# Anr. IX.—On a newly discovered Bactrian Pali Inscription; and on other Inscriptions in the Bactrian Pali Character. By Professor J. Dowson, Royal Stalf Colleye. 

[Read 16th February, 1863.]

In January, 1862, Mr. A. A. Roberts, of the Bengal Civil Service, presented to the Society two copper plates inscribed with Bactrian Pali characters, said to have been found at ILussm Abdal, near Rawal Pindee, in the P'unjab. 'Ihese plates were submitted to the examination of Mr . Norrin, and that gentleman at onco picked out the names of 'Takhasila nagara ('Taxila) and Śakyamuni, proving the inseription to be one of more than ordinary importance. Ilaving made a transcript of the docmment, he wrote a few notes upon it which were read at one of the Society's meetings, and he then suggested that the plates should be sent to me. The interest I had taken in these Bactrian inscriptions from the time of our joint labours on the Kapur di Giri edicts was well known to him, and was suflicient to ensure a careful if unsuccessful consideration of the newly-discovered inscription. In this recommendation the Society acpuiesced and placed the plates at my disposal for examination and report. I now propose to state the results of my investigation.

A very short examination satisfied me of the value of the record, and of the great service which Mr. Roberts had rembered to Palaographic science in preserving this relic and in making it available for the furtherance of our knowledge of the somewhat restricted but greatly perplexing stuck of Bactrian Pali records. The inscription of Kapur di Giri, with all the assistance it received from two independent versions in another chanacter, has in many pronts bafled the leaning and industry of Wilson and Burnouf, and I know of no inseription in this chatacter of which, up to the present time, a complete and convincing interpretation has been offered. The one now before us has enabled me to understand many things in other inseriptions of which I was in donht or ignorance before, and, above all, it supplies the long-desired key to the Bactrian system of numbers. Encouraged by the new light which it
afforis, and emboldened by the very unsatisfactory condition of Bactrian antipuities, I have extended my enquiries to several other inseriptions in the Bactrian character.

Mr. 'Thomas, with the consent of Mr. Austin, has kindly placed at my service the two phates of inscriptions which appeared in his edition of Prinsep's works. These lwo plates, and the additional two now published, contain nearly all the Bactrian inseriptions which have been made known. I propose to go through the whole of these, and allhough I have no expectation of making all things elear, I hope to help the netvance of knowledge ly a detailed statement of the results of my atudy and a framk acknowledgement of my doubts and dificulties. Ollers may thus be incited to follow up the investigation, and looking at it from a different point of riew, or bringing to it greater and more varied knowledge, may correct my errors and make up for my deficiencies.

The inseription of Mr. Rnberts was described as being upon two eopper plates, and Mr. Norris dealt with them as distinct phates, but their general appenrance made me suspect them to be two pertions of one plate broken rery nearly in the centre. $\Lambda$ careful examination contirmed this surmise. The two corresponding ends were much corroded and abraded, but upon joining them together a small pertion of each accurately fitted into the other, and in one place the juncture completed a letter, part of which was graven upon one and the remainder upon the other portion of the plate. This was decisive, and afforded a elear ditection as to the onder of reading the inseription.

The plate is fouten inches long and three broad. The letters which are composed of amall dots punched upon the plate, vary momewhat in size, but are very carcfully and distinctly formed; their average length may be said to be half an inch. The short line at the bottom of the plate is in somewhat smaller chatacters, as also is that stamped on the back of the phate as an endorsement or label. With these preliminary remarks, I proceed to give, in Roman characters, my reading of the inscription :-

Lime 1. Samvatsaraye atta-salatimac XX 7333 Maharayasa mahantasa mogasa pashemasa masasa divase panchame IX Ataye purvaye chhaharasa
2. chukhsasa cha chhatrapasi Liako Kusuluko nama tisa patropati ....... Takhaśilaye nagare utarcua prachu défo Ghhema nama atri
III ld

3. 白patiko apratittavita Bhagavat Śakamuuisa fariram patithavati sangharamam cha sarva-buddhana puyac mata pitaram puyayanto
4. chhatrapasisa putra darasa ayu bala vardhia bhratara sarva cha satiga ... a... dhavasa cha puyayanto mahadana patipatika sidella uvajae
Short line at bottom. Rohini mitrenaya imahi sungharame mava kamika
On the back. Patipasa Chhatrapa Liako.
The opening sentence is Simmeatstraye aff(1-statatimue, Sians. Sumrutsare ashta-saptutime, "ln the 78 th year." 'The first word has two points of interest; it supplies a new compound in the form $t s$, and a variety of the locative case, ye being used instead of the common c. Tho words expressing the number are of the chicf impurtance; it is therefore satisfactory to find that the letters on the phate are distinctly legible, and that, with one exception, their powers have long been conclusively decided. The exeeption is the second character rendered as $t$ (or $\|^{\prime \prime}$ ) but of which the value has hitherto been unknown. A little consideration will, however, demonstrate that its power must be that now assigned to it. There cammet be any doubt as to the second word of the number being sattati, "seventy;" the preceding word must, therefore, be the mit, and that unit unquestionably begins with the vowel a. Ashfa (Pali, atfa) is the only unit which has a for its initial, and consequently, that number must be here intended. $\Lambda$ further proof of the value of this character is found in line 3 , where we have it in the word apratitfavita, the Pali equivalent of "ipratisl!thipita. Sfter this there camot be any doubt of the chamacter being the equivalent of the Sanskrit sh! and shth. The reason for reading it as !6, and not as sht, is twofold; the number serenty being in the Pali form satati, it is ouly reasonable to expect that the mit mast be the Pali affa, not the Sanskrit ashta, and in the second place we have another character for the compound sht very chearly written on the Wardak Uri. These words are succeeded hy six muncrals, representing the number 78. The system of notation will form an independent portion of this paper, and need not be further noticed here. Then follow the words Maharayusa muthuntasa pushemasisu masasa divase panchame 5. The three concluding words ardmit of no doult whatever, but signify the "sth day of the month." 'The other four words are all in the genitive agrering: with metarter, :and "pparently in comection with it. The last of them, or promph the
last two, must be the name of the month, but I have been unable to identify it quite salisfactorily. The name unfortumately occurs just at the fracture of the plate, and the first two letters are very indistinct; the first; of them may be $p, k$, or $b h$, and the second нecms to be she, but as it is diflicull to decide what these letters really are, we may perhapsassume the mane to be l'amemasa, i. e., Pamemus, one of the Seleucidan months; for we alnall find these monthe employed in other inseriptions. 'Ihe initial letter seems to be preferably $p$, and it is casy to perceive how the letter ne might come to look like she, where the plate is so eaten away and comoded. Assaming then the name to be l'memasa, we have the words Maharayasa mahentasa mogase, to dispose of. The first word is the same as Mahárijass, the substitution of $y$ for $j$, being common in Prakrit, and of which we shall meet with other examples, as puyae for pugac. Mtahamtara is the adjective " great," for the Pali retains throughout the conjunct $n$, which occurs only in some of the cases in Sanskrit. In modern times the word is used for the head of a religious establishment. I have not been able to find a plausible equivalent for moga, and hence am led to conclude that it is a name. Ilaving thos examined the meaning of each word, their syntaclical relation requires attention, and is not without its difliculty. The words are all in the genitive case, agrecing with the word masasa, but whether they are to be taken as epithets of the month, or whether they are to be construed in comection with the previous sentroner, " In the year," is a matter of some importance. In Fig. 2, of llate $x$, we have the words Chetrasa maha dharistisa 8, the words maha dharistisa, whaterer they may mean, clearly being used as an epithet of the monlh, like the Rajabu'l-murajjab of the Muhammadans. There is, therefore, good ground for believing that descriptive epithets were occasionally applied to the months. But when we come to examine those before us, it is dillicult to see how maharajasa and mognsa can thus be applied. 'Ihe former might possibly have the forced signification of "very royal," but no intelligible meaning is discoverable for mogasa; l propose, therefore, but not without much hesitation, to real the opening sentence, "On the 5th day of the month lanamus, of the $78 t h$ year of the mighty king, the great Moga." Who or what this Moga is it is diflicult to conjecture. There is the Magres of the Kapur di Giri Inscription, and the name of Maudgala or Mogntr, the great disciple of Gotama, is derived from the word Mudga, the l'ali of which is MIuga or Moga. Mahanta might failly be applied to this great priest, but the applicability of Maharaja is not so apparent. The epoch from which
the year is numbered, must also remain in doubt-the number of the year is too hight to be that of the reign of any king, so that if it really be "the year of " of any particular person, it must date from his birth or accession, or his death, like the era of Buddha. We shall have, however, to recur to this subject in revicwing other dules.

The words coming next after the date are ctrye purrayr, locative cases apparently like sameatsaraye at the begiming. 'Ihe following word is chhaharest, but the fintal $s$ is doubtful, and the vowel attached still more obscure. 'laking the word in eomection with the next, Chukhsasa, which is a genitive, and followed by the conjunction cha, we may fairly assume this to be in the same case. The opening sentence then will read, Etaye parvaye chhaharasa chukhsasa cha. Unfortunately the two words chhuhara and chukhsa are unintelligible; the latter has a very foreign look, but the former may apring from the root $k s h i$ " to divell," "to reign." Etriye, is the demonstrative pronoun, and means, "in this;" and the word prirve, as a noun, significs "the east," and in l'ali has the meaning of "the presence" (Clough 124). The latter secmes to be the most suitable meaning here. We may, therefore, read the sentence, "In this presence of Chhahara and Chukhsa." 'The following words are, C'hhatrapasi Liako Küsuluho nama, "The satraj" by name Liako Kusuluko." I read the final of chhatrapa as si, for the point of the $s$ is evidently curled intentionally, and is so mate when the word occurs again in the third line. 'I'he whole word apmears to be a mere variant, not an inflection, of the word chhatrapa, as we have the genitive termination added thos, chhatrapasi-sa in line 3. The next word is tisa "his," and is followed by the lettere patropati, which extend as far as the frachure, and leave the word incomplete, as there is room for two more letters. If this be the right reading, it is probably connected with the word peitra, thongh the application of this word is not obvious. In my first reading of the phate, I took it to be patipati, but Mr. 'Ihomas, after eleaning the copper, considers the engraving as correct, and so we must leave the word in doubt. The next words are T'akilaśilaye nagave utarena pracha des'o chhema nama-rather an awkward sentence, but aparently signifying "The country called Chhema, north-east of the city of J'axila." Praichu is the Sanskrit preich, príy, "east," and the phrase utarence prachu is equivalent to the ordinary proitg-uttarena. Chhema for Kohema represents a well known word, but it has not been found as the name of a locality agreeing with that suecified in our text. The following word is atri or atra, "here," The third line begins with
the word sípetiko, the name of the building or establistment set up by the Satrap. Nu, Sanskrit cquivalent for this word is apparent. The word splp, with the signilication of "comfort," is given by Larrly in his Eastern Monachism, and possibly is comnected with the word sepmatik. We shall probably be not very far wrong in assuming this worl to designate a temple, vilhar, or some sort of building for religions proposes. The following word is a partieiple, "pratiffrerita for ripratishlfhipilite "established," founded"- The substifution of $/ f$ for sh! has atready been referred to, and that of $v$ for $p$ is common in D'aksit; thus prediueddit is the Prakrit of pratiputti, and in a future page we shatl find thene for thumo. After this come the
 and the vert patifigratit, the medial letter of which is somewhat olseme, but the whole word is sufliciently clear, and signilies " establishes,"" "paces." The sentenee then may be transkated, "The Satrap, ly mame Liakn Kusulukn, deposits a relic of the IIoly Sikiymmum in the seputikn established in the comutry called Chhema, north-cast of the cily of 'Taxila." The language is not very grammatical, and the dependence of the different words is not very clear. The word atra seems to be used instead of putting the name of the country in the loc. case, that case having already been used for the name of 'taxila.
'The next sentence is Semgharamam cha sarva buddhama pmyare, " in honour of the Sangharma, and of all the Buddhas." Burnouf discusses the meaning of Siculharama (hotus 436), and comes to the conclusion that it signifies "the garden of the assembly," and by extension the "lien dhabitation des Religienx." This signification is certainly bome out ly the etymology, and would seem to apply to the word in a passage lower down, but it hardly suits our text, where the word is compled with "all the Buddhas." May not the term be used to designate the Buddhist religion, or the priesthood collectively? The next sentence is Matr-pitaran pmy/ryanto, "for the homouring of his father and mother." The last letter of "pryary/meto is indistinct, but there can be no lesitation about it as the word occurs again in the uext line. It is the dative case of the aclive present participle. The following sentence, begimning line 4, is C'hhatrapasisa putra divasa aju-bela vardhia, "For the long life, strength, and prosperity of the son and wife of the Satrap." The Sanskrit word dárí, wife, is a masculine, and is always used in the pharal; but the Pali, while retaining the gender, employs the word in the singular, as in the text (Clough 29). V'ardhin is from the Sanskrit ofiddhi. The next sentence is defective-Bhratara sarva
cha sati.ga . . . ilhavasa chat myayanto. 'I'he defective word after the: chat is doubtless some form of sut, "good," "virtuous," and . . dharasu may probably be completed as bandhavasa, gen. of bandhava, "a relative." Onitting the defective word, the sentence may be translated, " For the honoming of all his brethren and . . relatives." 'The last sentence appeats to be Maha dana patipuatilia sidhat weajae, "For the knowledge (making known) of his great liberality, fame, and succoss." 'Ihe final word seems to le meajo, the Sanserit upringimaha dema potipatti is clear; but whether the ke should go with patipatti, or with tho following word sidha or sïa, is donltful. I have laken this word to stand for siddlue or siddhi.

The small line at the foot reads liohime Cictrencrya imohi sangharame nava lamika. The two first words form a name, and must le read as transcribed; for if Gatrena he taken as an instrumental, the $y$ ge will be superfluons. Imahi is the loc. "in this," agreeing with sangharame, "religious abode." The next word is obscure, and may be nara, nara, or nata; as nata it will mean " new," as nara "man." The last word is Kamiko, Sanskrit h"armike or Kármika, " maker." Kármika is also the name of a Buddhist sect (Burnouf, lint., 441), but the word would here appear to be used in its simple sense. The whole seems to be the huider's endorsement or certificate, "Rohini Gatrenaya, the new (?) builder in this religious abode."

The endorsement on the back is a sort of label comprising the Satrap's name-Patipasa Chlutrapa Lirkko. If Patipasa be taken as a gen., the reading will be "Liako, Satrap of the Lord of Lords;" lut if the word be a nom., as we have seen Chhatrapasi to be, it will then read, "The Lord of Lords, the Satrap Liako."

## Transiation.

In the year seventy-eight (78) of the great king, the great Moga, on the lifth (5) day of the month lanemus. In this presence of the Chhahara (?) and Chukhsa (?), the Satrap, by name Liako Kusuluko deposits a relic of the Iloly Siakyamuni, in the Sepatiko established in the country called Chhema, north east of the city of 'Taxila, in honour of the great collective body of worshippers and of all the Buddhas; for the honouring of his father and mother ; for the long life, strength, and prosperity of his son and wife; for the honouring of all his brothers and relatives; and for making. known his great liberality, fanne, and success.


Liako, Satrap of the Lord of Lords.
Liakn Kusuluko, the Satrap of this inseription, is a new name; but his dynastic name of Kusuluko is, withont much doubt, the same as the Greek Kozola, and the Bactrian Kujula or Kuyula which has been found upon many coins (see 'Thomas' Prinsep II, 202,3 ). Mr. Thomas has kindly favoured me with copies of the usual legends of these coins, and has noted several variants observable in them. They will come under review in a subsequent pertion of this paper. Little is known of these Kozolas or of the date of their power. Their coins have been found in considerable numbers in the Pumjab, and the present inscription is an indication of their authority over Taxila. They would seem to have belonged to a Scythic race; and the vations ways in which their name is remered in Bactrian characters is strong evidence of its being a foreign one.
'The Bactrian word for Satrap, which has hitherto been rendered "Chatrapa," l have converted into Chatropa. 'The initiabletter is a clear modification of the chh of Kapur di Giri, and the transition stages are seen in Mr. Bayley's seal (plate iv, fig. 6), and in the Wardak Urn (pl. x). It is always found as the representative of the Sanskrit $k s h$, of which compound, chh and not $c h$, is the inodern representative. 'Thus we fiud Ruchhita for rakshita, and dachhina for dakshinia; and the word chhatrapa itself is spelt Kshatrapa on the coins of the Sali Kings, and Khatrapa on the coins of the "Buddhist satraps," the signilication being "ruler or patron of the Kihatras." (1'rinsep ii, 85, 87, 223.)

## Numeral Sistem.

Before entering upon a consideration of any other inscriptions 1 propose to investigate the numeral system as exemplified and explained in this inscription, and to bring together all the dates within reach. These laactrian figures have, for a long time, excited the curiosity of the learned, and Colonel Cunningham has put forward a sysiem of interpretation so authoritatively that I feel bound to notice it at length, and accordingly allow him to speak for himself in a note. ${ }^{1}$ Lle gives the figures a decinal value; but a mere

[^0]glance at the array of six figures in the Taxila plate is sufficient to prove that the numerals must have an arbitrary and not a decimal power; that the Bactrian system must in fact lie of the same nature as the Roman. I had long been possessed with this idea, arising, in the first instance, from the fortuitous resemblance of the figures in the Manikyala inseription to the Roman $\mathcal{U}$ and $X$, and $I$ was confirmed in it by the occurrence of three figures in the date of the month on the Wardak Vase.

Upon reading the words atfe satatimae, "seventy-eight," in the Bactrian plate, and the word panchame, "five," I immediately sent my readings, with the figures, to Mr. Norris, and by return of post he
coins of the Satraps of Saurashtra;" and he then continues to state in a note that he discovered in the year 1852, "that these numeral figures, from 6 to $\theta$, wero the initial letters of their Pashtu names written in Ariano Pali. Thus 5 is represented ly $p$ for pinz; 6 ly ap for spaj; 7 by a for avo; 8 ly th for atha, the a having been already used for 7 ; and 9 by $\boldsymbol{n}$ for nah. Even the 4 is a ch; but as the Pashtu word is stlor, this form must have been derived from India. The first four figures are given in two distinct forms. the second set being the older; and the two forms show, in the clearest manner, how the straight horizontal strokes of Asoka's, and even of later days, gradually became the 1, 2, 3 of India, from which they were transmitted through the Arabs to Europe." The objections to this theory have alrealy been very forcibly urged by Mr. Thomas (Jour. As. Soc. Beng. xxiv, p. 556 ; Prinsep. Vol. I. 144, 145), and I should not have noticed it so fully here but for the reference to the inseribed stone upon which the theory is stated to have been founded. It is very much to be regretted that no copy of this stone has ever been made public for the satisfaction of the learned in Chese matters, as it is quite clear that Colonel Cumingham's interpretation and method of application are uncertain or crroncous, indeed he himself seems to have mistrusted his own renderings, as in his first paper above quoted he read from left to right, hut in his last (Beng. J. 1802, page 303) he reverses the method. The dates of which he gave solutions in the first paper, are -

1. Manikyala (pl. ix), $X X>=446$.
2. Ohind (pl. x, fig. 2), month $X X=44$.
3. " ", ycar | 333 | 333.
4. Panjlar (see pl. x, fig 3), year 390.

Upon couparing the first and second of these, it is clear that they were read from left to right; the reading of the last date is unintelligible. In the hast paper the reading is from "right to left," and the numbers 733 (Wardak, pl. x), and XX7 (PI. ix, fig. 3), are rendered as 331 and 144, from which also it appears that the figure 7 had in the iuterim changed its value from 6 to 1 . Whe truo value has been given to the figure $X, 4$, from the lirst; but the reading of $X X$ as 14 in the date of a month was a manifest crror, as has been well ured by njendra Lal (Beng. J. vol. $\times \times \times$. 342). Whether the correct rendering of the figure $X$ was more than accidental it is impossible to eay without a reference to the authority of the "stone slab," a publication of which document is urgeatly required for the furtherance of antiquarian knowledge.
favoured me with his interpretation of the numerals, which cutirely agreed with that I had myself determincd in the interim, and satisfied me that we had concurrently arrived at the true solution. It was clear from the date of the month that IX represented $\check{0}$, i.e., 4 and 1 ; consequently the two $X$ 's at the left of the number of the year expressed the number 8. It was thus manifest that the figures must be read from right to left. Taking the form 7 to represent 10, and the duplication of that form in the figure 3 to be 20, the required number 78 was obtained-thus $\mathrm{XX} フ 333$.

$$
78=.4+4+10+20+20+20
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The result of this is that we get examples of the figures $1,4,5,8,10$, and 20 , and are enabled, as I shall presently show, to express all numbers under 100 .

The date then of the Taxila Plate is 5th Panæmus, of the year 78.

The inscription on the Hidda Jar, which will be found in the plate at page 262 of the Ariana Antiqua, appears to be the earliest date known; the year being $X X=8$. Colonel Cunningham, in his last paper on these dates, reads it as consisting of three figures XX 7 , but this is a mistake, as there are only two figures. In this intercsting paper, Colonel Cunningham first makes known the fact of the Scleucidan months being in use. I had previously made the same discovery by reading the name of the month in the Wardak inscription as Artemisius. Gladly conceding to Colonel Cunningham the merit of first publication, it is desirable to mention the fact of my having independently arrived at the same conclusion, and being entirely of accord in identifying a Seleucidan month. The very unsatisfactory nature of the published copy of the Hidda inscription, and the absence of any means of verifying it, had induced me to pass it over, but I now fully concur with Colonel Cunningham in reading the month as $\Lambda$ pilacsa, or rather Apiracsa, i.e., Appellæus. The succeeding words he reads as vrehi dasami. We may admit that the last word is that which is really intended, but it reads clasahi rather than dasami; it may, however, 'be allowed to pass for " 10 th." The word which Colonel Cunningham reads "vrehi" requires attention, as it occurs in several other inscriptions. Rajendra Lal, in his paper on the Wardak inscription, agrees in reading the word as erehi, and thinks it to be an abbreviation of Vrihaspati, or Thursday. Colonel Cunningham, however, considers it the representative of the Sanskrit vriddhi, and to mean the iucrease of the moon-the bright half of the
month. I am obliged, however, to dissent from these opinions, and I concur with Mr. I'homas's tentative reading stehi. The initial letter is clearly the well-known "st" of Thomas's alphabet: it is found in the names of Strato (Ari. Antiq., plate vi, fig. 10) and Hippostratus, and in the word which Colonel Cunningham reads as "Strategasa," the Greek $\Sigma_{\text {tpait }}$ ós, on the coins of Aspavarma (Beng. J., 1857, p. 696). In the face of all these it is inpossible to read the word as vrehi, however desirable it might be. We must here anticipate a little, and compare the various dates in which the form appears. The following are examples of its use:-Hidda-Apiraesa stehi dasalii $=10$.
Wardak-Artamisigusa stehi IX$\rangle=15$.
In fig. 3, pl. ix, it occurs after an illegible month as stehi 7 $=10$. It may possibly be found in the Manikyala inscription between the name of the month and the word divasa, "day;". but this is far too doubtful for the purposes of argument. Colonel Cunningham, in his last paper, supplies another date, Tsattikasa divasa vrehi (stehi), 3 , which he renders "third day of the increase of Xanthikos." It is very desirable to ascertain if the word divasa really occurs as placed in the last date, or whether it is only inserted as complementary, as is the case with Colonel Cunningham's reading of the Wardak inscription, in which he gives the word divas $x$, though it is not in the original. The solutions of the word proposed by Babu Rajendra Lal and Colonel Cunningham, even supposing it to be vrehi, as they read it, are by no means satisfactory. The supposition of its locing an abbreviation of Vrihaspati, Thursday, is quite inadmissible, for the letters "vrehi" are not "the initials" of Vrihaspati; and even if they were it is next to impossible that they could be used in that sense in so many different records. The proposal to look upon the word as signifying the increasing half of the moon is more specious, but equally untenable. I cannot find that the Sanskrit vriddhi is ever used to express "the increase of the moon;" but even supposing it to have been employed in that signification veeli is not the Prakrit or Pali form of the word. The word vrehi is used as we have seen with the Seleucidan months, perhaps exclusively with them; and although there are reasons for believing those months to have been luni-solar, there are none, that I am aware of, for supposing the purely Hindu division of the bright and dark half to have been observed in them. Finally, if Colonel Cumingham's reading of his last date Tsattikasa divasa vrehi (stehi) is accurate, it settles the question, for there the term follows the word "day," which it could not do if vor.. xx.
it had the meaning he proposes: it would necessarily come after the name of the month if it related to the month. Though satisfied of the inaccuracy of the interpretations proposed, it must be confersed that no convincing solution of the word is apparent. It seems to be a word in the locative case; and in plate $x$, fig. 2, we have a form "stise," which may possibly be the genitive. It seems to be equivalent to "date;" the " $A$ ramisiyasa stchi, 15," of the Wardak Vase, correspmoling with the "divase penchame, 5 " of the Taxila inscription. luwther discoveries may enable us to settle the meaning of the word more distinctly, but we cannot err very much in attaching to it the meaning here proposed.

The Manikyala inseription (plate ix) is dated XX7, i.e., 18; and the month is apparently given in the last line of the shont passage on the right-hand side of the inseription. Colonel Ounningham has read it as "Kırttikasa misa dieasa, 3 ;" and I agree in the main with this reading of the letters; but there is such obsemrity in this part of the record that eppiess and tracings made at different times vary considerably. The first two letters and the last two are distinct, the others are all very hazy, and camot be traced with any degree of certainty. The first two letters make karti (for the compund is $r$, not ${ }^{t}$ ), the next letter does not resemble the required $k$, but its true form is somewhat doubuful. The next is $s$, and is tolerably clear. The succecding letters are extremely indistinct; and one tracing of my own is somewhat suggestive of the word stchi. The d of dieasa is not elear, but the other two letters are distinct. The figur: which Golonel Cumingham reads as 3 is bally formed; but there can be no hesitation in identifying it with the 20 of the 'laxila plate. We may, therefore, read the date of the Manikyala inseription as "20th Kartika, year 18."

The short and indistinct legend figured in plate ix, fig. 3 is dated in the same year as the Manikyala inseription; that is $X X 7=18$. Colouel Cumingham reads the month "doubtfully" as Artemisius (Beng. Joun., 1862, p. 303), but I cannot go with him in this reading. The mumber of the year is followed by two unknown letters, and the rest are indistinct, but appear to finish with "stchi 10." The date would then appear to be "10th of ———, year 18."

The date next in succession is that of the Wardak Urn, which is Sam 1733 Mrasy/n Arfamisigusustchi IX7 "15th of the month Artemisins, in the year 51."

Colonel Cuminghan's two Yusafzai inscriptions from Olined and l'anjtar (plate x, ligures 2 and 3) have the peculianty of being
preceded and followed by a straight stroke, enclosing the three central ligures as it were in brackets; and it is just possible that this may be their use here; but as the single stroke is the representative in other places of the numeral 1 we are not justified in assuming that they have no mumerical value in the dates before us. If they are really part of the date the right-hand stroke may be the representative of 100 ; but this is a mere speculation. The Olind inseription reads "San 13331 Chetrusa muha-dluatistisa vaomiti XX." I have adhered strictly to the poblished eopy, but I an cmions to know if the original might not justify the reading of affumiti instead of the unintelligilde word varomiti. The first letter an it now stands may be read indifferently as a or $v$, and the second merely requires a straight instead of a curved tep, to make it $\|$-the word would then be affomiti, "eight," and would agree with the numerals $X X=8$. The emendations required to arrive at this intelligible reading are so slight that they may very fairly be suggested, but I will not assume them however probable they may aprar. The date then of this inscription is " $81 /$ Chaital, of the year 61." 'The value of the right-hand stroke remains to besettled; but, an before stated, it may pessibly stand for 100 , and if so the year will tee 161 . I have, in a previons page, noticed the words "matha-dhutistisn," and the ground for considering them to form a descriptive epithet of the month. The meaning of mahu is obvious; dhatistisa may possibly be the Sanskrit adjective chatri, "cherishing, nourishing, fostering"an epithet not mesuitable to the vernal month of Chailaa. As to the termination stisa, may not this be the genitive form of the word stehi, alrealy commented upon.

The other Yusalzai inscription from Panjtar (pl. x, fig. 3) presents an meknown numeral if the form is correctly delineated. It is not possible to do more than guess at its value; but supposing it to be a real figure, it may dispute the representation of the number 100 with the right-hand I. The following figure is 20 , and the two succeeding strokes may be considered as representing 2 . Colonel Cumingham reads this date as Son 390 Srrivenus, mása sudi pratheme. Passing over the number of the year, which is irreconcileable with our presemt нунtem of numbers, the remainder of the reading is satisliactory. I ann mot sure, however, that we should read maisu sudi rather than misusushi, for the very slight twist at the boltom of the $s$ is not to be compared with the welldeveloped conjunct $u$ which oceurs subsequently; and the next lettor is more like the usual $h$ than $d$. Sudi is certainly more intelligible, and so far preferable. The word protheme is clear and certain,
nud the stroke following it may be taken as its numerical representative.

## Revteif of the Numbials.

Having thus gone throngh all the known dates, we may now proceed to sum up our acquisitions, to examine the arguments for and against the values assigned to the figures, and to see how far the Bactrian system is caprable of development from the materials in hand.

1. The stroke representing the figure 1 has been hitherto passed over, with the belief, apparently, of its being a mere stop or mark of separation dividing the numerals from the letters; and at first sight there is nothing improbable in such a supposition. The Wardak inseription employs this stroke after two figures in the date of the month, so that it conld have no power if the ligures had a local value like the Arabian numerals; and the copics of the Ohind and Panjtar inscriptions (pl. x, figs. 2 and 3) place it both before and after the undoubted figures, enclosing them as it were in brackets; thus affording a primá facie case for deeming it of no monerical value. On the other hame, it must be observed that it is entirely absent from the Manikyala inseription, and in the Taxila inseription it is absent from the number of the year, while it is used in the date of the month. Independent, therefore, of any knowledge of ita value it would seem to have been used with a purpose and a power. Now, as to its being the representative of the unit one, the general use of this symbol for that purpose need only be referred to as strongly favouring the supposition. The four straight strokes in the Kipur di Giri inscription, representing numerically the chataro rajano, prove it to be there used as the figure 1 ; following the word prathame in the date of the Panjtar inscription it must be looked upon as the figure representing that number ; and, finally, the way in which it is used in the Taxila inscription is decisive of its value; unless, indeed, the interpretation of the numbers in that document is altogether erroncous.
2. 3. The equivalents for these numerals are not given in the faxila inscription, and the only inference we can draw respecting then is from the Kapur di Giri inscription, where four distinct strokes are used as the representative of the numeral 4.
1. The four lines of the Kapur di Giri inscription are represented by $X$ in the Taxila inscription ; the four points of the cross being severally counted as onc, like as a star with 5 points, was used by the Egyptians as the representative of 5 (Revuc. Arch. Oct, 1862).

The change thus effected between the date of the Kapur di Giri and Taxila inscriptions is a very reasonable one, and the character so formed is a fair and intelligible symbol for the number 4. This figure, like the Roman $V$, is an important one, leving used with additions for expressing other numbers. As we have facts to deal with, it is unnecessary to theorise as to the employment of the number 4 as a master number; there are arithmetical reasons in its favour, and the Indians have certainly shown a partiality for this number and its multiples, in their weights, measures, and coinage.
5. This number is very clearly expressed in the 'Taxila inscription by IX, i.c., $4 \times 1$.
6. 7. We have no example as yet of these numbers, but we may conjecture that they are represented by the X for 4 with additional straight strokes, upon the same principle as in the numbers 5 and 8.

8 Is represented by XX, that is by two ligures of 4.
9. Of this numeral we have no example; it might, however, be clearly represented by IXX.
10. 20. Ten is represented by the sign 7 , and twenty by 3, that is by a double ten, in the same way as 8 is noted by a double 4.

The highest numeral that we are acquainted with is 78 , the date of the 'Taxila inseription, in which the 70 is expressed by three 20 's and a ten. It may reasonably be inferred that the same principle continued up to 100. Thus, allhough we have examples of only six figures, including the 10 and 20 , we may, ly carrying out the principle, express the unknown numbers intelligibly and in all likelihood accurately, thus:-


In the conjectural column there are many numbers about the accuracy of which there camot be the remolest dombt; thas, seeing. how the numbers 5 and 8 are formed, there cam be very little doult
nbout 9: and having the number 70 there is small room for hesitation abont the way of representing the mumbers between 20 and 70. No number, however, has been inserted under the head of "certain" wilhout express anthority in words for the value assigned to it. $\Lambda$ s to the numbers from 100 upwards we aro at present in the dark, and have not the same means of constructing them as we have of lower numbers. Whether a simple stroke upon the right of the figures is the representative of 100 , or whether the muknown ligure in pl. x, fig. 33, be the symbol of that or any higher number must, for the present, be a mere subject for spectilation, and remain open for the decision of futare diseoveries. The newly discovered inseriphions of Muttra with Indian Pali letters and Bactrian Pali figures may, when publishod, afford means for verifying and extending our knowlodge of these numerals.

The Bachrian sysem thens developed may appear, at first sight, clumsy and complicated; but keepring the Romansystem in remembrance, it is impossible to pronounce it improbable or unpractical. Comparing the Bactrian, so far as we know it, with tho Roman, there is little reason to prefer one over the other, on the ground of clearness or simplicity.

It is beside my present purpose to seek annlogies to these numerals, or to make any general comparison of them with other ancient systems of notation; nor have I the means at my command for doing so. Mr. Thomas, who has taken great interest in my discovery, has very kindly brought to my notice an "lixposé des Signes de Numeration usités che\% les Peuples Orientaux; " par A. P. Pilan, Paris, 1860, in which the following very curious account is given of the Phomician system:-" Un trait horizontal (一), quelquefois recourlé it droite ( $\neg$ ) indiquait le nombre 10........ La prenière dizaine s'exprimait aussi par l’un des
 20 pouvait s'écrire - - ou =on bien cucore m O. O 3 (ce qui représente deux fois $n$ ). Cependant il existait ụu signe commun pour les vingtaines. On le figurait habituellement ainsi N." The higher mumbers up to 80 were made ly repeating the sign for 20 , thus $\mathrm{N} \mathrm{N}=40, \mathrm{~N} N \mathrm{~N} N=80$. This system, so far as respects the numbers 10 and 20 , and the repetition of the latter for the expression of higher numbers is identical in principle with our numerals, and seems conclusive as to the accuracy of the values assigned to the Bactrian figures before this lhaenician syatem came under my notice. The similarity of the two camot well be accidental. The Bactrian figures, therefore, like the characters
of the alphabet, must have been drawn from a Semitic anurec. It is interesting also to compare the bigyptian figures 9 for 100 and $\cap$ for 10 which continued in use to the second or third century after Christ ; and the following illustration of the Egyptian system which appeared in the Revne de l'Arehéologigue for October, 1862, is very apmosite in its analogy to the Bactrian.

breufn 65.

Epocil of the Dates.
The materials at our command do not enable us to fix the epoch from which the dates start, nor are we hy any means certain that they are all concordant and of the same ea. 'The use of the Selencidan months gives fair ground for believing the Selencidan era also to have been in use ; but the docoments before us camot be so old as their dates would make them according to that era. The Samvat of Vikramaditya comes perhaps neareat in point of time, but we camot assme that cat to have been in use in Bactrian inseriptions without good evidence, and none is at present forthcoming. The epoch may be the rise of the dynasty, or the accession or the death of some king or great personage. The number is too high in one instance (Taxila plate) to admit of its being the year of the reign, which is cocomaging, and laves ground for hope that future discoveries may emable us to determine the epoch, and thus settle a very important point in Indo-Bactrian chronolagy.

## Coins of the Kozola Kabpimses Giour.

'The coins of the Kozola Kadphises group give us three names, Kadphises, Kozola Kadaphes, and another Kadphises. The Bactrian Pali legends present a few varimits, which Mr. Thomas has pointed out, and which will be noticed in due order.
'The coins of Kadphises are thus described by Mr. Thomas in Prinsep's Lissays, vol. ii, p. 202 :-
"Copper-Plate xxviii, lig. 12.
"Ohverse-Head as in the Su-Hermieus' coins.
"Lagent-KOPCIIAO [Varicty KOPONAO] KOZOYAO KA小IZor.
" Reverse-IIercules as above.
" Arian Legend-1)hama l’hidasa Ǩnjula Kasasa Kushanayatugasa.
" Monograms-Arian $d / 2$ with r. riana $\Lambda n t i q u a, ~ p l . ~ x i, ~ f i g s . ~$ 10, 11."

These coins have also been described by Colonel Cumningham (Beng. J., vol. xxiii, p. 709, and pl. xxxv). llis reading of the Arian legend is Kı̈jula Kasasa Kushanga Yathagasa Dhama pidasa. I propose to slightly amend these versions by reading the Bactrian legend (fl. iv, lig. 7 a) as follows: Dhama thiclasa Kíjorla Kasasa Kushana Fraugasa, "(coin) of the Yarngra of the Kushans Kujala Kasa, steadfast in the Dharma." In the variants of this legend wo find tharasa for thirasa and Śujula for Kujula.

The coins of Kozola Kadiphes are thus described (Prinsep, vol. ii, p. 203):-
"Copper small coin-Plate xviii, figs. 13, 14, 15, and pl. xxviii, figs. 13, 14.
"Obverse-Youthful head.
"Legend-KOZOAA K $\triangle \Delta \Lambda \Phi E L$ XOPANEY ZA日OY.
"Reverse- $\Lambda$ Scythic figure.
"Arian Legend-Khashanasa Yauasa Kuyula [Kuyanla?] Kaphsasa Sachha dhani phidasa.
"Monogram, No. 124-Some specimens add the Bactrian letter


Colonel Cumingham's reading and translation of the Bactrian legend is (Beng. J., vol. xxiii, p. 709), Kihushanga Yathaasa Kujula Kaphsasa Sachhe-dharmapidasa, "Coin of the king of the Khushang Kujula Kaphsa the Crown of the true dharma." My reading differs in n few particulars, being, Khashanası Yaïasa Kuıyla Kaphsasa Sacha-dharma thirasa "(coin), of the Yaüasa of the Khashan, Knyula Kaphsa, steadfast in the truc dharma" (plate iv, fig. 7, b).

The coins of the second Kadphises are thus described (Prinsep's Essays, ii, 213):-
"Gold-Uniquc.
"Ohverse-King, seated after the Oriental fashion (cross-legged) on clouds. Ite holds a club in his hand, and small flames ascend from his shoulders; he wears a Scythic cap surmounted by a single-centred trident.
"Legend-BACIAEXC OOENO KADIICIC.
" Monograin-169.

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\underset{\sim_{1}}{\stackrel{\rightharpoonup}{2}}
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"Reverso-Siva and his bull (Namdi); flames rise from the divinity's head; he holds a trident in his right hand.
" Arian Legend - Muharajasa Rujudirajasa sarvaloga Imastasa Malimastasa Mapinasusa.
"Monogram-159.
"Other gold and coppor coins of this king have some ratieties in the device, thus:-
"Obverso-King seated on an Eastern throne, with a flower in his right hand. Legend and monogram as above.
"Reverse-Device as above.
"Jour. des Sav., 1834, pl. fig. 7; Ariana Antiqua, pl. x, fig. 5, and ${ }^{1} \mathrm{l}$. xxi, fig. 7.

The Bactrian legend ( $p \mathrm{ll}$ iv, fig. 7 c ) is remarkably clear and intelligible. There is no reason to call in question the first half of Mr. Thomas's reading, but the latter half may certainly be greatly improved. The reading I propose is MLaharajasa Rajadirajasa Sarva-loga-isisarasa MLahisiswarasa Kapiśasa "(Coin) of the Great King, King of Kings, ruler of the whole world, the mighty Lord Kapisa." The gold coin which Mr. Thomas describes as " Thique," reads llapinusissa for Kapisisasa. The star at the foot of the $p i$ in the name is persistently repated, but its power is not obvious. Professor Wilson read it s, making the name Kapsiǵa; but the analogy of the $p h s$ in fig. $7 b$ forbids this rendering.

The substitution here proposed of thira or thida for the word hitherto read pida or phida is a manifest amendment. The old reading originated with the late Professor Wilson, who thought the character to be "in all probability $p$," becanse "the same form very nearly commences the equivalent of Philoxenes" (Áriana Antiqua, 257). The same learned writer conjectured the title as being: either Dhama-pidusa or Dhama-piasa, "the parent, or the friend of justice." Colonel Cumingham considered the word to be pidn, a chaplet or crown, and consequently read the compound Dhama-pida, "Crown of the Dharma." Ife admitted this compotund to bo "unusual," but still he thought it "grammatically correct and eminently Buddhistical." Mr. 'Thomas appears to have adopted the last reading in default of a better, but hats changed the word pide to phida. With respect to Coloncl Comingham's reading it must be observed, in the first place, that the Sanskrit word for "crown" is not pida, as he writes it, but pidde, not masculine but feminine; next that the cerebral dis not employed in the word on the evins, but the dental $d$ or the letter $r$; and lastly the compound is, at he admits, an musual one. On examining the chatacter, it is crident
that the right hand perpendicular is the stem or base of the letter, and the line on the left is the wowel mark-to make the letter $n$; the positions of these lines must be reversed, and a downward curve must be added to the horizontal line. 'The character is, perhaps, more like phi, but still the curve of the herizontal line, distinetive of the letter $p$, is absent in the charader before us. The only oljecetions to the proposed rendering the, is the cirenmstanco of the left end of the horizontal line being somewhat longer than in the simple $f$; but this prolongation lus probably been made to allow of the rowel $i$ being graven distinctly acrose it. But the fact of the word being written therrasa mom some coins is, I think, conclusive as to the word being really thiraso. The emendation thira represents the Sanskrit sthira, firm steadfast, a word very commonly employed in compounds; and the epithet dharma-fhira, steadfast in the dhamer, convers a very apmopriate and intelligible meaning, correspouding with the well-known name Yuddhishthirct.

The alteration in Fig. 7 a of Colonel Cuminghan's realing Yathagusa, and of Mr. Jhomas's, Jatugasa to Yarugnsa, is aboundantly justified by the exact resemblance of the letter in question to the normal form, and to the frepuently recuring $r$ in Fig. 7 c . This word Yaruga correspoods with the word in Fig. 71, which I concur with Mr. Thomas in reading Yaïnsa. No meaning has yet been assigned to this word or words, and 1 have no conjecture to offer as to the signilication. The two words are probably only different ways of expressing some forcign tille. The letter $r$ is rarely dided, but the guttural is frequenly omitted; thus we have dhamines for dhamikisa on ther coins.

Fig. 7 e is important, as affording in the word sarva, a character which there can be little hesitation in aceepting for $r e$, and as anpplying a key to similar combinations with other letters, as relh of the word samvardlutke in the Manikyala inscription. The word which I have transeribed iśrara, 1 at first read isura, a difference of apelling, not of meaning; but finding the wowel $u$ to be invariably aflixed to the left perpendicular line of the $s$ in the Kapur di Giri and Wardak inseriptions, and the salme rowel to be similaty amesed, in the Taxila inseription, to the left line of the $y$, while the annswara is amexed to the right, I conclude that the word on the coin must be read istuara-if this is right we get a new compound sw. It may further be obseeved that in the Kapur di Giri inseription, and in the word Sravan in Colonel Cumingham's Panjtar inseription, the lefter $r$ is appended to the right hand perpendicular of the $s$; these facts together, establish the rule that
vowels are added to the left limb, and conjunct consonants to the right limb of the letters $y$ and s.

## Pesinaifar Vase.

Plate iii, fig. 2. This is a legend copied from a Steatite Vase now in the Muscum at Peshatar, lut its history is mbnown to me. 'lhe inseription is carefully and clearly executed, every letter is distinctly formed, and the whole is in a line whate of preservation. $\Lambda$ copy of the inseription was sent to me some monthe ago by Mr. Thomats, and I had but little diflicully in mastering it. Tho reading is-
 pratiflututo sava Buddhama puyae. "This tope was erected in T'axila by the brothers Gihilena and Siha Rachhitena, in honour of all the Buddlaz."
'The word 'Iaxila, I was at first disposed to read an tat silae or tan silae, but there can be no doubt that the reading now propored is the right one, especially when the light of the 'raxila inseription is thrown upon it. There is little in the wording of this inscription to call for special remark, as the whole is expressed in very grammatical language. 'The word Takhesiluc, derived from the Sanskrit T'akshesilí, takes the proper form of the feminine lecative. 'The inward bend of the right limb of the $y$ in ayom has been read as amowara, but it may be omitted without injury to the rense. ?'loue may bo furo with the maspirated letter, and the substitution of $v$ for $p$ in this and the following word is a regular Prakrit change aheady noticed in the 'raxila inseription. The form sava instead of sarve is a nearer approach to the Pali.

## Binatran Vasie.

Fig. 3, pl. iii, is from a Steatite Vase, found by Masson in a tope at Deh Bémarán, near Jelalabad. Within the vase was inclosed a gold caskel, described by Professor Wilson in the following terms : "The casket is chatsed with a double series of four figures, representing Gantana in the act of preaching; a mendicant is on his right, a lay follower on his left, and behind the latter a fomale disciple: they stand under arched niches resting on pillars, and between the arches is a bird; a row of rubies is set round the upper and lower edge of the vessel, and the bothom is also chased with the leaves of the lotus. 'The vase had no cover" (Ariana Antiqua, 41). Bugratinge of the vase and casket are given in the same work. The longer inscription is scratched or graven round
the body of the vase; the shorter one round the upper part or shoulder, not on the enver, as stated in the description of the plate; for, as above observed, the vase had no cover. Burnouf picked out the word Sarivelh, but Colonel Cumningham was the first to make known the fact of the uper line heing only an abbreviation of the longer one, and to read the opening worls as Bhagavána Sarirahi " (Stupa), containing relics of Bhagwin or Buddha" (Jour. As. Soc., Beng., vol. xxiii, p. 707). The commencement of the longer inscription he read as Sri T'uluchitrasa Khumesspreda purrasa "(gift) of Sri Tabachitra, the son of Khamaspada." 'These readings, aldhough imperfect and open to amendment, do, nevertheless, give a very good idea of the import of the inseription. 'The engraving in the Ariana Antigua is somewhat faulty; but the cony now given has been carefully copied from the original vase. Taking the longer inscriptiom, the first word is a name in the genitive case, and is plainly Siva-rachhitasa. This differs considerably from Colonel Cumningham's reading, but the rariation arises from the close resemblance of the letters $t, b, r$, and $v$-the normal forms of which are clearly distinct, but are sometimes confounded in practice. A close adherence to the nomal forms in this instance supplies a well-known name in Sanskrit, Šiva-rekskhitasyr. The next word is also a name which is very dificult to read; indeed, the two versions of it on the vase differ materially. The first character Colonel Cuminghan reads $k \cdot h$, to which letter it bears a partial though not satisfactory resemblance. The next character differs in the two versions; in the long one it appears to be d in the other $m$; the following character is like $v$ in the first, and $d /$ in the second; the last letter is in both versions an $n$ or $d$. $\Lambda$ ssuming that the first letter is $k / h$, until a more satisfactory reading is arrived at, the transliteration of the name of the longer legend will be Khadarana, and of the shorter Khamidhana. I leave the name in doubt, for future discoveries or more acute investigators to determine. The following word is clearly putasa, or putrasa, and that succecling it danam. The next character is one to which no equivalent has hitherto been assigned: but I think we have now very good gromends for reading it as mu. The syllable mu, in "Śrikymmun" in the 'Taxila inscription, is expressed by a character strongly resembling this, and in the same name on the Wardak Vase the mu is identical with this character. This is tolerably decisive, and the sentence now before us appears to strengthen the proposed rendering. The mu is followed by hi, making muhi. The Sanskrit adas, "that," "this," makes, in several of its caser, amu; and I take
this word muhi to be a contracted form of the Prakit locative amuhi, "in this." But whether this conjecture be right or wrong, and whatever the true value of the letter, there can be litule or no doubt of the word in the inseription signifying "here;" the words "gift here," corresponding exactly with the "relic here," which comes in subseguently. Here the shorter legend teminates. Continuing with the longer one, the next word is the verb, or rather participle. It commences with niyg. 'Ihe following letter is meertain; and the engraver appears to have so deemed it, for he has endeavoured to make it more distinct ly re-writing it, but with little success. It may le kilh, di, or $t i$; the final character may be read nam. The whole word is in all probability miyatinam, the cansal past participle of the root put, which signifies "made to descend," "lowered," "deposited bencath." The following words are blagrevet surarehi; which words also oceur separately at the begiming of the shorter legend. Strivehi is as Bumouf observed the "forme I'alie de l'instrumental pluriel," but it is not probable that the word can be used in that sense here. In the longer legend an instrumental pharal might possibly be admitted, but the construction would be a very forced one. In the shorter legend it seems gnite inadmissible, for no sense can be got out of the phrase "with the holy relies." The word ehi, or ihi, a dialectical variety of the Prakit iha, signifying "here," or "in this," is, doubtless, the true reading, and supplies a consistent and appropriate meaning-Bhagavat sarir chi "Here (or, in this) is the holy relic." The remaining words are but a repetition of the formula in figs. 1 and 2-Sarea buddhaina puyae, "in honour of all the Buddhas;" the $n$ of 1Buddhama is obliterated, but may be unhesitatingly supplied.

The reading of the shorter legend is then l3hagavat sariv ehi. Siva-rachchitasa Khamidhana? putasa dana chi. "In this is the holy relic. In this is the gift of Siva Rachhita, son of Khamidhana" (?). The reading of the longer one is Siva-rachhitasa Khadavena (Khamidhana) putasa dana mulii míyatinam. Bhuagatat śarir ehi sarva buddhana puyae. "The gift of Siva Rachhita, son of Khamidhana (?), is here deposited. In this (is placed) the holy relic in honomr of all the Buddhas."

In this inseription we have met, for the first time, a variety in the form of the letter $y$, differing but slightly from the letter s', with which it has hitherto been confounded. The difference, though smatl, is distinctly marked in this inseription; the top line of the $y$ being sloped, that of the sumite straight. 'The final word of this inseription recors in the Wardak Vase insoriprinn, in which Baha

Rajendra Lal has read it "pmsine"" and has translated it as " nowishment, proteedion, or prosperity," making it an inaginary nom, supposed to be derived from the root push, to cherish or nurture (.Journ. As. Sue., Beng. : No. IV, 1861, p. 344). Mr. B. C. Bayley subsequently adopted this reading in an attempt to explain the inseription now under motice ( ${ }^{1}$ (d.: No. 1I, 1862, p. 190). The formation of a simple nom me:ning "prosperity," from the root, "to cherish," is not very ohvious. But it is mnecessary to pursue this empuiry further; the employment of the same formula in two other inseriptions, where the worl is clearly written payac, is quite andicient to determine the true reading.

## Manikyala Culinder.

We now come to some of the important articles extracted by General Ventura from the great tope of Manikyala. $\Lambda$ full description of the excavations and of the articles discovered is given in Priusep's Works (vol. i., p. 93), but it will be sufficient for our present purpose to state that although coins, medals, and other relics were found in several parts of the tope, there were three distinct deposits at the depths, respectively, of 12,45 , and 64 feet, for the security and preservation of which great precautions had been taken. In the first deposit was found an iron or copper box, enclosing nue of pure goll, within which were several coins, some of a comparatively late date. The secome deposit also consisted of a copper box, cuclosing a gold one; but nothing was foomd in the latter. The thind depmsit comsisted first of a copper box, enclosed in this was a brass eylindrical box on the cover of which an inserip)tion was punched. Within his brass box, and immersed in a thick brown liguid, was a gold cylindrical box, four and a-half inches lomg, and one and a-half inches in diameter. This box also contained some of the brown liquid and some fragments resembling hroken amber. There was besides a small gold enin with the legend ohipi kopino, and some other illegible letters, another small gold coin, and lastly, "a plain dise of silver, upon which have been engraved certain letters evidently calculated and intended to explain the whole mystery" (Prinsep i, 102). The inscription on the lid of the brass cylinder is that given in fig. 4, pl. iii, and that of the silver dise as fig 5 in pl. iv.

Colonel Cunningham has given considerable attention to these.

[^1]His realing of the first is-Siouti Siva Chatrapasa Gamdaphotha ('hatrapa putrasa danatrayam. "The three gifts of the Satray Swasti Siva, non of the Satrap Gandaphuka." In explanation of this, he says-"'The last four letters of the inseription which, for want of room on the lid of the cylinder, are placed below, I read as danatreyam, 'the three gifts.' 'Ihese, I suppose, to refer to the three cylinders or relic boxes which were deposited in the three separate chambers of the tope" (Jour. As. Soc. Beng. xxiii, 699). Mr. Thomas has ahrealy taken exception to the rendering "Swati Siva," prefering "Kavi Siva;" and his amended copy of the legend fully justifies him in this realing. 'The word Kavi signilies "poet" and may prosibly bear that meaning here. The following word is ummistakeably Chhatrapeesise. The next word, which Golonel Gumningham reads Gandaphaka, is somewhat doubtful, but his rendering ean hatdly be right. He appears to have taken the line at the bottom of the $g$ for an $n$, but this addition to the letter is frequently used without any alteration of the sound, as in Bhagavat, in fig. 3 , pl. iii. The first leter, then, is a simple $g$, the next is n, not $d$. The third is a doubtful eompound; the upper part of the letter is identical with the ph of the coins of Gondophares, and is observable in Colonel Cominghann's Panjtar inscription, thourh it is not the usual form of $p$ h. Mr. Thomas has already demmered to the rendering of the subjoined letter by $u$, very justly observing that it is different from the usual form of that vowel. This patt of the letter resembles $k$ in shape, and from the analogy of shk in the mames of Kanishka and llavishka in the Manikyala and Watdak inseriptions, would appear to be a $k$;-- if it be so, the componnd will be phl, and the whole word Gamephliatio. The two next words ate deanly Chhetrap'e putresse, and the following word dema. The last word, which Colonel Cunningham reads treyam, is open to mach donbt, and is important an the basis of his theory as to the three giftes or deposits. The first letter may be either $t$ or $t$,- it has genemally been read as $t$. in the word putra, but it may be a simple $t$, as it is in tho word blagarat (fig. 3, pl iii), where the curl of the botlom catnot represent the letter $r$. The final character is a compomad which Golonel Gumningham reads yam, but the first is preferentially the cerebral masal, and the whole word therefore in tranam or tariam. It must be admitted that there is much plausibility in the reading trayam, for "it assimilates so well wilh apparent probabilities." 'To my eye, however, the word is tranam, not traym, and I camot allow any conjuncture, however phasible, to lad me astray from a strict literal rendering of the
original. The reading train appears, moreover, to be a very natural one, and requires very litlle theory to support it. The Sanskrit trinía with the cerebral $n$, as in the word before us, signilies: "preserving, protection," anl, arcording to bühtlingk and Roth, "covering for the body, armour, helmet"; it may therefore be considered as applicable to the brass box on which the inseription is engraved, and in which the "gift" was deposited. For these reasone, the reading now proposed is-

Kavi-Siiva Chhatrapasa Ganaphkaka Chhatrapa putrasa dann trańam. "Casket of the gift of Kavi Siva Chhatrapa son of Ganaphkaka Chinatrapa."

## Manikyala Siluer Disc.

'The short inscription on the silver dise, which Prinsep considered so important as a key to the whole (fig. 5, p. iv) now claims our attention. Colonel Cumningham has published more than one decipherment and interpretation of this legend. Ulon his last reading he has built a very ingenions and attractive theory, concerning which it is desirable to quote his own words. He says"The upper line (of the inscription) may be read, without hesitation, as Gomangasa ' of the emancipated,' or more literally of 'one who has abandoned the body,' from guna abandoning, and angga the body. 'The second line I read as Kanarakasa, taking the first' and fourth letters as cursive forms of $k$. No doubt this plain dise of silver, as J. Prinsep supposed, was intended to explain the whole mystery. This mystery I believe to be explained by my reading of the two words as Gomangasa Kamarakasa, or '(relics) of the emancipated Kanerki.' According to this reading, the great tope of Manikyala was the Mausolemen of the Indo-Scythian Kanerki or Kanishka, the paramount ruler of Kabal, Kashmir, and the Pumjab, about the beginning of the Christian era. The Brown liquid, therefore, most probably coutained the mortal remains of the great Indo-Scythian emperor, mixed with a portion of sandal wood or other ashes from his funcral pile " (Jour. As. Soc. Beng. vol. xxiii, 701).

I very much regret that I am unable to acquiesce in this theory. The true interpretation of the legend has long seemed to me to be much more simple than that proposed liy Colonel Cumningham. I must confess that in the examination of old inseriptions, and

[^2]especially in these Buddhist inscriptions, my turn of mind inclines me to seek for the simple rather than the mystic, for a plain ordinary meaning, intelligible to all contemporaries, in preference to a refined and spiritual expression, comprehensible only by the learned and the priesthood. Mr. Thomas has already demmered to this interpretation, and very pertinently remarks that "no theory at all is preferable to a bad one; the negative position is not likely to mislead, the poritive converse is."

The reading of the first word as Comangasa seems to me untenable, and the interpretation of that reading to be equally inadmissible. 'The first letter with the sulpoined vowed is certainly go, the next letter is $m$; thus far our readings coincide. The following letter, which Col. C. reads ng ${ }^{1}$, is clearly $n$, - Lhe dental, as I believe, but the cerebral, aceording to Mr. Thomas,-at any rate it most closely resembles the $n$ in the word danam, the curve not lowing sulficiently deep for the cerebral. The final letter is sa; thus there is only a difference of one letter between us; Colonel Cumningham's reading being Gomangasa, that now proposed Gomanasa. Let us now examine if there is anything in the propesed etymology of Gomangasa to make that reading preferable. 'Ithe derivation of the term is said to be from gun, abandoning, and angya, body. In the first place, there is the fatal objection that gui camot by any conceivable means become yom, nor is any suggestion offered in explanation of the assumed change. The meaning "abandoning, leaving" is certainly to be found under the substantive Ciuna in Wilson's Dictionary, but Bohtlingk and Roth remark upon it as an unusual sense (besondere Bedienst); and no such meaning is given to the word in the Pali Amera Koshat (Clough, 1p. 51, 104, 107). But it is with the verb or participle, and not the noun, that we are concerned in this compound word, and no such siguification is traceable to the root in any of the authorities consulted. Wilson gives to the root the me:aninge to "invite, advise"; Westergaard agrees, "Cousiliun dare, suadere"; Clough's List of Pali roots says "to accustom." It is not to be found in Delius' Radices Pracritice, nor can I find it in Cowell's Vararnchi. Taking all these points into consideration, it is not too much to say that Colonel Cumingham's interpretation is inadmissible.

1" It is not a little singular that Major Cunninghan should have fallen in with so many of these otherwise rare letters ag, -they are infrequent enough in the ordinary language, but we have no single example of their use in the entire Kapur di Giri inseription, and Prinsep was a long time before he detected the sign at all in the Pali Lat apphabet."-Thomas in Prinsep, vol. i, p. 103, note.

Before offering any suggestion as to the import of this word, it seems desirable to examino the sccoml word which Colnmel Cunninghanir reads Kímarakasa. Mr. Thomas, though differing decidedly from this rendering, nevertheless "concurs in the acceptance of the opening letter as $k$;" which is the more surprising from the fact of Colonel Cumningham having felt a difliculty in this reading which he got over only by supposing the letiter to be "a cursive form." If in "cursive" writing it be allowable to reverse the form of a letter, to turn it bodily round, then this letier may be a $k$, not otherwise. The outline of the letter most closely resembles the normal form of the lefter $v$, the vowel o being subjoined in the same manner as to the letter $g$ in the preceding word. The next letter is too angular in the head, and differs so distinctly from the $n$ in the word above, that it cannot be so read; to me it is preferentially $d$. The next lelter is clearly $v$. The following is a very doubtful character; it is probably the letter $t$ in combination with some consonant, possibly $r$. The last letter is $s$. The word may then be read Vodavartasa,-with doubt and hesitation certainly, but with much greater adherence th the regular forms of the letters than in the realing Kanarakasa. 'Ihis rendering of Kanarakasa most have sprung from a preconceived notion as to what the word pught to be, and would probably never have been proposed if a coin of "Kanerki" had not been found with the piece of silver.

Gomanasa appears to be the gen. case of the Sanskrit gomat, making Goman in the nom., and Gomatas in the gen. The word signilies " rich in kinc," being in fact a word of similar formation and import to the well-known (Iovind and Gopail. The word Gome is given in the Pali Vocabulary with this meaning. There is, however, another derivative word in Sanskrit, exactly similar in character, and having precisely the same primitive meaning, which has the further signification of "an attendant on a Buddha," according to Wilson, and of "a Buddhist lay brother," according to Böhtlingk and Roth. This word is Gomin, or Gomi,-may not the word Gomàn, Goma, have been used in a similar sense? We lave then a choico of two interpretations,-Gomanosa may be taken as a name or title, like Govind; or it may mean " of the lay brother." The other word, Vodavartasa, if that be the true reading, is connected with the Sans. udeartta, "abounding, plentiful," but it is probably used here as a name. Accordingly, we may conjecturally and with hesitation presume the legend to signify-"Of the lay brother Vodavarta."

## Sear. Ring.

Fig. G, pl. iv, is a defective inscription on a copper seal procured by Mr. Bayley in the Punjab. " $\Lambda$ s the letters are reversed, the seal most probably belonged to one of these ludian satraps, who must have used it for stamping and anthenticating his public docnments. The Ariano Pali legend has not been satisfactorily made out, but it appears to be Sivaseme Chatrapa Atri naram Pathanavare "(Sealed) by Sivasena, of the race of Atri, Satrap of Pollowar" (Cunningham, Jour. As. Soc. Beng., xxiii, G98). The learned writer goes on to suggest that "Pathanáwáré may probably be comsidered as the original form of the present Pothowar, which is a part of the Rawal Pindi district." 'The letters of this short legend are stiff and well defined, the forms approaching the Kapur di giri type, especially in the letter chh. Very little change appears necessary in the reading above proposed, but that little involves some alteration in the interpretation. The reading now proposed is Sivasena Chhatrapa Atridara patana are . . . "Sivasema Chhatrapa, city of Atridara . . ." The letter after the word $\Lambda$ tri, which I have rendered $d$, is more like that letter than $n$, but I am not disposed to insist upon my reading if any reason can be shown for preferring $n$,-the letter in question may possibly be a stifly formed $n$. I camot find the $m$ which Colonel Cumningham gives in his realing naram, and the letter which I have read $r$ differs somewhat from the true shape as exemplified in the last letter of the inseription. The next difference is a slight one, a substitution of $t$ for $t$; but in the last letter but one there is a difference of more importance, as the notion of the modern Pothowar being connected with this inscription, depends in some measure urou the reading of the two final letters. Colonel Cuminghan's reading of these letters is vare; the $r e$ is indubitable, but it is equally clear that the other letter is $a$, and not $v$, for the letter is exactly like the $a$ in $\Lambda$ tri, and quite different from the $v$ of Siva. The final words, then, are Patana are, the former being the Sans Paffana city; and the latter, in all probahility, a merp fragment of a worl. I have not succeeded in finding any city of Atridara in the anthorities J have consulted, but the Brahminical tribe of Atri was widely spread in the northwest of hudia from the earliest times, and the name was also horne by a tribe of Rajputs mentioned in the Maha-Bharat.

## The Manikyada Stone Inscriution.-Piate IX.

The Manikyala inscription discovered by M. Court, and which is the sulbject of llate ix, baffled the acumen and ingenuity of Prinsep, and has remained to the present time the opprobrium of scholars and antipuaries. 'The familiar words maharaja and chhatrapa were pieked ont at once, and the word vihar in the left hand margin has since been read. Cotonel Gumuingham, in his paper so frequently referred to, made a considerable advance by reading the mames of Famish:a and Gushan, but his other speculations upon the inseription are more than donbtful. He put them forward, indeed, with considerable hesitation. Taking the end of the fourth line he says the name of the Satrap" "is unfortumately doubtful, but I venture to read the name as Gandaphuka,' which I will retain for the present for want of a better or more probable reading. The inscription appears to me to contain the following important facts:- In the year 446, in the reigu of Kanishka, Maharaja of the Gushang (tribe) the Sadrap erected a tope (for what purpose I have not yet been able to deciplicr).' $\Lambda$ s a proof of his attachment to the Buddhist faith, the inscription ends with the words Sacha-chama-pidasa, 'of the crown of the true dharma.'" That the inscription refers to the building of a tope may very fairly be predicated, but 1 am obliged to reject mhlesitatingly the supposed name, Gandaphulia, and the reading of Siacha-dhama-pidasa.

The foregoing is, I believe, a fair summary of the decipherments of this inscription, and 1 fear that I camot ald very much to them. Some few words, however, secm to be intelligille, and I hope to aid the progress of discovery ly making them known, and by pointing out possible variauts from the published plate. The original stone had, apparently, a very uncven surface originally, and time has so added to its imperfections that no two copics of the inscription agree in all the details. I possess several independent tracings, three of Mr. Thomas's and two of my own, and I propose to point out the important variations which occur in them.

The first line of the inscription appears to be independent, and to serve as a kind of heading to the rest, heing, perhaps, somewhat similar in character to the "Sacred to the Memory" of our gravestones. The reading seems to be Bhatarasya T'abuddhisa aga patiasace,

[^3]"In hope of the future of the brother 'labuddhi." The meaning of the word aga will be discussed in the notes on the Wardak Urn inscription, in which it occurs many times. The word patiasa is, probably, the Sanskrit prutyisí, "reliance, hope"-one tracing makes the pati into pali, but this would make very little, if any, alteration in the meaning.

The body of the inseription opens with the date "Sirn 18." This is succeeded by the character $s p$, which is followed by a letter wholly illegible; the next letter is $p$, then comes one without a head, but which is, probably, $r v$ or $r$, for the conjunct $r$ is distinct; the last of this series is again spl. It is diflicult to make any guess at the import of these five syltables beginning and ending with sp; the word puirva, "old, prior, chief," is probably included anong then, and the last may be aspe, a word found on the coins (Sias. usiva); the whole is, perhaps, a name or title. The next word is maharajusa, "of the great King;" the object of this genitive case is not very manifest, it may, lrowever, refer to the date "In the year 18 of . . . . . the great King," but this is far too doubeful to form the basis of any theory. The following word in ummistakeably Kemeshkic, lout it has for its final a letter which all the tracinge agree upon, and which camot, I think, be read otherwise than as rem, thas, apparently, forming a word in the genitive pharal. The succeeding words are clear Gushanna vasa sampardhutic, "Inereaser of the dominion of the Kaneshkaras and Gushans." The last word may be read without the final ka, and may signify simply "increase." Vasa may be either vensa, "family," or vusa, "authority, supremacy;" but the latter seems preferable. The next letter is a clear $l$ in the plate, but some tracings make it resemble an $e$, and as such it might be the dative or locative of the word Samardlanka. The last letter of the line is $l$. The first leter in the following line is no or $n u$ in the plate, but one tracing makes it hi, and another more like da. The following letters are tena suga, but the first of them may be re, or even $d$, for its outline is not very distinct: and the last letter has an o added to it in нome copien. I am quite at a loss to singest any probable meaning for these six or seven letters, and am afraid that the sense must remain in obscmity. The next words are respasisa chhatrapasa, the first of which will loe fomm repeated in the last line. The next line, and the line following (five and six) begin with a series of lettere which may be considered identical, notwithstanding some lithe varietics in the outlines. The copies differ most in respect of the second hetter of the "prer line; nome make it, doublfully, ri, but the $i$
should probably be nothing more than the upward bend peenliat to the consonant. Continuing our reading, the lifth line begins with huta (or hoba) murtasa, and continues tasa apanage vilhare; the last letter $r e$ is somewhat obseure, but is not doubtful. The rembring mu has been already referred to in the notes upon fig. 3 of phate iii, and will again come muder notice in the Wardak Inseription. Vepmesisa Chhatroprasa Hintamurtusa ate all genitives, and must be taken together; they, probably; have their complement in some of the words preceding them, while the following word tasa, the genitive of the pronom, would moro naturally relate to what follows. The words Vespasi and Hutamurta are, probably, names or titles, standing, as they do, in agreement with Chhatrapa. A further reason for considering them to be names or titles is that Huta, apparently, is fomed in the last line connected with Vespasi, thus, "Huta Vespasi." In Sanskrit, huta siguifies "offered sacrificed," and murta may represent múrtti, "form, body;" múrtta, "formed, swooned," or, mrita, " dead." None of these, however, supply any intelligible meaning to the context. I take the words tasa apanage vihare, to siguify "in his own vihar;" for it is not improbable that the word apmage is comnected with the Ilindi a $a$, apna, from the Sanskrit atman; or; it may be a proper thame "in his Vihar of Apanage." 'The sixth line begins "Huta (IIoba) murta" in the nomimative, followed by the wotds atra, "here," and nana, " many, vatious." These are succeeded by two words, which I prelty conlidently render as Bhagara Budha; the letters $b h, v$, and dh, are clear thed are so given in all the copies; a copy of my own makes the second letter distinetly $g a$, and the unknown form given in the plate closely resembles that letter. The most doublful is the ln, which is more like su in sone of the tracings. 'Taking all the letters together, however, there can be very little hesitation in recognizing the words Bhagava Budha. 'The stieceeding letter is an muknown one, and we have nothing here to suggest its power. The plate gives the true form graven on the stone, and the only point open to doubt, is, whether tho bend of the down stroke is sufliciently distinct to form the nasal. The last letter of the line is, apparently, ca.

The last line is in a very unsatisfactory condition, and will, I fear, remain unintelligible until the preceding context is so clearly understood as to auggest the words to be expected here. 'Iwo tracings make the line to begin with $a$, but this is, probably, a mere fracture. S'several copies agree in making the first letter pa, and the second $l a$, but one of my own makes the latter resemble $k a$, as in
the engraring. 'The following character is pretty elearly sta, and that after it va. The next letter is very doubtful; besides the form given in the elngriving, we have the varianta ve and se in different eopies. The following letters ri, sa, are sulliciently distinct. The next two are obseare, but the plate gives a fair representation of them, and no variant is nuggested. The following letter may possibly be e, mot hu; and the next, which is obscure, must be either $v$ or $t$. Then comes the word vespersi. The following letter is clear on the stone, and may be a bally-formed a; the next seems to be a defective $n$; then comes kih, followed by two muknown characters, and the finals are $e$ and ne. The third letter from the end may be dhi or chi, but is very doubtful.

The short passage in the left margin commences with a series of instrumental cases comected by the copulative cha. The first words may be read as Buritena cha vihara; then come the letters kara, followed by an unkown form. The next letter is possibly a defective $k$, and the last is $n$. From the collocation of the words there can be little hesitation in admitting this last word to bo in the instrumental case, and there is very little doubt in my mind as to the meaning of the word, which I suppose to be, " maker, buider." The following word reads samvena, but probably is either intended for sarvena, or is used in the same sense. The next word is cha, and that following is parivarena, the re being defective at the point where the characteristic twist of the $r$ should appear. The following word is saddhac, and but for its commencing with the detital s I sloould take it to stand for śraddhé, "faith "-sandhá, "union, association," seems, however, to be the more suitable equivalent. The following words are clearly tena kusal-mulenn, for some tracings indicate the presence of the $u$ wanting to the $k$, and we have a repetition of the phase imene kusal-mulena on the Wardak urn. I take the word mula, if that be the true reading, to be a derivative, aignifying "foundation," from the root mul, to plant, and in Pali " to found." The passage thus far may, therefore, be somewhat conjecturally rendered as "Buritena, the architect of this vihar, and his whole traill of workmen in union by this meritorious foundation," do something which I can only guess at, for the remainder of the passage is very indistinct and unintelligible. The first letter is m , as given in the plate, but the next is so obscitre that its true outline cannot be traced-st, the next letter, is tolerably clear, but hit seems a possible variant and more likely form. The next letter, which is di in the plate is converted distinclly into cha in two tracings. The next two characters are spa,
$v a$, and the next, which is ka in the plate, may also be spa-that next in order may be sta or hi-the last is cha. There seems then to be fair ground for considering these letters to form two words ending in sta or $h$, and the conjunction cha to be placed between them; if the former is the right rendering, they are probably verbs; but if the latter, instrumental pharals. This short inseription terminates witin the copulative cha, which affords good reason for sup. posing it to be comnected with the two lines on the opposite side, where we find the same prevalence of instrumental cases. The first words of this may be read as Sandha budhi lena cha, for the $i$ to the second dh is clear in two coppes. This would appear to be a name. The next letter is very obscure, but probably ve. The next is still more doultful; one copy makes it $s i$, another so, the others incline to the form of $k$, as in the plate: the following letter is also doubleul, but the plate appears to have the best rendering. The last two letters are clearly "gena," another instrumental case. It is impossible to make much out of this beyond assuming that the first is a name in the instrumental case, followed by a conjunction; which makes it probable that the last word, in the same case, is a name also. The last line contains the date, and has already been examined. It appears to read Kartikasa masa divasa 20" Twentieth day of Karttika."

The two words written upside down at the top of the inseription may be read Sachhasana bhavatu, for there seems to be a stroke under the second letter, making it chh in preference to $m$. This may be rendered " May it be manifest "-" May it be clear to all." The Sanskrit Sikishit, has the signilication of "manifest" being derived from aksha, the eyo.

Fig. 2 of plate ix is the bi-literal inscription discovered by Mr. E. C. Bayley in the Kangra hills. These counterpart legends are stated to be "cut on two granite boulders, about thirty yards apart." I shall simply quote the rendering of these as given in Thomas's Prinsep (vol. i., p 160). Bactrian, Krishanyasasa aramá; "the garden of Krishmayassa." Indian, Krashnayasusya arama madantasya: "the garden of the happy Krishmayasa."

Fig. 3 of Plate ix.-This is taken from the lid of a brass box, which "seems to have enclosed the usual silver and gold boxes devoted to the enshrinement of relies." It was included among the relics eent home by Mr. Masson, but the place of its discovery is unknown. The inseription seems to have been badly executed at
the first, and the box has been very much rubbed, so that a correct delineation is difficult, if not imporsible. I have a copy of my own which differs in some respects from that in the plate. There can be no doubt that we ought to begin with the date "San 18," \&c., which has already been examined, and need not be further referred to here. After the date is a small blank, and then the inseription begins with what appears to be a name in the gen. case-IInsharesya. 'Iaking the letters in order they read $g a, g o$ or $g i$, $l a$ or $v i$, the letter we have assuned to be mu, and then two doubtful letters, possibly both of them $n$, or one $n$ and the other $d$. My copy makes the next
 for the character read ship differs somewhat from the shik of the Manikyala and Wardak inscriptions, and the last compound sti has not been met with before. The word seems to be connected with the root kis's, "to whinc," or spas, " to touch, take, comect," and to both of which the senise of "making manifest" is applicable.

## Wardak Inscriftion.-Plate X.

The inscription upon the Wardak um is the lougest we possess in the Bactian chatacter, after that of Kapur di giri. It is in a most perfect stale of preservation, not a single letter has been obliterated, yet such are the difliculties attending the interpretation of these inscriptions that high authority pronounced this record to be written in no Sanskrit dialect. This opinion has been shown to be crroncous ; and some isolated passages have been translated, but no satisfactory interpretation of the whole docmment has yet been accomplished-and I cannot hoast of a complete success. I hope, however, to clear up a few points, and to remder some service by atating the objections which appear against some of the readings and interpretations proposed by my fellow-labourer babu Rajendra Lal. The Bengal Journal, No. IV, of 1861, contains his proposed translation of the document, but the writer disclaims all desire of laving it looked upon "as other than tentative," and expresses himself "fully prepared to surrender the version whenever further research will suggest another better fitted to suit the requirements of the monument." Before proceeding to criticise I will perform the more grateful task of applauding the success he has achieved, especially in the reading of the mame of the king, and in idnntifying him with the Inushka of the Raja Tarangini. This alome would have been a valuable gain; hut I am disjused to gre further, and agree, in a great measure, with

Colonel Cuinhingham, in believing that howover mich the letalls mady be imiproved, a very fair notion of the general scope of the recotd has been obtalned.

Before entering upon a consideration of the doculrient I thust express my acpuiescence in the ophtulons of Mr. Thomas and Rajendra Lal as to the want of due care in the delineation of the charateters. They have been formed by a firm decided haid ; but so little trouble has been taken to mark the true outlines and nicer shates of distlintion that it woilld seen as if the work had been executed from a copy ly an engraver who was ignorant of the letters or language: take for an example the letter bh as it appears in the frequently recurring woid bhavatio. It is also desirable that some guiding principlo should be first lald down for diseriminating the letters $r, t$, and $v$, which differ in sotne respects from the nomal forms. In the best examples of writing, as we have already seen, the $r$ and the $v$ are about equal in height, if there is any difference the $v$ is longer than the $r$. In this document, however, the $v$ appears to be generally short in the stem, but the main point of distinction is observed; the horizontal line of the $v$ being straight, that of the $r$ curved at the point: The $t$ is more true to the real form, being generally short in the perpendicular; and curled at the point of the horizontal. The line at the bottom of the letter $g$ would appear to be an optional addition, for it is sometimes given and sometimes omitted in the same word agabldga, and it can hardly have any power in the word bhagavan.

The inscription opens with Sum, for Samvatsara, year; then follow the figures for $20,20,10$ and 1 , the year; therefore, is 51 . The words Másya, or Maissa, "of the month;" and Artamisiyasastehi, "Artemisius," follow, and are succeeded by figures representing 15. The date, then, is " 15 th Artemisius of the year 51. " The value of this date has already been discussed in a previous page, and needs no further notice here.

Rajendra Lal's amended reading of the lirst line, as given in ii note at the end of his article, is-
"Imena gatrigeno Samayusa putra Vabamiteguso iya khaba tharmasatasa siga Vayamitega Vihar Mritua-vrimri Bhayavat Sakkydama sarii paridhareti or patidhareti."
"In this gatriga (cross way?) the sou of Samaguiso of (the village) of Vagamitega has placed this pillar (of religion and virtue??), and that monastery of Vagumitega for the relics of the divine Sakya."

The reading of the first two words is clearly imena gatrigena,
he vre or .r si mi "t a













there is no $o$ at the end of the last word, and its insertion in the reading is probably a mere slip of tho transcriber or printer. 'The following letter is, I think, bh, for it is identical in slidjec wiflh tho madoubted $b h$, five letters from the chd of the third line; if it be a sibilant it must be the cerebral sh, but the bh is preferable for the reason given. $\Lambda$ similar vatiety in the form of the letter $k$ is observable in the fourth letter of line 2 . The letters magat siceceed, but it is by no menne clear that the final is $s$, or rather sy or ss, the sign of the genitive, as it differs materially from the fintid sy or ss of the word mrisya in the dnte, and of the word Vagamarejasya a few letters further oin. 'There are no means at present for determining its true value, but the upper part of the character appears to be $l$ and the lower part a conjunct $y$; the preceding letters being Bhamagu, we may arbitratily read the whole an a mame Bhamiagnlya. The next word is petra, and I think there can be no doubt of the following one belng Vagamaregasya, not Vagamitegaso, for there is tio $i$ perceptible; and the middle consonant has the true normal form of the $r$. The next word is iya, and then follows a series of 9 letters, which are perhaps the most difficult in the ingeription, and out of which nothing satisfactory can be extracted. Mr. 'Thomas's tentative transeription and Rajendra's first and second versions are as follows:-
'Thomats.-Khaatagrashania-siga.
Rajendra.-1. Khasavamri sekhala—siga.
"
2. Khaba dharmasatasa-siga.
'The first letter may be admitted to be $k / h:$ The next is doubtful; it may be a $b$, for it is like the initial of the word which appears to be Budha, in line 6 of the Manikyala inseription, or it may be a badly formed $a$; the succeeding letter I have no hesitation in reading as $d$, and that following as mi or mmi, making altogether khabadami or khaudammi, which I take to be a word in the locative case, the horizontal stroke at the bottom of the mi possibly having the power of doubling the consonant, and making mmi the common Prakrit form of the locative. The mi in Artemisijas and mitra has no such mark appended ; some value must, therefore, be tissigned to it, and that which I have suggested is the most obvious. The next letter is a very bad one; it may be $k$, bh or sh; let us take it an kea. The following letter is $d a$, the next a badly formed $l$, like the $l$ in the undoubted word kusal at the begimning of line 2; the last two letters are siga, upon which all are agreed. The reading then is khabadammi kadala siga; the first word may be the Sauskrit stambha, and tho last
may be the representative of śringa as suggested, but I am at a loss to propose any meaning for the whole. I would gladly adopt Rajendra's last version, could 1 find the least warrant for it, as it affords an intelligible meaning; but a strict adherence to the text forbids the reading, and compels me likewise to reject a fancy I have sometimes indulged of the latter mmi being an imperfectly formed $g$, which supposition would give us the word dagabha. We now come to a more intelligible passage, Vaya-mariga viharammi, "in the vihara of Vaga-mariga." The next letter is $t u$; but the following one is doubtful, probably sti; the next is mmi, making altogether tustimmi, apparently a locative. The nearest Sanskrit equivalent is stuti " praise;" but the Pali form of that word is tuti, and tusti is hardly admissible for the Prakrit. The next word is Bhagavan, not Bhayavat, but the following name is donbtful; it begins with $s a$, and, although the next compound is more like shy than $k: y$, the latter is preferable; the $k$ is supported by the word kiusal in the next line, and a warrant for the conjunct $y$ may be found in Masya and Vagamaregasya. We thus get Sickiya. The power of the next letter has hitherto been unknown. It resembles, however, the indubitable mu of the 'laxila Plate, and as that somud is required here, we may assume it to have that power until a better offers. It is followed by an $n$ apparently doubled; but there can be no doubt of the word being in the gen. and so we will read Sukyamuma, " of Sákyamuni." The last two words are distinctly Sarir paridharetio or paridharedi, the latler being the true Prakrit fome. The following is a consecutive reading, the doubtful letters being in Roman:-

Imena gatrigena Bhamagnlya putra Vaga-marcgasya iya Khabadammi Kadala siga Vaga-mariga viharammi fustimmi blagavan Sakyamumaa surir paridharcdi.

I can fiud no authority supplying a meaning to the word gatriga. Rajendra Lal says, it may "possibly" have the sense of "crossway;" but this compels him to read "imena gatrigena" as a locative, though the phrase is unequivocally in the instrumental. May not the word apply to the urn in which the relic would seem to have been deposited, and be read, "With this urn." The following words apparently mean, "Yaga-marega, the son of Bhamagulya," and the donor in a sulsecquent passage distinctly calls himself " Inashtuma marega," leaving little room for doubt as to "Marega" being the name of his family or sect. Vaga is possilly the Sans. varga, "class." The following doubtful words are not suggestive of any intelligible rendering but Vaga-marign vilurammi may be translated "in the Vihara of Vaga-mariga." The following
whscure word, tustimmi may possilly signify "in praise." Bhagavan , S'rkyamunna sarir, means " the relic of the Iloly Sákya," and the last word paridharcti or paridharedi is the Prakrit Cansal form, from the root dhri, to lold, to keep-and may be rendered as "places, deposits." The obscuritics in this passage are so great as to deter me from venturing upon any altempt at a literal translation, but the general meaning is, I think, sufficiently clear; viz.: "With this (votive urn?) of Vagra-marega, the non of Bhamagulya there is deposited a relic of the ILoly Sakya in the Vihar of Vaga-mariga."

Rajendra's reading of the next passage is Imena Kusaliakilitena Mrahioraja raijatiroija Muvishliasya agabhagae bhavatu, which he translates, "May the fruit of this depository of innumerable blessings (relic-tleposil) be conducive to the good fortune of ILuvishka, the great king and king of kings."

There is little objection to this reading beyond that which Mr. Bayley made to the reading of the 7 th letter as khi-it is certainly not the same as the kh in the preceding linc. We have in the name of Sakyammona assumed its power to be mu, and for consistency will so read it here. The reading will then beImena kusal mulena maha-raja rajativaja Jhuveshkasya agabhagae bharatu. The second and third words oceur in the Manikyala stone, on the left-hand side, where the initial is clearly $k$; this removes all doubt which might arise from the malformation of the letter on the urn. The rearling of the second word is mula, the first letter appearing to be mu for the reasons above stated. Tlais word I have supposed to mean "foundation" in the Mankyala inscription. The gist of this and of many other passages depends eutirely upon the words agablagae. 'This phrase occurs several times in this form, that is, in the locative case, which is employed in Pali for the dative, and may also stand for the inst. and wenitive. At the end of the 3 rd line, however, ayde-bhaga the nominative is found ; and in two instances we have a varicty of the phrase in agabhaga patibasanam (or patiyaśanam) bhavatu. Rajendra Lal has discussed the signification of the term at some length. In the first place he rejects Mr. Bayley's idea of its meaning "an expiation for sin," on the ground that the Sanskrit aghe, "sin," would in all likelihood have been written with the Bactrian $g h$, and not $g$. In Pali, however, there is a word aga or agn, meaning "sin" (Clough's Pali Vocal., p. 10), which would seem to be connected with a root anlo; $2 s$ in the Dhammapadi, we meet the word anangana, "sinless." (Faussbiill Dhammapada, pp. 23, 205 ; Weber in Zeitschift Deutseh. Dlorg. (iescll, vol. xiv, p. 49). In Sanskrit :also we have $\bar{A} y$ ge, " sin.".

It is clear then that we may adopt the aiguification "sin," if desiraho: and if taken in that sense tho second word haga must stand for tho Sannscrit lhamga, "breaking," "defeat." noother reading which suggests itself is the Sanskrit anga-bhaga, "a portion of the body ;" and a third is that which Rajendra adopts agra-Lhaiga, "first or chief share," lat which he muderstande to signiify "grood fortune" in the record before us. Let us now see if the word patisusamam will help us. Rajemira reads this word "pmisasuma," and takes it to be the Sanskrit "pratisusana," which he renders "control." The true rearling of the word in the inseription is pati (or pati), not pari, being in this respect nearer to the equivalent proposed; but sisama is hardly admissible, becanse the secomd silitiant of the Sianskrit word is dental, while that in the inscription is palatal, and the sibilants are so clearly and regularly distinguished in Bactian that very strong evidence is required to establish a case of confusion. The word may be either patisaSanam, or patiyayanam, for it is diflicult to distinguish $s$ from $y$, and the changes may ba rung upon these two letters-the curve of tho right limb of the first of them may also bo intended for the numswira. 1 canuot think of any satisfactory Sanskrit equivalent, for the only words which suggest themselves are pratisraya, "a house, refuge," and a derivative from either śasicat, "continually, perpetually," or yaśss, "fame." The word aga makes its appearance in a different combination in the Manikyala inseription, the first line of which reads, "blatarasy,a T'abuddhisa aga patiasice (or palicsucu); the last word is the Sauskrit pratyísia "trust, confidence," and henco this line appears to signify "In hope of the 'Aya' of the brother T'abuddhi." If this be myything like the truo senser all ideat of aga signifying "sin" must be set aside. It is also very diflicult to see how the word anga, "body," can have any application, and we are consequently driven back upon the word agra, "chicf, supreme," which would make the above line read, "In supreme hope of the brother 'Tabuddhi"-a vague aud unconvincing result. Ayra, however, as a substantive, has the meaning of "top, summit," and hence may signify "exaltation," "preferment." The same word mader the form cigi is used in Hindi, with the sense of "the front," "that which is before," "the Future;" and I am strongly inclined to believe that the latter is the true meaning of the word in the inseription. At any rate it seems the most suitable of all the possible equivalents that we have examined, and it may accordingly be adopted. I slall gladly surrender it if a more appropriate or authoritative rendering is offered. 'Taking the word then to mean "the Future," bhága must signify "lot," and
putisisisimam, we may assume to mean "perpetual," the whole meaning "a lasting portion in the world to come." Turning now to the passage, a further difliculty meets us in the construction of the sentence; it begins with an instrumental, which is followed by a genitive, and ends with a locative and the verb. There secms to be no help for this, but to take one as a nominative, when we shall find the sense to be, "May this meritorious foundation tend to (procure) a lasting future lot for IInvishka, the great king, king of kings." The difference after all, between this and Rajendra's version, is but little; an exhanstive examination of all conceivable remderinge of the phrase agablagae secmed, however, to be deairable, and has not been, I hope, altogether umprofitable.

The next two sentences are about the clearest in the whole inseription; Rajendra reads them-

Mátaípitá náme pushac blavatu. Bhraita náme hasphanimategasyat pushae bhavatu. "May it be to prosperity of the name (my) mother and father-may it be to the prosperity of my brother Hasphanimatega."

I can find no warrant for the reading " nime," which appears to have troubled Rajendra in his translation; and the me is manifestly the possessive pronoun. I think the compound letter in the name is clearly "sht."-The word which he reads "pusue," and for which he constructs the meaning "nourishment, prosperily," from the root push to cherish, is without doubt the puyae (Sans. puja) of the Taxila Inscription. In the Bimaran Vase we have seen the same word written with a character intermediate between the $y$ and $s$, and in this inscription the two characters appear to be confounded. The ordinary form of the $y$ never occurs in this Wardak inscription, but it cannot be conceived that the letter is altogether absent. The reading of these sentences is-

Máda pidar me puyae bhavatu. Bhradar me Ifashtunamaregasya pmya blavatu. "May it be to the honour of my father and mother -may it be to the honour of the brothers of me, ITashtunamarega." The final $r$ of pidar and bhradar seems to represent the genitive plural.

Rajendra's reading of the next clause is-S'Suchyami blushana tigamitrasya blaratigana pushae bhavatu. "May it be to the prosperity of the brothers of Tigamitra, the omament of Suchyami." "The doubtful word," he says, "being the first, Suchyami." 'To me this word or words secms not at all doubtful, but my reading is different. The first letter is so not su, the next a simple ch not chy, and Rajendra so reads the same character three times in the last line, and the third is me and not mi-the whole making socha me,
"my purity," śocha bring the Sanskrit śauchar. Rajentaris bhushour is inambinssible, the sibilant, if it he ome, is palatal, not cerebral, and onght not to he confombled with it. The letter seems to be preferahly $y$, makingr bluyrr, which I suppose to represent the Sanskrit bhingit, the optative of bhi, riving the sense "May it be to my pmity." 'The remainder of the sentence reals matiga mitraste blatigame puye bhavatu. The first word I suppose to be the Sanskrit ungeri "a grandson," or preferably juétr, "a relative," which becomes nútá in Ilindi, and supplies a meaning consistent with the context. Bhatigama, a genitive plural, which Rajendra read as bhrítigana "brothers," is more probably the Sans. bhartti, "protector ;" for a clanse has been. specially devoted to the brother, and the orthography of the woral differs. The reading of this clanse is Socha me bhaya. Natiga mitrasa blatigana puyae blatatu. "May it be to my purity-may it temd to the honomr of relative and friend (and) of (my') protectors."

Rajendra's reading of the next clanse is Mrahisuculya Tryamategasya aga-bhaga pariśaiśana bharatu," May it eusure to the highlily pure (or the great minister) Uganategra control over good fortme." The first word is either Mahasicha or Mahiyachar, for it is impossible to distinguish with certainty whether the chanater is intended for sor $y$; the word oceurs again lower down, and there the form of the letter gives some gromed for reading it as $y$. Rajendra supposes the word equivalent to Mahii suchi "highly pure," or mahi sarhibu, "great minister;" but neither of these is satisfactory in sense, and the orthography is objectionable. The whole sentence reads, Mahiśacha Vaga-mareganaín aga-bhaga patiśaśama bhavatu. I'he first word apmears to be a term qualifying the second, which, as we have seen above, is the name of the donor's family or clase, and one would expect it to have some religious or sectantial meaning. There was a sect of the school of Rahula designated "mahísika" (Bournouf, lint. 1. 446) and this term is so like the one in our text, that we may presune them to have some comection. This clanse then will read as follows, "May this work tend to the lasting (happy) fulure lot of the Mahiśacha Vaga-maregus."

Rajendra's reading of the first clanse in the third line in Sareasatuena dirya gatichinac bharatu, "May it prove conducive to the moral improvement of mankind." I read "S'arce sattena aroga dachhinac bhatatu." 'The letter to (or tw) is a new form, lut the body of it is clearly $t$. The formation of the chhi in curious, the stem extending above the semicirenlar top, and so far resembling mi. $\Lambda s$, however, the vowel in appended in addition there ean bo no hesitation in reading it as chhi. The vowel mark $i$ is more
diatinct on the um itaclf, passing, as it ought, right through the letter. Sattrun is a genitive pural from the Sans. Sat, aird signifios in P'ali, " wise," learned (clough 28) duchlina is the Sans. dakshinía. The whole may be confidently rendered, "May this tend to the health and reward of all the learned."

Rajembra says tho next clause, "hata a long etring of mames of oljects, most of which are mintelligible," and he offere no explanation of ony part of it. I am reluctantly compelled to come to much the sane conclusion; but some of the words are intelligible, and afford at elue to the dieft of the passage. The first three words seem to be aviśana Sans. aveśma, " passion, demoniac possession ;" rị́!a, "desire, lust ;" and purs's, Sans. spur'se, " touch" " contact." The succeeding letters are tusícalharagnsión. I camot suggest any meaning for tuśa, as the palatal sprecludes us from assuming the word to be either trishnta, "thirst," or trása, "fear." The ta may possibly belong to the preceding word making sparata instead of persís, and then the next word would he sava, Sans. Sriva, a corpse. The succeeding word is in all probiability bhriva, state, condition of mind; but gasis, the following one, is muintelligible. Sfter this come the words atra antara, "herempom." Some letters follow which are dillicult to read with precision, and 1 an mable to discover any meaning until we get towards the cud. The last words appear in read arupermta serreina puyae blaratu, "may it be to the homour of all incorporeal beings (emancipated spinita?)." So far then as this clanse of the inscription is readable, it appears to begin with an aspiration for the removal of passion, lust, and ceremonial impurity, and to comelude with a desire that the work (of building the vilar) may be to the honour of all enamcipated souls.

Rajendra's reading of the next clanse is Mahisachayjuirlhana satuasangena avashati grunssya parivara cha aga-bhaya parišaśama bhavatu," May it ensure control over grod fortune to those who observe the autumual fast abasatha, as also to their domestics and such pious congregations as are capable of noble conduct." My fellow-labourer must forgive me for saying that here he seems to have given the reins too freely to his imagination. I cannot acquiesce in the realing saturasengenn, nor in the greater part of the translation. The first word is the same as that we have alove read as mahisucha; the next is a mane Roblanasa; the next is dusu, probably disen, "a slate," "servant." It is dificulte to say what the next componid chameter is intented for, as we have ure exact parallel to it. The borly of it is $v$, so that it may be intended for $r$, and be ouly a fanlly execution or a variety of the charater
which occurs at the beginning of this line in the plate. If so the word is probably sarvina, which compels us to suppose the letter s to have been omitted, and the phrase to read dasa sarvina instead of dasarvina. In offering this suggestion I may be making up for my own deficiencies, but I see no other way of getting through the difliculty. The following word is aveshatri or anershatri, which Rajendra takes to mean the ávasatha religious observance. I find no authority for considering the cirasathu to be a Buldhist institution, but even if it be, the orthography differs too materially from that of the word anvashatri to be taken as its original. The nearest equivalent appears to be aneeshtri-"inguirer," "searcher." The next word is ganasa, "of the band or class;" those succeeding are parivara cha, "and the train," which is followed by aga-bhaga parrśaśanam bhavatu. The whole of it appears to signify, "May there be a perpetual happy future lot for all the servants of the Mahisacha Rohana, and for his train of attendant students."

The last clause Rajendra reads Mistugrasya cha agabhaga bhavatu, "May it ensure good fortune to Mistugra." The only objection to this reading is to the rendering of the second character. The first part of this character is clearly the cerebral $t$, and when we consider the few consonants that can be added to this letter, we shall have little hesitation in reading the compound as $\#$ h. The whole will then read Mitfhagassa cha aga-bhaga bhavatu, "May there be a (hapry) future lot for Mitthaga.

The last line written in larger characters is thus rendered by Rajendra Eshat vihairt asansthánna mahásangigana patigaha. "'This vihaira is the asylum of the houseless of the great congregation." The first two words are clearly esha viharam, the termination of the last word, however, seems to be erroncons, the accusative being employed as a nominative. The following word, which Rajendra reads asansthanana, presents some difficulties. The first two characters are pretty certainly asan, but the following is the palatal $r s$, and certainly camot be taken as sth. But giving the compound its proper equivalents is we get the impossilbe combination asamr's. To escape from this dificulty we can only suppose the compound to be $\dot{s} r$ instead of $r s$, which will give the word asansrana, a word which has much the same meaning as Rajendra's asansthinana; but may possibly have also some peculiar sectarial signification, being comected as it is with the Mahisamglis, the great sectarians. Parigraha signifies "aceepted;" it has also the meaning "belonging to" (Clough, 115). The passage may, therefore, be translated
"'This Vihara belongs to the asanśras (or, 'to the houseless') of the great congregation."

## Proposed Translation.

Year 51-Artemisius 15.-With this (votive urn?) of Vagamarega, the son of Bhamagulya, there is deposited a relic of the IInly Siakya in the vilar of Vaga-mariga. May this meritorions foundation tend to (procure) a lasting future lot for Iluveshlika, the great king, king of kings : may it be to the honour of my father and mother : may it be to the honour of the brothers of me, Itashtuma-marega : may it be to my purity: may it tend to the honow of relative and friend, and of (my) protectors: may this work tend to the lasting future lot of the Mahisacha Vaga-maregas: may this tend to tho health and reward of all the leaned. (The next clause is not fully intelligible, but appears to begin with an aspiration for the removal of passion, lust, and ceremonial impurity, and to conclude with a desire that the work of building the vilar may be to the honowr of all emancipated souls.) May there be a perpetual (happy) future lot for all the servants of the Mahisacha Rohana and for his train of attendant students: may there be a happy future lot for Mitthaga.

I'lis Vihar belongs to the $A$ sansíras (or "to the houseless") of the great congregation.

Before dismissing this inscription I may remark that there appears to have been an attempt at writing a portion of it in verse. The fourth line apparently concludes with a couplet of twelve syllables, and is preceded by a couplet of eleven.

Fig. 2 of plate x has been already examined in page 233 , and the greater part of Fig. 3, comprising the date, has also been referred to. The words following the date are Maharayasa Gushanasa raja. "Of the great king Gushan." The substitution of $y$ for $j$ is a common one, as we have already seen in several iustances. Here the word Gushan is apparently used as the name of a king not of a people.

These two last inseriptions were discovered and published by Colonel Cumningham, Beng. J., xxiii, 705. The first of them contains a few letters more than are given in the Plate; the secomd two lines more; but the dates, being the most important parts, were alone included in our plates. Nothing is known of these inseriptions beyond the fact of their having been found, the one at Ohind and the other near Panjar, in the Y'usarzai comeng. It is to be
regretted that so little is known about them. $\Lambda$ description of the positions in which they were fomed, and some aceomit of the perfection or imperfection of the stones and the inseriptions would be of service in any attempted tramslation.

## Notes on the Alpilibet.

The characters of the Taxila Plate are so clear and so well defined that a few motes upon them and upon the characters in lig. 8 of plate iv. will be useful for reference.

The letters $t, r$, and $v$, which have hitherto been frequently confounded, here appear in their true nomal forms. The $t$ is short in the stem, and curled at the point of the horizontal line. The $r$ and $v$ are longer in the, stem than the $t$; the horizontal line of the $r$ is curled like the $t$, but that of the $v$ is perfectly straight. These are the true points of distinction, and ought never to be disregarded without strong reason. That variations do occur is certaiit, as we have seen in the Wardak inscription (page 256) ; but all the best specimens of writing mark the points of distinction above defined.

I have incidentally stated some of the reasons for the emendations in respect of the letters ch and chh; but the following general summary may be aceeptable. The first form of the ch, of which two slightly varying specimens are given, has long been conclusively settled hy the Kapur di Giri inseription and the eoin legends. The second form, of which also there are two slighty different types, is well exemplified and decided by the 'Taxila Plate. The third form is used in the word Chaitra in lig. 2, plate $x$, and is employed for the copulative chain the Mamiky:ala Inseription. The fourth form is so used in the Wardak luseription as to leave no donbt of its power. The earliest form of the chl is that of the Kapur di Giri edicts. The second form, found on Mr. Bayley's seal, departs slightly from this type by omilling the transverse line. The transition from this form to the third, hy converting the angular to a semi-circular top, is casy and manifest. This letter has msnally been read as ch, but is very clanty chl for reasoms I have stated above (page 228), chiof of which are its similarity to the eartier forms of the chh, and its being the constant representative of the Sanskrit kish. The fourth form is fomen in the Wardak lnseription


The two forms of the letter $y$ are fomal in the werd payne in the Bimaran and Wardak Vase Inseriptions. This word is written with
the ordinary form of the $y$ in the 'laxila Inseription in precisely the s:ame phrases, and there camot be the slightest doubt of its being the same. The first form differs sufficiently from the s' to mark a difference in pronunciation, and the second is probably only a careless mamer of writing.

The additional form of the $K h$ is found in the Wardak Inscription, line 2, and in the word Khushan of the coin legends (plate iv, fig. 7 b).

The reasous for reading the character thi are given in page 239, where it is shown to occur in the word thira for the Sanskrit sthira.

There can be no doubt as to the character mu, which is found so distinctly in the word Sókiyamuni in the 'Taxila plate. The second form, however, is not quite so certain, but still there is little room for doubt. It resembles the certain form of the mu more than any other letter; it occurs in what seems to be a faulty spelling of the same name Sakyamuni in the Wardak Inscription; and wherever it occurs the sound $m u$ appears to be suitable (see pp. 242, 253, 259).

The variety of the letter $s$, which has been read $s i$, occurs twice on the Taxila plate in the word Chatrapasi, and it is dificult to see what else than the rowel $i$ can be expressed by the curl of the point. The same twist appears to be alded to the letter $t$ at the end of line 2; but this is not quite certain as the plate is much decayed in this spot.
khs-See line 2 of Taxila Plate.
\#-Sec lines 1 and 3 of the Taxila Plate where it is the representative of the Sanskrit sht and shfl. It also occurs in a short inscription published in the Beng. J. for 1862, page 178, where it greatly troubled Rajendra Lal, who finally read it as juna, and the word in which it is found as prijina. The word, however, is clearly preffa, Sans. preshfa," dear."
phs-See coin legend. Plate iv, fig. 7 b .
bhr-'The first form of this compound is found on the coins, and was so read by Colonel Cumningham (Ben. J. xxiii, p. 695). The second form is found in the word blrata in the Taxila, Peshawar and Wardak Inscriptions.
$r$, rt, rill. \&c. \&c. --The comjunct form of the $r$ preceding a consomant is found in two shapes That of the $r v$ and $r$ eflh of the Taxila and Bimaram Inscriptions (plate iii), and that of the $r v$ in the word Sarrea in the coin legend (plate iv, fig. 7 c ). This latter form is fond combined with other consomants in the Manikyala and Wardak Inseriptions, and its power may bo now considered setteod.

The two forms of the $י$ rin differ from the ordinary way of pre-
fixing the $r$; Colonel Cunningham was the first to read this compound. The character rmi, which occurs in the Manikyala Inscription is doubtful.
sw-This compound is found in the word Isforara (plate iv, fig. 7 c) ; and I may here repeat what I have before stated in page 240, that conjunct consonants appear to be always joined to the right-hand limb of this letter and the letter $y$, while vowels are added to the left.
shk-The first form of this compound occurs in the name Kaneshka, line 3 of the Manikyala Inscription. The second form in the name Huvishka, Wardak Vase, line 4.
sh-Wee Wardak Vase, line 5.
st, str-The first form of the st was made known by Mr. Norris in his article on the Kapur di Giri Inscription. The second will be found in Mr. Thomas's Mlphabet (Prinsep's Essays ii, p. 166). The form str occurs in the word read "Strategasa" by Colonel Cunningham.
sy-Che two forms of this compound are found in lines 1,2 , and 6 of the Wardak Inseription. And it may be here stated that the first appears to be the common way of adding a conjunct $y$. Sce the words read as Gulya and Sakya in lines 2 and 3 of the same inscription.
$p r, t r$, fc.-The adjunct form of the $r$ has long been well-known.
pan, ram, fc.-'The form of the anuswara has also been long recoguised, but a few examples are given from the 'Iaxila l'late. The mam and han are worthy of attention.

I cannot conclude this paper without expressing my thanks to Mr. Thomas for many valuable hints and for references to books of authority not within my reach. The characteristic care and accuracy with which he has prepared the 'Taxila plate will be appreciated as much by my readers as by myself.


[^0]:    ${ }^{1}$ Colonel Cunningham's readings of these dates were, I believe, first made known in the year 1854 (Beng. Journal, xxiii, p. $\mathbf{7 0 3 \text { ), in which he states his }}$ interpretation to rest " upon the authority of a stone slab in my own possession, which gives in regular order the nine numerals of as carly a period as the Sah

[^1]:    ${ }^{1}$ Mr. Bayley $\quad$ nay, " The inseription from Bimaran is also a dedication of a reliquary for the prosperity (pusae) of Sri vechitra . . . . dhalra putra."

[^2]:    ${ }^{1}$ Schutz filr den Kürpere, IInraisch, Melm u.b.w.

[^3]:    I This is Col. Cunningham's reading of the name on Gen. Ventura's cylinder, and which he supposes to occur agaiu in this inscription. The reading of the name on the cylinder has been already noticed in page 244.

