452	156.457
VIENNA.....	Mark .....	24.072	132.933

The principal dealings in bullion being with England, where it is weighed by the pound troy, while in India it is received by the tolá, a simple table for the mutual conversion of these two weights (without regard to mans and sers) may be useful: it needs no explanation.

TABLE for the mutual conversion of Tolás and Pounds Troy.

TOLÁS into POUNDS TROY and DECIMALS.				TROY POUNDS into TOLÁS.			
Tolás.	Pounds.	Tolás.	Pounds.	Pounds.	Tolás.	Pounds.	Tolás.
1000	31.2500	550	17.1875	100	3200	55	1760
990	30.9375	540	16.8750	99	3168	54	1728
980	30.6250	530	16.5625	98	3136	53	1696
970	30.3125	520	16.2500	97	3104	52	1664
960	30.0000	510	15.9375	96	3072	51	1632
950	29.6875	500	15.6250	95	3040	50	1600
940	29.3750	490	15.3125	94	3008	49	1568
930	29.0625	480	15.0000	93	2976	48	1536
920	28.7500	470	14.6875	92	2944	47	1504
910	28.4375	460	14.3750	91	2912	46	1472
900	28.1250	450	14.0625	90	2880	45	1440
890	27.8125	440	13.7500	89	2848	44	1408
880	27.5000	430	13.4375	88	2816	43	1376
870	27.1875	420	13.1250	87	2784	42	1344
860	26.8750	410	12.8125	86	2752	41	1312
850	26.5625	400	12.5000	85	2720	40	1280
840	26.2500	390	12.1875	84	2688	39	1248
830	25.9375	380	11.8750	83	2656	38	1216
820	25.6250	370	11.5625	82	2624	37	1184
810	25.3125	360	11.2500	81	2592	36	1152
800	25.0000	350	10.9375	80	2560	35	1120
790	24.6875	340	10.6250	79	2528	34	1088
780	24.3750	330	10.3125	78	2496	33	1066
770	24.0625	320	10.0000	77	2464	32	1024
760	23.7500	310	9.6875	76	2432	31	992
750	23.4375	300	9.3750	75	2400	30	960
740	23.1250	290	9.0625	74	2368	29	928
730	22.8125	280	8.7500	73	2336	28	896
720	22.5000	270	8.4375	72	2304	27	864
710	22.1875	260	8.1250	71	2272	26	832
700	21.8750	250	7.8125	70	2240	25	800
690	21.5625	240	7.5000	69	2208	24	768
680	21.2500	230	7.1875	68	2176	23	736
670	20.9375	220	6.8750	67	2144	22	704
660	20.6250	210	6.5625	66	2112	21	672
650	20.3125	200	6.2500	65	2080	20	640
640	20.0000	190	5.9375	64	2048	19	608
630	19.6875	180	5.6250	63	2016	18	576
620	19.3750	170	5.3125	62	1984	17	544
610	19.0625	160	5.0000	61	1952	16	512
600	18.7500	150	4.6875	60	1920	15	480
590	18.4375	140	4.3750	59	1888	14	448
580	18.1250	130	4.0625	58	1856	13	416
570	17.8125	120	3.7500	57	1824	12	384
560	17.5000	100	3.4375	56	1792	11	352

To convert the decimals of a lb. into ounces and dwts., and vice versa.

12 oz. = 1.000	6 oz. = 0.500	20 dwt. = 0.083	9 dwt. = 0.037
11     .916	5     .416	18     .075	7     .029
10     .833	4     .333	16     .066	5     .020
9     .750	3     .250	14     .058	3     .012
8     .666	2     .166	12     .051	2     .008
7     .583	1     .083	10     .041	1     .004

1 ounce troy = 2.667 tolás, or 2 tolás 8 máshas.

7½ dwts. " = 1 tolá, and 1 dwt. = 1.83 tolá.

The same degree of correspondence cannot be expected between the Indian weights and the avoirdupois weights of England; but, as the latter are employed in all the transactions of commerce, excepting those of bullion and some other trifling articles, it becomes necessary to give tables for their conversion at greater length. In these, as on former occasions, the system of expressing fractions in decimals has been preferred, from the very great facility it affords in taking out the equivalents of quantities to which the tables do not extend. Decimal numeration is too well understood in the present day to require explanation, but one example may be advantageously given as applying to all the tables hereafter constructed on the same principle:

*Required the equivalent of 57,353 mans, 35 sers, 6 chhataks, in avoirdupois pounds.*

Taking the numbers opposite to 57, 35, and 30 respectively, and removing the decimal point,—in the first three places, to the right hand;—in the second, one place to the right;—and in the third, one place to the left, we have

57,000 mans	=	4690286.
350	=	38800.
3	=	246.867
37 sers	=	76.114
6 chhats.	=	.771

lbs. 4719409.742 = 12 ounces nearly.

Since 35 sers are exactly equal to 72 pounds avoirdupois, the following simple and accurate rules for their mutual conversion, will be found equally convenient with the table.

**RULE I.**—*To convert Indian weight into avoirdupois weight.*

1. Multiply the weight in sers by 72, and divide by 35: the result will be the weight in lbs. av.
2. Or, multiply the weight in mans by 36, and divide by 49: the result will be the weight in cwt. av.

**RULE II.**—*To convert avoirdupois weight into Indian weight.*

1. Multiply the weight in lbs. av. by 35, and divide by 72; the result will be the weight in sers.
2. Or, multiply the weight in cwts. by 49, and divide by 36: the result will be the weight in mans, or maunds.<sup>1</sup>

One ton = 27.222 mans, or  $27\frac{1}{4}$  mans nearly.

One man =  $82\frac{3}{4}$  lbs. av. exactly.

<sup>1</sup> For facility of recollection this rule may be expressed in *arithmetical* poetry thus:

Of one hundred weight should you incline  
A sum in Indian mans to fix;—  
First multiply by forty-nine,  
And then divide by thirty-six.

TABLE for converting New Bazar Mans (or Maunds), Sers, and  
Chhatáka, into Avoirdupois Pounds, and Decimals.

Mans.	Pounds, Avoir.	Mans.	Pounds, Avoir.	Sers.	Pounds, Av.	Value of oz. and drain in deci- mals of lb.
						oz.      dec.
100	8228.571	55	4525.714	sers 40	82.286	16 = 1.0000
99	8146.285	54	4443.429	39	80.228	15½ = .9687
98	8064.000	53	4361.143	38	78.171	15 = .9375
97	7981.714	52	4278.857	37	76.114	14½ = .9063
96	7899.428	51	4196.572	36	74.057	14 = .8750
95	7817.142	50	4114.286	35	72.000	13½ = .8438
94	7734.857	49	4032.000	34	69.943	13 = .8125
93	7652.571	48	3949.715	33	67.886	12½ = .7813
92	7570.285	47	3867.429	32	65.829	12 = .7500
91	7488.000	46	3785.143	31	63.771	11½ = .7188
90	7405.714	45	3702.857	30	61.714	11 = .6875
89	7323.428	44	3620.572	29	59.657	10½ = .6563
88	7241.143	43	3538.286	28	57.600	10 = .6250
87	7158.857	42	3456.000	27	55.543	9½ = .5938
86	7076.571	41	3373.715	26	53.486	9 = .5625
85	6994.285	40	3291.429	25	51.429	8½ = .5313
84	6912.000	39	3209.143	24	49.371	8 = .5000
83	6829.714	38	3126.858	23	47.314	7½ = .4688
82	6747.428	37	3044.572	22	45.257	7 = .4375
81	6665.143	36	2962.286	21	43.200	6½ = .4063
80	6582.857	35	2880.000	20	41.143	6 = .3750
79	6500.571	34	2797.715	19	39.086	5½ = .3438
78	6418.286	33	2715.429	18	37.029	5 = .3125
77	6336.000	32	2633.143	17	34.971	4½ = .2813
76	6253.714	31	2550.858	16	32.914	4 = .2500
75	6171.428	30	2468.572	15	30.857	3½ = .2188
74	6089.143	29	2386.286	14	28.800	3 = .1875
73	6006.857	28	2304.000	13	26.743	2½ = .1563
72	5924.571	27	2221.715	12	24.686	2 = .1250
71	5842.286	26	2139.429	11	22.628	1½ = .0938
70	5760.000	25	2057.143	10	20.571	1 = .0625
69	5677.714	24	1974.858	9	18.514	15 drs. = .0586
68	5595.429	23	1892.572	8	16.457	14 = .0547
67	5513.143	22	1810.286	7	14.400	13 = .0508
66	5430.857	21	1728.000	6	12.343	12 = .0469
65	5348.571	20	1645.715	5	10.286	11 = .0430
64	5266.286	19	1563.430	4	8.229	10 = .0391
63	5184.000	18	1481.144	3	6.171	9 = .0351
62	5101.714	17	1398.858	2	4.114	8 = .0312
61	5019.429	16	1316.573	1	2.057	7 = .0274
60	4937.143	15	1234.287	Ohhat. 8	1.028	6 = .0234
59	4854.857	14	1152.000	4	0.514	5 = .0194
58	4772.572	13	1069.715	3	0.386	4 = .0156
57	4690.286	12	987.430	2	0.257	3 = .0117
56	4608.000	11	905.144	1	0.129	2 = .0078

(The last column serves for the conversion of the decimals of a pound avoirdupois into ounces and drams. It will be found useful also with the two following Tables.)

TABLE for the conversion of *Mans* (or *Maunds*) into *Tons*, *Hundred-weights*, and *Pounds*.

Mans.	Tons.	cwts.	lbs.	Mans.	Tons.	cwts.	lbs.
100000	3673	9	43.00	100	3	13	52.57
10000	367	6	105.10	90	3	6	13.72
9000	330	12	27.39	80	2	18	86.86
8000	293	17	61.68	70	2	11	48.00
7000	257	2	95.97	60	2	4	9.14
6000	220	8	18.26	50	1	16	82.29
5000	183	13	52.55	40	1	9	43.43
4000	146	18	86.84	30	1	2	4.57
3000	110	4	9.13	20	0	14	77.71
2000	73	9	43.42	10	0	7	38.85
1000	36	14	77.71	9	0	6	68.57
900	33	1	25.12	8	0	5	98.28
800	29	7	84.56	7	0	5	16.00
700	25	14	31.99	6	0	4	42.11
600	22	0	91.42	5	0	3	75.42
500	18	7	38.85	4	0	2	105.14
400	14	13	98.28	3	0	2	21.65
300	11	0	45.71	2	0	1	52.57
200	7	6	105.14	1	0	0	82.28

TABLE for converting *Avoirdupois weights* into *British Indian weights*.

Tons.	Mans or Bazar Maunds.			Cwts.	Mans or Bazar Maunds.			Lbs.	Mans or Bazar Maunds.		
	mns.	sr.	chhat.		mns.	sr.	chhat.		mns.	sr.	chhat.
100	2722	10	10	19	25	34	7 $\frac{3}{4}$	100	1	8	9 $\frac{3}{4}$
90	2450	1	9	18	24	20	0 $\frac{1}{2}$	90	1	3	12 $\frac{1}{4}$
80	2177	32	8	17	23	5	9 $\frac{1}{8}$	80	0	38	14 $\frac{1}{2}$
70	1905	23	7	16	21	31	2	70	0	34	0
60	1633	14	6	15	20	16	10 $\frac{1}{2}$	60	0	29	2 $\frac{1}{2}$
50	1361	5	5	14	19	2	3 $\frac{3}{4}$	50	0	24	4 $\frac{1}{2}$
40	1088	36	4	13	17	27	12 $\frac{1}{2}$	40	0	19	7
30	816	27	3	12	16	13	5 $\frac{1}{2}$	30	0	14	9 $\frac{1}{2}$
20	544	18	2	11	14	38	14 $\frac{1}{2}$	20	0	9	11 $\frac{1}{2}$
10	272	9	1	10	13	24	7 $\frac{1}{2}$	10	0	4	13 $\frac{1}{2}$
9	245	0	2 $\frac{1}{2}$	9	12	10	0 $\frac{1}{8}$	9	0	4	6
8	217	31	4	8	10	35	9	8	0	3	14 $\frac{1}{2}$
7	190	22	5 $\frac{1}{2}$	7	9	21	1 $\frac{1}{2}$	7	0	3	6 $\frac{1}{2}$
6	163	13	7	6	8	6	10 $\frac{3}{4}$	6	0	2	14 $\frac{1}{2}$
5	136	4	8 $\frac{1}{2}$	5	6	32	3 $\frac{3}{4}$	5	0	2	7
4	108	35	10	4	5	17	12 $\frac{1}{2}$	4	0	1	15 $\frac{1}{2}$
3	81	26	11 $\frac{1}{2}$	3	4	2	5 $\frac{1}{2}$	3	0	1	7 $\frac{1}{2}$
2	54	17	13	2	2	28	14 $\frac{1}{2}$	2	0	0	15 $\frac{1}{2}$
1	27	8	14 $\frac{1}{2}$	1	1	14	7 $\frac{1}{8}$	1	0	0	7 $\frac{1}{2}$

The British Indian system of weights having been ordered by Regulation VII. of 1833, to supersede the bázár weights previously used, (of which the unit was the old Murshidábád rupee weight of 179.666 troy grains, called the sikká weight), in all Government transactions, a corresponding adjustment was made of all the weights in use at the several Government offices of the metropolis—the custom-house, the mint, the treasury, the bank, and the police; and sets of standard ser and tolá weights of brass were ordered to be prepared at the mint for distribution to all the collectors' offices of the Bengal presidency.

The Regulation in question expressly avoided enforcing the change by any penal enactment, trusting that the sense of public convenience would quickly ensure its substitution for the irregular system now prevalent; and directing only that the verification and adjustment of all weights at the Calcutta and Sagar assay offices, should be made for the future in accordance with the new scale.

In the ordinary dealings of commerce, the difference between the bázár weights and the new weights is not recognizable: indeed the error of single large weights is generally found to exceed the amount of modification now introduced: no inconvenience therefore remains from the still general use of the old bázár weights, while the principal European mercantile establishments of the town, as well as all the native bullion merchants, have already had their weights adjusted to the new system.

Where it may be required, however, to know the precise difference between the old and new system, recourse may be had to the following table. The new *man* will be seen to be one chhaták and a quarter, nearly, heavier than the old bázár *man*: which would induce an increase in the price of articles to the trifling extent of one-fifth per cent. or three áná in a hundred rupees.

TABLE for the mutual conversion of Tolás and old Sikká Weight of Bengal.

Old Sikká Weight into Tolás.				Tolás into Sikká Weight.			
Old Sikká Weight.	Tolás.	Old Sikká Weight.	Tolás.	Tolás.	Old Sikká Weight.	Tolás.	Old Sikká Weight.
3200	5194.060	800	798.515	3200	3205.948	800	801.487
1600	1597.030	700	698.700	1600	1602.974	700	701.301
1500	1497.216	600	598.886	1500	1502.789	600	601.116
1400	1397.401	500	499.072	1400	1402.604	500	500.929
1300	1297.587	400	399.257	1300	1302.419	400	400.734
1200	1197.772	300	299.443	1200	1202.220	300	300.557
1100	1097.958	200	199.628	1100	1102.044	200	200.371
1000	998.144	100	99.814	1000	1001.859	100	100.185
900	898.329	1 áná	0.062	900	901.673	1 másha.	0.084

This table will answer equally well for the conversion of old bázár mans or sers into new mans and sers, the ratio being the same, namely, as 180 : 179.666.

#### FACTORY WEIGHTS.

There is another species of weight employed in some branches of the commerce of Calcutta which it will be necessary to expel before uniformity can be established. This is the system of factory weights originally used by 'the English factory at Bengal,' and now generally retained in the commercial transactions of the Government, although long since superseded in their customs and revenue business by the bázár weights.

It would appear to have been adopted in 1787 to save calculation in the home remittances of produce, three factory mans being almost exactly equal to two hundred-weight avoirdupois.

A moment's inspection of the Calcutta price-current will be sufficient to prove the great inconvenience which the retention of the two-fold system must cause. Some articles are quoted at 'sikká rupees per bázár man,' others at 'sikká rupees per factory man,' and others again at 'current rupees per factory man,' the current rupee being an imaginary money, of which 116 are assumed as equal to 100 sikkás?

To increase the perplexity, the same article is often estimated in a different scale as it comes from different places; thus, Radnagor and Bauleah silk are sold per bázár ser: while Kasimbázár and Gonatea silk are sold per factory ser. Tin, iron, verdigris, Japan and English copper, per 'sikká rupees and factory man: '—steel, zinc, lead, mercury, and South American copper, per current rupees and factory man!—Gum-Benjamin is sold by factory, all other gums by bázár, weight:—stick-lac by the former, but shell-lac and lac dye by the latter!

Many more examples might be furnished of similar inconsistency. Saltpetre, indigo, silk the produce of the Straits, and metals, are the principal articles sold by the factory maund; while grain, sugar, cotton, most articles of food, and all of retail bázár consumption, are sold by the bázár weight.

The old bázár maund was defined to be ten per cent. heavier than the factory maund; therefore the latter will be equal to 74 lbs. 10 oz. 10.666 dr. avoirdupois; the ser to 1 lb. 33 oz. 13.866 dr.; and the chhaták to 1 oz. 13.366 dr.

From the simple relation of the factory to the bázár weight, there can be no difficulty whatever in substituting the latter in its place, in the valuation of such articles of commerce as are still estimated by the former:—nothing more being necessary than to add ten per cent. to the prices formerly quoted per factory maund. Thus, indigo sold at 100



or 200 rupees per factory maund, will now be 110 or 220 rupees per man, and so of other goods. As such goods are invariably weighed at the custom-house on the new system, and the duty or drawback calculated accordingly, it is only a source of perplexity to buy and sell by the obsolete weight; and to retain two species of weights in a warehouse, must obviously open the door to continual mistakes, if not occasionally even to fraudulent interchange.

The following Table gives the conversion of factory weights into new mans accurately, but in ordinary practice the following simple rules will suffice.

I. Deduct one-eleventh from the weight in factory maunds, sers, or chhatáks; the result will be the weight in British Indian (or bázár) mans, sers, and chhatáks.

II. Add ten per cent. to the price per factory maund, etc., the result will be the price per British Indian (or bázár) man, etc.

The reverse table has not been calculated, because, it is to be hoped, it will never be required.

TABLE for the conversion of Bengal Factory weights into new standard mans and decimals.

Factory weights, mans.	New man.	Factory weights.	New man.
10000	9074.400	mans. 5	4.537
1000	907.440	4	3.630
100	90.744	3	2.722
90	81.669	2	1.815
80	72.595	1	0.907
70	63.520	sers. 20	0.453
60	54.446	10	0.227
50	45.372	5	0.113
40	36.297	4	0.091
30	27.223	3	0.068
20	18.149	2	0.045
10	9.074	1	0.023
9	8.167	chhatáks. 8	0.011
8	7.259	4	0.005
7	6.352	2	0.003
6	5.444	1	0.001

(To reduce the decimals into sers and hundredths, multiply by 4, and move the decimal point one place to the right: to convert the hundredths into chhatáks, multiply by 16 and divide by 100.)

#### CURRENT RUPEE PRICES.

By a fortunate chance we are able to meet the apparently perplexing practice of estimating the values of some articles in 'current rupees per factory weight,' with a very simple method of expressing their equivalents according to the new system, so as to obviate any supposed

difficulty in eradicating long established habits: for 100 current rupees being equal to  $\frac{100000}{118}$  or 86.207 sikká rupees, and one factory man being equal to .90744 man, as above stated; the ratio of the two modes of valuation will be as 100 to  $86.207 \div .90744$ , or 95 exactly. Hence may be deduced the following simple rules:—

I. Deduct five per cent. from the price or value quoted in 'current rupees per factory weight,' and the result will be its equivalent in sikká rupees per bázár (or new) weight.'

II. Add one and a third per cent. to the price or value quoted in 'current rupees per factory weight,' and the result will be its equivalent in Farrukhábád, Madras, or Bombay rupees, per bázár (or new) weight.

The following table is constructed on this principle, and is applicable to mans, sers, and chhatáks, as the case may be:

TABLE for the conversion of values quoted in current rupees per factory maund, ser, or chhaták into their equivalents in sikká or Farrukhábád rupees per new standard (or bázár) weights.

Current rupees per factory man, etc.	Sikká rupees per new man, etc.	Fd. Mad. Bom. Rs. per new man, etc.	Current ánáś per factory man, ser, etc.	Decimals of sikká rs. per new man, etc.	Decimals of Fd. Mad. Bom. rs. per new man, ser, etc.
1000	950.	1013.333	15	0.891	0.950
100	95.	101.333	14	.831	.886
90	85.5	91.200	13	.772	.823
80	76.	81.066	12	.7125	.760
70	66.5	70.933	11	.653	.696
60	57.	60.800	10	.594	.633
50	47.5	50.666	9	.534	.570
40	38.	40.533	8	.475	.506
30	28.5	30.400	7	.416	.443
20	19.	20.266	6	.356	.380
10	9.5	10.133	5	.297	.316
5	4.75	5.066	4	.2375	.253
3	2.85	3.040	3	.178	.190
2	1.90	2.026	2	.119	.126
1	0.95	1.013	1	.059	.063

(To reduce the decimals into ánáś and pá'ís, see Table p. 12.)

The only other denomination used extensively at the Presidency is the salt man, which is  $2\frac{1}{2}$  per cent. heavier than the bázár man, having 82 tolás to the ser. It is much to be regretted that this absurd weight should not only have been retained, but that after the promulgation of the new regulation, the Government ordered a completely new and expensive series of brass weights to be made up for the Salt Board, at considerable cost, on the old system! It would of course have been just as simple to order the weightments of salt to be made

with the new *man*, and  $2\frac{1}{2}$  per cent. surplus to be levied on the gross amount to cover wastage; the weights would then have been convertible to general use, whereas now they are confined to one specific purpose.

In the Madras and Bombay Presidencies, the weights of commerce have been long since made to conform with the avoirdupois system, by assuming the nearest approximation in pounds to the local *man*, and adjusting the latter to it. Thus at Madras the 'man' is assumed as equal to 25lbs. avoirdupois: and at Bombay the more convenient equivalent of 28lbs., or one quarter cwt., has been adopted for the standard man. As these weights (especially the latter) are convenient by their direct relation to the commercial unit of England, it is neither to be expected nor to be wished that they should be exchanged for the weights of Bengal. Indeed, it should be remembered, that the use of purely English weights, even in Calcutta counting-houses, can lead to no confusion:—it is the introduction of a fictitious native weight, like the factory man, that is objectionable, as being neither Indian nor English.

The ser at Madras contains 8 paláms<sup>1</sup> of 10 pagodas each, so that, like that of Bengal, it has the sub-division into 80 parts. In the Malabar system, also used at Madras,  $2\frac{1}{2}$  paláms (fanams) make a ser, and the tolá occupies the place of the man; it is equal to 23.192lbs.

The ser at Bombay is divided into 30 pá'is, or 72 táńks,<sup>2</sup> or 72 troy grains each.

The conversion of the Madras and Bombay mans into the bázár man of Bengal requires another table. A practical estimate of their relative values may, however, be held in the memory by means of the following simple ratios:—

Ten Madras mans = 3 mans,  $1\frac{1}{2}$  sers, Bengal, nearly.

Three Bombay mans = 1 man, 1 ser, nearly.

The exact ratios between the cwt. and the man given in page 100, are of course applicable to the derivatives of the avoirdupois pound in the other Presidencies.<sup>3</sup>

<sup>1</sup> [Generally, though corruptly, written 'pollam or pullam.' TAM. from s. पल.]

<sup>2</sup> [s. टंक *ťank*, MAR. टंक, टांक *ťank* or *ťank*.]

<sup>3</sup> The readiest practical method of reducing the Indian to the English system, where the utmost accuracy is not required, is derived from the equation, 300 mans = 11 tons. Hence we have the following rules in addition to those given in page 100:—

III. Add a tenth to a sum of mans, and divide by 30 results—the weight in tons.

IV. Multiply a sum in tons by 30, and deduct an eleventh from the product: results—its value in mans.

V. Deduct one-third from a weight in mans, and increase the remainder by one-tenth: results—the weight in cwt. nearly.

VI. Add one-half to a given weight in cwt., and diminish the sum by one eleventh: results—the equivalent in mans, nearly.

For the more exact conversion of one denomination into the other, the following table may be consulted :

*TABLE for the mutual Conversion of Bengal, Madras, and Bombay mans.*

Bengal mans.	Madras mans.	Bombay mans.	Madras mans.	Bengal mans.	Bombay mans.	Bengal mans.
1000	3291.428	2938.775	1000	303.820	1000	340.278
100	329.143	293.877	100	30.382	100	34.028
90	296.229	264.492	90	27.344	90	30.625
80	263.315	235.104	80	24.306	80	27.222
70	230.401	205.716	70	21.268	70	23.819
60	197.487	176.328	60	18.230	60	20.416
50	164.571	146.938	50	15.191	50	17.014
40	131.656	117.552	40	12.152	40	13.612
30	98.742	88.164	30	9.114	30	10.209
20	65.828	58.775	20	6.076	20	6.806
10	32.914	29.388	10	3.038	10	3.403
1	3.291	2.939	1	0.304	1	0.340
sers, 30	2.469	2.203	sers, 30	0.228	sers, 30	0.255
20	1.646	1.469	20	0.152	20	0.170
10	0.823	0.734	10	0.076	10	0.085
5	0.411	0.367	5	0.038	5	0.042
4	0.329	0.294	4	0.030	4	0.034
3	0.240	0.220	3	0.022	3	0.025
2	0.164	0.147	2	0.015	2	0.017
1	0.082	0.073	1	0.008	1	0.008

The next table will be found very convenient for reducing the decimals of mans in the foregoing, and upon all other occasions, into the ordinary divisions of the native weights, viz., sers and chhatáks.

*TABLE for converting sers and chhatáks into decimals of a man, and vice versa.*

Chhtk.	Decimals for				Sers.	Decimals.
	0 ser.	1 ser.	2 sers.	3 sers.		
0	.0000	.0250	.0500	.0750	4	.0000
1	.0016	.0266	.0516	.0766	8	.2000
2	.0031	.0281	.0531	.0781	12	.3000
3	.0047	.0297	.0547	.0797	16	.4000
4	.0062	.0312	.0562	.0812	20	.5000
5	.0078	.0328	.0578	.0828	24	.6000
6	.0094	.0344	.0594	.0844	28	.7000
7	.0109	.0359	.0607	.0829	32	.8000
8	.0125	.0375	.0625	.0875	36	.9000
9	.0141	.0391	.0641	.0891	40	.10000
10	.0156	.0406	.0656	.0906		
11	.0172	.0422	.0672	.0922		
12	.0187	.0437	.0687	.0937		
13	.0203	.0453	.0703	.0953		
14	.0219	.0469	.0719	.0969		
15	.0234	.0484	.0734	.0984		

The three last figures of decimals recurring in the same order after every four sers, it is unnecessary to insert them at length.

## GENERAL TABLE OF INDIAN WEIGHTS.

However desirable it may be, in theory, to reduce the system of weights throughout the vast continent of India to order and uniformity; in practice, it is well known that insuperable difficulties oppose the execution of such a project: if ever effected, it can only be done in the gradual progress of time, by the spread of knowledge, and by the growing inter-communion of the multitudes engaged in the internal traffic of the country, who would by degrees feel the advantage of uniformity in their dealings.

It is a comparatively easy thing for a government, having the sole issue of coin within its own territories, to fix upon a convenient unit of value, and establish it to the supersession of former currencies; but the weights of a country do not so immediately come in contact with the ruling power (even though it have a commercial character itself:) not at least as regards the domestic or market weights, which are localised in a thousand distinct foci under as many modifications of prices, customs, and modes of calculation and sub-division.

It is but lately that the Legislature has attempted to equalise the weights of England, and then only by the retention of a double system. India does, however, in some respects, offer a better chance of success than the countries of Europe, where each locality has, by municipal laws, rendered permanent and cognate its own system, however differing from that of its neighbour. Here, all is vague—the standards of reference being in most cases the local rupee or copper coin, themselves subject to variation; or of modern introduction, and capable of equalisation.

Thus, throughout the Maráthí states, the ser is referred to the Puna or Ankusí rupee: in Gujarát, to the Baroch rupee: in Ajmír, to the Sálimsáhi; in Bengal, to the old Murshidábád rupee; all comparatively modern. In Madras, the coin of that presidency, or of Mysore, or Pondicherry, are appealed to; but more generally the English avoirdupois unit has become familiarised, as has been already stated, by the adoption of 25 lbs., to represent the commercial ‘man.’

By perseverance, therefore, in upholding one common system for the whole of British India, or at least for the Bengal presidency, a system founded on the previous habits and institutions of the country; by connecting it (as has been done) with a rupee of general, and to be hereafter exclusive, circulation; by restricting Government transactions to this system, and affording facilities of adjustment by depositing standard weights in public offices all over the country;—there is some reason to hope that, eventually, the incongruous mass now prevalent

will gradually give place to the convenience of an universal and single species of weight.

There is another argument in favour of its feasibility, namely, that India does not, properly speaking, possess dry or liquid measures. Where these are employed, they depend upon, and in fact represent the ser or the man weight; the mention of measures has been accordingly omitted in the foregoing scheme for Bengal, leaving the value of any vessel of capacity to rest solely on the weight contained in it.

The mode in which this is effected for the 'dry measures' of South and West India is, by taking an equal mixture of the principal grains, and forming a vessel to hold a given weight thereof, so as to obtain an average measure. Sometimes salt is included among the ingredients.<sup>1</sup> Trichinopoly is the only place where grain is said never to be sold by weight. The markál<sup>2</sup> and para<sup>3</sup> are the commonest measures; the latter is known throughout India; in Calcutta it is called 'ferrah,' and is used in measuring lime, etc. which is still recorded however in mans weight.

Of the origin or antiquity of the Indian weights it would be out of place here to institute an inquiry; the ancient metrology of the Hindús has been fully described by Mr. Colebrooke, in the 'Asiatic Researches,' v. As with the coins, so with the weights, Southern India retained most of the names and terms properly Hindú, *pala*,<sup>4</sup> *tulá*,<sup>5</sup> *visa*,<sup>6</sup> *dhára*,<sup>6</sup> *kháris* (? *khandi*), *báha*. Throughout the Moghul empire, on the contrary, the ser and man were predominant. The word 'man,' of Arabic or Hebrew origin,<sup>8</sup> is used throughout Persia and Northern India; but, as might be expected, it represents very different values in different places: thus the *man* of Tabriz is only  $6\frac{1}{3}$  lbs. avoird., while that of Palloda, in Ahmadnagar, is  $163\frac{1}{4}$  lbs.

It is probable that the ser, a Hindú weight (*setak*), was more uniform than the man, since it was founded upon the tolá (*tolaká*), which, with its subdivision, the *vasa*, must in very ancient times have been extensively known throughout commercial Asia. There can be little doubt that the 'tale or tael' and 'mace' of the Chinese are identical in origin. The variations of these weights may have been smaller, because their use was nearly confined to the precious metals and other

<sup>1</sup> "In Belary this is called the *nou-danium* measurement; from the 'nine' sorts of grain used: rice, wheat, coolty, pasaloo, mernoomooloo, oil seeds, Bengal grain, aunoomooloo, and nooloo. In Darwar, they take, wheat, toor, hurburr, roothee, moony, oored, juwaree, paddy, and mudkee."—Kelly's 'Metrology.'

<sup>2</sup> [Properly *Marakkál*, from the Tamil.]

<sup>3</sup> [MAL. *Para*.]

<sup>4</sup> [s. पल ह. <sup>5</sup> ه. تلا. s. तुला. <sup>6</sup> ه. بهار. s. भार. <sup>7</sup> s. خاری.]

<sup>8</sup> The Hebrew manoh was equal to 13110 grs. tr. or 72.83 tolás. The Greek mina to 6244 grs. or 33.57 tolás.

articles of value; the ser is quoted at the highest denomination of this class of weights in one Sanskrit work. For gross produce a greater latitude was required, and larger sers were introduced to suit the value of each article; the weight apparently, rather than the price, being made variable: while to prevent the ambiguity which might follow, it became necessary to define the ser employed as of 30, 40, 60, 72, 80, 90, or even as far as 120 tolás; and probably when the current coin began to vary from the original tolá, the mention of this weight became obsolete, and reference was made direct to the rupees of the local currency. It is to meet this mode of expression that, in the following table, the value of every ser has been given in the standard tolá of 180 grains.

The *man* of India may, as a genus, be divided into four different species: 1. That of Bengal, containing 40 sers, and averaging about 80 lbs. avoirdupois. 2. That of Central India (Málwá, Ajmír, etc.,) generally equal to 40 lbs. avoirdupois. and containing 20 sers, so that the ser of this large portion of the continent assimilates to that of Bengal. 3. The *man* of Gujarát and Bombay, equal to  $\frac{1}{4}$  cwt. or 28 lbs. and divided into 40 sers of a smaller grade. 4. The *man* of Southern India, fixed by the Madras Government at 25 lbs. avoirdupois. There are however many other varieties of mans, from 15 to 64 sers in weight, which it is unnecessary to particularise.

Abú'l-Fazl defines the *man* of Akbar's reign to be 40 sers of 30 dáms; each dam being five táns. The táns is in another place described as 24 ratís: the másha of eight ratís has been assumed, from the weight of Akbar's coins, to be 15.5 grs. troy. This would make the emperor's *man* =  $34 \frac{3}{4}$  lbs. av., agreeing pretty well with that of Central and Western India. The táns, as now existing in Bombay, is 72 grains; in Dharwár it is 50 grains; in Ahmadnagar, 268 grains. Its present weight consequently affords no clue for the verification of the above estimate, however desirable it may be to determine the point. In one part of the 'Ayín-i Akbarí,' the dam is called 20 máshas, 7 ratís, which would increase the *man* to about 47 lbs. In the absence of better evidence, it may be safe to reckon it in round terms at one-half of our present standard *man*.

#### ORIGIN OF THE PRESENT TABLE OF INDIAN WEIGHTS.

In 1821, the Court of Directors called upon their commercial agents, collectors of customs, and other public officers of the three Presidencies, to procure and forward to England accurate counterparts of the standard weights and measures in use throughout their territories in the East. The order was promptly obeyed, and the

required models sent home, with certificates and explanations. The packages as they arrived were placed under charge of Dr. Kelly, who was assisted in his examination and comparison of the weights by Mr. Bingley, Assaymaster, and of the measures by Mr. Troughton, both of whom had zealously co-operated in comparing the standards sent to the English Government from other parts of the world.

The dispatches accompanying the standards from India contained full information on the money and trade, as well as on the metrology of most places: this is embodied at length in the supplement to Kelly's 'Cambist,' whence it was subsequently collected in an octavo volume, entitled Kelly's 'Oriental Metrology.'

It is from these sources that the accompanying table has been drawn up, exhibiting in an abridged form the principal commercial weights of India and Asia. Most of the subdivisions peculiar to each place have been necessarily omitted for want of space, but, where possible, the formation of the ser, etc., from the local unit is mentioned. It may be generally assumed that the *man* system follows the common scale, viz.:

$$16 \text{ chhatáks} = 1 \text{ ser.}$$

$$40 \text{ sers} = 1 \text{ man.}$$

$$20 \text{ mans} = 1 \text{ khandí}^1 \text{ or mání.}$$

The use of a five ser weight also universally prevails under the name of Panserí,<sup>2</sup> dharí,<sup>3</sup> or vísa.<sup>4</sup> The *dharí* from its name, however, seems to be properly a measure, and accordingly, while in Málwá it is equal to 5 sers, in other places it is found of 4,  $4\frac{1}{2}$ ,  $5\frac{3}{4}$ , 10, 11, and 12 sers. The terms adholá, adheli,<sup>5</sup> 'half,' páo,<sup>6</sup> powah, 'quarter,' adhpáo 'half-quarter,' frequently occur: they explain themselves.

The only novelty in the present table is the insertion of the two last columns, expressing the equivalents of the local weights in the standard man and tolá of the British Indian system. The column containing their values in avoirdupois pounds, ounces, and drams is according to the London determinations of Kelly.

Where the ser only of any place is mentioned in the first columns, the value of the man of the same place, expressed in parts of the standard man, is inclosed in parentheses to prevent mistakes: it may be remarked that the ratio of the man will answer equally well for the

<sup>1</sup> [From s. कण्डा *khaṇḍa*: it is commonly written 'candy.']

<sup>2</sup> Written *punchaerree*, *punchaer*, and *punchaseer* in KELLY.

<sup>3</sup> [H. دھری *dharí*.] Written *dhuree*, *dhurra*, *dhuddee*, *dudda*, *dhadium*, in KELLY.

<sup>4</sup> Written *vis*, *viss*, *vesey*, *visay*, *biss*, in KELLY.

<sup>5</sup> H. ادھیلی

<sup>6</sup> H. پاو



ser, it being understood that the subdivision into 40 sers holds for the mans of the two places compared. To reduce any local weight into the standard denomination, or into the bazár man of Calcutta, nothing more is necessary than to multiply by the number in the last column, and convert the decimals into sers, if so required, by means of the second table in page 108.

The column of 'tolás per ser' will best express to a native the value of the weights of any particular locality; being the customary mode of estimation throughout the country.

In expressing the dimensions of the markál, the parra, and a few other dry or liquid measures; sometimes gallons and sometimes cubic inches have been introduced by Kelly. It may be convenient, therefore, to explain that, by the enactment of the 1st January, 1826, one imperial measure was established as a substitute for the variable wine, ale, and corn gallons of England, with their multiples and divisions.

This imperial gallon was made to contain 10 lbs. avoirdupois weight of distilled water, weighed in air at the temperature of 62° Far., the barometer standing at 30 inches. It has a capacity, therefore, of 277.274 cubic inches. Some of the most useful derivatives of this unit are here subjoined for the sake of reference.

Imperial dry and liquid measures.	Cubic contents.	Avoirdupois weight.	Indian weights.
1 pint, .....	34.659 c. i.	1 lb 4 oz.	48.611 tolás,
2 = 1 quart, .....	69.318 "	2 lbs. 8 "	97.222 "
8 = 4 = 1 gallon, .....	277.274 "	10 lbs.	4.861 ser.
64 = 32 = 8 = 1 bushel, ...	1.284 c. f.	80 "	38.888 "
512 = 256 = 64 = 8 = 1 quarter, ...	10,269 "	640 "	7.777 man.
2048 = 1024 = 256 = 32 = 1 chaldron	41,075 "	2560 "	31.111 "

The old wine gallon contained 231 cub. inches; the ale gallon 282 c. i., and the corn gallon 268.8 c. i.; whence are obtained the following multipliers to convert them into imperial measure, viz., .833, 1.017 and .969 respectively.

It will be remarked that the gallon nearly corresponds with the panserí or dharí of the Indian corn measures, while the bushel bears the same proximity to the man weight. Standards of the bushel, gallon, quart, and pint, are deposited in the Assay-offices of the three Presidencies.

The following is the scale of measures in use at Madras :—

		cub. inches.
	1 walak, <sup>1</sup>	= 11.719.
8 walaks,	= 1 paḍi,	= 93.752.
8 paḍis <sup>2</sup>	= 1 markál, <sup>3</sup>	= .750 = 27 lbs. 2 oz. 2 dr. water.
5 markáls,	= 1 parra,	= 3,750.
400 parras <sup>4</sup>	= 1 garce <sup>5</sup>	= 300,000.

The particulars of the Dry Measure of Ceylon are thus given in the Oriental Metrology.

		gallons.	inch.	inch.
4 cutchundoos,	= 1 ser,	= 0.24	= 4.35 diam.	+ 4.35.
4.8 sers,	= 1 coornly,	= 1.15		
2.5 goornies,	= 1 markál,	= 2.88		
2 markáls,	= 1 parra	= 5.76	= cube of 11.56 inches.	
8 parras,	= 1 amonam,	= 46.08	= 5½ bushels.	
8½ amonams,	= 1 last,	= 432	= 6¼ quarters.	

Thus it will be seen that there is no fixed rule as to the subdivisions and multiples of the parra or markál.

<sup>1</sup> [ واکت, vulgarly, Olluck.]

<sup>2</sup> [TAM. Paḍi.]

<sup>3</sup> [TAM. Marakkál. H. مرکال markál.]

<sup>4</sup> [TEL. Parra: in page 110, note 3, incorrectly given as 'MAL. Parra.']

<sup>5</sup> [Properly, TEL. Garisa.]

TABLE of the Commercial weights of India, and of other trading places in Asia, compared with the British-Indian Unit of weight, and with the Avoirdupois system of England.

Place.	Denomination of Weight.	Value in English avoirdupois weight.	No. of standard mds per ser, etc.	Value of mans, etc., in mans and decimals.
		lb. oz. dr.	Tolas.	Mans.
Acheen in Sumatra.	Tale, of 16 mace or 64 copangs.	grs. 148.2	0.790	...
	Catty = 100 tales or 20 buncals.	2 1 14 $\frac{1}{2}$	82.370	...
	Bahar, of 200 catties.	423 8 0	...	5.1466
Ahmadábád in Gujarát.	Bamboo, liquid measure	3 10 10	130.890	...
	Tolá = 32 válas, or 96 rattis.	grs. 193.440	1.075	...
	Ser (divided into $\frac{1}{2}$ and $\frac{1}{4}$ s).....	1 0 14 $\frac{1}{2}$	41.091	...
Ahmadnagar, in Aurangábád.	Man, of 40 sers.....	42 4 13	...	0.5140
	Tolá = 12 máshas or 96 gunjás	grs. 188.4	1.047	...
	Ser, com. wt. (of 80 Ankusí rs.)	1 15 8	76.562	...
	Man, of 40 sers.....	78 15 12	...	0.9599
	Ser, of capacity (110 Ankusí rs.)	2 11 6	105.425	...
Amboyna, in the Moluccas.	Man, do. = 12 pailis = 48 sers.	130 2 0	...	1.5814
	Tale, of 16 mace.	grs. 455.35	2.529	...
	Bahar, of cloves.....	596 12 0	...	7.2521
Ahmode, Gujarát.	Coyang, of rice (2,500 catties)...	3255 8 0	...	39.5632
	Man = 40 sers of 40 Baroch rs.	40 8 12	39.424	0.4928
	„ for grain = 40 sers of 41 do.	41 9 5	40.416	0.5052
Anjar, Bhuj.	„ for cotton = 42 sers „ „	43 10 10	...	0.5306
	„ of 40 sers (of 36 dokarás)...	27 3 8	26.464	0.3308
	Kalsí, measure = 64 máps.	3036l. (6c.in.)	...	...
Anjengo, Travancore, M.	Khandí (= 35 telong <sup>1</sup> of 16lbs.)	560 0 0	...	6.8056
Arkát, Madras.	Man (20 to the khandí).	28 0 0	...	0.3402
Aumodh, Kalpi.	Pakká ser, <sup>2</sup> of 24 paláms.....	1 13 0	70.486	(0.8811)
	Padi, for grain = 47 paláms. ...	3 8 12	137.930	...
	Ser, for cotton (see Kalpi). ....	1 8 0	58.336	(0.7292)
Aurangabander in Sindh.	„ „ grain, etc.....	2 0 8	78.993	(0.9872)
	Tolá = 12 máshas, or 72 rattis...	grs. 187.5	1.041	...
	Ser, of 64 pice. ....	1 13 13	72.461	...
Bagulkotá, M.	Man, of 40 sers.....	74 10 10	...	(0.9074)
	Kachchá ser, <sup>3</sup> for groceries, oil, etc.	0 8 3 $\frac{1}{2}$	20.	(0.2488)
	Pakká ser, for grain (116 $\frac{1}{2}$ c. i.)	3 6 11 $\frac{1}{2}$	133.	(1.6616)
Bairseah, Málwá.	Ser, of 80 Bhopál rupees.....	1 14 13	73.892	(0.9362)
Banda, Moluccas.	Man, of 40 sers.	77 1 12	...	0.9371
	Catty, of 5 $\frac{1}{2}$ lbs. Dutch. ....	6 1 10	...	0.0740
	Bahar, of 100 catties. ....	610 0 0	...	7.4132
Bangalore, in Maisúr.	Soekal, of nutmegs, 28 catties...	170 12 13	...	2.0757
	Kachchá ser, of 24 rupees. ....	0 10 0	24.304	(0.3038)
	„ man, of 40 sers.....	25 0 0	...	0.3038
	Khandí, of 20 mans.....	500 0 0	...	6.0764
	Pakká ser, for grain, 84 rupees	2 1 10 $\frac{3}{4}$	81.840	(1.0230)
Banjar Massin, in Borneo I.	Khandí, of 20 kolagas, or 160 sers.	336 12 4 $\frac{1}{2}$	...	4.0926
	Markál, of 9, 10, 12, etc., to 96 srs.	...	...	...
	Tale, of 16 mace.	grs. 614.4	3.413	...
Bantam, Java.	Pecul and catty (see China)	...	...	...
	Last, grain measure = 230 ganton	3066 10 10	...	37.2685
	Tale, for gold, musk, etc.....	grs. 1055	5.860	...
Banswarra.	Bahar = 8 peculs of 100 catties.	396 0 0	...	4.8124
	Coyang, of rice = 200 gantams.	8681 0 0	...	105.4982
	See Malwa.	...	...	...
Bardoler, Súrat.	Man, of 39 $\frac{1}{2}$ sers, 2 pice. ....	37 4 4 $\frac{1}{2}$	...	0.4529

<sup>1</sup> Properly, TAM. *Tuldm.* <sup>2</sup> پکا سر *pakká ser*, 'a full, complete, or correct ser.'

<sup>3</sup> کچھا *kachchá*, the converse of *pakká*.

Place.	Denomination of Weights.	Value in Eng- lish avoird- pois weight.	No. of stand- ard Tols per ser etc.	Value of mans, etc. in Mans, and decimals.
		lb. oz. dr.	Tols.	Mans.
Baroda, Baroch.	Ser, (pergunna,) 42 Bábásáhi rs.	1 0 13 8	41.186	...
	Man, of 42 sers. ....	44 9 10	...	0.5420
	Khandi, of 20 mans. ....	892 1 4	...	10.8411
	The town ser has 41 Bábás. rs.	1 0 9.5	40.286	(0.5036)
	The Sesamum man is of 40 sers.	42 7 10.8	...	0.5162
Batavia, Java.	Mark, of 9 reals. ....	grs. 422	2.344	...
	Bahar=3 peculs, of 100 catties.	406 14 0	...	4.9446
	Coyang, of rice=3,300 lbs. Dutch	3581 0 0	...	43.5190
	Timbang, of 5 peculs. ....	678 2 0	...	61.7133
	Kanne, liquid measure. ....	91 c. i.	...	...
Bauleah, Bengal.	Ser, of 80 sá. wt. or tolás. ....	...	80.	1.0000
	Ser, of 60 sá. wt. for liquids, etc.	...	60.	0.7500
Belgaum, Maráthi country.	Ser, of 24 Shápúri rs. (174 grs.)	0 9 8	23.091	...
	Man, of 44 sers. ....	26 3 15	...	0.3189
	Tolá, of 30 Kántarái fanams. ...	grs. 176.25	0.979	...
Bellary, Mad. Ced- ed Distr.	Ser, of 21 Mysore rs. or tulams	0 8 7 ½	20.621	(0.2578)
	Man, of 48 sers. ....	25 6 0	...	0.3083
	Man, for cotton (=1½ naga.) ...	26 5 4	...	0.3199
	Thimapoo, grain measure, 112 rs.	...	112.	...
	Markál chunám do.=12 sers. ...	...	1008.	0.3150
Benáres.	Tolá, of 215 grains troy. ....	...	1.194	...
	Ser, of 105 sá. wt. ....	2 10 0	105.	1.3125
	Ser, of 103 sá. wt. ....	2 9 2	103.	1.2875
	Ser, of 96 sá. wt. ....	2 6 7	96.	1.2000
Bencoolen, Sum.	Tale, for gold, etc.=638 grains.	...	3.940	...
	Catty, of 16 tales. ....	1 7 5	56.666	...
Betelfaki, Arab.	Frazil, of 10 mans. ....	20 6 4	...	0.2477
	Bahar, of 40 frazils. ....	815 10 0	...	9.9121
	Same as Málwá.	...	...	...
Bhopál, Bhilsa.	See Rangoon.	...	...	...
Birman Empire.	Tank, of 24 ratis, (for pearls.)...	grs. 72	0.400	...
Bombay,	Tolá, (formerly 179 grs.) ....	grs. 180	1.000	...
Money weight.	Ser, of 30 pice or 72 tanks. ....	0 11 3 ½	27.222	...
Commercial	Man, of 40 sers. ....	28 0 0	...	0.3402
weight.	Khandi, of 20 mans. ....	560 0 0	...	6.8056
Grain measure	Ser, of 2 tippees. ....	0 11 3.2	24.836	(0.3104)
	Para, of 16 pailis or adholis. ....	44 12 12.8	...	0.5444
	Khandi, of 8 paras. ....	358 6 4	...	4.3553
	Parra, salt measure, 6 gallons ...	1607.6 c. i.	...	...
	Ser, for liquids, 60 Bom. rs. ....	1 8 8 ½	60.	(0.7448)
Borneo.	See Banjar Massin.	...	...	...
Baroch, Gujarát.	Man,=40 sers, of 40 rs. ....	40 8 12	39.408	0.4928
	Man, for grain, 41 do. ....	41 9 5	...	0.5052
	Man, for cotton, 42 sers. ....	43 9 9 ½	...	0.5397
Bushire, Persia.	Man, Tabrizi=720 miskáls. ....	7 10 15	29.888	0.0934
Basra, Arab.	Man, of 24 vakias Sophi. ....	116 0 0	...	1.4097
Baghdád, ,,	Man=6 okas of 400 dirhams. ...	16 8 0	641.600	0.2005
Cachar, Tonquin.	Tale, of 10 mace, or 1000 kás. ...	grs. 590.75	3.282	...
Calcutta.	(See the foregoing pages.) ....	lbs. 82 ¾	80.	1.0000
	Grain weights or measures are de- rived from the others, thus.—	...	...	...
	1 kunki=5 chhatáks	...	25.	...
	1 raik=4 kunkis=1½ ser.	...	90.	...
	1 palli=4 raiks=5 sers.	...	400.	...
	1 soalli=20 pallis=2½ mans.	lbs. 205 ¾	5400.	2.500
Calicut, Malabar.	Ser, of 20 Súrat rs. ....	0 8 2 ¾	19.849	(0.2481)
	Man, of 68 sers. ....	34 11 11	...	0.4220

Place.	Denomination of Weights.	Value in Eng- lish pounds weight.	No. of stand- ards per ser, etc.	Value of mans. etc. in Mans. and decimals.
		lb. os. dr.	Tolás.	Mans.
Cambay, Malabar.	Same as Súrát.			
Canton.	See China.			
Cape Town.	91½ Dutch=100 English weight			
Carwar, Kanára.	Man, of 42 sers. ....	26 0 0	...	0.3159
Ceylon.	See Colombo.			
Chanador, in Ah- madnagar.	Ser, of 74 Ankusi rs. 10 más. ....	1 13 8	71.702	(0.8963)
	Ser of capacity=72 tanks. ....	2 5 7	90.995	...
	Man,=64 sers. ....	149 12 0	...	1.8200
China.	Tale, see page 16 (=579,84 grs.)	0 1 5½	3.221	...
	Catty, of 16 tale. ....	1 5 5½	51.586	...
	Pecul, of 100 catties. ....	133 5 5½	...	1.4987
Cochin, Malabar.	Man, of 25 lbs. of 42½ sers. ....	27 2 11	...	0.3301
Coimbatore, Mysore	Man, of 40 sers. ....	24 1 0	...	0.2923
	Palám, (of 10 pagodas) ....	grs. 528½	2.936	...
	Tolá, for cotton. ....	7 8 0	291.666	...
Colacby, Travancore.	Man=125 paláms, of 105 grs. ....	18 12 13	...	0.2284
	Khandi, of 20 mans. ....	376 1 2	...	4.5702
Colombo, Ceylon.	Khandi or Bahar. ....	500 0 0	...	6.0764
	Garce, (82 cwt. 2 qrs. 16½ lbs.) ...	9256 8 0	...	112.4921
	Markál, dry meas.=10 sers. ....	galls. 2.88	...	...
	Parra, do. ....	" 5.76	...	...
Comercolly, Bn.	Ser, for metals, 58 sa. wt. ....	1 7 9	58.	(0.7160)
	(other sers of 60 and 78 do.) ...			
Coolpahar, Calp.	Ser. ....	3 1 6½	120.000	(1.5000)
Cossimbázár, Bn.	Sers, of 76, 78, 80, and 82.10 tol.			
Calpi, Agra.	Ser, for sugar, metals, grain. ....	2 1 15	82.487	(1.0310)
	Ser, for ghi. ....	2 6 3	92.816	(1.1602)
	Ser, for cotton. ....	2 6 12	94.184	(1.1773)
	Ser, for grain, wholesale. ....	2 7 5	95.562	(1.1944)
Dharwár, Bom.	Kachchá ser, of 72 tanks. ....	0 8 3½	20.00	(0.2488)
	Pakká ser=116 Mad. rs. ....	2 15 11½	116.0	(1.4488)
	Dhará, liquid measure, 12 sers. ....			
Dewas, Malwa.	Ser, of 80 Ujjain rupees. ....	1 15 10	76.866	...
	Man, of 64 sers. ....	137 8 2	...	1.6712
Dindor, Ahmad.	Ser, of 76 Ankusi rs. ....	1 13 15	72.765	(0.9096)
	Ser, of capacity, 72 tanks ....	2 7 6½	95.778	...
	Man, of 64 sers. ....	157 10 0	...	1.9136
Dungurpur.	Ser, of 52 Salimani rs. ....	1 4 0½	48.725	(0.6090)
	Man, of 40 sers. ....	50 1 14	...	0.6090
Dakhan, Puna.	Ser, 72 tanks or tolás (80 Ank. rs.)	1 15 8½	76.638	...
	Man, of 12½ sers, for ghi, etc. ....	24 10 4½	...	0.2994
	Man, of 14 " for metals. ....	27 9 9½	...	0.3353
	Pala of 12½ " for iron, etc. ....	236 9 2	...	2.8749
	Man, of 48 " for grain. ....	94 9 8	...	1.1494
Faifoe, Coc. Chi.	Same as in China.			
Farrukhabád, Agra.	Ser, wholesale 110 sa. wt. ? <sup>1</sup> ....	.....	110.	(1.3625)
	" retail 94 " ? .....	.....	94.	(1.1750)
	" for spice, 82. ....	.....	82.	(1.0250)
Gerouli, Kalpi.	Ser, for all purposes. ....	1 15 0½	75.460	(0.9431)
Ghouhon, "	Ser, for wholesale. ....	2 2 0	82.638	(1.0330)
Gda, Malabar.	Quintal, of 4 arobas. ....	129 5 5	...	(1.5717)
	Khandi, of 20 mans. ....	495 0 0	...	6.0166
Gamron, Persia.	Man, Tabri. (Tabrizi?) ....	6 12 0	262.400	0.0820
	Man, Sháhi (= 2 Tabrizi) ....	13 8 0	524.800	0.1640

<sup>1</sup> These are marked in Kelly 11 and 14 Farrukhabád sikká weight, which must be a mistake for 110, and, probably, 94.

Place.	Denomination of Weights.	Value in English avoirdupois weight.	No. of standard Tolas per ser, etc.	Value of mans, etc. in Mails and decimals.
		lb. oz. dr.	Tolas.	Mans.
Gamron, Persia.	Man, Copra, for provisions .....	7 12 0	301.440	0.0942
Hansut, Barôch.	Market ser, of 38 Baroach rs. ....	0 15 7	37.521	(0.4690)
	man, of 40 sers. ....	38 9 9	...	0.4690
	Oil man, of 42 sers. ....	40 8 6	...	0.4925
	Pergunna ser, of 38½ Baroach rs. ....	0 15 11	38.129	(0.4766)
	man, of 40 sers. ....	39 3 10	...	(0.4768)
Haveri, Mad.	Kachhâ ser, for groceries, 23½ rs. ....	0 9 9	23.242	(0.2905)
Doâb.	Dharâ (for selling) = 12 sers ...			
	Pakkâ ser, for grain (82 cub. in.) ..	2 6 13	94.336	(1.1792)
Haidarâbâd, Mad.	Ser, of 80 Haidarâbâd rupees. ....	1 15 12	77.170	(0.9646)
	Kachchâ man, of 12 sers. ....	23 13 0	...	0.2893
	Pakkâ " of 40 " ....	79 6 0	...	0.9546
	Pala, of 120 sers for selling. ....	238 2 0	...	2.8938
Indor, Mâlwa.	Ser, of 82 Ujjain rupees. ....	2 0 6½	78.803	(1.9850)
	Man, of 20 sers (for grain) ....	40 8 6	...	0.4925
	Maunî, of 12 mans ....	486 4 8	...	5.9096
	Man, of 40 sers, for opium, etc. ....	81 0 12	...	0.9849
Islâmpur, Calp.	Ser (see Calpi). ....	2 0 12	79.600	(0.9950)
	Pakkâ ser. ....	2 0 15	80.056	(1.0007)
Jâmkhair, Ah-	Ser, commercial, of 80 Ankusi rs. ....	1 15 8½	76.635	(0.9580)
madnagar.	" of capacity = 72 tanks. ....	2 4 14½	89.702	(1.1213)
	Man, of 64 sers ? ....	147 10 0	...	1.7941
Japan.	Pecul (same as China) ....	lbs. 133½	...	1.6254
Jaulnah, Hyder.	Tolâ, of 12 mâshas. ....	grs. 184.5	1.025	...
	Pakkâ ser, of 80 rs. for grain ...	2 0 1	77.926	...
	man, of 40 sers. ....	80 2 8	...	0.9471
	Kachchâ man, of 12 sers (for ghî, liquids, etc.), measure. ....	24 0 12	...	0.2922
Java.	See Batavia.			
Judda, Arab.	Man, of 30 vakias. ....	2 3 9½	86.400	0.0270
	Bahar = 100 mans, or 10 frazils. ....	222 8 0	...	2.7039
Jumbusur, Guj.	Market ser, of 40 Baroach rs. ....	1 0 2½	39.270	...
	man, of 40 sers. ....	40 6 4	...	0.4908
	Cotton " of 42 " ....	1 0 9	40.256	0.5153
	Pergunna ser, of 40½ Bar. rs. ....	...	40.000	(0.5060)
Jungypur, Ben.	Ser, of 16 chhatâks. ....	1 8 0½	58.408	(0.7301)
	" liquid measure. ....	c. i. 50½	...	...
Junkceylon, Is.	Bahar = 6½ Ben. fac. mans. ....	485 5 5½	...	5.8981
Kati, Abed.	Ser of 80 Ankusi rs. ....	1 15 8½	76.638	(0.9580)
	" of capacity = 95 do. ....	2 5 8	91.146	(1.1393)
	" = 100 do. ....	2 7 6½	95.778	(1.1972)
Kutul, "	" of 30 Kotâ rs. ....	0 12 0	29.166	(0.3646)
Kotâ, Ajmîr.	Man, of 40 sers. ....	30 0 0	...	0.3646
	Seyn (measure), of 864 Kotâ pice. ....	34 2 3	...	0.4148
Kurda, Gujarât.	Ser, of 80 Ankusi rs. ....	1 15 8½	76.638	(0.9580)
	" of capacity, 90 do. ....	2 3 7½	86.208	(1.0776)
Kumbharia, Sur.	Man, of 40 sers, 8 pice. ....	37 13 10	...	0.4601
Kurod, "	" " " " 15 " ....	37 15 8½	...	0.4615
Loheia, Arab.	Quintal, of 100 rotolos. ....	62 8 0	...	0.7596
Luckipur, Ben.	Fact. and Bz. weights of Calcutta.			
Lukhnaw, Oudh.	Ser, of 100 Lukhnaw rs. ....	2 7 6½	95.817	(1.1977)
Macassar, Cele-	Tale, of 16 mace = 614 grains. ....	...	34.111	...
bes Is.	Pecul, of 100 catties ....	135 10 0	...	1.6483
Madras.	Pagoda weight = 52.56 grs. ....	...	0.292	...
	Man, of 40 sers, or 8 vis. ....	25 0 0	24.304	0.3038
	Khandi, of 20 mns. ....	500 0 0	...	6.0764
	Garec, for grain = 12.8 mns. ....	320 0 0	...	3.8888

Place.	Denomination of Weights.	Value of Eng- lish avoird- upois weight.	No. of stand- ard Tolas per ser, etc.	Value of mans, etc. in Mās and decimals.
		lb. oz. dr.	Tolas.	Mans.
Madras.	Padī, oil measure = 8 olluks, or Parra, for chunām = 5 markāls.. Mangelin, for pearls = 6 grains. 18 Mad. chows = 55 Bom. chows.	cub.in. 9375 cub.in. 3750		
Madurā, Carn.	Ser, of 80 Madurā pagodas .....	0 10 4	24.913	...
	Man, of 39.244 sers .....	25 0 0	...	0.3038
Malabar.	Palām, of 9 Pondich. rs. 1 kās.. Tulām, of 40 sers .....	grs. 1624 23 3 1	9.022	0.2817
Malacca, Malay.	Catty, of 20 buncals, for gold.... Pecul=100 com. catties of 16 tales Bahar, of 3 peculs .....	2 0 12 135 0 0 405 0 0	79.600 ...	1.6407 4.9219
	Ganton, measure. .... Kip, of tin = 30 tampang. ....	6 8 0 40 11 0	252.775 ...	...
Malda, Ben.	Ser, of 100 sa. wt. (72 c. i.) .....	2 9 0	100.	(1.2456)
	„ 96 (at Mogulbari) .....	2 7 5½	95.665	(1.1958)
	„ 82.10 (at Jelapir) .....	2 1 14	82.336	(1.0292)
	„ 80 (English bazar) .....	2 0 14½	79.942	(0.9993)
Mālwā, Central India.	Tola, of 12 māshas .....	grs. 190	1.055	...
	Ser, of 84 Sālimsāhī rs. ....	2 0 6	78.689	...
	Man, of 20 sers .....	40 7 8	...	(0.4918)
Mangalor, Mal.	Ser, of 24 Bombays, (42.79 grs.) Man, market, of 46 sers. ....	0 9 13 28 2 4	23.850 ...	0.3419
	„ Company's (16 rs. heavier). „ for sugar = 40 sers. ....	28 8 13 24 7 8	...	0.3469 0.2973
	Ser, of capacity = 84 Bomb rs.. Spanish weights and Chin. pecul.	.....	84.000	...
Manilla, Phil. Is.	Rottolo, of 12 vakias (4800 grs.) Tulām = 30 chunāms. ....	0 10 15½ grs. 179.04	26.635 0.995	...
Massuah, Red Sea.	Kachchá ser and man, as Madras. Pakkā man = 40 sers of 2lbs.	0 11 4 80 0 0	27.342	(0.3418)
Masulipatam, M.	Ser, of 90 Madras pagodas. .... „ „ 72 „ „ (for metals) „ „ 96 „ „ (for cotton)	0 9 0 0 12 0 8 5 6	21.875 29.165 20.210	(0.2734) (0.3646)
	Markāl, grain measure, 12 sers. Garce, „ „ 4800 „	galls. 3½ „ 1250	...	...
Mauritius.	Ton, of sugar = 2000 French, etc. „ „ grain and coffee = 1400 „ „ „ cloves = 1000 „ „ „ cotton = 750 „	lbs. 2160 1612 0 0 1080 0 0 810 0 0	...	26.2500 18.3750 13.1250 9.8437
Mocha, Arab.	Man, of 40 vakias .....	3 5 0	128.640	0.0402
	Bahar = 15 frazils, of 10 mans.. Teman, measure of rice. ....	450 0 0 168 0 0	...	5.4687 2.0417
	Gudda, liquid measure = 2 gall. See Amboyna and Banda.	18 0 0	...	0.2187
Moluccas.	Ser, of 92 Sālimsāhī rs. ....	2 3 7½	86.246	(1.0781)
Mundissor, Mal.	Man, of 15 sers (?). ....	34 4 4½	...	0.4042
Maişūr, Province.	Ser = 24 Maişūr rs. of 179 grs. „ of 79 Ank. rs. 4 māshas ...	0 9 13 1 15 4½	23.850 37.030	(0.2981) (0.9504)
Nassuk, Ahmad.	„ „ capacity, 99 Ank. rs. 2m. Tompong, (Benj. wt.) 20 catties Cattyootan (for do. and camphor)	2 7 2½ 80 0 0 4 0 0	95.018 ...	(1.1877) 0.9722
Natal, Sumatra.	Tale, for precious metals .....	grs. 584	3.244	...
	Sukat, grain measure = 12 pakkās Ser, of 8 palāms .....	cub.in. 4029 0 9 10½	23.470	...
Negapatam, Car.	Man, of 41,558 sers. ....	25 0 0	...	0.3038
New Hoobly, M. Doab.	Kachchá ser = 20½ Mad. rs. ... Pakkā ser = 106½ do. ....	0 8 6 2 11 13	20.352 106.488	(0.2594) (1.3111)

Place.	Denomination of Weights.	Value in Eng- lish avoirdupois weight.	No. of stand- ard Pounds per ser, etc.	Value of Mans, etc. in decimals.
		lb. oz. dr.	Tolas.	Mans.
New Hoobly, Doab	Dharā contains 13 sers. ....	cub. in. 1170	...	...
Nolye, Málwa.	Ser, of 80 Ujjain rs. ....	1 15 10	76.864	...
	Man, of 20 sers. ....	39 8 8	...	0.4805
Nolgund, Mad.	Kachchá ser = 20½ Mad. rs. ....	0 8 8½	20.736	(0.2592)
Doáb.	Pakká ser = 110½ M. rs. 96.6 c.i. ....	2 13 5½	110.210	(1.3776)
Okalesur, in Baroch.	Ser, of 38 Baroch rs. ....	0 15 6½	37.483	...
	Man, of 40 sers. ....	38 8 15	...	0.4685
	Pergunna ser, 39½ Br. rs. ....	1 0 2½	39.306	(0.3913)
	Man, 40 sers. ....	40 6 13	...	0.3912
Omutwara, Mál.	Ser, of 81 Salimsáhi rs. ....	1 15 3½	75.916	(0.9489)
	Man, of 28 sers. ....	54 10 8	...	0.6612
Onor, in Canára.	Man, of 40 to 44 sers. ....	25 0 0	...	0.3038
	Háne, grain measure. ....	cub. in. 87½	...	...
Ujjain, Málwa	Ser, of 80 Ujjain rs. ....	1 15 10	16.866	(0.9608)
	Man, of 16½ sers. ....	33 5 13	...	0.4054
	Máni, of 12 mans. ....	400 5 12	...	4.8655
Paichal, Súrat.	Man, of 48 sers, 8 pice Súrat. ....	45 4 0	...	0.5469
Palamkota, Car-nátic.	Tulám, of 100 paláms, (½ a mn.) ....	12 8 0	...	0.1519
	Pañi, for metals. ....	4 15 0	192.014	0.0600
	Marakkál, retail = 1½ gall. reven. ....	galls. ½ 32	...	...
Palimbang, Sum.	Catty, of 10 tales. ....	grs. 9494	52.744	...
	Bally, of 10 gantangs. ....	81 6 0	...	0.9888
Palloda, Ahmad.	Ser, of 78 Ank. rs. 10½ máshas. ....	1 15 2	75.651	(0.9456)
	„ of capacity, 103½ Ank. rs. ....	2 8 13	99.195	...
	Man, „ of 64 sers. ....	163 4 0	...	1.9839
Pandri, Kalpi.	Ser. ....	2 11 12	106.340	(1.3292)
Panwari, „	„ ....	2 2 2	82.943	(1.0968)
Parnair, Ahmad.	„ of 76½ Ankusi rs. ....	1 14 2½	73.296	(0.9162)
	„ of capacity, 95 rs. 7 m. ....	2 5 2	90.233	(1.1279)
Patna, Bihár.	Tolá, of 12 máshas. ....	grs. 209	1.161	...
	Ser, from 45 to 81 sá. wt. ....	...	80.	1.000
Pegu, Birma.	Tical, 100 to the vis. ....	grs. 237½	1.368	...
	Khandi, 150 vis, reckoned at ...	600 0 0	...	6.0764
	Basket, rice measure, 16 vis. ....	58 0 0	...	0.7048
Persia.	Man of Shiráz = 600 miscals. ....	12 10 14.4	493.172	0.1541
	Man of Tabriz, 300 do. 150 dirhs. ....	6 5 7.2	246.530	0.0770
	Artaba, corn measure, 2 bushels	...	...	...
Pratápgarh, Ajmir.	Ser, of 80 Salimsáhi rs. ....	1 14 13½	74.967	...
	Man, of 20 sers. ....	38 8 14	...	0.4686
Pondicherry, Car.	Ser, of 24½ Pon. rs = 731½ fan. ....	0 9 11½	23.622	...
	Man, of 8 vis. ....	25 14 5½	...	0.3146
	Garce of grain, = 100 markáls. ....	qurs. 13½	...	...
Penang.	Malay pecul, of 100 catties. ....	142 10 10½	...	1.7338
	Bahar, of 3 peculs. ....	428 0 0	...	5.2013
	Gantang measure, = 4 chupahs	cub. in. 27.165	...	...
Puna.	See Dakhan.	...	...	...
Quilon, Trav.	Olunda, or old Dutch pound ...	1 1 8	42.535	...
	Man, of 25 old Dutch pound. ....	27 5 8	...	0.3225
	Tulám, of 100 pal. for cotton. ....	16 11 5.6	...	0.2029
	„ for spices. ....	15 9 7.3	...	0.1894
Radnagor, Ben.	Sers of 62, 64, and 80 sá. wt. ....	...	80.	1.000
	Bági, for pañi = 5 sers of 62 ...	...	310.	(0.7750)
Rahorí, Ahmad.	Ser, of weight = 77 Ank. rs. ....	1 14 5½	73.790	(0.9223)
	„ of capacity = 115½ do. ....	2 13 8½	110.666	(1.3833)
Rangoon.	Vis of 100 tikals. ....	3 5 5½	140.	...
	Khandi, of 150 vis, reckoned. ....	550 0 0	...	6.0764
	Ten, or basket of rice = 16 vis. ....	58 4 0	...	0.7078



Places.	Denomination of Weights.	Value of Eng- lish avoirdu- pois weight.	No. of stand- ard Tolas, per ser, etc.	Value of Mans, etc., in Mans and decimals.
Rámbhari, Ah- madnagar.	Ser, of 74 Ankusi rs. ....	lb. oz. dr. 1 13 2½	Tolas. 70.901	Mans. (0.8863)
	" of capacity, 102 do. ....	2 8 3½	97.750	...
Rungypur, Ben.	Man, of 64 sers. ....	160 13 8	...	1.9548
	Sers, of 60, 65, 73, 80, 90, and 460 tolas; the standard ser ...	.....	80.	1.000
Rutlam, Málwa.	" of 84 Sálimsáhi rs. ....	2 0 6	78.689	...
	Man, of 20 sers. ....	40 7 8	...	0.4918
Salangor, Maly.	Bahar, of 240 catties. ....	324 0 0	...	3.9374
Sankaridrúg, Car- natic.	Ser, of 8 paláms for provisions. Man, of 41 256 sers. ....	0 9 12 25 0 0	23.698 ...	0.3038
Santipur, Bon.	Sers, of 60, 80, 84, and 96 to- las; also factory weights. ...	.....	80.	1.000
Seringapatam.	Kachchá ser, of 24 sultáni rs. " man, of 40 sers. ....	0 9 11½ 24 4 8	23.596 ...	0.2950
	Pakká ser, of grain; 84 Sul. rs. " kolaga = 16 sers. ....	2 1 15½ 33 15 12	82.601 ...	0.4130
Siam.	Pecul = 50 catties of 20 tales...	129 0 0	...	1.5677
Singapore, Malay.	Buncal, for gold. ....	grs. 832	4.022	...
	Pecul, of 100 catties, (see China)			
Sinkell, Samatra.	Tompong, of 20 cats. for Benzoin Pecul, etc. as in China.	3 8 0	36.110	...
Sólú, Sunda.	" as in China.			
Sunamuki, Bl.	Sers, of 58, 10, 60, 72, 73½, 75, and 82.10 tolas; stand. ser. ....	.....	80.	1.0000
Suez, Red Sea.	Rottolo, of 144 drams. ....	1 4 0	48.610	...
	Quintal varies from 110 to 150 rot			
Súrat, Gujarát.	Tolá, of 12 máshas. ....	grs. 187.2	1.040	...
	Ser, of 35 tolas. ....	0 15 0	36.458	(0.4557)
	Man, of 40 sers. ....	37 8 0	...	0.4558
Tellicherry, in Malabar.	Ser, of 20 Súrat rupees. ....	0 8 2½	19.849	(0.2481)
	Man, of 64 sers. ....	32 11 0	...	0.3972
Ternate, Molucc.	Pecul, of 100 catties. ....	130 3 8.3	...	1.6826
Tranquebar, Cor.	Man, = 68 lbs Danish. ....	74 12 9.6	...	0.9088
Travancor, M.	Tulám, of 20 pounds. ....	19 14 11	...	0.2420
	Khandí (30 tuláms), for purchase " (20 mans), for sale. ....	597 8 10 500 8 2	...	7.2618 6.0826
	Parra, grain measure. ....	qrts. 2	...	...
Trichinopoly, Carnatic.	Pakká ser, = 27 tuláms. ....	1 14 8	74.132	...
	Man, = 13.114 sers. ....	25 0 0	...	0.3038
	Ser, for metals = 4167.7 grs. ...	0 9 8½	23.167	(0.2896)
	Marakkál, gr. measure, 1½ gall. See Colombo.			
Trincomali.	See Arcot.			
Vellor.	See Arcot.			
Vizagapatam.	See Masulipatam.			
Wallahjábád.	See Arcot.			

## LINEAR MEASURES.

Notwithstanding the boast of Abú-'l-Fazl, that, among other beneficial effects of Akbar's administration, he had fixed one standard of linear measure for the whole of India, we find at the present day as great irregularity in this branch of our subject, as could have prevailed in his day, or rather much greater; on account of the semi-introduction of European measures in the British Indian territories, and in the Dutch and Portuguese settlements before them.

There is this peculiarity in the linear systems—that the basis of all is the same, the cubit or human fore-arm: and this unit is found in Oriental countries, as in those of the West, divided into two spans, and 24 finger's-breadths. Thus, under the Hindú princes, the *hâth* (in Sanskrit *hasta*) was equal to two *vitesti* or 'spans,' and to 24 *anguls* (*angula*). The *angul* 'finger' is divided into 8 *jau* (s. *yava*) or 'barley-corns.'

The subdivisions of the *yava*—proceeding downwards to the *paramânu*, or 'most minute atom,' according to the arithmetical works of the Hindús—are, of course, theoretical refinements which it is unnecessary to notice: a full account will be found in Colebrooke's treatise in the 'Asiatic Researches:' [epitomised above, vol. i. page 211]. Proceeding upwards, four *hâths* or 'cubits' are equal to a *danda*, or 'staff:' and 2000 *dandas* make a *krosa*, or *kos*, which should be, by this estimation, 4000 yards English, or nearly  $2\frac{1}{4}$  miles. The *kos* is generally for convenience now called equal to two English miles. Four *krosa* = one *yojana*, nearly ten miles. The 'Lîlâvatî' also states that 10 *hâths* make one *bans* or 'bamboo,' and 20 *bans* in length and breadth = 1 *niranga* of arable land.

That the cubit was of the natural dimensions (of 18 inches, more or less) can hardly be doubted; indeed, where the *hâth* is talked of, to this day, among the natives, the natural human measure is both understood and practically used, as in taking the draft of water of a boat, etc. In many places also, both in Bengal and in South India, the English cubit has been adopted as of the same value as the native measure.

The *gaz*, or yard, now in more general use throughout India, is of Muhammadan introduction: whether this is derived also from the cubit (for the Jewish cubit is of the same length) is doubtful; but, like the *hasta*, it was divided into 24 *tasûs*, or 'digits,' corresponding more properly to inches.

Abú-'l-Fazl, in the 'Ayîn-i Akbarî,' gives a very full description of the various *gaz* in use under the emperors, as compared with the earlier

standards of the Khalífs. He expresses their correct length in finger's-breadths, which may be safely taken as three-quarters of an inch each.

For facility of reference, his list is here subjoined, with the equivalents in English measure at this rate :—

ANCIENT GAZ MEASURES ENUMERATED IN THE 'AYÍN-I AKBARÍ.'

The Gaz-saudá of Hárún-al-Rashid = $24\frac{2}{3}$ (some MSS. have $25\frac{2}{3}$ ) fingers of an Abyssinian slave, the same used in the Nilometer of Egypt <sup>1</sup>	English.
The Kasbah gaz, of Ibn Abililah = 24 fingers.....	= $18\frac{1}{2}$ in.
The Yúsufi gaz, of Baghdád = 25 „ .....	= 18 „
The small Hashamah gaz <sup>2</sup> of Abú Músa Asharí = $28\frac{1}{3}$ fingers.....	= $21\frac{1}{2}$ „
The long „ „ „ Mansúr 'Abbás ... = $29\frac{2}{3}$ „ .....	= $22\frac{1}{2}$ „
The Umriah gaz of the Khalif Umr ..... = 31 „ .....	= $23\frac{1}{2}$ „
The Mámúniyah gaz of Mámún 'Abbási..... = $69\frac{1}{2}$ „ .....	= $52\frac{1}{8}$ „
The gaz Masáhat ..... = 28 „ .....	= 21 „
Sikandar Lodi's gaz of $41\frac{1}{2}$ silver Sikandarís <sup>3</sup>	
diameter, modified by Humáyún to 43 „ .....	= 32 „ .....
This was used in land measurements till the 31st year of Akbar.	= 26 „

<sup>1</sup> The cubit of the Nilometer is supposed to be the same as that of the Jews, which is exactly two feet English :—if so, the 24 digits will be, precisely, inches. Volney, however, makes it  $20\frac{1}{2}$  French, or 22 English inches. Some allowance must probably be made for the broad hand of a negro, but the other measures will not be affected by the same error, as they must be referred to the ordinary delicate hand of a native of Asia.

<sup>2</sup> These two are also called the Gaz Mullik and Gaz Zíádiah, because Zíád, the adopted son of Abú Sofíán, made use of them for measuring the Arabian Irak.

<sup>3</sup> [Abú-'l-Fazl, in noticing the various descriptions of yard-measures introduced at different times into Hindústán, makes incidental mention of certain coins designated Sikandarís—upon the basis of a given number of the diameters of which the Gaz of Sikandar Lodi was formed. The class of money described ('Num. Chron.'), evidently furnished, among their other uses, the data for this singularly-defined measure. Any tyro in Indian numismatology, under whose eye many specimens of this mintage may chance to pass, cannot fail to remark that, imperfect as their configuration undoubtedly is, as compared with our modern machine-struck money, yet that they hold a high place among their fellows in respect to their improved circularity of form, and general uniformity of diameter—points which had certainly been less regarded in the earlier produce of the Dihlí mints.

The passage alluded to is to the following effect :—

سلطان سکندر لودی در هندوستان نیز کزی در میان آورد و آنرا  
چهل و یک ونیم اسکندری اندازه گرفت و آن مسین نقدیست گرد  
نقره امیز جنت اشیائے نیم دیگر افزود بچهل و دو قرار گرفت \*

With a view to make these coins, even at the present day, contribute towards our knowledge of the true length of this Gaz—which is still a *verata questio*, I have carefully measured a set of 42 of these pieces, arranged in one continuous line: the result arrived at is, that the completion of the 30th inch of our measure falls exactly opposite the centre of the 42nd coin.

The specimens selected for trial have not been picked, beyond the rejection of five

\* [Page 103 Sir H. M. Elliot's MS. copy of the 'Ayin-i Akbari.' See also p. 355, vol. i., Gladwin's translation.]

		<i>English.</i>
The Akbarí gaz, for cloth measure .....	= 46 fingers .....	= $34\frac{1}{2}$ in.
The Iláhí gaz, established by Akbar, as the sole		
standard measure of the empire .....	= 40 „ .....	= $30\frac{1}{4}$ „ <sup>1</sup>
The Akbarí bighá, of 3600 square gaz=2600 square yards=0.538, or somewhat		
more than half an acre, on the above estimation.		

The Iláhí gaz of Akbar was intended to supersede the multiplicity of measures in use in the 16th century; and, in a great degree, it still maintains its position as the standard of the Upper Provinces. In general, however, different measures are employed in each trade, and the cloth-merchant, in particular, has a distinct gaz of his own. Thus the cloth gaz has assimilated in many places to two háths, or one yard; and the frequent employment of English tape-measures, as well as carpenter's two-foot rules, will ere long confirm the adoption of the British standard to the exclusion of the native system, for the linear measure of articles in the bázár.

The true length of the Iláhí gaz became a subject of zealous investigation by Mr. Newnham, Collector of Farrukhabád, and Major Hodgson, Surveyor-General, in the year 1824, during the progress of the great revenue survey of the Western Provinces, when it was found to be the basis of all the records of land measurements and rents of Upper India. As might have been expected, no data could be found for fixing the standard of Akbar with perfect accuracy; but every comparison concurred in placing it between the limits of 30 and 35 English inches; and the great majority of actual measures of land in Rohilkhand, Dihilí, Agra, etc., brought it nearly to an average of 33 inches. Mr. Duncan, in the settlement of the Benáres province in 1795, has assumed 33.6 inches to the Iláhí gaz, on the authority, it may be presumed, of standards in existence in the city, making the bighá = 3136 square yards.

The results of the different modes of determination resorted to in 1824-5, so characteristic of the rude but ingenious contrivances of the natives, are curious and worthy of being recorded. Maj. Hodgson made the length of the Iláhí gaz—

very palpably worn pieces out of the total 48 of Mr. Bayley's coins, which were placed at my disposal.

The return now obtained I should be disposed to look upon as a little below the original standard, notwithstanding that it slightly differs from the determination of the measure put forth by Prinsep; but I must add that Prinsep himself distrusted his own materials, and was evidently prepared to admit a higher rate than he entered in his leading table.—E. T.]

<sup>1</sup> Should the length of this gaz be taken at 32 or 33 inches, proportionate corrections must be made in the other measures.

From the average measurement of 76 man's finger's-breadths.....	= 31.55 in.
From the average size of the marble slabs in the pavement of the Tāj at Agra (said to be each a Shāh-jahānī gaz of 42 fingers ?).....	= 33.58 „
From the side of the reservoir at the same place, called 24 gaz .....	= 32.54 „
From the circuit of the whole terrace, 532 gaz (?) .....	= 35.80 „
Mr. Newnham, from the average size of 14 Chār-yārī rupees, supposed to be each one finger's-breadth, makes it .....	= 29.20 „
From the testimony of inhabitants of Farrukhābād.....	= 31.50 „
From statement in the 'Ayin-i Akbarī,' of the weight of the cubic gaz of 72 kinds of timber (this would require a knowledge of the weights)	
Halhed, from average measurement of 246 barley-corns .....	= 31.84 „
From $\frac{1}{2}$ sum of diameters of 40 Mansūrī pice .....	= 32.02 „
From $\frac{1}{3}$ of 4 human cubits measured on a string .....	= 33.70 „
From average of copper wires returned by Tahsildārs of Murādābād as counterparts of the actual measures from which their bīghās were formed .....	= 33.50 „
Mr. Duncan, as above noticed, assumed the Ilāhī gaz at Benāres .....	= 33.60 „
In Bareilly, Bulansahar, Agra, as in the following table, it is .....	= 32.5 „

It is natural to suppose that the gaz adopted for measuring the land should vary on the side of excess, and probably all the above, thus derived, are too long. The Western Revenue Board, thinking so many discrepancies irreconcilable, suggested that the settlements should everywhere be made in the local bīghā, the surveyors merely noting the actual value of the Ilāhī gaz in each village, and entering the measurement also in acres; but the Government wisely determined rather to select a general standard, which should meet as far as possible the existing circumstances of the country. Thus the further prosecution of the theoretical question was abandoned, and an arbitrary value of the Ilāhī gaz was assumed at 33 inches, which was in 1825-6 ordered to be introduced in all the revenue-survey records, with a note of the local variation therefrom on the village maps, as well as a memorandum of the measure, in English acres. Mr. Holt Mackenzie thus describes the convenience which the adoption of this standard (sanctioned at first only as an experiment and liable to reconsideration) would afford in comparisons with English measures:—

'Taking the jureeb (side of the square beegh, a) at 60 guntchs, or 60 guz, the beegh, ha will be 3600 square guz, or 3025 square yards, or five-eighths of an English acre (3 roods, 5 perches). The jureeb will be equal to 5 chains of 11 yards, each chain being 4 guntchs. In those places where the jureeb is assumed at 54 gaz square, it would equal  $4\frac{1}{2}$  chains, giving 2450 $\frac{1}{2}$  square yards (or 2 roods, 10 perches). In either case the conversion from one to another would be simple, and the connection between the operations of the surveyors and the measurements of the revenue officers would be easily perceived.'

This convenient bighá of 3600 square Iláhi gaz, or 3025 square yards, or five-eighths of an acre, may be now called the standard of the Upper Provinces. It is established also at Patna, and has been introduced in the settlements of the Ságar and Narbadda territories.

The notice of land measurement seems altogether to have been overlooked in the returns from the Bengal revenue officers, to the Hon. Court's circular; so that, with the exception of the facts gleaned from the official correspondence above alluded to, and other information hastily acquired from private sources, the present table exhibits nearly a blank in regard to the bighás of Bengal Proper, Bihár, Cuttack, and Central India. Rennell's general estimate of the area of Bengal in bighás of 1600 square yards merely followed the measure in use at Calcutta. The permanent settlement in these provinces left the land unmeasured, and obviated the necessity of an actual survey. In general terms, however, the bighá of the Bengal provinces may be assumed at 1600 square yards, or about one-third of the English acre, and a little more than half of the up-country bighá.

In Madras, Sir T. Munro established a measure (called ground or *máni*) of  $60 \times 40$ , or 2400 square feet, of which 24 make a *káni* = 57600 square feet, = 6400 square yards, or exactly four Bengal bighás. The Madras *káni* is to the English acre as 1 to 1.3223, or as 121 to 160 nearly. In the *jágir*, the *adi* or Malabar foot is used, which is 10.46 inches; 24 *adis* = 1 *káli*, and 100 square *kális* = 1 *káni*, or nearly an English acre. The common *káli*, however, is 26 *adies*, or  $22\frac{2}{3}$  feet, which makes the *káni* = 1 acre,  $28\frac{2}{3}$  perches.

Of the land measures of the Bombay Presidency, Kelly's tables are altogether silent; but as the cubit and gaz are stated to correspond with 18 and 27 inches respectively, doubtless the square measure has also been brought to agree with some aliquot or multiple of the English acre.

It is much to be regretted that the information on this most important point should have proved so defective; but in justification of the officers to whom the Court's circular was addressed, it should be stated that the draft of instructions did not specifically allude to square measures, merely directing that 'for measures of length, one that is nearest to the cubit or ell, should be selected as the model to be sent home.'

TABLE of Linear and Square Measures of India.

Place.	Denomination.	Value in English meas.
Agra, Presidency	Standard Ilāhī gaz, assumed at .....	33 inches.
	Standard bighā of Western Provinces = 60 × 60 gaz = 3600 gaz .....	3025 sq. yds. ( $\frac{5}{8}$ acres).
Ahmadābād.....	Local gaz varies from 32.8 to 33.25 av.	32.625 inches.
	Gaz, for cloth .....	27.75 "
	" " velvet .....	34.25 "
Ahmadnagar ...	" " artificers .....	23.33 "
	Hāth of 14 tasūs .....	14.00 "
	Gaz, of 14 hāth .....	24.50 "
Alligarh .....	" from 30.5 to 33.4 .....	33.00 "
Molucca .....	Covid, or cubit .....	18.13 "
Ahmod .....	Gaz .....	27.12 "
Anjar .....	" of 34 tasūs .....	26.40 "
Aurangabander ..	" " 16 garce .....	32.00 "
Bagulkota .....	" " 24 tasūs .....	32.87 "
Bangalor .....	Hāth = 19.1 inches .....	38.90 "
Bantam .....	Hasta .....	18.00 "
Bareli .....	Gaz, from 32.0 to 33.4 .....	32.90 "
Baroda .....	" of 24 tasūs .....	27.12 "
Batavia .....	Ell = 27½ inches, Foot = .....	12.36 "
Bauleah .....	Cubit (or hāth) .....	18. "
Benāres .....	Gaz, tailor's .....	33. "
	" weaver's .....	42.5 "
	" cloth-merchant's .....	37.5 "
	" architect's (maimāri) .....	25.33 "
	Bighā, by Reg. II., 1795 .....	3136 square yards.
Bencoolen .....	Hailoh, or two cubits .....	36 inches.
Betelfakī .....	Gaz .....	27 "
Bombay .....	Hāth = 18 inches; the gaz = .....	27 "
Bulandshahr ..	Gaz (originally 33) .....	31.75 "
Baroch .....	Zil'a gaz .....	27.25 "
	Wusa .....	89.6 square inches.
	Bighā = 20 wusa .....	2 roods, 20 perches.
Bushire .....	Half gaz, Shāhī .....	20 inches.
	" " Bushirī .....	18.4 "
Basrah .....	Aleppo yard .....	26.4 "
	Baghdād .....	31.6 "
Calcutta .....	Bighā = 20 katthā of 16 chhatāks .....	1600 square yards.
	Katthā .....	720 sq. feet = 80 sq. yds.
	Chhatāk .....	45 " " = 5 " "
Calicut .....	Gaz .....	28.6 inches.
Kalpi .....	" = 16 girās .....	40 "
Cambay .....	" .....	28 "
	Morgen of 600 square roods .....	2 English acres.
	Mathematical foot .....	13.12 inches.
China .....	Builder's " .....	12.7 "
	Tailor's " .....	13.33 "
	200 li = 1 degree .....	69.166 miles.
Chittagong .....	Nal, or bamboo, of 8 hāths = .....	12 feet.
	Ganda, of 4 kauris = 2 × 3 nals = .....	96 sq. yds.
	Kāni = 20 gandas = 12 × 10 nals = .....	1920 sq. yds.
	Dun = 16 kānis .....	30720 sq. yds. or 6.35 acres.
	Shāhī measures, 4 times greater .....	Seldom used now.
Kāsimbazar .....	Hāth .....	19.12 inches.
Dharwar .....	Hāth, for cotton cloths .....	19.36 "
	Gaz .....	32.75 "
	" .....	32.75 "
Dihli .....	Average bighā .....	2500 sq. yds.
Etāwa .....	Gaz from 32 to 33 .....	32.50 inches.
Farrukhābād ...	Cloth gaz = 12 muts (palms) = 48 angul .....	36 "
	Hāth, or cubit = 24 angul or fingers .....	18 "
	Land gaz 10½ muts or 42 fingers = .....	31½ "
	14 girās on cloth, g. of 16 .....	31½ "

Place.	Denomination.	Value in English meas.
Farrukhabád ..	Bighá, of 20 biswa = 36.00 Iláhi gaz ..	2756½ square yards.
Goa ..	Portuguese Covado ..	26.66 inches.
Gamron ..	Gaz, 93 = 100 English yards ..	38.7 "
Hansut ..	" of 24 tasús ..	27.12 "
Hávari ..	" " " " ..	34.75 "
Haidarábád ..	Cloth measure ..	35.33 "
Japan ..	Inc ..	75.00 "
Jaulná ..	Gaz ..	33.6 "
Jambusur ..	" ..	27.12 "
Jungle Maháls ..	Bighá, 80 × 80 háths ..	1600 square yards nearly.
Bancura ..	Gaz, of two háths = ..	36 inches nearly.
Loheia ..	Peek ..	27.0 inches.
Madras ..	Máni, 60 × 40 feet ..	2400 square feet.
Malabar ..	Káni = 24 máni ..	1.3223 acres.
Malacca ..	Foot ..	10.46 inches.
Málwa ..	Kovid ..	18.12 "
..	Gaz (from 28 to 32) ..	30.00 "
..	Bighá, of 20 wusas ..	2 roods nearly.
Maasuah ..	Peek ..	27.0 inches.
Masulipatam ..	Yard ..	38.25 "
Meerut ..	Land gaz ..	33.00 "
Mocha ..	Kobid = 19 inches. Gaz ..	25. "
Murádábád ..	Gaz, from 31.6 to 35.8 ..	33.50 "
..	Jarib = 20 gathás of 3 gaz ..	167.5 feet.
..	Bighá = 18 × 18 = 324 square gathás ..	2304 square yards.
New Hoobly ..	Gaz ..	31.75 inches.
Noulgund ..	Gaz ..	33. "
Palamkota ..	Gajum, for cloth ..	36.45 "
Pandri ..	Gaz ..	40.75 "
Panwari ..	" ..	36.37 "
Patna ..	" for carpets, etc. (iláhi) of 44 fingers ..	33. "
..	" for broad cloth ..	42.5 "
..	Jarib, 20 bamboos of 3 gaz ..	55 yards.
..	Bighá, 20 × katthás or bamboos ..	3025 square yards.
Persia ..	Guerze, royal ..	37.5 inches.
..	Common measure ..	25.0 "
..	Parasang, 20th of a degree at the equator ..	19.1 "
Rangoon ..	Taong, or cubit ..	2 miles, 293½ yards.
..	Taing, or 1000 dhas ..	63 inches.
Rangipur ..	Gaz, for bálta cloths ..	38.5 "
Seringapatam ..	Gajah ..	75.75 "
Siam ..	Vouah (2000 = 1 league) ..	52.4 "
Sunamuky ..	Corah, used at the factory ..	27.6 "
Súrat ..	Gaz, builder's ..	32.0 "
Saidábád ..	Gaz, land, 31.3 to 32.7 ..	28.4 "
Tellicherry ..	Gaz ..	9 feet 9 inches.
Tirhút ..	Revenue lagi, of 6½ háths = ..	1900 square yards.
..	Bighás, 20 × 20 lagi = ..	9 feet 4½ inches.
..	Small lagi, or rod, 6½ háths = ..	3906½ square yards.
..	Bighá, 20 × 20 ditto = ..	(In Champaran and Chaprá, the lagi or rod is of 7 háths).
Travancor ..	Tuda, for timber ..	20.46 cubic inches.
..	Mura, of stone-cutters ..	33.02 inches.
..	Kolu, in agriculture ..	21.16 feet.
Ságar ..	Standard bighá introduced ..	(See A'gra).

At most of the places omitted in the above table, such as Acheen, Arcot, Belári, Carwar, Ceylon, Cochin, Comeroolly, Jangipur, Bengal generally, Penang, Radnagor, Santipur, etc.; English measures alone are used, or at least a cubit founded on the English measure of 18 inches.



[The following notes are extracted from Elliot's 'Glossary,' already put under contribution (page 92):—

"The Biswa, from بیس 'twenty,' is the twentieth part of a 'Beeg, ha;' and besides being a measure of land, is also used to signify the extent of proprietary right in an estate. Each estate or village is considered an integer of one 'Beeg, ha,' which is subdivided into imaginary Biswas and Biswasees, to show the right of any particular party. Thus, the holder of 5 Biswas is a holder to the extent of one-fourth of the entire village; precisely in the same way as the *As* was used amongst the Romans. Thus, *heres ex sumuncio*, 'heir to one twenty-fourth'—*heres ex dodrante*, 'heir to three-fourths'—*heres ex asse*, 'sole proprietor.' (Cic. Att. iv. 15, vii. 8.—Cic. pro Caccina, c. 6.—Plin. l. v. Ep. 5.) In the same manner *bes*, *bessia*, was used to express a *biswa burar*—'socius ex besse'—and thus in sound and meaning (of course there is no real connection) there is a close resemblance between the words. *Bes*, when it was thus applied as a sub-division of the *As*, was the eighth part of a *Jugerum* or acre; not, as is usually supposed, two-thirds.—'Partes duæ tertie pedes decem novem millia et ducentos hoc est *bes*, in quo scripula cxxii.' (Colum. lib. v. cap. 2).

"Coss, کوس کوس *kos*. The itinerary measure of India, of which the precise value has been much disputed, chiefly on account of the difficulties which attend the determination of the exact length of the Guz, or yard. The 'Ayeen-i-Akheree' lays down distinctly that the Coss consists of 100 cords (*tunab*), each cord of 50 Guz; also of 400 poles (*ban*), each of 12½ Guz: either of which will give to the Coss the length of 5,000 Guz. The following particulars relative to the distances between the old Minars, or Coss pillars, may be interesting, and may be considered to afford the correctest means we have of ascertaining the true standard.

	Road distance in English yards.	Direct distance in ditto.
Octagonal Minar to Nurelah in Delhi .....	4,513	4,489
Minar between Nurelah and Shapoorgurhee .....	4,554	4,401
Minar opposite Aleepoor .....	4,532	4,379
Minar opposite Siruspoor .....	4,579	4,573
Ruins of Minar opposite to Shalimar .....	4,610	4,591
Average...	4,558	4,487

Length of the Coss = 2 miles, 4 furlongs, 158 yards.

It is important to observe that the length of the Ilahee Guz deduced from these measurements is 32  $\frac{11}{1000}$  inches, showing how very nearly correct is the length of 33 inches assumed by the British Government. The measurements taken to the south of Delhi, between the Minars in the Muttra district, closely correspond. Out of twelve distances it is found that eight give 2 m. 4 f. 19 p. 1 y., three give 2 m. 4 f. 25 p. 3 y., and one gives 2 m. 4 f. 38 p. 2 y. It may be proper to remark that it is frequently supposed that the Minars are set up every two Coss, and that the Coss contained 2,500 yards; but the 'Ayeen-i-Akheree' appears sufficiently explicit on the point. The same work gives the values of the local Coss. It says, 'the Guzerat Coss is the greatest distance at which the ordinary lowing of a cow can be heard, which is determined to be 50 Jureeb, or 15,000 Guz.' This Coss resembles the Chinese *li*, i. e. the distance which can be attained by a man's voice exerted in a plain surface, and in calm weather. Another in Bengal is estimated by plucking a green leaf, and walking with it till it is dry. Another is measured by a hundred steps made by a woman carrying a jar of water on her head, and a child in her arms. All these are very indefinite standards. The same may be remarked of the oriental Meel, as well as the European mile, and league. The two former evidently derive their name from the Roman *Milliare*, and the difference of their value in different places proves that the mere name was borrowed, without any reference to its etymological signification. According to the 'Kamoos,' the oriental Meel is a lax and vague measure, but it has been considered by Dr. Lee to be to the English one, as 139 to 112. The league also, from the German *legen*, 'to see,' (signifying the distance that can be readily seen by the eye on a plain surface) is as indefinite as a Guzerat, or Gao, or a Bengal, or Dhuppea, Coss, and sufficiently accounts for its varying

standard in Europe. Coss is an Indian word: the equivalent word in Persian is Kuroh, the same as the Sanscrit Krosa, of which four go to the Yojan; about the precise value of which different opinions are held. Bopp ('Nalus,' p. 213) says it is equal to eight English miles. Professor Wilson ('Sanskrit Dictionary,' p. 689) estimates it at nine miles, and says other computations make it about five miles, or even no more than four miles and a half, and, in his commentary on the Chinese travels, estimates it at no higher than four. But these travels enable us to fix the distance with tolerable precision. By following Fa-Hian's route between places of which the identity is beyond question, as between Muttra and Canouje, and between Patna and Benares, we find the Yojan in his time to be as nearly as possible seven English miles; and this agrees much better with what we find the Yojan to be, if we resolve it into its component parts. Eight barley-corns equal a finger, twenty-four fingers equal a Dund, one thousand Dunds equal one Krosa, and four Krosa, one Yojan. Now, estimating the finger's breadth at eight barley-corns, this makes the Yojan equal to six miles, one hundred and six yards, and two feet. It is the generally received opinion that from Coss is derived the word 'course,' used by the European residents of India to represent a promenade, but the 'Corso' of Southern Europe gives a much more probable origin.

"JUREEB' جرīb जरیب jarib. A measuring chain, or rope. Before Akber's time it was a rope. He directed it should be made of bamboo with iron joints, as the rope was subject to the influence of the weather. In our survey measurements we use a chain. A Jureeb contains 60 Guz, or 20 Gut, has, and, in the standard measurement of the Upper Provinces, is equal to five chains of 11 yards, each chain being equal to 4 Gut, has. A square of one Jureeb is a Beeg, ha. Till the new system of survey was established, it was usual to measure lands paying revenue to Government with only 18 knots of the Jureeb, which was effected by bringing two knots over the shoulder of the measurer to his waist. Rent-free land was measured with the entire Jureeb of 20 knots. A Jureeb, in Hebrew and Arabic, signified originally only a measure of capacity, equal to 4 Qufeez, or 384 Mud<sup>1</sup> (Latin, *modius*), and in course of time came to signify the portion of land which required as much to sow it as a Jureeb would contain.—(Asasu-l-Loghat). The Pat, ha and Naico of Gurhwal and Kumaon have a similar origin.

"DHONCHA, دھونچا धोन्चा dhonchá. Four and a half. The word is found in Arithmetical Tables of the Multiplication of Fractions, which are in constant use with our Surveying Ameens, when reducing their linear measurements to Beeg, has. The words used by them in Fractional Multiplication are

Deorba, डेरबा डेरबा 1½	Poncha, पोन्चा पोन्चा 5½
Dhuma, धमा धमा 2½	K, honcha, क्खोन्चा क्खोन्चा 6½
Honta, होंटा होंटा 3½	Sutoncha, सतोंचा सतोंचा 7½
Dhoncha, धोन्चा धोन्चा 4½	

The size of the fields rarely requires Ameens to go beyond this."

<sup>1</sup> [These words are both retained in the Spanish *caña* and *almud*. Indeed, nearly all the Spanish weights and measures are, like very many administrative words, derived from the Arabic:—As the *quintal* of one hundred pounds, from *kintur*: of which the fourth (*ródda*) is the *arroba*; *arralde*, a pound, from *arratil*; *zeme*, a span, from *shamah*; and so on.—'Al Makkari,' i., p. 500.]

# INDIAN

## CHRONOLOGICAL TABLES.

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The object of the present division of our work is to furnish—first, convenient Tables for the Reduction or Comparison of the various Eras in use throughout India; secondly, Tables of Ancient and Modern Dynasties, extracted from such sources as are available for India and the neighbouring countries. There are so many excellent works on these subjects as to leave us nothing more than the task of compilation or rather selection. For information regarding the astronomical and chronological computations of the Hindús, Colebrooke, Bentley, and Warren are the principal authorities. The ‘Kála-Sankalita’ of the latter author contains the fullest particulars of all the Eras in use. It is from this work that the present tables have been principally taken, with such abridgment as was necessary to bring them within the compass of an octavo volume. Col. Warren’s tables of the Hijra being in a less convenient form, we had remodelled them before it came to our knowledge that a complete series for every month of the Muhammadan era, down to A.D. 1900, had been published in Calcutta, forty-four years ago, in 1790. These tables have, however, been long out of print. Playfair’s Chronology, in folio, contains also a supplemental table of the Hijra calendar, copied from the celebrated French work, ‘*L’Art de vérifier les Dates.*’ There are occasional differences of a day in all tables of the Hijra.

A compendious account of some of the Indian eras was printed as a part of the ‘Companion to the Almanac’ published by the Society for the Diffusion of Useful Knowledge, for the year 1830. The whole article, however, on the eras of ancient and modern times, is calculated to be of such great utility in this country, both to Europeans who are out of the reach of works of reference or chronology, and to native

students of European literature and history, who have no prior acquaintance with the subject, that we make no apology for reprinting the paper entire, as an introduction to the tables which follow.

THE ERAS OF ANCIENT AND MODERN TIMES, AND OF VARIOUS COUNTRIES, EXPLAINED; WITH A VIEW TO THE COMPARISON OF THEIR RESPECTIVE DATES.

In the earliest stages of society, some division of time must have been necessary, and some means devised by men in the most savage state, to communicate to each other the period of undertaking, in concert, a hunt or a predatory excursion. But in such a condition the views of men do not extend far, and very limited periods would therefore suffice. The division of day and night, and the scarcely less obvious distinction of new and full moon, might have served to mark the lapse of time for ages; and, although in all climates the alternations of summer and winter, and of wet and dry periods, must have obtruded themselves on the feelings of the most unobserving, it was probably not until the practice of agriculture had afforded men leisure for reflection, that any accurate observations were made on the duration of the seasons, or means used to ascertain the periods of their return. We see, at the present time, that many societies of men, who live only by hunting and fishing, have no exact knowledge of duration of time beyond that of a moon or season, and designate a term of five or of fifty years, equally as a long time. All agricultural nations are aware of the return of the same seasons after a lapse of twelve or thirteen moons; but many years must have elapsed before the length of a solar year was accurately determined. Less civilized nations still continue to compute their time in part by the motions of the moon; and this was the mode of the Greeks, and of the Romans until the correction of Julius Caesar, but the subject was so little understood even in his time, that an error of several days crept into the Roman calendar soon afterwards, requiring another reformation.

It will render the comparison of eras much easier, if we give some account of what is meant by a solar and a lunar year. A solar year is that space of time during which all the seasons have their course. This takes place in 365 days, 5 hours, 48 minutes, and 49 seconds; and an approximation to that time has been adopted by those nations which have had sufficient astronomical science to determine it. But as it would be impracticable to begin every new year at a different hour of the day, which would be necessary if the perfect year should always be completed before the commencement of a new one, 365 days have been taken as the length of a year, leaving the odd hours and minutes to accumulate until they amount to a whole day, when they are added to the year, making what is called a leap year, or intercalary year, of 366 days. The various ways of doing this will be detailed when we speak of the different eras. Some nations still use a year of 365 days without any intercalation; and this is called a *vague*, or erratic year, because its commencement varies through all the different seasons.

A lunar year consists of 12 moons, or 354 days. This may be convenient enough for short periods, but is so ill adapted for the computation of a civilized nation, that none but Mahometans have continued in the use of it even for a little time. It suits the course of time so ill, that its commencement varies, in a few years, through all the seasons; and many men, amongst the nations which use it, can remember the fasts and seed-times altering from summer to winter, and again from winter to summer, and their seed-time and harvest alternately wandering from the beginning of the year to the end.

The luni-solar year is that in which the months are regulated according to the course of the moon, but to which from time to time a month is added, whenever the year would range too widely from its original situation. This year is inconvenient from its varying duration; but as, in a long course of years, the months remain nearly at the same situation, it is less objectionable than the pure lunar year. It was the mode of computation of the Greeks and Romans, and is even now that of the Chinese, Tartars, Japanese, and Jews.

All these varying modes render the comparison of dates much more difficult than it appears to be at the first view. We shall endeavour so far to simplify the calculation as to enable any arithmetician to compute, within a day or two, the eras of every nation, and to reduce them to the Christian era.

#### THE ROMAN YEAR.

The Roman year, in its arrangement and division, is that on which our year is entirely founded. The Romans reckoned their time from the date which some of their antiquaries chose to assign for the founding of Rome, viz., the 21st of April, in the 2nd year of the 6th Olympiad, or 754 B.C. This era is designated by the letters A.U.C., or *ab urbe condita*, "from the building of the city." The first year used by them, and attributed to Romulus, consisted of ten months, from March to December, or 304 days. A year exhibiting such a discrepancy from the real course of the seasons could not have remained long in use, and it is supposed that extraordinary months were added as often as it was found necessary. A correction is attributed to his successor Numa, who is said to have added two months to the year, January at the beginning, and February at the end. All these months consisted of 29 or 31 days. The year was lunar, and consequently shorter than the true year; several additions were therefore made, which brought the beginning of the year nearly to the same season, viz., the middle of winter. February subsequently became the second month, which change is alluded to by Ovid.

This computation was followed, with some variation, arising partly from ignorance, and partly from the intrigues of the priests, who had the direction of the calendar, until the time of Julius Cæsar, who, observing that the beginning of the year, instead of occurring in winter, as at first, had now receded to the autumn, ordered that the year A.U.C. 707, or 47 B.C., should consist of 445 days, whereby the following year might begin at the proper time. In order to avoid, in future, the confusion naturally attendant on years of such varied length as those hitherto in use, he determined that the year should be solar, without any reference to the lunar motions. Supposing the natural year to consist of 365 days and 6 hours, he ordered that three years in succession should each consist of 365 days, and the fourth should contain 366 days. He also allotted the respective number of days to each month, precisely as we use to this day. With the exception of July and August, (then called Quintilis and Sextilis, but altered to their present names in honour of Julius and Augustus Cæsar), the names also of the Roman months were similar to ours. The only difference between their calendar and ours was in their mode of counting days, which was backwards instead of forwards. To spare a long explanation, which perhaps might not be sufficiently intelligible to all readers, we shall set down a Roman month, with the days, according to our mode, opposite to each Roman day.

<i>English.</i>	<i>Roman.</i>	<i>English.</i>	<i>Roman.</i>
Jan. 1	Calends.	Jan. 6	8th before Ides.
2	4th before nones.	7	7th ditto.
3	3d before nones.	8	6th ditto.
4	day before nones.	9	5th ditto.
5	Nones.	10	4th ditto.

<i>English.</i>	<i>Roman.</i>		<i>English.</i>	<i>Roman.</i>
Jan. 11	3d before Ides.		Jan. 22	11th bef. Cal. of Feb.
12	day ditto.		23	10th ditto.
13	Ides.		24	9th ditto.
14	19th before Cal. of Feb.		25	8th ditto.
15	18th ditto.		26	7th ditto.
16	17th ditto.		27	6th ditto.
17	16th ditto.		28	5th ditto.
18	15th ditto.		29	4th ditto.
19	14th ditto.		30	3d ditto.
20	13th ditto.		31	day before Cal. Feb.
21	12th ditto.			

The nones and ides of March, May, July, and October, are two days later than in January, the nones falling on the 7th, and the ides on the 15th of those months; the 2nd of March will be therefore the 6th before the nones, and so on. In all the other months, the calends, nones, and ides hold the same places as in the month of January. In the months which have but 30 days, the number of days before the calends will, of course, be one less, and in February, three less. In leap years, the additional day was inserted in February, as in our calendar; but instead of making a 29th day, the 24th was reckoned twice, and being called in Latin *sexto Cal. Mart.*, (or sixth day before the calends of March,) this, with the addition of bis (twice), gave the name of *bissextile* to the leap year, which it still retains. The first year reckoned on this principle was a leap year. (A.U.C. 708, or 46 B.C.)

Julius Cæsar was killed soon after the reformation of the calendar, and his plan was so little understood, that, instead of making the fourth year a bissextile, a leap year was reckoned every third year, as though the length of the true year had been 365 days 8 hours. This error was discovered 37 years after, at which time thirteen intercalations had taken place instead of ten, and the year began three days too late. The calendar was accordingly again corrected, not by throwing out the three superfluous days at once, but by an order that the twelve following years should be all of 365 days each, and that there should be no leap year until A.U.C. 760, or A.D. 7. From that time the account has been kept without error, and the Roman year has been adopted by almost all Christian nations, with no other variation than taking the birth of Christ as the commencement, instead of the building of Rome.

If the given Roman year be less than 754, deduct it from 754; if the given Roman year be not less than 754, deduct 753 from it; the remainder gives the year (B.C. and A.D., in the first and second cases respectively) in which the Roman year commences.

Ex.—Required the year	780 A.U.C.	Required the year	701 A.U.C.
deduct	753		754
	<hr/> 27 A.D.		<hr/> 701
			53 B.C.

#### THE OLYMPIADS.

The Greeks computed their time by the celebrated era of the Olympiads, which date from the year 776 B.C., being the year in which Coræbus was successful at the Olympic games. This era differed from all others in being reckoned by periods of four years instead of single years. Each period of four years was called an Olympiad, and in marking a date, the year and Olympiad were both mentioned. The year was luni-solar, of 12 or 13 months. The names of the months varied in the different states of Greece, but the Attic months are most usual. They are as follows:—

Hecatombeon,  
 Metageitnion,  
 Boedromion,  
 Pyanepsion,  
 Mœmacterion,  
 Poseideon,

Gamelion,  
 Anthesterion,  
 Elaphebolion,  
 Munychion,  
 Thargelion,  
 Seirophorion.

In the year of 13 months, the additional month was inserted after Poseideon, and called the second Poseideon.

The months consisted of 30 and 29 days alternately, and the short year in consequence contained 354 days, while the intercalary year had 384. The third year of the first Olympiad consisted of 13 months, and the first and fourth years of the second Olympiad were also intercalary; consequently in the first Olympiad there were 1,446 days, and in the second 1,476, making together 2,922, exactly equal to eight Julian years: this mode of intercalation would therefore precisely bring about the commencement of the ninth year to the same season, as that of the first year. But as the Olympic months followed the course of the moon, and 99 such months contained  $2,923\frac{1}{2}$  days, the moon was in consequence a day and a half in advance of the reckoning. The error was, however, allowed to accumulate until it reached three days, which was in four Olympiads, or sixteen years, to the last of which three days were added. This corrected the errors with respect to the moon, but it threw out the commencement of the year, as regarded the seasons, making it three days too late. No means were adopted to remedy this until the fortieth Olympiad, the last year of which was made to consist of 12 months only, instead of 13 as usual, and the forty-first Olympiad began with the same days of the moon and sun as the first had done 160 years before. By this reckoning, the year always began between the new and full moon before or after the summer solstice, though more commonly after; and it continued in use until 432 B.C. or fourth year of the eighty-sixth Olympiad, when the cycle of 19 years was invented by Meton. This astronomer found that the Attic months no longer followed the course of the moon, but that the new moon nearest the summer solstice, which should have been the first day of the 87th Olympiad, would actually take place on the 13th day of Seirophorion, in the 4th year of the 86th Olympiad. He therefore proposed to commence the 87th Olympiad from that day, and to adopt a new system of intercalation. He supposed 235 moons to be exactly equal to 19 solar years, and that in every period of 19 years, the new and full moons would recur regularly at the same seasons. Nineteen years of 12 moons each would contain 228 moons, and consequently 7 moons were to be added. These were inserted in the 3d, 5th, 8th, 11th, 13th, 16th, and 19 years. Instead also of making the months of 30 and 29 days alternately, he determined that each month should consist nominally of 30 days, but that every 63d day should be omitted in numbering. The third day of Boedromion, for example, was omitted in the first year, the 6th of Poseideon, and so on to the end of the nineteenth year, when the last exemptile day (the 3d of Thargelion) was retained, making that year to consist of 385 days. This cycle was in use above a century, but was not quite accurate; 19 solar years are equal to about 6,939 days, 14 hours and a half, and 235 lunations to 6,939 days, 16 hours and a half, or 2 hours more. In the year 330 B.C. this excess amounted to only 11 hours; but by the cycle of Meton, to above 52 hours, he having made 19 years equal to 6,940 days; when another astronomer, Calippus, having made several observations on the solstice, calculated that the excess made 1 day in 76 years. He, therefore, invented the cycle of 76 years, called from him the Calippian, which consisted of 27,759 days, exactly equal to 76 Julian years, but above 14 hours in excess of the true solar year. In this period were included 940 lunations, equal to  $27,758\frac{1}{2}$  days.

The system of Calippus began in the 8th year of the Metonic cycle (330 B.C.), and is frequently referred to as a date by Ptolemy. It is supposed that he altered the periods of inserting the intercalary months, but this is doubtful. The system of Calippus continued in use as long as the Olympiads were employed, and was exactly equal to the Julian, on an average of years.

To reduce the date by Olympiads to our era, multiply the past Olympiad by four, and add the odd years. Subtract the sum from 777 if before Christ, and subtract 776 from the sum if after Christ, the remainder will be the beginning of the given year; to decide on the exact day would be very difficult, on account of the alterations which the system has undergone. It will be, perhaps, sufficient to observe that the year begins within a fortnight of the middle of July.

#### THE CHRISTIAN ERA.

The Christian era, used by almost all Christian nations, dates from January 1st, in the middle of the fourth year of the 194th Olympiad, in the 753rd of the building of Rome, and 4714th of the Julian period. It was first introduced in the sixth century, but was not very generally employed for some centuries after.

The Christian year in its division follows exactly the Roman year, consisting of 365 days for three successive years, and of 366 in the fourth year, which is termed leap year. This computation subsisted for 1,000 years throughout Europe without alteration, and is still used by the followers of the Greek Church; other Christians have adopted a slight alteration, which will be shortly explained. The simplicity of this form has brought it into very general use, and it is customary for astronomers and chronologists, in treating of ancient times, to date back in the same order from its commencement. There is, unfortunately, a little ambiguity on this head, some persons reckoning the year immediately before the birth of Christ, as 1 B.C., and others noting it with 0, and the second year before Christ with 1, making always one less than those who use the former notation. The first is the most usual mode, and will be employed in all our computations.

The Christian year (or Julian year), arranged as we have shewn, was 11' 11" too long, amounting to a day in nearly 129 years; and towards the end of the sixteenth century, the time of celebrating the church festivals had advanced ten days beyond the periods fixed by the council of Nice in 325. It was in consequence ordered, by a Bull of Gregory XIII., that the year 1582 should consist of 355 days only, which was effected by omitting ten days in the month of October, viz., from the 5th to the 14th. And, to prevent the recurrence of a like irregularity, it was also ordered, that in three centuries out of four, the last year should be a common year, instead of a leap year, as it would have been by the Julian calendar. The year 1600 remained a leap year, but 1700, 1800, and 1900 were to be common years. This amended mode of computing was called the New Style, and was immediately adopted in all Catholic countries, while the Old Style continued to be employed by other Christians. Gradually the New Style was employed by Protestants also. The last ten days of 1699 were omitted by the Protestants of Germany, who, in consequence, began the year 1700 with the New Style; and in England the reformed calendar was adopted in the year 1752, by omitting eleven days, to which the difference between the styles then amounted. The alteration was effected in the month of September, the day which would have been the third being called the fourteenth. The Greeks and Russians still use the Old Style.

To turn the Old Style to the New,—

From the alteration of style to the 29th February, 1700, add 10 days.



From 1st March, 1700, to 29th February..... 1800, add 11 days.

" " 1800, " .. 1900, " 12 days.

" " 1900, " ..... 2100, " 13 days.

Examples :—17th March, 1801, O.S. is 29th March, 1801, N.S.

19th Feb., 1703, O.S. is 2nd March, 1703, N.S.

24th Dec., 1690, O.S. is 3rd Jan., 1691, N.S.

20th Dec., 1829, O.S. is 1st Jan., 1830, N.S.

There will sometimes be a difference of one year in a date, from the circumstance that, in many countries, the time of beginning the year has varied. In England, until the year 1752, the year was considered to begin on the 25th of March; any date, therefore, from the 1st of January to the 24th of March, will be a year too little. It had been the practice for many years preceding the change of style to write both years, by way of obviating mistakes, as 1st of February, 170 $\frac{1}{2}$  or 1707-8, meaning the year 1708 if begun in Jan., or 1707 if begun in March.

In some countries, Easter-day was the first day of the year, in others the 1st of March, and in others, again, Christmas-day; but no certain rule can be given, as even in the same nation different provinces followed a different custom. The day of the week is, however, frequently added in old dates, which will at once clear up the ambiguity, the day of the week answering to any given date.

All nations, at present using either the Old or New Style begin the year on the 1st of January.

The Creation has been adopted as an epoch by Christian and Jewish writers, and would have been found very convenient, by doing away with the difficulty and ambiguity of counting before and after any particular date, as is necessary when the era begins at a later period. But, unfortunately, writers are not agreed as to the precise time of commencing. We consider the Creation as taking place 4004 years B.C.; but there are about a hundred and forty different variations in this respect. The following are those that have been most generally used :—

#### THE ERA OF CONSTANTINOPLE.

In this era the Creation is placed 5508 years B.C. It was used by the Russians until the time of Peter the Great, and is still used in the Greek Church. The civil year begins the first of September, and the ecclesiastical towards the end of March: the day is not exactly determined.

To reduce it to our era, subtract 5508 years from January to August and 5509 from September to the end.

#### ERA OF ANTIOCH, AND ERA OF ALEXANDRIA.

We place these together, because, although they differed at their formation by 10 years, they afterwards coincided. They were both much in use by the early Christian writers attached to the churches of Antioch and Alexandria. In the computation of Alexandria, the Creation was considered to be 5502 years before Christ, and, in consequence, the year 1 A.D. was equal to 5503. This computation continued to the year 284 A.D., which was called 5786. In the next year (285 A.D.), which should have been 5787, ten years were discarded, and the date became 5777. This is still used by the Abyssinians.

The era of Antioch considered the Creation to be 5492 years before Christ; and therefore the year 285 A.D. was 5777. As this was equal to the date of Alexandria, the two eras, from this time, were considered as one.

Dates of the Alexandrian era are reduced to the Christian era by subtracting 5502 until the year 5786, and after that time by subtracting 5492.

In the era of Antioch 5492 are always subtracted.

#### THE ABYSSINIAN ERA.

The Abyssinians reckon their years from the Creation, which they place in the 5,493rd year before our era,<sup>1</sup> on the 29th of August, Old Style; and their dates will consequently exceed ours by 5492 years and 125 days. They have 12 months of 30 days each, and 5 days added at the end, called Pagomen, from the Greek word *παρομεναι*, added. Another day is added at the end of every fourth year. To know which year is leap year, divide the date by 4, and if 3 remain, the year will be leap year. It always precedes the Julian leap year by one year and four months. The following are names of the months, with their beginnings referred to the Old Style:—

Mascaram .....	29th August.	Miyazia .....	27th March.
Tekemt .....	28th September.	Genbot .....	26th April.
Hedar .....	28th October.	Sene .....	26th May.
Tahsas .....	27th November.	Hamle .....	25th June.
Ter .....	27th December.	Nahasse .....	25th July.
Yacatit .....	26th January.	Pagomen .....	24th August.
Magabit .....	25th February.		

To reduce Abyssinian time to the Julian year, subtract 5492 years and 125 days.

The Abyssinians also use the era of Martyrs, or Dioclesian, with the same months as in the above.

#### THE JEWISH ERA.

The Jews usually employed the era of the Seleucides until the fifteenth century, when a new mode of computing was adopted by them. Some insist strongly on the antiquity of their present era; but it is generally believed not to be more ancient than the century above named.

They date from the Creation, which they consider to have been 3760 years and 3 months before the commencement of our era. Their year is luni-solar, consisting either of 12 or 13 months each, and each month of 29 or 30 days. The civil year commences with or immediately after the new moon following the equinox of autumn. The months, with the number of days in each, are as follows:—

1 Tisri.....	30 days	(Veadar) .....	29 days
2 { Marchesvan .....	} 29 or 30	7 Nisan, or Abib.....	30
{ Chesvan or Bul ... }		8 Jyar, or Zius .....	29
3 Chisleu.....	29 or 30	9 Sivan .....	30
4 Thebet.....	29	10 Thammuz .....	29
5 Sebat .....	30	11 Ab .....	30
6 Adar.....	29	12 Elul.....	29

And in intercalary years, 30.

The month Veadar is omitted in years of 12 months.

The average length of the year of 12 months is 354 days; but, by varying the length of Marchesvan and Chisleu, it may consist of 353 or 355 days also. In the same manner, the year of 13 months may contain 383, 384, or 385 days. In 19 years, 12 years have 12 months each, and 7 years 13 months. The following table of 19 years will show the number of months in each year, as well as the first day of their year, reduced to the New Style: the first day will not always be quite accurate,

<sup>1</sup> The Abyssinians place the birth of Christ in the 5,500th year of the Creation, and consequently eight years after our era.

as certain lucky and unlucky days require the postponement of a day in some years. The year must be divided by 19, and the remainder will shew the year of the cycle. If there be no remainder, it is the nineteenth year.

YEAR OF THE CYCLE.		MONTHS.
The 1st begins about the 2nd of October, and consists of 12		
2nd	22nd of September	12
3rd	10th	13
4th	29th	12
5th	19th	12
6th	8th	13
7th	27th	12
8th	16th	13
9th	5th of October	12
10th	25th of September	12
11th	14th	13
12th	2nd of October	12
13th	21st of September	12
14th	10th	13
15th	29th	12
16th	18th	12
17th	7th	13
18th	25th	12
19th	14th	13

To reduce the Jewish time to ours, subtract 3761, and the remainder will show the year: the beginning of the year may be ascertained by the above table, and the months must be counted from that time.

Example—Required the 1st of Chisleu 5588.

5588	19)5588(294
3761	38
1827	178
	171
	78
	76
	2

The remainder shews the year 5588 to be the second of the cycle, and consequently to begin on the 22nd of September. The 1st of Chisleu will therefore be about the 20th of November, 1827.

The ecclesiastical year begins six months earlier, with the month of Nisan. Consequently, when the given year is ecclesiastical, deduct a year in the date from Nisan to Elul, inclusive.

The Jews frequently in their dates leave out the thousands, which they indicate by placing the letters לבק meaning לכתובתן "according to the lesser computation."

(It will be unnecessary to mention the various other epochs that have taken place from the Creation, as those detailed are the only ones that have been in general use.)

#### THE ERA OF NABONASSAR

received its name from that of a prince of Babylon, under whose reign astronomical studies were much advanced in Chaldæa. The years are vague, containing 365 days each, without intercalation. The first day of the era was Wednesday,<sup>1</sup> 26th February, 747 B.C.

<sup>1</sup> This is said, by mistake, to be Thursday, in 'L'Art de vérifier les Dates.'

To find the day of any Julian year on which the year of Nabonassar begins, subtract the given year, if before Christ, from 748, and, if after Christ, add it to 747. Divide the result by 4, omitting fractions, and subtract the quotient from 57 (*i.e.* the number of days, from January 1 to February 26). If the quotient exceed 57, add 365 as often as necessary, before subtraction. The remainder will be the day of the year given. The first result before the division by 4, increased by a unit for each 365 added to 57, will be the year of Nabonassar then beginning.

The day of the week on which the year of Nabonassar begins may be known by dividing by 7. If there be no remainder, the day will be Tuesday; if there be a remainder, the day placed below it in the following table will be the day required.

0	1	2	3	4	5	6
Tu.	W.	Th.	F.	Sa.	Su.	M.

As the above stated rule may be one day in error from the omission of fractions, it may be corrected by the help of this little table.

The year of Nabonassar being given, to find when it begins.

Rule.—Divide the year by 4: subtract the quotient from 57, adding 365, if necessary, as before; the remainder will be the number of days from the 1st of January.

The given year diminished as often as 365 has been added, will shew the number of Julian years from 747 *a.c.* If it be less than 748, subtract from that number, and the remainder will be the year before Christ: if equal, or more, subtract 747 from it, and the remainder will be the year after Christ.

#### THE EGYPTIAN ERA.

The old Egyptian year was identical with the era of Nabonassar, beginning on the 26th February, 747 *b.c.*, and consisting of 365 days only. It was reformed thirty years before Christ, at which period the commencement of the year had arrived, by continually receding, to the 29th August, which was determined to be in future the first day of the year. Their years and months coincide exactly with those of the era of Dioclesian.

It appears from a calculation, that in 30 *b.c.*, the year must have begun on the 31st of August; in which case we must suppose the reformation to have taken place eight years earlier: however that may be, it is certain that the 29th of August was the day adopted, and the number of the year one more than would have resulted from taking 747 as the commencement of the era.

To reduce to the Christian era, subtract 746 years 125 days.

The old Egyptian year was in use for above a century after Christ; the reformed year being at first used only by the Alexandrians.

#### THE JULIAN PERIOD

is a term of years produced by the multiplication of the lunar cycle 19, solar cycle 28, and Roman indiction 15. It consists of 7980 years, and began 4713 years before our era. It has been employed in computing time, to avoid the puzzling ambiguity attendant on reckoning any period antecedent to our era, an advantage which it has in common with the mundane eras used at different times.

By subtracting 4713 from the Julian period, our year is found. If before Christ, subtract the Julian period from 4714.

#### THE ERA OF DIOCLESIAN, CALLED ALSO THE ERA OF MARTYRS,

was much used by Christian writers until the introduction of the Christian era in the

sixth century, and is still employed by the Abyssinians and Copts. It dates from the day<sup>1</sup> when Dioclesian was proclaimed Emperor, at Chalcedon, 29th August, 284. It is called the Era of Martyrs, from the persecution of the Christians in the reign of Dioclesian. The year consists of 365 days, with an additional day every fourth year. Divide the date by 4, and if 3 remain the year is bissextile. It contains 12 months of 30 days each, with five additional in common years, and six in leap years.

The Coptic months are as follow, with the corresponding time according to the Julian Calendar.

COPTIC.	ARABIC.	COPTIC.	ARABIC.
Thoth .....	Tot .....	Phamenoth.....	Buramat .....
Paophi.....	Babe .....	Pharmouti.....	Barmude .....
Atbyr .....	Hatur.....	Pashons .....	Bashans .....
Cohiac .....	Kyak .....	Payni .....	Baune .....
Tybi.....	Tobe .....	Epiphi.....	Abib .....
Mesir .....	Mashir } .....	Mesori.....	Meshri.....
	Amshir } .....		

The additional days are called, by the modern Copts, Nisi in common years, and Kebus in leap years; by the ancient Copts Piabotnkuji, and in Arabic Biabotanquji.

The Abyssinian names are given under the head of Abyssinia.

To reduce the years of this era to those of the Christian, add 283 years 240 days.

When the Dioclesian year is the year after leap year, it begins one day later than usual, and in consequence one day must be added to the Christian year, from the 29th August to the end of the following February.

#### THE GREEKIAN ERA, OR ERA OF THE SELEUCIDES,

dates from the reign of Seleucus Nicator, 311 years and 4 months before Christ. It was used in Syria for many years, and frequently by the Jews until the 15th century, and by some Arabians to this day. The Syrian Greeks began their year about the commencement of September; other Syrians in October, and the Jews about the Autumnal Equinox. We shall not pretend to great accuracy in this era, the opinions of authors being very various as to its commencement.

It is used in the book of the Maccabees, and appears to have begun with Nisan,

Their year was solar, and consisted of 365 days, with the addition of a day every fourth year.

To reduce it to our era, supposing it to begin 1st September, 312 B.C., subtract 311 years and four months.

The following are the months used by the Greeks and Syrians, with the corresponding Roman months.

SYRIAN.	MACEDONIAN.	ENGLISH.
Elul .....	Gorpiaeus.....	September.
Tishrin I.....	Hyperberetæus .....	October.
Tishrin II.....	Dius .....	November.
Canun I.....	Apellæus.....	December.
Canun II.....	Audynæus .....	January.
Shubat .....	Peritius .....	February.
Adar.....	Dystrius .....	March.
Nisan.....	Xanticus.....	April.
Ayar.....	Artemisius .....	May.
Haziran.....	Dæsius .....	June.
Tamus .....	Panæmus .....	July.
Ab .....	Lous .....	August.

<sup>1</sup> Dioclesian was not in reality proclaimed until some months after this time.

## THE DEATH OF ALEXANDER THE GREAT

dates from the 12th of November, 324 B.C.,<sup>1</sup> on which day the 425th year of Nabonassar began. This era was computed by years of 365 days, with a leap year of 366 every four years, like the Julian year. The months were of 30 days each, with 5 additional. To compute it, deduct 323 from the given year, and the remainder will be the year of the Christian era. If before Christ deduct the year from 324.

## THE ERA OF TYRE

began the 19th of October, 125 B.C., with the month Hyperberetæus. The months were the same as those used in the Grecian era. The year is similar to the Julian.

To reduce it to our era, subtract 124; and if the given year be less than 125, deduct it from 125, and the remainder will be the year before Christ.

## THE CESAEREAN ERA OF ANTIOCH

was used, in Syria, by Greeks and Syrians. The months are the same as those given under the Grecian era. The Greeks began with Gorpiaëus, in the year 49 B.C., and the Syrians with Tishrin I. of 48 B.C.

## THE ERA OF ABRAHAM

is used by Eusebius, and begins the 1st of October, 2016 B.C. To reduce this to the Christian era, subtract 2016 years 3 months, and the remainder will be the year and month.

## THE SPANISH ERA, OR ERA OF THE CÆSARS,

is reckoned from 1st of January, 38 years B.C., being the year following the conquest of Spain by Augustus; it was much used in Africa, Spain, and the South of France. By a Synod held in 1180, its use was abolished in all the churches dependent on Barcelona. Pedro IV. of Arragon abolished the use of it in his dominions in 1550. John I. of Castile did the same in 1382. It continued to be used in Portugal until 1455.

The months and days of this era are identical with those of the Julian Calendar; and, consequently, to turn this time into that of our era, we have only to subtract 38 from the year. Thus the Spanish year 750 is equal to the Julian 712. If the year be before the Christian era, subtract it from 39.

## THE ERA OF YEZDEGIRD III., OR THE PERSIAN ERA,

was formerly universally adopted in Persia, and is still used by the Parsees in India, and by the Arabs, in certain computations. This era began on the 16th of June, A.D. 632. The year consisted of 365 days only, and therefore its commencement, like that of the old Egyptian and Armenian year, anticipated the Julian year by one day in every four years. This difference amounted to nearly 112 days in the year 1075, when it was reformed by Jelaledin, who ordered that in future the Persian year should receive an additional day whenever it should appear necessary to postpone the commencement of the following year, that it might occur on the day of the sun's passing the same degree of the ecliptic. This took place generally once in four years; but,

<sup>1</sup> This would be more accurately 323 B.C., but the above date is more usually adopted.

after seven or eight intercalations, it was postponed for a year. It will be observed that such an arrangement must be perfect, and that this calendar could never require reformation; but it has the inconvenience of making it very difficult to determine beforehand the length of any given year, as well as that of causing a difference occasionally in the computation of persons living under different meridians; those living towards the east sometimes beginning their year a day after others more westwardly situate; the sun rising in the old sign to those in the former situation, who consequently continued in the old year another day; while the others, having their sun rise in the new sign, began a new year. The present practice of the Parsees in India varies in different provinces, some beginning the year in September, and others in October. The months are as follows: they have each thirty days, and the intercalation of five or six days occurs at the end of Aban.

Ferwardin,	Merdad,	Ader,
Ardibehisht,	Sheriur,	Dei,
Khurdad,	Meher,	Behmen,
Tir,	Aban,	Ispendarmez.

To reduce this era to the Christian year, add 630 to the given year, and the sum will be the year of our era in which the year begins, according to the practice of the Parsees.

Every day of the Persian month has a different name.

#### THE ERA OF THE ARMENIANS.

The Armenians began their era on Tuesday, the 9th of July, A.D. 552. Their year consists of 365 days only, and therefore anticipates the Julian one day in every four years.

To know the day of the week on which the Armenian year begins, divide the year by 7; if there be no remainder, the year begins on a Monday; if there be a remainder, the day put under it in this table will be the first of the year.

0	1	2	3	4	5	6
M	Tu.	W.	Th.	F.	Sa.	Su.

To reduce the Armenian year to the Julian, divide the given date by 4, and subtract the quotient from 191, adding 365 to 191 if necessary; the remainder will be the days from the beginning of the Julian year, and the Armenian date (diminished by 1, if 365 has been added to 191) added to 551, will give the Christian year.

The Armenian ecclesiastical year begins on the 11th of August, and has an additional day at the end of every fourth year; and consequently coincides in division with the Julian year.

To reduce ecclesiastical Armenian years to our time, add 551 years and 222 days.

In leap years, subtract one day from March 1 to August 10.

NOTE.—The Armenians frequently use the old Julian style and months in their correspondence with Europeans.

#### THE FRENCH REVOLUTIONARY CALENDAR.

In the year 1792, the French nation, in their excessive desire to change all existing institutions, determined on the adoption of a new calendar, founded on philosophical principles. But as they were unable to produce any plan more accurate and convenient than that which was previously in use, they were contented to follow the old plan under a different name, merely changing some of the minor details and subdivisions, and commencing the year at a different time.

The first year of the era of the Republic began on the 22nd of September, 1792, *n.s.*, the day of the autumnal equinox. There were twelve months in each year of thirty days each, and five additional days at the end, celebrated as festivals. The fourth year was a leap year, called by the French an Olympic year. The months and additional festivals were as follow :—

Vendémiaire began 22 Sep.	Germinal began 21 March.
Brumaire ..... 22 Oct.	Floréal..... 20 April.
Frimaire..... 21 Nov.	Prairial ..... 20 May.
Nivôse ..... 21 Dec.	Messidor..... 19 June.
Pluviôse ..... 20 Jan.	Thermidor ..... 19 July.
Ventôse ..... 19 Feb.	Fructidor ..... 18 August
Festival of Virtue, 17 Sep.	Festival of Opinion, 20 Sept.
„ Genius, 18 „	„ Rewards, 21 „
„ Labour, 19 „	

In Olympic years, from the 11th Ventôse (which was on the 29th of February) to the end of the year, each day answered to one day earlier than in other years; thus Germinal began on the 20th of March.

The months were divided into decades of ten days each, instead of weeks. These were the names of their days.

Primidi,	Quintidi,	Octodi,
Duodi,	Sextidi.	Novidi,
Tridi,	Septidi,	Decadi.
Quartidi,		

As this plan lasted so short a time, it will take less space to insert a table of years corresponding with the Christian era, than to give a rule for the deduction of one era from another.

1 1792-3	8 1799-1800
2 1793-4	9 1800-1801
3 1794-5	10 1801-2
4 1795-6	11 1802-3
5 1796-7	12 1803-4
6 1797-8	13 1804-5
7 1798-9	14 1805-6

#### THE MAHOMETAN ERA, OR ERA OF THE HEGIRA.

dates from the flight of Mahomet to Medina, which took place in the night of Thursday, the 15th July, *A.D.* 622. The era commences on the following day, viz. the 16th July. Many chronologists have computed this era from the 15th of July, but Cante-mir has given examples, proving that, in most ancient times, the 16th was the first day of the era; and now there can be no question that such is the practice of Mahometans. The year is purely lunar, consisting of twelve months, each month commencing with the appearance of the new moon, without any intercalation to bring the commencement of the year to the same season. It is obvious that, by such an arrangement, every year will begin much earlier in the season than the preceding, being now in summer, and, in the course of sixteen years, in the winter. Such a mode of reckoning, so much at variance with the order of nature, could scarcely have been in use beyond the pastoral and semi-barbarous nation by whom it was adopted, without the powerful aid of fanaticism; and even that has not been able to prevent the use of other methods by learned men in their computations, and by governments in the collection of revenue. It will also be remarked that, as the Mahometans begin each month with the appearance of the new moon, a few cloudy days might retard the commencement of a month, making the preceding month longer than usual. This, in



fact, is the case, and two parts of the same country will sometimes differ a day in consequence; although the clear skies of those countries where Islamism prevails, rarely occasion much inconvenience on this head. But in chronology and history, as well as in all documents, they use months of thirty and twenty-nine days, alternately, making the year thus to consist of 354 days: eleven times in thirty years, one day is added to the last month, making 355 days in that year. Consequently, the average length of a year is taken at  $354\frac{11}{30}$  days, the twelfth of which is  $29\frac{11}{300}$ , differing from the true lunation very little more than three seconds, which will not amount to a day in less than 2260 years, a degree of exactness which could not have been attained without long continued observations.

The intercalary year of 355 days occurs on the second, fifth, seventh, tenth, thirteenth, fifteenth, eighteenth, twenty-first, twenty-fourth, twenty-sixth, and twenty-ninth years of every thirty years. Any year being given, to know whether it be intercalary or not, divide by thirty, and if either of the above numbers remain, the year will be one of 355 days.

The names of the months, as used by the Turks, with the length of each, are as follow:—

Moharem.....	30	Regeb.....	30
Saphar .....	29	Shaban .....	29
Rabi' I.....	30	Ramadan .....	30
Rabi' II.....	29	Shawall.....	29
Jomadhi I.....	30	Dhu'l kadah.....	30
Jomadhi II.....	29	Dhu'l hajjah.....	29

And in intercalary 30 days.

They have weeks of seven days, named as follow:—

TURKS.	PERSIANS.	INDIANS.	ANC. ARABIC.	MOD. ARABIC.
Su. Pazar gun.....	Yekshambe.....	Etwar .....	Bawal .....	Yom ahad.
M. Pazar ertesi....	Doshambe.....	Peer or Somwah	Bahun.....	Yom Thona.
Tu. Sale.....	Sishambe.....	Mungul.....	Jebar.....	Yem tulta.
W. Charshambe....	Charshambe....	Boodh.....	Dabar.....	Yom arba.
Th. Pershambe.....	Panjshambe....	Jumerat.....	Femunes.....	Yom hamsa.
F. Juma .....	Juma or Adina..	Juma .....	Aruba.....	Juma.
Sa. Juma ertesi....	Shambe or Hafta	Sunneecher....	Shiyar.....	Sabt.

#### THE CHINESE,

like all the nations of the north-east of Asia, reckon their time by cycles of 60 years; instead of numbering them as we do, they give a different name to every year in the cycle. As all those nations follow the same system, we shall detail it here more particularly. They have two series of words, one of ten, and the other of twelve words; a combination of the first words in both orders is the name of the first year; the next in each series are taken for the second year; and so to the tenth: in the eleventh year, the series of ten being exhausted, they begin again with the first, combining it with the eleventh of the second series; in the twelfth year, the second word of the first series is combined with the twelfth of the second; for the thirteenth year, the combination of the third word of the first list with the first of the second list is taken, that list also being now exhausted. To make this clearer, we shall designate

the series of ten by the Roman letters, that of twelve by the italics, and the whole cycle of 60 will stand thus.

1 <i>a a</i>	16 <i>f d</i>	31 <i>a g</i>	46 <i>f k</i>
2 <i>b b</i>	17 <i>g e</i>	32 <i>b h</i>	47 <i>g l</i>
3 <i>c c</i>	18 <i>h f</i>	33 <i>c i</i>	48 <i>h m</i>
4 <i>d d</i>	19 <i>i g</i>	34 <i>d k</i>	49 <i>i a</i>
5 <i>e e</i>	20 <i>k h</i>	35 <i>e l</i>	50 <i>k b</i>
6 <i>f f</i>	21 <i>a i</i>	36 <i>f m</i>	51 <i>a c</i>
7 <i>g g</i>	22 <i>b k</i>	37 <i>g a</i>	52 <i>b d</i>
8 <i>h h</i>	23 <i>c l</i>	38 <i>h b</i>	53 <i>c e</i>
9 <i>i i</i>	24 <i>d m</i>	39 <i>i c</i>	54 <i>d f</i>
10 <i>k k</i>	25 <i>e a</i>	40 <i>k d</i>	55 <i>e g</i>
11 <i>a l</i>	26 <i>f b</i>	41 <i>a e</i>	56 <i>f h</i>
12 <i>b m</i>	27 <i>g c</i>	42 <i>b f</i>	57 <i>g i</i>
13 <i>c a</i>	28 <i>h d</i>	43 <i>c g</i>	58 <i>h k</i>
14 <i>d b</i>	29 <i>i e</i>	44 <i>d h</i>	59 <i>i l</i>
15 <i>e c</i>	30 <i>k f</i>	45 <i>e i</i>	60 <i>k m</i>

The series of 10 is designated in China by the name of *téen kan*, or celestial signs. Their names are—1, *kca*; 2, *yih*; 3, *ping*; 4, *ting*; 5, *woo*; 6, *ke*; 7, *kang*; 8, *sin*; 9, *jín*; 10, *kwey*.

The series of 12 are the horary characters, and are named *teche*, terrestrial signs. Their names are—1, *toze*; 2, *chow*; 3, *yin*; 4, *maou*; 5, *shin*; 6, *sze*; 7, *woo*; 8, *we*; 9, *shin*; 10, *yaw*; 11, *scö*; 12, *hac*.

These characters being substituted for their equivalent letters in the cycle, will show the Chinese name of every year; for example, *kia tzse* is the first year; *kang yin*, the 27th.

The Chinese months are lunar, of 29 and 30 days each. Their years have ordinarily 12 months, but a thirteenth is added whenever there are two new moons while the sun is one sign of the Zodiac. This will occur seven times in nineteen years.

The boasted knowledge of the Chinese in astronomy has not been sufficient to enable them to compute their time correctly. In 1290 A.D., the Arab Jemaleddin composed a calendar for them, which remained in use until the time of the Jesuit Adam Schaal, who was the director of their calendar until 1664. It then remained for five years in the hands of the natives, who so deranged it, that when it was again submitted to the direction of the Christians, it was found necessary to expunge a month to bring the commencement of the year to the proper season. It has since that time been almost constantly under the care of Christians.

The first cycle, according to the Romish Missionaries, began February 2397 n.c.<sup>1</sup> We are now, therefore, in the 71st cycle, the 27th of which will begin in 1830. To find out the Chinese time, multiply the eclipsed cycle by 60, and add the odd years; then, if the time be before Christ, subtract the sum from 2398; but if after Christ, subtract 2397 from it; the remainder will be the year required.

The Chinese frequently date from the year of the reigning sovereign, and in that case there is no way of having the corresponding date but by a list of Emperors. We subjoin a list of those who have reigned for the last two centuries.

<sup>1</sup> Dr. Morrison carries it back to the 61st year of Hwang-te, 2596 n.c., making the present year to fall in the 74th cycle; but, according to the celebrated historian Choo-foo-tze, Hwang-te reigned about 2700 n.c., making 75½ cycles from that period, which is, probably, more correct than either of the above statements.

## TARTAR DYNASTY.

He-tsung began to reign A.D.....	1616.
Chwang-lëë .....	1627.
Shun-che.....	1644.
Kang-he .....	1662.
Yung-ching .....	1723.
Këen-lung .....	1736.
Kea-king .....	1796.
Taou-kwang .....	1821, now Emperor.

## THE JAPANESE

have a cycle of 60 years, like that of the Chinese, formed by a combination of words of two series. The series of ten is formed of the names of the elements, of which the Japanese reckon five, doubled by the addition of the masculine and feminine endings, *je* and *to*.

1	kino-je	} wood.
2	kino-to,	
3	fino-je	} fire.
4	fino-to	
5	tsutsno-je,	} earth.
6	tsutsno-to,	
7	kanno-je,	} metal.
8	kanno-to,	
9	midsno-je,	} water.
10	midsno-to,	

The series of 12 is made up of the signs of the Zodiac.

1	ne, rat.
2	oos, ox.
3	torra, tiger.
4	ov, hare.
5	tats, dragon.
6	mi, serpent.
7	ooma, horse.
8	tsitsuse, sheep.
9	sar, ape.
10	torri, hen.
11	in, dog.
12	y, hog.

By substituting these words for the letters in the cycle, under the head of China, the Japanese names are found. Thus, the first year of the cycle is called *kino-je ne*, the 35th, *tsutsno-je in*, and so on. The cycles coincide with those of the Chinese; but a name is given to them instead of numbering them. Their years begin in February, and are luni-solar, of 12 and 13 months, with the intercalation as before mentioned under the head of China. The first cycle is said to begin 660 B.C.; but this cannot be correct, unless some alteration has taken place, as the Chinese cycle then began 657 B.C. We know, however, too little of Japan to pronounce positively respecting it; but thus far it is certain, that the cycle now coincides with that of the Chinese.

To an article of this nature, it may not be thought superfluous to append a slight notice of the manner in which some of the aboriginal tribes of America reckoned their time, before its discovery by the natives of Europe. The science of astronomy seems to have advanced there to a much greater extent than is commonly imagined. The extraordinary accuracy of the Mexicans in their computations, surpassing that of the Europeans of their time, cannot be accounted for otherwise than by the supposition that they had derived it from some people more civilized than themselves; and would appear incredible, if not well attested by Spanish authors of the fifteenth century, as well as by many hieroglyphic almanacs yet remaining, of undoubted antiquity. The Peruvians and Muyscas had lunar years of great accuracy also; but this is less surprising, as the phases of the moon are sufficiently visible to the eye, and their returns frequent. We shall detail that of the Mexicans only.

The year of the Mexicans consisted of 365 days; it was composed of eighteen

months of twenty days each, and five additional, called *nemontemi*, or void. At the end of a cycle of fifty-two years, thirteen days were added; and at the end of another cycle, twelve days, and so on alternately, making an addition of twenty-five days in 104 years. This made the mean year to consist of 365 days, 5 hours, 46 minutes,  $9\frac{2}{3}$  seconds, being only  $2' 39\frac{10}{13}''$  shorter than the truth. As the wanton destruction of the Mexican monuments and hieroglyphic records by their cruel and barbarous conquerors has left little to study, and the extermination of the Mexicans of superior order has done away with their system, we shall not detail the names of their months and particulars of their cycles, which afford striking coincidences with those of the Tartars, Japanese, etc. We shall only add that their first cycle began in the month of January, A.D. 1090.

## INDIAN CHRONOLOGY.

Having completed, in the foregoing extract, a general and condensed account of the eras in use among other nations, we proceed to enter a little more into detail upon the peculiar chronological systems of the natives of India, drawing our information chiefly from Col. Warren's '*Kāla Sankalita*.'

There are a great variety of eras in use in different parts of India, but all may be classified under four general heads, according to the mode of expressing or of subdividing the year; and in this way it is proposed to notice them: namely, first, those which are founded on the sidereal divisions of the months; secondly, those which follow the intricate and peculiar luni-solar computations; thirdly, those reckoned by cycles, and in which the years are generally distinguished by names, a system which spread from India into Tibet, and was long before used in China and Japan; and fourthly, those derived essentially from the Muhammadan era, though they have since followed the ordinary reckoning of the country. The Hijra era itself is also universally employed by the Musalmāns of India, but there will be no occasion to add to the description already given of this purely lunar year.

The present section will be confined to an account of the construction of the year by each system; the modes of comparison and the application of the tables being reserved for separate explanation.

### I.—SOLAR OR SIDEREAL YEAR.

The Hindú Solar Year, as it is improperly called, is strictly sidereal; it contains that space of time during which the sun, departing from a given star, returns to the same in his apparent revolution through the zodiac. In the most ancient period of their astronomy,

before the introduction of the solar zodiac, the pandits placed the beginning of the year at the entrance of the sun into Aświnī, the first of the twenty-seven Nakshatras, or mansions of the fixed lunar zodiac. The solar zodiac was afterwards formed from the lunar one, about the year 1181 B.C. according to Bentley; the names of the months being taken from those of the lunar mansions in which the moon happened to be full in the year of its invention.

Bentley supposes that a lunar cycle, or luni-solar period, was about the same time discovered, there having been 3056 lunations in 247 years *and one month*, which caused the initial month of the year to change its name every 247 years; the first had been Aświna, the second became Kārtika, etc., so that the date of an ancient author's writing may be roughly ascertained, should he happen to mention the name of the commencing month of the year. The following is a useful table of these lunar periods, which lasted until the year 538 A.D.<sup>1</sup>

PERIODS.	BEGAN.	MONTHS.	LUNAR ASTERISM COINCIDING.
1.....	1 Sept. 1192 B.C...	1 Aświna .....	Chaitra.
2.....	1 Oct. 945 „ ...	1 Kārtika .....	Vaiśākha.
3.....	29 „ 698 „ ...	1 Agrahāyana. <sup>2</sup>	Jyeshṭha.
4.....	27 Nov. 451 „ ...	1 Pausha .....	P. Ashādha.
5.....	25 Dec. 204 „ ...	1 Māgha .....	Śrāvana.
6.....	23 Jan. 44 A.D...	1 Phālguna ...	Śatabhisha.
7.....	21 Feb. 291 „ ...	1 Chaitra .....	Bhādrapada.
8.....	22 Mar. 538 „ ...	1 Vaiśākha ...	Aświnī.

The adoption of the fixed sidereal zodiac of twelve signs is ascribed by Bentley with tolerable certainty (from the position of the equinoctial colure and the minimum errors of the 'Brahma-Siddhānta' tables) to this latter epoch; whence Vaiśākha has continued to be the initial month of the solar year to the present time. This month corresponds with the sign Mesha or Aries of the fixed solar Hindū ecliptic.<sup>3</sup>

The Hindūs divide the year into six seasons (*ritu*), of two sidereal months each, the succession of which is always the same; but the vicissitudes of climate in them will depend on the position of the equinoctial colure.

<sup>1</sup> It is necessary to allude to this lunar division to show how Vaiśākha came eventually to be the first month of the solar year.

<sup>2</sup> Bentley supposes the former name of this month, Mārgasirsha, to have been changed at this period, to denote its now commencing the year.

<sup>3</sup> According to the Hindū authorities, the year in which the zodiac was adjusted, or when the solar and sidereal zodiacs agreed, and there was no '*ain-i anahd* or precession, was in 969, A.D.

TABLE I.—*The order and names in the Sanskrit, Hindi, and Tamil languages, of the signs, months, and lunar mansions.*

SEASONS.	SIGNS.	NAMES OF MONTHS.			Tamil Seasons.	Nakshatras or Lunar Mansions as they corresponded in 1102 B.C.
		Sanskrit and Bengali.	Urdú.	Tamil.		Sanskrit.
1. Vasanta,	12 ✕	Chaitra,	Chait,	Punguni,	Si.	14 Chaitra.
	1 ♀	Vaiśākha,	Baisākḥ,	Chaitram,	V.	15 Svāti.
2. Grishma,	2 ♂	Jyeshṭha,	Jeth.	Vyascei,		16 Vaisākha.
	3 ♀	Aśāḍha,	Asāph,	Auni,	G.	17 Anurādhā.
3. Varsha,	4 ☿	Srāvaṇa,	Sāwan,	Audi,		18 Jyeshtha.
	5 ♀	Bhādra,	Bhādon,	Auvani,	V.	19 Neritī.
4. Śarada,	6 ♂	Aświna,	Aśan,	Paratasi,		20 Purva Ashārha.
	7 ♀	Kārtika,	Kārtik,	Arpesi.	Sa.	(Abhijit afterwards struck out).
5. Hemanta,	8 ♀	Mārgaśīrsha or Agrahayana	Aghan,	Kartiga,		21 Uttara Ashārha.
	9 ♀	Pausha,	Pūs,	Margali,	II.	22 Śrāvana.
6. Śiśira,	10 ♀	Māgha,	Māgh,	Tye,		23 Śravishta.
	11 ☿	Phālguna,	Phāgun,	Maussi,	Si.	24 Satabhisha.
	12 ☿	Kumbha,				25 P. Bhādrapada.
						26 U. Bhādrapada.
						27 Revati.
						1 Aświni.
						2 Bharaṇi.
						3 Kritika.
						4 Rohini.
						5 Mṛgaśīrṣas.
						6 Ardra.
						7 Punarvāsa.
						8 Pushya.
						9 Aśleṣha.
						10 Māgha.
						11 P. Phālguni.
						12 U. Phālguni.
						13 Hasta.

The Hindús employ the several following modes of considering the duration of the day :

1. The *Sávan*, or natural day, is the time between two consecutive sun-risings; therefore, this day is of variable duration. Its subdivisions are 60 *dhatas*, of 60 *vinadikas*, of 60 *vipalas*.

2. The *Saura*, or solar day, is the time during which the sun describes one degree of the ecliptic; consequently, longer or shorter as the sun is near the apogee or perigee: it is divided into 60 *dandas* (or *kalas*) of 60 *vikalas* each.

3. The *Nakshatra* day is the true sidereal day, being the time between the same point of the ecliptic rising twice. These are equal throughout the year, and are used in all computations. They are divided into *gharīs* and *palas* (called *vighadīs* in the south), following always the same convenient sexagesimal division. The *pala* is again divided into six *prānas* or 'respirations'; but the '*Sūrya-Siddhānta*' and all astronomical works continue the subdivision by 60 throughout, thus :—

60 <i>kshanas</i>	= 1 <i>lava</i> .
60 <i>lavas</i>	= 1 <i>nimesha</i> .
60 <i>nimeshas</i>	= 1 <i>kāstha</i> .
60 <i>kāsthas</i>	= 1 <i>atipala</i> .
60 <i>atipalas</i>	= 1 <i>vipala</i> = 0.4 second, English.
60 <i>vipalas</i>	= 1 <i>pala</i> = 24 " "
60 <i>palas</i>	= 1 <i>danda</i> = 24 minutes "
60 <i>dandas</i>	= 1 <i>dina</i> or 1 'day' and night.
60 <i>dinas</i>	= 1 <i>ritu</i> or 'season.'

4. The lunar day, or *tithi*, is the 30th part of a lunation, and will be spoken of hereafter: it is used in astrological reckoning.

The division into weeks is also used, and the names of the days are derived from the planets, in precisely the same order as those of Europe.

TABLE II.—*Days of the week, with their synonyms in some other languages.*

ENGLISH.	HINDI.	SINGHALESE.	TIBETAN.	BURMESE.
☉ Sunday ...	Ravi-vār .....	Eri-dā .....	Gyah nyi-ma ...	Tanang-ganvé.
☾ Monday ...	Som-vār .....	Sa-du-dā .....	„ zlu-va ..	Tanang-lā.
☿ Tuesday ...	Mangal-vār ...	Ang-gahanuvā-dā...	„ mig-amar	Ang-gá.
♀ Wednesday	Budh-vār .....	Ba-dā-dā .....	„ thag-pu ..	Buddha-há.
♃ Thursday ...	{ Vrihaspat-vār } or Guru-vār	Bra-has-pa-ting-dā	„ phur-bu ..	Kyáa-padé.
♀ Friday .....	Sukra-vār .....	Si-ku-rá-dā .....	„ pa-sangs.	Sok-kyá.
♄ Saturday ...	{ Sanichar, or } Sani-vār ...	Sena-su-rá-dā .....	„ spén-pa...	Cha-né.

(They have already been given in Persian, Hindústání, etc., in page 145.)

Each month contains as many days and parts of a day as the sun endures in each sign; the *civil* differing from the *astronomical* account only from its rejecting fractions of days; each civil year and month being accounted to begin at *sunrise*, instead of at the exact time of the sun's entrance into the respective signs on the strict astronomical computation. If the fraction exceeds 30 *gharís* (half a Hindú day), then the civil year or month is accounted to begin one day later than the astronomical.

The portion of time assigned to each month further depends on the difference of time calculated for the passage of the sun through the northern and southern signs of the ecliptic, the time for the former being 186d. 21h. 38m. 24s., and for the latter, 178d. 8h. 34m. 6s.; the odd hours and minutes of which are applied to the beginnings of the year and months. The effect on civil reckoning is to produce differences in the relative lengths of the months of one or even two days more, or one day less, and to bring about a bissextile year of 366 days, as nearly as possible once in four years.

The unfixed lengths of the civil months renders it impossible to find the precise day corresponding to any other era, excepting by having

recourse to a calculation of the day of the week on which the Hindú civil month in question commenced, which, however, with the aid of the tables provided in Warren's excellent work from the bráhmancial formulæ, becomes a very simple problem. The order of the days having remained invariable since they first received their names, if any duration of years be multiplied by the mean length of the year, and the result in days be divided by seven, the remainder will necessarily shew the day of the week (counting from the epoch or initial day<sup>1</sup>), on which the period terminates.

Tables of roots, or moments at which particular epochs commence, such as centuries, will serve to facilitate this calculation, which, in fact, renders the system of the Hindú year more simple in expounding than those of the West, which are liable to secular variations.

A table of roots, as they are called, may in like manner be prepared for the durations of the months singly and collectively, so that by simple addition (rejecting sevens) the initial day of the required Hindú civil month may be accurately found. The dominical letter furnishes the same means of finding the day for any European date, and any two approximate dates may be thus brought to correspond precisely by the intervention of the weekly *feriæ*. Further explanation and examples of this process will be found in the pages of Calendric Scales, which we shall presently introduce for the purpose of simplifying the transposition of dates from one calendar to another.

It is impossible to enter into further particulars of the formation of the Hindú year without considerable knowledge of their astronomy; but it may be as well to state, that all the calculations of their books depend upon the hypothesis of four grand periods, comprising together 4,320,000,000 years, called a 'Mahá-Yug,' or great epoch of the conjunction of the planets in the beginning of the Hindú zodiac.

The four divisions of the 'Mahá-Yug' are called the 'Satya-yug,' the 'Tretá-yug,' the 'Dwápara-yug,' and the 'Kali-yug,' which latter commenced in March 3102 B.C., and is still current. All astronomical calculations start from this epoch, using the mean motions prescribed, which, by the nature of the system, are all whole numbers, although they vary in different authors, as the progress of observation suggested corrections. The three principal systems are set forth in the 'Brahma-' 'Súrya-' and 'Árya-' 'Siddhántas,' which Bentley has proved to have been framed respectively about the years 638, 1068, and 1322, A.D. The year by the 'Súrya-Siddhánta' consists of 365d. 15g. 31v. 31p. 24a., and by the 'Árya-Siddhánta,' 365d. 15g. 31v. 15p., which, expressed

<sup>1</sup> This, for the commencement of the Kali-yug, is Friday in the 'Súrya-Siddhánta.' In the epochs used in the 'Árya-Siddhánta,' it is Sunday.



in the European method, will be 365d. 6h. 12m. 36s. 34f.; and 365d. 6h. 12m. 30s. respectively. The latter is employed in the south of India: it differs from the Gregorian reckoning one day in sixty years, the amount of the equinoctial precession. The following table gives a general view of the planetary system according to the above authorities, and that of the 'Parásara-Siddhānta,' another authority supposed by Bentley to be nearly coeval with that of Aya Bhut.

TABLE III.—*General view of the different Hindú Planetary Systems.*

Revolutions of	'Brahma-Siddhānta.'	'Sūrya-Siddhānta.'	'Ārya-Siddhānta.'	'Parásara-Siddhānta.'
The sun....	4,320,000,000	4,320,000,000	4,320,000,000	4,320,000,000
The moon..	57,753,300,000	57,753,336,000	57,753,334,000	57,753,334,114
Mercury...	17,936,998,984	17,937,024,000	17,937,054,671	17,937,055,474
Venus.....	7,022,389,492	7,022,376,000	7,022,371,432	7,022,372,148
Mars.....	2,296,828,522	2,296,832,000	2,296,831,000	2,296,833,037
Jupiter....	364,226,455	364,220,000	364,219,682	364,219,954
Saturn.....	146,567,298	146,568,000	146,569,000	146,571,813
Equinoxes.	199,669	600,000	578,159	581,709
No. of days	1,577,916,450,000	1,577,917,828,000	1,577,917,542,000	1,577,917,570,000
Apsides—				
Sun.....	480	387	461	480
Moon....	488,105,858	488,203,000	488,108,674	488,104,634
Mercury..	332	386	339	356
Venus....	653	535	658	526
Mars.....	292	204	299	327
Jupiter...	855	900	830	982
Saturn...	41	39	36	54
Nodes, (retrograde)				
Moon....	232,311,168	232,238,000	232,313,354	232,313,235
Mercury..	511	488	524	648
Venus...	893	903	947	893
Mars.....	267	214	298	245
Jupiter...	63	174	96	190
Saturn...	584	662	620	630
Revolutions of the Rishis in an exclusive epicycle,			1,599,998	1,599,998

To find the number of lunations, deduct the sun's revolutions from those of the moon, the remainder is the number sought. The mean annual motion of a planet is found by dividing its revolutions by 4,320,000,000, and their mean places at any epoch of the Kali-Yug ( $k$ ) by the common rule of three, as, 4,320,000,000 : revolutions in a Mahá-kalpa :  $k$  : even revolutions and fraction, the latter to be converted into longitude on the Hindú ecliptic.

## ERAS DEPENDENT ON THE SOLAR YEAR.

The Hindú solar or sidereal year is used in India, south of the Nar-

bada, in Bombay, in Bengal, in Tirhút, and Nipál. The two principal eras in use are: 1. The Kali-Yug, dated, as before stated, from the equinox of March, 3102 B.C.; 2. The 'Śáka,' dating from the birth of Śáliváhana, a mythological prince of the Dakhan, who opposed Vikramáditya, the Rája of Ujjáyiní.

This era, called 'Śáka,' (a word of the same import,) commences on the 1st Baisákh, 3179, K.Y., which fell on Monday, 14th March, 78, A.D. Julian style. Several other styles seem to be connected in origin with it:

The Śáka of Bengal, as above ..... = 78 A.D. = 3179 K.Y.

The Burmese epoch, used at Prome..... = 79 A.D. = 3180 K.Y.

The Aji Śáka, used in Java..... = 74 A.D. = 3175 K.Y.

The Bali year       "       ..... = 81 A.D. = 3182 K.Y.

The Bengálí San, and the Viláyatí year of Orissa, etc., will be hereafter mentioned under the fourth division.

## II.—HINDU LUNI-SOLAR YEAR.

The circumstances of the Indian luni-solar year differ from every other mode of dividing and recording time that has been employed in ancient or modern times. Some similarity had been remarked, in the secular omission of a month, to the Chaldean system; and, at a particular period, the common intercalations concurred with those of the lunar cycle of Meton, which led the learned to imagine them derived from the same source; but Warren has proved from a minute analysis of the Hindú 'Chandra-Mána,' that it has no further similitude to other systems than its dependence on the moon's motions must naturally induce.

The ordinary year, called 'Samvat-sara,' or 'mana,' is divided into twelve lunar months; an intercalary month (called in Sanskrit *adhika vulgo*, 'lound') being supplied, on a particular principle, once in about three years.

The year commences at the true instant of conjunction of the sun and moon: that is, on the new moon which immediately precedes the commencement of the solar year: falling somewhere therefore within the 30 or 31 days of the solar month Chait (*Chaitra*). The day of conjunction (*amāvasyá*) is the last day of the expired month: the first of the new month being the day after conjunction.

Although the initial element of the year is thus determinate, there are two modes of reckoning the month. In the south of India they begin contemporaneously with the year, on the conjunction (*amāvasyá*), and run through the 30 days in two divisions of about 15 days, called *sucha-* or *śukla-* *-paksha*, and *krishna-* or *bahula-* *-paksha*, the light- and the dark- half, or wax and wane, of the moon.

The 'Vrihaspati-Mána,' however, which is derived from the 'Súrya-Siddhánta,' and is followed throughout Hindústán and Telingana, makes the months commence with the full moon (*púrnamá*) preceding the last conjunction; so that new-year's day always falls in the middle of the lunar month Chait, and the year begins with the last *paksha*, or light-half of that month.<sup>1</sup>

The lunar months are in all cases named from the solar month in which the *amávasyá*, or 'conjunction' happens, so that when two new moons fall within one solar month, (for example, on the 1st and on the 30th days,) the name of the corresponding lunar month is repeated, the year being then intercalary, or containing 13 months. The two months of the same name are distinguished by the terms *adhika* 'added,' and *nija*, 'proper' or 'ordinary.'

By the 'Súrya-Siddhánta' system, the intercalated month takes its place in the middle of the natural month; that is, of the four *pakshas*, 1, *badi*, 1, *sudi*, 2, *badi*, 2, *sudi*,—the first *badi* and second *sudi* belong to the natural month, and the first *sudi* and second *badi* to the intercalated month. The Tamil account makes the first month of the two the intercalated one.

It happens once within each term of 160 years, that there is no new moon in some one of the last six lunar months, which, from the sun being in perigee, as before explained, contain only 30 and 29 days each. On these occasions the month of that name is expunged; but it always happens that two others in the same year are for the opposite cause repeated in such years.

The common intercalary year is called *adhika-samvat-sara*; the double intercalary, with its expunged month, *kshaya-samvat-sara*.

The lunar month, whatever may be its civil duration, is divided into 30 *tithis*, or lunar days, which are subject to similar rules regarding intercalation and omission. When two *tithis* end in the same solar day, the intermediate one is struck out of the calendar, and called a *kshaya-tithi*: when no *tithi* begins or ends in a solar day, the *tithi* is repeated on two successive solar days, and the first is called *adhika*. When a *tithi* begins before or at sunrise, it belongs to the solar day about to begin: when after sunrise, it is coupled with the next solar day, provided it does not end in the same day; in which case, it would be expunged out of the column of *tithis*, as before explained.

To render this singular mode of computation more perplexing, although the *tithis* are computed according to apparent time, yet they are registered in civil time.

<sup>1</sup> Hence has doubtless arisen the variance in the names of the Tamil and Bengal months, the former being in name one month behind the others: (See the table of their solar year, page 150).

It is usual, however, to make account of the days in the semi-lunar periods, by the common civil reckoning, beginning (as with the years) after the completion of each diurnal period; thus, the day on which the full moon occurs is the *Sudi* 14th or 15th, and the following day is the 1st *Badi*. It is like our reckoning of the sun's place in the zodiac ( $0^{\circ} + 10^{\circ}$ . etc.  $1^{\circ} + 10^{\circ}$ . etc.), and is evidently better adapted for computations than where the current day or year is the one expressed by the figure.

The circumstance of expunging a *tithi* happens, on an average, once in 64 days; so that in one year it recurs five or six times. When a *tithi* is repeated twice it is called *tridina*: one *tithi* is equal to 0.984 of a day, or 64 *tithis* = 63 days nearly.

To understand the nature of this singular disposition of time, a diagram of an entire lunar month has been inserted in the page containing the scale for the comparison of the luni-solar year, the month selected being the intercalated, or *adhika*, *Chaitra* of the 4924th luni-solar year of the Kali-yug, (A.D. 1822-3) a year in which Davis had ascertained that there would be a *kshaya* month, and two intercalaries. Warren's book contains the calendar for the whole year in question.

To that work we must refer for the complete solution of the problem of its construction for all cases that may present themselves, wherein perfect accuracy is requisite. The rules which we shall give hereafter will be found sufficient to bring out the result to within a day or two of the corresponding Hindú solar year, and to even closer accordance with the Christian year, in which the days are not liable to the same variations *inter se*. The elements required for working it out thus far, on the supposition of the sun and moon both maintaining a mean rate of motion in their course, are few, and may mostly be determined from the tables in the present epitome. They are:

1. The sun's mean place in the Hindú ecliptic, and the skeleton of the solar months, formed therefrom, to show the disposition of the civil and sidereal days.

2. Also the moon's mean place in the ecliptic, which is found from the *Ahargana*, or sum of days expired from the commencement of the Kali yug to the beginning of the proposed lunar year: it is necessary for obtaining the epochs of the mean conjunctions, during the year in question.

3. The *Sûta-Dina*, or day of the week on which the initial conjunction falls. The two latter elements are given for every year of the last three centuries in the second General Table. For periods anterior to 1600, they may be found by adding the secular *Aharganas* for the broken period, to the root for the nearest epoch, contained in a separate table (VIII.) prepared for the purpose, from the data of the

'Súrya-Siddhánta.' Taking, then, the scheme of the corresponding solar year, and placing the two skeletons thus formed, in juxtaposition, the eye will at once tell what months or days will become subject to the rules of *kshaya* or *adhika*, 'expunging' or 'duplication': an example of the process will be given hereafter, in explaining a luni-solar scale contrived for working out the problem by simple inspection.

The place of the sun's and moon's apogee, the equinoctial precession, and the obliquity of the ecliptic, etc., are necessary for the true computation of the lunar days; but this degree of accuracy is beyond our present purpose.

The elements of the solar system (see page 153), would indeed furnish even these data, were it requisite; but the several equations of the sun's and moon's motions, and the gnomonic problem to convert the determinations, made for Lanká, to other situations on the globe, would call for a thorough acquaintance with the astronomic system of the Bráhmans. Where an English ephemeris is accessible, the construction of the Hindú lunar month may readily be effected for any given lunation from the times of new and full moon, corrected for the longitude of the place: it may be remembered, as a general rule, that the first day of every Hindú luni-solar month falls on the day following the new moon; and that it precedes by two days the initial *feria* (as it is called) of the Muhammadan lunar month, seldom diverging from this arrangement more than one day on either side: this is, of course, without reference to the names of the months, as those of the Hijra are continually gaining upon the others.

#### ERAS DEPENDENT ON THE LUNI-SOLAR YEAR.

##### ERA OF VIKRAMADITYA.

The principal era to which the luni-solar system is exclusively adapted is that of Vikramáditya, called Samvat, or vulgarly Sumbut. The prince from whom it was named was of the Tuár dynasty, and is supposed to have reigned at Ujjain (Ujjáyní) 135 years before Sáliváhana, the rival founder of the Śáka era, south of the Narbada (Narmada) river. The Samvat era commenced when 3044 years of the Kali-yug had expired; *i.e.* 57 years B.C., so that if any year, say 4925, of the Kali-yug be proposed, and the last expired year of Vikramáditya be required, subtract 3044 therefrom, and the result, 1881, is the year sought. To convert Samvat into Christian years, subtract 57; unless they are less than 58, in which case, deduct the amount from 58, and the result will be the date B.C.

The era of Vikramáditya is in general use throughout Telingana and Hindústán, properly so called; it is less used, although known, in Bengal, Tíghút, and Nípál; and, according to Warren, is nearly unknown

in the peninsula. The luni-solar division of the year, however, is necessarily adapted to other eras, conjunctively with the solar division, because almost all the festivals and religious observances of the Hindús and Buddhists depend upon the *Chandra-mána* or lunar reckoning. There can, therefore, be hardly said to be any eras exclusively solar, although the Samvat is exclusively luni-solar.

#### THE BALABHI AND SIVA-SINHA ERAS.

The Balabhi era is mentioned by Tod as occurring in an inscription found at Somnáth, and from its locality and connection with the Samvat, it must have been of the same construction, merely dating from a newly assumed epoch, which is shewn in the 'Annals of Rájasthán,' to correspond with 375 of Vikramáditya, or 318 A.D. Balabhi was destroyed in 802 Samvat, when it may be presumed the era was discontinued.

A third era, called the 'Śiva-Sinha Samvat,' is also noticed by the same author as having been established by the Gohils in the island of Deo: its epoch or zero corresponds with 1169 Vikramáditya Samvat (1112 A.D.)

The Faṣlī (vulgarly, Fuslee or Fusly) year, of Upper India, also follows the Samvat division, as being the system in vogue where it was introduced: this will be alluded to again under the fourth head.

### III.—YEARS NUMBERED BY CYCLES.

#### ERA OF PARASURÁMA.

This division of time Warren states to be used in that part of the peninsula of India, called Malayála by the natives, extending from Mangalor, through the provinces of Malabar, Cotiote, and Travancore, to Cape Comorin. It derives its name from a prince who is supposed to have reigned 1176 years B.C., the epoch being 7th August, 3537 Julian Period, or 1925 Kali-yug. This era is reckoned in cycles of 1000 years. The year itself is solar, or rather sidereal, and commences when the sun enters the sign Kanyá (Virgo), answering to the solar month 'Āsan (Āświna). The commencement of the 977th year of the 3rd cycle concurs with the 1st Āświna of 1723 Śāka, and 14th Sept. A.D. 1800.

#### THE GRAHAPARIVRITTI CYCLE OF NINETY YEARS.

The southern inhabitants of the peninsula of India use a cycle of ninety years, which is little known, according to Warren, in the Karnátak. This cycle was analyzed by the Portuguese missionary Beschi, while

resident for forty years in Madurá. The native astronomers there say it is constructed of the sum of the products in days of 15 revolutions of Mars, 22 of Mercury, 11 of Jupiter, 5 of Venus, 29 of Saturn, and 1 of the Sun.

The epoch of this cycle occurs on the expiration of the 3078th year of the Kali-yug, in 24 B.C. The years follow the ordinary solar or sidereal reckoning. The concurrent cycle and year for any European year may readily be found by adding 24 and dividing by 90: thus 1830 A.D. =  $\frac{1830+24}{90} = 20$  cycles, 54 years.

#### THE VRIHASPATI-CHAKRA, OR 'CYCLE OF JUPITER.'

The cycle of Jupiter is supposed by many to be one of the most ancient modes of reckoning time, not only in India, but in Asia generally; but we shall shew presently, that with regard to the former country, at least, it is most probably of comparatively modern introduction. It has been, however, known from time immemorial in China, where it partakes of the same peculiarity as on the continent of India, of having separate names for each year of the cycle; but these names are curiously compounded of two series of twelve and five names in the Chinese system, as has been fully explained in page 146, whereas, in India the series of single appellations continues through the sixty years.

The origin of the Vrihaspati-Chakra is unknown: it has been imagined by some to be the same as the Chaldean Sosos, but, Warren thinks, without foundation. It is mentioned in the 'Súrya-Siddhánta,' and other works, and is constructed on astronomical principles, although its genuine application in reference to Jupiter's revolutions has long since fallen into disuse in the south of India, as well as in China and Tibet; and this circumstance will furnish a clue to ascertain the epoch of its introduction into these countries; but we must first describe the different systems followed.

There are three rules for computing the years of the Jovian cycle: 1, that of the 'Súrya-Siddhánta,' followed in this part of India; 2, that of the 'Jyotistava'; 3, that of the Telingas, followed in the south.

According to the first, Jupiter's revolutions being 364,220,000 in a 'Mahá-yug' (see the table in page 153); his motion in one solar year coincides very nearly with one sign of the zodiac ( $1^{\circ} 00' 21'' 4''$ ). The actual time, therefore, of the planet's passing through one zodiacal sign (which is called a year of Jupiter) is, as  $30^{\circ} 21' 04'' : 365d. 15g. 31p. :: 30^{\circ} : 361d. 2g. 5p.$ , the true duration of the Chakra year. The difference, or four days and thirteen *gharís* short of the solar year, will in eighty-six years amount to a whole year; so that, to keep the cycle in

accordance with the planet's heliocentric motion, one year must be expunged in that period of time.

To find the current year of the cycle on this principle for any year of the 'Kali-yug' (say the beginning of 4870 A.D.) we have—

As 432,000 solar years to 36,422 revolutions of Jupiter, so 4870 to 410 rev. 7 signs,  $2\frac{1}{2}^\circ$ ; the odd signs and degrees give his longitude, which requires a small correction, or *bij*. Then multiplying 410 by 12, and dividing by 60, we have 82 cycles and 7 years: the latter to be counted always from the 27th of the cycle, or *Vijaya*, gives the 33rd year, or *Vikari*.

2nd Method. The 'Jyotistava' rule expounds the last year expired of the cycle, setting out from the Śaka epoch, and reckoning from *Prabhava*, as the first of the cycle. The rule is as follows:—

Note down the Śaka year in two places. Multiply one of them by 22, and add 4291 to the product. Divide by 1875.<sup>1</sup> Add the integers of the quotient to the 2nd number noted down, and divide by 60. The remainder will shew the last year expired from *Prabhava*. The fraction left by the divisor, 1875, may be reduced to months and days of the current year.

Example: 4870 Kali-yug = 1691 Śaka  $\frac{1691 \times 22 + 4291}{1875} = 22 \frac{878}{1875}$  and  $\frac{1691 + 42}{60} = 28^{\circ}33'$ ; the fraction  $\frac{878}{1875} = 5$  months  $17\frac{1}{2}$  days of the 33rd current year, or *Vikari*, which agrees nearly with the former account.

28=33J

The effect of the difference between the two systems is, that the expunged year in the 'Jyotistava' reckoning occurs thirteen years antecedent to that of the 'Sūrya-Siddhānta.' The second General Table follows the latter account, which must be borne in mind when consulting the *chakra* column.

This form of the Vrihaspati-Chakra prevails throughout Bengal, but little more than the name is ever attended to.

3rd Method. The Telinga rule takes no notice of the commencement of the Vrihaspati year, which it identifies in duration with the Chandra-māna, or common luni-solar account: thus it directs to

Divide the expired years of the Kali-yug by 60, the quotient will give the number of cycles expired, and the remainder the odd years, to be reckoned from *Pramathi* the 13th of the Chakra.

Example: For the year 4870 Kali-yug  $4870 \div 60 = 81$  cycles, 10 years, or *Sarva-dhari*, the 22nd, as expired. *Virodhi*, the 23rd, will be the current year sought.

This is the rule followed in the peninsula, and it coincides with the practice of Tibet, as appears from the following particulars, for which we are indebted to M. Csoma de Körös's researches:—

#### TIBETAN KALENDAR.

In Tibet the cycle of Jupiter is employed; but as the Sanskrit

<sup>1</sup> Multiplying by 22, and dividing by 1875, is equivalent to dividing by 85.227, the period when a year is to be expunged by this system.



literature was there introduced at a late period, this country presents the anomaly of preserving two series of denominations for the Chakra years: one derived from the Chinese by exact translation, and the other in a similar manner copied from the Indian cycle.

The whole Tibetan kalendar is, indeed, copied from the Indian; giving the solar and lunar days, the *nakshatras*, *yogas*, and *karanas*; with the usual lucky and unlucky days. The months are divided into *kar-choks* and *nik-choks*, or bright and dark halves, etc. The astronomical year begins with the vernal equinox (sidereal) on the first Baisákh, but the civil year commences differently in different parts of Tibet, varying from December to February. At Ladákh it begins in December. The Hors or Turks keep their new year some days after the winter solstice in January; and the people of U,tsáng at Lassa commence theirs with the new moon of February. The months have several names expressive of the seasons, asterisms, business undertaken in them, etc., but they are usually denominated numerically; first, second, etc. The year is luni-solar with intercalations.

The only fixed epoch in Tibet appears to be the birth or death of Śákya, from which event the almanacks note the years elapsed; sometimes also they note the year from the death of the two great Lamas of Lassa and Teshi-lunpo, or their re-incarnations within the last two centuries, and other memorable events.

The Tibetans, in estimating their age, especially in conversation, count by the cycle of 12 years (which is, in fact, the true cycle of Jupiter).

In the ordinary business of life, the cycle of 60<sup>\*</sup> years is universally employed, in which each year has its distinct name. The cycles themselves are not distinguished numerically, but are rendered intelligible by the mention of some coincident event or remarkable person of the period, a mode highly objectionable for remote dates.

The order of the years agrees precisely with the Tamil account to the present time, having no expunged year. But the Tibetans do not count from the same fixed epoch. Their authors on the 'Kala-Chakra'<sup>1</sup> system state that the mode of reckoning by cycles of 60 years was introduced into India about the year 965 A.D., and that 60 years afterwards it was adopted in Tibet (about 1025-6 A.D.) Their epoch, therefore, occurs in 1025 A.D.

Now, it is remarkable that the 69th cycle of the 'Súrya-Siddhánta,' and the 15th cycle of the 'Jyotistava,' and the 68th cycle of the Telinga astronomers, were all completed in 965-6 A.D., which is not much prior to Bentley's epoch of Varaha Mihira, the supposed author of the former work.

<sup>1</sup> See a note by M. Csoma, on this subject, in the 'Jour. As. Soc.', vol. ii. p. 57; [and the quotation from Albirúni (Reinaud's 'Fragments'), *infra*, p. 167.]

Moreover, the two systems, starting from the point thus assumed, would up to the present period (on account of the omitted years in the one) diverge between 10 and 11 years from one another, which is actually the case, the year 1834 A.D. agreeing with the 39th year of the Bengal cycle, and with the 28th of the Tamil and Tibetan account.

That the cycles did not commence either with the Kali-yug or with the Śaka epoch is proved by the two rules given above for expounding their dates, which expressly state that the odd years are to be reckoned from *Vijaya* (the 27th) and *Pramathi* (the 13th) respectively, and not from *Prabhava* (the 1st) as would naturally be expected.

It is not, therefore, unreasonable to conclude that the theory of the Vrihaspati-Chakra was invented or introduced in India, as affirmed by the Tibetan authorities, in the middle of the tenth century; and this might be adduced as a confirmation of the date assigned by Bentley to the 'Sūrya-Siddhānta,' which upholds and expounds that cycle.

M. Csoma states that before the introduction of the cycle of Jupiter into Tibet, frequent mention is made in their books of a period of 403 years, called *mé-kha-gya-tsho*, a symbolical name for the number 403 :<sup>1</sup> and dates are always expressed in it, as the 80th, 240th, or any other year of this period : now it is curious, as M. Csoma remarks, that if 403 be deducted from 1025 A.D. the remainder, 622 A.D., exactly coincides with the epoch of the Hijra, leaving an impression that the latter era had been once established there. The destruction of the Buddhist religion to the north is ascribed to the Muhammadans by the Tibetan authors.

We subjoin a catalogue of the Sanskrit, Tibetan, and Chinese names of the sixty Chakra years, with an English translation of the last two. The Sanskrit names have also a meaning which is precisely rendered in Tibetan. But they have no reference to any precise objects, and are therefore not worth insertion.<sup>2</sup> It should be remarked that the first year of the Indian series corresponds with the fourth of the Chinese, which goes far to disprove the connection of the two cycles; for had the discrepancy been owing to the different modes of reckoning (as with the 'Sūrya Siddhānta' and the Telinga), the divergence would have been at the other end of the scale; unless, indeed, it should have run through 56 years, which would have occupied nearly 50 centuries.

<sup>1</sup> See 'Jour. As. Soc.,' vol. iii. p. 6 : *Gya-tsho*, 'a lake' = 4 : *Kha*, 'void' = 0 : and *mé*, 'fire' = 3.

<sup>2</sup> The latter names are extracted from Warren's 'Kāla Sankalita;' the Chinese from De Guignes' 'Histoire des Huns;' and the Tibetan from M. Csoma's forthcoming 'Grammar of the Tibetan Language,' now under publication.

TABLE IV.—Names and Numbers of the *Vrihaspati-Chakra*, or 60 years' Cycle of Jupiter, in Sanskrit, Tibetan, and Chinese.

	Sanskrit Names.	Tibetan translation of Sanskrit Names.	Tibetan translation of Chinese Names.	Chinese Names.	Meaning of Chinese names.	ॐ ॐ
1	Prabhava.	Rab-hyung.	Mé-yos.	Ting-mao.	Fire-hare.	4
2	Vibhava.	r Nam-Hbyung.	Sa-Hbrug.	Vou-chin.	Earth-dragon.	5
3	Sukla.	Dkar-po.	Sa-Sbrul.	Kise.	Earth-serpent.	6
4	Pramodha.	Rab-mynos.	Chags-r Ta.	Keng-ou.	Iron-horse.	7
5	Prajapati.	Skyés-bdag.	lChags-lug.	Sin-ouei.	Iron-sheep.	8
6	Angira.	Angira.	Ch'hu-spré.	Gin-chin.	Water-ape.	9
7	Srimukha.	Dpal-Qdong.	Ch'hu-bya.	Kuei-yeou.	Water-bird.	10
8	Bháva.	Dnos-po.	Shing-k'hyi.	Kia-su.	Wood-dog.	11
9	Yuvá.	Na-tshod-ldan.	Shing-Phag.	Yhai.	Wood-hog.	12
10	Dhátá.	Hdsin-byéd.	Mé-byi.	Ping-tse.	Fire-mouse.	13
11	Iswara.	Dvang-p'hyug.	Mé-gLang.	Ting-tcheou.	Fire-ox.	14
12	Bahudanya.	Hbru-mang-po.	Sa-Stag.	Vou-yn.	Earth-tiger.	15
13	Pramáthi.	Myos-ldan.	Sa-yos.	Ki-mao.	Earth-hare.	16
14	Vikrama.	r Nam-Qnon.	lChags-Hbrug.	Keng-chin.	Iron-dragon.	17
15	Brisya.	K'hyu-Mch'hog.	lChags-Sbrul.	Sin-se.	Iron-serpent.	18
16	Chitrabhanu.	Sna-ts'hogs.	Ch'hu-rTa.	Gin-ou.	Water-horse.	19
17	Súbhānu.	Nyi-ma.	Ch'hu-lug.	Kuei-ouei.	Water-sheep.	20
18	Tárana.	Nyi-Sgtol-byéd.	Shing-spré.	Kia-chin.	Wood-ape.	21
19	Párhiva.	Sa-skyong.	Shing-bya.	Y-yeou.	Wood-bird.	22
20	Vyaya.	Mi-zad.	Mé-K'hyi.	Ping-su.	Fire-dog.	23
21	Sarvajit.	thams-chad-Hdul.	Mé-Phag.	Ting-hai.	Fire-hog.	24
22	Sarvadhári.	Kun-Hdsin.	Sa-byi.	Vou-tse.	Earth-mouse.	25
23	Viródhí.	Hgal-va.	Sa-gLang.	Ki-tcheou.	Earth-ox.	26
24	Vikrita.	rNam-rgyal.	lChags-Stag.	Keng-yn.	Iron-tiger.	27
25	Khara.	Pong-bu.	lChags-yos.	Sin-mao.	Iron-ape.	28
26	Nandana.	Dgah-va.	Ch'hu-Hbrug.	Gin-chin.	Water-dragon.	29
27	Vijya.	rNam-Hgyur.	Ch'hu-Sbrul.	Kuei-se.	Water-serpent.	30
28	Jya.	rGyal-va.	Shing-rTa.	Kia-ou.	Wood-horse.	31
29	Manmatka.	Myos-byéd.	Shing-lug.	Y-ouci.	Wood-sheep.	32
30	Durmukha.	Qdong-nan.	Mé-Spré.	Ping-chin.	Fire-ape.	33
31	Hémalamva.	Qjér-Hp'hyang.	Mé-bya.	Ting-yaou.	Fire-bird.	34
32	Vilamva.	rNam-Hp'hyang.	Sa-Khyi.	Vou-su.	Earth-dog.	35
33	Vikári.	Sgyur-byéd.	Sa-P'hag.	Ki-hui.	Earth-hog.	36
34	Sarvari.	Kun-ldan.	l Chags-byi.	Keng-tse.	Iron-mouse.	37
35	Plava.	Hp'har-va.	lChags-gLang.	Sing-tcheou.	Iron-ox.	38
36	Subhakrit.	Dgé-byéd.	Ch'hu-Stag.	Gin-yn.	Water-tiger.	39
37	Sobhana.	Mdsés-byéd.	Ch'hu-yos.	Kuei-mao.	Water-hare.	40
38	Krodhi.	K'hro-mo.	Shing-Hbrug.	Kia-chin.	Wood-dragon.	41
39	Viswávasu.	Sna ts'hogs-Dvyig	Shing-Sbrul.	Y-se.	Wood-serpent.	42
40	Parábhava.	Zil-Qnon.	Mé-rTa.	Ping-ou.	Fire-horse.	43
41	Plavanga.	Spréhu.	Mé-Lug	Ting-ouci.	Fire-sheep.	44
42	Kílaka.	P'hur-bu.	Sa-Spré.	Vou-chin.	Earth-ape.	45
43	Saumya.	Zhi-va.	Sa-bya.	Ki-yeou.	Earth-bird.	46
44	Sádhárana.	t'hun-mong.	lChags-Khyi.	Keng-su.	Iron-dog.	47
45	Virodhakrit.	Hgal-byéd.	lChags-P'hag.	Sin-hai.	Iron-hog.	48
46	Paridhavi.	Yongs-Hdsin.	Ch'hu-byi.	Gin-tse.	Water-mouse.	49
47	Pramádi.	Bag-med.	Ch'hu-gLang.	Kuis-tcheou.	Water-ox.	50
48	Ananda.	Kun-Dgah.	Shing-Stag.	Kia-yn.	Wood-tiger.	51
49	Rákshasa.	Srin-bu.	Shing-yos.	Y-mao.	Wood-hare.	52
50	Anala.	Mé.	Mé-Hbrug.	Ping-ohin.	Fire-dragon.	53
51	Pingala.	Dmar-Ser-chan.	Mé-Sbrul.	Ting-se.	Fire-serpent.	54
52	Káleyukta.	Dus-kyá-pho-nyi.	Sa-rTa.	Vou-ou.	Earth-horse.	55
53	Sidharti.	Don-grub.	Sa-lug.	Ki-ouei.	Earth-sheep.	56
54	Randra.	Drag-po.	lChags-Spré.	Keng-chin.	Iron-ape.	57
55	Durmati.	ò Lo-nan.	lChags-bya.	Sin-yeou.	Iron-bird.	58
56	Dundubhi.	rna-ch'hén.	Ch'hu-Khyi.	Gin-su.	Water-dog.	59
57	Rudiródgári.	K'hrag-Skyug.	Ch'hu-P'hag.	Kuei-hai.	Water-hog.	60
58	Raktáksha.	Mig-Dmar.	Shing-byi.	Kia-tse.	Wood-mouse.	1
59	Krodhana.	Khro-vo.	Shing-gLang.	Y-tcheou.	Wood-ox.	2
60	Kshaya.	Zad-pa.	Mé-Stag.	Ping-in.	Fire-tiger.	3

## ERA OF BUDDHA.

USED IN CEYLON, AVA, PEGU, SIAM, ETC.

The determination of the epoch of Buddha, Gotama or Sákya, has engaged the attention of many learned Orientalists, and although there remain some discrepancies in the results arrived at, most of these may be explained and reconciled by assuming that several individuals of the same character have existed at different epochs, or that the system of Buddhism has been at these times revived or re-organized.

Omitting all mention of the earliest Buddhas, such as the one who figures at the head of the lunar race of Hindú mythology, it may be advanced with tolerable confidence that the two latest of the epochs attributed to this personage are founded on actual events, from the near coincidence which may be observed in the statements of distant nations regarding them. A critical notice on the subject by Prof. Wilson, appeared in the 'Oriental Magazine' for 1825, which furnishes the following data for the epoch of, what may be called, the Elder Buddha.

According to Padmakarpo, a Lama of Bhutan, who wrote in the 16th century	B.C.
(made known by M. Csoma de Körös) .....	1058
By Kalhana Pandit, author of the history of Kashmir.....	1332
„ Abú'l-Fazl, probably following the last .....	1366
„ A couplet from Chinese historians .....	1036
„ De Guignes' Researches .....	1027
„ Giorgi, (period of Buddha's death) .....	569
„ Bailly .....	1031
„ Sir William Jones .....	1027
„ Bentley, one occasion, 1081; on another .....	1004
„ Jaehrig, from a Mongol Chronology, published by Pallas .....	991
„ Japanese Encyclopædia, birth of Buddha.....	1027
„ „ „ his death .....	960
„ Matonan-lin, a Chinese historian of the 12th century.....	1027
„ M. Klaproth himself, concurring with Sir William Jones .....	1027
M. Rémusat dates the death in .....	970
The era adopted at Lassa, and founded on the average of nine of the dates quoted by Padmakarpo, who himself however rejects them .....	835

The majority of these quotations concur in fixing the period of the existence of a Buddha about 1000 years anterior to the Christian era. It is not, however, believed that any chronological era is founded upon this period: and if derived from book authorities, or tradition, the same would have travelled wherever the religion spread.

There is an equally extensive and consistent series bearing testimony to the existence of a Second Buddha in the sixth century before Christ; indeed most of the eras noted are evidently identical in origin and concurrent in date to the present time.

The Burmese epoch of Gotama's death, as given by Crawford from a native chronological table .....	B.C. 544 <sup>1</sup>
The Singhalese epoch of Buddha's death, and commencement of their era, on the landing of Vijaya, according to Turnour ('Ceylon Almanac' for 1834) .....	543
The Siamese epoch, ('Oriental Magazine,' 1825) .....	544
(The religion of Buddha was introduced in Siam in 529 B.C., according to Finlayson.)	
The <i>nirvāna</i> of Śākya, according to the Rāj-guru of Asam, occurred in the 18th year of Ajata Satru, and 196 <sup>2</sup> years before Chandragupta, the contemporary of Alexander, which may agree thus, 348 + 196 = .....	544

This date may further be reconciled with the other three dates quoted by Wilson in conjunction with them, namely,<sup>3</sup>

The Singhalese .....	B.C. 619
The Peguan .....	638
And the Chinese cited by Klaproth .....	638

by referring these latter periods to the birth, and to the ministry or commencement of the reign of Śākya; for by the Burmese calendar the first of these events happened in the year 628 B.C., and the latter 608-9. There is a constant difference of 10 years throughout the early series of the latter chronicle, which also places the *nirvāna* of Gotama in the 8th year of Ajātasat (*Ajata-satru*), instead of the 18th, as above given: by adding, then, a correction of ten years, from whatever cause it may have originated, the Burmese dates will correspond exactly with those of Pegu and Ceylon; and they are thus brought to the confirmation of the unity of origin of the eras of all the countries which received their religion from Ceylon, or through the latter from central India.<sup>4</sup>

## JAIN ERAS.

The Jains in some parts of India are stated to follow the era of their last Jina, Mahāvīra, whom they make to be the preceptor of

<sup>1</sup> The 'Oriental Magazine' makes this date 546, but the authority in the text is most to be relied on. According to the invariable rule of Eastern chronologists the year is not numbered until after its completion. Thus an inscription or document is always dated 'so many years being expired after the death of Gotama:' and thus the year 1 of the Burmese sacred era corresponds with the second current year or 543 B.C. while the epoch, or *nirvāna* of Śākya happened in 544.

<sup>2</sup> 162 years by the Burmese table in Crawford.

<sup>3</sup> [The proof of this sheet has been submitted to Prof. Wilson, who intimates to me that there are no new data of sufficiently positive bearing on this question to justify any alteration or emendation of Prinsep's original text. Burnouf seems to place the event in 543 B.C.—'Le Lotus de la bonne Loi,' p. 487.]

<sup>4</sup> The 'Journal Asiatique,' for November, 1833, contains a chronological table of the events of Buddha's life, derived entirely from Chinese and Japanese authorities, which makes it very evident that the Fo or Buddha of 1027 B.C. is the same identical personage as the one who died 544 B.C. As far as real chronology is concerned the recent date is alone in use; but the more ancient date seems to be supported by some passages in the Sanskrit original text.

Gotama, and place a few years anterior to him, in the year 569 B.C., and 512 before Vikramáditya. None of the Jain inscriptions found in South Bihár or elsewhere, however, shew any trace of an exclusive chronology, while they invariably bear the common Samvat date of Vikramáditya. One inscription on a brass image found on digging a tank at Baghelpur, is dated 'after Pársa 925,'<sup>1</sup> which Dr. B. Hamilton interprets 'after Párswanátha, the twenty-third teacher of the Jain religion, and consequently somewhat anterior to Mahávira, who was the twenty-fourth;' but nothing positive can be asserted of these vague epochs.

#### BURMESE ERAS.

Other eras prevail in the Burmese country, which are more generally employed for the business of life, while the sacred era is kept up in ecclesiastical documents. The Prome epoch was established by king Samandri, and its first year corresponds with 623 of the sacred epoch, or 79 A.D. It seems to be the same as the Śáka era of Sáliváhana. The present Vulgar epoch used throughout Ava was established by Puppa-chan-ra-han; the first year agreeing with 639 A.D. or 1183 B. sacred era. The division of months accords with the luni-solar system of the Hindús in every respect, the year beginning as usual with the new moon of the solar month Chaitra. To reduce the Burmese vulgar year into the Christian, add 638. For the Prome era the number 78 must be used for the like purpose. They have also another sacred era, called the Grand Epoch, said to have been established by An-ja-na the grandfather of Gotama: the first year corresponds with 691 B.C.

#### NEWÁR ERA OF NIPÁL.

Besides the Śáka and Samvat eras introduced by the Gorkha dynasty into Nipál, there is still in use among this people a former era, called the Newár, from the name of the ancient dominant, or aboriginal, tribe of the valley. Dr. Bramley informs us that the origin of this era is not known, though many attempt to account for it by fabulous stories. The Newár year commences in the month of October, the year 951 terminating in 1831 A.D. Its epoch concurs therefore with the month of October, 870 A.D., which number must be retrenched from a Newár date to have the corresponding Christian year.

[In concluding Prinsep's notices of Local Eras, I extract from the work of Albirúní some further details in reference to Indian cycles, to

<sup>1</sup> 'Trans. Roy. As. Soc.', vol. i. 527.

complete the quotations previously given in reference to the epoch of the Guptas, inserted at p. 268, vol. i.]

‘Toutes ces ères présentent des nombres considérables remontent à une antiquité reculée, et leurs années dépassent les nombres cent mille et au delà. Ces nombres ont embarrassé les astronomes dans leurs calculs, et, à plus forte raison, le commun des hommes. Nous allons donner une idée exacte de ces ères, et nous rapporterons nos calculs à l’année des Indiens, dont la plus grande partie correspond à l’an 400 de l’ère de Yizderdjed. Cette époque s’exprime par un nombre rond et n’est embarrassée ni de dizaines ni d’unités. Cet avantage lui est particulier et la distingue de toutes les autres années.

‘De plus, elle a été rendue à jamais célèbre par la chute du plus fort boulevard de l’Islamisme et la mort de l’illustre sulthan Mahmoud, lion du monde et le phénomène du temps : Dieu lui fasse miséricorde ! En effet, Mahmoud expira moins d’un an avant cette époque.

‘Le *sandhi* des Indiens précède le nouroz (premier jour de l’année) des Perses de douze jours, et il fut postérieur de dix mois Persans complets à la nouvelle de la mort du sulthan.

‘Toutes ces ères présentent des nombres considérables et remontent à une époque reculée ; voilà pourquoi on a renoncé à en faire usage. On emploie ordinairement les ères de Sri-Harscha, de Vikramaditya, de Saca, de Ballaba et des Gouptas.

‘Les Indiens croient que Sri-Harscha faisait fouiller la terre et cherchait ce qui pouvait se trouver dans le sol, en fait d’anciens trésors et de richesses enfouies ; il faisait enlever ces richesses et pouvait, par ce moyen, s’abstenir de fouler ses sujets. Son ère est mise en usage à Mahourah et dans la province de Canoge. J’ai entendu dire à un homme du pays que, de cette ère à celle de Vikramaditya, on comptait quatre cents ans ; mais j’ai vu, dans l’almanach de Cachemire, cette ère reculée après celle de Vikramaditya de 664 ans. Il m’est donc venu des doutes que je n’ai pas trouvés moyen de résoudre.

‘L’ère de Vikramaditya est employée dans les provinces méridionales et occidentales de l’Inde. On pose 342, qu’on multiplie par 3, ce qui fait 1026 ; on ajoute au produit ce qui s’est écoulé du schadabda, mot par lequel on désigne le samvatsara sexagésimal. Voilà ce qu’on entend par l’ère de Vikramaditya. J’ai vu le mot schadabda cité dans le livre du *Soroudou*, composé par Mahadeva Djandaryna. Le procédé qu’on emploie d’abord est incommode. Si on commençait par poser le nombre 1026 au lieu de marquer sans aucun motif 342, l’opération serait plus simple : car admettons le résultat, maintenant qu’on en est au premier samvatsara, comment fera-t-on lorsque les samvatsara, se multiplieront.<sup>1</sup>

‘L’ère de Saca, nommée par les Indiens Sacakâla, est postérieure à celle de Vikramaditya de 135 ans. Saca est le nom d’un prince qui a régné sur les contrées situées entre l’Indus et la mer. Sa résidence était placée au centre de l’empire, dans la contrée nommée Aryavartha. Les Indiens le font naître dans une classe autre que celle des Sakya ; quelques-uns prétendent qu’il était Soudra et originaire de la ville de Mansoura. Il y en a même qui disent qu’il n’était pas de la race indienne, et qu’il tirait son origine de régions occidentales. Les peuples eurent beaucoup à souffrir de son despotisme, jusqu’à ce qu’il leur vînt du secours de l’Orient. Vikramaditya marcha contre lui, mit son armée en déroute et le tua sur le territoire de Korour,

<sup>1</sup> Il me semble résulter de l’ensemble du passage, que le cycle sexagésimal, non-seulement était propre à une certaine partie de l’Inde, mais qu’il était d’une institution récente. Le calcul présenté par Albyronny me fait croire qu’il commença seulement l’an 959 de notre ère.—*Reinaud*.

situé entre Moultan et le château de Louny. Cette époque devint célèbre, à cause de la joie que les peuples ressentirent de la mort de Saca, et on la choisit pour ère, principalement chez les astronomes. D'un autre côté, Vikramaditya reçut le titre de *Sri*, à cause de l'honneur qu'il s'était acquis. Du reste, l'intervalle qui s'est écoulé entre l'ère de Vikramaditya et la mort de Saca, prouve que le vainqueur, n'était pas le célèbre Vikramaditya, mais un autre prince du même nom. [Here follows the passage quoted in original Arabic, and in the French and English versions, pp. 269, 271, vol. i.; and the consecutive extract is complete at p. 269, with the exception of the following sentence, which comes in after '241 de l'ère de Saca.'] L'ère des astronomes commence l'an 587 de l'ère de Saca. C'est à cette ère qu'ont été rapportées les tables Kanda Khātaca, de Brahmagupta. Cet ouvrage porte chez nous le titre de *Arcand*. [To this succeeds the sentence 'D'après cela,' etc.; and Albirūnī, after stating his further difficulties in the reconciliation of discrepancies, and the local divergencies of the commencement of the year, concludes with the passage given in *extenso* at the foot of p. 269.]

#### IV.—ERAS DERIVED FROM THE HIJRA.

##### FASLĪ OR HARVEST YEARS.

We have alluded in the foregoing pages to one or two eras following the solar and luni-solar systems, which were nevertheless derived from the Muhammadan year. They are 1, the Bengālī san; 2, the Vilāyatī (vulgò, Vilaity) or Umly year of Orissa; 3, the Faslī (vulgò, Fusly) year of the Upper Provinces; 4, the Faslī year of the Peninsula. The circumstances connected with all of these have hitherto been enveloped in some obscurity. Warren was unacquainted with the first three, except by imperfect information obtained from Calcutta. He might, however, have discovered at once their character, had he known the custom followed in this presidency of inserting the concurrent dates of all these eras at the head of every regulation enacted by Government.

The Persian almanac of the Šadr Diwānī 'Adālat, from the year 1764, inclusive, has been translated by Mr. Reid, the Registrar of that court, for the use of civil officers in reducing the dates of native documents. These tables have proved very useful in comparing and proving the scales introduced into the present work, for facilitating the same operation.

Harington's Analysis of the Land Revenue Regulations, contains in a foot note (p. 176) the best explanation of the Faslī or 'harvest' years, tracing their origin to the year of Akbar's accession to the throne, or the 2nd Rabi-ul-sānī, A.H. 963 (14th February, 1556): 'A solar year for financial and other civil transactions was then engrafted upon the current lunar year of the Hijra, or subsequently adjusted to the first year of Akbar's reign.' It has been by some supposed that the Bengālī san was established by Husain Shāh, one of the kings of Bengal, but the following extract from a Persian manuscript, in posses-



sion of a native gentleman at Benáres, for which we are indebted to the kind inquiries of Capt. Thoresby, Secretary of the Benáres Sanskrit College, sets the matter in a very clear light, and entirely confirms Mr. Harington's statements:—

‘From the time of Amír Timúr, until the reign of Jalál-ud-dín Muhammad Akbar, there were three eras in use, viz., the Hijra, the Turki, and the Jaláli. The Turki era commences with the creation of the world, and is computed in cycles of twelve solar years each. In the month Muharram of A.H. 1138, five hundred and sixty-five cycles had elapsed, and the fourth year of the following cycle was in progress. Each year begins with the new moon of the month Jéth of the Hindú calendar, and the months are lunar. At the end of two or three years, as the case may be, an additional month is introduced to balance the computations by solar years and lunar months.

‘The Jaláli period is dated from the 5th of the month Shábán in the year 468 Hijra, under the reign of Jalál-ud-dín Toghlak Sháh, Ibn-i Alap Arsulan Saljúkí. The year begins with the Nauroz, or the day that the sun enters the zodiacal sign Aries. There are thirty days allotted to each month, and five supplemental days are added to the twelfth month, to which at the expiration of every fourth year a sixth day is superadded.

‘As the annual method of computation in the Turki era accorded with that observed by the Hindus in reckoning the years of the Samvat, it was generally used in the preparation of records and accounts, etc., but after the Emperor Akbar had extended his dominions by the conquest of Bengal, and a portion of the Dakhan, there were several modes of computing time prevalent in different parts of the empire: as the Samvat, with its lunar months and solar years; the Bengáli era, in which the year began with the arrival of the sun at the vernal equinoctial point, and the months were regulated by his passage through the twelve signs of the zodiac; and the Dakhani era, which comprehended lunar months, and a lunar year beginning on the 12th of the light half of the month Bhádon. These differences occasioned a good deal of perplexity to the accountants and other public officers: at length some of them drew the attention of the Emperor to the subject, who, after deliberating with his ministers, desired that the three foregoing eras should be made to agree with the year of the Hijra 964, (963?) and that appropriate names should be given to them. Accordingly, it was decided that the Samvat in Upper Hindústán should be named Fasli, and should commence with the month Aşwina (Kunwar), in which the collection of land-tax for the following seasons is first made. The era introduced into Bengal was denominated *San-i Bengdla*, and the year was continued there, in the period of its commencement, on the sun entering Aries, as heretofore. This was likewise the case in the Dakhan, where the new era was called Viláyatí, because it was received from the Viláyat of Hindústán, and the annual revolution continued to be dated on the 12th Bhádon. These three eras therefore owe their origin to the fiat of the Emperor Akbar, and they are formed upon the basis of the Muhammadan epoch, but the annual revolutions accord with those of the eras which they superseded.’

Thus the object of Akbar was merely to equalize the name or number of the year all over his vast empire, without interfering with the modes of subdivision practised in different localities: and this explanation will materially simplify the understanding of the subject of the four harvest years.

The Bengálí san, the Viláyati san, and the Tamil Faslí year, may be always considered identical in character with the Sāka solar year, while the Faslí of the western provinces may in like manner be classed with the luni-solar Samvat there current.

The reason of a year's variation in the denomination of the Bengálí san will at once be seen on comparing the commencement of each.

The Hijra year 963 began on the 26th November, 1555, *n.s.*

The concurrent Faslí year, 963, began on the 1st of the *lunar* month A'san (A'swina), which fell on the 10th September, 1555.

Th Viláyati year 963, on the 1st of the *solar* month A'san, which occurred on the 8th September, 1555.

But the Bengálí san 963, began on the 1st Baisákh falling within the same Hijra year, which was necessarily that of the 11th April, 1556.

The number 592 must be added to convert the two first eras into Christian account, if less than four of their months have transpired, and 593 years, if more; also 593 for the first nine months of the Bengálí san, and 594 for the rest.

#### FASLÍ ERA OF THE DAKHAN.

The Faslí year of the Peninsula, however, differs two years from the preceding, being apparently in advance of them. This can only be caused by its having branched off from the Hijra as a parent stock at a later period.

The year 1240 of this Faslí begins in July, 1831, or in the second month of 1247 Hijra. The difference is seven years, which converted into days, and divided by 11, the constant acceleration of the lunar year per annum, gives a period of about 230 years back for the epoch sought. But as the Faslí only drops behind, one year in 33, a latitude to that extent may be allowed in fixing the epoch of its foundation. In fact, we learn from Grant Duff's 'History of the Marhattas,' that this Dakhaní era owes its origin to the Emperor Sháh Jahan, who, after bringing his wars in Maháráshtra to a close in 1636, endeavoured to settle the country, and introduce the revenue system of Tudor Mul, the celebrated minister of the Emperor Akbar. Along with the survey and assessment naturally came the 'revenue year,' which, commencing as usual with the current Hijra year of the time, has now diverged from it seven years, as above-mentioned.

The constant for converting this era into Christian years is + 590. The year is, or ought to be, sidereal, but the Madras Government has now fixed its commencement to the 12th July. Its subdivisions are however, little attended to, the sole purpose of its application being in revenue matters.

## THE TARIKH ILAHI, OR ERA OF AKBAR.

This era was established by the Emperor Akbar, in the thirtieth year of his reign, (A.H. 992, A.D. 1584,) many years after his introduction of the Faslı era, as Abú'l-Fazl says, 'in order to remove the perplexity that a variety of dates unavoidably occasions. He disliked the word Hijra, 'flight,' but was at first apprehensive of offending ignorant men, who superstitiously imagined that this era and the Muhammadan faith were inseparable. Amír Fattah Ul-láh Shírází corrected the calendar from the tables of Ulugh Beg, making this era to begin with his majesty's reign. The days and months are both natural solar, without any intercalations. The names of the months and days correspond with the ancient Persian (see page 143). The months have from 29 to 30 days each. There are no weeks, the whole 30 days being distinguished by different names; and in those months which have 32 days, the two last are named *ro's'o shab* (day and night), and to distinguish one from the other are called first and second.'

The epoch of the Iláhí era consequently falls on Friday the 5th Rabi-ul-sání, A.H. 963, corresponding with the 19th February, 1556, N.S. which number must be added to bring its dates into Christian account. It is used on inscriptions, coins, and records of Jahángír's and the following reigns, but generally coupled with the Hijra date.

## THE SHAHÚR (VULGÒ, SHUHOOR) OR SOOR ERA OF MAHÁRÁSHTRA.

There is another era of Muhammadan origin still employed by the Maráthas of the west, entitled the Shahúr or Soor-san, a corruption of the Arabic word *shahúr*, (plural of *shahr*, 'month,') and literally meaning the 'year of months.' An account is given of this era in Capt. Jervis's 'Report on the weights and measures of the southern Konkan.' That officer affirms on some Hindú authority that it was introduced on Thursday, the 6th June, 1342, A.D., in the Hijra year 743, while others place it a year sooner: but the computation of its agreement with the Hijra year, says Capt. Jervis (in the same manner as was followed in ascertaining the epoch of the Faslı year), shews it to have begun when the 745th Hijra (A.D. 1344) corresponded with the 745th Shahúr san.<sup>1</sup> It was probably adopted on the establishment of one of the Muhammadan kingdoms in the Dakhan under the reign of Tughlak Sháh.

<sup>1</sup> This correspondence would continue for several years before and after, so that the Hindú account may probably be correct.

The years of this era are denominated after the corresponding Arabic numerals.

The following examples will be sufficient to explain the system; the names are, however, corrupted in pronunciation by the Maráthas:

1 <i>Ahadi</i> ,	10 <i>Ashar</i> ,	100 <i>Máyat</i> or <i>Máya</i> .
2 <i>Isni</i> ,	20 <i>Ishrin</i> ,	122 <i>Isna-ashrin máyat</i> .
3 <i>Salas</i> ,	30 <i>Saldtin</i> ,	200 <i>Miatin</i> .
4 <i>Arba</i> ,	40 <i>Arbain</i> ,	300 <i>Suls máyat</i> .
5 <i>Khams</i> ,	50 <i>Khamsin</i> ,	450 <i>Khamsin-arba máyat</i> .
6 <i>Sita</i> ,	60 <i>Sitain</i> ,	1000 <i>Alf</i> .
7 <i>Saba</i> ,	70 <i>Saba-in</i> ,	1100 <i>Máyat-o-alf</i> .
8 <i>Samáni</i> ,	80 <i>Samdnin</i> ,	1230 <i>Sulasin máyat-in-o-alf</i> .
9 <i>Tisa</i> ,	90 <i>Tisa-in</i> ,	1313 <i>Suls-ashar suls-máyat-o-alf</i> (A.D. 1834).

The correspondence with other eras may be seen from the following brief rule for their mutual reduction :

To reduce Shahúr years into	$\left\{ \begin{array}{l} \text{Christian} \\ \text{Śāka} \\ \text{Samvat} \\ \text{Fāṣlī} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{years, add} \\ \left\{ \begin{array}{l} 599 \\ 621 \\ 655 \\ 9 \end{array} \right\} \end{array} \right\}$	years respectively.
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If the given date fall after the sixth month of the Shahúr year, it will occur in the next ensuing Christian year; and after nine months, in the next Śāka or Samvat year; because the Shahúr year begins in June, at the sun's entrance into the lunar mansion Mriga (Mrigasrsha.) It is not stated whether its subdivisions follow the Hindú or Arabic system, but the former may be taken for granted.

#### JALÚS YEARS.

There is still another system of recording time to which some allusion is requisite under this head, as it depends, like the foregoing, upon the Hijra reckoning. During the dynasty of the Mughal Emperors, the year of the reigning monarch was usually inscribed, as is the case in most countries, upon all documents of a public nature. It was also particularly noted on the gold and silver coinage, where indeed it continues to be inserted under the Company's rule, although the date has long remained unchanged. The Hijra date was frequently added.

The jalús-san (*san-i jalús*) necessarily follows the Hijra reckoning, and the same tables will answer for the solution of them when the accession day of each sovereign is known. Those of the Mughal Emperors have accordingly been inserted among the festivals of the Muhammadan lunar calendric scale, where an explanation will be given of their application. A list of the sovereigns of Dikhí, in chronological succession, will also be found among the tables of dynasties.

It seems that the 'jalús-san' has been constituted a fixed era in

the Southern Konkan, commencing with the year of Sáliváhana 1578, (A.D. 1656), and running on henceforward in the ordinary solar manner contrary to all precedent in other parts of India.<sup>1</sup> This epoch, derived from Capt. Jervis' 'Report,' is anterior by two years to the coronation of Aurangzeb; but it corresponds precisely with the accession of Sultán 'Ali 'Adl Sháh II. to the throne of Bījápur; from which circumstance it doubtless drew its origin, although from subsequent disturbances, its correction was lost sight of.

In general it should be borne in mind that the duration of a Muhammadan monarch's reign, as well as of his life, is reckoned by lunar years; and that both consequently require correction when compared with other dates.

RÁJ-ABHISHEK ERA OF THE MARATHAS.

Only a few years subsequent to the establishment of the Jalús era last mentioned, another of the same nature was set up by the Maráthas, or at least it has since come into use, founded upon the rise of their power under the famous Sivají. We have the authority of Grant Duff for fixing the date of Sivají's ascending the throne, on the death of his father Sháhjí, in the year A.D. 1664, when he first assumed the title of Rájá, and struck money in his own name.

To convert the Ráj-abishek (meaning 'ointment of the king') into the Christian era, 1664 must be added. The division of months probably accords with the Śáka system.

RECAPITULATION.

The whole of the eras mentioned in the foregoing imperfect account are, for the convenience of reference, collected below in a tabular form, with the equation for their conversion into the ordinary reckoning of Europe. It has been deemed preferable to insert the year of the Christian era, corresponding with the *first nominal year* of each of the Indian eras, which will here and there produce an apparent variation from the epochs or initial dates given in the foregoing sketch. (See note, p. 165.)

<sup>1</sup> Jervis's 'Report,' p. 99.

TABULAR VIEW OF ERAS USED IN INDIA, WITH THE EQUATION FOR CONVERTING THEM  
INTO CHRISTIAN DATES.

DENOMINATION.	COMMENCEMENT.	EQUATION.
The Kali-yuga (vulgo, Kul-júg) commences Friday, 18th Feb.	(before Christ)	
	3102 B.C.	3102—K=C
The first year being reckoned as 0, the year 1 accords with	(after Christ)	
	3101 B.C.	K—3101=C
Era of Buddha's birth, by Chinese account..	1027 B.C.	not used.
Ditto, his <i>nirvāna</i> , in India, Ceylon, Ava, Siam, etc. 1st year=		545—B=C
	543 B.C.	B—543 =C
Jain era of Mahāvira.....	1st year 629 B.C.	not used.
Samvat (Sumbut) of Vikramāditya, year 1 = D March, 26 B.C.		— 56½
Śāka (Shuk) of Śālivāhana=equinox.....	79 A.D.	+ 78½
Parasurāma cycle of 1000 years (1st year of 4th cycle=Sept.		
	825 A.D.	+ 824½
Grahaparivṛthi ditto, of 90 years (1st year of 21st cycle)=		
	1777 A.D.	+1776
Vrihaspati (Jupiter's) cycle of 60 years (established in 966 A.D.)		
„ 1st year of 84th cycle ('Sārya-Siddhānta')=	1796 A.D.	+1795
„ „ 83rd cycle (Telinga account) ....=	1807 A.D.	+1806
„ „ 14th cycle (Tibet account) .....=	1807 A.D.	+1806
„ „ 76th cycle (Chinese account) ....=	1804 A.D.	+1803
Turkish or Ighari cycle of 12 years coincides with Tibetan and		
Telinga Jovian cycle, in its initial year.....		disused
Balabhi Samvat of Somnāth.....	1st year= March 318 A.D.	+ 317½
Siva-Sinha Samvat of Gujurāt.....	„ = „ 1113 A.D.	+1112
Burmerse era of Prome.....	„ = „ 79 A.D.	+ 78½
„ Vulgar epoch.....	„ = „ 639 A.D.	+ 638
„ Sacred era (see Buddha)....	„ = „ 543 B.C.	— 544
„ Grand epoch.....	„ = „ 691 B.C.	— 692
Java era, Aji Śāka.....	„ = „ 74 A.D.	+ 73
„ Bali era.....	„ = „ 81 A.D.	+ 80
Nipāl, Newār era.....	„ = „ 870 A.D.	+ 869
Tibet, <i>me-kha-gya-tsho</i> , 403-year era,	„ = „ 622 A.D.	+ 621
Hijra, lunar year.....	begins July 16, 622 A.D.	see tables
Era of Yazdijird, Persian.....	„ June 16, 632 A.D.	+ 631½
Jalālī era of Malik-shāh.....	„ March, 1079 A.D.	+1078½
Tārīkh-i ilāhī of the Emperor Akbar...	„ March, 1556 A.D.	
Faṣlī, revenue year of Upper India (established in 1556 A.D.)		+ 592½
„ „ of South India	„ 1638 A.D.	+ 590
Vilāyati „ of Orissa.....	„ 1556 A.D.	+ 592½
Bengālī-san „ of Bengal.....	„ 1556 A.D.	+ 593½
Shahūr-san of the Marāṭhas.....	(introduced in 1344 A.D.)	+ 599
Jalūs-san of Bijapūr.....	(Adl Shāh II. 1656 A.D.)	+1656
Rāj-abhishek of the Marāṭhas .....	(Sivaji's reign 1664 A.D.)	+1664

## DIRECTIONS FOR USING THE CHRONOLOGICAL TABLES.

Most persons consulting the following tables will wish to be spared the perusal of the description of the origin and formation of the several eras comprised in them, and will be desirous only of obtaining their object as directly as possible, namely, the conversion of a date expressed in either the Christian, Hijra, Samvat, Śāka, Kali-yug, Vrihaspati, Parasurāma, or Grahaparivriithi system, into the corresponding day of any other of the same series. The present rules will be confined to this object. They are partly repeated, also, with examples, on the pages of the several yearly scales, for the convenience of more immediate reference.

RULES FOR ANY DAY OF TIME FALLING WITHIN THE RANGE OF THE GENERAL TABLES XIII. AND XIV., NAMELY, FROM A.D. 622 TO A.D. 1900 FOR THE HIJRA, AND FROM A.D. 1600 TO A.D. 1900, FOR THE HINDÚ ERAS.

## HIJRA KALENDAR.

1. To find the Christian date corresponding with any Muhammadan date of the Hijra era,—say the 17th of Rajab 1201 A.H.

Take the initial day of the year 1201 from Table XIII., which will be found to be 3 (or Tuesday) the 24th October, 1786 N.S. Then set the first day of Muharram on the edge-scale of Table V. to the 24th October on the proper column of the Christian era, Table XII. Opposite to the 17th Rajab will be found to stand the 5th May (1787), which is the day required.

2. To find the Muhammadan day agreeing with a given Christian day,—say the 17th March, 1804 (a leap-year).

Find from Table XIII. what year of the Hijra commences next before March, 1804, namely, 1218 A.H., beginning on Saturday, the 23rd April, 1803. Set Scale V. to this date, and read off opposite to the 17th March, the 4th of Zilhejeh; but because 1804 is a leap-year, and the day falls after the end of February, one day must be added to the scale, and the reading will then be the 5th Zilhejeh, which is the day sought. Should the day of the week be also required, set the 1st Muharram to Saturday on the hebdomadal scale in Table XII. and read off 5th Zilhejeh, Saturday.

3. To find the Christian year corresponding with the jalús of any of the Mughal Emperors of Dihlí,—for instance, the 19th year of the reign of Sháh 'Ālam?

In the column of Festivals in the Hijra kalendar, page 182, it will be seen that Sháh 'Ālam came to the throne on the 1st of Jumádi I, A.H. 1178. Adding to this 19, as above, the general Hijra Table shows that A.D. 1192 commenced on the 30th Jan. 1778:—the 19th jalús

therefore (by the scale) will be seen to commence on the 29th May of the same year.

4. To convert a Hijra date into any of the Hindú eras corresponding to the given Hindú date.

In these cases the intervention of the Christian scale is required, because the initial days of the Muhammadan years are given only in the latter system. When once the English day is found, the rules already prescribed will answer for determining the remainder of the problem.

#### HINDÚ SOLAR OR SIDEREAL KALENDAR.

5. To convert a date in the Kali-yug, Śāka, or Bengálí-san eras, into the corresponding Christian date,—for example, the 1st of Jéth B.S. 1199 = K.Y. 4893 = S.A'K. 1714.

By Table XIV. the 1st Baisákh, K.Y. 4893, of the Hindú solar era coincided with Tuesday, the 10th April A.D. 1792. Therefore setting the index of the Hindú solar scale, Table X., to that day, on the proper column of Table XII. :—the 11th of May will be the resulting date.

(From the astronomical formation of the Hindú months, an error of a day in the *civil* reckoning will sometimes occur, which the kalendar X. is unable to correct, without a computation of the elements of the beginning of the particular Hindú month by the rule hereafter laid down, page 178).

6. The converse of the above proposition hardly requires a separate explanation.

Example: Required the Hindú solar day corresponding to the 20th December, 1813?

The 20th December, 1813, must fall in the Kali-yug year, 4914 (B.S. 1220), commencing, by Table XIV., on Sunday, 11th April, 1813. Setting, therefore, the index of the Hindú solar year to the 11th April, the 20th December will be found to accord with the 7th or 8th Pausha, 4914 K.Y. (The Viláyatí or Dakhaní reckoning gives the latter, while the Bengálí gives the former day.<sup>1</sup>)

#### FESTIVALS.

The Hindú Solar Kalendar contains but three festivals of any importance, namely, *Charak-púja*, on the last day of the year (or entrance of the Sun into the first sign *mesh*, of the Sidereal Zodiac), called also the *Satwa-sankránta*:—the first day of the Viláyatí year of

<sup>1</sup> It should be remarked that Warren's 'Kāla Sankalita' gives the beginning of the Hindú solar year invariably one day earlier than the reckoning followed in the tables of the Šadr Diwānī. This arises from his using the Tamil year of the 'Ārya Siddhānta,' while the 'Surya Siddhānta' is used in Bengal. We have not ventured to alter the tables, but the correction may be borne in mind.



Orissa and of the peninsula in general, viz., the autumnal equinox, or rather the Sun's entrance into Virgo:—and the *Makar-sankrānta*, on the last day of Paushya, when the sun enters Capricornus. The Christian day on which these occur will be shewn by the scale when the index is adjusted for the given year.

## LUNI-SOLAR KALENDAR.

7. To reduce a given date in the Samvat of Vikramāditya, or in the Fasli of the Upper Provinces, to the corresponding approximate Christian day,—for instance, the 2nd Súdī Bhádon (súdī Bhádra) 1861, Samvat, or the 16th Bhádon, 1211, Fasli.

By the general Table XIV., column 15, the Samvat year 1861, commenced on the *day after* the last conjunction, which fell on Sunday, 11th March, 1804.

Setting, therefore, the index of the luni-solar scale of Table VII. (or the new moon of the month Chaitra), to the 11th March, we find the 16th Bhádon (Bhádra) falls on the 7th August. But the year 1861, Samvat, is an *adhika*, 'lound,' or intercalary year; it is necessary, therefore, to find out what month is repeated, otherwise the denomination Bhádon may be a month erroneous. (N.B. It is always one of the first five months or the last month of the lunar year that is repeated).

8. To ascertain what month will be repeated in the Hindú luni-solar year,—taking for example the year 1861.

Set the index of Table VII. (the new moon of Chaitra) to the date of the beginning of the luni-solar year in the solar kalendar, taken from column 16 of the General Table XIV. namely, in the present instance, the 1st of the solar month Chaitra, which month (by column 14, of Table XIV, will contain 31 days.)

It will immediately be seen, that a second new moon will fall on the 31st of the same solar month Chaitra; the lunar month Chaitra therefore will be repeated, and the lunar month Bhádon (Bhádra) will fall a month later, coinciding with the ordinary month A'san<sup>1</sup> (A'swina).<sup>m</sup>

Therefore, in reading off the date opposite to the 16th Bhádon—(A'san,) the English date will come out the 6th September, A.D. 1804, which is now correct.

9. The converse of this proposition is equally simple, regard being paid to the *character* of the luni-solar year, and the month to be repeated (if any) being first ascertained by the rule just explained.

<sup>1</sup> The data for this example are taken from Warren; but strictly speaking the intercalation in this case should have belonged to the preceding year, since the definition of the commencement of the new year states that it begins with the *last* new moon antecedent to the first Baisákh of the solar kalendar.

**Example:** Find the approximate luni-solar day for the first July, 1812.

By the General Table XIV. the Samvat year 1869 begins on the day following the 13th March, 1812; it is an Adhika or intercalary year, beginning on the 3rd of the solar month Chaitra, which contains 31 days.

Setting the luni-solar index accordingly to the 2nd of Chaitra on the solar kalendar, the scale informs us at a glance that two new moons will fall within the solar month Baisákha; the lunar month of that name will consequently be repeated, and the denominations of the following months will be altered accordingly.

Now, set the luni-solar index to the 13th March, and read off opposite to the 1st July, the 6th (Sáwan) Asárha, 1869, which is the approximate date: (in reality it fell on the 7th, for no fixed scale can represent the variations of the lunar month correctly to a day in all cases.)

#### RULES FOR INTERCALATION.

It is not however necessary, within the limits of the General Table, to resort to the juxtaposition of the luni-solar and solar scales, to ascertain what month will be intercalated, since the initial letter of the month required is given in the 14th column of Tab. XIV.: thus AV signifies Adhika Vaisákha, or that the month Vaisákha will be repeated: the whole of the abbreviations which can occur, and the general order in which they do occur, are as follow:

AA	Adhika	Asárha	These intercalations happen respectively when the luni-solar year begins on the	5th or 6th of Chaitra (sol. calendar.)
AV	"	Vaisákha		2nd or 3rd ditto
AB	"	Bhádra		9th or 10th ditto
AS	"	Srđvana		6th, 7th, or 8th ditto
AJ	"	Jyestha		4th, 5th, or 6th ditto
AC	"	Chaitra		0 or 1st ditto <sup>1</sup>
AS	"	Srđvana		6th, 7th, or 8th ditto.

In this table, the last column shews what commencing day of the Samvat year will cause particular months to be intercalated: when therefore, by the rule just given, this day has been expounded, the existence and position of an intercalation is also determined for the given year: thus, in the Samvat year 500, as the initial day falls on the 4th of Chaitra, there will be an intercalation of the month Jyestha.

Some ambiguity, however, will still remain as to the actual month to be repeated, since, if Vaisákha had 32 days in that year and Chaitra 31, new moons would have occurred on the 3rd and 32nd of Vaisákha, and consequently the latter month would have been the one repeated.

<sup>1</sup> If Chaitra be accounted the *first* month of the year: but if it be called the *last* month, then the intercalation of Chaitra occurs when the preceding luni-solar year begins on the 10th or 11th Chaitra solar kalendar. Both cases are met with in the tables, as though the matter were indifferent to the Hindú astronomers.

To overcome this unavoidable degree of uncertainty, the problem must be worked out systematically with the elements furnished by the tables of Solar and Lunar Ahargana, but such an extreme measure will seldom or never be required in ordinary cases.

## LUNAR FESTIVALS.

The days on which the principal lunar festivals of the Hindús occur being inserted in the kalendar in Table VII, will be solved in European dates by simple inspection when the scale is once adjusted. It is only necessary to bear in mind that in an intercalary year such feasts as occur in the double month will be confined to the *nij* or proper month; and as the Adhika or intercalary month falls always in the middle of the 60 days (see page 155), the festivals will either happen in the first or in the last fifteen days of this period. All the festivals subsequent to it will be shifted forward one lunation along with the names of the months.

## TO CONVERT SAMVAT INTO ŚÁKA DATES.

For instance what is the Śáka day for the 6th Asara, 1869, Samvat?

Set the initial day of the luni-solar scale to the date of the solar Chaitra, given in the General Table as before (the 3rd Chaitra, or rather the 2nd, because the same General Table says, that Chaitra has 31 days): then (because also it is an intercalary year) read off opposite to the 6th (Sáwan) Asárha on the lunar scale,—the 19th Asárha, solar reckoning, which will be correct by the Dukhaní account. The Bengálí account is in all cases one day earlier. The Śáka year corresponding to Samvat 1869 by the General Table is 1726.

The same process precisely must be followed to find the Samvat from the Śáka date; only reversing the readings.

## CYCLES.

For the years of the several cycles of Parasuráma, Grahaparivritthi, and Vrihaspati, simple inspection of the table will be sufficient to find corresponding dates, as the sub-divisions of these years are seldom required. The names of the cycle of Jupiter (Vrihaspati) for the numerals in column xi. will be found in Table IV., page 163.

NOTE.—It should be borne in mind, that the natives, in speaking or writing a date in simple years, always express the number of years *expired*, not the current year, as is the custom in Europe. When they mention the month, therefore, they mean the month of the following current year: but as the numerical denomination of the Hindú year remains unchanged throughout it, no thought need be taken of the distinction of *expired* years, unless where a calculation has to be made from an initial epoch. In common parlance they may be treated like

the current years of any other system, as being more consonant with our ideas, and less liable to cause mistakes in transferring dates to and fro.

#### RULES FOR DATES TO WHICH THE TABLES DO NOT EXTEND.

There are two methods of solving Hindú dates anterior to the tables: 1st, by finding the time expired since the Kali-yug epoch (which commenced on Friday, the 18th February, of the year 3102 B.C.); or, 2nd, by starting from some more modern epoch, the correspondence of which has been previously established. The latter is the most convenient method, and a Table of such epochs (IX.), taken from the 'Káli Sankalita,' has been consequently inserted for the purpose of applying it in page 188: thus—

Let it be required to find the Christian date, Julian style, for the 15th Pausha, 622 Śáka? (623 current.)

From Table IX. it appears that the Śáka year 622 began on Saturday the 20th March, 700 A.D. Set the Index of the Hindú solar year scale to that day, and read off the 15th Pausha = 6th December, 700.

But as the Hindú months may vary in length a day or two, this result (if requisite) may be verified by finding the day of the week of both kalendars: thus—

	D.	G.	P.
1. Extract from Table IX. the root of the epoch .....	(6)	05	50
Add from Table X. the collective duration to the 1st Pausha...	(1)	18	37
And 15 days to the 15th of the month.....	(15)	00	00
The sum, rejecting sevens, is.....(Monday)	(1)	24	27

2. By the Dominican letter Table XI, of p. 190, the year 700 A.D. will be found to have commenced on Friday; whence (by the scale of days in the second part of the same table) the 6th of December will fall on Monday, which day, agreeing with that just found, the first computation is proved to be correct to a day.

Answer: Monday, the 6th December, 700 A.D.

Example 2. What is the Hindú solar date corresponding to the 12th June, 538 A.D.

The epoch for the expired year 3601, K.Y., or Śáka 422 (the nearest in occurrence to the year 538 A.D.) is ... (6) 21 40 on the 18th March.

Add from Table VIII. 30 years... (2) 45 46

„ „ 8 years... (3) 04 12

The year Kali-yug 3639 began ... (5) 10 58, or on Friday nearest the 18th March, 538.

Solve the Dominical day, by which Friday proves to be the 19th March.

Set the index of the Hindú solar scale according to the 11th March in the Christian kalendar, and read off, the 12th June = 23rd Asárha.

Now, by the Dominical letter, the 12th June falls on a Saturday;

And for the Hindú year we have as above..... (5) 10 58

Add collective duration to the first of Asárha ..... (6) 19 44

And the 23 days of Asárha..... (23)

Making the 23rd Asárha fall also on..... (6) 30 42 = Saturday; which

proves the operation to be correct, and the result to be, Saturday, the 23rd Aśārha year 460 Śāka.

Example 3. Expounded from the Kali-yug epoch. On what Christian day fell the 18th Māgha, 4903 K.Y.?

The proximate Christian year is  $4903 - 3101 = \text{A.D.}, 1802$  current. Take the contracted Ahargana from Table VIII., viz. —

$$\begin{array}{rcl} 4000 \text{ years} & = & (2) \ 01 \ 33 \\ 900 \text{ ,,} & = & (5) \ 52 \ 51 \\ 3 \text{ ,,} & = & (3) \ 46 \ 34 \end{array}$$

$$(4) \ 40 \ 58$$

Deduct constant, or *Sodhyam*<sup>1</sup>..... (2) 08 51

Year 4904 K.Y. begins (astronomically), (2) 32 07, counting from Friday, or on Sunday: and as the fraction is more than 30 gharis,<sup>2</sup> the civil year will commence on the following day, or on Monday: this is called the *suta dina*, and must fall, according to the General Table, somewhere near the 12th April. By the Dominical Table, then, it will be found that Monday corresponded with the 12th April of that year.

The remainder of the operation may be performed as before, either by the scale, or by the collective roots of the months: by both the answer comes out = Sunday, 30th January, 1803.

#### SAMVAT AND FAŚLI DATES ANTERIOR TO THE TABLES.

Where the tables do not give the initial day of the luni-solar year, it may be found from the table of Lunar Ahargana in p. 186, by the following simple process:—

1. Find the number of years elapsed since the commencement of the Kali-yug.
2. Extract the number of days corresponding with the elapsed period of Hindú solar years above found, from Table VIII.
3. Extract also the number of days elapsed in the luni-solar period corresponding, from Table VI.

Subtract the latter from the former, and the result is the number of days by which the luni-solar anticipates the solar year: if the remainder, however, exceed one lunation, or 29d. 31g. 50p., that amount must be deducted from it; because it is thence evident that an intercalary month would have intervened; the rule for the luni-solar year being, that it shall commence from the last new moon preceding the solar year.

NOTE.—For a correspondence of the luni-solar with the European date, it will in all cases be necessary to expound the beginning of the Hindú solar year in the first instance.

Example: On what European day did the Samvat year 1660 commence?

$$1660 \text{ Samvat} = \begin{array}{l} 1660 - 57 = 1603 \text{ A.D. (page 172).} \\ 1660 + 3044 = 4704 \text{ Kali-yug (expired.)} \end{array}$$

<sup>1</sup> Because the moment of the conjunction of the planets at the Hindú epoch occurred so many days and hours after the zero of the weekly reckoning. See note in page 188.

<sup>2</sup> The civil year begins at sunrise: the astronomical at noon.

1st. The number of solar days elapsed to the end of the Kali-yug year 4704

	D.	G.	P.
will be 4000.....	1461035	01	33
700.....	255681	07	46
4.....	1461	02	06
	1718177	11	25
Deduct <i>Sodhyam</i> or constant.....	2	08	51

Days elapsed, or root of K.Y. 4704..... 1718175 02 34 (Tuesday).

2nd. The number of luni-solar days elapsed, by Table VI. will be 4000 .....	1461025	50	19
700 .....	255675	49	49
4 .....	1446	59	56

Days elapsed, or root of Samvat 1660..... 1718148 40 04

Deducting this from the above, the remainder 26 is the number of days by which the luni-solar year precedes the solar, the last conjunction of the sun and moon falling on the (30 — 26 =) 4th of Chaitra : one day must, however, in all cases be added to this result, as the luni-solar year begins on the *day after* the conjunction of the sun and moon.

The 1st Baisâkh, solar year 4704 K.Y., occurs on Monday, the 7th of April, 1603 A.D., therefore deducting 25 days as above stated, the year 1660 Samvat began on Wednesday, the 12th March, 1603 A.D.

Setting the luni-solar scale accordingly to that day, any intermediate day of the year may be found : having previously determined whether any and what month of the year will undergo repetition or expungement, by the rules laid down in page 178.

Example 2. What day of the Samvat era corresponds with the 1st January A.D. 1 O.S.?

The year A.D. 1 = Kali-yug 3102 = Samvat 58 ; but as these years begin in March-April, the 1st January will fall in the preceding years respectively, viz. K.Y. 3101, and Sam. 57.

For the initial day of the solar year we have, epoch of 3101, by Table IX. = 14th March A.D. 0.<sup>1</sup>

The solar days expired, omitting fractions, will be.....	3000 =	1,095,776
	100 =	36,526
	1 =	365
		1,132,667

The luni-solar days will be (Tab. VI.).....	3000 =	1,095,732
	100 =	36,500
	1 =	354
Two intercalary months...	=	59
		1,132,645

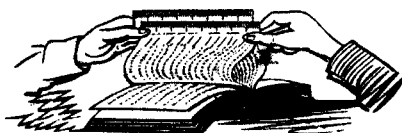
The Samvat precedes the solar year by 22 days and consequently begins on the 20th February, A.D. 0., and by the formula in page 177, it will be a 'lound' year, repeating either the month Bhâdra or Śrâvana.

Setting, therefore, the index of the luni-solar kalendric scale to the 20th Feb. in the appropriate Christian scale, the first of January will be found to fall on the 5th of Mâgha (Phâlguna) or 'Samvat 57, *Mâgha-badî panchami*.'

<sup>1</sup> Some chronologists make the year 0 = 1 B.C., and indeed this is the common mode of reckoning.

It is impossible, within the compass of the present practical rules, to furnish methods for correcting the approximate lunar days solved as above: for such a degree of accuracy, recourse must be had to Warren's, Jervis', or Bentley's tables; but as the lunar equations seldom exceed half a day in time, the moon's mean place will always be within one day of the truth.

## METHOD OF ADJUSTING THE CALENDRIC SCALES.



Lay the book open on a table: take the two required pages in the hands and depress them with opposite curvature. They will then bear side motion so as to adjust the respective indices.

N.B.—The duration of a day is represented by the space between two lines on the scale, not by the lines themselves.

The Muhammadan Year is of the most simple construction, consisting of twelve months of thirty and twenty-nine days alternately, with an intercalary day added to the last month on the 2nd, 5th, 7th, 10th, 13th, 16th, 18th, 21st, 24th, 26th, and 29th years of a cycle of 30 lunar years. For further particulars, see page 144.

## APPLICATION OF THE SCALE.

*To find the European day corresponding to any Hijra date, or vice versa?*

From the General Table find the day on which the Hijra year commences, to which set the index of the present scale (or the 1st day of Muharram), in that one of the columns of the European calendar, which may be most convenient for the purpose.

## EXAMPLE.

*Required the English day corresponding to the 12th Shabân, A.H. 1228?*

By the General Table of the Hijra, the year 1228 commenced on Monday, 4th January, 1813: setting therefore the 1st Muharram to that day in the outermost column but one in page 191, there will be found opposite to the 12th Shabân, the 10th of August, which is the day required.

To find the name of the day, set the index to Monday in the column of weeks and days; the 12th Shabân will be found to fall on Tuesday.

The jalûs years of the Mughal Emperors must be converted into Hijra years, by adding the initial years in each case, found in the column of 'festivals,' and then expounded as in the example just given.

New year's day, 1.  
Fête of Hasan and Hosain called the 'Muharram,' kept by Shîas, whole month

Jahândâr Shâh, j. 14th, 1124.

Akbar, jalûs 3rd, 963.

Shâh A'lam, jalûs 1st, 1173.  
Ahmad Shâh, j. 2nd, 1161.  
Humâyûn, jalûs 9th, 937.

Aurangzib, jalûs 1st, 1068.  
Shâh Jahân, jalûs 8th, 1037.

Jahângir, jalûs 24th, 1014.

Shab-i-barât, full moon.

Ramzân begins, > or 1st.  
Babar, jalûs 9th, 893.  
Akbar II., jalûs 6th, 1227.  
A'lamgir II., j. 10th, 1167.  
Taimûr, jalûs 12th, 774.

Eed-ul-Îtr. > or 1st,

Bakr-eed, 9th.

Muhammad Shâh, j. 25th, 1131  
Bahâdur Shâh, j. 1st, 1118.

Farrukhsîr, jalûs 23d, 1124.  
Ordinary year 354 days.  
Leap year, 355 days.

MONTHS.	1	2	3	4	5	6	7	8	9	10	11	12
MUHARRAM.	10	20	30	10	20	30	10	20	30	10	20	30
SABAB.	10	20	30	10	20	30	10	20	30	10	20	30
RAHÍ I.	10	20	30	10	20	30	10	20	30	10	20	30
RAHÍ II.	10	20	30	10	20	30	10	20	30	10	20	30
JUMADÍ I.	10	20	30	10	20	30	10	20	30	10	20	30
JUMADÍ II.	10	20	30	10	20	30	10	20	30	10	20	30
RAJAB.	10	20	30	10	20	30	10	20	30	10	20	30
SHABÂN.	10	20	30	10	20	30	10	20	30	10	20	30
RAMZÂN.	10	20	30	10	20	30	10	20	30	10	20	30
SHAWÂL.	10	20	30	10	20	30	10	20	30	10	20	30
HIKMA.	10	20	30	10	20	30	10	20	30	10	20	30
ZILHÊJÂ.	10	20	30	10	20	30	10	20	30	10	20	30



TABLE VI.—*Ahargana Chandramana, or Luni-solar Periods, reckoned from the beginning of the Kali-yug, according to the Surya Siddhanta, to find the root, or commencement of any Luni-solar Year.*

The days in this account are reckoned from Thursday.

Years.	Luni-solar Periods.				Years.	Luni-solar Periods.				Years.	Luni-solar Periods.			
	(4)	D.	G.	P.		(0)	D.	G.	P.		(1)	D.	G.	P.
1	(4)	354	22	01	20	(0)	7294	03	19	300	(1)	109558	28	53
2	(1)	708	44	03	30	(0)	10955	50	53	400	(4)	146087	49	07
3	(0)	1092	37	54	40	(0)	14588	06	37	500	(1)	182617	09	21
4	(4)	1446	59	56	50	(0)	18249	54	11	600	(4)	219146	29	35
5	(2)	1801	21	57	60	(1)	21911	41	46	700	(0)	255675	49	49
6	(1)	2185	15	48	70	(0)	25543	37	31	800	(4)	292205	10	04
7	(5)	2539	37	50	80	(1)	29205	45	06	900	(5)	328704	58	27
8	(2)	2893	59	51	90	(2)	32867	32	40	1000	(2)	365234	18	42
9	(1)	3277	53	43	100	(1)	36499	48	24	2000	(6)	730498	09	13
10	(6)	3632	15	44	200	(5)	73029	08	38	4000	(6)	1461025	50	19

To find on what day of the Solar month, Chaitra, the beginning of any luni-solar year falls.

1. From table VIII. of *Solar Ahargana* page 188, extract the number of solar days elapsed for the period of the Kali-yug.

2. From the present table extract in a similar way the number of days elapsed in the same luni-solar period.

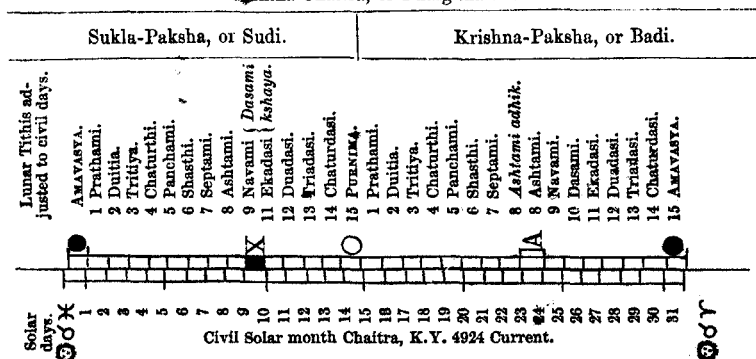
3. Subtract the latter from the former, and if the remainder exceed  $29\frac{1}{2}$  days, then subtract that amount so that the remainder shall always be less than  $29\frac{1}{2}$ .

4. This remainder is then the number of days by which the lunar year precedes the solar, and, counted back from the 30th of the solar month, Chaitra, shews the date in that month with which it commences.

For an example, see p. 181.

SPECIMEN OF A LUNAR MONTH FROM THE HINDÚ CALENDAR FOR THE INTERCALARY MONTH CHAITRA OF THE 4924TH LUNI-SOLAR YEAR OF THE KALI-YUG.

Adhika Chaitra, or Phalguna-itiek.



This scale shows how the lunar civil day is coupled with the solar civil day in which it ends: that when two tithis end in one day, the second tithi is expunged: and when none end in a civil day, the tithi is reckoned twice; see p. 155.



TABLE VIII.—*Solar Ahargana, or days, ghatis, and pals elapsed from the beginning of the Kali-yug, for any period of years, [with the days of the week (within brackets) obtained, by dividing the collective days by 7.]*

Years.	Time corresponding.			Years.	Time corresponding.			Years.	Time corresponding.		
	D.	G.	P.		D.	G.	P.		D.	G.	P.
1	(1)	365	15 31	20	(4)	7305	10 30	300	(6)	109577	37 37
2	(2)	730	31 03	30	(2)	10957	45 46	400	(6)	146103	30 09
3	(3)	1095	46 34	40	(1)	14610	21 01	500	(6)	182629	22 42
4	(5)	1461	02 06	50	(6)	18262	56 16	600	(6)	219155	15 14
5	(6)	1826	17 38	60	(5)	21915	31 31	700	(6)	255681	07 46
6	(0)	2191	33 09	70	(4)	25568	06 47	800	(6)	292207	00 19
7	(1)	2556	48 41	80	(3)	29220	42 02	900	(5)	328732	52 51
8	(3)	2922	04 12	90	(1)	32873	17 17	1000	(5)	365258	45 23
9	(4)	3287	19 44	100	(6)	36525	52 32	2000	(4)	730517	30 47
10	(5)	3652	35 15	200	(6)	73051	45 04	4000	(2)	1461035	01 33

From any period found by this table, the constant quantity 2 days 8 gh., 51 pl. is to be subtracted, because the epoch of the Kali-yug occurred that time after the zero of the table. The days of the week are to be counted from Friday.

The solar *ahargana* are required at length to find the beginning of the luni-solar year, as explained in page 186, and in the text at page 181.

To find the beginning of the Solar year, however, it is sufficient to take out the figures between brackets (with the *ghatis* and *pals*, where accuracy is required) for the odd years of the century; and add them to the epoch of the nearest century in the following table as explained in page 180.

TABLE IX.—*Epochs of Hindu Solar Years occurring in centuries before or after Christ, J. S.*

To be used for finding the beginning of any year, without reference to the commencement of the Kali-yug.

European year before Christ.	Anno Kali-yug.	Epochs.	Date in March.	European year after Christ.	Anno Kali-yug.	Saka year.	Epochs.	Date in March.
		D. G. P.					D. G. P.	
1000	2101	(1) 20 25	5	300	3401	222	(6) 37 30	16
900	2201	(1) 12 30	6	400	3501	322	(6) 29 35	17
800	2301	(1) 04 35	7	500	3601	422	(6) 21 40	18
700	2401	(0) 56 40	7	600	3701	522	(6) 13 45	19
600	2501	(0) 48 45	8	700	3801	622	(6) 05 50	20
500	2601	(0) 40 50	9	800	3901	722	(5) 57 55	20
400	2701	(0) 32 55	10	900	4001	822	(5) 50 00	21
300	2801	(0) 25 00	11	1000	4101	922	(5) 42 05	22
200	2901	(0) 17 05	12	1100	4201	1022	(5) 34 10	23
100	3001	(0) 09 10	13	1200	4301	1122	(5) 26 15	24
A.D. 0	3101	(0) 01 15	14	1300	4401	1222	(5) 18 20	25
100	3201	(6) 53 20	14	1400	4501	1322	(5) 10 25	26
200	3301	(6) 45 25	15	1500	4601	1422	(5) 02 30	27

From 1600 A.D. the General Table furnishes a continuation of the above epochs.

*Note.*—When this table is used, the days of the week are to be counted from Sunday.

*Example.*—On what day does the year 4250 K. Y. commence?

Nearest epoch 4201 gives .....	(5)	34	10
Add for 40 years, (table viii.) .....	(1)	21	01
9 ditto .....	(4)	19	44

Counting from Sunday, it begins on the (4) 14 55, fourth, or Thursday falling nearest to the 23rd of March, A.D. 1149.

# X.—HINDU SOLAR OR SIDEREAL YEAR.

## FESTIVALS.

(The Luni-solar year commences on the last new moon occurring in this month.)

Chaitra.  
10  
20

### EXPLANATION.

The divisions on the outermost edge of the paper shew the correct astronomical lengths of the Hindu-solar months, agreeing with the quantities in the column headed Collective Duration.

The scale of days, gives the civil division of the months when the astronomical year commences at or near sunrise: it is liable to variation when otherwise; but the first and second three-monthly periods always contain 94 and 93 days respectively.

The names of the months in Bengáli and Tamil, and their astronomical duration, are given in the column of months.

### RULE.

To find the European date of any day in the Kali-yug, Saka, Bengáli san, or Vildaty or Tamil eras: or vice versâ.

Set the index, or 1st Bysâkh, to the initial day of the Christian year extracted from the General Table, or found by means of the Table of Epochs in the opposite page; and read off the date required.

To resolve the Hindú solar date concurring with any day of the luni-solar year, Samvat or Fasli, set the index of the luni-solar scale (p. 187) to its expounded day in Chaitra and read off the day required, which will however be only an approximation, as the lengths of the lunar months vary in a trifling degree.

Year begins, on ☉'s entering the sidereal sign ♈ (mê-sha) called *Satwa-sankrant*.

*Kark-sankrant*.  
(*Shankodhara mēla* at Benares.)

Vilâtyati year begins, 1.

*Tula-sankrant*.

*Makar-sankrant*.

COLLECTIVE DURATION.				MONTHS. Tam. Ben.	
Day of week.	D.	G.	P.		
(2)	30	55	32	BYÁSÁKH. CHÁITRA. ८ d. १. P. 55 52	10 20 31
(6)	62	19	44	JYÊSHTHA. VYÁSÊ. ७ d. १. P. 31 24 12	10 20 31
(2)	93	56	22	ÂSÁÐHA. ÂVNI. ८ d. १. P. 31 36 36	10 20 31
(6)	125	24	34	SRÂVANA. ÂDHI. ७ d. १. P. 31 28 12	10 20 31
(2)	156	26	44	BHÂDRÂ. ÂVANI. ७ d. १. P. 31 62 10	10 20 31
(4)	186	54	06	ÂSVINÂ. PÂRÂVOSI. ८ d. १. P. 30 57 22	10 20 31
(6)	216	48	13	KÂRTIKA. ÂRÐASHI. ७ d. १. P. 29 54 07	10 20 30
(1)	246	18	37	ÂGRÂHANA. KÂRTIKA. ८ d. १. P. 29 50 24	10 20 29
(2)	275	39	30	PAUSHA. MÂRGASHI. ८ d. १. P. 29 30 53	10 20 30
(4)	305	06	46	MÂGHÂ. TYE. ८ d. १. P. 29 27 16	10 20 29
(5)	334	55	10	PHÂLGUNA. MAUSHI. ८ d. १. P. 29 43 24	10 20 30
				CHÂITRA. POONGOON. ८ d. १. P. 30 20 21	10 20 21

TABLE XI.—To find the day of the week for any date from 5000 B.C. to 2700 A.D.—First Part—for New Year's Day of any Year.

Centuries before Christ.								Odd years. of Centuries.	O. Style. N. Style.	Centuries after Christ.							
4800	4700	4600	4500	4400	4300	4200				1700		1800		1900	1800	2000	
4100	4000	3900	3800	3700	3600	3500				2100		2200		2300	2400	2500	2600
3400	3300	3200	3100	3000	2900	2800				0	100	200	300	400	500	600	
2700	2600	2500	2400	2300	2200	2100				700	800	900	1000	1100	1200	1300	
2000	1900	1800	1700	1600	1500	1400				1400	1500	1600	1700	1800	1900	2000	
1300	1200	1100	1000	900	800	700				2100	2200	2300	2400	2500	2600	2700	
600	500	400	300	200	100	0											
Fr.	Th.	W.	Tu.	M.	Su.	Sa.	0	28.	56.	84.	Fr.	Th.	W.	Tu.	M.	Su.	Sa.
Th.	W.	Tu.	M.	Su.	Sa.	Fr.	1	29.	57.	85.	Sa.	Fr.	Th.	W.	Tu.	M.	Su.
Tu.	M.	Su.	Sa.	Fr.	Th.	W.	2	30.	58.	86.	Su.	Sa.	Fr.	Th.	W.	Tu.	M.
M.	Su.	Sa.	Fr.	Th.	W.	Tu.	3	31.	59.	87.	M.	Su.	Sa.	Fr.	Th.	W.	Tu.
Su.	Sa.	Fr.	Th.	W.	Tu.	M.	4	32.	60.	88.	W.	Tu.	M.	Su.	Sa.	Fr.	Th.
Sa.	Fr.	Th.	W.	Tu.	M.	Su.	5	33.	61.	89.	Th.	W.	Tu.	M.	Su.	Sa.	Fr.
Th.	W.	Tu.	M.	Su.	Sa.	Fr.	6	34.	62.	90.	Fr.	Th.	W.	Tu.	M.	Su.	Sa.
W.	Tu.	M.	Su.	Sa.	Fr.	Th.	7	35.	63.	91.	Sa.	Fr.	Th.	W.	Tu.	M.	Su.
Tu.	M.	Su.	Sa.	Fr.	Th.	W.	8	36.	64.	92.	M.	Su.	Sa.	Fr.	Th.	W.	Tu.
M.	Su.	Sa.	Fr.	Th.	W.	Tu.	9	37.	65.	93.	Tu.	M.	Su.	Sa.	Fr.	Th.	W.
Sa.	Fr.	Th.	W.	Tu.	M.	Su.	10	38.	66.	94.	W.	Tu.	M.	Su.	Sa.	Fr.	Th.
Fr.	Th.	W.	Tu.	M.	Su.	Sa.	11	39.	67.	95.	Th.	W.	Tu.	M.	Su.	Sa.	Fr.
Th.	W.	Tu.	M.	Su.	Sa.	Fr.	12	40.	68.	96.	Sa.	Fr.	Th.	W.	Tu.	M.	Su.
W.	Tu.	M.	Su.	Sa.	Fr.	Th.	13	41.	69.	97.	Su.	Sa.	Fr.	Th.	W.	Tu.	M.
M.	Su.	Sa.	Fr.	Th.	W.	Tu.	14	42.	70.	98.	M.	Su.	Sa.	Fr.	Th.	W.	Tu.
Su.	Sa.	Fr.	Th.	W.	Tu.	M.	15	43.	71.	99.	Tu.	M.	Su.	Sa.	Fr.	Th.	W.
Sa.	Fr.	Th.	W.	Tu.	M.	Su.	16	44.	72.		Th.	W.	Tu.	M.	Su.	Sa.	Fr.
Fr.	Th.	W.	Tu.	M.	Su.	Sa.	17	45.	73.		Fr.	Th.	W.	Tu.	M.	Su.	Sa.
W.	Tu.	M.	Su.	Sa.	Fr.	Th.	18	46.	74.		Sa.	Fr.	Th.	W.	Tu.	M.	Su.
Tu.	M.	Su.	Sa.	Fr.	Th.	W.	19	47.	75.		Su.	Sa.	Fr.	Th.	W.	Tu.	M.
M.	Su.	Sa.	Fr.	Th.	W.	Tu.	20	48.	76.		Tu.	M.	Su.	Sa.	Fr.	Th.	W.
Sa.	Sa.	Fr.	Th.	W.	Tu.	M.	21	49.	77.		W.	Tu.	M.	Su.	Sa.	Fr.	Th.
Fr.	Th.	W.	Tu.	M.	Su.	Sa.	22	50.	78.		Th.	W.	Tu.	M.	Su.	Sa.	Fr.
Th.	W.	Tu.	M.	Su.	Sa.	Fr.	23	51.	79.		Fr.	Th.	W.	Tu.	M.	Su.	Sa.
W.	Tu.	M.	Su.	Sa.	Fr.	Th.	24	52.	80.		Su.	Sa.	Fr.	Th.	W.	Tu.	M.
Tu.	M.	Su.	Sa.	Fr.	Th.	W.	25	53.	81.		M.	Su.	Sa.	Fr.	Th.	W.	Tu.
Su.	Sa.	Fr.	Th.	W.	Tu.	M.	26	54.	82.		Tu.	M.	Su.	Sa.	Fr.	Th.	W.
Sa.	Fr.	Th.	W.	Tu.	M.	Tu.	27	55.	83.		W.	Tu.	M.	Su.	Sa.	Fr.	Th.

## Second Part—for Months or Days.

Days Additive.	January. October.	February. March. November.	January, L. Y. April. July.	May.	June.	Feb., L. Y. August.	September December.
0	1 8 15 22 29	5 12 19 26	2 9 16 23 30	7 14 21 28	4 11 18 25	6 13 20 27	3 10 17 24 31
1	2 9 16 23 30	6 13 20 27	3 10 17 24 31	8 15 22 29	5 12 19 26	7 14 21 28	4 11 18 25
2	3 10 17 24 31	7 14 21 28	4 11 18 25	2 9 16 23 30	6 13 20 27	8 15 22 29	5 12 19 26
3	4 11 18 25	1 8 15 22 29	5 12 19 26	3 10 17 24 31	7 14 21 28	9 16 23 30	6 13 20 27
4	5 12 19 26	2 9 16 23 30	6 13 20 27	4 11 18 25	1 8 15 22 29	3 10 17 24 31	7 14 21 28
5	6 13 20 27	3 10 17 24 31	7 14 21 28	5 12 19 26	2 9 16 23 30	4 11 18 25	1 8 15 22 29
6	7 14 21 28	4 11 18 25	1 8 15 22 29	6 13 20 27	3 10 17 24	5 12 19 26	2 9 16 23 30

## EXPLANATION.

Any year being given, either before or after Christ, Old or New Style, and the century at the top of the Table and the odd years in the middle column. The square of intersection shows the day on which the year commences. Then look for the day of the month in the lower part of the same table, and on a line with it, in the first column, is shown the number of days to be added to the initial day of the year first found: thus the 15th of April, 1833, will fall on Sunday + 6 = Saturday.

If the given year be a leap year, and the month January or February, it must be looked for under January, L. Y. or February, L. Y. A leap year after Christ is marked by a dot on the right hand; one before Christ, by a dot on the left.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 week.

[illegible]

When the Christian year is hilled, if the required day should fall after the month of February, one day must be subtracted from the resulting Christian day shown by the scale. The column headed "Days" serves to reckon the number of days between any given interval, which may either be done by juxtaposition, or by a pair of compasses. The same column also shows the day of the week, by simply setting the initial day of the year to the proper Dominical day; the preceding day being accounted Sunday.

## GENERAL TABLE OF THE HIJRA.

*Note.*—The Hijra Chronological Table has been collated with that published in Playfair's 'Chronology,' as several errors of the press were discovered in Warren's 'Kala Sankalita.' The dates are expressed in old or Julian style up to the year A.D. 1750, after which they are continued in new or Gregorian style.

In the initial *ferie*, 1 stands for Sunday, 2 for Monday, etc.

For an explanation of the Muhammadan era, see page 144, and for the application of the present table in conjunction with the calendric scale for the lunar year, see pages 175 and 185.

There are errors in many other published tales of the Hijra, and as those consulting them may thus be led to wrong results, it may be as well here to notice a few of the discrepancies which a cursory examination has discovered. Thus in 'Tables of the Christian and Muhammadan Eras,' published in Calcutta in the year 1790, by James White, the year 1800, A.D., is made a leap year, and all the Christian dates subsequent thereto are consequently in error one day, being in defect.

In the Sudur Dewanee tables<sup>1</sup> the irregularities of the earlier Hijra dates cannot be reconciled on any principle of a single mistake pervading them; and as the false dates have been in a manner officially promulgated at the head of the Government Regulations, it becomes the more necessary to point them out in a conspicuous manner. The Tables begin with the year 1765. The following are the corrections required for the first day of Muharram, up to the year 1197:—

A.H.		A.H.	
1178	for 5th July, read 1st July, 1764.	1188	for 20th Mar., read 14th Mar. 1774.
1179	„ 24th June, „ 20th June.	1189	„ 9th Mar., „ 4th Mar.
1180	„ 2nd June, „ 9th June.	1190	„ 28th Feb., „ 21st Feb.
1181	„ 2nd June, „ 30th May.	1191	„ 16th Feb., „ 9th Feb.
1182	„ 22nd May, „ 18th May.	1192	„ 4th Feb., „ 30th Jan.
1183	„ 13th May, „ 7th May.	1193	„ 22nd Jan., „ 19th Jan.
1184	„ 3rd May, „ 27th April.	1194	„ 11th Jan., „ 1st Jan.
1185	„ 24th April, „ 16th April.	1195	„ 30th Dec., „ 28th Dec.
1186	„ 2nd April, „ 4th April.	1196	„ 18th Dec., „ 17th Dec.
1187	„ 30th Mar., „ 25th Mar.	1197	„ 8th Dec., „ 7th Dec.

After this, the differences seldom exceed one day, and are caused by the wrong years being made bissextile. The jalús years of Sháh A'lam are all one year in advance.

Captain Jervis' Tables, printed at Bombay, are correct, differing only occasionally in the position of the intercalary years.

<sup>1</sup> The following, I am informed, is the mode in which the Sudur Dewanee Almanack is prepared. The Pandit of the Court, at the beginning of each English year, submits an almanack for the English and native Eras. One copy of this is kept in the office, and another forwarded to Government.

It may be noticed that the popular commencement of the Hijra year occurs on the first sight of the new moon; but this cannot affect its chronological determination.

TABLE XIII.—Of correspondence between the Hijra and the Julian and Gregorian Calendars of Europe, shewing the first day of each year of the Hijra Kalendar.

HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.		
	Year.	Month.	Day.		Year.	Month.	Day.		Year.	Month.	Day.
1	622	16 July...	6	56 B.	675	25 Nov...	1	111 B.	729	5 April...	3
2 B.	623	5 July...	3	57	676	14 Nov...	6	112	730	26 March	1
3	624	24 June...	1	58	677	3 Nov...	3	113	731	15 March	5
4	625	13 June...	5	59 B.	678	23 Oct...	7	114 B.	732	3 March	2
5 B.	626	2 June...	2	60	679	13 Oct...	5	115	733	21 Feb...	7
6	627	23 May...	7	61	680	1 Oct...	2	116 B.	734	10 Feb...	4
7 B.	628	11 May...	4	62 B.	681	20 Sept...	6	117	735	31 Jan...	2
8	629	1 May...	2	63	682	10 Sept...	4	118	736	20 Jan...	6
9	630	20 April...	6	64	683	30 Aug...	1	119 B.	737	8 Jan...	3
10 B.	631	9 April...	3	65 B.	684	18 Aug...	5	120	737	29 Dec...	1
11	632	29 March...	1	66	685	8 Aug...	3	121	738	18 Dec...	5
12	633	18 March...	5	67 B.	686	28 July...	7	122 B.	739	7 Dec...	2
13 B.	634	7 March...	2	68	687	18 July...	5	123	740	26 Nov...	7
14	635	25 Feb...	7	69	688	6 July...	2	124	741	15 Nov...	4
15	636	14 Feb...	4	70 B.	689	25 June...	6	125 B.	742	4 Nov...	1
16 B.	637	2 Feb...	1	71	690	15 June...	4	126	743	25 Oct...	6
17	638	23 Jan...	6	72	691	4 June...	1	127 B.	744	13 Oct...	3
18 B.	639	12 Jan...	3	73 B.	692	23 May...	5	128	745	3 Oct...	1
19	640	2 Jan...	1	74	693	13 May...	3	129	746	22 Sept...	5
20	640	21 Dec...	5	75	694	2 May...	7	130 B.	747	11 Sept...	2
21 B.	641	10 Dec...	2	76 B.	695	21 April...	4	131	748	31 Aug...	7
22	642	30 Nov...	7	77	696	10 April...	2	132	749	20 Aug...	4
23	643	19 Nov...	4	78 B.	697	30 March...	6	133 B.	750	9 Aug...	1
24 B.	644	7 Nov...	1	79	698	20 March...	4	134	751	30 July...	6
25	645	28 Oct...	6	80	699	9 March...	1	135	752	18 July...	3
26 B.	646	17 Oct...	3	81 B.	700	26 Feb...	5	136 B.	753	7 July...	7
27	647	7 Oct...	1	82	701	15 Feb...	3	137	754	27 June...	5
28	648	25 Sept...	5	83	702	4 Feb...	7	138 B.	755	16 June...	2
29 B.	649	14 Sept...	2	84 B.	703	24 Jan...	4	139	756	5 June...	7
30	650	4 Sept...	7	85	704	14 Jan...	2	140	757	25 May...	4
31	651	24 Aug...	4	86 B.	705	2 Jan...	6	141 B.	758	14 May...	1
32 B.	652	12 Aug...	1	87	705	23 Dec...	4	142	759	4 May...	6
33	653	2 Aug...	6	88	706	12 Dec...	1	143	760	22 April...	3
34	654	22 July...	3	89 B.	707	1 Dec...	5	144 B.	761	11 April...	7
35 B.	655	11 July...	7	90	708	20 Nov...	3	145	762	1 April...	5
36	656	30 June...	5	91	709	9 Nov...	7	146 B.	763	21 March...	2
37 B.	657	19 June...	2	92 B.	710	29 Oct...	4	147	764	10 March...	7
38	658	9 June...	7	93	711	19 Oct...	2	148	765	27 Feb...	4
39	659	29 May...	4	94	712	7 Oct...	6	149 B.	766	16 Feb...	1
40 B.	660	17 May...	1	95 B.	713	26 Sept...	3	150	767	6 Feb...	6
41	661	7 May...	6	96	714	16 Sept...	1	151	768	26 Jan...	3
42	662	26 April...	3	97 B.	715	5 Sept...	5	152 B.	769	14 Jan...	7
43 B.	663	15 April...	7	98	716	25 Aug...	3	153	770	4 Jan...	5
44	664	4 April...	5	99	717	14 Aug...	7	154	771	24 Dec...	2
45	665	24 March...	2	100 B.	718	3 Aug...	4	155 B.	771	13 Dec...	5
46 B.	666	13 March...	6	101	719	24 July...	2	156	772	2 Dec...	4
47	667	3 March...	4	102	720	12 July...	6	157 B.	773	21 Nov...	1
48 B.	668	20 Feb...	1	103 B.	721	1 July...	3	158	774	11 Nov...	6
49	669	9 Feb...	6	104	722	21 June...	1	159	775	31 Oct...	3
50	670	29 Jan...	3	105	723	10 June...	5	160 B.	776	19 Oct...	7
51 B.	671	18 Jan...	7	106 B.	724	29 May...	2	161	777	9 Oct...	5
52	672	8 Jan...	5	107	725	19 May...	7	162	778	28 Sept...	2
53	672	27 Dec...	2	108 B.	726	8 May...	4	163 B.	779	17 Sept...	6
54 B.	673	16 Dec...	6	109	727	28 April...	2	164	780	6 Sept...	4
55	674	6 Dec...	4	110	728	16 April...	6	165	781	26 Aug...	1



Hijra Year.	CHRISTIAN ERA.			Hijra Year.	CHRISTIAN ERA.			Hijra Year.	CHRISTIAN ERA.		
	Year.	Month.	Day.		Year.	Month.	Day.		Year.	Month.	Day.
166 B.	782	15 Aug...	5	226 B.	840	31 Oct....	1	286 B.	899	17 Jan....	4
167	783	5 Aug....	3	227	841	21 Oct....	6	287	900	7 Jan....	2
168 B.	784	24 July...	7	228 B.	842	10 Oct....	3	288 B.	900	26 Dec...	6
169	785	14 July...	5	229	843	30 Sept...	1	289	901	16 Dec...	4
170	786	3 July...	2	230	844	18 Sept...	5	290	902	5 Dec...	1
171 B.	787	22 June...	6	231 B.	845	7 Sept....	2	291 B.	903	24 Nov....	5
172	788	11 June...	4	232	846	28 Aug....	7	292	904	13 Nov...	3
173	789	31 May...	1	233	847	17 Aug....	4	293	905	2 Nov....	7
174 B.	790	20 May...	5	234 B.	848	5 Aug....	1	294 B.	906	22 Oct....	4
175	791	10 May...	3	235	849	26 July...	6	295	907	12 Oct....	2
176 B.	792	28 April...	7	236 B.	850	15 July...	3	296 B.	908	30 Sept...	6
177	793	18 April...	5	237	851	5 July...	1	297	909	20 Sept...	4
178	794	7 April...	2	238	852	23 June...	5	298	910	9 Sept...	1
179 B.	795	27 March...	6	239 B.	853	12 June...	2	299 B.	911	29 Aug...	5
180	796	16 March...	4	240	854	2 June...	7	300	912	18 Aug...	3
181	797	5 March...	1	241	855	22 May...	4	301	913	7 Aug....	7
182 B.	798	22 Feb....	5	242 B.	856	10 May...	1	302 B.	914	27 July...	4
183	799	12 Feb....	3	243	857	30 April...	6	303	915	17 July...	2
184	800	1 Feb....	7	244	858	19 April...	3	304	916	5 July...	6
185 B.	801	20 Jan....	4	245 B.	859	8 April...	7	305 B.	917	24 June...	3
186	802	10 Jan....	2	246	860	28 March...	5	306	918	14 June...	1
187 B.	802	30 Dec...	6	247 B.	861	17 March...	2	307 B.	919	3 June...	5
188	803	20 Dec...	4	248	862	7 March...	7	308	920	23 May...	3
189	804	8 Dec....	1	249	863	24 Feb....	4	309	921	12 May...	7
190 B.	805	27 Nov...	5	250 B.	864	13 Feb....	1	310 B.	922	1 May....	4
191	806	17 Nov...	3	251	865	2 Feb....	6	311	923	21 April...	2
192	807	6 Nov....	7	252	866	22 Jan....	3	312	924	9 April...	5
193 B.	808	25 Oct....	4	253 B.	867	11 Jan....	7	313 B.	925	29 March...	2
194	809	15 Oct....	2	254	868	1 Jan....	5	314	926	19 March...	1
195	810	4 Oct....	6	255	868	20 Dec...	2	315	927	8 March...	5
196 B.	811	23 Sept...	3	256 B.	869	10 Dec...	7	316 B.	928	25 Feb....	2
197	812	12 Sept...	1	257	870	29 Nov...	4	317	929	14 Feb....	7
198 B.	813	1 Sept....	5	258 B.	871	18 Nov...	1	318 B.	930	3 Feb....	4
199	814	22 Aug...	3	259	872	7 Nov....	6	319	931	24 Jan....	2
200	815	11 Aug...	7	260	873	27 Oct....	3	320	932	13 Jan....	6
201 B.	816	30 July...	4	261 B.	874	16 Oct....	7	321 B.	933	1 Jan....	3
202	817	20 July...	2	262	875	6 Oct....	5	322	933	22 Dec...	1
203	818	9 July...	6	263	876	24 Sept...	2	323	934	11 Dec...	5
204 B.	819	28 June...	3	264 B.	877	13 Sept...	6	324 B.	935	30 Nov...	2
205	820	17 June...	1	265	878	3 Sept....	4	325	936	19 Nov...	7
206 B.	821	6 June...	5	266 B.	879	23 Aug...	1	326 B.	937	8 Nov....	4
207	822	27 May...	3	267	880	12 Aug...	6	327	938	29 Oct....	2
208	823	16 May...	7	268	881	1 Aug....	3	328	939	18 Oct....	6
209 B.	824	4 May....	4	269 B.	882	21 July...	7	329 B.	940	6 Oct....	3
210	825	24 April...	2	270	883	11 July...	5	330	941	26 Sept...	1
211	826	13 April...	6	271	884	29 June...	2	331	942	15 Sept...	5
212 B.	827	2 April...	3	272 B.	885	18 June...	6	332 B.	943	4 Sept...	2
213	828	22 March...	1	273	886	8 June...	4	333	944	24 Aug...	7
214	829	11 March...	5	274	887	28 May...	1	334	945	13 Aug...	4
215 B.	830	28 Feb....	2	275 B.	888	16 May...	5	335 B.	946	2 Aug....	1
216	831	18 Feb....	7	276	889	6 May...	3	336	947	23 July...	6
217 B.	832	7 Feb....	4	277 B.	890	25 April...	7	337 B.	948	14 July...	3
218	833	27 Jan....	2	278	891	15 April...	5	338	949	1 July...	1
219	834	16 Jan....	6	279	892	3 April...	2	339	950	20 June...	5
220 B.	835	5 Jan....	3	280 B.	893	23 March...	6	340 B.	951	9 June...	2
221	835	26 Dec...	1	281	894	13 March...	4	341	952	29 May...	7
222	836	14 Dec...	5	282	895	2 March...	1	342	953	18 May...	4
223 B.	837	3 Dec....	2	283 B.	896	19 Feb....	5	343 B.	954	7 May...	1
224	838	23 Nov...	7	284	897	8 Feb....	3	344	955	27 April...	6
225	839	12 Nov...	4	285	898	28 Jan....	7	345	956	15 April...	3

HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.		
	Year.	Month.	Day		Year.	Month.	Day.		Year.	Month.	Day.
346 B.	957	4 April	7	406 B.	1015	21 June	3	466 B.	1073	6 Sept.	6
347	958	25 March	5	407	1016	10 June	1	467	1074	27 Aug.	4
348 B.	959	14 March	2	408 B.	1017	30 May	5	468 B.	1075	16 Aug.	1
349	960	3 March	7	409	1018	20 May	3	469	1076	5 Aug.	6
350	961	20 Feb.	4	410	1019	9 May	7	470	1077	25 July	3
351 B.	962	9 Feb.	1	411 B.	1020	27 April	4	471 B.	1078	14 July	7
352	963	30 Jan.	6	412	1021	17 April	2	472	1079	4 July	5
353	964	19 Jan.	3	413	1022	6 April	6	473	1080	22 June	2
354 B.	965	7 Jan.	7	414 B.	1023	26 March	3	474 B.	1081	11 June	6
355	965	28 Dec.	5	415	1024	15 March	1	475	1082	1 June	4
356 B.	966	17 Dec.	2	416 B.	1025	4 March	5	476 B.	1083	21 May	1
357	967	7 Dec.	7	417	1026	22 Feb.	3	477	1084	10 May	6
358	968	25 Nov.	4	418	1027	11 Feb.	7	478	1085	29 April	3
359 B.	969	14 Nov.	1	419 B.	1028	31 Jan.	4	479 B.	1086	18 April	7
360	970	4 Nov.	6	420	1029	20 Jan.	2	480	1087	8 April	5
361	971	24 Oct.	3	421	1030	9 Jan.	6	481	1088	27 March	2
362 B.	972	12 Oct.	7	422 B.	1030	29 Dec.	3	482 B.	1089	16 March	6
363	973	2 Oct.	5	423	1031	19 Dec.	1	483	1090	6 March	4
364	974	21 Sept.	2	424	1032	7 Dec.	5	484	1091	23 Feb.	1
365 B.	975	10 Sept.	6	425 B.	1033	26 Nov.	2	485 B.	1092	12 Feb.	5
366	976	30 Aug.	4	426	1034	16 Nov.	7	486	1093	1 Feb.	3
367 B.	977	19 Aug.	1	427 B.	1035	5 Nov.	4	487 B.	1094	21 Jan.	7
368	978	9 Aug.	6	428	1036	25 Oct.	2	488	1095	11 Jan.	5
369	979	29 July	3	429	1037	14 Oct.	6	489	1095	31 Dec.	2
370 B.	980	17 July	7	430 B.	1038	3 Oct.	3	490 B.	1096	19 Dec.	6
371	981	7 July	5	431	1039	23 Sept.	1	491	1097	9 Dec.	4
372	982	26 June	2	432	1040	11 Sept.	5	492	1098	28 Nov.	1
373 B.	983	15 June	6	433 B.	1041	31 Aug.	2	493 B.	1099	17 Nov.	5
374	984	4 June	4	434	1042	21 Aug.	7	494	1100	6 Nov.	3
375	985	24 May	1	435	1043	10 Aug.	4	495	1101	26 Oct.	7
376 B.	986	13 May	5	436 B.	1044	29 July	1	496 B.	1102	15 Oct.	4
377	987	3 May	3	437	1045	19 July	6	497	1103	5 Oct.	2
378 B.	988	21 April	7	438 B.	1046	8 July	3	498 B.	1104	23 Sept.	6
379	989	11 April	5	439	1047	28 June	1	499	1105	13 Sept.	4
380	990	31 March	2	440	1048	16 June	5	500	1106	2 Sept.	1
381 B.	991	20 March	6	441 B.	1049	5 June	2	501 B.	1107	22 Aug.	5
382	992	9 March	4	442	1050	26 May	7	502	1108	11 Aug.	3
383	993	26 Feb.	1	443	1051	15 May	4	503	1109	31 July	7
384 B.	994	15 Feb.	5	444 B.	1052	3 May	1	504 B.	1110	20 July	4
385	995	5 Feb.	3	445	1053	23 April	6	505	1111	10 July	2
386 B.	996	25 Jan.	7	446 B.	1054	12 April	3	506 B.	1112	28 June	6
387	997	14 Jan.	5	447	1055	2 April	1	507	1113	18 June	4
388	998	3 Jan.	2	448	1056	21 March	5	508	1114	7 June	1
389 B.	998	23 Dec.	6	449 B.	1057	10 March	2	509 B.	1115	27 May	5
390	999	13 Dec.	4	450	1058	28 Feb.	7	510	1116	16 May	3
391	1000	1 Dec.	1	451	1059	17 Feb.	4	511	1117	5 May	7
392 B.	1001	20 Nov.	5	452 B.	1060	6 Feb.	1	512 B.	1118	24 April	4
393	1002	10 Nov.	3	453	1061	26 Jan.	6	513	1119	14 April	2
394	1003	30 Oct.	7	454	1062	15 Jan.	3	514	1120	2 April	6
395 B.	1004	18 Oct.	4	455 B.	1063	4 Jan.	7	515 B.	1121	22 March	3
396	1005	8 Oct.	2	456	1063	25 Dec.	5	516	1122	12 March	1
397 B.	1006	27 Sept.	6	457 B.	1064	13 Dec.	2	517 B.	1123	1 March	5
398	1007	17 Sept.	4	458	1065	3 Dec.	7	518	1124	19 Feb.	3
399	1008	5 Sept.	1	459	1066	22 Nov.	4	519	1125	7 Feb.	7
400 B.	1009	25 Aug.	5	460 B.	1067	11 Nov.	1	520 B.	1126	27 Jan.	4
401	1010	15 Aug.	3	461	1068	31 Oct.	6	521	1127	17 Jan.	2
402	1011	4 Aug.	7	462	1069	20 Oct.	3	522	1128	6 Jan.	6
403 B.	1012	23 July	4	463 B.	1070	9 Oct.	7	523 B.	1128	25 Dec.	3
404	1013	13 July	2	464	1071	29 Sept.	5	524	1129	15 Dec.	1
405	1014	2 July	6	465	1072	17 Sept.	2	525	1130	4 Dec.	5

HJRA YEAR.	CHRISTIAN ERA.			HJRA YEAR.	CHRISTIAN ERA.			HJRA YEAR.	CHRISTIAN ERA.		
	Year.	Month.	Day.		Year.	Month.	Day.		Year.	Month.	Day.
526 B.	1131	23 Nov...	2	586 B.	1190	8 Feb...	5	646 B.	1248	26 April...	1
527	1132	12 Nov...	7	587	1191	29 Jan...	3	647	1249	16 April...	6
528 B.	1133	1 Nov...	4	588 B.	1192	18 Jan...	7	648 B.	1250	6 April...	3
529	1134	22 Oct...	2	589	1193	7 Jan...	5	649	1251	26 March...	1
530	1135	11 Oct...	6	590	1193	27 Dec...	2	650	1252	14 March...	5
531 B.	1136	29 Sept...	3	591 B.	1194	16 Dec...	6	651 B.	1253	3 March...	2
532	1137	19 Sept...	1	592	1195	6 Dec...	4	652	1254	21 Feb...	7
533	1138	8 Sept...	5	593	1196	24 Nov...	1	653	1255	10 Feb...	4
534 B.	1139	28 Aug...	2	594 B.	1197	13 Nov...	5	654 B.	1256	30 Jan...	1
535	1140	17 Aug...	7	595	1198	3 Nov...	3	655	1257	19 Jan...	6
536 B.	1141	6 Aug...	4	596 B.	1199	23 Oct...	7	656 B.	1258	8 Jan...	3
537	1142	27 July...	2	597	1200	12 Oct...	5	657	1258	29 Dec...	1
538	1143	16 July...	6	598	1201	1 Oct...	2	658	1259	18 Dec...	5
539 B.	1144	4 July...	3	599 B.	1202	20 Sept...	6	659 B.	1260	6 Dec...	2
540	1145	24 June...	1	600	1203	10 Sept...	4	660	1261	26 Nov...	7
541	1146	13 June...	5	601	1204	29 Aug...	1	661	1262	15 Nov...	4
542 B.	1147	2 June...	2	602 B.	1205	18 Aug...	5	662 B.	1263	4 Nov...	1
543	1148	22 May...	7	603	1206	8 Aug...	3	663	1264	24 Oct...	6
544	1149	11 May...	4	604	1207	28 July...	7	664	1265	13 Oct...	3
545 B.	1150	30 April...	1	605 B.	1208	16 July...	4	665 B.	1266	2 Oct...	7
546	1151	20 April...	6	606	1209	6 July...	2	666	1267	22 Sept...	5
547 B.	1152	8 April...	3	607 B.	1210	25 June...	6	667 B.	1268	10 Sept...	2
548	1153	29 March...	1	608	1211	15 June...	4	668	1269	31 Aug...	7
549	1154	18 March...	5	609	1212	3 June...	1	669	1270	20 Aug...	4
550 B.	1155	7 March...	2	610 B.	1213	23 May...	5	670 B.	1271	9 Aug...	1
551	1156	25 Feb...	7	611	1214	13 May...	3	671	1272	29 July...	6
552	1157	13 Feb...	4	612	1215	2 May...	7	672	1273	18 July...	3
553 B.	1158	2 Feb...	1	613 B.	1216	20 April...	4	673 B.	1274	7 July...	7
554	1159	23 Jan...	6	614	1217	10 April...	2	674	1275	27 June...	5
555	1160	12 Jan...	3	615	1218	30 March...	6	675	1276	15 June...	2
556 B.	1160	31 Dec...	7	616 B.	1219	19 March...	3	676 B.	1277	4 June...	6
557	1161	21 Dec...	5	617	1220	8 March...	1	677	1278	25 May...	4
558 B.	1162	10 Dec...	2	618 B.	1221	25 Feb...	5	678 B.	1279	14 May...	1
559	1163	30 Nov...	7	619	1222	15 Feb...	3	679	1280	3 May...	6
560	1164	18 Nov...	4	620	1223	4 Feb...	7	680	1281	22 April...	3
561 B.	1165	7 Nov...	1	621 B.	1224	24 Jan...	4	681 B.	1282	11 April...	7
562	1166	28 Oct...	6	622	1225	13 Jan...	2	682	1283	1 April...	5
563	1167	17 Oct...	3	623	1226	2 Jan...	6	683	1284	20 March...	2
564 B.	1168	5 Oct...	7	624 B.	1226	22 Dec...	3	684 B.	1285	9 March...	6
565	1169	25 Sept...	5	625	1227	12 Dec...	1	685	1286	27 Feb...	4
566 B.	1170	14 Sept...	2	626 B.	1228	30 Nov...	5	686 B.	1287	16 Feb...	1
567	1171	4 Sept...	7	627	1229	20 Nov...	3	687	1288	6 Feb...	6
568	1172	23 Aug...	4	628	1230	9 Nov...	7	688	1289	25 Jan...	3
569 B.	1173	12 Aug...	1	629 B.	1231	29 Oct...	4	689 B.	1290	14 Jan...	7
570	1174	2 Aug...	6	630	1232	18 Oct...	2	690	1291	4 Jan...	5
571	1175	22 July...	3	631	1233	7 Oct...	6	691	1291	24 Dec...	2
572 B.	1176	10 July...	7	632 B.	1234	26 Sept...	3	692 B.	1292	12 Dec...	6
573	1177	30 June...	5	633	1235	16 Sept...	1	693	1293	2 Dec...	4
574	1178	19 June...	2	634	1236	4 Sept...	5	694	1294	21 Nov...	1
575 B.	1179	8 June...	6	635 B.	1237	24 Aug...	2	695 B.	1295	10 Nov...	5
576	1180	28 May...	4	636	1238	14 Aug...	7	696	1296	30 Oct...	3
577 B.	1181	17 May...	1	637 B.	1239	3 Aug...	4	697 B.	1297	19 Oct...	7
578	1182	7 May...	6	638	1240	23 July...	2	698	1298	9 Oct...	6
579	1183	26 April...	3	639	1241	12 July...	6	699	1299	28 Sept...	2
580 B.	1184	14 April...	7	640 B.	1242	1 July...	3	700 B.	1300	16 Sept...	6
581	1185	4 April...	5	641	1243	21 June...	1	701	1301	6 Sept...	4
582	1186	24 March...	2	642	1244	9 June...	5	702	1302	26 Aug...	1
583 B.	1187	13 March...	6	643 B.	1245	29 May...	2	703 B.	1303	15 Aug...	5
584	1188	2 March...	4	644	1246	19 May...	7	704	1304	4 Aug...	3
585	1189	19 Feb...	1	645	1247	8 May...	4	705	1305	24 July...	7

HJRA YEAR.	CHRISTIAN ERA.			HJRA YEAR.	CHRISTIAN ERA.			HJRA YEAR.	CHRISTIAN ERA.		
	Year.	Month.	Day.		Year.	Month.	Day.		Year.	Month.	Day.
706 B.	1306	13 July...	4	766 B.	1364	28 Sept...	7	826 B.	1422	15 Dec ...	3
707	1307	3 July...	2	767	1365	18 Sept...	5	827	1423	5 Dec ...	1
708 B.	1308	21 June...	6	768 B.	1366	7 Sept...	2	828 B.	1424	23 Nov ...	5
709	1309	11 June...	4	769	1367	28 Aug...	7	829	1425	13 Nov ...	3
710	1310	31 May...	1	770	1368	16 Aug...	4	830	1426	2 Nov ...	7
711 B.	1311	20 May...	5	771 B.	1369	5 Aug...	1	831 B.	1427	22 Oct ...	4
712	1312	9 May...	3	772	1370	26 July...	6	832	1428	11 Oct ...	2
713	1313	28 April...	7	773	1371	15 July...	3	833	1429	30 Sept...	6
714 B.	1314	17 April...	4	774 B.	1372	3 July...	7	834 B.	1430	19 Sept...	3
715	1315	7 April...	2	775	1373	23 June...	5	835	1431	9 Sept...	1
716 B.	1316	26 March	6	776 B.	1374	12 June...	2	836 B.	1432	28 Aug ...	5
717	1317	16 March	4	777	1375	2 June...	7	837	1433	18 Aug ...	3
718	1318	5 March	1	778	1376	21 May...	4	838	1434	7 Aug ...	7
719 B.	1319	22 Feb ...	5	779 B.	1377	10 May...	1	839 B.	1435	27 July...	4
720	1320	12 Feb ...	3	780	1378	30 April...	6	840	1436	16 July...	2
721	1321	31 Jan...	3	781	1379	19 April...	3	841	1437	5 July...	6
722 B.	1322	20 Jan....	4	782 B.	1380	7 April...	7	842 B.	1438	24 June...	3
723	1323	10 Jan....	2	783	1381	28 March	5	843	1439	14 June...	1
724	1323	30 Dec ...	6	784	1382	17 March	2	844	1440	2 June...	5
725 B.	1324	18 Dec ...	3	785 B.	1383	6 March	6	845 B.	1441	22 May...	2
726	1325	8 Dec ...	1	786	1384	24 Feb ...	4	846	1442	12 May...	7
727 B.	1326	27 Nov ...	5	787 B.	1385	12 Feb ...	1	847 B.	1443	1 May...	4
728	1327	17 Nov ...	3	788	1386	2 Feb ...	6	848	1444	20 April...	2
729	1328	5 Nov ...	7	789	1387	22 Jan....	3	849	1445	9 April...	6
730 B.	1329	25 Oct ...	4	790 B.	1388	11 Jan...	7	850 B.	1446	29 March	3
731	1330	15 Oct ...	2	791	1388	31 Dec....	5	851	1447	19 March	1
732	1331	4 Oct ...	6	792	1389	20 Dec....	2	852	1448	7 March	5
733 B.	1332	22 Sept...	3	793 B.	1390	9 Dec....	6	853 B.	1449	24 Feb...	2
734	1333	12 Sept...	1	794	1391	29 Nov...	4	854	1450	14 Feb...	7
735	1334	1 Sept...	5	795	1392	17 Nov...	1	855	1451	3 Feb...	4
736 B.	1335	21 Aug...	2	796 B.	1393	6 Nov...	5	856 B.	1452	23 Jan...	1
737	1336	10 Aug...	7	797	1394	27 Oct....	3	857	1453	12 Jan...	6
738 B.	1337	30 July...	4	798 B.	1395	16 Oct....	7	858 B.	1454	1 Jan...	3
739	1338	20 July...	2	799	1396	5 Oct ...	5	859	1454	22 Dec ...	1
740	1339	9 July ...	6	800	1397	24 Sept...	2	860	1455	11 Dec ...	5
741 B.	1340	27 June...	3	801 B.	1398	13 Sept...	6	861 B.	1456	29 Nov...	2
742	1341	17 June...	1	802	1399	3 Sept...	4	862	1457	19 Nov...	7
743	1342	6 June...	5	803	1400	22 Aug ...	1	863	1458	8 Nov ...	4
744 B.	1343	24 May...	2	804 B.	1401	11 Aug ...	5	864 B.	1459	28 Oct ...	1
745	1344	15 May...	7	805	1402	1 Aug ...	3	865	1460	17 Oct ...	6
746 B.	1345	4 May...	4	806 B.	1403	21 July...	7	866 B.	1461	6 Oct ...	3
747	1346	24 April...	2	807	1404	10 July...	5	867	1462	26 Sept...	1
748	1347	13 April...	6	808	1405	29 June...	2	868	1463	15 Sept...	5
749 B.	1348	1 April...	3	809 B.	1406	18 June...	6	869 B.	1464	3 Sept...	2
750	1349	22 March	1	810	1407	8 June...	4	870	1465	24 Aug ...	7
751	1350	11 March	5	811	1408	27 May...	1	871	1466	13 Aug ...	4
752 B.	1351	28 Feb...	2	812 B.	1409	16 May...	5	872 B.	1467	2 Aug ...	1
753	1352	18 Feb ...	7	813	1410	6 May...	3	873	1468	22 July...	6
754	1353	6 Feb ...	4	814	1411	25 April...	7	874	1469	11 July...	3
755 B.	1354	26 Jan...	1	815 B.	1412	13 April...	4	875 B.	1470	30 June...	7
756	1355	16 Jan...	6	816	1413	3 April...	2	876	1471	20 June...	5
757 B.	1356	5 Jan...	3	817 B.	1414	23 March	6	877 B.	1472	8 June...	2
758	1356	25 Dec ...	1	818	1415	13 March	4	878	1473	29 May...	7
759	1357	14 Dec ...	5	819	1416	1 March	1	879	1474	18 May...	4
760 B.	1358	3 Dec ...	2	820 B.	1417	18 Feb....	5	880 B.	1475	7 May...	1
761	1359	23 Nov...	7	821	1418	8 Feb....	3	881	1476	26 April...	6
762	1360	11 Nov...	4	822	1419	28 Jan...	7	882	1477	15 April...	3
763 B.	1361	31 Oct ...	1	823 B.	1420	17 Jan...	4	883 B.	1478	4 April...	7
764	1362	21 Oct ...	6	824	1421	6 Jan....	2	884	1479	25 March	5
765	1363	10 Oct ...	3	825	1421	26 Dec....	6	885	1480	13 March	2

HJRA YEAR.	CHRISTIAN ERA.			HJRA YEAR.	CHRISTIAN ERA.			HJRA YEAR.	CHRISTIAN ERA.		
	Year.	Month.	Day.		Year.	Month.	Day.		Year.	Month.	Day.
886 B.	1481	2 March	6	946 B.	1539	19 May...	2	1006 B.	1597	4 Aug...	5
887	1482	20 Feb...	4	947	1540	8 May...	7	1007	1598	25 July...	3
888 B.	1483	9 Feb...	1	948 B.	1541	27 April...	4	1008 B.	1599	14 July...	7
889	1484	30 Jan....	6	949	1542	17 April...	2	1009	1600	3 July...	5
890	1485	18 Jan....	3	950	1543	6 April...	6	1010	1601	22 June...	2
891 B.	1486	7 Jan....	7	951 B.	1544	25 March	3	1011 B.	1602	11 June...	6
892	1486	28 Dec...	5	952	1545	15 March	1	1012	1603	1 June...	4
893	1487	17 Dec...	2	953	1546	4 March	5	1013	1604	20 May...	1
894 B.	1488	5 Dec...	6	954 B.	1547	21 Feb...	2	1014 B.	1605	9 May...	5
895	1489	25 Nov...	4	955	1548	11 Feb...	7	1015	1606	29 April...	3
896 B.	1490	14 Nov...	1	956 B.	1549	30 Jan....	4	1016 B.	1607	18 April...	7
897	1491	4 Nov....	6	957	1550	20 Jan....	2	1017	1608	7 April...	5
898	1492	23 Oct...	3	958	1551	9 Jan....	6	1018	1609	27 March	2
899 B.	1493	12 Oct...	7	959 B.	1551	29 Dec....	3	1019 B.	1610	16 March	6
900	1494	2 Oct....	5	960	1552	18 Dec....	1	1020	1611	6 March	4
901	1495	21 Sept...	2	961	1553	7 Dec....	5	1021	1612	23 Feb...	1
902 B.	1496	9 Sept...	6	962 B.	1554	26 Nov...	2	1022 B.	1613	11 Feb...	5
903	1497	30 Aug...	4	963	1555	16 Nov...	7	1023	1614	1 Feb...	3
904	1498	19 Aug...	1	964	1556	4 Nov...	4	1024	1615	21 Jan...	7
905 B.	1499	8 Aug...	5	965 B.	1557	24 Oct...	1	1025 B.	1616	10 Jan...	4
906	1500	28 July...	3	966	1558	14 Oct...	6	1026	1617	30 Dec...	2
907 B.	1501	17 July...	7	967 B.	1559	3 Oct....	3	1027 B.	1617	19 Dec...	6
908	1502	7 July...	5	968	1560	22 Sept...	1	1028	1618	9 Dec...	4
909	1503	26 June...	2	969	1561	11 Sept...	5	1029	1619	28 Nov...	1
910 B.	1504	14 June...	6	970 B.	1562	31 Aug...	2	1030 B.	1620	16 Nov...	5
911	1505	4 June...	4	971	1563	21 Aug...	7	1031	1621	6 Nov...	3
912	1506	24 May...	1	972	1564	9 Aug...	4	1032	1622	26 Oct...	7
913 B.	1507	13 May...	5	973 B.	1565	29 July...	1	1033 B.	1623	15 Oct...	4
914	1508	2 May...	3	974	1566	19 July...	6	1034	1624	4 Oct...	2
915	1509	21 April...	7	975	1567	8 July...	3	1035	1625	23 Sept...	6
916 B.	1510	10 April...	4	976 B.	1568	26 June...	7	1036 B.	1626	12 Sept...	3
917	1511	31 March	2	977	1569	16 June...	5	1037	1627	2 Sept...	1
918 B.	1512	19 March	6	978 B.	1570	5 June...	2	1038 B.	1628	21 Aug...	5
919	1513	9 March	4	979	1571	26 May...	7	1039	1629	11 Aug...	3
920	1514	26 Feb...	1	980	1572	14 May...	4	1040	1630	31 July...	7
921 B.	1515	15 Feb...	5	981 B.	1573	3 May...	1	1041 B.	1631	20 July...	4
922	1516	5 Feb...	3	982	1574	23 April...	6	1042	1632	9 July...	2
923	1517	24 Jan....	7	983	1575	12 April...	3	1043	1633	28 June...	6
924 B.	1518	13 Jan....	4	984 B.	1576	31 March	7	1044 B.	1634	17 June...	3
925	1519	3 Jan....	2	985	1577	21 March	5	1045	1635	7 June...	1
926 B.	1519	23 Dec...	6	986 B.	1578	10 March	2	1046 B.	1636	26 May...	5
927	1520	12 Dec...	4	987	1579	28 Feb...	7	1047	1637	16 May...	3
928	1521	1 Dec...	1	988	1580	17 Feb...	4	1048	1638	5 May...	7
929 B.	1522	20 Nov...	5	989 B.	1581	5 Feb...	1	1049 B.	1639	24 April...	4
930	1523	10 Nov...	3	990	1582	26 Jan....	6	1050	1640	13 April...	2
931	1524	29 Oct...	7	991	1583	15 Jan...	3	1051	1641	3 April...	6
932 B.	1525	18 Oct...	4	992 B.	1584	4 Jan....	7	1052 B.	1642	22 March	3
933	1526	8 Oct....	2	993	1584	24 Dec...	5	1053	1643	12 March	1
934	1527	27 Sept...	6	994	1585	13 Dec...	2	1054	1644	29 Feb...	5
935 B.	1528	15 Sept...	3	995 B.	1586	2 Dec....	6	1055 B.	1645	17 Feb...	2
936	1529	5 Sept...	1	996	1587	22 Nov...	4	1056	1646	7 Feb...	7
937 B.	1530	25 Aug...	5	997 B.	1588	10 Nov...	1	1057 B.	1647	27 Jan...	4
938	1531	15 Aug...	3	998	1589	31 Oct...	6	1058	1648	17 Jan...	2
939	1532	3 Aug...	7	999	1590	20 Oct...	3	1059	1649	5 Jan...	6
940 B.	1533	23 July...	4	1000 B.	1591	9 Oct....	7	1060 B.	1650	25 Dec...	3
941	1534	13 July...	2	1001	1592	28 Sept...	5	1061	1650	15 Dec...	1
942	1535	2 July...	6	1002	1593	17 Sept...	2	1062	1651	4 Dec...	5
943 B.	1536	20 June...	8	1003 B.	1594	6 Sept...	6	1063 B.	1652	22 Nov...	2
944	1537	10 June...	1	1004	1595	27 Aug...	4	1064	1653	12 Nov...	7
945	1538	30 May...	5	1005	1596	15 Aug...	1	1065	1654	1 Nov...	4

HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.		
	Year.	Month.	Day.		Year.	Month.	Day.		Year.	Month.	Day.
1066 B.	1655	21 Oct....	1	1126 B.	1714	6 Jan....	4	1186 B.	1772	4 April.	7
1067	1656	10 Oct....	6	1127	1715	27 Dec....	2	1187	1773	25 March	6
1068 B.	1657	29 Sept....	3	1128 B.	1716	16 Dec....	6	1188 B.	1774	14 March	2
1069	1658	19 Sept....	1	1129	1715	5 Dec....	4	1189	1775	4 March	7
1070	1659	8 Sept....	5	1130	1717	24 Nov....	1	1190	1776	21 Feb...	4
1071 B.	1660	27 Aug....	2	1131 B.	1718	13 Nov....	5	1191 B.	1777	9 Feb...	1
1072	1661	17 Aug....	7	1132	1719	3 Nov....	3	1192	1778	30 Jan....	6
1073	1662	6 Aug....	4	1133	1720	22 Oct....	7	1193	1779	19 Jan....	3
1074 B.	1663	26 July....	1	1134 B.	1721	11 Oct....	4	1194 B.	1780	8 Jan....	7
1075	1664	15 July....	6	1135	1722	1 Oct....	2	1195	1780	28 Dec....	5
1076 B.	1665	4 July....	3	1136 B.	1723	20 Sept....	6	1196 B.	1781	17 Dec....	2
1077	1666	24 June....	1	1137	1724	9 Sept....	4	1197	1782	7 Dec....	7
1078	1667	13 June....	5	1138	1725	29 Aug....	1	1198	1783	26 Nov...	4
1079 B.	1668	1 June....	2	1139 B.	1726	18 Aug....	5	1199 B.	1784	14 Nov...	1
1080	1669	22 May....	7	1140	1727	8 Aug....	3	1200	1785	4 Nov....	6
1081	1670	11 May....	4	1141	1728	27 July...	7	1201	1786	24 Oct....	3
1082 B.	1671	30 April...	1	1142 B.	1729	16 July....	4	1202 B.	1787	13 Oct....	7
1083	1672	19 April...	6	1143	1730	6 July....	2	1203	1788	2 Oct....	5
1084	1673	8 April...	3	1144	1731	25 June...	6	1204	1789	21 Sept...	2
1085 B.	1674	28 March	7	1145 B.	1732	13 June...	3	1205 B.	1790	10 Sept...	6
1086	1675	18 March	5	1146	1733	3 June...	1	1206	1791	31 Aug...	4
1087 B.	1676	6 March	2	1147 B.	1734	23 May....	5	1207 B.	1792	19 Aug...	1
1088	1677	24 Feb...	7	1148	1735	13 May....	3	1208	1793	9 Aug...	6
1089	1678	13 Feb...	4	1149	1736	1 May....	7	1209	1794	29 July...	3
1090 B.	1679	2 Feb....	1	1150 B.	1737	20 April...	4	1210 B.	1795	18 July...	7
1091	1680	23 Jan....	6	1151	1738	10 April...	2	1211	1796	7 July...	5
1092	1681	11 Jan....	3	1152	1739	30 March	6	1212	1797	26 June...	2
1093 B.	1681	31 Dec....	7	1153 B.	1740	18 March	3	1213 B.	1798	15 June...	6
1094	1682	21 Dec....	5	1154	1741	8 March	1	1214	1799	5 June...	4
1095	1683	10 Dec....	2	1155	1742	26 Feb....	5	1215	1800	25 May...	1
1096 B.	1684	28 Nov...	6	1156 B.	1743	14 Feb....	2	1216 B.	1801	14 May...	5
1097	1685	18 Nov...	4	1157	1744	4 Feb....	7	1217	1802	4 May...	3
1098 B.	1686	7 Nov....	1	1158 B.	1745	23 Jan....	4	1218 B.	1803	23 April...	7
1099	1687	28 Oct....	6	1159	1746	13 Jan....	2	1219	1804	12 April...	5
1100	1688	16 Oct....	3	1160	1747	2 Jan....	6	1220	1805	1 April...	2
1101 B.	1689	5 Oct....	7	1161 B.	1748	22 Dec....	3	1221 B.	1806	21 March	6
1102	1690	25 Sept...	5	1162	1748	11 Dec....	1	1222	1807	11 March	4
1103	1691	14 Sept...	2	1163	1749	30 Nov...	5	1223	1808	28 Feb...	1
1104 B.	1692	2 Sept....	6	1164 B.	1750	19 Nov...	2	1224 B.	1809	16 Feb...	5
1105	1693	23 Aug....	4	1165	1751	9 Nov....	7	1225	1810	6 Feb...	3
1106 B.	1694	12 Aug....	1	1166 B.	1752	8 Nov.n.s	4	1226 B.	1811	26 Jan....	7
1107	1695	2 Aug....	6	1167	1753	29 Oct....	2	1227	1812	16 Jan....	5
1108	1696	21 July...	3	1168	1754	18 Oct....	6	1228	1813	4 Jan....	2
1109 B.	1697	10 July...	7	1169 B.	1755	7 Oct....	3	1229 B.	1813	24 Dec....	4
1110	1698	30 June...	5	1170	1756	26 Sept...	1	1230	1814	14 Dec....	4
1111	1699	19 June...	2	1171	1757	15 Sept...	5	1231	1815	3 Dec....	1
1112 B.	1700	7 June...	6	1172 B.	1758	4 Sept...	2	1232 B.	1816	21 Nov...	5
1113	1701	28 May....	4	1173	1759	25 Aug....	7	1233	1817	11 Nov...	3
1114	1702	17 May....	1	1174	1760	13 Aug....	4	1234	1818	31 Oct....	7
1115 B.	1703	6 May....	5	1175 B.	1761	2 Aug....	1	1235 B.	1819	20 Oct....	4
1116	1704	25 April...	3	1176	1762	23 July...	6	1236	1820	9 Oct....	2
1117 B.	1705	14 April...	7	1177 B.	1763	12 July...	3	1237 B.	1821	28 Sept...	6
1118	1706	4 April...	5	1178	1764	1 July...	1	1238	1822	18 Sept...	4
1119	1707	24 March	2	1179	1765	20 June...	5	1239	1823	7 Sept...	1
1120 B.	1708	12 March	6	1180 B.	1766	9 June...	2	1240 B.	1824	26 Aug...	5
1121	1709	2 March	4	1181	1767	30 May...	7	1241	1825	16 Aug...	3
1122	1710	19 Feb...	1	1182	1768	18 May...	4	1242	1826	5 Aug...	7
1123 B.	1711	8 Feb....	5	1183 B.	1769	7 May....	1	1243 B.	1827	25 July...	4
1124	1712	29 Jan....	3	1184	1770	27 April...	6	1244	1828	14 July...	2
1125	1713	17 Jan....	7	1185	1771	16 April...	3	1245	1829	3 July...	6

HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.			HIJRA YEAR.	CHRISTIAN ERA.		
	Year.	Month.	Day.		Year.	Month.	Day.		Year.	Month.	Day.
1246 B.	1830	22 June...	3	1271	1854	24 Sept...	1	1295 B.	1878	5 Jan....	7
1247	1831	12 June...	1	1272	1855	13 Sept...	5	1296	1878	26 Dec...	5
1248 B.	1832	31 May...	5	1273 B.	1856	1 Sept...	2	1297 B.	1879	15 Dec...	2
1249	1833	21 May...	3	1274	1857	22 Aug...	7	1298	1880	4 Dec...	7
1250	1834	10 May...	7	1275	1858	11 Aug...	4	1299	1881	23 Nov...	4
1251 B.	1835	29 April...	4	1276 B.	1859	31 July...	1	1300 B.	1882	12 Nov...	1
1252	1836	18 April...	2	1277	1860	20 July...	6	1301	1883	2 Nov...	6
1253	1837	7 April...	6	1278 B.	1861	9 July...	3	1302	1884	21 Oct....	3
1254 B.	1838	27 March...	3	1279	1862	29 June...	1	1303 E.	1885	10 Oct....	7
1255	1839	17 March...	1	1280	1863	18 June...	5	1304	1886	30 Sept...	5
1256 B.	1840	5 March...	5	1281 B.	1864	6 June...	2	1305	1887	19 Sept...	2
1257	1841	23 Feb...	3	1282	1865	27 May...	7	1306 B.	1888	7 Sept...	6
1258	1842	12 Feb...	7	1283	1866	16 May...	4	1307	1889	28 Aug...	4
1259 B.	1843	1 Feb...	4	1284 B.	1867	5 May...	1	1308 B.	1890	17 Aug...	1
1260	1844	22 Jan...	2	1285	1868	24 April...	6	1309	1891	7 Aug...	6
1261	1845	10 Jan...	6	1286 B.	1869	13 April...	3	1310	1892	26 July...	3
1262 B.	1845	30 Dec...	3	1287	1870	3 April...	1	1311 B.	1893	15 July...	7
1263	1846	20 Dec...	1	1288	1871	23 March...	5	1312	1894	5 July...	5
1264	1847	9 Dec...	5	1289 B.	1872	11 March...	2	1313	1895	24 June...	2
1265 B.	1848	27 Nov...	2	1290	1873	1 March...	7	1314 B.	1896	12 June...	6
1266	1849	17 Nov...	7	1291	1874	18 Feb...	4	1315	1897	2 June...	4
1267 B.	1850	6 Nov...	4	1292 B.	1875	7 Feb...	1	1316 B.	1898	22 May...	1
1268	1851	27 Oct...	2	1293	1876	28 Jan...	6	1317	1899	12 May...	6
1269	1852	15 Oct...	6	1294	1877	16 Jan...	3	1318	1900	1 May...	3
1270 B.	1853	4 Oct...	3								

## NOTE REGARDING THE CHRONOLOGICAL TABLES OF THE HINDÚ ÆRAS.

In consequence of the want of width in an octavo page, it has been found necessary to break the following table into two parts, instead of exhibiting in one line and view, the whole series of the sidereal and luni-solar æras; which would have been more convenient for reference. In other respects the numbers of the several columns, etc. remain as stated in the text.

TABLE XIV.—CHRONOLOGICAL ERAS OF THE HINDUS.

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SOLAR YEAR.		PART I.—HINDU SIDEREAL YEARS.									
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	
CHRISTIAN YEAR. A. D.	First day of ditto. †	Years beginning on entrance of the Sun into Aries of the Sidereal Zodiac.				Character of the year. First weekly day of ditto. Indian hour and minute of Sankranta or ☉ enters constellation †.	CYCLES.				
		Kali-yug.	Saka.	Bengali San.*	Initial date of all three in March O.S.		Cycle of 1000 years of Parasurama, beginning in September.	Initial date in September.	Cycle of Orabhartri-vrital.	Cycle of Vrihaspati, (Bengal account).	Do. (Tamil account).
B.1600	Tu.	4701	1522	1007	Th. 27	B. D. G. P. (4) 54 35	776	10	5	43 34	
1601	Th.	4702	1523	1008	Sa. 28	(6) 10 6	777	11	6	44 35	
1602	Fr.	4703	1524	1009	Su. 28	(0) 25 37	778	11	7	45 36	
1603	Sa.	4704	1525	1010	Mo. 28	(1) 41 8	779	11	8	46 37	
B.1604	Su.	4705	1526	1011	Tu. 27	B. (2) 56 40	780	10	9	47 38	
1605	Tu.	4706	1527	1012	Th. 28	(4) 12 11	781	10	10	48 39	
1606	We.	4707	1528	1013	Fr. 28	(5) 27 42	782	11	11	49 40	
1607	Th.	4708	1529	1014	Sa. 28	(6) 43 13	783	11	12	50 41	
B.1608	Fr.	4709	1530	1015	Su. 27	B. (0) 58 45	784	10	13	51 42	
1609	Su.	4710	1531	1016	Tu. 28	(2) 14 16	785	10	14	52 43	
1610	Mo.	4711	1532	1017	We. 28	(3) 29 47	786	11	15	53 44	
1611	Tu.	4712	1533	1018	Th. 28	B. (4) 45 18	787	11	16	54 45	
B.1612	We.	4713	1534	1019	Sa. 28	(6) 0 50	788	10	17	55 46	
1613	Fr.	4714	1535	1020	Su. 28	(0) 16 21	789	11	18	56 47	
1614	Sa.	4715	1536	1021	Mo. 28	(1) 31 52	790	11	19	57 48	
1615	Su.	4716	1537	1022	Tu. 28	B. (2) 47 23	791	11	20	58 49	
B.1616	Mo.	4717	1538	1023	Th. 28	(4) 2 55	792	10	21	59 50	
1617	We.	4718	1539	1024	Fr. 28	(5) 18 26	793	11	22	60 51	
1618	Th.	4719	1540	1025	Sa. 28	(6) 33 57	794	11	23	1 52	
1619	Fr.	4720	1541	1026	Su. 28	B. (0) 49 28	795	11	24	2 53	
B.1620	Sa.	4721	1542	1027	Tu. 28	(2) 5 0	796	11	25	3 54	
1621	Mo.	4722	1543	1028	We. 28	(3) 20 31	797	11	26	4 55	
1622	Tu.	4723	1544	1029	Th. 28	(4) 36 2	798	11	27	5 56	
1623	We.	4724	1545	1030	Fr. 28	B. (5) 51 33	799	11	28	6 57	
B.1624	Th.	4725	1546	1031	Su. 28	(0) 7 5	800	11	29	7 58	
1625	Sa.	4726	1547	1032	Mo. 28	(1) 22 36	801	11	30	8 59	
1626	Su.	4727	1548	1033	Tu. 28	(2) 38 7	802	11	31	9 60	
1627	Mo.	4728	1549	1034	We. 28	B. (3) 53 38	803	11	32	10 1	
B.1628	Tu.	4729	1550	1035	Fr. 28	(5) 9 10	804	11	33	11 2	
1629	Th.	4730	1551	1036	Sa. 28	(6) 24 41	805	11	34	12 3	
1630	Fr.	4731	1552	1037	Su. 28	(0) 40 12	806	11	35	13 4	
1631	Sa.	4732	1553	1038	Mo. 28	B. (1) 55 43	807	11	36	14 5	
B.1632	Su.	4733	1554	1039	We. 28	(3) 11 15	808	11	37	15 6	
1633	Tu.	4734	1555	1040	Th. 28	(4) 26 46	809	11	38	16 7	
1634	We.	4735	1556	1041	Fr. 28	(5) 42 17	810	11	39	17 8	
1635	Th.	4736	1557	1042	Sa. 28	B. (6) 57 48	811	11	40	18 9	
B.1636	Fr.	4737	1558	1043	Mo. 28	(1) 13 20	812	11	41	19 10	
1637	Su.	4738	1559	1044	Tu. 28	(2) 28 51	813	11	42	20 11	
1638	Mo.	4739	1560	1045	We. 28	(3) 44 22	814	11	43	21 12	
1639	Tu.	4740	1561	1046	Th. 28	B. (4) 59 53	815	11	44	22 13	
B.1640	We.	4741	1562	1047	Sa. 28	(6) 15 25	816	11	45	23 14	
1641	Fr.	4742	1563	1048	Su. 28	(0) 30 56	817	11	46	24 15	
1642	Sa.	4743	1564	1049	Mo. 28	B. (1) 46 27	818	11	47	25 16	
1643	Su.	4744	1565	1050	We. 29	(3) 1 58	819	11	48	26 17	
B.1644	Mo.	4745	1566	1051	Th. 28	(4) 17 30	820	11	49	27 18	
1645	We.	4746	1567	1052	Fr. 28	(5) 33 1	821	11	50	28 19	
1646	Th.	4747	1568	1053	Sa. 28	B. (6) 48 32	822	11	51	29 20	
1647	Fr.	4748	1569	1054	Mo. 29	(1) 4 3	823	12	52	30 21	
B.1648	Sa.	4749	1570	1055	Tu. 28	(2) 19 35	824	11	53	31 22	
1649	Mo.	4750	1571	1056	We. 28	(3) 35 6	825	11	54	32 23	

\* The Fasli year of Southern India is two years in advance of the Bengali san; it begins on the 10-18 July, and is now fixed to the latter day. (The table shows the correspondence of Hindii eras with European dates.)



SOLAR YEAR.		PART I.—HINDU SIDEREAL YEARS.									
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	
CHRISTIAN YEAR. A. D.	First day of ditto.	Years beginning on entrance of the Sun into Aries of the Sidereal Zodiac.				Character of the year. First weekly day of ditto. Indian hour and minute of Sankranta, or Centers constellation T.	CYCLES.				
		Kali-yug.	Saka.	Bengali Sun.	Initial date of all three in March O.S.		Cycle of 1000 years of Parasurama, beginning in September.	Initial date in September.	Cycle of Grahapari-vrttil.	Cycle of Vrihaspati, (Bengal account).	Dg. (Tamil account).
1650	Tu.	4751	1572	1057	Th. 28	B. (4) 50 37	826	11	55	33	24
1651	We.	4752	1573	1058	Sa. 29	(6) 6 8	827	12	56	34	25
B.1652	Th.	4753	1574	1059	Su. 28	(0) 21 40	828	11	57	35	26
1653	Sa.	4754	1575	1060	Mo. 28	(1) 37 11	829	11	58	36	27
1654	Su.	4755	1576	1061	Tu. 28	B. (2) 52 42	830	11	59	37	28
1655	Mo.	4756	1577	1062	Th. 29	(4) 8 13	831	12	60	38	29
B.1656	Tu.	4757	1578	1063	Fr. 28	(5) 23 45	832	11	61	39	30
1657	Th.	4758	1579	1064	Sa. 28	(6) 39 16	833	11	62	40	31
1658	Fr.	4759	1580	1065	Su. 28	B. (0) 54 47	834	11	63	41	32
1659	Sa.	4760	1581	1066	Tu. 29	(2) 10 18	835	12	64	42	33
B.1660	Su.	4761	1582	1067	We. 28	(3) 25 50	836	11	65	43	34
1661	Tu.	4762	1583	1068	Th. 28	(4) 41 21	837	11	66	44	35
1662	We.	4763	1584	1069	Fr. 28	B. (5) 56 52	838	11	67	45	36
1663	Th.	4764	1585	1070	Su. 29	(0) 12 23	839	12	68	46	37
B.1664	Fr.	4765	1586	1071	Mo. 28	(1) 27 55	840	11	69	47	38
1665	Su.	4766	1587	1072	Tu. 28	(2) 43 26	841	11	70	48	39
1666	Mo.	4767	1588	1073	We. 28	B. (3) 58 57	842	11	71	49	40
1667	Tu.	4768	1589	1074	Fr. 29	(5) 14 28	843	12	72	50	41
B.1668	We.	4769	1590	1075	Sa. 28	(6) 30 0	844	11	73	51	42
1669	Fr.	4770	1591	1076	Su. 28	B. (0) 45 31	845	11	74	52	43
1670	Sa.	4771	1592	1077	Tu. 29	(2) 1 2	846	11	75	53	44
1671	Su.	4772	1593	1078	We. 29	(3) 16 33	847	12	76	54	45
B.1672	Mo.	4773	1594	1079	Th. 28	(4) 32 5	848	11	77	55	46
1673	We.	4774	1595	1080	Fr. 28	B. (5) 47 36	849	11	78	56	47
1674	Th.	4775	1596	1081	Su. 29	(0) 3 7	850	11	79	57	48
1675	Fr.	4776	1597	1082	Mo. 29	(1) 18 38	851	12	80	58	49
B.1676	Sa.	4777	1598	1083	Tu. 28	(2) 34 10	852	11	81	59	50
1677	Mo.	4778	1599	1084	We. 28	B. (3) 49 41	853	11	82	60	51
1678	Tu.	4779	1600	1085	Fr. 29	(5) 5 12	854	12	83	1	52
1679	We.	4780	1601	1086	Sa. 29	(6) 20 43	855	12	84	2	53
B.1680	Th.	4781	1602	1087	Su. 28	(0) 36 15	856	11	85	3	54
1681	Sa.	4782	1603	1088	Mo. 28	B. (1) 51 46	857	11	86	4	55
1682	Su.	4783	1604	1089	We. 29	(3) 7 17	858	12	87	5	56
1683	Mo.	4784	1605	1090	Th. 29	(4) 22 48	859	12	88	6	57
B.1684	Tu.	4785	1606	1091	Fr. 28	(5) 38 20	860	11	89	7-8	58
1685	Th.	4786	1607	1092	Sa. 28	B. (6) 53 51	861	11	90	9	59
1686	Fr.	4787	1608	1093	Mo. 29	(1) 9 22	862	12	1	10	60
1687	Sa.	4788	1609	1094	Tu. 29	(2) 24 53	863	12	2	11	1
B.1688	Su.	4789	1610	1095	We. 28	(3) 40 25	864	11	3	12	2
1689	Tu.	4790	1611	1096	Th. 28	B. (4) 55 56	865	11	4	13	3
1690	We.	4791	1612	1097	Sa. 29	(6) 11 27	866	12	5	14	4
1691	Th.	4792	1613	1098	Su. 29	(0) 26 58	867	12	6	15	5
B.1692	Fr.	4793	1614	1099	Mo. 28	(1) 42 30	868	11	7	16	6
1693	Su.	4794	1615	1100	Tu. 28	B. (2) 58 1	869	11	8	17	7
1694	Mo.	4795	1616	1101	Th. 29	(4) 13 32	870	12	9	18	8
1695	Tu.	4796	1617	1102	Fr. 29	(5) 29 3	871	12	10	19	9
B.1696	We.	4797	1618	1103	Sa. 28	B. (6) 44 35	872	11	11	20	10
1697	Fr.	4798	1619	1104	Mo. 29	(1) 0 6	873	11	12	21	11
1698	Sa.	4799	1620	1105	Tu. 29	(2) 15 37	874	12	13	22	12
1699	Su.	4800	1621	1106	We. 29	(3) 31 8	875	12	14	23	13

SOLAR YEAR.		PART I.—HINDU SIDEREAL YEARS.									
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	
CHRISTIAN YEAR. A.D.	First day of ditto.	Years beginning on entrance of the Sun into Aries of the Sidereal Zodiac.				Character of the year. First weekly day of ditto. Indian hour and minute of Sankranta or Centers constellation &c.	CYCLES.				
		Kali-yug.	Sāka.	Bengal San.	Initial date of all three in March O.S.		Cycle of 1000 years of Parasurāma, beginning in September.	Initial date in September.	Cycle of Grahapari-vrital.	Cycle of Vrihaspati, (Bengal account).	Do. (Tamil account).
B.1700	Mo.	4801	1622	1107	Th. 29	B. I. G. P.	876	12	15	24	14
1701	We.	4802	1623	1108	Sa. 29	(4) 46 40	877	12	16	25	15
1702	Th.	4803	1624	1109	Su. 29	(6) 2 11	878	13	17	26	16
1703	Fr.	4804	1625	1110	Mo. 30	(0) 17 42	879	13	18	27	17
B.1704	Sa.	4805	1626	1111	Tu. 29	(1) 13 13	880	12	19	28	18
1705	Mo.	4806	1627	1112	Th. 29	(2) 48 45	881	12	20	29	19
1706	Tu.	4807	1628	1113	Fr. 29	(4) 4 16	882	13	21	30	20
1707	We.	4808	1629	1114	Sa. 30	(6) 19 47	883	13	22	31	21
B.1708	Th.	4809	1630	1115	Su. 29	(6) 35 18	884	12	23	32	22
1709	Sa.	4810	1631	1116	Tu. 29	(0) 50 50	885	12	24	33	23
1710	Su.	4811	1632	1117	We. 29	(2) 6 21	886	13	25	34	24
1711	Mo.	4812	1633	1118	Th. 30	(3) 21 52	887	13	26	35	25
B.1712	Tu.	4813	1634	1119	Fr. 29	(4) 37 23	888	12	27	36	26
1713	Th.	4814	1635	1120	Su. 29	(5) 52 55	889	13	28	37	27
1714	Fr.	4815	1636	1121	Mo. 29	(0) 8 26	890	13	29	38	28
1715	Sa.	4816	1637	1122	Tu. 30	(1) 23 57	891	13	30	39	29
B.1716	Su.	4817	1638	1123	We. 29	(2) 39 28	892	12	31	40	30
1717	Tu.	4818	1639	1124	Fr. 29	(3) 55 0	893	13	32	41	31
1718	We.	4819	1640	1125	Sa. 29	(5) 10 31	894	13	33	42	32
1719	Th.	4820	1641	1126	Su. 30	(6) 26 2	895	13	34	43	33
B.1720	Fr.	4821	1642	1127	Mo. 29	(0) 41 33	896	12	35	44	34
1721	Su.	4822	1643	1128	We. 29	(1) 57 5	897	13	36	45	35
1722	Mo.	4823	1644	1129	Th. 29	(3) 12 36	898	13	37	46	36
1723	Tu.	4824	1645	1130	Fr. 30	(4) 28 7	899	13	38	47	37
B.1724	We.	4825	1646	1131	Sa. 29	(5) 43 38	900	12	39	48	38
1725	Fr.	4826	1647	1132	Mo. 29	(6) 59 10	901	13	40	49	39
1726	Sa.	4827	1648	1133	Tu. 30	(1) 14 41	902	13	41	50	40
1727	Su.	4828	1649	1134	We. 30	(2) 30 12	903	13	42	51	41
B.1728	Mo.	4829	1650	1135	Fr. 29	(3) 45 43	904	12	43	52	42
1729	We.	4830	1651	1136	Sa. 29	(5) 1 15	905	13	44	53	43
1730	Th.	4831	1652	1137	Su. 30	(6) 16 46	906	13	45	54	44
1731	Fr.	4832	1653	1138	Mo. 30	(0) 32 17	907	13	46	55	45
B.1732	Sa.	4833	1654	1139	We. 29	(1) 47 48	908	13	47	56	46
1733	Mo.	4834	1655	1140	Th. 29	(3) 3 20	909	13	48	57	47
1734	Tu.	4835	1656	1141	Fr. 30	(4) 18 51	910	13	49	58	48
1735	We.	4836	1657	1142	Sa. 30	(5) 34 22	911	13	50	59	49
B.1736	Th.	4837	1658	1143	Mo. 29	(6) 49 53	912	13	51	60	50
1737	Sa.	4838	1659	1144	Tu. 29	(1) 5 25	913	13	52	1	51
1738	Su.	4839	1660	1145	We. 30	(2) 20 56	914	13	53	2	52
1739	Mo.	4840	1661	1146	Th. 30	(3) 36 27	915	13	54	3	53
B.1740	Tu.	4841	1662	1147	Sa. 30	(4) 51 58	916	13	55	4	54
1741	Th.	4842	1663	1148	Su. 29	(6) 7 30	917	13	56	5	55
1742	Fr.	4843	1664	1149	Mo. 29	(0) 23 1	918	13	57	6	56
1743	Sa.	4844	1665	1150	Tu. 29	(1) 38 32	919	13	58	7	57
B.1744	Su.	4845	1666	1151	Th. 30	(2) 54 3	920	13	59	8	58
1745	Tu.	4846	1667	1152	Fr. 30	(4) 9 55	921	13	60	9	59
1746	We.	4847	1668	1153	Sa. 29	(5) 25 6	922	13	61	10	60
1747	Th.	4848	1669	1154	Su. 29	(6) 40 37	923	13	62	11	1
B.1748	Fr.	4849	1670	1155	Tu. 30	(0) 56 8	924	13	63	12	2
1749	Su.	4850	1671	1156	We. 29	(2) 11 40	925	13	64	13	3

SOLAR YEAR.		PART I.—HINDU SIDEREAL YEARS.									
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	
CHRISTIAN YEAR. A. D.	First day of ditto.	Years beginning on entrance of the Sun into Aries of the Sidereal Zodiac.				Character of the year. First weekly day of ditto. Indian hour and minute of Sankranta, or ☉ enters constellation ♑.	CYCLES.				
		Kali-yug.	Saka.	Bengali San.	Initial date of all three in April N. S.		Cycle of 1000 years of Parasurama, beginning in September.	Initial date in September.	Cycle of Grahapari-vrithi.	Cycle of Vihapati, (Bengal account).	Do. (Tamil account).
1750	Mo.	4851	1672	1157	Th. 29	D. 42 42	926	13	65	14	4
1751	Tu.	4852	1673	1158	Fr. 9	B. (5) 58 13	927	13	66	15	5
B.1752	We.	4853	1674	1159	Su. 9	(0) 13 45	928	13	67	16	6
1753	Fr.	4854	1675	1160	Mo. 9	(1) 29 16	929	13	68	17	7
1754	Sa.	4855	1676	1161	Tu. 9	(2) 44 47	930	13	69	18	8
1755	Su.	4856	1677	1162	Th. 10	B. (4) 0 18	931	13	70	19	9
B.1756	Mo.	4857	1678	1163	Fr. 9	(5) 15 50	932	13	71	20	10
1757	We.	4858	1679	1164	Sa. 9	(6) 31 21	933	13	72	21	11
1758	Th.	4859	1680	1165	Su. 9	B. (0) 46 52	934	13	73	22	12
1759	Fr.	4860	1681	1166	Tu. 10	(2) 2 23	935	13	74	23	13
B.1760	Sa.	4861	1682	1167	We. 9	(3) 17 35	936	13	75	24	14
1761	Mo.	4862	1683	1168	Th. 9	(1) 33 26	937	13	76	25	15
1762	Tu.	4863	1684	1169	Fr. 9	B. (5) 48 57	938	13	77	26	16
1763	We.	4864	1685	1170	Su. 10	(0) 4 28	939	14	78	27	17
B.1764	Th.	4865	1686	1171	Mo. 9	(1) 20 0	940	13	79	28	18
1765	Sa.	4866	1687	1172	Tu. 9	(2) 35 31	941	13	80	29	19
1766	Su.	4867	1688	1173	We. 9	B. (3) 51 2	942	13	81	30	20
1767	Mo.	4868	1689	1174	Fr. 10	(5) 6 33	943	14	82	31	21
B.1768	Tu.	4869	1690	1175	Sa. 9	(6) 22 5	944	13	83	32	22
1769	Th.	4870	1691	1176	Su. 9	(0) 37 36	945	13	84	33	23
1770	Fr.	4871	1692	1177	Mo. 9	B. (1) 53 7	946	13	85	34-5	24
1771	Sa.	4872	1693	1178	We. 10	(3) 8 38	947	14	86	36	25
B.1772	Su.	4873	1694	1179	Th. 9	(4) 24 10	948	13	87	37	26
1773	Tu.	4874	1695	1180	Fr. 9	(5) 39 41	949	13	88	38	27
1774	We.	4875	1696	1181	Sa. 9	B. (6) 55 12	950	13	89	39	28
1775	Th.	4876	1697	1182	Mo. 10	(1) 10 43	951	14	90	40	29
B.1776	Fr.	4877	1698	1183	Tu. 9	(2) 26 15	952	13	1	41	30
1777	Su.	4878	1699	1184	We. 9	(3) 41 46	953	13	2	42	31
1778	Mo.	4879	1700	1185	Th. 9	B. (4) 57 17	954	13	3	43	32
1779	Tu.	4880	1701	1186	Sa. 10	(6) 12 48	955	14	4	44	33
B.1780	We.	4881	1702	1187	Su. 9	(0) 28 20	956	13	5	45	34
1781	Fr.	4882	1703	1188	Mo. 9	(1) 43 51	957	13	6	46	35
1782	Sa.	4883	1704	1189	Tu. 9	B. (2) 59 22	958	13	7	47	36
1783	Su.	4884	1705	1190	Th. 10	(4) 14 53	959	14	8	48	37
B.1784	Mo.	4885	1706	1191	Fr. 9	(5) 30 25	960	13	9	49	38
1785	We.	4886	1707	1192	Sa. 9	B. (6) 45 56	961	13	10	50	39
1786	Th.	4887	1708	1193	Mo. 10	(1) 1 27	962	13	11	51	40
1787	Fr.	4888	1709	1194	Tu. 10	(2) 16 58	963	14	12	52	41
B.1788	Sa.	4889	1710	1195	We. 9	(3) 32 30	964	13	13	53	42
1789	Mo.	4890	1711	1196	Th. 9	B. (4) 48 1	965	13	14	54	43
1790	Tu.	4891	1712	1197	Sa. 10	(6) 3 32	966	14	15	55	44
1791	We.	4892	1713	1198	Su. 10	(0) 19 3	967	14	16	56	45
B.1792	Th.	4893	1714	1199	Mo. 9	(1) 34 35	968	13	17	57	46
1793	Sa.	4894	1715	1200	Tu. 9	B. (2) 50 6	969	13	18	58	47
1794	Su.	4895	1716	1201	Th. 10	(4) 5 37	970	14	19	59	48
1795	Mo.	4896	1717	1202	Fr. 10	(5) 21 8	971	14	20	60	49
B.1796	Tu.	4897	1718	1203	Sa. 9	(6) 36 40	972	13	21	1	50
1797	Th.	4898	1719	1204	Su. 9	B. (0) 52 11	973	13	22	2	51
1798	Fr.	4899	1720	1205	Tu. 10	(2) 7 42	974	14	23	3	52
1799	Sa.	4900	1721	1206	We. 10	(3) 23 13	975	14	24	4	53

SOLAR YEAR.		PART I.—HINDU SIDEREAL YEARS.									
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	
CHRISTIAN YEAR. A. D.	First day of ditto.	Years beginning on entrance of the Sun into Aries of the Sidereal Zodiac.				Character of the year. First weekly day of ditto. Indian hour and minute of Sankranta, or Oen- ters constellation V.	CYCLES.				
		Kali-yug.	Saka.	Bengali San.	Initial date of all three in April N. S.		Cycle of 1000 years of Parasurama, begin- ning in September.	Initial date in Sep- tember.	Cycle of Grahapari- vritih.	Cycle of Vrihaspati. (Bengal account.) Do. (Tamil account.)	
B.1800	Su.	4901	1722	1207	Th. 10	D. (4) 38 45	976	14	25	5 54	
1801	Tu.	4902	1723	1208	Fr. 10	B. (5) 54 16	977	14	26	6 55	
1802	We.	4903	1724	1209	Su. 11	(0) 9 47	978	15	27	7 56	
1803	Th.	4904	1725	1210	Mo. 11	(1) 25 18	979	15	28	8 57	
B.1804	Fr.	4905	1726	1211	Tu. 10	(2) 40 50	980	14	29	9 58	
1805	Su.	4906	1727	1212	We. 10	B. (3) 56 21	981	14	30	10 59	
1806	Mo.	4907	1728	1213	Fr. 11	(5) 11 52	982	15	31	11 60	
1807	Tu.	4908	1729	1214	Sa. 11	(6) 27 23	983	15	32	12 1	
B.1808	We.	4909	1730	1215	Su. 10	(0) 42 55	984	14	33	13 2	
1809	Fr.	4910	1731	1216	Mo. 10	B. (1) 58 26	985	14	34	14 3	
1810	Sa.	4911	1732	1217	We. 11	(3) 13 57	986	15	35	15 4	
1811	Su.	4912	1733	1218	Th. 11	(4) 29 28	987	15	36	16 5	
B.1812	Mo.	4913	1734	1219	Fr. 10	B. (5) 45 0	988	14	37	17 6	
1813	We.	4914	1735	1220	Su. 11	(0) 0 31	989	14	38	18 7	
1814	Th.	4915	1736	1221	Mo. 11	(1) 16 2	990	15	39	19 8	
1815	Fr.	4916	1737	1222	Tu. 11	(2) 31 33	991	15	40	20 9	
B.1816	Sa.	4917	1738	1223	We. 10	B. (3) 47 5	992	14	41	21 10	
1817	Mo.	4918	1739	1224	Fr. 11	(5) 2 36	993	14	42	22 11	
1818	Tu.	4919	1740	1225	Sa. 11	(6) 18 7	994	15	43	23 12	
1819	We.	4920	1741	1226	Su. 11	(0) 33 38	995	15	44	24 13	
B.1820	Th.	4921	1742	1227	Mo. 10	B. (1) 49 10	996	14	45	25 14	
1821	Sa.	4922	1743	1228	We. 11	(3) 4 41	997	15	46	26 15	
1822	Su.	4923	1744	1229	Th. 11	(4) 20 12	998	15	47	27 16	
1823	Mo.	4924	1745	1230	Fr. 11	(5) 35 43	999	15	48	28 17	
B.1824	Tu.	4925	1746	1231	Sa. 10	B. (6) 51 15	1000	14	49	29 18	
1825	Th.	4926	1747	1232	Mo. 11	(1) 6 46	1	15	50	30 19	
1826	Fr.	4927	1748	1233	Tu. 11	(2) 22 17	2	15	51	31 20	
1827	Sa.	4928	1749	1234	We. 11	(3) 37 48	3	15	52	32 21	
B.1828	Su.	4929	1750	1235	Th. 10	B. (4) 53 20	4	14	53	33 22	
1829	Tu.	4930	1751	1236	Sa. 11	(6) 8 51	5	15	54	34 23	
1830	We.	4931	1752	1237	Su. 11	(0) 24 22	6	15	55	35 24	
1831	Th.	4932	1753	1238	Mo. 11	(1) 39 53	7	15	56	36 25	
B.1832	Fr.	4933	1754	1239	Tu. 10	B. (2) 55 25	8	14	57	37 26	
1833	Su.	4934	1755	1240	Th. 11	(4) 10 56	9	15	58	38 27	
1834	Mo.	4935	1756	1241	Fr. 11	(5) 26 27	10	15	59	39 28	
1835	Tu.	4936	1757	1242	Sa. 11	(6) 41 58	11	15	60	40 29	
B.1836	We.	4937	1758	1243	Su. 10	B. (0) 57 30	12	14	61	41 30	
1837	Fr.	4938	1759	1244	Tu. 11	(2) 13 1	13	15	62	42 31	
1838	Sa.	4939	1760	1245	We. 11	(3) 28 32	14	15	63	43 32	
1839	Su.	4940	1761	1246	Th. 11	(4) 44 3	15	15	64	44 33	
B.1840	Mo.	4941	1762	1247	Fr. 10	B. (5) 59 35	16	14	65	45 34	
1841	We.	4942	1763	1248	Sa. 11	(0) 15 6	17	15	66	46 35	
1842	Th.	4943	1764	1249	Mo. 11	(1) 30 37	18	15	67	47 36	
1843	Fr.	4944	1765	1250	Tu. 11	B. (2) 46 8	19	15	68	48 37	
B.1844	Sa.	4945	1766	1251	Th. 11	(4) 1 40	20	14	69	49 38	
1845	Mo.	4946	1767	1252	Fr. 11	(5) 47 14	21	15	70	50 39	
1846	Tu.	4947	1768	1253	Sa. 11	(6) 32 42	22	15	71	51 40	
1847	We.	4948	1769	1254	Su. 11	B. (0) 48 13	23	15	72	52 41	
B.1848	Th.	4949	1770	1255	Tu. 11	(2) 3 45	24	15	73	53 42	
1849	Sa.	4950	1771	1256	We. 11	(3) 19 16	25	15	74	54 43	

SOLAR YEAR.		PART I.—HINDU SIDEREAL YEARS.									
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	
CHRISTIAN YEAR. A. D.	First day of ditto.	Years beginning on entrance of the Sun into Aries of the Sidereal Zodiac.				Character of the year. First weekly day of ditto. Indian hour and minute of Sankrānta, or ☉ entering constellation ♈.	CYCLES.				
		Kali-yug.	Śaka.	Bengal San.	Initial date of all three in April N.S.		Cycle of 1000 years of Parasurāma, beginning in September.	Initial date in September.	Cycle of Grahapari-vrithi.	Cycle of Vrihaspati (Bengal account.)	Do. (Tamil account.)
1850	Su.	4951	1772	1257	Th. 11	D. (4) 34 47	26	15	75	55	44
1851	Mo.	4952	1773	1258	Fr. 11	B. (5) 50 18	27	15	76	56	45
B.1852	Tu.	4953	1774	1259	Su. 11	(0) 5 50	28	15	77	57	46
1853	Th.	4954	1775	1260	Mo. 11	(1) 21 21	29	15	78	58	47
1854	Fr.	4955	1776	1261	Tu. 11	(2) 36 52	30	15	79	59	48
1855	Sa.	4956	1777	1262	We. 11	B. (8) 52 23	31	15	80	60	49
B.1856	Su.	4957	1778	1263	Fr. 11	(5) 7 55	32	15	81	1-2 50	50
1857	Tu.	4958	1779	1264	Sa. 11	(6) 23 26	33	15	82	3 51	51
1858	We.	4959	1780	1265	Su. 11	(0) 38 57	34	15	83	4 52	52
1859	Th.	4960	1781	1266	Mo. 11	B. (1) 54 28	35	15	84	5 53	53
B.1860	Fr.	4961	1782	1267	We. 11	(3) 10 0	36	15	85	6 54	54
1861	Su.	4962	1783	1268	Th. 11	(4) 25 31	37	15	86	7 55	55
1862	Mo.	4963	1784	1269	Fr. 11	(5) 41 2	38	15	87	8 56	56
1863	Tu.	4964	1785	1270	Sa. 11	B. (6) 56 33	39	15	88	9 57	57
B.1864	We.	4965	1786	1271	Mo. 11	(1) 12 5	40	15	89	10 58	58
1865	Fr.	4966	1787	1272	Tu. 11	(2) 27 36	41	15	90	11 59	59
1866	Sa.	4967	1788	1273	We. 11	(3) 43 7	42	15	1	12 60	60
1867	Su.	4968	1789	1274	Th. 11	B. (4) 58 38	43	15	2	13 1	61
B.1868	Mo.	4969	1790	1275	Sa. 11	(6) 14 10	44	15	3	14 2	62
1869	We.	4970	1791	1276	Su. 11	(0) 29 41	45	15	4	15 3	63
1870	Th.	4971	1792	1277	Mo. 11	B. (1) 45 12	46	15	5	16 4	64
1871	Fr.	4972	1793	1278	We. 12	(3) 0 43	47	15	6	17 5	65
B.1872	Sa.	4973	1794	1279	Th. 11	(4) 16 15	48	15	7	18 6	66
1873	Mo.	4974	1795	1280	Fr. 11	(5) 31 46	49	15	8	19 7	67
1874	Tu.	4975	1796	1281	Sa. 11	B. (6) 47 17	50	15	9	20 8	68
1875	We.	4976	1797	1282	Mo. 12	(1) 2 48	51	15	10	21 9	69
B.1876	Th.	4977	1798	1283	Tu. 11	(2) 18 20	52	15	11	22 10	70
1877	Sa.	4978	1799	1284	We. 11	(3) 33 51	53	15	12	23 11	71
1878	Su.	4979	1800	1285	Th. 11	B. (4) 49 22	54	15	13	24 12	72
1879	Mo.	4980	1801	1286	Sa. 12	(6) 4 53	55	16	14	25 13	73
B.1880	Tu.	4981	1802	1287	Su. 11	(0) 20 25	56	15	15	26 14	74
1881	Th.	4982	1803	1288	Mo. 11	(1) 35 56	57	15	16	27 15	75
1882	Fr.	4983	1804	1289	Tu. 11	B. (2) 51 27	58	15	17	28 16	76
1883	Sa.	4984	1805	1290	Th. 12	(4) 6 58	59	16	18	29 17	77
B.1884	Su.	4985	1806	1291	Fr. 11	(5) 22 30	60	15	19	30 18	78
1885	Tu.	4986	1807	1292	Sa. 11	(6) 38 1	61	15	20	31 19	79
1886	We.	4987	1808	1293	Su. 11	B. (0) 53 32	62	15	21	32 20	80
1887	Th.	4988	1809	1294	Tu. 12	(2) 9 3	63	16	22	33 21	81
B.1888	Fr.	4989	1810	1295	We. 11	(3) 24 35	64	15	23	34 22	82
1889	Su.	4990	1811	1296	Th. 11	(4) 40 6	65	15	24	35 23	83
1890	Mo.	4991	1812	1297	Fr. 11	B. (5) 55 37	66	15	25	36 24	84
1891	Tu.	4992	1813	1298	Su. 12	(0) 11 8	67	16	26	37 25	85
B.1892	We.	4993	1814	1299	Mo. 11	(1) 26 40	68	15	27	38 26	86
1893	Fr.	4994	1815	1300	Tu. 11	(2) 42 11	69	15	28	39 27	87
1894	Sa.	4995	1816	1301	We. 11	B. (3) 57 42	70	15	29	40 28	88
1895	Su.	4996	1817	1302	Fr. 12	(5) 13 13	71	16	30	41 29	89
B.1896	Mo.	4997	1818	1303	Sa. 11	(6) 28 45	72	15	31	42 30	90
1897	We.	4998	1819	1304	Su. 11	(0) 44 16	73	15	32	43 31	91
1898	Th.	4999	1820	1305	Mo. 11	B. (1) 59 47	74	15	33	44 32	92
1899	Fr.	5000	1821	1306	We. 12	(3) 15 18	75	16	34	45 33	93
1900	Sa.	5001	1822	1307	Th. 12	(4) 30 15	76	16	35	46 34	94

PART II.—LUNI-SOLAR YEAR.													
I.	XII.		XIII.	XIV.	XV.	XVI.	XVII.		XVIII.	XIX.			
CHRISTIAN YEAR.	Begins on the new moon occurring next before the 1st Visakha of the Sideral year.		Begins on the 1st of the lunar month Asvin.	Character of the year, and initial of Adhik or 'lound' month, in intercalary year. (See p. 176.)	Date of the last mean conjunction of ☉ and ♀, whence the new luni-solar year commences.	Same date in Hindū Sideral month Chaitra. (civ. acct.)	Number of days in the Sideral month Chaitra.	BUDDHIST ERA of India, Ceylon, Ava, Siam, etc.	BURMESE Vulgar Era (used also in Arracan, etc.)	CHINESE ERA.	Year of the Cycle of 60.	Approximate commencement from the new moon next before ☉ enters ♈ in old style.	Years in which intercalary months are introduced.
	A. D.	Kaliyug.											
B. 1600	4701	1657	1008	A. S.	We. 5 Mar.	8	30	2143	962	LXXII. Cycle.	37	3 Feb.	
1601	4702	1658	1009		Mo. 23 Mar.	26	30	2144	963		38	23 Jan.	
1602	4703	1659	1010		Sa. 13 Mar.	16	30	2145	964		39	13 Jan.	
1603	4704	1660	1011	A. A.	We. 2 Mar.	5	31	2146	965		40	31 Jan.	
B. 1604	4705	1661	1012		Tu. 20 Mar.	23	30	2147	966		41	21 Jan.	
1605	4706	1662	1013		Sa. 9 Mar.	12	30	2148	967	LXXIII. Cycle.	42	7 Feb.	
1606	4707	1663	1014	A. V.	Th. 27 Feb.	2	30	2149	968		43	28 Jan.	
1607	4708	1664	1015		We. 18 Mar.	21	31	2150	969		44	18 Jan.	
B. 1608	4709	1665	1016	A. B.	Su. 6 Mar.	9	30	2151	970		45	5 Feb.	
1609	4710	1666	1017		Sa. 25 Mar.	28	30	2152	971		46	25 Jan.	
1610	4711	1667	1018		We. 14 Mar.	17	30	2153	972	LXXII. Cycle.	47	14 Jan.	
1611	4712	1668	1019	A. S.	Mo. 4 Mar.	7	31	2154	973		48	2 Feb.	
B. 1612	4713	1669	1020		Su. 22 Mar.	25	30	2155	974		49	23 Jan.	
1613	4714	1670	1021		Th. 11 Mar.	14	30	2156	975		50	9 Feb.	
1614	4715	1671	1022	A. J.	Mo. 28 Feb.	3	31	2157	976		51	29 Jan.	
1615	4716	1672	1023		Su. 19 Mar.	22	31	2158	977	LXXIII. Cycle.	52	19 Jan.	
B. 1616	4717	1673	1024	A. C.	Fr. 8 Mar.	11	30	2159	978		53	7 Feb.	
1617	4718	1674	1025		We. 26 Mar.	29	30	2160	979		54	26 Jan.	
1618	4719	1675	1026		Mo. 16 Mar.	19	31	2161	980		55	15 Jan.	
1619	4720	1676	1027	A. S.	Fr. 5 Mar.	8	31	2162	981		56	3 Feb.	
B. 1620	4721	1677	1028		Th. 23 Mar.	26	30	2163	982	LXXII. Cycle.	57	24 Jan.	
1621	4722	1678	1029		Mo. 12 Mar.	15	30	2164	983		58	10 Feb.	
1622	4723	1679	1030	A. A.	Sa. 2 Mar.	5	31	2165	984		59	31 Jan.	
1623	4724	1680	1031		Fr. 21 Mar.	24	31	2166	985		60	21 Jan.	
B. 1624	4725	1681	1032		Tu. 9 Mar.	12	30	2167	986		1	8 Feb.	
1625	4726	1682	1033	A. V.	Sa. 26 Feb.	1	30	2168	987	LXXIII. Cycle.	2	27 Jan.	
1626	4727	1683	1034		Fr. 17 Mar.	20	31	2169	988		3	17 Jan.	
1627	4728	1684	1035	A. B.	We. 7 Mar.	9	30	2170	989		4	5 Feb.	
B. 1628	4729	1685	1036		Tu. 25 Mar.	28	30	2171	990		5	26 Jan.	
1629	4730	1686	1037		Sa. 14 Mar.	17	30	2172	991		6	14 Jan.	
1630	4731	1687	1038	A. S.	We. 3 Mar.	6	31	2173	992	LXXII. Cycle.	7	1 Feb.	
1631	4732	1688	1039		Tu. 22 Mar.	24	30	2174	993		8	22 Jan.	
B. 1632	4733	1689	1040		Su. 11 Mar.	14	30	2175	994		9	10 Feb.	
1633	4734	1690	1041	A. J.	Th. 28 Feb.	3	30	2176	995		10	29 Jan.	
1634	4735	1691	1042		We. 19 Mar.	22	31	2177	996		11	19 Jan.	
1635	4736	1692	1043	A. C.	Su. 8 Mar.	10	30	2178	997	LXXIII. Cycle.	12	6 Feb.	
B. 1636	4737	1693	1044		Sa. 26 Feb.	29	30	2179	998		13	27 Jan.	
1637	4738	1694	1045		Th. 16 Mar.	19	30	2180	999		14	16 Jan.	
1638	4739	1695	1046	A. S.	Mo. 5 Mar.	8	31	2181	1000		15	3 Feb.	
1639	4740	1696	1047		Su. 24 Mar.	26	30	2182	1001		16	24 Jan.	
B. 1640	4741	1697	1048		Th. 12 Mar.	15	30	2183	1002	LXXII. Cycle.	17	13 Jan.	
1641	4742	1698	1049	A. A.	Tu. 2 Mar.	5	31	2184	1003		18	31 Jan.	
1642	4743	1699	1050		Su. 20 Mar.	23	31	2185	1004		19	20 Jan.	
1643	4744	1700	1051		Fr. 10 Mar.	12	30	2186	1005		20	8 Feb.	
B. 1644	4745	1701	1052	A. V.	Th. 27 Feb.	1	30	2187	1006		21	28 Jan.	
1645	4746	1702	1053		Mo. 17 Mar.	20	31	2188	1007	LXXIII. Cycle.	22	17 Jan.	
1646	4747	1703	1054	A. B.	Fr. 6 Mar.	9	31	2189	1008		23	4 Feb.	
1647	4748	1704	1055		Th. 25 Mar.	27	30	2190	1009		24	25 Jan.	
B. 1648	4749	1705	1056		Tu. 14 Mar.	17	30	2191	1010		25	15 Jan.	
1649	4750	1706	1057	A. S.	Sa. 3 Mar.	6	31	2192	1011		26	1 Feb.	

This table includes the Burmese luni-solar era, which accords with the Hindū, and the Chinese, which begins one moon earlier. The Vijayanti revenue year of Orissa agrees numerically with the Festil; but its divisions are solar, being the same as column VI. until A.D. 1800, after which it is always one day earlier than the latter.

PART II.—LUNI-SOLAR YEAR.												
I.	XII.		XIII.	XIV.	XV.	XVI.	XVII.	XVIII.	XIX.			
CHRISTIAN YEAR.  A. D.	Begins on the new moon occurring next before the 1st of Vaisakha of the Sidereal year.		Begins on the 1st of the lunar month of Asvini.	Character of the year, and initial of Adhik or 'lound' month, in intercalary year. (See p. 176.)	Date of the last mean conjunction of ☾ and ☿, whence the new luni-solar year commences.	Same date in Hindū Sidereal month Chaitra. (civ. act.)	Number of days in the Sidereal month Chaitra.	Buddhist Era of India, Ceylon, Ava, Siam, etc.	Burmese Vulgar Era (used also in Arracan, etc.)	CHINESE ERA. Year of the Cycle of 60.	Approximate commencement from the new moon next before ☉ enters ♀ in old style.	Years in which intercalary months are introduced.
	Kaliyug.	Samvat.	Fasli of Upper India.									
1650	4751	1707	1058		Fr. 22 Mar.	24	30	2193	1012	27	22 Jan.	*
1651	4752	1708	1059		Tu. 11 Mar.	13	30	2194	1013	28	9 Feb.	
B. 1652	4753	1709	1060	A. J.	Su. 29 Feb.	3	30	2195	1014	29	30 Jan.	
1653	4754	1710	1061		Sa. 19 Mar.	22	31	2196	1015	30	19 Jan.	*
1654	4755	1711	1062	A. C.	We. 8 Mar.	10	30	2197	1016	31	6 Feb.	
1655	4756	1712	1063		Tu. 27 Mar.	29	30	2198	1017	32	27 Jan.	
B. 1656	4757	1713	1064		Sa. 15 Mar.	18	30	2199	1018	33	16 Jan.	*
1657	4758	1714	1065	A. S.	Th. 5 Mar.	8	31	2200	1019	34	3 Feb.	
1658	4759	1715	1066		Tu. 23 Mar.	25	30	2201	1020	35	23 Jan.	
1659	4760	1716	1067		Su. 13 Mar.	15	30	2202	1021	36	13 Jan.	*
B. 1660	4761	1717	1068	A. A.	Th. 1 Mar.	4	30	2203	1022	37	31 Jan.	
1661	4762	1718	1069		We. 20 Mar.	23	31	2204	1023	38	20 Jan.	*
1662	4763	1719	1070		Su. 9 Mar.	11	30	2205	1024	39	7 Feb.	
1663	4764	1720	1071	A. V.	Th. 26 Feb.	1	30	2206	1025	40	28 Jan.	*
B. 1664	4765	1721	1072		Th. 17 Mar.	20	30	2207	1026	41	18 Jan.	*
1665	4766	1722	1073	A. B.	Mo. 6 Mar.	9	31	2208	1027	42	4 Feb.	
1666	4767	1723	1074		Su. 25 Mar.	27	30	2209	1028	43	25 Jan.	*
1667	4768	1724	1075		Th. 14 Mar.	16	30	2210	1029	44	14 Jan.	*
B. 1668	4769	1725	1076	A. S.	Tu. 3 Mar.	6	31	2211	1030	45	2 Feb.	
1669	4770	1726	1077		Mo. 22 Mar.	25	31	2212	1031	46	22 Jan.	*
1670	4771	1727	1078		Fr. 11 Mar.	13	30	2213	1032	47	9 Feb.	
1671	4772	1728	1079	A. J.	Tu. 28 Feb.	2	30	2214	1033	48	29 Jan.	*
B. 1672	4773	1729	1080		Mo. 18 Mar.	21	31	2215	1034	49	19 Jan.	*
1673	4774	1730	1081	A. C.	Sa. 8 Mar.	11	31	2216	1035	50	6 Feb.	
1674	4775	1731	1082		Fr. 27 Mar.	29	30	2217	1036	51	27 Jan.	*
1675	4776	1732	1083		Tu. 16 Mar.	18	30	2218	1037	52	16 Jan.	*
B. 1676	4777	1733	1084	A. S.	Sa. 4 Mar.	7	31	2219	1038	53	3 Feb.	
1677	4778	1734	1085		Fr. 23 Mar.	26	31	2220	1039	54	23 Jan.	*
1678	4779	1735	1086		We. 13 Mar.	15	30	2221	1040	55	13 Jan.	*
1679	4780	1736	1087	A. A.	Su. 2 Mar.	4	30	2222	1041	56	31 Jan.	*
B. 1680	4781	1737	1088		Sa. 20 Mar.	23	31	2223	1042	57	21 Jan.	*
1681	4782	1738	1089	A. C. A. 1	We. 9 Mar.	11	30	2224	1043	58	7 Feb.	
1682	4783	1739	1090		Tu. 23 Mar.	30	30	2225	1044	59	28 Jan.	*
1683	4784	1740	1091		Sa. 17 Mar.	19	30	2226	1045	60	17 Jan.	*
B. 1684	4785	1741	1092	A. B.	Th. 6 Mar.	9	31	2227	1046	1	5 Feb.	*
1685	4786	1742	1093		We. 25 Mar.	27	30	2228	1047	2	25 Jan.	*
1686	4787	1743	1094		Su. 14 Mar.	16	30	2229	1048	3	14 Jan.	*
1687	4788	1744	1095	A. A.	Th. 3 Mar.	5	30	2230	1049	4	1 Feb.	*
B. 1688	4789	1745	1096		We. 21 Mar.	24	31	2231	1050	5	22 Jan.	*
1689	4790	1746	1097		Mo. 11 Mar.	13	30	2232	1051	6	9 Feb.	*
1690	4791	1747	1098	A. V.	Fr. 26 Feb.	2	30	2233	1052	7	28 Jan.	*
1691	4792	1748	1099		Th. 19 Mar.	21	30	2234	1053	8	19 Jan.	*
B. 1692	4793	1749	1100	A. B.	Mo. 7 Mar.	10	31	2235	1054	9	6 Feb.	*
1693	4794	1750	1101		Su. 26 Mar.	28	30	2236	1055	10	26 Jan.	*
1694	4795	1751	1102		Fr. 16 Mar.	18	30	2237	1056	11	16 Jan.	*
1695	4796	1752	1103	A. S.	Tu. 5 Mar.	7	30	2238	1057	12	3 Feb.	*
B. 1696	4797	1753	1104		Mo. 23 Mar.	26	31	2239	1058	13	24 Jan.	*
1697	4798	1754	1105		Fr. 12 Mar.	14	30	2240	1059	14	10 Feb.	*
1698	4799	1755	1106	A. J.	We. 2 Mar.	4	30	2241	1060	15	31 Jan.	*
1699	4800	1756	1107		Tu. 21 Mar.	23	31	2242	1061	16	21 Jan.	*

<sup>1</sup> In the current year K. Y. 4788, the months Chaitra and Asvina are repeated, and the month Agrahana is *kahaga* or expunged.

PART II.—LUNI-SOLAR YEAR.												
I.	XII.		XIII.	XIV.	XV.	XVI.	XVII.	XVIII.	XIX.			
CHRISTIAN YEAR. A.D.	Begins on the new moon occurring next before the 1st Yashaka of the Sideral year.		Begins on the 1st of the lunar month Aswin.	Character of the year, and initial of <i>Ashat</i> or 'found' month, in intercalary year. (See p. 175.)	Date of the last mean conjunction of ☉ and ♀, whence the new luni-solar year commences.	Same date in Hindū Sideral month Chaitra. (div. aet.)	Number of days in the Sideral month Chaitra.	BUDDHIST Era of India, Ceylon, Ava, Shan, etc.	BURMESE Vulgar Era (used also in Arracan, etc.)	CHINESE ERA. Year of the Cycle of 60.	Approximate commencement from the new moon next before ☉ enters ♀ in old style.	Years in which intercalary months are introduced.
	Kaliyug.	Samvat.										
B.1700	4801	1757	1108	A.C.	Sa. 9 Mar.	12	31	2243	1062	17	8 Feb.	
1701	4802	1758	1109	A.V.	Fr. 28 Mar.	30	30	2244	1063	18	28 Jan.	
1702	4803	1759	1110		Tu. 17 Mar.	19	30	2245	1064	19	17 Jan.	*
1703	4804	1760	1111	A.S.	Sa. 6 Mar.	8	31	2246	1065	20	4 Feb.	
B.1704	4805	1761	1112		Fr. 24 Mar.	27	31	2247	1066	21	25 Jan.	
1705	4806	1762	1113		We. 14 Mar.	16	30	2248	1067	22	14 Jan.	*
1706	4807	1763	1114	A.J.	Su. 3 Mar.	5	30	2249	1068	23	1 Feb.	*
1707	4808	1764	1115		Sa. 22 Mar.	24	31	2250	1069	24	22 Jan.	*
B.1708	4809	1765	1116		We. 10 Mar.	12	30	2251	1070	25	9 Feb.	
1709	4810	1766	1117	A.C.	Mo. 28 Feb.	2	30	2252	1071	26	29 Jan.	
1710	4811	1767	1118		Sa. 18 Mar.	20	30	2253	1072	27	18 Jan.	*
1711	4812	1768	1119	A.B.	Th. 8 Mar.	10	31	2254	1073	28	6 Feb.	
B.1712	4813	1769	1120		We. 26 Mar.	28	30	2255	1074	29	27 Jan.	
1713	4814	1770	1121		Su. 15 Mar.	17	30	2256	1075	30	15 Jan.	*
1714	4815	1771	1122	A.A.	Th. 4 Mar.	6	30	2257	1076	31	2 Feb.	
1715	4816	1772	1123		We. 23 Mar.	25	31	2258	1077	32	23 Jan.	
B.1716	4817	1773	1124		Mo. 12 Mar.	14	30	2259	1078	33	13 Jan.	*
1717	4818	1774	1125	A.V.	Fr. 1 Mar.	3	30	2260	1079	34	30 Jan.	
1718	4819	1775	1126		Th. 20 Mar.	22	30	2261	1080	35	20 Jan.	*
1719	4820	1776	1127		Tu. 10 Mar.	11	31	2262	1081	36	8 Feb.	
B.1720	4821	1777	1128	A.B.	Sa. 27 Feb.	0	30	2263	1082	37	28 Jan.	
1721	4822	1778	1129		Fr. 17 Mar.	19	30	2264	1083	38	17 Jan.	*
1722	4823	1779	1130	A.S.	Tu. 6 Mar.	8	30	2265	1084	39	4 Feb.	
1723	4824	1780	1131		Mo. 25 Mar.	27	31	2266	1085	40	25 Jan.	
B.1724	4825	1781	1132		Fr. 13 Mar.	15	30	2267	1086	41	15 Jan.	4
1725	4826	1782	1133	A.J.	We. 3 Mar.	5	30	2268	1087	42	2 Feb.	
1726	4827	1783	1134		Tu. 22 Mar.	24	31	2269	1088	43	22 Jan.	
1727	4828	1784	1135		Sa. 11 Mar.	13	31	2270	1089	44	11 Jan.	3
B.1728	4829	1785	1136	A.C.	We. 28 Feb.	1	30	2271	1090	45	30 Jan.	
1729	4830	1786	1137		Tu. 18 Mar.	20	30	2272	1091	46	18 Jan.	7
1730	4831	1787	1138	A.S.	Su. 8 Mar.	10	31	2273	1092	47	6 Feb.	
1731	4832	1788	1139		Fr. 29 Mar.	28	31	2274	1093	48	27 Jan.	
B.1732	4833	1789	1140		We. 15 Mar.	17	30	2275	1094	49	16 Jan.	5
1733	4834	1790	1141	A.A.	Su. 4 Mar.	6	30	2276	1095	50	3 Feb.	
1734	4835	1791	1142		Sa. 23 Mar.	25	31	2277	1096	51	23 Jan.	
1735	4836	1792	1143		We. 12 Mar.	14	31	2278	1097	52	12 Jan.	*
B.1736	4837	1793	1144	A.V.	Mo. 1 Mar.	3	30	2279	1098	53	31 Jan.	
1737	4838	1794	1145		Su. 20 Mar.	22	30	2280	1099	54	20 Jan.	*
1738	4839	1795	1146	A.B.	Th. 9 Mar.	11	31	2281	1100	55	7 Feb.	
1739	4840	1796	1147		We. 28 Mar.	29	30	2282	1101	56	28 Jan.	
B.1740	4841	1797	1148		Su. 16 Mar.	18	30	2283	1102	57	17 Jan.	*
1741	4842	1798	1149	A.S.	Fr. 6 Mar.	8	30	2284	1103	58	4 Feb.	
1742	4843	1799	1150		Th. 25 Mar.	27	31	2285	1104	59	25 Jan.	
1743	4844	1800	1151		Mo. 14 Mar.	15	30	2286	1105	60	14 Jan.	*
B.1744	4845	1801	1152	A.J.	Fr. 2 Mar.	4	30	2287	1106	1	2 Feb.	
1745	4846	1802	1153		Th. 21 Mar.	23	30	2288	1107	2	21 Jan.	
1746	4847	1803	1154		Tu. 11 Mar.	13	31	2289	1108	3	11 Jan.	3
1747	4848	1804	1155	A.C.	Sa. 28 Feb.	1	30	2290	1109	4	30 Jan.	
B.1748	4849	1805	1156		Fr. 18 Mar.	20	30	2291	1110	5	20 Jan.	7
1749	4850	1806	1157	A.S.	Tu. 7 Mar.	9	30	2292	1111	6	7 Feb.	

\* In the current year K. Y. 4783, the months Chaitra and Aswina are repeated, and the month Agrahana is *repe* or expunged.



PART II.—LUNI-SOLAR YEAR.												
I.	XII.		XIII.	XIV.	XV.	XVI.	XVII.	XVIII.	XIX.			
CHRISTIAN YEAR.	Begins on the new moon occurring next before the 1st Visakha of the Sideral year.		Begins on the 1st of the lunar month of Upper India.	Character of the year, and initial of <i>Adhik</i> or 'bound' month, in intercalary year. (See p. 175.)	* Date of the last reas conjunction of ☉ and ♀, whence the new luni-solar year commences.	Same date in Hindd Sideral month Chaitra. (civ. act.)	Number of days in the Sideral month Chaitra.	BUDDHIST ERA of India, Ceylon, Ava, Siam, etc.	BURMESE Vulgar Era (used also in Arracan, etc.)	CHINESE ERA. Year of the Cycle of 60.	Ascertained commencement from the new moon next before ☉ enters ♀ in new style.	Intercalary Year and No. of intercalated month.
	Kaliyug.	Samvat.										
A. D.					NEW STYLE.							
1760	4851	1807	1158		Mo. 6 Apr.	28	31	2293	1112	7	8 Feb.	
1751	4852	1808	1159		Sa. 27 Mar.	17	30	2294	1113	8	28 Jan.	5
B. 1752	4853	1809	1160	A.A.	We. 15 Mar.	6	30	2295	1114	9	15 Feb.	
1753	4854	1810	1161		Tu. 3 Apr.	25	30	2296	1115	10	4 Feb.	
1754	4855	1811	1162		Sa. 23 Mar.	15	31	2297	1116	11	24 Jan.	4
1755	4856	1812	1163	A.V.	Th. 13 Mar.	3	30	2298	1117	12	12 Feb.	
B. 1756	4857	1813	1164		Tu. 30 Mar.	21	30	2299	1118	13	1 Feb.	9
1757	4858	1814	1165	A.B.	Su. 20 Mar.	11	31	2300	1119	14	19 Feb.	
1758	4859	1815	1166		Sa. 8 Apr.	30	31	2301	1120	15	9 Feb.	
1759	4860	1816	1167		We. 28 Mar.	18	30	2302	1121	16	30 Jan.	6
B. 1760	4861	1817	1168	A.S.	Su. 16 Mar.	7	30	2303	1122	17	18 Feb.	
1761	4862	1818	1169		Sa. 4 Apr.	26	31	2304	1123	18	6 Feb.	
1762	4863	1819	1170		Th. 25 Mar.	16	31	2305	1124	19	26 Jan.	5
1763	4864	1820	1171	A.J.	Mo. 14 Mar.	4	30	2306	1125	20	14 Feb.	
B. 1764	4865	1821	1172		Su. 1 Apr.	23	30	2307	1126	21	3 Feb.	
1765	4866	1822	1173		Th. 21 Mar.	12	31	2308	1127	22	21 Jan.	2
1766	4867	1823	1174	A.C.	Tu. 11 Mar.	1	30	2309	1128	23	9 Feb.	
1767	4868	1824	1175		Mo. 30 Mar.	20	30	2310	1129	24	30 Jan.	7
B. 1768	4869	1825	1176	A.S.	Fr. 18 Mar.	9	30	2311	1130	25	17 Feb.	
1769	4870	1826	1177		Th. 6 Apr.	28	31	2312	1131	26	6 Feb.	
1770	4871	1827	1178		Mo. 26 Mar.	16	30	2313	1132	27	26 Jan.	5
1771	4872	1828	1179	A.A.	Sa. 16 Mar.	6	30	2314	1133	28	14 Feb.	
B. 1772	4873	1829	1180		Fr. 3 Apr.	25	30	2315	1134	29	3 Feb.	
1773	4874	1830	1181		Tu. 23 Mar.	14	31	2316	1135	30	22 Jan.	3
1774	4875	1831	1182	A.V.	Sa. 12 Mar.	2	30	2317	1136	31	10 Feb.	
1775	4876	1832	1183		Fr. 31 Mar.	21	30	2318	1137	32	30 Jan.	10
B. 1776	4877	1833	1184	A.B.	We. 20 Mar.	10	30	2319	1138	33	18 Feb.	
1777	4878	1834	1185		Mo. 7 Apr.	29	31	2320	1139	34	7 Feb.	
1778	4879	1835	1186		Sa. 28 Mar.	18	30	2321	1140	35	27 Jan.	6
1779	4880	1836	1187	A.S.	We. 17 Mar.	7	30	2322	1141	36	15 Feb.	
B. 1780	4881	1837	1188		Tu. 4 Apr.	26	30	2323	1142	37	5 Feb.	
1781	4882	1838	1189		Sa. 24 Mar.	15	31	2324	1143	38	24 Jan.	5
1782	4883	1839	1190	A.J.	Th. 14 Mar.	4	30	2325	1144	39	13 Feb.	
1783	4884	1840	1191		We. 2 Apr.	23	30	2326	1145	40	3 Feb.	
B. 1784	4885	1841	1192		Su. 21 Mar.	12	31	2327	1146	41	23 Jan.	3
1785	4886	1842	1193	A.C.	Th. 10 Mar.	1	31	2328	1147	42	10 Feb.	
1786	4887	1843	1194		We. 29 Mar.	19	30	2329	1148	43	31 Jan.	7
1787	4888	1844	1195	A.S.	Mo. 19 Mar.	9	30	2330	1149	44	19 Feb.	
B. 1788	4889	1845	1196		Su. 6 Apr.	28	31	2331	1150	45	8 Feb.	
1789	4890	1846	1197		Th. 26 Mar.	17	31	2332	1151	46	27 Jan.	5
1790	4891	1847	1198	A.A.	Mo. 15 Mar.	5	30	2333	1152	47	16 Feb.	
1791	4892	1848	1199		Su. 3 Apr.	24	30	2334	1153	48	4 Feb.	
B. 1792	4893	1849	1200		Fr. 23 Mar.	14	31	2335	1154	49	24 Jan.	4
1793	4894	1850	1201	A.V.	Tu. 12 Mar.	3	31	2336	1155	50	11 Feb.	
1794	4895	1851	1202		Mo. 31 Mar.	21	30	2337	1156	51	31 Jan.	
1795	4896	1852	1203	A.B.	Fr. 20 Mar.	10	30	2338	1157	52	21 Jan.	2
B. 1796	4897	1853	1204		Th. 7 Apr.	29	31	2339	1158	53	9 Feb.	
1797	4898	1854	1205		Tu. 28 Mar.	18	30	2340	1159	54	28 Jan.	6
1798	4899	1855	1206	A.S.	Sa. 17 Mar.	7	30	2341	1160	55	16 Feb.	
1799	4900	1856	1207		Fr. 5 Apr.	26	30	2342	1161	56	5 Feb.	

\* The particulars of the Chinese years from A.D. 1723 to 1733 inclusive, are taken from Bayer's 'Parergon Sinicum.' Those from 1745 to 1818, from a Chinese calendar:—and some few subsequent years from authentic sources. The rest are supplied by calculation.

PART II.—LUNI-SOLAR YEAR.										
I.	XII.		XIII.	XIV.	XV.	XVI.	XVII.	XVIII.		XIX.
CHRISTIAN YEAR.	Begins on the new moon occurring next before the last Visakha of the Sideral year.		Begins on the 1st of the lunar month of Aswin.	Character of the year, and initial of Adhik or 'lound' month, in intercalary year. (See p. 175.)	Date of the last mean conjunction of ☉ and ☽ whence the new luni-solar year commences.	Same date in Hindii Sideral month Chaitra. (alt. acct.)	Number of days in the Sideral month Chaitra.	BUDDHIST ERA of India, Ceylon, Ava, Siam, etc.	Burmese Vulgar Era (used also in Arracan, etc.)	CHINESE ERA. Year of the Cycle of 60.
A. D.	Kaliyug.	Samvat.	Feast of Upper India.	NEW STYLE.						Ascertained commencement from the new moon next before ☉ enters ♈ in new style.
1800	4901	1857	1208		Tu. 25 Mar.	15	31	2343	1162	57
1801	4902	1858	1209	A. J.	Su. 15 Mar.	4	30	2344	1163	58
1802	4903	1859	1210		Fr. 2 Apr.	22	30	2345	1164	59
1803	4904	1860	1211		We. 23 Mar.	12	30	2346	1165	60
B. 1804	4905	1861	1212	A. C.	Su. 11 Mar.	1	31	2347	1166	1
1805	4906	1862	1213		Sa. 30 Mar.	19	30	2348	1167	2
1806	4907	1863	1214	A. S.	We. 19 Mar.	8	30	2349	1168	3
1807	4908	1864	1215		Tu. 7 Apr.	27	30	2350	1169	4
B. 1808	4909	1865	1216		Su. 27 Mar.	17	31	2351	1170	5
1809	4910	1866	1217	A. A.	Th. 16 Mar.	5	30	2352	1171	6
1810	4911	1867	1218		We. 4 Apr.	24	30	2353	1172	7
1811	4912	1868	1219		Su. 24 Mar.	13	30	2354	1173	8
B. 1812	4913	1869	1220	A. V.	Fr. 13 Mar.	3	31	2355	1174	9
1813	4914	1870	1221		Th. 1 Apr.	21	30	2356	1175	10
1814	4915	1871	1222	A. B.	Mo. 21 Mar.	10	30	2357	1176	11
1815	4916	1872	1223		Su. 9 Apr.	29	31	2358	1177	12
B. 1816	4917	1873	1224		Th. 28 Mar.	18	31	2359	1178	13
1817	4918	1874	1225	A. S.	Tu. 18 Mar.	7	30	2360	1179	14
1818	4919	1875	1226		Su. 5 Apr.	25	30	2361	1180	15
1819	4920	1876	1227		Fr. 26 Mar.	15	31	2362	1181	16
B. 1820	4921	1877	1228	A. J.	Tu. 14 Mar.	4	31	2363	1182	17
1821	4922	1878	1229		Mo. 2 Apr.	22	30	2364	1183	18
1822	4923	1879	1230		Sa. 23 Mar.	12	30	2365	1184	19
1823	4924	1880	1231	A. C. A. <sup>1</sup>	We. 12 Mar.	1	31	2366	1185	20
B. 1824	4925	1881	1232		Tu. 30 Mar.	20	31	2367	1186	21
1825	4926	1882	1233	A. S.	Sa. 19 Mar.	8	30	2368	1187	22
1826	4927	1883	1234		Fr. 7 Apr.	27	30	2369	1188	23
1827	4928	1884	1235		Tu. 27 Mar.	16	31	2370	1189	24
B. 1828	4929	1885	1236	A. A.	Su. 16 Mar.	6	30	2371	1190	25
1829	4930	1886	1237		Sa. 4 Apr.	24	30	2372	1191	26
1830	4931	1887	1238		We. 24 Mar.	13	30	2373	1192	27
1831	4932	1888	1239	A. V.	Su. 13 Mar.	2	31	2374	1193	28
B. 1832	4933	1889	1240		Sa. 31 Mar.	21	30	2375	1194	29
1833	4934	1890	1241	A. B.	Th. 21 Mar.	10	30	2376	1195	30
1834	4935	1891	1242		We. 9 Apr.	29	30	2377	1196	31
1835	4936	1892	1243		Su. 29 Mar.	18	31	2378	1197	32
B. 1836	4937	1893	1244	A. S.	Th. 17 Mar.	6	30	2379	1198	33
1837	4938	1894	1245		We. 5 Apr.	25	30	2380	1199	34
1838	4939	1895	1246		Mo. 26 Mar.	15	30	2381	1200	35
1839	4940	1896	1247	A. J.	Fr. 15 Mar.	4	31	2382	1201	36
B. 1840	4941	1897	1248		Th. 2 Apr.	22	30	2383	1202	37
1841	4942	1898	1249		Mo. 22 Mar.	11	30	2384	1203	38
1842	4943	1899	1250	A. C.	Sa. 12 Mar.	1	31	2385	1204	39
1843	4944	1900	1251		Th. 30 Mar.	19	31	2386	1205	40
B. 1844	4945	1901	1252	A. S.	Tu. 19 Mar.	8	30	2387	1206	41
1845	4946	1902	1253		Mo. 7 Apr.	27	30	2388	1207	42
1846	4947	1903	1254		Fr. 27 Mar.	16	31	2389	1208	43
1847	4948	1904	1255	A. A.	Tu. 16 Mar.	5	31	2390	1209	44
B. 1848	4949	1905	1256		Mo. 3 Apr.	23	30	2391	1210	45
1849	4950	1906	1257		Sa. 24 Mar.	13	30	2392	1211	46

<sup>1</sup> The expunged month in the 4994th year of the Kaliyug fell on Agrahayan, otherwise Margashira, and the intercalated months were Aswina and Chaitra of the ensuing year.

PART II.—LUNI-SOLAR YEAR.												
I.	XII.		XIII.	XIV.	XV.	XVI.	XVII.	XVIII.	XIX.			
CHRISTIAN YEAR. A. D.	Begins on the new moon occurring next before the 1st Visakha of the Sideral year.		Begins on the 1st of the lunar month Aswin.	Character of the year, and initial of <i>Adhik</i> or 'leap' month, in intercalary year. (See p. 175.)	Date of the last mean conjunction of ☉ and ♀ whence the new luni-solar year commences.	Same date in Hindū Sideral month Chaitra. (civ. act.)	Number of days in the Sideral month Chaitra.	BUDDHIST ERA of India, Ceylon, Ava, Siam, &c.	Burmese Vulgar Era (used also in Arracan, &c.)	CHINESE ERA. Year of the Cycle of 60.	Approximate commencement from the new moon next before ☉ enters ♀ in new style.	Years in which intercalary months are introduced.
	Kaliyug.	Samvat.	Faali of Upper India.	NEW STYLE.								
1850	4961	1907	1268	A.V.	We. 13 Mar.	2	31	2393	1212	47	11 Feb.	
1851	4962	1908	1269		Tu. 1 Apr.	21	31	2394	1213	48	1 Feb.	*
B.1852	4963	1909	1260	A.B.	Sa. 20 Mar.	9	30	2395	1214	49	19 Feb.	
1853	4964	1910	1261		Fr. 8 Apr.	28	30	2396	1215	50	8 Feb.	
1854	4965	1911	1262		We. 29 Mar.	18	31	2397	1216	51	29 Jan.	*
1855	4966	1912	1263	A.S.	Su. 18 Mar.	6	30	2398	1217	52	16 Feb.	
B.1856	4967	1913	1264		Sa. 5 Apr.	25	30	2399	1218	53	6 Feb.	
1857	4968	1914	1265		We. 25 Mar.	14	30	2400	1219	54	25 Jan.	*
1858	4969	1915	1266	A.J.	Mo. 15 Mar.	4	31	2401	1220	55	13 Feb.	
1859	4960	1916	1267		Su. 3 Apr.	22	30	2402	1221	56	3 Feb.	
B.1860	4961	1917	1268	A.C.	Th. 22 Mar.	11	30	2403	1222	57	23 Jan.	*
1861	4962	1918	1269	A.C.	We. 10 Apr.	30	30	2404	1223	58	10 Feb.	
1862	4963	1919	1270		Su. 30 Mar.	19	31	2405	1224	59	30 Jan.	*
1863	4964	1920	1271	A.S.	Fr. 20 Mar.	8	30	2406	1225	60	18 Feb.	
B.1864	4965	1921	1272		We. 6 Apr.	26	30	2407	1226	1	7 Feb.	*
1865	4966	1922	1273		Mo. 27 Mar.	16	30	2408	1227	2	27 Jan.	
1866	4967	1923	1274	A.A.	Fr. 16 Mar.	5	31	2409	1228	3	14 Feb.	
1867	4968	1924	1275		Th. 4 Apr.	23	30	2410	1229	4	4 Feb.	
B.1868	4969	1925	1276		Mo. 23 Mar.	12	30	2411	1230	5	24 Jan.	*
1869	4970	1926	1277	A.V.	Sa. 13 Mar.	2	30	2412	1231	6	11 Feb.	
1870	4971	1927	1278		Fr. 1 Apr.	21	31	2413	1232	7	1 Feb.	*
1871	4972	1928	1279	A.B.	Tu. 21 Mar.	9	30	2414	1233	8	19 Feb.	
B.1872	4973	1929	1280		Mo. 8 Apr.	28	30	2415	1234	9	9 Feb.	*
1873	4974	1930	1281		Fr. 28 Mar.	17	31	2416	1235	10	28 Jan.	
1874	4975	1931	1282	A.S.	We. 18 Mar.	7	31	2417	1236	11	16 Feb.	
1875	4976	1932	1283		Tu. 6 Apr.	25	30	2418	1237	12	6 Feb.	*
B.1876	4977	1933	1284		Sa. 25 Mar.	14	30	2419	1238	13	26 Jan.	
1877	4978	1934	1285	A.J.	We. 14 Mar.	3	31	2420	1239	14	12 Feb.	
1878	4979	1935	1286		Tu. 2 Apr.	22	31	2421	1240	15	2 Feb.	*
1879	4980	1936	1287	A.C.	Su. 23 Mar.	11	30	2422	1241	16	23 Jan.	
B.1880	4981	1937	1288		Sa. 10 Apr.	30	30	2423	1242	17	11 Feb.	*
1881	4982	1938	1289		We. 30 Mar.	19	31	2424	1243	18	30 Jan.	
1882	4983	1939	1290	A.S.	Su. 19 Mar.	7	30	2425	1244	19	17 Feb.	
1883	4984	1940	1291		Sa. 7 Apr.	26	30	2426	1245	20	7 Feb.	*
B.1884	4985	1941	1292		Th. 27 Mar.	16	30	2427	1246	21	28 Jan.	
1885	4986	1942	1293	A.A.	Mo. 16 Mar.	5	31	2428	1247	22	14 Feb.	*
1886	4987	1943	1294		Su. 4 Apr.	23	30	2429	1248	23	4 Feb.	
B.1887	4988	1944	1295		Th. 24 Mar.	12	30	2430	1249	24	24 Jan.	*
1888	4989	1945	1296	A.V.	Tu. 13 Mar.	2	30	2431	1250	25	13 Feb.	
1889	4990	1946	1297		Su. 31 Mar.	20	31	2432	1251	26	31 Jan.	*
1890	4991	1947	1298	A.B.	Fr. 21 Mar.	9	30	2433	1252	27	19 Feb.	
1891	4992	1948	1299		Th. 9 Apr.	28	30	2434	1253	28	9 Feb.	*
B.1892	4993	1949	1300		Mo. 28 Mar.	17	30	2435	1254	29	29 Jan.	
1893	4994	1950	1301	A.S.	Sa. 17 Mar.	6	31	2436	1255	30	15 Feb.	*
1894	4995	1951	1302		Th. 5 Apr.	24	30	2437	1256	31	5 Feb.	
1895	4996	1952	1303		Tu. 26 Mar.	14	30	2438	1257	32	26 Jan.	*
B.1896	4997	1953	1304	A.J.	Sa. 14 Mar.	3	30	2439	1258	33	13 Feb.	
1897	4998	1954	1305		Fr. 2 Apr.	22	31	2440	1259	34	2 Feb.	*
1898	4999	1955	1306	A.C.	Tu. 22 Mar.	10	30	2441	1260	35	22 Jan.	
1899	5000	1956	1307		Mo. 10 Apr.	29	30	2442	1261	36	10 Feb.	*
1900	5001	1957	1308		Sa. 31 Mar.	19	31	2443	1262	37	1 Feb.	

\* The Burmese and the Ceylonese luni-solar years commence on the same day as the Hindū, being derived from the same original authorities.

A special work on Muhammadan dates has lately been produced by Herr Joh. Von Gumpach (Madden, 1856), which I have duly examined for the purpose of testing Prinsep's previously-published results. Prinsep's Tables, it will be seen, are calculated from the initial date of the 16th of July, 622, A.D., while Gumpach commences from the 15th of that month.<sup>1</sup>

Prinsep continues to follow the Julian style up to A.D. 1750, while Gumpach introduces the Gregorian kalendar from A.D. 1582.

The tables are, therefore, uniform in their several correspondents from A.H. 1 to A.H. 990 = Julian, 1582 (26th or 25th of January, as the optional initial day may determine). Thereafter there is a uniform discrepancy of nine days between the two serial calculations,

<sup>1</sup> [The following is M. Gumpach's statement determining the selection of the initial date for his tables]:—'The common era of the Mahometans, as has already been stated, is that of the flight of Mahomet (الهجرة) the era of the Flight =

Hegira). Its origin is by the Mahometans themselves referred to two distinct days; not that there is in reality a difference of opinion among them as to the true date, but that its epoch is fixed upon two principles, according to the astronomical or the civil view of the case. The majority of astronomers make it a Mahometan Thursday, = 15 Thamuz 933 A.S., or the moment of sunset on our Wednesday, the 14th July (old style) 622 A.D., so that the 1st of Muharram of the first year of the Hegira would mainly coincide with our Thursday, the 15th July, 622 A.D., according to the Julian kalendar. The majority of historical writers, on the contrary, place it a day later. All are in the habit of including in their expression of dates the corresponding day of the week, and thus not only obviate the uncertainty, which otherwise would attach to such dates, but, at the same time, afford a ready means of ascertaining the principle adopted, with regard to the epoch of the era, by each individual writer. Whenever the Turks express a date according to their solar kalendar, they commonly name the lunar year of the Hegira, including the 1st of March or the epoch of the solar year, to which that date belongs. . . . As will be seen on reference to the tables, the 1st of Muharram of the first year of the Hegira has been made to coincide, not with Friday the 16th, but with Thursday the 15th July, 622 A.D.; or, astronomically speaking, the epoch of the Hegira has been referred to the moment of sunset, not on Thursday the 15th, but on Wednesday the 14th July, 622 A.D. For a twofold reason. In the first place, it is in itself a matter of indifference which of the two dates be chosen for the basis of our tables, inasmuch as both are in use among Mahometan writers; the week-day, as has already been observed, frequently being the only criterion for the true reduction of a given date. In the second place, whilst the Thursday is adopted by the far greater majority of Mahometan astronomers, and thus has usually to be taken in the reduction of astronomical dates, its tabular use, at the same time, is more convenient to the layman, because it simplifies the conversion of civil and religious dates, which are mostly based on the Friday as the epoch of the Mahometan era. Two Christian dates are assigned to the 1st Muharram of the year 990 of the Hegira, namely: 'J. 1582, 25th January,' and 'G. 1582, 4th February.' The former is to be taken when, in the year 1582 A.D., the given Mahometan date falls previous to the 5th October; the latter, when it falls subsequent to the 14th October. The reason is, that our tables are computed according to the Julian kalendar or old style, up to the 4th October, 1582 A.D., inclusive, and according to the Gregorian kalendar or new style, since its introduction in that year, when ten days were passed over, and, the 4th October (corresponding to the 16th Ramazan 990 A.H.): being a Thursday, the next day, a Friday (corresponding to the 17th Ramazan), was accounted, not the 5th, but the 15th October, 1582, A.D., the usual succession of the week-days being preserved.'

consisting of the ten days passed over between the Julian and Gregorian styles, minus the one day initial difference, until A.H. 1112 = A.D. 1700, when the apparent difference increases to ten days,<sup>1</sup> the days of the week, however, continuing to correspond in their previous relative degree; and this divergence necessarily remains until A.H. 1166 = A.D. 1752, when the discrepancies are reconciled, and the Hijra year is made by Prinsep, under the new series, to commence on the 8th of November, being the fourth day of the week; and by Gumpach, on the 7th of November, corresponding with the third day of the week.

<sup>1</sup> 'The difference between the Old and the New Style up to the year 1699 was only ten days, after 1700 it was eleven days.' 'Chronology of History,' Sir Harris Nicholas, p. 36.

## GENEALOGICAL TABLES.

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THE purpose of the present division of our Appendix is by no means to attempt any improvement, nor even a critical adjustment, of the catalogues of princes preserved in the legendary records of the Bráhmans, but merely to afford a succinct synopsis of the principal ancient and modern dynasties of India, and of the neighbouring countries, for reference as to names, and, where accessible, as to dates.

For the early or mythological history of the Hindús, little can be done beyond enumerating the mere names, and marking the few variations in the lists of Sir Wm. Jones, Wilford, Bentley, Hamilton, Wilson, and, latterly, Col. Tod, who have endeavoured, successively, to trace the parallelism of the solar and lunar races, and assign to them more probable dates than those extravagantly put forth in the 'Puráṇas.' As the regular succession from father to son is given in them, it was not a difficult task to apply the ordinary term of human generation, derived from the authentic histories of other countries, to the adjustment of the Hindú Chronology. Thus Ráma in the solar line, who is placed by the Bráhmans between the silver and brazen ages (867102 B.C.), was brought down by Sir Wm. Jones to B.C. 2029, and reconciled with the Ráma of Scripture; Pradyota, of the lunar race, in whose reign the last Buddha appeared, was brought down to B.C. 1029, the assumed epoch of Śákya in Tibet and China; and Nanda to 699, etc. In the case of the Magadhá Rájas this adjustment was the more easy, because the length of each dynasty is given in reasonable terms from Jarásandha, the contemporary of Yudhis'hira, downwards; and the error might be only in the wrong assumption of the initial date, the epoch of the Kalí Yuga, which the pandits allotted to the year 3101 B.C. After the discovery of the identity of Chandra Gupta with Sandracottus, pointed out by Sir Wm. Jones ('As. Res.', vol. iv. p. 26), and followed up by Wilford (vol. xv. p. 262), a further

reduction of 250 years in the position assigned to him in Sir William's first list became necessary; and the diminished rate of generations, applied backwards, brought Yudhisthira, and his contemporaries Arjun, Krishna, and Jarásandha, within the twelfth or thirteenth century before Christ. A most satisfactory confirmation of the modified epochs of Nanda, Chandra Gupta, and Aśoka has been since derived from the chronological tables of the Buddhists in Ava, published in Crawford's Embassy, and again in those of the Ceylon princes, made known by the Honorable G. Turnour; their near concurrence with Greek history, in the only available point of comparison, reflects back equal confidence upon the epoch assigned to the founder of their religion (B.C. 544), in spite of the Chinese and Tibetan authorities, most (though not all) of which place Buddha 500 years earlier. It was this that misled Sir Wm. Jones in the epoch of Pradyota.

There are some discrepancies in the Burmese tables difficult to be explained, such as the placing of Ajátasatru 80 years prior to Śiṣunāga, and the occurrence of Chandra Gupta still 50 years too soon: but we must refer those who would investigate this, and all other branches of the intricate subject of Hindú and Bauddha chronology, to the learned authors we have above mentioned, satisfying ourselves here with exhibiting a comparative table of the gradual changes effected by the progress of research in a few of the principal epochs.

Names.	Paurānic date.	Jones.	Wilford.	Bentley.	Wilson.	Tod.	Burmese list.
	B. C.	B. C.	B. C.	B. C.	B. C.	B. C.	B. C.
Ikshwāku and } Buddha ..... }	2183102	5000	2700	1528	—	2200	—
Rāma.....	867102	2029	1360	{ 950 576 }	{ — 1430 }	1100	—
Yudhisthira ...	3102						
Symitra and } Pradyota ... }	2100	1029	700	119	915	—	600
Śiṣunāga .....	1962	870	600	—	777	600	472
Nanda .....	1600	699	—	—	415	—	404
Chandragupta ..	1502	600	350	—	315	320	392
Aśoka.....	1470	640	—	—	250	—	330
Balin .....	908	149	—	—	21	10	—
Chandrabija the last of Ma- gadhá Rājās }	B.C. 452	300 A.D.	—	—	428 A.D.	546 A.D.	

The aid of astronomy has been successfully called in to fix such epochs as afforded the requisite data; thus the situation of the equinoctial colure in the time of the astronomer Parāśara, who flourished under Yudhisthira, is fixed by Davis in 1391 B.C.; by Sir Wm. Jones, Colebrooke, and Bentley, in 1180; which latter closely accords with the epoch of the Cycle of Paraśurāma, used in the Dakhan, and ap-

parently unknown to these authors, B.C. 1176. Bentley, on another occasion, alters this date to 575 B.C.! he also places Rāma in 950 B.C.; but there is great uncertainty and incongruity in many of his determinations of the dates of native princes and of books, from the prejudices he exhibits, although he is entitled to every confidence in his ingenious mode of calculating the period at which the various improvements in astronomy were introduced, and the 'Siddhāntas' written or revised, by the time when the positions of the planets, as assigned by their tables, accorded best with the more accurate results of European astronomy. From the minimum errors, and the precession of the equinoxes (first applied to such a purpose by Sir Isaac Newton), we have the following epochs substantially ascertained:—

	B.C.	
Invention of the Nakshatras or Hindú Lunar mansions .....	1425	B.
The Mahābhārat war, according to Wilford .....	1367	
The Solar Zodiac formed by Parāsara (under Yudhisthira) .....	1180	
Era of Parasurāma commences (see page 158) 7th August .....	1176	
A Lunar Cycle invented, and precession discovered (Rāma ?) .....	945	B.
Four Yugas, founded on Jupiter's motions.....	215 ?	B.
	A.D.	
Seven Manwantaras, founded on Saturn's revolutions .....	31 ?	B.
The 'Rāmāyana,' written by Valmiki .....	291 ?	B.
Varāha Mihira, flourished, according to Telugu astronomers (also according to Sir W. Jones, Colebrooke, etc., from precession of the equinoxes) .....	499	
Tables of the 'Brahmā Siddhānta,' fixation of the sidereal Zodiac, and new system of Chronology, with extravagant antiquity, compiled) .....	538	B.
The 'Mahābhārat,' written from Krishna's janampatra .....	600 ?	B.
The Javanese translation of ditto, according to Raffles, in .....	1079	
Vishnu Purāna, whence genealogies of Andhra kings, 4955 K.Y., or .....	954	W.
Origin of the Kala Chakra, or Jovian Cycle (see prec. sect. p. 159) .....	965	
Tables of the 'Surya Siddhānta,' by Varāha Mihira .....	1068-91	B.
The 'Varāha Sanhita,' supposed by the same author, gives its own date... ..	1049	
The 'Lilāvati' of Bhāskar Achārya bears its own date .....	1088 <sup>1</sup>	
The 'Bhāsvatis' of Satānanda, pupil of Varāha, Saka 1021 .....	1109	
The 'Bhāgavat,' supposed by Colebrooke to be written by a grammarian in .....	1200	
The 'Arya Siddhānta,' compiled by Arya Bhatta.....	1322	
Gangadhar's Comment on Bhāskar Achārya .....	1420	
The Works of Kesava .....	1440	
The 'Grahā Lāghava,' by Gonesh, his son.....	1520	

Mr. Bentley would rob the seven last of a few centuries upon very insufficient grounds; he also ventures to place the authorship of the 'Rāmāyana' in A.D. 291, and that of the 'Mahābhārata' in A.D. 600, on far too slender astronomical data: but his mania for modernizing

<sup>1</sup> [This should be 1150. Bhāskar's own date being 1072 Saka = A.D. 1150. Colebrooke's 'Arithmetic and Algebra of the Hindús.' Introduction ii. H. H. W.]



renders his testimony of the advanced knowledge of the Hindús in astronomy, at so remote a period as the fifteenth century before Christ, the more valuable; and we can have little hesitation in giving credit to the lines of princes assigned to this space, and even to further antiquity, although their history has been mixed up with incredible mythos, and a falsified chronology. The more moderate and rational dates preserved by the Bauddha priests would lead to a supposition that the Bráhmans had purposely antiquated theirs, to confound their rivals in the contest for ascendancy over the minds of princes and people. That they should have suspended their histories with Sumitra of the solar, and Chandrabija of the lunar line, in the fifth century, might be naturally accounted for by the predominance of the Buddhists at that period, or more probably by the destruction of the Hindú monarchies by the incursions of the Huns and Tartars. The 'Purāṇas,' or at least the prophetic supplements describing their genealogies, must have been compiled long afterwards, and the relative dates then falsified. But the principal blame in the business seems to fall upon the astronomers, who are accused of throwing back the commencement of their era: for, taking the data of the Paurāṇic tables, and allowing, with them, 1015 years from Yudhisthira to Nanda; and from the latter prince to Puloman 836 years (which name is identified with Poulomien of the Chinese by Wilford, and placed in the year A.D. 648), the highest estimate of the 'Bhāgavat' gives 1857 B.C. for the epoch of the 'Kālī Yuga,' instead of the 3101 assigned in the astronomical works; while in the 'Brahmaṇḍa Purāṇa' it is brought down to B.C. 1775; and in the 'Vāyu Purāṇa' to B.C. 1729. The Jains, it is said, adopt the still more modern epoch of 1078 B.C.; and if Anjana of Crawford's Burmese chronology, founder of the sacred epoch, be Arjuna, this contemporary of Yudhisthira is placed by the Bauddhas so late as 691 B.C.!

The Jains are generally also the most trustworthy authorities for the Middle Ages. To them it is asserted that Abú'l Fazl is indebted for the series of Bengal, Malwa, and other princes, published in the 'Ayín Akbarí' with every appearance of accurate detail. The 'Rāja Taringini' of Kashmír also, the only Indian history of any antiquity, begins with Buddhist theogony. The Rájávali collection of genealogies is quite modern, having been compiled by Siwai Jaya Sinh, of Ambér, in 1650. Neither that nor the native bards and chroniclers, whence the valuable data for the more modern history of Hindústán were furnished to Col. Tod for his 'Annals of Rájasthán,' are to be trusted when they trace the ancestry of their princes back, and strive to connect them with the later heroes of the 'Purāṇas'; nor even to the earlier centuries of the Christian era, in which we find hardly any.

of their names confirmed either by grants, coins, or by the historians of neighbouring countries.

More authentic in every respect are the copper-plate grants, dug up in many parts of India, and the Sanscrit inscriptions on columns and temples, of which many have been deciphered and published, although the subject is by no means yet exhausted.<sup>1</sup> Owing to a fortunate pride of ancestry, most of these records of kingly grants recite a long train of antecedent Rájás, which serve to confirm or to supply vacuities in the more scanty written records. Of the value of these to history we cannot adduce a better instance than the confirmation of the Bhupála dynasty of the Rájás of Gaur, as given by Abú'l-Fazl in the occurrence of the names of Devapála, Dhermapála, Rájápála, etc., on the several monuments at Monghir, Buddal, Dinájpur, Amgáchi, and Sárnáth near Benares, where also the date and the Bauddha religion of the prince are manifested. It was supposed by Sir Charles Wilkins that the two first inscriptions referred to the first century of the Samvat era; but, as shewn by Mr. Colebrooke, as well as by actual date at Sárnáth, they rise no earlier than the tenth. Indeed, the occurrence of inscriptions bearing unequivocal dates, anterior to that period, is very rare. Col. Tod adduces one of the fifth century (Samvat 597) discovered near Kota. Mr. Wathen has also recently produced two of the fourth and sixth centuries, dug up in Gujarát, which confirm, or rather correct, the early records of the Sauráshtra dynasty. The oldest, however, exist in Ceylon, where they have been brought to light by Captain Forbes and the Honorable Mr. Turnour: some of these, of which translations are published by the latter author in the 'Ceylon Almanac' for 1834, are ascribed, on evidence of facts mentioned in them, to the year A.D. 262; but they bear no actual date. The period most prolific of inscriptions is from the ninth to the thirteenth century, when an anxiety seems to have prevailed among the priests to possess graven records of grants from the reigning or from former sovereigns, in order probably to secure their temples and estates from spoliation or resumption in those turbulent times. One of Col. Tod's inscriptions, translated by Mr. Colebrooke, in the 'Roy. As. Soc. Trans.', vol. i., expressly declares a rival grant to be futile, and derived from an unauthorized source.

The value of inscriptions, as elucidations of history, cannot better be exemplified than by the circumstance of the Burmese inscription in the Páli character found at Gaya on the visit of the envoys from Ava in 1827, of which a translation was printed in the 'Jour. As. Soc. Beng.', vol. iii. p. 214. It records the frequent destructions and

[These remarks were published in 1835 A.D.]

attempts to repair the Buddhist temple there, and the successful completion of it in the Sakarāj year 667, A.D. 1306.<sup>1</sup> Now Col. Tod's Rājput annals of Mēwār make particular mention of expeditions to recover Gaya from the infidels in 1200-50, which might not but for this record have been capable of explanation.

Where dates are not given in inscriptions, the style of the Nāgarī character will frequently serve to determine their antiquity. The cave temples of the west of India exhibit the most ancient form; the Gujarāt type, above alluded to, of the fourth century, has a part connection with them, and part with an inscription at Gaya, and another on the Allahābād Lāt; these again are linked by intervening gradations to the Tibetan alphabet, of which we know from Tibetan authors the existing Nāgarī of Magadhā was taken as the basis in the seventh century. We shall soon be able to furnish a tolerably accurate palæographical series of the Devanāgarī, but can here only allude to the subject. In the tenth and eleventh centuries it undergoes the modification observable on the Gaur, Sárnāth, and Shekāvati inscriptions, resembling very nearly the Bengālī type, of which it is doubtless the parent. The modern Nāgarī is found on monuments of the thirteenth century, when the irruption of the Moghals prevented any further change. There is also a still earlier character on the Dihlī, Allahābād, and Tirhut Lāts, which remains yet undeciphered; strong reasons have been advanced for its alliance to the Sanscrit group, if it contain not indeed the original symbols of that language. (See 'Jour. As. Soc.', vols. iii. iv.)

In all other countries, coins and medals have been esteemed the most legitimate archives and proofs of their ancient history. In India, little recourse to such evidence has hitherto been available. The few Hindú coins discovered have been neglected or deemed illegible. The subject is, however, now attracting more attention from the recent discovery of Bactrian and Indo-Scythic coins in great abundance in the Punjáb, bearing names hitherto quite unknown, in Greek, and on the reverse side in a form of Pehlvi character. The series is continued down to, and passes insensibly into, the purely Hindú coins of Kanauj, and some are in our possession, with Greek and Sanscrit on the same field. This very circumstance tends to bear out Col. Tod's supposition of the Kanauj princes having an Indo-Scythic origin. Yavan-asva, their progenitor, may indeed be 'the Greek Azo,' of whose coins we have so plentiful a supply.<sup>2</sup> The Sanscrit characters on the Kanauj coins are of the earlier type, be-

<sup>1</sup> Col. Burney reads the date, which is rather indistinct, 467, or A.D. 1106; but the above evidence tends to confirm the original reading.

<sup>2</sup> See vol. i. p. 190.

longing to the fourth or fifth century: they will soon, it is hoped, be read, and put us in possession of several new names.

Other coins, in a still more ancient character, and nearly resembling the undeciphered letters of the Láts or the cave-sculptures,<sup>1</sup> are dug up in the Dihlí district: they are found in company with Buddhist relics, and will, hereafter, doubtless, lead to historical information.

A third series of coins, with devices of a Bráhmañí bull, and a horseman, bears the Gaur Nágari of the tenth century; on this several names have been made out, Bhímadeva, etc.; and on some the Persian titles of the first Musalmán conquerors are impressed.

A fourth series, with a sitting female figure, is in the modern Nágari, and is probably the latest of the Kanauj coins. The early Muhammadan coins of Sabaktagin, Mahmúd, etc., frequently have a partial admixture of Nágari, which will aid in locating the rest; for while this provoking dearth exists with regard to Hindú coins, we find coins with legible names and Hijra dates for the whole line of their Muhammadan conquerors, whose history is amply preserved without their aid.

One confirmation of a historical fact from numismatic aid has been remarked in the discovery of the name of Vása Deva or Bas Deo on a Sassanian coin. Ferishta states, that Bas Deo, of Kanauj, gave his daughter in marriage to Bahrám of Persia, A.D. 330:—the coin marks exactly such an alliance; but the Hindú chronicles admit no such name until, much later, one occurs in the Málwa catalogue of Abú'l-Fazl.

In the dynasties of Nepál and Assam, (at least from the middle of the seventeenth century), we have been wholly guided by coins in our possession; and it might be possible, by persevering search, to obtain from the same source the names of many Rájas antecedent to this period, which are now doubtful or wholly unknown.

From the time of the subversion of the Moghal empire in the middle of the last century, the historical train of their coins ceases to be available; all the native states having, in imitation of the English, struck their money in the name of a nominal sovereign of Dihlí, with no regard to dates, or even to the existence of the monarch; and up to the present time, we have had the names of Muhammad Sháh, Alamgr II., and Sháh 'Alam, issuing simultaneously from the native and the Company's Mint, while a second Akbar sways the pageant sceptre of the seven climes.

It must be confessed that a large field still remains open, for the re-investigation of the middle ages of Hindú history, in judicious

<sup>1</sup> See 'Jour. As. Soc. Beng.', vol. iii. p. 495.

hands; for independently of the new materials now before us in the numerous coins lately discovered, and in many new inscriptions, we have the aid of the foreign histories of Ceylon, Ava, Tibet, and China; we have access to the native volumes before only consulted through interested pandits; and we have Col. Tod's ample traditions and real archives of the principal portion of the Indian continent, the seat of all its important history. To say nothing of the minute and circumstantial numismatic histories of Greece and Rome, it is principally to coins that we owe the history of the Arsacidæ of Persia, through Vaillant's investigation. The Sassanian dynasty has also been illustrated from similar materials by Frœhn and De Sacy. Marsden has extended the same principle to the Muhammadan princes of Persia and India, and to some few Hindú states, in his '*Numismata Orientalia*;' and its application may be still further urged in the latter line with the greater success, in proportion to the greater dearth of other materials for history, as is exemplified in the coins of the Bactrian provinces. The first thing to be done will be to expunge and lose sight of the learned but entangled accounts of Colonel Wilford and others, which, while they have confused, have frightened critics at the perplexity of the subject. The three Vikramádityas, and three Rájá Bhojas, invented to reconcile discrepancies in dates, will perhaps be found as little needed as the multiplication of Buddhas, the two principal of which are now seen by the identity of their biography to be the same personage.

Of the confirmation of the testimony of inscriptions by that of coins, we have remarkable instances in the Chandragupta and Samudragupta of Kanauj, names first discovered on the Allahábád pillar, and now fully made out, along with several others of the same dynasty, on the gold coins found in the ruins of that ancient town. In no other record have we any mention of these sovereigns,<sup>1</sup> who must have been several centuries anterior to Chandra Deva, the founder of the last reigning dynasty, which was overthrown by the Muhammadans.

The native dates of events, as has been already stated, are most vague and uncertain: still there are instances in which they have undergone further perplexity from their European commentators.

The looseness with which the chronology of the Pauránic genealogies has been investigated, is pointed out in Mr. Wilson's remarks on the '*Vishnu Purána*,' the authority whence Sir Wm. Jones' list was furnished by his pandit ('*Jour. As. Soc. Beng.*', vol. i. p. 437). By some mistake he gave 345 years to the Kánpa dynasty of four Rájas, and in this he was blindly followed by Wilford and Bentley, both professing to consult the original. Now all the manuscripts examined by Mr.

<sup>1</sup> [See vol. i. p. 235.]

Wilson give only 45 years. Indeed, when the epoch of Chandragupta is adjusted, the periods given in this 'Purāṇa' from Parīkshit (B.C. 1400) down to the termination of the list in A.D. 436, are quite rational.

A more glaring instance of error, sanctioned, nay almost perpetuated, by the extent to which it has been spread, has originated in blindly following the authority of the pioneers of our Sanskrit researches; and it is strange that it has never been detected, that we are aware of, up to the present day. We allude to the mode of converting the Samvat of Vikramāditya into the Christian era, by subtracting 56 instead of 57, thereby inducing a constant error of one year in all dates of chronicles, deeds, and inscriptions so read. We have taken some trouble to trace the origin of this mistake from curiosity, and it shows how subject we are to rest upon the assertions of others without duly scrutinizing the data on which they may be grounded.

Vikramāditya died in the Kali Yuga year 3044, according to Wilford, whose essays in the ninth and tenth volumes of the 'Asiatic Researches' contain the fullest information on the history of the three supposed princes of this name, and of their common rival Śālivāhana. The first Samvat, therefore, concurs with the year 3045 K. Y.; and to convert the latter into the former, 3044 must be uniformly deducted. This calculation agrees with Warren's 'Kāla Sankalita,' (see p. 157, and Table), also with Abū'l-Fazl's statement, that 'in the fortieth year of Akbar's reign (A.H. 1003, commencing 5th Dec. 1594, and ending 25th Nov. 1595, A.D.) there had elapsed 4696 years of the era of Yudhisthira (Kali Yuga),' making its commencement, 3101, B.C.

Also 1652 years of the era of Vikramāditya ( $1652-1595=57$ , B.C.) and 1517 years of the era of Śālivāhana ( $1595-1517=78$ , A.D.).

The Bengālī Almanacs, published at Nadiyá, give precisely the same agreement.<sup>1</sup> The Almanac of the Sadar Dewání, and the statements at the head of all the regulations of Government, coincide therewith: thus, the Samvat year 1877 began on the 15th March, 1820= $57$  years difference. If further evidence is required of the knowledge of the true era in possession of English authors, we have in Buchanan's 'Mysore,' vol. iii., p. 112:—'3786 years of the Kali Yuga had now elapsed, of which the particulars are, 3044 years of Yudhisthira,

135 years of Vikrama,  
607 years of Śālivāhana,

3786 K. Y., or A.D. 685.'

<sup>1</sup> One Bengālī Almanac, however, printed in Calcutta, which was brought to us for comparison, had both the Samvat and Śāka era one year in defect; the Bengālī San being the only era now used in Bengál, little care is taken in regard to the rest. The Kali Yuga, the foundation of all, was, however, correct.

Here the interval between 3044, whence the Samvat commenced, to the Saka, is 135, or  $57+58$  years; (or  $135-685-607=57$ ).

Again, Dr. Hunter, in his account of the astronomical labours of Rájá Jai Sinh, dates them in '1750 Samvat, or 1693 A.D.,' making the interval 57 years.

Sir William Jones, residing in Calcutta, where the Samvat is not used, in his speculations on Hindú chronology, only alluded to the Kali Yuga. Davis, in his account of the native method of eclipse calculations, used the Saka only; but he frequently alluded to the Kali Yuga, the first year of which he correctly placed in 3101 B.C.

Whence then can the now common, nay, almost universal, application of the subtrahend 56 have proceeded? Simply from Wilford's having placed the Kali Yuga epoch in 3100, instead of 3101 B.C., in his essay expressly written to settle the eras of Vikramáditya and Sáliváhana, to which too much confidence has been given by subsequent writers. Having everywhere assumed this erroneous datum, it followed that the Samvat epoch, which he rightly placed 3044 after Yudhisthira, would concur with  $3100-3044=56$  B.C.<sup>1</sup> But whence did he get his erroneous epoch of the Kali Yuga? This also we may conjecture, having already seen him convicted, on another count, of blindly adopting Sir W. Jones' data. Sir William, in his 'Essay on Hindú Chronology' ('As. Res.' vol. ii., p. 126), says, '4888 years of the Kali Yuga are passed up to the present time;' and his table of comparative epochs is calculated from 1788, A.D., leaving an obvious difference of  $4888-1788=3100$ , B.C., which Wilford seems to have adopted. Had he, however, looked to the heading of the article, he would have found the date 'January, 1788,' consequently the Kali Yuga year commencing in April, 1787, had not yet expired: the true difference therefore was  $4888-1787=3101$ , or more exactly  $3100\frac{3}{4}$  years; or, for the Samvat,  $56\frac{3}{4}$ , in the nearest round terms 57.<sup>2</sup> (See p. 157.)

Wilford is not the only author who was thus led to adopt the wrong equation. Colebrooke and Wilson always use 56. Jervis's Chronological Tables have the same intercal; and Colonel Tod employs it throughout his voluminous chronicles of the Rájputs, thereby throwing all his events forward one year, excepting such as fall in the

<sup>1</sup> In a previous part of the very same volume, p. 47, Wilford had used 57. In some places he makes the epoch of the Kali Yuga 3001 instead of 3101.

<sup>2</sup> There is another advantage in adhering to the difference 57 in general terms rather than the now correcter number,  $56\frac{3}{4}$ , namely, that before the year 1752 it was customary, in England and most parts of Europe, to commence the year in the month of March, or on the Easter moon; so that for all dates anterior to that period the European year may be accounted to have agreed with the Hindú luni-solar reckoning precisely.

months Pausa, Māgha, Phālgun, and half of Chaitra, subsequent to A.D. 1752. He himself notices here and there a discrepancy of one year with the Mussalmán historians, which is generally attributable to this cause alone.

Captain Fell always uses the correct formula, having had access to native almanacs or to pandits. Mr. Stirling, in his 'Account of Orissa,' has the right epoch of the Kali Yuga; but he applies a wrong equation (+ 77) to the Saka era of his Orissa rājās. It is possible that this may be the mode of reckoning in that province; for we find the Saka vary a year or two also in Burmah and Java, if these variations are not indeed attributable to our English references; for, as we have seen above, they are by no means infallible!

The term Samvat does not apply exclusively to the era of Vikramāditya. Colebrooke first corrected this erroneous supposition in regard to the Samvat of the Gaur inscriptions, which probably commenced with the Bhupāla dynasty, about 1000 A.D. Colonel Tod has also established the fact of a Balabhi Samvat in Gujarāt, dating in 318 A.D., and a Siva Singha Samvat, in the same country, coinciding with 1113 A.D. This circumstance must be particularly attended to in examining ancient documents.

Kirkpatrick mentions that Raghava Deva introduced the Samvat era into Nepāl; adding, that the Newār era is, however, generally used there, its origin being unknown. Now in the list of Nepāl rājās, from Hara Sinha Deva, A.D. 1323, back to Raghava Deva, there are but three reigns of extravagant lengths, viz., of 88, 85, and 80 years: if these be cut down to the usual average, the date of Raghava will fall about 880, which is the epoch of the Newār era, so that in all probability the term Samvat in this case merely applied to the latter era, and not to that of Vikramāditya.

It is frequently the custom in eastern authors to estimate dates backwards from the epoch of the writer or compiler. Thus, in the Buddhist chronology of Tibet, translated in M. Csoma's 'Tibetan Grammar,' we find, 'from the incarnation of Shākya 2647 years,' meaning anterior to A.D. 1686. In these cases, and particularly where time is estimated in cycles, great caution is necessary in fixing the initial date, and it is not improbable that from this source has arisen much of the confusion of Hindú chronology; as, for instance, from throwing back the origin of the Kāla-chakra system, or Jovian cycle of sixty years, which is traced (see page 161) to the year A.D. 965, as far as regards its introduction into India. Individual inaccuracies are hardly to be wondered at where events are chiefly chronicled from after-recollection. Thus the bard Chand is 100 years out in one place, according to Tod. Amír Khán's 'Biography' is one year out for a



long period, and endless instances of the same inaccuracy might be adduced. The Muhammadans are generally very particular in their dates, and so are the Hindús where they inscribe a deed on brass;—in this case they frequently allude to some eclipse or full moon, the act of donation being more pious for its occurrence on a religious festival.

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It is hardly necessary to enumerate the authorities for the different catalogues to which we may now proceed, since they will be mentioned under each dynasty: but it may be as well to premise that *A.* *A.* against a name or date denotes *Ayín-i-Akbarí*; *F.*, *Ferishta's* history; *J.*, *Jones*; *Wd.*, *Wilford*; *B.*, *Bentley*; *T.*, *Tod*; *H.*, *Hamilton*; and *W.*, *Wilson*.

All dates have, for uniformity sake, been expressed in Christian years, which can readily be converted into the various native reckonings by the rules given in page 172.

As a convenient preface to the mythological catalogues of the Solar and Lunar dynasties, a tabular sketch of the Hindú Theogony, with a few additional memoranda regarding their sacred works, etc., have been inserted. For more ample details on this subject, *Moore's* 'Hindú Pantheon,' and *Coleman's* 'Mythology,' or the standard work of *Ward* on the Hindús, may be consulted; while, for the Puránic genealogies at length, the elaborate tables published by *Dr. Hamilton*, at Edinburgh, in 1819, although inconveniently expanded in dimensions, will be found the most complete and authentic reference. The tables of *Sir William Jones*, *Wilford*, and *Bentley*, in the 'Asiatic Researches,' have the addition of dates; but, as before remarked, these are hardly admissible in the earlier periods of fabulous history.

In regard to the tables of the Muhammadan sovereigns, it has been thought sufficient, as their history is so readily accessible, to insert merely their names and titles at length, to facilitate the identification of coins, etc., where frequently only a part of the title is visible. To connect the line of these intruders into Hindústán, it was also unavoidable to carry back the list to the Persian, the Arsacidan, Syrian, and Bactrian monarchies; for, although properly speaking beyond the limits of India, their history is, from the time of *Alexander*, continually mixed up with that of the rich and fruitful country so constantly the prey to their invasions and plunder.

TABLE XV.—*Hindú Theogony.*

## 1. THE INFINITE ALMIGHTY CREATOR, OF THE VEDAS, BRAHM.

The Hindú Trinity, or Trimurti ...	Bramhá.	Vishnu.	Siva.
Their consorts .....	Sarāswatī, Sakti, or Mâyā.	Lakshmi, Padmā, or Sri.	Pārvatī, Bhawānī, or Durgā
Their attributes .....	Creator.	Preserver.	Destroyer.
Their attendant vahan, or vehicle	Hansa, a goose.	Garuda, bird.	Nandi, bull.
Their symbols.....	Time.	Water.	Fire.
Their stations.....	Meru.	The Sun.	Jupiter.
Their common titles, A U M.....	Paramésvara.	Narāyana.	Mahādeva.
Figure under which they are wor- shipped .....	Mentally.	Sāligram and 9	The Lingam, under his mil- lion epithets.
Analogues in Western Mythology...	Saturn.	Jupiter.	Jupiter.

## 2. OTHER MEMBERS OF THE HINDÚ PANTHEON, AND THEIR SUPPOSED ANALOGUES IN WESTERN MYTHOLOGY, ACCORDING TO SIR WILLIAM JONES.

Sarāswatī.....	Minerva, patroness of learn- ing, etc.	Vaitarini .....	The river Styx.
Ganēsa.....	Janus, god of wisdom.	Durgā .....	Juno.
Indra .....	Jupiter, god of firmament.	Nārada.....	Mercury, music.
Varuna .....	Neptune, god of water.	Krishna .....	Apollo.
Prithivi .....	Cybele, goddess of earth.	Bhawānī .....	Venus.
Viśvakarma..	Vulcan, architect of gods.	Kālī or Durgā	Proserpine.
Kārtikeya, or Skanda ...	Mars, god of war.	Agni.....	Vulcan, fire.
Kāma .....	Cupid, god of love.	Swāhā .....	Vesta (his wife).
Surya, or.....	Sol, the sun.	Aswini-ku- māra .....	Castor and Pollux.
Arka .....	Mithra, the same.	Aruna .....	Aurora.
Hanumān, son of Pavana..	Pan, the monkey god.	Atavideva.....	Diana.
Rāma .....	Bacchus, the god of wine.	Kuvera.....	Plutus, god of riches.
Yama .....	Pluto or Minos.	Gangā .....	The river Ganges.
Heracula .....	Hercules.	Vāyu .....	Æolus.
Aswiculapa ...	Æsculapius? (genii).	Sri .....	Ceres.
		Anna Purna...	Anna Perenna.

## 3. THE TEN BRAHMĀDICAS, CHILDREN OF BRAHMĀ, OR PRAJĀPATIS, LORDS OF CREATED BEINGS.

1 Marīchi.....	Morality.	6 Kritu.....	Piety.
2 Atri .....	Deceit.	7 Daksha .....	Ingenuity.
3 Angirasa .....	Charity.	8 Vasishtha .....	Emulation.
4 Pulastya .....	Patience.	9 Bhṛgu .....	Humility.
5 Pulaha .....	Pride.	10 Nārada .....	Reason.

## 4. THE SEVEN MENUS OF THE PRESENT CREATION.

1 Swayambhuva, Adam? 4006, B. C.	5 Raivata.
2 Swārochesha.	6 Chackshusha.
3 Uttama.	7 Vaivaswata or Satyavrata, Noah? 2950, B. C.
4 Tāmasa, Chaos, Thaumaz of Egypt.?	

## 5. THE SEVEN RÍSHIS, SPRUNG DIRECT FROM BRAHMÁ.

1 Kasyapa, Muni.	5 Gautama.
2 Atri, Muni.	6 Jamadagni.
3 Vasishtha.	7 Bharadvāja.
4 Visvamisra.	

## 6. THE TEN AVATÁRAS, OR INCARNATIONS OF VIṢṆU.

1 Matsya ..... The fish.	7 Rāma..... Of the solar race.
2 Kurma ..... The tortoise.	8 Krishṇa... Of the lunar race.
3 Vārāha ..... The boar.	9 Buddha ... Of the Buddhists.
4 Narasinha... The lion.	10 Dharma-bhushana or Kalki-avatār, to appear at the close of the Kali Yuga.
5 Vāmana..... The dwarf.	
6 Parasurāma. Son of Jamadagni.	

## 7. THE ELEVEN RUDRAS, OR FORMS OF SIVA.

1 Ajaikapāda .....	The names are differently given in the 'Bhāgavat.'	_____
2 Ahirvradhna.....		_____
3 Virupāksha.....		_____
4 Sureswara .....		Mohana.
5 Jayanta .....		Bama.
6 Bahurūpa .....		_____
7 Tryambaka .....		Bhawa.
8 Aparājita.....		Aja.
9 Savrita.....		Rawati.
10 Hara .....		Ugra.
11 Isha .....		Bhāma.

## RUDRAS ACCORDING TO THE HARIVANSA.

1 Mrigavyādha.
2 Sarwa.
3 Nirriti.
4 Ajekapād.
5 Ahirvradhna.
6 Pinākin.
7 Aparājita.
8 Havana.
9 Iswara.
10 Kapālin.
11 Sthānu.
12 Bhava. (J.P.)

## 8. THE EIGHT VASUS; A KIND OF DEMI-GOD.

1 Dhava.	5 Anila, or wind.
2 Druva.	6 Anala, or fire.
3 Soma, the moon.	7 Prabhūsha.
4 Vishṇu.	8 Prabhava.

## 9. THE TEN VIṢṆWAS, A CLASS OF DEITY WORSHIPPED IN FUNERAL ORSEQUIES.

1 Vasu.	6 Kāma.
2 Satya.	7 Dhriti.
3 Kratu.	8 Kuru.
4 Dakaha.	9 Pururava.
5 Kāla	10 Madrava.

## 10. THE EIGHT DIKPAŁAS, GUARDIANS, AND THE EIGHT DIKPAṬIS, LORDS, OF THE CARDINAL POINTS.

1 Indra..... East.	1 Surya..... The Sun.
2 Agni (or Vahni) ..... South-east.	2 Sukra..... Venus.
3 Yama..... South.	3 Mangala ..... Mars.
4 Nairrita ..... South-west.	4 Rāhu ..... Asc. node.
5 Varuna ..... West.	5 Sami ..... Saturn.
6 Marut (Vayu, Pavan).. North-west.	6 Chandra ..... The Moon.
7 Kuvera ..... North.	7 Buddha..... Mercury.
8 Isāna (Prithivi) ..... North-east.	8 Vrihaspati..... Jupiter.

11. THE TWELVE ADITYAS; MONTHLY NAMES OR EMBLEMS OF THE SUN.

1 Varuna.	7 Gabhasti.
2 Surya.	8 Yama.
3 Vedanga.	9 Swarnareta.
4 Bhānu.	10 Divakara.
5 Indra.	11 Mitra.
6 Ravi.	12 Vishṇu.

ADITYAS, ACCORDING TO THE HARIVANSA.

1 Dhātri.	7 Indra.
2 Aryaman.	8 Visaswān.
3 Mitra.	9 Puchan.
4 Varuna.	10 Twashtri.
5 Ansa.	11 Savitri.
6 Bhaga.	12 Vishṇu.

12. THE TWENTY-SEVEN NAKSHATRAS, DAUGHTERS OF DAKSHA, OR LUNAR MANSIONS.

1 Aswini.	10 Maghā.	19 Mūlā.
2 Bharani.	11 Purva Phālguni.	20 Purva Āsārha.
3 Kritika.	12 Uttara Phālguni.	21 Uttara Āsārha.
4 Rohini.	13 Hasta.	22 Śravaṇa.
5 Mrigasira.	14 Chitra.	23 Dhaneśtha.
6 Ardra.	15 Swati.	24 Satabhisha.
7 Punarvasu.	16 Viśākha.	25 Purva Bhādrapada.
8 Pushya.	17 Anuradha.	26 Uttara Bhādrapada.
9 Ashlesha.	18 Jayeshtha.	27 Revati.

13. THE NAMES OF BUDDHA.

Buddha, Sākya-muni or Sinha, Gautama, Tathāgata, Mahā-sramapa; Saudhodani, from his father Sudhodhana; Arkabandhu, or kinsman of the Sun; Māyā-devi-suta, or child of Māyā.

But, of the Mussalmāns.  
Buddas and Sarmanes, of the Greeks.  
Mercurius Mayæ filius, of Horace.  
Bud or Wud, of the Pagan Arabs.  
Woden, of the Scandinavians.  
Toth, of the Egyptians.  
Fo, Foe, or Fo-hi, and Sa-ka, of the Chinese.

Pout, of Siam.  
Sommonokodam, of ditto.  
Godama, of Ava.  
Kshaka, of Japan.  
Chakabout, of Tonquin China.  
Chom-dan-das, } of Tibet.  
Sangs-gyas, }

*Bauddha System of Theogony.*

Adi-Buddha, the Supreme Being, created by dhyān five divine Buddhas, who are quiescent, viz. :—

1 Vairochana Akshobhya.	Each of whom produced from himself his son, or Bodhisatwa,	1 Samanta Bhadra.
2 Ratna.		2 Vajra Pani.
3 Sambhava.		3 Ratna Pani.
4 Amitabha.		4 Padma Pani.
5 Amogha Siddha.		5 Viswa Pani.

The Buddhist Triad, or mystic syllable A U M, is interpreted :—

A, the Vija mantra of the male Buddha, the generative power.  
U, ditto of the female Dharma or Adi Prajñā, the type of productive power.  
M, ditto of Sanga, the union of the essences of both.

*The seven human or earth-born Buddhas.*

1 Vipasya.	5 Kanaka Muni.
2 Sikhi.	6 Kasyapa, and
3 Viswa Bhu.	7 Sākya Sinha.
4 Karkut Chand.	Arya Maitri, the future Buddha.

## 14. THE TWENTY-FOUR JINAS OR TIRTHANKARAS, OF THE JAINS.

	Where born.	Where died.
1 Adināth or Rishabhanāth .....	Ayodhya.	Gujarāt.
2 Ajitanāth.....	"	Mt. Sikhar (hod.
3 Sambhunāth .....	Sāwanta.	Parasnāth.)
4 Abhinandanānāth .....	Ayodhya.	"
5 Sumatināth.....	"	"
6 Padmaprabhunāth .....	Kausambhī.	"
7 Suparswanāth.....	Benares.	"
8 Chandraprabha .....	Chandripur.	"
9 Suvidhanāth or Pushpadanta ...	Kakendrapuri.	"
10 Sitalanāth .....	Bhadalpur.	"
11 Śrī Ansanāth .....	Sindh.	"
12 Vasupādya .....	Champapurī.	Champapurī.
13 Vimalanāth.....	Kumpalapuri.	Mt. Sikhar.
14 Anantanāth.....	Ayodhya.	"
15 Dharmanāth .....	Ratanpurī.	"
16 Santanāth .....	Hastināpur.	"
17 Kunthunāth .....	"	"
18 Aranāth .....	"	"
19 Mallināth .....	Mithila.	"
20 Munisuvrata .....	Rājgriha.	"
21 Nemināth .....	Mithila.	"
22 Namināth .....	Dwārīka.	Mt. Girināra.
23 Parswanāth.....	Benares.	Mt. Sikhar.
24 Vardhamāna or Mohāvīra Swāmi	Chitrakot.	Pawapurī.

## 15. THE SAPTA DWÍPAS OR DIVISIONS OF THE ANCIENT WORLD, RULED BY THE SONS OF PRIYABRATA, KING OF ANTARVEDA.

Oldest Division.		Newer Division.
Jambudwípa.....	India.	Jambudwípa ... India.
Angadwípa.....	Nepal?	Plakshadwípa . Asia Minor, W.
Yamadwípa .....	Assam, Ava?	Salmalidwípa.. Ceylon? W.
Yamaladwípa .....	Malaya.	Kushadwípa ... Assyria, Persia, etc.
Sankhadwípa .....	Africa.	Karanchadwípa Near the Baltic? W.
Kúshadwípa.....	Assyria.	Sákadwípa..... Part of Kushadwípa,
Varáhadwípa .....	Europe.	Britain? W.
		Puskaradwípa . Part of Kushadwípa,
		Ireland? W.

## 16. THE FOUR VEDAS.

1 The Ríg veda.	3 The Sáma veda.
2 The Yajur veda.	4 The Atharva veda.

## 17. THE FOUR UPAVEDAS.

1 The Ayush .....	Medicine.	3 The Dhanush .....	Warfare.
2 The Gándharva ...	Music.	4 The Sthápatya ...	Mechanics.

## 18. THE SIX ANGAS, OR BODIES OF LEARNING.

1 Siksha .....	Pronunciation.	4 Khandas .	Prosody.
2 Kalpa .....	Religious acts.	5 Jyotish...	Astronomy.
3 Vyākaraṇa ...	Grammar.	6 Nirukti...	Interpretation of Vedas.

19. THE FOUR UPĀNGAS.

- |   |                     |   |
|---|---------------------|---|
| 1 | Purāṇa .....        | History, comprising the eighteen Purāṇas. |
| 2 | Nyāya .....         | Logic, and the principles of knowledge.   |
| 3 | Mimāṃsā .....       | Religious principles and duties.          |
| 4 | Dharma śāstra ..... | Law, human and divine.                    |

20. THE EIGHTEEN PURĀṆAS.

- |   |  |    |                                   |
|---|--|----|-----------------------------------|
| 1 | Brahmā-purāṇa.   | 10 | Nārada.                           |
| 2 | Padma, or lotus.   | 11 | Skanda.                           |
| 3 | Brahmāṇḍa, egg of Brahmā.  | 12 | Mārkaṇḍa.                         |
| 4 | Agneya, or Agni, fire.   | 13 | Bhaviṣya, prophetic.              |
| 5 | Vaiṣṇava, or Viṣṇu-purāṇa.   | 14 | Matsya, or the fish.              |
| 6 | Gāruda, Viṣṇu's bird.  | 15 | Varāha, or boar.                  |
| 7 | Brahma-vaivarta, or transformations<br>of Kṛiṣṇa (as the supreme). | 16 | Kūrma, tortoise.                  |
| 8 | Saiva, or of Śiva. [Vāyu replaces it.]                             | 17 | Vāmana, or dwarf.                 |
| 9 | Linga-purāṇa.  | 18 | Śrī Bhāgavata, or life of Kṛiṣṇa. |

21. THE SIX PRINCIPAL SECTS OF THE HINDŪS.

- |   |               |   |
|---|---------------|---|
| 1 | Saiva.....    | Worshippers of Śiva, in his thousand forms. |
| 2 | Vaiṣṇava ...  | Viṣṇu.                                      |
| 3 | Sauriya ..... | Surya, or the Sun.                          |
| 4 | Gāṇapatya.... | Gaṇeśha.                                    |
| 5 | Sakti.....    | Bhāwānī, or Pārvatī.                        |
| 6 | Bhagavati ... | Who recognize all five divinities equally.  |

PAURĀNIC GENEALOGIES.

TABLE XVI.—*Descendants of Svāyambhūta, the first Manu, King of Brahmavarta, and progenitor of mankind (Adam ? J.), according to the 'Bhāgavat Purāṇa,' II.*

[Professor Wilson (Preface to 'Viṣṇu Purāṇa') reviews in detail the date and authenticity of the 'Bhāgavata Purāṇa;' his conclusions on these subjects may be gathered from the following quotation :—

'The statement of the text is of itself sufficient to show that, according to the received opinion of all the authorities of the priority of the eighteen Purāṇas to the Bhārata, it is impossible that the 'Śrī Bhāgavata,' which is subsequent to the Bhārata, should be of the number. . . . There does not seem to be any other ground than tradition for ascribing it to Vopadeva, the grammarian; but there is no reason to call the tradition in question. Vopadeva flourished at the court of Hemādri, Rājā of Devagiri, Deogur, or Dowlutabad, and must consequently have lived prior to the conquest of that principality by the Muhammadans in the 14th century. The date of the 12th century, commonly assigned to him, is probably correct, and is that of the 'Bhāgavata Purāṇa,' p. 31.]

**BRAHMA.**  
**SWAYAMBHUVA.**

UTTĀNAPĀDA, King of Bharatkhanda. (From whom descended the Kings of Brahmanavarta.)	PRIYAVRATA, King of Antardwipa. <sup>1</sup> AGNIDHRA, King of Jambudwipa. (From whom descended the Kings of Bharatkhanda.)
Dhruva.	Nābhi.
Vatsara.	Rishabha-deva. <sup>2</sup>
Pusparna.	Bharata.
Vyusha.	Vridhasēna (Sumati, 'V. P.').
Sarvatajas.	Devatajit (Indrayumna).
Chaxusha.	Devadyumna.
Ulmuka.	Purmeshtii (Parameshtin).
Anga.	Pritiha (Pratihāra).
Vena-adharmaraja.	Pritiharta (Pratihartā).
Prithu.	Bhuma (Bhava).
Vijitaswa, or Antardhyana.	Udgitha.
Havirdhana.	Prastāra.
Varhishata, or Prachinahvarhi.	Bibhu (Prithu).
Pracheta, and 9 brothers.	Prathusena.
Daksha Prajapati,	Nakta.
<i>Among whose numerous progeny were</i>	Gaya.
10 daughters, married to Dharma.	Chitraratha (Nara. <sup>3</sup> Succession varies considerably in 'V. P.' p. 165.)
13 daughters, married to Kasyapa Muni, the son of Marichi (see Solar race), progenitors of men, animals, vegetables, etc.	Sumrata.
Danā, mother of evil genii, comets, etc.	Marichi (see Solar race).
Diti, mother of the Daityas, or Asuras.	Binduma.
Aditi, mother of the gods and Suras.	Madhu.
27 daughters, the Nakshatras, married to the Moon.	Viravrata.
1 daughter, mother of the 11 Rudras, and others of less importance.	Manthu.
	Bhauvana.
	Twashtha.
	Viraja, and 100 sons, whose names are unknown.

TABLE XVII.—*The Surya-vansha, or Solar Dynasty, collated from the lists of Jones, Wilson, Tod, and Hamilton.*

Marichi.

Kasyapa Muni, married Aditi, Daksha's daughter (see Table XVI.).

Vivaswana, or Surya, the Sun.

Sradhadeva, or Vaivaswata (the Sun), King of Ayodhya.

Ikshwaku, in the Treta Yuga.—n.c. 3500, J.—2200, T.

<sup>1</sup> Priyavrata was also father of Idhmajabba, King of Plaksha Dwipa; Yagyabahu, of Salmala Dwipa; Hiranyarita, of Kusa Dwipa; Ghritaprishtha, of Kranchha Dwipa; Medhatithi, of Sāka Dwipa; and Bitihotra, of Puskara Dwipa; of whom the descendants are not traced farther than the first generation.

<sup>2</sup> Rishabha-deva was also father of the kings of various other nations, viz.:—Kusa-warta, of Kusa-warta-dcs; Ila-warta, Brahmā-warta, Malaya, Ketu, Bhadrāsēna, Indrasprik, Bidharbha, and Kikata, of desas, or countries, bearing the same names; besides the nine immortal Siddhas,—Kābiyaga, Hari, Antarixa, Prabuddha, Pippalayana, Abirhotra, Dranila, Chumasa, and Karubhajana; also eighty-one Brāhmans, names unknown.

<sup>3</sup> [I do not think it necessary to continue these corrections of mere nominal lists<sup>ist</sup> of fabulous ages.]

*From whom sprung the two Solar Dynasties.*

## OF AYODHYA (OUDE).

Vikukshi (did not reign, W.).  
 Kukutset'ha, or Puranjaya.  
 Anenas } An-Prithu, T.  
 Prithu }  
 Viswagandhi, Visvagaswa, W.  
 Chandra { Ardra, T. W.  
           { Bhadrardra, W.  
 Yuvanáswa.  
 Sráva, Svasava, H.  
 Vrihadas'wa.  
 Dhundhumara, Kuvalayaswa, W.  
 Drid'hás'wa.  
 Haryas'wa.  
 Nikumbha.  
 Cris'aswa { Varunaswa, T. H.  
           { Sankataswa, W.  
 Senajit, Prasenajit, W.  
 Yuvanáswa, H. W. *car. J.*  
 Mándhata { Suvinthu, T.  
           { King of Saptadwípa.  
 Purukutsa.  
 Trasadasyu, *car. T.*  
 Anaranya.  
 Prishadaswa, W.  
 Haryas'wa, H. W.  
 Praruna, Aruna, H., Vosumána, W.  
 Trivindhana, Tridhanwa, W.  
 Satyavrata, Trayaruna, W.  
 Suvritha, T., *car. J. H. W.*  
 Tris'anku.  
 Harischandra, King of India.  
 Rohita, Kohitaswa, H.  
 Hárta.  
 Champa, Chunchu, W.  
 Sudéva, *car. T. W.*  
 Vijáya (his brother; Kurm. Pur.)  
 Bharuca.  
 Vrika.  
 Báhuka, Bahu, W.  
 Sagara, had 10,000 sons.  
 Asamanjasa, only survivor.  
 Ansumán.  
 Dulipá, W. T. H., *car. J.*  
 Bhagirat'ha, brought down Ganges river.  
 Sruta.  
 Nábhaga.  
 Ambarsha, T. W.  
 Sindhudwípa.  
 Ayutáyush.  
 Ritaperna.  
 Nala, T.  
 Sawakáma, W. T. } *car. J. H.*  
 Saudása.  
 Kalmáshapáda, W. H., *car. J. T.*  
 Asmaka.  
 Múlaca, Harikavacha, W.  
 Das'arat'ha.  
 Ádabida, Ilivita, W.

## OF MATTHILA (TIRHUT).

Nimi.  
 Janaka, built Janakpur.  
 Udvasu.  
 Nandiverdhana.  
 Suketu.  
 Dewarata.  
 Vrihadratha.  
 Mahabirya.  
 Sudhrita.  
 Dhristaketu.  
 Haryaswa.  
 Maru.  
 Pratipaka.  
 Kritiratha.  
 Devamirha.  
 Visruta.  
 Mahadhrít.  
 Dhritiratu.  
 Maharoma.  
 Swarnaroma.  
 Haraswaroma.  
 Swadhaja, { Father of Sitá, who  
                   { married Ráma (see  
                   { the parallel line of  
                   { Ayodhya.)

This list is imperfect in number, if the father of Sitá, the bride of Ráma, be correctly placed.

Kesidhaja.  
 Dharmadhwaja.  
 Kritadhwaja.  
 Kesidhwaja.  
 Bhanuman.  
 Satadyumna.  
 Suchi.  
 Sunadhwaja.  
 Urdhaketu.  
 Ayu.  
 Purajit.  
 Arishtanemi.  
 Srutayu.  
 Supanswaka.  
 Chitraratha.  
 Kshemadhi.  
 Samaratha.  
 Satyaratha.  
 Upa-guru.  
 Upajupta.  
 Baswananta.  
 Yugudhana.  
 Subhasana.  
 Sruta.  
 Jaya.  
 Vijaya.  
 Ritu.  
 Sunaka.  
 Bitahala.  
 Dhriti.  
 Bahulaswa.  
 Kriti.  
 Mahabasi.



AYODHYA RÁJÁS, *continued.*

Vis'wasaha.  
K'hatwānga, Kharbhanga, T.  
Dirghabāhu.  
Raghu.  
Aja.

## DWÁPÁR YUGA OR BRAZEN AGE.

Kusha, Lava, T.  
Atithi.  
Nishadha.  
Nabhas, or Nala, T.  
Pundarika.  
Kshemadhanwas.  
Dévānica, Dwarika, W.  
Ah'inagu, Ahinaja, W., Hina, H.  
Kuru, W., *car.* J. H.  
Páriputra.  
Dala, W., Bala, H.  
Rana-chhala.  
Uktha, W., *car.* J. H.  
Vajranabha.  
Arca, *car.* W. T. H.  
Sugana, Sankhanābhi, W.  
Vidhriti, Vijuthitābhi, W.  
Viswasaha, 2nd W., Visitaswa, T.  
Hiranyanābha.  
Pushpa, Pushya, H.  
Dhruvasandhi, *car.* T.  
Suders'ana, *car.* W.  
Agnivera, Apaverma, W.  
Sighra.  
Manu, Maru, W. T. H.  
Prasuruta.  
Sandhi, Susandhi, W.  
Amers'ana, Amersha, W.  
Mahaswat, Avaswana, T.  
Vis'wabhāhu, } Viswasava, T.  
Prasénajit, } *car.* W.  
Takshaka, }  
Vrihadbala.<sup>1</sup>  
Vrihadsan'a, B. C. 1300 J.

Das'arat'ha, 2nd W.

Rāma, A. C. 2029, J., { His brothers,  
950, B., 1100, T. { Bharata,  
Lakshmana,  
Satroghana.

## SOLAR LINE OF VESALA

(ALSO DESCENDED FROM SRADHA-DEVA.)

Dishta, King of Vesala.  
Nabhaga.  
Bhalandama.  
Vatsaprité.  
Prangsu.  
Pramati.  
Khanitra.  
Chaxusha.  
Bibingsati.  
Rambhu.  
Khaninetra, } *car.* Vanselāta.  
Dharmika, }  
Karandhāma.  
Adixita.  
Maruta.  
Dama,  
Rajyavarodhana, *car.* do.  
Sudhriti.  
Nara, *car.* do.  
Kebala.  
Dhundhumana, or Bandhuman.  
Begawan, } *car.* do.  
Budha, }  
Trinavindhu,<sup>2</sup> }  
Besabiraja, or Visala, who founded  
Vaisali (Allahābād).  
Hemachandra.  
Dhumrara.  
Sangyam.  
Sahadeva, *car.* V. L.  
Krisaswa.  
Somadatta.  
Sumati (ends V. L.)  
Janamejaya.

[N.B.—The names which are enclosed in parentheses in the sub-joined tables are not to be found in the 'Vishnu Purāna.' The orthography of the leading names has generally been adopted and corrected up from that authority.]

As illustrative of the probable date and authenticity of this Purāna, I cite Prof. Wilson's careful *résumé* of the subject :]

'The fourth book contains all that the Hindús have of their ancient history. It is a tolerably comprehensive list of dynasties and individuals; it is a barren record of events. It can scarcely be doubted, however, that much of it is a genuine chronicle

<sup>1</sup> ['Vishnu Purāna,' p. 463.]

<sup>2</sup> His daughter, Brabira, married Visvarawa Muni, the father (by another wife, Nikaksha) of Ravana, the demon king of Lanka, or Ceylon, afterwards killed by Rāma.

of persons, if not of occurrences. That it is discredited by palpable absurdities, in regard to the longevity of the princes of the earlier dynasties, must be granted, and the particulars preserved of some of them are trivial and fabulous. Still there is an inartificial simplicity and consistency in the succession of persons, etc. . . . It is not essential to its credibility or its usefulness that any exact chronological adjustment of the different reigns should be attempted. . . . Deducting, however, from the larger number of princes a considerable proportion, there is nothing to shock probability in supposing that the Hindú dynasties and their ramifications were spread through an interval of about twelve centuries anterior to the war of the Mahābhārata, and, conjecturing that event to have happened about fourteen centuries before Christianity, thus carrying the commencement of the regal dynasties of India to about 2600 years before that date, pp. 64, 65. . . . After the date of the great war, the 'Vishṇu Purāṇa,' in common with those Purāṇas which contain similar lists, specifies kings and dynasties with greater precision, and offers political and chronological particulars, to which, on the score of probability, there is nothing to object, pl. 70 . . . The 'Vishṇu Purāṇa' has kept very clear of particulars from which an approximation to its date may be conjectured. No place is described of which the sacredness has any known limit, nor any work cited of probable recent composition. The Vedas, the Purāṇas, other works forming the body of Sanskrit literature, are named; and so is the Mahābhārata, to which, therefore, it is subsequent. Both Bauddhas and Jains are adverted to. It was, therefore, written before the former had disappeared; but they existed in some parts of India as late as the twelfth century at least, and it is probable that the Purāṇa was compiled before that period.—p. 71.

[I curtail my quotations in this, as in previous instances, precisely where Prof. Wilson ceases to speak from the absolute knowledge contributed by the Sanskrit writings, of which he is *facile princeps* the exponent.]

## KALI YUGA,—IRON, OR FOURTH AGE, 3101, B.C.

Urukshepa, Urukria, W.	} Bentley places these eight names imme- diately after Rāma.	(Berhi), Dharman, W.
Vatsa, W., <i>car. J.</i>		Kritanjaya, first emigrant from Kosala
Vatsa, (vridhdha) Vyūha, W.		(Oude) and founder of the Suryas in
Prativyoma.		Saurāshtra, T.
(Bhānu, <i>car. W.</i> )		Raṇanjaya.
Divākara.		Sanjaya.
Sahadeva.		Śākya, W. T. (Slocya).
(Vira, <i>car. W. T.</i> )		Śuddhodana, Khroddhodana, W., Sudipa,
Vrihadaśwa.		T.
Bhānuratha—Bhānumat, Bahman, Lon-		Rātula, W. <sup>1</sup> (Lāngalada, Sangala, T.)
gimanus of Persia? T.		Prasenajit.
(Pratīcās'wa, <i>car. W.</i> )		Kshudraka, Romika, T.
Supratitha.		Kuṇḍaka, W., <i>car. J.</i>
Marudeva.		Suratha, Surita, W., <i>car. J.</i>
Sunakshatra.		Sumitra, B.C. 2100, J., 57, T. The last
Kinnara—Pushcara.		name in the 'Bhāgavat Purāṇa,' said
Antariksha, Rekha, T.		to be contemporary with Vikramā-
Suvarna, W. (Sūta, Sūtapas).		ditya? T. from this prince the Mewār
Amitrajit.		chronicles commence their series of
Vrihadrāja.		Rājās of Saurāshtra (see Tab. xxvi.).

<sup>1</sup> [Rāhula, 'Vāyu Purāṇa,' Siddhārtha or Pushkala, 'Matsya Purāṇa,' Lāngala, 'Bhāgavat Purāṇa.' 'This and the two preceding names are of considerable chronological interest; for Śākya is the name of the author or reviver of Buddhism, whose

TABLE XVIII. — *Chandra-vansa, Indu-vansa, or Lunar Race, who reigned in Anturveda and Kāśī; afterwards in Magadh (Behar), and Indraprastha (Dihli).*

Atri.....	Muni.
Soma .....	(Lunus, the Moon).
Buddha .....	(Mercury) married Ilā, daughter of the Sun.
Ailas, or .....	Purdravas.
Ayu.....	Kings of Kāśī also descended from him (see below).
Nahusha.....	(Devanahusha, Dionysos, Bacchus, W.D.).
Yayati .....	Father of Puru and Yadu (see next page).

KINGS OF KĀŚĪ (BENARES).

Kshetravridha, son of Ayu.	Ritadwaja.
Suhatra.	Alarka.
Kāśī.	Santati.
Kāśī.	Sunitha.
Rashtra.	Suketana.
Dirghatama.	Dharmaketu.
Dhanwantra.	Satyaketu.
Ketumana.	Dbrihtaketu.
Bhimaratha.	Sukamara.
Divodāsa, becomes a Buddhist.	Bitihotra.
Dyamana.	Bharga.
Pratardan.	Bhargabhumi (end in 'Bhāgavat P.')

LINE OF PURU.

Puru, king of Prātishthāna.  
 Janamejaya, king of Anturveda.  
 Prachinwat.  
 Pravira.  
 Manasya.  
 Bhayada.  
 (Sudhyumna.)  
 (Bahugava.)  
 Samyāti.  
 Ahamyāti.  
 Raudrásva.  
 Riteyu, *car.* W.  
 Rantināra, Rantimara, W.  
 Tansu, W. (Sumati).  
 (Raibhi or Anila, *car.* W.)  
 Dushyanta or Dushmanta, husband of Sakuntalā.  
 BHARATA, king of Anturveda and India.  
 Vitatha, or Bharadwāja, adopted.  
 Bhavanmanyu.  
 Vrihatkshatra.  
 Snuotra.

LINE OF YADU.

Yadu, excluded from succession.  
 Kroshta.  
 Vrijinavan.  
 Swāhi.  
 Rishadyu.  
 Chitraratha.  
 Saravindu.  
 Prithusravas.  
 Tamas, or Dharma.  
 Usanas.  
 Sīteshu, Siteyas, W. *car.* H.  
 Ruchaka, Rukshma, W.  
 Kavalha, W. *car.* J.  
 Parāvrata, line extinct.  
 Jamodhya, Jyamagha, W.; from Saravindu by another line.  
 Vidarbha.  
 Krotha.  
 Kunti.  
 Drashti, Vriahni, W.  
 Nirvratī.  
 Dashārha.  
 Vyoma, Yijaman, W.

birth appears to have occurred in the seventh century, and death in the sixth century, B.C. (B.C. 621-543). There can be no doubt of the individual here intended, although he is out of his place, for he was the son, not the father, of Suddhodana, and the father of Rāhula, as he is termed in the Amara and Haima Koshas' . . . . 'Vishnu Purāṇa,' p. 463.

LINE OF PURU (*continued*).

Hastin, built Hastinapur.<sup>1</sup>  
 Ajamidha, reigned at do.  
 Riksha, do.<sup>2</sup>  
 Samvarana.  
 Kuru, from whom also descended the  
 Magadhá princes (see tab. xx.  
 and 'V. P.', p. 455).  
 Parikshit, 'V. P.'  
 Jahnu.  
 Suratha.  
 Viddratha.  
 Sárvaabhauma.  
 Jayasena, Arávin 'V. P.'  
 (Radhica, Arávi, W.)  
 Ayutáyus, Ajita, H.  
 Akrodhana.  
 Devatiithi, *car.* W.  
 Riksha [another son of Akrodhana].  
 (Bhimasena, *car.* J.)  
 Dilipa.  
 Pratipa.  
 Śantann.  
 Vichitravírya, married Ambá and Am-  
 baliká, daughters of the King of  
 Káśi, who have issue, after his  
 death, by his half-brother, Krishna-  
 dwaipáyana or Vyása, Dhritaráshtra  
 and Pandu, whose wives bore the  
 five Pandavas, viz :  
 1 Yudhisthira (see table xix.)  
 2 Arjuna, father of Parikshita (see do.)  
 3 Bhíma, no descendants.  
 4 Nakul, and } founded the Magadhá  
 5 Sahadeva, } line (table xx.)

LINE OF YADU (*continued*).

Jimutra.  
 Vikrati.  
 Bhimaratha.  
 Navaratha.  
 Dasaratha.  
 Sakuni.  
 Kusambha.  
 Devarata.  
 Devakshetra.  
 Madhu.  
 Anavaratha.  
 Kuru-yata.  
 Anuratha.  
 Puruhotra.  
 Ayu, Angasa, W.  
 Satwata (several branches).  
 Andhaka, do.  
 Bhajamána.  
 Viduratha.  
 Sura.  
 Sami, Samana, W.  
 Pratikshetra.  
 Swayambhuva.  
 Hridika (several branches).  
 Devamida.  
 Sura (numerous progeny by Marusá).  
 Vasudeva, the eldest, who had thirteen  
 wives.  
 Krishna and Balaráma, with whom  
 this line becomes extinct, by quarrel  
 of the Yádus.

## SYNCHRONISMS OF THE SOLAR AND LUNAR RACES, T.

- T. { Buddha of the Lunar race married Ilá, the sister of Ikshwaku, s. l.  
 { Harischandra, s. l. cotemporary of Parasuráma, of lunar line.  
 Sagara, cot. of Taljanga, of do.  
 Ambarisha, cot. of Gadhi, founder of Kanauj.

TABLE XIX.—*Pandu Dynasty of Indraprastha, or Dihli, continued from the line of Puru of the Chandra vansa, or Lunar line, and collateral with the Magadhá Princes, descending from Jarasandha, of TABLE XX.*

ACCORDING TO THE 'BHÁGAVAT PURANA,' H. 'RÁJAVALI,' T.—['V. P.', 461.]  
 Yudhisthira, 1st King of Indraprastha  
 —no issue.

- B.C. 3101 J. Parikshita, son of Arjuna (son of Abhim-  
 anyu, 'V. P.') succeeds.  
 1300 W. Janamejaya, W.  
 1100 T. Satánika

Parikshita.  
 Janameja.  
 Asmund.

<sup>1</sup> ['It was finally ruined by the encroachments of the Ganges, but vestiges of it were, at least until lately, to be traced along the river, nearly in a line with Dihli, about sixty miles to the east.'—'V. P.', p. 462.]

<sup>2</sup> [Another son, Kapwa.—'V. P.', 462.]

## 'BHĀGAVAT,' (continued).

(Sahasranika, *car.* W.)  
 Aswamedhadatta  
 Asmākrishna, Nichakra, W.  
 Nichakra—Nemi, king of Hastināpur (capital washed away)<sup>1</sup>  
 Chakra, built Kausāmbhī.  
 Ushna, Ukata, king of Kausāmbhī, W.  
 Chitraratha.  
 (Kabiratha, *car.* W.)  
 Vrishnimata, Dhritimān, W.  
 Sushena.  
 Mahipati, *car.* W.  
 Sunitha.  
 Sukhśbala { Richa, W.  
                   { Nrichakshu, W.  
                   { (Sukhavati), W.  
 Pariplawa.  
 Sunaya.  
 Medhāvin.  
 Nripanjaya.  
 Mridu, W. (Durba).  
 Tigma, W. (Timi).  
 Vrihadratha.  
 Vasudāna, W. (Sudasa).  
 Satānika.  
 Udayana, W. (Durdamana).  
 Ahinara, W. (Bahinara).  
 Khandapāni, Dandapani.  
 Nimi, Niramitra, W.  
 Kshenaka, *car.* W.

## 'RĀJĀVALI,' (continued).

Adhuna.  
 Mahajuna.  
 Jesrita.  
 Dehtwana.  
 Ugarsēna.  
 Sursēna.  
 Sutassbama.  
 Rēsmaroja.  
 Bachil.  
 Sootpāla.  
 Narhardēva.  
 Jesrita.  
 Bhupata.  
 Seovansa.  
 Mēdavi.  
 Sravāna.  
 Kikan.  
 Pudhārat.  
 Dasuama.  
 Adeliā.  
 Huntavarnu.  
 Dandapāla.  
 Dunsāla.  
 Sēnpāla.  
 Khēvanraj, de-  
 posed, and Pan-  
 dulin ended, T.

The 'Rājāvali continues the Indraprastha sovereigns of the Lunar race, through three more Dynasties, Tod, viz. :—

SECOND DYNASTY 14, PRINCES, REIGNED  
500 YEARS.

Viserwa (contemporary with Sisunāga? T.)  
 Surien.  
 Sīrsah.  
 Ahangsāl.  
 Vyerjita.  
 Durbara.  
 Sodpala.  
 Sursana.  
 Singraja.  
 Amargoda.  
 Amarpāla.  
 Sērbēhé.  
 Padharat.  
 Madpāl, slain by his Rajput minister.

## THIRD DYNASTY.

Mahraje, Maharaje of Ferishta? T.  
 Srisēna.  
 Mahipāla.  
 Mahāvali.  
 Srupvarti.  
 Netrasēna.  
 Samukdana.  
 Jetmala.  
 Kālanka.  
 Kalmana.  
 Sirmandan.  
 Jeywanga.  
 Hergūja.  
 Hirasena.  
 Antinai, resigned to his minister.

[Major Cunningham has investigated this section of the Dihlī line with a view to the illustration of certain local coins derived from the

<sup>1</sup> ['His son (Asma-krishna's) will be Nichakra, who will remove the capital to Kausāmbī, in consequence of Hastināpura being washed away by the Ganges.'—'V. P.', p. 461.]

type of the Bactrian monarch Strato. As the nomenclature varies in the different authorities, and these lists may be held to be fairly within the limits of legitimate history, I append the modifications<sup>1</sup> advocated by that numismatist, as well as those cited by him from 'Ward's Hindús.']

FOURTH DYNASTY.—TOD.	WARD, Vol. i., p. 24.	CUNNINGHAM, 'J.A.S.B.', vii., 1854.
Séndhwaja.	Dhurandhara, n.c. 230	Yonadhara.
Maháganga.	Senodhata, „ 210	Senadhwaia.
Náda.	Mahákataka, „ 190	Mahiganga.
Jewana.	Mahayodha, „ 170	Mahajodh.
Udiya.	Nátha, „ 150	Sarma.
Jehala.	Jirana-rája, „ 130	Jivan-siráj.
Ananda.	Udaya-Sena, „ 110	Umed-sen.
Rájpála, invaded Kemaon, and killed by Sukwanti, who seized on Indra- prastha, whence he was expelled by Vikramáditya, T.	Vindhachala „ 90	Anandajala.
	Rájapála, „ 70	Rájapála.
	„ 60	Dihlf taken by
	Sákáditya or Sakwanti n.c. 57,	retaken by Vikramáditya Sákári.

TABLE XX.—*Kings of Magadhá, or Central India, hod. Behar, of the Indu, or Chandra Vansa, Capital, Rájagriha.*

## BARHADRATHA DYNASTY.

(See Table xviii.)

Kuru.	Vrihadratha, 'V. P.'
Sudhanush.	Kuságra.
Subotra.	Vrishabha.
Chyavana.	Pushpavat.
Kritaka.	Satyadhrita.
(Visruta).	(Urja), Sudhanwan, 'V. P.'
Uparichara—the Vasu.	(Sambhava), Jantu, 'V. P.'

## LINE OF PANDU.

(Brought on from page 237.)

Jarasandha, cot. of Yudhisthira and Krishna, B.C. 3101 ? J.	B.C. 1400. W. Suvrata.
n.c. 1400. W. Sahadéva, Parikshita born, great war ends.	Dherma.
(Márjári), or Somapi, W.	(Nribhrata, Wd.)
Śrutavat.	Susuma.
Ayutáyus.	Drirhasena, Vrihadséna, Wd.
Niramitra.	Sumati.
Sukshatra.	Suvala, Suddhamva, Wd.
Vrihatkarmán.	Sunita.
Senajit.	Satyajit.
(Śrutanjaya.)	Viswajit.
(Vipra.)	915. Ripunjaya, 700 Wd., a Buddha
(Suchi).	born in his reign, 'As. Res.'
(Kshema).	vol. ii., p. 138. <sup>2</sup>

<sup>1</sup> [Derived from a new list, 'obtained from a *Purohit* in the Punjab.']

<sup>2</sup> ['Our list,' says Prof. Wilson, 'and that of the *Váyu*,' specifies 21 kings after Sahadéva; the *Bhágavata* specifies 20, and in another passage states that to be the

## SUNAKA DYNASTY, KINGS OF MIZARATKHANDA, REIGNED 128 YEARS.

('V. P.' 138 years, p. 466.)

B.C. 915, W. Pradyota, B.C. 700, W.D. 650?  
 'Bud. Chron.' 2100, Jones.  
 Pálaka.

B.C. 915, W. Viśākhayūpa.  
 Janaka (Rajaca or Ajaca, W.D.)  
 Nandivarddhana (or Takshac, T.)

## ŚAIṢUNĀGAS OR Ś'ESNĀGS, REIGNED 360 YEARS.

('V. P.' 362 years, p. 467.)

B.C. 777, W. Śaiṣunaga, 1962, T.,  
 550, W.D., 472, B. } car. W.D.  
 Kākavarṇa .....  
 Kshemadherman.  
 Kshatraujas (Kshetranja).  
 Vidmisāra (Vidhisāra).  
 Ajātaśatru 450, W.D. 551, 'Bud.  
 Chron.' of Ava.  
 Darbhaka, Dāsaca.  
 Udayāśwa, Udāsi, Ajaya.  
 Nandivarddhana.  
 Mahānandi (Mahabali, W.D. 355.)

B.C. 777, W. (Sumalya or Vikhyaat, T.)  
 415. Nanda, *Mahāpadma*, 1602, J.,  
 340, W. 'He will bring the  
 whole earth under one um-  
 brella; he will have eight  
 sons, Sumālya and others,  
 who will reign after Mahā-  
 padma; he and his sons will  
 govern for 100 years. The  
 Brahman Kautilya will root  
 out the nine Nandas.' 'V. P.'  
 p. 468.

## MAURYA DYNASTY, GOVERNED 137 YEARS.

('V. P.' p. 470.)

B.C. 315. W. Chandra-gupta Sandracottus  
 of Greeks, 1602 J.  
 Vinudisāra, Vārisāra.  
 Aśoka Varddhana, patron of  
 the Buddhists, 330, 'Bud.  
 Chron.'<sup>1</sup>  
 Suvāśas, Sujaswa, T. Culāta,  
 W.D.

B.C. 315, W. Daśaratha, car. T. W.D.<sup>2</sup>  
 Sangata, Bandupālita, W.D.  
 Śāliśūka, Indrapālita, W.D.  
 (Devadharma, W.D.)  
 Somasārman.  
 Saśadharman (Satadharwa).  
 Vrihadratha.

## ŚUNGA DYNASTY, 110 YEARS.

('V. P.' 112 years.)

B.C. 178. W. Pushpamitra, puts his  
 master, the last of the  
 Mauryas, to death,  
 1365, J.  
 Agnimitra,  
 Sujyeshtha,  
 Vasumitra.

B.C. 178. W. Ardra, Abhadra, W.D.,  
 Badra, T.  
 Pulindaka.  
 Ghoshavasus.  
 Vajramitra, (Vicramitar, W.D.)  
 Bhāgavata.  
 Devabhūti.

## KĀṆVA DYNASTY, 45 YEARS. ('V. P.')

B.C. 66. W. The Kāṇva named Vasudeva  
 usurps his master's kingdom,  
 1253, J. car. T.  
 Bhūmimitra, cot. of Vikramā-  
 ditya, T.

B.C. 66. W. Nārāyaṇa, Parana, T.  
 Susarman. \* (Wilford supposes  
 interval of 150 years before  
 Sipraka.)

number. My copy of the 'Matsya' names but 19, and the 'Radcliffe' but 12; but both agree in making the total 32. They all concur with the text also, in stating that 1000 years had elapsed from the great war, at the death of the last Vrihadratha prince; and this is more worthy of credit than the details, which are obviously imperfect.' 'V. P.' p. 465.]

<sup>1</sup> [Of. also 'Burnouf,' vol. ii. p. 778; 'Huen Tsang Mémoires,' p. 170; 'Bhāgavata Purāṇa,' xii., i. p. 12.]

<sup>2</sup> [Buddha Gaya Insc., 'Jour. As. Soc. Beng.', vol. vi. p. 671, 'Jour. Roy. As. Soc.', etc.]

TABLE XXI.—*Āndhra or Vrispala dynasty, of Āndhra (Orissa?) or Telingana, in continuation of the Magadhā line.*

(See Wilford's comparative list from the 'Bhāgavat, and three other Purāṇas, in the 9th vol. of 'As. Res.'). [These thirty Andhra Bhṛitya kings will reign 456 years.—'Vishṇu Purāṇa.' Prof. Wilson adds in a note.—'The 'Vāyu' and 'Bhāgavata' state also 30 kings and 456 years; the 'Matsya' has 29 kings and 460 years. The actual enumeration of the text gives but 24 names; that of the 'Bhāgavata' but 23; that of the 'Vāyu' but 17. The 'Matsya' has the whole 29 names, adding several to the list of our text ('V. P.'), and the aggregate of the reigns amounts to 435 years and six months.]]

B.C. 21. Sipraka, 'a powerful servant of Suṣarman, kills the latter and founds the Andhra bhṛitya dynasty;' Balin, Balihita, B.C. 908, J. A.D. 190, W.D. <sup>1</sup>	B.C. 21. Chakora Sātkaṛṇa
Krishna	Sivaswāti
Srī Sātakaṛṇi	Gomatiputra, (Gautami, W.D. A.D. 500).
Pūrnotsanga, Paurṇamāsa } car.	Pulimat, Purimat
Sātakaṛṇa, II. } W.	(Sātkaṛṇi IV. car. Bhāg. Purāṇa).
Lambodara	Śivaśrī.
Ivilaka, Apilica, W.D.	Śivaskandha.
Megha Swāti	408. Yajnaśrī, (Yong nai of Chinese? W.D.)
Patumat.	Vijaya.
Arishtakarman, car. Bhāg. Purāṇa.	A.D. 428. Chandrasrī, (or Vijaya, last Magadhā king, 300, J. 546, T.)
Hāla.	Pulomārchish, (Poulomien of Chinese? W.D. dies, 648, A.D.
Tālaka, Tiluk, T.	Salomdhi, T. cot. of Bappa
Pravilasena.	Rāwal of Mewār, A.D. 720 ?)
Sundara, named Sātkaṛṇa.	

TABLE XXII.—*Rājas of Kashmir, of the Line of Kuru in the Lunar race : worshippers of Nāgas or Snakes.*

[I have scarcely left myself space in this reprint to attempt to unravel the mystifications of the early Kashmir Chronology. The con-

<sup>1</sup> [Pliny, 'Hist. Nat.', vol. vi. p. 22, 'As. Res.', vol. ix. p. 101. 'Sipraka is variously named, *Sindhuka*, Vāyu; *Sisuka*, Matsya; Balin, Bhāg; and, according to Wilford, *Chhismaka* in the 'Brahmanda P.', and *Sudraka*, or *Samuka*, in the *Kumārikā Khanda* of the 'Skanda Purāṇa.' . . . If the latter form of his name be correct, he may be the king who is spoken of in the prologue to the 'Mṛichchakati.' Prof. Wilson, in a valuable notice on the subject, further reviews the various items of evidence bearing on the date of the Andhras, and arrives at the conclusion that 'the race of Andhra kings should not commence till about 20 years B.C., which would agree with Pliny's notice of them; but it is possible that they existed earlier in the south of India, although they established their authority in Magadhā only in the first centuries of the Christian era.'—'V. P.', p. 475. Major Cunningham has discovered the name of Sri Sātakaṛṇi among the votive Buddhist inscriptions at Sanchī. He transcribes the original Pāli legend as follows, *Rajnyo Siri Sātakanisa Avesanisa Vāsithi-putasa, Anandasa adnam*, 'Gift of Ananda, son of the neophyte Vaishtha, in the reign of Sri Sātakaṛṇi.'—'Bhilsa Topes,' p. 264. The writing itself is referred to the time of the king of this name, third in the Magadhā list, though any such special appropriation of the designation is open to question when we find Prof. Wilson remarking, 'The adjuncts *Sudti* and *Sātikaṛṇa* appear to be conjoined or not with the other appellations, according to the convenience of the metre, and seem to be the family designations or titles.'—'V. P.', p. 474. See also Stevenson, under *Saurashtṛa infṛā*, and 'Bombay Jour.', July, 1853.]



jectural results arrived at severally by Prof. Wilson,<sup>1</sup> Captain Troyer,<sup>2</sup> and Major Cunningham,<sup>3</sup> are subjoined in parallel columns for the scrutiny of future inquirers. Prof. Wilson, without according any great faith to the Sanskrit authority, from which his outline of the history of Kashmir was translated, contented himself with leaving it to carry its own weight. The succeeding commentators have exercised less reserve in the adaptation of the original materials, and hence their rectifications demand a more distinct review. I should naturally desire to abstain from the use of any harsh expression in referring to the exhaustive labors of M. Troyer; but, in truth, I can scarcely bring myself to notice his arguments with much seriousness; and this feeling will, perhaps, be better understood when I say that we are invited to believe that Aśoka reigned in 1436 B.C. (vol. ii., p. 435), and that the Seythian Kanishka ought to be dated in the 13th century, B.C. Equally must the author's endeavor to account for the extraordinary lengths of reigns be received with distrust, which line of reasoning is appropriately climaxed by an attempt to show that it was possible that Ranāditya lived and even reigned 300 years (vol. ii. p. 379).

Major Cunningham's ratiocination towards the general settlement of the relative epochs is based primarily upon the assumed fact of Hiranya and Toramāna having been contemporaries of the 3rd Vikramāditya of Ujain (s. 466 = A.D. 409),<sup>4</sup> whom the author, in preparatory training for the more complete development of the same idea in his subsequent works,<sup>5</sup> identified with the Chandra Gupta of the Gupta coin series, and the 3rd Vikramāditya. I do not at all wish to contest that there may have been one of the many monarchs who assumed the supplementary titular designation of Vikramāditya ruling over Malwa at or about this period, and that the potentate in question may well have been a contemporary of Toramāna of Kashmir, whom, judging from the style of writing on his coins, I should not desire to place so early as Wilson and Troyer have done; but this concession by no means implies an accord with the other portion of the argument, that would bring the Guptas down to so modern an epoch as is there proposed. In other sections, Major Cunningham's method of compression is about as summary and as little satisfactory as Troyer's system of expansion, inasmuch as the process of the reduction of the supposed superfluous periods of the Aditya and Gonerdiya dynasties is effected by the easy arithmetic of a diminution of the declared totals of *one-half* and *one-third* respectively.

<sup>1</sup> ['Asiatic Researches,' xv., and 'Ariana Antiqua,' p. 347.]

<sup>2</sup> ['Rājatarangini,' Paris, 1840.]

<sup>3</sup> ['Numismatic Chronicle,' vol. vi., 1843.]

<sup>4</sup> [Wilford, 'Asiatic Researches,' vol. ix., p. 156.]      <sup>5</sup> ['Blülsa Topes,' p. 142.]

There is one point, however, somewhat assuring, that is—the general coincidence of the different commentators in regard to the proper period of the initial date of the Nága dynasty, and, for the present, we must accept this as the single bright spot in the otherwise hazy atmosphere with which Oriental authors so often envelope the simplest history.]

‘The Rája Tarangini, whence this line is taken, commences with an account of the desiccation of the valley by Kasyapa Muni: supposed to allude to the Deluge.’—Wilson, ‘As. Res.’, vol. xv. p. i.

## FIRST PERIOD—KAURAVA RACE, 1266 YEARS.

B.C. 3714. Kashmir colonised by Kasyapa,  
B.C. 2656, W.

Fifty-three Princes,<sup>1</sup> names  
omitted by Hindú writers,  
but partly supplied by Mu-  
hammadan authority, as fol-  
lows:

Sulimán.  
Cassalgham.  
Maherkaz.  
Bandu-khán, (Pandu of the  
Lunar line?)  
Ládi-khán.  
Lodder-khán.  
Sunder-khán,—Hindú worship  
established.  
Cunder-khán.  
Sunder-khán.  
Tundu-khán.  
Beddu-khán.  
Mahand-khán.  
Durbinash-khán.  
Deosir-khán.  
Tehab-khán, dethroned by king  
of Kabul.  
Cálju-khán.  
Luvkhab-khán.  
Shermabaram-khán.  
Naureng-khán, conquered China.  
Barigh-khán.  
Gowasheh-khán.  
Pandu-khán II, extended em-  
pire to the sea.  
Haris-khán.  
Sanzil-khán.  
Akber-khán.

Jaber-khán.

Nauder-khán.

Sanker-khán, slain by

Bakra Rája.

An interval ensues, and au-  
thentic history commences  
with

2448. Gonerda, I. Kali Yuga, 653.

Gonanda or Agnand, a re-  
lation of Jarasundha, 1400,  
W. B.C. 1045, P.

Damodara, 1st.

Gonerda, II.

Thirty-five Princes, names  
forgotten.

1709. Lava (Bal-lava), Loo of Mu-  
hammadan historians. B.C.  
570, P.

1664. Kausasaya.

1666. Khagendra.

1600. Surendra, cot. with Bahman of  
Persia.

1573. Godhara, Gowdher, A. A.

1537. Suverna, Suren, do.

1477. Janaca, Jenak, do.

1471. Sachinara, Seijuner, do.

1394. Asoka, established Buddhism.

(See pages 216, 240, B.C. 250?)

1332. Jaloka, adopted castes.

1302. Damodara, II. a Saiva; trans-  
formed into a snake.

1277. Hushka, } Tartar princes, re-  
Jushka, } established Budd-  
Kanishka, } him.

1217. Abhimanyu, an orthodox Hindú,  
B.C. 423, W. B.C. 73, P.

<sup>1</sup> [M. Troyer has the following note upon the subject of these fifty-three princes :—‘C’est sans doute par le vague des expressions de Kalhana, et par le récit des écrivains mahométans qui font mention d’autres rois avant Gonarda Ier, que M. Wilson a été induit à placer avant ce roi une première série de cinquante-trois princes, tandis que le texte, comme je crois l’avoir démontré, ne fixe la durée d’aucune autre série avant celle qui précède le règne de Gonarda III me. Il serait en effet très-singulier de trouver deux séries consécutives, qui offriraient le même nombre de rois et la même durée de règne. Je suis bien loin de nier qu’il n’ait pu y avoir plusieurs rois avant Gonarda Ier, et j’admets même qu’on a une presque certitude à cet égard ; mais le Rádjatarangini n’en dit rien de positif.’—Vol. ii. p. 371.]

SECOND PERIOD—GONERDIYA DYNASTY, 1013 YEARS, OR 378 YEARS AFTER  
ADJUSTMENT, W.<sup>1</sup>

Troyer. B.C.	Cunningham. A.D.	Wilson. B.C.		B.C.
1182	53-3 <sup>2</sup>	1182	Gonerda, III. Nāga worship resumed,	388 W. 108, P.
1147	61-9	1147	Vibhishana,	370
1093-6	73-1	1096	Indrajita,	352
1058		1060-6	Ravana,	334
1028	80-8	1030-6	Vibhishana, II.	316
992-6	89-2	993	Nara (Kinnara), persecuted Buddhists,	298
952-9	99-2	953-3	Siddha,	280
892-9	114-2	893-3	Utpalāksha Adutbulabch, A. A.	262
862-3	121-9	862-9	Hiranyāksha, Teernya, "	244
824-8	131-2	825-2	Hiranyākula, Herenkul, "	226
764-8	146-2	765-2	Vāsūkula, Ebeshak, "	218
704-8	163-8	705-2	Mihirākula [Mukula, Troyer], invaded Lanka or Ceylon,	200
634-8	178-8	635-2	Vaka,	132
571-8	187-8	572-2	Kshitinanda (Nandana),	154
541-8	195-2	542-2	Vasunanda, Vistnand, A. A.	146
489-6	208-2	490	Nara II. or Bara—Nir, "	128
429-6	223-2	430	Aksha, Aj, "	100
369-6	238-2	370	Gopaditya, a pious brahminist, Kul- varit, A. A.	82
309-6	253-2	310	Gokerna, Kurren, A. A.	64
251-7	269-11	253	Narendrāditya, Nurundrawut, A. A.	46
<sup>3</sup> 215-4	279-0	216-9	Yudhisthira, surnamed the blind, (see Lunar race?)	28

ADITYA DYNASTY, 192 YEARS.

167-3	287-6	168-9	Pratāpāditya, kinsman of Vicramāditya, 10 W.	
135-3	303-6	136-9	Jalaucas, Juggooh, A. A.	22
103-3	319-6	104-9	Tunjina, a great famine, Bunjir, "	54
67-3	338-6	66-9	Vijaya, Bejcery, "	90
59-3	341-6	60-9	Jayendra, Chander, "	98
22-3	360	23-9	Arya Rāja, of miraculous accession, (Sandhimati),	135 400, P.

GONERDIYA LINE RESTORED, 592 YEARS, OR  
433 ADJUSTED.

A.D. 24-9	A.D. 383	A.D. 23-3	Méghavāhana, Megdahen, A. A., invited Bauddhas, and invaded Ceylon.	
58-9	400	57-9	Srēsthasēna, or Pravarasēna.	
88-9	415	87-3	Hiranya, contention with Toramāna Yu- varāja, contemporary with Vicramāditya.	
118-11	430	117-5	Mātrigupta, a Brāhman from Ujjain, suc- ceeds by election,	471 W.
123-8	432-6	122-2	Pravarasēna, invaded Silāditya of Gujarāt, (table xxvii.)	476
183-8	464	185-2	Yudhisht'hira II.	499
204-11	483	224-5	Nandrávat, Narendrāditya, or Lakshman'a	522
217-11	490	237-5	Ranāditya, married daughter of Chola Rāja,	545
517-11	555-6	537-5	Vicramāditya, supposed an interpolation (Ujjain princes?)	568
559-11	576-6	579-5	Balāditya, last of the Gonerda race,	592

<sup>1</sup> See also 'Ayn-Akbari,' vol. ii. p. 164.

<sup>2</sup> The fractional figures express the months of the year to which they are in each case appended.

<sup>3</sup> Note, p. 364.

## NÁGA OR KARKOTA DYNASTY, 260 YEARS, 5 MONTHS.

Troyer. A.D.	Cunningham. A.D.	Wilson. A.D.	
597-3	594-6	615-5	Durlabhaverddhana, contemporary with Yezdijird.
633-3	630-6	651-5	Pratápáditya, founded Pratápapur. Durlabhaca, <i>cæ.</i> W.
683-3	680-6	1701-5	Chandrápíra, or Chandránand, a virtuous prince.
691-11	689-2	710-1	Tárápíra, a tyrant.
695-11	693-2	714-1	Lalitáditya, conquered Yasovarman of Kanauj, (Yasovigraha of inscriptions) and overran India.
732-7	729-9	750-8	Kuvalayápíra.
733-7	730-9	751-8	Vajráditya.
740-7	737-9	758-8	Prithivyápíra.
744-8	741-11	762-10	Sangramápíra.
751-8	748-11	769-10	Jajja, an usurper, deposed by
754-8	751-11	772-10	Jayápíra, married daughter of Jayánta of Gaur, encouraged learning, invaded Bhíma Sēna of Gujārat, 841?
785-8	782-11	803-10	Lalitápíra.
797-8	794-11	815-10	Sangramápíra II. or Prithivyápíra.
804-8	801-11	822-10	Vrihaspati, or Chippatajaya, son of a prostitute, whose five brothers governed in his name.
816-8	813-11	834-10	Ajitápíra, set up by the same usurpers.
852-8	849-11	870-10	Anangápíra, restored to the succession.
855-8	852-11	873-10	Utpalápíra, last of the Karkota race.

UTPALA DYNASTY, 84 YEARS 5 MONTHS.<sup>2</sup>

857-8	854-11	875-10	Aditya Vermá, or Avanti Vermá, a severe famine.
886-8	883-2	904-1	Sankara Vermá, invaded Gujara and Rája Bhōja (? see Málwá), Kashmir cycle brought into use, 59.
904-8	901-10	922-9	Gopála Vermá, killed in youth.
906-8	903-10		Sankatá, last of the Vermá race.
906-9	903-10	924-9	Sugandhá Ráni, recommended the election of
908-9	905-10	926-9	Part'ha.—The Tattris and Ekangas powerful.
924-9	920-10	941-9	Nirjita Vermá, also called Pangu, the cripple.
925-9	921-10	942-9	Chakra Vermá, civil wars.
936-9	931-10	952-9	Sura Vermá.

<sup>1</sup> Renaud, 'Mémoire sur l'Inde,' p. 189; 'Nouveaux Mélanges Asiatiques,' vol. i. p. 196.

<sup>2</sup> [Prof. Wilson, in anticipation of the due course of publication, has obligingly favoured me with the subjoined note on an inscription which, under the double aspect of geographical proximity and identity of family names, seems to establish some sort of connexion between its line of kings and the Vermá dynasty of Kashmir:]—'An inscription of some interest has lately been communicated to the Royal Asiatic Society by the President, having been sent to him by Mr. John Muir; unfortunately it is not known where it was originally found, beyond the fact that it was procured in the north-west of Hindústán; another defect is want of date, but the character in which it is written renders it probable that it is not later than the seventh or eighth century. The invocation shows it to belong to the orthodox system, as it is addressed to the Creator of the Triad, Brahmá, Vishnu, and Rudra, for the sake of the creation, preservation, and destruction of the universe. The document records, in a plain and uninflated style, the following succession of princes, of the Yadu family: 1. Sēna Vermá; 2. Ārya Vermá, his son; 3. His son, Śrīdeva V.; 4. His son, Vradīpta V.; 5. His son, Iśwara V.; 6. His son, Vridhha V.; 7. His son, Siddha V.; 8. His son, Jala V.; 9. His son, Yajna V.; 10. His son, Achala V.; 11. His son, Divākara V.; 12. His younger brother, Bhāskara V., who married Jayavati, daughter of Kapila-varddhana; 13. Their daughter was Iśwari, married to Chandra-gupta, son of the king of Jālandhara: on her husband's death she founded an establishment for religious mendicants, which foundation it is the purpose of the inscription to record.

Troyer. A.D.	Cunningham. A.D.	Wilson. A.D.	
937-9	932-10	953-9	Parttha, a second time.
938-9	933-4	954-3	Chakra Vermá, ditto
939-3	933-10	954-9	Sankara Verdhana.
939-7	935-4	956-3	Chakra Vermá, a third time.
939-11	936-8	957-7	Unmatti Vermá.
941-11	938-10	959-9	Sura Vermá II.

## LAST OR MIXED DYNASTY, 64 YEARS 4 MONTHS.

942-1	939-4	960-3	Yasaskara Deva, elected sovereign.
	948-4	969-3	Sangrama Deva, dethroned and killed by
951-1	948-10	969-9	Parvagupta, slain at Suréswari Kshetra.
952-10	950-2	971-3	Kshemagupta, destroyed many Viharas of Buddhists.
961-4	958-8	979-9	Abhimanyu, intrigues and tumult.
975-2	972-8	993-9	Nandigupta, put to death by his grandmother Diddá.
976-2	973-9	994-10	Tribhuvana, shared the same fate.
978-2	975-9	996-10	Bhimagupta, ditto.
982-6	980-0	1001-1	Diddá Rání, assumed the throne herself. adopts
1006-9	1003-6	1024-7	Sangrama Deva II. (with whom Wilson's list closes.)
	1028-4	1032	Harirája and Ananta Deva, <sup>1</sup> his sons (continued from the printed Tarangini.)
	1080-9	1054	Kalasa.
	1088-10	1062	Utkarsha, and Harsha deva.
	1100-7	{ 1062	Udayama Vikrama, son of the latter.
		{ 1072	Sankha Rája.
	1110-11	1002	Salha, grandson of Udayama.
	1111-3	1072	Susalha, usurper, do.
	1127-3	1088	Mallina, his brother (end of Kalhana Pandit's list.)
	1127-9	1088	Jaya Sinh, son of Susalha, (Jona Rája's list.)
	1149-9	1110	Paramána.
	1159-3	1119	Bandi deva.
	1166-3	1126	Bopya deva.
	1175-7	1135	Jassa deva, his brother, an imbecile.
	1193-8	1153	Jaga deva, son of Bopya.
	1208-2	1167	Rája deva.
	1231-6	1190	Sangrama deva, III. a relation
	1247-6	1206	Ráma deva.
	1268-7	1227	Lakhana deva, adopted.
	1281-10	1261	Sinha deva, new line; killed by his brother-in-law
	1296-4	1275	Sinha deva II. an usurper, who was himself deposed and killed by the Mlechas under Rája Dullach (?)

The name or title Varmma, or Varmá, is especially appropriate to a man of the Kshatriya, the military and regal caste; it affords, therefore, no safe clue to the identification of this dynasty; but the mention of Jalandhara intimates their position among the mountains not far from Kashmir, where we find a race of princes bearing the same title; the first of these, Avanti Varmá, began his reign after the middle of the ninth century, and he may have been a scion of the family recorded in this inscription, which, as above stated, is in a character that may be possibly of the seventh or eighth century, just prior to the date of the Varmá dynasty of Kashmir. Thirteen generations, of what appears to have been a peaceable succession, will carry us back at least two centuries, so that we may safely place the first prince of this series in the sixth century of the Christian era.]

<sup>1</sup> The lengths of reigns only are given in the original: calculating therefore backwards from 'Alá-ud-din, it becomes necessary to curtail the reign of Harirája (52 years) by about 30 years, to form a natural link with Wilson's date of Sangrama Deva.—J. P. [Major Cunningham ('Num. Chron.', vol. vi.) has pointed out the error committed by Prinsep in this place in confounding 'Alá-ud-din of Dihli with the Kashmir moharch of the same titular designation, whose date should therefore be corrected to A.D. 1351, or, as adjusted by Major Cunningham, to 1339.]

## THE BHOTA DYNASTY.

Troyer. A.D.	Cunningham. A.D.	Wilson. A.D.	
Udayana- deva	1318-10	1294	Sri Rinchana, obtained throne by conquest.
Kota Ráni	1334-0	1294	Kota Ráni, his wife. <sup>1</sup>

[The names of the Musalman kings are continued from Major Cunningham's paper—]

Sháh Mír .....	1334	6	10	Fateh Sháh .....	1483	7	28
Jamshir .....	1337	5	0	Muhammad (2nd time)...	1492	7	28
Alá-ud-dín .....	1339	4	0	Fateh Sháh (ditto) .....	1513	5	7
Shaháb-ud-dín .....	1352	0	23	Muhammad (3rd time)...	1514	5	7
Kutb-ud-dín .....	1370	0	23	Fateh Sháh (ditto) .....	1517	5	7
Sikandar .....	1386	0	23	Muhammad (4th time)...	1520	5	7
Alí Sháh .....	1410	0	23	Názuk Sháh .....	1527	5	7
Zain ul Abidín .....	1417	0	23	Muhammad (5th time)...	1530	5	7
Haidar Sháh .....	1467	0	23	Názuk Sháh .....	1537	5	7
Hasan .....	1469	0	23	Mirza Haidar .....	1541	5	7
Muhammad .....	1481	0	28	Humáyún .....			

Kashmír finally annexed to the Moghul Empire under Akbar, in 1586, A.D.

TABLE XXIII.—*Chohan or Chahumán Dynasty, at Ajmír, Dihlí, and afterwards Kotah and Bundi.*

'The Chohans, one of the four Agnicula tribes, Chobáns, Purihárs, Soláнки and Pramára, said to have been produced by a convocation of the gods on Mount Abú supposed of Parthian descent.'—Tod, vol. ii. p. 451.

B.C. 700 Anala, or Anhil Chouhan, established at Garra Mandela.

Suvácha.

Mallan, source of Mallani tribe?

Galan Sár.

A.D. 145 Ajipála, Chakravartti, founder of Ajmír, 202 of Virát era?

500 Sámanta Déva,

Mahá Déva,

Ajaya Sinh,? Ajipala, } Wilford.

Virá Sinh,

Vindasur,

Vairi Vihanta,

684 Dola Rái, lost Ajmír to Muhammadans.

695 Manikya Rái, founded Sambhar: hence title of Sámbrí Rao, slain by Moslem invaders under Abul Aás; eleven names only in Jáégua's catalogue, Tod, vol. ii. p. 444.

Mahásinha.

Chandra Gupta, (of Allahabad pillar inscription? See Kanauj.)

Pratáp Sinh.

Mohan Sinh.

2 Setarai.

Nágahasta.

Lohadhár.

Virá Sinh, II.

Vibudh Sinh.

Chandra Ray.

<sup>1</sup> 'The names of the Muhammadan chiefs, who held possession of the valley, sometimes independently, under the Patan and Moghul Emperors, are so disfigured in Nágari characters as to be hardly recognizable. Jona Rája's list continues to Zein-ul-áb-ud-dín, 815 Hijra, whence Sri Vara Pandit continues it to Fateh Sháh, A.D. 1477. The 'Rájavalí Patáka' brings on the line to Akbar's conquest in 1560,' (see Muhammadan dynasties).—J. P.

<sup>2</sup> 'Bombay Government Selections,' vol. iii. p. 193.

- B.C. 770 Harihara Ray (Hursrāj, Tod), defeated Subaktegin.  
 Basanta Rai.  
 Balianga Rai (Belundeo? Tod), or Dheruca Gaj, slain defending Ajmir against Sultan Mahmūd.  
 Pramatha Rai.  
 Anga Rāja, (Amilla Deva, Dihli inscription).  
 1016 W. Visala Deva,<sup>1</sup> from inscriptions, 1031 to 1095, Tod, interpolated date in the books of Chand, S. 921.  
 Seranga Deva, a minor.  
 Ana Deva, constructed the Anah Sāgar, at Ajmir.  
 Hispāl (of Ferishtah), father of  
 977 Jayah Sinh (or Jypal of Ferishtah, burned himself, 1000, see Málwā), extended his dominion to Lahore, etc.  
 1000 Ananda Deva (or Ajay deo), Anandpāl, F.  
 Someswara, married daughter of Anangpāl of Dihli.  
 1176 Prithirāj, of Lahor, obtained Dihli, slain by Shahābuddīn, 1192.  
 1192 Raiyasi, slain in the sack of Dihli, T.  
 Vijaya Ray, adopted successor of Prithiraj (see Dihli pillar)  
 Lakunsi, thence twenty-six generations to Nonad Sinh, present chief of Nimrāna, nearest lineal descendant of Ajipāl and Prithirāj.<sup>2</sup>

TABLE XXIV.—*Haravati or Harauti branch of the Chohan Dynasty.*

The Haras are descended from Anurāja, a son of Visaladeva, or more probably of Mānikya Rai, Tod, vol. ii. p. 454 (see preceding table).

- A.D. Anurāja, took possession of Asi, or Hansi, in Hariāna.  
 1024 Ishtpāla, obtained Asirgarh, miraculously.  
 Chand Karna.  
 Lok Pāl.  
 1192 Hamīra (known in Prithirāja wars), killed in 1192.  
 Kālkarna.  
 Mahā Magd.  
 Rao Bacha.  
 1298 Rao Chand, slain with all but one son by A'lā-ud-dīn.  
 1300 Rainsi, protected at Chitor, obtained Bhynsrōr.  
 Kolan, declared lord of the Pathār, (central India.)  
 1341 Rao Bango, took possession of the Hun court of Mynāl.  
 Rao Deva, summoned to Lodi's court, abdicated to his son.  
 Hara Rāja, founded Bundī; country called Haravati after him.  
 Samarsi (Samara Sinh), conquered the Bhils.  
 Naptūji, feud with Solankhi chief of Thoda.  
 Hemū-jī, defied supremacy of Rāna of Mewār.  
 Birsingh.  
 1419 Biru.  
 1485 Rao Banda, a famine, 1487, expelled by his brothers Samarkandī and Amarkandī, who ruled twelve years.  
 Narain Dās, recovers Bundī.  
 1533 Suraj Mal, assassinated by Chitor Rāna.  
 1534 Soorian, a tyrant, banished.  
 Rao Arjun, his cousin, killed in defence of Chitor.  
 1575 Rao Rāja Surjan, Chunar, and Benares given to him.  
 Rao Bhoja, separation of Bundī and Kota.

BUNDI BRANCH.

- 1578 Rao Ratan, built Ratanpur, his son Mādhū Sinh receives Kotā from Jehāngir, henceforward separation.

<sup>1</sup> The lath of Firoz, bearing Visala Deva's name, is dated S. 1220, in the reign of Vighraha Rai Deva. See *Ante*, vol. i. p. 325; also 'As. Res.', vol. vii.

<sup>2</sup> See also lists in 'Ayin-i-Akbari,' vol. ii. p. 94-97, etc.

- A.D. 1578 Gopināth.  
 1652 Chatra Sāl, took Kalberga, under Āurangzīb, killed with twelve princes in battle of Ujjain.  
 1658 Bhao Sinh, received government of Aurangābād under Āurangzīb.  
 1681 Anurad Sinh.  
 1718 Budh Sinh, supported Bahādur Shāh, dispossessed by Jypur Rāja.  
 1743 Omeda, regains Bundī, 1749, with Holkar's aid, retires 1771, dies 1804.  
 1770 Ajit Sinh, Jugrāj, murders Rāna of Mewar.  
 Rao Rāj, Bisben Sinh, minor, protects Colonel Monson's flight.  
 1821 Rām Sinh.

## KOTAH BRANCH.

- 1579 Madhu Sinh, son of Rao Ratan (see above).  
 1630 Mokund Sinh.  
 1657 Jagat Sinh.  
 1669 Keswar Sinh.  
 1685 Rām Sinh.  
 1707 Bhim Sinh, entitled Mahārāo.  
 1719 Arjun.  
 1723 Durjan Sāl, without issue, Zālīm Sinh, born 1740.  
 Ajit, grandson of Bishen Sinh.  
 Chatr Sāl, succeeded by his brother.  
 1765 Gomān Sinh,—Zālīm Sinh, Foujdār.  
 1770 Omeda Sinh, „ Regent.  
 1819 Kiswar Sinh, Madhu Sinh, ditto.

TABLE XXV.—*Rājas of Malwa, Capitals Ujjayana, and Mandor.*

'This line is taken from Abū'l Fazl,<sup>1</sup> and is supposed to have been furnished from Jain authorities: it agrees nearly with appendix to 'Agni Purāṇa.'—Wilford.<sup>2</sup>

In early ages Mahahmah founded a fire temple, destroyed by the Buddhists, but restored by

B.C. 840 Dhanjī (Dhananjaya, a name of Arjun) about 785 before Vikramāditya (see Anjana, Burmese list).

760 Jitchandra.

<sup>1</sup> ['Ayin-i-Akbari,' vol. ii. p. 49, et seq.]

<sup>2</sup> [As Wilford's lists, purporting to be taken from the 'Agni Purāṇa,' were largely quoted in the original edition of this work (A.D. 1835), it is necessary that I should annex the caution in the reception of that author's data since enjoined by Prof. Wilson:—] 'Col. Wilford (Essay on Vikramāditya and Śalivāhana, 'Asiatic Researches,' vol. ix. p. 131) has made great use of a list of kings derived from an appendix to the 'Agni Purāṇa, which professes to be the 63rd or last section. As he observes, it is seldom found annexed to the 'Purāṇa.' I have never met with it, and doubt it ever having formed any part of the original compilation. It would appear from Col. Wilford's remarks, that this list notices Muhammad as the institutor of an era; but his account of this is not very distinct. He mentions explicitly, however, that the list speaks of Śalivāhana and Vikramāditya; and this is quite sufficient to establish its character. The compilers of the 'Purāṇa' were not such bunglers as to bring within their chronology so well-known a personage as Vikramāditya. There are in all parts of India various compilations ascribed to the Purāṇas, which never formed any portion of their contents, and which, although offering sometimes useful local information, and valuable as preserving popular traditions, are not in justice to be confounded with the Purāṇas, so as to cause them to be charged with even more serious errors and anachronisms than those of which they are guilty.'—'Vishnu Purāṇa,' pp. 38-9. London, 1840—Again, p. 73, *preface*, 'The documents to which Wilford trusted proved to be in great part fabrications, and where genuine, were mixed up with so much loose and unauthenticated matter, and so overwhelmed with extravagance of speculation, that his citations need to be carefully and skilfully sifted, before they can be serviceably employed.'



- B.C. 670 Śālivāhana.<sup>1</sup>  
 680 Nirvāhana.  
 580 Putra Rājas, or Vānsāvalis, without issue.  
 400 Aditya Punwar, elected by nobles (cot. Sapor, A.D. 191, W.)  
 390 Birma or Brahma Rāja, reigned in Vidharbanagar.  
 360 Atibrahma, at Ujjain, defeated in the north.  
 271 Sadhroshana Sadāsava-Sena<sup>2</sup>).  
 191 Heymert, Harcha Megha, killed in battle (misplaced, W.D.)  
 91 Gundrup, Gardabharupa, Bahram-gor ? of Wilford.  
 56 VIKRAMĀDITYA (3rd of Wilford. A.D. 441 Yesdejird ?) Tuár tr.  
 A.D. 44 Chandrassen, possessed himself of all Hindústān.  
 135 Karaksen, Surya Sena, W. 676.  
 215 Chaturkot (Sactisinha succeeded, W.)  
 216 Kanaksen (see Saurashtra, which he conquered ? 144, Tod).  
 302 Chandrapāl.  
 402 Mahendrapāl.  
 409 Karmchandra.  
 410 Vijyananda, adopted a successor (his son being an infant) Sindula, W.  
 470 Munja, killed in the Dekhan (reigned A.D. 993 according to Tod).  
 483 BHOJA<sup>3</sup> (S. 540), by Tod. 567 A.D.<sup>4</sup> Kalidās flourished.  
 583 Jayachandra, put aside in favour of  
 593 Jitpāl, of the Tenore (Tuár) caste (Chaitra Chandra, 'Bavishye P.')
 598 Rāna Rāja.  
 603 Rāna Baju.  
 604 Rāna Jalu.  
 620 Rāna Chandra.  
 654 Rāna Bahādur.  
 659 Rāna Bakhtmal.  
 664 Rāy Suhenpāl.  
 669 Rāy Keyretpāl.  
 674 Rāy Anangapāl (rebuilt and peopled Dihli, 791, Tod).  
 734 Kunwerpāl.  
 735 Rāja Jagdeva, of the Chohān tribe.  
 745 Jagannath.  
 755 Hara deva.  
 770 Vāsu deva.  
 786 Suradeva.

<sup>1</sup> [Orientalists do not rely much upon Wilford's speculations in these days; but as evidence imperfect in itself has often some foundation in truth, it may not be inappropriate to transcribe the following, which seems oddly to assimilate with some of the indications noted at p. 274-5, vol. i., in regard to the Gupta succession:—'As there are several kings and legislators called Vikrama; in the same manner we find also several Śālivāhanas. This grandson of Dhananjaya is made contemporary with another Vikramāditya, who is supposed to have begun his reign A.D. 191; but, according to others, either in the year 184 or 200. In Raghunāth's lists, current in the western parts of India, which have appeared in print, instead of Śālivāhana, we find Samudrapāla.'—'As. Res.' ix. 135. See also pp. 146-7, *ibid*; and the curious tale in connection with Sukāditya or Bhartrihari, brother of Vikramāditya, and his retirement to Bhitāri, on the Gumti, near which place, Wilford remarks, 'is a stone pillar, with an inscription, containing only a few couplets from the Mahābhārata:' (see *ante*, p. 240, vol. i., Bhitāri Lāt Inscription).]

<sup>2</sup> Vasudeva of Wilford, Basdeo, Ferishtah. A.D. 390, father-in-law of Bahram (see Kanauj).

<sup>3</sup> [See Pehewa or Thaneswar Inscription, 'Jour. As. Soc. Beng.' vol. xxii. p. 673, dated 279 Samvat, but of doubtful attribution. Names recorded: 1, Mahendrapāla; 2, Jatula; 3, Vijrāta; 4, Yajnika; 5, Sagga; 6, Purna; 7, Devarāja; 8, Rāmchandra; 9, Bhoja.]

<sup>4</sup> The other two Rājas Bhoja, Tod fixes in 665 (from Jain MSS.) and 1085, the father of Udayati.

A.D.	801	Dharmadeva.	
	815	Bhaldeva.	
	825	Nanakdeva.	
	834	Keyratdeva.	
	845	Pithoura.	
	866	Maldeva, conquered by Sheikh Shah, father of 'Alá-ud-dín.	Ujjain Inscription, S. 1036—A.D. 980.
		Sheikh Shah, from Ghazni.	Krishna Rája.
1037		Dharma Rája Soud, Vizir during minority of	Vaira Sinha.
1057		'Alá-ud-dín, who put him to death.	Siyaka.
		Kemal-ud-dín, murdered by	Amoghavasra, or Vak-
1069		Jitpál Chohán (Jaya Sinh of Dihlí and Lahore? 977) a descendant of Manikya Rai?	pati, otherwise Val-
			labhanareudra.
1089		Harachandra.	
1109		Keyratchand.	
1111		Oogerscin.	
1124		Surajnanda.	
1136		Tipperscin, or Beersén, dispossessed by	
1146		Jelal-ud-dín, an Afghán.	
1168		Álam Sháh, killed in battle by	
1192		Kerakson, son of Beersén, emigrated to Kámrup, married the king's daughter, succeeded to the kingdom, and regained Málwá.	

		Ujjain Inscription.	(The Astrgarh Inscription furnishes the following names. <sup>1</sup> )
		Bhoja deva.	Hari-varman.
		Udayáditya.	Aditya-varman.
		Naravarma.	Isvara-varman.
		Yašovarma, A.D. 1137.	(born of Ari-
		Jayavarma deva, 1143.	kári, eldest
		Lakhan, or Laksh-	daughter of the
		mivarma deva, a	Gupta race.)
		second son of	Sinha-varman.
		Yašo, A.D. 1144?	Kharva-varman.
1200	Narbahen <sup>2</sup>	Ajayavarma, A.D. 1143.	
		Vindhayavarma.	
		Amushyáyana.	
		Subhatavarma.	
		Arjuna, A.D. 1210.	

<sup>1</sup> Undated. See 'Jour. As. Soc. Beng.' vol. v. p. 482.

<sup>2</sup> Piplianagar, in Bhopál (Shujálpur) copper plates, dated Samvat 1267, 'Jour. As. Soc. Beng.', vol. v., p. 380:—'An inscription on a Tamba Patra found in the village of Piplianagar, in the Shujálpur Perganah, by L. Wilkinson, Esq., Political Agent, who says, in a letter to the Editor, 'I owe you many apologies for the delay which has transpired in forwarding to you copies and translations of the three remaining Tamba patras found at Piplianagar in 1836. I have now the pleasure to forward a copy and translation of the oldest dated in Samvat 1235. It seems to throw some doubt on the course of succession that appeared to you to have been rendered plain and clear, for eight generations, by the inscription dated Samvat 1267 before submitted to you. That inscription states that Jayavarma was succeeded on the gaddí of Mandap (or Mandu) by his son Vindhyavarma, and he by his son Amushyáyana, and he again by Subhasavarma, and this last Rája by his son Arjuna; whilst this states that Harischandra succeeded Rája Jayavarma, and adds, moreover, in the last verse, that he was the son of Lakshmivarma. This discrepancy may be reconciled by supposing that Rája Harischandra was only a prince of the royal family, and as such became possessed of an appanage and not of the whole kingdom; and the fact that Nilagiri, and not Mandap, was his capital, seems to confirm this supposition, supported as it also is by the title of Mahá Kumára, or prince, given to him. I was about to add translations also of the other two inscriptions; but finding that they both correspond, word for word, with that formerly sent to you in all respects but the dates, which are later—the one only by three and the other only by five years—than that of the former inscription, and that they both record grants by the same Rája Arjuna, translations of them would be but an idle repetition. I enclose, however, copies of both, which

- A.D. 1220 Birsal.  
 1236 Purenmall.  
 1268 Harnand.  
 1330 Sakat Sinh, killed by Bahádur Sháh, King of Dakhan.  
 (On the division of the Dibli monarchy on Ghíásuddín Tughlak Sháh II's death.)  
 1390 Diláwar Khán Ghorí, viceroy of Málwá, assumed sovereignty.  
 (See Mussalman Dynasties.)—'Ayin-i-Akbarí,' vol. ii. p. 57.

[The inscription on a temple at Oudayapúr, taken by Captain Burt in 1838, claims notice in this place, on account of its supplying us with evidence of the existence, and continued currency for more than four centuries, of an era designated by the name of Udayáditya. The nominal roll of the princes associated with this monumental record does not satisfactorily fall in with the traditionary list of the Mahá-rájas of Málwá; but this need not affect the authenticity of the one or the other, as the provincial dignities, of which the inscription is an exponent, were usually treated *en seigneur*, whatever title to real power or supremacy the local ruler might chance to possess.

- 1 Suravira (of the Pávára line).
- 2 Gondala.
- 3 Arevalamathana (went to Malava and recovered his former kingdom of Madhya desa, and 'caused this sacred and divine temple to be erected' . . . in the year of the Vikramáditya *Samvat* 1116, corresponding with the Saka year 981, in the Kaliyuga 4160, and in the same of Udayáditya 446.)
- 4 Sáliváhana.—'Jour. As. Soc., Bèng.', vol. ix. p. 548.]

TABLE XXVI.—*Sauráshtra (Surát and Gujarát). Capital, Balabhi-pura. The Balabhi, Balhara, or Bala-rai Dynasty.*

The Jain chronicles of Jai-sinha, consulted by Colonel Tod, trace the ancestry of Keneksen, the founder of the Méwar family, up to Sumitra, the fifty-sixth descendant from Ráma (*vide* the Surya-vansa list). Solar worship prevailed, afterwards the Jain.—[Tod, vol. i. pp. 231, etc.]

A.D. 0?	Maharita, follows Sumitra, Tod.	Names according to grants dug up in Gujarát.—Wathen.
	Antarita.	
	Achálisena,	Senapati, { Bhatárka. A.D. 144–190. Dharasena.
144	Kanaksena, emigrates to Sauráshtra (vol. i. p. 216). Mahá Madan Sén,	Maharája, { Dronasinha. Dhruvasena I. Dharapatta.

you may place on record, if you can afford to spare a space for them in your journal.—*Sehore, 27th August, 1838.* See also 'Jour. As. Soc. Bèng.', vol. vii., p. 736.—[Another Nagpur inscription, translated and collated with kindred documents by Ball Gungadhar Shashtri supplies the following list:—1. Vairi Sinha; 2. Bhimaka (his son); 3. Rája Rája, or Bhoja Rája (his son); 4. Bhadra Rája; 5. Bhoja deva; 6. Udayáditya; 7. Lakshmi dhara; 8. Nara Varma deva (A.D. 1105); 9. Yaço Varma deva (A.D. 1137); 10. Jaya Varma deva; 11. Lakshmi Varma deva; 12. Vindhya Varma (son of Ajaya Varma); 13. Harischandra (A.D. 1179); 14. Amushayana; 15. Subhása Varma; 16. Arjuna (his son, A.D. 1211).] 'Jour. Bomb. B. Roy. As. Soc.', vol. i. p. 263.

<sup>1</sup> [See *ante*, vol. i. p. 256. See also 'Jour. Bomb. B. Roy. As. Soc.' vol. iii. p. 215.—The Rev. P. Anderson has examined the nominal series obtained from previously published grants of this family, and tested them by the aid of new inscriptions. His

A.D.

Names according to grants dug up in  
Gujarat.—Wathen.

318	Sudentu, Vijya, or Ajyasena, founded the } Balabhi era, Tod. <sup>1</sup> }	Grihasena. Sri-dhara Sena, 319. Silāditya I. Charagriha, I. Sridharasena, II. Dhruvasēna, II. Sridharasēna, III. Silāditya, II. (three names obliterated). Charagriha, II.
523	Silāditya, killed, and Balabhi de- } stroyed by the Parthians, 524. }	523 Silāditya, III. 559 Silāditya Musalli, IV.

ORIGIN OF GEHLOTE, GRAHALOTE, OR SESODIA TRIBE OF SURYA-VANSIS.<sup>2</sup>

	Kaiswa, Goha, or Grahāditya, posthumous son of Silādityu, born in Bhandar forest.	Names inscribed on Aspur marble, Tod.
	Nagāditya, of Bhandar.	
	Bhagāditya.	
	Devāditya.	
	Assaditya, founded Aspur in Mewar.	
	Khalbhaja.	
713	Grahāditya (others make Nagāditya), father of Buph, or Bappa, seized Chitor, from Mori tribe, A.D. 727, and founded the Gohila or Gehlote, dynasty of Mewar.	

(Continued in Table XXVIII.)

[I extract the following summary of dates, forming the *résumé* of Dr. Stevenson's remarks upon his translations of the Western Cave Inscriptions, published in the 'Jour. Bom. Br. Roy. As. Soc.' vol. v., without in any way pledging myself for its accuracy; indeed, it will have been seen that Dr. Stevenson and myself differ notably in our ideas of the correct epochs of two of the leading dynasties of India; but for this very reason I am the more anxious to allow him to speak for himself in as much of detail as my space will permit me to concede to reasoning that I so far deny myself the opportunity of contesting.—E.T.]

"I shall now conclude this paper with a short summary of the chief events mentioned in the Sahyādrī inscriptions, in chronological order. . . The dates which have

observations, to the following effect, are merely important in the correction of the orthography of names and titles:—'In the Bengal Society's list, the 7th, 10th, and 12th of these kings are called Śrī Dhara sena, but in both the plates now before me the names are precisely the same as the second, *i.e.*, Dhara sena, with the addition of Śrī, which is common to all the kings. Moreover Śilāditya is said in the 'Bengal Journal' to be surnamed Kramāditya. . . The surname is clearly written on plate ii. Dharmāditya. Three of the other kings are not Dhuruva, but Dhruva sena.'—'Bomb. Jour.' vol. iii. p. 216.]

<sup>1</sup> This and the Sri-dharasena of the adjoining list, fixed upon as the founders of the Balabhi era or samvat, may probably be the Suraka of the Purāṇas, mentioned as a Vikramāditya to mount the throne An. Kal. Yug. 3290, or A.D. 191 or 291 ('As. Res.' vol. ix. pp. 135, 203), Wilford. Many legends related by him of the Aditya, belonging to this dynasty.

<sup>2</sup> The Persian historians make Noshizād, son of Noshirvān,<sup>3</sup> or Maha Band, daughter of Yazdijird, the origin of the Sesodia race of Mewar, 531.

not been ascertained from inscriptions, but merely made out by calculation, are marked with an interrogation.

R.C.  
200.(?)—A cave was excavated, and an alms-house established in it, on the top of the Náná Ghát, by an Emperor of India, probably Āsoka, the first Buddhist Emperor.

70.(?)—The Great Cave Temple at Kārlen was formed by the Emperor Devabhūti, under the superintendence of Xenocrates, (धनुकाकटा or धीनुकाकटि) a Greek.

65.(?)—A small cave was excavated at Kānheri by the same Xenocrates, in which a supposed tooth of Buddha was deposited, till it was removed to an adjoining tope, as mentioned below.

23.(?)—The expedition of the constructors of the cave mentioned below into Malabar, to quell an insurrection there, took place.

22.(?)—The central or Satrap cave at Nāsik was excavated by Ushavadatta, son-in-law of the Satrap Nahapāna, of the Parthian monarch Kshaharāta (Phrahates?).

20.(?)—Lands were given to the monks at Junir, who dwelt in the third series of southern caves, by several individuals, and especially by Ś'isuka, called there Ś'risuka, the first Andhrabhṛitya sovereign, while he was yet only prime minister.

15.(?)—The Great Temple Cave at Kānheri was probably excavated by the same monarch, after he ascended the throne. The name given him above is that of the Matsya Purāṇ; here he receives the name of Balin, that given in the Bhāgavat.

A.D.  
189.—A tope or mound was constructed at Kānheri to contain the tooth of Buddha, mentioned above, and also in honour of a celebrated Buddhist devotee, by Pushyavarman, who was connected with the Andhra royal family.

N.B.—This is the tope opened by Dr. Bird in 1839, and which contained a plate with the date on it.

326.—The village of Karanja, on the Ghāts, was made over to the monks at Kārlen by the two great military commanders, who, in the struggles between the regal Satraps and Magadh Emperors, had most likely wrested the adjacent territory from the former and afterwards resigned it to the latter. About the same time, also, the image of Buddha, on the left of the entrance, where these inscriptions are found, was probably executed.

337.—The large cave most to the left of those that contain inscriptions at Nāsik was excavated at the command of the queen of Gautami-putra, described as lord paramount of India and Ceylon, and who had established in his capital a college for Brahmanical and another for Buddhist science, an institution for teaching archery, and a hospital.

N.B.—Reasons have been adduced to show that the era mentioned in this inscription is the Balabhi, and that it was established in commemoration of the overthrow of the Græco-Parthian empire in Western India, by the united forces of the Magadh Emperor and the Balabhi Commander-in-Chief, who rebelled against his sovereign, the reigning royal Satrap, and rendered himself independent. These Satraps had, in all probability, reigned for a long time in their own right, and had prefixed the title regal to their former appellation to point this out. The latest date on any of their coins is Samvat 390, or A.D. 333; for I think, from the form of the letters, that the era must be the common Samvat. We have, then, only to suppose that on the Indus their government subsisted fourteen years after it was overthrown in Gujarāt, as the Balabhi era commences with A.D. 319. In accordance with this supposition, none of the 400 regal Satrap coins that were found at Junir in 1846 belong to the two last Satraps. The vaunting, too, of Rudra Dāma, the last of them but one, on the Gīrnār inscription.

A.D.

over the Sât Karni ruler of the Dakhan, our Ándhra monarch, could refer only to some partial success preceding the final catastrophe, as we usually find people boast most when hardest pressed. From our inscriptions it is evident that the hills in which the caves are excavated were sometimes in possession of the one and sometimes of the other party.

342.—The monastery cave at Kárlen was excavated by a mendicant devotee.

410.(?)—Buddaghosha, the author of the Páli work called in Ceylon the 'Atthakatha,' and the Buddhist apostle of the Burman peninsula, set up a middle-sized image of Buddha on the right porch of the Great Temple Cave at Kánheri.

428.(?)—During the reign of the Ándhra monarch Yadnya S'ri Sât Karni, who is mentioned in the annals of China as having sent ambassadors there, a nephew and other relations of his set up the two colossal images on each side of the porch of the same great cave, and at the same time a village was given to the monks.

430.(?)—Other relations of the same Emperor established an alms-house in connection with a cave at Kánheri.

431.(?)—Others of the royal family established a refectory in connection with another cave there.

433.(?)—A monastery cave was excavated at Násik by command of the wife of the commander-in-chief of the same Emperor.

460.(?)—A temple cave at Kuden (Korah), in the Concan, was excavated by the Secretary of the Chief of Salsette, who seems to have exercised authority over a considerable adjoining district of country.

N.B.—The above-mentioned works are all that appear to me to derive from the inscriptions probable indications of the period about which they were executed, whether by means of the dates or the names they contain. The time when the others were engraved can only be guessed at from the style of the letters; but none seem to me to have been inscribed on the Sahyádrí rocks at a later period than that last mentioned, and certainly none earlier than the first date here given, bringing them all within the two centuries preceding and the five succeeding the Christian era, during which time Buddhism flourished in Western India, while the modern Hindú system was silently moulding itself into its present form and preparing to take the place, at a somewhat later period, of the religion of Buddha, and to exhibit that compound of Vedic pantheism, Buddhistical tenderness for animal life, and indigénal superstition that is now current in India. During, however, the whole period of Buddhist ascendancy, Brahmáns existed, studied their literature, had their holy places, and performed those of their rites that could be performed in private. The common people also worshipped Krishna, Bhaváni, and S'iva, as local gods, in particular districts. The travels of the Chinese Fa Hian show that, at the beginning of the fifth century, Buddhism prevailed throughout India; and those of Whang Tshang show that this was still the case in the beginning of the seventh century. An inscription, of date A.D. 657, originally affixed to a Buddhist temple near Nagpore, shows that it still prevailed in the East at that period ('Jour. Bom. Roy. As. Soc.,' vol. i., p. 150.) It is to be noticed here, also, that there is a discrepancy of 42 years between the date A.D. 342 and A.D. 428."

TABLE XXVII.—*Gujarát. Capital Patan. The Anhulodra Dynasty, a reiteration of the dynasty of the Balháras.*

'Ayn Akbari' list collated with that of the 'Agní Purána,' of Wilford.

S.	A.D.	
	696	Saila-deva, living in retirement at Ujjain, found and educated.
802	745	Banarája, son of Samanta Sinh (Chohan), who founded Anhulpur (Nerwaleh or Patan), called after Anala Chohan, A. A.

		Chowra Dynasty of Anhilipoor.	
		A.D.	
		746	1. Wura Rāj, son of Jye Sheker.
806 Jagarāja .....	} Bhunda-deva, Wd.	806	2. Yog Rāj.
841 Bhīma Rājā....		841	3. Kshem Rāj.
866 Bheur .....		866	4. Bhooyud.
895 Behirsinh .....		895	5. Vair Sing.
920 Reshadat .....		920	6. Rutnāditya.
935 Samanta .....	} From the 'Ayin Akbari. Rāja Aditya, W. Daughter, married son of Dihlī Rāja: Bhunda, W.	935	7. Samunt Singh.
		942	Mool Rāj Solunkhee.— 'Rās Māla.'—London, 1856.

## RĀJAS OF THE SOLANKHI TRIBE.

- 910 W. Mula Rāja, usurped the throne.<sup>1</sup>  
 1025 Chamund, invaded by Sultān Mahmūd (Samanta, W.)  
 1038 Vallabha (Beyser, or Bisela, 'Ay. Ak'), ancient line restored.  
 1039 Durlabha (Dabisalima, F.), usurped the throne.  
 1050 Bhīma rāja.  
 Kāladeva (Karan, 'A. A. '), Carna-rajendra, or Visala-deva, Wd., who became Paramount Sovereign of Dihlī (see p. 247).  
 1094 Siddha, or Jayasinh, an usurper (Tod, vol. i. p. 98).  
 Kumārapāla, poisoned.  
 Ajayapala, son of Jayasinha.

## SOLUNKHEE DYNASTY.

List of the successors of Mool Rāj, from a copper-plate inscription, dated Samvat 1266 (A.D. 1210), found at Ahmadābād.

- 1 Mool Rāj dev.
  - 2 Chāmoond Rāj dev.
  - 3 Doorlubh Rāj dev.
  - 4 Bheem dev.
  - 5 Kurun dev.
  - 6 Jye Singh dev.
  - 7 Koomār Pāl dev.
  - 8 Ujje Pāl dev.
  - 9 Mool Rāj dev.
  - 10 Bheem dev.
- 'Rās Māla.'

## THE BHĀGELA TRIBE.

- Mūla (Lakhmul, 'A. A. '), Lakhan-rya, W. without issue.  
 Birdmūla, } Baluca-mūla, Wd.  
 Beildeva, } of Bhāgela tribe.  
 1209 W. Bhīma Deva, or Bhala Bhīma Deva, same as the last, Wd.  
 1250 Arjun deva, }  
 1260 Saranga deva, } 'Ay. Ak.'  
 1281 Karan, } Carna the Gohilā, fled to the Dakhan, when in the year  
 1309 Gujārāt was annexed to Dihlī by 'Alā-ud-din Muhammad Shāh.

TABLE XXVIII.—*Rānas of Mewār. Capitals Chitōr, Udayapur.*

(Continued from Table XXVI.)

After the destruction of the Balhāra monarchy of Saurāshtra, and two centuries' sojourn of the family in the Bhandar desert, Baph or Bappa conquered Chitor, and founded a new dynasty in A.D. 727. The hereditary title was changed from Gehlote to Aditya.

Wilson's Hist.		Tod, from Aitpur inscription (dated Samvat 1084, vol. i. p. 802).	
750	Guhila .....	1.	Sri Gohadit, founder of Gohila (Gehlote) tribe.
	Bhoja .....	2.	Bhoja (Bhagaditya?)
		3.	Mahendra.
		4.	Naga (Nāgāditya).
		5.	Syela.
		6.	Aprajit (compare with Table XXVI.)
		7.	Mahendra.

<sup>1</sup> See also 'Ayin-i-Akbari,' vol. ii. p. 74, *et seq.*; Elliot, 'Jour. Roy. As. Soc.', vol. iv. p. 1.

- Wilson's list. Tod, from Aitpur inscription (dated Samvat 1084, vol. i. p. 808).
- Kalabhoja ... 8. Kalabhoja.  
 Bhartribhata... 9. Khoman, invasion of Chitor from Kábul 812 A.D.  
 Samahayika... Mangal, expelled by chiefs.  
 Khuman ..... 10. Bhirtripad, founded thirteen principalities for his sons in Málwá and Gujarát.  
 11. Singhji, whose Rání, Lakshmi, bore  
 Alláta ..... 12. Sri Allat, whose daughter Haria devi was grandmother of Naravahana... 13. Nirvahana.  
 14. Salvahana.  
 967 Saktivarma ... 15. Saktikumar, resided at Aitpur, 967, or 1068? Tod, vol. i. pp. 243, 803.  
 Suchivarma ... Umba Passa.  
 977 Naravarma ... Narvarma, cotemporary with Subuktigin.  
 1027 Kirttivarma... Yasovarma, do. with Mahmúd. Aitpur destroyed.  
 Vairi Sinh, (Vira Sinha deva of Kanauj? See Bengal.)  
 Vijaya Sinh.  
 Ari Sinh.  
 Vikrama Sinh.  
 Sámanta Sinh, 1209, W.  
 Kumara Sinh.  
 Mathana Sinh.  
 Padma Sinh.  
 Jaitra Sinh.  
 Tej Sinh.  
 1165? Samara Sinh, (Samarsi, T.) born 1149; marries Prithi Rái's daughter.  
 1192 Kerna, or Káran, his son—  
 1200 Rahup,—attacked by Shams ud dín, 1200.  
 Nine princes, occupying fifty years, engaged in crusades, to recover Gayá from the infidels (Buddhists), T.  
 Bhonsi, recovers Chitor.  
 1274 Lakshman Sinh (Lakumsi, T.), married Ceylon princess.  
 1289 " " (Ramdeo of Ferishta.) Chitor sacked by 'Alá-ud-dín, (1305, F.)  
 Ajaya Sinh (Ajaysi, T.), resided at Kailwarra.  
 1300 Hamíra, son of Úrsi, recovered Chitor.  
 1364 Khait Sinh (Khaitsi, T.), captured Ajmír.  
 1372 Laksha Rána (Lakha Rána, T.), rebuilds temples. Expedition to Gayá.  
 1397 Mokulji, suppliants rightful heir Chonda.  
 1418 Khumbo (Kumbho, T. Gownho, 'A. A.'), defeats Mahmúd of Málwá; pillar raised in commemoration at Chitor, Tod, 1439, vol. i. p. 286; vol. ii. p. 761.  
 1468 Oda, murders his father, and is killed by lightning.  
 1473 Raemal, repels invasion of Dihli monarch Lodi.  
 1508 Sanga, Singram, or Sinka, the *Kalash* or pinnacle of Mewár glory; successfully resists Bábar at Biána, 1526.  
 1529 Ratna, fell in duel with Bundi Rája.  
 1532 Bikramajit, his brother. Second sack of Chitor by Bahádur of Gujarát; recovered by Hamáyún.  
 Banbir, the bastard, raised to throne by Rájputs.  
 1540 Udaya Sinh (Oody Sing), third sack of Chitor, 1580, by Akbar.  
 1583 Pertáp (Rána), reverses at Udipur and Kumalnfr.  
 1596 Amera (Umra), succeeds, recovers the ruined capital; defeats Abdullah Jan. 1610; makes peace with Jahángir.  
 1620 Kerna (Kurn), last independent Rája; embellished Udipur.  
 1627 Jagat Sinh, tributary to Sháh Jahan; peaceful reign.  
 1663 Ráj Sinh, embanked Lake Rájsamundra.  
 1680 Jay Sinh, forms the Lake Jay-samund.  
 1699 Amera, II. triple alliance with Márwár and Amber, S. 1758.  
 1715 Sangrám Sinh; the *jizyah* tax abolished.  
 1738 Jagat Sinh II. pays chouth to Mahrattas.  
 1751 Pertáp, II.  
 1754 Ráj Sinh II., country desolated by Mahrattas.



- 1761 Arsi, his uncle, Zalim Sinh's rise.  
 1771 Hamira, a minor.  
 1777 Bhim Sinh, his brother. Holkar and Sindia overrun Mewar. Marriage feud of Jaypur and Jodhpur. Kishna Kumār poisoned, and the race of Bappa Rāwāl extinguished, all but  
 1828 Jewan (Javan) Sinh, the only surviving son.

TABLE XXIX.—*Rahtor Dynasty of Kanauj, afterwards continued in Mārwar, or Jodhpur.*

From Tod's genealogical rolls of the Rahtors, preserved by the Jains, vol. ii. pp. 5-7.

- A.D. (After the usual Theogony.)  
 300? Yavanasva, prince of Parlipur? supposed of Indo-Scythic origin.  
 390 Basdeo (Vasudeva<sup>1</sup>), revives Kanauj dynasty; his daughter marries } Forishtah.  
     Bahram Sassan, of Persia.  
 450 Ramdeo, fixed in Mārwar—tributary to Feroz Sassan.  
 469 Nayana Pāla, conquers Ajipāla of Kanauj—hence called Kāma dhvaja.  
     Padārat or Bharata, king of Kanauj.  
     Punja, his son.  
 570? Dherma Bhumbo, his descendants called Dhānesra Camdhaj (for twenty-one generations bore the name of Rao, afterwards Rāja.)  
     Aji Chandra.

	From inscriptions. <sup>2</sup>	Fyzābād Copper Plate, J. A. S. B., vol. x. p. 98, dated S. 1220 = A.D. 1187.	From coins, old series. <sup>4</sup>
Udaya-chandra. Nirpati.			Aparajitadhajaparakrama. Apatirurha. Kragiptapara-shuja? Sri Vikrama. Chandragupta. Samudragupta. Kumārāgupta. Vikrama Nārendragupta.
Kenckséna (see Mālwa 400; Sehesra-sāla. Mēghasēva. Virabhadra.	Gupta. Ghatotkacha. Chandragupta. Samudragupta. .....a son.		Sasigupta? Asvamedhaparakrama.
Deosen. Vimalasena.			New series.
Dānasen. Mokunda. Bhadu	700? Yasovigraha or Sripāla. Mahichandra.	1 Yasovigraha. 2 Mahi Chandra.	
1016 Kora or Chand- pāl, F. Rājser. Tripāla. Sri Punja. (Vira Sinhā), see Bengal.	1072 Chandra deva, conq. Kanauj. 1096 Madana Pāla. 1120 Govinda Chan- dra. 1144 Vijaya Chandra. 1163 Jaya Chandra, died, 1193.	3 Chandra deva. <sup>3</sup> 4 Madana pāla. 5 Govinda Chan- dra. 6 Vijaya Chandra. 7 Jaya Chandra.	Mahīpāla deva. Kumārāpāla deva. Govinda Chandra. Jadjeya deva. Ajaya deva.
712 (Yass varman), see tab. xxii. 900 (Sābasanka), see 'Vis. Prak.' Vijayachandra. 1169 Jaya Chandra, (Dal. Pangla).			

<sup>1</sup> Wilford names this prince Sadāpāla, or Sadasvapala, 'As. Res.', vol. ix. p. 211.

<sup>2</sup> See Essays, vol. i. pp.

<sup>3</sup> 'Who was also very learned, king of kings, etc., and who gained the kingdom of Kanaya Kubja by the power of his arms.'

<sup>4</sup> [See vol. i. pp. 288, etc.; 'Ayin-i-Akbari,' vol. i. p. 80.]

TABLE XXX.—*Márwár or Jodhpur. Continuation of ditto.*

- 1210 Sivaji, grandson of Jayachandra, settled in the desert, Kher.  
 Ashtama (Asothama T.)  
 Doohar, T. Dula Rai, W. made an attempt on Kanauj and Mandor.  
 Raipál.  
 Kanhul.  
 Jalhun.  
 Chado.  
 Theedo.  
 Siluk or Silko (origin of the Silkáwats or Bhomeás).  
 Biramdeva.
- 1381 Chonda, assaulted Mandor, and made it his capital.  
 1408 Rinmal, of Gohila mother, made pilgrimage to Gaya.  
 1427 Rao Joda and twenty-three brothers had separate fiefs.  
 1458 " " founded Jodhpur, and removed from Mandor.  
 1488 Rao Sújoh, or Surajmal; rape of Rahtor virgins by Patháns.  
 1515 Rao Ganga  
 1531 Rao Maldeo becomes chief Rája of Rájputs; fortifies capital.  
 1568 " " sends his son as hostage to Akbar; marriage alliance.  
 1583 Udaya Sinh; Chandra Sinh, upheld by clans, installed by Akbar.  
 1594 Soor Sinh; named Siwai Rája, a general in Moghul armies.  
 1619 Rája Gaj Sinh slain in Gujarát.  
 1637 Jeswant Sinh, died in Kábul.  
 1680 Ajit Sinh, posthumous. Rahtor conflict at Delhi, 4th July, 1679 (7th Sravan, S. 1716); thirty years' war against empire. Murdered by his son
- 1724 Abhay Sinh; entitled Mahárája Rájeswar, 1728.  
 1749 Rám Sinh, son, defeated by his uncle,  
 1749 Bakht Sinh, who was poisoned in 1752.  
 1752 Vijaya Sinh (Beejy Sinh) disputed possession with Rám Sinh.  
 1793 Bhim Sinh usurps throne on his grandfather's death, by defeat of Zálím Siph.  
 1803 Mán Sinh. Feud for Kishna Kumári, the Udípur princess.

TABLE XXXI.—*The Bikaner Ráj, a scion of Jodhpur.*

- 1458 Bika, son of Joda, settled in the Jit country.  
 1494 Nunkarna.  
 1512 Jaet.  
 1546 Kalián Sinh.  
 1573 Ráy Sinh.  
 1631 Karna Sinh.  
 1673 Anop Sinh.  
 1708 Sarup Sinh.  
 Súján Sinh.
- 1736 Zuráwar Sinh.  
 1745 Gaj Sinh.  
 1786 Ráj Sinh, poisoned in thirteen days by  
 1788 Surat Sinh, regent, who usurped the throne.  
 1799 " vanquished Surtan Sinh and Ajib Sinh.  
 1804 " annexed Bhatner to his dominions.

TABLE XXXII.—*Rámas of Amber or Dhund'hár. Capital Jaypur.*

- The Cuchwáha race of Rájputs claims descent from Cush, second son of Ráma, king of Ayodhya, who migrated and built the fort of Rotás, on the Sone.
- 294 Rája Nala, founded Narwar or Nishida.  
 Thirty-two princes—having the affix, Pála.
- 965 Sura Sinh.  
 966 Dhola (Dula) Rai, expelled from Narwar, founded Dhund'hár dynasty.  
 Kankul.

- Maidul Rao, took Amber from the Meenas.  
 Hundeo.  
 Kuntal.
- 1186 Pujandevā (Pajun), married daughter of Prithī Rāja.  
 Malesi  
 Bijal.  
 Rājdeo (Sahirdeva? of Narwar, defeated by Mahmūd II. 1251, F.)  
 Kīlan.  
 Kontal.  
 Junsi.  
 Udayakarna—his son, Baloji, obtained Amritsir, called Shekhāvat, from his grandson, Shekhji.  
 Nara Sinh.  
 Banbir.  
 Udhārao.  
 Chandrasen.  
 Prithī Rāj, pilgrimage to Dewal on the Indus : murdered by Bhīma, his son.  
 Aiskarn.
- 1550? Baharmal (Puranmal, W.), paid homage to Bābar.  
 1586? Bhagwān Dās, Akbar's general, wedded his daughter to Jehāngir.  
 1592 Mān Sinh, ditto, governor of Bengal, Dakhan, Kābul.  
 1615 Bhao Sinh, died of drinking.  
 1621 Mahā Sinh, ditto.  
 1625? Jaya Sinh, Mirza Rāja, poisoned by his son Kerat.  
 Rām Sinh, reduced to mansab of 4000.  
 Bishen Sinh, ditto 3000.  
 1698 Siwai Jay Sinh, founded Jaypur, published 'Zij Muhamadshāh.'  
 1742 Iswari Sinh.  
 1760 Madhu Sinh.  
 1778 Prithi Sinh, II. minor.  
 1778 Pertāp Sinh.  
 1803 Jagat Sinh, an effeminate prince, died without issue.  
 1818 Jay Sinh, III. posthumous, believed supposititious.

[It is somewhat difficult to decide where each series of inscription princes, often of most circumscribed local power, may most fitly be inserted in the general list; under the claims of caste, the subjoined sovereigns should be classed with the Chohāns of Ajmīr; and, under the geographical aspect again, their position might be determined by any one of the contiguous principalities by which the modern clump of Shekāvātī states is bounded. I have made them follow Jaypur, as to that kingdom they now belong.

*Inscription on the Temple of Sri Harsha Shekdwati. Samvat 1030.*

- |                    |                                   |
|--------------------|-----------------------------------|
| 1. Gūvaka, Chohān. | 5. Vākpati.                       |
| 2. Chandra rāja.   | 6. Sinha rāja, 961 A.D.           |
| 3. Gūvaka.         | 7. Vīgraha rāja, of another race, |
| 4. Chandana.       | A.D. 973.                         |
- 'Jour. As. Soc. Beng.,' vol. iv., p. 367.]

#### TABLE XXXIII.—*Raos of Jesalmer.*

Dynasty of the Bhattis, a branch of the Yadu race of the Chandra Vansa, Tod.

- Nāba, fled from Dwarica to Marusthāl—(Bhāgavat).  
 Prithibāhu—Khīra—Jud-bhān (from Bhatti chroniclers).  
 Bāhu-bāl, espoused daughter of Vijaya Sinh, Mālwa.  
 Bāhu, killed by a fall from his horse.

- Sdbahn, poisoned by his wife, daughter of the Ajmír Rája, Mund.  
Rijh married daughter of Ber Sinh of Málwá; invasion of Farid Sháh.  
B.C. 94? Rája Gaja, invaded Kandrupkél, in Kashmir.  
A.D. 15? Salbahan, fifteen sons, all Rájas, conquered Panjáb, expelled from Kábul.  
Báland, invaded by Turks—his grandson, Chakito, source of Chakit tribe.  
Kullur, eight sons, all became Mussalmans.  
Jinj, seven ditto.  
Bhatti, court at Lahor, gave name to family.  
Mangal Rao, expelled by king of Ghazni—settled in Mér.  
Majam Rao, his son—  
730 Kehur, invaded by the Barahas, 787, A.D. 731.  
733 Tanno, erected Bijnót.  
813 Biji Rae, continual feuds with the Langas, till 1474. Title Rao exchanged for Rawul.  
Deoraj, excavated several lakes, one at Tunnot.  
Munda.  
1008 Bachera, tributary to Anandapál of Delhi; invaded by Mahmúd.  
1043 Dusaj.  
Bhojdeo conspired against and killed by his uncle.  
1155 Jesal, slain in defending Lodorva. Removed capital to Jesalmér,  
1167 Salivahan II., throne usurped by his son, Bijnl.  
1200 Kailun, elder brother, repelled the Khán of Baloch.  
1218 Chachik Deo, extirpated Chunna Rájputs.  
1250 Karan, repelled Muzaffer Khán.  
1270 Lakhan Sinh, an idiot, replaced by his son.  
1275 Pánpál, dethroned by nobles.  
1275 Jaetsi, recalled from Gujarát—defended fort for eight years.  
1293 Mulráj III., great sack of Jesalmér by Mabúl Khán, 1294.  
Dúdú, elected Ráwul, second sack and immolation.  
1306 Gursi re-establishes Jesalmér.  
Kéhar, adopted; feuds.  
Rao Kailan, or Kerore, conquered to the Indus—lived to 80.  
Chachik Deo, fixed capital at Marote; continued feuds.  
1473 Bersi, conquest of Multán by Bábar.  
Sabal Sinh, Jesalmér becomes a fief of empire, under Ráwuls Jait, Nunkarn,  
Bhím, Manohar Das; conversion of Bhattis.  
Umra Sinh, predatory incursions.  
1701 Jeswant, alliance with Mewár—end of Bhatti chronicle.  
1622 Akhi Sinh, Sarúp Sinh minister potential.  
1761 Mulrája, ditto.  
1820 Gaj Sinh, ditto, under British protection.

[Although the dynasty of the Gurha Mundala Rájas can scarcely claim much prominence amid the sovereignties of the larger Indian states, yet the central position of their seat of government, and the fullness of the detail of names, render it possible that their annals may tend to throw a light upon the still obscure contemporaneous history of proximate lands.]

*History of the Gurha Mundala Rájas. By the late Col. Sir W. H. Sleeman, formerly Commissioner for the suppression of Thuggee in the Norbudda Provinces.*

The dominions of the Gurha Mundala sovereigns extended before the death of Sungrám Sá, in the year A.D. 1530, over fifty-two districts, containing each from three hundred and fifty to seven hundred and fifty villages, and, collectively, no less than thirty-two thousand two hundred and eighty. But the greater part of these districts were added to their dominions by the conquests of that prince.

These princes trace back their origin in the person of Jadoo Rae to the year Samvat, 415, or A.D. 358, when, by the death of his father-in-law, the Gond Rája Nagdeo, he succeeded to the throne of Gurha. Mundala was added to their dominion by Gopál Sá, the tenth in descent from that prince, about the year A.D. 634, in the conquest of the district of Marroogurh from the Gond chiefs, who had succeeded to the ancient Haihaibunsi sovereigns of Rutunpore and Lahnjee. That this ancient family of Rájputs, who still reign at these places, reigned over Mundala up to the year A.D. 144 or Samvat, 201, was ascertained from an inscription in copper dug up during the reign of Nizám Sá (A.D. 1749) in the village of Dearee in the vicinity of that place. This inscription was in Sanskrit upon a copper plate of about two feet square, and purported to convey, as a free religious gift from a sovereign of the Haihaibunsi family, the village of Dearee in which it was found, to Deodatt, a Bráhmaṇ, and his heirs for ever. The plate was preserved in the palace with the greatest care up to the year 1780, when it was lost in the pillage of the place, and all search for it has since proved fruitless. There are, however, several highly respectable men still living who often saw it, and have a perfectly distinct recollection of its contents. How and when the Gonds succeeded this family in the sovereignty of Mundala we are never likely to learn; nor would it be very useful to inquire.

This family of Haihaibunsis reigned over Lahnjee, formerly called Chumpanuttu; Rutunpore, formerly called Monopore; Mundala, formerly called Muhikmuttee (Mahikmati); and Sumbulpore (Sambhalpur).

The Gurha Mundala dynasty boast a Rajpoot origin, though they are not recognized to be genuine. Tradition says a soldier of fortune from Kandiesh, Jadoo Rae, entered the service of one of the Haihaibunsi sovereigns of Lahnjee, and accompanied him on a pilgrimage to the source of the Nerbudda at Amurkuntuk, and eventually, in S. 415 = A.D. 358, succeeded the Gond Rája of Gurha.

When Jadoo Rae succeeded his father-in-law on the throne he appointed Surbhce Partuk as his prime minister, and we have some good grounds to believe, what is altogether singular in the history of mankind, that the descendants of the one reigned as sovereigns of the country for a period of fourteen hundred years up to the Saugor conquest in Samvat 1838, or A.D. 1781; and that the descendants of the other held the office and discharged the duties of chief ministers for the same period. Among the sovereigns during this time, there are said to have been fifty generations and sixty-two successions to the throne; and among the ministers only forty generations. This would give to each reign something less than twenty-three years. In 1260 years France had only sixty-three kings, or one every twenty years.<sup>1</sup>

I shall here give a list of the sovereigns, with the number of years each is said to have reigned.<sup>2</sup> This list, as far as the reign of Prem Narrain, the 53rd of this line, is found engraven in Sanskrit upon a stone in a temple built by the son and successor of that prince at Ramnugur, near Mundala. It is said to have been extracted from records to which the compiler, Jyogobind Bajpae, had access; and good grounds to rely on the authenticity of this record for above a thousand years may be found in the inscriptions on the different temples built by the several princes of this house, bearing dates which correspond with it; and in the collateral history

<sup>1</sup> In one hundred and sixty years Rome had no less than seventy Cæsars. In two hundred and fifty years the Mamelukes had in Egypt forty-seven sovereigns; and a reign terminated only with a life. The Goths had in Spain, in three hundred years, thirty-two kings.

<sup>2</sup> We have not altered the system of orthography followed by the author, although at variance with Sir W. Jones' scheme, because there are some names for which we should be at a loss to find the classical equivalents.—J. P.

of the Muhammadans and others who invaded these territories during their reign. The inscription on the stone runs thus: 'Friday, the 29th of Jet, in the year Samvat, 1724 (A.D. 1667), the prince Hirdee Sá reigning, the following is written by Suda Seo, at the dictation of Jygodind Bajpae, and engraved by Singh Sá, Dya Ram, and Bhagi Rutee.'

As an instance which collateral history furnishes in proof of the authenticity of this record, it may be stated that Ferishta places the invasion of Gurha by Asuf in the year Hijra 972, or A.D. 1564; and states that the young prince, Beer Narain, had then attained his eighteenth year. The inscription on the stone would place the death of Dulpot Sá, his father, in Samvat 1605, or A.D. 1548, as it gives 1190 years to the forty-nine reigns, and the first reign commenced in 415. The young prince is stated to have reigned fifteen years, and tradition represents him as three years of age at his father's death. This would make him eighteen precisely, and, added to 1548, would place the invasion 1563 A.D.

	Years.		Years.
1 Jadoo Rae, An. Sam. 415, reigned	5	35 Okur Seyn, his son, reigned	36
2 Madhoo Singh, his son	33	36 Ram Sábee, ditto	24
3 Jugurnáth, ditto	25	37 Tarachund, ditto	34
4 Ragonáth, ditto	64	38 Odee Singh, ditto	15
5 Roder Deo, ditto	28	39 Bhun Mitter, ditto	16
6 Beharee Singh, ditto	31	40 Bhowany Das, ditto	12
7 Nursing Deo, ditto	33	41 Seo Singh, ditto	26
8 Sooruj Bhan, ditto	29	42 Hurnaraen, ditto	6
9 Bús Deo, ditto	18	43 Subul Singh, ditto	29
10 Gopál Sá, ditto	21	44 Raj Singh, ditto	31
11 Bhopál Sá, ditto	10	45 Dadee Rae, ditto	37
12 Gopeenáth, ditto	37	46 Goruk Das, ditto	26
13 Rámehund, ditto	13	47 Arjun Singh, ditto	32
14 Soortan Singh, ditto	29	48 Sungram Sá, ditto	50
15 Hureehur Deo, ditto	17	49 Dulpot Sá, ditto	18
16 Kishun Deo, ditto	14	50 Beernaraen, ditto	15
17 Jugut Sing, ditto	9	51 Chander Sá, his paternal uncle	12
18 Muha Sing, ditto	23	52 Mudkur Sá, his son	20
19 Doorjun Mul, ditto	19	53 Prem Naraen, ditto	11
20 Jeskurun, ditto	36	54 Hirdee Sá, ditto	71
21 Pertapadit, ditto	24	55 Chutter Sá, ditto	7
22 Juschund, ditto	14	56 Kesuree Sá, ditto	3
23 Munohur Singh, ditto	29	57 Nurind Sá, ditto (ob. A.D. 1731)	44 or 54
24 Gobind Singh, ditto	25	58 Mohraj Sá, ditto	11
25 Ramehund, ditto	21	59 Seoraj Sá, ditto (ob. A.D. 1749)	27
26 Kurun, ditto	16	60 Doorjun Sá, ditto	2
27 Rutun Seyn, ditto	21	61 Nizam Sá, his paternal uncle (ob. 1776 A.D.)	27
28 Kumul Nyne, ditto	30	62 Nurhur Sá, his nephew, son of Dhun Singh, brother of Nizam Sá, but of a different mother (ob. 1789)	3
29 Beer Singh, ditto	7	63 Somere Sá, ditto, 9 months (ob. 1804)	
30 Nurhur Deo, ditto	26		
31 Troo Bobun Rae, ditto	28		
32 Prethee Rae, ditto	21		
33 Bharteá Chund, his son	22		
34 Mudun Singh, ditto	20		

At the close of the reign of Sungram Sá the dominion of the Gurha Mundala rájas extended over fifty-two districts, but it is believed that he received from his father only three or four of these districts.

<sup>1</sup> [Invasion by Asuf Khán, the imperial viceroy at Kurha Mánikpúr, in 1564 A.D.]

<sup>2</sup> [Invasion by Balajee Bajee Rao, A.D. 1742. See also Captain Fells' Inscription, As. Res., vol. xv. p. 43.]

[The two inscriptions which follow refer more or less to localities proximate to the site of the country whose history forms the subject of the preceding remarks.]

*Inscription from Khajrao, near Chhatarpur, dated 1019 Samvat=962 A.D.*

1 *Nannuka.	5 Sri harsa.
2 Vag Yati.	6 Yaso-dharma deva.
3 Vijaya.	7 Banga.
4 Vihala.	8 Jaya-varma deva.

This inscription possesses an adventitious interest in the fact, recorded in its text, relative to its having been engraved, 1st, in irregular letters; 2nd, in clear character; and 3rd, 54 years afterwards (S. 1173), re-engraved in *Kakuda* characters.—'Jour. As. Soc. Beng.', vol. viii. p. 160.

*Kumbhi (35 miles N.E. of Jabalpur) Saugor territory: Inscription, S. 932=A.D. 876.*

*Dynasty entitled Kula-Churi.*

1 Yuvá-Rája-deva, a descendant of	4 Karna-deva.
Kartta Viryya, of the race of	5 Yasas Karma-deva.
Bharat.	6 Gaya Karna.
2 Kokalla.	7 Nara Singha.
3 Gangeya-deva.	8 Vijaya Singha.

—'Jour. As. Soc. Beng.', vol. viii. p. 481.

[Mr. Ommanney, in forwarding the Multáye plates, of which the translation is subjoined, prefaces them with a few remarks:—]

There are no such names as Datta Rája,<sup>1</sup> Govinda Rája, Māsawmika Rája,<sup>2</sup> or Nanda Rája, in the catalogue of Garha Mandala Rájās. They may be descendants of Bakht Buland of Deogarh Bálaghát, but it is not probable. It appears that they were Rahtors (Rashtra kuṭas), but still they were called Ghorowa or Gond,<sup>3</sup> which induces me still to think they must have reigned somewhere in these parts. The villages mentioned have not the slightest resemblance in name to any in this district, nor can I discover any at all like them at Hoshangábád or Jubalpur.

[In commenting on Mr. Ommanney's communication, Prinsep adds:—]

One of the most obvious corrections is that of the name on the seal, and in the second line of the third page, where the plate is much worn, viz., Yudhásura in lieu of Yudhástara, which the Sadr Amin apparently supposed a corruption of Yudhish-thira. The first name also read as Datta Rája should be Durgga Rája.

But the most material correction applies to the date, which Mr. Ommanney interprets as Samvat 1630, or A.D. 1573. The alphabetical type at once proves that this supposition is many centuries too modern, nor do I clearly see how the pandit could so far have misled his master in the translation, seeing that the text is read by Mr. Ommanney himself and the pandit *s'ateshu shatkena trimsottareshu*. The

<sup>1</sup> I read this name Durgga Rája.—J. P.

<sup>2</sup> The Sadr Amin reads Māsawmaika Rája; but it is probable that the text should be understood as Srimat-Swámika Rája.—J. P.

<sup>3</sup> The word supposed to be Ghorowa is precisely the same as that on the seal, the surname of the Rája, Yudhásura, the 'hero in battle,' so that the connection with the Gond tribes cannot be thence deduced.—J. P.

obvious meaning of this is six hundred and thirty besides,—just about the period we should have assigned to the writing on comparison with the Gupta and Gujaráti styles. But it is not at all certain that this is the correct reading, or that the era can be assumed to be that of Vikramáditya. The precise letters in modern character are,

शक काले संवत्सरे शतेषु \*\* त्रिंशोत्तारेषु

*Saka kâlê samvatsarê s'ateshu ? ? triṁs'ottarêshu.*

Now, in the first place, the era is here that of Saka or Saliváhana; in the next, after the word *s'ateshu*, hundreds, in the plural number, two unknown characters follow which may be very probably numerals. The second has much resemblance to the modern ८ or eight, but the first is unknown and of a complex form; its central part reminds us of the equally enigmatical numeral in one of the Bhilsa inscriptions. It may, perhaps, designate in a cipher the word *ankê* अङ्के, 'in numerals,' thus purporting 'in the year of Saka, hundreds, numerically eight, and thirty over.' A fertile imagination might again convert the cipher into the word अष्टके, eight, afterwards expressed in figures; but I must leave this curious point for future elucidation, wavering between 630 and 830 for the date of the document, which in either case is of considerable antiquity, and indeed one of the most ancient of such records yet brought to light containing a date.

#### TRANSLATION OF THE MULTÁYE PLATES.

(On the Seal) Sri Yuddhásura (the adopted name of the prince).

Swasti! Sprung of the pleasing lineage of the Rāshṭrakūṭa (Rahtor), like the moon from the ocean of milk, was the Prince Sri Durga Rāja through whose conciliatory conduct to the meritorious, and his vigorous energy, extending his rule to the ocean, secured him the good-will of both parties (his friends and enemies). His son was Govinda Rāja, whose fame was earned in many a battle; from him was born the self-controlling and fortunate Prince Māswamika Rāja, the unrivalled, whose valour is everywhere the theme of song, who never turned his back in battle, and was always victorious. His son is Sri Nanda Rāja, much respected by the pious; handsome, accomplished, humane, faultless, a dreadful avenger (*kāla*) on his enemies; foremost of the aspirants for military renown, chief of the dignified, and prominent among the active and intelligent, the very tree of desire (*kalpa druma*) to the necessitous.

All natural and acquired qualities seek refuge in his virtuous breast, a firm Brāhmana—a firm Bhāgavata<sup>1</sup>—his surname is Sri Yuddhasura<sup>2</sup> (the hero of battle). He hereby proclaims to all his officers, nobles, and the holders of villages, 'Be it known to all of you that we, for the promotion of our father and mother's virtues, consecrating with water, present to Sri Prabha Chaturveda, of the Kautsa tribe, the grandson of Mitra Chaturdeva, and son of Rana Prabha Chaturdeva, the village named Jalau Kuha, bounded on the west by Kinihi-vajāra, on the north by Pipparikā, on the east by Jalukā, and by Ujānagrāma on the south,—on the full moon of the month of Kartika.

Let this gift be held unobjectionable and inviolate by our own posterity, and by princes of other lines. Should any whose mind is blinded with ignorance take it away, or be accessory to its resumption by others, he will be guilty of the five great sins.

It is declared by the divine Vyāsa, the compiler of the Vedas, 'Many kings have

<sup>1</sup> That is, a rigid disciple of Vishnu.

<sup>2</sup> Mr. Ommanney reads 'Ghorowa Sur' (Ghorowa the Sanscrit for Gond), but the word is evidently the same as that on the seal.



in turn ruled over this earth, yet he who reigneth for the time is then sole enjoyer of the fruits thereof. 'The bestower of lands will live sixty thousand years in heaven, but he who resumes it, or takes pleasure in its resumption, is doomed to hell for an equal period.'

In the Shakakál, six<sup>1</sup> hundred and thirty years over, was written this edict (Sásanam): Aulá, the well-skilled in peace and war, wrote it.

TABLE XXXIV.—*Orissa, Or-Desa, or Atkala-Desa, hod. Cuttack.*

From the Vansavali, and Rája Charitra, in the Uria language, preserved in the temple of Jagannáth, a record supposed to have been commenced in the 12th century. —Stirling's 'Account of Cuttack.' 'As. Res.,' vol. xv., p. 257.

After the usual detail of the Mythology, and early kings of India, down to Vikramáditya.

A.D.

142 Bato Kesari.<sup>2</sup>

103 Tirbhoban deo.

236 Nirmal deo.

281 Bhíma deva.

318 Subhan deva. Rakta bahu invades Jagannáth by sea, destroyed by an inundation of the sea, that also formed the Chilka lake.

Indra deva was captured and displaced by the Yavanas, who reigned for 146 years.

KESARI-VANSA RESTORED.

473 Jajati (Yayáti) Kesari, capital Jajepur.

Suraj Kesari.

<sup>1</sup> I have kept here Shatkena as read by Mr. Ommanney.—J. P.

<sup>2</sup> Mr. Stirling says<sup>a</sup> that 'no information whatever is afforded by the Orissa chronicles of the origin of the princes called the Kesari vamsa; the founder of the new dynasty in A.D. 473 was Jajati (Yayáti) Kesari, a warlike and energetic prince, but who he was or whence he came we are not apprised. He soon cleared his dominions of the Yavanas, who then retired to their own country' Perhaps the present inscription may in some measure remove this obscurity. It commences with the conquest of Udhra or Orissa by Janamejaya, the king of Telinga. It is possible that this alludes to the prince of that name in the Puranic lists, but the locality of his dominion and the names of his immediate successors are wholly different from those of the Magadha line, and their history is circumstantially told as of events transpired not long antecedent to the Kesari dynasty of Orissa. His son was Dirgharava, and from the latter was born Apavára, who died without issue. The kingdom was then overrun by invaders from foreign countries (perhaps the same designated as Yavanas in Stirling's 'Chronicles'), when Vichitravira, another descendant of Janamejaya reigning in a neighbouring kingdom, possessed himself of Orissa. His son was named Abhimanyú; his again Chandihara; and from the latter descended Udyotaka Kesari, whose mother, Kolávati, created the temple to Siva as Brahmeswara. The date of the inscription is expressed only in terms of the reign, but, from the style of the Devanágari, it may be confidently affirmed to be later than the epoch fixed for Lalat Indra Kesari (617 A.D.). Udyotaka Kesari must, then, be one of the thirty-two unrecorded princes who succeeded him in the Kesari line previous to the establishment of the Gangavamsa family on the Cuttack throne. The figure 3, it may be remarked, closely resembles the ancient form of this numeral; the 8 is nearly of the modern shape.

[The following is the list of names supplied by this inscription:—]

1. Janamejaya.—2. Dirgharava.—3. Apavára.—4. Vichitravira.—5. Abhimanyu.—6. Chandihara.—7. Udyotaka Kesari.—On the 3rd of the light half of Phalguna of the Samvat 18, of the victorious reign of rája Udyotaka Kesari Deva, who was most rich, king of kings, a rája of the lunar line and lord of Kalinga. 'Jour. As. Soc. Beng.' October, 1837.

<sup>a</sup> 'As. Res.,' vol. xv., p. 265.

**Ananta Kesari.**

- 617 Iśāt Indra Kesari, built the Bhuvaneswar temple, 657.  
Thirty-two reigns, extending 455 years. Cuttack built, 989.

**GANGA-VANSA.**

- |      |  |  |
|------|--|--|
| 1131 | Churang, Saranga deva, or Chor Ganga, invaded Orissa.  | { Tribhuvana. <sup>1</sup><br>{ Mala Deva.<br>{ Proli.<br>{ Rudradeva. |
| 1151 | Gangeswara deva, extended dominions.   |  |
| 1174 | Ananga Bhim deo, ascended Gajapati throne; endowed Jagannāth; struck coin; title Rāwat'Rāi. <sup>2</sup> |  |
| 1201 | Rājeswara deo.   |  |
| 1236 | Rāja Narsinh deo, built Kanārak (black pagoda) 1277.   |  |

**FIVE NARA SINHAS AND SIX BHĀNUS, CALLED THE SURAJ-VANSA RĀJAS.**

- 1451 Kapil Indra deo, adopted by the last Bhānu, assisted Telinga Rāja against Musalmans, 1457.  
1471 (Himber? Rai of Uria, according to Ferishta.)  
1478 Pursottem deo, conquers Conjeveram.  
1503 Pertāb Rudra deo, left thirty-two sons, all murdered by  
1524 Govind deo, his minister.  
1531 Pertāb Chakra deo, the last of the dynasty.  
1539 Narsinha Jenna, deposed by  
1550 Telinga Mukund deo, (Harichandan) invaded, and sovereignty of Orissa overthrown, by King of Bengal, 1558.

<sup>1</sup> This inscription is stated to be engraved on a slab about six or seven feet high, which is to be found close to the temple of Rudradeva at Warangal, the modern name for the ancient capital of the Telingana rājas, called in this inscription *Arunakundapura* or *patana*. The inscription,—that is, its commencement and close, excluding the Sanskrit slokas,—is in an old dialect of mixed Telugu and Oorya. It is valuable as containing the genealogy of rāja Rudradeva, and as showing that the previous dynasty established at Warangal was overcome and displaced by his father, called Proli rāja. The inscription gives an authentic date also for the reign of Rudradeva in Telingana, viz., 1054 Saka, corresponding with 1132 A.D., and shows this to be the rāja, called in the temple annals of Jagannath, Churang or Chorgunga, who is said to have overrun Katak coming from the Karnatik, and to have founded or established the Gunga-vansa dynasty in the very year of this inscription, viz., 1054 Saka. Rāja Rudradeva is mentioned as a benefactor of Jagannath, and Katak is included in the boundaries which are assigned to his dominions at that period. These are described in the inscription as extending as far as the sea to the east; the Sree Saila? mountains to the south; as far in another direction, which must be west, as Bākatāka; while to the north his rule extended as far as the Malyavanta, now perhaps the Malyagiri, mountain, west of Baleswar.—1. Tribhuvana, a great warrior, of the Kākalya race.—2. Mala Deva, 'chief of the Kākalya rājas.'—3. Proli rāja, the son of Mala Deva, reduces Govind rāja, king of Tailapa? gives back his kingdom to the king of Erha; conquers and brands the founder of Nāḍha? in Mantra-kutnagar, and because the Erha rāja declines to join in the expedition, expels him afterwards from his rāj.—4. Rudradeva. Ascendancy gained by Bhima rāja (half-brother of Rudradeva), consequent upon the death of the Gokurna rāja, the Chorchādaya rāja, and the king of Tailapa; inflated with these successes, he ventures to defy Rudradeva. Bhima flies in terror.

<sup>2</sup> [Bhubaneswa (in Orissa) Inscription. 'Jour. As. Soc. Beng.,' vol. vi., p. 278. '*Aniyanka Bhima*, the brother of "an excellent man," who had come to the throne through marriage with Saramā, the daughter of Ahirama.' Prinsep adds, 'the date of Ananga Bhima also agrees closely with what was assumed from the style of the alphabet and the Samvat 32 of the Basu-deva slab (inscription in As. Soc. Museum, vol. vi., p. 88, 'Jour. As. Soc. Beng.'). It will hence become a question whether

<sup>a</sup> The pundits say this is not Orissa, which always in the old dialects is written Oordha Des.

## KHURDA RÁJAS; BHUI-VANSA, OR ZEMINDÁRI RACE.

- 1580 Ramchandra deo, titular Rája under Akbar.  
 1609 Pursottem deo. Afghan incursions.  
 1630 Narsinh deo.  
 1655 Gangadhar deo.  
 1656 Balbhadder deo.  
 1664 Mukund deo.  
 1692 Dirb Sinh deo.  
 1715 Harikishen deo.  
 1720 Gopináth deo.  
 1727 Ramchandra deo. Boundary much reduced.  
 1743 Birkishore deo. Mahratta depredations.  
 1786 Dirb Sinh deo, attached to Nágpur, 1755-6.  
 1798 Mukund Deo, deposed by the English, 1804.

TABLE XXXV.—*Rájas of Nepál.*

The mythology of Nepál commences, like that of Kashmír, with the desiccation of the valley, for ages full of water, by a Muni called Naimuni) whence the name of the country Naipála), whose descendants swayed the sceptre for near 500 years.—Kirkpatrick's 'Nipal.'

B.C. 3803	Bhurimahághah (adjusted back at 18 years per reign, B.C. 844 ?)	B.C. 3423	Jayagupta II., overcome by Rájputs of the Terai, near Janakpur, A.C. 700 ?
3795	Jayagupta.	3211	Bal Sinha, descendant of Mahipa Gopála.
3722	Permágupta,	3302	Jaya Sinha.
3631	Sri Harkh.	3281	Bhuwáni Sinha, overcome by the
3564	Bhimágupta.		
3526	Munigupta.		
3489	Bishengupta.		

## KERRÁT TRIBE OF EASTERN MOUNTAINEERS.

3240	Yellang, adjusted date, B.C. 646 ?	2949	Srupast.
3150	Daskham.	2910	Parb.
3113	Baláncha.	2854	Jety dastri.
3081	Kingli.	2794	Panchem.
3040	Hewanter.	2723	King-king-king.
2990	Tuskhah.	2667	Súnand.
		2627	Thúmú.

these figures are, in all cases, to be referred to a Cuttack era, or whether the same Devanágari alphabet was in use from Shekawáti to Benares, Dinajpur, and Orissa, in the 12th century, while each prince had then an era of his own.' 'Jour. As. Soc. Beng.', vol. vi., p. 280.]

[The fellow inscription alluded to is to the following effect:—]

This inscription is without date; but the form of the letters and the names of persons mentioned will probably render the fixing of its age an easy matter to those conversant with such subjects. It was composed by a pandit named Sri Váchaspati, in praise of a bráhmaṇ of rank and learning, styled Bhatta Sri Bhava-deva, and his family; and it would appear that the slab on which it is engraved must have been affixed to some temple of which Bhava-deva was the founder. The individuals of this family, whose names are given, are—1. Sávarna Muni, the root of the gotra or line.—2. Bhava-deva 1st, a descendant of the above, whose elder and younger brothers were Mahá-deva and Attahása.—3. Rathánga, son of the above, who had seven younger brothers.—4. Atyanga, son of the above.—5. Budha, son of the above, surnamed Sphurita.—6. Adi-deva, son of the above.—7. Govardhana, son of the above, whose mother's name was Devaki.—8. Bhava-deva 2nd, son of the above, surnamed Bála-valabhi-bhujanga, whose mother's name was Sāngoká, and who was minister to Rája Harivarma-deva and his son.

2558	Jaigri.	2065	Teshú.
2498	Jenneo.	2019	Sungmia.
2425	Suenkeh.	1950	Jusha.
2365	Thúr.	1887	Gontho.
2294	Thamu.	1813	Kimbhúm.
2211	Barmah.	1739	Galijang, displaced by Khetris of the
2138	Gunjah.		
—	Kashkún.		

SURYA-VANSA RACE.

1658	Nevesit (adjusted date of conquest, B.C. 178).	724	Vasu datta varma.
1608	Matta Rátio.	691	Sripatri.
1517	Kaikvarma.	688	Siva vridi.
1441	Pasupush deva (founded Paspatuáth).	611	Vasanta deva.
1385	Bhoskar varma, a great conqueror.	550	Deva.
1311	Bhumi varma	493	Brikkh (Vriksha) deva.
1270	Chandra varma.	436	Sankara deva.
1249	Jaya varma.	386	Brahma deva.
1187	Vrisha varma.	335	Mán deva, erected Sambhunnáth mundil.
1130	Sarva varma.	297	Mahe deva.
1081	Pathi (Prithi) varma.	247	Vasanta deva.
1025	Jist (Jayertha) varma.	190	Udaya deva.
977	Kuber (Kuvera) varma.	143	Mán deva, II., three years' drought.
901	Hari varma.	98	Sukam.
824	Siddhi varma.	48	Siva deva.
763	Haridatta varma (founded Sapae Narayan temple),	6	Narendra deva.
		A.D. 27	Bhima deva, varma, displaced by the

AHIRS, OR ORIGINAL SOVEREIGNS.

43	Bishen gupta.	178	Bhúmi gupta, expelled by
117	Krishna gupta.		

THE NEVERIT DYNASTY, RESTORED.

218	Siva deva varma (adjusted date, A.D. 470).	773	Soho deva.
259	Anghú varma.	807	Vikrama deva.
301	Kirtu varma.	808	Narendra deva.
319	Bhima Arjuna deva.	810	Ganakáma deva.*
358	Nanda deva.	895	Udaya deva.
371	Siva deva.	901	Narbhay deva.
387	Narendra deva.	908	Bhoj deva bhagta.
424	Bala deva.	917	Lakshmi kám deva datta.
441	Sankara deva.	938	Jaya deva, reduced Patan.
453	Bhima Arjuna deva, II.	958	Udaya deva.
469	Jaya deva.	966	Bala deva.
488	Sri bala deva.	977	Padiem deva.
504	Kondara deva.	984	Nag Arjuna.
531	Jaya deva, II.	987	Sankar deva.
574	Bala deva, III.	1004	Bam deva.
585	Balanjun deva.	1006	Sri Harak deva.
622	Raghava deva (adjusted date, A.D. 880 <sup>1</sup> ).	1022	Siva deva.
985	Sikar deva.*	1050	Indra deva.
		1062	Mán deva.
		1067	Narendra deva.

<sup>1</sup> This is exactly the first year of the Newar era. He, it is said, introduced the Samvat into Nepal, which may apply to this, and not to the era of Vikramaditya. (With one or two exceptions, marked \*, these reigns are of natural lengths, and require no adjustment.)

1073	Rudra deva.*	1195	Anya mall—a famine.
1153	Amrita deva (a great dearth).	1244	Obhaya mall, ditto, and earth- quake.
1157	Súmesar deva.	1246	Jaya deva.
1164	Baz kám deva.		
1280	Anwanta mall deva. Kásias and Tirhut families settled in Nepál, Samvat 1344, A.D. 1287.		
	Jayananda deva.		
	Jaya sinha mall.		
	Jaya Raera mall, daughter married Hari Chandra, Rája of Benares—his daughter, Ráj Lachmí, succeeded, but was deposed by		
1323	Jaya deva, who was dispossessed of the throne by		
1323	Hara sinha deva, Rája of Simroun, who was expelled from his own dominions by the Patan sovereign of Dibli. (See below.)		
	Belal Sinha, capital Bhatgaon.		
	Srí deva mall.		
	Náya mall.		
	Aśoka mall.		
	Jestili mall.		
	Jait mall.		
Newár year.			
1731 1600	Jaya Eksha Mall (or Jye Kush Mull), divided Patan, Khatmandu, Banepa, and Bhatgaon between his daughter and three sons.		

## BHATGAON.

		Raya Malla.
		Bhu Bhin malla.
		Besson malla.
790-800	1669-79	Jaya Chakra mall.
		Trihoka malla?
		Jagat Johi malla.
		Jay Jeta mitra malla.
816	1695	Bhupati Indra malla.
842	1721	Ranjit malla, formed alliance with Gurk- has, which ended in his subversion, and finally that of all Nepál.

## BANEPÁ.

Newár year.		Ran Malla.
		KHATMANDU.
		Ratna malla.
753	1632	Jaya Prakás malla.
777	1656	Pratáp malla.
783	1662	Jaya Yoga Prakás malla.
816	1695	Jaya Prakás malla.
822	1701	Bhaskara malla.
836	1715	Mahendra malla.
843	1722	Jaya Jagat Jaya malla.
845	1724	Jaya Yoga Prakás malla,
874	1753	from Patan.

## PATAN.

Newár year.		A daughter.	Newár year.		
775	1654	Siddhi Nara Sinha.	837	1716	Rishi nirmal deva.
806	1685	Nirman Indra malla.	843	1722	Jaya Zughir Yoga malla deva.
810	1689	Yoga Narendra malla.	840-42	1729-31	Jaya Vishnu malla.
816	1695	Mahipat Indra mall.	863	1742	Jaya Yoga Prakás malla deva.
817	1696	Jaya vira mahendra.	870	1749-5	Jaya Vishnu malla Agani.
827	1706	Jaya Indra malla deva.			
836	1715	Hridiah Narasinha.			

GURKHALI DYNASTY, DESCENDED FROM THE UDAYAPUR RÁJPUTS, OCCUPIED KEMAON  
AND NOAKO'T, FOR SIX OR EIGHT GENERATIONS, PRIOR TO CONQUEST OF NEPÁL.

A.S.

1690	1768	Prithinarayan Sáh.
1693	1771	Pertáb Sinha Sáh deva.
1697	1775	Ran Behádúr (Behádúr Sáh regent), deposed by nobles, 1800.
1722	1800	Girwan Yudh Vikrama Sáh deva.

<sup>1</sup> [The dates if the Newár cycle inserted in this table were written in by Jas. Prinsep, on the printed page of his own copy of the 'Useful Tables.']

A.S.		
1726	1804	Ran Behádur, returns from Benares, deposed and assassinated.
1727	1805	Girvan Yudh Vikrama Sáh deva, again.
1738	1816	Rajendra Vikrama Sáh deva.

The Khatmandu and Patan names, and all the dates from 1632 downwards, are confirmed by Nepálese coins in my possession, collected by Dr. Bramley.—J.P.

TABLE XXXVI.—*Rájas of Samangarha, or Simroun, in the Tardi, south of Nepál.*

FROM KIRKPATRICK.		FROM HODGSON'S LIST, 'JOUR. AS. SOC.' vol. iv. p. 123.	
A.D.	844	Nána deva.	Nányupa deva, founded Simroun,
		Kanak deva.	A.D. 1097.
		Narsinba deva.	Ganga deva.
		Ráma Sinha deva.	Nara Sinha deva.
		Bhad Sinha deva.	Ráma Sinha deva.
		Karm Sinha deva.	Sakti Sinha deva.
1323		Hara Sinha deva.	Hara Sinha deva, compelled to abandon his capital and take refuge in the hills, when Simroun was destroyed by Tughlak Sháh, in 1323 A.D. See above for his connection with the Ráj of Nepál.

TABLE XXXVII.—*Rájas of Bengal, capitals, Kanauj?—Gaur.*

Abu'l Fazl enumerates three Dynasties anterior to the family of Bhupála, which last is identified by inscriptions found at Benares, Monghir, Dinajpur, etc., viz. :—

The family of Bhugrut (Bhagiratha), Kshatriya—24 princes, reigned 2418 years.

The family of Bhojgorya, Kaith—9 princes, reigned 250 years.

The family of Udsoor (Adisur), Kaith—11 princes, reigned 714 years.

Then follows the family of Bhupál, to whose 10 reigns 689 years are allotted, which is evidently too much; the succession of names differs also somewhat from those of the inscriptions.

FROM ABU'L FAZL. 'Ayín-i-Akbari,' vol. ii. p. 21.	MONGHIR PLATE. <sup>1</sup>	DINÁJPUR COPPER-PLATE.
Bhopála.	Gopála.	Lokapála.
1027 Dhirpála.	Dhermapála.	Dhermapála.
1050 Deopála.	Devapála.	Jayapála.
Bhupatipála.	BUDAL PLATE.	•Devapála.
Dhanpatpála.	Rájapála.	Naráyanpála?
Bijjenpála.	Súrapála.	(Two names illegible.)
Jayapála.	Naráyanpála.	Rájapála.
Rájapála.	SAERNÁTH INSCRIPTION.	Vigrahapála.
Bhogpála.	Mahipála.	Mahipála, at Benares.
Jagadpála.	Sthirapála.	Nayapála.
	Vasantapála.	1027 Vigrahapála.
	1017 Kumarapála (Fer.)	

<sup>1</sup> The Monghir plate, dated 23 or 123 Samvat, evidently refers to the Bhupála dynasty, and not to the Vikramáditya era, as was supposed by Wilkins.—J.P.

## VAIDYA RĀJAS OF BENGAL.

- 1063 Sukh Sen.  
 1066 Belal Sen, built the town of Gaur.  
 1116 Lakshman Sen.  
 1123 Mādhava Sen.  
 1133 Kesava Sen.  
 1151 Sura Sen.  
 1154 Nārāyana—Noujeb, last rāja of  
 Abu'l Fazl's list.  
 Lakshmana.  
 1200 Lakshmaniya.  
 (See Muḥammadan dynasties).

BĀKERGANJ INSCRIPTION,<sup>1</sup> 1136 A.D.

- Vijaya Sena.  
 Ballāla Sena.  
 Lakshmana Sena.  
 Keṣava Sena.

<sup>1</sup> [ 'The purport of the whole inscription is, a grant in perpetuity to a brāhman named Iswara deva sarma, of the Vātsa tribe, of the villages of Bāgūlé, Bettogāta, and Udyamūna, situated between four equally unknown places in Banga, or Bengal : unless Garhaghataka be Ghoraghāta in the Dinājpur, or Vikramapur, the place of that name in the Decca district. The mention of tanks of fresh water, with houses built on the raised banks for protection against inundation,—of the neighbouring jangal in the west, and of the saline soils, is in favour of the locality being in the Bākerganj district itself, on the edge of the Sundarbans, where sea salt is still manufactured. Probably the Chanda Bhanda tribe, made over as property along with the soil, may have been the poor class named from this tract (quasi Sandabanda, as, indeed, it is generally pronounced) employed in the salt works, and, like the modern Molangis, only a step or two removed from slavery. Regarding the Vaidya dynasty of Bengal (so called from its founder being of the medical caste), there is the same uncertainty as in almost all other portions of Indian history. Some make Adisur the progenitor : he who is stated to have applied to the reigning king of Kanauj, Kanyakubja, for a supply of brāhmans for the Bengal provinces ; but the catalogues recorded, on good authority, in the 'Ayin-i Akbari,' place the whole of the Bhupāla dynasty, extending to 698 years, between Adisur and Sukh Sena, the father of Ballāla Sena, who built the fort of Gaur. No mention of either of these parties is made in the present inscription, but on the contrary, the father of Ballāla Sena is distinctly stated to be Vijaya Sena ; and as this is, I believe, the first copper-plate record of a grant by the family, we should give it the preference to books or traditions, on a point of history so near its own time : for Keṣava Sena is but the fourth in descent from Vijaya on the plate ; or the fifth, if we take Abu'l Fazl's list. It is curious that wherever the name of Keṣava Sena occurs on the plate there are marks of an erasure ; as if the grant had been prepared during the reign of Mādhava Sena, and, on his dying before it was completed (for such a plate must have taken a long time to engrave), the name of his successor, Keṣava, fortunately happening to be of the same prosodial quantity, was ingeniously substituted, and *mutato nomine*, the endowment was completed and promulgated. Keṣava must have been in this case the brother of Mādhava. Little of the historical occurrences of Keṣava's reign are to be gathered from the inflated eulogistic style common to this species of composition. It is said, in general terms, that he kept his enemies in awe, that he was religious and bountiful to the priesthood. The title of Sankara Gaureswara, applied to all the members of the family, may mean either the auspicious family of the city of Gaur, or it may convey a sly hint, by the substitution of शङ्कर for सङ्कर (mixed race) of the inferior caste of the Sena dynasty. Nothing is said of the miraculous descent of Ballāla Sena, as before remarked ; but he is said to have worshipped Ś'iva for many hundred years (in former generations) to obtain so famous a son as Lakshmana Sena,—who seems to have been the hero of the family,—erecting pillars of victory and altars at Benares, Allahabad, and Jagannātha. It may, however, be reasonably doubted whether these monuments of his greatness ever existed elsewhere than in the poet's imagination. The date of the grant is very clearly written in the lowermost line सं ३ ज्यैष्ठदिने *samvat 3 jyaistha dinē* ... but the rest is not legible. The third year doubtless refers to the reign of Keṣava Sena, which brings the age of the plate to the year 1136 of our era.]

TABLE XXXVIII.—*Rájas of Assam—anciently Kamrup.*

The best authority is a Native History ('Assam Buranji') by Huliram Dhaikiyál Phukan, of Goháti. Bengal, era 1236. 'As Jour.,' 1830, p. 297; also Mr. Scott's MS. Notes, arranged by Dr. McCosh.—Buchanan is not to be trusted prior to Rudra Sinha. [Tezpur inscription, 'Jour. As. Soc. Beng.' vol. ix., p. 766.]

After bringing down the genealogies to the Kshatriya dynasty of Dravir (Dharmapála, etc., who invited bráhmans from Gaur to his court, north of the Bráhma Putra!)

## BRÁHMAPUTRA DYNASTY, 240 YEARS.

Shusáнку, or Arimatu, built fort of Vidyagarh.

Phainguya, an usurper of the race of Kumuteshwar.

Gujanke, former line restored.

Shukaranku.

Mriganku, without issue; died A.D. 1478.

Assam divided into 12 petty states.

1498 ——— invaded by Dulal Ghází, son of Hosain Sháh.

Musundár Ghází.

Sultán Ghiásuddín; after whom 12 states restored, of which Nara, east of Saumar, had been gradually rising into power since the middle of the 13th century.

## INDRATANSA (INDU) DYNASTY.

1230? Chu-kapha, became independent, and spread conquests, surnamed Asama (unequalled), whence Assam.

1268 Chu-toupha, son, defeated the Rája of Cachár.

1281 Chu-benpha.

1293 Chu-kangpha.

1332 Chu-khampha; valley invaded by Muhammad Sháh, 1337.

1364-9 Interregnum of five years; when the ministers installed

1369 Chu-taopha, a relation, conquered Chhutiya.

1372 Chu-khámethépa, a tyrant, killed by his ministers.

1405-14 Interregnum of nine years.

1414 Chu-dangpha, conquered as far as the river Kurutoya.

1425 Chu-jángpha, his son.

1440 Chu-phákpha, ditto.

1458 Chu-singpha, ditto.

1485 Chu-hangpha, ditto.

1491 Chu-simpha, a tyrant, put to death.

1497 Interregnum, and Hosain Sháh's invasion, 1498.

1506 Chu-humphá, a brother, various conquests.

1549 Chu-klunpha, his son, built Gurgram.

1563 Chu-khrunpha.

1615 Chu-chainpha; introduced reforms; protected Dharmanárain.

1640 Chu-rúmpha, a tyrant, dethroned.

1643 Chu-chinpha.<sup>1</sup>

1647 Kuku-raikhoya Gohani, dethroned for his brother.

1665? Chukum, or Jayadhwaia Sinha, adopted Hindu faith, defeated Aurangzib's general?

1621\* Chakradhwaja (or Brija) Sinha, built fort of Goháti; (Sámagrya deva, Mo. C); repulsed Aurangzib's general? called Chukum?

1665 Kodayaditya Sinha, attempted to convert the people.

1677 Parbattia Kunria.

1681 Lorarája, for some reigns confusion prevailed until

1683\* Gadádharma Sinha; his son Kana set aside.

<sup>1</sup> A.S. 1570, A.D. 1648—*Soverganardyan*, also called Pratápa Sinh, the Hindu name of *Chusungpha*—(Jenkins); he was of the Dehingia family, who took the name of Narain; the other branch, Toughonent, took the title of Sinha.—J. P.



- 1689-1713\* Rudra Sinha, built Rangpur and Jorhát; his coins first bear Bengálí inscriptions.  
 1715-21\* Siva Sinha, established Hindu festivals.  
 1723-26\* Phulésvari, his wife, acquires sovereign rule.  
 1729-30\* Pramathésvari devi, ditto.  
 1732-36\* Ambiká devi, ditto.  
 1738-43\* Sarvvésvari devi, ditto.  
 1744\* Pramatha Sinha, made equitable land settlement.  
 1761\* Rájeswara Sinha, embellished Rangpur, allied with Manipur.  
 1771\* Lakshmi Sinha Narendra, younger son, raised and deposed by minister.  
 1779\* Gaurinátha Sinha, his son.  
 1792\* Bharata Sinha Mahámári, conquers Rangpur, and  
 1793\* Sarvánanda Sinha, usurps power at Baingmara.  
 1796\* Bharata Sinha again attempts, but is killed.  
 Gourinátha Sinha, restored by British; died at Jorhát.  
 1808\* Kamaleswara Sinha, or Kinnarám, not crowned.  
 Rája Chandrakanta Sinha Narendra, fled to Ava.  
 Purandhar Sinha, great grandson of Rájeswara Sinha, expelled by Burmese, and  
 Chandrakanta, restored, but deposed again, and  
 Yogeswar Sinha, raised by Assamese wife of an Ava monarch, under  
 Menghi Maha Theluah, the Burmese general and real governor.  
 1824 Burmese expelled by English.
- 
- 1712\* Date of Manipur square coins.  
 1763\* Persian coins of Rája Mir Sinh of Rangpur.  
 1780\* Bengálí coins of Jayantea Rája.

TABLE XXXIX.—*Rájas of Manipur, Miéthiè, or Mogh. From the Miehoubá or royal genealogical roll, Capt. Pemberton's MS.*

A.D.		Years.	A.D.		Years.
35?	Pakhungba, reigned.....	140	1200	Thawálthába .....	36
174	Khói .....	90	1236	Chingtanglalthaba .....	11
264	Tanuthingmang .....	100	1247	Thing baisel homba.....	5
364	Koenig gualba .....	15	1252	Puralthaba .....	16
379	Pensiba .....	15	1268	Khumomba .....	15
394	Kanu khangba .....	15	1283	Moeramba .....	24
411	Nanu khamba .....	47	1307	Thangbilalthaba .....	22
428	Nanu phamba .....	90	1329	Kongyamba .....	31
518	Samuérang .....	50	1360	Telhueba .....	19
568	Kol Thuoba .....	90	1399	Laizelba .....	6
663	Nanuthinghong .....	100	1409	Púseba .....	24
763	Khongtekcha .....	10	1437	Ninthoukhombo, reigned.....	35
784	Kaereleha .....	15	1472	Keyamba .....	40
799	Yaraba .....	22	1512	Koeremba .....	5
821	Ayangba .....	89	1517	Lamchaigmanba .....	3
910	Ningloucheng .....	39	1520	Nongyilphuba .....	9
949	Eipál lai Thaba .....	24	1529	Kapomba .....	17
973	Yanglao kai phamba .....	8	1546	Tangchomba .....	4
981	Eerengba .....	89	1550	Chullamba .....	17
1070	Laiyamba .....	56	1567	Mungyamba .....	35
1126	Loitongba.....	30	1602	Khakemba .....	55
1156	Monyoirelba .....	14	1657	Khulchouba .....	14
1170	Eiwalthaba .....	30	1671	Paikhomba .....	31

\* These dates are confirmed by coins in Marsden's Num. Or. and others in Captain Jenkins' collection.

A.D.		Years.	A.D.		Years.
1702	Charáirongba .....	12	1766	Gouree Shám .....	1
1714	Pamhaiba—Gharibnawáz, or Garmúni Rája, or Myang- gnumba .....	39	1767	Jaya Sinha .....	31
1753	Khakhilalthába, or Oogat Sháh .....	3	1798	Robin chandra .....	3
1756	Mingthoèkhomba — Bharat Sháh .....	2	1801	Modu chandra .....	6
1758	Gouri Shám—Maramba .....	6	1806	Charjit Sinha .....	6
1764	Chingthangkomba, or Jaya Sinha, Nonguangkhomba..	2	1812	Márjit Sinha, expelled by Barmas, 1819.	
			1824	Gambhir Sinha, brother, re- gained possession.	
			1834	Kirti Sinha, a minor, son of ditto.	

TABLE XL.—*The Narapati, or Sholan Dynasty of Karnáta, Dravira, and the southern portion of the Peninsula. Twenty-seven Rájas, reigned 534 years.*

(Contemporary with the Gajapati and Asvapati Dynasties; from a MS. translated by Buchanan.)

A.D.		Years.			Years.
266 ?	Utinga Sholan, reigned .....	32	Arleana Cadamai Canda Sho- lan, reigned .....		62
	Culatunga Sholan .....	18	Jayam Canda Sholan .....		12
	Rájendra Sholan .....	11	Kirimi Canda Sholan .....		20
	Tiramadi Canda Sholan .....	13	Tondaman Sholan .....		12
	Carical Sholan .....	21	Buddam Cattam Sholan .....		45
	Arundavan Sholan .....	13	Shomuman Sholan .....		11
	Vomyara Sholan .....	17	Ghingui Canda Sholan .....		11
	Shayangana Sholan .....	15	Sundra Pandia Sholan .....		40
	Munalinda Sholan .....	12	Pottápa Sholan .....		24
	Mavanedi Canda Sholan .....	15	Shingu Vullanda Sholan .....		14
	Vakala Sholan .....	14	Deva Sholan .....		10
	Alaperinda Sholan .....	8	Shayanahatti Sholan .....		15
	Tiraveratu Sholan .....	15	Vira Sholan .....		30

800 ? Shayangara Sholan, 24 years; the MS. makes the final date A.D. 288. After the overthrow of the Narapati dynasty, Karnata and Dravira seem to have been separated from the southern districts, in which the Chera, Chola, and Pandava lines were at first united under one sovereignty.

THIRTEEN MAHÁ RÁJAS OF MÁDURA, TANJORE, AND COIMBETORE, REIGNED  
239 YEARS.

	Years.	A.D.		Years.
Udiamara, reigned .....	18		Srí Devanátla, reigned .....	38
Jeya deva .....	19		Malik Arjana .....	7
Lohita <sup>1</sup> .....	10		Adi Raer .....	13
Ganga dira .....	11		Mahá sustra .....	16
Vama deva .....	13		Visuvesvara .....	8
Terupulinda .....	34	950 ?	Chindrabnti .....	2
Pattáviran .....	43			

After which follow the Belál Rájas of the Karnáta, and the petty Polygér dynasties of Máadura, etc.

<sup>1</sup> During this dynasty the palace of Máadura is supposed to have been erected.

TABLE XLI.—*Belál Rájás of the Karnáta. Capital, Dwdrasamudra.*

'Nine Princes governed above the Gháts 98 years, and afterwards below the Gháts 111 years.'—(Buchanan, 'Mysore,' vol. iii. p. 112.)

MACKENZIE'S MS.		BUCHANAN, VOL. III. P. 474.	
A.D.		A.D.	Years.
984	Hayasala Belála ráya.		Rája Belála Ráya, reigned... 18
1043	Vináditya Belála.		Vira B. R. .... 11
1073	Yareyánga Belála.		Chinna B. R. .... 22
1114	Vishnu Verddhana Belála.		Deva B. R. .... 14
1145	Vijaya Narasinha Belála.	1016	Vishnu verti B. R. .... 28
1188	Vira Belála.		Hari B. R. .... 19
1233	Vira Narasinha deva.		Imadi B. R. .... 17
1249	Vira Someswara.		Visia B. R. .... 16
1268	Vira Narasinha, taken by the Muhammadans, and his capital destroyed in 1310–11.		Buca B. R. .... 22
			China Buca B. R. .... 8

TABLE A.

[Mr. Walter Elliot, of the Madras Civil Service, some years ago (1836) contributed to the 'Jour. Roy. As. Soc.' an elaborate *résumé* of a series of no less than 595 Hindú inscriptions, collected chiefly in the Southern Mahratta country, or the district of Dharwa; in the western part of the Nizam's territories; in Mysore, the Mangalore collectorate, etc. In due preface to his table of results derived from these especially authentic documents, I prefix an outline of his supplementary remarks which more properly form an introduction to the inscribed genealogies of the leading race :—]

'This [the Chalukya] is the oldest race of which we find satisfactory mention made in the records of the Dekkan; they seem to have belonged to the great tribe that, under the general name of Rajpúts, exercised dominion over the whole of the Northern and Central India. . . . The names anterior to Teilapa deva (Saka 895) are given on the faith of two inscriptions,<sup>1</sup> which profess to be taken from older inscriptions on copper-plates then extant,' supported by confirmatory evidence of a like nature. 'From these authorities we learn that Jaya Sinha claims to be descended from ancestors previously enjoying royal power, of whom 59 reigned in Ayodyapúra and other places in the North, or in Hindustan. . . . 16 are then described as reigning after him in the Dekkan. . . . but previous to them, two other families or races had possessed it, the Kartas and the Rattas, the latter of whom were overthrown by Jaya Sinha, who defeated and destroyed Krishna, the Ratta Rája.'

1. Jaya Sinha.
2. Rája Sinha, *Rana Ragaha*.
3. Pulakesi (Saka 411).<sup>2</sup>
4. Kirthivarma.
5. Mangalisa.
6. Satya Sri (eventually a family designation) son of No. 4, Saka 488.

7. Amara.
8. Aditya varma.
9. Vikramáditya (accession Saka 515).
10. Vinayáditya, *Yudha Malla*.
11. Vijayáditya (accession Saka 617).
12. Vikramáditya (accession Saka 655).<sup>3</sup>

<sup>1</sup> (1) At Ye-ur, in the Nizam's Territory, No. 4 of Vikram. II. (2) At Handarki in Tondur, No. 141 of Vikram II.

<sup>2</sup> See also 'Bombay Jour.' ii. 6; Pulakesi's father is also entitled Kirti Varma.

<sup>3</sup> See also Major Le-Grand Jacob's grant of this monarch, dated S. 627 (A.D. 705).

"No records have been obtained of any of the succeeding names in the list, till the time of Teila."

[Reverting to the original text, Mr. Elliot is found introducing his more especial series of documents in the following words:—]

'The inscriptions so arranged are found to relate to four dynasties of princes, reigning over the greater portion of that part of India now denominated the Dakshana, or Dekkan, but at that time Kuntala-desa. The capital was first Kalyân (in the Muhammadan province of Kalbarga), and subsequently Devagiri, now the modern city of Dowlutâbâd. The limits of this kingdom appear to have been the Nermada on the N.; the ocean on the W.; the line formed by the Kanarese language on the S.E.; and on the S.W. they would include the provinces of Nuggar or Bidnûr, and of Sunda. . . . The eastern boundary I have not been able to ascertain, but it is probable that it did not extend beyond the Ghâts, under which lay the kingdoms of Kalinga and Andhra.

## I.—CHALUKYA DYNASTY.

Name.	Title.	Accession Saka.
1. Teilapa deva.....	.....	895
2. Satya Sri, <sup>1</sup> or Irivi Bhujanga deva .....	.....	919
3. Vikramāditya I. or Vibhu Vikram .....	.....	930 ?
4. Jaya Sinha deva .....	Jagadeka Malla .....	940 ?
5. Someswara deva I. ....	{ Treilokya Malla .....	962 ?
	{ Ahawa Malla .....	
6. Someswara deva II. or Soyi or Sovi-deva...	Bhuneka Malla .....	991 ?
7. Vikramāditya II. or Kali Vikram or Permadi raya .....	Tribhuvana Malla .....	998
8. Someswara deva III. ....	Bhuloka Malla .....	1049
9. ....	Jagadeka Malla .....	1060
10. Teilapa deva II. or Nurmadi Teilap .....	Treilokya Malla .....	1072
11. Someswara deva IV. ....	Tribhuvana Malla .....	1104

## II.—KALABHURJA OR KATACHUNA DYNASTY.

12. Vijala deva or Bijala .....	Tribhuvana Malla .....	1078
13. Morari Sovi deva, or Vira Vijala or Somes- wara deva .....	Bhuneka Malla .....	1087
14. Sankama deva .....	Ahawa Malla .....	1098

## III.—YADAVA DYNASTY OF DWARA SAMUDRA.

15. Vira Bellala .....	.....	1113
16. Nara simha .....	.....	?

## IV.—YADAVA DYNASTY OF DEVAGIRI.

17. 1. Ballam deva .....	.....	1110
18. 2. Jayatuga deva .....	Jytpâl dev .....	1115
19. 3. Simhana deva .....	.....	1132
20. 4. Kandarae deva or Kanera deva .....	.....	1170
21. 5. Mahâ deva .....	.....	1182
22. 6. Ramachandra .....	.....	1193
23. 7. Shankar deva .....	.....	1232

—'Jour. Roy. As. Soc.', vol. iv. p. 4.

'Bombay Jour.' iii. 203. The genealogy of the family is here somewhat differently stated: 3. Pulakesi; 4. Kirthivarma; 5. Satyâsraya; 6. Chandraditya; 9. Vikramāditya (brother of 5); 10. Vinayaditya; 11. Vijayaditya; 12. Vikramāditya.

<sup>1</sup> The Khârepâtan inscription ('Bombay Jour.' i. 209) describes Satya Sri as reigning in the Saka year 930 (A.D. 1008). See also Major G. Le-Grand Jacob's Copper-plate Charters ('Bombay Jour.' iv. 97) dated S. 855 (A.D. 993).

TABLE B.

[I also annex Mr. Wathen's summary of the Chalukya dynasty of the South, the materials for which have also been derived from the authentic sources of inscribed copper-plate grants of land, etc. :—]

## THE CHĀLUKYA DYNASTY OF THE SOUTH (CAPITAL, DHĀTAPIPURA).

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Jayasinha Vallabha i. <i>Jagadekmalī</i>, (Śāka 371 ? A.D. 450) 're-establishes' the Chālukya kingdom.</li> <li>2. Rana-rāja (Śāka 391 ? A.D. 470).</li> <li>3. Pulakesi, <i>Satyāsraya</i> (Inscription 'Jour. Roy. As. Soc.' vol. v. p. 434) (Śāka 411, A.D. 490).</li> <li>4. Kūti-varma (conquered Naladroog or Beder) 'conquest over the Maurya and Kadamba princes.'</li> <li>5. Mangalīsa, <i>Satyāsraya</i>.</li> <li>6. Neramari.</li> <li>7. Aditya varma.</li> <li>8. Vikramāditya I.</li> <li>9. Yūdha-mallā.</li> <li>10. Vijayāditya.</li> <li>11. Vikramāditya II.</li> <li>12. Kūti-varma II.</li> <li>13. Taila-bhūpatī (Revolutions, etc.).<sup>1</sup></li> <li>14. Bhīma.</li> </ol> | <ol style="list-style-type: none"> <li>15. Kūti-varma III.</li> <li>16. Apānāya (restores Chālukya power).</li> <li>17. Vikramāditya III. <i>Satyāsraya</i>.</li> <li>18. Taila-bhūpa II. (conquers 'Rāshtrakūta Rājas of Rānāstambha (Chandail, in Berar) and Karkara').</li> <li>19. <i>Satyāsraya</i>.</li> <li>20. Jayasinha II. (?)</li> <li>21. Dasa-varma.</li> <li>22. Jagadeka Mallā. (?)</li> <li>23. Jayasinha III. entitled <i>Sri-Prithivī, Vallabha Mahardjādhirāja, Paramesvara, Parama-bhadraka, Satyāsraya</i>, etc., conquers Panchadrōmīla-nagara, the capital of the Chola king, and seizes the dominions of the seven Rājas of the Konkana.—Inscription dated Śāka 946, A.D. 1025 ('Jour. Roy. As. Soc.' vol. ii. 380).<sup>2</sup></li> </ol> |
|--|---|

[Mr. Wathen's other grants may be briefly recapitulated as follows : ]

1. Śāka 894, A.D. 973. Kakka or Kakkala rāja entitled Amogha-varsha ; capital Mankhera in the Hyderabad country. See also 'Bombay Jour.' vol. i. p. 211, grant dated Śāka 930.

3. and 4. Śāka 948 and 980.<sup>3</sup> Silāra, Silyāra, or Silāhāra family present a series of eight or nine princes commencing with Kapard (*circa* 900) who claim to rule over the Konkana.

6. Śāka 1102. Śrī Mata-Aparāditya-Rāja. Konkana.

7. Śāka 1127. Five local Silāra rājas enumerated.

8. Śāka 1182. Grant by a minister of a king of the Chālukya race.

9. 10. Śāka 1212 and 1194. Yādava family, under Rāma Chandra Deva of Devāravati.

TABLE XLII.—*Adeva Rājas of Tuluva, Andhra, or Telingāna. Capital Woragalli or Warangalla.*

Nineteen Adeva Rājas reigned 370 years (211 years ?) supposed to be the eighteen princes of Andhra descent, prior to Pratāpa Rudra.<sup>4</sup>

Tribhuvana Mallā Rāja, of Warangalla.

Poli Rāja his son.

A.D. 1084. Pratāpa rudra built a temple.

East boundary the seashore ; Sri Salla hills (South of Hyderabad) ; West, Vakataka country ; North, Mountains N. of Godavery.—J.P.

<sup>1</sup> [See grant of Govinda Rāja Rāshtra-kūta, dated Śāka 730, A.D. 808. 'Jour. Roy. As. Soc.' vol. v. p. 350, and the still earlier document of Danti Durga, Śāka 675, A.D. 753.]

<sup>2</sup> [See also Mackenzie collection, introduction, cxv.]

<sup>3</sup> [Also Śāka 939. 'As. Res.' vol. i ; and Śāka 1113 : 'Trans. Lit. Soc. Bombay,' vol. iii.]

<sup>4</sup> Sasanam from a temple at Warangoll.

A.D.	Years.		Years.
800?		Sri Ranga A.R. reigned.....	25
		Vira Nārāyana A. R.....	23
		Wobala, A. R. ....	21
		Siruvayanagada A. R. ....	22
		Pirungei Endia A. R. ....	15
		Canda Gopāla A. R. ....	32
		Narasinha A. R.....	13
		Cambuli A. R. ....	15
		Bacan A. R. ....	22
		Vira Narasinha A. R. ....	12
1167		Uricandi Pratāpa Rudra, 58 or 54, ended 1221.	
		Anna Pemma ..... 77 supposed subsequent to Mahratta subjection.	
		Narasinha A. R. ....	8
		Dua A. R. ....	12
		Sri Pandia A. R. ....	9
		Vasu deva A. R. ....	12
		Sirio Virindi A. R. ....	15
		Cutia deva A. R. ....	14
		Rāja visia Bujinga ....	12
		Salica Nārāyana A.R. ....	10
		Prithivadi Bacukera Sadicun ...	87

The Mlechhas (Muhammadans) followed, and Pratāpa Rudra; whose officers, Hucca and Bucca, raised the Vijyanagar dynasty; the list of which, in Buchanan, vol. iii. p. 476, differs essentially from that given by inscriptions.

TABLE XLIII.—*Rājas of Chola (Chola-mandeloor, Coromandel).*

(Including the country now called the Karnatic below the Ghāts, hod Tanjore. Capitals, in Ptolemy's time, Arcot; then Wariur, near Trichinopoly; next, Kumbhahona, and lastly, Tanjore.)—Wilson's Mackenzie MSS.<sup>1</sup>

A.D.		A.D.	
700-1000	Kulottungā—others say 3000 B.C. or 500 A.D., or 1200 A.D.; built temple at Tanga- pur, or Tanjore. Deva Chola. Sasisekhara. Siva linga. 918? Vira chola. 1100? Keri kala, persecutor of Rā- mānuja. Bhima. 886? Rājarājendra, subdued various countries. Vira mārtanda. Kirttivardhana. Vijaya.		Kanaka. Sundara, killed a Brahman. Kalakala. Kalyāna. Bhadra. 1407? Pattira Chola? last according to some accounts. Kulottunga Chola—last according to others, married his daughter to 48th Pandyan prince, who succeeded An illegitimate son (Nanda?) founded the Tonda Mandalam (Conjeveram)—also annexed to Pandya kingdom.

TABLE XLIV.—*Rājas of Chera or Konga (comprehending Salem and Coimbatore.)*

'The Kongadesa Rāja kal enumerates twenty-six princes.'—Mackenzie's MSS.

Vira rāya.	Madhava vermā.
Govinda rāya.	Hari varmā.
Krishna rāya.	Vishnugopa.
Kalivallabha.	Krishna varmā.
Govinda II.	Dindikara.
Chaturbhujā.	Durvaniti.
Kumāra deva.	Pushkara.
Trivikrama deva.	Trivikrama.
Kongani vermā.	Bhūvikrama.

<sup>1</sup> Wilson, 'Jour. Roy. As. Soc.', vol. iii. p. 119; Dowson, *ibid.*, vol. viii. p. 1.

Kongani Mahádhirája.	Malla deva.
Govinda III.	Ganda deva.
Sivaga.	A.D. Satya vrákya deva.
Prithivi Kongani Mahádhirája.	894 Gauttama deva, subdued by the
Rája deva.	

Chola Rája, from whose descendants it passed to the Belál Rájas of Maisur, and thence to the Vijayanagar dominion.

[BARODA TAMBA-PATRA.

Dated Saka 734=812 A.D. 'Jour. As. Soc. Beng.,' vol. viii., p. 292.  
(Láteşwara<sup>1</sup> kingdom; capital, Elapur.)

1 Govinda Rája.	5 Govinda II.
2 Karka.	6 Indra.
3 Krishna.	7 Karka.]
4 Dhruva.	

#### TABLE XLV.—*Pandyan Dynasty of Mádura.*

Tradition ascribes seventy-four princes, of whom thirty-nine names are extant.

Kulottunga, 2000 B.C. ?	Udanta.
Anantaguna.	Rája Charámani.
Kálabhúshana.	Rája Sárdula.
Rájendra Pándya.	Kulottunga.
Rájeswara.	Yodhana pravira.
Gambhira.	Rája Kunjara.
Vansapradipaka.	Rája Bhayankara.
Puruhutajit.	Ugrasena.
Pandya Vamsapátáká.	Mahásena.
Sundareswara.	Satrunjaya.
Padasekhara.	Bhimaratha.
Varaguna, united Chola and	Bhimaparákrama.
Tonda to Mádura.	Pratápa Mártanda.
Rájendra.	Vikrama Kunjaka.
Suguna.	Yuddha Koláhala.
Chitraratha.	Atula Vikrama.
Chitrabhushana.	Atula Kirtti.
Chitra dhvaja.	Kirttivibhúshana.
Chitra verma.	Vamsasekhara, founded the Ma-
Chitrasena.	dura College.
Chitravikrama.	Vamsachurámani.

Náyak Dynasty—founded by Nágama Nayak, an officer of Krishna Rája of Vijaya-nagar, fourteen princes.

1530 Viswanáth.	Chokanáth; died 1667.
Krishnapa.	1687 Krishna mutu Virapa.
Virapa.	1695 Vijaya ranga, under regency
Visvapa.	of Mangamál.
Kumara Krishnapa.	1731 Vijaya Kumára, do. of Minakshi
Kasturi Ranjapa.	ráni. Fort seized by Mu-
Mutu Krishnapa.	hamedans, and Mádura be-
Virapa; died 1623.	came tributary to Nuwáb of
1623 Terumala, or Trimal, 1663.	Carnatic, and afterwards to
1663 Muta virapa.	the British.

<sup>1</sup> Supposed to be Kongades by Mr. H. T. Prinsep. See also Wilson's Mackenzie MS., p. 198.

TABLE XLVI.—*Rájas of Vijayanagar.*

From history, inscriptions, and family genealogy, (see 'As. Res.', vol. xx.) The latter authority, in the usual manner, deduces a direct line from Pandu, of the lunar dynasty, imperfectly following the Pauranic lists to Chandrabija, the last of the Mágadha rájas; to whom succeeds,

A.D.		A.D.	
	Marru.	1490	Vira nararasinha rája.
	Nanda.		Achyuta rao.
	Bhutanandi.	1524	Krishna deva; extended his sway to Gujerát, etc.
	Nandili, who has two sons, Ses-hunandi and		Ráma Rája, killed in invasion of Nizám Sháh, and I'mád ul mulk.
	Yeshanandi, whose fourteen sons, ruling over Bylmdesh, are dispersed by two invaders, Amitra and Durmitra; and seven fled to Andhradesa, or Telingana, where	1565	Sri Ranga Rája.
1034	Nanda, maharája, erected a kingdom, and founded Nandapur and Warangol.		Trimala Rája.
1076	Chalik Rája.		Vira yangat pati.
1118	Vijaya Rája; founded Vijayanagar.		Sri Ranga II.
1158	Vimala rao.		Rámadeva rao.
1182	Narasinha deva.		Venkatapati rao.
1249	Ráma deva.		Trimala rao.
1274	Bhúpa raya, died without issue.		Rámadeva rao.
1334	Bukka, son of a neighbouring Rája, raised to the throne of the Dakhan by Vidyaranya, his gúrú.		Sri Ranga rao.
1367	Havihara rao.		Venkatapati; invaded by the Moghuls and fled to Chandragiri.
1391	Deva rao.		Ráma rao; recovered a portion of territory.
1414	Vijaya rao.	1693	Hari Dás.
1424	Pundara deva rao, deposed by Sri Ranga Rája of Kaliandrúg.	1704	Chak Dás, his brother.
1450	Ráma chandra rao, son of Sri Ranga.	1721	Chima Dás.
1473	Narasinha rao.	1734	Ráma ráya.
			Gopála rao, son of Chak Dás.
		1741	Yankatapati.
		1756	Trimala rao.
			Sultán Khán took the country in the name of Tipu; and with Vira Venkatapati Ráma ráya, the dynasty became extinct, A.D. 1829.

TABLE XLVII.—*Rájas of Maisur (Maheshwar or Mysore.)*

Their genealogy is traced from the Yadu line of Chandravansa.—Mackenzie MSS.

A.D.	
	Betta Vadiyar.
	Chamaraja Vadiyar, son of Yadu.
1530	Timmaraja Vadiyar, son of Betta.
	Hiriya Chamarasa Vadiyar, his son.
	Bettatha Chamarasa Vadiyar, do., who had three sons,
	1 Timmarája Vadiyar.
	2 Krishnarája Vadiyar,
	3 Bola Chamarasa Vadiyar; had two wives, Viryammá and Demayammá.
1600 ?	Rája Vadiya, son of the former, took Seringapatam, 1610.
	Bettada Chamarasa Vadiyar.
	Devappa rája Vadiyar, } sons of Demayamma.
	Chama rája Vadiyar, }





TABLE I.—*Indian Dynasties, according to Ferishtah, stated to be taken from Persian and Sanscrit authorities.*

[The subjoined list seems to have been compiled by Prinsep from Dow's translation of Ferishtah ('History of Hindústán,' London, 1812), whose work, often most meritoriously exact in its rendering of the original, is at times quaintly interpolated with observations, which, though appearing by the context as Ferishtah's, are in effect not to be found in his proper Persian version : under this category may be classed the dates pertaining to the ante-Muhammadan section of the Table under review. Dow's translation of this portion of the entire history labours under the additional disadvantage of having been based upon manifestly imperfect MSS., which are now susceptible of correction and amplification from the excellent lithographed copy of the Persian text published at Bombay. I have introduced a few emendations and additions from that source ; but in the process of the examination necessary to this end, I have been led to form a somewhat unfavourable impression of Ferishtah's knowledge, and his power or will to sift and elucidate the traditions he inserts regarding the early dynasties of India. I am fully prepared, however, to admit that there is much curious matter to be found in his introductory chapter, which, if we could but rely upon our authority or trace up his sources of knowledge, would be well worth the deliberate scrutiny of orientalists. I intentionally abstain from entering more fully into this subject, as I am aware that the late Sir H. M. Elliot has devoted much time and attention to the illustration of this fragmentary preface ; and I trust that his observations on its merits may shortly see the light in the forthcoming posthumous edition of his works now under preparation by Mr. W. H. Morley.]

(This list is useful for comparison with those already inserted.)

Maharāj ; descended from Krishna (not the fabulous Brahmanical hero, but an ordinary mundane king of Hindústán, reigning in Oudh).

B.C. Faridún ; first invasion of India, Málchand reigned in Málwa.

1429 Kesvarāja, son of Maharāj, invades Ceylon and reduces the Dakhan with the aid of Mumuchehr, king of Persia.

Manérrāja, built Manér.

1209 Feroz-rai, son of Kesvarāja, recovers the provinces on the Indus previously ceded to Persia.

1072 Rustam of Persia establishes Seorāja dynasty at Kanauj, where worship of sun is introduced. (Dynasty survives 286 years?)

786 Baraja (36 years).

Keidar, a Brahman ; tributary to Persia (19 years).

731 (died) Shunkal ; built Laknauti (Gaur) in Bengal. Persian invasion under Peiranweisa, and subsequently by Afrasiáb.

Rohata, son of Shunkal (dynasty reigns for 81 years after the death of Shunkal).

586 Maharāj, Kachawa Rajputs of Amber established (reign 40 years, contemporary with Gustasp).

- 540 Keda rája. Rustam Dista, the Persian Governor of the ceded Indian provinces being dead, Keda rája reduces the countries on the Indus, and fixes his residence in the city of Bera; driven back by the Kábul mountaineers.
- 497 Jaya chand, his general—a famine.
- 437 Dáhlá, built Dihlí.
- 397 Porus, of Kemaon, usurped throne of Kanauj.
- 350 Porus II.; resisted Alexander's invasion.
- 330 Sinsar-chand (Sandracottus).
- 260 Jona, and his line, reigned tranquilly 90 years.
- 170 Kalián chand, a tyrant; kingdom of Kanauj dismembered.
- 56 Vikramajit (died), reigned in Málwá and Gujarát; era established;<sup>1</sup> anarchy and confusion succeeded.
- A.D. Rája Boga (Bhoja), of the Tódar tribe.
- 330 Basdeo (Vasudeva), revived Kanauj dynasty;<sup>2</sup> cotemporary of Bahramgor, who married his daughter.
- 410 Rámdeo, of Rhatore race, fixed in Mārwar; tributary to Feroz Sassan. Civil wars, took Kanauj and Bengal, married daughter of Sivaray of Vijayanagar.
- 500 Pratab Chand, his general, of Sesodia tribe, refused tribute to Noshurvan.
- Anand deva; reigned in Málwá, built Mandô and Ramgir (stated to be contemporary of Khusrú Parviz.)
- 550? Maldeo; assumed throne of Dihlí, and Kanauj empire divided.<sup>3</sup>
- Hispál, father of
- 977 Jaipál, Rája of Láhore, invaded by Subuktigin and by Mahmúd.
- Anandpál succeeds, defeated by Mahmúd.
- 1009 Bachera (Vijaya ray) of Bhattis, invaded by Mahmúd, A.H. 393.
- 1012 Prithirájpál (Jaipál II.?) of Dihlí and Láhore, fled to Ajmir.
- 1016 Korra (Kunwer ray—Kumárapál) king of Kanauj, surrendered to Mahmúd, in whose time the country was divided into principalities.
- Hardat, rája of Merat.
- Chándpál or Calchandra, rája of Mathura.
- Jundray?—Nanda ray of Kalinjar.
- 1022 Jasuverma? rája of Ajmir.
- 1024 Byramdeo (Brahma deva), of Gujarát deposed; and Sumnáth temple plundered.
- 1026 Dabisalimo (Saila deva) enthroned in his stead.
- 1035 Daipál, governor of Sonpat, forty miles from Dihlí on road to Láhore; in Sewálík, Rám ray, another chief.
- 1043 Daipál, king of Dihlí, with other rajas, retake Hansi, Tanesvar, etc., from Modood Ghiznavi.
- 1118 Balin, of Lhor; built Nágore in Sewálík; upset by Bairam Sháh.
- 1192 Pitter Rai of Ajmir, }  
Candi (Cháwandi) Rai of Dihlí } defeated Muhammad Ghorí.
- 1193 Hindú confederacy of 150 rajas defeated by ditto.
- Jay Chand, of Kanauj, defeated.
- Hemraj, of Ajmir, expelled Pithiray's son.
- Bhimdeva, of Gujarát; Goorkhas noticed, under Muhammed.
- 1215 Sahir deva of Narvar (Patán) defeated by Mahmud II.
- Uday-sa, tributary rája of Jálwar.
- 1231 Rája Dewbal, of Gwalior, reduced.
- 1246 Dilleki and Milleki rajas, of Kalinjar.
- 1253 Diepal, rája of Sitnur; raised rebellion in Sind.

<sup>1</sup> [Dow's English text says, 'The Hindoos retain such a respect for the memory of Biker-Majit, that most of them to this day reckon their time from his death, which happened in the 89th year of the Christian era,' vol. i. p. 11. Ferishtah himself, in the Persian original, indicates this date as corresponding (at the time he was writing, A.H. 1015,) with the Hindú reckoning of 1663.]

<sup>2</sup> Wilford names this king Sadápála, or Sadasvápála. 'As. Res.', vol. ix. p. 211.

<sup>3</sup> [See extracts from Albirúni, vol. i., p. 314.]

- 1291 Rája of Rintinpur besieged by Feroz.  
 1294 Rámdeo, rája of Deogir (Daulatábád).  
 — Shankaldeo, his son, married Dewal devi, daughter of Ray Karan, of Nehrwala, Gujarát; his wife, Kamlá devi.  
 Bhima deo, rája of Riutinbhore.  
 1299 Hambar deo (Hamira), his son, besieged by A'la.  
 1304 Koka, rája of Málwá, overcome by Ein ul mulk.  
 1308 Nehr Deo, of Jálwar, surrendered to ditto.  
 Ray Ratan Sen, of Chitor, escaped from A'la's camp.  
 — his nephew confirmed in that principality.  
 Sital deo, rája of Sewana.  
 1309 Laddar deo, rája of Warangol, made tributary.  
 Bilal deo, of Karnáta, resists Tughlak 1338, founds Vijayanagar.  
 1318 Harpál deo, son-in-law of Rám deo, slayed.  
 1340 Nag nak, Koly chief of Kondhana.—Prem Ray, of Gujarát.  
 1347 Man deo, rája of Buglana.—Krishna ray of Vijayanagar.  
 1389 Ray Sarvar, rayrayan, of Behar.—Vinaek ray of Telingana.  
 1391 Narsinh Bhan of Gwalior, Rahtor chief.—Narsinh of Kehrla.  
 1402 Brahma deo, son of ditto, repelled Timúr at Gwalior.  
 1405 Ray Davood, and Hubboo of Toolumba.  
 1425 Ray Bheem of Jummo.—Deva ray, of Vijayanagar.  
 1446 Pertáb Sinh of Patíála and Kampila, 1452 Narsinh, his son.  
 1452 Prithivy ráy and Karan ráy.—Bhim ráj of Condapilly.  
 1471 Amber ray and Mangal ray of Orissa, 1470.  
 1478 ——— Gwalior rája resisted Lodi.  
 ——— Sangat Sinh, expelled from Etáwa.—Siva ray of Vijayanagar.  
 1490 Mán Sinh, of Gwalior, receives dress of honor.  
 1518 Vikramajit, his son, killed by Bábar, 1526, and Gwalior reduced after 100 years' independence.  
 1491 Saha deo, rája of Katra.  
 1493 Balbhadra ráy, of Kootumba, near Chunar. Narsinh ray, his son.  
 Saliváhana, rája of Panná.  
 1501 Vinaik deo, of Dholpoor.  
 1528 Mán Sinh, rája of Gwalior.  
 1533 Rana Sanka, of Chitor (Sangráma Sinh)—finally reduced by Akbar, 1570.  
 Rawel deo of Bagur. Medny rája of Chandery.  
 Manik chand and others killed.  
 1540 Maldeo, of Ná gore and Ajmír, most powerful rája.  
 1542 Harkrishna ráy, of Rotás—killed by Shir Sháh.  
 1554 Ramchandra, rája of Panná and Kalinjar.  
 1556 Hemoo usurps the throne of Dihlí—battle of Pánipat.  
 — Ram-Sa, a descendant of Mán Sinh.  
 — Jugmul and Deví Dás, rájas of Márwár, yield to Akbar.  
 1567 Ujaya Sinha, of Udi pur.—Surjan ráy of Rintinbhore.  
 1570 Chandra Séa, son of Maldeo of Ajmír.  
 1572 Ráy Sinh, appointed to Jodhpur by Akbar.  
 1586 — his daughter married to Selim Mirza.

TABLE LI.—*Máhratta Governments.*<sup>1</sup>

I.—FAMILY OF SIVAJÍ, RÁJAS OF SATTARA.

- 1644 Shahjí, a Subáhdár of the Karnatic under Aurangzib, bestows jágirs on his sons.—Tanjore on Ekojí—dies 1664.  
 1647 Sivají, his son, commences predatory expeditions.  
 1664 ——— plunders Surát, and assumes title of rája.

<sup>1</sup> The origin of Sivají is traced in the chronicles of Mewár to Ajaya Sinh rana of Chitor, 1300 (T. I. 269), thus: Ajayasi, Sujunat, Dulceppí, Seojí, Bhorají, Deoraj, Oogursén, Maholjí, Khailoejí, Junkojí, Suttoojí, Sambojí, Sarají, ~~Sambhójí~~, ~~Sambojí~~, usurpation of the Peshwás.

- 1669 Siváji establishes a military government—dies 1680, April.  
 1680 Rája Rám, set up by minister—imprisoned at Raigarh.  
 — Sambhaji, assumed the sovereignty—executed at Talapur, August, 1689.  
 Santa, usurped power—murdered 1698.  
 1689 Rája Rám, again proclaimed at Sattara, died 1700.  
 1700 Tára Bai, his wife, assumed regency—incursions into Bahár.  
 1707 Siváji II., son of Sambha, nicknamed Shao-ji, released on Aurangzib's death,  
 and crowned at Sattara, March 1708—goes mad.  
 1749 Rám Rája, nominal successor—power resting with minister or Peshwa.  
 1818 Pertáb Síva, or Sinh, re-instated at Sattara by British, April 11.

## II.—HEREDITARY PESHWÁS OF PÚNÁ.

- 1740 Báláji Báji Rao, succeeds his father—dies after battle of Pánapat.  
 1761 Mádhují Rao Belál, second son, invested as nominal Peshwá, uncle Raghu-  
 náth, regent. Nána Farnavis, his kárkun—dies November 1771.  
 1772 Naráyan Rao, youngest son of Báláji, murdered.  
 — Rághunáth Rao (Ragoba), usurped.  
 1774 Mádhoraó Naráyan, posthumous son of Naráyan (Nána F. in power), com-  
 mitted suicide 1795.  
 1796 Báji Rao, proclaims himself; is taken by Sindia.  
 — Chimnájí, furtively invested at Puna, 26th May.  
 — Báji Rao, publicly proclaimed, 4th December.  
 1818 — surrenders to and pensioned by the English, 3rd June.

## III.—BHÚNSLA RÁJAS OF NÁGPUR.

- 1734 Raghúji Bhúnsla, nominated 'Séna Sáhib Subá,' or general in Márhatta  
 confederacy.  
 1750 — received sunud of Berár from Peshwá, dies 1753.  
 1753 Januji, eldest son, adopted his nephew.  
 1772 Raghují, eldest son of Madhoji, removed by Madhoraó in favour of  
 1774 Sabaji (his uncle), killed in action soon after by Mudaji.  
 1816 Parsaji, succeeded his father, Raghují; an idiot; strangled by  
 — Mudaji (Appa Sáhib), acknowledged by English; deposed 1817-18.  
 1818 May. Goozur, grandson of Raghují, seated on musnud by ditto.

## IV.—THE SINDIA FAMILY, FROM A VILLAGE NEAR SATARA, NOW GWALIOR RÁJAS.

- 1724 Ranuji Sindia, an officer in the Peshwá's army.  
 1750 Jyapa, succeeded to his father's jagír of half of Málwá, murdered 1759.  
 — Dattaji, second son of Ranuji, engaged in the Panjáb wars.  
 1769 Mahádaji, third, illegitimate, confirmed in jagír by Madhoraó, died 1794.  
 1794 Doult rao, his grand-nephew, adopted; fixed his camp at Gwalior, 1817.  
 1825 Baiza Báí, his widow, adopted Jankuji, and acted as regent.  
 1833 Jankuji, assumed the reins of government.

## V.—THE HOLKAR FAMILY.

- 1724 Mulhár Rao Holkar, a Sudra, an officer of note in the Peshwá's army.  
 1750 — obtained jagír in Málwá, died 1767.  
 1767 Málí Rao, grandson, succeeded under regency of  
 — Ahilya Báí, his mother, but died soon after.  
 — Tukaji Holkar (no relation), appointed to command of troops.  
 1797 Jeswant Rao Holkar, illegitimate son, maintained predatory rule.  
 1805 — confirmed in jagír of Indore, etc., died insane.  
 1811 Tulsi Báí, widow, adopted his illegitimate child,  
 — Mulhár Rao Holkar; battle of Mehadpur, December, 1818.  
 1834 Martand Rao, adopted son, dispossessed by  
 — Hari Holkar, present chief.

## VI.—GAIKWAR FAMILY—NOW REIGNING AT BARODA, GUJARÁT.

- 1720 Damuji Gaikwar (Shamsher Behádur), officer under Khândi Rao Holkar.  
 1731 Pilaji Gaikwar, nominated Séna Khas Khél; murdered.

- 1732 Dammaji, son, occupied east of Gujarát, died 1768.  
 1768 Govind Rao, second son, succeeded; but eldest, Syaji, an idiot, supported by  
 1771 Fatih Sinh, youngest, who held real power at Baroda.  
 1790 Mannaji Rao, assumed charge of Syaji, as regent; died 1793.  
 1793 Govind Rao, made regent 19th December, died September, 1800.  
 1800 Ananda Rao, eldest son; disputes with Mulhár and Kanhaji.  
 1806 ——— Treaty with the British Government.  
 ——— Fatih Sinh.

TABLE LII.—*Sikh Government of Láhore.*

- A.D.  
 1479 Nanak, founder of the Sikh sect, born.  
 ——— Guru Angad, wrote some of the sacred books.  
 1552 Amara dás, Khetri.  
 1574 Rám dás, beautified Amritsar.  
 1581 Arjun Mal, compiled the 'Adi Granth.'  
 1606 Har Govind, first warlike leader.  
 1644 Har Ray, his grandson.  
 1661 Har Krishna, died at Dihli.  
 1664 Tegh Behádur, put to death by Moslems.  
 1675 Guru Govind, remodelled the Sikh Government.  
 1708 Bandu, last of the succession of Gurus; put to death by Aurangzib.  
 ——— Predatory bands; internal feuds.  
 ——— Twelve misals or tribes of Sikhs captured Láhore and occupied Panjáb.  
 Charat Sinh, of Sukálpaka misal, died 1774.  
 1774 Maha Sinh, his son, extended his rule; died 1792.  
 1792 ——— his wife, regent, with Lakpat Sinh minister.  
 1806 Ranjit Sinh (born 1780), established Láhore independency.

BUDDHIST GENEALOGIES.

TABLE LIII.—*Chinese and Japanese Chronology.*

(From M. Klaproth's translation, Paris, 1833).

The Japanese names are distinguished by the letter J.

- |  |   |  |           |
|--|---|--|-----------|
| <p>Ta chen seng wang.<br/>                 I szu ma wang.<br/>                 Yeon lo tho wang.<br/>                 Kio lo wang.<br/>                 Ni feon lo wang.<br/>                 Szu tsu kie wang (Sans. Sinhastana-kabana).<br/>                 Tsing fan wang, Suddodana (and three brothers, Sans., Suklodana Amittidana, and Dhotodana).</p> | } | <p>Genealogy of Sákya, according to the Buddhist works of the Chinese.</p> | <p>1a</p> |
|--|---|--|-----------|
- a.c. 1027 Si tho to, nan tho, Chykie (Sákya muni), born.  
 999 Sákya becomes eminent in eighth year of Ajatasvara of Magadha.  
 949 Sákya or Buddha (Fo), attains nirvána (dies).  
 868 Anan (Ananda), second patriarch, dies.  
 833 A yu wang (J., A ik ô) (Sans., Asoka), dies.  
 806 Changna ho sisou, third patriarch, dies.  
 741 Yeou po kiu to (J., Ou fa kik ta), fourth patriarch, dies.  
 692 Thi to kia (J., Dei ta ka), fifth patriarch, dies at Mathurá.  
 687 Weng chu, disciple of Sáríputra.  
 660 Commencement of Japanese monarchy.  
 637 Mi chu kia (J., Mi sia ka), sixth patriarch of Magadha, dies.  
 604 Lao tan (J., Rô tan), founder of Tao tsu sect in China, dies.  
 590 Pho sin mi (J., Fâ sin mi), seventh patriarch, dies in N. India.  
 551 Confucius, born in the kingdom of Lore.  
 550 500 arhans of Kashmir (ka sita mi ra) preach the law.  
 535 Foe tho nan ti (J., Boudz da nan dai) eighth patriarch (Sans., Boudhánandi) of Canara, dies.

- 487 Fou tho mi to (Sans., Boudhāmīta), ninth patriarch, dies.  
 442 Hie, tenth patriarch of Central India, dies.  
 383 Fo na ye che, eleventh patriarch of Palibothra, dies.  
 327 Ma ming ta su, twelfth patriarch (Sans., Asvagocha) o<sup>r</sup> Benares, dies.  
 264 Kia pi mo lo, thirteenth patriarch of West India, dies.

## COMMENCEMENT OF THE TSIN DYNASTY OF CHINA.

- 212 Loung chou, fourteenth patriarch of Central India, dies.  
 161 Kia na chi pho, fifteenth patriarch of West India.  
 130 Ko li nan tho, makes an image of Mi le in India.  
 113 Lo hoei lo to, sixteenth patriarch of Kapila, dies.  
 74 Sang kia nan thi, seventeenth patriarch, born at Chi lo fa, dies.  
 13 Kia ye che to, of Ma ti, eighteenth patriarch, dies.  
 2 King hian fetches Buddhist scriptures from the kingdom of Yue ti.  
 A.D. 221 Kieu mo lo to, of Ferghāna, nineteenth patriarch, dies.  
 24-57 Hindús carry Buddhist religion into Java.  
 65 Buddhism introduced at the Court of Ming ti, Emperor of China.  
 74 Tu ye to, twentieth patriarch of India, dies.  
 117 Pho sieou phan theou, twenty-first patriarch, dies.  
 165 Mo nou lo, of Nati, twenty-second patriarch, dies.  
 209 Ho le na, of Ferghāna, twenty-third patriarch, dies.  
 259 Szu tsu pi khieu, of Magadha, twenty-fourth patriarch, dies.  
 266-313 The 'Prajña Páramita' translated into Chinese.  
 300 Won lo tchhu, of Khotan, translates the Fang konang king.  
 325 Pho che su to, of Ki pin or Cábul, twenty-fifth patriarch, dies.  
 372 Introduction of Buddhism into Kaoli (Corea).  
 382 Kieon mo lo chy, settles in China and translates 'Mahá Prajñá.'  
 384 Introduction of Buddhism into Pe tsi (in Corea).  
 388 Pou jou my to, twenty-sixth patriarch of India, dies.  
 399 Chy fa hian visits India to study.  
 407 Introduction of Buddhism into Tibet, under Hlato tori.  
 414 Chy fa hian returns to Chang ngan.  
 429 Death of Foe fou pha tho lo, of Kapila vástu, who translated the Houyan king in China.  
 457 Pan jo to lo (Prajñá dhara) of S. E. India, twenty-seventh patriarch, dies.  
 499 Pou thi ta ma (Bodhi dharma), twenty-eighth patriarch of N. India, settles in China as first patriarch of that country, dies in 508.  
 506 Sang kia pho lo, of Fou nan, made chief of Chinese Buddhist temples by the Emperor Siuan ven ti; dies in 525.  
 528 Introduction of Buddhism into Sin lo or Sinra (in Corea).  
 552 Ditto into Japan.  
 592 Death of Hoei kho ta su, second patriarch of China.  
 606 Seng lin ta su, third patriarch, dies.  
 629-645 Yuan honang, samanean of the Chhin family, travels in India and translates many books.  
 632 General introduction of Buddhism into Tibet, under Srong dbzam gampo.  
 651 Death of Tao tin ta su, fourth patriarch of China.  
 675 Death of Houng jin ta su, fifth patriarch of China.  
 676 Ti pho ho lo, priest of Magadha, visits China and translates books.  
 699 Chy chha nan tho, of Cábul, ditto, dies in 710.  
 713 Hoei neng ta su, last patriarch of China, dies.  
 732 Pou koug, a brahman sramana, visits China and translates the questions of Manju Sri (Kin kang ting king).  
 814 (about) Phan jo, priest of Cábul, settles in China and translates the 'Houa yan king.'  
 854 Phan jo, made Fa pao ta su, grand master of the treasure of religion.

<sup>1</sup> The Chinese 'MS. of the 'Bibliothèque du Roi' ends here.—M. Klaproth derives the continuation from other Chinese and Japanese authors.

TABLE LIV.—*Buddhist Chronology of Tibet.*

From the 'Vaidúrya Karpo,' written at Hlassa in the year A.D. 1686. Translated in Csoma's 'Tibetan Grammar,' p. 181.

- B.C. 962 Birth of Shakya (Chomdándás).  
 882 The Kála Chakra system taught by him; his death.  
 881 The 'Mula Tantra' compiled at Shambhala.  
 879 Death of Zla bzang, king and author of ditto.  
 878 Padma Sambhava born.  
 838 Manju Ghosha born in China.  
 432 Nágarijuna born.  
 278 Rigs-dan-grags-pa, ascended the throne of Shambhala.  
 A.D. 252 Nyan-tsan, king of Tibet (Thothori), died 371.  
 618 Doctrine of 'endeavouring perfection' upheld.  
 622 Nam-gyal, king of Shambhala; epoch of 403 years, called Mekha gya-tso, commenced.  
 627 Srong-tsan gam-bo born.  
 639 Kong-cho, a Chinese princess, arrived in Tibet.  
 651 Phrul-snang college, or Vihar, built at Lhassa.  
 728 Khri srong, king of Tibet.  
 747 Padma Sambhava arrived in Tibet; returned to India, 802.  
 804 A new astronomical period commenced.  
 861 Langtarma born; abolished Buddhism, 899.  
 965 Kala Chakra system introduced into India.  
 971 Restoration of Buddhism.  
 980 Atisha born.  
 1002 Brom-ton, the teacher, born.  
 1015 Sol-nag thang monastery founded.  
 1024 Mekha gya-tsho era terminated.  
 1025 Kala Chakra, or Jovian cycle, established in Tibet.  
 1038 Milaraspa born.  
 1052 Lang rithang pa born.  
 1055 Ragreng college founded.  
 1057 Lo-dang shesrab, the translator.  
 1071 Monasteries of Sangphu and Sákya founded.  
 1077 Tagpo-lha-je born.  
 1079 Grathang monastery founded.  
 1082 Ras-ehhung pa born.  
 1090 Kun-gah-nying-po, the great Sákya Lama born; died 1156.  
 1108 Phag-mo-grub-pa born.  
 1118 Period of 'deep meditation' commenced.  
 1121 Yubrag pa born.  
 1125 Shákya Sri born.  
 1134 Nyang, the prince, born.  
 1156 The Thet monastery founded.  
 1173 The Tshal monastery founded.  
 1177 The Bri-gung monastery founded.  
 1178 The Stag-iung ditto.  
 1180 The great Sákya pandit born.  
 1185 Gung-tang monastery founded.  
 1202 Shákya Sri, of Kashmír, arrived in Tibet.  
 1210 Ter-ton Lama born.  
 1211 The Lang-tang monastery founded.  
 1223 The Byang and Dor ditto.  
 1233 Gro gon phagspa born, mastered Tibet 1251  
 1253 The Chhos-lung monastery founded.  
 1288 Bu-ton born.  
 1300 Ta-si-byang chhub-gyal tshan born.  
 1347 Theg-ehhen chhos gyal born; became Tari (king) 1347.  
 1347 Thes-thang monastery founded.



- A.D. 1355 Incarnation of Tsong-khapa; died 1417.  
 1383 Thang-tong-gyal-po born.  
 1389 Ge-dun-grub-pa born.  
 1403 Shes-rab, the great interpreter, born.  
 1407 Yearly confession at Lhasa established by ditto.  
 1414 Karma pa born; Bras-pungs Vihār founded.  
 1417 The Sera monastery founded.  
 1419 The Sang-nags-khar ditto.  
 1421 Dus-zhabs-nor-zang-gya-tsho born.  
 1427 The Nor monastery founded by the Sa-skyas.  
 1429 Ge-legs pal-dan succeeded to the Gal-dan chair.  
 1433 The Nalenda monastery was founded.  
 1435 The Chhab-do-byams-gling ditto.  
 1436 Zna-lu-legs-pa succeeded at Gal-dan.  
 1437 The Pal-khor chaitya built.  
 1439 Lotsava chhos-kyong-zang-pa born.  
 1446 The 'Pod-kar hal lung,' work on Lunations, etc., written.  
 1447 The Bras-yul monastery founded.  
 1448 Logros succeeded at Gal-dan.  
 1461 Baso ditto.  
 1462 The Gong-kar Vihār founded.  
 1467 The Ser-dog-chan ditto.  
 1470 The Byams-gling ditto.  
 1471 Logros-tan-pa succeeded at Gah-dan; died 1473.  
 1474 Incarnation of Gê-dun gya-tsho; died 1540.  
 1476 The Ta-nag thub stan-nam gyal monastery founded.  
 1478 Mon-lam-pal succeeded at Gah-dan.  
 1500 Tshar chhen born.  
 1507 The Chhos-khor monastery founded.  
 1535 Khas grub pal gyi sengé born.  
 1541 Snod-nams gya-tsho born; died 1586.  
 1575 ——— invited by Althun khân, a Mongol prince.  
 1576 ——— built the Chhos-khor-ling monastery.  
 1587 Yon-tan gya-tsho born; died 1614.  
 1615 Nag-vang lo zang gya-tsho born.  
 1618 Period of 'morality' commences.  
 1625 Rigs-dan sengé, succeeds at Gah-dan.  
 1639 Stan dsin chhos gyal, king of Tibet.  
 1640 Nag vang lo zang conquered whole of Tibet.  
 1643 ——— founded the Potala (residence).  
 1650 ——— visited China.  
 1686 This Chronology compiled at Lhasa.

TABLE LV.—*Kings of Tibet, to the subdivision of the country in the tenth century.*

(From the Depter non po, or ancient Records of Zhonnu Pál, in Tsang, or middle Tibet; extracted and translated by M. A. Csoma Körösi.)

gNyah khri tsanpo—(about two hundred and fifty years B.C.)	Grigum tsanpo.
Khri tsanpo	Spudé gung rgyel.
hodidé,	Esho legs.
Mukhri tsanpo.	Désho legs.
These two names may designate the same person, according to different authorities.	Thiso legs.
	Guru legs.
Dingkhri tsanpo.	hGrong zhi legs.
So khri tsanpo.	Isho legs.
Mér khri tsanpo.	Za nam za idé.
gDags khri tsanpo.	Idé hñul-nas gzhung tsan.
Sribs khri tsanpo.	Sé ruol nam idé.

Sé rñolpo ldé.  
 ldé rñol nam.  
 ldé rñolpo.  
 ldé rgyelpo.  
 ldé Srin btsan.  
 rGyel tori long btsan.  
 Kñi btsan, or Kñri dGah.  
 dPungs btsan.  
 Kñri thoñi rjes grogs btsan.  
 Lha Thothori gNyan btsan—(five hundred years after the first king), A.D. 407, see Chinese list.  
 Kñri gNyan gzugs btsan.  
 dGro gNyan ldem-bu.  
 Stagri gNyan gzigs.  
 gNam ri strong btsan.  
 Strong btsan sgampo—born A.D. 627.  
 Gung strong gung btsan—(died before his father).  
 Mang strong mang btsan—(son of Strong btsan, etc.)

Adus sang mangpo rjé.  
 kLung nam tsrunggi rgyelpo.  
 Kñri ldé gtsug bñtan mēs ats'hogs.  
 Kñri strong ldé btsan—(born A.D. 726.)  
 Muné btsanpo.  
 Kñri ldé strong btsan (or Mutig btsanpo.)  
 Ralpa chen.  
 Kñri hum btsan dpal. (or kLangdar ma?)  
 A.D. 900.  
 gNam ldé hod srungs—(in the 10th century; anarchy.)  
 dPal kkhör btsan—(division of Tibet into several small principalities.)  
 dKra shis brtségs dpal.  
 Skyid ldé Nyima mgon.  
 dPalgyi mgon—(occupied Maryul or Ladags.)  
 bKra shis ldé mgon—(took possession of Spurang.)  
 ldé gtsug mgon.

Then follow the names of some kings or princes who reigned in Gugé and Spurang (or, in general, in Nári), above Garhiwal and Kamaon, commencing with the tenth century. At Lé in Ladags may be found the names of the kings that successively reigned in that principality; but I could not procure them. There is great confusion in the series of the princes that reigned in Nári, and their enumeration would be of little interest. There are in Tibet several works containing lists of the descendants of Nyá khri tsanpo, the first king, whom they derive from the Litsabyi race, in India; but in different authors the orthography sometimes varies, and even the whole name is differently stated. This, which I now communicate, has been taken from the Dep-ter hon-po, 'Ancient records,' written by Zhonnu pál, a learned religious person, who lived some centuries ago, and belonged to the Sa-skya religious sect, in gTsang, in Middle-Tibet.—A. C.

TABLE LVI.—*Burmese Chronological Table, translated in Crawford's Embassy.*

B.C.	A.D.	
691		The grand epoch established by An-ja-na, the grandfather of Gautama.
628		Gautama born.
608		Gautama began to reign.
589		Gautama obtained deification (became a Buddha).
551		Ajatasat began to reign.
544		Gautama died and obtained nib-b'han (annihilation).
543	1	The sacred epoch established by king Ajatasat.
520	24	His son, U-da-ya-bad-da, began to reign.
496	48	His son, Muny-da, and after him, his son, Na-ga-da-sa.
485	59	Maha Sam-b'ha-wa.
478	66	His younger brother, Chula Sam-b'ha-wa, began to reign.
472	72	Su-sa-na-ga, in Maj-ji-ma (Central India).
453	91	His son, Ka-la-san-ka, in Maj-ji-ma.
443	101	Twat-ta-paong, the founder of Sa-re-k'het-ta-ra (or Ras-se Myo, vulgarly called Prome).
426	118	His son, Bat-la-se-na, in Maj-ji-ma.
404	140	Nan-da began to reign, and was followed by eight kings of the same name, in Maj-ji-ma.
392	162	Chan-ta-kut-ta, in Maj-ji-ma (Chandragupta).

B.C.	S.E.	
376	168	His son, Bin-tu-sa-ra, in Maj-ji-ma.
373	171	His son, Twat-ta-ram, in Prome.
351	193	His son, Ram-b'haong, in Prome.
330	214	His son, D'ham-ma-sau-ka, in Maj-ji-ma.
326	218	D'ham-ma-sau-ka received the sacred affusion (Ab'hi-se-sa).
320	224	Prince Ma-hin-d'ha became a priest (Rahan), and his sister, Princess San-g'ha-mit-ta, a priestess (Rahan).
307	237	The period of the third rehearsal of the communications of Gautama. The priest Ma-hin-d'ha went on a religious mission to Si-ho (Ceylon).
301	243	Ra-han-man, son of D'ham-ma-sau-ka, began to reign in Prome.
289	255	Death of D'ham-ma-sau-ka (literally, 'his going to heaven').
251	293	His son or grandson, Kak-k'han, began to reign in Prome.
219	325	His son, Khan-laong, in Prome.
182	362	His son, Lak-k'hong, in Prome.
148	396	His son, Si-k'han, in Prome.
118	426	His son, Si-ri-rak, in Prome.
111	436	Ta-pa-ung, in Prome.
94	450	The communications of Gautama reduced to writing in Ceylon.
60	484	Ta-pa-man's son, Pi-ram, in Prome.
39	505	Ram-mak-k'ha in Prome, and his son.
A.D.		
21	565	Ram-sin-ga, in Prome, and his son.
54	568	His son, Ram-mun-cha-lin-da, in Prome.
39	583	His brother, Be-rin-da, in Prome.
54	598	His son, Mun-ja, in Prome.
56	600	His son, Pu-nyan-nya, in Prome.
59	603	His brother, Sa-k'ha, in Prome.
62	606	Sa-k'hi, in Prome.
65	609	His younger brother, Kan-un, in Prome.
66	610	His elder brother, Kan-tak, in Prome.
69	613	His elder brother, Bin-ja, in Prome.
73	617	His son, Su-mun-dri, in Prome.
P.E.		
76	1	The Prome epoch, established by king Su-mun-dri.
80	2	His son, Ati-tra, in Prome.
83	5	His brother, Su-panya-na-ga-ra-chin-na, in Prome.
94	16	Death of king Su-panya-na-ga-ra-chin-na.
107	29	Sa-mud-da-raj began to reign in Pngan.
162	74	Ras-se-kyaong, in Pngan.
167	89	Phru-chau-ti, in Pngan.
242	164	His son, T'himany-rany, in Pngan.
299	221	His son, Rang-mang-pok, in Pngan.
324	246	His son, Pok-san-lany, in Pngan.
386	308	Bud-d'ha-gau-sa went to Ceylon.
387	309	Pok-sang-lany's son, Kyaong-du-rach, began to reign.
412	334	His son, Sany-t'han.
469	391	Muk-k'ha-man and Su-rai.
494	416	Sany-t'han's great grandson, Ra-mwan-mya.
516	438	Sok-ton.
523	445	His son, Sang-lang-kyaung-ngai.
532	454	His brother, Sang-lang-pok.
547	469	His brother, K'han-laong.
557	479	His brother, K'han-lap.
569	491	His son, T'hwan-t'hek.
582	504	His son, T'hwan-prach.
498	520	His son, T'hwan-khyach.
613	535	Pup-pa-chau-ra-han.
V.E.		
639	1	The present vulgar epoch established by Pup-pa-cha-ra-han.
640	2	His son-in-law, Shwe-bun-si, succeeded.
652	14	His brother, Pis-sun.

A.D.	V.B.	
660	22	His son, Pit-taung.
710	72	His brother, Na-k'hwe.
716	78	Myang-ka-kywe.
726	88	Sing-ga.
734	96	Sing-k'hwan.
744	106	His son, Shwe-laung.
753	115	His son, T'he-wan-twang.
762	124	His son, Shwe-mauk.
766	128	His son, Chau-k'hang-nach.
785	147	His brother, T'hwan-lwat.
829	191	His son, Hhai-lu.
846	208	His brother, Pyany-bya.
864	226	His son, Tan-nak.
889	251	Sin-chwan, and his brother, Cha-le-nga-kwe.
914	276	His son, Sing-g'ho.
930	292	Taung-su-kri (the mountain chief)
945	307	Kwan-chau Kraung-pru.
966	328	His son, Kraung-cho.
972	334	His brother, Chuck-ka-té.
997	359	Kraung-p'haus'son Nau-ra-t'ha-chau.
1030	392	His son, Chau-lu.
1056	418	Kyan-chach-sa.
1081	443	His grandson, Alaun-chany-su.
1151	513	His son, Ku-la-kya.
1154	516	His son, Mang-rai-na-ra-sung-ga.
1157	519	His brother, Na-ra-pa-ti-chany-su.
1190	552	His son, Je-ya-sing-ga, or Nan-taung-mya-mang.
1212	574	His son, Kya-chwa.
1227	589	His son, Uch-cha-na.
1233	595	His brother, Mang-k'hen-k'hye.
1277	639	His son, Kyany-chwa.
1291	653	His son, Chau-nach.
1300	662	Ta-chi-shang-si-ha-su, in Panya.
1313	675	His son, Chau-mwan-nach, in Panya.
1322	684	His son, Uch-cha-na. This year Asang-k'ha-ra-chau-rwan founded Chit-kaing, and began to reign.
1330	692	His elder brother, Ta-ra-bya-kri, in Chit-kaing Sagaing.
1342	704	His younger brother, Na-chi-shang-kyany-chwa, in Chit-kaing.
1351	713	His son, Kyany-chwa, in Chit-kaing.
1356	718	Chau-mwan-nach died, and Pagan was destroyed.
1362	723	Kyany-chwa's brother, Mau-pa-na-ra-su, in Chit-kaing.
1364	726	His elder brother, Uch-cha-na-praung, in Chit-kaing. This year Sa-to-mang-bya founded Angwa (Ava), and began to reign; Chit-kaing and Panya were destroyed.
1377	739	His father-in-law, Many-kri-chwa, in Ava.
1401	763	His son, Ta-ra-bya-kri, in Ava, succeeded the same year by Mang-kaung the First.
1422	784	His son, Chany-pru-shang-si-ha-su, in Ava.
1425	787	His son, Many-P'ha-gray, in Ava, succeeded the same year by Ka-le-kye-ngo.
1426	788	Mo-n'hany-mang-ta-ra, in Ava.
1439	801	His son, Mang-rai-kyany-chwa, in Ava.
1442	804	His brother, Na-ra-pa-ti-kri, in Ava.
1468	830	His son, Mang-k'haung the Second, in Ava.
1501	863	His son, Shwe-nan-kyany-shang, in Ava (proper name, Na-ra-pa-ti.)
1526	888	Mo-n'hany-so-hau-pwa, in Ava.
1541	903	Un-b'haung-chan-b'hwa, in Ava.
1546	908	His son, Mo-bya-na-ra-pa-ti, in Ava.
1551	913	Cha-kong-chany-su-kyay-taung, or Na-ra-pa-ti-gan, in Ava.
1554	916	Sa-to-mang-chau, in Ava.

A.D.	V.E.	
1565	927	Prany-chun-mang-rai-kyany-ehwa, in Ava.
1597	959	Nyaung-ram-man-kri, in Ava.
1605	967	His son, Anauk-pak-lwan-mang-ta-ra-kri, in Ava.
1629	990	Sa-lwan in Ava.
1648	1010	His son, Na-dat-da-ya-ka, in Ava.
1661	1023	His brother, Prung-mang, in Ava.
1672	1034	His son, Na-ra-wara, in Ava; succeeded the same year Mang-rai-kyany-tang, grandson of Sa-lwan.
1698	1060	His son, Man-aung-ra-da-nga-da-ya-ka, in Ava.
1714	1076	His son, Chang-p'hru-shang, in Ava.
1733	1095	His son, K'haung-thit, carried captive to <del>Hansa</del> Hama-wati.
1752	1114	Alaung-b'hu-ra (Alompra) began to reign at Mut-cho- <del>oo</del> (Monchabo).
1760	1122	His son, U-pa-ra-ja, at Chit-kaing.
1763	1125	His brother, Chany-p'hru-shang (Sembuen), at Ava.
1776	1138	His son, Chany-ku-cha, at Ava.
1781	1143	His cousin, Paung-ka-cha, commonly called Maung-mang, son of U-pa-ra-ja, at Ava; succeeded the same year by his uncle, Pa-dun-mang, or Man-ta-ra-kri, son of A-laung-b'hu-ra, and founder of A-ma-ra-pu-ra.
1819	1181	His present Majesty, grandson of Pa-dun-mang, ascended the throne at A-ma-ra-pu-ra.
1822	1184	Ava rebuilt, and made the capital.

TABLE LVII.—*Chiefs of Labong and Zimmay.—(Northern Laos of Europeans; Yeun Shan of the Burmese.)*

From the Native Records consulted by Dr. D. Richardson, 1834. MS.

A.D.	S.E.	Bud.
576	1118	Wathoo daywa (Vāsudeva) and Taka danda, founded Labong.
578	1120	Placed Vama on the throne (or Zamma devi), daughter of the king of Chandapur, widow of Cambodia raja. 35 Kings, or 'Lords of the White Elephant.' Aditza-woon-tha built the Pagoda. 19 kings to
	V.E.	Bénya men yea (in Burmese, Dolana).
1289	651	Bénya tso men yea, changed the capital; thrice married into Pegu family.
1294	656	Benya—founded Zimmay.
1331	693	Nga then patchoon, his son.
1333	695	Np tchoon ta yung.
1334	696	Nā tchoon tareung.
1336	698	Ngathenpoo.
1345	707	Tso kanprú.
1347	709	Tso boa you.
1369	731	Goona.
1377	739	Gnathen numa.
1380	742	Thambi.
1420	782	Tso Benya.
1455	817	Tso neat.
1463	825	Benya yothee.
1503	865	Tso myn ar.
1537	899	Benya tsay.
1542	904	Tso myne.
1544	906	Zalapaba, his daughter, called there tha Dama mahadevi.
1558	920	Len bue mya shee, king of Pegu, took the town. His son, Narata tso.
1628	990	Ladong family restored.
1630	992	Thadau dama yaza of Pegu regained it.

A.D.	V.E.	
1763	1125	Nao oung recovered his independence.
		Lenbu Sheen, son of Alompra of Ava, took it.
1774	1136	Benya sa Ban rebelled, threw off Burmese yoke, and joined Bankok allegiance.
1778	1140	Chou chee weet, present king.

 TABLE LVIII.—*Sovereigns of Ceylon.*

From the 'Ceylon Almanack,' the Honorable George Turnour's Epitome.

B.C.	Names.	Relationship of each succeeding sovereign.
543	Wejaya (Vijaya) .....	The founder of the Wejayan dynasty.
505	Oopatissa I. ....	Minister; regent.
504	Panduwaasa .....	Paternal nephew of Wejaya.
474	Abhaya .....	Son of Panduwaasa; dethroned.
454	Interregnum.	
437	Pandukaabhaya (capital Anuradhapura).....	Maternal grandson of Panduwaasa.
367	Mootaseewa .....	Paternal grandson.
307	Devenipeatissa .....	Second son.
267	Oottiya .....	Fourth son of Mootaseewa.
257	Maha-seewa .....	Fifth ditto.
247	Suratissa .....	Sixth ditto; put to death.
237	Sena and Goottika .....	Foreign usurpers; put to death.
215	Asela .....	Ninth son of Mootaseewa; deposed.
205	Elaala .....	Foreign usurper; killed in battle.
161	Dootogaimoonoo .....	Son of Kaawantissa.
137	Saidaitissa .....	Brother.
119	Toohl or Thullathanaka .....	Younger son; deposed.
119	Laimiuitissa I. or Lajjetissa .....	Elder brother.
109	Kaloonna or Khallaata Naaga .....	Brother; put to death.
104	Walagambahoo I. or Wattagaamini .....	Brother; deposed.
103	Pulahattha (usurpers) .....	14. 7—Foreign usurpers; successively deposed and put to death.
100	Baayihha .....	
98	Panaymaaraa .....	
91	Peliyamaaraa .....	
90	Daathiya .....	
88	Walagambahoo I. ....	Reconquered the kingdom.
76	Mahadailitissa or Mahachoola .....	Son.
62	Chooraa Naaga .....	Son; put to death.
50	Kooda Tissa.....	Son; poisoned by his wife.
47	Anoola .....	Widow.
41	Makalantissa or Kallakanni Tessa .....	Second son of Koodatissa.
19	Baatiyatissa I. or Baatikaabhaya .....	Son.
A.D.		
9	Mahadailiya Maana or Daathika .....	Brother.
21	Addagaimoonoo or Aamanda Gaamini .....	Son; put to death.
30	Kinihirridailla, or Kanijaani Tissa.....	Brother.
33	Kooda Abhaa or Choolaabhya .....	Son.
34	Singhawallee or Seewalli .....	Sister; put to death.
35	Interregnum.	
38	Elloona, or Ila Naaga.....	Maternal nephew of Addagaimoonoo.
44	Sanda Mochoona, or Chanda Mnkha Seewa .....	Son.
52	Yasa Siloo, or Yataalakatissa.....	Brother; put to death.
60	Subha .....	Usurper; put to death.
66	Wahapp, or Wasakha .....	Descendant of Laiminitissa.
110	Waknaia, or Wanka Naasika .....	Son.
113	Gajaabahoo I. or Gaamini .....	Son.

A.D.	Names.	Relationship of each succeeding sovereign.
125	Mahaloomaana, or Mallaka Naaga...	Maternal cousin.
131	Baatiya Tissa II. or Bhaatika Tissa	Son.
155	Choola Tissa, or Kanittha Tissa ...	Brother.
173	Koochoona, or Chooodda Naaga .....	Son; murdered.
183	Koodanaama or Kooda Naaga .....	Nephew; deposed.
184	Kooda Sirinaa, or Siri Naaga I.....	Brother-in-law.
209	Waiwahairatissa, or Wairatissa .....	Son; murdered.
231	Abha Sen, or Abha Tissa .....	Brother.
239	Siri Naaga II.....	Son.
241	Weja Indoo, or Wejaya II.....	Son; put to death.
242	Sangatissa I. ....	Descendant of Laiminitissa; poisoned.
246	Dahama Sirisanga Bo, or Sirisanga Bodhi I.....	Ditto; deposed.
248	Goloo Abhaya, Gotha Abhaya, or Meghawarna Abhaya .....	Ditto.
261	Makalan Detoo Tissa I. ....	Son.
275	Maha Sen.....	Brother.
302	Kitsiri Maiwan I. or Kirtissri, Meghawarna .....	Son.
330	Detoo Tissa II.....	Brother.
339	Bujas or Budha Daasa .....	Son.
368	Oopatissa II.....	Son.
410	Maha Naama .....	Brother.
432	Senghot or Sotthi Sena .....	Son; poisoned.
432	Laimini Tissa II., or Chatagaahaka	Descendant of Laimini Tissa.
433	Mitta Sena, or Karalsora .....	Not specified; put to death.
434	Paandu .....	} 24. 9—Foreign usurpers.
439	Paarinda Kooda .....	
455	Khudda Paarinda .....	
455	Daatthiya .....	
458	Pitthiya .....	
459	Daasenkelleya, or Dhaatu Sena.....	Descendant of the original royal family; put to death.
477	Sigiri Kasoomboo, or Kaasypa I. ...	Son; committed suicide.
495	Moogallaana I. ....	Brother.
513	Koomaara Daas, or Koomaaran Dhaat Sena .....	Son; immolated himself.
522	Kirti Sena .....	Son; murdered.
531	Maidi Siwoo, or Siwaka .....	Maternal uncle; murdered.
531	Laimini Oopatissa III.....	Brother-in-law.
534	Ambaherra Salamaiwan, or Silaakaala. ....	Son-in-law.
547	Daapuloo I. or Daatthaapa Bhodoi...	Second son; committed suicide.
547	Dalamagan, or Moogallaana II. ...	Elder brother.
567	Kuda Kitsiri Maiwan I. or Kirtissri Meghawarna .....	Son; put to death.
586	Senewi, or Maha Naaga .....	Descendant of the Okaaka branch.
589	Aggrabodhi I. or Akbo .....	Maternal nephew.
623	Aggrabodhi II. or Soola Akbo .....	Son-in-law.
633	Sanghatissa .....	Brother; decapitated.
633	Boona Moogalan, or Laimini Bo-naaya .....	Usurper; put to death.
639	Abbaseggaheka, or Asiggaheka ...	Maternal grandson.
648	Siri Sangabo II. ....	Son; deposed.
648	Kaloona Detootissa, or Laimina Katooreya .....	[suicide. Descendant of Laimini Tissa; committed
649	Siri Sangabo II. ....	Restored, and again deposed.
665	Daloopeatissa I. or Dhatthopattissa	Laimini branch; killed in battle.
677	Paisooloo Kasoombo, or Kaasypa II.	Brother of Sirisangabo.
686	Dapuloo II. ....	Okaaka branch; deposed.

A.D.	Names.	Relationship of each succeeding sovereign.
693	Daloopetiss II. or Hattha-Dattho-patissa .....	Son of Daloopetissa I.
702	Paisooloo Siri Sanga Bo III. or Aggrabodhi .....	Brother.
718	Walpitti Wasidata, or Dantanaama	Okaaka branch.
720	Hoonnonara Riandalaor Hatthadatha .....	Original royal family; decapitated.
720	Mahalaipaano, or Maanawamma ..	Ditto.
726	Kaasiyappa III. or Kasombo .....	Son.
729	Aggrabodhi III. or Akbo .....	Nephew.
769	Aggrabodhi IV. or Kuda Akbo .....	Son (capital Pollonnarowa).
715	Mihindoo I. or Salamaiwan .....	Original royal family.
795	Dappoola II. ....	Son.
800	Mihindoo II. or Dharmika-Seelaam-aiga .....	Son.
804	Aggrabodhi V. or Akbo .....	Brother.
815	Dappoola III. or Kuda Dappoola ...	Son.
831	Aggrabodhi VI. ....	Cousin.
838	Mitwella Sen, or Selaamaiga .....	Son.
858	Kaasiyappa IV. or Maaganyin Sena, or Mihindoo .....	Grandson.
891	Udaya I. ....	Brother.
926	Udaya II. ....	Son.
937	Kaasiyappa V. ....	Nephew and son-in-law.
954	Kaasiyappa VI. ....	Son-in-law.
964	Dappoola IV. ....	Son.
964	Dappoola V. ....	Not specified.
974	Udaya III. ....	Brother.
977	Sena II. ....	Not specified.
986	Udaya IV. ....	Ditto.
994	Sena III. ....	Ditto.
997	Mihindoo III. ....	Ditto.
1013	Sena IV. ....	Son; minor.
1023	Mihindoo IV. ....	Brother; carried captive to India during the Solcean conquest.
1059	Interregnum .....	Solcean vice-royalty.
1071	Wejayabahoo I. or Sirisangabo IV.	Grandson of Mihindoo IV.
1126	Jayabahoo I. ....	Brother.
	Wikramabahoo I. ....	
1127	Gajaabahoo II. ....	A disputed succession.
1153	Prakramabahoo I. ....	Son of Maanaabarana.
1186	Wijayabahoo II. ....	Nephew; murdered.
1187	Mihindoo V. or Kitsen Kisdaas ...	Usurper; put to death.
1187	Kirti Nissanga .....	A prince of Kaalinga.
1196	Werabahoo .....	Son; put to death.
1196	Wikramabahoo II. ....	Brother of Kirti Nissanga, put to death.
1196	Chondakanga .....	Nephew; deposed.
1197	Leelawati .....	Widow of Prakramabahoo; deposed.
1200	Saahasamallawa .....	Okaaka branch; deposed.
1202	Kalyaanawati .....	Sister of Kirti Nissanga.
1208	Dharmaasooka .....	Not specified; a minor.
1209	Nayaanga or Nikanga .....	Minister; put to death.
1209	Leelawati .....	Restored, and again deposed.
1210	Lokaiswera I. ....	Usurper; deposed.
1211	Leelawati .....	Again restored, and deposed a third time.
1211	Pandi Prakrama Bahoo II. ....	Usurper; deposed.
1214	Maagha .....	Foreign usurper.
1235	Wejayabahoo III. (cap. Dambadinia)	Descendant of Sirisangabo I.
1266	Kalikaala Sabitya Sargawajnya, or Paandita Prakrama Bahoo III. ....	Son.



A.D.	Names.	Relationship of each succeeding sovereign.
1301	Bosat Wejaya Bahoo IV. ....	Son.
1303	Bhuwaneka Bahoo I. ....	Brother.
1314	Prakrama Bahoo III. ....	Son of Bosat Wejaya Bahoo.
1319	Bhuwaneka Bahoo II. (at Hasti-sailapura) .....	Son of Bhuwaneka Bahoo.
	Pandita Prakrama Bahoo IV. ....	} Not specified.
	Wanny Bhuwaneka Bahoo III. ...	
	Wejaya Bahoo V. ....	
1347	Bhuwaneka Bahoo IV. (at Gampala) .....	
1361	Prakrama Bahoo V. ....	} Cousin.
1371	Wikram Bahoo III. (at Kandy) ...	
1378	Bhuwaneka Bahoo V. ....	} Not specified.
1398	Wejaya Bahoo V. or Weera Bahoo .....	
1410	Siri Prakrama Bahoo VI. (at Kotta) .....	} Maternal grandson; put to death.
1462	Jayaa Bahoo II. ....	
1464	Bhuwaneka Bahoo VI. ....	Not specified.
1471	Pandita Prakrama Bahoo VII. ....	Adopted son.
1486	Wira Prakrama Bahoo VIII. ....	Brother of Bhuwaneka Bahoo VI.
1505	Dharma Prakrama Bahoo IX. ....	Son.
1527	Wejaya Bahoo VII. ....	Brother; murdered.
1534	Bhuwaneka Bahoo VII. ....	Son.
1542	Don Juan Dharmapaala .....	Grandson.
	A Malabar, at Yapahoo.	
	Portuguese at Colombo.	
	Weediye Rája, at Pailainda Nowera.	
	Raajasingha, at Aiwissawelle.	
	Idirimaaney Suriya, at Seven Korles.	
	Wikrama Bahoo, at Kandy.	
1581	Raajasingha I. ....	Son of Maayaadunnai.
1592	Wimala Dharma .....	Original royal family.
1604	Senaaratena, or Senerat .....	Brother.
1635	Raajasingha II. ....	Son.
	Koomaara-singa. ....	Brother.
	Wijaya Paala. ....	Brother.
1685	Wimila Dharma Suriya II. ....	Son of Raajasingha.
1707	Sriwira Prakrama Narendra-singha, or Koondasaala .....	Son.
1739	Sriwejaya Raajasingha, or Hangu-ranketta .....	Brother-in-law.
1747	Kirtisiri Raajasingha .....	Brother-in-law.
1781	Raajaadhi Raajasingha .....	Brother.
1798	Sree Vikrama Raajasingha .....	Son of the late king's wife's sister, deposed by the English, and died in captivity.

In the native mode of recording the lengths of individual reigns, without referring them to a fixed epoch, anachronisms are unavoidable: Mr. Turnour has judiciously applied the following fixed points to correct the foregoing table.

B.C.	543	The landing of Vijaya, in the year of Buddha's death.
	307	The mission from Dharmásoka to establish Buddhism in Ceylon.
	104	The conquest of Ceylon by the Malabars.
	90	The founding of Abhayagiri by Wala gaarbahu.
A.D.	209	The date of the Vaitúliya heresy, in Vaivahara's reign.
	252	The revival of ditto, in the reign of Gold Abhas.
	301	Death of Makasen, 4 years anachronism.
	545	Another revival of the Vaitúliya heresy, in Ambakira's reign.
	838	Origin of the Vijira waadiya heresy, in Mitwella Sën's reign.
	1153	The accession of Prakrama Báhu, 6 years anachr.

- A.D. 1200 Ditto of Sahasa Mallawa, by Dambulla rock inscription, A.D. 1473.  
 1266 Ditto of Pandita Prākrama Bāhū III., error seven years.  
 1347 Ditto of Bhuwanika Bāhū IV.

In the remaining portion of the history of Ceylon, other materials have not been wanting for the adjustment of its chronology.

TABLE LIX. *Greek dynasties in Asia, founded after the death of Alexander the Great, by his Generals, etc.*

B.C.		SYRIA.	
334	Alexander the Great; born, 356; died, 323.	B.C.	137 Antiochus VII. Sidetes.
312	Seleucus I. Nicator.	128	Alexander II. Zebina.
280	Antiochus I. Soter.	125	Seleucus V.
261	Antiochus II. Theos.	125	Antiochus VIII. Grypus.
246	Seleucus II. Callinicus.	112	Antiochus IX. Cyzicenus.
226	Seleucus III. Ceraunus.	96	Seleucus VI. Epiphanes.
223	Antiochus III. Magnus. (Achæus.)	95	Antiochus X. Eusebes.
187	Seleucus IV. Philopator.		Antiochus XI. Epiphanes Philip, and
175	Antiochus IV. Epiphanes.	94	Demetrius III. Eucærus.
164	Antiochus V. Eupator.	88	Antiochus XII. (Dionysius of Josephus).
162	Demetrius I. Soter.	83	Tigranes, of Armenia.
160	Alexander I. Bala.	69	Antiochus XIII. Asiaticus.
147	Demetrius II. Nicator.	65	Syria became a Roman province.
144	Antiochus VI. Theos.		
142	Tryphon.		
B.C.		PARTHIA.	
255 <sup>1</sup>	Arsaces I.	A.D.	(Cinnamus.)
253	Tiridates * I.		(Artabanus III.)
216	Artabanus I.	42	Bardanes.
196	Phraapatus.	45	Gotarzes.
181	Phrahates I.	50	(Meherdates.)
173	Mithradates I.	51	Vonones II.
136	Phrahates II.	51	Vologeses I.
126	Artabanus II.	62	(Artabanus IV.)
123	Mithradates II.	77	Pacorus.
87	Mnaskires.	108	Chosroes.
77	Sinatroces.	115	(Parthamaspatēs).
70	Phrahates III.	116	(Chosroes restored),
60	Mithradates III.	121	Vologeses II.
54	Orodes I.	148	Vologeses III.
37	Phrahates IV. (Tiridates II.) (Phrahates IV.)	192	(Vologeses IV.)
A.D. 4	Phrahataces.	209	(Vologeses V.)
5	Orodes II.		Artabanus V.
5	Vonones I.	235	Artaxerxes, King of Persia, 1st of the Sassanids. (See table LXI).
13	Artabanus III. (Tiridates III.)		

#### KNOWN KINGS OF BACTRIA.

[I have omitted this list of Prinsep's, which was necessarily less complete than the elaborated series already inserted at p. 173, vol ii. of this work]

<sup>1</sup> The dates in this list, as well as the new names inserted in brackets, are taken from Mr. Lindsay's work on Parthian coinages. The titles of the kings appended to Prinsep's note \* are also corrected up from the same authority.

The family name Arsaces is applied to all the princes of Parthia, hence called

TABLE LIXa.—*Arsacidan Kings of Armenia, according to Moses of Chorene.*

	B.C.		Years.	
149	130	Valarsaces .....	reigned 22	Vaghurshag.
127	108	Arsaces I. ....	13	
114	95	Artases I. ....	25	
89	70	Tigranes II. ....	33	19th year of Arsaces III.
55-36	34	Artavasdes I. ....		
	20	Arsanius .....	20	20th of Arsaces.
	4	Abgarus .....	38	20th of Arsavirius.
	35	Sanatruces .....	30	
	65	Eruandus II. ....	21	8th of Darius.
	86	Artases II. ....	43	29th ditto.
	129	Artavasdes II. ....	few days.	
	129	Tiranus I. ....	21	3rd of Feroz I.
	150	Tigranes III. ....	42	
	192	Valarsaces .....	33	30th of Valarsaces.
	225	Chosroes I. ....	47	2nd of Artabanus.
	272	Interregnum under Artasires and Sapor Sassan.		
	286	Tiridates .....	56	3rd of Diocletian.
		(Intervallum).		
	337	Chosroes II. ....	9	8th of Constantius.
	353	Tiranus II. ....	11	
	364	Arsaces II. ....	30	
	394	Papus .....	7	
	401	Varasdates .....	4	20th Theodosius.
	406	Arsaces III. ....	5	
	411	Chosroes III. ....	5	
	416	Veramus Sapoies .....	21	
	437	Chosroes III. restored .....	1	
	438	Sapoies .....	4	
	442	Interregnum.		
	444	Artasires .....	6	
	450	The Armenian kingdom extinguished.—J.P.		

TABLE LX.—*Mythological Period of Persian History.*

## PESHADÁDIAN DYNASTY.

Kaiumars, by some supposed to be Adam, or Noah, reigned at Balkh.

Siamek, his son.

Hoshang.

Thamurath, surnamed Deoband.

Jamshid, reigned at Persepolis.

Zohák, surnamed Alvani, an invader.

Feridún, restored by Kawa the blacksmith.

Iráj.

Koshang.

Manuchehr.

Naudar.

Afrasiáb, king of Túrkiistán

Zab, brother of Naudar.

Ghorshasp.

the Arsacidæ, and is almost the only one visible on their coins. [Their coin titles (usually occurring in the genitive case) are—ΒΑΣΙΛΕΩΣ, ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ, ΒΑΣΙΛΕΥΟΝΤΟΣ ΒΑΣΙΛΕΩΝ, ΒΑΣΙΛΙΣΣΗΣ ΘΕΑΣ ΟΥΡΑΝΙΑΣ, ΜΕΓΑΛΟΥ, ΘΕΟΠΑΤΡΟΣ, ΘΕΟΠΑΤΡΟΥ, ΦΙΛΑΔΕΛΦΟΥ, ΕΠΙΦΑΝΟΥΣ, ΕΥΕΡΓΕΤΟΥ, ΑΥΤΟΚΡΑΤΟΡΟΣ, ΦΙΛΑΔΕΛΦΝΟΣ ΦΙΛΟΠΑΤΡΟΣ, ΝΙΚΑΤΟΡΟΣ, ΔΙΚΑΙΟΥ, ΕΥΠΑΤΟΡΟΣ ΝΕΙΚΗΣΑΣ, ΤΙΟΣ ΚΕΚΑΛΟΥΜΕΝΟΣ.]

## KASIANIAN DYNASTY.

- Kai-kobád (*kai* signifies the mighty).  
 Kai-Káuś, son or grandson. Rustam his general.  
 Kai-Khusrú, grandson. Cyrus the great.  
 Lohrásp, son of Orond Sháh. (Cambyzes omitted ?)  
 Gushtásp, his son. Hystaspes of Grecian history.  
 Isfendíár, his son. Apanda or Astyages of ditto.  
 Kai Bahman, or Ardeshir darázdest. Artaxerxes Longimanus.  
 Homái, daughter and wife of ditto.  
 Daráb, son of ditto.  
 Dará, his son: the Darius overcome by Alexander the Great.  
 (The Mulúk-tawáif, or petty kings, following Alexander, called by the Persians the Ashkanians and Ashghanians, have been given above as the Arsacidae of the Greeks.—J.P.)

## TABLE LXI.--Kings of Persia, of the Sassanian race.

[The subject of the dates of the accessions of the Sassanian dynasty is involved in some obscurity, from the practice prevailing of reckoning by the years of each king's reign instead of following the order of a single cycle.<sup>1</sup> I have contented myself for the present with quoting the dates given in Dr. Smith's Dictionary, and appending Dr. Mordtmann's latest determinations *à propos* to his elaborate coin illustration of the history of the race.]

Smith, Mordtmann.

A.D.	A.D.	
226	226	1 Ardeshir-Bábegán bin Sásán, or Artaxerxes. <sup>2</sup>
240	238	2 Shahpúhr, Shapúr, or Sapor, captured Valerian.
273	269	3 Hormuzd or Hormisdas.
274	271	4 Baharám, or Varanes I.
277	274	5 Baharám, or Varanes II.
294	291	6 Baharám, or Varanes III. Segán Sháh.
294	291	7 Narsè or Narses, conquered Armenia and Galcrius.
303	300	8 Hormuzd, or Hormisdas II.
310	308	9 Shahpúhr, or Sapor II.
381	380	10 Ardeshir, or Artaxerxes II.
385	383	11 Shahpúhr, or Sapor III.
390	389	12 Baharám, or Varanes IV. Kermán Sháh.
404	399	13 Yezdegird, or Isdegerde I. <sup>3</sup>
420	420	14 Baharám-gaur, or Varanes V. visited India.

<sup>1</sup> ['Hamzah Isfahání,' Latin Preface, p. vi.]<sup>2</sup> From Moses of Chorene:—

A.D.	Years.	A.D.	Years.
232	Artasires.....reigned 53	421	Artasires II. ....reigned 4
285	Sapores I. .... 31	425	Veramus I. Cermanus ..... 10
	Nerses..... 9	435	Isdigerdes I. .... 11
344	Hormisdas ..... 3	446	Veramus II. .... 21
	(contemporary of Constantine).	467	Isdigerdes II. ....
	Isdigerdes ..... 70		Feroses II. in whose reign Moses of Chorene lived.—J.P.
351	Sapores II..... 70		

<sup>3</sup> [Some authors insert a second king of this name after Yezdegird I.—'Hamzah Isfahání,' p. 14. Mordtmann, p. 64; but there seems to be no sufficient authority for the interpolation.]

Smith. A.D.	Mordtmann. A.D.	
448	440	15 Yezdegird, or Isdegerde II.
458	457	16 Hormuzd, or Hormisdas III.
458	458	17 Firúz, or Perose, allied with Khákán of Huns.
484	485	18 Balás, Palash, or Balasces.
488	491	19 Kobád, or Cavades.
498	498	20 Jamasp. (Kobád recovers kingdom 502.)
531	531	21 Khosrú, Kesri (Nushírván), or Chosroes.
579	579	22 Hormuzd, or Hormisdas IV. deposed by his general (Varanes VI. A.D. 590, M. A.D. 591.)
591	591	23 Khosrú-Parváz, Kesri, or Chosroes II. put to death by
628	628	24 Kobád Shíráyieh, or Siroes.
	629	25 Ardeshir III. Anarchy.
	629	26 Shahriár or Sarbazas.
	629	27 Púrán-Dukht.
	631	28 Azermi-Dukht.
	631	29 Fafokh-zád-Bakhtyar.
	632	30 Yezdegird or Isdegerde III. overthrown by Musalmáns 641.

TABLE LXII.—*Khalifs, vicegerents or successors of Mahomed or Muhammad bin Abd-allah, whose death occurred in the 11th of Hijra era, or A.D. 632.*<sup>3</sup>

(This and the following from Marsden's 'Numismata Orientalia,' corrected up from later Numismatic works.)

A.H.	A.D.	
11	632	1 Abúbakr.
13	634	2 U'mar.
23	644	3 U'smán.
35	656	4 A'li.
40	661	5 Hasan bin A'li, retired to Medina—Husain killed at Kerbela

RACE OF OMMIAH, REIGNING AT DAMASCUS.

41	661-2	1 Mua'wiah I.
60	679-80	2 Yazíd bin Mua'wiah.
64	683-4	3 Mua'wiah II. bin Yazíd.
64	684	4 A'bdallah bin Zubeir.

<sup>1</sup> [632 A.D. is the date of the commencement of this king's reign, which has given the initial year to the era bearing his name. See p. 142, vol. ii. *ante*, Ockley's 'Hist. Saracena,' pp. 145, 277.]

<sup>2</sup> [I have altered the original transliteration of these names in order to reduce the orthography of the Roman equivalents to as close an adherence to the literal definition of the original Kufic as the nature of our English system of writing will permit. The nine letters of the Arabic alphabet, whose powers have been perverted in the utterance of foreigners, have been made to follow the Persian system of phonetic expression, and are severally represented by the following English pointed or accented equivalents:—

1	2	3	4	5	6	7	8	9
ث	ح	ذ	ص	ض	ط	ظ	ع	ق
ṯ	ḥ	ḏ	ṣ	ẓ	ṭ	ẓ	a', u', etc.	q

The Arabic powers of these letters are severally—1. *ṯ* (*thick*); 2. *ḥ*; 3. *ḏ* (*this*); 4. *ṣ*; 5. *ḏ*; 6. *ṭ*; 7. *ṭh* (*father*); 8. *a*; 9. *k* (*guttural*). I have not concerned myself greatly with the correction of the equivalents of the Arabic short vowels, but it may be noted that, under the old system, the English vowel *e* ordinarily stood for what modern practice represents by the short *a*, though in many cases it was inserted indifferently in the place of the *i*.]

A.H.	A.D.	
64	684	5 Marwán bin Hakím.
65	684-5	6 A'bd-ul-malik bin Marwán.
86	705	7 Walid bin A'bd-ul-malik.
96	714-15	8 Solaimán bin A'bd-ul-malik.
99	717-18	9 U'mar bin A'bd-ul-a'ziz.
101	719-20	10 Yazid II. bin A'bd-ul-malik.
105	723-4	11 Hishám bin A'bd-ul-malik.
125	742-3	12 Walid II. bin Yazid.
126	743-4	13 Yazid III. bin Walid.
126	744	14 Ibrahim bin Walid.
127	744-5	15 Marwán II. bin Muḥammad, deposed and slain

## RACE OF AL-A'BBÁS, REIGNING AT BAGHDÁD.

132	749-50	1	Abú'l A'bbás al-saffáh.
136	753-4	2	Almansúr.
158	774-5	3	Al-Mahdí bin al-Manşúr.
169	785-6	4	Al-Iládf bin al-Mahdí.
170	786-7	5	Harún al-Rashid bin al-Mahdí.
193	809-10	6	Al-amín bin al-Rashid.
198	213-14	7	Al-Mámún bin al-Rashid.
202-3			Ibráhím bin Al-Mahdí, competitor, 817-18.
218	833-4	8	Al-Ma'taşem billah bin al-Rashid.
227	841-2	9	Al-Wáşik-billah bin al-Ma'taşem.
232	846-7	10	Al-Mutawakkil a'l'illah bin Ma'taşem.
247	861-2	11	Al-Muntaşir billah bin Mutawakkil.
248	862-3	12	Al-Ma'sta'in billah bin Muḥammad bin Ma'taşem.
252	866-7	13	Al-Ma'taz billah bin Mutawakkil.
255	868-9	14	Al-Muhtadi billah bin Wáşik.
256	869-70	15	Al-Ma'tamed a'la'illah bin Mutawakkil; Egypt independent. Muwaffik billah, his coadjutor from 871 to 891.
279	892-3	16	Al-Ma'tazed billah bin Muwaffik.
289	901-2	17	Al-Muktafi billah bin Ma'tazed; provinces independent.
295	907-8	18	Al-Muktader billah bin Ma'tazed; murdered by a eunuch.
320	932	19	Al-Káher billah bin Ma'tazed.
322	933-4	20	Al-Rází billah bin Muktader; Amír ul umrá powerful.
329	940-1	21	Al-Mutakí billah bin Muktader.
333	944-5	22	Al-Mustakfi billah bin Mutakí.
334	945-6	23	Al-Muti'lillah bin Muktader.
363	973-4	24	Al-Taí' lillah bin Mutí'.
381	991-2	25	Al-Kádir billah bin Ishak Muktader.
422	1030-1	26	Al-Káim beamrillah Abú Ja'far A'bd-Allah bin Kádir.
467	1074-75	27	Al-Muktadí billah Abú'l Kasem A'bdallah bin Muḥammad bin Káim beamrillah.
487	1094-5	28	Al-Mustazhir billah bin Muktadí.
512	1118-9	29	Al-Mustarshed billah bin Mustazhir.
529	1134-5	30	Al-Ráshid billah bin Mustarshed.
530	1135-6	31	Al-Muktafi beamrillah bin Mustazhir.
555	1160	32	Al-Mustanjed billah bin Muktafi.
566	1170-1	33	Al-Mustaẓí beamrillah bin Mustanjed.
575	1179-80	34	Al-Násir le din illah bin Mustanjed, professes Shíah doctrines.
622	1225	35	Al-Záhir beamrillah Muḥammad bin Násir.
623	1226	36	Al-Mustanşer billah Abú Jáfár Al-Mansúr bin Záhir.
640	1242-3	37	Al-Musta'shem billah Abú Ahmad A'bd-Allah bin Mustanşer.

In the year 656 (1256), Baghdád was besieged and taken by the Moghul Chief Hulágu, grandson of Jenghiz Khán, and the Khalif Musta'shem put to death.

[I have introduced among Prinsep's original extracts the Tables marked **C. D. E.** which have been compiled chiefly from the work of

**Hamzah Isfahání,**<sup>1</sup> for the purpose of illustrating more fully the annals of the Eastern provinces of the empire of the Khalifs, the successional history of which may chance to throw light upon some of the obscure dynasties of the conterminous kingdoms of India, whose epochs and transitions are so peculiarly identified with the objects of these volumes.

**TABLE C.—Arab Governors of Khordásán: capitals, Merv, Nishápur, Bokhára.**

(A'bdallah bin Táhir adopts the second, Isma'íl bin Ahmad the third.)

A.H.	A.D.		A.H.	A.D.	
129	747	Abú Muslim.	173	790	Alhasan bin Kahtabah.
137	755	Abú Dáúd Khálid bin Ibrahim.	175	792	Ghitriff bin A'tá.
140	757	Abú A'sám bin Salím.	177	793	Hamzah bin Málik.
142	759	A'bdul Jabár bin A'bdulrahman.	177	793	Alfázl bin Yahyi bin Khálid.
143	760	Házim bin Hazaimah.	179	795	A'mrú bin Hamal.
144	763	Abú A'ún A'bd ul Malik.	179	796	Manşúr bin Yazid bin Alkhá- lid Al-mahdí.
149	766	Abú Malik Asid bin A'bdallah.			Ja'far bin Yahyi.
150	768	Házim (again).	180	796	A'li bin A'ist bin Máhán.
151	768	Humídl bin Kahtabah.	192	808	Harşama bin Aa'yan.
159	776	A'bdallah bin Humídl.	193	809	Al Mámún (subsequently Kha- lif).
160	776	Abú A'ún.			
		Mu'ád bin Muslim.	196	812	Alfázl bin Sa'hl (nominated)
163	780	Zahír bin Almasib.	203	818	Rajá bin Zuhak.
166	782	Alfázl bin Sulaimán.			Ghasán bin A'bad.
170	787	Ja'far bin Muḥammad.			

**TABLE D.—Táherides.**

204	819	Táhir bin Al-Husain.	230	844	Táhir bin A'bdallah.
207	822	Talhah bin Táhir.	248	862	Muḥammad bin Táhir.
213	829	A'bdallah bin Táhir.			

**TABLE E.—Saffaris.**

259	873	Ya'kúb bin Laís.
265	878	A'mrú bin Laís, defeated by Isma'íl bin Ahmad, the Sámání in A.H. 287, A.D. 900.
287	900	Táhir bin Muḥammad succeeds in Sistán (Price ii. 233).

**TABLE LXIII.—Sámánian or Sámání Dynasty of Bukhárá, Khordásan and Persia.**

A.H.	A.D.	
261	874-5	1. Naşr bin Ahmad, great grandson of Sámán, a robber chief, ap- pointed governor of Bukhárá by the Khalíf Ma'tamad.
279	892	2 Isma'íl bin Ahmad.
295	907	3 Ahmad bin Isma'íl.
301	914	4 Naşr bin Ahmad.
331	943	5 Núh bin Naşr.
343	954	6 A'bd-ul-malik bin Núh.
350	961	7 Al-Manşúr bin Núh.
366	976	8 Núh ben Al-Manşúr. [By some authorities this accession is placed in Rajab, A.H. 365.]
387	997	9 Al-Manşúr bin Núh, deposed and blinded.
389	999	10 A'bd-ul-malik bin Núh. [Ailek Khan enters Bukhárá on the 10th of Df'ka'dah, A.H. 389.
		11 Isma'íl bin Núh, killed in the 3rd month of A.H. 395.]

<sup>1</sup> حمزة بن الحسن الصفهاني (composed in A.H. 330 = A.D. 951-2) edit. of M. Gottwaldt: Lipsie, 1848

TABLE LXIV.—*The Ghaznî Dynasty, with the cotemporary Khalifs whose names appear on the local coinage.*

(From the 'Jour. Roy. As. Soc.' 1848.)

Khalifs of Baghtlad.	Accepted Dates of Accession.			Kings of Ghaznî.	Notices of various Dates assigned by different Authorities.
	A.H.	A.H.	A.D.		
Al Mutî' lillah ... Abdicates, Dî'î Ka'dah, 363	334				
		350	961	Alptegîn .....	Revolt 350, Rauzat al 'Safa.
Al Tâî' lillah.....	363				
Deposed by Bahâ al dowlah (Shabân), 381		366	976	Ishak .....	Alptegîn's death doubtful. (Abû Ishak Ibrahim, "Ibn Haukal.")
		367	977	Subuktigîn	
Al Kâdir billah ... Died, Dî'î Hajah, 422	381				
		387	997	Isma'îl .....	Subuktigîn's death, 386, Nâsiri, Jenâbi; 387, Abûl Faraj; 387 (Shabân), Rauzat al 'Safa, Abûl Fidâ, Khalâsat al Akhbâr.
		388	998	Mahmûd.....	Entitled Saif al dowlah, 384; takes possession of Ghaznî, Rabî al Awal, 388; becomes independent, 389.—Various authorities.
		421	1030	Muhammad ..	Mahmûd's death, Rabî al Akhir, 421, Abûl Fidâ, Khalâsat al Akhbâr.
		421	1030	Masa'ûd .....	Muhammad's 1st reign, 7 mths., Nâsirî. Masa'ûd's accession, 422, Nâsirî; 421 (3rd Shawâl), Rauzat al 'Safa, Khalâsat al Akhbâr.
Al Kâim beamrillah ..... Died, 13 Shabân, 467	422				
		432	1040-1	Muhammad ..	Rebellion against Masa'ûd, 432 (Rabî al Akhir), Abûl Fedâ; Muhammad's restoration, 432, Nâsirî, Abûl Faraj; 432 (Jumâd al Awal), Akbarî; 433, Habib al Sair; 433 (Jumâd al Awal), Guzidah.
		432	1041	Môdûd .....	Muhammad's 2nd reign, 4 mths., Nâsirî. Môdûd's accession, 432 (Shabân), Masa'ûdî, 432, Nâsirî, Abûl Faraj. Entry into Ghaznî, 432 (23rd Shabân), Abûl Fidâ. Accession, 434, Guzidah; 433, Khalâsat al Akhbâr; Ferishtah.
		440	1048	Masa'ûd II...	Môdûd's death, 441, Nâsirî, Abûl Faraj; 441 (Rajab), Abûl Fidâ, Guzidah, Rauzat al 'Safa, Khalâsat al Akhbâr, Habib al Sair.



Khalifs of Baghiddá.	Accepted Dates of Accession.			Kings of Ghazni.	Notices of various Dates assigned by different Authorities.
	A.H.	A.H.	A.D.		
		440	1048	Abúl Hasan A'li ..... <i>Bahá al dowlah</i>	Masa'úd II. and Abúl Hasan A'li, length of reign, jointly, 2 months, Násiri. Masa'úd II., 1 month, Guzidah, Habib al Saír; 5 days, Tabakát Akbari; 6 days, Ferishtah, Abúl Hasan A'li, length of reign 2 years, Guzidah, Khalásat al Akhbár; nearly 1 year, Habib al Saír; 1 month, Tabakát Akbari.
		440	1048	A'bdal Rashíd	Accession, 440, fixed from coins; 441, Násiri, Abúl Faraj, Abúl Fidá; 443, Guzidah, Khalásat al Akhbár.
		444	1052	Toghral .....	444, Abúl Fidá.
		444	1052	Ferokhzád ...	Length of Toghrál's rule, 40 days, Násiri, Khalásat al Akhbár, etc. Ferokhzád's accession, 443, D'l Kadal, Násiri.
		451	1059	Ibrahím .....	Accession, 451, Táríkh Masa'údi, Násiri, Abúl Fidá, Jenábi; 450, Guzidah, etc.
Al Muktafi beamillah ..... Died, 15 Muharrim, 487	467				
Al Mustazbar billah Died, 16 Rabi al Akhir, 512	487	492	1099	Masa'úd III..	Ibrahím's death, 492, coins, Násiri, Guzidah, Abúl Mahá-san; 481, Abúl Fidá, Rauzat al Safá.
		508	1114	Shirzád .... <i>Kamál al dowlah</i>	Guzidah, Jenábi, etc.
		509	1115	Arslán .....	Accession, 509, Násiri, Guzidah, etc.
Al Mustarshid billah ..... Killed, 17 D'l Ka'dah, 529	512	512	1118	Bahrám Sháh	Capture and sack of Ghazni by A'la al din Jehánsóz, 547.
Al Ráshid billah...	529				
Al Muktafi leamerillah ..... Inaug., 12 D'l Hajab, 530	530	547	1152	Khusrú .....	Accession, 552, Násiri; 544, Guzidah; 548 or 550, Abúl Fidá; 547, Akbari.
Al Mustanjid billah .....	555	555	1160	Khusrú Malik	Khusrú Malik finally dispossessed of Ghazni by the Ghoris, 567, Ferishtah; forced to surrender at Lahór, 585, Rauzat al Safá; 588, Akbari; 582, Ferishtah.

TABLE LXV.—*Sultáns of the Seljúk Dynasty.*

[The grandsons of Seljúk, a Turk of the tribe of Khazar or Ghaz on the Caspian, Toghrul-beg and Jáfer-beg Daoud, were in the service of Mahmúd of Ghazni. In A.H. 429 (1036), the former resisted Masa'úd, and received investiture as Sultán of Khorán from the Khálif. The three branches of the Seljúk family settled in Hamadán, Kermán, and Rum or Anatolia.—Marsden's 'Or. Num.']

## I.—SELJÚK DYNASTY OF IRÁN OR PERSIA.

A.H.	A.D.	
429	1037	Rukn-ud-dín Abuthaleb, Toghrul Beg, Mahmúd.
455	1063	Alp Arslan, Abushajia, Azz ud-din.
465	1072	Maleksháh, Moaz ud-dín abul fateh.
485	1092	Barkiarok, rokn ud-dín abulmozafer kásim : in his reign the empire was divided, he retaining Persia; Ghiás ud-dín Muhammad, Syria and Aderbiján; and Moaz ud-dín burhán sanjiár, Khorásán and Maveruhnahr.
498	1104	Malek Sháh, his son, deposed.
498	1105	Muhammad, chosen Sultan.
511	1118	Mahmúd, Moghiáth ud-dín Abul Kásem.
525	1131	Da'úd, his son, deposed.
526	1131	Masa'úd, Ghiath ud-dín, deposed.
527	1132	Toghrul, son of Muhammad.
529	1134	Masa'úd, re-established.
547	1152	Malek Sháh, son of Mahmúd, deposed.
547	1152	Mahmúd, grandson of Bograkkán, at Merv.
552	1157	Muhammad, his son, at Hamadán.
554	1159	Sulaimán Sháh, killed.
555	1160	Arslán Sháh, son of Toghrul, son of Muhammad.
571	1175	Toghrul Sháh, his son.

## II.—SELJÚK DYNASTY OF KERMÁN.

483	1041	Kadherd, or Karut beg, installed by Toghrul beg.
465	1072	Sultan Sháh, his son.
467	1074	Turán Shah.
489	1096	Iran Sháh.
494	1100	Arslán Sháh.
536	1141	Moghiáth ud-dín Muhammad.
551	1156	Toghrul Sháh.
565	1169	Bahrám, Arslán, and Turán Sháh dispute succession.
—	—	Muhammad Sháh, dispossessed by Malek dinar 683-1187.

## III.—SELJÚK DYNASTY OF RÚM OR ANATOLIA. CAPITAL IOONÍUM.

470	1077	Sulaimán bin Kotlumiáh.
478	1085	Interregnum of seven years.
485	1092	Da'úd Kilij Arslán bin Sulaimán.
501	1107	Saisan bin Kilij Arslán.
510	1116	Masa'úd bin Kilij Arslán.
551	1156	A'zz-ud-dín Kilij Arslán bin Masa'úd, destroyed first crusade army.
584	1118	Kutb-ud-dín Malák Sháh bin Kilij Arslán, deposed.
588	1192	Ghiás-ud-dín Kai Khusrú bin Kilij Arslán, deposed.
596	?	Rukn-ud-dín Sulaimán bin Kilij Arslán, deposed.
600	1203	Kilij Arslán bin Rukn-ud-dín, deposed.
600	1203	Ghiás ud-dín Kai Khusrú (restored).
607	1210	A'zz-ud-dín Kai Káus bin Kai Khusrú.
616	1219	A'lá-ud-dín Kai Kobád bin Kai Khusrú.
634	1236	Ghiás-ud-dín Kai Khusrú bin Kai Kobád, invaded by the Moghul Princes, descendants of Jenghiz Khán (See Table XLIX).
643	1245	A'zz-ud-dín Kai Káus, in nominal conjunction with his brothers, Rukn-ud-dín and A'lá-ud-dín, sons of Kai Khusrú.
655	1257	Rukn-ud-dín Kilij Arslán.
666	1267	Ghiás-ud-dín Kai Khusrú bin Rukn-ud-dín.
682	1283	Masa'úd bin A'zz-ud-dín Kai Káus, died 708—1308.

TABLE LXVI.—*Atabegs of Irák, ruling Ministers under the later Princes of the Seljukian race.*

## MOSUL BRANCH.

A.H.	A.D.	
521	1127	I'mád-ud-dín Zengi.
540	1146	Saif-ud-dín Ghází bin Zengi.
544	1149	Kutb-ud-dín Maudub bin Zengi.
565	1170	Al-Mu'iz Saif-ud-dín Ghází bin Módúd.
576	1180	A'zz-ud-dín Masa'úd bin Módúd.
589	1193	Núr-ud-dín (Bedr ud-dín) Arslán Sháh bin Masa'úd.
607	1210	Malik al-Káhir A'zz-ud-dín Mas'aud bin Núr-ud-dín.
615	1218	Núr-ud-dín Arslán Sháh bin Káhir.
616	1219	Násir-ud-dín Mahmúd bin Káhir.
619	1222	Al-Malik al-Rahím Bedr-ud-dín Lúlu.
657	1259	Al-Malik as-Şalah Isma'il bin Lúlu.

## HALEB (ALEPPO) BRANCH.

521	1127	Imád ud-dín Zengi.
540	1145	Malik al-A'ádel Núr-ud-dín Mahmúd bin Zengi.
569	1174	A'l-Malik as-Şalah Isma'il bin Núr ud-dín Mahmúd.
577	1181	I'mád ud-dín Zengi bin Kutb ud-dín bin Módúd, delivered Haleb to Şalah-ud-dín or Saladin.
594	1197	Kutb-ud-dín Muhammad bin I'mád-ud-dín, at Singara.

TABLE LXVII.—*Turcoman Ortokite Princes, reigning in Mardin and Mafarkin, Syria.*

		Il Ghází bin Ortok, seized Jerusalem and Mardin.
516	1122	Husám-ud-dín Timurtash bin Il Ghází.
547	1152	Najm-ud-dín Abu'l Muẓaffar Albí bin Timurtash.
572	1176	Kutb-ud-dín Il Ghází bin Albí (or Alpi).
580	1184	Husám-ud-dín Yúluḳ Arslán bin Kutb-ud-dín.
597?		Malik-ul-Manşúr Násir-ud-dín Ortok Arslán bin Kutb-ud-dín.
637	1239	Malik us-Sa'id Najm-ud-dín Ghází bin Násir-ud-dín Ortok.
653	1255	Malik ul-Muẓaffar Kará Arslán bin Najm-ud-dín.
691	1291	Shams-ud-dín Dáúd.
693	1293	Malik ul-Manşúr Najm-ud-dín Ghází.
712	1312	Albí Malik al-A'ádil I'mád-ud-dín A'li.
712	1312	Malik as-Şaleḥ Shams-ud-dín Şalah.

## ORTOKITES REIGNING AT AMÍD AND KHEIFA.

490	1097	Şokmán bin Ortok.
498	1104	Ibráhm bin Sokmán.
522?	1128	Rukn ud-dín Dáúd.
544?		Fakhr ud-dín Kará Arslán bin Dáúd.
562	1166	Núr ud-dín Muhammad bin Kará Arslán.
581	1185	Kutb-ud-dín Sokman bin Muhammad.
597	1200	Malik as-Şalah Násir ud-dín Mahmúd.
618	1221	Malik al-Masa'úd bin Malik as-Şalah Mahmúd.
629	1231	Malik al-Kámil, nephew of Şalah ud-dín (Saladin), took Amíd.

TABLE LXVIII.—*The Mogol or Moghul empire of Tartary. Capital Karakurm.*

A.D.	
1206	Jengíz Khán, or Timugin declared emperor, on the Onon river.
1227	Túli Khán, his son, regent during interregnum.
1241	Oktai Khán, fourth son of Jengíz, elected by his father's will.
	Tourakina Kkatun, his wife, regent for four years.
1246	Gaiuk Khán, son of Oktai.

- A.D.  
 1248 Ogoulganmish, his wife, regent on his death.  
 1251 Mangu Khán, died in 1259.

The empire of the Moghuls was subsequently divided into different branches in China, Persia, in Kapchak, etc.

- 1260 Knblai Khán, succeeded in China, and founded the Yuen dynasty.  
 1240 Zagatai Khán, son of Jengiz, founded Zagatai branch in Transoxiana.  
 1226 Tushi Khán, another son, founded Kapchak dynasty.

(For these dynasties of the Tartars, and those of the Huns, Chinese, etc., see De Guignes' 'Histoire des Huns.'—J. P.)

### TABLE XLIX.—*Moghul-Tartar or 'Il-Khánian Dynasty of Persia.*

On the death of Mangú Khán, son of Jengiz Khán, the sovereignty of Persia was assumed by his brother,

A.H.	A.D.	
657	1259	Húlágú or Húlákú 'Il-Khán.
663	1264	Abágá, or Abáká 'Il-Khán, his son.
681	1282	Nikudár Oglan, seventh son of Húlákú, on conversion to Muhammadanism, took the name of Ahmad Khán.
683	1284	Arghún Káán, son of Abáká.
690	1291	Kai-Khatú Káán, ditto.
694	1294	Baidú Káán, son of Targhih, fifth son of Húlákú.
694	1294	Gházán Káán Mahmúd, eldest son of Arghún.
703	1303	Ghiás-ud-dín Au-gaptú, Khudabandah Muhammad.
716	1316	Abú Sa'id Bahádur Khán, his son, on whose death in
736	1335	The dynasty became dependent.
747	1346	Auáshúrván. Invasion of Taimur, or Tamerlane. (See below, LXX).

### TABLE LXX.—*Moghul Sultáns of Khorásán.*

795	1393	Kutb-ud-dín Amir Tímúr Gúrgán Şahibkírán (Tamerlane) conquered Baghdád, invaded India, etc.
807	1404	Khalíl Sultán, son of Mirán Sháh, deposed.
—	—	Sháh Rukh, Behádur Sultán.
850	1447	Ulugh Beg, Malik us Sa'id, of Khiya.
853	1449	A'bdul Latif Mirzá, his son.
854	1450	Bábar Mirzá, Sultán Abul Kasam.
861	1456	Mirza Sháh Mahmúd deposed.
861	1456	Abú Sa'id, son of Ahmad. (See Moghuls of India.)
—	—	Jiadighiar, grandson of Sháh Rukh.
805	1470	Sultán Hosain Mirzá, grandson of U'mar.
901	1505	Badí' ezzamán, his son, took refuge with the Sufis.

### TABLE LXXI.—*Kings of Persia of the Sophi, Súfí, or Şafi Race.*

Juneid, a descendant of Şafi ud-dín, a Sophi or mystic philosopher, being expelled from Aderbiján by the Turkoman ruler Jehán Sháh, established himself in Shirwán. His grandson

905	1499	Isma'il al-Şúfí bin Shaikh Haidar, united conquered provinces and assumed sovereignty of Persia and Khorásán, 908-1502.
932	1525	Sháh Tahmásp bin Isma'il.
933	1575	Sháh Isma'il II. bin Tahmásp.
935	1577	Muhammad Khudábandah bin Tahmásp.
994	1585	Hamzah bin Muhammad, or Amir Hams.
994	1585	Sháh Isma'il bin Muhammad.
994	1585	Sháh A'bbás bin Muhammad.
1039	1629	Sháh Şafi bin Şafi Mirzá bin A'bbás.

A.H.	A.D.	
1052	1642	Sháh A'bbás II. bin Sháh Sa'fí.
1077	1666	Solaimán bin Sháh A'bbás.
1106	1694	Sháh Husain bin Solaimán, last of the Sa'fis.
		Sháh Tahmásp II. bin Sháh Husain, abdicated.
1135	1722	Mahmúd, an Afghán, invaded Persia, and usurped.
1137	1725	Ashraf, an Afghán, defeated by Nádir Kulí.
1242	1730	Sháh Tahmásp, nominally restored, murdered 1737.
1145	1732	A'bbás III. bin Tahmásp.
1148	1736	Nádir Sháh, or Nádir Sultán, proclaimed king.
1160	1747	A'ádil Sháh, nephew and murderer of Nádir.
1161	1748	Ibráhím, his brother.
1163	1749	Sháh Rukh, blinded, driven to Khurásán.
1163	1750	Solaimán, or Mirzá Sa'id Muhammad.
1163	1750	Ism'ail bin Sa'id Mustáfa, under regency of A'li Merdan.
1173	1759	Muhammad Kerím Khán Zendi, held power under title of Wakil.
1193	1779	Zeki Khán, usurped on his death, murdered by
1193	1779	Abd'ul Fath Khán, son of Kerím, blinded.
1193	1779	Sádik Khán, brother of ditto.
		A'li Murád Khán assumed the title of Wakil.
1199	1785	Ja'far Khán, son of Sádik, murdered.
1203	1789	Luţf A'li, his son, defeated by
1209	1794	Aghá Muhammad Khán Kájár, an eunuch.
1211	1797	Fath A'li Sháh Kájár, died 1834.

TABLE LXXII.—*List of the Patán, Afghán, or Ghorí Sultans of Hindústán. Capital, Dihlí.*

(Corrected up from the coins of the 'Pathán Kings of Dihlí,' by the Editor.)

589	1193 <sup>1</sup>	1	Mu'iz-ud-dín Muhammad bin Sâm (587 <sup>2</sup> ) (1st Dynasty).
602	1206	2	Kutb-ud-dín Ai-beg.
607	1210	3	Arám Sháh.
607	1211	4	Shams-ud-dín Altumsh.
633	1236	5	Rukn-ud-dín Fíroz Sháh.
634	1236	6	Sultán Rizíah.
637	1240	7	Mu'iz-ud-dín Bahrám Sháh.
639	1242	8	A'lá-ud-dín Masa'úd Sháh (11).
643	1246	9	Násir-ud-dín Mahmúd (12).
664	1266	10	Ghiás-ud-dín Balban (5).
686		11	Mu'iz-ud-dín Kaikubád.
689	1290	12	Jalál-ud-dín Fíroz Sháh, Khiljí <sup>3</sup> (2nd dynasty).
695	1296	13	Rukn-ud-dín Ibráhím (9).
695	1296	14	A'lá-ud-dín Muhammad Sháh (12).
715	1316	15	Shaháb-ud-dín U'mar (10).
716	1316	16	Kutb-ud-dín Mubárak Sháh (1).
720*		17	Násir-ud-dín Khusrd.
720*		18	Ghiás-ud-dín Tughlak Sháh (3rd dynasty).
725	1325	19	Muhammad bin Tughlak (3).
752	1351	20	Fíroz Sháh bin Salar Rajab (1).
790	1388	21	Tughlak Sháh II.
791	1389	22	Abúbakr Sháh II.
793*		23	Muhammad Sháh bin Fíroz Sháh.

<sup>1</sup> The dates of accession, as converted into the years of the Christian era, are calculated from the months in each Hijra year in which the several monarchs are determined by Sa'id Aḥmad to have succeeded to the throne. The small figures in brackets indicate the months of each accession. The dates marked with a star are derived from coins, and do not coincide with our native author's historical deductions.

<sup>2</sup> See vol. i. p. 326.

<sup>3</sup> Zia Barani says 688 A.H. "

A.H.	A.D.	
795*	24	Sikandar Sháh.
796*	25	Mahmúd Sháh bin Muhammad Sháh (Timúr, 800).
797	26	Nusrat Sháh Interregnum (coins dated 797, 798, 800, 801 and 807), Mahmúd restored, 802.
816	1413	27 Daulat Khán Lodí (1).
817	1414	28 Khizr Khán Sa'id (4th dynasty) (3).
824	1421	29 Mubarak Sháh II. (5), coins extant with the date of 838 A.H.
837	1434	30 Muhammad Sháh bin Farid Sháh (7).
849	31	A'alam Sháh (?)
855	1451	32 Bahlól Lodí (5th dynasty) (3).
894	33	Sikandar bin Bahlól (?)
923	1517	34 Ibráhm bin Sikandar (Bábar, 932 A.H.) (11).
937	1531	35 Muhammad Humáyún, Mughul (5). See Table LXXX.
946*	36	Farid-ud-dín Shír Sháh, Afghán (?)
952	1545	37 Islám Sháh (3).
960	1553	38 Muhammad A'ádil Sháh (5).
962	1555	39 Ibráhm Súr (5).
962	1555	40 Sikandar Sháh (Humáyún, 962 A.H.)

TABLE LXXIII.—*Patan or Afghán Sultáns and Governors of Bengal.*  
(*Purbi dynasty.*) *Capital Laknauti, or Gaur.* (MARSDEN.<sup>1</sup>)

600	1203	Muhammad Bakhtíar Khiljí, governor of Berár under Kutb ud-dín.
602	1205	Muhammad Sherán A'zz ed-dín.
605	1208	A'li Mardán A'lá ed-dín.
609	1212	Hasám ed-dín Ghíás ed-dín.
624	1226-27	Násir ed-dín bin Shams ed-dín.
627	1229	Mahmúd bin Shams ed-dín, became Sultán of Hindústán.
634	1237	Toghan Khán, governor under Sultán Ríziyah.
641	1243	Tiji, or Taji.
642	1244	Timúr Khán Kerán.
644	1246	Saif ed-dín.
651	1253	Ikhtíár ed-dín Malik Yúzbeg.
656	1257	Jalál ed-dín Kháni.
657	1258	Táj ed-dín Arslán.
659	1260	Muhammad Tatar Khan.
676	1277	Muiz ed-dín Tughral.
681	1282	Nasir ed-dín Baghra (by Dow written Kera), considered first sovereign of Bengal by some.
725	1325	Kadr Khán, viceroy of Muhammad Sháh.
741	1340	Fakhr ed-dín Sekandar assumes independence.
743	1342	A'lá ed-dín Mubárik.
744	1343	Shams ed-dín Muhammad Sháh Ilías Bangarah.
760	1358	Sikandar Sháh bin Shams ed-dín.
769	1367	Ghíás ed-dín A'azm Sháh bin Sekandar Sháh.
775	1373	Saif ed-dín Sultán as-Sulátín bin Ghíás ed-dín.
785	1383	Shams ed-dín bin Sulátín as-Sulátín.
787	1385	Kansa or Khansa, a Hindú.
794	1392	Jalál ed-dín Muhammad Sháh (Chitmul bin Khansa).
812	1409	Ahmad Sháh bin Jalál ed-dín. <sup>2</sup>
830	1426-7	Násir Sháh (descendant of Shams ed-dín Ilías Bangarah).
862	1457	Barbak Sháh bin Násir Sháh.
879	1474	Yásaf Sháh bin Barbak Sháh.

<sup>1</sup> [See also *Ayín-i-Akbari*, vol. ii., p. 16.]

<sup>2</sup> Marsden remarks in a note: 'The coins show that the historical dates about this period are erroneous; but the means of correcting the mistakes are not sufficiently ample.' P. 562 'Numismata Orientalia.'

A.H.	A.D.	
887	1482	Sikandár Sháh.
887	1482	Fath Sháh.
896	1490-1	Sháh-zádah, a eunuch.
897	1491	Fíroz Sháh Habshí.
899	1494	Mahmúd Sháh bin Fíroz Sháh.
900	1495	Muzaffar Sháh Habshí.
903	1428	A'lá ed-dín Husain Sháh bin Syed Ashraf.
927	1521	Nusrat Sháh bin A'lá ed-dín Husain.
940	1534	Mahmúd Sháh bin A'lá ed-dín Husain, defeated by
944	1537	Faríd ed-dín Shír Sháh.
945	1538	Humáyún held court at Gaur, or Jenatábád.
946	1539	Shír Sháh again.
952	1545	Muhammad Khán.
962	1555	Khizr-Khán Bahádur Sháh bin Muhammad Khán.
968	1560-1	Jalál ed-dín bin Muhammad Khán.
971	1563-4	Solaiman Karáni, or Karzáni.
981	1573	Báyazíd bin Solaimán.
981	1573	Dáúd Khán bin Solaimán, defeated by Akbar's forces.

TABLE LXXIV.—*Kings of the East, or Sharki Dynasty of Jaunpur.*

(FERISHTAH.)

796	1394	Khawájah Jahán, Subahdár of Kanauj, Audh, Kora, and Jaunpúr, assumed independence.
802	1399	Mubárik Sháh, his adopted son.
804	1401	Shams ud-dín Ibráhím Sháh Sherki.
844	1440	Mahmúd Sháh bin Ibráhím.
862	1457	Muhammad Sháh.
862	1457	Husain Sháh bin Mahmúd bin Ibráhím Sháh.
881	1476	_____ took refuge in the Court of 'Alá ud-dín of Bengal, where he died in 905, A.H.

TABLE LXXV.—*Musalmán Kings of Kashmir.* (FERISHTAH.)

727	1326	Shams ud-dín, Sháh Mír, minister of Senadeva.
750	1349	Jamshíd, expelled by his youngest brother.
752	1351	A'li Shír, A'lá ud-dín; a severe famine.
765	1363	Shaháb ud-dín; Siamuk invades Sind.
785	1386	Kutb ud-dín; defeats Rája of Lokhot.
799	1396	Sikandar, Butshikan; subverts Hindú religion.
819	1416	Amir Khán, A'li Sháh; civil wars; expelled by
826	1422	Zain ul Ab-ud-dín, Shádi Khán, his brother.
877	1472	Haidar Sháh, Hají Khán.
878	1473	Hasan Sháh.
891	1486	Muhammad, a child; civil wars.
902	1496	Fath Sháh usurps the throne. Chakk tribe converted to Islám.
911	1505	Muhammad regains the throne; Ibrahím usurps.
942	1535	Nazúk Sháh; conquest of Emperor Humáyún, 948=1543.
948	1541	Mírzá Haidar Dughlat, governor under him; interregnum, and dissensions.
960	1552	Ibrahím II., set up by Daulat Chakk: earthquake.
963	1555	Ism'ail, set up by Gházi Khán's party.
964	1556	Habíb, raised by Daulat Chakk.
971	1563	Hosain Sháh Chakk: embassy from Akbar.
986	1578	Yúsaf Sháh Chakk, expelled by Gohar Chakk.
997	1588	_____ annexation of Kashmir to the Moghul Empire by Akbar.

TABLE LXXVI.—*Kings of Sind and Tatta.*

A.H.	A.D.	
87	706	Belochistán invaded by Hijáj, governor of Basrah, and Muhammad Kásim.

The Ansáries, the Sumeras, and the Sumanas or Jams, successively, gain the ascendancy, then a Dihlí governor.

1203? Násir ud-dín Qubáchah, becomes independent.

## TABLE F.

[I have compiled the following list of the Arab Governors of Sind from Beládori,<sup>1</sup> collated with and improved from Sir H. M. Elliot's excellent work on the Arabs in Sind.]

A.H.	
93	1 Muḥammad bin Kasim.
	2 Yazid bin Abú Kabshah (appointed by Sulaimán).
96	3 Ḥabíb bin Muḥalab.
	4 A'mrú bin Muslim.
	5 Junid bin A'bd al raḥman (under Hishám).
107	6 Tamín bin Zaid.
	7 Al ḥakam bin A'úanah.
	8 A'mrú bin Muḥammad.
	(Sulaimán bin Hishám—Abú Al-Khattáb) <sup>2</sup>
	Under the A'bbásides.
	9 A'bd al raḥman bin Muslim, Al A'bdi, defeated by Manşúr bin Jamhúr, the local Governor under the Ummayy Khalífis.
	10 Músa bin Ka'ab, Altamimí; overpowers Manşúr. (The Tohfát ul Kirám attributes this victory to Dáúd bin A'li.)
140	11 Hishám bin A'mrú.
	12 A'mar bin Ḥafṣ, Hazármard. <sup>3</sup>
154	13 Ruḥ bin Hátim. <sup>4</sup>
184	14 Dáúd bin Yazid bin Hátim.
	15 Bashir bin Dáúd (about 200 A.H. Reinaud).
213 <sup>5</sup>	16 Ghassán bin A'bád.
	Músa bin Yahya, <i>Al Barmaki</i> (dies in 221 A.H.)
	A'mráam bin Músa. <sup>6</sup>
257	Y'akúb bin Laiṣ.

Subsequent division of Sind into the two principalities of Multán and Al-Mansúrah.

TABLE LXXVII.—*The Jámi Dynasty of Sumana, originally Rájputs.*

A.H.	A.D.	
737	1336	Jam Afra; tributary to Tughlak Sháh.
740	1339	Jám Choban.
754	1353	Jám Baní; asserted his independence.
782	1380	Timaji, his brother.
782	1380	Jám Sálah ud-dín; converted to Muhammadanism.
793	1391	Jám Nizám ud-dín.
796	1393	Jám A'li Shír.

<sup>1</sup> ['Abú Ja'afir Ahmad bin Yahya ibn Jábir al Baládori,' ob. inter 256 and 279 A.H. Ibn Khaldun, p. 438. Reinaud 'Fragments Arabes et Persans,' inédits relatifs à l'Inde.]

<sup>2</sup> [Appendix to the 'Arabs in Sind:' Cape Town, 1853. Elliot quoting 'Tohfát ul Kirám.']

<sup>3</sup> [Transferred from Sind to Africa in A.H. 151. Reinaud, p. 213.]

<sup>4</sup> [A.H. 160 to 161. Reinaud.]

<sup>5</sup> [Gildemeister quoting Abúlfeda ii. 160.]

<sup>6</sup> [Killed by عمر بن عبدالعزيز الهباري, 'Beládori.']



A.H.	A.D.	
817	1409	Jám Giran, son of Timaji.
812	1409	Jám Fath Khán.
827	1423	Jám Tughlak; invaded Gujerát.
854	1450	Jám Sikandar.
856	1452	Jám Sangar, elected.
864	1460	Jám Nanda, or Nizám ud-din; cot. of Hasan Langa.
894	1492	Jám Feroz; the Turkhán family become powerful, 1520.
927	1520	Sháh Beg Argun occupies Sind.
930	1523	Sháh Hosain Arghun.
966	1554	Mahmúd of Bhakar.
982	1572	Akbar annexes Sindh to the Empire.

TABLE LXXVIII.—*Bahmani Dynasty of Kalbarga, or Ahsunábád.*

A.D.	
1347	A'lá ud-din Hasan Sháh gango Bahmaní, servant of a brahman in Muhammad Tughlak's court, subdued all the Dakhan.
1358	Muhammad Sháh B. I. (Gházi), makes tributary Telingana and Vijyanagar.
1375	Mujáhid Sháh B., killed by his uncle.
1378	Dáúd Sháh B., assassinated by his niece.
1378	Mahmúd Sháh I., youngest son of 'Alá; patron of literature.
1397	Ghiás ud-din; blinded and dethroned.
1397	Shams ud-din Sháh; puppet to Lakhin, the Malik Naib or regent.
1397	Firóz Sháh, married daughter of Vijyanagar rája, Deva Ray.
1422	Ahmad Sháh Wali (Khán Khánán); war with rajas.
1435	A'lá ud-din Sháh II., war with Vijyanagar.
1457	Humáyún the cruel; general insurrection.
1461	Nizám Sháh; rajas of Telingana and Orissa powerful.
1463	Muhammad Sháh II.; Málwa power increasing.
1482	Mahmúd II.; loses Konkan, Bijápúr, and Berár.
1518	Ahmád Sháh II.; under control of Amír Berid, minister.
1520	A'lá ud-din Sháh III.; deposed by ditto.
1522	Wali Ullah; murdered by ditto.
1525	Kallam Ullah, Bahmaní dynasty of Bidar (Ahmadábád) terminates, and is succeeded by that of Amír Berid at Ahmadábád.

TABLE LXXIX.—*Berid Sháhi Dynasty of Bidar, or Ahmadábád.*

1492	Kásim Berid, a Túrki or Georgian slave.
1504	Amír Berid; held sway over nominal kings.
1549	A'lá Berid Sháh; first who assumed royalty.
1562	Ibrahim Berid Sháh.
1569	Kásim Berid Sháh.
1572	Mírzá A'li Berid Sháh; deposed by his relative.
1609	Amír Berid Sháh II.

TABLE LXXX.—*Faruki Dynasty of Kándeish. Capitals Tálnir and Búrhánpúr.*

1370	Malik Rája Faruki, receives the jágir of Tálnir, from Fíroz.
1399	Malik Nasír or Nasír Khán Faruki, builds Búrhánpúr.
1437	Mírán A'dil Khán Faruki, expels Dakhanies from Khandeish.
1441	Mírán Mubárik Khán Faruki; peaceful reign.
1457	Mírán Ghani, or A'dil Khán Faruki I.; tributary to Gujerát.
1503	Dáúd Khán Faruki, tributary to Málwa.
1510	A'zim Humáyún, or A'dil Khán F. II.; grandson of Gujerát king.
1520	Mírán Muhammad Khán Faruki; succeeds to Gujerát throne.
1535	Mírán Mubárik Khán Faruki, brother; war with Moghuls.
1566	Mírán Muhammad Khán Faruki, attack from Dakhan.
1576	Rája A'li Khán Faruki; acknowledges Akbar's supremacy.
1596	Bahádur Khán Faruki; defies Akbar; is imprisoned at Gwálior.

TABLE LXXXI.—*Kings of Málwa. Capitals Dhár, Mándó or Shádábád.*

A.D.	
1387	Sultán Diláwar Ghóri, governor, assumes title of Sháh, 1401.
1405	Sultán Hoshang Ghóri, or Alp Khán, his son, defeats Narsinha Ray.
1432	Ghazni Khán, or Sultán Muhammad Ghóri; poisoned.
1435	Mahmúd Khán, or Sultán Mahmúd Khilji. Rána of Chitor, Kumbho presents tankas coined in his own name, 1450.
1469	Sultán Ghías ud-dín; peaceful reign.
1500	Sultán Násir ud-dín; his son, Shaháb ud-dín, revolts.
1512	Sultán Mahmúd II., younger son, last of the Khiljis.
1534	Málwa incorporated with Gujerát kingdom.
1568	— annexed as a province of Akbar's Empire.

TABLE LXXXII.—*Kings of Gujerát. Capital Pattan.*

1391	Muzaffar Sháh I.; appointed viceroy by Firoz Tughlak, A.H. 793, assumes independence in A.H. 799 = A.D. 1396.
1411	Ahmad Sháh I., grandson, builds Ahmadábád and Ahmadnagar.
1443	Muhammad Sháh, surnamed Karim, the merciful.
1451	Kutb Sháh; opposes Málwa king, and Chitor rája Kombha.
1459	Dáúd Sháh, his uncle, deposed in favor of
1459	Mahmúd Sháh I. Begarrá; two expeditions to Dakhan.
1511	Muzaffar Sháh II.; war with Rána Sanga.
1526	Sikandar Sháh, assassinated.
1526	Nasir Khán, or Mahmúd Sháh II., displaced by
1526	Bahádúr Shah, invades Málwa; murdered by Portuguese.
1536	Mírán Muhammad Sháh Faruki, his nephew, of Málwa.
1538	Mahmúd Sháh, son of Latif Khán; released from prison.
1553	Ahmad Sháh II., a spurious heir set up by minister.
1561	Muzaffar Sháh III. Habbú, a supposititious son of Mahmúd.
1572	Muzaffar Sháh submits to Akbar, and in 1583 Gujerát finally becomes a province of Akbar's empire.

TABLE LXXXIII.—*Kings of Multán.*

This province was first conquered by Muhammad Kásim, at the end of the first century, Hijra. It was recovered by the Hindús on the decline of the Ghazni power. After Muhammad Ghori's subjugation, it remained tributary to Dihli until

A.H.	A.D.	
847	1443	Sheikh Yúsaf established an independent monarchy.
849	1445	Ray Sehra, or Kutb ud-dín Hosain Langa I.; expelled the Sheikh.
908	1502	Mahmúd Khán Langa; his minister, Jám Bayezid.
931	1524	Hosain Langa II.; overcome by Sháh Hosain Arghún. Under Humáyún, becomes a province of the empire (see below).

TABLE LXXXIV.—*Imád Sháhí dynasty of Berar. Capital, Ellichpur.*

A.D.	
1484	Fath Ullah Imád Sháh, Bahmaní, governor of Berár, became independent.
1504	A'la-ud-dín Imád Sháh, fixed his capital at Gával.
1528	Daria Imád Sháh, married his daughter to Hosain Nizám Sháh.
1560	Burhán Imád Sháh, deposed by his minister.
1568	Tufal Khán, whose usurpation is opposed from Ahmadnagar, and the family of Imád Sháh and Tufal extinguished.

TABLE LXXXV.—*A'ādil Shāhī dynasty of Bijāpūr.*

A.D.	
1489	Yūsaf Khān, son of Amurath II. of Anatolia; purchased for the body guard at Ahmadābād.
1501	— on the defeat of Dustūr Dīnār assumes independent sovereignty as Yūsaf A'ādil Shāh.
1511	Isma'il A'ādil Shāh. Goa taken second time by Portuguese.
1534	Mullū A'ādil Shāh, a profligate, deposed and blinded by
1535	Ibrahim A'ādil Shāh I. Minister Rāmraj assumes throne of Vijyanagar.
1557	A'li A'ādil Shāh; war against the Hindū rāja.
1579	Ibrahim A'ādil Shāh II. Chand bibi regent.
1626	Muhammad.
1660	A'li A'ādil II.

TABLE LXXXVI.—*Nizām Shāhī dynasty of Ahmadnagar.*

1490	Ahmed Nizām Shāh, Bheirg, son of a brahman of Vijyanagar; throws off Bahmanī yoke.
1508	Burhān Nizām Shāh; petty wars with Berār, etc.
1553	Husain Nizām Shāh I.; confederacy against Vijyanagar.
1565	Murtaza Nizām Shāh, Diwana, conquers Berar; smothered by
1588	Mirān Husain Nizām Shāh, put to death.
1589	Isma'il Nizām Shāh, raised by Jumāl Khān Mehdevi.
1590	Burhān Nizām Shāh II.; constructs Korla fort.
1594	Ibrahim Nizām Shāh, killed in battle.
1594	Ahmad, son of Shāh Tāhir, raised by chiefs; pensioned.
1595	Bahādur Nizām Shāh, proclaimed by Chand bibi's party; imprisoned by Akbar.
1598	Murteza Nizām Shāh II.; Nizām Shāhī dominions fall under the control of
1607	Malik Amber.

TABLE LXXXVII.—*Kutb Shāhī Dynasty of Golconda.*

1512	Sultān Kulī Kutb Shāh, a Tūrkman, assumed title of king.
1543	Jamshīd Kutb Shāh, leagues with the Nizām Shāhīs.
1550	Ibrahim Kutb Shāh, joins league against Rāmraj.
1581	Muhammad Kulī Kutb Shāh, builds Bhagnagar or Haiderābād; died 1586.
1611	Abdallah Kutb Shāh, tributary to Shāh Jahān.
1672	Abū Hasan, imprisoned at Daulatābād.

Under Aurangzib, the southern conquests were formed into six Sūbahs, viz.: 1, Kandeish; 2, Aurangābād; 3, Bīdar; 4, Berār; 5, Haiderābād; and 6, Bijāpūr.

TABLE LXXXVIII.—*Moghul Emperors of Hindustān.*

(Fourth descendant from Taimūr or Tamerlane, see Table LXX.)

A.H.	A.D.	
899	1494	Bābar, Zahīr ud-dīn Muhammad (mounted throne 9th June).
937	1531	Humāyūn, Naṣir ud-dīn Muhammad (28th Jan.), in 946 defeated by Shīr Shāh. <sup>1</sup>
962	1554	" , founded the Moghul dynasty of Dihli.
963	1556	Akbar, Abū fath, Jalāl ud-dīn Muhammad (17th Feb.) consolidated empire.
1014	1605	Jehāngir, Abūl Muzaffar Nūr ud-dīn Muhammad (7th Oct.)
1037	1628	Shāhjahān, Shahāb ud-dīn Ghāzī (9th Feb.)
1068	1658	Aurangzib A'langir, Abūl Muzaffar, Mahī ud-dīn (24th Feb.)
1118	1707	A'zim Shāh, Muhammad Shahīd (3rd March).
1118	1707	Behādur Shāh, Shāh A'alam, Abūl Muzaffar Kutb ud-dīn (23rd Feb.)

<sup>1</sup> [10th Muharrem, A.H. 947. Ferishtah.]

A.H.	A.D.	
1124	1713	Jahándár Sháh, Mú'iz ud-dín (11th Jan.)
1124	1713	Farukhsfr, Muhammad Shahid Marhum (11th Jan.)
1131	1719	Rafia' ud-darjat, Shams ud-dín (18th Jan.), (Abú berkát.)
1131	1719	Rafia' ud-daulat, Sháhjahán Sání (26th April).
1131	1719	(Muhammad Nakosir), (May).
1131	1719	Muhammad Sháh, Abúl fath Násir ud-dín (28th Aug.)
1132	1720	(Sultán Muhammad Ibrahim), (4th Oct.)
1161	1754	Ahmad Sháh, Abúl Nasr (20th April).
1167	1749	Alemgir II., A'ziz ud-dín Muhammad (2nd June).
1173	1759	(Sháhjahán), (29th Nov.)
1173	1759	Sháh A'lám, Jalál ud-dín (Mírzá Abdallah, A'lí Gohar), (Nov.)
1201	1786	(Muhammad Badar bakht).
1221	1806	Akbar II., Abúl Nasir, Moaín ud-dín Muhammad (3rd Dec.)

TABLE LXXXIX.—*Nizáms of Haiderábád.*

A.D.	
1717	Aṣaf Jáh, Nizám-ul-Mulk, usurped power on Aurangzíb's death.
1748	Násir Jang, assassinated.
1757	Muzaffar Jang, ditto. Salabat Jang, killed by
1763	Nizám Ali, his brother.
1803	Sikandar Jáh. English interference, 1807.

TABLE XC.—*Nuwábs and Kings of Oude.*

—	Sa'dat A'lí Khán of Khorasán, Nuwáb Vazír, under Muhammad Sháh.
—	Safdar Jang, ditto.
1756	Shuja' ud Daulah, ditto.
1775	Aṣaf ud Daulah.
1797	Spurious son, Vasír A'lí, displaced for
1798	Sa'dat A'lí, brother of Shuja', Vazír of Hindustán.
1814	Ghází ud-dín Haidar A'lí, Sháh Zamán, king.
1827	Nasír ud-dín Haidar.
1837	Nasír ud-Daulah—Amjad A'lí Sháh.
1847	Wajid A'lí Sháh.

THE END.

## ADDENDA TO USEFUL TABLES.

The paper on the Gold and Silver Currencies of India (pp. 69 to 92) was compiled, set up, and privately circulated in type in the month of October, 1856. As the period that has since elapsed has proved so calamitously exceptional both as regards the internal tranquillity and external commerce of the country, it has been deemed unnecessary to recast the memorandum, or to do more than complete the details as far as possible up to the present date, by the subjoined additional returns.

Page 81.—*Value of Gold and Silver coined in the Mints of the three Presidencies for 1855-56.*

CALCUTTA. Value in Co.'s Rs.	MADRAS. Value in Co.'s Rs.	BOMBAY. Value in Co.'s Rs.
Gold, 16,78,635    Silver, 3,87,62,323	Silver, 54,52,318	Silver, 2,55,21,952

Page 82.—*Imports and Exports of Treasures (Gold and Silver) in each of the Presidencies of India, for 1854-55, 1855-56, 1856-57, at 2s. the Rupee (from a Parliamentary Return dated April 16, 1858).*

YEAR.	BENGAL.			MADRAS.			
	Imports.	Exports.	Net Imports.	Imports.	Exports.	Net Imp.	Net Exp.
	£	£	£	£	£	£	£
1854-55	645,123	391,566	253,557	194,221	521,814	.....	327,593
1855-56	5,479,854	112,536	5,367,318	852,486	70,730	781,756	.....
1856-57	6,428,573	529,425	5,899,048	1,137,488	78,477	1,059,011	.....

YEAR.	BOMBAY.			TOTAL.		
	Imports.	Exports.	Net Imports.	Imports.	Exports.	Net Imp.
	£	£	£	£	£	£
1854-55	1,188,913	353,654	835,259	2,028,258	1,267,034	761,223
1855-56	4,968,947	417,910	4,551,037	11,301,288	601,176	10,700,111
1856-57	6,847,637	645,525	6,202,112	14,413,698	1,253,428	13,160,270

Page 84.—*Value of Imports and Exports of Merchandise, from 1854-55 to 1856-57, from a Parliamentary Return dated April 16, 1858. The Return for 1854-55 is inserted, because that already given at Page 84 is only partially official.*

**MERCHANDISE IMPORTED INTO THE  
THREE PRESIDENCIES.**

1854-55	.....12,742,670
1855-56	.....13,947,657
1856-57	.....14,194,586

**MERCHANDISE EXPORTED FROM THE  
THREE PRESIDENCIES.**

1854-55	.....18,927,223
1855-56	.....23,039,268
1856-57	.....26,338,453

Page 86.—*Table exhibiting the Sums paid into the East India Company's Treasury in London, on account of Railways in India, up to the 31st March, 1858.*

NAMES OF COMPANIES.	Capital sanctioned.	Total paid in.	Re-issued • in England.
	£	£	£
East Indian .....	10,731,000	7,757,949	4,543,919
Great Indian Peninsula .....	8,333,300	3,356,257	1,868,727
Madras .....	4,000,000	2,689,800	1,306,983
Scinde, including Indus Flotilla and Punjaub.....	2,750,000	934,151	272,540
Bombay, Baroda, and Central India .....	1,750,000	723,448	337,841
Eastern Bengal.....	1,000,000	35,000	.....
	28,564,300	15,496,605	8,330,010*

*The following Statement, extracted from a Parliamentary Return, dated 13th April, 1858, shows the amount of Capital which it is estimated will be required for the Indian Railways sanctioned up to this time.*

RAILWAY COMPANY.	Miles.	Estimated Outlay required to complete the several Lines sanctioned.
		£
East Indian .....	1,400	12,731,000
Eastern Bengal .....	130	1,000,000
Madras .....	740	6,000,000
East Indian Peninsula .....	1,208	10,000,000
Sind and Punjab .....	350	2,500,000
Bombay, Baroda, and Central India .....	330	2,000,000
		£ 34,231,000

Page 88.—*Assay produce of Silver Bullion received into the Mints of Calcutta, Madras, and Bombay, for 1855-56.*

	CALCUTTA.	Rupees.
Assay produce of Silver received from individuals.....		4,53,61,863
Value of uncurrent coins received from Treasury officers.....		44,98,209
Silver Coinage .....		3,87,62,323
	MADRAS.	
Assay produce of Silver received from individuals.....		68,01,491
Value of uncurrent coins received from Treasury officers.....		3,70,938
Silver Coinage .....		54,52,318
	BOMBAY.	
Assay produce of Silver received from individuals.....		2,92,45,122
Value of uncurrent coins received from Treasury officers.....		10,60,480
Silver Coinage .....		2,55,21,952

\* Of this total the sum of £1,800,746 has been disbursed as interest on capital.

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[Where asterisks (\*) are inserted after the figures, the passages indicated will be found in the foot-notes.]

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