only a height of 50 feet, or 20 less than Maxikyala. The general outline of the building too is somewhat varied, but the small pilasters are to be recognized, though the mnuldings are numerous. The tope of Belar too has been opened from the top at some former period, and a section of it would present a counterppart of the plan of Mamikydla. The few coins which I found here are similar to those of that tope, but no where did I receive the least trace or tradition regarding those buildings.

Like one in search of the philosopher's stone, I found myself referred from place to place, and at Usmán heard of a "tope" near Peshavor, which I afterwards visited. It is about five miles from the city, but in so decayed a condition that the remains would not suggest any idea of the design without seeing those of the Panjab, though they were one hundred feet high. There is however a "tope" in a perfect state of repair in the great Khyber pass to Cábul, and about 20 miles from Peshadwar, but I could not visit that building from the troubled state of the country. The natives of Peshawar assured me also that there were 8 or 10 such "topes" in their neighborhood towards the Kafir country in Swat and Búneir, but the extent of their information leads no further than that they are "topes" or mounds of a prior age.

Seeing that the structures of Manikyala and Belar are both pierced by a shaft or well, descending into the building, I incline to an opinion that in these "topes" we have the tombs of a race of princes who once reigned in upper India; and that they are either the sepulchres of the Bactrian dynasty or their Indo-Scythic successors, mentioned in the Periplus of the second Arrian.

## V.-Note on Lieutenant Burnes' Collection of Ancient Coins. By James Prinsep, Sec. \&c. [Read 29th May, 1883.] <br> 

Considering the short space of time allowed to a traveller, in his rapid passage through a foreign country, for the pursuit of objects not immediately connected with his errand; and the disadvantages which his own disguise, and the suspicions of the natives oppose to his search after the very rare relics of antiquity, which may have escaped destruction for twenty centuries in their country :-considering too that the inhabitants are unable to appreciate the value of such objects, and mostly ignorant of the demand for them among the inquisitive natives of the west ; Lientenant Burnes may be deemed very successful in the
store of coins he has brought back from the Panjab and from the valley' of the Oxus .

Of pure Bactrian coins, he will be able to add at least three to the cabinets of Europe; apon one of which the name of Euthydsmus is quite distinct : while of the Indo-Scythic or subsequent dynasties his store is so ample as to afford ten for the Bombay Literary Society, and as many more for our own cabinet, besides those he takes to Earope; and among the latter is one coin of the dynasty which supplanted the Macedonian princes of Bactria, calculated to excite much curiosity among antiquarians.
This abstruse subject is already deriving elucidation from the discovery of coins in many places, which is a forcible proof of the advantage of giving early publicity to such discoveries, and to the comments of antiquarians upon them : already has Dr. Swinsy at Karnal, following up his former researches, fallen upon two silver coins of Apollodotus and Menander, neither of them duplicates of the two which rewarded Colonel Top's labours. I hope soon to have it in my power to engrave these coins as a continuation of the plate I am now about to describe, in illustration of some of Lieutenant Burngs' collection. Captain Wadr has also presented me with a few coins, obtained in his recent tour down the Satlej. To General Vrntura however we still look for our richest harvest, because his coins have a definite connection with an existing monument ; and when that meritorious officer shall see how Lieutenant Burnss has taught us to appreciate his labours at Maxikyála, we hope he will no lopger think us unworthy of being made the medium of their introduction to the knowledge of the world.

## Macodonian and Syrian Coins.

Having given in Plate V. a type of the coins of Alziandrr, I need not stop to describe those brought from Persia by our traveller, a tetradrachma and two small coins of that conqueror in excellent preservation ; the larger coin has a curious cypher composed of the letters PMHenclosed in a wreath; in numerals this would represent 148.

Captain Wads has presented me with a rarer silver coin of Albxandsi, having a fine juvenile portrait of the conqueror before he assumed the horn of Ammon; and, on the reverse, Apollo seated on the peculiar oracular seat, holding an arrow pointed downwards, in the right hand (denoting clemency); his left hand resting upon a bow.

The epigtaphe is bazineaz aneeanapot ezomatopoz eteptetor. On the exergue, the letter c ; and on the left, a peculiar three-pronged monogram, resembling the letter A.

This coin is not mentioned by Pinkrrton, and would doubtless be designated by him rrrr or rarissimus. It is engraved as fig. 1 of Plate VIII. (of coins) ; it was procured in Asia Minor by Dr. Martin, the German physician, lately in Ranjít Sinar's service, and by him given to Captain Wade.
To return to Lieutenant Burnes' collection.
Pl. VII. fig. 1, represents one of three beautiful coins of Antiocaus VI. or Theos, of Syria, during whose war with Proleky Philadelphus, Bactria revolted. These are supposed by Pinkzeton to exhibit the most perfect examples, both of manly and of monetal beauty, to be found among ancient medals. They are however common enough. The Epigraphe is, bazinzax antioxor emiøanotz. Device, Jupiter seated, holding a small victory.
Fing. 2. Another Antiochus, probably struck in Parthia, from the figure of the javelin.thrower.

## Bactrian Coins.

Figs. 3, 4, 5, 6. These silver coins, tetradrachms, are known at once to be of Bactrian origin, from the sitting figure of Hercules holding his club, on the reverse, much in the same posture as that of Jupiter on the Syro-Macedonian coins. The epigraphe on fig. 3, a valuable coin and in fine preservation, is bazineaz ererahm.. or " of king Euthyonmus," the third king of Bactria. The only coin of this monarch hitherto known in Europe is described in Mionnet's Description de Medailles Antiques; Pingrrton says it is a gold coin, having" two horsemen with Bactrian tiaras, palms, and long spears" on the reverse; it is therefore quite different from the unique specimen before us.
Fig. 4 has the features of a different prince; the reverse is however similar to the last, and the three final letters of baxineax are visible: as are .. HM.. which can only form part either of Eveus HMos or of днм $\begin{aligned} & \text { mppos his son. }\end{aligned}$
Fig. 5, of which there is a duplicate, is of a similar nature ; the features corresponding with No. 3 or Euthydesus. There are two others of atill ruder fabrication, distinguished by a more projecting forehead : ther are illegible on the reverse.
Fig. 6. One of two silver tetradachms. These are more like Arsacidan coins, the stool on which the figure on the reverse sits haring the form of those depicted in Vaillant, although the connection, with the foregoing coins is very strong, the head dress and
formal curls, appertain to the Persian monarchs. The inscription is in the Pehlevi character : some of the letters resemble badly executed Greek.
These coins are all from Khoja-0-baim, the ruins of an ancientcity N. W. of Bokhara, whence numerous gems and antiqnes were also procured.
Pig. 8, was obtained from the same place. A gold coin of one of the Saseanian kings of Persia, supposed to be Sapor (Shápur). The name and titles are very distinct in the Pehlevi character. It is remarkable that the usual supporters of the fire altar, two priests or kings, are omitted; unless indeed the rude ornaments on each side are intended to represent human figures holding swords. A silver Sassanian coin delineated in Hydz's Religio Veterum Persarwm has similar supporters. Lient. Burnss has also a silver Sassanian coin; it is curions from the contour of the fire altar being fashioned into a human profile; it was found at Khiva. I have not found room to insert it.
Fig. 9. One of twenty small Sassanian copper coins, which are very abundant in the same neighbourhood. They have a good head on the obverse, and a very rudely executed fire altar on the reverse*.
Fig. 7. A square copper coin from Shorkot,h, a fortress twenty miles from the junction of the Jelwm and the Chunab (the Hydaspes and Acesines) where Ausxandzz lost his fleet in a storm. It is by some thought to be the fortress of the Malli, in the assault of which he was wounded. All that can be read of the inscription is bailazax.... On the other side the inscription is in Pehlevi. This coin may be ascribed with tolerable certainty to Menandze, both because it resembles in shape the coin of that prince in Col.Ton's plate, and because the three first letters of the word which follows bainenc have much the appearance of NIK, or NIKATOPOI, the epithet applied to Menander according to Schlegrl. Journal Asiatique, Nov. 1828. The standing figure however, on the obverse, and the curious emblem on the reverse, supposed by Col. Tod to be a portable altar, agree rather with his coin of 'Apollodotus.
Pl. VIII. fig. 2. I must here introduce a coin procured from the same place by General Ventura, for which I am indebted to Captain

[^0]Wads; it is a copper or brass coin of Antiochus, mixineax Antioxor, with a Grecian head on the obverse ${ }_{2}$ and the perspective view of the after part of a boat on the reverse : the tiller of the rudder is worked from behind, as is even now the case in the river craft of the Indus.
A ruby seal antique, with a well-executed head of a Grecian female, was found at the same place.
Figg. 11, 12, 13, 15. The series of small copper coins found near Namikyala, and generally throughout upper. India, which have a head on the obverse and a Bactrian horseman on the reverse, may be referred to the reign of Eucratides I. since the gold coin from the neighbourhood of the Caspiàn Sea, described by Baysz, as having the same device on the reverse bears in legible oharacters the epigraphe " of the great king Eocrantions." .Our coins of this type have never shewn us more than the words " King of kings," and in most of them (as fig. 13, bacinst saciarr) the Greek is so corrupted as to give thie iden of a later epoch.
The type of the horse seems to have prevailed long afterwards in that part of the world, as fig. 14 evinces : it is a Hind́ coin, of much later though of unknown date. The nagri letters appear to be part of a larger inscription : their porport is therefore ancertain.
Fig. 10. A copper coin procured by Lieut. Burnses, in the neighbourhood of Manikyala.
Obverre. A king or warrior holding a spear in the left hand; and with the right sacrificing on a manal altar (?). Epigraphe baclaerc BAC...... KANHPKOT,

## C

Reverse. A priest or sage standing, and holding a flower in his right hand; a glory encircles his head; on the left, the letters namais -on the right, the usual Bactrian monogram with four prongs.
This coin is of very great value, from the circumstance of its being the only one out of many discovered in the same neighbourhood, upon which the characters are sufficiently legible to afford a clae to the Prince's name. In the onset however we are disappointed to find that none of the recorded names of the Bactrian kings at all resemble that before us*; yet there can be no doubt about any letter but that

[^1]preceding kor, which may be either ©, p, or $\mathbf{c}$. By assuming this latitude in the reading I discovered a name which would agree as nearly as it could be expressed in Greek, with ranheror or kanhcior; and should my conjecture prove correct, the discovery of this coin will be hailed as of the greatest value by all who are engaged in the newly diveloped study of Bactrian antiquity. The coin was at first placed with the Society by Lieut. Buns, but seeing its value, I thought it bat just, after taking impressions and drawings of it, to place it in the disco: verer's hands, for the personal satisfaction of numismatologists in Europe. I suppose it to be a coin of Kaniseria, a Tartar or Scythic conqueror of Bactria.

According to Mr. Coma de Körös, the name of Kantian occurs in the Tibetan works as a celebrated king in the north of India, who reigned at Kapila, which is supposed to have been in Rokilkhand, or near Hardoár. His reign dates about 400 years after Surya, when the followers of the Buddha religion had become divided into eighteen sects (the Sakya tribes, or Saca) under four principal divisions, of which the names both Sanscrit and Tibetan are on record*.

In Mr. Wilson's Chronological Fable of the History of Kaskmar (As. Res. IV. p. 81,) we find " Hushca, Jushca, and Canishca, three Tartar princes, who succeeded Domodara, in the kingdom of Kashmir, either reigning successively or synchronously. They introduced the Buddha religion under a hierarch named Náaínuuna, and were, according to the Raja Taringini, of Twrushca or Tatar origin. The Sanscrit MS. places their reign 150 years before Sacaysinda (ar Saki Sinai), but the learned translator in a note proves that the text was at first misun.
B. C. 255. Theodotus I.
243. Theodotus II.
220. Edthydemus of Magnesia.
195. Apollodotus stir. Menander nikator.

Heriocles pika ios.
Demetrius.
181. Euckatides I.
146. Eucratides II.

Fixed historically by Strabo, \&c. Alluded to by Plutarch Trogus and Arrian, their coins prevalent in Broach, A. D. 200. $\left\{\begin{array}{c}\text { On the authority of Visconti and } \\ \text { Monet, from a single medal. }\end{array}\right.$ $\{$ Son of Euthydemus, doubtful if ( he reigned in Bactria.
$\{$ Artemidorgs calls hips the ". Great \{ King."
\{ Murdered his father and was him\{self shan.
125. Destruction of the empire by the Tartars and the Scythian or Secure. - Coma's Life of Safety, MS.
derstood, and that the pessage intended to exprese " 150 years ffter the emancipation of the Lord Satya Sinma."

The epoch of Saxia, (the fifth Buddia, or Goutara,) is determined by concurrent testimony of the Ceylonese, Siamese, Pegue, Burmese, and Chinese seras, which are all founded on the birth or death of the Buddha legidator, and, thongh all differing more or less, concur in placing him between the limits of 544 and 638 years B. C.: the Raj Gérú of Aram, a Pundit well versed in Buddha literature, fixes the Niruan or emancipation of Saxya-Muni in 520 B. C.* Taking then from this epoch an interval of four hundred years to the reign of Kansara, the latter would fall near the end of the second century B. C. We know from other sources, that the overthrow of the Bactrian dynaty by the Scythian or Sakyan tribes happened in 134 B. C. (125 by Schleasl.) The present coin therefore confirms the fidelity of the Raja Taringini as a historical work, and leaves no doubt of the epoch of Saxya.

Mr. Wıson finds grounds for throwing back the termination of the reign of Abhimanya Canishca's saccessor, from R. C. 118, me given in the Raja Taringini, to B. C. 388, because "Kashmír be-came-a Buddha country under Tartar princes shortly after the death of Sakya ;" but from Mr. Cnoma's subsequent examination of the Tibetan sacred books, in which the three periods of their compilation are espressly stated; " first, under Sakia himself (520-638 B. C.) then under Asmoza, king of Pataliputra, 110 years after the decease of Sarita, and laatly by Kanisia, upwards of 400 years after Saxis" little doubt can remain that the epoch as it atands in the Raja Taringini is correct.

There are other circumstances connected with the Bactrian coins, which tend to confirm the supposition of a Buddhist succession to the Greek princes. In the first place, the reverse ceases to bear the formerly national emblem of the Bactrian horseman with the Macedonian spear, and in its place a sage appears holding a flower, and invariably having a glory round his head, proving him to be a sacred personage $\dagger$; secondly, although upon the first coins of the dynasty we find the inscription in Greek characters-(a custom which prevailed under the Arsacide aleo, and continued under the first Sassanian princes;) still upoo coise of the same device, but probably of later fabric, we find the same kind of character which appears upon the Delhi and Allahabad pillars: :-the same which is found at Ellora and in many ancient caves and temples

- Orient. Mag. iv. 108.
t. (See Col. Tod's Coins 11, 14; Mr. Wilsox's Platea, fig. 1, 2, 6, 7; and this Journal, Plate ii. figs. 17, 18.)
of central India, and is held in abhorrence by the Brahmans; as belong: ing to the Buddhist religion*.

I need not repeat Mr. Wilsow's opinion, drawn from other grounds, that the tope of Manikyala, in the neighbourhood of which these coins are found, is a Buddhist monument, but it receives much conffrmation from the discovery of this coin of the Sakyan hero Kanishka.

Having thus far endeavoured to reconcile the coin before us, and others of the same olass to the Sakyan dynasty, to which the term Indo-Scythic very aptly applies, we may reasonably follow up the same train by ascribing the next series, which exhibit, on the reverse, a Brahmaní bull, accompanied by a priest in the common Indian dhoti, es the coins of the Brahmanical dynasty which in its turn overcame the Buddhist line. Colonel Tod includes these coins in the same class as the last, and adduces his reasons for referring them to Mithridates, or his successors, of the Arsacidan dynasty, whose dominions extended from the Indus to the Ganges, and to whom Bactria was latterly tributary. Greek legends " of the King of kings," \&c. are visible on some, and what he supposes to be Pehlevi characters on the reverse: but I incline to think these characters of the Delhi type, and the Bactrian Monogram should decide their locality. Mr. Wilson and Sceleanl, both call them Indo-Scythic, and the latter, with Col. Tod, names the figure "Sive with his bull Nandi†." Mr. Scaleael thinks it curions that such marks of the Hinda faith should appear on these Tartar coins, but considering the Indian origin of the Sacæ, does not this rather prove the same of their successors, instead of their Tartar descent? It is more curious that the fire-altar should continue on all of the series, but the fact of its being a fire-altar at all is still matter of great uncertainty.

[^2]Fig. 16. Copper coins of this device are met with throughout Upper Hinduastan:-they constitute the third series of Colonel ToD's plate, and some in his possession have decided Greek characters apon them. On the obverse is the same warrior with apear and altar. On the reverse is what he supposes to be a priest about to sacrifice the bull; but in the coin before us the dhot反 is so precisely the costume of the Brahmans, that it inclines rather to look upon the animal (especially as he has the hamp) as the sacred bull of this country, denoting the prevalence or predominance of the Brahmanical faith in the Indian dependencies of Menandrr or Eucratides' dominion.
Fig. 18. This type of coin is if any thing more common than the last: and the inscriptions are no longer Greek ; but either of the anknown character of the Delhí column or genaine Hindi. The figure astride upon the elephant is always much out of proportion, and the Raja with the altar more rudely executed. The elephant is, like the horse, preservied in subsequent coiss ; of the Hindús; this
Frig. 17 represents one of these procured by Lieut. Burnas in his tour. The same device is still common in Southern India. The form of the Nagrícharacters on this and fig. 14 agrees with those on copper grants of land 7 or 800 years old.
I do not mention Lieut. Burner' Muhammedan coins, as itis better to keep them distinct from the present engraved series, to which I may have soon to add a valuabte sapplement, containing a selection from Dr. Swingy's and General Vinisura's discoveries. My task inoreases apon me daily, bat I shall be amply rewarded if my humble notice of the discoveries of others shall, by connecting them with ancient history, eventually turn these most interesting reliques to the true end of numismatic study.

## VI.-Astronomical Observations at Barelly. By H. S. Boulderson, Esq.

The 4th No. of the Journal of Science for Oct. 1832 contains odmet: vations of the transit of Mercury in May last made at Hell, Let. $58^{\circ}$ $45^{\prime} 57^{\prime \prime}$ N. Long. $1^{\prime} 21^{\prime \prime}$ W. As the longitude of the place of observation at Hull is probably very correct, this gives the means of graining to some degree of certainty the longitude of the few places is India where the transit was observed. There is a considerable nocer: tainty in the place of Mercury at the transit. At least the times of conjunction in AR. gained from the elements given in the Naut. Alm.



[^0]:    - A gold solidus of the lower empise was also found at Khoja-o-bhom, of rude fa-brication:-it is either of Marcianus, or more probably Mauricius-inscription DN MAVRC.. TIb PP AVG. On the reverse, an angel bolding the cross and globe with VICTORIA AVGGG. and below, CONOB.

[^1]:    - By way of convenietce to those who have not the power of refereace rexpecting the history of Bactria, to which I may often have to allude in the disonadon of these coise, I subjoin a catalogne of ita Kings, accosining to the derthority of Scrlegri.-Jowral Asiatique, 1828;\{p. 326.

[^2]:    - See translation of portions of the Salsette and Ellora inscriptions by Major Wilyond, As. Res. v. 140, which shews them all to refer by name to Sarya. Mr. A. Straling, As. Res. xv. 314, says of some similar inscriptions on the Udaya Givi hill in Orissa. "The Brahmans refer the inscription with horror and disgust to the time when the Buddhist doctrines prevailed. I cannot however divest myself of the notion that the character has some connection with the ancient Prakrit, and I think an explazation is to be looked for only from some of the learned of the Jain sect." What has become of the key to this and other ancient Sanskrit alphabets, which Wilirosd says he fortunately discovered in the possession of an ancient sage at Benares ?
    t "Ce qui me parait la circonstance la plus remarquable dans ces medailles, ce sont ces preures du culte brahmanique adopté par les rois Tartares. Ils regnaient donc certainement sur des provincee ou ce colte était etabli."-Joursal Ariatiguc; Nov. 1828.

