visible by the presence of living representatives, they can, nevertheless, be made very real by means of the Museum's collection, as well as by lantern slides. In every instance, whatever the subject chosen, the teachers have expressed the greatest approval and the children have never failed to enter thoroughly into the spirit of the work.

In order to test the effect of these exercises on the children's minds and the reliability of their memories, one of the schools participating in the work was asked to request the children to write essays on what they had seen and been told in the Museum. The teachers of another school requested the boys and girls to draw pictures illustrating some phase of primitive life or some particular primitive invention and to explain the device in a few words. The Wharton School, which contributed the essays, sent in a large number of compositions which showed a high average of intelligence in the children and proved the permanent value of our work by the reliability of their memories and the accuracy with which the ideas imparted to them were usually reported. The Brooks School, which was selected for the drawings, also made a return which was particularly pleasing for the skill and good taste shown in the water-color drawings made by the children and in the faithfulness of their memories. In both essays and drawings no one could fail to detect the stimulating influence upon the pupils of having seen and handled the rare and curious objects which come from remote parts of the world or from the distant past. They are being helped to observe for themselves how other people think and act under conditions different from our own.

The humanizing influence of this method of instruction and of these excursions into the past history of our race and into the habitations of unfamiliar peoples, often in a lower state of culture than ourselves, is, in the end, the highest and noblest effect of the Museum's educational work among the school children.

So long as the teachers continue to co-operate with the Museum by bringing their classes here, so long as they enable us to feel by their interest and enthusiasm that our work is of value to them and helps the educational work entrusted to them, so long will this Museum be able to afford the school children of Philadelphia many desirable things and many pleasures which they would otherwise be denied.

G. B. G.

MEDITERRANEAN SECTION.

THE CRETAN EXPEDITION.

THE story of the archaeological discoveries in Crete is now ten years old. Even our school-boys are learning to-day that the labyrinth of Minos has been found and that it was a palace three stories high, with open courts and winding corridors, with storehouses for treasure, a well equipped bath-room and a suite of apartments for the queen that would compare favorably with those of a high-born woman of to-day. But the tale is not yet told. We cannot read the writing of this far-away people of 2000 B. C. We do not know whence they came or whither they later went or how they were related to the Greeks of Pericles' time. All this must be learned by the spade. Only by the patient excavation of site after site can such problems be solved, and it is to the lasting credit of the University Museum and of the people of Philadelphia that they have understood this and have made possible further explorations in Crete.

Two years ago I commenced excavating for the Museum a town situated on a steep and lofty mountain-crag in eastern Crete where the successors of Minos had lived in the days of their declining power. It was in a wild and rugged district where our ponies could scarcely make their way over boulders and along

FIG. 15.—A Vrokastro Shepherd-boy.

dizzy ledges, and where it was difficult to find a level spot big enough to pitch my tent. Our faithful workmen had no other shelter than the small bush huts which they improvised for themselves, and their food was confined to bread and oil with an occasional dish of snails as a relish. But in spite of our hardships and difficulties we accomplished our end, for we found deep deposits of earth crammed with pottery, the very best evidence possible. It seemed, in fact, that we might learn from an extended excavation of this site, especially if we could also find the tombs, the answers to some of the vexed questions as to when and how the Minoan power fell, and it was with this purpose in mind that I returned to Crete last March.

Crete is not an island which is easy of access. This year I tried going by way of Egypt, but the same difficulties beset me as heretofore. The steamers were small and dirty and we were landed in rowboats at 1 A. M. in a heavy sea. It was two days before my companion and myself had sufficiently recovered from seasickness to start on our journey eastward. In the meantime I had opportunity to see the new accessions of the Candia museum and to arrange with the government for our excavation permit.

All traveling in Crete is done on horseback. Camp beds and the necessary food and clothing are carried on the packsaddle of the muleteer. There is no pleasanter mode of travel. The Cretan pony gets over the ground easily with a quick, trippling gait, and the grave courtesies and simple hospitality of the islanders are a never-failing source of pleasure. Such travel is not dear. Two francs will pay for the evening meal and an empty room in which the campbed may be set up. The Greek monasteries also make a practice of receiving guests, and these are the most delightful places to stop, for they are clean and are built in high and picturesque places. I visited one this year which was a miniature Amalfi. The abbot and monks will accept no pay, but the guest is expected to leave an offering before the eikon in the church.

Our museum is fortunate in being allowed to use as excavation headquarters the comfortable house of the director of these excavations, Mr. R. B. Seager, at Pacheia Ammos. Here we stayed until the rains were over, making ready to go into camp. There were tents to patch, stores and kitchen utensils to arrange for, and wheelbarrows and water barrels to overhaul. In the meantime we dug a few stray tombs at Kavousi, to which our attention had been called by our Kavousi workmen.

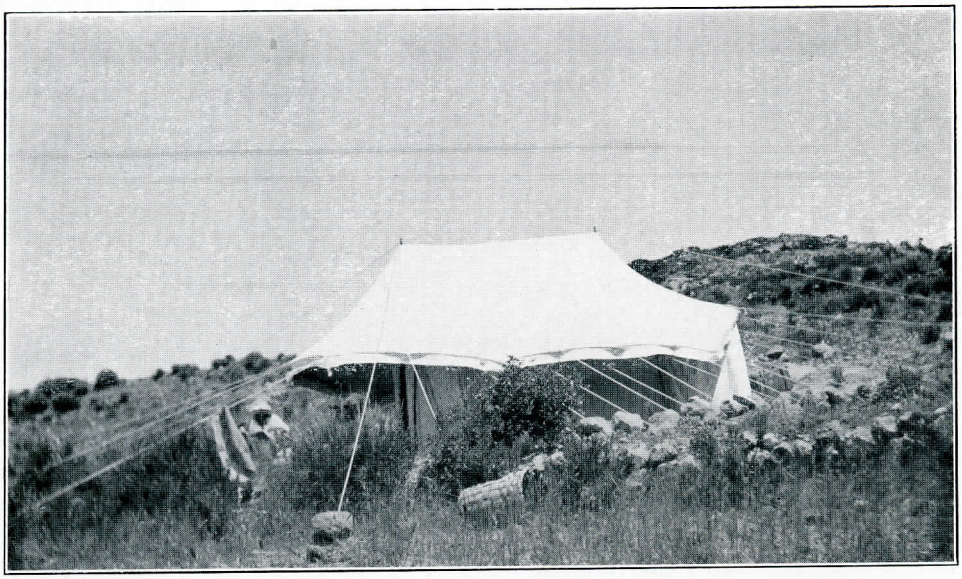

Fig. 16.—Excavator's Tent on Vrokastro.

On the last of April we were ready. A Turkish caique brought the picks, spades and wheelbarrows as well as the tents and camp supplies to a cove at the foot of the mountain and from there our workmen, with the help of a few pack animals, carried them to a little plateau half way up the mountain, where we had decided to pitch our camp this year. A small stone hut was secured for a kitchen by the payment of ten francs for the season.

We had no neighbors save the shepherds who pastured their flocks close by, but every night and morning the well of water near my tent presented a lively scene when the women and children from the village below stopped to water their "possessions"—generally a donkey, a goat and a pig apiece—on their way to and from their fields. This well of water was, in fact, the social centre of the place, all the more so when the women learned that I would allow them to inspect my tent. Sometimes at evening when I rode home from work, I would find a dozen waiting for me to show them the wonders of my tent, which consisted of a camp bed, a table, and two chairs.

On May 1st we began digging in earnest with about fifty men. I set them first to clearing away brush and stones on the north face of the summit where unusually good walls were peering out from among the bushes and where I thought well-preserved houses might be found. But I also started another project. Two years ago under the guy

ropes of my tent I had noticed a heap of stones that looked like the top of a "bee-hive" tomb, but I had not investigated it because of the inconvenience of disturbing my tent. This year, however, I resolved to lose no time in trying this spot and sent one of the oldest and most trusted workmen there. The second day when on my rounds I visited him, he showed me a piece of bronze which I recognized as a piece of a foot from a very fine bronze tripod. He also pointed in triumph to a small pile of teeth and of human bones he had found. He had not yet cleared any of the walls of the tomb, but that it was indeed a tomb there could be no doubt. During the next week I spent most of my time sitting on the edge of this excavation, for every few minutes Nikolaos would hand me something, another piece of the tripod, a bronze safety-pin, a porcelain bead, or a bit of pottery. So much pottery came to light that we were able to put together forty vases, more than all the other workmen together found during that first week. The porcelain beads particularly interested me, for they looked to be Egyptian. I had already filled all the small boxes I had with them when Nikolaos, who was full of jokes about the value of beads in the next world, suddenly cried, "Behold, I have his seal too." And sure enough, there was a porcelain seal with Egyptian hieroglyphs, and the same day he found five more. I cannot read hieroglyphs; we had, accordingly, to wait until two weeks later we chanced to have a visit from an English Egyptologist. He pronounced them to be commemorative probably of the XXII dynasty, from about 950–850 B.C. We had thus accomplished one of our purposes, for we had obtained evidence for dating the fall of the great Minoan civilization.

Fig. 17 —Packing up the boxes of Antiquities.

I had thought that with one tomb found the cemetery of our town was already discovered, and that it would be an easy matter to find more tombs.

But such was not the case, for the tombs proved to be widely scattered. We spent days in digging trial trenches which yielded absolutely nothing. We did, however, find more in the end, six of the "bee-hive" type and at least fifty shallow graves which yielded quantities of vases and many bronze safety-pins or *fibulæ*.¶ It is often said that Queen Victoria invented the safety-pin. But it was only a reinvention; it had been in use throughout the first millennium B.C. These pins, moreover, are of singular value to the archaeologist, for according to their shape and size the peoples who used them may be classified. We had therefore good evidence for the solution of the other archaeological problem as to who these people were. It was now the middle of June and the heat was exceedingly fierce. The women and children no longer returned to the village for the night, but whole families were camping in the fields for the harvesting season. Near every threshing-floor a family was encamped under a tree, while men, women and children helped with the work of reaping, threshing and winnowing, all of which is accomplished by the most primitive methods. We were daily visited at our tombs by these neighbors, who brought us fresh almonds, apricots and plums tied up in the corners of their aprons or handkerchiefs, and were delighted to receive in return presents of pins with colored heads.

In spite of the heat there was one thing more to accomplish. One of our basket-boys had brought me excellent potsherds from a field in the plain below close to the sea, and I was eager to try there for a week to learn if it was a site worthy of further excavation another season. Unfortunately the Romans had been there before us, so that much of the pottery was badly broken. Some beautiful specimens of the very best period were, however, recovered during the week that the excavation lasted, and there is every evidence that much more lies hidden away beneath the earth.

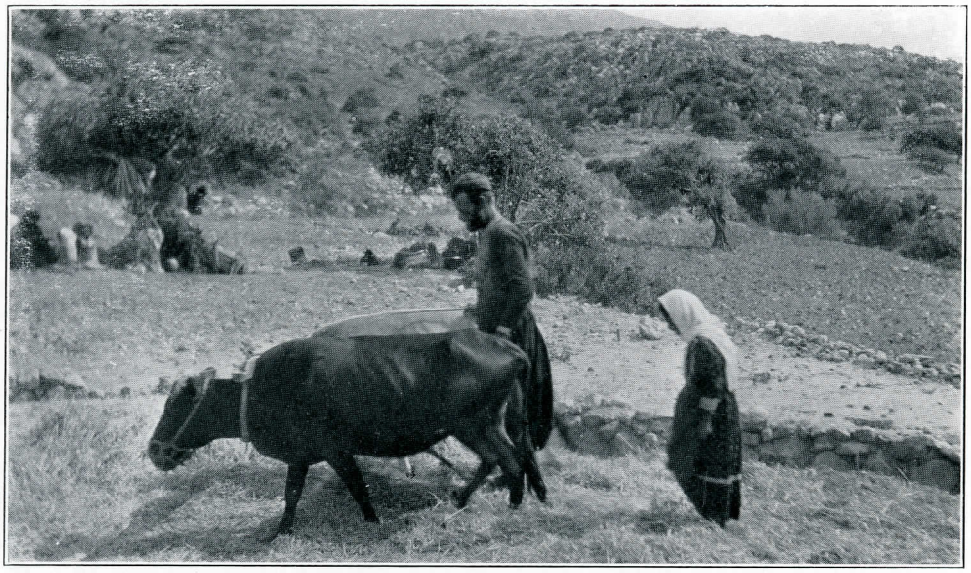

FIG. 18.—Cretan Method of threshing.

But by this time our money was

exhausted and we were obliged to send for the Turkish caique, in which all our goods and chattels together with our precious finds were shipped to the house.

A few days were spent there in sorting pottery and then I packed up the antiquities in fifteen cases and set sail with them in the small coasting steamer for Candia.

The authorities of the Candia Museum with their usual kindness gave me the use of a large cool basement room where I could spread out my pottery and bronzes on long tables. Here I worked for ten days, photographing and taking the final notes and measurements. The last task of all was to petition the Cretan government in the name of the University of Pennsylvania Museum for a consignment of the objects found. I asked for over sixty pieces which, if they are granted to us, will reach the Museum this autumn.

E. H. Hall.

AMERICAN SECTION.

THE FIESTA OF THE PINOLE AT AZQUELTÁN.

By the first of January, 1912, I had already spent nearly three weeks in the little pueblo of Azqueltán, and had been accepted as a permanent resident. This little village lies at the bottom of the barranca or cañon of the Rio de Bolaños, in the northern part of the Mexican State of Jalisco, and on the edge of the Huichol country. Here dwell the remnants of the Tepecanos, or, as I prefer to call them, the Tepehuán of Azqueltán, for they claim, and probably with justice, to be an isolated branch of this greater nation.

The little pueblo, reported to be so aboriginally clannish, so absolutely isolated, by Hrdlička in 1903, has since greatly changed. The village is now full of mixed blood, the houses are mostly of adobe; nothing but Spanish is ever heard in the houses, and most of the older customs are entirely forgotten. Only in the isolated little ranch houses, situated within a five-mile radius of the pueblo, are found the conservative persons of the older generation who still cling to the customs of their ancestors.

Following information obtained from natives with whom I had established relations of confidence, I started out about dusk with Eleno, and following a winding trail that led toward the Cerro de la Niña Encantada, arrived an hour later at the isolated ground which had already been prepared for the ceremony.

The square or patio, according to my observations, was about thirty feet in width, the size of all patios which I noticed in this part of the country. It was a roughly circular enclosure, cleared of all plant-life and free from stones. On the northern side several trees marked the outer limits, but on the south a ring of stones was placed. Approximately in the centre was a pile of flat stones covering a heap of ashes, this being the fireplace necessary to all ceremonies. In a rough circle without were placed seven large stones partly sunk in the earth, these forming the seats for the communicants at the ceremonies. This circle of seats was approximately fourteen feet in diameter, leaving an outer circle or path about eight feet in width for the dancers. To the east the circle became elongated, like the neck of a pear, and here, just beyond the outer diameter, lay the altar. This was a rough structure of stone, five feet in width and a foot in height, roughly circular and flat on the top.

A fire was burning in its proper place in the middle of the patio and several figures were gathered around it. With-