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Fig. 1. Semna West Fort, looking south through north-gate; glacis with remains of causeway descending from gate; on the sky-line the New Kingdom temple. March 20, 1924.

Ancient Egyptian Forts at Semna and Uronarti

ABOVE Wady Halfa, near the northern boundary of the Anglo-Egyptian Sudan, the current of the Nile is broken by a series of cataracts, or rapids, for a distance of over sixty miles. The part near Halfa is called the Second Cataract, but beyond that there are numerous smaller rapids each with a separate name. The most wonderful and the most dangerous of the minor rapids is at a place called Semna, about fifty miles south of Halfa. Between Semna and Halfa, including both those places, modern travelers have marked eleven ancient forts, of which eight are of the Egyptian Middle Kingdom (ca. 2000 B. C.). Fortunately we have a list of these forts in a hieratic papyrus found by Mr. Quibell at the Ramesseum and published by Dr. Gardiner. (*J. E. A. III*, pp. 184-192.) The list of forts as identified by Dr. Gardiner is as follows (the letters are those used by Mr. Somers Clark in *J. E. A. III*, pp. 155-179):

Name in papyrus:

1. "Repressing-the ?"
2. "Powerful-is-Sesostris III."
3. "Warding-off-the-Bow-People"
4. "Repelling-the-Nubians"
5. "Curbing-the-Foreign-Lands"
6. "Subduing-the-Oasis-People"
7. "Iqen."
8. "Buhen."

Modern name:

- K. Semna Gubli (or South).
- I. Semna Gharb (or West).
- J. Semna Sherq (or East) (called Kummeh).
- H. Uronarti.
- G. Shalfak (or Sarras).
- E. Mirgisseh (Matuka).
- F. Dabenarti.
- B and A. Both at Buhen, opposite Halfa.

The identification of forts Nos. 2, 3, and 4 is certain because of inscriptions found in these three forts giving the ancient names. The Egyptian name of No. 2, translated above, was *Sekhem-Khakaawra-ma'a-keruw*, but in use the name was sometimes shortened to *Sekhem*, and it is possible that the other names, Nos. 1-6, were also shortened. The names of Nos. 7 and 8, Iqen and Buhen, are older geographical names in use before the Middle Kingdom. The other identifications are in my opinion extremely probable.

These forts have attracted the attention of travelers and archæologists since the early part of the last century but, while many surface plans and a few desultory excavations have been made, no single fortress had been excavated previously to 1923, when the Joint Egyptian Expedition of Harvard University and the Boston Museum of Fine Arts undertook a detailed examination of the whole series beginning at Semna. In 1923-24, assisted by Mrs. Reisner, Mr. George Valliant, and Mr. Prescott Childs, I began the excavation of Semna East (No. 3) and Semna West (No. 2). In March, my chief assistant, Mr. Alan Rowe, and Mrs. Rowe, were brought up, and in April I turned the fieldwork over to him. The next winter the work was interrupted by the discovery of the tomb of the mother of Cheops at the Giza pyramids; the whole attention of the expedition was taken by the work on that tomb until 1927-28. In that winter, I sent Lt. Comm. Noel Wheeler up to continue, assisted by Mr. Phelps Clawson, and the whole of that short season was taken up by the completion of the excavation of Semna West. In the next winter, 1928-29, Lt. Comm. Wheeler, with Mrs. Wheeler to help him, excavated the greater part of the inner fort at Uronarti (No. 4).

Fort No. 1, Semna South, presents an unfortunate problem owing to local superstition. It is a small



Fig. 2. Semna Cataract, lower pool, looking northwest; the date-fleet gathering to pass upstream through the middle channel; 13 boats in foreground and 11 along west bank — total 24. November 17, 1928.



Fig. 3. Semna Cataract, looking east on November 6, 1928. Western channel in foreground; middle channel between two rocky islands; opening of eastern channel beyond the fort; +, New Kingdom temple; X, fort walls; arrow marks, Nile levels. November 6, 1928.

ruin of crude brick about a mile south of Semna West. A few generations ago a man of Semna wandering there with a couple of camels saw that the halfa grass in the fort was good and he cut a bundle in one corner for his camels. He then went to sleep in the shade of a rock about a hundred yards away while his camels fed on the halfa. Awakening suddenly, he saw a white gazelle, seized his gun and shot it. Running to the spot, he found he had shot one of his own camels. The moral was clear; he had cut grass belonging to a powerful "shiekh" and the "shiekh" had punished him. He erected a vault over the northeastern corner of the fort where he had cut the grass and began the cult of the unknown "shiekh" with proper sacrifice. And the "shiekh" has been well respected ever since. Another tale is that during the Wolsley campaign, an Englishman, stationed at Semna to assist the army transport through the cataract, had dug three trenches (which were pointed out to me) in a search for treasure. When shortly afterwards he reached Halfa on his way to Egypt, he shot himself and died. Again the "shiekh" was credited with having punished one who encroached on his domain. Our friends in Semna warned us most earnestly against excavating in this fort and it was clear that none of the local workmen would put a pick in the ground there. It thus became necessary to leave the excavation of fort No. 1 until a more propitious time.

The Middle Kingdom forts at the cataracts from Semna to Halfa have a great importance for the history of the relations between Egypt and Ethiopia. If I may be permitted to recall the historical context, the interest of Egypt in the Sudan (or Ethiopia) has until quite recent times always been in the southern trade. The story of the early trading caravans to Ethiopia represents the King of Upper and Lower Egypt, the Son of Ra, as a great merchant prince importing into Egypt for the royal treasury the ebony, ivory, gold, panther-skins, ostrich feathers, resins, and black slaves of the southern countries. The tribes along the river between the First and Second Cataracts had enjoyed a considerable prosperity during Dynasties III-V (and perhaps before) from the blackmail, or *tongo*, levied on the Egyptian royal trading caravans. As is usual in such cases, the population tended to increase beyond the local agricultural means of support and was forced to increase its demands until the situation from the Egyptian point of view became unbearable. In Dynasty VI, the caravan leaders sought to avoid the exactions of the riparian tribes by opening a new road through the western desert and its oases and so traveling under the protection of much less numerous and therefore less exacting desert tribes. This was the situation when, owing to the breakdown of the Egyptian monarchy at the end of Dynasty VI, the inscriptions fail us for several centuries. The Nubian Archaeological Survey has shown us that during the obscure period between Dynasty VI and Dynasty

XI, Lower Nubia between the first two cataracts was very sparsely populated by tribes existing mainly on the meagre agricultural produce of the country. The local market went on—that cumbersome process by which goods passed up and down the river by exchanges between traders who ranged only from one local market to the next and back again. Market to market exchanges can be inferred even from predynastic times and go on today between the Nubian villages. Some present-day traders even range from Assuan to Halfa, stopping at all villages. But there is no evidence of further royal expeditions to Ethiopia until Dynasty XI and no clear view of the relations between Egypt and Ethiopia until Dynasty XII.

When the curtain rises again, the traffic is passing along the river and mainly by ships. But the trade, instead of depending on caravans sent unsupported to the south, is now carried through a country completely subdued by a well-organized military occupation. It took at least three campaigns to bring the men of "wretched Cush" to a proper appreciation of the long arm of the king of Egypt: the first campaign by Amenemhat I in his 29th year; the second, nine years later, by his successor, Sesostri I; and the third by Sesostri III, eighty-three years after that of Sesostri I. This third campaign was so decisive that during the New Kingdom, Sesostri III was generally worshipped at the Nubian temples as one of the gods of Ethiopia.

The southern products, the ebony, the ivory, the pelts, the incense and resin, the ostrich feathers, the black slaves, were as much desired by the kings of the Middle Kingdom as by their forebears. But in order to maintain the supply of materials from the south, a new method had been adopted as early as the time of Amenemhat I, the founder of the dynasty. He and his successors were much too strong to submit to any interference by savage tribes with their royal interests. The new policy consisted in planting agencies, which were little more than fortified trading posts, in the region between the Third and Fourth Cataracts, and perhaps further south, and linking these outposts with Egypt by the permanent occupation of Northern Ethiopia. Communications were maintained chiefly by water, and the passage of the transport fleets was protected by means of fortified posts along the river. The riparian tribes had been severely handled in each of the three campaigns, but the desert tribes, particularly on the west, were more difficult to handle and were a constant source of danger to the freight fleets and to the smaller land caravans. Sesostri III built the fort at Uronarti in his sixteenth year, according to his granite stela set up at Uronarti, and apparently the enlarged fort of Semna West in his twelfth or thirteenth year. He probably built the fort of Semna East also. Nothing is yet known of the builders of the forts Nos. 1, 5, and 6, but they were in existence in Dynasty XII, as is shown by

their mention on the papyrus list. No. 7 (Iqen) and No. 8 (Buhen, the old fort) were in existence before the time of Sesostris III, and there were Nubian towns of those names as early as the Old Kingdom. It is probable that some of the forts, perhaps the "Walls of Amenemhat" (Kerma) and the old nucleus fort at Semna West, were constructed by Amenemhat I. When the rest of the forts have been excavated, further conclusions on this question may become possible. In any case it is evident that in the latter part of Dynasty XII

general merchandise purchased in Halfa. The down-stream journey is the dangerous part and usually results in the loss of one or two boats every year. The boats are cheap local craft and not difficult to replace in Dongola Province. The return journey is the more arduous as the boats have to be pulled up one at a time where the north wind cannot carry them up against the current of the stronger rapids. (Figs. 2 and 3.)

In ancient times the boats laden with the southern products must also have traveled in fleets which came

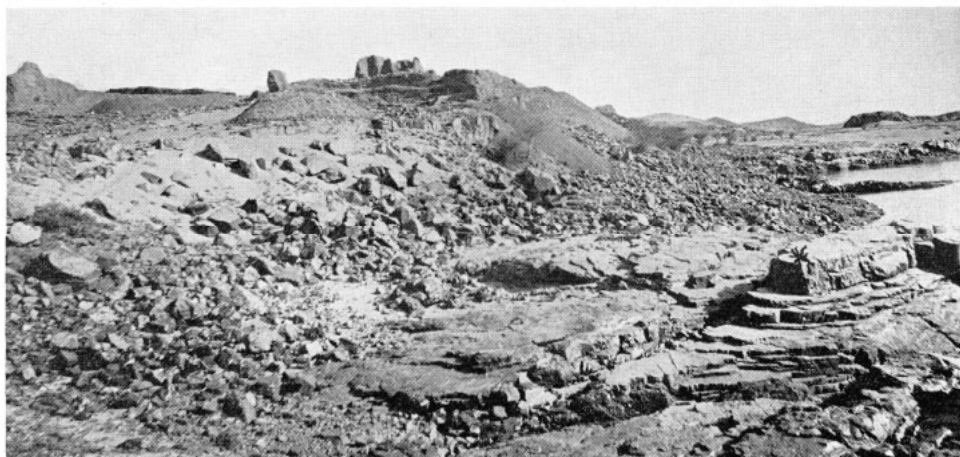


Fig. 4. Semna Cataract; the dry western part of the western channel; the rock marked * is also marked with a star in Fig. 3. In September the water runs through this channel covering the starred rock. Note the collapsed rock cliff on the left and the layered formation of the rock. Looking north. April 3, 1924.

the waterway between Kerma and Halfa was fully protected at those points where trading fleets were exposed to the attacks of the desert tribes by a series of strong crude-brick forts each within signalling distance of the other; and the land roads on both banks were under military supervision.

The historical importance of the forts in this cataract region is clear from the above outline. The significant fact is that they guard the waterway from Egypt to the Southern Lands. It is not generally understood that the Nile cataracts between Kerma and Halfa have always been navigable for light sailing boats. Many records engraved by shipmasters and royal officials are still to be seen on the rocks along this part of the valley; and in the mortuary chapel of Hepzefa at Kerma, a fleet of sailing vessels was painted on one of the walls. Even at the present time, a great part of the date harvest of northern Dongola and southern Halfa provinces is moved to Halfa by sailing boats. The boats move in fleets so that their crews may help one another through the difficult rapids, especially on the return journey. I have been told that several trips are made each high Nile. In November, 1928, the expedition saw the fleet go up through the Semna Cataract on its last trip. The boats come down loaded with dates and go back nearly empty; but some carry small cargoes of

down during the high Nile. In the New Kingdom these boats were made in Ethiopia and formed part of the tribute of the southern lands. In the great stela of Thothmes III, now in the Museum of Fine Arts, Boston, it is expressly stated that he had convoy boats and freight boats constructed of local timber in Ethiopia. Most of these probably went on down to Thebes never to return. In the Middle Kingdom the boats were probably also made in Ethiopia and may have gone all the way to Memphis, but on the other hand the goods may have been transhipped at Assuan. There must have been a certain number of boats which went up stream. The Egyptian produce sent southwards (beads, amulets, perfumes, tools, etc.) was of very much less bulk than that sent to Egypt, and could have been carried in a different type of ship. There was also a constant passing of officials, royal inspectors, and messengers, and men being sent to stations in the south. It is impossible to determine at present just how much of this travel passed by land and how much by water, but it may be reasonable to suppose that a part of this traffic went up by water. Shallow draft rowing boats with crews of eight to sixteen men, such as Egyptian officials used, would have been able to navigate the cataracts from June to January. No doubt there were accidents enough, but the danger

would not have been sufficient to deter the officials from the more convenient mode of traveling.

At Semna a barrier of crystalline rocks crosses the course of the Nile. On the east bank the barrier approaches the river in a line of rocky hills separated by wind-swept ravines, and the last great hill on the river bank is the site of the fort of Semna East. From the fort, at middle and low Nile, the observer looks down on broad water, worn masses of rock cut through in the middle by a single narrow channel only about 120 feet (40 meters) wide, through which the whole Nile river is rushing.

that the Nile flood rose at that time to a level about eight meters (25 feet) above the present-day level. This curious fact has given rise to a great deal of speculation as to the cause of the fall and as to its effect on Egyptian irrigation.

Dr. Ball of the Egyptian Geological Survey determined many years ago that the barrier had been worn down by erosion, but this does not account for the sudden fall and the cessation of the records early in Dynasty XIII. When the Nile flood lessens, the two principal masses of rock in the barrier become islands and the current is divided



Fig. 5. Semna East; rock inscriptions Nos. 29-32, on the granite rock under west side of fort. No. 29, record of high Nile level in the 23rd year of Amenemhat III; No. 30, record of high Nile in the 32nd year of Amenemhat III; No. 31, graffiti of the priest, Senebtifi; No. 32, prayer of the funerary priest, Mentu-hotep. March 16, 1924.

About 500 yards (500 meters) away the rock rises to an undulating plateau which forms the west bank. On the west bank a little below the cataract stands a rock-hill. On this hill, but extending back over the broader plateau, is the fort of Semna West. The barrier is about 200 yards wide in the direction of the river current, and the distance across from fort to fort is, as I have said, about 500 yards. When we were working there we used to call messages back and forth across the cataract. The barrier in the river bed is worn by water-erosion and at high Nile is covered or nearly covered by the water flowing over it. On the rock cliff under the western side of the fort of Semna East there are 18 inscriptions recording former levels of the high Nile, and on the west bank there are 9 more, making a total of 27 records. The usual form of these records is as follows: "Level of the Nile of year 24 in the reign of the King of Upper and Lower Egypt, Nema'atra (Amenemhat III), living forever and ever." Nineteen are from the reign of Amenemhat III, the successor of Sesostri III, who built the two forts; one from Amenemhat IV; one from Sebekneferuw; and four from Sekhemra-Kkuwtauwy; three successive kings of Dynasty XII and one of Dynasty XIII. These marks prove

into three main channels (see Fig. 3), east, middle, and west. During middle and low Nile the water runs only through the narrow middle channel, as I said before. The fact that has heretofore been overlooked is that the western channel in its present form was due to the undermining of the western cliff. The rock at this end of the barrier is a foliated hornblende-schist, differing from the red gneiss of the eastern part of the barrier. During or immediately after the reign of Sekhemra-Khuwtauwy of Dynasty XIII the rush of water along the western side of the western channel brought the adjoining cliff down in ruins. (See Figs. 3 and 4.) Only one of the Nile levels on this bank is in its original position. The others are displaced, the parts of the cliff on which they were inscribed are broken into blocks which have fallen down the bank. The result of this collapse was to deepen and widen the western channel into a spillway through which a much greater quantity of water passed at high Nile than had passed during Dynasty XII. This loss of water through the enlarged western channel prevented the river from ever again reaching the levels marked on the rocks during the reigns from Amenemhat to Sekhemra-Khuwtauwy

The purpose of the records of flood levels at Semna is obscure. In Egypt itself and Lower Nubia the real Nilometer consisted of a graduated scale from which the level was read. Even at Karnak the levels inscribed were marked with the height as read on some fixed scale. At Semna there is a bare mark indicated by the hieroglyphic sign for "level" or by a line drawn through that sign, with no indication of any reference to a fixed scale. The records found are not continuous, but they may have been made continuously from the first year of Amenemhat III to the fourth year of Sekhemra-Khuwtauwy. I imagine that these marks were for local use, and very probably in connection with the navigation of the cataracts. I suggest that a list was kept at Semna West, which recorded the conditions of the difficult places in the cataracts and the dates of the departures of freight fleets from Kerma. By comparing the water level of any year with the previous marks it would have been possible for the competent official to fix the best time for the departure of the fleet and to predict the conditions to be expected at the various rapids.

The two forts at Semna East and Semna West command the passage of Semna Cataract and the north-south land roads on both banks. About three miles away to the north, the fort on the island of Uronarti is clearly visible from the ramparts of both the Semna forts. Uronarti is a rock island in the Nile with the main channel, containing a bad piece of rapids, on its western side. The fort is on a long triangular ridge which runs out in a narrow spur to the northern end of the island. From this ridge the fort at Shalfak (Sarras) is visible to the north.

The three forts, Semna East, Semna West, and Uronarti, are built of the same materials and with the same type of masonry. The walls rest on a foundation platform of granite rubble with a sloping outer surface, or on rock where the rock rises higher than the foundation platform. This rubble platform equalizes the irregularities in the rock surface. On the platform the massive exterior walls of the fort, five to eight meters thick, were built of crude brick to a height of ten meters or more. The brickwork was strengthened by layers of wooden beams laid parallel to the faces and by layers of logs or beams laid horizontally also, but at right angles to the faces. (See Fig. 7.) These beams and logs made the undermining or the penetration of the walls a very laborious and indeed a practically impossible process. The thick walls were recessed on the outer side and were further strengthened by towers at the corners, at the gates, and at other places. The tops of the walls were never found preserved but were, of course, flat and provided with a parapet for use by the defenders. The land gateways were through towers and provided with double wooden doors of considerable strength. Probably the space between the wooden doors was accessible from the parapet above so

that if an enemy broke through the outer door he would be exposed in a very crowded space to arrow fire and the impact of stones from above. The approach to the gateway was always narrow or up-hill. Whenever there was a rocky spur jutting out from the hill, this was protected by a single projection of the main wall which commanded the slopes of the spur and prevented the



Fig. 6. Semna West Fort; river stair, looking west. April 19, 1924.

attacking enemy from gaining the level of the fort itself. Thus the main idea was to force the enemy always to attack up-hill, at a disadvantage against troops lining the parapet of the high wall. In those days walls were scaled from the outside by ladders. But against these forts scaling ladders must have been difficult of use owing to the steep slope of the ground and the height of the walls. It must also have been difficult to gain even the foot of the wall by driving back the defenders from the top of the wall with missiles thrown up against gravity. In fact, as far as we know, none of these forts was ever taken by an enemy during Dynasty XII itself.

In addition to the defensive strength of the forts, the water supply of each was carefully protected in case of a siege by a long covered stairway of granite rubble which led from the fort itself to the edge of the river, at the level of low Nile. The best preserved of these water-stairs is at Semna West. From the highest rock in the fort a crude-brick stairway descended through the massive exterior wall to the top of the rubble foundation platform. Here the stairway entered a covered corridor of granite rubble and descended by ninety-five steps to the edge of the lower pool of the



Fig. 7. Uronarti Fort; outside of massive wall; looking south, with Semna East (marked E) and Semna West (marked W) in the distance; note the horizontal wooden beams strengthening the face of the wall. December 20, 1928.

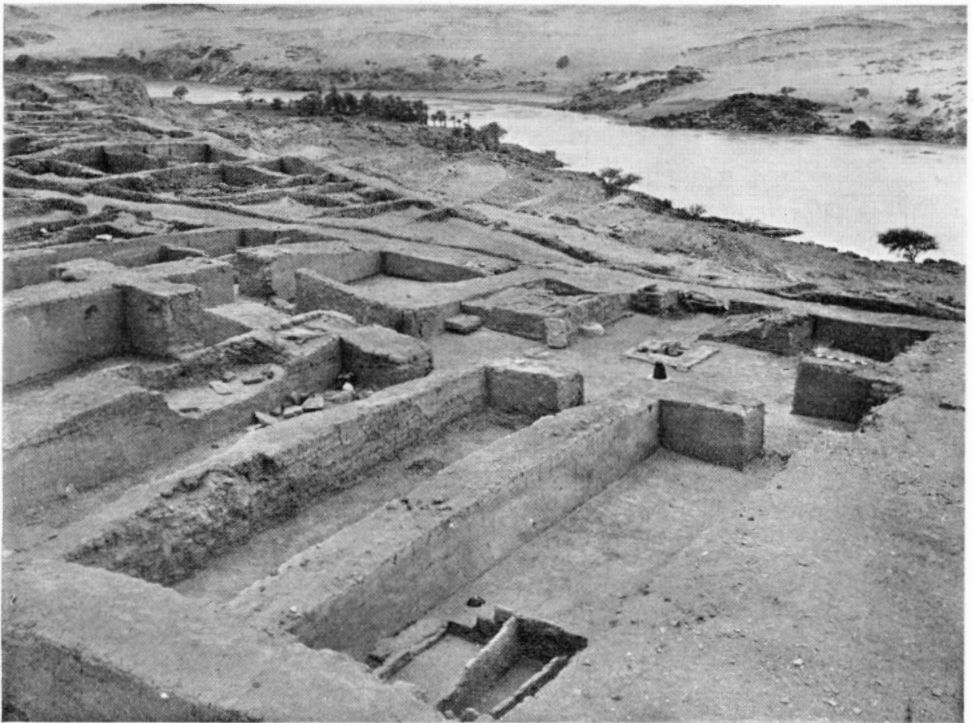


Fig. 8. Uronarti Fort; "Commandant's house" at north end of Main Street; looking southwest across main channel of the Nile; note remains of wooden column. January 14, 1929.

cataract as it is now at low water. Above, the steps were built of granite slabs, but lower down, where the corridor was sunk about a meter in the rock, the steps were cut in the rock. The rubble structure was in fact an extension of the rubble platform of the fort. Through this stairway, no matter at what level the river might be, the garrison could always descend in safety to draw fresh water.

These are the points which the forts have in common, and yet each has a plan entirely different from any other fort. The Egyptian military engineer or architect understood perfectly well the general type of defensive structure needed against the weapons of his day, and devised for each separate site a plan of the outer walls which was an adaptation of the same general principles to the peculiar form or topography of each place. Semna East is on a dome-like eminence with one shoulder of rock jutting out to the south, and lies beside, not in, the line of the north-south land road which passed through the adjoining ravine. The fort is nearly square so that the walls surmount the steep sides of the hill and throw out a spur wall along the southern shoulder. There is only one land-gate at the head of the declivity which leads down to the ravine and it is guarded by a large tower. The water-gate opens through the wall at the northwest corner and enters a covered rubble stairway, the lower part of which is now missing.

The Uronarti fort is not yet completely excavated, but its form, as determined by the shape of the hill on which it is built, is a long triangle from the apex of which a spur runs out on the northern extension of the ridge. It again has only one land-gate through a great tower in the middle of the southern short side of the triangle. Added to this, however, is an outer fort enclosed by a wall abutting on the southern side.

The greatest of the three, the fort of Semna West, has not only its special form but certain features wanting in the other two. The fort is divided into two parts, an eastern and a western. The eastern part is again divided into a northern and a southern part. The northeastern quarter covers a high conical hill of rock and appears to be the original nucleus of the fort. It has a spur wall to the northeast. The southeastern quarter covers the southern slope of this hill and the two together form a long north-south rectangle. The western part was apparently added later and covers the rising ground of the rock plateau to the west of the southeastern quarter. Thus the whole building is L-shaped with the two long sides on the south and along the river. The effect of the situation is that the exterior walls crown a steep slope only on the river side. To offset the absence of a steep approach on the other sides they were protected by a dry ditch bounded by a wall of granite rubble. (See Fig. 1.) This system of protection is used at other forts which stand on a flat surface (Semna South and Mirgisseh). Unlike the other two forts under discussion, Semna West has two

land-gates, one in the north wall and one in the south. These are connected by a north-south street contained between brick walls and paved with irregular slabs of granite. The street—"Main Street" we called it—lies in the line of the great north-south caravan road on the western bank. The road coming from the south went up a rubble causeway, now nearly totally destroyed, to the top of the outer rubble wall, crossed the dry ditch over a culvert and entered the great southern gate, where there appears to have been an office for the control of persons and goods. The caravan then passed up Main Street to the top of the rise opposite the place where later stood the temple of Thothmes III. (See Fig. 12.) From there it descended to the northern gate, over the dry ditch by another culvert, down another rubble causeway, and so on to the north. Egyptian caravans, especially small parties conducting officials, were of course quartered in the fort, and probably Nubians of importance who were in friendly relations with the Egyptian occupation were also quartered there; but most of the Nubian trading caravans probably camped outside near the southern end of the northern pool of the cataract. Just outside the end of the water-stair there is and was a very convenient gravelly shore which may have served as a harbor for boats, and it is beside this shore that I conceive the camping place of the caravans (see Fig. 2) to have been.

Long before we came to Semna three large stelæ of Sesostrius III had been found, two by Lepsius at Semna West and a third much later at Uronarti by another German party led by Professor Steindorff. The first is dated in the year 8 of Sesostrius III and the other two in the year 18. The Uronarti stone mentions that the fort there was built in that year. The stone of year 8 was a boundary stone erected with an order that no negro should pass by with herd or ship, by land or water, except a negro going to the market at Iqen or on official business. There can be no doubt that the forts at Semna were built not only to protect the Egyptian transport but also to control the native traffic by land and water in accordance with this order.

Semna West, finally, had a small postern gate in the river-wall south of the river-stairway, and this appears to have given access to the cliff where the records of Nile levels were inscribed. It is probable that there was a similar postern gate in the western wall of Semna East, also south of the river-stair.

Inside the great exterior walls the three forts were filled with crude-brick structures laid out on similar principles, but with a different plan adapted to the form of each fort. First there was a wall street, 1.3 to 2 meters wide, which ran entirely around the fort just inside the wall. The space inside this wall was divided by cross streets into blocks of houses (*insulæ*). The Middle Kingdom houses are best preserved in Uronarti fort and



Fig. 9. Granite stela of the general, Mentu-em-hat, found in Semna West Fort; was originally in the Middle Kingdom temple.

present three large buildings and numerous smaller structures all on a similar plan, which appear to be barracks or storehouses. (See Fig. 8.) The large building in the southwest corner I believe to have been a temple on account of eleven wooden commemorative models of loaves and cakes found in it. One of these is dated in the 33rd year of Amenemhat III and another mentions the Uronarti fort, No. 4, by its name of "Repelling-the-Nubians." Of the other two, one probably contained the administrative offices and the second the residence of the Commandant. The remaining buildings consisted of very similar blocks of three-room apartments which may have been used as barracks or partly for storerooms.

The size of the garrisons which occupied these forts can be roughly estimated from the quarters provided inside the walls, and their character by the cemeteries and the objects found in the houses. The cemetery of the Middle Kingdom garrisons of the two Semna forts was on the slopes of a hill southwest of the fort at Semna West. It was a typical Egyptian cemetery, in the types of tombs, in the burials, and in the funerary furniture. The bodies in the cemetery included those of women and children as well as men. A number of objects used by women were found in the houses. It is obvious that some members of the garrison were accompanied by their families, although many of the women may have been Nubians, and that the

men were stationed for long periods in Ethiopia. Remembering the space taken by the official buildings, the fact that a number of women and children also lived in the fort diminishes the possible number of soldiers. I estimate that about 50 men could have been quartered in Semna East, about 150 at Semna West, and about 100 at Uronarti (main fort only). But primitive men have such a capacity for crowding themselves that more persons no doubt could have been accommodated, and we must allow double the above numbers as possible, *i. e.*, 100, 300, 200. I imagine that in dealing with a raiding party the Commandant of Semna West, who appears to have controlled the whole district, could have got together from the three forts a force of between 150 and 200 fighting men for operations outside the forts. This should have been quite sufficient to deal with any ordinary raid. In the case of a serious revolt of the whole country, the garrison would have had to sit tight within the massive walls of the fort where, with an assured water supply and stores of grain, they could have held out long enough for troops to arrive from Egypt. In the year 8 of Sesostris III, when the last great revolt of Ethiopia occurred during Dynasty XII, the fort at Semna West had in all probability withstood a siege of several months. But after that time we have no direct evidence of such an occurrence.

We must conceive of the garrison of such a fort as consisting of a Commandant with the necessary scribes and officials, certainly a judge, a treasurer, and one or two learned scribes who acted as priests; for each fort had of course its little temple of crude brick dedicated to the local god. Then there were the officers of the army and the soldiers, and attached to each fort several rowing and sailing boats with their crews, probably Nubians. Quartered in the fort were also the wives and families of some of the officials and officers. Life went on much as it did in garrisons in Egypt itself, except that it was in isolation in a sparsely inhabited foreign land. The forts are in one of the most desolate of regions, a district called at the present day "The Belly of the Rock." At Semna itself there are perhaps in all two or three acres of cultivable land — poor land at that. From there to Uronarti there are a few little patches of river bank that yield a miserable harvest, and at Uronarti there are a few small fields. The rest is sand and rock. From Semna to Halfa is about 50 miles of this desolation and from there to Assuan, the Gateway of the South, there are 214 miles of rocky valley only a little less barren than the cataract region itself. The three forts at Semna and Uronarti were within easy visiting distance and the garrisons no doubt saw something of one another, both officially and socially. In ordinary times there was guard duty, the receipt and despatch of messages, the examination and recording in the books of passing traffic, the accounts of receipts and expenditures, the attendance at festivals in the temple

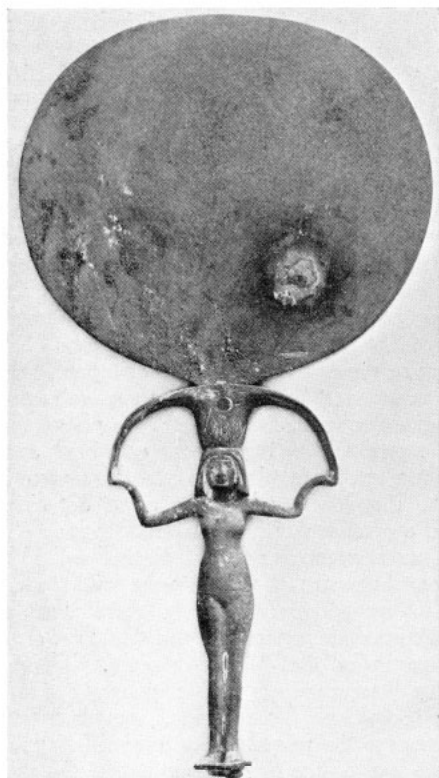


Fig. 10. Copper mirror found in Semna West Fort.



Fig. 11. Two copper *menat* ornaments found in Semna West Fort.

and the cemetery, and as always, marriage, birth, and death. The passage of the freight fleet from the south, the arrival of the grain boats from the north, the harvest of the meagre fields of the district, and the arrival of important officials going and coming, these were the great events. There was occasion enough for the rites of hospitality, the slaughter of sheep, and feasting. And there was not wanting personal friendships and enmities, cunning intrigues, loud quarrels, theft and murder, and appeals to the Commandant and the judge—all the elements that make life interesting for primitive men.

All three forts were occupied during the New Kingdom, but it was only the great West fort at Semna which was remodelled inside, and apparently that fort was the only one in military occupation. In each of the three a new temple was built wholly or partially of stone. The earliest of these was in the fort of Semna West and bears the name of Thothmes I, but only the foundations of a single room and a few fallen blocks remain. South of this were the outlines of several rooms of crude brick which had been partially destroyed when Tirhaqa (688-663 B. C.) built a crude-brick temple here. Just south of the Tirhaqa temple, in the debris, we found a large stone slab (in two pieces) which bore reliefs and inscriptions of Thothmes II and was probably part of the casing of the older crude-brick temple. Thothmes III, in his second year, built a small stone temple (Fig. 12) adjoining that of

Thothmes I on the northeast. The inscription on the east wall outside says: "The Good God, Thothmes III: he has made it for his father Dedwen foremost god of Nubia and for the king of Upper and Lower Egypt, Sesostris III. That which he has made for them is a temple of the good white stone of Nubia, when he had found it of crude-brick, greatly decayed." Thothmes III made additions and alterations to the temple later in his reign; and he built a stone temple also inside the fort at Uronarti and another at Semna East. At Semna East, the temple, dedicated to Khnum-itenuw-peduw and to Sesostris III, was built early in the reign. The front (south) part which still exists shows some curious alterations in the inscriptions. The name of Hatshepsuwt has been erased and that of Thothmes II inserted. But the greater part of this temple fell down or was torn down and rebuilt by Amenophis II whose inscriptions it bears without any reference to Thothmes III. In examining the foundations of the temple of Amenophis II we found four blocks of stone from the original temple of Thothmes III, bearing his name and figure. These had been re-used by Amenophis who turned the reliefs and inscriptions inside so that they were concealed from view.

All these stone temples appear to have been built in honor of the great ancestor, Sesostris III, the conqueror of Ethiopia, rather than to supply any religious need. Thothmes III assigned a fixed ration from the royal income for the upkeep of the

temple services, that is, for the maintenance of the priests, with the idea of restoring the old income provided by Sesostri III for the gods of Nubia. The evidence from Semna East seems to indicate that the fort was not garrisoned in Dynasty XVIII but occupied by a small civil community, the priests of the temple, who probably maintained a sort of guest house for travelers.

The cemetery of Semna West was continued throughout the New Kingdom. Most of the old graves of the Middle Kingdom, which had all been plundered and partly filled with drift sand, were reused in Dynasties XVIII-XX. The new burials were usually laid in the old graves on top of the drift sand, leaving the remains of the Middle Kingdom burials underneath. But a number of new graves were made, and a small cemetery was begun at Semna East. The fort at Semna West, however, was the only one which showed extensive alterations in Dynasty XVIII. There the houses inside the walls were entirely rebuilt, and indeed continued to be rebuilt over and over again until the Ethiopian period. On the other hand, the massive walls of the fortress hardly needed any repairs even as late as the Ethiopian period, and are still preserved to a considerable height. The mud bricks in that arid climate are still marvelously preserved. The natives who built the small village in the fort of Semna East some thirty years ago used the old bricks of Sesostri III. We indemnified the inhabitants and destroyed their huts, and with the old bricks built our camp-house on the old stone platform of the fort. Thus these bricks were used three times after having been made about 2000 B. C.

Many of the important objects found in the fort of Semna were of the New Kingdom, the copper mirrors (Fig. 9), the copper *menat* (Fig. 10), the wooden doll, the copper vessels, the scarab-seals, and the statuettes. There was also a ceremonial axe-blade showing a dog pulling down a gazelle, and a dagger with an ornamented butt depicting a lion biting the head of a prostrate negro.

The most valuable historical material from Semna and Uronarti were however the inscriptions. I have already mentioned the three stelæ of Sesostri III and the wooden objects of the time of Amenemhat III from the old crude-brick temple at Uronarti. Also from the Middle Kingdom were four stelæ and two offering stones dedicated by officials in the old crude-brick temple at Semna West. These stones give the names of

1. The king's sealer, the commander of the army, Mentu-em-hat. (See Fig. 11.)
2. The district Commandant, Makhuw; an invocation to those who enter the temple to utter a prayer for him.
3. The district Commandant, Ameny born of Yaky; the usual offering formula.
4. The overseer of followers, Bebusen; usual offering formula.

5. The district Commandant of the soldiers of Sekhem (Semna West), Ameny.
6. The king's sealer, overseer of ——— (?), Ameny, born of Senebtisi.

The three Amenys mentioned were probably three different men of the same name.

A large number of the graffiti of the Middle and New Kingdoms are inscribed on the rocks, mainly at Semna East. I have already discussed the 27 which are records of the levels of the high Nile during the later part of Dynasty XII and the beginning of Dynasty XIII. Lepsius mentions 76 altogether on the east bank, of which he publishes 47, and on the west bank 11. Of these we could not find nine (three are in Berlin). We photographed and copied 132,—109 on the east bank and 23 on the west bank. Thus while there were nine of the Lepsius list which we could not find, we noted a number which he has not reported. The total number recorded is 141 inscriptions, 113 on the east bank and 28 on the west; and deducting the 27 records of Nile levels, there were 114 private inscriptions partly of the Middle Kingdom and partly of the New Kingdom. These are usually offering prayers to Khnumuw (but also to other gods, Osiris, Dedwen, etc.), sometimes with invocations to the passerby to utter an offering prayer for the soul of the man who inscribed the graffiti. Few of these are formally dated, but the inscriptions of the New Kingdom may be roughly distinguished from the earlier inscriptions by the association of Sesostri III as a god with Khnumuw and by the character of the proper names. Seven inscriptions are formally dated and all of these are from the reign of Amenemhat III. The prayer used in these seven is the traditional formula, "May the King give an offering"; and only once is a god named, Anubis. Two (Nos. 112 and 115), which are not far apart, are identical and read: "Year six under the king of Upper and Lower Egypt, Nema'atra (Amenemhat III). The actual kinsman of the king, his beloved, the judge attached to Nekhen (Hierakonpolis), Simontu, lord of honor. Whoever passes by this inscription, when he reaches home in safety, finds his wife happy, and embraces his kinsfolk, let him say offerings, a prayer for the soul of the judge attached to Nekhen, Simontu." Beside these is a third, by the same judge Simontu, dated in the 9th year of Amenemhat III, which gives the same text but adds a note saying that he was going down stream to Egypt. Near these are two records of "the messenger, the palace door-keeper, Dehuty-hetep." The earlier (No. 117) is dated only to the reign of Amenemhat III, but the second (No. 118) with a text like that of Simontu, is dated like the second Simontu inscription, in year 9. I suppose that Dehuty-hetep, the messenger, came down with Simontu going to Egypt and perhaps went up with him to serve also the three years from the 6th to the 9th of Amenemhat III. In the year 9 some one else made a long inscription (No. 119a), but



Fig. 12. Temple of Thothmes III at Semna West, looking northeast.

this is so weathered that we have not yet been able to make it out. On the west bank the Nile level of year 8-9, which mentions the old officer Sebek-khuw, is also dated to this year (see below). In the year 43 of the same king a "great commandant of the city (Thebes), Neter-puw-Geb," left a record close beside an undated record made by himself. All these dated inscriptions of the time of Amenemhat III are in the second ravine east of Semna East. The greater part of the other inscriptions in this ravine are also of the Middle Kingdom and contain a number of well-known Middle Kingdom names. Here also are a number of rude graffiti of an older period, drawings of cows mainly. The first ravine and the sides of the rock hill on which the fort is built were the favored places for the private inscriptions of the New Kingdom.

Only one of the records of Nile levels contains any mention of persons other than the king, No. 1 on the west bank. This is on a small block of granite in the rubble foundation masonry and is dated in the year 9 of Amenemhat III, the same year in which Simontu, the judge, and Dehuty-hetep, the messenger, stopped at Semna on their way to Egypt. After a rather unusual indication of the Nile level of "year 8 which is year 9" of Amenemhat III, a note is added concerning a visit of inspection (?) by the commandant of the table (?) of the ruler, Sebek-khuw, known as Zauw. This man has left us his autobiography on his stela found at Abydos by Professor Garstang and published by Professor Peet for Liverpool University. Sebek-khuw was born in the 27th year of Amenemhat II and began his military career at the accession of Sesostris III. He took part in the great Nubian campaign of that king and also in an Asiatic campaign. At the time when this Semna inscription was made he was about

74 years old and still on the active list. He had probably come up on a tour of inspection, revisiting the scenes of the fighting in which he took part in the time of Sesostris III. He happened to be in Semna when this record of the high Nile of that year was inscribed, and the Commandant made mention of his presence out of a desire to please the old warrior, who was no doubt his superior officer.

There are many other men who were busy in Ethiopia during the Middle and the New Kingdoms, and the records of the viceroys of the New Kingdom are especially numerous. These concern that period when Ethiopia was administered by a civil organization under the royal offices at Thebes and which ended with the complete Egyptianization of the people of Ethiopia. When in the eighth century under Libyan leadership Ethiopia turned on Egypt and Egypt became a province of the land it had conquered, the fort at Semna West was once more in military occupation. King Tirhaqa built a new temple in front of the old temple of Thothmes III, and Semna West again became an official stage in the road of communications between the Egyptian and the Ethiopian capitals.

REISNER.

Print Exhibitions

THE new exhibitions of prints which opened on October first include: Room 1, German and Italian Engravings of the Fifteenth Century; Room 2, Etchings by Dutch Artists of the Nineteenth Century; Room 3, Etchings by Platt, Parrish, Pennell, and the Morans; Room 4, Turner's Vignettes for Rogers' "Italy" and "Poems"; Room 5, Etchings by Claude Lorrain; Room 6, Eighteenth Century Aquatints; Room 7, The Beginnings of Etching in Germany and the Netherlands.