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## COINS of

## ALEXANDER'S SUCCESSORS

IN THE EAST,
(BACTRIA, ARIANA \& INDIA).


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COINS OF ALEXANDER'S SUCCESSORS IN THE EAST, (Bactria, Ariana $\&$ India)

By Major-General A. Cunningham.

PART I.-THE GREEKS OF bACTRIANA, ARIANA, AND INDIA.

## INTRODUCTION.

When Alexander dismounted from the hardly tamed Bukephalus, his father Philip exclaimed, with tears of joy, "Seek another kingdom, my son, for Macedonia is too small for thee." Afterwards, when Philip planned the invasion of Persia, his most ambitious dreams, perhaps, never reached the vast extent which his son's conquests actually realized. Even Alexander himself, on hearing of Philip's victories, is said to have lamented that his father would leave nothing for him to conquer ${ }^{1}$-so little can even the most comprehensive mind grasp of the future.

In the summer of b.c. 334, Alexander crossed the Hellespont at the head of thirty thousand infantry and

[^0]four thousand five hundred cavalry. He forced the passage of the Granicus in spite of all the efforts of Memnon, the ablest officer of the Persian army, and afterwards defeated Darius himself in two decisive battles at Issus and Arbela. On the death of Darius, in b.c. 330, Alexander followed his murderer Bessus to the frontiers of Bactria, where he was obliged to give up the pursuit in consequence of the simultaneous revolt of the satraps of Aria, Drangiana, and Arachosia. With characteristic rapidity he made a forced march of about seventy miles to Artakoana, the capital of Aria, with his cavalry and mounted archers, and nearly surprised the revolted satrap in his palace.

There Alexander seems to have paused in his career to consider his present position and future movements. He had just before heard of the assumption of the regal title of Artaxerxes by Bessus, in Bactria; and the organized revolt of these Eastern satraps now showed him that resistance had not died with Darius. His first plans were most probably confined to the humiliation of Persia; but they seem gradually to have been enlarged by success, until they embraced the complete subjugation of the Persian empire, and the conquest of India, even to the mouth of the Ganges. Alexander's comprehensive mind contemplated much more than a predatory excursion, resulting only in plunder; and when he determined on the conquest of Bactria and India, he had also formed plans for their permanent occupancy and future government. Indeed, after his death there was found amougst his papers the rough dranght of a scheme for the amalgamation of the different nations of Europe and Asia into one people under his own single rule. This he purposed to effect by securing the good-will of his conquered
subjects. How well he succeeded in his purpose was afterwards shown by the peaceful submission of the eastern provinces to the sway of the Seleukidæ, which was quite undisturbed for more than two generations.

With his usual judgment, Alexander now determined to leave no enemy behind him. He therefore turned aside from the pursuit of Bessus, to crush the rebellious satraps of Aria, Drangiana, and Arachosia. This being done, he resumed his pursuit of Bessus through the territories of the Paropamisadæ to Bactria. On crossing the Oxus into Sogdiana, Bessus was delivered into his hands by Spitamenes, the governor of the province. The whole country then submitted to the conqueror, and Grecian garrisons were established in all the principal cities. When Spitamenes betrayed Bessus, he no doubt thought that he would be permitted to retain his own government, and that, on the departure of Alexander, he might be able to form Sogdiana into an independent kingdom. He now openly rebelled, and so great was his skill that he managed to keep the field for two entire years, when, being signally defeated, he was treacherously murdered by his Scythian allies. The spirit of organized resistance died with this heroic Persian nobleman; yet many of the petty chiefs still held out, and retreated to their mountain fastnesses, where they vainly hoped that Alexander would be unable or unwilling to follow them. But danger only inflamed his natural ardour, while difficulty stimulated his energy and increased his perseverance. His romantic disposition sought danger wherever she was to be fuund, and he courted her, as the knights of chivalry wooed their brides, by force of arms. The two provinces of Sogdiana and Bactria were thus finally subdued and permanently amexed to the Macedonian empire in b.e. $3 \geqslant 8$.

Early in the following spring Alexander crossed the Indian Caucasus, and at the $\tau \rho t o \delta o v$, or meeting of the three roads from Bactria, India, and Arachosia, founded the city of Alexandria ad Caucasum, or Alexandria Opiane. The remainder of the year b.c. 327 was spent in the reduction of the various cities and strongholds of the Kabul valley, ending with the capture of the famous rockfort of Aornos. In the spring of в.c. 326 he crossed the Indus at Embolima, or Ohind, and marched to Taxila, where he was hospitably entertained by the Indian king Mophis, or Omphis.

From Taxila, Alexander advanced to the Hydaspes, where he was so stoutly opposed by Porus that he could only pass the river by a stratagem. Then followed a great battle between the Greeks and Iudians, the submission of Porus, and the foundation of the cities of Nikæa and Bukephala. Next came the capture of the hill-fortress of Sangala, and the advance to the Hyphasis, beyond which the Greek army, dispirited by long marches and the warlike character of the people, refused to proceed. There, says Gibbon, " on the eastern bank of the Hyphasis, on the verge of the desert, the Macedonian hero halted and wept." Then retracing his steps to the banks of the Hydaspes at Nikæa, he prepared a fleet to carry him to the Indian Ocean. On his voyage down the Hydaspes, towards the end of в.c. 326, he received the submission of Sopeithes, or Sophites, who possessed the large tract of country between the Indus and the Hydaspes, in which the valuable salt mines are situated. Continuing his descent of the river, he reached the junction of the Akesines, or Chenâb, from whence he made a successful expedition against the Oxydrakæ and Malli, ending with the capture of their chief city, which was
almost certainly Multan. Thence sailing down the Indus, he conquered successively the kingdoms of Musikanus, Oxykanus, and Mæris of Patalene, and reached the Indian Ocean about the middle of в.c. 325.

From the mouth of the Indus, Alexander returned to Patala, leaving Nearchus in command of the fleet, with orders to sail for the mouth of the Euphrates. He then began a long and harassing march through Gedrosia and Karmania to Persepolis and Babylon, where he shortly after died in May, b.c. 323.

At a meeting of the principal officers held after Alexander's death, his half-brother Arrhidseus, and his expected son by Roxana, were declared joint sovereigns of the magnificent empire which he had raised. The chief provinces were divided amongst the most powerful officers. Europe was assigned to Lysimachus, Antipater, and Kraterus; Egypt was given to Ptolemy; Asia Minor was divided between Antigonus, Kassander, and Eumenes, and some others of less note; while the provinces of Upper Asia were left under the charge of the governors appointed by Alexander.

The eastern provinces of Alexander's empire were Bactriana, Ariana, and India, or the countries watered by the Oxus, the Helmand, and the Indus.

Bactriana comprised Sogdiana, Bactria, and Margiana, all of which were included by Alexander in one satrapy under Philip.

Ariana comprised Aria and Drangiana in one satrapy, under Stasanor ; and Arachosia and Gedrosia in a second satrapy, under Siburtius.

India comprised the three satrapies of the Paropamisade, the Punjabl, and Sindh. The first, to the west of the ludus, was placed under Oxyartes, the father of Roxana.

The second, which included the kingdoms of Taxiles, Porus, and Sophites, with the territories of the Oxydrakæ and Malli, to the east of the Indus, was placed under the military governorship of Philip, the son of Machetas, while the civil rule was left in the hands of the native sovereigus. The third, which included the kingdoms of Musikanus, Oxykanus, Sambus, and Mæris of Patalene, or the country now forming Sindh, was entrusted to Python, the son of Agenor.

Philip, the satrap of the Punjâb,,$_{2}$ was killed in a mutiny of the mercenary soldiers shortly before the death of Alexander, and was succeeded by Eudemus. ${ }^{3}$ The other Philip, the satrap of Bactriana, was transferred to Parthia at the redistribution of the provinces by Antipater in b.c. 321, and his place was filled by Stasanor, of Aria who was himself succeeded by Stasander.

In the great war that followed between Antigonus and Eumenes, in b.c. 317, the Eastern satraps were summoned to join the standard of Eumenes, as the upholder of the sovereignty of Alexander Aegus, the son of Roxana. Eudemus, the satrap of India, who had treacherously murdered Porus, joined the royal standard with three thousand five hundred troops and one hundred and twenty elephants. ${ }^{4}$ Oxyartes, the father of Roxana, also sent a small contingent to the assistance of Eumenes; and Stasander, the satrap of Aria, joined him with a large force. ${ }^{5}$ But Siburtius, the satrap of Arachosia, sided with Antigonus; and Pithon, the son of

[^1]Agenor, satrap of Sindh, must have followed his example, as he was afterwards entrusted by Antigonus with a high command. Justin, who, however, calls him satrap of Parthia, says that he joined Eumenes. ${ }^{6}$ No mention is made of Stasanor, the satrap of Bactria; but as he retained his government at the redistribution of the provinces after the defeat of Eumenes, it seems probable that he was not hostile to Antigonus. At the same time Siburtius was confirmed in the government of Arachosia, and Evagoras was appointed satrap of Aria, in the place of Stasander. ${ }^{7}$

The power of Antigonus was dominant in Upper Asia from b.c. 316 to 312, when his son Demetrius was defeated by Ptolemy and Seleukus at the decisive battle of Gaza. Seleukus then recovered his satrapy of Babylonia, and established the Seleukidan era on the lst of October, b.c. 312. But he was immediately called into the field to oppose the Eastern satraps, who, under the command of Nikanor of Media, were advancing towards Babylon to support the interests of Antigonus. Seleukus met them at the passage of the Tigris, and defeated them with great slaughter. Nikanor himself escaped, and took refuge with Autigonus ; but Evagoras, ${ }^{8}$ the satrap of Aria, and several " other principal chiefs" were killed on the field. Amongst them were probably included Siburtius of Arachosia, and Stasanor of Bactria, as there is no further mention of them in history.

Seleukus now turned his arms against the eastern provinces of Parthia, Bactriana, and Ariana, all of which

[^2]cheerfully submitted to him ; ${ }^{9}$ and in в.c. $3 \underset{\sim}{\circ} 6$, when he assumed the title of king, his rule was undisputed from the Euphrates to the Oxus and Indus. A year or two later he conducted an expedition against Sandrokottus, or Chandra Gupta, King of India, who, after the departure of Eudemus, in b.c. 317, had overpowered the Macedonian garrison, ${ }^{10}$ and made himself the sole master of the Punjâb, and perhaps also of the Kabul valley. Seleukus crossed the Indus, and, according to some authors, advanced as far as the Ganges. Chandra Gupta hastily assembled an army of sixty thousand men, with an incredible number of elephants, to oppose him, and presented so bold a front that Seleukus thought it prudent to court his alliance, which was secured by a matrimonial connection. ${ }^{11}$ The Indian prince surrendered five hundred elephants, in exchange for which Seleukus renounced all right to Alexander's Indian conquests. By this treaty the satrapies of the Paropamisadæ and of the Upper and Lower Indus, or the Punjâb and Sindh, were permanently added to the dominions of Chandra Gupta, and Ariana and Bactriana became the most easterly provinces of the kingdom of Seleukus. The alliance thus begun between the two countries was afterwards continued by the residence of Megasthenes, the ambassador of Seleukus to the Indian court, at Palibothra. To him and his successor, Daimachus, the ambassador of Antiochus Soter, ${ }^{12}$ the ancients were indebted for nearly all their knowledge of the Indian continent.

[^3]After the battle of Ipsus, in 1s.c. 302, when the dominions of Antigonus were divided amongst his victorious rivals, the whole of Syria, with a great part of Asia Minor, was added to the dominions of Seleukus, whose territories now extended from the Mediterranean to the Indus. The capital was then moved from Babylon to the new city of Antiocheia, on the Orontes, at the extreme western boundary of the kingdom, and the eastern provinces were entrusted to the government of his son, Antiochus. Selenkus was assassinated in b.c. 280, and was succeeded by his son, who is generally known as Antiochus Soter. During his reign of nineteen years the eastern provinces would appear to have enjoyed a profound peace, as there is no mention of them in history, except the bare facts that Antiochus rebuilt the city of Alexandreia, in Margiana, founded the city of Soteira, in Ariana, and maintained the Iudian alliance by the embassy of Daimachus to Allitrochades, or Amitrochates, the son of Chandra Gupta.

Antiochus II., surnamed Theos, succeeded his father in January, b.c. 261. Shortly after his accession he eugaged in war with Ptolemy Philadelphus, partly to recover Cyrene for Magas, the husband of his sister, and partly to gain possession of Phœnicia, the old object of dispute between the founders of the two kingdoms. The war lasted for many years, and was only terminated in s.c. 249, shortly before the death of Ptolemy, by the marriage of Antiochus with his daughter Berenike. Ptolemy died in b.c. 247, when Antiochus at once dismissed Berenike, and recalled his former wife, Laodike, who, distrusting his fickle disposition, caused him to be poisoned in January, 246.

Antiochus II. was succeeded by his son Seleukus II.,
surnamed Kallinikos, who was immediately attacked by Ptolemy Evergetes, to avenge the death of his sister, Berenike. Seleukus was unable to offer any effectual resistance, and retreated towards the north, while Ptolemy pursued his career of conquest towards the east, as far as the confines of Bactria and Ariana. The invader was then compelled to return by disturbances in his own kingdom, and Seleukus at once recovered all the conquered provinces up to the Euphrates, while Ptolemy retained Syria and the rich maritime districts of southern Asia Minor. In commemoration of the recovery of his dominions, Seleukus assumed the title of Kallinikos, and founded the city of Kallinikon in Olymp. 134-1, or в.c. 244. In the following year he prepared to attack Ptolemy ; but his brother Antiochus Hierax, on whose assistance he had relied, turned against him, and sought to establish an independent kingdom in Asia Minor. Antiochus was at first successful, and even managed to obtain possession of Mesopotamia and part of Armenia; but about b.c. 238 he was finally defeated, and obliged to fly to Egypt. Seleukus then prepared to attack Arsakes, the king of Parthia, whose brother, during the later years of the troubled reign of Antiochus Theos, had slain the Macedonian governor of the province, and declared himself independent. Diodotus, the governor of Bactria, and other chiefs had followed his example, and all the eastern provinces of the empire had thrown off their allegiance to the Seleukidæ.

The Parthian revolt is now generally assigned to b.c. 250 , and that of Bactria to the same period; but the date of these events is so intimately mixed up with the history of Bactrian independence that I must reserve its discussion for the present, while $I$ give a brief account
of the countries that were then permanently detached from the great Syrian empire founded by Seleukus Nikator.

## Geography.

The dominions of Seleukus Nikator and his successors extended from the banks of the Indus to the shores of the Mediterranean. The eastern provinces of this vast empire were Parthicne, Bactriana, Ariana, and India, which stretched from the Caspian Sea to the banks of the Satlej, and from the Sir, or Jaxartes, to the Iudian Ocean.

Parthiene comprised Parthia proper and Hyrkania, both lying to the south-east of the Caspian Sea. It was bounded by the Chorasmian desert on the north, and by the Karmanian desert on the south.
Bactriana comprised Bactria proper, Sogdiana, and Margiana, or the countries lying on the Oxus and its tributaries. On the north it was bounded by the Jaxartes, or Sir River ; on the south by Ariana; on the west by Parthiene and the Chorasmian desert ; and on the east by the Komedian mountains, or Belut Tagh.
Ariana comprised Aria, Drangiana, Arachosia, and Gedrosia, or the countries lying on the rivers Arius and Hermandus and their tributaries. It was bounded on the west by the great Karmanian desert ; on the north by Bactriana; on the east by the Indian mountains which separate the valleys of the Helmand and Indus; and on the south by the Erythræan Sea, or Indian Ocean.

India comprised the territory of the Paropamisadæ to the west, and the rich province of the Panjab to the east of the Upper Indus, and the valley of Sindh on the Lower Indus.
The government of the whole empire was divided
among seventy satraps, each of whom possessed, and most probably exercised, the right of coinage in one or more of the chief cities of his satrapy. The coins of some of the great cities of the western provinces can be recognised at once by their well-known symbols, as well as by their monograms. But the coins of the great eastern cities rarely possess any symbols, and their monograms are more difficult of decipherment owing to the greater poverty of our information regarding these remote provinces of the Syrian empire.

## Parthia.

In the time of Ptolemy, the chief cities of Parthia were Hekatompylos the capital, Apameia, and Ambrodax. To these Pliny adds Calliope and the rock-fort of Issatis, both on the Median frontier. Strabo also includes Rhaga and Herakleia in Parthiene, but notes that they formerly belonged to Media. Hekatompylos is mentioned by the historians of Alexander, and again by Polybius in his account of the campaigns of Antiochus the Great. As it is omitted by Isidorus of Charax in his list of Parthinn cities, it must have ceased to be the capital of the country some time before the Christian era. Its probable site was at Dâmghân, where Fraser found considerable ruins. Wilson has suggested Jah-Jerm as a more probable site, because Dâmghân is too near the Caspian gates; and his suggestion has been followed by Mr. Vaux in Smith's Dictionary, and by Mr. Riley in his translation of Strabo. But there are two distances to be considered-namely, the forward distance to the capital of Aria, as well as the backward distance from the Caspian Gates. According to Pliny, Hekatompylos was 133 Roman miles from the

Caspian Gates, and either 562 or 575 miles from the capital of Aria ; or, respectively, as 1 to $4 \frac{1}{3}$, which agrees; almost exactly with the position of Dâmghân. I believe that Wilson must have been misled by following Strabo instead of Pliny, as Strabo makes the two distances 1,960 stadia and 4,530 stadia, which are respectively equal to 245 and 566 Roman miles. But from a comparison of another passage of Strabo it is evident that there is a mistake in the first distance. His words are, "from the Caspian Gates to Rhagr are 500 stadia, according to Apollodorus; and to Hekatompylos, the royal seat of the Parthians, 1,260 stadia." By adding these two together Strabo obtained 1,760 stadia, or by some change of the figures 1,960 stadia, as in the first passage. But as Rhage was in Media, to the west of the Pylæ Caspiæ, Hekatompylos was only 1,260 stadia, or $157 \frac{1}{2}$ Roman miles, beyond the Gates, according to the second passage. That the greater number is erroneous is clearly shown by his description of Tape in Hyrkania as being " near the sea, distant 1,400 stadia from the Pylæ Caspiæ;" for as Parthia was to the south-west of Hyrkania, its capital must have been considerably nearer to the Gates than Tape. I conclude, therefore, that the distance of 133 Roman miles, as stated by Pliny, is correct; and that the number in Strabo should be its equivalent of 1,060 stadia.

Rhage was an ancient city of Media, but being only 500 stadia, or $57 \frac{1}{2}$ miles, beyond the Parthian frontier, or Caspian Gates, it was an early acquisition of the Parthian kingdom. According to Strabo, it was rebuilt by Seleukus Nikator as Európus, and its name was afterwards changed to Arsakeia by the Parthians. Its position has been identified by Ker Porter with the ruius of Rha, or Rhe, near Teheran.

Apameia and Herakleia were also in Media. Pliny calls the former Apamea Rhagiane, and Strabo places the latter near Rhaga ; but as he mentions each of them as distinct from Rhage, they must have been separate places, although perhaps quite close to the ancient city. Their positions have not been identified.

In the time of Isidorus of Charar the capital of Parthia was Zaulöë, which the Greeks called Parthaunisa, or Nisæa. It contained the royal tombs, and was most probably the same as the famous city of Nishapur.

## Hyrkania.

Iu Hyrkania the principal cities noted by Ptolemy are Amaruseia and Hyrkania Metropolis. Strabo mentions Talabroke, Samariane, Karta, and the royal residence Tape, which was situated near the sea. Polybius notices only two places, Tambrake and Syrinx, of which the latter, both for strength and situation, was considered as the capital of all Hyrkania. To these Isidorus adds Asaak, or Arsakeia, a city of Astabene, built by Arsakes I., in which was preserved a perpetual fire. According to Ptolemy, the Astabeni occupied the north-western part of Hyrkania, near the Caspian Sea.

Hyrkania, or Hyrkana Metropolis, is generally admitted to be the same as the modern Gurgan, or Gurkan, to the north-east of Astarâbâd. It is, no doubt, the same place as Zadrakarta, or the "royal city" of Alexander's historians, and the same as the karta of Strabo. I conclude also that it must be the Syrinx of Polybius, as Gurgân is called Jurján by the early Arab geographers, to which $\Sigma_{\text {vofly }}$ is a very near approximation in Greek characters.

Tambrake, or 'I'ambrax, according to Polybius, was an open town of great extent, containing a royal palace. It is, no doubt, the same place as Strabo's Talabroke, as the names are almost identical. I think also that his Tape may possibly be the same, as it contained a royal palace, like Tambrake, and was near the sea, which at once suggests its identification with Astarabad as the most probable representative of Talabroke. Tape may be an abbreviation of Taprake.

## Bacthia.

The chief cities of Bactria, in the time of Ptolemy, were Zariaspa, Chatrakarta, Baktra Regia, Marakanda, and Eukratidia. Strabo mentions "Baktra, which they call also Zariaspa," Darapsa or Adrapsa, and Eukratidia. In the time of Alexander, the chief cities were Aornos and Baktra. Zuriaspis is also mentioned by Arriarı; and, although not specially noted, it is clear that it was the capital city of the province, as Alexander wintered there during the Sogdian campaign, and there left the royal household.

Zariaspa, or Baktra, is universally admitted to be the modern city of Balkh. Ptolemy alone makes Baktra Regia a different place from Zariaspa. His Zariaspa is certainly Balkh, as it is situated amongst the Zariaspa, and on the Zuriaspes river. Now the great fire-temple of Balkh was called Azar-i-Asp, from which the Greeks made Zariaspa. I think also that Strabo's Adrapsa may be only a slight alteration of Zariaspa, as Adar-i-Asp is the common pronunciation of Azar-iAsp.

Aornos I take to be the Baktra Regia of Ptolemy, which he places on the Dargydus river, to the south-east
of Zariaspa. This position corresponds exactly with that of the old fortified city of Samungân, near Haibak, on the Khulm River. There the valley of the river becomes so narrow that it is called Darâ-i-Zandên, or the "Dungeondefile," and "so high are the rocks that the sun is excluded from some parts of it at mid-day." ${ }^{13}$ Near this Aornos Ptolemy places the Varni, or Uarni, a people who most probably derived their name from the place. According to Moorcroft, the ruins of Samangân are very extensive, ${ }^{14}$ and in the time of Edrisi it was equal in size to Khulm. ${ }^{15}$

Eukratidia is placed by Ptolemy on the Dargydus River, immediately to the eastward of Zariaspa. Its position, therefore, corresponds so exactly with that of Khulm as to leave no doubt of the identity of the two places. It was founded by Eukratides, King of Bactria.

## Sogdiana.

The great cities of Sogdiana, according to Ptolemy, were Drepsa Metropolis, Oxiana, Maruka, Alexandreia Oxiane, and Alexandreia Eschate. Pliny mentions the town of Panda, as if it was the capital of the country; and also, "at the very extremity of their territory, Alexandria, founded by Alexander the Great." Ammianus, who copies Ptolemy, notices Alexandria, Cyreschata, and Drepsa Metropolis, without any remarks as to their situation or history.

Drepsa Metropolis is placed by Ptolemy on a small stream which falls into the Oxus. I believe that Drepsa is only another name for Samarkand, or Marakanda, which,

[^4]according to Strabo, was destroyed by Alexander. Now Samarkand is situated on the Zar-afshan, or "gold-scattering" river, which, in a Greek form, would be the Darapsanes; and the city of Marakanda, on its bank, would have been called Marakanda Darapsiane, or simply Darapsa, or Drepsa, to distinguish it from the Marakanda in Bactria. As there is no trace of the name amongst the monograms, it is probable that the city did not recover its importance for some time after the death of Alexander. The Panda of Pliny is perhaps only a mutilated form of the old nanie.

Alexandreia Oxiane, which was situated on the Oxus immediately to the north of Zariaspa, or Balkh, is most probably Termed, an ancient town described by the old Arab geographers.
Alexandreia Eschate may perhaps be Ush, to the south of Andaján.

Kyreschate, or Cyra, the town of Cyrus, is most probably Kokan or Kukand, the city of $K u$, which is traditionally said to have been founded by Kur, or Cyrus. It was destroyed by Alexander.
Nautaka is mentioned by Arrian ${ }^{18}$ as the place where Alexander wintered during his Sogdian campaign. To this city also Bessus retired ${ }^{17}$ when Alexander approached the Oxus. It must, therefore, have been situated somewhere on the route between Baktra and Marakanda, and most probable at Kesh, a laryc town to the south of Samarkaud. After the destruction of the latter city by Alexander, I presume that Nautaka became the capital of Sogdiana, and continued to be so during the Greek occupation of the country.

[^5]
## Margiana.

'The chef towns of Margiana were Antiocheia Margiane, Jasonion, and Nisaia. The first is mentioned by numerous authorities: by Ptolemy and his copyist, Ammianus; by Pliny and his copyist, Solinus; as well as by Strabo and Isidorus of Charax.

Antiocheia, the capital of Margiana, was named after Antiochus Soter. According to Pliny, it was originally founded by Alexander the Great, and named Alexandria; but, "having been destroyed by the barbarians, it was rebuilt by Antiochus, the sou of Seleucus, on the same site, like that of Seleucia, intersected by the River Margus, which flows in a divided stream through Zotale, and he desired that it should be named Antiochia." ${ }^{18}$ As I understand this difficult passage, the site of the restored city, intersected by the divided waters of the Margus, was, like that of Seleucia, intersected by the waters of the 'ligris. But all the early editors understood Pliny to say that the restored city was named Seleucia; and this view is cor. roborated by Solinus, who distinctly states that the rebuilt city was called Seleucia. ${ }^{19}$ Cellarius, however, and the modern editors are unanimous in rejecting Seleuciam, for which they read Syriamnam, apparently as a correction of Syrianam, which is the reading adopted by Philemon Holland. Mr. Riley translates Syriam as "a Syrian city;" but I think that the term must refer to the site, and I would therefore render it, "like the Syrian city," that is, of Seleucia on the 'Tigris.

[^6]The position of Antiocheia Margiane has always been identified with that of Merv; but I think that the smaller city of Meru-ur-Rud has a better claim to this distinction. Ptolemy places Jasonion at the junction of the Margus with another stream from the Sariphian mountains, which is most probably the lower course of the Arius, or Harirud, after the junction of the T'ejend. The Hari River does not now reach the Murglâb, but it formerly joined it in the neighbourhood of Meru Shah-i-jan, or Shah Jehan, which latter title may perhaps be the original of Jasonion. According to Ptolemy, Antiocheia was to the south-east of Jasonion, which corresponds precisely with the position of Meru-ur-Rud of the Arab geographers, or the Maru-chak of the present day. In support of this opinion, I may cite the statement of Curtius that Alexander "selected sites for six new cities in the neigh.bourhood of Marginia-two seated towards the south, and four towards the east, at moderate intervals, that the garrisons might not have far to go for mutual aid." ${ }^{20}$ The Margian Alexandria was therefore not Marginia itself, but some one of the six new cities; and, as it was situated on the Margus, I conclude that it must have been the modern Maru-chak, or Maru-ur-Rud of the early Arab geographers. Pliny's description of the site as intersected by the divided waters of the Margus is specially true of Maru-ur-Rud, of which Edrisi says: " L'eau est amenée par un grand nombre de canaux à la ville." ${ }^{21}$ For this reason the Greeks called the Margus or

[^7]Murghâb River the Epardus, or Irrigator. ${ }^{22}$ Maru-ur-Rud was the capital of some of the early Arab governors. According to Pliny, Antiochia was situated in the fertile district of Zocale, or Zothale, or Itale, from which I infer that the name of the city may have been Antiocheia Zocalene or Iotalene, as a monogram, forming the letters $1 \Omega$, is common on the coins of Antiochus II.

Nisaia is most probably the Neshin of the Arab geographers, which was situated in Gharjistân, on the Upper Murghâb, to the south-east of Merv.
Aria.

The chief cities of Aria, according to Ptolemy, were Bitaza, Areia, Alexdndreia in Ariis, Siphare, Soteira, and Zimyra. Strabo names only three cities, Artakaëne, Alexandreia, and Achaia, all of which were called after their founders. Isidorus likewise gives three cities, Kandake, Artakaan, and Alexandreia in Ariis. Pliny mentions Artacoana, Alexandria on the Arius, and Artacabene, and in another place Achaïs, which I take to be the same as the Achaia of Strabo.

Bitaza, or Bitaxa, which Ptolemy places on a branch of the Arius River, amongst the Nisæi, is almost certainly the ancient city of Tuts, on the Tejend branch of the Hari Rud, in the district of Nishapur. I believe also that Tus is the Susa of Arrian. ${ }^{23}$

Areia of Ptolemy is not mentioned by any other authority ; not even by his copyist, Ammianus. Judging from its position on the western frontier of Aria, near the Masdoranus mountain, I infer that it may be the fort of Muzdardn, at the entrance of the Darband Pass. As

[^8]the people in the immediate vicinity of Areia are named Mazorani, or Masdorani, this identification seems highly probable.

Alexandreia in Ariis.--Wilson identified Areia with Herât ; but as the measurements of Alexander's surveyors were made to and from Alexandreia, and as Herât has always been a position of importance, and is traditionally said to have been built by Alexander, I think that Herât has a very strong claim to be identified with Alexandreia. We know also from Pliny that the Arius River flowed past the Greek city, as the Hari Rûd now flows past Herât.

Artalioana is mentioned by Arrian as the ancient capital of Aria, which contained the royal palace. All the original authorities agree in describing it as a separate city, distinct from Alexandreia, while all the modern writers are unanimous in identifying them as the same city. I think it most probable that they were two distinct but contiguous cities, forming one capital, which was called Alexandreia by the Macedonians, and Artakoana by the natives of the country, and perhaps also by the Greeks.

Soteira is mentioned by Ptolemy and Ammianus, and by Stephanus Byzantinus, who states that it was founded by Autiochus Soter. As Pliny ${ }^{24}$ describes Artacabene as a very ancient and beautiful city, which was strengthened by Antiochus, I have a suspicion that Soteira was only a new name for the old capital of Artalcoana or Alexandreia. As we have an exactly similar instance in the rebuilding and renaming of Antiocheia Margiane, it seems highly probable that Antiochus Soter may have given his title to the neighbouring city of Herat.

Achaïs is mentioned by Pliny just before his notice of the Derbices, a well-known nomad people of Margiana. He states that the city was originally founded by Alexander as Heraclea; but, having been destroyed, it was rebuilt by Antiochus, aud named Achaïs. ${ }^{25}$ Solinus gives the same name, but places the city amongst the Caspii. The Achaia of Strabo, however, was a city of Aria. I conclude, therefore, that Achaïs, or Achaia, was in the extreme north-west corner of Aria, on the western frontier of Margiana, and either at or near the ancient city of Sarakhs, which is probably the Sirok of Isidor, and the Sariga of Ptolemy.

## Drangiana.

I'he principal cities of Draugiana noted by Ptolemy are Prophthasia, Ariaspe, and Pharazana. Isidorus mentions only Parin and Korok in Drangiana proper; but in Sakastene, which certainly formed a part of the ancient Drangiaua, as its name is still preserved in Sejestân and Seistân, he notices several towns, as Barda, Min, Palakenti, and Sigal, the capital. It is highly probable also that Isidorus's Arian district of Anabon properly belonged to Drangiana, as its chief city, named Phra, is almost certainly the modern Furrah.

Prophthasia is mentioned by both Strabo and Pliny in their accounts of the marches of Alexander. The former places it at 1,500 or 1,600 stadia, equal to 183 to 200 Roman miles, from Alexandreia in Aria, while Pliny makes the distance 199 Roman miles, or from 172 to 183 British miles. Wilson has identified it with Peshawarun, an old city to the north of the Hamún, or Lake of Seistan, which is about 180 miles to the south of Herât.

$$
\because \text { Nat. Hist. vi. } 18 \text {; also Solinns, c. } 18 .
$$

Palakenti of Isidorus is most probably represented by Pulaki on the Helmand, which, according to Christie, still possesses immense ruins.

## Arachosia.

The chief cities of Arachosia noted by Ptolemy are Azôla, Phôklis, Alexandreia, and Arachotus. Isidorus names Bï̈t, Pharsaga, Chorochoad, Demetrias, and Alexandropolis, the capital, which was seated on the Arachotus River. Pliny also notices Arachosia, with its river and city of the same name.

Azóla, or Ozôla, is most probably the Ho-sa-lo of the Chinese pilgrim, Hwen Thsang, which I have identified with Guzar, or Guzaristan, on the Upper Helmand.

Phôklis may be either Kelat-i-Ghilji on the 'Turnak River, between Ghazni and Kandahar, or Ghazni itself. I think also that it must be the Demetrias of Isidorus, as the place named aiter the Bactrian king was most probably the stroughold of the country.

Alexandreia is probably Kandahar, and perhaps also the Pharsaga of Isidorus.

Arachótus, the capital of the country, was situated on the Arachotus River, at 2000 stadia, or 230 British miles, according to Strabo, from the $\tau \rho t o \delta o v$, or meeting of the three roads to the north of Ortospana; but, according to Pliny, the distance was only $175+50=225$ Roman miles, or 206 British miles. The site of the capital must therefore be looked for somewhere to the north of Kelât-iGhilji, which is 225 miles from Kabul. Now in this very position stands the great ruined city of Zohak, on the Upper Argandâb River, which is about 25 miles to the north of Kelât, and 200 miles from Kabul. This, therefore, would appear to be the most probable site of the
famous city of Arachôtus, or Cutin, which, according to Pliny, was founded by Semiramis.

Biuit, or Buvt, must, I think, be a mistake for Bíst, or Buat, the great city at the junction of the Helmand and Argandâb, which is of vast antiquity, as I possess several bronze arrow-heads and other relics found in its ruins. It is perhaps the Bigis of Ptolemy, and is undoubtedly the Beste of Pliny, which he places on the Erymanthus, or Helmand river.

## Gedrosia.

According to Ptolemy, the capital of Gedrosia, named Parsis, was situated on the Arabis River, in the district of Parisene, and to the east of the Parsiki Montes. Its position has not been identified. In the time of Alexander, the capital was called Pura; but this would appear to have been a different place from the Parsis of Ptolemy, on a comparison of his coast-names with those of Nearchus.

## Paropamisade.

The chief towns of the Paropamisadæ noted by Ptolemy are Naulibis, Kabura or Ortospana, and Parsiana, and to the eastward Kaisana or Karnasa. Ortospana and Alexandreia are also mentioned by both Strabo and Pliny in their accounts of the measurements of Alexander's surveyors. The names of many other towns in the Kabul valley are recorded by Ptolemy, as well as by Alexander's historians; and as this was the principal seat of Greek power in Ariana, it is of special importance that the sites of all the larger cities should be fixed as accurately as possible, to enable us to make use of the mint monograms on the coins for the illustration of their history. But as

I have discussed all these sites in my forthcoming work on the Medirval Geography of India, I need state here only the results of my investigations.

Ortospana, or Kabura, is Kabul, the people of which are named Kabolitce by Ptolemy. His Arguda is most probably Argandi; his Locharna is Logarh; and his Bayarda is perhaps Wardak; all three being situated to the south of Kabul.

Alexandreia ad Caucasum, or Alexandreia in Opianum, as it is named by Pliny ${ }^{26}$ and Stephanus of Byzantium, ${ }^{27}$ I have identified with Opian, 36 miles to the north of Kabul. Alexandreia is not found in Ptolemy's list of the towns of the Paropamisadæ; but as his Niphanda, with a very slight alteration, may be read as Ophianda, I think that we may perhaps recognise the Greek capital under this apparently different name.

Kapisa, which is placed by Ptolemy close to Niphanda, is said by Pliny to have been destroyed by Cyrus. It is most probably the modern town of Kushân, in the Ghorband valley, which gives name to the Kushân Pass.

Cartana is described by Pliny as situated at the foot of the Caucasus. It was probably therefore near Alexandreia, which agrees with Ptolemy's position of Karsana. Pliny adds that in later times it was called Tetragonis, or the "Square." ${ }^{28}$ I have identified this city with the famous ruins of Begrâm, 27 miles to the north of Kabul, of which the principal mass is described by Masson as forming a perfect square. ${ }^{29}$ From this ancient site Masson obtained upwards of thirty thousand coins in a ferv years.

[^9]Nayara or Dionysopolis is mentioned only by Ptolemy ; but from its position to the south of the Kophes, about midway between Kabul and the Indus, it would appear to be the Nysa of Alexander's historians. Its site is more precisely fixed by the bearings and distances given by the Chinese pilgrims, from whose account Ptolemy's Nagara has been identified with the Sanskrit Nagara-hâra, and with the present ruined site of Begrâm, near Jalalabad.

Peukelaotis and Peukelas are the Greek names of a large city, situated on the northern bank of the Kabul River, and at a short distance from the Indus. The first name is derived from Pukkalaoti, and the other from Pukkala, which are the Pali forms of the Sanskrit Pushkalavati and Pushkala, a well-known city to the west of the Indus. The itineraries of the Chinese pilgrims enable us to fix its exact position at Hashtnagar, on the left bank of the Lower Swât River. As I cannot find any monogram on the coins that represents this important city, I think that its name must have been changed by one of the earlier Greek princes ; and I would suggest the probability that it was named Demetrias, by Demetrius, the son of Euthydemus, when he conquered the Panjâb, and changed the name of Sangala to Euthydemia, in honour of his father.

Embolima is fixed by Ptolemy near the junction of the Kabul River with the Indus, which agrees with the accounts of Alexander's historians, who place it on the Indus, either at or near the confluence of the Kabul River. I take ' $\mathrm{E}_{\boldsymbol{\mu} \beta \text { òд } \mu a}$ to be a pure Greek word, meaning a "projecting point" of land, such as is commonly formed at the junction of two rivers, and which is specially remarkable at the meeting of the Kabul River with the Iudus. I have, therefore, identified Embolima with the
modern town of Ohind on the Indus, and with the Utakhanda of the Chinese pilgrims.

Aornos I have identified with the ruined hill-fort of Rânigat, above Nogrâm, which, like the famous fort captured by Alexander, is accessible only by a single path cut in the rock.

## Pentapotamia or Panjah.

The chief towns of the Panjâb noted by Ptolemy are Bukephula and Kaspeira; but we know from the Buddhist chronicles, as well as from Alexander's Listorians, that Taxila and Sangala were amongst the principal places of the country prior to the Christian era.

Taxila was the capital of the Sindh Ságar Doâb at the time of Alexancer's expedition; but, after Seleukus Nikator had ceded his Indian provinces to Chandra Gupta, it became the head-quarters of the Iudian governor of the Panjâb. 'There Asoka held his court in the following reign, and there resided the satraps of the Greek kings, and of their successors, the Indo-Scythian princes of Ariana and India, for upwards of two centuries. It seems probable that the name was changed during the Greck occupation, as I find the monograms of Taxila on the coins of the earlier kings only. Now we know from* Philostratus that this city possessed a famous temple of the Sun; and I am therefore inclined to think that Taxila may have been called Heliopolis, or Apollóneia, either by Lukratides or by one of his successors, Heliokles or Apollodotus. 'The position of Taxila I have identified with the extensive ruins around Shahdheri, which are situated 8 miles to the east of Hasan Abdâl, 36 miles from the Indus at Ohind, and 20 miles to the north-west of hiawal lindi.

Bukephala was founded by Alexander on the site of his camp on the Hydaspes, which I have identified with Jalâlpur.

Nikaia was also founded by Alexander on the battlefield where he defeated Porus. I have identified the site of this city with that of Mong, an ancient town on the eastern bank of the Hydaspes, opposite Jalâlpur.

Sagala or Euthydemia of Ptolemy is admitted by general consent to be the Sangala of Alexander's historians, and the Sákala of the Buddhists and Brahmans. Its position I have identified with that of a precipitous curved hill the Rechna Doâb, sixty miles to the westward of Lahor. A swamp still exists at the foot of the hill covering the hollow, and 1 found traces of brick fortifications at the east end, where the wall joined the hill. 'The hill itself is still called Sangala-wala-Tiba, or the "Sangala hill;" but the city is said to have been named Uttamnagar, which at once recals the Luthydemia of Ptolemy.

Kaspeira is noted by Ptolemy as the capital of the Kaspeirai. He places it at a bend on the lower course of the Rhuadis or Râvi, just above its junction with the Chenâb. The position of Kaspeira, therefore, corresponds exactly with that of the great city of Multân, which is situated on the old bank of the Ravi, at the point where the former channel changes its course from south-east to cast. Now the most ancient name of Multân is said to to have been Kasyapa-pura, that is, the "town of Kasyapa," or the Sun. This is usually pronounced Kasap-pur, which I take to be the original of Ptolemy's Kaspeira. The great antiquity of Multan is undoubted; and as the name of Kasyapapura is mentioned by Abu Rihân in the llth century, I think that it has a very strong claim to be identitied with the Kaspapuros of

Hekatæus and Herodotus, from which town Skylax began his voyage, in the reign of Darius, the son of Hystaspes.

## Sindi.

The chief towns on the Lower Indus werc the capitals of Musikanus, Oxykanus, and Sambus, above the Delta, and of Moris within the delta. To these may be added Harmutelia, or the City of Brahmans, which would appear to have belonged to Musikanus. 'The first I have identified with Alor, which was perhaps the Binagara of Ptolemy, as he places it on the Indus, to the east of Oskana, the probable capital of Oxykanus. The latter I have identified with Mahorta, a ruined fortress, ten miles from Larkâna. The capital of Sambus, named Sindomana, has been recognised by every inquirer in the modern Sehwan, a lofty fortress on the west bank of the Indus.

Harmatelia of Diodorus is the Brahman city of Curtius and Arrian, which I have identified with Brahmasthala, or Bralhmanabâd. The ruins of this famous city still exist near an old bed of the Indus, at 47 miles to the northeast of Haidarabad. This place is now known as Bamblira-ka-thul, or the "Ruined 'lower." The coins found in these ruins by Mr. Bellasis were chiefly Muhammadan; but as the explorer's excavations were very limited, it is most probable that they were confined to the later Muhammadan capital of Mansura, and that the old Hindu city still remains to be explored.

Patala, the capital of the delta, I have identified with the Pitasila of the Chinese pilgrim, Hwen 'Ihsang, and with the modern Haidarâbîd, or Nirunkot, as it was called at the tine of the Muhammadan invasion.

Minnagar I have identified with Manhabari of the Arab geographers, and with the modern Thatha.

Barbari of Ptolemy, or the Barbarike Emporium of the Periplus, is probably Bambhûra on the Ghâra creek, which was formerly a branch of the Indus.

## The Arian and Indian Alphabets.

On the coins of the Seleukidæ the legends are confined to the Greek language and characters; but the founders of the independent Greek kingdoms of Ariana and India adopted the practice of giving the Greek legends on the obverse of their coins, and a translation on the reverse in the language and alphabetical characters of their native subjects. Thus, on the square copper coins of Agathokles
 and on the reverse a translation of the title, with a transcript of the king's name, in Indian characters, which 1 read as Rujine Agathuklayesa-" of King Agathokles." On the reverse of the similar coins of Pantaleon, the king's name is transcribed in Indian characters as Pantalevasu. ${ }^{30}$ The title of Rajine, or Rajino, has not hitherto been read. The first letter is a slightly waved line, instead of the usual straight stroke of Asoka's inscriptions; but this way form of the letter R is found in the short inscriptions on the ancient Buddhist pillars at Gaya. On the best coins, the letter is inflected with the long vowel $A$, thus making $R a$. The second character, $j i$, also differs in form from the standard letter of $\bullet$ Asoka's edicts ; but it agrees with that of the great rock inscription at Khalsi, and of some of the shorter iuscriptions at Sâuchi, near

[^10]Bhilsa. ${ }^{31}$ The last letter is ne on the coins of Agathokles, and no on those of Pantaleon. The three characters therefore read Rajine, or Rajino, which is the regular Pali form of the Sanskrit possessive Rajnya, " of the king."

The name of Agathokles is also found inscribed in Arian characters on a rare copper coin, which offers on one side the legend No. 2, or Akathukreyasa, and on the other side the legend No. 1, which I read as Hinduja Same, or "lord of the Indians." Sdmi is the regular Pali form of the Sanskrit $S w d m i n,{ }^{32}$ and takes same in the genitive. The legend is therefore equivalent to the Greek 'I $\nu \delta \omega \nu$

The Greek princes of Bactria, Diodotus and his son of the same name, with Antimachus Theos and Euthydemus, use Greek legends ouly; but all the Greek princes of Ariana and India, nearly thirty in number, make use of the Arian language and characters on the reverses of their coins.
The language used in the Arian translations of the titles is purely Indian; but the Arian alphabet has nothing in common with the Indian alphabet, save the adoption of a series of cerebral letters to express' certain sounds which are peculiar to the dialects of India. The two alphabets are even read in different directions-the Indian from left to right, as at present, and the Arian from right to left, like all others of Semitic origin. The origin of the Arian alphabet has been ably discussed by Mr. E. Thomas, ${ }^{33}$ who concludes that it is cognate with the Phœnician. This also was the opinion of Gesenius, as he couples the inscriptions on the coins of the Arian Greeks

[^11]with those on the coins of the Achæmenidæ and Arsakidæ of Persia, and describes them as bearing legends "Græcis et Persicis literis inscripta." ${ }^{34}$ In Asoka's inscription on the Kapurdigiri rock, which is the earliest Arian record that has yet been found, the alphabet is already mature, with all the cerabral letters complete. At present, therefore, we possess no data for determining even the probable period when it was first employed; but, from its wide-spread use over all the provinces of Ariana and India subject to the Eastern Greeks, it could not have been of very recent origin in b.c. 250.

The Arian inscriptions hitherto discovered range from b.c. 250 , in the time of Asoka, to A.D. 100, or perhaps even later. The principal records were found at Wardak, to the south of Kabul ; at Hidda, on the Kabul river ; at Kapurdigiri, to the north-east of Peshâwar ; at Shahdheri, or the ancient Taxila; at Mânikyâla; and at Kangra, on the Bias River, in the Eastern Punjâb. But the coins bearing Arian inscriptions have a much greater range, as they are found in considerable numbers, from the shores of the Hâmûn Lake, in Drangiana, to the banks of the Jumna and the Delta of the Indus. Throughout this wide extent of country the Arian alphabet was in gencral use for upwards of three centuries. But the language was Indian, as the coins of the Greek Eukratides, the Indo-Scythian Kadphises, and the Parthian Pakores alike record the well-known Hindu title of Maharaja.

The Arian and Indian alphabets are exhibited in the accompanying plate. The discovery of the Indian alphabet is wholly due to James Prinsep, and, had he lived, that of the Arian alphabet would have been his also. But,

[^12]unfortunately, he was cut off in the midst of his brilliant discoveries, leaving the task to be slowly completed by others. The values of most of the unknown characters were afterwards recognised by mysclf, and the few still remaining were discovered by Mr. Norris during his examination of the Kapurdigiri version of Asoka's edicts. The resolucion of the compound letters was a much more difficult task, as the forms of the combined characters are generally so much changed as not to be easily recognised. But most of them are now known-some having been discovered by myself at an early date, and the others simultaneously by Mr. Dowson and myself in 1864, on reviewing all the known Arian inscriptions.

The first discoveries in the Arian alphabet were made by Masson, ${ }^{35}$ who pointed out to James Prinsep the native transcripts of the Greek names of Menander, A pollodotus, and Hermæus, and the native equivalents of the Greek titles of BAミIAE $\Omega \Sigma$ and $\Sigma \Omega$ THPO乏. This clue was eagerly followed up by Prinsep, who successfully recognised no less than sixteen, or just one-half, of the thirty-three letters of the Arian alphabet. He discovered, also, three out of the five initial vowels, and two of the five medial vowels. I will now make a brief review of the characters in detail, giving in each case the authority for the value assigned, and the name of the discoverer. This review is rendered necessary by the discovery of some new names and titles, which were unknown to Mr. Thomas, as well as by a few slight but important differences in the readings of some of the known names.
A. The initial vowel was determined by Prinsep from the name of Apollo:lotus. The short medial $a$ is inherent

[^13]in all consonants, and the long medial $\boldsymbol{a}$ is represented by a dot at the foot of the consonant.
I. The initial form was happily guessed by Prinsep from its cross stroke, resembling that of the medial $i$ attached to the consonants, which was well determined from the names of Eukratides, Antimachus, and Antialkidas.
U. The initial form of this letter was supposed by Prinsep to be represented by the second letter in the name of Eukratides; but he admitted that "other evidence was wanting." ${ }^{36}$ This character, however, is the letter $v$, inflected with the vowel $u$, and the true reading of the Arian rendering of the name is Evukratidasa. We have an analogous instance of a Pali rendering of a diphthong, in chdvu for chau. The true initial $u$ is given by Norris, from the Kapurdigiri inscription. It is simply the letter $a$ with a footstroke to the left. The two forms of $u$ initial and $v u$ are found on the coins of Kozola Kadaphes, in the title of Yaüasa, or Yavugasa, in which with the preceding short vowel $a$ they probably represent the diphthong $a u$, equivalent to AO of ZAOOY. ${ }^{37}$

The medial $u$ is formed by attaching the same footstroke to all the consonants, as in Akathukreyasa (No. 2) and in Apulaphanasa (No. 24). It is also found in the word putra, or "son," which is so frequently used on the coins of the earlier Indo-Scythians. In the later examples it takes the form either of a loop or of two separate footstrokes.
O. The initial o does not occur on the coins, but was

[^14]found hy Mr. Norris in the Kapurdigiri inscription, in the word orodhaneshu, corresponding to olodhanesu of the Indian Pali version at Dhauli. The medial 0 , which is of common occurrence in the inscriptions, is rarely found on the coins. It is, however, well defined in the names of Zoilus and Artemidorus (Nos. 7 and 17), where it is represented by a short downward stroke attached to the upper or horizontal limb of the consonant. This vowel was first determined by myself from the name of Gondophares, and was afterwards verified by my readings of the names of Moas and Zeionises.
E. The initial $e$ was one of the first letters recoguised by Prinsep from the name of Eukratides, and his determination has since been verified by the native transcript of the name of Epander (No. 22), as well as by the inscriptions. The medial form was also an early discovery from the names of Heliokles, Menander, and Hermaus (Nos. 5, 11, and 25), and it has since been amply confirmed by its occurrence in several new names.

A reference to the plate will show the rare simplicity of this scheme of vowels, each of which is formed by the addition of a different short stroke to the standard initial $a$; while, as observed by Mr. Thomas, "the same discriminating signs suffice, in combination with cousouants, to represent the medial form of their several fundamental letters." In the accompanying plate, I have given the letter $k$ inflected with each of the vowels, from which it will be easily seen how each may be attached to any of the consonants.

K is found in the names of Eukratides, Heliokles, and Antialkidas (Nos. 4, 5, and 15), and was recognised by Prinsep in 1838, with its inflections $k i$ and $k i u$, aid in a compound form as $k r$.

KH was identified by Prinsep as the representative of the Greek $X$ in the name of Antimachus (No. 12), and its value has since been confirmed by its occurrence in the name of Archebius (No. 10).

G was unknown to Prinsep, and was first discovered by myself on the coins of Gondophares and his nephew Abdagases; and its value has since been verfied by Mr. Norris, from the Kapurdigiri inscription.

GH was also a discovery of mine, from the bilingual coins of Kunanda Amogha-bhuti; and its value has since been confirmed by Mr. Norris.

NG has not yet been met with.
CH and CHH were first recognised by Mr. Norris; but a variant form of the aspirate was discovered by myself, in the title of chhatrapa, on the coins of the satraps Zeionises and Rajubula. The identity of Chhatrapa with the Sanskrit Kshatrapa and the Greek צarpánŋs has been admitted by every scholar, except the late Professor H. H. Wilson. With his usual scepticism on most points not emanating from a Brahmanical source, lie expressed his opiuion ${ }^{38}$ that "the legends of these coins had not been satisfactorily read; and he especially objected to the reading of the word Kshatrapasa, or satrap, the letters of which were very doubtful, and no other evidence being found to prove that this title had ever been borue by a Hindu prince." But as I had shown the accuracy of my reading by applying the value of the letter $c h /$ to the term sachha-dharma, or "true dharmu," Wilson's objection was a mere ebullition of his accustomed scepticism. His statement that no other evidence had been found to prove that the title of satrap had ever

[^15]been borne by a Hindu prince is strangely incorrect, as Prinsep had found the title in the Girnar Bridge inscription of Rudra Dâma, a Hindu prince ; and Wilson's own translation of this inscription, afterwards furnished to Mr. Thomas, ${ }^{99}$ contains the title of Mahakshatrapa applied to Rudra Dâma.
J was discovered by Priusep in the well-known title of Maharajasa (No. 27), which is the translation of basine 2 ; and its value was confirmed by the native translation of NIKHФOPOY as jayadharasa, and by the more ligh-sounding title of the later kings as rajatirajasa, or " king of kings."
JH has not been found in the inscriptions; but I agree with Mr. Thomas that the initial letter of the native transcript of the name of Zoilus is most probably this Arian letter inflected with the vowel o (No. 7). The common $j$ is used for the initial of Zeionises, and the letter $y$ in the names of Azas and Azilises. The initial letter of Zö̈lus differs from the common $j$ in having an additional sidestroke.
NY was first recognised by Mr. Norris in the Kapurdigivi inscription ; and I have since found it in the word rajnya, on a well-preserved silver coin of Kunanda.
'T.' The cerebral and dental letters were not discriminated by Prinsep; but, " from the variety of symbols to which the form of $d$ and $t$ must be ascribed, he was inclined to think that the alphabet was provided with the full complement. ${ }^{0}$ They were first discriminated by Mr. Norris from the Kapurdigiri inscription, and at least two of them have since been recognised on the coins.

[^16]TH is found in the name of Theophilus, inflected with the vowel $e$ (No. 19). It also occurs in the Arian transcript of the Macedonian month Artemisius, as Arthamisiyasa, and in one of my Yusufzai inscriptions in the well-known word prathame, "first," which I recognised before the publication of Mr. Norris's paper on the Kapurdigiri inscription. But, as the Sanskrit prathama is spelt with the dental $t h$, there must be an error in one of the inscriptions.
D is found in the name of A pollodotus (No. 6), interchangeably with the dental letter. It occurs also in apadihatasa (No. 31), as the translation of ANIKHTOY.

N is not easily discriminated from the dental letter, but it is found in the name of the Hindu month of Srávana, in one of my Yusufzai inscriptions, and in numerous words in the great Kapurdigiri record.

T was early recognised by Prinsep in the names of Eukratides and Apollodotus (Nos. 4 and 6).

TH has been found only in the Kapurdigiri inscription.
D was recognised by Prinsep in the names of Eukratides, Apollodotus, and Diomedes.

DH was also determined by Prinsep from the word dhramikasa, which is the Arian translation of DIKAIOY (No. 35).

N was recognised by Prinsep in the names of Philoxenes and Menander (Nos 13 and 11).
$P$ was also determined by Prinsep from the name of Apollodotus. On my bilingual coin of Demetrius this letter has a horizontal footstroke (No. 30), in the word aparajitasa, the translation of ANIKHTOY.

PH is found in two different forms on the earlier and later coins, both of which were first recognised by myself. The carlicr form occurs in the names of Philoxenes,

Telephus, and Apollophanes; and the later form on the coins of Gondophares.

B was first made known by Mr. Norris from the Kapurdigiri inscription, and has since been found on the coins of Archebius (No. 16).

BH was originally discovered by myself in the word bhrata-putrasa, or "brother's son," as the translation of $A \Delta E \Lambda \Phi I \Delta E \Omega \Sigma$, on the coins of Abdagases, and in the word bhratasa, or "brother," as the translation of A $\Delta E \Lambda \Phi O Y$, on the coins of Vonones and Spalahores. This discovery I applied to the coins of Kunanda, on which I was the first to read his title of Amogha-bhuti.

M was recognised by Prinsep in the vames of Me nander and Hermæus, and in the well-known title of Maharaja.

Y was determined by Prinsep from the word jayadhara, as the translation of NIKHФOPOY, and also from the transcript of the name of Hermæus, which is rendered by Heramayasa. But the transcript of Kalliope as Kaliyapaya is decisive, as $y a$ is the feminine possessive termination.

R was also determined by Prinsep from the name of Hermæus, and its value was afterwards fully confirmed by his reading of maharajasa.

L was recognised by Prinsep in the names of Apollodotus, Philoxenes, Lysias, and Antialkidas; and it has since been found in several new names.

V was found by Mr. Norris in the Kapurdigiri inscription, in devanam, savata, vijaya, and other well-known Indian words. I had previously recognised the same character on the coins of Abdagases, where it is used as the equivalent of the Greek $B$, which is pronounced as $v$ by the modern Greeks.
$H$ was recognised by Prinsep in the name of Heliokles, and in the title of Maharaja.
$S$ was also recognised by Prinsep in the name of Lysias (No. 14.), and in the possessive termination of all the Arian translations of the Greek titles, as maharajasa, mahatasa, \&c.
$\mathbf{S}$ is found in the name of Spalirises, in which it was discriminated by Priusep from the dental $s$.

SHI is found on the coins of Azilises, whose name is transcribed as Ayilishasa. Its value, however, was first definitely fixed by Mr . Norris from the Kapurdigiri inscription.

In the accompanying plate I have inserted ali the principal compound letters of both alphabets, that have yet been fornd either on coins or in inscriptions. Many of these are apparent at the first glance, and require no comment; but others, like the combinations with the prefixed $r$, are not so obvious, and require some explanation of the grounds on which their values have been determined.
$r k h e$. This character is found in the transcript of the name of Archebius (No. 16), which I read as Arkhebiyasa. 'The horizontal line of the $r$ is placed across the lower limb of the $k h$.
$r t$ is found in the transcript of the narne of Artemidorus (No. 17).
rth occurs in the Wardak inscription, in Arthamisiyasa, the Arian transcript of the Macedonian month Artemisius. In this compound, the tail of the th is turned upwards to join the hurizontal stroke of the $r$. In the earlier form the $r$ was simply placed across the lower member of the other letter.
rm was first made known by me in 1853 as occurring
in the names of Indra Varma and Aspa Varma, and in the word dharma. It is formed in the same way as the others, by placing the upper limb of the $r$ across the right horn of the $m$, which is lengthened for the purpose of forming the junction.
vri. This character occurs on a small silver coin in my own possession, which has a bilingual legend in Arian and Indian Pali. The coin is of Vrishni Raja, and the value of the Arian compound is ascertained by the corresponding Indian character which is placed beside it in the plate.
st was first recoguised by myself in the native trauscripts of the names of Straton and Hippostratus (Nos. 10 and 20 ), and was afterwards confirmed by my reading of the Greek title of $\Sigma \tau \rho a \tau \eta \gamma o s$ on the coins of Aspil Yarma as Strategasa.
$s p$ was first recognised by Prinsep in the names of Spalahores and Spalirises, and was afterwards verified by my own reading of the name of Aspa Varma, the general of the Indo-Scythian prince Azas.
$s v$ is found on the coins of Himakalphises, in the well-known titles of Mahesuara and Sarva-lokeșara.
shk is found in the names of Kanishka and Huvishka in the inscriptions from Mânikyâla, Zedi, and Wardak. The combination was discovered by .myself in the first inscription in 184, and was contirmed in 1860 by my reading of the name of Huvishka in the Wardak inscription.

The transcripts of the Greek names have been sufficiently discussed in my account of the alphabet; but the translations of the titles require a separate notice. They will be found in the plate immediately after the names.

No. 27. Maharajasa, " of the king." This is the usual
rendering of BAELAE $\Omega \Sigma$ ，which is found on the coins of all the Greek kings from Demetrius and Eukratides to Hermæus and Apollophanes．But，on the coins of Panta－ leon and Agathokles，the Indian Pali translation is rajino， as I have already noticed．
The more pompous title of BAEIAE $\Omega$ BAEIAE $\Omega$ N is not used by any of the Greek princes of Ariana and India．${ }^{41}$ Its first appearance is on the coins of the Indo－Scythiau king Moas，with the simple translation of Rajatirajasa for the Sanskrit Rajadhirajasya，or＂king of kings．＂His successors，Azas and Azilises，adopted the still more sound－ ing translation of maharajasa rajarajasa，or＂great king， king of kings，＂without making any change in the Greek title．

No．23，tradatasa is my reading of the translation of $\Sigma \Omega$ THPO乏，from tranam，＂safety，＂and datri，＂a giver，＂ or traldatri in Sanskrit，which becomes tradata in Pali． Professor Lassen proposed tadara as the Prakrit form of the Sanskrit trâta，＂preserver．＂

[^17]No. 29, mahatasa, the translation of METANOY, is the Sanskrit mahat, "great." On the common coins of Eukratides the title of BAEIAESE MELAAOY is translated by the simple term maharajasa; but on the later coins this is expanded to maharajasa rajadirajasa, "of the great king, the king of kings." On the didrachms of Apollodotus the title of Meranoy is left untranslated in the native legend.
No. 30, aparajitasa is the translation of ANIKHTOY, found on my unique bilingual coin of Demetrius. The term is pure Sanskrit, apardjita, "unconquered or invincible;" but it would seem not to have satisfied the critical taste of the later kings, as they are unanimous in their adoption of the term which follows, viz. :-
No. 31, apadihatasa, which is found on the coins of Philoxenes, Lysias, and Artemidorus. It is the spoken form of the Sanskrit apratihata, the " unbeaten or irresistible."
No. 32, jayadharasa is found on the coins of Antialkidas and Archebius as the translation of Nікнфорог, and on those of A myntas as the equivalent of NIKATOPOL. Its literal meaning is " victory-holder," from jaya, victory, and dhara, holder or possessor.
No. 33, pratichhasa is found only on the coins of
 has suggested that either the Sanskrit pratishthita, "renowned," or possibly pratiksha, "venerable or respectable," may be the original of this term. But I think that the simpler form of pratishthd, "famous," is perhaps the true original of pratichha.
No. 34, priyapitasa is found only on some of the later coins of Straton as the translation of ФIлOПATOPOг, which at once suggests the original Sanskrit form of
priyapita, or "lover of his father," from priya, a lover, and pitá, father.

No. 35, dhramikasa was recognised by Prinsep as the translation of $\triangle I K A I O Y$. The original Sanskrit form is dharmmika, from dharmma, "law, justice." On some of the coins it takes the abbreviated form of dhramiasa.

The title of EYEPRETOY is found only on the unique silver coin of Telephus, which is now in the Bodleian Museum at Oxford. The upper parts of the letters are wanting; but they may be read, as suggested by Mr . Thomas, as Kalảna-kramasa, " of the beneficent," from the Sanskrit Kalyâna-karmma, "good works."

The only remaining Greek title, ©EOTPOПOY, which is found on the coins of Agathokleia, has no translation, as the Arian legend of her coins gives only the name and titles of her husband Straton.

# COINS OF ALEXANDER'S SUCCESSORS IN THE EAST. 

By Major-General A. Cunningham.

## Monograms.

Ter monograms on the coins of Greece and Western Asia are of comparatively little importance, as each city is generally distinguished by its particular symbol, and the history of 'those countries is sufficiently well known from ancient authors. For the West, therefore, the coins are only aids to history ; but for the East, from the want of written records, they are history itself. So also from the entire absence of symbols on the Eastern coins, the monograms become one of our chief authorities for the determination of the particular localities over which the different rulers held sway. The find-spots of the coins themselves are likewise specially valuable for the same purpose ; but, unfortunately, they are not always known ; and in the case of single silver coins which may have been carried from place to place by traders, such data might even perhaps mislead us. But although the actual findspots of the rarer specimens may be neither traceable nor trustworthy, yet we know that the great mass of these coins, both in silver and in copper, has been found in Afghanistan and the Western Panjâb. We possess also

Massou's detailed record of the annual yield of coins at Begrâm, near Kabul; which is equally valuable for its omissions, as we may conclude with some certainty that the kings whose coins were not found there, and which are yet plentiful about Peshâwur and in the Panjâb, could not have ruled over Kabul. Masson himself remarks that Begrâm, which had furnished him with thousands ${ }^{1}$ of the coins of Eukratides, had not yielded a single coin of the Arsakidæ, and only one of the Seleukidæ, from which he justly inferred that neither of those dynasties could have reigned over the Kabul valley.

In attempting an explanation of some of the monograms of the coins of Alexander's successors in the East, I have used the known find-spots of the coins as the chief guide to the localities over which the different princes reigned. Thus we learn from Masson ${ }^{2}$ that he found no coins either of Moas or of Azas at Begrâm ; and we know, from the experience of many collectors for the past twenty years, that the coins of both these princes are found in considerable numbers throughout the north-western Panjâb, and more sparingly towards Peshawur on the west, and the Satlej on the east. From these known find-spots it may be inferred, with some certainty, that both kings must have reigned over the Panjâb, and that the chief seat of their power was the country lying between the Indus and the Chenâb. Now, the principal cities of this district were Taxila and Nikaia, the former being the ancient native capital, and the latter a new city founded by Alexander on the battle-field of the Hydaspes, where he gained his victory over Porus. Accordingly, on the

[^18]coins of these two princes we find the names of both Taxila and Nikaia in monogram ; but not a single specimen of their coins has yet been discovered with the monograms of Kabul, Alexandria Opiane, Kartana, or Dionysopolis, which are of such common occurrence on the coins of the pure Greek kings.

As the Seleukidæ possessed Parthia and Bactriana for upwards of seventy years, we might expect to find some of their mint monograms repeated on the coins of the earlier princes of those countries after they became independent. Such monograms, therefore, as are commou to the coins of the Seleukidæ and earlier Bactrian princes I would assign to Bactriana and Ariana; and such as are common to the Seleukidæ and earlier Arsakidæ I would assign to Parthia. For the purpose of making this comparison, I have introduced, at the head of the accompanying Plate, a number of monograms taken from the coins of the earlier Seleukidæ and Arsakidæ. Amongst them $I$ have included several of the commoner and better defined monograms of Western Asia for the express purpose of showing that the system of explanation which I have followed is equally applicable to the monograms on the coins of those countries as to those of Bactriana and Ariana.

It is now just a quarter of a century since I made my first attempt to explain the monograms on the Bactrian coins. The subject was then almost new, as previous writers on Greeks coins had generally left them unnoticed. Since my first attempt, however, as Mr. Thomas has remarked, "the question of the interpretation of mint monograms has received more attention and illustration from the learned of Europe." Müller, especially, has illustratcd the coinage of Alexander the Great in a com-
plete and masterly manner, partly from the symbols and monograms combined, and partly from the monograms alone. ${ }^{3}$ But the reading of the Western monograms is rendered comparatively easy by the frequent accompaniment of well-known symbols, as a club, a lion, a trident, and a palm, on the coins of Herakleia, Miletus, Mylasa, and Aradus. The Western geography, also, is tolerably well known. With the Eastern monograms, however, the case is exactly reversed, as they are quite unaccompanied by symbols, and our knowledge of the ancient geography of Bactriana and Ariana during the Greek domination is very imperfect.
M. Chabouillet, in his notice of the twenty-stater gold piece of Eukratides, ${ }^{4}$ objects to my early attempt to explain these monograms, because my readings do not give the name of any one of the seventeen towns of Bactria recorded by Ptolemy. But this objection is scarcely valid, as Ptolemy lived upwards of three hundred years after the Greek dominion in Bactria had passed away. Now, little more than three centuries have elapsed since the death of Jehangir, the son of Akbar, but we may examine the coins of both father and son in vain for the names of the famous cities of Akbarabad, Shahjahanabad, Muhammadabad, Azimabad, Ghâzipur, Farokhabad, Muradabad, Amritsar, Caunpore, Mirzapur, Murshidabad, or Calcutta. The first four, we know, are the new Muhammadan names of Agra, Dehii, Beuares, and Patna, all of which appear on their coins : but who now can point out the ancient names of the seventeen Bactrian cities of Ptolemy?

[^19]Doubtless many of these cities must have existed during the period of Greek dominion ; but it is beyond our power to say whether any of Ptolemy's names, besides Zariaspa and Eukratidia, were in use in the times of Euthydemus and Eukratides. Again, the coins of Akbar and his successors do not show the name of Balkh, or Ghazni, or Jalalabad, or Peshawur ; and of all the cities to the west of the Indus mentioned by Abul Fazl, the name of Kabul alone is found on the coins of Akbar. I am, however, quite ready to admit that the fact of my early readings not giving any one of the Bactrian names mentioned by Ptolemy was rather unfavourable to my proposed explanations. But, after the experience of a quarter of a century, during which the subject of mint monograms has received so much illustration from Müller and others, I am now firmly convinced that $I$ was quite right in my original conclusion that all the mint monograms which are common to a number of different princes can only be the names of cities, and cannot possibly be the names either of magistrates or of mint-masters, or of any other functionaries.

It has been conclusively shown by Müller that the monograms of cities were already in use in the time of Alexander, on whose coins we see the well-known symbols of many famous cities, accompanied sometimes by the first two or three letters of the name, and sometimes by a monogram forming the same letters. We may therefore confidently expect to find the names of the mint cities of his successors, the Greek princes of Syria, Bactriana, and Ariana, expressed on their coins in a similar manner. It is unfortunate that the coins of the two Diodoti furnish but two monograms, aud that only one of these, No. 1, is found repeated on a single gold
piece of Euthydemus. It is, indeed, possible that this monogram may be the name either of a mint-master or of a magistrate ; but as it does not occur on the coins of the second Diodotus, I am inclined to look upon it as the name of a city rather than that of a man. According to my reading, it forms Nautaka, which would appear to have been the chief city of Sogdiana after the destruction of Marakanda by Alexander.

No. 2 monogram, which is found on most of the coins of Diodotus II., I read as Zariaspe, the well-known capital of Bactria. No. $10^{\circ}$ monogram, which is found on the coins of Pantaleon and Agathokles, as well as on those of Euthydemus and Demetrius, I read as Arachotus, the capital of Arachosia. No. 3 monogram, which is found on the coins of the same four princes, I read as Ophiane, which was the true name of the Caucasian Alexandria, the capital of the Paropamisadæ. No. 31 monogram, which is found on the coins of Antiochus II. and Euthydemus, both with the seated Herakles reverse, I read as Iotale, the name of the fertile district of Margiana, in which stood the Greek city of Antiocheia, and which, therefore, would have been named Iotale, to distinguish it from other cities of the same name. Lastly, No. 28 monogram, which is found on the coins of Euthydemus alone, I read as Herakleia, which, as it is placed by Pliny either near or amongst the Derbikkæ, must be either at or near the old town of Sarakhs on the lower Arius River.

If my readings are correct, I have thus been able to identify, amongst the few monograms of these earlier princes, the name of the chief cities of Sogdiana, Bactria, and Margiana to the north, and of Arachosia and the Paropamisadæ to the south of the Caucasus. I have followed the same system in reading the monograms on
the Syrian and Parthian coins; and I believe that I have been successful in the decipherment of several names that have hitherto baffled our best numismatists. I refer specially to the following readings of the Syrian mono-grams:-No. 2, as Atropatene ; No. 3, as Stratonikeia ; Nos. 6 to 11, as Samosata; Nos. 12 to 15, as Seleukeia ; No. 22, as Soteira: and to the following readings of Parthian monograms :-Nos. 4 and 6, as Arsakeia; No. 7, as Kharax ; and Nos. 5, 8,12 , and 13, as Soteira. I would also refer to my readings of the four monograms on the coins of Kamnaskires, namely, Babylon, Kirkesium, Soteira, and Edessa, ${ }^{5}$ as another decisive testimony in favour of my opinion that many of the monograms on the coins of the Eastern Greel princes are the names of their mint cities.

In my readings of all these monograms I have followed the same system of decipherment which I adopted in my first attempt in 1842, and which has since been so successfully employed by Müller in reading the monograms of Alexander's coins. In some few cases the letters have been read sideways or reversed, as in the well-ascertained examples of Samê, Larissa, Demetrius, Marathus, Herakleia, and others. In many cases the same letter has been read twice, or even thrice, as in Samosata. In no case whatever has any letter of a name been neglected, but every separate line of each mouogram has been accounted for.
I do not suppose that all, or even one-half, of the mono-

[^20]grams that occur on the coins of the Bactrian and Arian Greeks are the names of mint cities. But I fully believe that many of them are so; and further, from their occurrence on the coins of several consecutive princes of different ages, I contend that they cannot be anything else but the names of places. I would draw especial attention to Nos. 17 and 58, each of which is found on the coins of no less than twelve different princes. I freely admit the difficulty of satisfactorily deciphering some of the monograms, in consequence of the variety of readings of which they are susceptible. But this difficulty is much lessened where, as in the present case, the dominions of the princes are limited to a comparatively small area.
Thus we may be puzzled whether to assign No. 1 monogram of the Syrian series to Apameia in Asia Minor, or to Apameia in Media, or to Pasargadæ in Persia, all of which places belonged to the wide dominions of Seleukus. But with the monogram No. 10 of the Bactrian series, which is found on the coins of Pantaleon, Agathokles, Euthydemus, and Demetrius, we are certain that it must represent some place either in Arachosia, or among the Paropamisadæ, where alone the coins of the first two princes have been found. I therefore read this monogram as Arachotus, the capital of Arachosia. This reading is confirmed by the fact that the same monogram is found on the coins of Seleukus I. and Antiochus II. (No. 30 of Syrian monograms), and not on the money of any of their successors. For, as the country of the Paropamisadæ was yielded to the Indian prince Chandra Gupta by Seleukus I., the position of the mint city indicated by the monogram is certainly restricted to Arachosia.

In suggesting some of the following readings, I have been guided partly by the absence of several well-known
names, and partly by the probable vicinity of the few places found on the coins on some of the princes whose money is rare, and whose dominions, therefore, may fairly be presumed to have been confined to narrow limits. Thus none of the early monograms give the names of Ortospana or Peukelaotis, although we know that these were two of the most ancient cities of the Kabul valley. The first place, called Kabura or Ortospana by Ptolemy, I am inclined to identify with the Nikaia of Arrian, which was the first city visited by Alexander immediately after leaving Alexandria, and just before commencing his Indian campaign. As the name is a pure Greek one, it must have been imposed on some previously existing native city, and as the indicated position of Nikaia points to Kabul, I infer that Kabura or Ortospaua was most probably the actual place so renamed by the conqueror. Similarly the find-spots of many of the coins bearing the monogram No. 58 lead me to infer that this city must have been situated not far from the Indus. I think, therefore, that it may represent the new Greek name either of Peukelaotis itself, or perhaps of Taxila. The reading of this monogram will be fully discussed in its proper place.

This practice of the Macedonian princes of renaming many of the chief cities of their dominions after themselves or their queens offers little difficulty in the case of the Syrian towns, as most of their positions are well known. Thus, amongst the Syrian places we have Seleukeia, Antiocheia, Achaïs, Soteira, Apameia, Stratonikeia, Laodikeia, \&c., all named after members of the royal family of the Seleukidæ. It seems almost certain, therefore, that the Greek princes of Bactriana, Ariana, and India must have followed the example of the Syrian lings.

The only names, however, that have been recorded are Euthydemia, Demetrias, and Eukratidia; but I conclude that several other names must have been imposed by some of the more powerful kings, such as Diodoteia, Agathokleia, and Menandreia, which will be noticed hereafter. I infer also that, like the Syrian kings, they must have renamed some of their towns after their favourite deities. Indeed, one of these is recorded by Ptolemy, as Nagara or Dionysopolis, of which No. 18 is the probable monogram. But there are also monograms which seem to point to the names of other deities. Thus Nos. 52 and j6, on coins of Eukratides, who was a worshipper of Apollo, may be read as AllOллOvelas and АПОлАшvas, and No. 120, on a coin of Artemidorus, who was a worshipper of Artemis, may be read as APTEMİia§. No. 90 is perhaps intended for НАІОпОлєшs, and No. 28 for hPaknelas. The positions of the Syrian towns are mostly well known; but, with the exceptions of Euthydemia, Demetrias, and Eukratidia, we have no clue but our own sagacity to guide us in determining the positions of any of these renamed cities of the Eastern Greeks.

In conclusion, I may point to the consistent and satisfactory results which several of my readings afford as to the precise localities possessed by several of these Eastern Greek kings, whether their history is partly known, as in the case of Euthydemus, or altogether unknown, as in the cases of Pantaleon, Agathokles, and Archebius. From Strabo we learn that Euthydemus occasioned the revolt of the provinces adjacent to Bactriana, and from Polybius, that he opposed Antiochus the Great on the banks

[^21]of the Arius River, and that after being defeated he retired to Zariaspe. He must, therefore, have possessed not only Aria and Bactriana, but also the intervening district of Margiana; and as his coins have been found both in Begrâm and in Kandahar, he must have held Arachosia as well as the country of the Paropamisadæ. In accordance with these facts my readings of the principal monograms of Euthydemus give the names of Herakleia in Aria, Iotale or Antiocheia in Margiana, Nautaka in Sogdiana, Euousmou-Anassa ${ }^{\text {e }}$ in Bactria, Arachotus in Arachosia, and Ophiane, Kartana, and Kapisa, amongst the Paropamisadæ. Similarly the coins of Pantaleon and Agathokles, which have been found at Begrâm, and about Ghazni and Kandahar, give the monograms of Ophiane and Arachotus, while the coins of Archebius, which have been found chiefly at Begrâm and Kabul, give the monograms of Nikaia or Kabul, Ophiane or Alexandria, and Kartana, all situated in the Upper Kabul valley.

I offer the following readings of the monograms on the coins of the Eastern Greek princes with much diffidence. The subject is confessedly a difficult one, and although I feel quite satisfied myself as to the correctness of some of the readings, yet I only venture to publish them with the reservation that they are but another attempt to explain these mysterious symbols, which could not well be left unnoticed in this account of the coins of "Alexander's Successors in the East."

## Monograms olf Syrian Coins.

No. 1, on Seleukus I. and Antiochus I., forms

[^22]иIIAMetas, or Apameia. It might also be read as Pasargade, but as it occurs on the Parthian coins of the Arsakidæ, it probably refers to the Median Apameia near Rhagæ.

No. 2, on Antiochus I., forms AKBaravas, or Akbatana of Media. The Ekbatana of Atropatene is perhaps represented by the lower monogram, No. 2, which is found on coins of Alexander the Great (see Leake, No. 36), and which may be read as ATPOMAT $\eta \nu \eta s$.

No. 3, on Seleukus I., forms ETPATONIKEIAS in full. Leake reads ErPA without offering any explanation. Gough proposes Seleukeia, but this reading omits the letter P. Stratonikeia in Caria was built by Seleukus I. in honour of his wife Stratonike. Two similar monograms, but with the letters differently and less neatly arranged, occur on some of the later Syrian coins. (See M. Borrell in Num. Chron. XV., monograms Nos. 33 and 34.

No. 4, on Alexander the Great, and No. 5, on Autiochus $I$., form BABYA $\Lambda$ os. It is also found on one of the tetradrachms of Kamnaskires and Anzaze. A similar monogram, but with the letters differently arranged, is found on some of the later Syrian coins. (See Borrell in Num. Chron. XV., No. 23.

No. 6, on Seleukus I. ; No. 7, on Alexander the Great; No. 8, on Seleukus I. ; Nos. 9, 10, and 11, on Antiochus I., all form $\Sigma$ AMOEATA $\Sigma$ in full. Samosata was a famous fortified city of Kommagene on the Upper Euphrates, and one of the most important places in the Syrian dominions.

Nos. 12 and 13, on Seleukus I. and Antiochus I., form ミE^EYKEIas ; and No. 15, on Antiochus I., gives the same name in full. The city of Seleukeia on the Tigris was
founded by Seleukus I., who made it his capital in preference to Babylon.

No. 16, on Alexander the Great, gives the name of Pasargada in full. Leake reads $\Sigma A P$ for Sardis; but as No. 17 on Seleukus I. and Antiochus III., No. 18 on Antiochus I., Antiochus II., and Seleukus III., and No. 19 on Antiochus I., all form the same name of ПAइAPГADAS in full, I prefer my own reading of No. 16.

No. 20, on Antiochus I., may be read either as TAPaєшv, Tarsus, or APA $\Delta \mathrm{I} \omega \nu$, Aradus.

No. 21 is found on coins of Antiochus II. with the seated Herakles reverse, which was afterwards adopted by Euthydemus. I read it as HPaкגєıas, or Herakleia, also named Achais, which was most probably Sarakhs.

No. 22, on Antiochus II., forms $\sum \Omega T \varepsilon \iota \rho a s$, or Sóteira, a city in Ariana mentioned by Ptolemy, Ammianus, and Stephanus Byzantinus. Its position is uncertain, but it was, perhaps, only a new name for the Arian Alexandria.

No. 23, on Antiochus II., forms MAPCIAN $\eta$, or Margiane, which I would identify with the celebrated old city of Meru.

No. 24, on Alexander the Great and Seleukus I., is doubtful ; but both may be read as Margiane.

The following monograms (Nos. 25 to 30, together with No. 21 already noticed) are found on the coins of Antiochus II., with the types of the seated Herakles and the thundering Zeus, both of which were adopted by the early Bactrian kings. All of these monograms also, except Nos. 27 and 28, are found on the coins of the Bactrian kings.

No. 25, on Antiochus II., reverse Herakles, and No. 26, Antiochus II., reverse Zeus, may both be read as इAMAГГANAZ, or Samangân, a very ancient town to the
south of Khulm, and to the south-east of Balkh, which I have identified with the Bactra Regia of Ptolemy, and with the Aornos of Alexander's historians.

No. 27, on Antiochus II., reverse Herakles, forms EEnevelas, or Seleukeia, on the Tigris.

No. 28, on Antiochus II., reverse Zeus, forms $\Delta I T$ or $\Delta \mathrm{IKT}$, for which I am unable to offer any equivalent.

No. 29, on Antiochus II., reverse Zeus, forms $\mathrm{I}_{2} \mathrm{Ta}$ 分 s , that is, Antiocheia, in the fertile district of Iotale, or Itale, or Zotale in Margiana, which was irrigated by canals drawn from the Margus River. Here Alexander founded a city, which, having been destroyed by the barbarians, was rebuilt by Antiochus I., who admired the great fertility of the district. ${ }^{\circ}$ The position of this place has been already discussed in my notice of the geography.

No. 30, on Seleukus I. and Antiochus II., forms APA $\chi$ øтои, or Arachotus, the capital of Arachosia.
No. 31, the letter N, on Antiochus II., is perhaps intended for Nautaka in Sogdiana, as it is found on a coin with the type of the thundering Zeus, which was, therefore, most probably, struck by Diodotus, the satrap of Bactriana.

No. 32, the letter $\Xi$ inside a circle, on Antiochus II. is perhaps intended for Oヨavns, or Alexandreia Oxiane on the Oxus, which was probably the modern Termed. A similar monogram is found on the coins of the Bactrian Demetrius. (See No. 34 of Bactrian monograms.)

## Monograms on Parthlan Coins.

No. 1 first appears on coins of Arsakes IV., and is

[^23]used by most of his successors. On some of the smaller copper coins it is the sole type of the reverse. It forms the letters TAM, and is almost certainly intended for TAMßpaкns, or Tambrake in Hyrkania, as there are coins of Arsakes IV. in the British Museum with the legends TAM and TAMB on the obverse behind the head.

No. 2, on Arsakes VI., forms TAMBPAKİ in full.
No. 3, on Arsakes VI., forms TAMBPAкns.
No. 4, on Arsakes VI., forms APミAKııas, or Arsakeia, which was the new name of Rhage in Media; but there would appear to have been a city of the same name either in Parthia or in Hyrkania. (See also No. 6.)

No. 5, on Arsakes IV., forms PAT $\omega \nu$, or Rhage in Media.

No. 6, on Arsakes IV. and VI., forms APEAKıias, or Arsakeia. (See No. 4.) It is apparently this monogram which Lindsay reads as Drangiana. But that country, with its capital of Zarang or Darang, was not acquired by Parthia until the reign of Arsakes VI. or Mithradates the Great. I have, however, seen two copper coins with a similar monogram, which I read as $\Delta O$, and which is perhaps intended for $\Lambda \mathrm{AO} \Delta$ ıкєıs, or Laodikeia. MM. Rollin aud Feuardent also read $O \Delta$ in their priced catalogue.

No. 7, on Arsakes Vl., forms XAPAкıs, or Kharax, a town in Parthia.

No. 8, on Arsakes X., XI., and XIV., forms इOTEIpas, or Soteira, a town in Ariana. In the catalogue of MM. Rollin and Feuardent it is read as ETO. On most of the specimens that I have seen the left-hand stroke is bent in the middle, and on one coin the $\Sigma$ is perfectly formed. As given by Lindsay this monogram would form rePTas, which might be taken as a variant reading of Kerta or

Karta, or Zadrukarta, the capital of Hyrkania. Strabo calls it simply Karta.

No. 9, on Arsakes X., XIII., and XV., and No. 10, on Arsakes X., XII., and XIV., form TITPavoкepras, or Tigranokerta, the capital of Armenia.

No. 11, on Arsakes X., XII., and XIV., and No. 12, on Arsakes X., XII., XIV., and XV., form ミOTepas, or Soteira, a town of Ariana, already noticed under No. 8. No. 13, on Arsakes XI., forms इO, and is most probably intended for the same place.

No. 14, on Arsakes XIV., forms AIA $\mu є 1 a s$, or Apameia, a town of Media near Rhagæ.

No. 15, on Arsakes XII., forms AMOANOvetas or AПOлムшvas, for Apollonia in Assyria.

## Munograms on Bactrian Coins.

No. 1, on Diodotus I. and Euthydemus, forms Naytakas, or Nautaka, a large town in Sogdiana where Alexander wintered. It is probably Kesh, to the south of Samarkand. The summary heading of Chap. XVII. of Diodorus mentions Alexander's expedition against the Nautakæ, but the account itself is lost. According to Strabo the old capital of Samarkand was destroyed by Alexander.

No. 2, on Diodotus II. and Seleukus I., forms zapiainhe in full. Zariaspa was the capital of Euthydemus, to which he retreated after his defeat by Antiochus III. on the Arius River.

No. 3, on Pantaleon, Agathokles, Euthydemus, Demetrius, and Eukratides ; No. 4, on Eukratides ; Nos. 5 and 6, on Euthydemus; aud No. 7, on Agathokles, may all be read as $\Omega \Phi \mathrm{I} a \nu \eta \mathrm{~s}$ or $0 \Phi \mathrm{I} a v \eta \mathrm{~s}$, for Alexandreia Opiane,
or the Caucasian Alexandria, which was situated at the rpıodov, or meeting of the three roads from Bactriana, Ariana, and India. Hupiân or Opián still exists near Chârikâr, about thirty-six miles to the north of Kabul. The non-occurrence of this monogram on the coins of Antiochus II. and Diodotus confirms its identification as the name of an Indian town, as neither of these princes possessed the country of the Paropamisadæ, which was first acquired by Pantaleon and Agathokles, whose coins are found in considerable numbers at Begrâm. The Opia ' $\Omega \pi i a t$, are mentioned by Hekatæus, 10 which proves the antiquity and importance of the name.

Nos. 8 and 9, on Heliokles, I read doubtfully as OMlapps. It is in favour of this reading that the use of monogram No. 3 ceases with Eukratides.

No. 10, on Pantaleon, Agathokles, Euthydemus, Demetrius, Heliokles, and Apollodotus, I read as APA $\boldsymbol{q}^{\omega} \boldsymbol{\tau} \boldsymbol{\sigma}$, or Arachotus, the capital of Arachosia. It is found also on the coins of Seleukus I. and of Antiochus II. with the seated Herakles type, which was adopted by Euthydemus.

No. 11 occurs on coins of Agathokles, with the names of Diodotus and Antiochus on the obverse. Mr. 'Ihomas has suggested Diodotopolis, ${ }^{11}$ which agrees with my own reading of $\triangle I O A O T E I A \Sigma$, or Diodoteia, in referring the name of the city to Diodotus. I am inclined to think that Diodoteia was a new name of Alexandreia Opiane, imposed by Agathokles in honour of Diodotus, when he acknowledged his suzerainty, as $I$ find that the old monogram No. 3, or Ophiane, is reverted to by

[^24]Agathokles on the coin on which he acknowledges the supremacy of Euthydemus. This conclusion is based upon the belief that the coins which bear the joint names of Agathokles and his three successive suzerain princes must have been struck by Agathokles himself, in acknowledgement of their supremacy.

Nos. 12 and 13 occur on Antimachus Theos, and No. 14 on coins of Antiochus, with the name of Diodotus on the obverse. The last monogram is probably intended for NAГApas, or Nagara, which, according to Ptolemy, was also called Dionysopolis. This city I have identified with Begrâm, near Jalâlabad, in the middle of the Kabul valley. As Antimachus likewise uses the monogram of Dionysopolis itself, No. 18, my interpretation may not be correct. But I am unable to suggest any other reading, and it is possible that Antimachus himself may have imposed the new name.

No. 15, on Antimachus Theos and Eukratides, forms both Kamizias and masiaiai. The former is much the more probable reading, as Kapisa and Capissa are mentioned by Ptolemy and Pliny. I have identified Kapisa with the town of Kafshân or Kushân of the present day, which gives its name to the Kushân Pass of the Hindu Kush.
Nos. 16 and 17 occur on the coins of no less than twelve different princes from Antimachus Theos to Menander and Zoïlus. I read this monogram as KAPravas, or Kartana, which I have identified with the extensive ruins of Begrâm, to the north of Kabul. The continuous use of this monogram shows that it must be the name of some great city, which was almost certainly the capital of the Upper Kabul valley. The ruins of Begrâm answer this description exactly; and as the most prominent mass
of ruin, according to Masson, forms an accurate square, ${ }^{12}$ there is a very strong presumption in favour of its identification with the ancient Kartana, which Pliny says was also called Tetragonis, or "The Square." ${ }^{1 s}$ It is significant that with the adoption of this monogram that of Alexandreia Opiane falls into disuse. The two places are only a few miles apart, aud it is probable that in ancient times they were actually conuected together, like the two towns of Dehli and Shâhjahânabad. A single coin of Eukratides bears the separate letters KI, without any monogram, which might be thought to refer to No. 16 ; but this seems very improbable, as I find No. 17 ou a coin of Straton, accompanied by the compound Arian letter kra , which might even more plausibly be taken for the Arian equivalent of the Greek monogram.

No. 18 is found on the coins of Antimachus Theos, Eukratides, Straton, Menander, and Antimachus Nikephoros. It forms $\triangle \mathrm{ION} \boldsymbol{v \sigma o \pi o \lambda \varepsilon \omega s , ~ o r ~ D i o n y s o p o l i s , ~ w h i c h ~}$ I have identified with Begrâm, near Jalâlabad. The Sauskrit name is Nagarahâra, ${ }^{14}$ which has been corrupted into Nangnehar of the present day. (See No. 12.)

No. 19 is found only on some barbarous tetradrachms of Demetrius, and its true reading is therefore doubtful. I can only suggest that the two leters may be $\Sigma \mathrm{A}$; and if so, I would identify them with the monograms Nos. 29 and 30, which I read as SAMACLANAE, or Samangân, the old name of an important town between Balkh and Bamian, which is now called Haibak.

[^25]No. 20 is found on Euthydemus and Menander, No. 21 on Euthydemus, and No. 22 on Straton, Zoillus, Apollophanes, and the Satrap Rajubul. It is difficult to determine what place is intended by the first two of these monograms. Ptolemy mentious a town in Bactria which he calls Eovgrov Avaraa, and places on the Ochus river. Its position corresponds with that of the town of Maimuna on the Yukh-Darâ. Its title of avacoa shows that it was one of the principal places of the country ; but the name is doubtful, as a various reading gives Tovo $\mu$ ov. It is possible, therefore, that the true reading should be Euvv$\delta \eta \mu o v$. A single copper coin of Eukratides has the separate letters EY, which are probably intended for the same name as monograms 20 and 21. No. 22 I read as EYEYon $\mu$ aca, or Euthudemia, which Ptolemy gives as the Greek name of Sangala.
No. 20, ou the coins of Menander, must be intended for the same place, as none of his coins have been found to the north of the Hindu Kush, while we know that he made extensive conquests in India, beyond the limits of Alexander's farthest point. Sangala, or Sakaia, as it is named in the old Brahmanical and Buddhist books, was the capital of the Eastern Panjâb: and the inferior execution of the coins of Straton and Zoilus with this monogram proves that the city where they were minted was on the extreme verge of Greek civilisation. The early extinction of the Greek power in this direction is shown by the coins of the native Satrap Râjubul, which bear exactly the same types with the same monogram (see Nos. 146 and 149) as are found on the coins of Straton and Zoïlus. (See also No. 27 for another form of the monogram of Euthudemia and Sangala.

No. 23 is found on a single tetradrachm of Eukratides
in the British Museum. No. 24 occurs also on Eukratides with the type of Apollo standing. Both monograms may be read as $\Sigma \mathrm{H} \Lambda \mathrm{H}$, which would stand for Selenopolis, if such place had existed in Bactria. Its modern representative might be Siripul, which is mentioned by some of the early geographers.

No. 25, on Demetrius, and No. 26 on Eukratides, form KAIIISEAL, or Kapisa, which has already been noticed under No. 15.

No. 27 occurs on Eukratides, and a nearly similar monogram is found on the coins of Azas. I read it as इAГLAAAE, or Sangala, and the lower monogram which accompanies it on the coin as ErEraHMIAs, or Euthydemia, which, according to Ptolemy, was the new Greek name for Sangala.

No. 25 is found ouly on some tetradrachms of Euthydemus with the type of the seated Herakles resting his club on a rock in front. It forms HPAKAєtas, or Herakleia, which Pliny mentions as a city founded by Alexander, either near to, or amongst the Derbices or Derbikkæ. I think that it was probably Sarakhs, on the lower Arius river. It is curious that this monogram may also be read as $\Sigma A P A \Gamma K H \Sigma$ in full, ${ }^{15}$ but I prefer the reading of Herakleia, as the monogram is always found along with the type of Herakles.

Nos. 29 and 30 are found only on the coins of Eukratides and Heliokles. Referring to the well-ascertained monograms of Samè, in Kephalenia, I am inclined to read both of these as $\Sigma$ amaryaras, or Samangân, an

[^26]old city of Bactria, which I have already noticed under No. 19.

No. 31, on Antiochus 1I. and Euthydemus, forms I $\Omega$ Ta $\lambda \eta s$, for Iotale, in Margiana, which I have already noticed, under No. 29 of Syrian monograms, as the probable name of the Margian Alexandria, which was afterwards rebuilt by Antiochus Soter, and named Antiocheia. I conclude that it was generally called Iotale, to distinguish it from other Antiocheias.

Nos. 32 and 33, on Demetrius, may be read as TA氠InAs; but these readings are doubtful. I am not able, however, to offer any better explanation.

No. 34, on Demetrius, forms OElavns, for Alexandreia Oxiane, which being situated on the Oxus, near Zariaspa, may be identified with the modern Termed.

No. 35, on Demetrius, is doubtful.
No. 36, on Demetrius, forms $\Delta \mathrm{P} \in \psi \mathrm{as}$, or Drepsa, the metropolis of Sagdiana.

No. 37, on Demetrius and Menander, is doubtful.
No. 38, on oboli of Eukratides of late fabric, may be read as ANTIL or ПANTA; but neither of these combinations offers an approach to any of the known names of cities in Arachosia or amongst the Paropamisadæ, where these coins are chiefly found. The monogram might perhaps stand either for Antimacheia or Pantaleonopolis.

No. 59, on Eukratides, is doubtful.
No. 40, on Eukratides, I read as NIKAIAE in full ; but it is doubtful which of the two cities of this name is intended. Nikaia, of the Paropamisadæ, was near the Caucasian Alexandria, and was most probably Kabul itself; while the Indian Nikaia was opposite Bukephala, on the Hydaspes. I prefer Kabul as the more important place.

Nos． 41 and 42，on Eukratides and Hermæus，may， perhaps，be intended for the same place．The first I read as $\Phi$ APaayas，or Pharsaga，a city of Arachosia，according to Isodorus of Kharax．I possess a drachma of Deme－ trius with the separate letters ФAP forming part of a countermark，which is probably as old as the time of Eukratides，and which，I think，serve to explain this monogram．Pharsaga I have identified with Kandahar．

Nos．43，44，45，and 46，on Eukratides and Hermæus， may be read as ■PTロミПANAE，or Ortospana，which was another narae for Kabul．The coins of Hermæus are mostly found about Kabul；and rarely to the eastward．
No．47，and No． 48 joined with No．49，are found on the coins of Apollodotus；and without 49 they are both found on the money of Hippostratus and Moas．As the coins of the two latter princes have not been discovered to the westward of Peshawur，we must look for the city intended either along the line of the Indus or in the western Panjâb．I read the monogram as Kasileipas， or Kaspeira，which Ptolemy places on the bank of the Hydraotes，in the lower Panjâb；and which，therefore， corresponds exactly，both in name and in position，with the famous city of Kasyapapura，or Multân．
No．50，on Eukratides，may be read as EAMAypavas， or Samangadn，corresponding with Nos． 29 and 30，which are found on coins of the same king．
No．51，on Eukratides and Apollodotus，is doubtful．It is，perhaps，intended for AP，and would therefore cor－ respond with No．10，or Arachotus，which is also found on the coins of both princes．

No．52，on Eukratides，forms АПロ $\triangle \Lambda \square$ NEIA ，or Apolloneia．（See No．56．）

No．53，on Eukratides，Apollodotus，Hippostratus，and

Hermæus, and Nos. 54 and 55 on Hermæus, are doubt. ful. No. 54 on Hermæus may, perhaps, be intended for -YゅIANHE, or Ophiane, in accordance with the spelling of Hupian, which was adopted by the Emperor Baber.

No. 56, on Eukratides, forms ADOAムcras, or Apollonia. (Sec No. 52.) No place of this name is recorded in the lists of the geographers; but the reading is so obvious that I am tempted to suggest the proballe foundation of a city of this name by Eukratides, who was a worshipper of Apollo.

No. 57, on Eukratides, forms OПI or ПО ; but I am unable to refer the monogram to any known name.

No. 58 is found on the coins of no less than twelve different princes. It occurs first on the coins of Eukratides, but is not used at all by Apollodotus, his presumed son and successor. It is the commonest monogram on the coins of Antimachus II., Philoxenes, Lysias, Antialkidas, and Menander ; and, as the coins of Antimachus and Straton were not discovered at Begrâm by Masson, I presume that it must represent some city either in the lower Kabul valley or in the Panjâb. I read it as $\Delta$ HM $^{2}$ роги, or Demetrias. There was a city of this name in Arachosia noted by Isidorus of Kharax ; but it seems quite impossible that this can be the place intended, as the coins of only one of the twelve kings who use the monogram-namely, Eukratides-are found in Arachosia. Colonel Stacy, for instance, did not obtain a single coin of Menander during his long residence at Kandahar. I am quite satisficd, therefore, that we must look to the eastward for the place represented by this monogram; and I think that the famous old city of Peukelaotis, or Hashtnagar, to the north of Peshawur, which is otherwise unrepresented, has a fair claim to be identified with
this unrecorded city of Demetrias. We learn from Strabo ${ }^{16}$ that Demetrius, the son of Euthydemus, made conquests in India ; and, as we find the name of Euthydemia imposed on Sangala in honour of his father, it is, I think, only fair to infer that he must have given his own name to some other city. M. Chabouillet ${ }^{17}$ objects to my reading of this monogram, not only that its component parts do not comprise the letter $M$, but also that they unmistakeably present either a $\Phi$, or an $\Omega$, neither of which letters is found in Demetrias. Now, both of these assertions I am prepared to contest ; and I cannot, perhaps, refer to any more satisfactory refutation of his opinion than to M. Dardel's drawing of the monogram on the gold 20stater piece of Eukratides that accompanies M. Chabouillet's essay, in which the letter M is most clearly defined. I may add, however, that I have examined no less than three hundred and fifty examples of this monogram, and that, though the sloping strokes of the M are not always brought downwards to the foot of the $T$, yet in no single instance have I seen them forming a curve which could be mistaken for the lower portion of a flatheaded and abnormal $\Phi$. I therefore adhere to my reading of the monogram as composed of the letters $\triangle H M H T$; but I do not presume to offer more than a suggestion that the combination may be intended for Demetrias.

No. 59, ou Eukratides, is only a new form of the last, as it reads $\triangle \mathrm{HMH}$.

No. 60, on Eukratides, is doubtful.
No. 61 is found on Heliokles only. It forms KHAP-

> 16 "Geograph." xi. ii. i.
> ${ }^{17}$ Revue Numismatique, 1867, p. 40.1.
ovosas, which is the Cadrusi of Pliny, ${ }^{18}$ and the Cadrusia of Solinus. ${ }^{19}$ This town was built by Alexander, and as it was at the foot of the Caucasus, and near Alexandria, I think that it may possibly be the Koratds of Masson, ${ }^{20}$ which he describes as a large ruined city to the north of the Kabul River, and six miles to the north-east of Begrâm.

Nos. 62, 63, and 64, on Heliokles, may, perhaps, be read as dates; namely, 81 and 83 of the Bactrian æra, which, deducted from 246 в.c., the date of Bactrian independence according to my reckoning, give b.c. 165 and 163, in perfect accordance with all that we know of the probable date of Heliokles.

No. 65 is found on Heliokles, Archebius, Straton, Menander, and the Indo-Scythian king Moas. I read it as NIKAIAS in full. On the coins of Heliokles and Archebius I believe that the monogram is intended for the Nikaia of Arrian, ${ }^{21}$ which, as it stood between Alexandria and the Kophes river, I have identified with Kabul. But this cannot be the place intended on the coins of the Indo-Scythian king, which are found chiefly in the Panjâb. I would therefore refer his monogram to Nikaia on the Hydaspes, which I have identified with the old town of Mong, on the eastern bank of the Jhelam, opposite Jalâlpur. The same monogram, on the coins of Straton and Menander, I am inclined to refer to this Indian Nikaia.

[^27]No. 66, on Heliokles and Apollodotus, is doubtful. It forms moz.

No. 67, on a single bilingual silver coin of Heliokles, may be read as $\square P T \square ミ \Pi A N A \Sigma$, or Ortospana, another name for Kabul : but this reading is extremely doubtful.

Nos. 68, 69, and 70, are found on the Philopator coins of Apollodotus and on Moas. I read the combination as andpananas, or Andrapana of Ptolemy, a city to the west of the Indus, and to the south of Dionysopolis, which I have identified with Draband. On a large copper coin of Apollodotus found in the Banu valley this monogram is accompanied by two Arian letters, Ada or Andra, which would thus appear to confirm the accuracy of my reading.
No. 71, on Apollodotus, forms KIB.
No. 72, on Hermæus, forms Kabovpas, or Kabura, of Ptolemy, the modern Kabul.

No. 73, and No. 74 joined with 75, on Apollodotus, Zoilus, and Dionysius, form $\Delta$ IOAOTEIas, or Diodoteia, which is partly repeated in the Arian letters of No. 75 as Diu. I have identified Diodoteia conjecturally with Ophiane, which name is not found on the coins of Apollodotus, although he must certainly have possessed that city. It is also possible that he may have claimed descent from Diodotus, which would account for his revival of the name.

No. 76 is found on the Philopator coins of Apollodotus, and on those of the Indo-Scythian princes Moas and Azas. It forms ANDPAtaras, or Andrapana, which has already been noticed under No. 68. It may, however, also be read as banafapad, or Banagara of Ptolemy, which is, perhaps, the modern town of Banu, to the west of the Indus.

No. 77, on Apollodotus, forms 「azakas, or Gazaka, which I have identified with Ghazni. It is the Gazos of Dionysius.

No. 78, on Apollodotus, forms nikaias, or Nikaia, which may be either Kabul, or Mong on the Jhelam. The former, I think, is the more probable.

No. 79, on Apollodotus, forms AAEEANAptas, or Alexandreia; but this reading is perhaps doubtful, as I believe that each separate city of this name was distinguished by its original native appellation. But I am unable to suggest any other probable reading. The combination may also be resolved into ADEA, or EEAI or CANEA, but none of these offer an approach to any recorded name.

No. 80, on Apollodotus, forms $\Delta I K$.
Nos. $81,82,83$, and 84 , are the most common monograms on the square copper coins of Apollodotus. I read No. 81 as MIT, and the other three as MITP, but I am unable to apply either of these combinations to any recorded name. No. 84 may be read as mitpaias, or MITPANAE, in full; and this reading suggests a guess that either Eukratides or Apollodotus, both worshippers of Apollo, after exhausting the Greek names of Apollonia and Heliopolis, may have designated some other city by the Persian name of the sun, as Mitraia or Mitrana. We know, at least, that the ruins of a large city, eight miles to the north-west of Begrâm, are still called Merwân by the Muhammadans and Milwân by the Hindus, ${ }^{29}$ both of which names seem to preserve a trace of the Persian Mithra or Mihr.

No. 85, on Apollodotus, is found only on a few rare
coins with No. 10, or Arachotus, and cannot therefore be the name of a place. It forms ANTI or ANTANA.

No. 86, on Menander, forms MIT, for which see No. 81.
Nos. 87 and 88, on Menander, form MENav $\delta \rho \varepsilon a s$, or Menandreia, of which name we have no record. But as Menander had a long reign, it is most possible that he followed the example of his predecessors in naming some city after himself.

No. 89, on Menander, is doubtful.
No. 90, on Menander, may be read as HлIOПOムєшs, or Heliopolis, which possibly may have been the Greek name of Taxila, where, according to Apollonius, there existed a famous temple of the sun. See No. 98.

No. 91, on Menander and Moas, is doubtful. It forms AMY or AYM.

Nos. 92 and 93, on Menander, form EZ; and Nos. 94 and 95, on Menander, form E $\Delta$ or $E \Lambda$.

No. 96 joined with 97, the Arian compound letter San, is found on Menander.

No. 98, on Menander, is doubtful; but by reading M upside down, as in the monograms on the Macedonian coins of Demetrius, the combination will form $\triangle$ HMHT, like No. 58.

No. 99, on Menander, I read doubtfully as НАІОПОАєшs, or Heliopolis.

No. 100, on Heliokles, is similar to No. 101, which is also found on Heliokles as well as on Agathokleia and Hermæus. It is perhaps intended for $\triangle$ HMHT by reading the T sideways; but without that letter it will still represent $\triangle H M H$ for Demetrias.

No. 102, on Menander, is doubtful.
No. 103, on Menander, is similar to No. 101, and is probably intended for $\Delta$ HMHTpeas.

No. 104, on Apollodotus, is doubtful.
No. 105, on Amyntas, forms MY.
No. 106, on Epander, is doubtful. It forms eik or KEZI.

No. 107 joined with $\Sigma$, on Philoxenes, appears to be an incomplete form of No. 150, on Philoxenes, Diomedes, and Theophilus, which I read as Aneeanapeas इupiavns. No. 108, which is invariably joined with $\Sigma$, I take to be another form of the same monogram. It is found on the coins of Straton, Antialkidas, Lysias, and Philoxenes. The occurrence of these monograms ou the coins of Philoxenes, which were not found by Masson at Begrâm, points to an eastern position, and the invariable addition of the letter $\Sigma$ to the right of the monogram would seem to indicate a second name. Both of these requirements are fulfilled by my reading of Alexandreia Soriane, which, according to Stephanus Byzantinus, ${ }^{\text {,2 }}$ was situated in India, and which I have already identified with the large ruined town of Shorkot in the Western Panjâb.

No. 110, on Hippostratus, is accompanied by the Arian letters No. 111, forming lo and cha; by No. 112 forming pri and cha; by No. 113, forming $n a$ and $l o$; and by No. 114, forming $t s a$. These Arian letters are not found together, but in separate places on the coins. Thus cha is always found in the opposite half of the field to the Greek monogram, while some one of the other letters occupies the exergue. I infer, therefore, that cha, or its equivalent tsa, as it is pronounced in the Western Panjâb, is most probably the first letter of the Greek monogram, which I would read as beginning with EAT or ETA. The

[^28]Arian reading of Chhatrapa for the Greek Earpants is in favour of this interpretation; but I am unable to apply it to any recorded name. I am, however, inclined to think that there may be no connection with the Arian letter cha, and I would, therefore, prefer reading the Greek monogram as TAEIAAS in full, as nearly all the coins of Hippostratus have been found in the districts of Hazâra and Râwal Pindi, which formed the ancient province of Taxila.

No. 115 is always joined with No. 116, or the Arian letter $a$, on the coins of Hippostratus. It may be read as APT, and might perhaps be intended for APToapta, a city noted by Ptolemy to the west of the Indus.

No. 117, on Straton, and No. 118, on Agathokleia, may be read as $\triangle$ HMHTPIov, or Demetrias, for which name see Nos. 58 and 103.

No. 119, on Artemidorus, is doubtful.
No. 120, on Artemidorus, forms APTEMI, and may be intended for Artemisias, in honour of the goddess whose name is borne by the king. Similar monograms, Nos. 124 and 130, are found on Hermæus. All of them, however, may be read as MITPA (See No. 82), and this is perhaps the name intended.

No. 121, on Hermæus, is doubtful.
No. 122 and 123, on Hermæus, form Гazakas, or Gazaka, which is probably the modern Ghazni.

No. 124, on Hermæus. (See No. 120).
No. 125, on Hermæus, forms AN $\triangle$ PAMANAE, or Andrapana, for which see No. 67.

No. 126, on Hermæus, forms $\square P T \square \Sigma \Pi A N A \Sigma$ in full. (See Nos. 43 and 45.) As No. 127 is joined with this monogram it cannot be taken as the name of a city. It forms XロY.

Nos． 128 and 129，on Hermæus，form MOY．
No．130，on Hermæus，has already been noticed under No． 120.

Nos． 131 to 135，on Hermæus，are doubtful．
Nos． 136 and 137，on Hermæus，form KAPTAvas，or Kartana．（See No．16．）

No．138，on Antialkidas，is perhaps a blunder for No． 58．But as it now appears it is quite distinct，and may be read as KAミ $\pi \varepsilon \iota \rho a s$ ，or Kaspeira，which I have identified with Kasyapapura，or Multan．

No．139，on Hermæus，forms $\square$ 中Iavps，or Alexandreia Ophiane．（See No．3．）

Nos． 140 and 141，on Hermæus，are doubtful．Both of them may be read as $\square$ 中I；but the first has another stroke，and may have been intended for the same mono－ gram as No． 139.

Nos． 142 to 149 are found on coins of different princes， but of the same types．The Greek monogram I read as EYEY $\delta \eta \mu \mathrm{c} a \mathrm{~s}$ ，or Euthydemia，which was the Greek name of Sangala，the capital of the Eastern Panjâb．On No． 142 of Straton the Arian letters read Ara or Ada；on No． 143 of Straton they are doubtful，but seem to read Viraha；on No． 144 of Straton they read $A b h i$ ；on another of his coins there is the single letter $S a$ ；and on his priyapati coins there is the compound letter Bo．On No． 145 of Zoilus the monogram is accompanied by the Greek letters BO，and the Arian compound Bo；on No． 146 of Zoilus and of the Satrap Râjubul the Arian letters read Husti；and on No． 147 of Zoilus they read Indra． On No． 148 of Apollophanes the Arian letters read Mahi； and on No． 149 of Râjubul they read Aga．As Abhi， Hasti，Indra，and Mahi，are all Hindu men＇s names，I presume that the others are the same．Hasti and Bo are
the only combinations that appear on the coins of different princes. The first most probably refers to two separate individuals; but the second, which is found on the coins of Straton and Zoilus is, I think, intended for the same person. Altogether there are nine distinct names, or portions of names, represented in these Arian characters, all of which $I$ am inclined to accept as belonging to the native Indian Governors of Euthydemia or Sangala under the Greek princes Straton, Zoilus, and Apollophanes, and afterwards under the Indian Satrap Râjubul.

On the base silver coins of Rajubul already published by me he takes the titles of Chhatrapa and Maha Chhutrapa in Arian characters. These coins were obtained at Mathura; but I have since procured more of the same kind in the Panjâb, and others with old Indian characters at Mathura. As his son Saudâsa, of whom I possess several coins and one inscription, takes the same lofty title of Maha Kshatrapa, I conclude that both father and son were the rulers of North-west India and of the Eastern Panjâb shortly after the decline of the Greek power.

No. 150, on Philoxenes, Diomedes, and Theophilus, has already been noticed under No. 107, as being probably intended for Alexandreia Soriane, or Shorkot in the Western Panjâb.
coins of alexander's successors in The east.

# Part I.-Greeks of Bactriana, Ariana, and India. 

 (Continued from p. 76.)By Major-General A. Ounningham.

## DATE OF BACTRIAN INDEPENDENCE:

The rise of the independent kingdoms of Parthia and Bactria took place about the same time. According to Justin, the Parthians revolted in the reign of Seleukus, the great-grandson of Nikator, during the first Punic war, when L. Manlius Vulso and M. Atilius Regulus were consuls. 1 In this passage, however, two distinct dates are mentioned; and as each is supported by other ancient authorities, it has been suggested by St. Martin that two distinct events have probably been confounded together. 'The accession of Seleukus II. Kallinikos, the greatgrandson of Nikator, is fixed by Cliston in January, 246 в.c., while the consuls named by Justin are those of the year 250 b.c. In favour of the latter date we have

[^29]the Armenian translation of Eusebius, which gives Olymp. 132-3, or в.c. 250, as the date of the Parthian revolt; also Samuel, the Armenian presbyter, and Moses of Khorene, who assign it to the eleventh year of Antioclus Theos, and the Persian Mirkhond, who mentions seventytwo years after Alexander. Other authorities, perhaps, refer to the same early date, as the Armenian Johaunes Katholikos, who gives the sixtieth year of the Seleukidan æra, or в.c. 252, and Jerome's Latin translation of Eusebius, and the Greek chronologist of Scaliger, both of whom assign it to Olymp. 133-1, or b.c. 248.
The actual names of the consuls given by Justin belong to the year 256 в.c. ; but as M. Atilius Regulus was only consul subrogatus, the year would have been named after the two consuls elect, or suffecti, who, according to the fragments of the "Capitoline Fasti," published by Pighius, were A. Manlius Vulso and Q. Cædicius. St. Martin and Dr. Scott ${ }^{2}$ have therefore adopted the year 250 b.c., when the consuls-elect were L. Manlius Vulso and C. Atilius Regulus. There is a disagreemeut in the prenomen of Regulus; but if the fragments of the "Capitoline Fasti" are correct, there is a similar discrepancy in the prænomen of Manlius Vulso of 256 b.c., which should be A. and not L., as given by Justin. I agree, therefore, with St. Martin and Dr. Scott in adopting 250 b.c. as the date intended by Justiu for the revolt of the Parthians, which is confirmed by Eusebius, and the other authorities already quoted.

The two distinct events to which St. Martin refers these

[^30]two different dates of Justin are the revolt of Arsakes in b.c. 250, and the actual foundation of the Parthian monarchy by his brother Tiridates some years later.

The revolt of Arsakes was related in the "Parthica" of Arrian, of which we now possess only some apparently discrepant fragments preserved by Photius and Syncellus. According to the former, the brothers Arsakes and Tiridates, descendants of Phriapites the son of Arsakes, were petty chiefs under Pherekles, the satrap of Parthyene, appointed by Antiochus Theos. According to the latter, the brothers, descended from Artaxerxes, were petty chiefs in Bactria under the Macedonian Agathokles, the Eparch of Persia. By Persia we must understand Parthia, as the Parthians were become the actual rulers of Persia, and the two names are used indifferently by later writers, including Syncellus himself, who records that Arsakes ruled for two years over the Persians. ${ }^{3}$ The discrepancy in the name of the progenitor is accounted for by the statement of Ktesias that Artaxerxes Muemon, before his accession to the throne, bore the name of Arsika. The disagreement in the name of the Macedonian governor is more difficult to explain; but as Phereklês is the Macedonian form of Periklês, it is possible that $\phi \in \rho є \kappa \lambda \eta s$, or "wide-fame," may have been used either intentionally
 fame."

From these explanations it appears that the brothers Arsakes and 'Tiridates were petty chiefs subject to Pherekles, or Agathokles, the Macedonian governor of Parthia under Antiochus Theos. Strabo mentions that some authors called Arsakes a Scythian of the Dahæ

[^31]Parni, and others a Bactrian. Now, the Parni were seated on the banks of the Ochus, a southern tributary of the Oxus, and therefore Arsakes might with equal accuracy be described either as a Bactrian or as a Scythian. The limits of the different satrapies are unknown; but as Margiana lay between Parthia and Bactriana, it may have belonged to either ; and, as Arsakes is said to have been subject to the governor of Parthiene, I conclude that Margiana must have formed part of the satrapy of Agathokles.
Both Photius and Syncellus agree that the Macedonian satrap, having offered an insult to the young Tiridates, was slain by the brothers, who induced the Parthians to revolt. Arsakes became their king; but having been killed by a lance after a reign of only two years, he was succeeded by his brother Tiridates, who reigned thirtyseven years.

The account of Justin is different, although it clearly refers to the same story. ${ }^{4}$ According to him, Arsakes was a man of uncertain origin, but of tried valour, who lived by plunder. Being freed from his fear of Seleukus after his defeat by the Gauls, Arsakes invaded Parthia with a band of robbers, and having slain the satrap Andragoras, seized the government of the nation. According to this account, the slaughter of the satrap of Parthia did not take place until after the battle of Ankyra in b.c. 243. But it seems probable that Justin has jumbled together two distinct events under this one date, as he had previously given an earlier date for the

[^32]Parthian revolt. I would therefore assign the slaughter of Andragoras to his earlier date of b.c. 250, and the invasion of Parthia by Arsakes to the later date. His account would then agree very closely with that of Photius and Syncellus.

The later date for the establishment of the Parthian monarchy is supported by the weighty authority of Strabo, as well as by the independent testimony of Suidas and Appian. Strabo's account is specially important, as it refers to the rise of both kingdoms, of Bactria as well as Parthia. His words are : -" Disturbances having arisen in the countries beyond Mount Taurus, in consequence of the kings of Syria and Media, who possessed the tract of which we are speaking, being engaged with each other, those who were entrusted with the government of it occasioned first the revolt of Bactriana; then Euthydemus and his party the revolt of all the country near that province. Afterwards Arsakes, a Scythian, invaded Parthia, and made himself master of it." Before discussing the several facts stated in this important passage, it is necessary to note that Appian places the revolt of the Parthians at the death of Antiochus Theos, or in b.c. 246 , and Suidas at 293 years after the beginning of the reign of Cyrus, or in в.c. $539-293=246 .{ }^{6}$

The kings of Syria and Media mentioned by Strabo

[^33]are geuerally supposed to be Seleukus Kallinikos and his brother Antiochus Hierax. But there is a grave oljec. tion to this identification in the fact that Hierax never obtained possession of any part either of Syria or of Media. There was also no difference between the brothers until after the defeat of Seleukus by Ptolemy, in B.c. 244, when Hierax refused his aid, and openly aspired to the sovereignty of the whole kingdom. ${ }^{7}$ If Strabo alluded to these disturbances between the brothers, then the revolt of Bactria must be fixed about b.c. 240, and the invasion of Parthia by Arsakes somewhat later, or about b.c. 238, the very year in which Arsakes himself' is said to liave been attacked by Seleukus. It seems to me, therefore, much more probable that the king of Syria alluded to by Strabo is Ptolemy Evergetes, who took possession of Seleukeia and the whole of Syria shortly after the death of Antiochus Theos in b.c. 246. Seleukus retired across Mount 'laurus, while Ptolemy pursued his couquest beyond the Euphrates, where he received the submission of Mesopotamia, Babylonia, Susiana, Persis, and Media, and of all the provinces of Upper Asia as far as Bactria. ${ }^{8}$ Ptolemy was theu compelled to return to Egypt by domestic disturbances, and Seleukus rapidly

[^34]recovered the eastern provinces of his kingdom, and in b.c. 242 founded Kallinikon on the Euphrates. But Ptolemy still held Syria for himself; and so firm was his grasp that the strongly-fortified capital of Seleukeia, on the Orontes, remained in the possession of the Egyptian kings for a quarter of a century, until it was recaptured by Antiochus the Great, ${ }^{9}$ about b.c. 220.

From this discussion it would appear that Strabo referred the rise of the Greek kingdom of Bactria to the period immediately succeeding the death of Antiochus Theos, in January, 246, when Ptolemy Evergetes invaded Syria to avenge the murder of his sister Berenike. As the authority of Strabo is of great weight, and as his date is confirmed by both Appian and Suidas, I have no hesitation in adopting the year b.c. $2 \not 46$ as the true period of the foundation of the Bactrian monarchy. This date is not inconsistent with the statement of Justin in the passage already quoted, in which, after noting that the Parthians first revolted in 250 b.c., and that the differences between the two brothers, kings Seleukus and Antiochus, gave them impunity, he adds, "at the same time also Theodotus, governor of the thousand cities of Bactria, rebelled." ${ }^{10}$ This statement has usually been accepted as referring to the earlier date of b.c. 250 ; but it appears to me that Justin's expression, eodem tempore, refers rather to the whole period between b.c. 250 and the termination of the war betwixt the brothers. Under this view, the statement of Justin is consistent with the accounts of Strabo, Appiarı, and Suidas, who assign the

[^35]Bactrian revolt under Diodotus to the year 246 b.c., immediately following the death of Antiochus Theos.

The same date is perhaps intended by the Eastern authors, according to whom Sansârchaud, or Sandrokottus, assumed the imperial dignity after the death of Phûr, or Porus, and with his son possessed the empire of India for seventy years. ${ }^{11}$ They were succeeded by Yona, that is, by the Yauanas, or Greeks. Now Porus was assassinated by Eudemus in b.c 316, ${ }^{12}$ from which, deducting seventy years, we obtain the year b.c. 246 for the accession of the Yona to sovereignty ; that is, as I understand, for the Greek occupation of the Kabul Valley, which had been previously ceded to the Indians by Seleukus Nikator.

One other source of information still remains to be noticed-namely, the rock inscriptions of the Indian king Asoka, which mention the names of no less than five contemporary Greek princes. Asoka began to reign in b.c. 263, but was not inaugurated until four years later; and as some of these inscriptions refer to the tenth and twelfth years after his inauguration, it is certain that these particular edicts could not have heen published before b.c. 249 and 247 . It is equally certain that those edicts which mention the name of Antiochus must have

[^36]been drawn up before b.c. 246, when he was succeeded by his son Seleukus Kallinikos. The Greek princes named in these inscriptions are Antiochus, Ptolemy, Antigonus, Magas, and Alexander. ${ }^{13}$ In a second place, where Asoka mentions by name Antiochus only, he seems to refer to the Greek satraps of Antiochus in the following words, samanta lajane sadata, which Wilson renders, " and those who are near to Antiochus everywhere;" ${ }^{1 s}$ but which, I think, may be more simply translated by "his military governors everywhere." I conclude, therefore, with some confidence, that if the Bactrian revolt had taken place as early as the usually accepted date of в.c. 250 , the names of Diodotus and Pantaleon would certainly lave appeared in these edicts of Asoka. It is admitted that the edicts were not all inscribed on the rock at the same time; but as the particular edict which contains the names of the five Greek princes was certainly engraved subsequent to those which contain the dates of the tenth and twelfth years after Asoka's inauguration, I conclude that no fresh treaties had been made with other kings down to b.c. 247. The testimony derived from these Indian records is therefore strongly in favour of the later date of в.c. 246, which I have adopted, on the authority of Strabo, as the true period of the rise of the Greek kingdom of Bactria.
The Indian date of Asoka depends on the date of Buddha, as his inauguration is stated to have taken place 218 years after the death of the Indian reformer. If we adopt the Ceylonese date of the Nirvdna in b.c. 543, the inauguration of Asoka will fall in b.c. 325, and the accession of his graidfather, Chandra-Gupta, in e.c. 381 ; both

[^37]of which dates we know to be about sixty-six years in error, ${ }^{15}$ as Sandrokoptos or Chandra. Gupta was a contemporary of Seleukus Nikator, and his grandson Asoka, was a contemporary of Magas, King of Cyrene. But the true date of Buddha's death, accorrling to my view, was в.c. 477, and, consequently, the accession of ChandraGupta took place in b.c. 315, and the inauguration of Asoka in b.c. 259. The amount of error is exactly sixtysix years, which may, perhaps, have originated in the following manner. I suppose that the Buddhist annals of the Panjâb and Afghânistan were dated in the æra of the Greeks of Bactriana and Ariana, beginning in b.c. 246, and that after the Greek dominion had passed into the hands of the Indo-Scythian Sakas, who were half Parthians, the Bactrian æra fell into disuse, and was superseded by that of the Seleukidæ, which we know had been adopted by the Parthians. At a later date, when the Buddhists of Western India began to compile the annals of their religion, and when the Bactrian æra had become obsolete and unknown, they referred all the dates in the ancient records to the well-known Parthian æra of the Seleukidæ, and thus raised the death of Asoka, which would have appeared under the jear 20, or b.c. 226 , to 292 в.c. (or 312-:0), which is just sixty-six years too early. As he reigned thirty-seven years, his accession would have been placed in $292+37=329$, instead of $226+37=263$ в.c. ; and, similarly, the death of Buddha, which occurred 216 years prior to Asoka's accession, was
${ }^{16}$ Chandra-Gupta succeeded to power at the same time as Seleukus I., or about b.c. 315, which, deducted from 381, leaves 66 years ; and Asoka was a contemporary of Magas in 259 в.c., which, deducted from 325 , leaves also 66 years as the amount of error.
referred to $329+214=543$ н.c., instead of $263+214=$ 477 в.c.

A similar mistake was of very frequent occurrence between the date of Alexander's death, in D.c. 323, and the initial point of the Seleulkidan æra in в.с. 31\%. Thus Philostratus states that the natives of India computed 350 years, ${ }^{18}$ from the battle with Porus to the date of the visit of Apollonius, in the reign of the Parthian Bardanes, a.d. 42 to 45 . As the battle was fought in 326 b.c., this would make the date of Bardanes $350-3: 5=25$ a.d.; but if referred to the æra of the Seleukidæ, the date will be $350-311=39$ a.d., or close to the true time. Similarly, Moses of Khorene states that Arsakes I. of Parthia began to reign sixty years after Alexander, or $323-60=263$ в.с. instead of $312-60=252$ в.c.

The corrected date of b.c. 477 was first proposed by me in 1854, ${ }^{17}$ when I suggested its probable identity with the æra of Sri Harsha, which was in use at Mathura and Kanoj in the time of Abu Rihân, and which, he was informed, dated as early as 400 years before Vikramaditya, or b.c. 457 . But when a round number of centuries is thus given on hearsay evidence ${ }^{18}$ as the commencement of an æra, it appears to me that it can be accepted only as an approximation, and as the proposed date of the Nirvâna of Buddha in B.c. 4.77 is only twenty years in excess, I think it highly probable that the period of 400 years was simply the nearest round number of centuries from the actual time intended. This date of b.c. 477 for the Nirvana of Buddha has since been adopted by Dr. Max Müller, in his "History of Sanskrit Literature,"

[^38]published in 1859. ${ }^{19}$ Professor Goldstücker, however, contests the necessity for this correction, and adheres to the Ceylonese date of Buddha, ${ }^{20}$ although he adopts the correction of sixty-six years for the dates of ChandraGupta and Asoka, thus creating a gap in the previous history, which is left unfilled. But an examination of the Ceylonese history shows that a correction of sixty or seventy years is absolutely necessary in the very period contemporary with Asoka. Thus, to Mutasiwa and his five sons is assigned the period from b.c. 367 to 205 , or 162 years, which, for two generations, is simply impossible. By applying the correction of sixty-six years, which I have shown to be necessary in the history of Asoka himself, the joint reigns of Mutasiwa and his five sons will amount to ninety-six years, which is the extreme period hitherto attained by two generations either in India or in Europe. ${ }^{21}$ By this correction Devenipiatissa of Ceylon becomes a contemporary of Asoka, as is stated in the Mahawanso.

## History.

After the death of Antiochus Theos, when Syria was invaded by Ptolemy Evergetes, the satraps of Bactria and other provinces of the East, taking advantage of the disturbed state of the empire, rebelled against Seleukus Kallinikos and established independent kingdoms. As

[^39]similar causes usually produce similar results, it will be instructive to compare the state of the great Syrian empire alter the death of Antiochus II., with that of Northern India shortly after the death of Firuz Tughlak. In A.d. 1400 , when the kingdom of Delhi was invaded by Timur, the governors of Jonpur, Malwa, Gujarât, Multân, Samâna, Biâna, and Mahoba, taking advantage of the weakness of their suzerain, openly rebelled, and became independent sovereigns. The last three rebels were soon reduced ; but the ruler of Multân eventually became King of Delhi ; and the rulers of Jonpur, Malwa, and Gujarât transmitted their crowns to their descendants. And, like as the petty Greek states of Ariana and India were all conquered by the Indo-Scythians about 120 years after the death of Antiochus, in the same manner were the different Muhammadan kingdoms of Northern India overthrown by the Moguls under Baber just 126 years after the invasion of Timur. During this period no less chan eleven princes, of four different families, reigned in Delhi; eight princes, of three different families, in Jonpur; twelve princes, of two different families, in Malwa; nine princes, of a single family, in Gujarât; and three princes, of three different families, in Samâna, Biâna, and Mahoba; or, altogether, forty-three princes, of thirteen different families. As we possess the coins of no less than twenty-nine princes with pure Greek names, who must have reigned in Bactriana, Ariana, and India, within a similar short space of 120 years, the state of the kingdom of Delhi, after the death of Firaz and the invasion of Timur, appears to me to offer a very fair and useful comparison with that of the ancient Syrian monarchy after the death of Antiochus II., and the invasion of Ptolemy Evergetes.

From the revolt of Diodotus in b.c. 246 to the IndoScythian conquest of Kabul and Westerı India in b.c. 126 , or in the short space of 120 years, we have to arrange the names of these twenty-nine pure Greek princes. It is admitted by all inquirers that they could not possibly have reigned in succession over one kingdom, as the average length of reign would be only four years. It is certain also that there could not have been more than five or six generations of any one family during that period; aud even allowing the possibility that two brothers might have succeeded to the throne in each generation, there would still remain some eighteen or twenty princes to be accounted for, who might be assigned to two or more contemporary kingdoms. But as it is barely possible that these twenty-nine princes were confiued to only three or four families in successive generations, I conclude that they must have belonged to several different families, as we have seen was actually the case in the analogous circumstauces of the Delhi kingdom. Sometimes the members of one family might dispute amongst themselves for the throne of a single petty state, whilst at other times the members of different families might contend for supremacy. Thus at one time the sovereignty may have been in the hands of a single powerful king like Euthydemus, or Eulkratides, or Menander ; whilst at another time it may have been divided between several contemporary princes, who held a precarious sway over the several petty kingdoms of Alexandria, Nysa, and 'Taxila; and perhaps other places, such as Ortospana and Sangala.

We know from their coins that Antimachus was a contemporary of Diodotus, and that Agathokles was a contemporary of Diodotus, Euthydemus, and Antiochus

Nikator. We learn from history that Diodotus was succeeded by his son, who was supplanted by Euthydemus; and that Demetrius, the son of Euthydemus, was supplanted by Eukratides, who was himself murdered and succeeded by his own son, of name unknown. We cau see, from their portraits as well as from the actual identity of their coin types, that Pantaleon and Agathokles must have belonged to the same family ; and, from the want of similar affinities, we may infer that Antimachus Theos belonged to a different family from Euthydemus or Eukratides, and was not succeeded by his son. Here, then, we have no less than five distinct families, of which some one at least may fairly be presumed to have continued down to the final extinction of the Greek power. But, unfortunately, we have nothing but coins to guides us in this part of our inquiry ; and as it is almost entirely from similarity of type and fabric that any connexion can be inferred, we are often left in doubt whether the connexion is a family one, or only that of immediate succession of one king by another. The former connexion is certain in the case of Lysias with Antialkidas, as their names are found together on the same coin ;-and it is highly probable in that of Antimachus II. with Philoxenes, Nikias, Hippostratus, and Queen Kalliope, all of whose coins exhibit the same type of a king on horseback, which is probably that of Antimachus himself, the founder of the family. A similar connexion is perhaps indicated by the religious type of Herakles, which is found on the coins of Euthyclemus and his son Demetrius, amongst the Bactrian kings, and on those of Straton, Lysias, Theophilus, and Zoïlus, amongst the Indian kings. But as Antialkidas, the son of Lysias, wears a Macedonian helmet, he must have
claimed Macedonian descent through his mother, as Euthydemus was a Magnesian. Where so little is actually known, we may hazard a guess that Straton himself was the son of Eukratides, and the son-in-law of Demetrius, through his wife Agthokleia. Through Eukratides he would have claimed descent from Laodike, who, from the appearance of her name upon the coins, was almost certainly of royal extraction, and perhaps, therefore, a daughter of Agathokles. This conjectural connexion with the families of Agathokles and Euthydemus is the more probable from the name of Agathokleia, and from the fact that the coins bearing the joint names of Straton and Agathokleia have the seated Herakles of Euthydemus; while the copper coins of Straton himself bear the head and club of Herakles, which are found on those of both Euthydemus and Demetrius. As the same head occurs on the coins of Theophilus and Lysias, I infer that they must have been his contemporaries, and very probably his near connexions. His own name was perhaps derived through his grandmother, who, as the daughter of Antiochus the Great, ${ }^{22}$ may have been called Stratonike, which was a favourite Macedonian name in the family of the Seleukidæ. 'The last members of this group are Amyntas and his successor Hermæus, whose queen, Kalliope, would appear, from the royal horseman on her coins, to have been a descendant of the Macedonian Antimachus.

A third group of princes is distinguished by the worship of Athene Promachos, as well as by the use of the Indian

[^40]types of the elephant and humped bull. The figure of the goddess is first found on the coins of Straton and Apollodotus, and is afterwards continued on those of Menander, Epander, Dionysius, Zoïlus, and Apollophanes. Both the elephant and the bull are found on coins of Heliokles and Apollodotus; the elephant alone on the coins of Menander, Archebius, and Zoillus, and the bull alone on those of Diomedes, Epander, and Artemidorus. It seems probable that there was some family comexion between all these princes; and I am inclined to consider Menander as the son and successor of Straton ; and Dionysius, Zoïlus, and Apollophanes as the descendants of Apollodotus. Archebius is connected with Heliokles by the types of the thundering Zeus and elephant, and I think also by similarity of features.

All these various connexions, whether certain, probable, or merely conjectural, are shown in a compendious form in the annexed table, which includes all the names that are at present known of the Greek princes of Bactriana, Ariana, and India.

Conjectural Family Connexion of the Greek Princes of Bactrinna, Ariana, and India.


## Description of the Coins.

In the following description of the Greek coins of Bactriana and Ariana, I have adopted a compendious form to avoid the continued repetition of the same terms. The shape of each coin is distinguished either by a square, $\square$, or by a circle, $O$; its metal by the usual monograms, $A$, $\not \mathbb{R}^{\text {, and }} \mathbb{E}$, for gold, silver, and copper, and by $N K$ for the few rare specimens composed of nickel and copper ; and its size is noted in tenths of Euglish inches. Thus $O_{A} 22$ is a description of the 20 -stater piece of Eukratides, which is a "round gold coin, two inches and twotenths in diameter ;" and $\square \not \subset 8$ is a description of the square copper coins of Agathokles, eight-tenths of an inch in breadth. I have purposely rejected the scale of Mionnet, because it is not founded on any rational basis, but is a purely arbitrary series of unequal divisions, which has no reference to any known measure. Some common scale of measurement for all numismatic writers is highly desirable; but the scale should be uniform in its divisions, and should be founded on some actual unit of known value, as the English inch, or the French mètre.
I propose to describe the coins in separate groups, with reference to the rise, growth, and decline of the Grecian dominion in the East. The present description accordingly will be confined to the founders of the Greek power in Bactriana, Ariana, and India.
In most cases I have had access to the original coins, either in my own cabinet or in the collections of the British Museum, the East India Office, General James Abbott, and Mr. E. C. Bayley. A few illustrations have been copied from the plates of Raoul Rochette and

Mr. E. Thomas. To the latter gentleman, also, I am much indebted for the liberal communication of his MS. notes on the various collections which he has inspected. The elaborate dissertations of the learned French Academician, Raoul Rochette, ${ }^{23}$ have been of great service to me; but I am more specially indebted to the full and detailed catalogue of Mr. Thomas, ${ }^{24}$ which is by far the most ample and satisfactory notice that has yet been published of the coins of Alexander's successors in the East.

## DIODOTUS I.

1. O A 10. Tetradrachma. Pl. i., fig. 1, Mr. Sim; fig. 2, author, 252.5 grs .

Obr.-Bare diademed head of king to right.
Rer.-Zeus naked and helmeted, moving to left, with ægis on left arm, and thunderbolt in upraised right hand. In the field to left an eagle, and to right No. 1 monogram, with the letter $x$, or 8, perhaps for the year of the reign, or в.с. $247-8=239$.

Legend in two lines, bAEIAE $\Omega \Sigma \Delta I O \Delta O T O Y$.
Mr. Gibbs's specimen, 255 grs., now in the cabinet of Mr. Wigan, has a monogram forming the letters MY. My own coin is much rubbed on the reverse, and offers no monogram. Another specimen in the British Museum, 235.4 grs., is in much the same condition; and a fifth specimen, sold by auction last year, was even worse. See also Jour. Royal Asiat. Soc., yx. Pl. ii., fig. 1.

1 a. O Al 7. Drachma. British Museum, from Sir Herbert Edwardes, a very fine specimen; duplicate, author, 60.5 grs . See also Num. Chron., xiii. p. 70, and fig. 5 of Bactrian Coins.

[^41]Types the same as those of the tetradrachms. 'The monogram on the two specimens noted above, is the same as on Mr. Wigram's tetradrachm, which forms the letters MY. On the specimen engraved in the Num. Chron. the monogrum appears to be No. 1.

## DIODOTUS II. Soter.

1. O N 7. Stater. Pl.i. fig. 3. British Museum. Duplicates, Gen. Fox and author, 132 grs. ; and three or four others.

Obv. - Bare diademed head of king to right.
Rev.-Zeus hurling the thunderbolt, as on the coins of Diodotus I. In the field to left an eagle and a wreath, and to right a spear-head.

Legend, BAIAERI $\triangle I O \Delta O T O Y$.

I have seen five specimens of these gold staters, all of which have the same peculiarity in the want of the cross stroke to the letter A of BAZInESE. I notice the same deficiency in the two specimens published by Mr. Thomas. See Num. Chron., N.S., ii., Pl. iv., figs. 2 and 3.
2. O A 7. Drachma. Pl. i. fig. 4. Author, $61 \cdot 5$ grs. Obv.-Bare diademed head of king to right.

Rev.-Zeus hurling thunderbolt, as on the coins of Diodotus I. In field to left eagle and wreath, and below and to right the monograms given under No. 2.

In assigning some of these coins to Diodotus I., and others to his son and successor, Diodotus II., I have been guided chiefly by the presence or absence of the wreath, which I take to be the distinguishing feature of the coins of Diodotus 1I. On the Bactrian silver money of Antiochus II., 'Theos with the 'Thundering Zeus, there
is no wreath, ${ }^{25}$ and, consequently, I infer that the coins of Diodotus, which are without the wreath, must belong to the first king of that name, who rebelled on the death of Antiochus. On the other hand, I assign those with the wreath to Diodotus II., because I find the same wreath on the coins of Agathokles and Antimachus, which present the head of Diodotus Soter on the obverse. ${ }^{28}$ These differences, alone, appear to me to be quite conclusive, as Agathokles is known to have been also a contemporary of Euthydemus, the supplanter of the family of Diodotus. ${ }^{27}$

## ANTIMACHUS I. Theos.

1. O \& 13. Tetralrachma. Pl. i. fig. 5. Mr. E. C. Bayley. Duplicate, Dr. Mackinnon.

Obv.-Diademed head of king to right.
Legend in two lines, $\triangle 10 \triangle O T O Y \Sigma \Omega T H P O \Sigma$.
Rev.-Zeus thundering, with eagle and wreath, as on the coins of Diodotus. In the field to right No. 14. monogram.

Legend in three lines, BAEIAEYONTUE ©EOY AN'IIMAXOY.
2. O A 12. Tetradrachma. Pl. i. fig. 6., British Museum, 260 grs. Duplicates, Lady Sale, Mr. Bayley ; British Museum, Mr. Wigan, from Mr. Gibbs, 261 grs.

Obv.-Diademed head of king to right, covered with the Macedonian kausia, or flat hat.
Rev.-Poseidon standing to the front, with trident in right hand and palm branch in left. In field to right No. 13 monogram.
Legend in two lines, BAEINERE @EOY ANTIMAXOY.

[^42]2a. O A 7. Drachma. Author, $65 \cdot 5$ grs. Duplicate, British Museum.

Of same types as the tetradrachma, and with the same monogram.
$2 b . O_{R} 6$. Hemidrachma. British Museum, $31 \cdot 7$ grs.
Of same types as the tetradrachma, but with No. 15 monogram.

2 c. O A 5. Obulus. Author, 6 grs.; duplicate, East India Office. See Ariana Ant., Pl. xxi. fig. 12.

Of same types as the tetradrachma. In the field to right the letter $\Delta$.
3. O Æ 9. Di-chalkous? Pl. i. fig. 7 ; author.

Obv.-Indian elephant moving to right.
Rev.-Winged figure of Victory standing to front on the prow of a ship, with wreath in right hand and palm in left.
Legend in two lines, as on the tetradrachma.
'This coin was stolen from me in 1844, and the engraving has been taken from a pencil sketch made by myself in 1841.

## PANTALEON.

1. O $\mathbb{A 1 3}$. Tetradrachma. Pl. i. fig. 8. Author, unique, 232 grs., much rubbed. Before a rough cleaning to which it was subjected, this coin weighed 248 grs.

Obv.-Diademed head of king to right.
Rev.-Zeus, clad in the pallium, sitting on a high-backed throne, holding a sceptre in his right hand, and a small figure of the three-headed Artemis Hekate in his left hand. In the field to left No. 3 monogram.
Legend in two lines, BAEIAES乏 ПANTAAEONTOE.
(2.) O N 9. Obolus? British Museum; unique.

Obv.-Head of king as Bacchus to right, crowned with a wreath of vine leaves. A thyrsus behind.
Rer.-Panther moving to right, with left fore leg raised.

Legend in two horizontal lines，as on the tetradrachme．
2 a．О 巴 9．Di－chalkons？Pl．i．fig．9．Author，unique， 121 grs.

Of same types as the preceding，but with No． 10 monogram in field to left．

3． $\mathbb{\square}$ 9．Di－chalkous？Pl．i．fig．10．British Museum． Average of seven coins， 186.3 grs．

Olv．－Panther standing to right．
Legend in two horizontal lines，as on the tetradrachm．
Rev．－A Bacchante to left，clad in loose，flowing robes， with full Eastern trousers，holding a flower in her right hand，and apparently dancing．
Legend in two perpendicular lines，in Indian Pali cha－ racters，Räjine Pantalevast，＂of King Pantaleon．＂

## AGATHOKLES．Dikaios．

1．O A 13．Tetradrachma．Pl．ii．fig．1．Mr．Wigan，from Mr．Gibbs，${ }^{28} 261$ grs．Duplicate，M．de Bartholomæi．

Olv．－Diademed head of king to the right．
Legend in two lines，$\triangle$ IOAOTOY $\Sigma \Omega$ THPOI．
Kev．－Zeus thundering，with eagle and wreath，as on the coins of Diodotus II．In the field to right No． 11 monogram．

Legend in three lines，BAEIAEYONTOE $\triangle I K A I O Y$ АГА＠OKAEOYミ．
？．O A 12．T＇etradrachma．Pl．ii．fig．2．Mr．Wigan from Mr．Gibbe ${ }^{29} 259 \cdot 5$ grs．；unique．

Obr．－Diademed head of king to the right．
Legend in two lines，Ey＠rロHMOY ©EOY．

[^43]Rev.-Herakles sitting on a rock to left, resting his left hand on the rock behind, and holding in his right hand a club, which stands on his knee. In the field to right No. 3 monogram.

Legend in three lines, BAEINEYONTOE $\triangle I K A I O Y$ ATA@OKAEOYE.
3. $\mathrm{O}_{\boldsymbol{A}}$ 12. Tetradrachma. Pl. ii. fig. 8. Author, 255 grs ; unique.

Obv.-Diademed head of king to right.
Legend in two lines, ANTIOXOY NIKATOPOE.
Rev.-Zeus thundering, with eagle and wreath, as on the coins of Diodotus. In the field to right No. 11 monogram.

Legend in three lines, BADINEYONTOI $\triangle$ IKAIOY AГA@OKAEOYミ.
4. O $\not \mathbb{R}$ 12. Tetradrachma. Pl. ii. fig. 4. Aathor, 259 grs. Journal des Savants, 1836, p. 77 ; duplicates, Mr. Wigan, from Mr. Gibbs, 460 grs.

Obv.-Diademed head of king to right.
Rev.-Zeus, clad in the pallium, standing to the front, grasping a sceptre in his left hand, and holding a figure of Artemis Hekate in his left. In the field to left No. 3 monogram.

Legend in two lines, BAEIAE $2 \Sigma$ ATA@OKAEOYZ.
4 a. O AR 7. Drachma. Author, $65 \cdot 5$ grs.; Journal des Savants, 1834, p. 832.

Types the same as those of the tetradrachma.
4 b. O $\mathbb{R}$ 6. Hemidrachma. Author, 24 grs.; unique, but in poor condition, and very much worn.

Of same types as the tetradrachma.
5. ○ $\mathrm{N}_{\mathbb{A}}$ 7. Drachma. Pl. ii. fig. 5. Journal des Savants, 1884, p. 332.

Obv.-Head of the king, as Bacchus, to the right, crowned with vine leaves; a thyrsus behind.

Rev.-Panther to right holding a bunch of grapes in his left fore-paw.

Legend in two horizontal lines, BAEIAESI AFA@OKAEOY亡.

I have entered this specimen as a silver coin in accordance with Raoul Rochette's description ; but I strongly suspect that the metal is nickel bronze, as the types and the arrangement of the legend correspond with those of the nickel coins of Pantaleon and Agathokles, while they differ in both respects from those of the silver coins.
6. O N 9. Obolus? Pl. ii. fig. 7. Author, 129 grs.

Obv.-Head of the king as Bacchus, as on the last coin.
Rev.-Panther to right, with left fore-paw raised towards a vine. In field to left No. 3 monogram. Legend in two lines as on the last. A duplicate in my possession has the letters $\Phi \mathbf{I}$ in the field.

6 a. O NK 6. Hemiobolus? East India Office, 57 grs. Types as on the last coin.

6 b. O 巴 9. Di-chalkous! East India Office, 128 grs.
Same types as No. 6, with monogram No. 10. A duplicate, formerly in my possession, had the separate letters AP.
7. $\triangle$ ※ 7. Challious? Pl. ii. fig. 6. Author $71 \cdot 5 \mathrm{grs}$. Duplicates in British Museum and Bodleian Library, Oxford.
()hr.-Tree in a square railed enclosure.

Legend below, in Arian Pali characters, Hiduja same, "lord of the Indians."

Lirl.-A peculiar symbol common on Indian Buddhist coins, which is generally supposed to represent a Chnitya or Buddhist Stupa. The symbol on this coin, which is perhaps the earliest representation that we possess, is almost certainly intended for a Buddhist Stupa, as it is surmounted by a
crescent with the horns pointed downwards, which I take for the umbrella that usually crowns the Buddhist edifice.

Legend below, in Arian Pali characters, Akathuhrayasa, " of Agathokles."
8. $\square$ § 9. Di-chalkous? Pl. ii. fig. 8. Author: average of 14 coins $181 \cdot 2 \mathrm{grs}$.

Obr.-Panther to right.
Legend in two horizontal lines, BAInces ara@oKAEOYミ.

Rev.-A Bacchante in loose flowing robe and full Eastern trousers, holding a flower in right hand.

Legend in two perpendicular lines of Indian Pali characters, Râjine Agathuklayesa, "of King Agathokles."
(To be continued.)
coins of alexander's successors in the east.

By Major-General A. Cunningham.

In 1834, the learned French Academician, Raoul Rochette, first broached the opinion that Agathokles was the real founder of the Bactrian monarchy in b.c. 262, and that, on his murder by the brothers Arsakes and Tiridates in b.c. 256 , he was succeeded by his son Diodotus I. ${ }^{1}$ This opinion he continued to uphold in spite of the criticism of Lassen, Grotefend, and Wilson, who referred to the Indian inscriptions on the copper coins of Agathokles as offering a sure indication that he could not have reigned in Bactriana. The opinion of Raoul Rochette was adopted by Mionnet, but it has found no other supporters.

In 1843, M. de Bartholomæi published a most important and interesting tetradrachm, bearing the joint names of Diodotus and Agathokles, the former with the title of Soter only, and the latter with the titles of Dikaios and Basileuôn. ${ }^{2}$ He ascribed its issue to Agathokles as a post-

[^44]humous honour to Diodotus, the founder of the Bactrian monarchy. This assigument was adopted by R. Rochette, who republished the coin in 1844, and triumphantly pointed to it as "a proof that Agathokles must have reigned in Bactriana itself, and that he belonged to the first Greek dyuasty of that kingdom, (namely), to that of Diodotus." But he afterwards modified this opinion, and made Agathokles the immediate successor of Diodotus in Bactria. He still, however, maintained that Agathokles lelonged to the family of Diodotus; and, although he does not expressly say so, it follows, as a natural consequence of his argument, that Agathokles must have been the son of Diodotus I ., and was therefore identical with Diodotus II. of Justin.
The relation between Diodotus and Agathokles proposed by M. de Bartholomæi was first contested by Droyseu, in 1843, who argued that the title of BAEIIEYRN denoted the suhordinate position of Agathokles to his contemporary suzerain, Diodotus. I formed the same opinion when I first read R. Rochette's description of the coin in 1844; and the subsequent discoveries of other coins, which show that Agathokles held exactly the same relation to Euthydemus Theos and to Antiochus Nikator, prove that this is the only true deduction which the coins afford. This also is the opinion of Mr. Thomas, who has examined the question at length in all its bearings. ${ }^{3}$

The argument of M. de Bartholomæi is based chiefly on the value of the term baitamenn, which he takes to be a title superior to basineys. The term is used ou a single coin of Arsakes XII. of Parthia, as basineyontos

[^45]basine nn, where it takes the place of the usual bainAESE. It is used in the same way on a single coin of the Arian Arsakes; but in this instance we have the advantage of an Indian translation in Arian characters on the reverse, as Maharajasa rajarajasa, which is the usual rendering of BAEIAESS BAEIAERN. In the case of the Parthian king, who is known to have been associated with his father, I suppose that the coin with the title of bAEIAEYONTOE may have been struck during his father's lifetime, and, consequently, that it must of necessity be an inferior title to BAEIIESE. The term is also found in two of the Ptolemaic inscriptions. First, on the wellknown Rosetta stone, ${ }^{4}$ where it is the opening word; and, secondly, in the Tanaitic inscription, ${ }^{5}$ in both of which cases it would appear to mean simply "during the reign." A similar form of a new title is found on the coins of the Scythian king, Miaus, who calls himself TYPANNOYNTOZ; and a similar form of expression is now in common use in the French word, lieu-tenant. In none of these instances is there any evidence to support the view of M. de Bartholomæı; on the contrary, the evidence on the coin of Arsakes XII. of Parthia is decidedly opposed to it. But the evidence of the new coins of Antimachus and Agathokles which have been since discovered is conclusive, as it is quite impossible that Diodotus could have been tributary to both Agathokles and Antimachus, or that Agathokles could have been the paramount sovereign of Diodotus of Bactria, of Luthydemus of Ariana, and of Antiochus Nikator of Syria,

[^46]'I'he discovery of a coin bearing the joint names of Antimachus Theos and Diodotus Soter shows that the former prince must also have been subject to Diodotus. From these remarkable coins we have thus obtained the names of two other princes who were contemporary with the founder of Bactrian independence. But Agathokles would appear to have been preceded by Pantaleon, whose unique tetradrachm, both in fabric and in type, is of earlier date than the silver coins of Agathokles. The figure of the seated Zeus is like that on the coins of Alexander; while the head of Pantaleon is in much higher relief and of much finer execution than any of the portraits of Agathokles. His features also are much older than those of Agathokles; and I am therefore quite satisfied that the independent Pantaleon must be placed before the tributary Agathokles. We have thus the names of three princes, Antimachus, Pantaleon, and Agathokles, all of whom were contemporary with Diodotus. These, then, must be the Eastern satraps referred to by Justin, ${ }^{6}$ who followed the example of Diodotus in revolting against the authority of the Seleukidæ. The original revolters, according to my view, were Diodotus, Antimachus Theos, and Pantaleon. The last prince dying early, was succeeded by Agathokles, who was either his younger brother or his son. Diodotus I. was succeeded by his son Diodotus II., to whom I attribute the coins with the title of Soter, minted by Antimachus and Agathokles, who thus acknowledged the supremacy of the Bactrian king. The unique coin bearing the joint names of Euthydemus and Agathokles shows that the latter had been subjected by the

[^47]former ; and to him and to Diodotus II. I would apply the words of Euthydemus in his exculpatory address to Antiochus the Great, that he himself was not a revolter against the power of the Seleukidæ, but, on the contrary, the destroyer of the "descendants of the original rebels."

## Diodotos I.

The history of Diodotus and his son is derived from the brief statements of Trogus, Justin, and Strabo. According to these accounts, Diodotus, the Satrap of Bactriana, took advantage of the disturbances which followed the death of Autiochus II. Theos, to make himself independent. The date of his revolt has already been fixed in 246 в.c. The notice of Trogus is limited to the fact that the Bactrian kingdom was founded by Diodotus. ${ }^{7}$ Justin's account is brief, but important. " At tine same time, also, Theodotus, satrap of the thousaud cities of Bactria, revolted, and assumed the title of king; following which example, all the people of the East rebelled against the Macedonians. At that time there was one, Arsakes, a man of uncertain origin, but of tried courage, who, accustomed to live by plunder and rapine, having heard a report that Seleukus had been overthrown by the Gauls in Asia, and being thus freed from his fear of the king, invaded Parthia with a band of marauders, defeated their satrap, Audragoras, and, having put him to death, seized the government of the country. Shortly after he also took possession of Hyrkania, and thus, holding rule

[^48]over two nations, he raised a large army through fear of Seleukus and Theodotus, King of the Bactrians. But being soon freed from his fears by the death of Theodotus, he made peace and an alliance with his son, who was also named Theodotus; and not long after he overcame Seleukus, who had advanced to punish the revolters, which day the Parthians have solemnly observed ever since as the beginuing of their liberty."

The principal passage of Strabo, which has already been quoted in the disquisition on the date of Bactrian independence, mentions that those "who were entrusted with the government of it first caused the revolt of Bactriana." ${ }^{9}$ The name of Diodotus is given in another section of the same chapter, ${ }^{10}$ when speaking of Arsakes, who, " withdrawing himself from the growing power of Diodotus, caused the revolt of Parthia." A third passage merely mentions the fact that "Arsakes fled from (Seleukus) Kallinikus, and sought refuge amongst the Aspasiakæ." ${ }^{11}$

The Arsakes referred to in these passages of Justin and Strabo is Tiridates, or Arsakes II. His elder brother was killed in b.c. 248 , but the circumstances attending his death are not known. To the year immediately following, or b.c. 247, I would refer the appointment of Andragoras as satrap of Parthia, on the part of Antiochus II. Theos; and to b.c. 246 the flight of Tiridates, or Arsakes II. from Seleukus Kallinikus to the Aspasiakæ,

[^49]as mentioned by Strabo. With these Scythians he would appear to have remained until after the battle of Ankyra, in b.c. 240 , where Seleukus was defeated by the Gauls. Tiridates then returned, and, having slain the satrap, Andragoras, took immediate possession of Parthia, and shortly afterwards conquered the neighbouring province of Hyrkania. But after the conclusion of a ten years' peace with Ptolemy, and the subsequent defeat of Antiochus Hierax in g.c. 239, Seleukus was able to direct the whole power of his kingdom for the recovery of the revolted provinces. Accordingly, in 238 b.c., or the following year, Parthia was invaded by Seleukus in person. Tiridates prepared to resist, and raised a large army, partly through fear of Diodotus, King of Bactria. From this statement it may be inferred, either that Seleukus had made overtures to Diodotus, or that Diodotus hoped to obtain the recognition of his independence in return for his assistance. But the death of Diodotus saved the independence of Parthia, as his son and successor, Diodotus II., entered into an alliance with Arsakes against the Syrian king. Seleukus was defeated, and, either at this time or in a subsequent expedition, was taken prisoner ; ${ }^{12}$ and the day of victory was ever after-

[^50]wards solemnly observed as the beginning of Parthian liberty. The dates of these events cannot be fixed exactly; but as Seleukus was engaged in his wars with Ptolemy and Antiochus Hierax until about b.c. 239, the preparations for the Parthian expedition cannot have been begun before вс. 238, or the following year, and the death of Diodotus, and the subsequent campaigu against Arsakes, must therefore be placed in the years 237 and 236 respectively.

Vaillant originally proposed the year 236 for the death of Diodotus; ${ }^{13}$ but he afterwards hesitated, and suggested 234. Bayer adopted the year 243 ; ${ }^{14}$ which Wilson thought too early, and proposed the intermediate date of $240 .{ }^{15}$ Lassen assigned в.c. $237,{ }^{16}$ which is the date that I have adopted. This latter date is corroborated by a tetradrachm of Diodotus I. (see PJ. i., fig. 2), which, in addition to the monogram, bears the letter $I$, equivalent to the year 7; and which, if referred to the Bactrian era of в.c. 246 , gives b.c. 240 as the date of the coin.

## Diodotus II. Soter.

According to Strabo and Justin, Diodotus I. was King of Bactriana, or of the thousand cities of Bactria, that is, of all the districts to the north of the Indian Caucasus, or

[^51]Bactria, Margiana, and Sagdiana. This is confirmed by the find-spots of his coins, as well as by the mint cities of his monograms, all of which are in ancient Bactriana. Strabo records that, "when the Greeks got possession of the country (of Bactriana) they divided it into satrapies, of which that of Aspionus and Turiva was taken from Eukratides by the Parthians. They possessed Sogdiana also." ${ }^{17}$ The satrapy taken by the Parthians must have been in Margiana, which bordered on Parthia, as we know that Eukratides kept possession of Bactria, in which he founded the city of Eukratidia.

The provinces to the south of the Indian Caucasus, or Ariana and the Paropamisadæ, I would assign to Pantaleon and Antimachus, and to them I would refer the statement of Justin that all the other people of the East followed the example of Diodotus.

During the reign of Diodotus I. the small kingdoms of Ariana and the Paropamisadæ retained their independence; but on the accession of his son, Diodotus II., they would appear to have become tributary to Bactria, as shown by the rare coins of Agathokles and Antinachus, with the head of Diodotus Soter on the obverse. ${ }^{18}$ On each of these coins Diodotus is the acknowledged suzerain, while the other is only the BAEIAEY king. But from the extreme rarity of these coins $I$ conclude either that the supremacy of Diodotus was of brief duration, or that its acknowledgment was little more than nominal.

Of the history of Diodotus II. nothing has been handed down to us but the bare facts that his reign began by an

[^52]alliance with Tiridates, King of Parthia, and was ended by the successful invasion of Euthydemus. As the reign of this last prince was a long one, I conclude that his first attacks on Bactria must have been made about в.c. 230 , and that he finally succeeded in dispossessing Diodotus about b.c. 225. To this interval I would assign the coins of Agathokles and Antimachus with the head of Diodotus, as an acknowledgment of supremacy, in return for his assistance against the attacks of Euthydemus. The title of Soter, or Preserver, which is applied to Diodotus on these coins only, might thus be naturally referred to the actual succour given by him on this particular occasion.

About b.c. 225 I suppose that both Diodotus and Antimachus were either killed in battle, or otherwise disposed of, while Agathokles was reduced to acknowledge the supremacy of Euthydemus, by placing his head on the obverse of his coins, and by taking himself the inferior title of BALIAEYSN. This supposition agrees with the exculpatory statement of Euthydemus to Antiochus the Great, "that it was not just to deprive him of his kingdom, as he had not rebelled against the king, but had acquired possession of Bactriana by dethroning the descendants of those who had first revolted." Taking the words of Polybius in their simple literal meaning, the
 refer to the son of Diodotus only, but must also include the descendants of the other revolters, Pantaleon and

[^53]Antimachus. On the authority of the coins, we can now point out three kings who must have been dispossessed by Euthydemus-namely, Diodotus II., Soter, the son of Diodotus I.; Agathokles, the son of Pantaleon ; and the son or daughter of Antimachus I., Theos. At present we know of no children of Antimachus; but it is not improbable that Laodike, the wife of Heliokles, and mother of Eukratides, was his daughter, as it is almost certain that she was of royal descent, otherwise her portrait would not have been placed upon her son's coins. I have already hazarded a conjecture that she may have been the daughter of Agathokles; but I overlooked the important fact that her portrait bears no resemblance whatever to those of Agathokles and Pantaleon, with their very peculiarly-shaped noses; and I am now of opinion that she must have been the daughter of Diodotus II. or of Antimachus. In either case she would have been the descendant of one of the first revolters.
The only mint monogram on the coins of Diodotus II. is No. 2, which I read as Zariaspa, the well-known capital of Bactria.

## Antimachus I., Theos.

The position of the kingdom of Antimachus is difficult to fix, as his coins are extremely rare, and their find-spots are not certainly known. So far as I have been able to trace them, they have been found in about equal numbers in the Kabul valley and to the north of the Caucasus, while two specimens have been obtained in the Panjab. But as two of his monograms, Nos. 14 and 16, are also found on the coins of many later princes, who certainly did not possess any territory to the north of the Caucasus, it seems most probable that the dominions of Autimachus
were confined to the Kabul valley, with Nagara or Dionysopolis as his capital, as represented by the monograms Nos. 14 and 18, which are found on seventeen of the twenty specimens of his coinage known to me.

The only type on the silver coins of Aitimachus is Poseidôn with a palm branch. This points to a naval victory, which could only have taken place on one of the larger rivers, such as the Oxus or the Indus. On his unique copper coin the figure of Victory, standing on the prow of a vessel, also points to a successful naval engagement, which the obverse type of the elephant refers directly to India. I conclude, therefore, that Antimachus must have forced the passage of the Indus. In illustration of this view I may cite a passage from Diodorus, ${ }^{20}$ describing the assemblage of a fleet of 2,000 boats on the Indus to oppose the passage of Semiramis. This alone would not be of much value ; but when we find that in a.d. 1025 a fleet of 4,000 boats was actually collected by the Jâts on the same river to oppose the passage of Mahmud of ('hazni, ${ }^{21}$ with a fleet of 1,400 vessels, we may be satisfied that a naval action on a large scale might easily have taken place in the time of Antimachus.

I should perhaps have been inclined to place Antimachus in Margiana, and to fix the scene of his uaval victory on the Oxus, were it not that his monograms Nos. 16 and 18 point most unequivocally to the Kabul valley as the true position of his kingdom. Out of tweuty specimens of his coinage known to me, there are twelve which bear the monogram of Nagara, and five that of

[^54]Dionysopolis, while two are of Kartana and only one of Kapissa. Taking the readings of the monograms in conjunction with the indication of the elephant as a type of India, it seems to me impossible to withstand the conclusion that Antimachus must have reigned over the lower half of the Kabul valley, with Nagara or Dionysopolis as his capital. The monograms of Kapissa and Kartana (Nos. 15 and 16) show that for a short time he must have extended his authority to the upper end of the Kabul valley, which is confirmed by the entire absence of these two monograms ou the coins of Agathokles. It may also be inferred that after his naval victory on the Indus his dominion was extended eastward as far as Taxila.

The French savant, Raoul Rochette, has suggested that the naval victory of Antimachus may perhaps refer to some assistance given by him to the King of Syria in a naval engagement with the King of Egypt. ${ }^{22}$ But as the dominions of Antimachus were one thousand miles from the ocean, and as the only naval armament of Seleukus Kallinikus against the King of Egypt was destroyed by a storm, it seems to me quite impossible that the naval victory typified on the coins of Antimachus can have any reference to Syria.

The only objection that occurs to me against the position in the Kabul valley, which I have proposed for the kingdom of Antimachus, is the fact that about one half of his coins have been procured to the north of the Caucasus. But the number of his coins at present known is too few to afford a safe guide for fixing the locality of his kingdom. The position of Margiana accords best with the actual find-spots of his coins; but as they are all of silver,

[^55]excepting only the unique copper coin procured in Sistan, their testimony is not sure, as every one of them may have been carried from its original country by some merchant, either of ancient or of modern times. I must confess, therefore, that I am not disposed to accord much weight to their single evidence, while their number is so small.

No argument can be founded on the absence of Indian legends on the coins of Antimachus, as these legends are uniformly confined to the square copper money of the earlier kings. The round copper coins of his contemporaries, Pantaleon and Agathokles, and of his immediate successors, Euthydemus and Demetrius, as well as of the later king, Eukratides, bear Greek legends only; and as the single copper coin of Autimachus 'Theos is a round one, we must await the discovery of some specimen of his square copper money for decisive evidence on this point.

## Pantaleon.

The coins of Pantaleon are found chiefly about Ghazni and Kabul, but a few have been obtained about Peshâwar and in the Western Panjal). As Masson procured seven copper specimens at Begram, it is certain that the kingdom of Pantaleon must have extended to the north of Kabul ; but his coins are still too rare to afford sufficient evidence of the actual extent of his territory. Those of his successor, Agathokles, are, however, much more common; and as single copper specimens have been found as far to the south as Kandabar and Sistan, while they are common about Kabul and Begram, I infer that he must have ruled over Arachosia and the Western Paropamisadæ. This view is corroborated by the monograms (Nos. 3 and 10 ) on the coins of both princes, which I read as Ophiane
and Arachotus. The legends of their copper coins, which are in the Indian character and language, also show that the province over which they ruled must have been either in India itself, or closely bordering upon it. This condition is fulfilled by the territory which I have already assigned to them on the joint evidence of the find-spots and monograms of their coins. The Kabul valley, or country of the Paropamisadæ, was essentially an Indian province, which had been ceded by Seleukus Nikator to Sandrokottus, or Chandra-Gupta. The religion of the country also was Indian Buddhism, which had lately been introduced by the missionaries of Asoka; and the money was purely Indian, of the same indigenous types as those on the coinage of the neighbouring district of Taxila. Even the Buddhist Chaitya and Sacred Tree are found on one of the coins of Agathokles (see Pl. ii., fig. 7). The head of Bacchus, which is found on the curious nickel coins of Pantaleon and Agathokles, may also be supposed to refer to India, as Bacchus was the mythical conqueror of India.

As the silver, nickel, and round copper coins of Pantaleon are at present unique, while his square copper coins are still rare, his reign must certainly have been short. We may therefore, for the sake of convenience, fix its termination in b.c. 237, in the same year as the death of Diodotus I.

## Agathokles Difaios.

The position of the kingdom of Agathokles has already been discussed, as well as his relationship to Pantaleon, whose older portrait shows that he must have been either the father or the elder brother of Agathokles. To this I may now add the evidence afforded by one of his extremely
rare copper coins (Pl. ii., fig. ${ }_{X}^{6}$, of which only tliree specimens are known) which bears the curious legend of Akathukreyasa Hinduja Samê, or "Agathokles, King of the Indians," in Indian Pali characters. His other coins, in silver, nickel, and copper, which bear his own name only, are similar in all respects to those of Pantaleon. But there are three highly interesting and important silver coins which offer the name of Agathokles on the reverse, but on the obverse give the portraits and names of three other kings, namely, Diodotus Soter, Euthydemus Theos, and Antiochus Nikator (see Pl. ii., figs. 1, 2, and 3), each of whom in turn must have been acknowledged by Agathokles as his suzerain, or lord paramount. His career, therefore, must have been a chequered one ; and as his coins are common, his reign was most probably a long one. But unfortunately history does not afford us even a single hint on which we might base a probable account of his career; so that we have conjecture only to guide us in coinnecting together the few facts derived from his coins.

I have already discussed the bearings of the coill with the joint names of Agathokles and Diodotus Soter, which I have conjectured to have been struck towards the end of the reign of Diodotus, or after в.c. 232 , when Agathokles and Antimachus being pressed by Euthydemus, applied to Diodotus for aid against the common enemy, and in return acknowledged the supremacy of the Bactrian king. In this struggle Enthydemus prevailed, and Diodotus and Antimachus were destroyed (ímavedónevos), while Agathokles alone escaped by becoming tributary to Euthydemus, as shown by the unique coin in Pl. ii., fig. 2. This event most probably did not take place until after the death of Diodotus, as I presume that the
first efforts of Euthydemus were directed against the powerful kingdom of Bactria, which was readily accessible from Aria and Margiana, the early kingdom of Euthydemus. The subjection of Agathokles I would therefore fix about b.c. 228. But it is perhaps equally probable that Agathokles may have saved his kingdom by making a timely submission to Euthydemus before the death of Diodotus, in which case the coin bearing the joint names of Agathokles and Euthydemus may have been struck as early as в.c. 230.
The date of the third coin with the joint names of Agathokles and Antiochus Nikator, is even more difficult to fix, as the title of Nikator is not known to have been assumed by any prince bearing the name of Antiochus. I infer, however, that this must have been the youthful title of Antiochus III., before his eastern expedition obtained for him the loftier title of Megas, or "the Great." This inference is based on a passage of Joannes Malalas, ${ }^{23}$ which has been quoted by Clinton for the purpose of noting that Malalas has confounded Seleukus Keraunos with his brother Antiochus III. The words are,
 to have been the original name of Seleukus Keraunos, as Clinton has pointed out, ${ }^{24}$ but be has taken no notice of the new title of Nikator. From the coin now under review, we learn that some king of the name of Antiochus actually did bear the title of Nikator; and as this title is applied by Malalas to the successor of Seleukus Kallinikos,

[^56]to whom he assigns a reign of thirty-six years, the king intended by him must be Antiochus the Great, as his elder brother Seleukus bore the title of Keraunos, and reigned only three years, while thirty-six years was the exact duration of the reign of Antiochus, to whom also no title is assigned by history during the first eighteen years of his sovereignty.
Antiochus began to reign in в.c. 223 , when he was only in his fifteenth year. Taking advantage of his youth, the two brothers Molon and Alexander, satraps of Media and Persia, revolted, and made themselves masters of all the eastern provinces of the kingdom beyond the Tigris. But in в.с. 220 the rebellion was suppressed by Antiochus in person, who, following up his success, reduced the province of Media Atropatene, which had previously formed an independent kingdom. In consequence of this success, I presume that he was saluted by his troops with the title of Nikator, like as his elder brother Seleukus had been saluted with the title of Keraunos by his army. To this period, therefore, I would refer the coin of Agathokles with the portrait of Antiochus Nikator, as I conclude that Agathokles would naturally have taken advantage of the presence of Antiochus in Media to make an attempt to free himself from the hated yoke of Euthydemus. To secure this end, I suppose him to have proffered his submission to Antiochus, and to have invited him to the easy conquest of the provinces of Bactriana and Ariana, which had revolted from his father Seleukus Kallinikos. But the success of the youthful king had excited his ambition, and he gave up the almost certain prospect of recovering the eastern provinces of his kingdom for the more dazzling but doubtful chance of a war with Ptolemy Philopator, in which he was signally defeated at Raplia, near Gaza. The return of Antiochus to Syria in the following year
left Agathokles entirely at the mercy of Euthydemus, and I conclude, therefore, that in the same year, or в.c. 220, he was deprived of his dominions, from which time Euthydemus became the sole master of all the eastern provinces of Alexander's empire, or Bactriana, Ariana, and India.
In illustration of my conjecture that Agathokles wished to free himself from the yoke of Euthydemus, I may point to the monograms of the three coins, on which he successively acknowledges the supremacy of Diodotus, Euthydemus, and Antiochus. On the first I read the monogram (No. 11) as Diodoteia, which I take to be the city of Alexandreia Opiane, re-named by Agathokles in honour of Diodotus. On the second coin the new name is dropped as uncomplimentary to Euthydemus, the antagonist of Diodotus, and the old monogram (No. 3), ot Ophiane itself is again brought forward. But on the third coin, on which he hails Antiochus as Nikator, or the "Conqueror" of the East, he resumes the use of the previous monogram of Diodoteia, which he had been obliged to give up during the supremacy of Euthydemus.

This scheme for the career of Agathokles will require to be slightly modified, should the date of the fall of Diodotus and the rise of Euthydemus be brought down lower, or to в.c. 220 . The first coin with the name of Diodotus would then date about b.c. 222 , and that with the name of Antiochus in b.c. 220, while that with the name of Euthydemus would be the latest of the three, and would date about b.c. 218. But as the coins of Euthydemus are very common, and as his portraits exhibit both extreme youth and old age, I am satisfied that the date of в.c. 225, which I have already assigned for his accession, is not too early.

## COINS OF ALEXANDER'S SUCCESSORS IN THE EAST.

> By Major-Grneral a. Ounningham.

The group of coins previously described had reference to the rise of the Greek power in Eastern Asia, and was confined to the money of its founders, Diodotus I. and II. in Bactriana, Pantaleon and Agathokles in Ariana, and Antimachus Theos in India. The second group of coins, which I am now about to describe, illustrates the extension and consolidation of the Greek dominion in the East under Euthydemus and his son Demetrius, and under Eukratides and his successors Apollodotus and Menander.

The coins of Euthydemus, engraved in the accompanying Plate III., are taken partly from the British Museum collection, and partly from my own cabinet :-those of Demetrius, engraved in Plate IV., are taken entirely from my own collection.
In the Plate of Euthydemus I have arranged the portraits of various ages side by side, for the purpose of ready comparison. Certain differences in the features of some of these portraits led the late Mr. Burgon to conclude that there must have been two Bactriau kings of the name of Euthydemus. This question has already been discussed
at some length by Mr. Thomas, and in the present state of the inquiry, and under the evidence now available, he is disposed to acquiesce in Mr. Burgon's opinion. ${ }^{1}$ To my eye, however, the variations in the portraits appear to be chiefly due to difference of age, and partly to difference of treatment by various artists. I take the portraits on Figs. 4, 5, and 6 to represeut Euthydemus at three different periods of life, or youth, middle age, and old age, or, say, at 25,40 , and 55 years of age. The style of portrait on Fig. 5, with its short crisp hair, deep-set eye, and thick neck, may possibly be intended for an idealised head of the king as Herakles, as I observe that this particular style is confined to the series of silver coins with the seated figure of Herakles resting his club on a rock in front, which are the produce of a single mint, represented by the monogram No. 28 of Herakleia, that is not found on any of the other types. A similar portrait of middle age is found on the only two known gold coins of Euthydemus, which are of the same type, but with a different monogram, No. 1, of Nautaka, the presumed capital of Sogdiana. ${ }^{2}$

There is a sensible difference, however, between the portraits on the coins with the standing Herakles, No. 2 of the accompanying Plate, ${ }^{3}$ and those with the other types, which cannot be accounted for by difference of mint, as these coins bear the same mint monograms as Nos. 4 and No. 6. There is also a difference of treatment in the addition of drapery to the shoulders, and in the

[^57]flowing ends of the diadem; and I can only conjecture that these draped portraits, which agree remarkably with each other, must be copies of some particular bust of the king that was made when he was about thirty years of age. There certainly is a difficulty about this difference of portraiture; but the creation of a second Euthydernus, as advocated by Burgon, appears to me to involve another difficulty, which is even greater than the first. The explanation which I have suggested is supported by the marked differences in the numerous portraits of Antiochus the Great, ${ }^{4}$ the contemporary of Euthydemus, as well as in those of the later princes of Bactria, Eukratides and Heliokles. Altogether, I find it less difficult to accept these differences in the portraiture of a single prince, than to receive into our already well-filled list a duplicate Euthydemus, with other shadowy followers of equal pretensions, a second Demetrius, and a second Eukratides, both of whom have had their different advocates. ${ }^{5}$

## COINS OF EUTHYDEMUS.

1. O N 7. Stater. Plate III. Fig. 1. Brit. Mus., 129 grs. Duplicate Biblioth. Imp. Pellerin, Additions aux Médailles des Rois, p. 95 ; Mionnet, pl. lxxviii. No. 3 ; Ariana Antiqua, pl. i. fig. 1 ; Journ. de Sav., June, 1834, p. 328.

Obv.-Bare diademed head of king to right.
Rev.-Herakles sitting on a rock to left, resting his left hand on the rock behind, and grasping in his right hand a club, which rests on a rock in front. In the field to left No. 1 monogram. Legend, in two lines, BAEIAERS EY@YロHMOY; the whole surrounded by a beaded circle.
${ }^{4}$ See Gough's Seleucidæ, pl. iv., p. 36, figs. 14, 15, 16 ; pl. iv., p. 53, figs. 2 and 3 ; and pl. vi., fig. 3.
${ }^{5}$ Mionnet, Supplement viii. 473, suggests that there was a second Demetrius; and Raoul Rochette, Jour. des Sav., March, 1836, p. 130, argues in favour of a second Eukratides. Both opinions are justly disputed by Wilson in Ariana Antiqua, pp. 281, 238.
2. O $\boldsymbol{A}$ 13. Tetradrachma. Plate III. Fig. 1, British Maseam, 260.5 grs. Plate II. Fig, 3, Author, 257.5 grs. See also Bengal Asiat. Soc. Jour. v. pl. xlvi. fig. 3, and Arian. Ant., i. 22.

Obv.-Bare diademed head of king to right, with chlamys on the shoulders, the whole surrounded by a beaded circle.
Rev.-Herakles standing to the front, crowned with a chaplet of oak-leaves, and holding a wreath of oak-leaves in his outstretched right hand, and a club in his left hand, with the Nemæan lion's skin hanging from his left arm. In the field to left No. 16 monogram on Fig. 2, and No. 10 monogram on Fig. 3. Legend as on No. 1.
2a. O $\not \mathbb{R}^{8}$. Drachma. Author, 62 grs . Type and legend as No. 2. Monogram No. 16. See also Ariana Ant., pl. i. fig. 12.
3. O R 12. Tetradrachma. Plate III. Fig. 4. Author, 254 grs.

Obv.-Youthful head of the king, bare and diademed to the right, surrounded by a beaded circle.
Rev.-Herakles to left sitting on a rock, covered with the Nemæan lion's skin, resting his left hand on the rock behind, and grasping in his right hand a club, the end of which rests on his right knee. In the field to right monogram No. 16. Legend as on No. 1.
4. O A 10. Tetradrachma. Plate III. Fig. 5. Author, 256 grs. Duplicate, General Abbott. See also Bengal Asiatic Soc. Jour., iv. pl. xxv. fig. 1.

Obv.-Middle-aged head of the king bare and diademed to right, surrounded by a beaded circle.
Rev.-Herakles sitting to left, with club resting on rock in front, as on No. 1. In the field to right monogram No. 28. Legend as on No. 1. One of General Abbott's coins has monogram No. 1.
4a. O $\boldsymbol{A}$ 6 $\frac{1}{2}$. Drachma. Masson collection in Ariana Antifun, pl. xxi. fig. 2. Types as No. 4.
5. O R 12. Tetralrachma. Plate III. Fig. 6. Author, 254 grs. Duplicate, British Museum.
obr.-Aged head of the king bare and diademed to right, surrounded by a beaded circle.
Rer.-Herakles sitting to left, as on No. 4, with end of club resting on right thigh. In the field to right monogram No. 16. Legend as on No. 1.

5a. O \& 7. Drachma. Author, 63 grs.
Obv.-Head of the king as on No. 5, but less aged, and rather more aquiline nose.
Rev.-Type and legend as on No. 5.
6. O NK 10. Obolus ? Plate III. Fig. 7. British Museunn, 118 grs. Duplicate, Author, much worn, 108 grs. Extremely rare. See Jour. des Sav., Dec., 1838, p. 741, and pl. i. fig. 1, where it is described as a silver coin.

Obv.-Laurelled head of Apollo to right, surrounded by a beaded circle.
Rev.-Tripod. In the field to left monogram No. 6. Legend as on No. 1.
7. O 厌 11. Di-chalkon? Plate III. Fig. 8. British Museum, 160 grs. Duplicate, East India Museum. ${ }^{6}$

Obv.-Laurelled head of Apollo, as on No. 7.
Rev.-Tripod and legend as on No. 7. In the field to left monogram No. 3.
8. О Æ 9. Di-chalkon? Plate III. Fig. 9. British Museum. Duplicate, Author, 118 grs. Both broad thin coins. Two thick coins of the same type weigh respectively 122 and 121 grs .

Obv.-Bearded head of Herakles to the right, surrounded by a beaded circle.

Rev.-Horse galloping to right. Legend as on No. 1.
8 a . O ※ $7 \frac{1}{2}$. Chalkous. Author, 58 grs. A thin coin.
Obv. and Rev. as No. 9, but with monogram No. 21. This is the only specimen of the copper money of Euthydemus that offers a monogram.

## COINS OF DEMETRIUS.

1. O \& 11. Tetradrachma. Plate IV. Fig. 1. Author, 243 grs. See Jour. des Sav., 1835, pl. i. fig. 4, for Honigberger's duplicate, which, it is believed, is now lost.

Obv.-Bare diademed head of king to right, with chlamys on the shoulder.
Rev.-Pallas Athene, helmeted and draped, standing to front, holding a spear in her upraised right hand, and resting her left hand on a buckler, which

[^58]stands on the ground beside her. Legend in two lines, BAEIAE $\Sigma \triangle$ HMHTPIOY. In the field right the letter $\Delta$, and to left monogram No. 25.
2. $O_{A 1}$ 10. Tetradrachma. Plate IV. Fig. 2. Author, 239 grs., much worn.

Obv.-Youthful diademed bust of the king to right, his head covered with the spoils of an elephant, and his shoulders with the chlamys.
Rev.-Herakles standing to the front, holding the club and lion's skin in his left hand, and crowning himself with a chaplet of oak or ivy with his right hand. Legend as on No. 1. In the field to left No. 3 monogram.
2a. O $\not \subset$ 12. Tetradrachma. Plate IV. Fig. 3. Author, 261 grs. See Jour. des Sav., Dec., 1838, p. 748, pl. i. fig. 2 ; and Ariana Antiqua, pl. ii. fig. 2.

Types similar to the last ; but the face middle-aged, and the monogram No. 16.

2b. O $\mathbb{R}$ 7. Drachma. Plate III. Fig. 4. Author, 51 grs.
Types similar to No. 2. Obr. countermarked with a figure of Herakles, similar to that on the Rev., and accompanied by the detached letters $\boldsymbol{\Phi A P}$.

2c. $\mathrm{O}_{\mathrm{Al}} 4 \frac{1}{2}$. Obolus. Plate III. Fig. 5. Author, 10 grs .
Types as on No. 2. Monogram No. 32.
3. O $A 4 \frac{1}{2}$. Obolus. Plate III. Fig. 6. Author, 10.75 grs.

Obv.-Head as on No. 2, but with bare neck. Monogram No. 16. Legend as on No. 1.
4. ○ Æ 13. Hexa-chalkon? Plate IV. Fig. 7. Author, 357 grs. Duplicate, British Museum (from author), 364 grs. Third specimen, in poor condition, General Abbott.

Obv.-Shield of Pallas Athene with the Gorgon's head in the middle.
Rev.-Trident. Legend as on No. 1. In the field to left No. 33 monogram.
5. ○ 巴 11. Tri-chalkon? Plate IV. Fig. 8. Author, 783.5 grs . Extremely rare.

Obv.-Head of Indian elephant to right, with a bell suspended from the neck.
Rer.-Caduceus. Legend as on No. 1. In field to left No. 3 monogram.
6. O 厌 10. Di-chalkon? Plate IV. Fig. 9. Author, 128 grs. Very rare.

Obv.-Bearded head of Herakles to right, with the Nemman lion's skin fastened in front of neck, and a club over the left shoulder.
Rev.-Radiated figure of Apollo, standing to the front, draped in a short tunic, and trousers reaching below the knees. In his left hand he holds a bow, and with his up-raised right hand he is drawing an arrow from a quiver at his back. Legend as on No. 1. In the field to left No. 36 monogram.
7. O 届 7. Chalkous. Plate IV. Fig. 10. Author, 63 grs. Jnique.

Obv.-Head of the king with elephant's spoils to the right, as on No. 2.
Rev.-Pallas Athene, helmeted and draped, sitting to left, holding a spear in her right hand, and resting her left hand on her shield, which stands on the ground by her side.
8. $\square \mathbb{E}$. Chalkous? Plate IV. Fig. 11. Author, 84 grs. Unique.

Obv.-Youthful head of the king, covered with the elephant's spoils, and with chlamys on shoulder, as on No. 2. Legend on three sides, BAEIMEת $\Sigma$ ANIKHTOY $\triangle$ HMHTPIOY.
Rev.-A winged thunderbolt. Arian legend on three sides, Maharajasa aparajitasa Deme . . . In the field to right an indistinct monogram like No. 37.

## EUTHYDEMUS.

The history of Euthydemus is derived from a single passage of Strabo, and from the interesting details given by Polybius of the Eastern campaign of Antiochus the Great. According to Strabo, the example of Diodotus was followed by Euthydemus and his party, who caused the revolt of all the country near Bactriana. ${ }^{7}$ The date of this defection is not stated; but as we know, from Poly-

[^59]bius, that Demetrius the son of Euthydemus was a young man of sufficient age in b.c. 207 to be deputed as ambassador to Antiochus, Euthydemus himself must bave been not less than 25 or 30 years of age in b.c. 230 , the date which I have adopted as the most probable period of the full establishment of his power. At that time the Eastern provinces of Alexander's empire were held as independent kingdoms by the families of the first founders: Bactriana by Diodotus II. ; Arachosia, or Eastern Ariana, by Agathokles; and the Paropamisadæ by Antimachus Theos. Previous to that date I suppose that Euthydemus must have held the government of Western Ariana, that is, of Asia proper and Margiana, on the part of Diodotus I. of Bactria. The death of Diodotus in b.c. 237, and the subsequent invasion of Parthia by Seleukus Kallinikus in b.c. 236, where Diodotus formed an alliance with the Parthian king, must have presented a most tempting opportunity to Euthydemus, of which he doubtless took immediate advantage to make himself virtually independent.

According to my views Euthydemus may have been the governor of Aria and Margiana under Diodotus II., at which time I suppose him to have been between 20 and 25 years of age. His early career, after the declaration of independence, must have been devoted to the successful consolidation of his own power, while the neighbouring Princes, Agathokles of Arachosia and Antimachus of Paropamisus, became tributary to Diodotus of Bactria. About в.c. 230 his power had become so firmly established that he was able to make aggressions on his neighbours, which ended in the subjugation of Agathokles, and the dethronement, or destruction, of Diodotus II. and Antimachus about 225 в.c.
There is a difference of opinion as to the exact period
of his accession to the throne of Bactria. Bayer assigned 220 в.c., which has been adopted by Wilson; ${ }^{8}$ while General de Bartholomæi has brought it down to 215 b.c. ${ }^{9}$ But Lassen fixes his acquisition of Bactria in e.c. 222; while Raoul Rochette is inclined to place it some years before $220 .{ }^{10}$ In adopting the earlier date of 225 s.c., I am therefore supported by the authority of both Lassen aud Raoul Rochette, as well as by the evidence of the coins, which show that Euthydemus must have had a long reign of not less than thirty years, if we may judge by the difference in his portraiture, which ranges from youth to old age.

This conjectural early career of Euthydemus agrees with the exculpatory statement which he offered to Antiochus the Great, "that it was not just to deprive him of his kingdom, as he had not rebelled against the king, but had acquired possession of Bactriana by the destruction of the descendants of the first revolters. ${ }^{11}$ In my account of Agathokles I have suggested that, during the campaign of Antiochus III. in Media, in b.c. 220, Agathokles may have taken advantage of the proximity of the Syrian king to make an attempt to free himself from the yoke of Euthydemus. For this purpose I suppose him to lave proffered his submission to Antiochus, and to have hailed hin as Nikator, with the promise of an easy conquest of the provinces which had revolted from

[^60]Antiochus Theos. But the Syrian king preferred the more dazzling, but much more doubtful chance of a campaign against Ptolemy Philopator, and the unfortunate Agathokles was thus left at the mercy of Euthydemus. I conclude therefore that about the same time he must have been deprived of his dominions, and that Euthydemus then became the sole master of all the Eastern provinces of Alexander's empire.

From this time until the invasion of Bactria by Antiochus III., in b.c. 208, the history of Euthydemus is entirely unknown; but from the statement which he made to Antiochus it would appear that he must have been frequently engaged in hostilities with the nomad Scythians on the Sogdian frontier. ${ }^{12}$ The Eastern campaign of Antiochus lasted for seven years, from в.c. 212 -205. After conquering Media, Parthia, and Hyrkania, he made peace with Arsakes, and advanced towards Bactria in b.c. 208. The history of the Bactrian campaign is preserved only in two long fragments of Polybius, which are too important to be abridged.
"When Antiochus was informed that Euthydemus had encamped with his whole army near Tagouria, and that he had stationed a body of ten thousand cavalry upon the banks of the River Arius, to defend the passage, he immediately raised the siege, and resolved to pass the river, and to advance towards the enemy. Being distant three days' journey from the place, during the first two days

[^61]he moved with a moderate pace. But on the evening of the third, having ordered the rest of the army to decamp, and follow him at break of day, he took the cavalry and the light-armed troops, together with ten thousand of the peltestæ, and continued his march all night, with the greatest haste; for he had heard that the cavalry of the enemy, which guarded the passage of the river by day, retired as soon as night came on to a certain city, which was full twenty stadia distant from the river. As the country was a level plain, commodious for the march of cavalry, he arrived at the expected time, and passed the river with the greatest part of his forces before the day approached. But the Bactrian cavalry, being now informed by their scouts of what had happened, ran towards the river, and were ready to attack the troops as they marched. The king, judging it to be necessary that he should receive their first charge, exhorted the two thousand horsemen that always fought near his person, to perform their duty; and having ordered the rest to range themselves in troops and cohorts, and to take their accustomed posts, led on his body of cavalry, and engaged with the foremost of the enemy. In this action he distinguished himself above all that were with him. Many fell on both sides; but the first squadron of the enemy was at last broken by the king. When the second, and afterwards the third squadron advanced to the charge, the troops of Antiochus were in their turn pressed, and began to fall into disorder. But Panætolus, bringing up the rest of the cavalry, who were now almost all completely formed, rescued the king from the danger, and forced the Bactrians, whose ranks were already broken, to fly in great disorder. Nor did they stop their flight till they had reached the camp of Euthydemus,
being still closely pursued by Panætolus, and having lost the greatest part of their men. The royal cavalry, when they had killed great numbers, and taken many also alive, at last desisted from the pursuit, and encamped upon the banks of the river. Antiochus had a horse killed under him in the battle, and was limself wounded in the moutl, and lost some of his teeth. . . . Euthydemus, disheartened by this defeat, retreated to Zariaspa, a city of Bactriana, with all his army." ${ }^{13}$

Here the narrative of Polybius is interrupted ; but as it afterwards appears that Antiochus crossed Mount Caucasus on his way to India, it seems certain that he must have advanced to Zariaspa, or Balkh, the capital of Bactriana. 'lhis being admitted, both his previous march and the scene of the battle may be fixed with some certainty, as the country is mountainous, and the roads are therefore few and permanent.

In marching from Hyrkania to Bactria, Antiochus must have followed the high road along the valley of Meshed to the fort of Muzdaran, which stands on an isolated spur of table-land, at the entrance of the Darband Pass. ${ }^{14}$ This is the place which I suppose that Antiochus was besieging when he heard that Euthydemus was encamped at Tagouria, only three days' march distant, and that a body of cavalry was prepared to dispute the passage of the Arius River. Antiochus at once raised the siege, and resolved to cross the river, and advance against the eneny. For the first two days he moved slowly, but on the evening of the third day, leaving the main body behind, he made a forced march with all his

[^62]cavalry, and light-armed troops. As the country was level, and easy for the march of cavalry, he reached the banks of the River Arius, and crossed it before dawn. Now the road through the Darband Pass leads direct upon the town of Sarakhs, which lies to the east of the Tejend, or Arius River, at forty-five miles distance from Muzdarîn. The nature of this road also corresponds exactly with the account of Polybius; as Burnes describes the route for eighteen miles to the south-west of Sarakhs, as lying " over a level country, broken in some places by gravelly hillocks." ${ }^{15}$ Sarakhs itself must therefore be the city to which the Bactrian cavalry retired at night ; and Tagouria, where Euthydemus was encamped, may be looked for somewhere along the line of the Murghâb, or Margus River, in the neighbourhood of Maru-ur-Rud, or Alexandreia Margiane.

Wilson thinks that Euthydemus showed little courage or conduct ${ }^{16}$ in retiring at once so far back as Balkh, and he therefore infers that Zariaspa should rather be in the situation of Meru or Andkoh. But the identification of Zariaspa with Bactria or Balkh, seems to me to be too well established by the direct testimony of Ptolemy, as well as by the coincidence of its name with Azergashasp or Azerasp, the famous fire-temple of Balkh, to be set aside by any reasoning founded on mere opinion. I disagree also with Wilson in thinking that Euthydemus would have shown good judgment in retiring upon Meru, for Meru stands on the edge of the desert, so that his further retreat would have been cut off, and he would have been compelled either to fight or to submit, and in

[^63]such a position a defeat would have been fatal. By retiring upon Balkh there were two lines of retreat open to him; either northward into the mountains of Sogdiana, or eastward up the valley of the Oxus. By taking up this commanding position in front of his capital, Euthydemus forced his antagonist to come to terms. The memory of Alexander's long and arduous campaign in Sogdiana had not been forgotten, and as Antiochus was "desirous of putting an end to the war, ${ }^{17}$ he accepted the peace that was offered by the Bactrian king." ${ }^{18}$
The negotiations are described at length by Poly-bius:-"Euthydemus, who was himself a native of Magnesia, endeavoured to justify his conduct, and said Antiochus had no reason for attempting to deprive him of his kingdom, since he never had rebelled against him, but had only obtained possession of Bactriana, by destroying the descendants of those who had before revolted. He insisted long upon this point, and entreated 'Teleas to mediate for him with Antiochus, that hostilities might cease, and that he might be allowed to retain the name of king. He urged that such a reconciliation was even necessary for their common safety. That those wandering tribes, who were spread in great numbers along the borders of the province, were alike dangerous to them both, and that if ever they should gain admittance into it, the whole country must inevitably fall into a state of barbarism. With these instructions he sent back Teleas to the king.
"Antiochus, who had been long desirous of putting an

[^64]end to the war, acknowledged the force of these reasons, and declared himself willing to accept the peace that was offered. And when Teleas had gone and returned again many times, Euthydemus at last sent his own son, Demetrius, to ratify the treaty. The king received him favourably, and, judging by his appearance and his conversation, as well as by a certain air of majesty that was conspicuous in his person, that the young man was worthy of a kingdom, he promised to give him one of his daugliters in marriage, and to suffer his father to retain the name of king. The rest of the treaty was expressed in writing, and the alliance confirmed by oaths." ${ }^{19}$

This easy termination of the war, so favourable to the Bactrian king, was partly secured by the surrender of all his elephants. Antiochus then crossed the Caucasus into India, where he renewed his alliance with the Indian king, Sophagasenus, and obtained more elephants, and the promise of a payment in money. He then marched through Arachosia and Drangiana into Karmania, where he passed the winter, and in the following year, b.c. 205, he returned to Syria.

The full terms of the treaty with Euthydemus are not stated by Polybius; but it seems highly probable that they must have included the surrender either of the whole or of a part of the Kabul valley. This province of the Paropamisadæ had been formerly ceded to India by Seleukus Nikator, in return for a large present of five hundred elephants. As a similar present of elephants was made by Sophagasenus to Antiochus, it is probable that the Indian king may have urged the original cession of the province to Sandrokoptus by Seleukus, and that

[^65]Antiochus was not unwilling to secure a large number of elephants by the easy transfer of a district, which he could not himself hold. But the return of Antiochus, and the resumption of his designs upon Egypt, offered a favourable opportunity to the ambition of the Bactrian king for the recovery of his Indian provinces, which was soon followed by the invasion of India itself. It seems doubtful, however, whether the conquest of the Panjâb was effected towards the latter end of the reign of Euthydemus, or during the early career of his son, Demetrius. Bayer first proposed the correction of Euthydemia for Ptolemy's Eù $\theta v \mu \eta \delta i a$, the Greek name of Sanyala, a suggestion which has been generally adopted; but he assigned the renewing of the town to Demetrius. ${ }^{20}$ Both Lassen and Wilson lave objected that there is no evidence that the change of name was due to Demetrius. ${ }^{21}$ But it seems to me that the bare fact that an honour to the name of Euthydemus could not have originated with an enemy is a sufficient proof that the new name must have been imposed either by Euthydemus himself, or by his son, as Demetrius was eventually supplanted by Eukratides, who belonged to another family. My own impression is that the conquest of the Panjâb was most probably effected by the Prince Demetrius during the reign of his father. In coming to this conclusiou I am partly influenced by the fact that single specimens of the copper money of Euthydemus are occasionally met with in the Western Panjâb, but chiefly because several of his

[^66]copper coins were found in the bed of the Indus at Attok in 1840, while raising a sunken boat.
That the Indian war was begun by Euthydemus was first suggested by Bayer, who thought that, after the peace with Antiochus, Euthydemus turned his arms against the nomads and the Indians. But he inferred that the Indian war must have terminated unfortunately, because (as he believed) Menander, and not Demetrius, was the successor of Euthydemus. ${ }^{22}$ This error regarding the relative dates and positions of these two princes was only dispelled in our own times by the discovery of their coins, which prove most clearly, not only that Demetrius did reign in Bactria immediately after his father, but that Menander did not reign there, and was besides many years posterior to Demetrius. If this knowledge had been accessible to Bayer, it seems very probable that he would have come to a different conclusion regarding the termination of the Indian war; and that he would, therefore, have assigned the renaming of Sangala to Euthydemus himself.
The date of the death of Euthydemus is variously estimated by the different authorities. ${ }^{23}$ Thus Vaillant places the extreme limit of his reign in A.ס.c. 555, or b.c. 199, while Bayer assigns b.c. 195, and Raoul Rochette, Wilson,

[^67]and Bartholomæi bring it down to 190 . Lassen, on the other hand, takes it back to 205, and my own opinion is in favour of b.c. 200. But as all are unanimous in assigning him a reign of from 25 to 35 years, in agreement with the marked differences of age observable in the various portraits on his coins, the period of his death will depend on the date of his accession. Now, I have already shown that the most probable date of his accession to the throne of Bactria was about b.c. 230, or not later than 225 , and consequently the most probable date of his death will be about b.c. 200 .

The silver money of Euthydemus is very common in Balkh and Bokhara, to the north of the Caucasus, and less common in Kabul, Kandahar and Sistan. His copper coins, which are perhaps less numerous than the silver, are found in about equal numbers in Sistan and Kandahar, and throughout the Kabul valley. Colonel Stacy describes them as "very common in Sistan and Kandahar;" and his testimony is supported by that of Captain Hutton, who obtained five specimens in Sistan. ${ }^{24}$ Masson collected six copper coins at Begram, and ten more at other places in the Kabul valley. ${ }^{25}$ From these well-ascertained find-spots of his coins, it seems quite certain that Euthydemus must have possessed Sogdiana and Bactria, to the north of the Caucasus, with Arachosia, Drangiana, and the Paropamisadæ to the south. 'T'o

[^68]these we may add Aria and Margiana, as he advanced to the banks of the Arius River, and beyond the Margus or Murghâb River, to oppose Antiochus. This extent of the Kingdom of Euthydemus, which I have deduced from the actual find-spots of his coins, is supported by the testimony of Apollodorus of Artamita, who says that the Greeks of Bactria "became so powerful, by means of the fertility and advantage of the country, that they made themselves masters of Ariana and India. ${ }^{\prime 26}$ This wide extent of dominion is also indicated by the monograms, if my readings of them be correct. Thus No. l represents Nautaka, in Sogdiana; No. 9 is Iotale, in Margiana; No. 28 is Herakleia, in Aria; No. 10 is Arachotus, the capital of Arachosia; and Nos. 3 and 16 are Alexandreia Ophiane, and Kartana, the chief cities of the Paropamisadæ.
According to Polybius, ${ }^{27}$ Euthydemus was a native of Magnesia; a fact which it is equally pleasing and interesting to find perpetuated by the king himself in the adoption of the galloping horse of the coins of Magnesia ${ }^{28}$ as the common type of his own copper money. The obverse has a bearded head of Herakles, crowned with a chaplet of oak or ivy. The gold and silver coins offer a bare diademed head of the king on the obverse, with a figure of Herakles sitting on the reverse. On the rarer silver coins, Herakles is represented crowned with a wreath of oak or ivy, standing to the front, with a club and lion's skin on his left arm, and holding out a second wreath in his right hand. As Herakles was one of the



 Màzıns.
${ }^{28}$ Müller, Numismatique d'Alexandre le Grand, pl. xv., fig. 1070.
two mythical couquerors of India, ${ }^{20}$ I suppose that this second wreath is offered to the king himself, and that the type is designed to show the hero's acknowledgment of Euthydemus as another conqueror of India. Pautaleon and Agathokles, the predecessors of Euthydemus, had already appropriated the type of Bacchus, who was regarded as the first conqueror of the East; and the adoption of the type of Herakles by Euthydemus was only a repetition of the same idea.

The nickel coins, as well as the larger pieces of copper, refer wholly to the worship of Apollo. The head of the god is laurelled and youthful, and is perhaps intended as an ideal representation of the king himself, as the coins most probably belong to the early part of his reign, before he had discontinued the nickel coinage, which is peculiar to his two predecessors, Pantaleon and Agathokles, and to himself.

## DEMETRIUS (Aniketos).

The earliest notice of Demetrius is by Polybius, who relates that, while yet a youth, he was sent by his father to conclude the treaty of peace with Antiochus the Great. "The king received him favourably, and judging by his appearance and his conversation, as well as by a certain air of majesty that was couspicuous in his person, that the young man was worthy of a kingdom, he promised to give him one of his daughters in marriage, ${ }^{30}$ and to suffer his father to retain the name of king." Bayer doubts this fact, because Antiochus was only fifteen years of age at his accession in b.c. 223 ; and asks how he could have promised one of his daughters when he had none. ${ }^{31}$ But
${ }^{29}$ Arrian. Indica, vii. and viii.


${ }^{31}$ Hist. Reg. Græc. Bact., p. 74. "Quas tum potuit Demetrio despondcre filias, cum haberet nullas?"
his eldest son, Antiochus, was born in 220, and as he had a large faraily of nine or ten children, he may easily have had two or three daughters before b.c. 207. The names of. three daughters, Laodike, Kleopatra, and Antiochis, are recorded as the wives of Prince Antiochus, of Ptolemy, and of Ariarathes; and a fourth daughter, without name, is mentioned as having been offered to Eumenes in в.c. 188. The last was most probably born after the Eastern campaign ; but as we know that Kleopatra was fourteen years old at the time of her marriage in в.c. 193, it is certain that she must have been born in b.c. 207 or 208 ; and, consequently, I see no reason to doubt the statement of Polybius that Antiochus had promised one of his daughters to Demetrius in b.c. 207.

Wilson thinks that Demetrius was then "probably little more than a boy, and not of marriagable years; ${ }^{332}$ but, as Polybius styles him a young man, I conclude that the reason why Antiochus only promised his daughter was on account of her youth, and not because Demetrius was too young to be married. For it seems highly improbable that a young man, who was sent by his father to ratify a treaty with the great King of Syria, should have been of too immature an age for an eastern marriage. Indeed, Antiochus himself was only seventeen years old at his marriage in b.c. 221, and it is quite incredible that Demetrius could'have been a boy of less age in s.c. 207.

The accession of Demetrius to the throne of Bactria has also been doubted by Bayer, chiefly because he is called by Justin " King of the Indians." Bs But these doubts have been satisfactorily dispelled by the discovery of more than fifty specimens of his coins, nearly all

[^69]of which were found in Bactria and Ariana. This is further confirmed by the notice of Strabo, that the Greeks, under Demetrius and Menander, had extended their dominion in the East to the Seres and Phauni beyond Sogdiana, and into India as far as the Isamus. ${ }^{34}$ For the coins of Menander, which are numerous in the Kabul valley and Panjâb, and not uncommon in North India, are not found at all to the north of the Caucasus, or Hindoo Kush; and, consequently, the extension of the Greek dominion beyond Sogdiana must be assigned to Demetrius. We know also from Polybius, that the Nomad Scythians had already become troublesome during the reign of Euthydemus, and at his death, I suppose them to have taken advantage of the absence of Demetrius in the Panjâb to invade Sogdiana. Thus arrested in his early career of Indian conquest, Demetrius must have returned at once to Bactria, to begin a campaign against the Scythians, in which he carried his victorious arms beyond the limits of Alexander's empire to the distant Seres and Phauni.

The exact position of these barbarous tribes has not hitherto been fixed. But if the Phauni, or Phruni, are the same people as the Grinæi Scythians of Ptolemy, they were probably located in the neighbourhood of Kashgar and Yarkand. The Seres and Phruri are mentioned by Dionysius Periegetes, ${ }^{35}$ along with the Tokhari on the Jaxartes; and the same people are no doubt

[^70]intended by Pliny's Thyri (or Thuni) and Tochari; and by the Thyni and Phocari of Solinus. ${ }^{36}$ Some MSS. also read $\Sigma \dot{v} \rho \omega v$ instead of $\sum \eta \rho \rho \omega \nu$; and this $I$ believe to be the true reading, as I find that Su-le was the old Chinese name of Kashgar in the time of the Han dynasty, which was contemporary with Demetrius. ${ }^{37}$ The Phruri, or Phruni, I take to be the same as the people of Phu-li, one of the four nations that were subject to the Shu-kiu-pho (i.e., the Sokpos or Sakas) at the same time. The Sokpo territory is described as lying $1,000 \mathrm{li}$, or 167 miles, to the west of Khotan, 300 li , or 50 miles, to the north of the Tsung-ling or Karakoram Mountains, and 900 li , or 150 miles, to the south of Su-le, or Kashgar. It thus corresponds exactly with the present Yarkand, as well as with the country of the Sakai, or Sakas, of Ptolemy, whom he places to the south of the Grinæi Scythæ. Now at this very time, or in b.c. 200, according to the Chinese authorities, Mothé, the great chief of the Hiung-nu, had driven the Yuchi, or Tokhari, from their territories, and had subdued the whole country up to the banks of the Volga on the west. ${ }^{38}$ These successes of the Hiung-nu must have forced the conquered nations towards the west, and thus have brought them into contact with the Greeks of Bactriana, on the banks of the Jaxartes. For a time, however, their further advance was stayed by the victories of Demetrius, who carried his arms into the midst of their territories, and added fresh lustre to the Grecian name.

[^71]The period of this Scythian campaign is determined partly by the death of Euthydemus, and partly by the date of the forced migration of the Yuchi and other Scythian tribes towards the Jaxartes. Now, I have already shown that both of these events must have taken place either in or about в.c. 200 ; and as they almost certainly preceded the campaign of Demetrius, I believe that the date of his Scythian conquests may be assigned with some certainty to the very beginning of the second century, or between 200 and 196 в.c.
After the close of the Scythian campaign, it is probable that Demetrius returned to his original project of extending the Bactrian dominions towards India. Justin actually designates him as " King of the Indians;" ${ }^{38}$ and as the famous passage of Strabo, describing the conquests of the Bactrian kings, refers the eastern extension beyond the Hypanis to Menander, it seems almost certain that the southern extension to Patalene must have been due to Demetrius. The elephant head-dress on his coins refers pointedly to the conquest of India, which is confirmed by the title of Aniketos, or the Invincible, on his Indian coin, while the title of "King of the Indians" given by Justin would seem to refer to the actual occupation of the country.
The passage of Strabo regarding this conquest is so important that it must be quoted at full length. ${ }^{40}$ "The Greeks, who caused the revolt of Bactriana, became so

[^72]powerful by means of the fertility and advantages of the country, according to Apollodorus of Artamita, that they made themselves masters of Ariana and India. Some of these princes subdued more nations than Alexander himself; particularly Menander, who, crossing the Hypanis, penetrated eastward as far as the Isamus. But though the Greek conquests were chiefly due to Menander, yet they were partly also due to Demetrius, the son of Enthydemus, King of Bactria. Thus they conquered Patalene, and advancing along the coast they subjected the kingdoms of Sarioustus and Sigertis."

On this passage Lassen remarks that, "to Demetrius we must assign the conquest of Ariana, namely, the country of the Paropamisadæ, and Arachosia." The same opinion had already been formed by Bayer, on the authority of Isidorus of Kharax, who mentions amongst the chief places of Arachosia the town of Demetrias, which both Bayer and Lassen think must have been so named by the Bactrian king. ${ }^{41}$ This inference is doubtless correct, as the province of Arachosia had fallen into the possession of the Parthians before the accession of the Syrian Demetrius. But as I have already shown, on the unimpeachable testimony of the find-spots of his copper coins, that the conquest of Drangiana, Arachosia, and the Paropamisadæ, must be assigned to the reign of Euthydemus, it is probable that the foundation of the town in honour of Demetrius may have taken place before his accession to the throne. It is certain, at least, that if he was the conqueror of Drangiana or Arachosia, it must have been during the lifetime of his father. But, according to Strabo, the province of Ariana was not limited to Arachosia and the

[^73]Paropamisadæ, but comprised also Gedrosia and the country of the Oritæ to the south. To Demetrius, therefore, I would assign the conquest of southern Ariana, from whence he extended his arms through the Bolân and Gandava passes to Patalene, or the lower valley of the Indus, and then, stretching along the coast, he subjected the kingdoms of Sarioustus and Sigertis.
The conquest of Patalene is ascribed to Menander by both Lassen and Wilson, ${ }^{42}$ on the ground that the drachmæ of Apollodotus and Menander were still current at Barygaza in the second century of the Christian æra. But as Lassen makes Apollodotus the predecessor of Menander, his coins could not have been current in the country before its conquest. Wilson is more consistent, as he places Apollodotus after Menander, while Raoul Rochette ${ }^{43}$ makes him the son and successor of Menander. But as both Trogus Pompeius and the author of the Periplus place the name of Apollodotus before that of Menander, it seems to me most probable that he must have preceded Menander. The find-spots of his coins show that he must have reigned in Arachosia and Drangiana; and as not a single specimen of Menander was obtained in those countries either by Colonel Stacy or by Captain Hutton, it is certain that he did not reign there. From these facts I conclude that both Arachosia and Drangiana had fallen into the hands of the Parthians before the accession of Menander, and that he must therefore have been posterior to Apollodotus. If this be admitted, it follows that the conquest of Patalene could not have been due to Menander, but to Demetrius, the son of Euthydemus. To him,

[^74]therefore, must be ascribed the greatest extension of the Greek power in the East, as his authority was acknowledged from the banks of the Jaxartes to the mouths of the Indus, and from the shores of the Caspian to the banks of the Hyphasis.

Wilson, however, not only ascribes the conquest of Patalene to Menander, but excludes Demetrius from India altogether. According to his view, " neither from a consideration of probability, nor from the evidence afforded by the coins of Demetrius, can we attach any credit to his Indian sovereignty.' ${ }^{44}$ And in another place ${ }^{45}$ he adds that the "absence of bilingual inscriptions excludes the coins of Demetrius from any community of circulation with those coins of which the Indian origin cannot be doubted." The last objection is removed by the discovery of the square bilingual coin No. 11 of the accompanying Plate IV.; and the fact of his Indian sovereignty is too well attested by Strabo and Justin to be set aside by a mere opinion, which is unsupported either by fact or by argument.

The date of this Indian campaign may be fixed approximately towards 192 b.c. The Scythian war was finished about в.c. 196 ; and if we allow two years for rest and preparation, the campaign in Southern Ariana would have occupied the year 193, while the invasion of Patalene would have taken up the whole of the year 192, and the campaign against Sarioustus and Sigertis would not have been completed until the close of b.c. 191. During the continuation of the Indian war I conjecture that Eukratides was left as Satrap in Bactriana; and that about b.c. 190 he took advantage of the prolonged absence of his sovereign to make himself independent.

[^75]Our only authority for this period of Bactrian history is a single passage of Justin, ${ }^{46}$ in which, after describing the rise of Eukratides in Bactria, and of Mithridates in Parthia, as being nearly contemporary, he adds that "Eukratides carried on many wars with great vigour, being weakened by which, when he was besieged with only three hundred men by Demetrius, he, by continual sallies, withstood sixty thousand of the enemy. Wherefore being delivered in the fifth month, he reduced India under his power." From this passage it may be inferred that Demetrius had first overcome Eukratides in the field, and that the defeated chief had taken refuge with a small body of men in some strong fort, where he was closely besieged for five months, and reduced to very great straits. With such scant information it is difficult to form more than a conjecture as to the probable scene of this remarkable event in Bactrian history. But two inferences may be drawn, which seem to me to be nearly certain : first, that the fort must have been a small place, of difficult access, otherwise it could not have been defended successfully by three hundred men; and second, that as Eukratides was not relieved until the fifth month, his defeat must bave occurred in winter, somewhat to the south of the Hindu Kush, or Snowy Caucasus, so that his Bactrian friends could not come to his assistance for some months. Either Kilât-i-Ghilzi in Arachosia, or Aornos near the Indus, would satisfy both of these conditions, and to one of them I would assign the honour of being the probable scene of this famous defence.

[^76]From the brief notice of Justin it might be supposed that the contest between Demetrius and Eukratides was limited to this single siege, but it is more probable that the operations in the field may have extended over one or two years; and that the relief of Eukratides, and his final triumph, did not take place until two or three years after his revolt, which may therefore be dated about в.c. 187.

I think it probable that Enkratides was not alone in this revolt, and that his success may have been partly due to the simultaneous defection of Antimachus Nikephoros, whom 1 suppose to have been either a sou or a grandson of Antimachus Theos. It is probable that some descendants of the original revolters, Diodotus, Pantaleon, and Antimachus, and more especially females, may have escaped the general destruction of their families by Euthydemus. Such perhaps was Laodike, the wife of Heliokles and mother of Eukratides, whom I suppose to have been the daughter either of Diodotus II., or of Antimachus Theos. Such also must have been Antimachus Nikephoros, who, judging from his name, was either a son or grandson of Antimachus I. He therefore would naturally have joined the party of Eukratides against the son of Euthydemus, and to him I would assign the defection of the Eastern Paropamisadæ, or Lower Kabul valley.

At the close of hostilities in b.c. 187 I suppose that the dominions of the Eastern Greeks were divided between the three rival princes. Eukratides obtained possession of Bactriana, including Bactria proper, Sogdiana and Margiana; Antimachus got the Paropamisadæ; while Demetrius retained Ariana and India, or Aria, Drangiana, Arachosia and Gedrosia, with the Pentapotamia, or Panjâlb, and Patalenc, or Sindh. But the boundaries of
the rival states were most probably well defined; and I presume that the Western Paropamisadæ, or the Upper Kabul valley, and its capital the Caucasian Alexandria, which was situated at the $\tau p o \delta o v$, or meeting of the three roads from Bactriana, Ariana, and India, may have changed masters several times, according to the temporary ascendency of one of the rival princes.

The further history of Demetrius is not known, but I conjecture that he may have continued to reign over Ariana and India until about b.c. 180, when he either died or was killed in battle, after a chequered but not inglorious reign of twenty years. Ariana then fell to Eukratides; but the Indian provinces most probably still remained in the possession of the family of Demetrius, as I conclude that Lysias, who adopted the types of the elephant head-dress, the head of Herakles with club, and the standing Herakles crowning himself, must have been his sou and successor.

The romantic career of Demetrius, who shared with Menander the glory of having extended the Grecian empire in the East, would seem to have attracted the eager notice of his countrymen in the West. His royal bearing as a youth had won the regard of Antiochus, and his exploits as a man had pushed the Greek dominion in the East beyond the conquests of Alexander. To him was due the glory of having carried the Greek arms across the mountains of Imaus on the north, and beyond the mouths of the Indus on the south. His dominions embraced the fairest and the richest portion of the ancient Persian empire; and the vanity of his countrymen was flattered by hearing that the gods of Greece were worshipped on the Indian Caucasus, and that distant nations beyond the Sogdians and Indians had yielded to the
happy influence of Hellenic genius. ${ }^{47}$ The exploits of Demetrius were no doubt related in the Parthian history of Apollodorus of Artamita. But of this work we have only a single passage preserved by Strabo, which has already been quoted. It seems probable, however, that the story of Demetrius must have been preserved in some other ancient work down to a very late period, as Chaucer gives a description of
> "The great Emetrius, the King of Ind,"

in the "Knight's 'Iale," which he derived from Boccaccio, who professes to have translated it into "vulgar Latin" (i.e., Italian) from una antichissima storia. Tyrwhitt doubts this statement, and thinks that he must have taken the story from some Greek original, an opinion in which I fully concur. The part of the poem which I suppose to refer to the son of Euthydemus is the description of the king's personal appearance.
> " With Arcite, in stories as men find The great Emetrius, the King of Ind, Upon a steedé bay, trapped in steele, Covered with clothe of gold, diápred wele Came riding like the God of Armes, Mars.

> His crispé hair like ringés was yrun, And that was yellowe, and glittered as the sun; His nose was high, his eyen bright citrene, His lippes round, his colour was sanguine;

${ }^{47}$ Such, at least, was the effect of the exploits of Alexander on the mind of Plutarch; and it is only reasonable to suppose that his feelings were generally shared by his countrymen.
 $\pi \rho о \sigma \epsilon \kappa \dot{\nu} \nu \eta \sigma \epsilon$. . . 'A入є́ $\xi a \nu \delta \rho o s ~ \delta \epsilon . . к а \tau а \sigma \pi \epsilon i ́ \rho a s ~ \tau \grave{\eta} \nu ~ ' A \sigma i a \nu$




> A fewe fracknés in his face ysprent,
> Betwixen yellow aud black somdeal yment; ${ }^{48}$
> And as a lion he his loking cast;
> Of five and twenty years his age I cast."

The fair complexion, as well as the Greek name of the king of India, shows that the poet intends to describe a European, and not a native of the East. His youth and royal bearing tally exactly with the account of Polybius; and his aquiline nose is seen on all the coins of the King of Bactria. This curious and interesting coincidence is so close and precise that it can scarcely be accidental ; and I feel a strong inclination to identify the great Emetrius of Chaucer with the son of Euthydemus of Bactria.

The coins of Demetrius in the accompanying plate have all been taken from my own cabinet. The copper coins are less numerous than the silver, but all are rare, and several are unique, or nearly so. The type of Athene has already been published by Raoul Rochette, ${ }^{49}$ from Honigberger's tetradrachm, which I believe has since been lost. The learned Frenchman has suggested that this type appears to be imitated from the coins of the kings of Kappadckia, and specially from those of Antiochus IX., Philopator, and Seleukus VI., Nikator of Syria; but he must have overlooked the fact that the whole of these

[^77]princes were posterior to Demetrius of Bactria. The action of the goddess on the Bactrian coins is also different, and corresponds minutely with her figure, as represented on a Bactrian gem. I would refer those coins which offer a bare head of the king to the early part of his reign, before the commencement of the Indian campaign. The usual representation shows the king's head covered with an elephant's skin, which no doubt refers to the conquest of India. So also does the elephant's head on Fig. 8; but the accompanying caduceus I am unable to explain. The trident in Fig. 7 probably refers to some naval success, such as the passage of the Indus, or perhaps an actual sea-fight off the coast of Patalene or Surasbtra during his Indian campaign. But the most interesting of the coins of Demetrius is the square copper piece, Fig. 11, the reverse of which offers a literal translation in the Indian language, and in Arian letters, of the Greck legend of the obverse. On this coin Demetrius assumes the title of Aniketos, or the "Invincible," which is further typified by the Thunderbolt of Zeus, who is invincible amongst the gods.

Many of the coins of Euthydemus and Demetrius take high rank as works of art, and some of them may be compared with advantage with the contemporary coins of the Seleukidæ of Syria. The spirited treatment of the elephant's head on the coins of Demetrius, and more particularly on Fig. 8 of the accompanying plate, is specially deserving of notice, as alike truthful and artistic. On the coins of his contemporary, Antiochus the Great, the elephant is represented with a trunk of twice the natural length and thickness, which widens towards the end like a cornucopiæ.

# COINS OF ALEXANDER'S SUCCESSORS IN THE EAST. 

By Major-General A. Cunningham.

Before proceeding to describe the coins of Eukratides, the successor of Demetrius, it is necessary to discuss the theory first put forth by Bayer in the last century, and in our own time supported by the weighty opinion of the learned French Academician, Raoul Rochette, that there was was a second prince of this name, the son and successor of the first. The argument of Bayer is based upon the assumption that some of the facts told of Eukratides agree better with the history of his son, and, consequently, that the name of the son must also have been Eukratides. ${ }^{1}$ But Bayer's facts are only ingenious inferences, which seem to me to lave no solid foundation. He supposes that Eukratides was the King of the Bactrians, who invited the advance of Demetrius Nikator against Parthia; and that as the son of Eukratides treated his father as an enemy, the father must have been a friend of the Parthians; and, consequently, that the

[^78]friend and enemy of the Parthians must have been two different persons. But these are mere assumptions: and although I am quite prepared to admit that the son of Eukratides may have invited the King of Syria to invade Parthia, yet it is certain that no ancient author gives this son the name of Eukratides. Strabo, however, does mention that the Parthians took the two satrapies of Aspiones and Turiva from Eukratides; and as Bayer assigns this campaign to the latter part of the reign of Mithridates, he argues that it must have been conducted against the son of Eukratides, the enemy of the Parthians, and, therefore, that this son must also have been named Eukratides. Now the actual date of the conquest of these satrapies by the Parthians is uncertain; but I gather from the expression used by Justin, of the Bactrians worn out by their wars with the Drangians, Sogdians, and Indians, being at last vanquished by the "weaker" Parthians, that this acquisition of territory must have been made before the Parthian conquest of Media and Elymais, as after their annexation the Parthians could not be called "weaker" than the Bactrians. The conquest of these satrapies must consequently have taken place early in the reign of Mithridates, and therefore during the reign of Eukratides, the supplanter of Demetrius.

The argument of Raoul Rochette is founded upon the fact that the Eukratides of the coins uses two different titles and two distinct types; the one offering a bare head of the king, with the simple title of BAEIAES天, and the other a helmeted head with the more ambitious title of basine $\Omega$ metanoy. These differences are sufficient, he thinks, to prove that there must have been two princes of the name of Eukratides. He alan
thinks that the two heads are of different slapes. But I am prepared to contest these conclusions; for we not only possess several coins with helmeted heads, accompanied by the simple title of BAEIAESSI, as well as others with bare heads, and the more ambitious title of bAEIAESI METANOY, ${ }^{2}$ but we actually have the name of the father of Eukratides the Great recorded by himself on the remarkable coin engraved as Fig. 6 of the accompanying Plate V. On this coin Eukratides the Great distinctly calls himself the son of Heliokles and Laodike, and, consequently, Raoul Rochette's argument has lost its only support. ${ }^{3}$ Wilson had this coin before him when he wrote the Ariana Antiqua; but as he supposed that it was minted by the young Prince Heliokles, the son of Eukratides, he failed to see its conclusive bearing on the question raised by Bayer and Raoul Rochette. The two legends of this important coin are basiners meias eykpatiahi, and haiokaeoys kal aaOaikhz, which form one iutelligible inscription by the insertion of vos between them. The connection of the two legends is obvious, and is most satisfactorily illustrated by the



[^79]
## COLNS OF EUKRatides the Great.

1. O N 22. Twenty-stater picce, or ${ }_{1}^{\frac{1}{s}}$ talent. Bibl. Imp., 2503.5 grs . Unique, from Bokhara. See description ly M. Chabouillet in Rev. Num., 1837, p. 382 and pl. xii. For types sce Plate V., Fig. 7.

Obr.-Helmeted head of king to right, with the ends of the diadem hanging behind. The helmet has a long, flowing crest, and is ornamented on the side with the ear and horn of a loull. The shoulder is draped. The whole is surrounded by a circle of astragalus beading.
licr.-The mounted Dioskuri charging with levelled spears to the right, and carrying palm branches over their left shoulders. In the field to right No. 58 monogram. Legend dispused in two lines; basiaess metanor in a semicircle at tor, and EXKP.ATIAOY in a straight line beluw.
2. OR13. Tetralrachma. British Museum. 259 grs. Duplicates, Bodleian Lil., and author, 258 grs. Rare. Plate V., Tig. 1. Thomas, Nu. 1.

Olr.-Barc diademed head of king to right, with the shoulders draped. The whule surrounded by a circle of astragalus beading.
Rer.- Draped figure of Apollo, standing to the front, holding an arrow in his right hand, and placing his left hand on a bow, which rests ou the ground. In the field to left $\mathrm{N}_{\mathrm{N}}$. 24 monogram, lower fig. Legend in two perpendicular lines, BAEIAE $\Omega$ EYKPATIAOY.

A duplicate has a monogram formed of the letters M and H ; and the Bodleian specimen has a monogram like No. 1, but without the sloping stroke on the left.

2a. O R 7. Drachma. General Fox. Duplicate, General Ablott. Thomas No. 1a.

Same types as No. 2, with No. 57 monogram. General Abbott's duplicato has the detached letters KI .
3. O A12. Tetradrachma. British Museum, 258.5 grs. From author. Duplicates, Mr. Wigan (from Mr. Gibbs), 263 grs., $\operatorname{Mr}$. E. C. Bayley, and General Abbutt. Extremely rare. Plate V., Fig. 2. Thomas, No. 4.

Obr.-Bare diademed head of king to right, with draped shoulders, as on No. 2.
Rev.-Diuskuri charging to right, as on No. 1. In field to right $N o .16$ monogram. Legend in two horizontal lines, BAミINE $2 \Sigma$ EYKPATIDOY.

Mr. Wigan's coin has No. 3 monogram; and Mr. Bayley's coin has No. 16.

3a. O R 7. Drachma. Author, 64 grs. Jour. des Sav., 1836. Plate ㅍ., Fig. 3. Thumas, No. 4a.

Same types as No. 3. In the field to left the letter A, and to right a monogram like No. 105, but with the middle stroko extended upwards.
4. O AR 14. Tetradrachma. 247 grs . Formerly in the possession of the author; stolen in 1 S 44 . Duplicate, Mr. Campbell, procured by Dr. Mackinnon from Bukhara. Only two specimens. Plate V., Fig. 3.

Obv.-Helmeted head of the king to the right, as on Nu. 1.
Rev.-Mounted Dioskuri, as on No. 1. Legend in two horizoutal lines, as on No. 8. Monogram No. 17.
5. O A 4. Obolus. Author, 10.75 grs. Plate V., Fig. 4. Thomas, No. 2.

Olv.-Bare diademed head of the king, as on No. 2.
Rev.-Egg caps and palm branches of the Dioskuri. In the field below No. 16 monogram. Other specimens have Nos. 18 and 30 monograms. Legend in two perpendicular lines, BAELAE $2 \Sigma$ EYKPATIAOY.
6. Odl 4. Obolus. Author, $10 \cdot 5$ grs. Plate V., Fig. 5. Thomas, No. 3.

Obv.-Helmeted head of the king, as on No. 1.
Rici.-Egg caps and palm branches of the Diuskuri, In the field below No. 30 monogram. Legend in two perpendicular lines, as on No. 5.
7. O A12. Tetradrachma. Author, 259 grs. Plate V., Fig. 6. Duplicate, India Office. See Jour. Asiat. Soc. Bengal vii., pl. xxvii., fig. 1 ; and Ariana Antiqua, xxi., 7. Lady Sale obtained a third genuine specimen of this coin from Badakshan. It was lost during the Indian mutiny, along with the whole of her collection. Thomas, No. 5.

Obv.-Helmeted head of the king, as on No. 1. Legend in two lines, disposed as on the gold coin, BAEIAEYミ MELAE EYIKPATIAHE. The whole sarrounded by a circle of astragalus beading.
Rev.-Bare male and female heads in high relief to right, without diadems. In the field to left No. 3 monogram. The duplicate has No. 80 monogram. Legend in two hurizontal lines, HAIOKAEOYミ KAI $\Lambda A O \Delta I K H \Sigma$.

Mr. Thomas notices two forged casts of this coin ; and I saw five different casts of it before I obtained the original. All the casts repeat a straight superficial scratch in front of the face of Eukratides, as well as the injury to the eye of Heliokles, which has been deliberately drilled out by some bigoted Muhammadan.

7a. O R 8. Drachma. Mr. Wigan (from Mr. Gibbs).
Same types as No. 7, with No. 30 monogram.
8. O $\mathbb{R}$ 13. Tetrallrachma. British Muscum, 258 grs. This is the common type of the tetradrachms of Eukratides. Thomas, No. 6.

Olv.-Helmeted head, as in No. 1.
Rev.-Mounted Dioskari charging, as on No. 1. Monogram No. 57. The usual monograms that accompany this type are Nos. $3,18,30,57$, and 58. One of the British Museum specimens has No. 40 monogram.

8a. O R 8. Drachma. Author, 64 grs.
Same types as No. 8. Thomas, No. 6a.
9. OR13. Tetradrachma. Aathor, 283 grs. Much worn. From Bokhara. Plate V., Fig. 8. Duplicate published in Trésor de Num., lxxxiii., fig. 7. The author also possesses the cast of a third specimen.

Obv.-Naked bust of the king, with helmet and diadem, looking to left, and darting a javelin with his upraised right hand.
Rev.-Mounted Dioskuri charging, as on No. 1. Legend the same. In field to right No. 3 monogram.
10. O A 4. Obolus. Author, 7 grs. Unique. Plate V., Fig. 9.

Olv.-Winged figure of Victory to right, holding out a wreath in her right hand.
Rer.-Mounted Dioskuri charging, as on No. 1. Legend below indistinct —— $\Delta T$ —. In field to right the letter B.
11. O $A$ 7. Hemidrachma. General Abbott, $34 \cdot 5$ grs. Unique. Plate V., Fig. 10. Thomas, in Num. Chron. N.S., IV. 204.

Olv.-Helmeted head of the king, as on No. 1. Legend disposed as on the reverse of No. 1, BAELAES 2 MEГANOY EYKPATIAOY.
Rev.-Dismounted Dioscari standing to front. In field to left a monogram framed of $H$ with Y in centre, forming YTH. Arian legend disposed in the same manner as the Greek legend of the obverse, Maharajasa mahatakasa Evikratidasa. This is the only silver coin of Eukratides with an Arian legend. Wilson's square silver coin (Ariana Antiqua, No. 8, p. 239) is a forged cast of a common copper coin. Plate VI., Fig. 2.
12. $\square$ ※ 5. Lepton? Author, 81 grs. Unique. Plate V., Fig. 11.

Obv.-Bare diadomed head of king to right.
Rev.-Egg caps and palms of the Dioskuri. Legend in two perpendicular lines, as on the silver oboli, BAEINERD EYKPATIAOY. In field below No. 98 monogram, and the letter E reversed.
13. $\square$ 厄 5. Lepton. Author, 46 grs. Plate V., Fig. 12. Thomas, No. 12.

Olv.-Bare diademed head of king to right. Legend in three lines, BAEIAERE METANOY EYKPA. TIAOX.
14. O 巴 7. Challos? Jour. des Sav., April, 1836, vignette, and p. 270 ; copied in Ariana Antiqua, pl. iii., 7. Unique. Thomas, No. 8.

Obv.-Laurelled head of Apollo to right.
Rev.-Horse standing to left. Legend in two horizontal lines, as on No. 8, BAELAES2 (EY)KPATIDOY.
15. O ※ 6. Chalkos. British Museum, 42 grs. Plate V., Fig. 14. Unique. Thomas, No. 11.

Olv.-Helmeted head of king to right.
Rev.-Single horseman at charge to right. Legend disposed as on No. 7, BAEINESE MELANOY EYKPATIAOY.
16. O Æ 10. Dichalkon. Author, 108 grs. Plate VI., Fig. 1. Thomas, No. 9.
$O b v$.-Helmeted head of ling to right.
Rev.-Mounted Dioskuri charging to right. Legend disposed as on No. 1. In field to right No. 41 monogram.
17. $\square$ Æ. Dichrllion. Köhler Méd. de la Bactriane, quoted in Mionnet, Suppt. viii., 470. Thomas, No. 10.

Obv.-Helmeted head to left, with apraised right hand darting a javelin.
Rev.-Mounted Dioskuri charging. Legend in three lines, BAEINERE MELANOY EYKPATIDOY.
18. $\square$ ※ . Dichalkon. Author, 132 grs.; average of sixteen good specimens. Very common. Plate VI., Fig. 2. Thomas, No. 13.

Obv.-Helmeted head to right. Greek legend as on the last.
Rev.-Mounted Dioskuri charging to right. Arian legend in two horizontal lines, Maharajasa Evulkratidasa. In the field to right No. 18 monogram.

18a. $\square$ 无 7. Chalkos. Author, average of five specimens, 63.4 grs.

Types and legends as on No. 18.

18b. $\square$ § 5. Lepton. Author, average of five specimens, 33.9 grs.

Types and legends as on No. 18.
19. $\square$ 9. Dichallion. India Museum, 130 grs. Unique. Plate VI., Fig. 3. See Ariana Antiqua, pl. xxi., fig. 5. Thomas, No. 15.

Obv.-Helmeted head to right, with upraised arm about to dart a javelin, as on Nos. 9 and 17. Greek legend as on No. 17.
Rec.-Winged figure of Victory to right, with palm branch and wreath. In field to right a monogram like No. 98, but with the middle stroke extended upwards, to form the letter P. Arian legend in two horizontal lines, as on No. 18.
20. $\square$ ※ 7. Challios. Author, average of four coins $64 \cdot 25$ grs. Plate VI., Fig. 4. Ariana Antiqua, pl. xxi., fig. 6. Rare. Thomas, No. 16.

Obr.-Helmeted head to right, with Greek legend as on No. 17.
Rev.-Winged figure of Victory to left, with palm branch and wreath. In field to left No. 41 monogram. The whole surrounded by a square. Arian legend in three lines, Maharajasa rajadirajasa E'valeratidasa. This is the only type on which the title of rajadirija, or king of kings, is found.
21. $\square$ 厌 9. Chalkos. Author, mean of two coins, $69 \cdot 5$ grs. Plate VI. Fig. 5. Very rare. Duplicates, author, Plate VI. Fig. 6. Ariana Antiqua, pl. iii., fig. 11. Author's unpublished plates. Mr. E. C. Bayley.

Olv.-Helmeted had of king to right, with usual Greek legend as on No. 17.
Rec.-Seated figure of Zeus to the front, with a palm branch over the left shoulder, and holding out a wreath in his right hand towards the forepart of an elephant. In the field to left a conical object, surmounted by No. 50 monogram. The whole enclosed in a square. Arian legend in three lines outside, incomplete; but by collation with other specimens it appears to be Karisiye nagara devata, "the god of the city of Karisi," but the last word is very doubtful. It is quite certain, however, that this legend does not contnin cither the
name of Eukratides, or any known title. The fourth side, below, is occupied by a line of ornament.

The first of these two coins, Plate VI., Fig. 5, would have given the whole of this curious legend complete had the reverse been better struck; but owing to imperfect mintage the whole of the well-known Arian legend of Apollodotus is clearly legible on the same three sides of the coin, and in somewhat larger characters-Maharajasa Apaladatasa tradatasa. The second coin, Fig. 6, wants the third word of the Arian legend, which has been restored from a comparison of the few other specimens at present known.

COINS OF HELIOKLES. Diraios.

1. O AR 14. Tetradrachma. Author, 260 grs. Duplicates, British Museum, $259 \cdot 6$ grs. ; Mr. Bayley, and others. Plate VI., Fig. 8. Thomas, No. 1.

Obv.-Bare diademed head of king to right, with draped shoulder, surrounded by a circle of astragalus beading.
Rev.-Half-draped figare of Zeas standing to the front, holding a spear in his left hand, and a winged thunderbolt in his right hand. In the field to left No. 61 monogram. Legend in three lines, BAELAESE $\triangle I K A I O Y$ HAIOKAEOTE.

Several specimens have the letters $\Pi \Gamma$ in the exergue, which I take to be the date 83 of the Bactrian æra, which, deducted from 247, gives 164 b.c. Other monograms are Nos. 8, 10, 29, and 94.

1a. O A 8. Drachma. Author, 62 gre.
Same types and legend as No. 1. In the field No. 14 monogram. Two specimens have IIT in exergue.
2. O A 11. Tetradrachma. Major Hay, quoted by Thomas, No. 2. Duplicate, author, apparently a forged cast, its weight being only 214 grs. See Plate IV. Fig. 9, for type.

Obv.-Helmeted head of king to right, with the shoulder draped, and ends of the diadem floating behind. The whole surrounded by a circle of astragalus beading.
Rer.-Zeus seated to left, holding a spear in his left hand, and a small Victory in his right hand. Legend in three lines, as on No. 1.

2a. O R 7. Drachma. Mr. E. C. Bayley. Plate VI., Fig. 9. Duplicate, Major Hay. Thomas, No. 8.

Types and legend as on No. 2.
3. O AR 10. Didruchma. General Abbott, $146 \cdot 3$ grs. Plate VI., Fig, 10. Unique. Thomas, in Jour. Royal Asiat. Soc., xx., pl. ii., fig. 5.

Olv.-Bare diademed head of king to right, with the shoulder draped. Circular legend, BAEINE $\Omega \Sigma$ $\triangle I K A I O Y$ H $\Lambda$ IOK $A E O Y \Sigma$, the name being placed immediately below the bust.
Rer.-Half-draped figure of Zeus, with spear and winged thunderbolt, as on No. 1. In field to left No. 101 monogram. Circular Arian legend, Maharajasa dhamikasa Heliyakreyasa, the name being placed immediately below the figure of Jupiter.

3a. O Ar 6. Hemidrachma. 32 grs. Stacy Collection in Museum Bengal Asiat. Soc., British Museum, India Museum, General Abbott, Mr. E. C. Bayley. See Thomas, No. 4.

Types and legend the same as on No. 3. Monograms, Nos. 16,17 , and 61 .
4. $\square$ E 8. Dichallion. British Museum, 128 grs., from author. Plate VI., Fig. 11. Duplicates, Royal Asiat. Soc., India Museum, General Van Cortlandt, and others. Thomas, No. 5.

Obv.-Bare diademed head of king to right. Legend in three lines, BAEIAESE $\triangle I K A I O Y H A I O K A E O T \Sigma . ~$
Rev.-Indian elephant moving to left. Letter $\Sigma \mathbf{\Sigma}$ below monogram. Arian legend in three lines, Maharajasa dhamikusa Heliyalereasa. On other specimens the name is variously rendered as Heligu-
kresasa and Heliyakraasa (Thomas) with Nos. 17 and 65 monograms. The specimen engraved is struck upon a coin of Straton, a portion of the original Arian legend being still legible on the reverse, as sa Strata, for Maharajasa tradatasa Strutasa.
5. $\square$ 8. Dichalkon. Author, 138 grs. Plate VI., Fig. 12. Duplicate, General Van Cortlandt. Thomas No. 7.

Obe.-Indian elephant moving to right. Legend in three lines, as on No. 4.
Lier.-Iudian humped bull to right. In field below No. 25 monogram with $\Sigma$. General Van Cortlandt's coin has No. 26 monogram with $\Sigma$. Arian legend in three lines, as on No. 4.

## Eukratides the Great.

The early career of Eukratides has already been discussed in my account of Demetrius. I need, therefore, only now repeat that I suppose him to have rebelled against his sovereign about b.c. 190, and that a few years later he finally succeeded in making himself the independent ruler of Bactriana and of the Upper Paropamisadx, or district of Kabul. I have also supposed that the success of his revolt was partly secured by the simultaneous defection of Antimachus II., Nikephoros, the Satrap of the Lower Paropamisadæ, or the united districts of Jalâlâbâd and Peshâwar. Of his subsequent career we have only a few curt notices of Strabo and Justin to assist us in sketching the probable outline of a long reign of twenty or twenty-five years.

According to Strabo the Parthians deprived both Eukratides and the Scythians of a part of Bactriana by force of arms ; ${ }^{4}$ and in another passage he describes the

4 Geogr., xi., 9, 2. 'Aфє ${ }^{2}{ }^{2}$

territory taken from Eukratides as the satrapy of Aspiones and Turiva. ${ }^{5}$ From Justin also we learn that the Bactrians under Eukratides had been harassed and weakened by several wars with Sogdians, Drangians, and Indians before they were conquered by the weaker Parthians. ${ }^{6}$ Now this expression of the "weaker" Parthians fixes the period of the Bactrian campaign early in the reign of Mithridates, as the term could not have been applied to the Parthian kingdom after the annexation of Media, Hyrkania, and Elymais. This indeed is Justin's own view of the relative dates of these events, as he makes the acquisition of the three provinces either subsequent to or nearly contemporaneous with the murder of Eukratides. ${ }^{7}$ We know from other sources that the conquest of Elymaïs must have been subsequent to b.c. 165, as in that year the province belonged to Anticchus IV., Epiphanes, when he made his unsuccessful attempt to plunder the famous temple of the goddess Anaitis.
The conclusive determination of this point is of the greatest importance to Bactrian history, as it places the death of Eukratides some years before the Parthian capture of Babylon in b.c. 153 or $152,{ }^{8}$ during the war hetween Demetrius I. of Syria and Alexander Balas. Bayer has assigned the death of Eukratides to the year

[^80]в.c. 143 ;' $^{9}$ but he was led to this conclusion by his reading of a monogram as forming the łetters HP, or 108, which, deducted from b.c. 255 , the presumed period of the establishment of the Bactrian monarchy, gave the year 148 b.c. for the date of the coin. But dates are never expressed in monograms, which are capable of being read in several different ways. Thus Bayer's monogram may also be read as forming the letters HIP, or 118; and this vagueness is fatal to his assumed date of 148 в.с. for the coin.

Wilson in one place has adopted Bayer's date, which he erroneously quotes as b.c. 147, while in another place he assigns 155 в.c. for the death of Eukratides. ${ }^{10}$ Raoul Rochette and General de Bartholomei prefer 155 в.c., ${ }^{11}$ while Lassen has adopted the still earlier date of 160 в.с. ${ }^{12}$ The date that I have assumed is b.c. 165, which is partly determined by the earlier date of в.c. 190, assigned from his accession, partly by my reading of the detached letters $\Pi \Gamma$ on the coins ef Heliokles as forming the date 83, or b.c. 164; and partly by an impression that the campaign of Antiochus IV. in Upper Asia in e.c. 165-64 may have been instigated by the solicitations of the sous of Eukratides for assistance against the Parthians. The portraits on the coins of Eukratides do not show the same marked disparities of age as those of Euthydemus. I disagree therefore with Bayer and Wilson in assigning him a reign of thirty-five years, and prefer the shorter period of about twenty-five years, which is given to him by the general consent of modern writers. This will fix his reign to the period between b.c. 190 and 165.

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9 Hist. Reg. Græc. Bact., p. }44
10 Ariana Antiqua, pp. 235-262, and p. 266.
11 Jour. des Sav., Oct., 1835, p. }170
12 Indische Alterthumskunde, II., xxiv.
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The principal events in the reign of Eukratides are contained in the brief passages of Justin and Strabo, which have already been quoted. They may be summarily stated as follows:-1. Harassing and exhausting wars with the Sogdians, Drangians, and Indians. 2. An unsuccessful campaign with the Parthians, in which he lost the satrapy of the Aspiones and Turiva. 3. A final triumphant campaign against the Indians, on returning from which he was murdered by his son.
The campaign of Eukratides against the Drangians I take to be his war with Demetrius, who would appear to have held Drangiana and Arachosia as an independent kingdom for several years after. he was deprived of Bactriana by Eukratides, or from b.c. 190 to 180.
The Sogdians with whom the Bactrian king contended must have been the Sace-Scythians, who had been previously held in check with much difficulty by Euthydemus and his son Demetrius. The revolt of Eukratides, and his prolonged hostilities with Demetrius on one side, and with the Greek princes of India on the other, gave the Scythians a favourable opportunity for the occupation of Sogdiana, of which they doubtless took immediate advantage. This event I would assign to the period between в.c. 180 and 170 , after which time the Greek dominion to the north of the Caucasus was limited to Bactria proper and Margiana, or the two provinces lying to the south of the Oxus. To this period I would assign the foundation of the Greek city of Eukratidia in Bactria, which, according to Strabo, derived its name from King Eukratides. ${ }^{13}$ The position of Eukratidia was most probably at Khulm, as Ptolemy places it on a river, at a

[^81]short distance to the south-east of Zariaspa, or Balkh, the ancient capital of Bactria.

The Indian wars of Eukratides must have been waged with the Greek princes of the Indian provinces of Peuke. laotis, or the Lower Kabul valley, of which the capital was Pushkalavati, or Pukhalaoti, the modern Hashtnagar, which I suppose to have been renamed as Demetrias, and to be represented by the monogram No. 58. The founder of this kingdom was most probably Antimachus II. Nikephoros, and with him and his successors Nikias and Philoxenes, as well as with Lysias and Antialkidas, the presumed successors of Demetrius, the Bactrian king must have been engaged in continual hostilities. This view is supported by the fact that the monograms of the eastern cities, Dionysopolis (No. 18) and Demetrias (No.58), are found on the coins of Eukratides, as well as on those of the Indian Greek princes; while the monogram of the western city of Kartana, near Alexandria (No. 17), which is used by Eukratides, does not occur on the coins of Antimachus, while it is found on a few coins of Philoxenes and Lysias, and on many of Antialkidas. According to this view the monograms serve to show the changing fortunes of these Greek princes, as I conclude that Philoxenes and Lysias must have held at least temporary possession of Kartana, when their coins were impressed with the monogram No. 17, which forms the letters KAP. This is confirmed by the actual discovery of a few coins of Lysias on the plain of Begram. The hold of the Western Kabul valley by Antialkidas must have been of longer duration, as one-fourth of his coins are impressed with the monogram of Kartana, while no less than thirty-seven specimens of his copper money were obtained by Masson from the plain of

Begram. On the other hand, we know that while many thousands of the coins of Eukratides have been discovered at Begram, one-fifth of them bear the monogram of Demetrias, and one-tenth of them that of Dionysopolis.

Under this view, the statement of Strabo that Eulratides possessed one thousand cities in India, ${ }^{14}$ must refer to the latter end of his reign, after he had put down all competitors, and had become the sole master of Alexander's Indian domiuions. Wilson, indeed, has denied his Indian sovereignty altogether, on the ground that it is "not confirmed by the discovery of his coins in the Panjab;' and although he afterwards contradicts himself ${ }^{15}$ by affirming that "the collections of Ventura, Honigberger, and Court offer equally abundant specimens procured in the Panjab, and towards Kabul and Peshawur," it is certain that his original statement is much nearer the truth, as I am able to vouch, from my own experience, that the coins of Eukratides, which Masson found in thousands at Begram, are rare in the Panjab. I can add also that in Captain Hasell's and Major Nuthall's collections, which were made between Peshawur and Lahore during the Afghan campaign, there was not a single coin of Eukratides, whilst of Apollodotus and Menander there were numerous specimens. On the other hand, the coins of Eukratides in the collections of Lady Sale, Lieut. Combe, and Dr. Chapman, were all procured at Kabul and Begram, or from Bokhara and Badakshan, while those of Stacy and Hutton were obtained in Kandahar and Sistan.
All the evidence which I have adduced tends to show

[^82]that the Indian empire of Eukratides was not established until towards the close of his reign, and that his Indian wars must have been waged with the Greek princes of the Lower Kabul valley and Panjab, and not with the native princes of the country. The evidence also tends to show that the warfare on his Indian frontier must have been nearly continuous throughout the whole period of his reign. I am therefore inclined to attribute the Parthian war, and the consequent loss of the satrapy of the Aspiones and Turiva, to the close of his reign, when Antialkidas, being closely pressed by Eukratides, would naturally have solicited the assistance of the Parthian king. To this call I suppose that Mithridates at once responded by the invasion of Margiana, which ended in the pormanent annexation of the satrapy of the Aspiones and Turiva to the Parthian empire. This event I suppose to have taken place between wc. 170 and 168 , just before the final subjection of Antialkidas, and before the Parthian conquests of Media, Hyrkania, and Elymaïs, while the Parthian kingdom might still be justly cousidered "weaker" than that of Bactria.

According to Justin, the conquest of India was the last act of the reign of Eukratides, as he was murdered by his son whilst on his return march. The words of Justin are explicit-Indiam in potestatem redegit, "he reduced India under his authority." He had therefore succeeded in suppressing all competitors, and the last of the Greek kings of Peukelaotis must either have been removed, or have become tributary. This prince I believe to have been Antialkidas, all of whose silver coins bear the same type of the Olympic Zeus, with a figure of Victory in his right hand, extending a wreath to an Indian elephant. Now this very type was adopted by

Eukratides himself on his latest coins, one of which, engraved in Plate VI., Fig. 5, is struck upon an Apollodotus. It will be observed also that, contrary to the usual practice, the Arian legend on the reverse of this coin is not a translation of the Greek legend of the obverse, but is altogether different. Unfortunately, these coins are extremely rare, and the legend is imperfect on the few specimens that I have seen. But the reading of the first two words I take to be certain, and that of the last word is the preferable rendering of the imperfect legends of five different coins. I read the whole as Karisiye nagara devata, or, "the god of the city of Karisi," the last word only being doubtful. If this reading be correct, then the god of the city of Karisi must have been the Olympic Zeus holding a figure of Victory in his right hand.
The name of Karisi is not mentioned by any ancient writer, but it seems probable that it must be the same place as Kalasi, the birthplace of the famous Raja Milindu. ${ }^{16}$ In another passage of the same Buddhist book, he is said to have been born at Alasanda, or Alexandria, the capital of the Yona, or Greek country. Kalasi must therefore have been either Alexandria itself, or some place close to it. Now in a.d. 641, the Chinese pilgrim, Hwen Thsang, on leaving the capital of Kapisa to the north of Kabul, was accompanied by the king for seven miles to Kiu-lu-sa-pang, ${ }^{17}$ which would appear to be iutended for Kalasi or Karisi. The same name may also be read in the opening of Ventura's Manikyala inscription as Karisia chhatrapasa, "of the satrap of

[^83]Karisi." I would therefore identify the place with the Cartana of Pliny, ${ }^{18}$ and the Karsana of Ptolemy, which he fixes to the north of the Kophes, or Kabul River. ${ }^{19}$ Now, in the very position indicated by all these authorities, Masson places a ruined city, named KoratAs, ${ }^{20}$ which he describes as lying six miles to the north-east of Begrâm, and to the east of the Regh-Rawân, or "Flowing Sand." This town I take to have been the favourite residence of the Greek kings, from the time of Antimachus I. to the beginning of the reign of Menauder. It was the birthplace of Raja Milindu, whom I believe to be Menander himself. The other name of Tetragonis, or the "Square," which is mentioned by Pliny, shows that the place was a fortified town, the remembrance of which is still preserved in the name of Kilah Káfr, or the "Infidel's Fort," which is applied to the ruins of Koratâs by the Muhammadan population of the district.

The coins of Eukratides may be divided into three groups, according to their types; the first referring to the worship of Apollo, the secoud to the Dioskuri, and the third to Victory. The name of his father, Heliokles, suggests the probability that the sun-god was the special olject of worship in his family, and the inference is raised almost to a certainty by the fact that the coins bearing the type of Apollo are undoubtedly his earliest mintage. ${ }^{21}$

[^84]The portrait is that of a young man, accompanied by the simple title of BAEIMESE. The usual monogram on this class of coins is No. 24, which may be read either as Heliopolis, or as Heliokleia, the probable name of some city founded by his father.

The type of the Dioskuri was adopted while Eukratides still bore the simple title of $\operatorname{BAEI} \Lambda E \Omega \Sigma$; but this was soon rejected for the more ambitious title of BAEINERS: meranoy, or the Great King, which he continued to use until the close of his reign. On a few of the earlier coins of this class the king's head is bare ; but on the greater number, both in silver and in copper, the head is covered with a helmet, which is ornamented with the curious device of the ear and horn of a bull. I suspect, however, that the ear is that of a horse, which, combined with the bull's horn, may have some reference to Alexander's famous steed Bukephalus. But as the same horn and ear are found on the helmeted coins of Seleukus Nikator, where they belong to the hairy bull's skin with which the helmet is covered, it is probable that the device may have no special significance. I am aware also that there still exist many Greek helmets of bronze which are ornamented with horses' ears of metal. But as the helmet of Eukratides has no appearance of hair, it is possible that the bull's ear and horn may be symbolic of the great strength of the wearer.

The type of the Dioskuri, with exactly the same treatment and action of the horses, is found on an early Parthian coin, which I agree with M. Longpérier in

[^85]assigning to Artabanus I. This coin also has a peculiar shape, being flat on the reverse, and convex on the obverse, with a rounded sloping edge, similar to that of the contemporary copper coins of Euthydemus. It is therefore several years anterior to the earliest mintage of Eukratides. On the silver oboli and smaller copper coins, the Dioskuri are represented only by their caps and palm branches. On the uniquc bilingual hemidrachma, with the type of the Dioskuri, Plate V., lig. 10, the Arian legend for the first time offers a translation of the Greck Meгinoy as mahatakasa, or "great." I think, therefore, that this coin is most probably the latest silver mintage of the reign of Eukratides.

The Dioskuri were orginally the tutelary divinities of Sparta, where they were wcrshipped as the ©єò $\sigma \omega \tau \bar{\eta} p \epsilon 5$, or " divine helpers" of mankind; and as the gods of battle, their aid was invoked in all times of difficulty and danger. It seems probable, therefore, that their aid may have been sought by Eukratiles when he was closely besieged by Demetrius for five months, and that he attributed his escape to the timely assistance of the great Twin Brethren, whose images he afterwards placed on his coins. Under this view the type of Dioskuri would liave been adopted shortly after the close of hostilitics with Demetrius, or about 186 s.c. The earliest coins of this type are no doubt those with the bare head and simple title of bailherse, as seen in Figs. 2, 4, and 11 of Plate V. The next in age must be those with the helmeted head and simple title, as seen in Figs. 3 and 5 of the same Plate; while the latest, and by far the most numerous class, must be those with the helmeted head and the more ambitious title of basiness meranoy, or the "Great King."

The type of Victory is confined to some rare copper coins of two kinds, which were undoubtedly the last mintages of Eukratides. On the less rare kind, Pl. VI., Fig. 4, of which there may be about twelve or fifteen specimens known, the figure of Victory is represented in the usual form, carrying a palm branch over her left shoulder and a wreath in her right hand. But the usual Arian title of Maharaja is extended to the more ambitious form of Maharajasa rajadirajasa, or the "great kingthe king of kings," although the Greek title remains the same as before. On the rarer kind, Pl. VI., Figs. 5 and 0 , of which only six specimens are known to me, the figure of Victory stands in the hand of the Olympic Zeus, and holds out a wreath towards an elephant with upraised trunk.
All these Victory coins I would assign to the last few years of the reign of Eukratides, when he had become sole master of the eastern provinces of Alexander's empire, by the final overthrow of Antialkidas, and the consequent annexation of the Indian kingdom of Peukelattis and Taxila.

The single coin, Pl. V., Fig. 9, with Victory on the obverse and the Dioskuri on the reverse, is attributed to Eukratiles on the authority of the types alone, as the legend is imperfect. But as both of the types belong to Eukratides, and there is no Arian legend, I consider the attribution almost certain; and I am therefore prepared to accept it as a specimen of one of the latest silver mintages of Eukratides.

## Helookles. (Dikaios.)

The successor of Eukratides is mentioned only in a single passage of Justin, in describing the close of his Indian campaign. "He reduced India under his power.

From whence, as he was withdrawing himself, he is slain in his march by his son, whom he had made his partner in the kingdom; who without concealing the parricide, as if he had slain an enemy and not his father, he both drove his chariot through his blood and ordered his body to be thrown out unburied." ${ }^{22}$ Mionnet first suggested that Heliokles was the parricidal son of Eukratides, and that he adopted the title of Dikaios, or the "Just," because he prided himself on the slaughter of his father, as that of an enemy. But this conclusion was contested by Raoul Rochette, ${ }^{23}$ who says, somewhat contemptuously, "that it does not deserve to be seriously discussed, as no one has ever yet so braved public opinion, or so outraged both reason and humanity, as to pretend to cover a parricide by taking the title of Just."

Mionnet's view of the relationship of Heliokles to Eukratides was adopted by Wilson and Lassen, and has since been most unexpectedly confirmed by the discovery of the valuable coins bearing the heads of Heliokles and Laodike, the father and mother of Eukratides. For it was the usual practice amongst the Greeks to name one child of every family after its grandfather, and therefore it is highly probable that one of the children of Eukratides would have been named Heliokles. But this probability is raised to a certainty by the fact that we possess many silver coins of a king named Heliokles, which, from their fabric alone, have been assigned to the period imme-

[^86]diately following Eukratides. ${ }^{24}$ But although I consider the relationship of Heliokles to Eukratides to be quite certain, yet I am not prepared to admit that he was the parricidal son of Eukratides, who had been made his partner in the kingdom.

So far back as 1840 I first published my opinion that Apollodotus was the eldest son of Eukratides. ${ }^{25}$ This opinion was based on two facts which may be summarily stated as follows:-1. The common round silver coins, as well as several of the copper coins, of Apollodotus give the title of Philopator, which Jacquet conjectured would declare his father to have been a royal personage, for had he been in a private station his son would not have paid him so stiiking an honour. Raoul Rochette admits that this conjecture appears very plausible, and adds, ${ }^{26}$ "But there is something more to be remarked here, which is, that on the coins of the kings of this part of the East, especially on those of the Arsakidæ, the epithet of Philopator indicates the association of a son in the royal title of the father." The comparative rarity of the Philopator coins would seem to show that these pieces were all struck during his association in the government with his father. 2. We know that Mithridates the Great, of Parthia,

[^87]wrested Drangiana and Arachosia from the Eastern Greeks, either during the latter end of the reign of Eukratides or shortly after the accession of his son. Now there are found in those countries the coins of only four Greek princes, Euthydemus, Demetrius, Eukratides, and Apollodotus, agreeing exactly with the number of princes to whom the possession of Drangiana and Arachosia can be assigned from the brief notices of ancient authors. These are Euthydemus and his son Demetrius, and Eukratides and his associated son, whose name has not been recorded. This last prince must therefore be Apollodotus.

To these arguments I may now add the still more convincing fact that one of the latest coins of Eukratides (engraved as Fig. 5, Plate VI.) is actually struck upon an Apollodotus, every letter of whose Arian legend, Maharajasa Apaladatasa tradatasa, is still distinctly legible.

This last evidence seems to be quite incontestable, as it shows that Apollodotus not only bore the title of king, but that he actually struck money in his own name during the lifetime of Eukratides. The first issue of his coins I would limit to the rarer specimens with the title of Plilopator, which I suppose him to have dropped shortly before the murder of his father, and to have retained only the title of Soter, which is found on the coin re-struck with the name and titles of Eukratides.

According to my view Apollodotus was the eldest son of Eukratides, and accompanied his father in the Indian campaign, while his younger brother, Heliokles, was left in charge of Bactriana. Both of these sons I suppose to have been born during the early career of Eukratides, while he was still a worshipper of A pollo, after whom the cldest son must have been named. If Apollodotus was
born in b.c. 188, he would have been twenty years of age in 168, at the beginning of the last Indian campaign, at which time I suppose him to have been associated as a partner in the kingdom with his father. The younger son, Heliokles, would therefore have been about nineteen years of age when he was left in the goverument of Bactriana.
On the murder of Eukratides by his eldest son, Apollodotus, I suppose that Heliokles refused to acknowledge his sovereignty, and declared himself independent in Bactriana. I am also inclined to think that he may have assumed the title of Dikaios, or the "Just," as the proclaimed avenger of his father's murder. About the same time also I suppose that Straton, who was probably a third son of Eukratides, made himself master of Peukelaotis and Taxila, partly in his own right and partly in right of his wife Agathokleia, whom I take to have been either the daughter, or perhaps the granddaughter of Demetrius. That Straton was a contemporary of Heliokles is proved by one of the coins of the latter (engraved as Fig. 11, Plate VI.), which is struck upon a coin of Straton, whose name in Arian characters is still legible on the reverse. The dominions of Apollodotus would thus have been confined to the Paropamisadæ on the north, with Ariana and Patalene on the south, or Kabul, Afghanistan, and Sindh, within which limits his coins are now found in considerable numbers. But I must postpone the history of Apollodotus for the present to follow the fortunes of Heliokles, who was the last of the Greek kings of Bactriana.
Of the career of Heliokles we know absolutely nothing, as his uame is not mentioned by any historian. But as his coins are the latest Greek money found to the north
of the Indian Caucasus, we may safely infer that he was the last Greek prince of Bactriana. We may accordingly apply to his reign the following statement of Strabo regarding the Scythian invasion of Bactriana:-"The best known tribes are those who deprived the Greeks of Bactriana, the Asii, Pasiani, Tochari, and Sakarauli, who came from the country on the other side of the Jaxartes, opposite the Sakæ and Sogdiani." ${ }^{27}$ The same fact is also stated by Trogus, who ascribes the Scythian occupation of Bactriana and Sogdiana to the Sarauce and Asiani. The period of this occupation is not stated; but as it immediately precedes the mention of the exploits of Apollodotus aud Menander, it can only be ascribed to the reign of Heliokles.

In my account of Eulratides I have shown that the Scythians must already have occupied some part of Sogdiana during his lifetime. This agrees with the accounts of the Chinese writers, who fix the year b.c. 163 as the exact date of the occupation of Bactria and Sogdiana by the Scythian Sus and Yuechi, or Sace and Tochari. If, therefore, the murder of Eukratides took place in в.c. 165, as I have assigned it, his son Heliokles must have come into collision with the Scythians in the very first years of his reign ; and the invasion was most probably precipitated by the disturbed and weakened state of the Bactrian lingdom after the death of Eukra-

[^88]tides. As the coins of Heliokles are scarce, his reign must have been a short one; and I would assign his final expulsion from Bactria to the year b.c. 162. I suppose that lie then retired to the Caucasian Alexandria, to the north of Kabul, which he wrested from Apollodotus, and where he continued to reign for a few years, or till about в.c. 158.

The coins of Heliokles are of four distinct types, two in silver and two in copper. The common silver type is a standing figure of Zeus with spear and thunderbolt. On the earliest coins there is a Greek legend only, but the later coins have an Arian translation on the reverse. The other silver type presents a seated figure of Zeus holding out a small Victory. The coins of this type are extremely rare. All the copper coins are square. 'I'he common kind oflers a bust of the king, with an elephant on the reverse. The rarer kind has the same elephant on the obverse, and a humped bull on the reverse. There are also many barbarous coins of copper, of the same size and the same type as the early tetradrachms; but these are no doulst Scythian imitations; and they thus afford another proof that Heliokles was the last Greek king of Bactriana.

Several of the copper coins of Heliokles are remarkable for the traces of previous mintage, of which one (see Plate VI. Fig. 11) was certainly a Straton, a second was probably a Philoxenes, and a third is not distinguishable. These imperfect mintages imply haste, which would indicate a temporary mint, and a very insecure tenure of puwer.

The monograms of Heliokles are very varied for the suall number of his coins. The commonest, No. 71, which occurs on seven specimens, I am unable to read.

It forms the letters $\triangle$ IPKH or KIPKH $\Delta$, and is most probably intended for some place in Bactria, as it is found only on the silver tetradrachms. Two other tetradrachms offer No. 29 monogram, which I read as Samangan, or Heibak, an ancient town to the north of the Caucasus, which was probably the Bactra Regia of Ptolemy. All these nine tetradrachms are thus referred to Bactria; but there are two others that bear No. 8 monogram, which I read doubtfully as Opiane, or Alexandria of the Paropamisadæ. Four coins have No. 139, or Ophiana; two give Nikaia, or Kabul; and one alone gives Kapisa, or Kushân. All these places were to the south of the Caucasus, and in the immediate neighbourhood of the Paropamisan Alexandria. The readings of the monograms thus correspond with the probable history of Heliokles, which I have traced from other sources.
coINs OF ALEXANDER'S SUCCESSORS IN THE EAST.

By Major-General A. Cunningham.

The coins which I am now about to describe belong to the Greek Princes of India, who would appear to have been the contemporaries of Eukratides. As they are all quite unknown to history, I must claim every indulgence for the few remarks which I am able to offer, as they are simply based on inferences, derived either from the coins themselves, or from the places of their discovery. It is fortunate, therefore, that the coins of the Greek Princes of Ariana and India are so varied and so novel in type that they naturally suggest numerous inferences and associations, such as have not yet been wrung from the monotonous series of Egypt, Syria, and Parthia, by the most patient investigations of many enquirers during the past three centuries.

In dealing with these Eastern Greek kings we encounter a difficulty of a peculiar kind, which is not met with, so far as I am aware, in treating of other royal dynasties. In some cases there is a paucity of names to fill up the required interval of time; but with the Greek Princes of Ariana and India our embarrassment is caused by the
number of lings whom we have to crowd into the short period that elapsed between the rise of the Bactrian kingdom under Diodotus, in s.c. 246, and the final extinction of the Greek power in the East by the IndoScythians, about b.c. 126. Over this brief period of one hundred and twenty years, we have to distribute no less than twenty-nine princes, whose pure Greek names declare them to have ruled before the Indo-Scythian invasion. From their number it is certain that they could not have beer successive rulers of the same province; and it is therefore a legitimate inference that they must have been the contemporary sovereigns of different but neighbouring States.

Wilson experienced the same difficulty in dealing even with the much smaller number of names that were known in his time. Some of these princes, he inferred, must have governed for many years over extensive territories, but the whole of them could not have reigned in succession, and therefore he concluded that "some of them must have been contemporary from the time of Eukratides, or even earlier." ${ }^{1}$ He considered that "the aggressions of the Parthians, combined with other causes, produced a state of general confusion, in which different members of the reigning dynasty, or mere military adventurers, erected petty independent principalities. In this way only" could he "explain the existence of the many Greek princes whose names are preserved in the Bactrian coins, and who are posterior to historical identification." Wilson's "Ariana Antiqua," which was published in 1841, described the coins of twenty kings with pure Greek names; but my "Chronological Table," which
was lithographed at Lucknow in the same year, gave five additional names, ${ }^{2}$ and I have since added four others, making a total number of twenty-nine pure Greek princes. Since then my views have been much modified by new discoveries; but I have adhered to the same principles of classification, by endeavouring to discover the seat of each king's rule from the find-spots and monograms of his coins. Following this clue, I have been led to distinguish the three separate kingdoms of Bactriana, Ariana, and India, which were generally united under the more powerful princes, such as Euthydemus, Demetrius, and Eukratides. After the loss of Bactriana, the southern provinces were held for a short time by his sons Apollodotus and Heliokles; but Ariana was soon wrested from them by Mithridates, and the possessions of the Eastern Greek kings were subsequently confined to the Kabul valley and Panjab and the provinces on the Indus.
I have already described the three separate principalities of Bactriana, Ariana, and India; but none of the coins which I have previously published, with the single exception of Antimachus Theos, belonged to the Greek princes of India. It is true that both Demetrius and Eukratides held possession of the Panjab and Sindh; but they were kings of Bactriana, who extended their arms eastward to India, whereas the kings whose coins I am now about to describe were the actual rulers of North-west India, who extended their arms westward to Kabul. The scat of their rule is determined chiefly by the find-spots of their coins, and partly also by the monograms, many of which, as they orcur on the coins of several successive princes,

[^89]can only represent the names of mint-cities. The period of their rule is less certain. It may, however, be inferred from the general fabric of their coins, and their superiority to those of Apollodotus and Menander, that they must have been contemporaries of Eukratides, a conclusion which seems to be fully borne out by the adoption on his latest coins of the type of Zeus Nikephoros, which was certainly borrowed from the coins of Antialkidas.

COINS OF antimachus II. Nibephoros.

1. O AR 7. Hemidrachma. Plate VL. Fig. 1. Author, 36 grs. Ariaua Antiqua, ii., 15. Thomas, No. 1.

Obv. -Winged figure of Victory moving to left, with palmbranch in her right hand, and wreath in her left. In field to left No. 86 mon. Circular legend, bAEIAESE NIKHФOPOY ANTIMAXOY. The only other monograms on these coins are Nos. 18, 58 , and 87.

Rec.-King on horseback, with Kausia or Macedonian cap, galloping to right. Circular Arian legend, Maharajasa jayadharasa Antimalhasa.
2. $\square$ 8. Dichalkon. Plate VII. Fig. 2. Author, 142 grs. Duplicates: E. I. Mus., 118 grs., engraved in Ariana Antiqua, pl. xxii., 11, and Bodleian Library, Oxford, 163 grs.; described by author in Jour. Bengal Asiat. Soc., 1840, p. 392. Thomas, No. 3. Only these three specimens known.

Obv.—Ægis of Pallas; or human head to front, with four outspread wings, with claws at the points and junction of the wings. Legend on three sides, as on No. 1, but with K instead of X in the name.
Fiec.-Wreath and palm of Victory. In field below an indistinct monogram, like No. 89. Arian legend on three sides, as on No. 1.
N.B. The square copper coin, pl. ii., fig. 16 of Ariana Antiqua, which is attributed by Wilson to Antimachus, is a well known
coin of Moas. I recognise it not only by both its types, but also by its Arian legend, which is peculiar in offering the title of Rajadirajasa as the translation of BAEINESE. See Thomas, No. 5 of Moas, for a description of the actual coin.

## PHILOXENES. Aniketos.

1. O $\not \approx$ 10. Didrachma. Plate VII., Fig. 3. Brit. Mus., from Sir H. Edwardes. 151 grs. Unique.

Obv.-Bare diademed head of king to right, his shoulder covered with the chlamys. Circular legend, BAEINE $\Sigma$ E ANIKHTOY $\operatorname{II} \Lambda O Z E N O Y$.

Rev.-King helmeted, on horseback, galloping to right. In field below No. 140 monogram, but of round shape. Circular Arian legend, Maharajasa apaphihatasa Philasinasa, which is blundered in the second word, the letter phi being a mistake for $d i$.
2. O A 10. Didrachma. Plate VII., Fig. 4. General Ventura's collection, engraved in Jour. des Savants, 1836, pl. ii., 5, and Ariana Antiqua, pl. ii., 17. Thomas, No. 1.

Obv.-Helmeted and diademed head of king to right ; the helmet ornamented with the ear and horn of a bull, like that of Eukratides. Shoulder covered with the chlamys. Circular legend as on No. 1.
Rev.-Type and legend as on No. 1.
3. $\square \mathbb{R}$ 6. Hemidrachma. Plate VII., Fig. 5. Author, 37 grs. See Ariana Antiqua, pl. xxi., 13. Thomas, No. 2.

Obv.-Bare diademed head of king to right; his shoulder covered with the chlamys. Legend on three sides, BAEIMESE ANIKHTOY $\Phi$ ILOEENOY.

Rev.-King helmeted and diademed, on horseback, galloping to right. In field below No. 58 monogram. On other specimens, Nos, 17, 107, and 150.
4. $\square$ A 6. Hemidrachma. Plate VII., Fig. 6. Author, 37 gre. Thomas, No. 1a.

Olu.-Helmeted and diademed head of king to right; his shoulder covered with the chlamys. Legend as on No. 3.

Rev.-Type and legend as on No. 3. In field below No. 17 monogram. On other specimens, No. 58 and 150 .
5. $\square$ 8. Dichallion. Plate VII., Fig. 7. Author, 126 grs. Jour. des Savants, 1836, pl. ii., 6 ; Ariana Antiqua, pl. ii., 18. Thomas, No. 3.

Obc.-Demeter Karpophoros standing to left, holding a cornucopir in her left hand, and pointing with the forefinger of her right hand. In field to left No. 58 monogram. Legend on three sides, BAETAERS ANIKHTOY ФINOミENOY. On other specimens Nos. 89 and 108 monograms.
Rev.-Humped Indian bull to right. In field below the Arian letter $T$ or $R$. Arian legend on three sides, Mahurajasa apadihatasa Philasinasa.
6. $\square$ 8. Dichalion. Plate VII., Fig. 8. Brit. Mus., 124 grs. Unique. Thomas, No. 4.

Obv.-Radiated figure of Apollo, clad in skins, standing to the front, holding a loug sceptre in his left hand, and pointing with the forefinger of his right hand. Legend on three sides as on No. 5.
Rer.-Winged figure of Victory moving to right, holding a palm in her left band and a wreath in her right hand. In field to right No. 58 monogram. Arian Iegend as on No. 5.

## NIKIAS. Soter.

1. OAR 7. Hemidrachma. Plate VII., Fig. 9. Author, 36 grs . Unique.
(obr--Bare diademed head of king to right, his shoulder covered with the chlamys. Circular legend, BAEINE $\Omega \Sigma \Sigma \Omega$ THPOS NIIKIOY.
Rer.-Helmeted figure of the king standing to the front, holding the palm of Victory in his left hand, and pointing with the forefinger of his right hand. In field to left No. 58 monogram. Circular Arian legend, Maharajasa tradatasa Nikiasa.

2．$\square$ ※ 9．Dichalkon．Plate VII．，Fig．9．Author， 130 grs．Sec also author in Jour．Bengal Asiat．Soc．，xi． p．136，and Thomas，No．1．Only these three specimens known．

Obr．－Bare diademed head of king to right，his shoulder covered with the chlamys．Legend on three sides， BALIAE山L LШTHPDL NIKI口

Rev．－King helmeted and diademed on horseback，gal－ loping to right．Arian legend as on No． 1.

It is worthy of notice that the late square form of the omikron，sigma，and omega，which are seen on this coin，as well as on the duplicate published by Mr．Thomas，are not found on the specimen originally published by me in the Journal of the Bengal Asiatic Society，and which is now in the Bodleian Library at Oxford．

## LYSIAS．Aniketos．

1．O AR 7．Hemidruchma．Plate VIII．，Fig．1．Author， 37 grs．Ariana Antiqua．pl．ii．，9．Thomas，No． 1.

Obr．－Head of king to right，with helmet of elephant＇s spoils，the tusks projected forward，and the trunk raised upwards．King＇s shoulder covered with the chlamys．Circular legend BAEIAE $\Omega$ S ANIKHTOY AYミIOY．
Rer．－Herakles standing to the front，with club，lion＇s skin，and palm of Victory in his left hand，and crowning himself with his right hand with the wreath of Victory．In the field to left No． 89 monogram．Circular Arian legend，Maharajasa apadiliatasa Lisiasa．Most specimens of this type render the name in Arian characters as Lisikasa．Other monograms are Nos． 17 and 108.

2． O R 7．Hemidrachma．Plate VIII．，Fig．2．Author， 37 grs．Thomas，No． 2.

Ohr．－Head of ling helmeted and diademed to right；the belmet ornamented with the ear and horn of a bull，as on the coins of Eukratides．Circular legend as on No． 1.

Rev.-Type and legend as on No. 1. In field to left No. 89 monogram. On some specimens the name is rendered in Arian characters as Lisikasa.
3. $\square$ 9. Dichallon. Plate VII., Fig. 3. Author, 128 grs. Jour. des Savants, 183, plate ii., 8. Ariana Antiqua, pl. ii., 10. Thomas, No. 3.

Obr.-Bearded head of Herakles to right, with club over left shoulder. Legend on three sides, BAEINESE ANIKHTOY AYEIOY.
Rev.-Indian elephant moving to right. In field below No. 89 monogram. Arian legend on three sides, Maharajasa apadihatasa Lisikasa. The name is thus written on all the copper coins that I have seen. Other monograms are Nos. 58 and 108.
4. O 巴 Dichalkon. Thomas, No. 4, from Col. Bush's collection.

Types and legend as on No. 3.

## LYSIAS and ANTIALKIDAS.

1. $\square$ 7. Dichaltion. Plate VIII., Fig. 4. Bodleian Library, Oxford. Unique.

Obv.-Bearded head of Herakles with club to right, as on No. 3 of Lysias. Legend on three sides, BAEIAESE ANIKHTOY AYミIOY.
Rev.-Egg-shaped caps of the Dioskuri, surmounted by stars, with two palm branches between. In field below No. 108 monogram. Arian legend on three sides, Maharajasa jayadharasa Antialikidasa.

ANTIALKIDAS. Nikephoros.

1. $O \neq 14$. Tetradrachma. Plate VIII., Fig. 5. 257 grs. E. I. Museum, from Gen. Abbott. Unique. Thomas, No. 1. Obv.-Bare diademed head of king to right, his shoulder covered with the chlamys; the whole surrounded by a circle of astragalus beading.
Rev.-Draped figure of Zeus Nikephoros seated, and half turned to left, with sceptre in left hand, and a small figure of Victory in right hand. Victory
holds a palm in her left hand, and with her right hand extends a wreath to the forepart of an approaching Indian elephant, which stands with upraised trunk to receive the wreath. The elephant has a bell suspended from his neck by a cord. Legend in one semicircular line above and one horizontal line below, BAEINE $\Omega \Sigma$ NIKHФOPOY ANTIA $\Lambda K I \Delta O Y$. In field to right No. 89 monogram.
2. OR 8. Drachma. Plate VIII., Fig. 6. Mionnet, Supplement viii., p. 483, plate. Cabinet of M. Revil.

Obv.-Diademed head of king to right, covered with the kausia, or Macedonian royal cap, and shoulder clad in the chlamys; the whole surrounded by a circle of astragalus beading.
Rev.-Draped figure of Zeus Nikephoros with sceptre, Victory, and forepart of elephant, as on No. 1; but the elephant has received the wreath from Victory, and is marching away from Zeus. Circular legend as on No. 1.
3. O R 7. Hemidrachma. Plate VIII., Fig. 7. Brit. Mus., $34 \cdot 5$ grs. Unique.

Obv.-Bare diademed head of king to right, as on No. 1. Circular legend, BAEINESE NIKHФOPOY ANTIAAKIAOY.
Rer.-Zeus seated, as on No. 1, with sceptre in his left hand, and holding out in his right band a wreath and palm, the symbols of Victory, towards a small elephant, which stands sideways, with upraised trunk, to receive them. The figure of Victory, which is found on all the other silver coins of Antialkidas, is onitted on this unique coin. In field to right No. 58 noonogram. Circular Arian legend, Maharajasa jayadharasa Antialikidasa.
4. $O R$ 7. Hem:drachma. Author, 37.5 grs . Ariana Antiqua, pl. ii., 12. Thomas, No. 1a.

Olr.-Bare diademed head of king to right, his shoulder covered with chlamys. Circular legend as on No. 3.
Rer.-Zeus Nikephoros, with Victory and approaching elephant, as on No. 1. In field to right No. 58 monogram. Circular Arian legend, as on No. 3.

4a. O Al 7. Hemidrachma. Author's unpublished lithographed plates, vii., fig. 1.

Obv.-Bare head, as on No. 3.
Rer.-Type as No. 3, but the elephant is marching away with the wreath.
5. O A 7. Hemidrachna. Plate VIII., Fig. 8. Author, 36 grs. Thomas, No. 3.

Obv.-Head of king helmeted and diademed to right, his shoulder covered with the chlamys. Circular legend, as on No. 3.
Rev.-Type and legend as on No. 3. In field to right No. 58 monogram.

5a. O R 7. Hemidrachma. Author, 37 grs .
Obr.-Helmeted head of king, and legend as on No. 4.
Rer.-Type and legend as on No. 4a; with the elephant marching off with the wreath of Victory. In field to riglat No. 58 monogram.
6. O $\mathbb{R} 7$. Hemidrachma. Author, $37 \cdot 5$ grs. Ariana Antiqua, pl. ii., 11. Thomas, No. 2a.

Obe.-Diademed head of the king covered with the kausia, or Macedonian cap, and his shoulder clad in the chlamys. Legend as on No. 3.
Rer.-Type and legend as on No. 3; with the elephant receiving the wreath from Victory. In the field to right No. 89 monogram.
6. OAR 7. Hemidrachma. Plate VIII., Fig. 9. Author, 37 grs.

Olr.-TType and legend as on No. 6.
Per.-Type and legend as on No. 4a; with the elephant marching off with the wreath. In field to right No. 58 mouogram.
7. O 巴 10. Dichallion. Plate VIII., Fig. 10. Author, 120 grs. Thomas, No. 4.

Obr.-Bearded and laurelled head of Zeus to right, with thunderbolt in upraised right hand. Circular legend, BA $\Sigma I \Lambda E \Omega \Sigma$ NIKHФOPOY ANTIAAKIDOY.

Pec.-Egg-shaped caps of the Dioskuri, surmounted by stars, and with two palm branches between
them. In field below No. 89 monogram. Circular Arian legend, Maharajasa jayadharasa Antialikidasa.

7a. $\square$ ® 8. Dichalkon. Author, 128 grs.
Types and legends as on No. 7.
8. $\square$ Æ 8. Dichalkon. Plate VIII., Fig, 11. Author, 128 grs. Jour. des Savants, 1835, pl. ii., 15 ; Ariana Antiqua, pl. ii., 13. Thomas, No. 5.

Obv.-Bearded head of Zeus to right, with thunderbolt resting on left shoulder. Legend on three sides, as on No. 7.
Rev.-Egg-shaped cap of the Dioskuri, as on No. 7. In field below No. 58 monogram. Arian legend on three sides, as on No. 7.

## THEOPHILUS. Dikaios.

1. O R 7. Henidrachma. Plate VII., Fig. 13. Author, 36 grs. Unique.

Obv.-Bare diademed head of king to right, his shoulder covered with the chlamys. Circular legend, BAIAE $\Sigma \triangle I K A I O Y$ 日EOФIAOY.
Rev.-Figure of Herackles to front, holding club and lion's skin in left hand, and crowning himself with wreath of Victory with his right hand. In field to left No. 150 monogram. Circular Arian legend, Maharajasa dhamikasa Theüphilasa.
2. $\square$ 8. Dichalkon. Plate VII., Fig. 14. Author, 131 grs. Unique.

Obv.-Head of Herakles to right, with club over left shoulder. Legend on three sides, as on No. 1.
Rev.-Cornucopiæ. In field to left No. 58 monogram. Arian legend on three sides, as on No. 1.

## EPANDER. Nikephoros.

1. O R 7. Hemidrachma. Plate VIII., Fig. 11. Author, 19 grs.; broken and worn. Unique.

Obv. -Bare diademed head of king to right; his shoulder covered with the chlamys. Circular legend, bąi.less nikhoopor enanapoy.

Rev.-Helmeted figure of Athene Promachos to left, with wgis on left arm, and thunderbolt in upraised right hand. In field to right No. 106 monogram. Circular Arian legend, Maharajasa jayadharasa Epandrasa.
2. $\square$ 8. Dichalkon. Plate VII., Fig. 12. Aathor, 152 grs. Three specimens, Author; Two specimens, E. I. Museum, from Gen. Abbott.

Obr.-Winged figure of Victory, with palm and wreath, moving rapidly to right. Legend on three sides, as on No. 1.

Rev.--Humped Indian ball to right. In field to right No. 106 monogram. Arian legend on three sides, as on No. 1.

## Antimachus II. (Nikephoros.)

The position which I claim for Antimachus II. is different from that assigned to him by Wilson, who supposes him to have "founded a principality immediately above the Hazara Mountains, to the west of the Balkh road." ${ }^{3}$ According to this description, Antimachus must have been the ruler of Shibrgân and Maimuna, or Western Bactria. But this locality is quite incompatible with the Arian legends on his coins; and Wilson must have forgotten that he himself was the first who gave the name of Arianian to these characters, because they were found to be restricted to the coins of the Greek princes of Ariana proper, or the provinces of Aria, Drangiana, Arachosia, and Gedrosia, to the south of the Kaukasus. If they had occurred on the coins of the Greek kings of Bactria, it is almost certain that they would have been called Bactrian characters, as the name of Bactria was then much better known than that of Ariana. Lassen

[^90]calls them Kabulian characters, and argues that their use prevents him from acceding to R. Rochette's suggestion that Philoxenes ruled to the north of the mountains, and fought against the Scythians. ${ }^{4}$ The same argument is even employed by Wilson himself in another case, where he says that "the use of the Arianian characters places Lysias on the south of the mountains, out of Bactria proper." ${ }^{5}$
Wilson was most probably induced to place Antimachus in this westerly position from the fact that Masson had procured more of his coins from the Hazara Mountains than from Begram. ${ }^{6}$ But out of twenty-five coins which I have been able to trace, all, except the seven specimens obtained by Masson, were procured to the eastward, or in Jalalabad, Peshawar, and the Panjab. The actual numbers are in Hazara and Begram, seven; in Jalalabad and Peshawar, eleven; and in the Panjab, seven; which point to the Lower Kabul valley as the chief seat of the dominions of Antimachus. This conclusion is supported by my readings of the monograms, as just one half of his coins known to me, or twenty-six out of fifty specimens, bear No. 58 monogram, which I read as Demetrias, the name that I suppose to have been given by the Greeks either to Peukelaotis or to Peshawar. One-tenth of his coius bear No. 18 monogram, which I read as Dionysopolis, or Jalalabad. Of the remaining coins, three-tenths bear No. 86, and one-tenth No. 87 monogram, both of which may be read as חEYKE^, for Peukelaotis. These two monograms are found also on the coins of Menander, but

[^91]not on those of any other princes. Altogether, the balance of evidence, as derived from the find-spots of the coins, as well as from the readings of the monograms, is decidedly in favour of the eastern position which I have assigned to the kingdom of Antimachus in the Lower Kabul valley. This conclusion is corroborated by the testimony of Colonel Stacy and Captain Hutton, neither of whom obtained even a single specimen during their long residence in Kandahar and its neighbourhood.

The date of Antimachus is more difficult to determine; but the evident superiority in the fabric of his coins has led every enquirer to place him before Philoxenes, Lysias, and Antialkidas; and as there are strong reasons for believing that the type of Zeus Nikephoros on the latest copper coins of Eukratides is copied from the coins of Antialkidas, ${ }^{7}$ I conclude that all these four princes were most probably the contemporaries of Eukratides. Masson was satisfied that Autimachus could not have reigned after Eukratides, and was even inclined to place him before that prince. ${ }^{8}$ Wilson makes them all posterior to Eukratides, but admits that some of them may have been earlier. ${ }^{9}$ My own conjecture is that Antimachus Nikephoros was the grandson of Antimachus Theos, and that on the rebellion of Eukratides against Demetrius, he managed to make himself independent in the Lower Kabul valley. I suppose that he at first assisted Eukratides in

[^92]his successful revolt, and was afterwards supported by that prince against the attacks of Demetrius from the Panjab.
The coins of Antimachus 1I. are limited to two typesone in silver, and one in copper. On the silver coins we see the figure of Victory hastening to present her wreath and palm to the king, who appears on horseback on the other side. On the rare copper coins we see only the symbols of Victory joined to a curious figure with a human head and four large outspread wings. It is possible that this may be intended for the Agis of Pallas, in a new form ; but the figure has so much the appearance of outspread wings as to suggest the conjecture that the type may be a symbol of power and swiftness of motion, and may thus indicate the rapidity and completeness of the king's victory. It has also struck me as not improbable that there may be some allusion to the name of Aornos, and its capture by Antimachus from the governor of Demetrius. The Greek form of the name was intended to convey a description of the inaccessibility of the rock, even to birds. ${ }^{10}$

The same thing was said of the lill-fort of Arimazes in Sogdiana; and when the Macedonian conqueror summoned him to surrender, he hanghtily enquired, "whether Alexander could fly?" on which the king remarked that on the following night he would know that the Macedouians could even fly. ${ }^{11}$ Now, I think it not improbable

[^93]that a similar story may be typified on these coins of Antimachus, and that the winged figure, joined to the symbols of Victory, may be intended to record the capture of the famous fort of Aornos, on the western bank of the Indus.

As the coins of Antimachus are rare, his reign must have been a short one; and as I have fixed his accession contemporary with that of Eukratides, in b.c. 190, the close of his reign may be placed about b.c. 185. '

## Philoxenes. (Aniketos.)

Wilson remarks that " the several scholars and numis. matists who have investigated the subject agree in recognising this prince as the successsor of Antimachus." ${ }^{12}$ I have also arrived at the same conclusion, partly because Philoxenes has adopted the horseman type, but chiefly on account of the close similarity in the style and fabric of his copper coins to those of Antimachus.

The coins of Philoxenes are not so rare as those of Antimachus, and they are more varied both in size and in type. Not a single specimen of his coinage was found by Masson at Begram; ${ }^{13}$ and Stacy did not obtain any either at Kandahar or at Kabul, although he got no less than twenty specimens on his arrival at Peshawar. Out of twenty-four other specimens, of which I have a record, all but two were procured near the banks of the Indus, at Ohind and Peshawar to the west, and at Attak, Shahdheri, and Rawul Pindi to the east. Judging, therefore, from the actual find-spots of his coins the seat of his rule must have been in the Lower Kabul valley.

[^94]The same conclusion is derived from my readings of the monograms, which show that nearly one-half of the coins of Philoxenes were minted at Demetrias (No. 58 mon.), and about one-fifth at Taxila. (No. 108 mon.) It is curious that not a single specimen bears the monogram of Dionysopolis (No. 18), although three coins were struck at Karsana (No. 17), and two coins at Ophiana itself (see No. 139 mon., and the didrachm, Fig. 2 of the accompanying plate). On the other hand we have a new monogram, No. 89, which I read as MOY, and suppose that it may be intended for Multan.

The types of the coins of Philoxenes add but little to our knowledge of his history. The figure of Victory and the title of Aniketos show that he must have been engaged in hostilities with some success, which were probably followed by peace and plenty, as indicated by the figure of Demeter Karpophoros on his copper coins. The humped bull I take to be the type of India, which thus corroborates the previous conclusion drawn from the monograms and find-spots of the coins, that the seat of his power was in the Lower Kabul valley, and on the banks of the Iudus.

Putting all these indications together, I am inclined to suppose that Philoxenes, shortly after his accession, was attacked by Eukratides, and deprived of his western province of Nysa or Dionysopolis. But I conclude that he must have recovered it again, at least for a short time, as the monograms of Karsana and Ophiana would seem to show that he had invaded the territories of Eukratides, and hal actually coined money in the capital of the Upper Kabul valley. But this success must have been very temporary, as I know of only five coins bearing these two monograms; and one of these coins, the
didrachin No. 3 of the accompanying plate, is of such inferior and faulty execution ${ }^{14}$ as to betray the unsettled tenure of a hasty occupation.

## Nikias. (Soter.)

Nikias is one of those ephemeral princes whose name is known to us only by a few rare coins. His silver coin is unique, and of his copper coinage only three specimens are known to me. He is connected with Antimachus and Philoxenes by the type of the horseman, and with the Greek kingdom of the Lower Kabul valley by the monogram of Demetrias, No. 58, which is the only one found on his coins. On the reverse of his silver coin the king appears on foot, carrying the palm of Victory; but the extreme rarity of his coins proves decisively that his reign must have been a short one. I conclude, therefore, that he lost his throne within a few months of his accession, after the death of Philoxenes in в.c. 180. His antagonist was, probably, Lysias, whom I suppose to have succeeded his father, Demetrius, on the throne of the Panjab about b.c. 180.

## Lysias. (Aniketos.)

The connection between Demetrius and Lysias has already been noticed by Wilson; ${ }^{15}$ but at the same time he remarks that "there are some considerations which militate against an immediate succession. The fabric of the coins, the square form of the copper coins, and the presence of Arianian letters, show both place and period different from that of Demetrius." These objections

[^95]have since been removed by the progress of discovery, as we now possess a square copper coin of Demetrius with an Arian legend; ${ }^{16}$ while the inferiority of the later tetradrachms of Demetrius is so great as to range them with the ruder tetradrachms of Eukratides, and with the unique tetradrachm of Antialkidas engraved in the accompanying plate.
The points of connection between Demetrius and Lysias are the absolute identity of the king's elephant helmet, of the standing figure of Herakles crowning himself, and of the head of Herakles with the club over the left shoulder. These coincidences of type have always been considered as strong proofs of a connection, either in time or in place, or in both. Where history is silent such data are invaluable; and in the present instance I think that they are almost certain indications of a very close connection between Demetrius and Lysias.
The coins of Lysias are of nearly the same rarity as those of Philoxenes. Masson obtained fourteen specimeus at Begram, and I have traced six others to Kabul; but about three-fourths of the number known to me have been procured at Peshawar and Rawul Pindi, and at other places in the neighbourhood of the Indus. The monograms also point to the same locality, according to my readings, as only three coins out of fifty-one bear the monogram of Karsana (No. 17), while the remaining forty-eight are equally divided between Demetrias (No. 58), Taxila (No. 108), and Multan (No. 89). Both the monograms and the find-spots of his coins, therefore, agree in pointing to the Lower Kabul valley and Panjab as the seat of the kingdom of Lysias, which is further
confirmed by the type of the Indian elephant on his copper coins.
The date of Lysias is more difficult to fix. Wilson has assigned him to $\mathbf{B . c}$. 147 ; ${ }^{17}$ but he has obtained this late date by bringing down the period of Menander's accession to в.c. 126; thus ignoring altogether the accepted date of the Indo-Scythian conquest, which is authenticated by the Chinese and classical authorities. By accepting their date of the Indo-Scythian occupation of the Kabul valley, the reigns of Apollodotus and Menander must be thrown back about thirty years before the period assigned to them by Wilson; and by applying the same correction to his date of Lysias, the accession of this prince may be fixed about в.c. 180, as I have already determined from other data. As his coins are rare, his reign must have been a short one, say of five years, and its close may therefore be placed approximately about b.c. 175.

Of the career of Lysias we know absolutely nothing, as his name is not mentioned in history. But I gather from the monograms of his coins that his kingdom originally comprised the Lower Kabul valley and the Panjab, and that for a short time he must have held the city of Karsana, to the north of Kabul. The type of Herakles crowning himself with a wreath, and holding a ${ }^{\text {ralm }}$ as well as the usual club, is no doubt intended to indicate the king's victorious career. His first success I would refer to the overthrow of Nikias, and the subversion of his kingdom; but his subsequent victories must have been obtained over the governor of Eukratides in the Upper Kabul valley, at a time when, I suppose, that prince to have been engaged in hostilities with the Scythians.

[^96]
## Antialkidas. (Nikephoros.)

The connection between Lysias and Antialkidas has been admitted by all inquirers, although they differ as to its nature, as well as in the relative positions of the two princes. According to Wilson, they were of different families, and either Lysias or his immediate successor was overthrown by Antialkidas. ${ }^{18}$ Lassen, on the contrary, placed Lysias after Antialkidas; ${ }^{19}$ while my own Chronological Table, which was prepared in $1841,{ }^{20}$ makes Antialkidas the son and successor of Lysias. My attribution was chiefly founded on the important coin, Plate VIII., Fig. 4, which bears their joint names, that of Lysias being on the obverse, or Greek side, and that of Antialkidas on the reverse, or Arian side. This junction of two names on the same coin is, I believe, generally admitted to denote the association of the younger prince in the government; and as the name of Antialkidas occupies the reverse of the coin, I infer that he was the prince so associated. It is quite certain that they ruled over the same kingdom, as they both use the same four monograms. I conclude, therefore, that Antialkidas was either the son or the younger brother of his predecessor, Lysias.

The four monograms used by Antialkidas are those which I read as Demetrias (No. 58), Taxila (No. 108), Multan (No. 89), and Karsana (No. 17). The last occurs on only 8 coins out of 118 , of which I have a record, while

[^97]the first is found on no less than 51 specimens, the second on 32 , and the third on 27 . These proportions are confirmed by the find-spots of 140 coins which I have noted. Of these 38 were obtained by Masson at Begram, 2 by other collectors at Kabul, and two at Jalalabad; but the remaining 98 specimens were procured at Peshawar, and at various places in the Panjab. From these data I conclude that the kingdom of Antialkidas must have comprised the Lower Kabul valley and the Panjab, and that for some time he must have held the city of Karsana, in the Upper Kabul valley, which had lately been occupied by his predecessor Lysias. I suppose this uccupation to have continued whilst Eukratides was engaged in hostilities with Mithridates the Great of Parthia, or between 170 and 168 b.c. I thiuk it probable that Mithridates and Antialkidas were acting in concert, and that the timely cession of the two satrapies of Aspiones and Turiva, which had been invaded by Mithridates," may have bought off the more formidable Parthian, and thus left Eukratides free to oppose the Greek King of India with all the power of the Bactrian monarchy. Being thus abandoned by his Parthian ally, Antialkidas must have eventually succumbed, when his dominions were annexed to the Bactrian kingdom of Eukratides about в.c. 167.

The coins of Antialkidas offer only two distinct types on the reverse-one in silve', and one in copper-both of which are connected with he coins of Eukratides. On the coins we have the egg-shaped bonnets of the Dioskuri with their stars and palm branches. Now this is the well-known type of the smaller silver and copper pieces of

[^98]Eukratides; and as it is found on the earliest coinage of Antialkidas, bearing the joint names of himself and his predecessor, I conjecture that the type was adopted on the first occupation of Karsana by Lysias, and that Anti. alkidas was most probably associated in the kingdom at the same time. The silver coins bear the single type of Zeus Nikephoros, with three varieties of treatment. The commonest type represents Zeus holding a small figure of Victory, who extends her wreath to an approaching Indian elephant. On some coins the elephant has received the wreath of Victory, and is marching off with it. The third variety, which is found cnly on a single coin, represents Zeus himself holding out the wreath and paln of Victory to the Indian elephant. I understand these types to indicate the success of Antialkidas over Eukratides. The elephant typifies India, or the King of India, to whom Zeus Nikephoros presents the symbols of Victory.

Now this type is found on some very rare copper coins of Eukratides, which have already been described, and which I have shown to be the latest mintage of the Bactrian king. ${ }^{22}$ On these coins Zeus Nikephoros is seated, with the palm over his left shoulder, and the wreath in his right hand, as if just taken from the Indian elephant, which stands dejected, with pendent trunk, to show that Victory had been wrested from the King of India by Eukratides. If my interpretation of these curious types is correct, they furnish the most conclusive proof that Antialkidas must have been the contemporary

[^99]and autagonist of Eukratides. They help also to corroborate in the most satisfactory manner the conjectural sketch which I have given of the career of both princes.

The coins of Antialkidas are about twice as numerous as those of Lysias or Philoxenes, which would argue a longer reign. I suppose him to have been associated with Lysias about в.c. 176, and to have succeeded him in the following year. During the early part of his reign he was able to hold the Upper Kabul valley against the governors of Eukratides; but about b.c. 167 he was finally conquered and deprived of his kingdom, after a reign of eight years.

## Theophilus. (Dikaios.)

Only two coins of Theophilus have yet been discovered, which afford but a slight foundation to build any con. jectures regarding his career. But, fortunately, both of these coins offer types which connect him with Lysias; while one of his two monograms, No. 58, is the commonest of Lysias and Antialkidas, and the other is found on the coins of Philoxenes. The fabric of his copper coin is also similar to that of the coins of Lysias and Antialkidas, so that all the data that we possess regarding Theophilus are strongly in favour of his connection with those princes. The standing figure of Herakles on the silver coin wants the palm branch of the coins of Lysias ; but the head itself is smaller, and its general treatment is more like that of the head of Zeus on the coins of Antialkidas. The cornucopiæ on the reverse of the copper coin is the symbol of Demeter Karpophoros, which again connects him with Philoxenes, who ruled over the same
kingdom. The silver coin was obtained at Rawul Pindi, and the copper coin at Syâlkot.
From all these data I would hazard a conjecture that Theophilus was the son of Lysias, and the younger brother of Antialkidas, and that he either disputed his brother's succession immediately after their father's death, or was set up by Eukratides, during his contest with Antialkidas, to weaker the power of his adversary. The former conjecture appears to be the more probable one, and I would therefore assign to Theophilus an ephemeral reign of a few months in the year в.c. 175.

## Epander. (Nikephoros.)

The coins of Epander are so rare that we have but little to guide us in fixing his position either in place or in time. His silver coin is unique, and of his copper coins only six specimens are known to me. One of his coins was brought from Kabul, but the find-spots of the others have not been ascertained. The figure of Athene Promachos on the silver coin of this prince is probably copied from the coins of Straton ; the bull on his copper coins is identical with that on the copper coins of Heliokles, while the figure of Victory is similar to that on one of the copper coins of Eukratides, and is quite different from the Victories ou the coins of Meuander and of the later Greek princes. The same monogram, No. 106, appears on all his coins; but on one specimen it is accompanied by No. 17, which I read as Karsana. 'laking this solitary guide as to place, the seat of his rule must have been in the Upper Kabul valley; and as the fabric of his copper coins connects him with Heliokles, while the types connect him with Eukratides, as well as
with Heliokles, I conjecture that he may have been one of the sons of Eukratides, and that for a few months in b.c. 165, after the murder of his father by Apollodotus, he contrived to maintain himself as the ruler of the city of Karsana.
In assigning dates and localities to these unrecorded Princes, I wish it to be distinctly understood that they are all more or less conjectural. I have sought diligently for indications of their history in the types and monograms as well as in the find-spots of their coins ; but as these data are often imperfect or uncertain, it is perhaps impossible to arrive at any conclusions to which some objections may not be offered. I believe that as new coins are found, we shall gradually discover fresh facts, and thus eventually obtain a tolerably correct outline of the history and connections of most of these Princes. So long, however, as our data are liable to be modified by fresh discoveries, no certain classification can be made; but as I have fully stated the grounds of my present classification in each case, I trust that it will be accepted with every indulgence as a convenient temporary arrangement.

# COINS OF ALEXANDER'S SUCCESSORS IN THE EAST. 

By Major-General A. Cunningham.

Before the death of Eukratides the empire of the Bactrian Greeks had been extended from Sogdiaua to the mouths of the Indus, and from the great Drangian lake to the bauks of the Hesudrus or Satlej. But after his murder, the wide dominions which he had held together with so much difficulty crumbled to pieces, and the once famous kingdom of Bactria was no more. The succession to the throne must have been obstinately disputed, as several of his sons, or principal officers, would appear to have seized upou different parts of the empire, where they made themselves independent. To add to the confusion, the Scythians just then invaded Bactria from the north, and at the same time Mithridates I., the most able and powerful of the Parthian mouarchs, attacked the western provinces of Aria and Drangiana.

Of the presumed competitors for the throne of Eukratides Apollodotus alone is known to history. The probable career of Heliokles and Epander has already been
sketched, and that of Diomedes and Straton, the other supposed sons of Eukratides, will follow hereafter. Where so little is known I must claim every indulgence for the conjectures which I now venture to offer regarding the immediate successors of Eukratides. According to my view, Apollodotus was the eldest son of Eukratides, and was associated in the kingdom with his father before the Iudian campaign. Heliokles was another son, who was left as governor in Bactria. Epander, a third son, was perhaps governor of Alexandria Opiane, or the Upper Kabul Valley; and Diomedes, a fourth son, was governor of Denietrias, or Peukelaotis, in the Lower Kabul Valley. Straton, who may have been either a fifth son, or a principal officer of Eukratides, I take to have been governor of Taxila in the Panjàb. His later coins give the title of Philopator, which is generally admitted to denote the royalty of the father ; but if, as I suppose, these coins belong to a second Straton, the son and successor of the first, the royalty of the father would apply to Straton himself. The counection with Eukratides is, however, a mere conjecture; and I should prefer to associate him with Demetrius and Lysias, did not his wife, Agathokleia, appear to lave a better claim to that relationship. This, however, is not a very strong objection, as the marriage of brothers and sisters was a common practice in the royal families of Syria and Egypt at this very period. I an inclined, therefore, to consider Stratou and Agathokleia as the brother and sister of Lysias, and the children of Demetrius. I suppose Straton to have held the Eastern Panjâb during the reigns of Lysias and Antialkidas, and to have been tributary to Eukratides just belore his murder, after which he made himself the undisputed master of the Panjîl).
apollodotus the great．Phlopator，Soter．
1．O A 11．Didrachma．Plate IX．，Fig．1．Author， 152.5 grs ．Duplicate，Brit．Mus．，from author．Only these two specimens known．

Obv．－Bare diademed head of king to right，with chlamys on the shoulder．Circular legend，BAEIAESE MELANOY EתTHPOE KAI ФIлOIIATOPOE AПOムпOДOTOY．
Rev．－Helmeted and draped figure of Athene Promachos moving to left，with ægis on left arm，and thunderbolt in upraised right hand．In field to left No． 48 monogram，and to right No． 49 monogram．Circular Arian legend，Maharajasa tradatasa Apaladatasa．

2．O Æ7．Hemidrachma．Plate IX．，Fig．2．Author， 36 grs．Rare．Ariana Antiqua，pl．iv．，13．Thomas，No． 1.

Obv．－Bare diademed head of king as on No．1．Circular
 TOPO乏 AПONAOAOTOY．
Rer．－－Type and legend as on No．1．In field to left No． 46 monogram．A few specimens have No．51， and a single coin has No． 71.

3．О A 7．Hemidrachma．Plate IX．，Fig．3．Author， 36.5 grs．Very rare．Duplicates，Brit．Mns．and E．I． Mus．

Obr．－Bare diademed head of king as on No．1．Circular legend，B $\triangle 0 T O Y$ ．

Rer．－Type and legend as on No．1．In field to left the Arian character di，and to right No． 74 mono－ gram．Arian legend as on No． 1.

4．O A 6．Hemidrachma．Plate IX．，Fig．4．Author， 81 grs．Rare．Ariana Antiqua，pl．iv．，15．Thomas，No． 3.

Obv．－Indian elephant moving to right．Circular legend， BAEIAES乏 A
Rer．－Humped Indian bull moving to right．Circular Arian legend，Maharajasa Apaladatasa tradatasa．
5. $\square$ 7. Hemidrachma. Plate IX., Fig. 5. Author, 36.5 grs. Common. Ariana Antiqua, pl. iv., 16. Thomas, No. 2.

Obr.-Elephant as on No. 4. Legend on three sides, the same as on No. 4. In exergue 刋E.
Rer.-Bull as on No. 4. Arian legend on three sides, the same as on No. 4. In exergue NO. Other specimens have Nos. 10, 17, 81, and 85 monograms.
6. О ※ 12. Hemiobol. Plate IX., Fig. 6. Author, 255 grs. Rare. None in the Masson collection. Thomas, No. 5.

Obv.-Apollo standing to right, clad in the chlamys and anaxyrides, or tight eastern trousers, with quiver behind left shoulder, and holding out an arrow with both hands. In field to left No. 74 monogram. Circular legend as on No. 3.
Rev.-Tripod. In field to right and left the Arian letters $d i$ and $u$. Circular Arian legend, as on No. 3. On a few specimens the legends are disposed in three straight lines.

A single specimen, procured in Bannu by Colonel Honner, has No. 68 monogram, with the Arian letters $a$ and $r$, with foot-strokes attached, as in the Arian characters on the coins of Pakores.
7. $\square$ 6. Lepton. Plate IX., Fig. 7. General Van Cortlandt. Very rare. Thomas, No. 9.

Obv.-Rude figure of Apollo to right, holding out an arrow, as on No. 6, surrounded by a square of astragalus beading. No legend.
Rev.-Royal diadem, with ends hanging down. Arian legend on three sides, Maharajasa tradatasa Apaladatasa.
8. $\square$ ※ 6. Half-Lepton? Plate IX., Fig. 8. Author, 22 grs. Thomas, No. 10.

Obv.-Humped Indian bull to right, in a square of astragalus beading. No legend.
Rev.-Tripod in a similar square. No legend.

9．$\square$ 8．Dichalkon．Plate IX．，Fig．9．Author， 138 grs ． Very rare．Thomas，No． 4.

Obv．－Draped figure of Apollo holding out an arrow，as on No．6，with bow resting on the ground before him，in a square of astragalus beading．Legend on three sides，BA $I \Lambda \Omega E \Omega \Sigma \Sigma \Omega T H P O \Sigma$ KAI ФIAOIATOPO乏 A $O$ OANOAOTOY．

Rev．－Tripod，surrounded by a square of astragalus bead－ ing．In field to right No． 46 monogram．Arian legend on three sides，Maharajasa tradatasa Apaladatasa．

9a．$\square$ ※ 7．Chalkous． 68 grs ．
Types and legends as on No．9，but legend disposed in four lines．

10．$\square$ ※ 9．Hemiobol．Plate IX．，Fig．10．Author， 261 grs．Rare．Thomas，No． 6.

Obv．－Draped figure of Apollo holding out an arrow，as on No．6．Legend on three sides，BAEIAE $\Omega \Sigma$ $\Sigma \Omega T H P O \Sigma$ A $10 \wedge \Lambda O \triangle O T O)^{\circ}$ ．
Rev．－Tripod surrounded by a square of large beads．In field to right the Arian letter bu．Arian legend on three sides，Maharajasa tradatasa Apalada－ tasa．

10a．$\square \mathbb{E}$ 7．Dichalion．Author， 147 grs．
10b．$\square$ 疋 7．Chalkous．Author， 47 grs．
Types and legends as on No．10，with No． 46 monogram．
11．$\square \nVdash 10$. Dichalkon．Plate IX．，Fig．11．Brit．Mus．， 165 grs ．Unique．

Obr．－Draped figure of Apollo standing to front，holding a bow in his upraised left hand，and resting an arrow on the ground with his right hand．
 АПОムпОДOTOY．
Rev．－Tripod．In field to left No． 48 monogram，and to right No． 49 monogram．Arian legend on three sides，Maharajasa tradatasa Apaladatasa．

12．ロ ※ 8．Dichalkon．Plate IX．，Fig．12．Author， 117 grs．Duplicate，Mr．E．C．Bayley．Extremely rare．Thomas， No． 11.

Obv．－Draped figure of Apollo seated on a chair to right， and holding out a bow in his left hand．Legend on three sides，as on No． 11.
Rev．－Tripod．In field to right No． 140 monogram and the Arian letter $s$ ，and to left the Arian letter $t$ or $r$ ．Arian legend on three sides，as on No． 11.

13．$\square \not \subset$ 10．Trichalkon．Plate IX．，Fig．13．Author， 193 grs．Very rare．

Obv．－Apollo naked，standing to front，holding an arrow downwards in his right hand，and resting his bow on the ground with his left hand．Legend on three sides，BAミINE $\Sigma \Omega$ THPO.
Rev．—Tripod in a beaded square．In field to right No． 77 monogram，forming the letters KA or AK．Arian legend on three sides，Maharajasa Apaladatasa tradatasa．

13a．ロ Æ 9．Dichalkon．Mean of twelve specimens， 143 grs．Very common．Ariana Antiqua，pl．iv．，17．Thomas， No． 7.

Types and legends as on No．13．The usual monograms are Nos．17，20，78，79，82，83，84，85，and 131.

14．ロ 厌 7．Chalkous．Plate IX．，Fig．14．Author， 59 grs．Ariana Antiqua，pl．iv．， 19.

Obv．－Apollo standing，as on No．13，but with the arrow resting on the ground．Same legend as on No． 13.
Rev．－Tripod in beaded square．Arian legend as on No．18．In field to right No． 66 monogram．
All the specimens of this type are of inferior execution．
DIONYSIUS．Soter．
1．O A 7．Hemidrachma．Plate IX．，Fig．15．Author， 30 grs．Duplicates，E．I．Mus．and Calcutta Asiat．Soc．，all from General Abbott＇s collection．Extremely rare．Thomas，No． 1.

Obv.-Bare diademed hend of king to right, with chlamys on shoulder. Circular legend, BAミINESE E $\Omega$ THPOE $\triangle I O N Y \Sigma I O Y$.
Rev.-Helmeted figure of Athene Promachos, moving to left, with ægis on left arm, and thunderbolt in upraised right hand. In field to right No. 74 monogram. Circular Arian legend, Maharajasa tradatasa Diunisiyasa.
2. ロ Æ 8. Hemiobol. Plate IX., Fig. 16. Author, 289 grs. Duplicates, E. I. Mus. and Brit. Mus., 252 grs. Very rare. Thomas, No. 2.

Obr.-Apollo clad in the chlamys and anaxyrides, or tight eastern trousers, standing to right, and holding out an arrow with both hands. Legend on three sides, as on No. 1.

Rer.-Tripod. In field to right and left the Arian letters si and a. Circular Arian legend, Maharajasa tralatasa Diunisijasa.
3. $\mathbb{\text { ® }}$. Lopton. Plate IX., Fig. 17. Colonel Bush. See Thomas, No. 3. Indian Antiquities, pl. xlii., fig. 7.

Obr.--Rude figure of Apollo, as on No. 2, in a square of astragalus beading, but without legend.
Rel.-Royal diadem, with ends hanging down. Arian legend on three sides, as on No. 2.

## ZOILUS. Dikaios, Soter.

1. O Al 8. Hemidrachma. Plate X., Fig. 1. Author, $36 \cdot 5$ grs. Unique.

Obr.-Bare diademed head of king to right with chlamys on shoulder. Legend semicircular above and straight below, BAEINE $\Omega \Sigma \triangle I K A I O Y$ I $\Omega I \Lambda O Y$.
Rer.-Herakles standing to front, carrying the lion's skin, and club sloping over his left arm, and holding out a wreath with his right hand. On his left shoulder stands a small winged figure of Victory, who is crowning him with her wreath. In field to left No. 18 monogram. Circular Arian legend, Muhuriujusat diramilinsu Jhoillasa.
2. O A 7. Hemidrachma. E. I. Mus., 35 grs., from General Abbott. Duplicates, Bodleian Library, Oxford, and Lady Headfort. Thomas, No. 1.

Obv.-Type and legend as on No. 1.
Rev.-Herakles as on No. 1, but with the club upright, and without the small figure on the shoulder. In the field to left monogram No. 78 of Thomas, forming ZUIAEIas. On the Bodleian specimon the monogram is No. 87, and on Lady Headfort's coin No. 58.
3. O A 7. Hemidrachma. Plate X., Fig. 2. Author, 37.5 grs. Very rare. Thomas, No. 2.

Obv.-Diademed bust of king to right, with chlamys on the shoulder. Circular legend, BAEINERD इ $\Omega$ THPOS Z $\Omega$ IAOY.
Rev.-Helmeted tigure of Athene Promachos to left, with ægis on left arm, and thunderbolt in upraised right hand. In field to right No. 145 monogram and the Arian character $B O$, and to left the Greek letters BO. Circular Arian legend, Maha. rajasa tradatasa Jhoïlasa.
4. $\mathbb{Æ}$ 11. Hemiobol. Plate X., Fig. 3. Lady Headfort. Thomas, No. 3.
nbr.-Bearded head of the king as Herakles, covered with the lion's skin, to the right. Legend on three sides, BAELAESE $\triangle$ IKAIOY I $\Omega I \Lambda O Y$.
Rev.-Club and bow case, with bow inside, surrounded by a wreath of ivy. In field to right No. 91 monogram. Arian legend on three sides, Maharajasa dhramikasa Jhoïlasa.
5. О Æ 11. Hemiobol. Plate X., Fig. 4. Author, 247 grs. Rare. Thomas, No. 4.

Obv.-Figure of Apollo to right, clad in the chlamys and tight eastern trousers (anaxyrides), and holding out his bow with both hands. A small elephant behind. Circular legend, BAIINE $\Sigma \Sigma \Sigma \Omega$ THPO乏 ZCOINOY.
Rer.-Tripod. In field to right and left the Arian letters $a$ and $r$. Circular Arian legend, Maharajusa tradatasa Jhoïlasa. The Brit. Mus. specimen reads .Jnïlasa.

5a. ロ $\mathbb{\Phi}$ 11. Trichallim. Author, 199 grs. Duplicate, Brit. Mus.

Types and legends as on No. 5, but without the elephant. On obverse No. 142 monogram forming EYEY, and on reverse the Arian letters $t i$ and $r$ on author's coin, and liv and $j$ on Brit. Mus. specimen.
6. O Æ 8. Chalkous. E. I. Museum, 67 grs., from General Abbott. See Plate X., Fig. 5.

Olu.--Indian elephant moving to right. Legend obliterated.

Rer.-Tripod. In field to right and ieft the Arian letters $a$ and $r$. Circular Arian legend, Maharajasa traditasa .Jhoillasa, the name being imperfect.

6a. O Æ. Lepton. Plate X., Fig. 5. Mr. E. C. Bayley.
Obv.-Indian elephant moving to right, as on No. 6. Legend imperfect, . . ZWIA
Rev.-Tripod. In field to left the Arian character dhi. Arian legend imperfect, Maha(rajasa tradatasa) Jhoilasa.

## DIOMEDES. SотEr.

1. О $\nrightarrow$ 7. Hemilrachma. Plate X., Fig. 6. Mr. E. C. Bayley.

Ohr.-Helmeted head of king to right, with the ends of the diadem hanging behind, and the chlamys on the shoulder. Circular legend, BAEINE $\Omega \Sigma$ $\Sigma \Omega T H P O \Sigma \triangle$ IOMH $\triangle O Y$.
Rer.-The Dioskuri, dismounted, standing to the front, and holding their spears upright beside them. In field to right No. 139 monogram. Circular Arian legend, Maharajasa traditasa Diyamedasa.
2. O $\mathbb{R}$ 7. Hemidrachma. Plate X., Fig. 7. Author, 28.5 grs. Much defaced. Unique.

Obv.-Bare diademed head of king to right, with chlamys on the shoulder. Legend as on No. 1.
Rer.-Type, legend, and monogram as on No. 1 ; but the monogram to left.
3. $\square$ ※ 8. Dichalkon. Plate X., Fig. 8. Author, 120 grs. Rare. Ariana Antiqua, pl. v., fig. 1. Thomas, No. 1.

Obr.-The Dioskuri, dismounted, standing to the front, as on the reverse of the silver coins. Legend on three slides, BA $\mathbb{I} I \Lambda E \Omega \Sigma$ E $\Omega$ THPOE $\triangle I O M H \triangle O Y$.
Rev.-Humped Indian bull moving to right. In field below No. 107 monogram with $\Sigma$. Arian legend on three sides, Maliarajasa tradatasa Diyamedasn.

On other coins the monogram is No. 58, either alone, or with the letter $\Sigma$.

## ARCHEBIUS. Dikatos Nikephoros.

1. O A 11. Didrachma. Plate X., Fig. 9. E. I. Mus., 139 grs., from General Abbott. Unique. Thomas, No. 1. See Num. Chron., N.S., II., Plate IV., 8, and p. 267.

Obr.-Bare diademed head of king to right, with chlamys on the shoulder. Circular legend, BAEIAESE $\triangle I K A I O Y$ NIKHФOPOY APXEBIOY.

Rev.-Half-draped figure of Zeus standing to the front, holding a sceptre in his left hand, and a thunderbolt in his upraised right hand. In field to right No. 65 monogram. Circular Arian legend, Maharajasa dhramikasa jayadharasa Arkhebiyasa. See Fig. 10.

1a. O AR 7. Hemidrachma. Author, $35 \cdot 5$ grs. Duplicate, E. I. Mus. See Ariana Antiqua, pl. ii., 8. Thomas, No. 1a.

Types and legends the same as on No. 1. Monogram forming the letters TAZAKA, which is Ptolemy's name for Ghazni.
2. $\mathrm{O}_{\mathrm{A}}$ 10. Didrachnia. Plate X., Fig. 10. Aathor, 148 grs. Unique.

Obr.-Helmeted head of the king to right, with the ends of the diadem floating behind, and the chlamys on the shoulders. Circular legend as on No. 1.
Rer.-Type and legend the same as No. 1, with same monogram.

## 2a. O AR 7. Hemidrachma. Brit. Mus.

Same types, legends, and monogram as No. 2.
3. O $\mathbb{R}$ 10. Didrachma. Plate X., Fig. 11. E. I. Mus., 147.5 grs ., from Gencral Abbott. Unique. Thomas, No. 2. See Num. Chron., N.S., II., Plate IV., Fig. 9.

Obv.-Helmeted head of king to left, with ends of diadem falling behind on his right shoulder ; on his left shoulder the ægis; and grasping a javelin in his upraised right hand. Circular legend as on No. 1.

Rev.-Type and legend the same as No. 1, with No. 199 monogram.

3a. O R 7. Hemidrachma. E. I. Mus. See Ariana Antiqua, pl. xxi., 10. Thomas, No. 3.

Types and legends as on No. 3. Monograms No. 16 and 107 with P attached.
4. O 压 10. Dichalkon. Plate X., Fig. 12. Author, 147 grs. Daplicates, author and Calcutta Asiat. Soc. 140 grs. Extremely rare. Thomas, No. 4.

Obv.-Winged figure of Victory moving to left, holding a palm branch in her left hand, and a wreath in her right hand. Circular legend, BAIAE $\Omega \Sigma$ $\triangle I K A I O Y$ NIKHФOPOY APXEBIOY.

Rev.-Owl standing to front. In field to right No. 65 monogram. Circular Arian legend, Maharajasa dhramikasa jayadharasa Arkhebiyasa.
5. ㅍ 9. Dichalkon. Plate X., Fig. 13. Author, 104 grs. Extremely rare. This coin is very much corroded; but the engraving is taken from a lead impression of a good coin, which I believe to have formed part of General Ventura's collection. A silver cast of a third specimen is in the Calcutta Museum of the Bengal Asiatic Society.

Obv.-Bare, bearded, and diademed head of king, as Zeus, to right, with the shoulders draped, and a sceptre over the left shoulder. Legend on three sides, as on No. 4.

Rec.-Egg-shaped caps and palms of the Dioskuri. In exergue, No. 65 monogram. Arian legend on three sides, as on No. 4.
6. ロ Æ 10. Dichalkon. Plate X., Fig. 14. Author, $165 \cdot 5$ grs. Extremely rare. Duplicates: E. I. Mus. and Brit. Mus., 165 grs. See Num. Chron. XVI., Plate XVI., Fig. 3, and page 111.

Our.-Indian elephant moving to right. Legend on three sides, as on No. 4.
Fitc.-Owl to front. No. 65 monogram. Arian legend as on No. 4.

Apollodotus (Philopator, Soter).
The types of the silver coins of Apollodotus present the figure of Athene Promachos, which is always associated with the title of Philopator and the elephant and humped bull of India. The types of the copper coins are exclusively dedicated to Apollo and his tripod, in evident allusion to the name of the king. The position of the figure of Apollo is varied on different specimens; but without a single exception, the whole of the copper money of this king is dedicated to the worship of Apollo.

There is a great variety of monograms on the coins of Apollodotus; but most of them are of rare occurrence. The commonest, which is found on 30 specimens out of 120 , is some variety of Nos. 81 to 84 , which I read as MITP. The next is No. 74, which I have found on 24 coins, sometimes accompanied by the Arian letters, Di-u. I read it as Diodoteia, which I lave conjectured to be the later name of Alexandreia Opiane. The next is No. 68, found on 10 specimens, which I read as Andrapana, because it is accompanied by the Arian letters Ada or Andra on a fine round copper coin from the Bannu valley. The Indrapana of Ptolemy I would identify
with Drâband, an important town to the west of the Indus on the Gomal river, which commands the road from Dera Ismâil Khan to Ghazni and Kandahar. It may also be read as APMAT $\lambda \lambda a s$, or Harmatelia, which is the name given by Diodorus to the "City of Brahmans," in Sindh. It is no doubt the famous city of Brahmana of the Hindus, and the Brahmanabad of the Muhammadans. No. 76, which occurs on 4 coins, may also be read as Andrapana; and No. 47, also on 4 specimens, is perhaps only a variety of No. 68. No. 79, which is found on 9 specimens. I read as Alexandreia, as the monogram of Opiane is not found on any of the coins of Apollodotus. On all the specimens that I have seen, this monogram is accompanied by the letters EI on the obverse, which may, perhaps, represent the year 15 of the king's reign. No. 10, which I read as Arachotus, is found on 5 coins. No. 17 on 17 coins, and No. 77 on 3 coins, 1 read as Karsana.
The coins of Apollodotus, with the title of Soter alone, are common; but those with the additional title of Philopator are comparatively rare. Only two coins have yet been found with the more ambitious title of Megas, or the Great ; but both Philopator and Megas are confined to the Greels legends, as the Arian legends invariably present the title of Soter only. The find-spots of the Philopator coins are almost entirely limited to the Panjâb and N.W. India. There are none in the Masson collection from Kabul and Begram. General Ventura's silver specimens, which were procured in the Panjâb, are chiefly Philopator coins, and nearly all the silver coins found in India are of the same kind.
The readings of the monograms are at present too micertain to be of much value in determining the extent
of the kingdom of Apollodotus. But the total absence of the two conmon monograms, Nos. 18 and 58, which I read as Dionysopolis and Demetrias, is of some importance, as it shows that most probably he did not possess the Lower Kabul Valley. The Philopator coins, which are all found either along the line of the Indus, or to the eastward, usually bear Nos. 47, 68, and 76 monograms, for which I have suggested Andrapana as a probable reading; but perhaps Harmatelia, or the "City of Brahmans," in Middle Sindh, is the preferable reading for the first two. The rarer monograms on the Philopator coins are Nos. 51,66 , and 72 , of which the second way be read doubtfully as Moyntavas, or Multan.
The evidence derived from the find-spots during the last forty years is fortunately much more certain and definite. From these we learn that the kingdom of Apollodotus must have included the Upper Kabul valley in the north, Kandahar and Roh in the west and east, and Sindh in the south. These formed his permanent dominions; but at some time he must also have possessed Draugiana on the west, with the lower Panjâb and some portion of Rajputâna on the east.

In my account of Eukratides and Heliokles, I have stated all my reasons for believing that Apollodotus was the eldest son of Eukratides, who was associated in the kingdom with his father. I first published this opinion in $1840,{ }^{1}$ and it has since been confirmed beyond all reasonable doubt by the opportune discovery of a late coin of Eukratides struck upon an Apollodotus. ${ }^{2}$ The argument for this affiliation is based partly on the use of the title of Philopator, which denotes the association of a

[^100]son with his father, and partly on the fact that Apollodotus is the only Greek king posterior to Eukratides whose coins are found in Arachosia and Drangiana, the two western provinces of the Bactrian empire of Eukratides, which were wrested from his son by Mithridates the Great of Parthia.

The position here assigned to Apollodotus is not inconsistent with the only two passages of ancient authors in which he is mentioned by name. In the brief epitome of Trogus Pompeius, the notice of the occupation of Sogdiana and Bactriana by the Scythians is immediately followed by the mention of the exploits of the Indian kings Apollodotus and Menander. ${ }^{3}$ Now the Scythian occupation of the countries on the Oxus is fixed by the Chinese writers in the year b.c. 163 , or shortly after the death of Eukratides, an event which perhaps suggested, or at least precipitated, the Scythian invasion; and, as these exploits of Apollodotus and Menander are the only other points of Eastern history noticed by the epitomizer, I conclude that they must have formed the most striking portion of the history of the Greek kings of Ariana and India between the death of Eukratides in b.c. 165, and the final downfall of the Greek power in b.c. 126. This view is fully supported, not only by the great abundance of the coins of these two princes, but also by the great extent of country over which they are now found.

The second mention of Apollodotus is in the wellknown passage of the Periplus of the Erythræan Sea,4

[^101]where the author states that "even in his time ancient drachmas were current at Barygaza, bearing in Greek characters the stamp of the kings Apollodotus and Menander, who reigned after Alexander." From this statement I would draw the same inferences of length of reign and extent of power that have already been arrived at from the notice of Trogus, as well as from the evidence afforded by the abundance and wide-spread extent of the find-spots of his coins.

In both of these passages the name of Apollodotus is placed before that of Menander, which is a point of some importance, as Wilson and Raoul Rochette have supposed him to have been the son and successor of Menander. ${ }^{5}$ In the notice of the Periplus it is perhaps possible that the order of the names may be accidental; but it seems to me much more probable that the author must have been acquainted with their history and relative positions. In the notice of Trogus, which is a chronological epitome of events, the order of the names cannot be accidental ; and I accept the joint testimony of the two passages as a sufficient proof that Apollodotus was the predecessor of Menander.

According to my view Apollodotus was the eldest son of Eukratides, and was associated with his father as joint king at the opening of his Indian campaign, about

 Атол入об́ótov кає Мєvavסроv.
© Wilson. Ariana Antiqua, p. 288. "Menander, who it seems to be admitted generally, was probably the predecessor and father of Apollodotus." Raoul Rochette, in Jour. des Sav., Oct., 1835, p. 579, says, "Philopator, et de là il résulte, presque avec certitude, qu'Apollodote était fils, et qu'il devint le successeur de Ménandre, après lui avoir été associé de son vivant."
3.c. 168. He then assumed the title of Philopator, which is found upon most of his coins that have been discovered to the east of the Indus. The direction of this campaign is not indicated : but, as I have already shown reason for believing that a previous expedition had been conducted against Antialkidas in the Panjâb, his later campaign may have been directed against Sindh and the provinces ou the Lower Indus. The coins of Eukratides himself afford no indications on this point, and the readings of the monograms on the Philopator coins of Apollodotus are not sufficiently certain to offer a trustworthy clue. It is therefore only a plausible conjecture that the Indian campaign of Eukratides was conducted from Arachosia against the provinces on the Lower Indus. The expedition was successful, and India was added to the dominions of Eukratides. The conclusiou must be given in the words of the historian, as it is much too important to be curtailed: "On his march back," says Justin, ${ }^{6}$ " he was murdered by his son, whom he had associated in the kingdom; who, glorying in the parricide, as if he had slain an enemy and not his father, both drove his chariot through the blood, and ordered the body to be cast out unburied." This son I believe to have been Apollodotus; and the immediate result of his crime I conjecture to have been the revolt of all the northern provinces; of Bactriana under Heliokles; of Kabul under Epander; of Peshâwar under Diomedes; and of Taxila and the Panjâb under Straton.

Where history is silent we must be content with

[^102]inferences more or less probable; but when several independent inquirers come to the same result, their mature conclusions, derived from the consideration of many minute facts, may be accepted as the best substitute for actual history. This is more especially the case with the period immediately following the murder of Eukratides. History has left no record of the consequences; but the opinions of Lassen, Wilson, General de Bartholomæi, and myself, which were all independently formed nearly thirty years ago, agree in attributing the division of the Bactrian empire among several contemporary princes to the period immediately following the murder of Eukratides. ${ }^{7}$

To this period I would assign the conquest of Aria and Drangiana by Mithridates the Great of Parthia, and the final separation of those provinces from the dominions of the Eastern Greeks. Bayer supposes that it was the son and successor of Eukratides who invited Demetrius Nikator to invade Parthia in b.c. 140. ${ }^{8}$ This view was adopted under the belief that the monogram on the'single coin of Eukratides then known represented the date 108 of the Bactrian era, or в.c. 148, according to his reckoning. But as I have already pointed out that dates cannot be expressed in monograms, on account of the various readings of which they are susceptible, the late date suggested by Bayer is left without any support whatever.

According to my view, the murder of Eukratides took

[^103]place about b.c. 165, and was immediately followed by the revolt of all the northeru provinces. I suppose that Apollodotus, who was then approaching Arachosia from the Lower Indus, at once directed his arms against Epander in Kabul, whom he speedily suppressed. His next step was to make preparations for a campaign against Heliokles in Bactria. I think it highly probable that Heliokles may have sought the aid of Mithridates of Parthia, who just about that time invaded the western provinces of Aria and Drangiana, either under the specious pretence of avenging the murder of Eukratides or as an ally of Heliokles. Now it is a curious coincidence that at this very same time Antiochus IV., Epiphanes, crossed the Euphrates, and advanced to Elymais, from whence he retired through Media to Babylon. ${ }^{9}$. As no cause is assigned for this expedition, it appears to me not improbable that the assistance of the Syrian king may have been sought by Apollodotus for the protection of his western provinces against the attack of Mithridates. This suggestion is strongly supported by the fact that Elymais lies about midway on the direct route between Babylon and Drangiana. This advance to Elymaiss was made in b.c. 164 , by which time I suppose that Mithridates had completed the conquest of Aria and Drangiana, and had, perhaps, made peace with Apollodotus, on the condition of their permanent cession to Parthia. Under this supposition the intervention of Antiochus was too late, and he accordingly returned disappointed to Babylon. ${ }^{10}$
The dominions of Apollodotus were now confined to the

[^104]Paropamisadæ, or Upper Kabul valley, to Arachosia, or Afghanistan, and to the districts on the Lower Indus. With the exception of Kashmir, this is almost exactly the same extent of territory that was possessed by the Durâni kings of Kâbul in the beginning of the present century. During the struggle with Mithridates, in b.c. 164, I suppose that Diomedes may have advanced from Peshâwar, and have taken temporary possession of Kabul, from which he was at once ejected on the return of Apollodotus from Drangiana. This attack was probably followed by a more serious invasion of Straton from the Panjâb, who would appear, from his monograms, to have held possession of the two contiguous cities of Karsana and Ophiana for some time, or perhaps from в.c. 164 to 162 , whilst Apollodotus still maintained his hold on Kabul itself.

About b.c. 162, as I have already stated in my account of Helickles, I suppose that the Greeks were finally driven out of Bactriana by the Scythians, and that Heliokles then managed to establish himself in the Upper Kabul valley. Perhaps the two brothers, Apollodotus and Heliokles, may have joined their forces for the expulsion of Straton, after which Heliokles may have retained peaceful possession until b.c. 158. He was then probably succeeded for a short time by Archebius, who was perhaps his son, and in the following year I suppose Apollodotus to have once more become the undisputed master of the greater part of his old dominions, comprising Kabul, Afghanistan, and Sindh.

During this period, from b.c. 165 to 158 , the Panjâb was most probably held by Straton, whom I conjecture to have been succeeded by Menander. The probable career of these two princes will be described hereafter. At present it is sufficient to say that I believe Apollodotus
and Menander to have lived in peace with each other, and that the Indian exploits attributed to them by Trogus refer to distinct campaigns in different parts of the East; those of Apollodotus being from Sindh against Rajputana, and those of Menander from the Panjâb against Northwest India.

In the epitome of Trogus we have nothing recorded but the bare fact of certain exploits of Apollodotus in India; but if we may make a guess, founded on the actual campaigns of the early Mussulman conquerors, Mahmud of Ghazni and Muhammed Ghori, it seems most probable that the exploits of Apollodotus must have been directed against the famous fort of Ajmir, in Central Rajputâna, and against Khambay, and other rich cities on the western coast of India; and, perhaps, even against Ujain. This is partially corroborated by the find-spots of his coins, at Karnâl, to the north of Delhi ; at Pushkar, near Ajmer, and in Gujarât; as well as by their longcontinued currency at Barygaza, as noticed by the author of the "Periplus." My own impression is that Barygaza itself must have formed part of the dominions of Apollodotus, and that the capture of this rich commercial city was amongst the exploits referred to by Trogus.

It is difficult to determine the length of reign that should be assigned to Apollodotus. His coins are certainly common; but they are much less numerous than those of either Eukratides or Menander, and about twice as common as those of Antialkidas. I would, therefore, assign him a reign of about fifteen years alone, or of eighteen years from the time of his association with his father. A few of his copper coins bear the detached letters EI, or fifteen, on the obverse, in addition to the usual monogram on the reverse ; and as this is probably
intended for the year of his reign, the period which I have assigned him, between b.c. 165 and 150 , is not too long.

Wilson assigns to Apollodotus a somewhat shorter, but a very much later, reign, between b.c. 110 and $100 .{ }^{11}$ But if any credit is to be given to the date of в.c. 126, which is assigned by Chinese writers for the occupation of Kabul by the Scythians, and which is confirmed by the classical notices of the wars between the Parthians and Scythians, it is certain that Wilson's date must be about half a century too late. Lassen ${ }^{12}$ agrees with me in placing Apollodotus immediately after Eukratides; but he makes the date a few years later, or b.c. 160 , and assigns to him and to his two ephemeral successors, Zoilus and Dionysius, a reign of sixteen years, down to в.c. 144 .

## Dionysius. (Soter.)

All that we know of Dionysius is derived from about twelve coins-four of silver, and seven or eight of copper -which are rude imitations of the money of Apollodotus. The silver coins bear the figure of Athene Promachos, and the copper coins have Apollo and his tripod. The common monogram is No. 74, which I read as Diodoteia, or Ophiana; but a siugle specimen has No. 115, which is found also on the coins of Hippostratus and Azas. One coin, which has been traced, was obtained at Kabul, but none were found at Begram by Masson. The four silver coins were found in a pot on the bank of the Upper Satlej, along with several specimens of Apollodotus and Zoilus; but, as they were evidently hidden there by the

[^105]owner, their place of discovery may not have been within the dominions of Dionysius. From these scanty data I suppose Dionysius to have been the son of Apollodotus, and to have succeeded his father on the throne of Kabul for a few months in r.c. 150.

## Zorlus. (Dikaios Soter.)

The coins of Zoilus are extremely rare, and of different styles of execution, some being nearly equal to the coins of Apollodotus, whilst others are much ruder, and some are so barbarous as to be nearly illegible. The number of specimens known to me is under thirty, of which about one-half are silver of the Athene Promachos type, and one-fifth silver of the Herakles type. The remainder are copper, of the Apollo and tripod type, with one exception of the Hercules type, and two of the elephant and tripod.
The type of the elephant connects Zoïlus with India, and that of Apollo and the tripod with Apollodotus; but the type of the standing Herakles belongs to the family of Lysias and Demetrius. The find-spots of his coins are not sufficiently known to warrant any certain conclusions as to the scene of his rule. Four different specimens of his coins were obtained in Kabul, and about twice as many in the Panjâb; but I have been unable to trace the find-spots of the remainder, excepting the few silver coins found in the pot on the bank of the Upper Satlej, as already noticed.
The monograms of Zoilus are very varied for the small number of his coins. There are three specimens with No. 74, or Diodoteia, in the Upper Kabul valley; two with No. 18, or Dionysopolis, in the Middle Kabul valley; one with No. 58, or Demetrias, in the Lower Kabul
valley; two with No. 68, either Andrapana to the west of the Indus, or Harmatelia in Sindh; and four with No. 142, or Euthydemiu, in the Panjâb. These readings of the monograms agree with the find-spots of the coins in fixing the seat of his rule in the Kabul valley and Panjâb, but they give no hint as to the principal seat of his authority. I gather, however, from the types of Apollo and the tripod, that Zoilus must have been one of the sons or successors of Apollodotus, who reigned for a short time after Dionysius. But as none of his coins were found at Begrâm by Masson, his reign over the Upper Kabul valley must have been a short one. From the variety of his monograms, which include those of the principal cities in the Kabul valley, as well as that of Euthydemia or Sangala in the Panjâb, I am inclined to suppose that he may have become tributary to Menander, by whom he was probably transferred to the government of the eastern Panjâb. But our present data are so scanty, that until more of his coins have been discovered, and their find-spots well ascertained, all speculations regarding the exact locality of his rule must be very vague. According to my conjecture, he must have flourished from about в.c. 150 to 146 .

## Diomedes. (Soter.)

Diomedes is another of the ephemeral princes, whom I suppose to have reigned for a short time after the death of Eukratides. His chief type of the dismounted Dioskuri connects him so directly with that prince, ${ }^{13}$ as to suggest a conjecture that he may have been one of his sons. His

[^106]only other type of the humped bull, connects him with India, and as his commonest monogran is No. 58, which I read as Demetrias, or Peukelaotis in the Lower Kabul valley, I am inclined to fix that place as the chief seat of his short-lived authority. Two of his coins bear the monogram of Ophiana, No. 139; but three others have No. 107, which is found also on the coins of Pbilozenes, who certainly reigned in the Panjâb. Only one specimen of his coinage was found at Begrâm by Masson ; and of ten other specimens, of which I have a record, only one was obtained at Kabul, two at Peshâwar, and seven in the Panjâb. The number of the coins of Diomedes hitherto found is too small to yield any certain inferences; but judging from the data afforded by the few known specimens, I infer that the chief seat of his power must have been in the Lower Kabul valley. I conjecture that he may have been one of the sons of Eukratides, who made himself independent on the murder of his father by Apollodotus; that he afterwards held Ophiana for a short time, perhaps under Apollodotus, and that he was eventually overthrown by Straton. His reign may have extended frome b.c. 165 to 163.

## Archebius. (Dikaios Nikephoros.)

The coins of Archebius are even rarer than those of Zoilus, and Diomedes. I know of only eighteen specimens, nine in silver and seven in copper, of which six are in my own cabinet. In fabric they resemble the coins of Heliokles, with which they are also connected by the types of the thundering Zeus, and the Indian elephant, with sloping back. The greater number of these coins were obtained at Kabul, and in its neighbourhood, although
raenoue
pone were found at Begrâm by Masson. Ten out of the eightcen known specimens bear No. 65 monogram, which I read as Nikaia, or Kabul. Four coins have No. 16 monogram, which I read as Karsana. Three others have a new monogram, which I read as TAZAKA, and identify with Ghazni ; while only a single specimen has the monogram of Ophiana, No. 139. The monograms therefore agree with the find-spots in fixing Archebius at Kabul; and as both the types and fabric of his coins seem to connect him with Heliokles, I suppose that he may have been the son and successor of that prince in Kabul.

From the great rarity of his coins it is certain that the reign of Archebius must have been a short one, and I would therefore assign him only a single year, immediately following the death of Heliokles, in b.c. 158.

The copper coins of Archebius present us with four different types, viz., Victory, an owl, an elephant, and the caps and palms of the Dioskuri. Of these the first and last are found on the coins of Eukratides, which tends to confirm the supposed relationship between Archebius and Heliokles that I have just suggested. These copper coins are remarkable for the neatness and perfection of their workmauship, the size of the metal blanks having been carefully adjusted to that of the die.

# COINS OF ALEXANDER＇S SUCCESSORS IN THE EAST． 

By Major－General A．Cunningham．

> STRATON I.
> Soter, Dikatos, Epiphanes.
> b.c. $165-160$.

1． $\mathrm{O} \not \approx$ 10．Didrachmon．Plate XI．，Fig．1．Author， 134 grs ．Unique．

Obv．－Bare diademed head of king to right，with chłamys on shoulders．Circular legend，basinesis EIITANOYミ $\Sigma \Omega$ THPO乏 ETPAT $\Omega$ NO乏．
Rev．－Draped and helmeted figure of Athene Promachos moving to left，with the ægis on left arm，and a thunderbolt in her upraised right band．In field to left No． 65 monogram．Circular Arian legend， Mahârâjasa pratichhasa trâdâtasa Stratasa．
1a．$O$ R 7．Hemidrachma．Author， 34 grs．Duplicate， Brit．Mus．Thomas，No． 2.
Types and legends as on No．1．Monograms，Nos． 17 and 189.
2． $\mathrm{O} \mathbb{R} 10^{\circ}$ ．Didrachmon．Plate XI．，Fig．2．Brit．Mus．， $133 \cdot 5$ grs．Duplicate，Dr．Mackinnon．Thomas，No．1．，from a cast．

Obv．－Helmeted head of king to right，with ends of diadem streaming behind，and chlamys on the shoulders． The helmet is ornamented like that of Eukra－
tides，with the horn and ear of a bull．Circular legend as on No． 1.
Rev．－Type of Athene Promachos and Arian legend as on No．1．In field to left No． 139 monogram．

3．O R 7．Hemidrachma．Plate XI．，Fig．3．Author， 31 grs．Unique．

Obv．－Bare diademed head of king to right，with chlamys on the shoulders．Circular legend，BAEINE $2 \Sigma$ ェתTHPO乏 $\Sigma$ TPATRNOE．
Rev．－Athene Promachos as on No．1．In field to left No． 100 monogram．Circular Arian legend， Mahárảjasa tràdâtasa Strâtasa．

3a．O $\mathbb{R}$ Hemidrachma．Plate XI．，Fig．4．Author， 37 grs．Rude workmanship．

Types and legends the same as on No．3．In field to right No． 142 monogram，forming EX日r，with the Arian letter $s$ to left．I suppose the monogram to be intended for Euthydemia or Sangala in the Panjab．

4．$\square$ 巴 8．Dichalkon．Plate XI．，Fig．5．Author， 136 and 125 grs．Duplicates，E．I．Mus．， 138 and 126 grs． Thomas，No．4．Rare．

Obv．－Bare diademed head of the king as Herakles to right， with club over left shoulder，and ends of dia－ dem hanging behind．Legend in three lines， BAEIAES $\Sigma \Sigma$ THPO $\Sigma$ TPATRNOE．
Rev．－Winged figure of Victory，with palm and wreath moving to right．In field to left and right No． 108 monogram．Arian legend on three sides Mahârájasa tràdátasa Stratasa．

5．$\square$ ※ 9．Dichalkon．Plate XI．，Fig．6．Brit．Mus． Duplicate，Author， 125 grs．Very rare．Thomas，No． 5.

Obv．－Bare diademed head of the king，as Herakles，to right，with club over left shoulder，and ends of diadem hanging behind．Legend in three lines， BAEIAE $\Sigma \Sigma \Sigma \Omega$ THPOE $\triangle I K A I O Y ~ \Sigma T P A T \Omega N O \Sigma$ ．
Rev．－Winged figure of Victory with palm and wreath moving to right．In field to right No． 117 mono－ gram．Arian legend in three lines，Mahariajasa trádátasa dhramikasa Stratasa．
6. ○ Æ. Dichalkon. Plate XI., Fig. 7. E. I. Mus., from General Abbott. 152 grs. Thomas, No. 3. Four other specimens range from 137 to 145 grs.

Obv.-Standing figure of Apollo inclined to left, with arrow in left hand, and bow in right hand resting on the ground. Legend in three lines, BAEIAERE EПIФANOYУ ЕתTHPOS ETPATRNOS.

Rev.-Tripod. In field to right No. 17 monogram, and to left the compound Arian character kra. Arian legend in three lines, Maharajasa pratichhasa trádatasa Stratasa.

## AGATHOKLEIA AND STRATON.

1. $\square$ 巴 8. Dichalkon. Plate XI., Fig. 8. Author, 129 grs. Formerly in Dr. Swiney's cabinet. Only three other specimens known, in E. I. Mus., 128 grs.; Brit. Mus., and Mr. E. C. Bayley. Thomas, No. 1.

Obv.-Helmeted female head to right, with chlamys on shoulder, and without diadem. Legend in three lines, BAEIAIESHE OEOTPOПOY AГA@OKAEIAL.

Rev.-Naked figure of Herakles to left, seated on a rock, and holding a club on his right kne?, as on the well-known silver coins of Euthydemus. In field to left No. 101 monogram, as on Fig. 6 of Straton. Arian legend in three lines, Maharajasa tradatasa dhramikasa Stratusa.
N.B.-All the four specimens have Basilisses, and not Busilissas, as inadvertently engraved by James Prinsep.

## STRATON II. Philopator.

$$
\text { в.с. } 160 \text { (?) }
$$

1. O $a$ Hemidrachma. Plate XI., Fig. 9. Author, 86 grs. Extremely rare. Very rude workmanship.

Obv.-Bare diademed head of king to right, with chlamys on shoulder. Cireular legend in bnrbarnus Greek lotters, BACIALRC CSTHPOL CTPATSNoC yIOY CTPATSNOC.

Rev.-Rude figure of Athene Promachos to left. Circular Arian legend. Mahârâja râjarâjasa Stratasa putrasa cha sampriyapita Stratasa.

Fig. 10 has the Arian character ro, or $t o$, in the field to right; and Fig. 11 has the letters $a$ and $b h i$ in the field to right and left.

## MENANDER. Soter, Dikatos.

$$
\text { в.с. } 160-140 .
$$

1. O $\mathbb{R}$ 10. Didrachmon. Plate XI., Fig. 12. Author, 145 grs. Duplicates, Author and E. I. Mus. Thomas, No. 1. Very rare.

Olv.-Bare diademed head of king to right. Circular legend, BAミINE $\Omega \Sigma \Sigma \Omega$ THPOD MENANAPOY.
Rev.-Helmeted and draped figure of Athene Promachos to left, with ægis on left arm, and thunderbolt in upraised right hand. In field to left No. 90 monogram. Other monograms are No. 89 with $\Sigma$, and No. 139. Circular Arian legend, Mahärájasa trádâtasa Menandrasa.

1a. O $\boldsymbol{A}$ 7. Hemidvachma. Author ; average weight 36 grs. Common. Thomas, No. 1a.

Obverse and reverse types and legends as on No. 1. Various monograms, Nos. $58,86,88$, 89 with the letters $\mathrm{F}, \mathrm{E}$, and $\Sigma$, 90, 91, 92, 95 ; and Nos. 22, 94, and 95 of Thomas.
2. O $\mathbb{R}$ 10. Didrachmon. Plate XI., Fig. 13. Author, 146 grs. Duplicates, Lady Headfort and Dr. Campbell. Extremely rare. Thomas, No. 3.

Obv.-Helmeted and diademed head of king to right. Greek legend, as on No. 1.
Rev.-Type and legend as on No. 1. In field to left No. 58 monogram.

2a. ORR 7. Hemidrachma. Average weight 36 grs . Common. Thomas, No. 3a.

Types and legends as on No. 2. Various monograms, Nos. $17,18,58,86,89$ with $\Sigma, 92$, and No. 22c. of Thomas.
3. O A 7. Hemidrachma. Plate XI., Fig. 14. Author, 28 grs., from Major Pearse, found in the temple of Mârtand,
in Kashmir. Duplicates, Mr. E. C. Bayley, and two others. Extremely rare. Thomas, No. 5.

Obv.-Helmeted head of Athene to right with long curls, and without diadem. Surrounded by Greek legend as on No. 2.
Rev.-Owl standing to right. In field to right No. 58 monogram. Arian legend as on No. 1. On Mr. Bayley's coin the monogram is No. 18.
4. O R 10. Didrachinon. From a sealing-wax impression. See Plate XI., Fig. 15 for types. Extremely rare. Thomas, No. 2.

Obv.-Bare diademed head of king to left, with ægis on left shoulder, and grasping a javelin in upraised right hand. Circular legend, BAIAESI $\Sigma \Omega$ THPO乏 MENAN $\triangle$ POY.

Rev.-Athene Promachos to left, with wgis on left arm, and thunderbolt in upraised right hand. Circular Arian legend, Mahárájasa tradatasa Menandrasa.

4a. O A 7. Hemidrachma. Plate XI., Fig. 15. Author, average weight 36 grs . Extremely common. Thomas, No. 2.

Types and legends as on No. 4. In field to right No. 86 monogram. Other monograms are Nos. 17, 18, 58, 87, and 89 with $\mathbf{\Sigma}$.
N.B.-On some specimens the figure of Athene is turned to the right, and the ægis is horizontal. See Ariana Antiqua, pl. iv., fig. 1, and Thomas, No. $2 b$. On some specimens also the legends are continuous round the coin, instead of having the name placed below.
5. O A 7. Hrmidrachma. Plate XI., Fig. 16. From Wilson's Ariana Antiqua, pl. iv., fig. 2. Duplicate, Royal Asiat. Soc. Thomas, No. 4.

Obr.-Helmeted and diademed head of the king to left, with $æ g i s$ on left shoulder, and javelin in upraised right hand, ready to dart. Greek legend as on No. 1.

Rec.-Athene Promachos, and Arian legend as on No. 1. In field to right No. 58 monogram.
6. $\square$ E 11. Obolus. Phte XII. Fig. 1. Aulhor, 679 grs.

Duplicates, Bodleian Library, Oxford, 656 grs.; Brit. Mus., 550 grs. Much worn. Thomas, No. 6.

Obv.-Helmeted head of Pallas Athene to right, with long curls, and without diadem. Legend on three sides, BAEIAER乏 $\Sigma \Omega$ THPOZ MENANAPOY.

Rev.-Horse rearing to right. In field below No. 58 monogram. Arian legend on three sides, Mahirajasa trâdâtasa Menandrasa.
7. $\square$ 7. Chalkous. Plate XII., Fig. 2. Author, 82 grs. Duplicate, Author. Rare. Ariana Antiqua, pl. iv., fig. 7. Thomas, No. 9.

Obv.-Helmeted head of Pallas to right, with long curls, as on No. 6. Greek legend on three sides, as on No. 6.

Rev.-Athene Promachos to left, with ægis on left arm, and thunderbolt in upraised right hand, as on the silver coins. In field to left No. 86 monogram. Arian legend on three sides, as on No. 6. Duplicate, No. 88 monogram.
8. $\square$ 9. Dichallion. Plate XII., Fig. 3. E. I. Mus., from General Abbot. 125 grs. Other specimens 131 and 127 grs. Ariana Antiqua, pl. iv., fig. 12. Thomas, No. 12.

Obv.-Helmeted head of Pallas Athene to right, and Greek legend, as on No. 6.
Rev.-历gis to front, with Gorgon's head in the middle. In field to left No. 86 monogram. Arian legend in two horizontal lines, as on No. 6. This legend is usually distributed on three sides, as on the other square copper coins already described.
9. $\square$ 9. Dichallion. Plate XII., Fig. 4. Author, 147 grs. Duplicate, E. I. Mus., 144 grs. Ariana Antiqua, pl. iv., fig. 8. Thomas, No. 11.

Obv.-Helmeted head of Pallas Athene to right, and Greek legend, as on No. 6.
Rev.-Owl standing to right. In field to right No. 58 monogram. Arian legend on three sides, as on No. 6.
10. $\square$ 9. Trichalkon (?) See Plate XII., Fig. 5, for type. Author, 246 and 240 grs. Ariana Antiqua, pl. iv., figs. 5 and 6. Thomas, No. 10.

Obv.-Helmeted head of Pallas Athene to right, with long curls, and Greek legend, as on No. 6.
Rev.-Winged figure of Victory moving to right, holding a palm branch in her left hand, and a wreath in her right hand. In field below No. 58 monogram. Arian legend on three sides, as on No. 6.

10a. $\square$ 巴 8. Dichalkon. Author, 148 grains.
Types and legends as on No. 10. No. 58 monogram.
10b. $\square$ Æ 7. Challous. Plate XII., Fig. 5. Author, 91, 79 , and 70 grs.

Types and legends as on No. 10. Nos. 20 and 58 monograms.

10c. $\square$ Æ 7. Chalkous. Author, 91 and 83 grs. Ariana Antiqua, pl. iv., fig. 4. Thomas, No. 10a.

Types and legends as on No. 10 ; but the figure of Victory is turned to the left. No. 58 monogram with B , and on the other specimen the letter B only.
11. $\sqcap \nVdash$ 10. Hemiobolus. Plate XII., Fig. 6. E. I. Mus., 340 grs. Ariana Antiqua, pl. iv., fig. 3. Thomas, No. 8.

Obv.-Laurelled head of king to right, with the ends of the diadem floating over the shoulders to right and left. Greek legend on three sides, BAEINERE Z $\Omega$ THPOZ MENANAPOY.
Rev.-Dolphin to right. In field below No. 58 monogram with the letter H. Arian legend on three sides, Mahârájasa trâdâtasa Menandrasa.
12. $\square$ 9. Dichalkon. Plate XII., Fig. 7. Author, 124 grs. Duplicates, author, 148 grs.; E. I. Mus., 181 grs. Ariana Antiqua, pl. iv., fig. 7. Thomas, No. 9.

Obv.-Bare diademed head of king to left, with mgis on left shoulder, and javelin in upraised right hand, ready to dart. Greek legend on three sides, as on No. 8.

Rev.-Athene Promachos to right, with ægis and thunderbolt, as on the silver coins. In field to right No. 20 monogram. Arian legend on three sides, as usual.
13. $\square$ ※ 10. Hemiobolus. Plate XII., Fig. 8. Museum Bengal Asiat. Soc. 306 grs. Unique.
Obv.-Two-humped Bactrian camel moving to left. Greek legend on three sides, as usual.
Rev.-Head of bull to front, with long horns and extended ears. In field below No. 58 monogram with letter ©. Arian legend on three sides, as usual.
14. ロ Æ 9. Hemiobolus. Plate XII., Fig. 9. Author, 313 grs. Duplicates, author, 341, 303, 292, 280 grs. ; Brit. Mus., 316 grs. Thomas, No. 7.

Obv.-Head of bull to front, with long horns and extended ears. Greek legend on three sides, as usual.
Rev.—Tripod. In field to left No. 17 monogram. Arian legend on three sides, as usual.

On other specimens, with No. 58 monogram accompanied by the Arian letter $m$, the horns of the bull are very short.
15. $\square$ ※ 9. Dichalkon. Plate XII., Fig. 10. Author, 167 grs. Duplicate, Mr. E. C. Bayley, 176 grs. '.'he only two specimens known. Thomas, No. 17.

Obv.-Indian elephant moving to left. Greek legend on three sides, as usual.
Rev.-Elephant goad, called ankûs, placed upright. In field to right No. 58 monogram, and to left the letter $\Delta$. Arian legend on three sides, as usual.
16. $\square$ ※ 6. Lepton. Plate XII., Fig. 11. Author, 36 grs. Very common. Ariana Antiqua, pl. iv., fig. 10. Thomas, No. 14. Heavy specimens range up to 44 and 46 grs., but the average is under 40 grs .

Obv.-Head of elephant to right, with a bell suspended from the neck. Greek legend on three sides, as usual.
Rev.-Club of Herakles placed upright. In field to right No. 20 monogram, and to left the letter A. Arian legend on three sides, as usual.

Other specimens have Nos. 18 and 58 monograms, both accompanied by the letter A. A few specimens have the Arian letter sam, with the Greek $A$ on the obverse; and a single coin has the Arian letter nam, with the Greek A, both on obverse and reverse.
17. $\square$ ※ 8. Dichalkon. Plate XII., Fig. 12. Author, 152 grs. Duplicate, E. I. Mus. Only these two specimens known. Ariana Antiqua, pl. iv., fig 9. Thomas, No. 13.

Obv.-Head of boar, with open mouth, to right. Greek legend on three sides, as usual.
Rev.-Palm branch placed upright and bent to left. In field to left No. 58 monogram. Arian legend on three sides, as usual.
18. $\square$ 5. Hemilepton? Plate XII., Fig. 13. E. I. Mus. Unique. Ariana Antiqua, pl. iv., fig. 11. Thomas, No. 15.

Obv.-Wheel of eight spokes. Greek legend on three sides as usual.
Rev.—Upright palm branch with top bent to left. In field to right No. 20 monogram. Arian legend on three sides, as usual.
19. $\square$ ※ 9. Dichalkon. Plate XII., Fig. 14. Author, ${ }^{〔} 124$ grs. Much worn. Duplicates, Brit. Mus., and Bodleian Library, Oxford, 89 gre. See R. Rochette, in Jour. des Sav., Dec. 1838, p. 751, and pl. i., fig. 8. Thomas, No. 16.

Obv.-Pallas Athene standing to the front, with her right hand extended before her, a spear in her left hand, and her shield resting on the ground at her right knee. Greek legend on three sides, BAEIAERE $\triangle$ IKAIOY MENANAPOY.
Rev.-Indian lion to left resting on his haunches. Arian legend on three sides, Mahârájasa dhramikasa Menandrasa.

The Bodleian specimen has No. 139 monogram under the lion.

Straton I. (Epiphanes, Soter, Dikaios) b.c. 165-160.
Amongst the many competitors of Eukratides, the only one who would appear to have been ultimately successful
was Straton, whom I conjecture to have been a son of Demetrius, and to have held the government of the Eastern Panjâb during the reigus of his brother Lysias and his nephew Antialkidas. After the death or deposition of the latter, I conclude that Straton must have been tributary to Eukratides; but immediately after the murder of that great prince $I$ suppose him to have asserted his independence, and to liave become at once the undisputed master of the Panjâb.

There is no mention of Straton in history; and I must, therefore, again claim indulgence for the few remarks which I have to offer about this prince, as they are founded solely on the inferences which have been deduced from his coins. But his coins are rare, and the types are few; and the principal fact which I have discovered in his career is due to a fortunate accident. In Plate VI. Fig. 11, I have engraved a copper piece of Heliokles, which has been struck over a previous type of Straton, whose name is still legible in Arian letters on the reverse. I am now able to refer to a copper coin of Straton himself, which has been struck over a type of Heliokles, whose name in Greek appears on the reverse, instead of the Arian title of Mahárájasa. This mutual restriking of each other's coins shows that these two princes must certainly have been contemporaries, as well as near neighbours. This is a most important fact in the history of Straton, as it places him amongst the earliest of the Greek kings of India, contemporary with Heliokles and Apollodotus, the sons of Eukratides.

The types of Straton are few in number, and of no special significance. On the silver coins we find only the figure of Athene Promachos, which was copied from the money of Apollodotus. On the earlier copper coins with
the simple title of Soter, the king is represented on the obverse as Herakles, with a short beard, and a club over his left shoulder, and is accompanicd by a figure of Victory on the reverse. The same types accompany the title of Dikaios; but with the more ambitious title of Epiphanes, we find the types of Apollo and the Tripod exactly similar to those on the well-known copper money of Apollodotus. The head of Herakles with his club very probably connects Straton with Demetrius and Lysias, who use the same type; and if Lysias, as I suppose, was a son of Demetrius, this inference is strengthened by the use of the seated figure of Herakles on the coins of Straton's wife, Agathokleia, similar to that on the well-known silver coins of Euthydemus.
I have not been able to trace the find-spots of more than twenty, or just one half, of the specimens of Straton's coins that are known to me. None were found by Masson at Begrîm, and only three out of the twenty coins traced were obtained to the west of the Indus. Of these one was purchased at Jalalabad, the second at Peshâwar, and the third by myself at Akora. Of the remainder, sixteen were obtained in the Panjâb, and one to the east of the Satlej.

Of the base silver coins of Straton of rude workmanship no less than ninety-six were found in a mound at Mathura, along with eighty-seven similar coins of the Indian Satrap, Râjubul or Ranjubul. ${ }^{1}$ But as the hoard must have been hidden during the reign of the Satrap,

[^107]the find may only show that the dominions of Straton bordered on the kingdom of Mathura, somewhere to the east of the Satlej.

The monograms of Straton are numerous, considering the rarity of his coins. On thirty specimens which I have examined, I have found no less than ten different monograms. According to my readings, three of these, Nos. 17, 65, and 139, belong to Karsana, Nikaia, and Alexandria Opiane, all in the Upper Kabul valley. Together, they form about one-third of the whole number of monograms. No. 58, which I read as Demetrias, and which was most probably either Peshâwar or Penkelaotis, is the commonest of all, forming just one-third of the thirty monograms which I have recorded. Of the remaining third, No. 108 is found on one coin, which is engraved in the accompanying Plate XI. Fig. 5. No. 142 is found on the ruder silver coins, and No. 46 upon two specimens in the possession of Colonel Bush. Upon a single specimen I find a monogram similar to No. 56, forming AПOллOveas for A pollonia.

On comparing these monograms with those of Heliokles I find that three of them are common to both princes, namely, Nos. 17,65 , and 139 , all of which, according to my readings, belong to places in the Upper Kabul valley. Thus these three monograms, if my explanation of them is correct, prove that Heliokles and Straton, who were certainly contemporaries, must have disputed the possession of the Upper Kabul valley. For some time, at least, these cities must have been held by Straton, as most of his good silver coins, and nearly all of his Apollo and Tripod copper coins, were minted at one or other of them.

The comnection with Lysias, which I have inferred from the type of Herakles, is partly confirmed by the
common use of No. 108 monogram, which is found only on the coins of Lysias, Antialkidas, and Straton. I read this monogran as Taxila, the ancient capital of the Panjâb ; but Straton's own capital would appear to have been Demetrias, as one-third of his coins bear No. 58 monogram. His kingdom would, therefore, have extended from Peshâwar on the west, to Sangala or Euthydemia on the east, as shown by the use of No. 142 monogram, which I read as EY日Y for Euthydemia. This last monogram is found only on the ruder silver coins of Straton, of which a favourable specimen is engraved in Plate XI. Fig. 4. The inferior workmanship is probably due to the ruder art of the Indian mint on the eastern frontier. At first I was inclined to assign all these rude coins to Straton II., who bore the title of Philopator; but as the rude Soter coins are generally superior in execution to the Philopator coins, and are at least equal to the ruder specimens of Zoillus, which bear the same monogram, I thiuk that they must belong to the elder Straton.

On putting together these few scanty indications derived from the coins, I gather that Straton was most probably connected with the family of Demetrius and Lysias; that after the murder of Eukratides he made himself independent, and reigned over the Panjâb, contemporary with Heliokles in Bactria and Kabul, and with Apollodotus in Afghanistan and Sindl. As his coins are very rare, his reign must have been a short one-say, of about five years, or from b.c. 165 to 160 -when he was succeeded by Menander, whom I suppose to have been his son. During the first year of his reigu he was probably employed in consolidating his power against the attacks of Apollodotus; but shortly afterwards he must
have been engaged in a successful invasion of the Kabul valley, as the monograms of Karsana (No. 17), Ophiana (No. 139), and Nikaia or Kabul (No. 65), are found upon many of his coins, as well as upon those of his contemporary, Heliokles.

## Agathorleia and Sthaton.

Of the coins of Agathokleia only four specimens of the same type are at present known. On the obverse the queen is represented helmeted as Pallas-Athene, with the legend baidaisiñ oeotronor aia@okneiaz. The reverse has a figure of Herakles seated on a rock, with his club resting on his knee, as on the silver coins of Euthydemus. But the Arian legend gives the name and titles of Straton. The curious epithet, Theotropos, applied to the queen, is not found in any of the Lexicons; but Lassen has pointed out that it is used by Heliodorrus as an epithet
 may mean simply the "godlike"; but, if I am right in supposing that Agathokleia was a niece or daughter of Demetrius, it is not improbable that Theotropos may have some reference to the title of Theos, which was borne by Euthydemus, the father of Demetrius.

The connection between Straton and Agathokleia can only be that of man and wife, or king and queen, and from her name thus appearing on the money it may be assumed that she was of royal descent. Her marriage with Straton may thus perhaps have united two rival families, which may have been either two branches of the family of Euthydemus, or the antagonistic families of

[^108]Demetrius and Eukratides. If Agathokleia was a niece of Demetrius, and Straton his son, their marriage would lave united two rival branches of the family of Euthydemus, and have given strength to their party against Eukratides. But if Straton and Agathokleia were not of the same family, I should incline to make Straton either a sou or brother of Eukratides.

Straton II. (Philopator), b.c. 160.
In assigning certain coins to a second prince of this name, it is necessary that $I$ should state in full the reasons which have influenced me in thus creating a new prince, instead of giving all the coins which bear the name of Straton to the one king who was previously known. 'The coins which I attribute to Straton II. are small pieces of silver, of rude workmanship, with legends on both sides differing from those on the well-known coins of Straton, the husband of Agathokleia. In the Greek legend the name of Straton occurs twice; once in the usual place under the head of the king, and again on the right hand before the face. The legend is difficult to read in parts; but from a comparison of six specimens it appears to be BACIAE $\Omega \mathrm{C}$ C $\Omega$ THP•C CTPAT $\Omega \mathrm{N} \bullet \mathrm{C}$ YI•Y CTPAT $\Omega \mathrm{N} \bullet \mathrm{C}$; that is, " of King Straton Soter, the son of Straton." In the Arian legend of the reverse there occurs the new title of priyapita, which is a perfect translation of the Greek Philopator. Some portions of the legend are rather indistinct; but from a comparison of the six specimens I read the whole as Mahârájnsa tradâtasa Stratasa putrasa cha sampriyapitasa Stratasa; that is, " of King Straton Soter, the son of, and lover of his father, Straton."

It is difficult to say what position the younger Straton
may have held ; but I conjecture that, as the eldest son, he was associated with his father in the kingdom, and was probably left in charge of the eastern provinces of the Panjâb, when the elder Straton entered on his campaign against Heliokles in the Upper Kabul valley. On the death of his father, about b.c. 160, he may have been either supplanted at once, or for a time left in charge of the eastern provinces, by his brother Menander. The coins themselves offer no further clue to his history. My six specimens were all found together in the Panjâb along with rude specimens of Straton I. and Zoïlus. On one of them there are the Arian letters $a+b h i$ forming $a b h i$, which is a pure Sanskrit word, and may be either the beginning of a man's name, or of the district of Abhisara, to the south-west of Kashmir, or of Abhinagara or Abhor to the east of the Satlej. Two specimens have the Arian letter ro, or to, in the field, and the other three have no monogram.

At present our materials are too scanty to enable us to do more than offer a mere conjectural sketch of the probable career of Straton and his eldest son. But with the discovery of more coins it may be hoped that some light will be thrown upon the family connections, as well as on the extent of country over which they ruled.

Menander (Soter, Dikaios), 13.c. 160-140.
The coins of Menander are more numerous than those of any other Greek prince of the East. I have recorded the monograms of eight hundred and ninety-three different specimens, but I have examined altogether more than one thousand coins. Of these, one hundred and fifty-three were obtained by Masson at different times from the plain
of Begrâm to the north of Kabul, and one hundred and eight in one find from Western Hazâra. I have traced seventy others to Kabul, sixteen to Jalalabad, and two to Peshâwar, making altogether three hundred and forty-nine coins found to the west of the Indus. Captain Hutton got nine silver coins at Kabul, but " not a single specimen from Sistan or Kandahar," although he had resided for a long time at both places. So also Colonel Stacy "did not find a single coin of Menander at Kandahar" (where he lived for two years), " but got them when he reached Kabul." From this evidence it is certain that Menander could not have possessed any part of Arachosia or Drangiana, and that his dominions to the west of the Indus must have been confined to the Kabul valley and Eastern Afghanistan.

Large collections of the coins of Menander have also been made in the Panjâb. Wilson ${ }^{3}$ thought that they might have been " brought there for sale;" but although this is undoubtedly the case at present, it was not so when Ventura made his collection in the Panjâb, at the very same time that Masson and Honigberger were collecting in the Kabul valley. Neither was it the case during the British occupation of Kabul, at which time Captain Nuttall made his collection in the Panjâb. In General Abbott's collection, now in the East India Museum, which was made in the North-West Panjâb between 1846 and 1857, there are ninety-eight coius of Menander ; and siuce the beginning of 1859 I have myself received no less than two hundred and forty-four coins of Menander from the Panjâb. How many of these may have been brought from Kabul it is impossible to say; but my impression is that the coins

[^109]of Menander are perhaps nearly as common in the Panjâb as they are in the Kabul valley. Even to the east of the Satlej they are not uncommon, as I have at different times procured no less than nineteen specimens at Mathura, and ten specimens at other places in North India. Mr. Thomas also obtained twenty-nine specimens from Râmpur. Altogether, including Tod's specimen from Buteswar, on the Jumna, and Dr. Swiney's from Subâthu, no less than sixty coins of Menander have been fouud in different places to the east of the Satlej.

Putting together all the indications afforded by the findspots of his coins, I conclude that the rule of Menander must have been firmly established in the Panjâb and Kabul valley; that it was extended by conquest to the eastward as far as Mathura, on the Jumna, and that it most probably embraced the greater part of North-West India.
The monograms, according to my readings, give much the same information. Out of eight hundred and ninetythree monograms there are two hundred and seventy-four, or nearly one-third, of Demetrias (No. 58) in the Lower Kabul valley; and two hundred and thirty-seven, or rather more than one-fourth, of Dionysopolis (No. 18), in the middle Kabul valley; while there are only thirty-eight of Karsana (No. 17), and none of Ophiana, in the upper Kabul valley. The readings of the remaining monograms are more or less doubtful; but several of them certainly belong to places in the Panjâb and lower Kabul valley, as they are also found on the coins of Antimachus, Lysias, and Antialkidas, whose rule did not extend to Kabul. Of No. 89, which I read as Heliopolis, and identify with Taxila, there are fifty-four coins; of No. 86 there are eighty-eight coins; and of No. 89 there are forty-one coins; or altogether more than one-fifth of the whole
number. There are also twelve examples of No. 142 monogram, which I read as Euthydemia, in the eastern Panjâb; and thirty-five specimens of No. 91, which I read as Multân, and which was undoubtedly some place in the Panjâb, as it is found on the coins of the IndoScythian king, Moas, whose rule did not extend to the westward of the Indus. ${ }^{4}$

From this examination of the monograms it would appear that Demetrias, in the lower Kabul valley, was the chief mint of Menander, and that his rule must have extended from Kabul to Sangala, or Euthydemia, in the eastern Panjâb.

On comparing these deductions with the few notices of Menander which have been preserved by ancient authors, it is satisfactory to find that they are fully contirmed by history. Our principal authority is Strabo, who derived his information from the Parthian History of Apollodorus of Artamita. According to him, " the Greeks who caused the revolt of Bactriana, became so powerful by means of the fertility and advantages of the country, according to Apollodorus of Artamita, that they made themselves masters of Ariana and India. Some of these princes subdued more nations than Alexander himself; particularly Menander, who, crossing the Hypanis, penetrated eastward as far as the Isamus." ${ }^{5}$ It is no doubt this expedition of Menander that is referred to in the epitome

[^110]of Trogus, "Indica quoque res addita, gesta per Apollodotum et Menandrum, reges eorum." ${ }^{6}$ In these two passages we have the fullest confirmation of the Indian conquests of Menander, which I have already deduced from the find-spots of his coins. Unfortunately the Isamus River, mentioned by Strabo, is quite unknown. Mannert proposed to change the name to Jomanes, or the Jumna, an alteration which Lassen considers as "perhaps necessary." Tod identified it with the Isan, which flows down to the Doab between the Ganges and Jumna; but the Isan is an insiguificant stream, which is not likely to have been mentioned as the limit of the Greek conquests in India. I would propose to read Soamos, or the Son, a large river that joins the Ganges just above Patna, or the classical Palibothra, which according to an ancient native authority was actually captured by the Greeks.

This important fact was discovered by Dr. Kern in a fragment of the Gärgi-Sankita of the astronomer, Garga, the approximate date of which work he assigns to b.c. 50. ${ }^{7}$ After mentioning Sâlisuka, one of the Maurya princes who died in b.c. 200, Garga says :-

> Tatah Sâketamâkramasya Panchâlân Mathurân tathâ Yavana dushṭavikrântâh prâsyanti Kusumadhwajam Tatah Pushpapure prâpte Kardame (?) prathite hite(?) Akulâ vishayâh sarve bhavishyanti na Sanṣayah.
"Then the viciously valiant Greeks, after reducing Sáketa, Panchâla-country, and Mathura, will reach (or

[^111]take) Kusumadhwaja (Palibothra) * * * Pushpapura (Palibothra) being reached (or taken) all provinces will be in disorder undoubtedly." On which Dr. Kern re-marks:-"So then we see in a Sanskrit work the confirmation of the records of the Greek historians, that the Bactrian kings led their victorious armies far into the heart of Hindustan." This passage is specially valuable for the details which it gives of the Greek conquests. Saketa is Oudh, Panchala is the Gangetic Doab and Rohilkhand, and Mathura is the chief city of a large tract of country to the south and west of the Jumna.

Another native authority for the Greek conquests in India has been found by Professor Goldstücker in Patanjali's Commentary on Pânini, ${ }^{\text {® }}$ where he says-"TheYavana (or Greek) besieged Ayodhya; the Yavana besieged the Mddhyamikas." Ayodhya is the Sanskrit form of the vernacular name of Oudh, and the Mádhyamikas are the people of Madhya-deṣa, ${ }^{9}$ or the "middle country," that is, of the Gangetic provinces above the Delta. The exact date of Patanjali is not known; but as his Commeutary was introduced into Kashmir in the beginning of the first century after Christ, ${ }^{10}$ he must have flourished some time earlier. On this point Professor Goldstücker very ingeniously, and I think justly, refers to the use of the imperfect tense in the phrase, "the Yavanas besieged Ayodhya," as a proof that Patanjali was contemporary with the event. ${ }^{11}$ He bases his opinion on the fact that Patanjali gives the phrase as an illustration of the state-

[^112]ment of the earlier grammarian, Kâtyâyana, that the imperfect tense is used "when the fact related is out of sight, notorious, but could be seen by the person who uses the verb."

Here, then, we have two distinct Sanskrit authorities for the fact of the Greek conquest of Ayodhya and Madhyadesa, of whom the first was most probably contemporary with the event, and the other not more than one century later. According to the later account the Greeks actually captured Palibothra. In the original Sanskrit, the statement of this interesting fact is followed by three corrupt words, " Kardame, prathite, hite," of which Dr. Kern ${ }^{12}$ remarks that they " look as if they contain the name of the Greek king, and it is most tantalising that they are so badly preserved." But as Kardama is a pure Sanskrit name, it is possible that it may be intended for the King of Palibothra, although no such name is given in the royal lists of Magadha, In these lists, however, we have the name of Pushpamitra, who reigned for thirty-six years, or from b.c. 178 to 142 , and who was, therefore, a contemporary of Menander. Now, in one of the Hindu dramas, ${ }^{13}$ this very prince is said to have let loose a horse, that it might wander free for twelve months, previous to the performance of the Aswamedha, or "Horsesacrifice." The horse was attended by a guard under the command of his grandson, Vasumitra, who, whilst following the victim on the bank of the Sindhu river, was attacked by a party of Yavana cavalry, which was defeated by the young prince after a sharp conflict.

Wilson supposed that the Sindhu river here mentioned

[^113]was the Indus; but as Pushpamitra and his son Agnimitra are called the rulers of Vidisâ, which is described as lying to the north of the Vindhya mountains, and as bounded by the kingdom of Vidarbha or Berar on the south, the Sindhu of the drama cannot possibly be the Indus. The great Indus also flows from north to south, and has no south bank, on which the skirmish with the Yavana cavalry, as described by Pushpamitra, could have taken place. There are several rivers of this name in Northwestern India; but the only one which has a south bank is the famous Sindhu of Narwar, which has been celebrated by Bhavabhuti in another Hindu drama. ${ }^{14}$ This stream has its source in the Vindhyan mountains, and after flowing to the north as far as the great fort of Narwar, it turns suddenly to the east-north-east for 100 miles, and joins the Jumua almost due west from Cawnpore. This wellknown stream was once the boundary between the great Chohâı empire of Delhi and the Chândel kingdom of Mahoba, and it still forms a sharp line of demarcation between the states of Rajputana and Bundelkhand. In the tenth and eleventh centuries it was also the boundary of the Hindu kingdom of Mathura towards the south. I couclude, therefore, that in the time of Menander it was most probably the boundary between his conquered province of Mathura, and the independent Indian state of Vidisa, or Bhilsa, on the south.

In the Buddhist history of the Tibetan author, Târânâth, the "first invasion of India by foreigners" is said to have taken place during the reign of Pushyamitra. ${ }^{15}$ If this

[^114]king is the same as the Pushpamitra of the Brahmans and Buddhists, this invasion of "foreigners" must refer to the conquest of the Greeks under Menander. Târânâth specially mentions that they advanced as far as Magadha, which agrees exactly with the account of Garga, as Palibothra was the capital of Magadha. The Tibetan author's chronology is too confused to offer any sure clue to the date of Pusiyamitra; but as we know of no foreign invasion of the banks of the Ganges before the time of Menander, it seems most probable that Târânâth's Pushyamitra is the same king as the Pushpâmitra of the Purânas. This identification is of importance, as Târânâth fixes the invasion of India five years before the death of Pushyamitra, and as Pushpâmitra of the Purânas died in b.c. 142, the invasion of India must have taken place in в.c. 147.

Such is the account which we derive from the native Sanskrit authorities regarding the extent of the Greek conquests in India. It adds many important details to the classical notices of Strabo and Trogus, and fully confirms the deductions which I have made from the findspots of Menander's coins. But the information regarding Menander to be derived from native authorities is not confined to his conquests. In the Milinda-prasna, ${ }^{16}$ or

[^115]"Questions of Milinda," one of the Pali books of Ceylon, we have a long and curious disputation between the Yavana (or Greek) Milinda, Raja of Sagal, and the famous Buddhist priest, Nâgârjuna. As the original form of the name of Milinda is admitted by Pali scholars to have been Milindra, there can be little doubt that this prince is Menander, the Greek King of Sdkala, or Sangaia, in the Panjâb. In one of his replies to Nâgârjuna, he states that he was born at Alasadda, or Alexandria; and he is invariably attended by Yavana, or Greek nobles. He was, therefore, undoubtedly a Greek ling, and his name is so very similar to that of Menander, that the identity of the two kings is, I believe, generally admitted. The questions put by Milinda to the Buddhist priest show much of the argumentative acuteness of the Greek mind, and as the work is a Buddhist one, the king is of course represented as being finally convinced by Nâgârjuna. But it is not improbable that Menander may have had a leaning towards Buddhism, as, according to Plutarch, his subjects treated him after death like a Buddhist prince. "One Menander, who had reigned with justice over the Bactrians, having died in camp, it was agreed that the cities jointly should have the charge of his funeral rites ; but, disputing amongst themselves, they at last divided his ashes equally, that all might raise monuments to the memory of such a mar., ${ }^{17}$ James Prinsep first pointed out that this " singular passage may have had its origin

[^116]in a confused account of the monuments raised by the Buddhists to preserve the relics of their lawgiver.' ${ }^{18}$ But we learn from the Pali annals of Ceylon that it was the custom to erect a monument over the ashes of a "supreme monarch." ${ }^{19}$ In the case of Menander, no doubt a single monument would have been erected to his memory if the people could have agreed as to which city should have the honour of possessing the remains of their beloved king. But as the inhabitants of different cities contended for this honour, it was determined, as in the similar case of Buddha's own remains, to divide the ashes equally amongst them, so that all the cities might erect their own monuments to the memory of their king.

There is still one more classical mention of Menander in the well-known passage of the Periplûs, ${ }^{20}$ where the author states that "even in his time ancient drachmas were current at Barygaza, bearing in Greek characters the stamp of the kings Apollodotus and Menander, who reigned after Alexander." Coupling this statement with the brief notice of Trogus, regarding the "Indian exploits" of Apollodotus and Menander, and with the important passage of Strabo, relating to Menander, I have assigned to Apollodotus the conquest of the country to the east of the lower Indus, and that of the Gangetic provinces to Menander. But as the coins of Menander were still current in Barygaza three centuries after his death, I conclude that he must have succeeded either

[^117]immediately, or after a short interval, to the sovereignty of all the dominions of Apollodotus. Thus at the time of his death the dominions of Menander would have comprised Kabul and Afghanistan on the west, the Panjâb and Sindh in the middle, and the whole of north-western India, as far as Mathura, on the east. Under him the empire of the Eastern Greeks attained its greatest extent, and the victorious arms of one of Alexander's successors were carried in triumph down the banks of the Ganges to the great capital of Palibothra.

According to my view, the career of Menander, as derived from all these various sources, may be briefly sketched as follows. About b.c. 160, I suppose him to have succeeded his presumed father, Straton, in the sovereignty of the Panjâb. For the first ten years he was probably employed in consolidating and extending his kingdom to the eastward as far as the Jumna. About в.c. 150, or shortly afterwards, he obtained possession of all the dominions of Apollodotus by the expulsion of that prince's feeble successors. Being now master of a powerful empire, extending from the sources of the Kabul river to the banks of the Jumna, and from Kashmir to the mouths of the Indus. I suppose him to have begun his Indian campaign in b.c. 148, when he obtained possession of the Gangetic Doab, Rohilkliand, and Mathura. In the following year, B.c. 147, the Greek cavalry was engaged with the troops of Pushpamitra, King of Vidisa or Bhilsa, on the south bank of the Sindhu, near Gwalior; and about the same time Menander must have taken possession of Salketa, or Oudh, and of the lower Duab down to the confluence of the Ganges and Jumma. The next year, b.c. 146, was probably occupied with preparations for the great campaigu against Palibothra, which was carried out
in b.c. 145, by the capture of that famous capital of the Gangetic India.

After this crowning triumph of the Greek arms in the East, I suppose that the ambition of Menander was aroused, and that a restless love of glory, and the desire of recovering the former dominions of the Bactrian Greeks, incited him to plan further conquests in the West. It is certain, at least, that the campaign of Demetrius Nikator against the Parthian king was not undertaken until after repeated invitations from the Eastern Greeks. According to Josephus, ${ }^{21}$ the Syrian king intended, "when he should have obtained the dominion of the upper provinces, to lay a foundation for recovering his entire kingdom ; for those Greeks and Macedonians dwelling there, frequently sent ambassadors to him, and promised that if he would come to them, they would deliver themselves up to him, and assist him in fighting against Arsakes, King of the Parthians." This account is confirmed by Justin, ${ }^{22}$ who relates that when Demetrius had decided upon invading Parthia, "the people of the East saw his coming not unwillingly, both because of the cruelty of Arsaces, King of the Parthians, and because, having been used to the old goverument of the Macedonians, they bore the pride of this upstart people with indignation. Wherefore, being assisted with the auxiliaries both of the Persians, and Elymeans, and Bactrians, he routed the Parthians in

[^118]many battles. However, at last, being trepanned by a pretence of making peace, he is captured." Now, Demetrius succeeded to the throne of Syria by the defeat of Alexander Balas in Nov., b.c. 146, and deeming himself secure, reduced his army, and gave himself up to pleasure. This conduct alienated his soldiers, of which Tryphon took advantage, in b.c. 144, to set up the young son of Balas as Antiochus VI., who soon got possession of Autioch and of the greater part of Syria. Demetrius then retired to Babylon, where I suppose him to have received the embassies from the Eastern Greeks and Macedonians mentioned by Josephus and Justin. Several of these embassies we know were from the discontented subjects of Parthia; and it is highly probable that one at least was from Menander, King of India, who must certainly have desired to recover the districts of Ariana, which had so recently been wrested from Apollodotus by the Parthians.
The campaign of Demetrius against the Parthian king is assigned by Clinton to b.c. 139. ${ }^{23}$ He assumes that " Demetrius made his preparations in An. Sel. 172, about the beginning of b.c. 140 ; that he entered Parthia at the close of a.s. 173, about July b.c. 139; and was captured at the beginning of a.s. 175 , in b.c. 138. ." But the last date is certainly too late, as there are numerous coins of his successor, Antiochus Sidetes, dated in A.s. 174 ; and as Antiochus did not obtain the kingdom until some time after the marriage of Demetrius with the Parthian princess Rhodogune during his captivity, I couclude that he was most probably taken prisoner about the middle of a.s. 173, or early in b.c. 139. This seems to be confirmed by the

Greek coins of Mithridates, which are dated in a.s. 173 and 174 , and which were most likely minted by Greek artists after the defeat of Demetrius. Of Demetrius himself there are no coins of a.s. 174, and I know of only two of a.s. $173,{ }^{24}$ which would appear to have been the last year of his reign; for as Syria was then held by Tryphon, the reign of Demetrius ended with the Parthian occupation of the Eastern provinces. As the testimony of the coin-dates is conclusive as to the end of his reign, the Parthian campaign must have been opened at least one year previously, or in в.c. 140. 'This indeed is the very date assigned to it in the Book of Maccabees, ${ }^{25}$ or A.s. 172, which begau 6th Oct., b.c. 141. I suppose therefore that the campaign was commenced early in b.c. 140 , and was concluded before the middle of the following year.

Now all these dates correspond with the latter end of the reign of Menauder; and as he would have been a great gainer by the defeat of the Parthians, I have littie doubt that he was one of the parties who urged the attack with a promise of hearty co-operation. But as the account of this campaign preserved by Justin limits the allies of Demetrius to the revolted subjects of Parthia, "the Persians, Elymæans, and Bactrians," I infer that Menander must have died before the end of the campaign, which would at once account for the absence of the Greek troops of Iudia. In the passage already quoted from
${ }^{24}$ Gough's Seleucidæ, pl. xiv., fig. 18, of Demetrius is dated TOP, or 173 ; and Frölich, No. 31, p. 79 ; Gough, pl. xv., figs. $8,9,10,11$ are all dated $\Delta O P$, or 174 ; and also Frölich, Nos. $1,3,5$, p. 79. I have in my own cabinet coins of Mithridates of both dates.

251 Macc. xiv. i. "Now in the hundred threescore and twelfth year King Demetrius gathered his forces together and went into Media, to get him help to fight against Tryphon."

Plutarch we learn that Menander "died in camp; ${ }^{2 \theta}$ and whether he instigated the expedition of Demetrius, or simply took advantage of the favourable opportunity thus offered for the recovery of at least some portion of the former possessions of the Bactrian Greeks, I conclude that he had actually entered on a campaign against Parthia, and that he died about the end of b.c. 140 , in the very midst of his march to the West.
Such, it appears to me, may have been the probable career of Menander, the most powerful and at the same time the most honoured of Alexander's successors in the East. Under him the Greek dominion attained its greatest extension, and the arms of Greece were carried down the banks of the Ganges to Palibothra, a triumph for which "the great Emathian conqueror" had sighed in vain.
I have now only to say a few words regarding the types of Menander's money. On his silver coins, which are very numerous, the types are limited to the figure of Athene Promachos and her Owl, both of which are also found on his copper money, as well as the Aegis with the head of Medusa. I suspect that this attachment to PallasAthene must have originated with his name, as $\mu$ 'sos is certainly connected with the Sanskrit manas and Latin mens, which is the root of the Etruscan Menrva and the Latin Minerva. The common type of Menauder's copper money is the figure of Victory, which in his case was specially appropriate. His other types are chiefly animals, of which the elephant most probably refers to India, and the two-humped camel to Kabul. The elephant's head is the usual type of the lepta, or smaller copper coins; and the complete animal with the goad on the reverse, is

[^119]restricted to a few rare specimens, which bear the title of Dikaios. These would appear to have been struck towards the close of his reign, and shortly after his great Indian conquests; and the title was therefore most probably conferred upon him by his subjects.

The only other type which seems to call for any notice is that of the wheel, Plate XII. Fig. 13, which is found on a single coin of the Masson collection in the East India Museum. The wheel is of common occurrence on Buddhist coins and sculptures; ${ }^{27}$ it crowned the summits of the gateways of the great Sânchi Tope; and it formed the pinnacle of many of the great Buddhist monoliths. I believe it to have been the symbol of a Chakravartti Raja, or "Supreme Ruler," a title which was applied to all great earthly monarchs, as well as to Buddha himself. Chakra means simply a "wheel or sphere," and chakra vartti signifies literally the "wheel-turner"; but chakra also means a large territory"or "circle" of many districts; hence the title of Chakravartti was given only to supreme monarchs. It was applied to Buddha because his attributes where those of a Chakravartti Raja. ${ }^{28}$ To Menander it was especially appropriate from the extent of his territory; and the wheel on the coin was, therefore, perhaps intended to denote the extent of his rule, and probably also some acknowledgment of his leaning towards Buddhism.

[^120]
# COINS OF ALEXANDER'S SUCCESSORS IN THE 

 EAST.By Major-General A. Cunningham, R.E.

Tre vast dominion established by Menander, which extended from Kâbul to Mathura, and from Kashmir to the mouths of the Indus, was not destined to last. The same Sanskrit writer who relates the campaign of the Greeks in the valley of the Ganges, ending with the capture of Palibothra or Patna, tells us that " the fiercelyfighting Greeks will not stay in Madhyadesa (the valley of the Ganges) : there will be a cruel dreadful war in their own kingdom, caused between themselves." In this short passage I think that we have a true account of the actual cause of the downfall of the last Greek kings, and of the closing history of Greek dominion in India.

On the death of Menander in camp, which probally

[^121]happened when on his march against Parthia, I suppose that a general scramble took place amongst his relatives and friends to secure some portion of his dominions for themselves. This would be the "cruel and dreadful war between themselves" which is mentioned by the native author. About the same time, or certainly very soon afterwards, the Hindu princes of Menander's territories to the east of the Satlej must have risen against their Greek conquerors and driven them back into the Panjâb. This view of the state of affairs after Menander's death is borne out by the number of ephemeral princes, who, from the style of their coins, must be placed in the short interval that elapsed before the final establishment of peace under the greatly reduced sway of Hermwus. It is strongly supported also by the recent discovery, in company with twenty-seven hemidrachms of Apollodotus Philopator, of some well-executed silver coins of three different native princes, who most prol)ably took part in the expulsion of the Greeks from the territories to the east of the Satlej. I presume that these chiefs most probably adopted the Greek style of coinage to which their subjects had been accustomed during the Greek occupation under Menander.

Another very large find of hemidrachms of the IndoGrecian princes themselves was made on the 29th June, 1871, at the old town of Sonipat, or Sonaprastha, twentyeight miles to the north of Delli. 'The coins were placed in a common earthen sarai, or water vessel, with a narrow neck, about three feet under ground, near the bank of a tank, where they were found by some women digsing clay. The discovery was at first concealed, and many of the coins are said to have been melted. The exact number, therefore, will never be known; but all the
people agree that about 3 sers, or 6 lbs . in weiglit, were found. This weight would give rather more than 1,200 hemidrachms; but as a large mass of the coins at the bottom of the vessel were completely oxidized, and as many of them are known to have been melted, the actual number now existing is believed to be under 1,000 . Of this number I now possess 745 coins, and I have seen and examined 138 others, or altogether 883 specimens, being very nearly three-fourths of the whole find. This find comprises coins of no less than eleven different princes posterior to Eukratides, and of one Queen, Kalliope. Of Hermæus, the last Greek king, there are only 32 specimens, while there is the same number of the doubleheaded coins of Hermæus and Kalliope. The following table shows the relative numbers of coins of the different princes amongst the total of 883 which I have examined.

|  | Kinge. | Author. | Others. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Heliokles | 27 | 3 | 30 |
| 2 | Straton | 17 | 2 | 19 |
| 3 | Antimachus II. | 64 | 10 | 64 |
| 4 | Apollodotus . . | 21 | 5 | 26 |
| 5 | Lysins . . . | 13 | 6 | 19 |
| 6 | Philoxenes . | 18 | 3 | 21 |
| 7 | Antialkidas . | 64 | 15 | 79 |
| 8 | Menander | 481 | 83 | 564 |
| 9 | Diomedes | 11 | 1 | 12 |
| 10 | Amyntas | 4 | 1 | 5 |
| 11 | Hermæus . . . . | 17 | 5 | 22 |
| 12 | , and Kalliope | 18 | 4 | 22 |
|  | Total | 745 | 138 | 883 |

In this list the large number of the coins of Menander is as remarkable as the paucity of those of Apollodotus and Hermæus. The equal number of the coins of Hermæus alone, and of Kalliope, is also very curious.

Taking this last fact into consideration along with the entire absence of any coins of the earlier Indo-Scythian princes, Vonones, Moas, or Azas, I conclude that the hoard must have been buried in the beginning of the reign of Hermæus. About that time, as I have already shown, the Greek troops would appear to have been finally withdrawn from India, and all the conquests of Menander to the east of the Satlej were abandoned. Perhaps, therefore, it is not too hazardous to conjecture that this Sonipat treasure, of about 6 mince or one-tenth of a talent, may have been secreted by some Greek officer during the anarchy and general confusion which followed soon after the death of Menander. I presume that the town of Sonipat, one of the oldest in Northern India, was then garrisoned by Greek troops, and that the luckless owner of the treasure being suddenly called away to take part in the "cruel dreadful war in their own kingdom caused between themselves," as described by Garga the Indian astronomer, was killed in the bitter contest, and his secret consequently buried in his grave.

All of these Sonipat coins are more or less worn by circulation. Some of them, indeed, are almost obliterated on the reverse side, and this is more particularly the case with the coins of Heliokles, Straton, Antimachus II., and Apollodotus. But the comparative amount of wear can be best judged of by the following table, which gives the average weights of 703 coins of eleven different kings, with the loss on each referred to the standard of 37 grains, as determined from the best preserved specimens of these Indo-Grecian kings.

|  | Specimens. | Kings. | Total Weight. | $\begin{gathered} \text { Mean } \\ \text { Weight. } \end{gathered}$ | Loss. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 28 | Heliokles | $884 \cdot 00$ | 31.57 | $5 \cdot 43$ |
| 2 | 15 | Apollodotus . | $486 \cdot 50$ | 32.43 | $4 \cdot 57$ |
| 3 | 15 | Straton | 486.55 | $32 \cdot 44$ | $4 \cdot 56$ |
| 4 | 53 | Antimachus II. | 1724.00 | $32 \cdot 52$ | $4 \cdot 48$ |
| 5 | 77 | Antialkidas | $2533 \cdot 25$ | 32.90 | $4 \cdot 10$ |
| 6 | 12 | Lysias. | 396-50 | $33 \cdot 27$ | $3 \cdot 73$ |
| 7 | 21 | Philoxenes | 699.50 | $33 \cdot 23$ | $3 \cdot 77$ |
| 8 | 450 | Menander | 14,977.00 | 33.28 | $3 \cdot 72$ |
| 9 | 9 | Diomedes | $302 \cdot 50$ | 33.61 | $3 \cdot 39$ |
| 10 | 5 | Amyntas . | 168.50 | $33 \cdot 70$ | $3 \cdot 30$ |
| 11 | 18 | Hermæus | 608.50 | 33.80 | $3 \cdot 20$ |
|  | 703 |  |  | 33.09 |  |

This table shows such considerable differeuces between the weights of the earlier and later coins, as could only, in my opinion, have been caused by equally great differences in the periods during which the coins had been in circulation. Thus, taking the dates of 165 and 135 b.c. as the extremes between the coins of Heliokles and Hermæus, it is clear that there would be a great difference in the amount of wear between the two if the money had been buried early in the reign of Hermæus, when his coins were nearly new, while those of Heliokles had been thirty years in circulation. For this reason I look upon the small loss shown by the coins of Hermæus and Kalliope as a strong evidence that they had not been long in circulation; and I conclude, therefore, that the Sonipat hoard must have been buried during the early part of the reign of Hermæus.

## aMYNTAS, Nikator.

1. O ㅈ 10. Didrachmon. Plate XIII., Fig. 1. Brit. Mus., 128 grs. Unique. Thomes, No. 1.

Obv.-Helmeted head of king to right, with the ends of his diadem hanging behind, and chlamys on
sboulder. Circular legend, BAEIAESE NIKA. TOPOE AMYNTOY.

Kev.-Draped and helmeted figure of Athene Promachos moving to left, with ægis on left arm, and thunderbolt in her upraised right band. In field to left No. 139 monogram of Ophiana. Circular Arian legend, Mahárâjasa jayhadharasa Amitasa.
2. OA7 7. Hemidrachma. Plate XIII., Fig. 2. Dr. Chapman. Duplicates, author, 85 grs.; and Lahore Mus., from Sonipat find. Only these three specimens known.

Obv.-Diademed head of king to right, covered with the Macedonian kausia, with the ends of his diadem hanging behind, and chlamys on his shoulders. Circular Greek legend as on No. 1.
Rev.-Draped figare of Zeus Nikephoros seated, and half turned to the left, with sceptre and palm branch in left hand, and a small figure of Victory in right hand. In field to left No. 127 monogram, with the addition of a central horizontal stroke. Circular Arian legend as on No. 1.
3. O 丑 7. Hemidrachma. Author. Unique. From the Sonipat find. $82 \frac{1}{2} \mathrm{grs}$.

Obv.-Bare diademed head of king to left, with $\begin{aligned} & \text { gis on }\end{aligned}$ his left arm, and hurling a javelin with his upraised right hand. Circular Greek legend as on No. 1.

Rev.-Seated figure of Zeus Nikephoros holding a small Victory in his right hand, as on No. 2. Monogram and circular Arian legend as on No. 2.
4. O AR 7. Hemidrachma. Plate XIII., Fig. 3. E. I. Mus. Duplicate, author, 34 grs. No other specimens known.

Obv.-Bare head of king to right, with ends of his diadem hanging behind, and chlamys on his shoulder. Circular Greek legend as on No. 1.

Rev.-Zeus Nikephoros seated with Victory, as on No. 2. Monogram as on No. 2. Circular Arian legend as on No. 1.
5. $\square$ 8. Dichalloon. Plate XIII., Fig. 4. Brit. Mus. Duplicate, E. I. Mus. Very rare.

Obv.-Bearded head of king to right, covered with a lofty tiara, shaped like a Phrygian cap. Sceptre and chlamys on shoulders. Greek legend on three -sides, BAEIAERミ NIKATOPO乏 AMYNTOY.

Rev.-Draped figure of Pallas Athene, armed with helmet, spear, and shield, moving to left, with her right hand extended before her. In field to left No. 139 monogram of Ophiana. Arian legend on three sides, Mahärajasa jayadharasa Amitasa.
6. $\square$ ® 8. Dichalkon. Plate XIII., Fig. 5. Author, 127 grs. Rare. Thomas, No. 2. Ariana Antiqua, pl. ii., 14.

Obv.-Bearded head of king to right, covered with a peculiar rayed head-dress, and with chlamys on the shoulder. Greek legend on three sides as on No. 5.

Rev.-Draped figure of Pallas Athene as on No. 5. In field to left No. 139 monogram of Ophiana. Arian legend on three sides as on No. 5. A duplicate in my collection has No. 65 monogram, forming Nikaia, or Kabul.
N.B.-R. Rochette, Journal des Savants, February, 1839, p. 90, describes one of these coins as having a " bearded head " and the other a "beardless head." "On the few specimens which I have seen I did not observe any difference. The head with the rayed diadem is certainly bearded." (See Journal des Savants, February, 1839, pl. i., fig. 12.) See also the similar coins of Hermæus, Pl. XIV., Fig. 12, accompanying, and Ariana Antiqua, pl. xxi., fig. 15. I think that the other portrait is also bearded, judging from the similar coins of Hermæus.

## HIPPOSTRATUS THE GREAT, Soter.

1. O A 11. Didrachmon. Plate XIII., Fig. 6. Author, 148 gre. Rare. Thomas, No. 1.

Obv.-Bare diademed head of king to right, with chlamys on the shoulders. Circular Greek legend, BAELAESE ESTHPSE IMITOETPATOY.

Rer.-Draped figure of Demeter to left, holding a cornucopia in her left hand, and extending her right hand to the front. In the field to left the Greek monogram No. 115, forming APT, and to right the Arian letter $a$, No. 116. Circular Arian legend, Mahârâjasa trâdatasa Hipastratasa.
1a. $\mathrm{O}_{\mathbb{R}}$ 7. Hemidrachma. Anthor, 36 grs . Thomas, 1 g.
Types, legends, and monogram as on No. 1.
2. O A 12. Didrachmon. Author, 142 grs. Unique.

Obv.-Bare diademed head of king to right, with chlamys on shoulders, as on No. 1. Circular Greek legend as on No. 1, with Soter only.
Rev. Helmeted figure of king on horseback, galloping to right, as in Pl. XIII., Fig. 7. In field below No. 48 monogram, which I read as KAEIEIPAE, or Kaspeira, and would identify with Kasyapapura, or Multàn. Circular Arian legend, Mahârâjasa trâdatasa jayantasa Hipastratasa.
N.B.-The title of jayanta, the victorious, has no equivalent in the Greek legend of the obverse.

2a. $O \mathbb{R}$ 12. Didrachmon. Plate XIII., Fig. 7. Author, 135 grs. Thomas, No. 2.

Obv.-Bare diademed head of king to right, as on No. 1. Circular Greek legend, BAIANE $\Sigma \Sigma$ METAAOY इתTHPOE IMIOETPATOY.
Rer.-Helmeted figure of the king on horseback galloping to the right. In field below No. 48 monogram of Ḱaspeira. Circular Arian legend, Mahärajasa tradatasa Mahatasa jayantasa llipastratasa.
2b. O A 7. Hemidrachma. Author, 36 grs. Thomas, No. 2a.

Types and legends as on No. 2a. Monogram No. 110.
3. $O_{A}$ 11. Didrachmon. Plate XIII., Fig. 8. Author, 144 gre. Thomas, No. 3.

Obv.-Bare diademed head of king to right. Circular Greek legend as on No. 2a.
Rev.-Helmeted figure of king on horseback standing at rest. In field to right No. 110 Greek monogram, With the Arian letter ch to left, and the Arian
letter $n$ in the exergue. Circular Arian legend as on No. 2a, including the additional title of jayanta. Other specimens have the Arian letters pre, or lo, or misi in the exergue.
4. $\square$ 10. Tetrachalkon, or Hemiobol. Plate XIII., Fig. 9. Author, 295 grs. Very rare.

Obv.-A triton stamding to the front, with fishtails for legs, holding a dolphin in his right hand and a rudder in his left. Legend on three sides, BA $\Sigma I \Lambda E \Omega \Sigma$ $\Sigma \Omega T H P O \Sigma$ IППOミTPATOY.
Rev.-Demeter standing to left, holding a palm-branch in her left hand, and extending her right hand to the front. In field to left, the Greek monogram No. 115, forming APT, and to right the Arian monogram forming ar. Arian legend on three sides, Mahârâjasa trädatasa Hipastratasa.
5. $\square$ 8. Dichalkon. Plate XIII., Fig. 10. Author, 131 grs. Thomas, No. 4.

Obv.-Draped figure of Apollo standing to right, holding an arrow with both hands. Greek legend on three sides as on No. 4.
Rev.-Tripod, with Greek and Arian monograms forming APT and ar, as on No. 4. Arian legend on three sides, as on No. 4.
5a. O 巴 13. Trichalkon. E. I. Mus., from General Abbott, 250 grs .

Types and legends as on No. 5.
6. Æ 8. Plate XIII., Fig. 11. Author, 93 grs. Thomas, No. 5.

Obv.-Zeus seated on throne half turned to left, and holding out a wreath in his right hand. Legend on three sides as on No. 4.
Rev.-Horse walking to left, surrounded by a square of astragalus beads. In field to left variant form of No. 46 monogram, forming ortospana. Arian legend on three sides, Mahârajasa tradatasa jayantasa Hipastratasa. Here again the word jayantasa, or the " victorious," has no equivalent in the Greek legend of the obverse.
N.B.-General Fox possesses a large copper coin of the same types.

## ARTEMIDORUS, Aniletos.

1. O $\boldsymbol{R}$ 10. Didrachmon. Plate XIV., Fig. 1. Author, 128 grs. Unique.

Obv.-Bare diademed head of king to right, with chlamys on the shoulders. Circular Greek legend, BAI. $\Lambda E \Omega \Sigma$ ANIKHTOY APTEMI $\triangle \Omega P O Y$.
Rev.-Draped figure of Artemis to left, with quiver at her back, and drawing her bow. In field to left, No. 119 monogram. Circular Arian legend, Mahárájasa apadihatasa Artemidorasa.
2. O A 6. Hemidrachma. Plate XIV., Fig. 2. Author, 36 grs . Unique.

Obv.-Helmeted and diademed head of the king to right, with chlamys on the shoulders. Circalar Greek legend as on No. 1.
Rev.-Draped figure of Artemis drawing a bow, as on No. 1, with the same monogram and Arian legend.
3. $\mathrm{O}_{\text {R 6. Hemidrachma. Plate XIV., Fig. 3. Author, }}$ 37 grs. Unique. From the late Mr. Brereton.

Obv.-Bare diademed head of king to right, with chlamys on the shoulders. Circular Greek legend as on No. 1.
Rev.-Winged figure of Victory to right, holding oat a wreath in her right hand, and carrying a palmbranch in her left. In field to right No. 120 monogram, forming APTEMI, perbaps for some town named Artemisias, or Artemita, in honour of the goddess, whose name is borne by the king. Circular Arian legend as on No. 1.
4. $\square$ 8. Dichalknn. Plate XIV., Fig. 4. Author. Very rare. Thomas, No. 2.

Obr.-Draped figure of Artemis to the front, holding a bow in her left hand, and drawing an arrow from the quiver at her back with the right band. Greek legend on three sides as on No. 1.
Rev.-Humped Indian bull to right. In field below No. 58 monogram of Demetrias. Arian legend on three sides as on No. 1.

## APOLLOPHANES, Soter.

1. OAR 6. Hemidrachma. Plate XIV., Fig. 5. Author, 37 grs. Five specimens of which are now in the Brit. Mus.

Obv.-Helmeted and diademed head of king to right, with chlamys on the shoulders. Circular Greek legend BAEIAE $\Sigma \Sigma$ ISTHPO乏 A $O \Lambda \Lambda O \Phi A N O Y$.
Rev.-Figure of Athene Promachos to left, with mgis on left arm, and thunderbolt in upraised right hand. In field to right No. 142 Greek monogram, forming EYBY, for Euthydemia, and to left the Arian letter $h i$. Circular Arian legend, Maharajasa tradatasa Apuluphanasa.

TELEPHUS, Euergetes.

1. O AR 7. Hemidrachma. Plate XIV., Fig. 6. [Elliot collect]. Bodleian Library, Oxford. Unique. Thomas, No. 1.

Obv.-Giant (? Scythes) with snaky legs to front. Circular Greek legend, BAZINERE EYEPTETOY THAEФOY.
Rev.-Two draped figures of Helios and Selene standing to the front, the former crowned with the solar rays, the latter with the lunar crescent. In field to right a variant form of No. 77 monogram, perhaps forming TAZAKAE, the Gazaka of Ptolemy, and the Gazos of Dionysius, which I have identified with Ghazni. Circular Arian legend, Mahâräjasa kalàna-kramasa Teliphasa.
N.B.-The late Mr. Brereton told me that he had seen a didrachmon of Telephus in the possession of a Kabul Jew at Attok.

HERM庣US, Soter.

1. O $\not \mathbb{R}^{10}$. Didrachmon. Plate XIV., Fig. 7. Author, 145 grs. Thomas, No. 1.

Obv.-Bare diademed head of king to right, with chlamys on the shoulders. Circular Greek legend, BAEI$\Lambda E \Omega \Sigma \Sigma \Omega T H P O \Sigma$ EPMAIOY.
Rev. -The Olympian Zeus seated on throne half turned to left, holding a sceptre in his left hand, and
extending his right hand to the front. In field to left No. 100 monogram. Circular Arian legend, Maharâjasa tradatasa Hermayasa.
Ia. O A 7. Hemidrachma. Author, 81 to 96 grs. Thomas, No. 1九. Common.

Types and legends as on No. 1. Monograms various.
2. OA 10. Didrachmon. Plate XIV., Fig. 8. Author, 153 grs. Unique.

Obv.-Helmeted and diademed head of the king to right. with chlamys on the shoulders. Circular Greek legend as on No. 1.
Rev.-The Olympian Zeus seated as on No. 1. In field monogram No. 100, for Demetrias. Circular Arian legend as on No. 1.

2a. O A 6. Hemidrachma. Author, 81 grs. Unique.
Types and legends as on No. 2, with No. 139 monogram, forming Ophiana.
3. O $\neq$ 7. Hemidrachma. Author. Unique. From the Sonipat find.

Obv.-King on horseback galloping to right. Circular Greek legend as on No. 1.
Rev.-The Olympian Zeus seated as on No. I. In field to right No. 58 monogram, forming Demetrias. Circular Arian legend as on No. 1.

## HERMEUS ANd KALLIOPE.

4. OAl 7. Hemidrachma. Plate XIV., Fig. 9. Aathor 36 grs. Thomas, No. 2.

Obv.-Bare diademed heads of king and queen to right, with drapery on the shoulders. Circular Greek legend, BAEIAESE $\Sigma$ ISTHPO乏 EPMAIOY KAI KANAIOLIHE.
Rev.-Helmeted figure of king on horseback galloping to right. In field below No. 139 monagram. Circular Arian legend, Mahirajjasa tradatasa Hermayasa Kuliyapaya.

5．$\square$ § ．Lepton．Plate XIV．，Fig．10．Author， 27 grs ． Unique．

Obv．－King on horseback galloping to right．
Rev．－No type，but in the middle of the field the Greek letters AIOY，which I take to be the latter half of the name of Hermeus．

6．O ※ 10．Dichalkon．Plate XIV．，Fig．11．Author， 143 grs．Common．Thomas，No． 3.

Obr．－Bare diademed head of king to right，with chlamys on the shoulders．Circular Greek legend，BAEI－ $\Lambda$ E $\Omega \Sigma$ Е $\Omega$ THPO乏 EPMAIOY．
Rev．－The Olympian Zeus seated as on the silver coins． In field to left No． 46 monogram，forming Orto－ spana．Circular Arian legend，Maharâjasa trada－ tasa Hermayasa．
6a．O 届 6．Lepton．Author， 33 and 34 grs．
Types and legends as on No． 5.
7．$\square$ 8．Dichalkon．Plate XIV．，Fig．12．Author， 125 grs．Rare．Thomas，No． 4.

Obv．－Bearded head of king to right，covered with a rayed tiara，his shoulders clad with the chlamys． Greek legend on three sides as on No． 6.
Rev．－Horse standing to right，with right fore－leg raised． Arian legend on three sides as on No． 6.

8．$\square \mathbb{E}$ 10．Dichalkon．Plate XIV．，Fig．13．Author， 181 and 138 grs．Rare．Thomas，No．4a．

Obv．－Bearded head of king，covered with a lofty tiara． Greek legend on three sides as on No． 6.
Rev．－Horse standing with right fore－leg raised，as on No．7．Arian legend on three sides as on No． 6.
9．O 无 8．Chalkous．Plate XIV．，Fig．14．Author， 70 to 90 grs ．Of rude fabric．

Obv．－Bare diademed head of king to right with chlamys on the shoulders．Circular Greek legend，blun－ dered，BAEINERE ETHPOE $\Sigma$ Y EPMAIOY．
Rev．－The Olympian Zeus seated as on the silver coins． Circular Arian legend，Mâharajasa mahatasa Hermayasa．

N．B．－On these coins the Arian legend presents the title of mahatasa，the＂great，＂instead of the usual tradatasa，the ＂preserver．＂One coin gives the name of Hermaasa，and on the obverse I think that I can trace the lofty title of BALI－ תEUN BALINEWL．

10．O 届 7．Chalkous．Plate XIV．，Fig．15．Author， 50 grs．Rare．

Obv．－Bare diademed head of king to right，of rude ex－ ecution．Circular Greek legend，with ETHPO乏 $\Sigma Y$ ，as on No． 9.
Rev．－－Winged figure of Victory to left，holding out a wreath in her right hand．Circular Arian legend， Mahảrâjasa rájarâjasa mahatasa Hermayasa．

N．B．－On some specimens the lofty title of＂king of kings＂ is expressed by Mahâráyasa rayadirayasa．

10a．O ※ 5．Lepton．Author， 28 to 35 grs．Rare．
Types and legends as on No． 10.
11．O ※ 9．Dichalkon．Plate XIV．，Fig．16．Author， 135 grs．Common．Thomas，No．1．Su－Hermæus．

Obv．－Bare diademed head of king to right，with chlamys on the shoulders．Circular Greek legend，blun－ dered，with $\Sigma$ THPO乏 $\Sigma$ Y，as on No． 9.
Rev．－Herakles standing to the front，with the skin of the Nemæan lion on his left arm，and his right hand holding a club，which rests on the ground．Cir－ cular Arian legend，Kujula Kasasa Yavugasa dhramathidasa．

N．B．－This last coin of the Greek kings of India，which bears the name of Hermæus，with blundered Greek title on the obverse，presents an entirely new legend on the reverse，which has no connection with the Greek legend．On the reverse we find the name and titles of the great Scythian conqueror，Kujula Kasa，the leader of the Kushân tribe．The name of the Greek king on the obverse was afterwards dropped，and that of his Scythian conqueror takes its place in barbarous Greek，as KOZOY $\Lambda$ O KA $\triangle$ 中IZOY，which on other specimens of different type is modified to KOZOAA KA $\triangle A \pm \in C$ ，with the title of ZAOOY，in the Greek legend，and to Kuyula Kaphsa，with the title of Yaüa，in the Arian legend．The Greek form of ZAOOY， which has hitherto been always misread as ZA＠OY，is，there－ fore，an attempt to transliterate the native title of Yavug，or

Yuü. Professor Dowson reads Yarug and Yaü, and suggests that "the two words are probably only different ways of expressing some foreign title. ${ }^{2}$ He notes also that the gutturals are frequently omitted, as in dhamiasa for dhamikasa-to which I may add mahate and mahataka. Yavug, by dropping the guttural, will become Yavu, which is really the same as Yaü, for which the Greek ZAOOX is a very close rendering.

## Amyntas, Nikator.

$$
\text { в.с. } 140-138 \text {. }
$$

The coins of Amyntas are exceedingly rare, only twentrsix specimens being known to me, of which five are in my own cabinet. There are only three distinct types; but there are several different styles of head-dress, as the Macedonian kausia, the common helmet, and two varieties of Oriental tiara. From the Macedonian cap, as well as from his Macedonian name, I infer that he must have been connected with the family of Lysias and Antialkidas. I suppose him to have been the son of the latter prince, and that he may have been employed during the reign of Menander as a tributary governor. On the death of that great king, amid the general scramble for power, Amyntas must have kept his hold on Kâbul, where he probably reigned for one or two years, from b.c. 140 to 138 .

This assignment is partially borne out by the monograms on his coins, among which there are Nikaia or Kâbul (No. 65), and Ophiana or Alexandria (No. 139). The find-spots of his coins also point to the Kâlul valley as the seat of his power. But the strong argument in favour of Kâbul, is the fact that the chief type of Zeus, as well as the two curious Oriental head-dresses of his coins, are found

[^122]repeated on those of his successor, Hermæus, whose seat of power was undoubtedly Kâbul itself, and Jalalabad.

The type of Athene Promachos, which is found on the unique didrachmon in the British Museum, is precisely the same as that on the coins of Menander, his immediate predecessor. On all of his six hemidrachms, we find but one type, that of the seated Olympian Zeus, which is copied from the coins of Antialkidas, his presumed father. ${ }^{3}$ A similar figure is found on the coins of Hermæus, which the learned Raoul Rochette believed to have been copied from the coins of Alexander II., Zebina, of Syria, who reigned from b.c. 129 to 123 . He argues that this particular representation of the god, seated on a high-backed throne, was taken from the colossal statue of the Olympic Zeus at Antioch; and, as its first appearance on the Syrian money took place under Alexander Zebina, this type must have preceded that on the coins of the Greek kings of Bactriana. 4 But, as we have already seen this same figure on the coins of Antialkidas, who, according to all inquirers, reigned many years before Alexander II. of Syria, and whom R. Rochette himself places immediately after Eukratides, ${ }^{5}$ we must altogether discard

[^123]this idea of imitation of the Syrian coinage, and its consequent value in fixing the chronology of the Greek kings of Bactria and India.

Wilson, curiously enough, repeats this suggestion of R. Rochette, and calls the high-backed chair on the coins of Hermæus "a piece of furniture first observable on the coins of Alexander Zelina of Syria, who died in b.c. 123," " although he has given engravings of two coins of Antialkidas, the type of which he describes as "Jupiter seated in a chair with a high back," while he assigns Antialkidas to b.c. $135 .{ }^{7}$ I have already shown how this partiality for regarding the types of the Bactro-Grecian and IndoGrecian coins as imitations of the Syrian money had misled the learned French author in the case of the Pallas Athene found on the coins of the Bactrian Demetrius, which he suggested was copied from the money of the kiugs of Kappadokia, and, more especially, from the coins of Antiochus IX. and Seleukus VI. of Syria, a position which is quite uutenable, as the whole of these princes were posterior to Demetrius of Bactria. I have considered it necessary to discuss this point fully, because, if we accept R. Rochette's conclusions, we must assign not only

[^124]Hermæus, but also Amyntas and Antialkidas to a date somewhat later than 129 в.c.

On the copper coins of Amyntas the sole type is that of Pallas Athene, armed with helmet, spear, and buckler, moving to the left, and holding out her right hand. ${ }^{\text {s }}$ Wilson suggests some affuity with the Pallas on the coins of Demetrius ; but both the position and the action are different. The type was probably original on the coins of Amyntas, from which it appears to have been afterwards copied on the money of the Indo-Scythian princes, Vonones and Azas.

The place which I have assigned to Amyntas, following Menander, and immediately preceding Hermæus, is, I think, fully established by the two peculiar head-dresses on his copper coins, both of which appear again on the square copper coins of Hermæus, and are found only on the coins of these two princes. Wilson justly describes them as belonging to a " more barbarous period." ${ }^{\prime}$ One of these curious head-dresses is described by Raoul Rochette as " une tiare recourbée en avant et ornée de rayons sur les cótés." The other seems to be of exactly the same shape, but without the rays. These curious head-dresses are certainly not Greek ; and, as they show an increase of Oriental influence, the kings who adopted them must be assigned to a late period of the Greek rule in India. The dominions of Amyntas I suppose to have been confined to the Kabul valley, excluding Peshâwar, which, from the monograms, would appear to have belonged to Artemidorus.

[^125]Hippostratus, the Great.-Soter.

$$
\text { в.с. } 140-135 .
$$

The position of Hippostratus is chiefly determined by the find-spots of his coins, which are limited to the Northwest and West Panjâb. The coins themselves are not very rare, but the copper money is less plentiful than the silver. Altogether, I have seen just sixty specimens, of which upwards of twenty are in my own cabinet. The monograms are confined to three varieties of equally common occurrence, not one of which, however, can be assigned with certainty to any particular city. No. 110 monogram may be read as Taxila; No. 48 as Kaspeira, or Multân; and No. 115, which forms APT, is probably intended for Artoarta, as it is always accompanied by the Arian letter $a$ on the same face of the coin. The city of Artoarta is mentioned by Ptolemy, who places it immediately to the west of the Indus. According to all these indications, I infer that Hippostratus must have ruled over the Panjâb.

By the style and fabric of his coins, as well as by the types of Apollo and his tripod, on both round and square coins, Hippostratus claims a close connection with Apollodotus. The adoption of the title of Great points in the same direction. Hippostratus was probably the son of Apollodotus, and we may suppose that he saved himself by becoming a tributary governor under Menander, when other members of his family were reduced. The type of the galloping horseman shows a connection with the princes of the hostile family of Antialkidas and Lysias, perhaps referring to his own marriage, which might have united the interests of the two rival families during the supremacy of Menander. The type of the Olympian Zeus,
which is copied from the coins of Antialkidas, not improbably refers to the same conuection.

The silver coins of Hippostratus are more common than the copper; but they are not numerous. I would therefore limit his reign to four or five years, and assign him to the period between 140 and 135 в.c.

## Artemidorus, Aniketos.

$$
\text { н.с. } 140-138 \text {. }
$$

Of this ephemeral prince, whose coins known to me are limited to seven specimens, I bave little to say. I got the first of his coins in Kashmir, in 1848, and I have since obtained four others from Peshâwar and the North-west Panjâb. One of them is a didrachmon, the whole style and fabric of which are so like those of Menander's coins, that I am very strongly inclined to believe him to have been the son and successor of that powerful and popular prince. Of the seven coins known to me, three of silver and one of copper are now in my own collection; and the original copper coin which I got in Kashmir is now in the Bodleian Library at Oxford. Two of the silver coins bear the figure of Artemis on the reverse, in evident allusion to the king's name. The third silver coin gives the figure of Victory, which is so uncommon on the silver money of these Indo-Grecian kings, that I know of but one other example, on a recently acquired unique hemidrachma of Menander. As this coin bears the title of Dikaios, it must have been struck towards the end of his reign; and the adoption of the type by Artemidorus, offers another point of connection with Menander, besides the general style and fabric of the coins.

The monograms are limited to three, of which one is an obvious compound of Artamita or Artemisias (see No. 120). A second, No. 119, is not resolvable; but the third, which is found on all the four copper coins, is the well-known monogram of Demetrias, No. 58, which was most probably the Greek name of the city of Peukelaotis, to the north of Peshâwar. Both the monograms and the find-spots of the coins thus agree in showing that Artenidorus must have ruled over the Lower Kabul valley, of which some city represented by No. 58 monogram was the capital.

On the death of Menander I suppose that Artemidorus, his presumed son, may have succeeded to this central portion of his wide dominions, while the western territory of Kabul was seized by Amyntas, the Eastern Panjâb by Apollophanes, and all the North and North-west Panjâb by Hippostratus. As the coins of Artemidorus are exceedingly rare, his rule cannot have extended beyond one or two years. I suppose him therefore to have reigued over the Peshâwar valley for a short time immediately after the death of Menander, or from b.c. 140 to 138.

## Apollophanes, Soter.

$$
\text { в.с. } 140 .
$$

It is difficult to say anything regarding a prince who is only known to us from five coins, all of the same type. These five coins I procured in the Panjâb, together with several rude coins of Straton I. and Straton II. of the same type. As these rude coins of Straton I. bear the same monogram as those of Apollophanes, they must have been minted at the same place. This monogram (No. 142) I read as Euthydemia or Sanyala, which was
the capital of the Eastern Paujâb. The coins of Apollophanes preserve the full weight of the Indo-Grecian hemidrachms, two of the five weighing 37 grains each, but the metal is base, and the execution barbarous. I may hazard the suggestion that this prince must have belonged to the family of Straton and Menander, and that he held the Eastern Panjâb for a short time just before the final extinction of the Greek dominion in India. This may have been in 140 b.c., immediately after the death of Menander, or perhaps as late as 135 в.c., after the death of Hippostratus. The rule of Apollophanes I suppose to have been brought to a close by the increasing power of the native princes, rather than by the hostility of his own countrymen.

## Telephus, Euergites. в.c. 135.

A single silver coin of this prince was obtained towards the close of the Afghan campaign in 1841, which is now in the Bodleian Library at Oxford. Its strange types offer nothing whatever to guide us in assigning him a position either in time or place, and its single monogram is not found on the coins of any other Greek prince. But as the coin itself is of inferior workmanship, Telephus must be placed towards the close of the Greek rule. I should therefore assign him to the year b.c. 135, immediately after Hippostratus, when he may have ruled either in Peshâwar, or in the North-west Panjâb, for a few months before he was subdued by Hermæus.

The type of the giant with the snaky legs may possibly refer to Scythes, the son of Herakles and Echidna according to Herodotus, or of Zeus and Echidna according to

Diodorus, who was the eponymous hero of the Scythian nations. ${ }^{10}$ If this supposition is correct, the type would show some connection with the Scythians. The mother of Telephus may perhaps have been a Scythian princess, and the type would thus refer to his Scythian descent.

Hermeus, Soter.

$$
\text { в.c. } 138-120 .
$$

The coins of Hermæus were found in such numbers at Begrâm by Masson, that he concluded there must have been no less than three different kings of that name. ${ }^{11}$ To the first he assigned the coins given in Pl. XIV., Fig. 11; to the second, Fig. 15; and to the third, Fig. 16. But this opinion was justly objected to by both R. Rochette and Lassen. ${ }^{12}$ The conclusion which the former experienced and judicious Numismatist drew from the same facts was, "that a prince of the name of Hermæus, after Apollodotus, ruled the country of which Nysa was the capital ; and that his reign, judging from the quantity of his money, must have been a long one; and that it lasted until the Scythian occupation of Bactriana." From the description of the three different coins already given, it will be seen that the first and second belong to a single king, Hermæus Soter, and that the third class bears two names, that of Hermæus Soter in the Greek legend, and of Kujula Kadphizes in the Arian legend. This joint appearance of the names of a Greek and a Scythian ruler on the same coin offers a convincing proof that Hermæus must have been the last of the Indo-Grecian princes,

[^126]and that Kujula Kadjhizes must have been the Scythian prince who subverted the Greek dominion in India. This conclusion is definitely proved by the final dis. appearance of the name of Hermæus from the coinage, its place being taken by that of the Scythian conqueror Kujula Kadphizes in the Greek legend without any alteration of the types.

The coins of Hermæus, which are found in such numbers in the Kabul valley, are much less cominon to the east of the Indus, and there the find-spots are limited to the north-west portion of the Panjâb. The monograms are very varied, there being no less than twenty different kinds on eighty coins which I have examined. But of this number no less than twenty-five specimens bear No. 48 monogram of Ortospana; eight bear No. 139 of Ophiana (all these are Kalliope coins) ; six bear No. 41, of which the reading is doubtful; five bear No. 58 of Demetrias ; five bear the letters MO, or a combination of them; three bear No. 128; and two bear No. I29 monogram. The last three I read conjecturally as mora for Multân in the Southeru Panjầb, but all the other places shown ly the monograms are in the Kâbul valley.

The types of the coins of Hermæus are few, and offer no novelties. The most important coin is the hemidrachma with the portraits of himself and his queen, Kalliope, as I understand it to refer to a royal alliance. Hermæus himself I suppose to have heen the brother of Amyntas, whora he succeeded on the throne of Kâbul about b.c. 138. The seated Zeus of Olympns, as well as the two curious head-dresses on the coins of Hermæus, are undoubted copies of the coins of Amyntas, but the proof of relatiouship will not be complete until we olstain a coin of Hermæus with the Macedonia Kausia. Kalliope
may have been the daughter of Menander or Hippostratus, or even of Amyntas; and perhaps the type of the horseman, which is found on all her coins, points to her connection with the Macedonian dynasty of Antialkidas. But the horseman is also found on the obverse of a single hemidrachma of Hermæus himself, which I have lately obtained from the Sonipat find.

The coins of Hermæus, as already stated, are of three distinct kinds :-1, pure Greek, of good workmanship, with either the Olympic Zeus, or a horse on the reverse ; 2, rude copper coins, with either the seated Zeus or Victory on the reverse, and the Greek legend of the obverse invariably blundered, offering $\Sigma$ ITHPO乏 $\Sigma \mathbf{\Sigma}$ instead of $\Sigma \Omega$ THPO $\Sigma$, but with the Arian legend perfect; 3, boldly executed coins with the same blunder in the Greek legend, but on the reverse, a standing figure of Herakles, with the name and titles of the Scythian Prince Kujula Kadphizes in the Arian legend.

The last class is of special interest and importance, as it reveals to us not only the name and title of the Scythian conqueror, but also the name of his tribe. By comparing the two legends of these last coins, we find that the conqueror was named KOZOлA KAдAфEC, or KOzOYaO KA $\Delta \Phi I Z H C$ in Greek, that his title was zaOor, and his tribe the Kopano. The Greek zaooy, or Zawu, is represented in the Arian legend in two slightly different ways, as Yaï and Yaug, or Yavug, which is evidently the the same title as Shao-wu, which the Chinese gave to all kings who were descendants of the great Scythian ruler named Wen. ${ }^{13}$ This title of Shao or Zao, was afterwards changed to Rao, paO, by Kanishka and his successors, in

[^127]conformity with a peculiar law of the Turki dialect, which changes an iuitial $s h$ or $z$ to $r$. The tribal name of KOPANO is represented in the Arian legends of the coins by Kushan and Khushdn, and in the inscriptions by Gushan. Here, therefore, we have the same change from $s h$ to $r$ in the middle of a word, although the rule, as laid down in books, is limited to these letters when they are initial ${ }^{14}$ We thus learn from the coins that the Greek dominion in India was overthrown by a Scythian chief named Kujula Kadphizes, who was the Zau or Shao of the Kushadn tribe. Now, turning to the Chinese authorities, we find that sometime before the Christian era, the chief of the Kuei-shwang tribe of the great Yuchi, named Khiu-tsiu-ki, subjected the other four tribes of the nation, and assuming the title of " King of the Kuei-shroang, or Kushan, conquered Kaofu, Kipiu, and Hantha, or Ophiana, Kophene, and Parthia. ${ }^{15}$

This account is confirmed by the few notices of classical authors regarding the overthrow of the Greek dominion in Bactria, and the name of the ruling tribe of Scythians who caused its downfall. From Trogus we learn that Bactria and Sogdiana were occupied by the Scythian tribes of Sarance (read Saraucce to agree with Strabo's Sagarauka) and Asiani; and, afterwards, that the Asiani gave kings to the Tochari, and overthrew the Sarduche, ${ }^{16}$ for whom I believe that we must again read Sarauce

14 That this law was actually extended to these same letters in the middle of words we learn from the Greek forms of KANHPKE and OOHPKE, which correspond with Kanishka and Hurishka of the inscriptions.
${ }^{15}$ Remusat, "Nouveaux Mélanges Asiatiques," i., 222.
${ }^{16}$ Trogi Pomp. Prolog., c. 41 :-" Scythicæ gentes Sarancæ et Asiani Bactra occupavere et Sogdianos;" c. 42: "Additæ res Scythicæ, reges Thocarorum Asiani, interitusque Sarducharum."
or Sagarauka. Here the Asiani are evidently the Kushan tribe, who gave kings to the whole nation of the Yuchi, or Tochari, and subdued Kaofu and Kipiu. The war with the Parthians is confirmed by the classical accounts of the death of Phraates II. (Arsakes VII.) in battle with the Scythians in b.c. 126, and of the death of his successor, Artabanus II., in battle with the Thogarii in b.c. 123.17 In these, Thogarii, we have the Tochari, and we thus learn that the Tochari or Yuchi, had actually come into conflict with the Parthians before the death or deposal of Hermæus.
In the Chinese Khiu-tsiu-ki, the conqueror of Kophene and Parthia, I recognise Kujula Kadphizes of the coins, the overthrower of the Greek dominion in the Kabul valley, and the successful leader of the Thogarii or Tochari against Phraates and Artabanus of Parthia. According to the Chinese authorities, these events took place about one hundred years after the embassy of Chang-kian to the Yuchi, which dates from b.c. 139 to 126, or perhaps from their first settlement in Bactria, after the death of their king, Lao-shang, which took place in b.c. 163. Khieu$t s i u-k i$ died at eighty-four years of age, and his son, Yen-kao-ching, extended his conquests far into India, towards the south and east. If we allow forty or fifty years to the reign of the long-lived father, the reign of the son may be fixed at from b.c. 80 to 60 , or just one hundred years after the first occupation of Bactria by the Yuchi. Or, if we must accept the embassy of Chang-kian as the starting point, I would take the year b.c. 139, in which he left China, and curtail the vague number of " about one hundred years" to seventy-five or eighty years, and

[^128]thus bring the Chinese date into accord with that derived from the classical authorities, by referring to the conquests of Yen-kao-ching in India, about в.c. 60.

My view of the career of Hermæus may be summed up as follows :-He was most probably the brother of Amyntas, and succeeded him on the throne of Kabul about b.c. 138. By his marriage with the Princess Kalliope, he must have increased his power, and perhaps also his dominions. To this marriage I would assign the acquisition of the Lower Kabul valley, with its capital Demetrias. About b.c. 135, he probably took advantage of the death of Hippostratus to extend his rule into the Panjâb, and to add the rich city of Taxila to his kingdom. His dominions would then have stretched from Kabul on the west, to the Hydaspes on the east, and to Ghazni and Multan on the south. For some years he probably ruled in peace, until about b.c. 128, when the Su, or Saka Scythians, under Vonones and Moas, being driven from Bactria towards the south, took possession of Kabul and Ghazni. I suppose that Hermæus may then have applied for aid to their powerful enemy, the leader of the Tochari, on whose advance the Sakas, or Saca retired to the south and east, where they established several petty kingdoms ${ }^{18}$ under Vonones and his relatives in Ghazni and Kandabâr, and under Moas in the Panjâb. To this period I refer the ruder coins of late date, (Pl. XIV., Fig. 14), on which the equivalent of the Greek title of Soter is omitted in the Arian legend of the reverse, and also those shown in PI. XIV., Fig. 15, with the type of Victory, and the sounding title of "great king of kings,"

[^129]which was employed only in the Arian legends of this new money for the benefit of his native subjects.

From this time, about b.c. 126, I suppose Hermæus to have been a mere pageant king, under the protection of the great Scythian conqueror, Kujula Kadphizes, the chief of the Kushân tribe, and leader of the whole nation of Yuchi, or Tochari. As the coins with the joint names are common, this state of affairs must have lasted for some years, until it was finally closed either by the death or removal of Hermæus, about в.c. 120. ${ }^{19}$

Thus ended the Greek dominion in the East, after a brief but brilliant career of uprards of one hundred and twenty years, from the first establishment of the independent kingdoms of Bactriana, Ariana, and India, by Diodotus and his contemporaries, Pantaleon and Antimachus. But, though the political power of the Greeks had thus gone for ever, yet the far greater power of intellect and civilisation still remained with the Hellenized subjects of the Scythian kings. Their influence was shown by the adoption of the Greek religion and the Greek language by Vonones and Moas and their successors, as well as by the great conqueror, Kujula Kadphizes, and his successors. So deeply rooted was this influence of a superior civilisation, that the Greek alphabet and language were still employed by the Scythian chiefs, Kanishka Huvishka and Vâsu Deva, more than a century after the complete extinction of the Greek kingdom of Hermæus.

[^130]COINS OF ALEXANDER'S SUCCESSORS IN THE EAST.
(Conclusion.)

By Major-General A. Cunningham, R.E.

> ON THE MONETARY SYSTEM OF THE GREEKS OF BACTRIANA, ARIANA, AND INDIA.

THe coinage of the Eastern Greeks, which I have attempted to describe in the foregoing pages, presents several very important deviations from the systems followed by their countrymen in Europe and Western Asia, which I now propose to examine in some detail. The weights of the various coins from Diodotus to Hermæus show that the Eastern Greeks followed the monetary system of Athens, which had been already adopted by Alexander the Great and his immediate successors. To this system the Greek kings of Bactriana steadily adhered; but the Greek kings of India, from the very first, departed from the Attic system in the mass of their copper money, as shown in the coins of Pattaleon and Agathokles, which are of the same weight, and of the same square shape, as the previously existing Indian money. ${ }^{1}$ They also reproduce the same type of

[^131]the maneless Indian lion on the reverse, and even exhibit the same peculiarities of fabric in the deeply indented small square die of one side, and the loss of one or more corners, by the adjustment of the original square or oblong blank piece of metal to the required weight. A few copper coins of Agathokles also show the adoption of the sacred Bodhi tree surrounded by a Buddhist railing, and of the Indian symbol, which is usually called a Chaitya, but which I believe to be a conventional representation of Mount Meru. The square form thus introduced by the first kings was continued down to the close of the Greek rule under Hermæus, when it disappears suddenly with the advent of the Indo-Scythian princes.
Another novelty was the introduction of a nickel coinage by the Indo-Grecian kings Pantaleon and Agathokles, which was copied by Euthydemus. The use of nickel is confined to the money of these three princes -by previous writers these nickel coins had always been described as silver; but when I began to write the present account of these Eastern Greek coins I was led to examine them more carefully, and as I felt satisfied that they were not silver, I placed them in the hands of my friend Dr. Walter Flight, of the British Museum, who kindly undertook to make a quantitative analysis of a coin of Euthydemus. The result was most unexpected, as it revealed the fact that these coins owe their whiteness entirely to the presence of nickel, which amounts to as much as 20 per cent., while the mass of the metal, or upwards of 77 per cent., is pure copper, the remainder being composed of small quantities of cobalt, iron, tin,

[^132]and sulphur. This coinage, therefore, as Dr. Flight remarks, " essentially consists of an alloy of copper and nickel," the proportions differing but little from that of the 5 and 10 centime pieces of Belgium, which are composed of 70.4 of copper and 25.55 of nickel. Much interest was excited by this discovery, as "nickel was first shown to be a metal by Cronstedt in 1751." But although the use of nickel is comparatively recent in Europe, yet, as Dr. Flight observes, it has "formed a very constant constituent of some of the alloys known to the Chinese, especially packfony, tutenag, and white copper. The last alloy is composed of copper $79 \cdot 4$, nickel, 16.02 , and iron 4.58 , which is almost the same as that of the Indo-Grecian and Belgian alloys. Dr. Flight subsequently made a qualitative analysis of another white coin of Euthydemus, two coins of Agathokles, and one of Pantaleon, all of which gave precisely the same results, as they were found to contain much copper, and a considerable amount of nickel, with a little iron, a trace of tin, and no silver.

It would be very interesting if we could ascertain from whence this nickel was procured. I incline to the opinion that it must have come from China. Quintus Curtius, however, mentions that, near the junction of the Five Panjâb Rivers, Alexander received from the Oxydracæ and Malli, a present of 100 talents of "white iron," (ferri candidi). ${ }^{2}$ I conclude that this was certainly not tin, which is a soft metal, and was besides very well known to the Greeks. But as nickel is both hard and magnetic, as well as white, it might be justly described as white iron. In the Greek Anthology also I fiud mention

[^133]of an "Indian brass as white as silver," by the poet Krinagoras, who was a contemporary of Strabo. ${ }^{3}$

Which I translate as follows :-

> "This drinking-cup of Indian brass, As silver white, Krinagoras, To Simon's son, his best of friends, A loving birth-day present sends."

I think it possible that the names of "white iron," and "white or silvery brass," like that of "white copper," may refer to one of the Chinese alloys of nickel. Commerce has always been active between India and China, and it was very easy for a merchant to reach the Panjâb and Kabul from the western coast of India. One of the Buddhist legends in fact refers to the shipwreck of Kaka-Prabhâsan, a "merchaut of Taxila," on the east coast of India.

At what value these nickel coins passed current can only be conjectured; but it seems probable that they may have been oboli, as I notice that the three nickelstriking kings have no silver oboli, while, on the contrary, their contemporary Antimachus I., as well as their successors Demetrius and Eukratides, all have silver oboli, and no nickel coins. The one would therefore appear to have been intended as a substitute for the other; but the nickel coins soon fell into disuse, either from some inconvenience, or from the difficulty of procuring a

[^134]sufficient supply of the metal. No trace of nickel has yet been discovered in any of the purely Indian coinages.
I now come to the consideration of the influence which the previously existing Indian money had upon the monetary system of the Greeks, who ruled over the Kabul valley and North-west India. The monetary system of Athens is well known; but for the purpose of comparison with that of India it is necessary to give the names and weights of the various coins of both systems in some detail.
The silver drachma was the unit of the Athenian money. Its exact weight has not been absolutely determined; but it is generally admitted to have been somewhat over 67 English grains. For the sake of convenience of calculation I have adopted the value of $67 \%$ English grains, which differs by only one-hundredth of a grain from the mean value deduced by no less than eleven of the principal writers on the subject:-


The learned Böckh adopts the valuation of Barthelemy of $67 \cdot 24$ English grains, which is almost the same as the mean value just obtained. In the Masson collection at the East India Museum there is a bronze astragalus, or knuckle-bone, weighing 402 grains, which I take to be a weight of 6 drachmas, or one-thousandth part of a talent. If this assignment is correct, the astragalus gives exactly

67 grains to the drachma. I believe therefore that the value which I have adopted of $67 \cdot 2$ English grains is as nearly accurate as it is now possible to determine. The convenience of this value is very great; for it is not only a finite fraction itself, but it is continually divisible by 2 , as a finite fraction, down to 0.7 of a grain, or one-sixteenth of an obolus. It also gives the whole number of 112 grains for 10 oboli, and fixes the Phœnician drachma at 56 grains, the Macedonian drachma at 112 grains, and the Hebrew shekel at 224 grains, all in whole numbers. It makes its own talent equal to $57 \cdot 6$ English pounds, with a finite fraction, aud makes other talents equally compact, and therefore readily convertible into English money.

The gold coin of Alexander was the stater, a piece of 2 Attic drachmas in weight, or $134 \cdot 4$ grains, and the counterpart of the Persian daric.
The silver coins of Alexander and his successors, the Greeks of Syria, Bactriana, and India, were the following multiples and divisions of the drachma:-

| attic ailver. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Dekadrachmon | 10 drachmas | 672.0 | English | graine. |
| 2 | Tetradrachmon | 4 , | 268.8 | " | " |
| 3 | Didrachmon | 2 " | 134.4 | " | " |
| 4 | Drachma | 1 | 67.2 | " | " |
| 5 | Tetrobolon | 4 oboli | 44.8 |  | " |
| 6 | Hemidrachma | 3 " | 33.6 | ", | " |
| 7 | Diobolon | 2 ", | $22 \cdot 4$ | , | " |
| 8 | Tribermiobolion | 1古", | 16.8 | , | " |
| 9 | Obolus |  | 11.2 | , |  |
| 10 | Hemiobolion | ", | $5 \cdot 6$ | " |  |
| 11 | Tetartobolion | 4 " | $2 \cdot 8$ | , | ${ }^{5}$ |

[^135]Specimens of all these denominations are found amongst the coins of the Greek princes of Bactriana and India, excepting only Nos. 1, 8, and 11.

The copper coins of the Seleukidæ, the successors of Alexander in Syria, adhere very closely to the weights of the silver money, the unit being the chalkous of about one drachma in weight. The actual weights vary very much, as indeed might be expected in copper coins. Amongst 145 specimens which I have weighed, I find large coins of Seleukus I. ranging from 59 to 70 and 73 grains, and smaller ones of 35 and 19 grains:-large coins of Antiochus I. from 57 to 68 , and smaller ones from 30 to 35 , the lowest being 19 grains. Other classes range up to 130 grains, 190 grains, and from 261 to 273 grains, and in the single case of Antiochus IV., Epiphanes, up to 518,551 , and 563 grains. The mean of five of these large coins would give a tetradrachmon of 269.2 grains, and a drachma of $67 \cdot 3$, or only one-tenth of a grain higher than the standard which I have adopted. I conclude therefore that the copper coins of the Seleukidæ followed the same system of weights that was used for the gold and silver money. The chalkous or copper unit would therefore be equal to 1 drachma in weight, or $67 \cdot 2$ grains, which gives the rate of silver to copper as 48 to 1 , as 6 obols $\times 8$ chalki give 48 chalki to the drachma. As the rate in Iudia at the same period was 50 to 1 , I have no hesitation in adopting the above rate of 48 to 1 for the copper coins of the Seleukidæ of Syria, as well as for the Greek kings of Bactria. According to this conclusion the weights of the various multiples and divisions of the chalkous will be as follows :-

| ATTIC COPPER. |  |  |  |
| :---: | :---: | :---: | :---: |
| 8 Chalki |  | 1 obolus | $537 \cdot 6$ grains. |
| 6 , | Tritemorion | , ${ }_{4}$ | 403.2 " |
| 4 " | Hemiobolion | $\frac{1}{3}$ " | 268.8 " |
| 3 " | Trichalkon | 年 | 201.6 " |
| 2 " | Dichalkon | $\frac{1}{4}$ " | 134.4 " |
| 1 Cealkous | - . | " | 67.2 ", |
| \% | Lepton | $\frac{1}{16}$, | 33.6 |
| 4 " | Hemilepton | $3^{1} 2^{-1}$ | 16.8 " |

The quarter, the half, and the three-quarter obolus were frequently made of silver; but in the Seleukidx series there are several examples of the hemiobolion in copper, and even of the full obolus in the single case of Antiochus IV., Epiphanes. Copper oboli are in fact mentioned by Lucian. The chalkous itself was, as its name implies, always of copper, although its equivalent, the kollybus, had been a silver coin. According to Pollux the chalkous contained seven lepta, which is a division hitherto unheard of either in weights or measures, and which I firmly believe could never have been used on account of its extreme inconvenience. According to my view the lepton was one half of the chalkous, a value which I have adopted for the following reasons :-the word $\Lambda \in \pi \tau o s$ means "husked," and must therefore refer to a " husked grain of barley," which was the smallest weight in the Greek scale, just as the lepton was the smallest piece of money. Speaking of the Lapis Lydius, or touchstone, Theophrastus, ${ }^{6}$ mentions that " the assays are taken from the smallest quantity, for the least weight is a grain of barley, the next the Kollybus, then the quarter, theu the half obol, from which they ascertain the amount of the alloy." According to this account the lepton was onesixteenth of the obolus in weight, that is $\mathrm{I}_{1}^{1}$. 11.2
grains, or exactly seven-tenths, $0 \cdot 7$, of an English grain, which is in fact the actual weight of a grain of "husked barley,"-Maimonides (or Mâmun), quoting the Misna, makes the mea, or later Jewish obol of $11 \cdot 2$ grains, consist of 16 barleJ-corus, each of which was therefore 0.7 of an English grain,

Originally the lepton was not a coin, but simply the smallest practical weight applied to gold and silver. But seven-tenths of a grain of silver being equal to 48 times that weight of copper, the lepton, after the introduction of copper money, became an actual coin, weighing $33 \cdot 6$ grains, or one-half of the chalkous. The same value of the lepton may also be deduced from a comparison of a passage in Polybius with a well-known saying of St. Mark. From the first we learn that the assarion was equal to half an obolus, or 4 chalki. ${ }^{7}$ The Roman quadrans was therefore equal to the chalkous; and as St . Mark says that the quadrans contained two lepta, ${ }^{8}$ the lepton must have been exactly one-half of the chalkous. It follows also that the kollybus, which ranged between the lepton and quarter obol, must have been one-eighth of an obol, or 1.4 grain of silver, and was therefore of the same value as the chalkous.

The Indian monetary system was essentially original, as it differed from the Greek, and from all other systems, in its unit of weight, as well as in its scale of multiples. The yava, or "barley-corn," is not known to Hindu metrology, but the unit of the system is the rati, the bright red and black seed of the gunja, or hemp plant (Abrus precatorius), the whole of the Indian money, whether of gold, silver, or copper, being certain multiples

[^136]of this one well-known unit. The Assyrian and Lydian, and the Babylonian and Persian systems, as well as that of the Greeks, were raised chiefly by sixes, while the Indian system was raised by fours, with a sparing use of fives in the higher multiples. Its nomenclature also is quite different, and the common form of the money is not round, but square. Altogether the differences are so great aud so marked, that I have no hesitation in stating my conviction that the Indian monetary system is the original invention of the Hindu mind.

The rati, in Sanskrit raktika, or the "red seed," is also known by the name of tulavija, or "weight seed." It is still used all over India, and from 1849 to 1863 I collected several thousands of seeds at ten different places, from Taxila to Multan in the Panjâb, from Haridwâr on the Ganges to Châuderi in Malwa, and from Kosâmbi on the Jumna to Prome in Burma. Rejecting all the largest and smallest seeds out of the whole number of 5,327 , I found, on the 21st March, 1869, when they were all thoroughly dry, that one thousand sound and tolerably even-sized seeds gave an average weight of 1.823 English grains. The weighments made by other inquirers have given very nearly the same result.

| Sir William Jones | $\begin{aligned} & \text { Grains. } \\ & 1.8333 \end{aligned}$ | reading $1{ }^{\frac{5}{5}}$ instead of $1_{1}{ }^{5} 5$. |
| :---: | :---: | :---: |
| Sir Walter Elliot | 1.8127 | Numismatic Gleanings, p. 87. |
| Shakespear | $1 \cdot 7966$ | Hindustani Dictionary, in voce. |
| Mr. Laidlay | 18250 | W eighed for me in Calcutta. |
| Author | 18230 |  |

The mean of these five values is 1.8181 grains, or, if we omit Sir William Jones's result as doubtful, the mean of the four values is 1.8143 grains.

I obtained nearly the same value for the rati from a comparison of the weights of five other different kinds of
seeds, which are referred to in Indian tables of weight. Thus the rati seed is said to be equal to 5 rice seeds, or 3 barley-corns, to one-half of a mashaka, or small bean, to one-fifth of a másha, or common bean, and to oneeighth of a másha, or large black bean. My weighments of all these kinds of seeds gave the following results :-

|  | Grains. | Each. |  | Rati. |
| :---: | ---: | ---: | ---: | ---: |
| 1,000 rice seeds . | 358.5 | 0.3585 | $\times 5$ | $=1.7925$ |
| 700 barleycorns, husked . | 418.5 | 0.5978 | $\times 3$ | $=1.7934$ |
| 600 mâshaka, small beans | $1,791.0$ | 3.5820 | 2 | $=1.7910$ |
| 60 bâkala, common beans | 546.0 | 9.1000 | 5 | $=1.8200$ |
| 10 mâsha, black beans . | 146.0 | 14.6000 | 8 | $=1.8250$ |
|  |  |  |  |  |

The average of these five kinds of grains gives 1.8044 as the approximate weight of the rati; and taking the two results 1.8143 and 1.8044 , we obtain 1.8093 as the true value of the actual rati. But the weights of very few of the existing ancient silver coins come up to this high standard, although many of the copper coins reach it, and a few even exceed it. For all practical purposes, however, I find it extremely convenient and sufficiently accurate to assume the value of the rati at 1.75 English grain, which is the value that has already been adopted by Mr. Thomas on the evidence of the coins themselves. ${ }^{9}$

The most ancient coins of India were the pana of copper, the karsha or kdrshapana of silver, and the suvarna of gold, with their subdivisions. All of these are mentioned in the Laws of Manu and in the Buddhist Sutras. In Manu most of the fines are stated in sums of panas, from 1 pana up to 1,000 panas. The exceptions are 1 and 5 mishas of silver, 5 raktikas of gold or silver, 1 másha, 1 suvarna, and 6 nishkas of gold. ${ }^{10}$ In another place

[^137]Manu gives the weights of these different coins as follows, ${ }^{11}$ to which I have added a few names from other sources:-
oOLD.

| 5 raktikas $=1$ mâsha | 8.75 grains. |  |  |
| :---: | :---: | :---: | :---: |
| 16 mâshas = 1 suvarna | $140 \cdot 00$ |  |  |
| 4 suvarnas $=1$ pala, or nishka | 560.00 | " |  |
| 10 palas $=1$ dharana | $=5600 \cdot 00$ | " |  |
| sinver. |  |  |  |
| tikas $=1$ mâshaka | = |  | grains. |
| hakas $=\frac{1}{3}$ tangka | . . $=$ | 7.00 |  |
| hakas $=1$ tangka | $=$ | 14.00 |  |
| gras $=1 \mathrm{kona}$ |  | 28.00 |  |
| hakas $=1$ dharana, or kârsha, or | purâna $=$ | 56.00 |  |
| ranas $=1$ satamâna |  | 60.00 | " |

copper.


From the Lilâvati we learn that 16 panas were equal to 1 dharana or kdrsha of silver, and in the Amara Kosha we find that the pana was also called a "copper kârsha," and the suvarna a "golden kârsha."

## Gold.

The actual weights of these coins are stated above; but all of them have not yet been found by our collectors. No one to my knowledge has seen a suvarna; but I possess two small gold coins, and there is a third specimen in the East India Museum, which appear to be quarter suvarnas. My two specimens weigh $33 \cdot 75$ and $33 \cdot 25$ grains respectively, which might possibly be taken for the quarter Greek stater. But I am not aware that such a coin ever existed in gold, and I think it more probable that these three coins are actual quarter suvarnas of 37.5

[^138]grains, the original weight of the old Hindu system prior to the invasion of Alexander. They are rather too heavy for the Attic scale, as the heaviest would give a drachma of $67 \cdot 5$ grains.

## Silver.

The silver coins are the most common of all the ancient Indian money. There were upwards of 200 specimens in the Mackenzie collection gathered in Southern India, ${ }^{14}$ about 500 in the Masson collection made in Kabul, and 373 in the Stacy collection made in North-west India, and there are 227 in the British Museum. Not less than 1,000 of these coins from all parts of India have been in my possession, but of this number 250 were received by exchange from the Stacy collection.

About one-fourth of these punch-marked coins are round or oval, and three-fourths square or oblong, the former being apparently the older, as the pieces are generally more worn, and are always of less weight than the square coins, which besides frequently preserve the marks of the chisel by which they were cut into blanks. Some of these punch-marked coins are upwards of one inch in length, by three-quarters of an inch in breadth, and very thiu. But the general size is from half to threequarters of an inch in length by half an inch in breadth.
The mint weight of these old silver coins has been fixed at 56 grains, which is that of the karsha, or karshapana, of Manu. Of the 10 best specimens in the British Museum Mr. Thomas found the average weight to be 52.98 grains, the heaviest being 54 , and the lightest 52 grains. Of the 250 coins which I got from the Stacy

[^139]collection I found no less than 22 of 54 grains, 1 of 54.5 , 2 of 55 , and 1 of 55.5 grains, the 10 heaviest giving an average of 54.4 grains. Of the 10 heaviest of my other specimens there are 2 of $56 \cdot 5$ grains, 1 of 56,4 of $55 \cdot 5$ and 3 of 55 grains, the average being 55.6 grains. Thus the mean weight of the 20 heaviest coins that I have possessed is 55 grains. Good specimens generally weigh from 50 to 52 grains, but the great mass of the worn coins is much lighter, the average of 700 , which $I$ have weighed at different times, being only 47.82 grains.

To fix the value of these old Hindu karrshas we must ascertain the actual amount of pure silver that they contain, which varies very much in different specimens. For this purpose I had the following assays made during the course of the last twenty years :-

By native goldsmiths in India.


Taking all the assays together, the result is that the 113 coins show a mean amount of silver equal to 79.05 per cent., which may be considered as equal to 80 per cent., or four-fifths, leaving the remaining one-fifth for copper alloy. The amount of pure silver in a full weight coin of 56 grains would therefore be only four-fifths of 56 , or 44.8 grains, 一which is exactly equal to 4 Attic oboli, or two-thirds of a drachma. Here then we see how well the karsha would have fitted in with the Attic monetary system adopted by the Greek kings of Kabul. It is true that it was different in shape, and of a rude appearance; but these distinctive features were in its favour, as it could not be mistaken for anything else. It was a 4 obol piece even in the dark.

The half kârsha of the same fabric is very rarely met with. I possess three specimens, but one only appears to have been a complete coin originally, the other two being simply the halves of full karsha pieces, made by cutting them in two. A large number (274) of half kârshas, but of a different kind, was found near Shâhjahânpur in Rohilkhand, of which I examined 150 specimens, all of which were thick oblong pieces. The mean weight was $25 \cdot 34$ grains; but I found no less than 11 specimens weighing 28 grains each, which fully confirms the full weight of 56 grains, which I have adopted for the karsha itself.

In the cave inscriptions of Bombay mention is frequently made of the padika, which is said to be the one-hundredth part of a suvarna. But as its literal meaning is "onefourth," the padika must also be the quarter of some wellknown coin. This could only have been the kdrsha, because 4 padikas were equal to one-twenty-fifth of the suvarna, which is the exact value of the kdrsha. The pádika was therefore the equivalent of the silver tangka
or $\frac{1}{4}$ karsha, which is the same as the panam, or fanam, of the present day,-whether of gold or of silver. Another name for the same coin was pâddharana, or the "quarter dharana." This quarter kärsha, or silver tangka, I have never seen of the same fabric as that of the full and half kârshas. But I possess a number of small silver coins (51) of another kind from Mathura, which include specimens of the half, quarter, and one-eighth kârsha. The common mark upon these coins is the figure of a dog. Thirty-two of them assayed together yielded 81.9 per cent. of silver, which agrees very closely with the average out-turn of 79.05 obtained from the other coins. They are, however, quite different from them, both in appearance aud in fabric.

## Copper.

The unit of the old Indian copper money was the pana, weighing 80 ratis, or 140 grains. ${ }^{15}$ This was subdivided into halves, quarters, eighths, and sixteenths, of all of which I possess numerous specimens. All except the last division are mentioned by Manu, who fixes the amount of the ferry tolls at 1 pana for an empty cart, $\frac{1}{2}$ pana for a loaded man, $\frac{1}{4}$ pana for a woman or ox, and $\frac{1}{8}$ for an unloaded man. The pana is the unit throughout; and it was such a common and well-known sum that it was fixed as the daily wage of the lowest class of servants, in addition to their food.

But our collections contain many coins much heavier than the pana, of which the square copper pieces hearing an elephant and a lion, the prototypes of the coins of Pantaleon and Agathokles, are the best known

[^140]examples. From 34 of these coins I find that the average weight is 182.5 grains, that of Pantaleon's coins from 9 specimens being 181 grains, and that of Agathokles' coins from 15 specimens being 180 grains. The average of all three is $181 \cdot 1$ grains, which it will be remembered is just 100 times the mean weight of the actual rati seed as previously determined. There is no mention of such a piece of money by name, but as it is exactly one-fourth greater than the pana of 80 rati seeds, it must be the coin referred to by Manu, where he fixes the fine for cattle trespass at $1 \frac{1}{4}$ pana. ${ }^{16}$ This sum no doubt refers to a decimal scale of money, which was reckoned in panas only : for in the later lawgiver, Yâjnyavalkya, the scale of fines inclucled $2 \frac{1}{2}, 5,10,12 \frac{1}{2}, 25,50,100,200,250$, and 500 panas. Manu has also fines of $12,25,100$ and 500 panas, and the decimal division of the pana, or 8 raktikas, is mentioned as the fine for an indolent servant. ${ }^{17}$ The weight of this coin would have been only 14 grains; but small as it seems, I possess several specimens of this " tenth of a pana," which range from 12 to 14 grains. I have also a few specimens of much smaller coins weighing only 7 to $7 \frac{1}{9}$ grains, which must have been either onesixteenth or one-twentieth of the pana. The latter is perhaps the more probable, as its value would have been exactly equal to one ganda of four cowrees.

The curious subdivisions $1 \frac{1}{4}$ and $2 \frac{1}{2}$ panas seem at first to have no connection with the silver portion of the Indian scheme, as the silver kirsha was equal to 16 copper panas. But on referring to the surarna, or gold unit, which was equal to 25 karshas, of silver, we see that 100 panas were equal to $6 \frac{1}{4}$ karshas or $\frac{1}{4}$ suvarna, so that there

[^141]were 400 panas in the surarna. The small sums of $2 \frac{1}{3}$ and $1 \frac{1}{4}$ panas were consequently equal to $-\frac{1}{160}$ and $-\frac{1}{3} \frac{1}{20}$ of the suvarna.

The scale of Indian copper coins was as follows:-

|  |  | Grains. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5 panas | . . . | 700 to 720 | $=80$ cowrees. |  |
| $3{ }^{4}$, |  | 525 , 540 |  |  |
| $2 \frac{1}{}$ | . . . | 350 , 360 |  |  |
| $1 \frac{1}{4}$ | $\cdots \cdot{ }^{\circ}$ | 175 , 180 |  |  |
| 1 Pana | 20 gandas | 140 " 144 |  |  |
| $\frac{1}{1}$ | 10 , ${ }^{\text {a }}$ | 70 35 | $=40$ |  |
| $\frac{1}{4}$ | 1 kâkini | 35 17.5 | $=20$ | " |
| $\frac{1}{4}$ " | ${ }^{\frac{1}{2}} \quad "$ | 17.5, 18 | $=10$ | " |
| - |  | $\begin{array}{cc}14, & 14 \cdot 4 \\ 8.75 & 9\end{array}$ | $=8$ | " |
| ${ }^{16}$ | ${ }^{\frac{1}{4}}$ kâkini |  | $=5$ | , |
| - $\quad$ - | 1 ganda | 7 , 7•2 | $=4$ | " |

By comparing these weights with those of the copper coins of the Seleukidæ already given, it will be seen at a glance that the pana was but a trifle greater than a dichalkon, and that the quarter pana or kâkni was a close equivalent of the lepton. The two systems of the copper money were thus in complete harmony. I am therefore quite satisfied that the old Hindu panas and kakinis passed current freely along with the chalki and lepta, as change for the Greek drachmas and oboli; and I have no doubt that cowree shells played an important part in all the daily purchases of the common people, just as they do now. The following table shows the comparative values of Greek and Indian moncy of all the usual deno-minations:-

Comparative Values of Greek and Indian Coins.

| GREEK. |  |  |  |  |  | INDIAN. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { oold. }}{\text { Stater. }}$ | ativer. |  | copper. |  |  | sllver. |  | coprer. |  | shells. |
|  | Drachms. | Oboli. | Chalki. | Lepta. |  | Karshas. | Trangkas. | Panas. | Kükinis. | Cowrees. |
| 1 | 20 | 120 | 960 |  | equal | 30 | 120 | 480 |  | 38,400 |
| $\frac{1}{2}$ | 10 | 60 | 480 |  | ", | 15 | 60 | 240 |  | 19,200 |
| $\frac{1}{4}$ | 5 | 30 | 240 |  | ", | 71 | 30 | 120 |  | 9,600 |
| ${ }^{10}$ | 2 | 12 | 96 |  | " | 3 | 12 | 48 |  | 3,840 |
| ${ }^{1}{ }^{1} \mathbf{i}$ | 1 | 6 | 48 |  | " | $1 \frac{1}{2}$ | 6 | 24 |  | 1,920 |
|  | $\frac{2}{3}$ | 4 | 32 |  | ", | 1 | 4 | 16 |  | 1,280 |
|  | $\frac{1}{2}$ | 3 | 24 |  | " | $\frac{3}{4}$ | 3 | 12 |  | 960 |
|  | $\frac{1}{3}$ | 2 | 16 |  | ", | $\frac{1}{2}$ | 2 | 8 |  | 640 |
|  | $\frac{1}{4}$ | $1 \frac{1}{2}$ | 12 |  | ", | $\frac{3}{18}$ | $1 \frac{1}{2}$ | 6 |  | 450 |
|  | $\frac{1}{6}$ | 1 | 8 |  | " | $\frac{1}{4}$ | 1 | 4 |  | 320 |
|  |  | $\frac{3}{4}$ | 6 |  | " | $\frac{3}{16}$ | $\frac{3}{4}$ | 3 |  | 240 |
|  |  | $\frac{1}{2}$ | 4 |  | ", | $\frac{1}{8}$ | $\frac{1}{2}$ | 2 |  | 160 |
|  |  | $\frac{1}{4}$ | 2 |  | ", |  | 1 | 1 | 4 | 80 |
|  |  | $\frac{1}{8}$ | 1 |  | ", |  | $\frac{1}{B}$ | $\frac{1}{2}$ | 2 | 40 |
|  |  |  | $\frac{1}{2}$ | 1 | " |  |  | $\frac{1}{4}$ | 1 | 20 |

Having thus shown how happily the principal pieces of Indian money would have fitted in with all the denominations of Greek money of the Attic scale, it now remains ouly to establish the fact, which I have hitherto assumed, that the Hindus were in actual possession of a real coinage at the time of Alexander's expedition. Wilson thought it " likely that the currency of the country consisted chiefly, if not exclusively, of lumps of gold and silver, not bearing any impression, until the Hindus had learned the usefulness of money from their Bactrian neighbours, and from their commerce, especially with Rome." ${ }^{18}$ He then adds, " at the same time it seems likely that they had a sort of a stamped coin even before the Greek invasion." He is led to this conclusion chiefly by the fact " that the different tables, which are given in their law books, of the several values of gold and silver refer to weight, not to number." But this argument is of little value; for we know that the moncy of every country refers to weight.

[^142]Was not the Roman as a pound of brass ?-aud what was the Greek drachma or the Hebrew shekel?-and when the Roman soldier received his stipendium, and when he expended it, did he weigh the pieces or count them? And yet do not all the Latin expressions regarding monetary transactions, such as impendium, pretium pendere, \&c., refer directly to weight?

Wilson was perhaps influenced by James Prinsep's early opinion that the Hindus derived their knowledge of coinage from the Bactrian Greeks. ${ }^{19}$ But this was his first hasty deduction put forth in 1832, before he had seen any really ancient Hindu coins: for, three years later, with Stacy's rich collection before him, he no longer " contended that the Hindus had no indigenous currency of the precious metals. On the contrary, he thought that evidence would be found, in the coins he was about to describe, that they circulated small pieces of a given weight, that stamps were given to them varying under different circumstances, and that many of these earliest tokens exhibit several stamps consecutively impressed on the same piece, until at last the superposed impressions, not those of a die but rather of a punch, came to resemble the devices seen on the Indo-Scythian coins, in company with which they have been found buried in various places," as at Behat. But he still ventured to uphold that from the time the Greeks entered India " may be assumed the adoption of a die-device, or of coined money properly so called, by the Hindus." ${ }^{20}$ This view he propounds still more distinctly a few pages further on. ${ }^{21}$ "It is an indisputable axiom that unstamped fragments of

[^143]silver and gold, of a fixed weight, must have preceded the use of regular coin." He therefore assigned the highest grade of antiquity in Indian numismatology to those small flattened bits of silver or other metal, which are found all over the country, "either quite smooth, or bearing only a few puuch marks on one or both sides, and generally having a corner cut off, as may be conjectured, for the adjustment of their weight."

In this last passage Prinsep describes the numerous silver pieces, appropriately named punch-marked by himself, which are found all over India from Kashmir to Cape Kumâri, and from Sistân and Kabul to the mouths of the Ganges. But he omits all mention of the thick copper coins of Taxila and Kabul, with an elephant on one side and a lion on the other, which formed the prototype of the coinage of the Indo-Grecian lings Pantaleon and Agathokles. These are true coins, impressed with a single die on each side. ${ }^{22}$ It is true that the reverse die is frequently smaller than the blank upon which it was struck, yet this was also the case with all the famous old tetradrachms of Athens, and the well-known didrachms of Corinth, and it may still be seen on the money of Philip the father of Alexander. But there are numerous other coins found at Taxila, and more rarely at Kabul, which are struck upon one side only, from which I infer that they are older than those with types on both faces. ${ }^{23}$
But if the Hindus derived their knowledge of die coinage from the Greeks, as argued by Prinsep and Wilson, I would ask "which are the first specimens of their diestruck money?" They cannot be the square copper

[^144]coins of Taxila stamped with the elephant and liou, because these rude pieces of about 180 grains, and with one or more corners cut off, are quite foreign, both in their shape and in their standard, to any known Greek coins. The types also are native, and the elephants are more like the real animal than any of the representations on the coirs of the Greek kings of Syria. But there is one variety of these coins, which instead of the lion has a galloping horse on the reverse, a type which was most probably imitated from the copper coins of Euthydemus. Indeed, a single specimen of this type in the British Museum has a Greek monogram under the horse, and consequently this particular coin must have been struck some time after the Greeks had established themselves in Kabul.


My conclusion is that when the Greek dominion was first established by Pantaleon in 246 b.c., the square copper coins bearing the elephant and lion formed the native currency of Taxila and Kabul, which were immediately imitated by Pantaleon and Agathokles. Some time afterwards, or about 200 в.c., the people of 'Taxila may have copied the galloping horse from the round copper coins of Euthydemus, to which, in the unique specimen here represented, they added the Greek monogram for Taxila itself. Admitting that these coins are contemporary with Euthydemus, I contend that those previously mentioned with the types of the elephant and lion must have been
in use when Pantaleon established the Greek dominion in the Kabul valley, and that the earlier coins, which are struck upou one face only, were most probably the current money at the time of Alexander's invasion.

That the punch-marked coins existed before the time of Alexander seems to me quite certain, for they could not have been imitated from any other known coins. In the early Greek money we have only the youth of coinage ; but in these punch-marked pieces of India, we see money in its most immature state, in the very infancy of the numismatic art. But the point is placed beyond all dispute by the discovery, about 1853, of a number of silver coins in the Kangra district, comprising specimens of Antimachus II., Philoxenes, Lysias, Antiaikidas, and Menander, together with a few punch-marked pieces, the last being much worn, whilst all the Greek coins were comparatively fresh. ${ }^{24}$

Let us now examine such coins as we know must have followed the close of the Greek rule in North-west India and Kabul. The first are those of the Indo-Scythians, on which we find the letters, the language, and the mythology of Greece distinctly preserved, even when the king proclaims his devoted adherence to Buddhism by the title of " defender of the true Dharma." Contemporary with the Indo-Scythians were the Satraps of Saurashtra, whose silver coins of the Attic standard bear on the obverse a head, surrounded by barbarous Greek letters. These Satrap coins are undoubted imitations of the Greek money; but they are widely different from the punch-marked silver coins of the indigenous currency.

[^145]Following the Indo-Scythians came the powerful Gupta kings of Northern India. Their earliest gold coins are imitations of the gold money of their predecessors the Indo-Scythians, and their silver coins are imitations of Satrap money of Saurashtra, as the Indo-Scythians had no currency in that metal.

But the Hindus would appear to have struck coins towards the latter end of the Greek rule; for a recent find of 32 silver coins in a field at Jwâla Mukhi, near Kangra, consisted of 27 Philopator hemidrachms of Apollodotus in good condition, with 3 bilingual coins of Amagha-bhuti, 1 of Dhara Ghosha, and 1 of Vamika Rudra Vama. The types of the last are a bull and an elephant, like those of the well-known square hemidrachms of Apollodotus, excepting only that the elephant on the Indian coin has his trunk raised. These 5 Indian coins are also undoubted imitations of hemidrachms of the Attic standard.

From all the evidence which I have brought forward, it appears to me quite clear that the punch-marked silver coins of India were anterior to the expedition of Alexander. We might therefore reasonably expect to find some allusion to Indian money in the records of the Macedonian conquest of the Panjâb. This proof I can now produce in a passage of Quintus Curtius describing the reception of Alexander by Amphis, Raja of Taxila. On this occasion he presented golden crowns to Alexander and all his friends, in addition to 80 talents of "coined silver." ${ }^{25}$ The words used by Curtius are signati argenti, which cannot possibly bear any other meaning than that of actual coin, as signatus was the special term used by the Romans to denote coined money.

[^146]To this evidence $I$ may add a passage of Arrian, describing the gifts presented to Alexander by the subjects of Sambus, when they opened the gates of Sindomana to the conqueror. ${ }^{26}$ These consisted of elephants and $\chi \rho^{\rho} \eta \mu a \tau a \dot{a} \pi \eta \rho^{\prime} \theta \mu \eta \sigma a v$, the latter being generally considered as coined money. The word $\chi \rho \dot{\eta} \mu a \tau a$ was certainly in common use for money, whatever may have been intended by the qualifying term ám $\quad$ 位 $\mu \eta \sigma a \nu$. Mr. Thomas has pointed out that the usual translation of numerata pecunid has been objected to, and that one
 objectors have been under the impression that the Hindus did not possess a coinage in the time of Alexander, which naturally suggested an attempt to explain away the true
 upon it as equivalent to the Latin numerata, which was commonly used for ready cash-and I conclude therefore that the presents consisted of actual coin, and not of bullion or crude metal.

But a still further confirmation of the same fact may be derived from one of the common ancient names for the silver karsha, which is used by Manu himself and throughout the Buddhist Sutras. This name is Purana, which means simply the " old." Now I would ask under what possible circumstances could the Indian silver kârsha have been called "old" at the time of the compilation of the Buddhist Sutras, about 200 b.c.? I do not hesitate to reply that they must have received this name shortly after the expedition of Alexander, when they were first brought into contact with the Greek money of Alexander's successors. From the common use of the

[^147]word dramya in after times, I infer that the punch-marked silver coins must have been called purâna dramya or "old drachms," in contradistinction to the new drachms of the Greek standard, when they were first introduced by the successors of Alexander. 'To the same period I would attribute the appellation of shad-vodrika dramya, or "drachm of six vodris," which is found in an inscription so late as A.d. 1216. ${ }^{28}$ This distinction must certainly have been handed down from an early period, when there were two dramyas, or drachms, of different values in currency at the same time. The punch-marked silver coin must then lave been the purána dramya, or "old" drachm of 4 vodris or oboli, while the " new" Greek drachm was the shad-vodrika, or shad-boddika, dramya, or drachm of 6 vodris or obols. If the Hindus had learned the art of coinage from the Grecks, they would never have possessed any other dramya but that of 6 vodris.

In favour of the existence of an indigenous Indian coinage prior to the time of Alexander, I would remark that if the Hindus had derived their knowledge of coinage from the Greeks, the types, shape, and standard of all their money would have been Greek. But instead of this expected imitation we find that the early copper coins of Taxila differ from the Greek money in every single point. They are square in form, different in standard, and indigenous in type. They are besides utterly withont inscriptions; and this difference appears to me to offer a really crucial test of the asserted imitation. For I contend that if the Hindus had copied the square copper coins of Pantaleon aud Agathokles, they would certainly have adopted inscriptions, as they actually did in after

[^148]times, as we know from the Satrap coins of Saurashtra, and from the still earlier coins of Amægha-bhuti, Dhara Ghosha, and Vâmaka. I therefore look upon the numerous copper coins of Taxila, a province in immediate contact with Kabul, as a purely indigenous currency.

James Prinsep was led to doubt the early existence of Indian money by a statement of the rather credulous chronicler Pausanias, who says, "Indeed even at present, (A.d. 160 to 180 ), those that sail to India report that Indian equivalents are given for the Grecian commodities which are carried thither, but that the inhabitants are unacquainted with money, though their country abounds with gold and brass. ${ }^{29}$ Now this assertion is directly contradicted by his contemporary Arrian, the author of the Erythræan Periplus, who says that the Roman goid was exchanged with advantage against the native gold coin called kaltis. ${ }^{30}$ But the story told by Pliny of the freedman of Annius Plocamus, who was shipwrecked on the coast of Ceylon, about a.d. 50 , is a still earlier confutation of the silly gossip preserved by Pausanias. The King of Ceylon, he says, admired and approved some Roman denarii, because they were all of the same weight, although evideutly coined at different times, from the various heads that were upon them. ${ }^{31}$ But this very observation shows that he had been accustomed to the use of other coins which were not of uniform weight.
I have not thought it necessary to do more than allude to the numerous passages in the Buddhist Sutras and chronicles which refer to actual money, because Mr. Thomas has brought these so prominently to notice in his

[^149]very full and valuable disquisition on "Ancient Indian Weights and Coins," that they are now easily accessible; and I am glad to be able to refer the reader to that Essay, in which he has so successfully upheld the independent origin of the ancient Indian coinage, which I have always advocated.

It now only remains to notice the relative values of the three metals, gold, silver, and copper, of which these coins are made. In the time of Alexander the price of gold was ten times that of silver; and the gold stater, or didrachmon, was equal to 20 silver drachmas. In India, where gold was found in considerable quantities, while silver was comparatively scarce, the price of gold was only eight times that of silver under the native rule. This is shown by the valuation of the gold suvarna of 140 grains at 25 silver kdrshas of 44.8 grains pure metal; as 44.8 $\times 25=1120$ grains, which, divided by 140 , gives 8 rates exactly. In treating of the relative values of the Greek and Indian money, I have assumed that the silver coins of Alexander were quite pure. This is not exactly the case; as the result of several assays shows that they contain only $96 \frac{1}{2}$ per cent. of silver, and $3 \frac{1}{2}$ per cent. of alloy. But as gold has been found in these coins to the extent of $2^{\frac{1}{7}}$, or one-quarter of a grain, ${ }^{32}$ it seems to me almost certain that the silver money of Alexander was as pure as the scientific skill of his workmen could make it, that is always supposing the presence of the gold to have been unknown. If, however, the presence of the gold was known, the value of $\frac{1}{4}$ grain would be $2 \frac{1}{3}$ grains of silver, which would partly cover the deficiency in value of the alloy. But I fully believe that the presence of the gold

[^150]was quite unknown, and that the silver was honestly esteemed to be quite pure.

The coins of the Greek kings of Bactria appear to follow the same standard ; but with the use of the ArianoPali alphabet, the silver coins of the Greek kings of Kabul and India become somewhat heavier, 16 good didrachmas of 7 different kings averaging 1466 grains, and numerous hemidrachmas of 17 kings averaging 36.35 grains. The full weight of the hemidrachma was therefore not less than $36 \cdot 5$, or perhaps 37 , grains. But this was not all pure silver, as $I$ found that 70 hemidrachmas of Apollodotus and Menander, assayed at five different times, gave an average weight of 35.58 grains in weight, but only 32.78 grains of silver. Assuming the full weight of the hemidrachma at from 36.5 to 37 grains, the amount of pure silver in each coin, at the above rate, would have been from 33.6 to 34 grains, which agrees with the Attic standard of 33.6 grains for the hemidrachma, and 67.2 grains for the drachma, which I have adopted in this disquisition. I have recently melted 106 hemidrachmas, from the Sonpat find, of Heliokles, Straton, Antimachus II., Antialkidas, Apollodotus, and Hermæus, besides 475 hemidrachmas of Menander, which gave almost the same result as the previous assays. The actual value of the later coins was therefore the same as that of the earlier ones, the alloy having no doubt been purposely added, as in our modern European coinage, for the purpose of hardening the silver. The amount of alloy was probably fixed at one-tenth, which would have increased the weight of the hemidrachma from $33 \cdot 6$ grains of pure silver to 36.96 grains of hardened silver, which agrecs with the full weights of 37 grains of the best preserved specimens.

After the Greck occupation, the relative values of gold
and silver in North-west India must have changed from 8 to 10 rates. This was only the natural consequence of the redistribution of the great hoards of silver money obtained by Alexander in Persia, where the rate of gold to silver was 13 to 1 . The result of this change was a slight fall in the value of the silver karsha of India. Before the time of Alexander it had been worth $\frac{1}{4}$ th of $44 \cdot 8$, or $5 \cdot 6$ grains of gold; but after the Greek occupation it was worth only ${ }_{1}^{1}$ th of its weight, or 4.48 grains of gold ; and as the silver kârsha was only equal to two-thirds of the Greek drachma, the value of the stater in Indian money became 30 silver kârshas, at $1 \frac{1}{2}$ kârsha to the drachma.

Of the price of copper in Greece the learned Böckh was " unable to find any definite statement." ${ }^{33}$ But from the value which I have now assigned to the lepton of seven-tenths of a grain of silver, or 33.6 grains of copper, which is exactly half a drachma in weight, the relative proportion between silver and copper in Greece was 1 to 48. In India at the same time it was 1 to 50 , the karsha of 44.8 grains of silver being worth 16 panas of copper of 140 grains each, or $16 \times 140=2,240$ grains of copper were cquivalent to 44.8 grains of silver, which gives exactly 50 rates. The small difference of 2 rates between 48 and 50 is caused by the difference of weight between the Indian pana of 140 grains, and the Greek dichalkon of 134.4 grains. The copper coins of the Greek kings of Bactriana adhere to the Greek standard, but those of the Greek kings of Ariana and India would seem to have been raised to the Indian standard. The following list shows this result rery clearly :-

[^151]|  | Pantaleon |  |  |  | 13 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Eukratides |  |  |  | 137-19 |  |  |
| 7 | do. $h$ | half coins gi |  |  | 138.28 |  |  |
| 8 | do. $q$ | quarter coin |  |  | $140 \cdot 24$ |  |  |
|  | 6 Apollodotus |  |  |  | 148.87 |  |  |
| 1 | do. | half coin | . | . | 72.00 |  |  |
|  | Antimachus |  |  |  | 138.75 |  |  |
|  | Antialkidas | . . |  |  | $140 \cdot 00$ |  |  |
|  | Menander | . . |  |  | $141 \cdot 33$ |  |  |
|  | Epander |  | - |  | $143 \cdot 60$ |  |  |
|  | Hermmus |  | - |  | 138.34 |  |  |
|  | coins give |  |  |  | $140 \cdot 78$ |  | rage |

The Greek coinage of India would thus appear to have been assimilated very early with the indigenous copper money of the country. I have already pointed out that the square copper money of Pantaleon and Agathokles of about 180 grains weight was an actual Indian coin mentioned by Manu, and equal to $1 \frac{1}{4}$ pana. ${ }^{34}$ To this evidence $I$ will now add the large copper pieces of Demetrius, of which three specimens weigh respectively $364,359 \frac{1}{2}$, and 357 grains, giving an average of $360 \cdot 16$ grains, or exactly $2 \frac{1}{2}$ panas, which is another of the coins mentioned by the Indian lawgiver Yâjnavalkya as a fine. ${ }^{35}$ Similarly my Horse coin of Menander, which now weighs 679 grains, must originally have weighed about 700 grains, or just 5 panas, a sum which is also mentioned by Yâjnavalkya. The Dolphin coin of Menander, weighing 343 grains, and the Ox-head coins weighing 341, are, I think, further examples of the $2 \frac{1}{9}$ pana pieces. The large Victory coins of 246 grains are perhaps intended for 2 pana pieces, named dnipana, of 280 grains, although it is not improbable that they were hemiobols, or pieces of 4 chalki of the Greek standard of 268.8 grains. But as this mixture of standard would have been extremely

[^152]inconvenient, I conclude that the chalkous, which was the Greek copper unit, must have been raised from the Attic standard of 67.2 to 70 grains, so as to assimilate the two systems by making the Greek chalkous exactly equal to half an Indian pana.
In conclusion, I may mention that two at least of the Indian names of coins were not unknown to Western

 The first of these is evidently the Indian karsha, and the second is the kdrshapa or kdrshapana. For tap' A'rvatious I would therefore propose to read aapà 「variocs, and to refer the name to the powerful family of Gupta kings. Now the work of Hesychius is generally considered to have been abridged from the larger lexicon of Diogenianus, who flourished in the second century of the Christian era, at the very time that the Guptas were at the height of their power, under Chandra Gupta II. and Kumâra Gupta, whose rule extended to Surashtra and Bharoch, or Syrastrene and Barygaza, where their silver coins are still found.

As a means of convenient reference, I add a Table of Ancient Indian Coins, showing their relative values to each other, and their weights in English grains.

General Table of Ancient Indian Coins.

| GOLD. |  | SILVER |  |  |  | COPPER. |  | Names. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Suvarnas. |  | Karshas. | Pad- <br> ikas. | $\begin{array}{\|c\|} \hline \mathrm{M} \hat{\mathrm{~A}}- \\ \mathrm{nas} . \\ \hline \end{array}$ |  | Panas, |  |  |
| No. | Grains. | No. | No. | No. | Grains. | No. | Grains. |  |
| 1 | 140.0 | 25 | 100 | 200 | $1120.0$ | 400 |  | Suvarna. |
| $\frac{1}{2}$ | 70.0 | 121 | 50 | 100 | $560 \cdot 0$ | 200 |  | \{Silver Pala, or Satamâna. |
| $\frac{1}{4}$ | 35.0 | $6 \frac{1}{4}$ | 25 | 50 | $280 \cdot 0$ | 100 |  | $\frac{1}{8}$ Daric. |
| $\frac{1}{5}$ | $28 \cdot 0$ | 5 | 20 | 40 | $224 \cdot 0$ | 80 |  | Helrew shekel. |
| $1{ }^{10}$ | $14 \cdot 0$ | $2 \frac{1}{2}$ | 10 | 20 | 112.0 | 40 |  | Macedonian diachma. |
|  |  | - | $7 \frac{1}{2}$ | 15 | 84.0 | 30 |  | Persian siglos. |
|  |  | $1 \frac{1}{2}$ | 6 | 12 | 67.2 | 24 |  | Attic drachma. |
| ${ }^{1}{ }^{1}$ | $7 \cdot 0$ | $1 \frac{1}{4}$ | 5 | 10 | 56.0 | 20 |  | Phanician drachma. |
| $2{ }^{1} 5$ | $5 \cdot 6$ | 1 |  | 8 | $44 \cdot 8$ | 16 |  | Kársha. |
| ${ }^{-1}{ }^{1}$ | $3 \cdot 5$ | - | $2 \frac{1}{2}$ | 5 | 28.0 | 10 |  |  |
| $3^{3} 0$ | 2.8 | $\frac{1}{2}$ | 2 | 4 | $22 \cdot 4$ | 8 |  | Kona. |
| ${ }^{\frac{1}{31}}$ | 1.75 | 2 | $1 \frac{1}{4}$ | $2 \frac{1}{2}$ | 14.0 | 5 | $700 \cdot 0$ | Persian danake ${ }^{36}$ |
| ${ }^{1} \frac{1}{10} \overline{0}$ | $1 \cdot 40$ | $\frac{1}{4}$ | 1 | 2 | 11.2 | 4 | $560 \cdot 0$ | Tangra-Attic obolus. |
| $\mathrm{T}_{6}^{1} \overline{0}$ |  |  |  |  | $7 \cdot 0$ | $2 \frac{1}{2}$ | $350 \cdot 0$ |  |
| $\overline{2} \bar{i} \overline{0}$ |  | ${ }_{8}^{1}$ | $\frac{1}{2}$ | 1 | $5 \cdot 6$ | 2 | $280 \cdot 0$ | Hemiobolion. |
| उ ${ }^{\frac{1}{2} \overline{0}}$ |  |  |  |  | $3 \cdot 5$ | $1 \frac{1}{4}$ | 175.0 |  |
| ${ }^{4} \frac{1}{60}$ |  | ${ }_{1}^{16}$ | $\frac{1}{4}$ | $\frac{1}{2}$ | $2 \cdot 8$ |  | $140 \cdot 0$ | Pana-Dichalkion. |
|  |  |  |  |  | $2 \cdot 1$ 1.4 | $\frac{3}{4}$ | $105 \cdot 0$ | Chalkous |
|  |  |  |  |  | $1 \cdot 4$ 0.7 | $\frac{\frac{1}{2}}{\frac{1}{4}}$ | $70 \cdot 0$ 35.0 | Chalkous. <br> KÁKini-Lepton. |
|  |  |  |  |  | $0 \cdot 3.5$ | $\frac{1}{4}$ | 35.0 175 | Kakini-Lepton. <br> 10 cowrees. |
|  |  |  |  |  | $0 \cdot 17$ | ${ }^{\frac{1}{1}}$ | $8 \cdot 75$ | 5 cowrees. |
|  |  |  |  |  | $0 \cdot 14$ | ${ }_{20}^{1}$ | $7 \cdot 00$ | 4 cowrees. |

${ }^{36}$ The Persian $\Delta$ àáк $\eta$ is described as being somewhat heavier than the Attic. It was therefore the same coin as the Indian Tangka, which weighed 14 grains, although it contained only 11.2 grains of pure silver.

| CONSONANTS |  |  |  |  |  | A <br> $B$ <br> 1 |  | Lemathutlayesa <br> lantmicrasa |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AR／A．V | indian |  | ARIAN | INDIAN |  |  |  |
|  |  |  |  |  |  |  |  |  |
| $k$ |  | ＋＋$\dagger$ | ${ }^{\circ}$ | 7 3 | ＞y |  | Pハさナ77 | Alathutreyas． |
| kh |  | ワ 7 | $i$ | 77 ： | ：。： | 3 | $f$ D | Dem |
| 9 |  | $\wedge \Omega$ | u | 31 L | L L | 4 | PY＊，E］ | Evuhratidasa |
| $g h$ |  | $\downarrow$ 山 | e | $\gamma \quad \gamma$ | －$\Delta$ | 5 | アべせん』て | Heliyalircyasa |
| ng |  | $\ulcorner 5$ |  | $7 \lambda$ | ＊$y^{\text {y }}$ | 6 | P〉SH｜r | Apaladatasa |
| ch |  | $d \quad 0$ |  | 32 |  |  |  | ．hoilasa |
| chh | $y \quad 7$ | －¢ | $k{ }^{\text {a }}$ | ${ }_{7}$ | f F | 8 | FS＊ | Diyamidasa |
| $j$ | $y$ y $y$ | $\varepsilon 6 E$ | ki | 为＋ | f乒 | 9 | $P \wedge p+\Lambda f$ | Diyanis！yasa |
| jh | $\downarrow$ | H $\quad \mathrm{H}$ | ku | $)^{\prime}$ | † 7 | 10 | Pフz | Stratas， |
| ty | Y $\mu$ | 77 | ke | \％ 7 | 77 | 11 | P2fw | Henatmrn |
| $\underline{1}$ | ＋ | C | $k_{0}$ | 7 | 7 7 | 12 | P¢¢カ3 | tilha |
| th | $\dagger \quad+$ | $\bigcirc 0$ | kan | ¢ $7+$ | ＋「 | 13 | Pl＞y喪 | Philasinaso |
| ${ }^{\text {d }}$ | 4 | • | kr | そ | $\downarrow_{=k l}$ | 14 | P7 ${ }^{\text {＋}}$ | Lisiac |
| dh | T $\quad$ T | $\bigcirc$ G | ky |  | 士 | 15 | ア州成了 | Antiatikedasa |
| $n$ |  | 工 $\boldsymbol{\sim}$ | khs | $\xi{ }^{\text {k }}$ | ksh $=$ \＃ | 16 | Р八而つ | Arihabivasa |
| th | 7 | $\lambda \lambda$ | khy |  | 1 | 17 | アク吹？ | temidroras |
| th |  | － | jny | f |  | 18 | 『ケ\％つ | Amitasa |
| d | 515 | ל ל | $z s$ |  | d＝chy | 19 | Pササ3＋ | Thciuphilasa |
| dh | $3 \quad 3$ | D D | $d h_{r}$ | $z \quad 1$ | ｜ $\mathcal{L}$ ahy | 20 | アクモヶも | Hipas／ratasa |
| $n$ | $r \quad r$ | $1 \quad$ L | pr | L |  | 21 | カャッツ | Tciophasa |
| $P$ | Frs | $l$ | phs | 专 |  | 22 | Prrr Eran | Efradrrisa |
| ph | ＋ャア | ७ ム | bhr | F I | $\mathbb{I}^{1}=$ bhy | 23 | アつヶ＋2 | V゙わせッ＊ |
| b | ワらリ | 口 | mh |  | $\overbrace{2}=h m$ | 24 | マイヤサ力フ | mulaphanasa |
| bh $m$ | 万r $\begin{aligned} & 7 \\ & \checkmark\end{aligned}$ | ¢4¢ | rkhe | $\%_{1}$ |  | 25 | アヘレワて | Heramaymsa |
| $m$ |  |  | rt | \％ |  | 26 |  | arava |
| y | $\wedge n$ |  | rm | H |  | 27 | PYר．24 | aharujusa |
| r | $\begin{array}{r} 7 \\ 7 \end{array}$ | 1く5 | $r v$ | あ |  | 28 | ר | tradntasa |
|  |  | ป ป |  |  |  | 29 | とて | hat |
| $v$ | 71 | b $\Delta$ | ri |  | ， | 30 | アフサフ下） | aparcintasa |
| $s$ | ＇ P | d $\times$ | st |  | 女 | 31 | Рフてサト？ | padihatas， |
| $\stackrel{s}{5}$ | $\Pi \quad \square$ | ヘヘヘ | sp | 3 ¢ | $8=s v$ | 32 | P〉̧＾Y | vadharnism |
| sh |  | せリ | sv | $\pi$ 亿 | $\downarrow=5 y$ | 33 | РYY\％ | atichtros |
| h | $2 \sim 2$ | いもしく | shk | F T |  | 34 | － |  |
|  |  | $\checkmark$ | shni |  | E | 35 | アヶッチ | dha\％\％hasat |




PLATE 1

AGATHOKLES. Dikaios.





EUKRATIDES the Creat.






DIOMEDES Soter



FI Leed $\mathcal{D}$ ert
上rar

MENANDER.


FIJen Deer


UOINS OF A.FXANDER'S SUCCESSORG IN THE EAST COINS of ALEXANDERS SUGCESSORS IN THE EAST.



[^0]:    1 ". . . . fertur Pellæus Eoiim
    Qui domuit Porum, cum prospera sape Philippi
    Audiret, latos inter flevisse sodales,
    Nil sibi vincendum patris virtute relinqui."
    Cluudian, de IV. Cons. Hon. Panegyr., 37t-377.

[^1]:     ris.
    ${ }^{3}$ Curtius (Vit. Alex., x. 1) calls him Eudemon.
    ${ }^{4}$ Jiodorns, Hist. Univers., xix. 5.
    ; Diodorus, Hist. Univers., xix. 9.

[^2]:    ${ }^{6}$ Justin, xli. 4.
    ${ }^{7}$ Diodorus, Hist. Univers., xix. 15.
    ${ }^{8}$ Diodorus (Hist. Univers., xix. 24) calls Lim Evagrius.

[^3]:    9 Justin, xv. 4. Bactrianos expugnavit. Plutarch. in Demet. Diodorus, xix. 24 and xx. 12.

    10 Justin, xv. 4.
    11 Strabon. Gcogr., xv. 2-9.
    12 Strabon. Geogr., xv. 1—9.

[^4]:    13 Burnes' Travels into Bokhara, iii. 174.
    14 Travels, ii. 402. Tradition refers the foundation of Samangàn to Rudàba, the wife of Rustam.

    15 .Jauhert's Translation, i. 475.

[^5]:    ${ }^{18}$ Anabasis, iv. 18.
    ${ }^{17}$ Arrian, Anabasis, iii. 28 .

[^6]:    ${ }^{18}$ Nat. Hist. vi. 18, "Qua diruta a barbaris, Antiochus Seleuci filius eodem loco restituit Seleuciam, interfluente Margo, qui corrivatur in Zotale, maluerat illam Antiochiam appellari."
    ${ }^{18}$ C. 51, "Quam mox a barbaris excisam, Antiochus Seleuci filius reformavit, et de nuncupatione domus sum dixit Seleuciam.'

[^7]:    ${ }^{20}$ Vit. Alex., vii. 10, "Superatis deinde amnibus Ocho et Oxo, ad urbem Marginiam pervenit. Circa eam sex oppidis condendis electa sedes est; duo ad meridiem versa, quatuor spectantia orientem, modicis inter se spatiis distabant, ne procul repetendum esset mutum auxilium."
    $\because$ Taubert's Tramslation, i. 166.

[^8]:    22 Arrian, Anabasis, iv. 6. An An, Anabasis, iii. 2.5.

[^9]:    ${ }^{26}$ Nat. Hist., vi. 17.
    ${ }^{27}$ In voce Alexandreia, $\epsilon \nu \hat{\eta}{ }^{\prime}$ O $\pi \iota a \nu \hat{\eta} \kappa a \tau \grave{\alpha} \tau \hat{\eta} \nu \mathrm{I} \nu \delta \iota \kappa i \nu \nu$.
    ${ }^{23}$ Nat. Hist., vi. 25. The town said to be " sub Caucaso."
    ${ }^{29}$ Travels in Biluchistan, de., iii. 155-1.59.

[^10]:    an Sec A and B in the accompmying plate of tho Arian and Indian Mphabets.

[^11]:    ${ }^{31}$ See Bhilsa Topes, Plate xvi., inscrs. Nos. 9 and 5.
    ${ }^{32}$ Lassen, Institutiones Lingum Pracriticm, p. 257.
    ${ }_{33}$ Numismatic Chronicle, New Series, iii., 229.

[^12]:    34 Scripturæ Linguæeque $\mathrm{Ph} æ$ niciæ, i., 74.

[^13]:    35 Journal of the Rengal Asiatic Society. 1835, p. 329.

[^14]:    ${ }^{36}$ Journal of the Bengal Asiatic Society, 1838, p. 639.
    ${ }^{37}$ As the Turks change $r$ to $z$, I take the ZAO of the earlier coins to be the PAO of the later coins.

[^15]:    *3 Jondon Athenemm, 15th March, 1856.

[^16]:    ${ }^{39}$ E. Thomas, Prinsep's Indian Antiquities, ii., 68.
    ${ }^{40}$ Joumal of the Bengel Asiatic Society, 1838, p. (641.

[^17]:    ${ }^{41}$ I am aware that Raoul Rochette（Journal des Savants， 1838，p．753）his published a coin with the legend BAEIAESE BA－A－$O \Lambda \Lambda O \triangle O T O Y$ ；but as his engraving shows the vory iurperfect state of the coin，I infer that the legend was only partially risible，which is confirmed by the jumbled arrangement of the letters，the second instead of the first letter of the title being opposite the last letter of the name－ a departure from symmetry which is quite unknown throughout the whole series of the Greek coins of Ariana and India．From the description of the device，as surrounded by a square of ＂elongated globules，＂and from the position of the name opposite the title，I recognise the coin as a specimen of the class which bears the figure of Apollo standing to the right， and holding out his bow，with the legend BAEINE $\Omega \Sigma \Sigma \Omega$ THPO乏 KAI ФIムOПATOPOL A $O \cap \Lambda \Lambda O O T O Y$ arranged on three sides． The two letters following the initial title，which R．Rochette has read as BA．must therefore be $\Sigma \Omega$ of $\Sigma \Omega$ THPOL．

[^18]:    ${ }^{1}$ Journal Bengal Asiatic Society, 1836, pp. 537-539.
    ${ }^{2}$ Journal Bengal Asiatic Society, 1886, p. 547, note.

[^19]:    ${ }^{3}$ Numismatique d'Alexandre le Grand, par L. Müller. 1855.

    - Revue Numismatique, 1867, p. 403.

[^20]:    ${ }^{\delta}$ The first, forming BABY $\Lambda \omega v o s$, will be found in Longperier's Plates of Parthian coins. The second is the same as No. 16 of the present Bactrian series, and forms KIPK $\eta \sigma \iota o v$. The third I read as $C \omega T \in I P a s$, and the fourth as $€ \triangle € C C A C$ The last is also in Longpérier's Parthian Plates.

[^21]:    - Geograph, xi. 9, 2.
    ${ }^{7}$ Hist. xi. 8.

[^22]:    ${ }^{8}$ EYOY EMOY or TOY EMOY is perhaps only a misreading for EY@YAHMOY.

[^23]:    ${ }^{\circ}$ Strabo, xi. 10, 2 ; Pliny, vi. 18.

[^24]:    
    11 "Royal Asiatic Society Journal," xx. 132.

[^25]:    12 " Travels in Biluchistan," iii. 155.
    13 " Nat. Hist." vi. 25-" Quod postoa Tetragonis dictum." ${ }^{14}$ See an inscription in the "Bengal Asiatic Society Journal," 1848, p. 494.

[^26]:    ${ }^{15}$ Polyænus, in "Stratagematis," i. 1, mentions the nountains on the river Sarankes, where the natives opposed Dionysius, on his invasion of Bactria.

[^27]:    18 "Nat. Hist." vi. 25. Ad Caucasum Cadrusi, oppidum ab Alexandro conditum.
    ${ }^{19}$ Solin, c. 57. Cadrusia oppidum ad Caucasum constitutum est ; ubi et Alexandria.

    20 "Travels," iii. 166.
    ${ }^{21}$ Anabasis, iv. 22. ' $\Lambda ф \iota к o ́ \mu є v o s ~ \delta ' ~ ' e s ~ N i ́ к а ı а у ~ \pi o ́ \lambda \iota v ~ . ~ . ~ . ~$
    

[^28]:     Ëvec.

[^29]:    1 xli. 4: "A cujus pronepote Seleuco primum defecere primo Punico bello, L. Manlio Vulsone, M. Atilio Regulo, consulibus."

[^30]:    ${ }^{2}$ See Numismatic Chronicle, xvii. 131, "On Parthian coins," by W. H. Scott, where the question is ably discussed. St. Martin's arguments are given in his posthumous "Fragments d'une Histoire des Arsacides," which I have not seen.

[^31]:    

[^32]:    4 xli. 4: "Arsaces, vir, sicat incertæ originis, ita virtutis expertm, . . . cum prædonum manu Parthos ingressus, præfectum eorum Andragoram oppressit, sublatmque eo, imperium gentis invasit."

[^33]:    
    
    
    
    
     aúrìs." I have adopted Bayer's reading of $\pi \rho \grave{\varsigma} \varsigma$ á $\lambda \lambda \dot{\eta} \lambda o \iota \varsigma$, instead of the usual modern reading of $\pi \rho o ̀ s \dot{\alpha} \lambda \lambda o s$, as $I$ understand Strabo to say that the kings of Syria and Media were engaged with earh other, and not with other affairs.
    " Clinton, " Fasti Hellenici," iii. 20.

[^34]:    ${ }^{7}$ Hierax is said to have been so named from his grasping disposition, as shown in this attempt to supplant his brother. But I am inclined to assign to him the coins with the winged diadem, all of which, from their monograms, would appear to have been struck in Asia Minor, and to refer his title to the wings of the Huwh, "I 1 pak, as represented on the coins. We know that the title of Dhul-Kirmain, or "Lord of the Horns," was applied to Alexander the Great from his portrait on the coins being represented with the Horns of Ammon.
    
     нєvos." See also Polyænus, l. 8: "a Tauro ad Indiam usque Evergeten omnia obtinuisse.'

[^35]:    ${ }^{9}$ Polybius, Hist., v. 5.
    ${ }^{10}$ xli. 4: "Eodem tempore etiam Theodotus mille urbium Bactrianarum præfectus defecit, regemque se appellari jussit."

[^36]:    ${ }^{11}$ Ferishta, Introduction. Briggs has omitted the period in his translation (i. lxxiv.) ; but it is given by Dow, i. 9 ; and it is found in most copies of the original as haftad sál, or 70 years. See "Bengal Asiatic Society Journal," 1838, p. 163.

    12 Diodorus, xix. 6, fixes the last campaign of Eumenes during the archonship of Demokleides, in в.c. 316, and in the consulship of M. Junius (Brutus) and Q. Aemilius (Barbula), in b.c. 317. The former date is adopted by Clinton (Fasti Hellenici, i. 170), who fixes the death of Eumenes early in 315. The murder of Porus, and the march of Eudemus with the elephants from Taxila to join Eumenes, must therefore have taken place early in 316 , b.c.

[^37]:    13 Royal Asiat. Soc. Journal, xii. 225, 18 th edict.
    ${ }^{14}$ Ibid., xii. 165, 2nd edict.

[^38]:    ${ }^{15}$ Vit. Apollonii, ii. 12.
    ${ }^{17}$ Bhilsa Topes, p. 74 ; and Bengal Asiatic Soc. Journal, 1854, p. 704.
    ${ }^{18}$ Reinaud, "Fragments Arabes;" Abu Rihàn, p. 139.

[^39]:    19 "History of Ancient Sanskrit Literature," p. 298.
    ${ }^{20}$ Panini, p. 281.
    " Heary III. and Edward I. reigned 91 years; Louis XIII.
    and XIV. reigned 105 years; two Châlukya Rajas reigned 102 years; two Rajas of Bikaner, 100 years; two Rajas of Handur, 96 years ; and two Rajas of Kashmir, 86 years. Altogether, six pairs of kings, fathers and sons, reigned 580 years; which gives an average of $96 \frac{2}{3}$ years for the extreme duration of the reigns of two generations.

[^40]:    ${ }^{22}$ The name of the daughter who was betrothed to Demetrius is not mentioned; but as his three other daughters were called Laodike, Kleopatra, and Antiochis, it is highly probable that the fourth was named cither Stratonike or Apame.

[^41]:    ${ }^{23}$ Journal des Savants, 1834, 1835, 1836, 1838, and 1834.
    ${ }^{24}$ Num. Chron., vol. xix.; and Prinsep's "Indian Antiquities,' vol. ii., p. 178.

[^42]:    ${ }^{25}$ See Num. Chron., N.S., vol. ii., Pl. iv., fig. 1, for a tetradrachm of this type of Antiochus.
    ${ }^{26}$ See Pl. i., fig. 5, and Pl. ii., fig. 1.
    ${ }^{27}$ See Pl. ii., fig. 2.

[^43]:    28 An engraving of this coin was kindly communicated to me by Mr．Gibbs，in India，some years ago；but the illustration in the Plate is taken from Mr．Thomas＇s plate．
    ${ }^{29}$ The illustration in the plate is taken from Mr．Thomas＇s engraving，but it had been communicatod to me previously by Mr．Gibbs．

[^44]:    ${ }^{1}$ Journal des Savants, Juin, 1834, p. 339.-See also 1835, p. 593, and 1836, p. 75.
    ${ }^{2}$ Idem, 1844, pp. 118, 119.-" Or il est maintenant avéré qu'Agathocle regna dans la Bactriane même, et qu'il appartint à la première dynastie de ce royaume Grec, à celle de Diodotus.'

[^45]:    ${ }^{3}$ Numismatic Chronicle, Now Series, II., 186.

[^46]:    ${ }^{4}$ The opening words are Baбı入є́́ovтоs той vє́ov, каі тарадаßóvтоs
     renders by "Sous le règne du Jeune, et successeur immédiat de son père."
    ${ }^{5}$ Revie Archæologique, Janvier, 1868, p. 9.

[^47]:    ${ }^{\text {j }}$ xli. 4.-" Quod exemplum secuti totius Orientis populi a Macedonibus defecere."

[^48]:    ${ }^{7}$ Prolegom, xli.—"In Bactrianis autem rebus ut a Diodoto regnum constitutum est."
    ${ }^{8}$ xli. 4.-_" Eodem tempore etiam Theodotus mille urbium Bactrianarum præfectus defecit, regemque se appellari jussit, quod exemplum secuti," \&e.

[^49]:     Bактрıav̀̀v à $\pi \epsilon ́ \sigma \tau \eta \sigma a v$ oi $\pi \epsilon \pi \iota \sigma \tau \epsilon \nu \mu \epsilon ́ v o l$.
    
    
    
    

[^50]:    ${ }^{13}$ Posidonius, in Athenæus, iv. 38.—" Speaking of Seleukus the king, and relating how he came against Media, and warred against Arsakes, and was taken prisoner by the barbarian, and how he remained a long time in captivity to Arsakes, being treated like a king by him." The writer of the life of Seleukus in Smith's "Dictionary of Biography" disputes the captivity of Kallinikus, and identifies the captive prince as Seleukus, the son of Antiochus Sidetes. But the writer must have overlooked two facts: 1st, that Posidonius calls him King Seleukus, tov $\beta a \sigma i \lambda \epsilon \omega s$; and 2nd, that Justin expressly states that he had lost his kingdon, amisso rcgoo (xxvii. 3). The captivity of Kallinikus is further corrobornted by his title of Pogon, $\pi \omega \gamma \omega \nu$,

[^51]:    or "bearded" (Polyb. ii. 5), as the wearing of a beard was not a Syrian but a Parthian custom, which he must have adopted during his captivity. This is rendered almost certain by the fact that Demetrius II., the only other Syrian king who wore a beard, was also a prisoner amongst the Parthians.
    ${ }^{13}$ Hist. Reg. Syr., p. 60 ; and Hist. Arsac., i. 4.
    ${ }^{14}$ Hist. Reg. Bactr., p. 39.
    15 Ariana Antiqua, 217.
    16 Indische Alterthumskunde. II. xxiv.

[^52]:    17 Geograph., xi. 11, 2.
    ${ }^{18}$ See Pl. ii. fig. 5, and Pl. ii. fig. 2.

[^53]:    ${ }^{19}$ Polybius, x., extract 8. Kaì $\gamma$ à $\rho$ ảvtòs $\boldsymbol{\eta}^{2} \nu$ ó Eú $\theta u ́ \delta{ }^{\eta} \eta \mu o s$
    
    
    
    

[^54]:    ${ }^{20}$ Hist. ii. 74. The Indian commander was named Staurobates.
    ${ }^{21}$ Briggs's Ferishta, i. 81.

[^55]:    ${ }^{22}$ Journal des Sivants, Fevrier, 1868, p. 82.

[^56]:    ${ }^{23}$ Fasti Hellenici, ii. 313, and iii. 815.
    ${ }^{24}$ Fasti Hellenici, ii. 313, quoting Eusebius: "Huic successit filius Alexander, qui maluit dici Seleucus, ab exercitu autem Ceraunus vocitatus est. Is habuit etiam fratrem nomine Antiochum."

[^57]:    ${ }^{1}$ Num. Chron., N.S., vol. ii. p. 264.
    2 For the silver coins see Jour. des Sav., 1834, pl. i., figs. 3 and 4 ; and 1835, pl. i., fig. 2. See also Ariana Antiqua, pl. i., figs. 1, 2, 3 ; but especially Num. Chron., N.S., ii., Plate IV., Figs. 4, 5, and 6, with Mr. Thomas's accompanying remarks.
    ${ }^{3}$ See also Mr. Thomas in Num. Chron., N.S., vol. ii., Plate IV., Fig. 6, and compare with Fig. 5 of the same Plate.

[^58]:    ${ }^{6}$ This coin, of which nearly one-half has been cut off, is wrongly described by Wilson as having "part of a standing figure " on the reverse. See Ariana Antiqua, p. 227, No. 22.

[^59]:    
    

[^60]:    ${ }^{8}$ Bayer, Hist. Reg. Græc. Bact., p. 40 ; and Wilson, Ariana Antiqun, p. 221.
    ? Thomas's Prinsep., ii. 174.
    ${ }^{10}$ Lnasen's Indische Alterthumskunde II., Appendix xxiv., and Raoul Rochette in Jour. des Sav., October, 1835, p. 594.
    ${ }^{11}$ Polybius, Hist., x., Extr. 8. Гєүovévą jà $\rho$ oùk aúròs
    
    

[^61]:    12 Polybius, Hist., xi., Extr. 8. Euthydemus urged that peace was " necessary for their common safety; that those wandering tribes who were spread in great numbers along the borders of the province, were alike dangerous to them both; and that, if ever they should gain admittance into it, the whole country must inevitably fall into a state of barbarism."-Hampton's translation.

[^62]:    ${ }_{13}$ Polybius, Hist., x., Extr. 9.
    14 Burnes's 'Truvels, iii., 50.

[^63]:    ${ }^{15}$ Burnes's Travels, iii., 58.
    ${ }^{18}$ Ariana Antiqua, p. 221, note.

[^64]:    ${ }^{17}$ Polybius, Hist., xi., Extr. 8.
    ${ }^{18}$ The same view is held by Mr. Bunbury, who says that Antiochns " appears to have despaired of effecting his subjugation by force, as he was readily induced to make terms." Smith's Dictionary in v. Euthydemus.

[^65]:    19 Polybius, Hist., xi., Extr. 8.

[^66]:    ${ }^{20}$ Bayer, Hist. Reg. Græc. Bact., p. 85., " non dubito fere Demetrium hanc urbem Eúdvסŋnciav vocasse ab Euthydemo parcnte, sed defuncto eodem," \&c.
    ${ }^{21}$ Lassen on Bactrian coins; Dr. Roer's translation, p. 154 ; Wilson, Ariana Antiqua, p. 230.

[^67]:    ${ }^{22}$ Hist. Reg. Græc. Bact., p. 74. "Non est absurdum statuere post illam pacem Euthydemum arma vertisse in Nomadas, quorum vires superiori bello formidaverat et in Indos, ut infra dicemus. Hoc autem bellum Indicum malum denique cessisse videtur, quod ex haud obscuris argumentis concludo, Menandrum Ineiæ regem, successorem Euthydemi fuisse, non Demetrium filium."
    ${ }^{23}$ Vaillant, Parth. Hist., i., Canon Chronolog. 27. Bayer, Hist. Reg. Grec. Bact. 41. R. Rochette, Jour. des Savants : Oct. 1835, 594. Wilson, Ariana Antiqua, p. 220. Lassen, Indische Alterthumskunde, ii., App. xxiv.

[^68]:    ${ }^{24}$ My old fricnd, Colonel Stacy, commanded a regiment at Kandahar in 1839, '40, and '41, where he made a large collection of coins, which is now in the museum of the Bengal Asiatic Society in Calcutta. Captain Hutton was employed in the Commissariat Department in Sistan and Kandabar during the rame period. His collection came to me by purchase. From both I received many valuable notes as to the comparative rarities of the coins and the localities whence they were obtained.
    ${ }^{25}$ Bengal Asiatic Soc. Jour., v., pp. 11, 21, 547.

[^69]:    32 Ariana Antiqua, p. 228.
    ${ }^{33}$ Hist. Reg. Græc. Bact., p. 75, "Neque omnino Bactriorum fuisse regem."

[^70]:    ${ }^{34}$ Geogr., xv., 11, 1. Bayer reads $\sum$ 'v́ $\rho \omega \nu$ каì Фаúv $\omega \nu$; but all the editions that I have consulted have E'ŋ́pov кaì \$aivevv. Lassen has Фрivev ; Lassen's Bactrian Coins, Dr. Roer's translation, p. 153. Some MSS. give इípou.
    ${ }^{35}$ Orb. Descript., v. 752.-киє Toхароє, Фроироє тє, каї єӨvєа ßapßapa Eńpov. Avienus, v. 934, and Priscianus, v. 727, have Phruri; but Eustathius, in his Commentary, gives Phruni.

[^71]:    ${ }^{36}$ Plinii. Nat. Hist., vi. 20. Ab Attacoris gentes Phuri et Tochari--Solini-c.
    ${ }^{37}$ Remusat's Fo-kwe-ki, c. iv., n. 3. Kao-tsu, the founder of the Han dynasty reigned from 202 to 194 в.c.
    ${ }^{39}$ D'Herbelot, Bibliothèque Orientale, vol. vi., p. 9, in roce Turk.

[^72]:    ${ }^{39}$ Hist., xli., 6, "regis Indorum."
    ${ }^{40}$ Geog., xi., 11, 1.-каì $\mu a ́ \lambda \iota \sigma \tau a ~ M e ́ v a v \delta \rho o s . ~ E i ̈ \gamma є ~ к а i ̀ ~ t o ̀ v ~$
    
    
    
    
    
    

[^73]:    ${ }^{41}$ Bayer Hist. Reg. Græe. Bact., p. 84. Lassen on Bactrian Coins, by Roer, p. 154.

[^74]:    ${ }^{42}$ Lassen on Bactrian Coins, p. 153. Wilson, Ariana Antiqua, p. 280.
    ${ }^{43}$ Jour. des Sav., Oct., 1835, p. 579.

[^75]:    ${ }^{44}$ Ariana Antiqua, p. 280.
    ${ }^{45}$ Ariaur Antiqua, p. 231.

[^76]:    ${ }^{48}$ Hist. xli. 6.-" Multa tamen Eucratides bella magna virtnte gessit ; quibus attritue, cum obsidionem Demetrii regis Indorum pateretur cum CCC militibus LX millia hostium assiduis eruptionibus vicit. Quinto itaque mense liberatus Indiam in potestatem redegit."

[^77]:    48 These lines have been modernised by Dryden with his usual spirit and vigour :-
    " His amber-coloured locks in ringlets run
    With graceful negligence, and shone against the sun ;
    His nose was aquiline, his eyes were blue;
    Ruddy his lips, and fair and fresh his hue,
    Some sprinkled freckles on his face were seen
    Whose dusk set off the whiteness of the skin."
    ${ }^{49}$ Jour. des Sav., Sept., 1835, p. 520, pl. i., fig. 4. See the accompanying Plate IV., fig. 1.--"Le type de la Mincrve debout, tel qu'il estici figuré, semble imite de celui des monnaies des rois de Capradoce, et de celles des rois de Syrie, notamment d'Antiochus IV., Philopator, et de Selencus VI., Nicator."

[^78]:    ${ }^{1}$ Historia regni Græc. Bactr., xxxix., p. 95. "Nam quædam de Eucratido dicuntur, quæ in illum superiorem non caduntfuit igitur, cui illa conveniunt, et ipse dictus Eucratides."

[^79]:    ${ }^{2}$ See the accompanying Plate V., Figs. 3 and 5, for a tetradrachm and obolus of the furmer type, and Fig. 12 of the same Plate for a square copper lepton of the latter type. See also Ariana Antiqua, pl. iii., figs. 6 and 12.
    ${ }^{3}$ Jour. des Sav., 1836, p. 130, note 1 : "Les faits historiques rappelés par Bayer, et que no peuvent concerner qu'un second Fucratide, d'accord avec les médailles mêmes, qui nous offrent une tête de Roi diadémée, avec le simple titre, BAEIAE $\Sigma$ ErKpatialor, et une tête de Roi, differénte pour la conformation, et coiffée d'un casque, avec l'inscription acerae d'une epithète ambitieuse, BAEIAE $\Omega \Sigma$ MEFANOY EYKPATIDOY, prouvent suffisamment qu'il y out effectivemant deux Eucratides."

[^80]:    
    
    ${ }^{6}$ Hist., xli., 6. "Sogdianorum, et Drangianorum, Indorumque bellis fatigati, ad postremum ab invalidioribus Parthis, velut exsangues, oppressi sunt."

    7 Hist., xli., 6. "Dum hæc apud Bactros geruntur, interim inter Parthos et Medos bellum oritur . . . ad postremum victoria penes Parthos fuit. His viribus auctus Mithridates in Hyrcaniam proficiscitur. Unde reversus bellum cum Elymxorum rege gessit, quo victo hanc quoque gentem regno adjecit."
    ${ }^{8}$ Orosius.

[^81]:    

[^82]:     ěx ${ }^{\text {elv. }}$

    15 Compare Ariana Antiqua, pp. 235 and 211.

[^83]:    ${ }^{16}$ Hardy, Manual of Buddhism, pp. 440 and 516.
    ${ }^{17}$ Julien's Hwen Thsang, i., 266.

[^84]:    ${ }^{18}$ Nat. Hist., vi., 25. "Cartana oppidum sub Caucaso, quod postea Tetragonis dictum."

    19 In the brief geographical abstract prefixed to this series of papers on the Bactrian coins, I have identified Pliny's Cartana, as well as Ptolemy's Karsana, with the ruins of Begram. But since my reading of the name of Karisi on the coins of Eukratides, I have given up these identifications in favour of Koratas.
    ${ }^{20}$ Travels in Biluchistan, \&c., iii., 166.
    ${ }^{21}$ This also was the opinion of Raoul Rochette, whose authority is of the greatest weight on such a point. Speaking

[^85]:    of the coins with the type of Apollo, he says that their style and fabric, as well as the simplicity of thoir legends, show "un règne plus nncien, plus voisin de l'époquo d'Euthydème."-Jour. des Suv., 1834, p. 888.

[^86]:    ${ }^{22}$ Hist., xli., 6. "Indiam in potestam redegit. Unde cum se reciperet, a filio, quem socium regni fecerat, in itinere interficitur; qui non dissimulato parricidio, velut hostem, non patrem interfecisset, et per sanguinem ejus currum egit, et corpus abjici insepultum jussit."
    ${ }^{23}$ Jour. des Sav., 1836, p. 130, note. "Cette idée est si extraordinaire qu'elle ne comporte pas uno discussion sérieuse."

[^87]:    ${ }^{24}$ Mionnet, viii., 470, founded the relationship of father and son on this fact; and Raoul Rochette himself admits that Heliokles must have been a contemporary of his Eukratides II., the son of Eukratides I.; "On ignore l'epoque précise, mais dont le règne doit avoir eté contemporain de celui d'Eucratide II. ; ǹ en juger d'après la fabrique de leurs médailles."Jour. des Sav., 1836, p. 130, note.
    ${ }^{25}$ Jour. Asiat. Soc. Bengal, 1840, pp. 869, 870.
    ${ }^{26}$ Jour. des Sav., Oct., 1835, p. 579. "Cette conjecture me parait très-plausible ; mais il y arait quelque chose de plus a remarquer ici: c'est que sur les monnaies des rois de cotte partie de l'Orient, notamment sur cellos des Arsacides, l'epithete Fhilopator indique l'association d'un fils au titre royal du père."

[^88]:    
    
    
     Ź́кал.
    ${ }_{28}$ Prolog. Frag. Pompeii, xli. "Deinde qua re pugnante Scythix gentes Saraucæ et Asiani Bactra occupavere et Sogdianos. Deinde quoque res addita gesta per Appollodotum et Mcnandrum reges eorum.'

[^89]:    ${ }^{2}$ These were Straton, Hippostratus, Telephus, Nikias, and Dionysius. Those since added are Artemidorus, Epander, 'Thcophilus. and Apollophanes.

[^90]:    ${ }^{3}$ Ariana Antiqua, p, 274.

[^91]:    ${ }^{4}$ Bactrian and Indo-Scythian coins, p. 30, English translation.

    - 5 Ariana Antiqua, p. 269.

    C Journal Bengal Asiatic Society, 1836, p. 15.

[^92]:    7 See Plate VI., Figs. 5 and 6, of Eakratides, and Plate VIII., Figs. 5 to 9, of Antialkidas.
    ${ }_{8}$ Journal Bengal Asiat. Soc., 1836, p. 15. "The beauty of the coins of Antimachus, the excellence of their execution and designs, allow us not to place this prince subsequent to Eukratides, whose coins in theso particulars they surpass."
    "Ariana Antiqua, p. 266.

[^93]:    10 Dionys. Perieg. Orb. Descript., v. 1151, which Priscian, in v. 1056, renders by
    " Unde locis Graii posuerunt nomen Aornin."
    11 Q. Curt., Vit. Alex. VII., 11. "Superbe multa respondit, ad ultimum, au Alexander volare possit, interrogat. . . . . Se auten proxima nocte effecturum, ut crederat Macedonas etiam volare.'

[^94]:    12 Ariana Antiqua, p. 275.
    13 Journal Bengal Asiat. Soc., 1836, pp. 5 to 7.

[^95]:    ${ }^{14}$ Apaphihata instead of apadihata, as the translation of Aniketos.
    ${ }^{15}$ Ariana Antiqua, p. 268.

[^96]:    17 Ariana Antiqua, p. 268.

[^97]:    18 Ariana Antiqua, p. 277.
    ${ }^{19}$ Bactrian and Indo-Scythian coins, p. 181. English translation.
    ${ }^{20}$ Table lithographed at Lucknow in 1841, and published in the Numismatic Chronicle, viii., 175, for 1843.

[^98]:    ${ }^{21}$ Strabo, Gcog. xi., 11, 2.

[^99]:    ${ }^{22}$ See Plate VI., Figs. 5 and 6, of the coins of Euliratides: and Ariana Antiqua, pl. iii., 11, on which the palm and weath ol' Yictory are held by Zeus himself, and the elephant stands dejected, with pendent trunk.

[^100]:    1 Jour. Asiat. Soc. Bengal, 1840, pp. 869, 870.
    ${ }^{2}$ Scc Plate VI., Fig. 5, of the coins of Eukratides.

[^101]:    ${ }^{3}$ Prolog. Trog. Pomp. xli. "Deinde qua re pugnante Scythim gentes Saraucw et Asiani Bactra occupavere et Sogdianos. Deinde quoque res additæ gestæ per Apollodotum et Menandrum reges eorum." As the Scythians had occupied Bactriana eorum must refer to India.
    

[^102]:    6 Justin. Hist. xli. 6. "Unde cum se reciperet, a filio, quem socium regni fecerat, in itinere interficitur, qui non dissimulato parricidio, velut hostem, non patrem interfecisset, et per sanguinem ejus currum egit, et corpus abjici insepultum jussit.

[^103]:    7 Lassen, Zur Geschichte der Griech. und Indoskyth. Könige, 1838, p. 283, and Indische Alterthumskunde, II. xxiv., 1852; Wilson, Ariana Antiqua, p. 267, 1841 ; De Bartholomai, Köhnes Zeitschrift, p. 76, 1843 ; Cunningham, Num. Chron., VIII. 175, 1843.
    ${ }^{\text {y }}$ Hist. Regn. Grece. Bact., p. 95.

[^104]:    9 Josephus, Antiq., xii. 7, 2 ; xii. 9, 1. 1 Maccabees vi. 1 ; ix. 1 .
    ${ }^{10} 1$ Maceabees vi. 4. "And departed thence with great heaviness, and returned to Bahylon."

[^105]:    11 Ariuna Antiqua, p. 288.
    12 Indische Alterthumskunde II. xxiv.

[^106]:    ${ }^{13}$ See Plate V., Fig. 10, of the coins of Eukratides for the type of the dismounted Dioskuri.

[^107]:    ${ }^{1}$ See Jour. Bengal Asiat. Soc., 1854, pl. xxxv., figs. 8, 9, 10. I selected 50 of them, and Mr. Thomas got the remainder, 8. in number; so that the whole find was 134 coins, and not 133 , as shown to me at Mathura in 1853. See Prinsep's Essays by 'I'homas, ii. 197, note.

[^108]:    2 Carm. v. 250.

[^109]:    3 Ariana Antiqua, p. 281.

[^110]:    ${ }^{4}$ Altogether there are 230 coins which may be assigned to the Panjâb.
    
    
    
    
    
    

[^111]:    ${ }^{8}$ Prolog. xli. Bayer, in Hist. Reg. Græc. Bact., p. 77, gives this passage somewhat differently. "Indiæ quoque additæ res gestæ per Apollodotum et Menandrum reges."
    ${ }^{7}$ Preface to "Brihat Sanhita" of Varâha Mikira, p. 40. Garga is one of the oldest of the Hindu astronomers, and is repeatedly quoted by Varâha.

[^112]:    ${ }^{8}$ Golststücker's Pánini, p. 290. "Arundyavanah Sàketam; arundyavano Mâdhyamikân."
    ${ }^{\theta}$ See Kern's Brihat Sanhita, xiv. 2.
    ${ }^{10}$ Raja Tarangini, i. 176.
    11 Pàuini, p. 229.

[^113]:    ${ }_{12}$ Preface to Bribat Sanhita, p. 38.
    ${ }^{13}$ Màlavikàgnimitra, in Wilson's Hindu Theatre, vol. ii. p. 353.

[^114]:    14 Wilson's Hindu Theatre, vol. ii. pp. 51, 95. "Malati and Madhava."

    15 French translation of Vassilief's Russian translation, p. 50 , note. "On voit que c'est dans ce temps qu'arriva dans l'Inde

[^115]:    la première invasion d'etrangers, qui furent nommés 'Tirtika ou hérétiques. Après avoir commencé la guerre contre Poucheiamitra, ils brûlèrent une quantité de temples, dit-on, en commençant depuis Djalandara jusqu'í Magada, ils tuèrent une quantité de Bickhou . . . . et Poucheiamitra lui-même mourut cinq ans après dans le nord."
    ${ }^{16}$ Pali "Milinda-panna." The only notices of this valuable work that have yet appeared are Turnour, Jour. Asiat. Soc., Bengal, 1836, p. 531 ; and Hardy, Manual of Buddhism, p. 516. I understand, however, that the whole work is now in course of translation by M. Trenclner of Copenhagen.

[^116]:    ${ }^{17}$ Plutarch, Reipub. ger. Præcept. Mevávסpov סè $\tau \iota v o ́ s ~ e ̀ v ~$
    
    
    
     $\mu \nu \eta \mu \epsilon i ̄ a ~ \pi \alpha \rho \alpha ̀ ~ \pi a ̂ \sigma \iota ~ \tau o v ̂ ~ a ̉ \nu \delta \rho o ́ s . ~$

[^117]:    18 Jour. Asiat. Soc. Bengal, 1833, p. 409.
    19 Turnour, in Jour. Asiat. Soc. Bengal, 1838, p. 797. Buddha informs his disciple Ananda that over the remains of a Chukravartti Raja they build a situpa at a spot where four roads meet.
    ${ }^{20}$ Hudson, Geog. Vet. Script., i. 27. The original passage has already been given in my account of Apollodotus.

[^118]:    ${ }^{21}$ Antiq., xiii. 5, 11.
    ${ }^{22}$ Hist., xxxvi. 1. "Cujus adventum non inviti Orientis populi videre; et propter Arsacidæ, regis Parthorum crudelitatem, et quod veteri Macedonum imperio assueti, novi populi superbiam indigne ferebant. Itaque cum et Persarum, et Elymæorum, Bactrianorumque auxiliis juvaretur, multis preliis Parthos fudit. Ad postremum tamen, pacis simulatione deceptus, capitur.

[^119]:    

[^120]:    ${ }^{27}$ See Jour. Asiat. Soc. Bengal, 1838, pl. 32, fig. 6. On some coins from Taxila the wheel of eight spokes, with knob ornaments on the outside, forms the sole type of the obverse, just as it does on this coin of Menander.
    ${ }^{29}$ Turnour in Jour. Asiat. Soc. Bengal, 1838, p. 106.

[^121]:    ${ }^{1}$ Dr. Kern, Preface to " Bribat Sanhita," p. 38, quoting the "Gargya Sanhita" of the astronomer Garga, whose date he fixes about 50 e.c. The following is the Sanskrit text:" Madhyadese na Sthâsyanti Yavanâ yuddhadurmadâh Teshâmanyonyasambhâva (?) bhavishyanti na sansâyah."'

[^122]:    ${ }^{2}$ Royal Ariatic Socicty's Journal, xx., p. 240.

[^123]:    ${ }^{3}$ See Pl. 8, Figs. 5, 6, 7, 8, and 9.
    4 Journal des Savants, Oct., 1835, p. 580 :-" En effet, ce type est manifestement imite de celui des medailles d'Alexandre II., Zebina, roi de Syrie, qui représentent Jupiter, assis sur un siége a jour, avec dossier; et cette manière de représenter lo dieu supreme, dont le colosse d'or et d'ivoire formait le principal ornement d'Antioche, est, sur la monnaie des rois de Syrie, une innovation qui ne s'est ni montrée avant le règne Alexandre II., ni reproduite depuis; et dont l'usage, en conséquence, renfermé entre les années 129 et 123 avant notre ère, doit avoir precedé l'imitation qui se fit de ce type sur la monnaie Grecque des rois de la Bactriane."
    ${ }^{5}$ Journal des Savants, Mars, 1836, p. 183 :-"Je me crois donc maintenant pleinement autorisé à placer la règne d'Antial-

[^124]:    kidès à peu de distance de celui d'Eucratide II. . . . . . et, si je ne me trompe, il dut occuper, dans la succession des princes qui gardaient la frontière septentrionale de la Bactriane, le rang qui vient immédiatement après Philoxène." Lassen places Antialkides in b.c. 150-140; Wilson, in b.c. 135.
    ${ }_{7}^{6}$ Ariana Antiqua, p. 292.
    ${ }^{7}$ Ariana Antiqua, p. 277, and pl. ii., figs. 11 and 12. Wilson has committed another mistake of a similar kind, in supposing that the double portrait of Hermæus and Kalliope was a novelty, which might "have been suggested by the heads of Cleopatra and Antiochus VIII. of Syria, b.c. 125 (Ar. Ant., p. 292) while in pl. xxi., fig. 7, he has given an engraving of the beautiful tetradrachm of Eakratides, with the heads of his father and mother, Heliokles and Laodike, on the opposite side.

[^125]:    ${ }^{8}$ See R. Rochette's description, Journal des Savants, Fev., 1839, p. 90, and pl. i., fig. 12.
    ${ }^{9}$ Ariana Antiqua, p. 271.

[^126]:    ${ }^{10}$ Herodotus, iv., 9, 10. Diodorus, ii., 43.
    ${ }^{11}$ Bengal Asiatic Society's Journal, 1834, p. 167.
    12 Journal des Savants, April, 1863, p. 194.

[^127]:    ${ }^{13}$ Remusat, " Nouveaux Mélanges Asiatiques," tom. i., pp. 203, 219, and 227.

[^128]:    ${ }^{17}$ Justini, xlii. 1, 2.

[^129]:    ${ }^{18}$ Remusat, " Nouveaux Mélanges Asiatiques," i., 205 :-" Le roi des Saï (Sakas or Sacce) vint au midi demeurer dans le Kipin (Kophene). Les tribus des Saï se divisèrent et se dispersèrent dc manière à former çà et là differens royaumes."

[^130]:    ${ }^{19}$ In the Hindu Purânas the duration of the Yavana, or Greek rule, in India, is said to have been eighty-two years. If we recton this number back from 120 or 126 в.c. We obtain from 202 to 208 в.o. for the Indian conquests of Demetrius during the lifetime of his father, Euthydemus. Perhaps the same thing is intended by Ferishta in the length of reign, ninety years, assigned to Jona (or Yavana) Raja, one of the successors of Sansârchand, or Chandragupta.

[^131]:    ${ }^{1}$ It is a curious fact that the first two Mughal Emperors of India, Bàber and Humàyun, adhered to the style of coinage of

[^132]:    their own country; but their successors adopted the Indian aystem of coinage, which was in general use, and which they found it impossible to suppress.

[^133]:    ${ }^{2}$ Vit. Alexand., ix. 8.

[^134]:    ${ }^{3}$ Anthologia Græca. Lipsiæ, vi. 261. With reference to the name of Olpe I may mention that the relic-caskets found in the Buddhist Topes of the Panjâb are now called Harpa.

[^135]:    - At the Borrell sale there was sold a hemiobolion of Athens weighing $5 \cdot 7$ grains.
    - There are two specimens of the Tetartobolion in the British Museum, weighing only 2.5 grains each.

[^136]:    ${ }^{7}$ Polyb., ii. 15.
    

[^137]:    ${ }^{\circ}$ Ancient Indian Weights, p. 19.
    ${ }^{10}$ Laws of Manu, by Haughton, viii. 274; xi. 142 ; viii. 188, 400.

[^138]:    ${ }^{11}$ Laws of Manu, viii. 134, 135, 137.
    ${ }^{12}$ Laws of Manu, viii. 136-404.
    ${ }^{13}$ Wilson's Vishnu Purana, p. 653, note; " the half of a half of a half of a pana."

[^139]:    ${ }^{14}$ Col. Mackenzie notes that " these coins are very common throughont India, but particularly in the South."

[^140]:    ${ }^{5}$ Laws of Manu, viii. 136. "A kiarsh", or 80 ralitilias of copper, is called a pana, or kiershapana."

[^141]:    ${ }^{16}$ Lavs of Mimu, viii. 240.
    ${ }^{17}$ Ibid., viii. 215.

[^142]:    ${ }^{18}$ Ariana Antiqua, p. 104.

[^143]:    ${ }^{19}$ Bengal Asiatic Socicty's Journal, i. 304.
    ${ }^{3 n}$ Ibid., iv. 621.
    allid., iv. 626.

[^144]:    ${ }^{22}$ See Ariana Antiqua, Pl. xv., figs. 26 and 27.
    ${ }^{29}$ For three specimens see Ariani Antiqua, Pl. xv., figs. 28, 29 , and 30 ; but I possess many others of different types.

[^145]:    ${ }^{24}$ I owe this information to Mr. E. C. Bayley, a highly experienced Numismatist, who was Deputy Commissioner of the Kangra District where the coins were discovered.

[^146]:    ${ }^{25}$ Vita Alexandri, viii. 13-41. "Præter hæe signati argenti LXXX talenta dono dedit."

[^147]:    ${ }^{26}$ Anabasis, vi. 16.
    ${ }^{27}$ Prinsep's Essays, i. 223.

[^148]:    ${ }^{28}$ Bengichl Asiatic So ioty's Journal, 1850, p. 455.

[^149]:    ${ }^{29}$ Lakonia, iii. 2.
    
    ${ }^{31}$ Plinii, Nat. Hist., lib. vi. c. 22.

[^150]:    ${ }^{32}$ Hussey, Essay on the Ancient Weights and Moncy, p. 71,

[^151]:    ${ }^{33}$ Public Economy of Athens, p. 30.

[^152]:    ${ }^{34}$ In fact I possess several old Indian coins of this very weight.
    ${ }^{35}$ English Translation of Code, ii. 297.

