ON SOME FUNERAL WREATHS OF THE GRÆCO-ROMAN PERIOD, DISCOVERED IN THE CEMETERY OF HAWARA.¹

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Through the kindness of Mr. Flinders Petrie I am enabled to exhibit here this afternoon a series of ancient funeral wreaths and plant remains, which were discovered by him last year in the cemetery of Hawara, Egypt. They form but a portion of those which were exhibited last summer at the Egyptian Exhibition, Piccadilly, but as they were not then arranged in glass cases, and as the space at Mr. Petrie's disposal did not permit of their being properly set out and arranged, they attracted but little attention. At the close of that exhibition last July the whole collection was placed in my hands to be botanically examined and divided into sets and arranged for the museums of Kew, South Kensington, and Leyden. The Kew set, which is by far the most complete one, I took (at the request of Mr. Thiselton Dyer, the Director of the Royal Gardens, Kew), down to the Bath meeting of the British Association last September, and read a paper on it before the Biological section, which has since been printed in extenso in Mr. Flinders Petrie's Hawara, Biahmu and Arsinæ. In that paper, however, I only dealt with such points as I considered were of peculiar interest from a biologist's point of view, and did not touch upon the archæological value of the collection. Interesting and, indeed, important as this is, I shall only be able to briefly touch upon it in the present paper.

I have lately heard from Mr. Petrie that he has made a further discovery of wreaths and remains of plants

¹ Read at the Monthly Meeting of the Institute, June 6th, 1889.

at Hawara. When these arrive in England I shall immediately begin to work them out, and when I have done so I hope to publish a complete monograph of the whole collection, illustrated by photographs or autotypes of the wreaths, and botanical drawings of the plants.

In the present paper therefore, I shall confine myself to giving a description of some of the more interesting objects, and point out the light that they throw upon the

writings of classical authors.

It may be well, however, at the outset to mention that they were all found in coffins, which, from the style and manufacture and the decoration of the mummies found in them, Mr. Petrie attributes to the first century, B.C. "It was in this period," he writes, "that the decoration of the Hawara mummies came into the hands of Greek workmen" and that a colony of Greeks settled at Hawara.

This is interesting, for, as I shall endeavour to show, not only did the Greeks assist in making the coffins and in decorating the mummies, but they also clearly had a hand in the manufacture of some of the funeral garlands. Several of the wreaths, such as those of narcissus flowers, roses, and lychnis flowers, are undoubtedly of Greek manufacture. These flowers are not indigenous to Egypt, and, with the exception of the rose they must have been introduced from Greece. The manner in which these wreaths are made, is also quite different from any that have been previously found in Egypt, and coincides more with the pattern of the Greek and Roman examples described by Athenæus and Pliny.

There are, however, several kinds of wreaths in the Hawara collection which have undoubtedly been made by Egyptian hands. This type, for instance, is, I believe, made on a purely Egyptian pattern. It is true that no wreaths like it have ever before been found in the tombs, but a garland made on a very similar pattern is represented in a tomb painting of the eighteenth dynasty at Thebes. Another wreath found at Hawara is made on a pattern which frequently occurs in the ancient Egyptian tombs. I have not the wreath here (it is now in the Natural History Museum at South Kensington), but these fragments, of

¹ A wreath was here shown by the Author

another wreath of the same pattern (which were discovered in a tomb of the Ptolemaic period at Thebes, and which Dr. Pleyte kindly forwarded to me from Leyden), will serve to illustrate the style. Another kind of wreath—the immortelle—discovered at Hawara, also appears to be made on an Egyptian pattern, but of this I shall speak more fully further on.

The wreaths discovered by Mr. Petrie may therefore be classed under the two following divisions: those made by the Greeks and those made by the Egyptians. I will first

describe those of Egyptian manufacture.

1. The most ancient type is most probably this one,1 for as I have already remarked, wreaths made in exactly the same manner have been found in tombs of the eighteenth dynasty. It is made of mimusops and olive leaves. The mimusops leaves are, as may be seen in this fragment, folded length-wise in the middle, then folded again in the contrary direction over a strip about \(\frac{1}{6} \) inch wide of a leaf of the date-palm. In the fold of each mimusop leaf, olive leaves (which, it is interesting to note, are not leaves of the common olive but of a rare Nubian variety) are inserted in such a manner that they are fixed in the leaf as in a pair of pincers. Then with a finer strip of the leaf of the date palm than the central one, they are stitched through and securely fastened together in long rows side by side and all pointing in the same direction. It is probable that these are the "socalled Egyptian Evergreen Garlands" which are alluded to but not described by Plutarch, Athenæus, and Pliny.

The second garland to which I would call your attention is made on a very complicated pattern. It consists of a number of small nosegays (about eighty go to the foot) bound by strips of pith on to a thick stem about 4 ft. long of the Egyptian papyrus. (Only a portion of the wreath is here exhibited for it has been cut into three pieces.) The nosegays are of two sizes. The smaller ones merely consist of a piece of papyrus stem about $1\frac{1}{2}$ inches long, round one end of which are bound rose petals. The larger ones are more complicated and appear to have been made in the following manner: a piece of pith about two inches long by a quarter of an inch

¹ Specimen exhibited.

in diameter is first taken and round one end of this a rose leaf is so fastened as to cover the end entirely with This forms as it were the foundation of each bunch. Around the same end again a thin slice of pith about $2\frac{1}{2}$ inches long by $\frac{3}{4}$ inch wide is rolled so as to form an inverted cone. A number of the scarlet berries of the woody nightshade are then taken and threaded on thin strips of the leaves of the date-palm, the ends of which strips are turned down and fastened (thus) so as to secure the berries from slipping off. These little bunches of berries were then placed immediately outside the inverted pith cones, and fastened by another thin band of pith around which again a row of pink lychnis flowers were fixed. These small bunches and the manner in which they are secured on to the papyrus stalk may be well seen in this specimen. These very complicated garlands are, I believe, nowhere mentioned in classical or in native Egyptian literature, but the lychnis flowers, of which some of the small bunches are composed, were among the Greeks favourite garland flowers. They are mentioned as having been used for this purpose by Theophrastus, Athenæus, and several of the old Grecian poets. The nightshade berries, too, it is interesting to note, are mentioned by Pliny as having been used by the chaplet makers of Egypt. "I wish," he writes in his Natural History, "that the garland makers of Egypt would never use this plant in making their chaplets." Why he wished so he does not say.

The third kind of Egyptian wreath, though made on a far simpler pattern than the two former, is no less interesting. It is composed of the flowers of a species of immortelle, and is believed to be one of the immortelle or helichrysos wreaths which are mentioned by Pliny, Plutarch, Atheneus, and several other writers. The flower, or rather the plant which bore the flower, of which these famous wreaths were made, is thus described by Pliny, a description which coincides exactly with the species of gnaphalium. "It has, he writes," "small white branches, with leaves of a whitish colour, and the flowers, which grow in clusters, glisten like gold in the rays of the sun. They are never known to fade" he continues, "hence it is that they make chaplets of it for the gods, a custom

¹ Specimen exhibited.

which is most faithfully observed by Ptolemy, the King of Egypt" (Hist. Nat., xxi, 96). Pliny elsewhere writes respecting these wreaths,—"According to the Magi, the person who crowns himself with an helichrysos chaplet will be sure to secure esteem and glory among his fellow men." He does not mention, however, that they were used for funeral purposes, but perhaps they were worn by their owners during life and interred with them in their coffins after death. There are one or two other wreaths which are probably of Egyptian make, such as this one' composed of flowers of the date palm threaded on strips of twine, and another of date fruit, and this of seeds of some plant which I

have not yet succeeded in identifying.

2. Among the wreaths which are probably of Greek origin the narcissus ones are perhaps the most interesting. A strip of papyrus stem forms the foundation around which the flowers are simply bound by very thin strips of papyrus pith. Garlands made of this narcissus, the polyanthus narcissus of our English gardeners, and the "clustered" narcissus of the ancient Greeks, were much prized in ancient times, and are often alluded to in classical literature. Sophocles tells us, in his "Œdipus Coloneus," that it was of this flower that the "ancient coronets of the mighty goddesses" were made. "And ever day by day," he writes, "the narcissus, with its beauteous clusters, the ancient coronet of the mighty goddesses, bursts into bloom by heaven's dew." Another Grecian poet, one quoted by Athenæus, also alludes to the use of the narcissus in the manufacture of garlands. He is writing about the garland makers of Athens, and says—

> Nor did they seorn The dewy cups of that ambrosial flower Which boasts Narcissus' name.

Another flower much used by the Greek garland makers was the rose, and two styles of rose garlands have been found in the Hawara cemetery. The first and commonest kind is made on the same pattern as the narcissus garlands; the flowers simply bound round a piece of papyrus stem. The use of the papyrus stem in these rose garlands may, perhaps, explain a passage in Athenæus. That author is discussing a line of one of

the odes of Anacreon, in which a "Naucratite" garland is mentioned, and quoting all the writers who have spoken on this subject. "Some say," he writes, "that it was a garland made of roses, and of what is called by the Egyptians biblus (papyrus), but," he continues," what pleasure or advantage could there be in having a crown made of biblus with rose. One might as well have a garland made of onions and roses." If Athenæus had seen this wreath he perhaps would not have been so hasty in ridiculing it. The second style of rose wreath is composed of rose petals threaded by a needle on to strips of twine. It is chiefly interesting from the fact that it illustrates a passage of Pliny. "Recently," he writes, "in his History of Garlands, the rose chaplet has been adopted, and luxury has now arisen to such a pitch that rose garlands are held in no esteem at all if they do not consist entirely of petals sewn together with the needle" (Hist. Nat., xxi, 8).

There is one more wreath to which I would call your attention. It is made of twigs of the sweet marjoram (the amaracus of the Greeks, the sampsuchion of the Egyptians) and lychnis flowers together with thin coils of copper tinsel. It must have been when fresh one of the most lovely of all the funeral wreaths found at Hawara.

Besides these funeral wreaths a large quantity of seeds, fruits, leaves, and other fragments of plants were discovered last year by Mr. Petrie. Many of these, such as the peach stones, dates and date-stones, walnut shells, currants, pomegranates, plums, figs, chick peas, garden peas, and beans, evidently represent the remains of the old funeral feasts held in the cemetery. other plant remains one which was found in the interior of a mummy crocodile is of special interest for it allows us to determine the species of plant of which the writing pens of the ancient Egyptians were made. A number of writing pens exist in the British Museum and at Leyden, but until now the grass or reed of which they are made has not been identified. I have examined some of these and find that they are undoubtedly made out of the stems of the infloresence of the Egyptian Sugar Cane, the Saccharrum Egypticum of botanists.