Rhyton of Greek red-figured pottery signed by the Attic potter Sotades (about 450 B.C.); found in Pyramid S. XXIV at Begarawiyah, the ancient Meroe, by the Harvard University-Museum of Fine Arts Egyptian Expedition.
The royal cemeteries of Meroe (Begrawiyah). In the foreground is the Southern Cemetery and beyond the Wady et-Tarabeel is the Northern Cemetery. On the spur to the left of the Northern Cemetery stands the Expedition Camp. Looking north.

The Pyramids of Meroe and the Candaces of Ethiopia

In the Bulletin of the Museum for June, 1921, an account was given of the excavations of the royal tombs of the Egyptian XXVth Dynasty at El-Kur'uw under the title of "The Royal Family of Ethiopia." The discovery of these tombs completed the list of kings, who, residing at Napata, ruled Ethiopia from 750 to 300 B.C., and it rounded out the chronological basis of the history of that period as recovered by the Expedition at Nuri. But the history of Meroe, which succeeded Napata as the capital of Ethiopia, remained as obscure as that of Napata had been before our excavations at Nuri. In April, 1920, before the report on El-Kur'uw appeared in the Bulletin, the Harvard University–Museum of Fine Arts Egyptian Expedition had already begun the work of recovering from the royal pyramids of Meroe the knowledge needed to permit a reconstruction of the history of the later Southern Kingdom of Ethiopia. These excavations were continued during 1921-1922 and, it is hoped, will be brought to a conclusion this winter (1922-1923).

Taught by the manner in which the excavation of the royal pyramids at Nuri and El-Kur'uw had yielded the chronology of the older Napatan Kingdom of Ethiopia, the Harvard–Boston Expedition selected the royal pyramids of Meroe as probably containing the solution of the chronology of the later Meroitic Kingdom of Ethiopia. Now, at Meroe there are three cemeteries of pyramids and therefore of royal tombs — the Western (called hereafter W. Cem.), the Northern (N. Cem.), and the Southern (S. Cem.). The character and the order in time of these three cemeteries are of great importance for the larger chronological question, but to make that clear it will be necessary to recall the outline of the history of the Northern Kingdom as recovered from the Nuri and El-Kur'uw pyramids at Napata.

The royal family of Ethiopia was, by origin, of the southern Libyans, the tribe of the Temehuw, whose ancestors in the western desert are mentioned by the leaders of the first Egyptian trading caravans, who, about 2500 B.C., "opened" the western roads into the Sudan. These desert men had pushed into Ethiopia and settled at Napata some time about 900 B.C., while their relations, the northern Libyans, ruled over Egypt as the XXIInd Egyptian Dynasty. The first of the

The Attic rhyton in position as found in the debris of the Pyramid S. XXIV. It had been removed by plunderers from the burial chamber of the little prince (or princess) to whom the tomb belonged and left practically on the surface, where it was covered by driftsand containing the missing parts in minute fragments.
The Northern Cemetery seen from the N.N.E. before the beginning of the excavations.

The southern end of the Northern Cemetery in process of excavation. Note the open stairways which lead to the underground burial chambers of Pyramids N. V and N. LIII. Pyramids III and IV are the earliest in this cemetery; Pyramid I is the tomb of the Candace, Amante; No. II, of King Amanhabale, probably her father; No. V, of her son, Prince Arik-khaer; and No. VI, of Queen Amanshakhet, probably her mother. Pyramid N. VI was that destroyed by Ferlini in 1853. Looking down to south from N. VII.
Napatan Temehuw of whom we now know was buried on top of the hill at El-Kur'uw and began the cemetery in which were buried the first six generations of the family. Kashta was also buried here — the first of the family recorded as having borne the title of king — and inscriptions at Thebes prove that he had gained control of Upper Egypt as far as that city. Thus the old family cemetery at El-Kur'uw became the first royal cemetery of Ethiopia. In it, in turn, Piankhy, the conqueror of Lower Egypt, and his successors, Shabaka and Shabataka, were also laid in their pyramids. The following king, Tirhaqa, could find no place in the old cemetery for the great pyramid he had planned — the greatest in Ethiopia — and he began a new cemetery at Nuri, five miles further up the river. The sovereignty of Tirhaqa over Egypt had been challenged by the Assyrian King, Ashurbanipal, ruler of one of the greatest of the predatory empires of antiquity, and Tirhaqa had been forced to retire to Upper Egypt. The struggle lasted for about ten years, as the Assyrians had many other wars on their hands. But the armies of Mesopotamia won all but the first battle, and in the end Tirhaqa's nephew and successor, Tanutaman, was utterly beaten and driven back into Ethiopia (about 661 B.C.). A new dynasty of Egyptians was set up by the Assyrians at Sais in the Delta (the Egyptian XXVIth Dynasty), which soon became independent through the break-up of the Assyrian Empire. Tanutaman, with his dominions reduced to Ethiopia proper, never recovered from the blow to his fortunes and was buried in a very small pyramid close beside his father, Shabaka, at El-Kur'uw.

But after the death of Tanutaman the prosperity of Ethiopia revived, and for about 350 years (to about 300 B.C.) his successors ruled the whole of that country, from the swamps of the White Nile to the frontier of Egypt, near the First Cataract. All these kings, twenty in number, were buried with one exception in Tirhaqa's cemetery at Nuri. The one exception was a late king, about 350 B.C., who built his pyramid at El-Kur'uw.

There are two points of special interest in the history of the Napatan kings of that monarchy which I call the Napatan Kingdom of Ethiopia (750-300 B.C., approximately). Ethiopia had been thoroughly Egyptianized in the time of the
The interior of the burial chamber of Queen Khennuwa as found on opening the doorway. The walls are painted in colors, but the contents had been entirely removed by the plunderers.

The interior of the tomb of King Amanitenmemize (N. XVII), about 50-75 A. D., as left by the thieves. The partly blocked doorway leads to the actual burial chamber; the room in the foreground, littered with pottery and fragments of the wooden coffin, is that in which the offerings were placed, including the bodies of those persons who died with the king.
viceroy of the Egyptian New Kingdom—1550-1100 B.C.—and the Libyan family, which became the royal family of Ethiopia, had naturally been also Egyptianized by their surroundings at Napata, with its temple and priesthood. When they had added Egypt to Ethiopia, the Ethiopian kings imported a number of Egyptian craftsmen, especially for the building and the decoration of the great temple of Amon at the Holy Mountain (Gebel Barkal). These included masons, faience workers and other craftsmen, all of the highest standing. Thus a school of crafts was established at Napata in the persons of these Egyptian craftsmen, and the traditions of Egypt became fixed as the traditions of Ethiopia. This is the basis on which rests the whole history of the culture of Ethiopia. The civilization was Egyptian, not native, and the subsequent history is one of loss, not of gain, of the gradual fading of the traditions of the arts and crafts and of the knowledge of the Egyptian language and the sacred texts. For a century or so the degeneration was hardly noticeable. After three hundred years the losses, especially in forms, in skill, and in knowledge of Egyptian, had become striking, but the main features of the old culture, although blurred, were still discernible. Then the sovereignty passed to Meroe, and the development of the Meroitic culture begins with this Ethiopian version of the Egyptian culture—all being based on that of Egypt.

The second point is that of the material resources of the Napatan Kingdom of Ethiopia. The power of the early kings of Ethiopia—those who conquered Egypt—was founded on the caravan traffic
Reliefs on coffin bench of King Nahirqa (N. VIII), about 180-160 B.C.

Reliefs on the walls of the chapel of N. XII, about 120 B.C.

Reliefs on the chapel walls of N. XXVI, about 340 A.D.
between Egypt and the South and on the exploitation of the gold mines of the eastern desert. Northern Ethiopia, the seat of the first monarchy, is agriculturally and otherwise one of the most poverty-stricken lands in the world. In itself a narrow river channel between two deserts, there was no support for more than a scanty population. But southwards lay the inexhaustible supplies of Abyssinia and Central Africa—slaves, gold, ivory, ebony, ostrich feathers, resins and incense, leopard skins and other things desired by the Egyptians; and all the trade in these materials must pass through Ethiopia, either by river or by the land roads which were supported by the river. And in the eastern desert lay that long series of gold mines which had supplied Egypt so abundantly with gold during the New Empire. The Libyan tribesmen who seized Napata obtained thereby the control of the trade routes and the roads to the gold mines of Egypt. On the exploitation of this control they built the material power of their monarchy until they had taken Egypt; and on this exploitation rested the material power of the twenty kings who ruled Ethiopia after the defeat in Egypt by the Assyrians. Northern Ethiopia was a rainless desert, a land of caravan routes; but Southern Ethiopia, falling within the region of tropical rains, was of an entirely different character (see Crowfoot, The Island of Meroe, page 9). It was also crossed and recrossed by caravan routes and supported a number of trading centers. But more than this, the rain fertilized vast tracts of land suitable for cultivation and pasture. Abundant supplies of grain were obtainable with little labor, and enormous herds of domestic cattle bred and increased on the pasturage with still less trouble. Forests of ebony grew in the south, and resin-producing trees flourished in much the same provinces in which they grow to-day. And the vegetation sheltered numbers of wild animals and birds whose products formed part of the trade supplies for Egypt. On the south, again, there was contact with the black populations, which yielded slaves. Thus Southern Ethiopia was self-supporting even without the profits of the carrying trade. And it is clear that if for any reason trade declined or the gold mines ceased to yield their wanted supplies, Southern Ethiopia would be less affected and would become the chief source of the material power of the monarchy. The shift in power, about 300 B.C., from Napata, the capital of Northern Ethiopia, to Meroe, the capital of Southern Ethiopia, was no doubt due to some such change in the relative importance of the resources of the two divisions of the country.

Thus the Meroitic Kingdom of Ethiopia is culturally and politically merely a continuation of the Napatan Kingdom of Ethiopia, and it was therefore to be expected that the first king's tomb at Meroe would approximate in its structure, reliefs, inscriptions, burial chambers and funerary furniture the last preceding king's tomb at Napata, that is, the tomb of Nastasan at Nuri. By a superficial examination I selected for preliminary excavation the two kings' pyramids of the Southern Cemetery at Meroe, S. VI and S. V, as nearest like the pyramid of Nastasan and therefore the earliest royal tombs at Meroe. Their excavation proved that this conclusion was correct, for the burial chambers and the objects found were also similar to those of Nastasan. Subsequent excavations showed that six other pyramids near these were the burial places of one other king of the same period and of five queens related to the three kings. A ninth pyramid, belonging to a queen (Khennuwa) was later found in the plain northwest of the southern hill, and proved to belong to the same royal family. These nine tombs repeated at Meroe the chief characteristics of the last royal tomb at Nuri, thus linking the two cemeteries archaeologically and forming a chronological basis for the examination of the other tombs at Meroe. Now eight of these tombs, standing in a row along the bank of a ravine which bounds the hill, were built on the lowest part of the hill on which lies the S. Cem. After they were built the S. Cem. was full, and this is the reason why the ninth tomb—that of Queen Khennuwa—had to be built by itself in the plain. But above the eight tombs on the bank of the ravine, the southern hill rises eastward to a flat top about thirty feet higher. The whole of its eastern slope, a northern extension, and the top were covered with small tombs. Their excavation proved that the S. Cem. was a family cemetery which had been begun on the top of the hill about the time of the reign of Piankhy and continued to be used as such down to the time of Nastasan's successor, when it became a royal cemetery. Thus the S. Cem. repeated the circumstances under which the old family cemetery at El-Kur'uw became the first royal cemetery of Napata.

The parallelism between the cemeteries of Napata and those of Meroe was continued by the N. Cem. at Meroe. Just as Nuri had been begun when the field at El-Kur'uw was exhausted, so at Meroe the N. Cem. was begun when the S. Cem. was exhausted by the eight royal tombs mentioned above. The N. Cem. is on a fine ridge of sandstone north of the southern hill, across the Wady et-Tarabeel, but only about two hundred yards away, in full sight of the old cemetery. The three earliest tombs were similar to the royal pyramids of the S. Cem., but the rest showed varying departures from the older types down to the brick pyramids which were manifestly of the Christian period. Thus it is clear that the N. Cem. was the royal cemetery of Meroe in historical succession to the S. Cem. There are forty-one pyramids in the N. Cem., of which two are the tombs of crown princes, five of queens and the rest—or almost all the rest—of kings. The queens appear to have been of unusual power, and it may be stated that the N. Cem. was practically reserved for kings, queen regents, and two especially favored heirs to the throne.
Gold and electrum finger rings.

The seals engraved on the rings.
In almost all these tombs evidences were found of sātī-burial, that is, the burial of the harem and of servants with the king in order that their spirits might serve him in the other world. But it is clear that queens of the blood-royal and members of collateral branches of the family would not suffer sātī-burial. At El-Kur'ūw and Nuri about two queens for every king received burial in separate small pyramids of their own, and at Meroe, according to previous custom, about forty to sixty queens should have been buried in separate pyramids. The absence of queens' pyramids was a continual source of wonder to me until a few months ago we began the systematic examination of the W. Cem. This is the cemetery of the other members of the royal family who were not buried in the N. Cem.

Thus the three cemeteries of Meroe are historically significant, as follows:

(1) The S. Cem. was the old family cemetery of the Meroitic branch of the royal family of Ethiopia, and extends in time from about 720 B.C. to 300 B.C. The last nine tombs of the cemetery are the first royal tombs made at Meroe and standardized the field.

(2) The N. Cem. was begun as the royal cemetery of Meroe in succession to the S. Cem., and contains only the tombs of sovereigns and acting sovereigns from the close of the S. Cem. down to about 350 A.D.

(3) The W. Cem. was begun about the same time as the N. Cem. and was the family cemetery, as distinguished from the king's cemetery, of the royal family of Meroe. It is thus practically contemporaneous with the N. Cem., but may have continued in use longer.

From the foregoing it becomes plain that the chronological basis of the history of the Sudan for the six centuries and a half from 300 B.C. to about 350 A.D. must be recovered from the series of fifty tombs of kings and queens presented by the two royal cemeteries at Meroe — the older S. Cem., with its nine tombs, and the later N. Cem., with its forty-one. The period is a long one, and to the layman the effort to fix the order of fifty royal tombs presented by the cemetery, foundation deposits, stairway, burial chambers, and accompanying objects. For example, the three pyramids — N. XI, XII, and XIII — were shown by physical contacts and by their relative positions to have been built in this order, while the forms of all their parts, and especially the use of a stone coffin in each (the only stone coffins found in the cemetery) proved that they were made by nearly the same set of workmen or their apprentices. This group, fixed in its order, was connected with Pyr. N. VIII by the forms of its pyramid and its burial chambers, and on the other side with N. XX by the forms of its pyramids and its foundation deposits. Thus the group, the internal order of which was established, was connected on one side with the single pyramid group, N. VIII, and on the other with the single pyramid group, N. XX. Similarly N. VIII was linked to N. IX, and N. XX to N. XXI, and so on until the whole series of groups, which I marked with the letters a-j, had been arranged internally and laced together by similarities in one long chronological series. The group marked a was, in fact, the group of the S. Cem., which resembled the tomb of Nastasan at Nuri and was therefore the earliest of the series. As a consequence the chronological order of the groups extended downwards from about 309 B.C. in the order of the letters a-j.

Now there is one other cemetery of royal tombs of the Meroitic period which I have not yet mentioned. These are the eighteen pyramids at Gebel Barkal (Napata) which the Harvard-Boston Expedition excavated in 1916. At that time the paucity of the evidence made it difficult to draw general conclusions, and the detailed records, the note-books, diaries, drawings, and photographs were set aside for future consideration. When the chronological order of the pyramids of Meroe had been established, the records of the Napatan pyramids of the same period were at last taken out for examination. The remarkable fact was at once apparent that the same type-forms occurred at Napata as at Meroe, and in exactly the same chronological order. The Napatan series showed, however, a gap between the type-forms of Barkal VIII and those of Barkal V, and came to an end about the time of Pyramid N. VI, the twenty-third of the pyramids at Meroe, or about half way through the Meroe list. This showed that there were two periods, each about eighty years long, when royal tombs were being built at Napata and at Meroe — in other words, periods in which Ethiopia was divided into two independent kings. The type-forms showed again exactly the number of reigns through which each of these two periods of division lasted.

In this manner the tombs of the kings were arranged in chronological order, but the identification of the tombs with the names of the kings and queens buried in them remains a matter of great difficulty. The names of twenty-three of the royal persons buried in the N. Cem. are still wanting. The rest have been found by the inscriptions in the chapels or on the coffin benches or on the altars. However, the work of piecing together the fragments of altars is yet incomplete; a few more names may still be connected with their pyramids, and the task of the identification of the kings promises to reach a fairly satisfactory conclusion.

Such, in brief, is the story of the recovery of the chronological basis of the history of Meroe — six and a half centuries in the history of Ethiopia. This is the period of which the classical historians and geographers give the fullest accounts. And now for the first time a beginning may be made in separating fact from fiction in their accounts. One of the most interesting points now proved true is...
Bronze lamp with two spouts and an elephant's head on each.

Bronze camel with pack saddle, from the tomb of Arik-khefêr.

Bronze bell with cow in relief wearing a similar bell on the neck, from N. XV, about 30 A.D.

given by Strabo in his Geography, Book XVII, II, 3: "It is still the custom in Ethiopia that when the king, by accident or otherwise, has lost the use of a member, or a member itself, all his usual followers (those who are destined to die at the same time as himself) inflict on themselves a similar mutilation, and that explains the extreme care with which they watch over the person of the king." It seems ludicrous to imagine the household of the Candace of Petronius as consisting of one-eyed servants and one-eyed ladies-in-waiting; but Strabo was quite right as regards those who were destined to die with the king. The household not only died with the king, but was actually buried in the same tomb. This custom was practised in Egypt by the predynastic Egyptians as early as the Late Stone Age. Traces of the custom appear in the Dynastic Age when figures were substituted in the tombs for the bodies of the members of the household. It was revived again by the Egyptian officials who lived at Kerma and held the Ethiopian roads for the King of Egypt during the Middle Kingdom. The same idea is represented in the sacrifice and burial of the horses of Piankh when he was buried at El-Kur'uw. Here at Meroe the custom was clearly visible in the tombs from the second century B.C. onwards. Finally it may be added that sâêt-burial, as I name this custom, is still practised by certain African tribes.

Pliny (Nat. Hist., VI, xxxv, 8) says: "The buildings of the city [of Meroe] are few. The ruler is a woman, Candace, whose name has now been handed down for many years from queen to queen." The other two references to rulers of Ethiopia in foreign books—one in Strabo, relating to the Roman invasion, and the other in the New Testament, Acts VIII, 28—also speak of the Queen Candace as if she were the ruler of Ethiopia. From these sources arose an impression that Ethiopia, especially Meroitic Ethiopia, had been governed by a long line of queens named Candace. Professor Griffith dispelled the greater part of this delusion by proving that the word "candace" is only a title meaning "queen." The excavation of the tombs has served further to make the situation plain. From 750 B.C. every ruler of Ethiopia was a male. About 160 B.C., the third generation after Ergamenes, the great queen who was buried in N. VI seems to have been queen-regent for her son for perhaps ten years. About one hundred and thirty years later Queen Amanshakhetê, whose tomb is N. VI and who reunited Ethiopia, appears to have been queen-regent under similar circumstances. Her son-in-law, Netekaman, the great builder of temples, obviously came to the throne by the hereditary position of his wife, Queen Amantêre (Pyr. N. I), who occupied an unusual position and received burial
with the honors of a king. After her two more queens were buried with the honors of a king, but in the poorly-built later pyramids. Altogether, from the time of the Egyptians until the end of the N. Cem., about five hundred and seventy-five years, there were thirty kings and five queens buried in the official royal cemetery of the kings. This fact proves clearly that there was no long line of queens ruling over Ethiopia; but it also proves that five queens occupied a position of unusual influence—a position that was recognized by burial in the cemetery of the kings. It appears to me that these were, as a rule, women of the blood-royal who survived their husbands and acted practically as queen-regents during the minority of their sons. During the earlier period, that of the Napatan kings of Ethiopia, the queens of the direct blood-royal had always enjoyed great consideration during the reigns of their sons and received especially costly burial as queen-mothers. Aspalta mentions his mother in all his known stelae set up at Barkal, and on one he gives her ancestry in the female line through five queens. But none of the great queen-mothers of this older period was buried in the cemetery or with kingly honors, and I suspect that none of them approached in power the five great queens of Meroe buried in N. Cem.

The history of Meroitic Ethiopia, as far as it is now clear, was briefly as follows:

1. On the death of Nastasan, who had been a member of the southern branch of the royal family, each branch of the family set up a king of its own, Arakakam at Meroe and the unknown king of Barkal XI at Napata. Thus was established the First Meroitic Dynasty of Napata.
2. During this first period of separated kingdoms the second king at Meroe, Yersuaman, must have held Napata for a short time, as he inserted his name on a pair of small lion statues in one of the temples.
3. Ethiopia was reunited into one kingdom by Erakamenes about 220 B.C., with the capital at Meroe. The greatest period of Meroitic prosperity is represented by the tomb of Nanni, the king of Meroe, and his successor, Agaraman, who used an Egyptian scribe, perhaps the same man. Both these kings built temples in Lower Nubia, Erakamenes at Dakkeb, and Agaraman at Dabot.
4. A separate kingdom was set up at Napata after the death of the fifth successor (buried in N. XII) of Erakamenes, probably because of his marriage with a lady of the Napatan branch of the royal family.
5. Owing to the premature death of the Napatan heir of the king of N. XIII, the first two rulers of the Second Meroitic Dynasty of Napata were women.
6. The Second Meroitic Dynasty of Napata was broken by the invasion of the Romans under Petronius, and Napata was absorbed finally in the kingdom of Meroe under Queen Amanshakete and her son-in-law, Netekam. Napata was never again a rival of Meroe.
7. During the reign of Netekam an Egyptian craftsman was again brought to Ethiopia primarily to restore the damage done to the temples at Napata by the Romans. Thus for the second time the dying Egyptian traditions were revived. The effect of the teaching of this Egyptian is clearly seen in the later temples built by Netekam and in the subsequent forms of the chapel reliefs. During this reign Hellenistic bronze objects in the tombs indicate either gifts brought back by the embassies to Rome or objects sent up to Meroe in trade.
8. From Netekam (about 20 B.C. to 10 A.D.) to King Tantanaya (ca. 200 to 220 A.D.) the fortunes of Meroe were on the wane. The pyramid N. X, probably the tomb of Netekam's son, Sherkakete, was never finished above the chapel roof. The two following tombs, N. XV and XVI, were both small, though of stone. Then followed a brief period of rather better times, when pyramids N. XVII, N. XVIII, and N. XXXIV were built. The chapel of N. XXXIV had even some Egyptian inscriptions in relief. But except for N. XIX, these were the last of the stone pyramids, and five reigns intervened between Amyuntebebe, the heir of N. XXXIV, and Tantanaya, the king of N. XIX.
9. After the burial of Tantanaya in N. XIX, all the pyramids are of plastered brick and of modest size. The effect of the intrusions of the Blemyes and the Nobatae tribes on the prosperity of the kingdom is manifest in these poor tombs. And it may be imagined that the Abyssinians who overwhelmed the kingdom of Meroe in about 350 A. D. required no great force of arms to conquer Ethiopia.

The great outstanding feature of the history of Ethiopia was that the Ethiopian cultural unit stood as an outpost of Egyptian civilization in Middle Africa. Immediately southeast of Ethiopia, in Abyssinia (also called Ethiopia, but mistakenly so) lay an outpost of another lesser civilization, that of the Semites of Southern Arabia. Each of these outposts had writing, a great mark of distinction in the illiteracy of Central Africa. The inhabitants of both lands brought under the influence of their culture the native races which were under their dominion. As far as ran the orders of the king of Axum or Napata or Meroe, so far extended the influence of the Semitic or the Egyptian-Ethiopian culture. But beyond those limits lay the inert mass of the black races of Africa, unmoved by any inward stirrings or by any outward culture which had not been imposed on them by physical force. The inhabitants of both Abyssinia and Ethiopia were mixed races. In Abyssinia, southern Semites, immigrants from the Arabian Yemen on the other side of the Red Sea, were the dominant race; and in Ethiopia Hamitic Libyans from the western desert formed the ruling class, while the mass of the people were probably racially Hamites if not actually of Libyan origin. The whole region involved was inhabited in antiquity, as it is to-day, by dark-colored races in which brown prevails. They are not and were not, African negroes, although many individuals in the same region show a mixture of black blood owing to intermarriage, or are themselves blacks of the slave class.

With the passing of time there came a decline among the Ethiopians of the Egyptian language in which the religious texts were written, and the degeneration of craftsmanship had already become marked before the death of King Nastasan, the last king of the Napatan Kingdom of Ethiopia. At Meroe, where the culture was a reflex of that of Napata, the decline proceeded until the time of
Bronze: (a) pot with spout; (b) and (d) jugs with handle; (c) blue faience stand; from W. 109.

Medallion of bronze from a basin found in the tomb of Amankhenerel. Relief of Actaeon and the dogs; Roman.

Bronze quiver, from W. 122. When found it contained seventy-three iron arrows, probably poisoned. Three bells hang from chains on the lower end.

Hanging lamp, bronze. The griffin's head is of bronze, like the lamp; only the rod which connected the lamp and the griffin's head was of iron and had rusted away from its point of attachment above the leaf.
Gold ornaments, about 100 B.C.: from W. 125, pair of blue inlaid buttons, pair of earrings, part of a necklace; from W. 127, pair of yellow inlaid buttons and a bracelet.

Ergamenes (about 225-200 B.C.). He appears to have been educated at the court of the Ptolemies, and, perhaps through his friendship with Ptolemy IV, was able to import into Ethiopia a few Egyptian craftsmen. By this means the traditions of Egyptian culture were reintroduced and the arts and crafts of Meroe were revived according to those traditions. This process of degeneration during long periods and of revival by the importation of Egyptians was repeated at least twice during the subsequent history of Meroe—once certainly when Netekaman brought up an Egyptian scribe (or scribes) for the restoration of the temple of Amon at Napata after the Roman invasion of 23 B.C., and probably again about 100 A.D. Intimately connected with this story of the variations in the decline and revivals of Egyptian traditions is that of the invention of the Meroitic writing.

It was the use of writing which marked the difference between the negroes on the one hand and the Ethiopians and the Abyssinians on the other. The Abyssinians, speaking a form of Arabic, used the alphabetic script of Southern Arabia. But as for the Meroites, when Lepsius copied their inscriptions he found that they had used a corrupted Egyptian written in Egyptian hieroglyphics and also an unknown language written in two scripts, one hieroglyphic and the other a practicable cursive. Professor Griffith of Oxford has succeeded in fixing the sound values of the two alphabets so as to enable any scholar to read the inscriptions. He has now fixed approximately the meanings of about fifty words, but the decipherment proceeds very slowly, for the language in which the inscriptions are written is still unidentified. But the facts disclosed by our excavations permit a further insight into the history of the invention of the Meroitic scripts. The Ethiopians are among the few nations which have actually invented a script of their own. They knew well the use of writing from the cumbersome Egyptian hieroglyphics which they had inherited along with the official Egyptian language, and they must have had hints of alphabetic writing from the use of Greek in Ptolemaic Egypt and the use of the Southern Arabic script in Abyssinia. But they made a script of their own, unique in the form of the letters, adapted only to the writing of their own peculiar language. The cursive was invented first for the practical purposes of daily life and caused an immediate decline in the knowledge of Egyptian; and when the knowledge of Egyptian hieroglyphics was lost, they invented a hieroglyphic script of
Gold ornaments, from W. 179, about first century A. D.: string of fine gold beads, heavy necklace of gold Hathor beads and white glass beads, three pairs of blue inlaid buttons, pair of earrings (ducks), and a scarab.

their own for use in the official and monumental inscriptions in which the Egyptian hieroglyphics had been traditional for centuries. These inventions are warnings that the genius of the people of Meroe is not to be underestimated. The Meroitic cursive script maintained the culture of Meroe as long as the political dominion of Meroe lasted, and preserved some remnants of it in Lower Nubia until after the coming of Christianity into Nubia (about 500 A. D.), when the native script gave place to a bastard Greek as the language of the religion.

The excavations at Meroe (Begarawiyah) have proved that a certain influence was exerted on Meroitic art by the arts and crafts of Hellenistic Greece, although the main influence was Egyptian. Even as early as the fifth century B. C., Greek manufactures had occasionally found their way to Meroe. In the debris of a ruined pyramid (S. XXIV) belonging to a child of the royal family who had made their tombs in the Southern Cemetery, we found to our great surprise, a Greek rhyton of red-figured ware signed with the name of the known Athenian potter, Sotades, who lived about 450 B. C. This was borne on the back of an Amazon mounted on a horse, all beautifully modeled. Whether this masterpiece of the Athenian potter reached Meroe by trade or as a gift brought back by some Meroitic ambassador to Egypt, must remain uncertain for the present, but in any case it proves intercourse with the Greeks and an appreciation of Greek craftsmanship. It was the Hellenistic-Roman period, however, which yielded the most numerous examples of Greek work. The chief of these are as follows: —

(1) A miniature head of Athena, bronze, broken from a figure. Found in the debris of N. XII — about 125 B. C.

(2) Fragments of a glass bowl painted in colors with a figure of Hathor in perspective, similar to the well-known Ptolemaic-Roman mummy portraits of the Fayoum. From N. XIII — about 100 B. C.

(3) An electrum ring with a brown agate set, on which is engraved a figure of the Phidian Athena of the Acropolis. From W. XX — about 100 B. C.

(4) A silver goblet with a scene in relief: a king seated in judgment on an offender (six figures in the scene) in typical Hellenistic-Roman work. Found in the ruins of Pyramid N. II — about 50-40 B. C.

(5) A small gold ring inscribed in Greek — Ἡ ΧΑΠΙΚ. Found in W. 137.

(6) Two heads of a Greek god, bronze, about half life size (human), and some fragments of the limbs. The heads had been made separately to set on a body, perhaps of a different material. They were found in the burial chamber of the crown prince, Arik-kharer, who died about 20 B. C.

(7) Bronze lamp with the front half of a centaur projecting from the acanthus leaf. Found in N. XVIII — about 100 A. D.

(8) Bronze lamp with the front half of a horse projecting from the acanthus leaf. Also from N. XVIII — about 100 A. D.
Gold bracelet, from W. 125, 100 B.C.

(9) Large two-handled bronze basin with a medallion in the centre inside. On the medallion a relief scene of Actaeon and the dogs. Also from N. XVIII — about 100 A.D.

(10) Several single-spouted hanging lamps, each with a beautiful acanthus leaf protecting the handle and suspended by a hook ending in a griffin's head. These came from N. XXVIII (King Tamereqerize-amaui), about 150 A.D., and from W. 110 and W. 122 — both of about the second century A.D.

(11) A large bronze basin with three figures on the broad rim — a frog and two naked boys. Found in W. 179 and possibly local work, imitating the Hellenistic-Roman. About second century A.D.

In addition to these pieces, all but one of which were manifestly of foreign manufacture — that is, Hellenistic-Roman — some foreign pottery was found, and some forms of the native pottery and of the decorative designs of the goldsmiths were derived from the Hellenistic forms. In the royal pyramids of the first century B.C. at Napata fragments were found of the so-called "Samian" bowls and of the flat red-glazed plates which preceded the Roman sigillata. There were also amphorae recorded like those of the Ptolemaic period in Egypt, while at Meroe one amphora with a stamped handle, but not the usual Rhodian amphora, was recovered. However, it is clear that the amphora form was well known to the local potters, probably through the importation of a small amount of Greek wine, and was copied by them in local materials imitating the Greek wares. A type of askos-jug, resembling in form the Apulian askos of Italy, was also found, not in great numbers, but widely distributed from Lower Nubia to Meroe, and generally not later than the first century B.C. This seems also to have been an imported ware, but possibly some examples were made by the potters at Meroe. In the case of the decorations on the gold jewelry and on the ivory boxes found at Meroe, the traces of Greek influence are vaguer and more illusive. The designs show characteristic modifications of the older Egypto-Ethiopian forms, apparently details derived from the decoration of objects of Greek manufacture and blended with the older forms.

It is not clear in what way these and other products of Southern European crafts came into Ethiopia. The old trade which had always existed between Egypt and the Southern Lands must have been maintained in some form or other, at any rate until the Nobate and the Blemyes disorganized the administration of Lower Nubia in Roman times. After the establishment of the Greek colonies in the Delta and the spread of Hellenistic culture by the conquests of Alexander, the Egyptian markets offered an abundance of foreign wares. The most plausible explanation of the presence of Hellenistic-Roman objects at Meroe is that they were imports resulting from this trade. But we also know from Strabo that an Ethiopian embassy visited Augustus on the Island of Samos about 22 or 23 B.C., while the inscriptions left by Meroites on the temple of Philae record several embassies to the Romans after this time. Before that there had been at intervals friendly political relations with the court of the Ptolemies. Thus it is quite possible that the better objects of foreign make found in the tombs were brought back to Meroe by official embassies.

The foreign imports were, however, only a small part of the objects placed in the tombs. As always throughout Ethiopia the burial chambers of every tomb which we excavated had been plundered, and usually very completely plundered. The gold objects actually found by the Expedition were therefore only those overlooked or dropped by the thieves, and were only a small proportion of those originally in the tombs. There had been elaborate
Gold buttons: (a) Horus spearing enemy, from W. 106; (b) pair of small buttons, from N. XXII; (c) two buttons, one from N. XXXIV and the other from W. 140; (d) head of lioness on moon's disc, from N. XXVI; (e) pair of buttons, colored paste filling, from W. 111; (f) pair of buttons, red paste filling, from W. 138.

Gilded mummy-cases, sometimes with inlaid stones, carved wooden beds and toilet boxes with decorated ivory inlays, rings, earrings, necklaces, bracelets, girdles and crowns of gold on the mummies, vessels of alabaster, glass, bronze, silver, and pottery in the burial chambers, mirrors, scepters, wands, bows, arrows, quivers, and even flutes, laid with the mummy. Evidences were found of all these; but the most important objects of local manufacture found by the Expedition were the products of the goldsmiths:

(1) A series of twenty gold seal rings dated from about 100 B. C. to about 100 A. D.

(2) A series of thirty silver seal rings of about the same date.

(3) A collection of nine pairs of enameled gold buttons.

(4) Six pairs of pendent earrings of gold or enameled gold.

(5) Ten necklaces and seven bracelets composed mostly of gold amulets.

(6) A number of gold amulets disconnected from necklaces or bracelets, including a gold scarab and two finely decorated gold caps from wands.

(7) Seven hollow pieces of gold which formed the casing of the end of a six-foot wooden bow and were modeled in imitation of a finely lashed gut binding around the bow.

Mention must also be made of the two stone coffin benches, one in Egyptian sunk relief from the tomb of Ergamenes (200 B. C.), and the other in Meroitic high relief from the tomb of Nahirqa (about 160 B. C.). Several bronze mirrors were found in the S. Cem., one with an electrum handle in the form of a papyrus column with incised details. Among the bronze vessels of local work was a bowl (from the S. Cem.) decorated with a hunting scene and an Egyptian inscription. Two Egyptian stelae from the S. Cem. gave the name and titles of a brother of the king.

GEORGE A. REISNER.

Notes

Two free concerts will be given at the Museum at 8 o'clock on the following evenings: on Monday, April 30, by thirty-three performers from the Boston Symphony Orchestra, under the direction of Mr. Agide Jacchia; on Thursday, May 10, by the Harvard Glee Club, under the direction of Dr. Archibald T. Davison.

Attendance and annual subscriptions increased since free opening. In January, 1918, the Trustees voted to give up admission fees and to open the Museum free to the public. They did this in the belief that the Museum would thus perform a greater public service. And they relinquished for that cause the income from admissions, amounting in 1917 to $3,977.25, only, indeed, about 2 per cent. of the running expenses. During the year 1917 the attendance at the Museum was 224,735; and 1,742 persons contributed $36,491.17 toward the running expenses of the Museum. During the year 1922 the attendance was 330,243; and 2,807 persons contributed $54,594 toward the running expenses. Doubtless much of this 50 per cent. increase, both