II.

NOTES ON A COLLECTION OF WORKED FLINTS FROM THE NEIGH-BOURHOOD OF LUXOR, EGYPT. Now presented to the Museum. By JOHN FINDLAY, F.S.A. Scot.

The majority of the flints exhibited (and now presented to the Museum) were found near the edge of the Arabian desert in the neighbourhood of Luxor—the site of the ancient Thebes. The Nile valley is here about 11 miles broad, measuring from the base of the hills on the one side to that of the hills on the other. On the western bank the hills rise almost directly from the edge of the cultivated land, but on the eastern bank there is a strip of desert some 4 miles broad, between their base and the abrupt edge of the arable land. The surface of the desert is gently undulating, but the differences of level are comparatively slight, and the general appearance presented is that of a smooth The surface is soft and yielding, and is strewn with sandy plain. fragments of cherty limestone of all colours and flint nodules. Some of the flakes exhibited were found on this level tract within a few hundred yards of the cultivated ground. Among them are one or two which have evidently been used as gun-flints, but the others are entirely different in character. All are small, the nodules found on the surface of the desert here seldom exceeding 2 or 3 inches in diameter.

The greater part of the collection, however, was found on the top of a small hill, called by the Arabs Gebel el Gheir. This hill is an outlying spur of the vast chain of mountains which flank the Nile valley on the east, and rises abruptly to a height of about 100 feet above the level of the desert. It is composed of nummulitic limestone, in which are embedded numerous flint nodules. Here and there on the sand drift which covered the slopes of the hill were flakes of flint, or nodules from which flakes had been chipped. One of the cores found here is extremely curious, as close beside it was found the piece which had been chipped off it. The two pieces fit exactly, but on putting them together two gaps are left, showing that two flakes

had been taken off the larger piece after the piece found was broken off. The top of the hill was level and entirely free from sand, and this surface was strewn with flints of all sizes, forming a dark layer on the surface of the brilliantly white limestone. A cursory examination of them showed that the majority had been broken, and the ground was littered with flakes and cores. The whole place, in fact, presented the appearance of a regular manufactory of flint flakes. Not only was the rough material abundant, and free from the sand that hid it on the slopes of the hill, but every here and there large blocks of stone protruded from the level surface, as if intended by nature for anvils on which the flints could be worked. It is the place nearest to a large area of cultivated ground at which flints are to be found in any large number, and any one wandering in the desert in search of them would naturally light upon it. Some of the flints bear traces of secondary working along the edges. One is worked into the form of a borer, and two or three have been chipped into forms resembling the "scrapers" which are of frequent occurrence in all collections of flint implements. Most of them, however, are merely rough flakes, the probability being that they were chipped off there and taken away to be finished afterwards. Perhaps the ancient inhabitant of the Nile valley had as great a horror of the desert as his modern successor. Similar places in the neighbourhood of Thebes have been described before, but most of them are on the western bank of the river, where the hills are nearer and more readily accessible. As far as I can ascertain, this spot has never been noticed. The ground in the neighbourhood of the Tombs of the Kings and the ridge which separates the eastern valley from Der el Bahari has been carefully examined by Sir John Lubbock, and the flints which he found, and which are engraved in the Proceedings of the Anthropological Institute, are very like mine. On that side of the river I picked up a good many flakes and cores, but never succeeded in finding so many together as at Gebel el Gheir. I also found one or two flakes in the neighbourhood of the pyramids.

Finished flint implements of good workmanship are comparatively rare in Egypt, though a few worked flints are found in some of the tombs. Nor is this wonderful. Every year the inundation spreads

a fresh layer of soil over the land, so that the relics of a Stone Age are hidden deep below the present surface. A few large flint knives known as embalming knives are found, and one dealer in Luxor had several of them. They were about 7 or 8 inches long, and were wonderful pieces of workmanship, the one side being polished and the other beautifully rippled. The only other flints which the dealer



Fig. 1. Flint Implement, from Luxor, Egypt (actual size).

had were a thin flake like a lancet, and several pieces with serrated edges. One fragment, which I procured, of an extremely slender and acutely pointed implement, minutely serrated on the one side and more roughly on the other, indicates a degree of dexterity in flint-working rarely exemplified even among the finer products of prehistoric handicrafts. It is here figured of the actual size (fig. 1). He had also a bow and set of arrows. Most of the arrows were broken, but one retained its point, which consisted of a thin T-shaped flake of flint, fixed with the broad end outwards. It was fastened on with a sort of putty. He told me that there was no demand among his customers for rough flint implements, and that he had recently refused to purchase a large collection offered to him by an Arab.

Though finely finished flints are rare, those such as I found have been found in large numbers on the edge of the Nile valley, and during the last twenty years or so they have given rise to a considerable amount of controversy. M. Arcelin, who seems to have been the first to call attention to them, accepted them as indications of a Stone Age in Egypt, and Hamy and Lenormant, who described several manufactories in the neighbourhood of Thebes, adopted this view. Egyptologists, however, were extremely loth to admit the existence of a Stone Age in Egypt, and Lepsius maintained that these fragments were natural products caused by sudden changes of temperature. Chabas was of the same opinion. This view was, however, easily proved to be untenable, and a compromise effected, of which Mariette was the chief exponent. He admitted that these flakes were the work of man, but maintained that they were fashioned in historical times.

He based his contention on the fact that flint implements are often found among the funerary objects deposited in the tombs near Thebes, and that flint implements were used for various sacred and ceremonial Herodotus mentions that an Ethiopian stone was used in the process of embalming, and stone knives seem to have been used for circumcision. His view is also borne out by the discovery of wooden sickles with serrated flints inserted in them by Mr Flinders On the other hand, as Petrie in tombs of the 12th and 18th dynasties. Sir John Lubbock points out, flints are never found among the debris of Egyptian dwellings, and cannot, therefore, have been used to any large extent. At the same time their use for certain ceremonial purposes bears the appearance of being a survival from earlier times when flint implements were in general use, and was, as he puts it, a "superstition" in the literal sense of the word. Their use in historical times, instead of being an argument against a Flint Age in Egypt, is rather a proof that there was such an age. In recent years a large number of flints have been found in different parts of Egypt by Sir Richard Burton, General Pitt Rivers, Mr A. Jukes Browne, Mr R. P. Greg, Mr Havns, and others, while evidence was gradually accumulated to show that some of them at any rate date from prehistoric times. M. Zittel has found them in parts of the Libyan desert which are almost inaccessible, and which could not have been inhabited in historical times, while General Pitt Rivers has found worked flakes embedded in the conglomerate out of which Egyptian tombs have been excavated.

As far as those exhibited are concerned, their age can only be determined by their form and the character of their surfaces. It should be remembered, however, before drawing conclusions from their superficial character, that the conditions under which flints are found in Egypt are different from those obtaining elsewhere, and that, instead of being embedded in damp soil, they have been exposed to the action of the hot dry air of the desert, with its blasts of drifting sand. In considering their form we are on safer ground; and the fact that many of them resemble implements which undoubtedly belong to a Stone Age is a very strong argument for ascribing them to this period,

while the numbers in which they are found show that when they were made, flint implements were in general use for many purposes, and not only employed in a few religious observances.