



The Tomb of Queen Hetep-heres







THE GENERAL PUBLIC is apt to think of archaeological excavation as being a very romantic and exciting occupation. In sober fact it is far more frequently a matter of patience, hard work, and much disappointment. Only after months and sometimes years of labor, first in the field and later in working over the records, do results become evident and add, if we are fortunate, to our growing body of knowledge. Now and then, at rather rare intervals, spectacular "finds" do turn up to act as stimulants and give encouragement to those engaged in the laborious routine of note-taking, drawing, measuring and photographing. Such a one we had the good fortune to make at Giza in 1925.

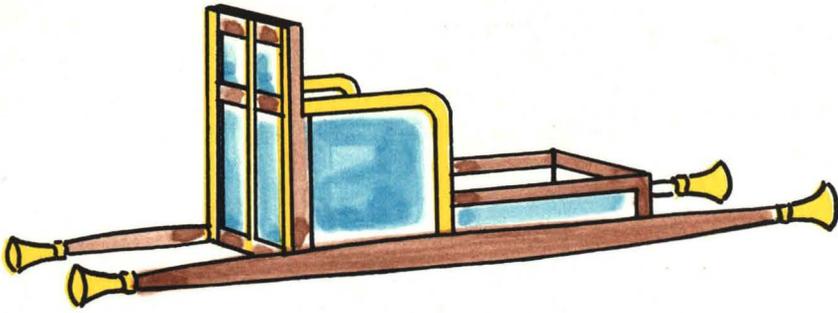
The Expedition had been systematically clearing the great Royal Cemetery at Giza which lies immediately east of the Great Pyramid. Here, south-east of the site where once stood the funerary temple of Cheops, lie the three small pyramids of his queens, their eastern sides, with their small funerary chapels, facing on a street beyond which lie the tombs of Cheops' sons and daughters. One day the Expedition photographer was taking pictures at the northern end of this street, and in setting up his tripod on the rock surface, one of the legs sank into a soft spot. He investigated and discovered that there was a patch of plaster on the surface of the rock running north and south. When this had been photographed and removed, there appeared a trench filled with blocks of dressed limestone which sealed a stairway running down to the south and ending in a short tunnel. At the end of this tunnel the diggers came upon a mass of limestone blocks set in plaster and running both up and down. At this point the excavators paused and began to examine the surface of the street above. Careful sweeping of the rock presently revealed the outline of a square hole cunningly filled with large stones, the surfaces of which had been left rough so as to blend with the adjacent rock and effectively mask the mouth of a pit. Now burial shafts were well known at Giza, but they all went down through a tomb superstructure. This one had no superstructure and had been most carefully concealed by its makers. This secret pit, beneath the masking stones at the surface, was filled with squared limestone blocks set in plaster and quite undisturbed. Whatever it concealed had evidently never been tampered with, and our hopes rose at the thought. There followed weeks of patient work while layer after layer of the filling blocks were hoisted out of the ever deepening pit. Presently the entrance to the tunnel was



2. The deposit on the tomb of Hetep-heres. Back part of chamber.

exposed and passed and the pit continued down, roughly cut in the living rock but rectangular and fairly regular in form. Then an opening in the west wall of the pit came to light, carefully sealed with more limestone blocks. Excavation of the pit was suspended while this blocking was removed, exposing a small cavity or niche in which were found bones of an ox and several jars which had once contained beer. This was a food-offering made for the dead at the time of burial, quite undisturbed. The main pit went on down, still filled with blocks and plaster, and excavating continued. Fifty feet, seventy-five feet — the filling was rough and careless now, and among the limestone blocks were broken fragments of pottery basins which had been used for bringing down the plaster poured over the blocking stones. Finally at ninety feet down the filling began to be more careful. The blocks were neatly laid in rows and layers, set carefully in plaster. We knew that we must be getting near the bottom. On March 8, 1925, a block on the south edge of the pit was removed and behind it appeared a black hole. We had reached the burial chamber. More stones were taken out to enlarge the hole, flash-lights were brought, and we lay down and peered through the opening.

As the beams of the flash-light penetrated the gloom we could make out a small room cut out of the rock, about fifteen feet long and eight feet wide and approximately six feet high. The north-east quarter was filled with a plain alabaster sarcophagus, its lid still in place, and resting on it a mass of gold tubes, somewhat longer than the lid, and apparently hollow. Beside them on the lid, lay the decayed remains of some ornamented object, on which hieroglyphs could be made out, including a cartouche or royal oval with the name of Sneferu, father of Cheops. On the floor, to the west of the sarcophagus, lay a jumbled mass which was quite confusing, but we could make out a copper ewer and basin, a group of small alabaster vases, sheets of gold, and various golden bars which looked like parts of furniture. These lay among a mass of thin gold strips and bits of blue and green faience, together with two palm capitals in gold (fig. 2). At the far end of the little room appeared a piled mass of pottery in utter confusion, and on top of one large bowl, a golden lion's leg from a piece of furniture, upside down. There was not a square inch of unencumbered floor-space anywhere in the chamber. High up in the west wall a long opening was blocked with stones smeared over with plaster, masking a cavity in the rock. Now a great many burial chambers at Giza had been examined by the Expedition, all of them more or less plundered, but nevertheless showing us what was the normal ar-



angement. Generally the sarcophagus stood at the far end, and in this at the funeral, the dead had first been placed and the lid closed. Next to this the more valuable articles of furniture and personal equipment would be stacked, and last would be put the pottery and stone vessels to meet the cooking and eating requirements of the dead, and the containers of food and drink to supply him with food in the hereafter. The arrangement of the contents of this chamber were the reverse of normal: first to be deposited were the stone and pottery vessels, next the furniture and personal toilet requirements of the owner, and lastly the great sarcophagus slid in close to the doorway, and on top of it were laid the golden tubes and the inscribed object. This was entirely abnormal and puzzling, yet it was obvious that there had been no tampering with the contents after it had been placed there nearly 5000 years ago. It was also clear from the cartouche, which could be read, that the tomb had belonged to an important person having some association with the predecessor of Cheops, and the importance of the owner was further indicated by the large amount of gold visible in the tomb.

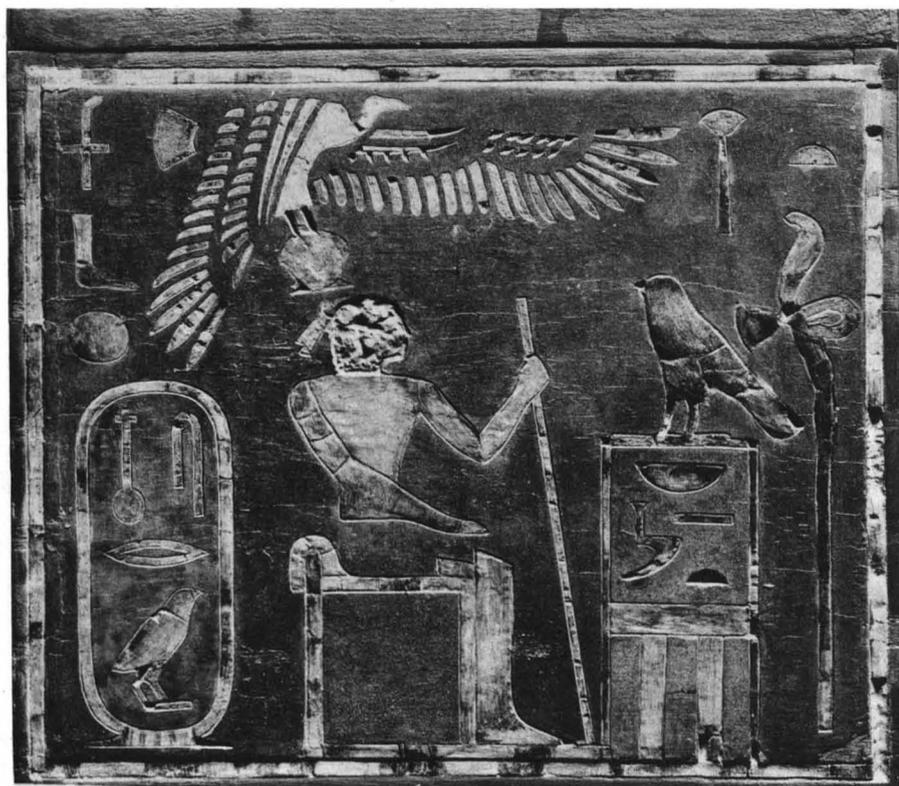
The clearing of this remarkable chamber of its contents took the Expedition the greater part of two seasons, and the subsequent study and reconstruction of its treasures occupied our attention for many years more. Indeed, it was not until 1955 that the final publication of the results was issued by the Harvard University Press. The difficulties entailed were formidable. The tiny chamber lay 100 feet down at the base of a vertical shaft, and lighting had to be devised so that we could see to work and to take the many photographs during the progress of the work, so that the record might be adequate. And the deposit in the chamber lay so thickly everywhere that it was impossible to enter without stepping on something. Originally, the space beside the sarcophagus had been filled with various pieces of wooden furniture cased in gold sheets and largely covered with ornaments consisting of colored faience inlays set in thin sheet gold. The wood of this furniture had completely decayed, leaving the gold sheets and the inlays scattered about in apparent confusion, yet the position of every piece in its relation to others had to be noted and recorded in full detail if we were ever to hope to be able to reconstruct the conditions which had prevailed when the deposit was made. Remember that in the beginning we did not know what to expect. No furniture of the Old Kingdom had ever been found up to this time — we did not know what it would look like, how it had been constructed, nor what the decoration of it would be like. It was thus essential that the record of our work should be as perfect as was humanly possible — no pains or time must be



spared and every minutest point should be observed, noted and photographed. Our ideal was to make the record such that it would later be possible, in theory at least, to put everything back again exactly as we had found it, even to the minutest scrap of gold or faience inlay piece.

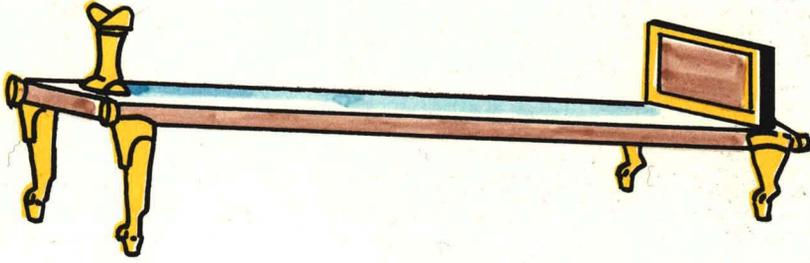
The method adopted was this. Starting at the base of the shaft and looking down on the first square foot of floor space, we made a plan of that area at full size, drawing in every object that could be seen as it lay. To check this we then took a vertical photograph of the same area, being careful to touch nothing. Then with drawing and photograph in hand, we started picking up the objects that had been so recorded, giving each an identifying number as we removed it, and marking this number on the plan. When everything visible on the plan had been removed, other things below became visible, and so the whole process was repeated, and we went down through the second layer in the same way, and so on, until we reached the rock floor of the chamber. In this way we cleared a space next the entrance and were able to advance into the tomb sufficiently to take up a further area in the same way. All the time we were studying the deposit, discussing the details and trying to determine the relation of one scrap to another, constantly making notes of our observations and theories, sometimes only to discard them the next day when further evidence showed them to be wrong, but always putting everything in writing, taking photographs, drawing detailed plans, and giving identifying numbers to everything picked up. In the end, after two long seasons of subterranean labor, we had 1700 photographs and something like 1500 pages of notes and plans as a permanent record of the work. Often we spent long hours discussing what lay before us without touching anything, trying to understand the meaning of how this piece came to lie in a certain position, and what its original relation to that other piece may have been. Often we worked delicately with tweezers, trying to lift one tiny inlay without disturbing others adjacent to it, and laying the group out on trays in their original order, so that we might thus reconstruct the designs which they had once formed. It was hot and stuffy down there, and we had to install a ventilation system with an electric fan, for the great 1000 candlepower lamps which lit our work generated heat as well as light. At first we squatted down in the confined space to work, but as we progressed into the chamber we lay on mattresses or sat on wooden boxes and eventually we were able to move in a small table and chair so as to work in greater comfort.

At first it was quite impossible to identify individual pieces of furniture, but



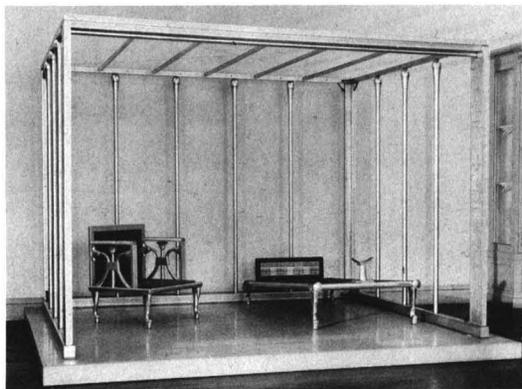
3-4. Details from curtain box of Queen Hetep-heres, Dyn. IV about 2600 B.C.





gradually certain pieces began to become apparent even though their parts were disjointed and fallen out of place. The first piece of furniture to be recognized was the carrying chair. Its main frame had been sheathed in heavy sheet gold, and the pieces which composed it, ornamented with a mat pattern, had retained their shape and, of course, their original dimensions, for gold is one of the few materials which does not alter with the passage of time. In this case we were fortunate in finding still intact inside the gold sheathing some of the original wood which, although greatly shrunken and warped, enabled us to study and recover in detail the method used in making the joints of the carrying chair. This piece, too, enabled us for the first time to identify the owner of this secret tomb, for inlaid into strips of ebony let into its back, were little gold hieroglyphs which formed an inscription, repeated in four different places. Although the ebony strips were no longer preserved, the gold hieroglyphs lay approximately in their original arrangement and we were able to read the inscription (fig. 1) . It said "Mother of the King of Upper and Lower Egypt, Follower of Horus, Guide of the Ruler, Favorite one, she whose every word is done for her, the Daughter of the God's body, Hetep-heres". Thus was the owner identified as a King's mother, a King's chief wife (the titles Follower of Horus, and Guide of the Ruler), and the daughter of a deceased King (Daughter of the God's body). So we found out that Hetep-heres, Queen of Sneferu (whose name we had already found) and daughter of a former king (probably Huni, the predecessor of Sneferu), was the mother of the king who had presented her with the carrying-chair, undoubtedly Cheops himself.

The second piece of furniture which was identified and reconstructed was the queen's bed, which had been laid in the tomb upside-down on top of other things. It too was sheathed in gold, but the center part was a wooden framework let in to the structure, and most probably supporting a laced rawhide webbing to give resilience. The frame was supported on four gold-sheathed lion's legs, the two at the foot being shorter than those at the head so that the bed sloped. To prevent the queen from sliding down as she slept, a foot-board, ornamented with a pattern of faience inlays was provided. We found too a pillow or head-rest of wood, sheathed in sheets of gold and silver, which we were able to reconstruct from the sheathing, all the wood having decayed. There were also in the tomb two arm-chairs similarly constructed, one of which has been rebuilt. It is low and wide so that the queen might have sat on it comfortably with her feet tucked under her, and it was supported on four lion's legs. Under each arm was a de-

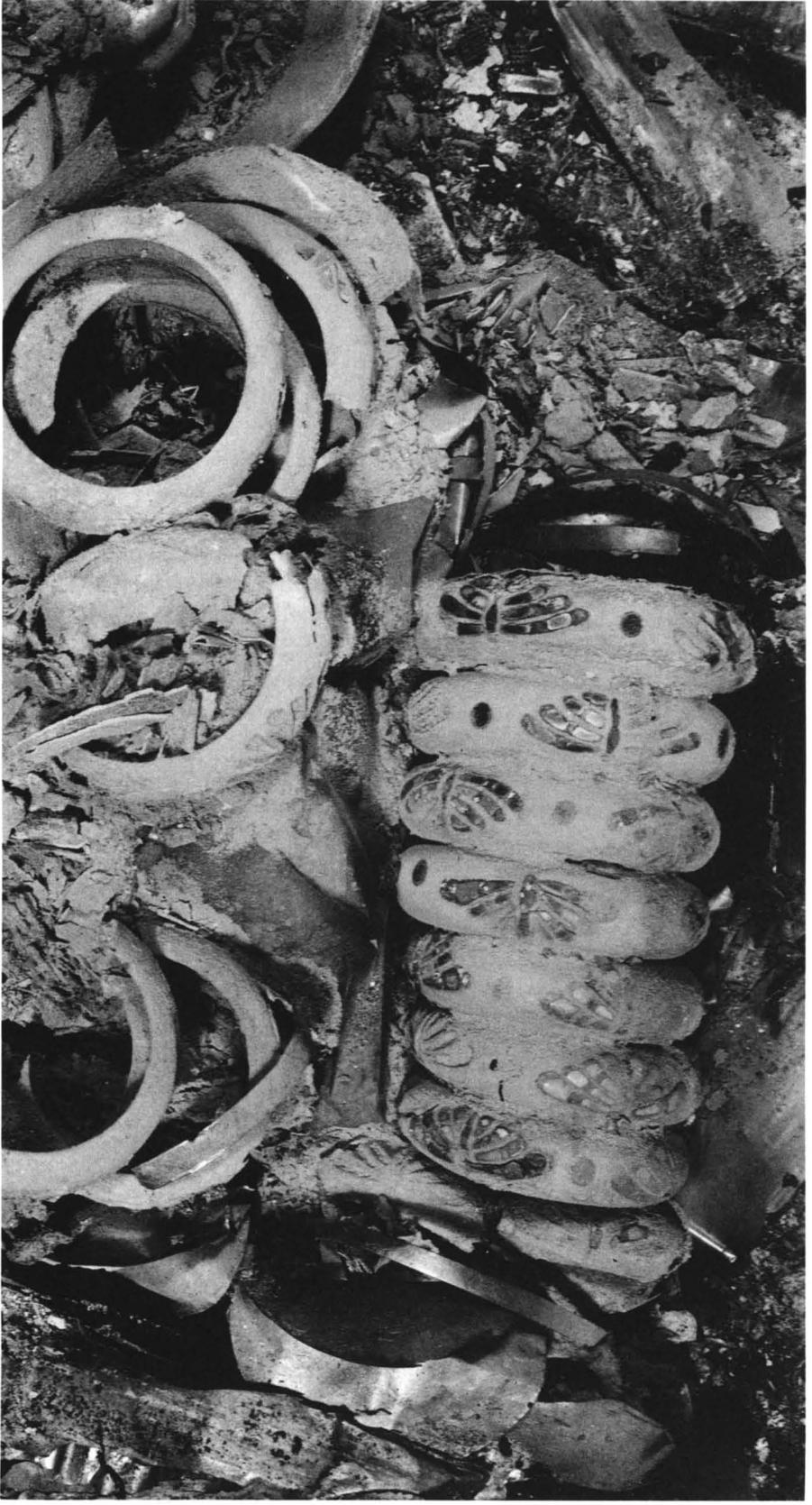


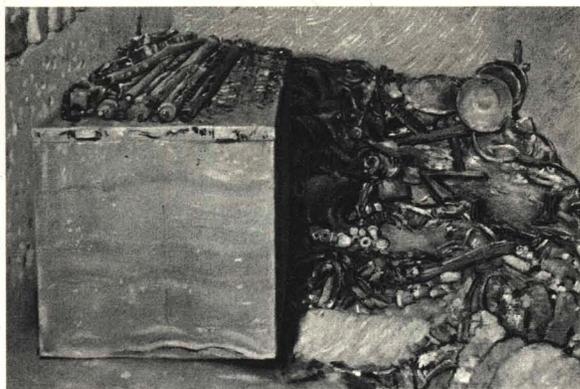
5. The Queen's bed-canopy, bed, and armchair as restored. Wood overlaid with sheet gold.

sign of grouped papyrus plants, the emblems of Lower Egypt. The other armchair was covered with elaborate decorations in inlay or gold, featuring under the arms a hawk with outspread wings standing on a lily, perhaps the emblem of Upper Egypt. This second chair has not as yet been rebuilt, but its design has been worked out on paper.

One of the most interesting finds in the tomb was the queen's jewel box. This lay beside the sarcophagus and had been sheathed inside and out with sheets of gold covered with a mat-pattern in relief. At first its contents were not visible, but as the clearing of the tomb progressed and some of the gold sheets from the box were removed, there came to light a series of silver bracelets (fig. 7), inlaid with butterflies in semi-precious stones, lapis lazuli, beryl, and carnelian. There had originally been twenty of these, ten for each arm, graded in size to fit from wrist to upper forearms. Later on a representation of the queen wearing these bracelets was found in the tomb, so that there can be no question as to how they were used, but at first they were thought by Dr. Reisner to have been anklets rather than bracelets.

Time and space do not permit of a detailed description here of the many other interesting and important finds from this remarkable tomb. They are fully described and discussed in the publication. *A History of the Giza Necropolis, Volume II. The Tomb of Hetep-heres*, published by the Harvard University Press in 1955 over the name of George A. Reisner, completed and revised by William Stevenson Smith. But before continuing the story a few words must be said about the identity of the remarkable gold tubes seen on the sarcophagus lid when the tomb was first opened. These tubes were actually the gold covering of a series of poles, the wood of which had disintegrated. Their lower ends were sheathed in copper and they terminated at the top in bulbous enlargements. Beside them on the lid, and fallen to the floor east of the sarcophagus were many bars and beams, together with copper-sheathed joints, tenons, hooks and staples. The study of these various large pieces after their removal from the tomb required several months, but in the end they proved to be the parts of a unique article of household furniture, none other than a demountable bed-canopy which had been placed disassembled in the chamber, apparently because it was too large to be placed there intact. The canopy consisted of a framework of heavy gold-cased beams, a series of columns, and a set of roofing poles, the whole fitted with copper-sheathed joints and held together by rawhide thongs passing through copper staples, so that the canopy could be easily taken apart, transported in





6. Tomb chamber of Queen Hetep-heres I when first opened: after a painting made on the site by the late Joseph Lindon Smith.

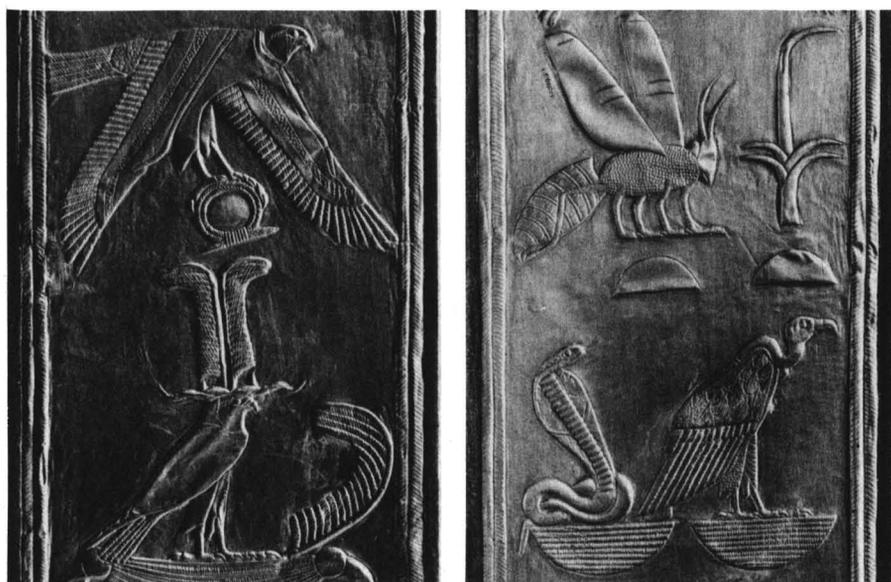
sections, and reassembled. All around the top were a series of little hooks for the suspension of linen curtains, the latter, of course, having completely disappeared. However, the inscribed object found on the lid of the sarcophagus proved to be the decayed remains of a decorated box which had undoubtedly served as a container for the curtains when not in use (fig. 3) . The two principal uprights at the front corners of the canopy bore beautiful relief inscriptions giving the names and titles of King Sneferu, and the canopy can thus be safely taken to have been a gift from her husband to Queen Hetep-heres. It was, in fact, a little portable bed-chamber which could be transported from one palace to another when the court travelled and served to afford privacy to the queen wherever she might be. When these various pieces of furniture were reconstructed with new wood on which the original gold sheathing was placed, they were set up in the Museum in Cairo and there the Queen's bed-canopy may now be seen, minus its curtains, to be sure, but equipped with her bed, arm-chair, and jewel box, much as it might have been used by this great royal lady nearly 5000 years ago. Copies of these pieces, exact in every detail, have been made and are shown in one of the Museum galleries on the ground floor in Boston.

Well on in the second season of our labors in the tomb, the time came for which we had all been waiting. The room at last stood empty, all but the great alabaster sarcophagus, its lid still in place. All these beautiful objects had been

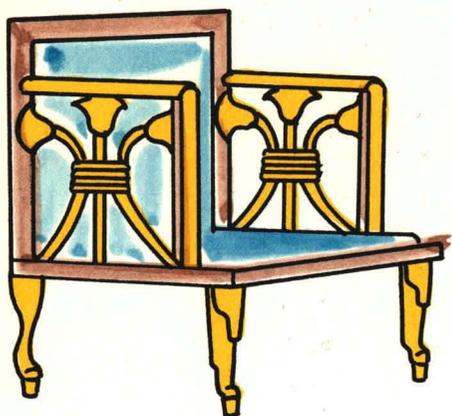
7. The Queen's silver bracelets as first uncovered.



placed in the tomb for the benefit of the queen, to accompany her mummy to the next world. Now at last the coffin was to be opened and we should see her mortal remains, together with the jewelry and other regalia which should adorn it. On March 3, 1927, there assembled one hundred feet underground, a distinguished company. In addition to Reisner, his two assistants and head foreman, there was the American Ambassador, one of the King's Chamberlains, the Director General of Antiquities and the Chief Inspector of Antiquities for the Giza area. At a nod from Reisner, the jacks which had been placed for the purpose began to turn. Slowly a crack appeared between the lid and the box. Little by little it widened until one could see into the upper part of the box — nothing was visible. As the lid slowly rose we could see further into the interior, and finally the bottom became visible — the sarcophagus was empty! No word was spoken, but astonishment and disappointment pervaded the chamber. Then Reisner turned and looked at the plastered niche in the west wall of the chamber. What lay behind it? We had not long to wait for the answer. When the plastered blocking had been removed we saw a low but deep cavity in the rock in which stood a plain square alabaster box, its lid in place. And when it in turn was opened it was seen to be divided into four compartments containing



8. Details from reproduction of jambs on Queen's bed canopy.



all that will ever be found of the mortal remains of Hetep-heres, the four packets of her viscera which, according to Egyptian custom, had been separately embalmed and deposited in a canopic chest.

The fact that this tomb had never been entered by any thieves, that it contained the deposit originally placed in it for the benefit of the queen's spirit in the hereafter, and yet did not contain her mummy, was a puzzle of the first magnitude. How can this unique situation be explained? Let us review the facts revealed by excavation. The owner was the mother of the builder of the Great Pyramid. She had died during his reign, for she is called "Mother of the King". The deposit was made in this tomb during Cheops' reign, for mud seals bearing the insignia of his funerary officials were found in the tomb. But the arrangement of the contents was the reverse of normal. Also in clearing the mass of pottery found at the far end of the chamber, other significant facts came to light. All these vessels had originally been packed in wooden boxes in the tomb, and although these had disintegrated, it was possible to define the limits of each box by the traces of decayed wood running among the vessels. Now some of the pots were broken, and it was not too hard to discover that fragments of the same pots had been originally packed in different boxes — in other words, they had been broken before they were placed in the tomb. Another fact of great significance should also be mentioned. Chips were missing from the joint between the lid and the sarcophagus itself, and some of these chips were found by us in the boxes with the pottery, and they fitted the broken places on the sarcophagus.

All these things had to be explained, and after much thought and study, and with Reisner's profound knowledge of ancient Egyptian customs and psychology, the following account seems best to fit the circumstances and forms at least a plausible explanation of the observed facts.

Shortly after Cheops' accession to the throne his mother Hetep-heres died and, as was the custom, was buried in a tomb near the pyramid of her husband Sneferu, presumably at Dahshur some fifteen or twenty miles south of Giza. Her tomb has not been identified, but Dahshur has not as yet been thoroughly examined. Within a few years, perhaps quite soon, tomb robbers entered her tomb at night, possibly with the collusion of the watchmen, or after drugging or even murdering them. The deed was daring in the extreme, the risk was appallingly great, but the loot expected must have been extraordinarily tempting. They worked in great haste and in constant fear of discovery. Tossing aside and breaking some of the pottery, and upsetting the furniture which barred their passage



9. Detail of deposit on tomb of Hetep-heres.

to the sarcophagus, they roughly pried off its lid and dragged the queen's mummy to the entrance, where moonlight afforded enough illumination for their gruesome task. Ripping off the wrappings they despoiled the body of its jewelry, then fled in haste into the darkness. Soon prowling jackals made off with the dismembered remains of the queen's mummy.

When the appalling facts were discovered by the mortuary priests the next morning, consternation must have been indescribable. Such sacrilegious violation of the sacred tomb of the mother of the all-powerful and divine reigning Pharaoh was unthinkable. At all costs the crime must be hushed up. All trace and knowledge of it must be suppressed. It is probable that the Vizier or Prime Minister was secretly informed, and that he, in dread of the king's wrath, took drastic action. He inspected the violated tomb, had the sarcophagus re-closed, and then quite likely saw to it that everyone with knowledge of the matter was put to death. Then one imagines that he went to the king, in any case a close relative to whom he would have ready access in private. What did he tell him? He may possibly have made a clean breast of the matter, relying on his relationship to protect him from retribution, for we must remember that he was responsible for law and order in the country. But far more probably, he concealed the true facts from Pharaoh. Cheops was in process of building his great

10. Pottery from Tomb of Queen Hetep-heres at Giza, Dyn. IV about 2600 B.C.





tomb, and had just begun the lesser pyramids of his wives to the east. It seems likely that the Vizier may have planted in his mind the idea of moving his mother's burial to Giza so that her spirit might be close to his own in the after-life, and perhaps share in the offerings to be made in his funerary temple which was to stand adjacent to her resting place. In any case, a shaft was dug, and a burial chamber was prepared which from its small size and unfinished state bears all the marks of haste. And when all was ready, the entire contents of the original tomb at Dahshur was transferred to the new burial place. First the pottery and stone vessels were packed in wooden boxes to conceal the damage they had suffered, and were stacked at the back of the room. Then the gold cased furniture, the jewel box and other smaller objects were placed in the western half of the chamber. The alabaster sarcophagus, unopened, was let down the shaft and placed at the east side, and on it were laid the parts of the bed-canopy and the box for its curtains. Finally, the alabaster canopic chest was placed in a niche to the west which was sealed with masonry. When all was in place workmen were set to filling in the shaft, and part way up, with due ceremonies, a food offering for the dead was solemnly placed in the niche and also sealed up.

It would be quite contrary to Egyptian beliefs about the future life of the dead for all this to have been done with the knowledge that the queen's mummy no longer existed. It would have been, from their point of view, quite useless. So we must assume that Cheops was ignorant of the fate of his mother's mummy and that the secret of the plundering of the original tomb had been kept from him. It has taken nearly five thousand years for it to be revealed.



Museum of Fine Arts, Boston

