

ON SOME ANCIENT GLASS IN THE MAYER  
COLLECTION.

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I AM much indebted to the President and Members of this Society, who have given me an opportunity of bringing to the notice of any who may be interested in them, some of the more important specimens of ancient glass in the Mayer collection.

It is to such opportunities as these that I look for a wholesome ventilation of the work I am engaged upon, of bringing fresh criticism to bear upon it, and possibly of enlarging the public interest in our archæological and artistic treasures. I hope from time to time, with your permission, to bring before you representations of various departments of antiquity as I pass through them; and I am only too glad for any species of criticism that may assist me in arriving at a truthful knowledge of the matter in hand. If I may say so, it seems to me that this Society is doing a good work if they are the means of making known the archæological value of our public collection. It is to be hoped that, in course of time, we may publish some useful catalogues, giving such information; but this is a matter which is not accomplished in a few months.

By the kind permission of the Committee of our Free

Public Museum, I have brought this evening various specimens of ancient glass. Some of the objects are really beautiful, and shew the great skill and taste of their manufacturers; others are only historically interesting, as links in the history of glass-making. Some of these were found in Egypt, and others in various parts of Eastern Europe; but, unfortunately, the exact localities of most are unknown.

I shall have now to preface my remarks with a few technical observations. The material which we call glass is composed of two simple elements, a silica in the form of sand, and an alkali in the form of potash or soda. These two, fused together under the influence of heat, form, as you know, a material very well suited to artistic manufacture. When it is hot and in a liquid state it can be shaped with great ease by blowing or moulding; and it can be coloured with very small quantities of various oxides. And when we consider its transparency, its power of reflecting light and holding liquids, the ease with which it may be cut, ground, polished, coloured, moulded, and blown, it is not surprising that it has been a favourite manufacture in all times. The history of its original discovery is unknown to us, but the first productions we know of are undoubtedly Egyptian. There is a well-known story, given by Pliny, of the discovery taking place on the shores of Syria, to some merchants who were carrying a cargo of natron. This may be true so far as those persons are concerned, but it will hardly meet the immense antiquity of the early Egyptian glaze.

I must not detain you, however, by reading a general paper on glass manufacture, or I shall keep you longer than is fitting. The general question, in its historic bearings, has been worked up in an excellent manner in books I will presently refer you to. On the present occasion I shall confine myself to the pieces actually exhibited in the cases in

our Free Public Museum, with such brief suggestions upon them as my elementary knowledge enables me to give.

There is one other general consideration, however, to which I wish to call your attention. Glass is no doubt made of simple ingredients, and blown and moulded very easily, as far as the raw material is concerned; but like many other things it needs the artistic handicraftsman to shape it well. The great poet and the ordinary reader start equal as to the number of words at command, both have a large dictionary to draw upon; but the poet has the thought, the craft, the power of selection and grouping, which give the life and soul, in addition to the flesh and bones. Anyone may get the molten glass out from the melting pot, but it is necessary to give one's life to it, to go into the traditional lines of the craft, to have experience, to have one's taste refined, the eye and hand rendered sensitive by constantly attentive command, in order to produce with a blow-pipe and a clumsy-looking pair of wooden pincers, the wonderful productions which have come forth from the skilled labour of Tyre and Venice. Hence, it is interesting to trace this skilled tradition, to see it disappear in Tyre and Alexandria in classical times, and reappear in mediæval days at Venice. Like all other skilled labour, this must have an undisturbed home, if it is to be carried on from generation to generation; but, like every other study, it has been alternately sheltered and driven out, by the vicissitudes of nations and the course of human affairs.

This traditional skilled labour is amongst those things which time and recent discoveries have not made any great advance upon. Indeed, it may be reasonably asked, whether machinery is not, in a great measure, an enemy to artistic handicraft, however excusable it may be in view of the necessities of the times. It may be asked whether it does not tend to remove the workman's object from the production of excellence to the production of quantity.

There is always, of course, in an educated community, and among people who are jealous for the past, a demand for what is done upon the traditional lines, and a certain amount of handicraft will find its market. But, for all that, the thirst for rapid production must take many first-rate artizans away from the skilled labour, and employ them upon mechanical advances.

How little modern mechanics have improved on the ancient, in the matter of glass-blowing, might be gathered from the drawings at Beni Hassen, of the glass-blowers, who are represented with the traditional long pipe to the mouth, with the soft lump of glass at the end, as they can be seen any day in England now. And I believe it is not overdating those frescoes, to put them down at about 3500 years from our present time.

To begin our subject satisfactorily, we must start with the Egyptian specimens. As I have said, we know of no glass manufacture so early as the Egyptian. There are drawings on the tombs at Beni Hassen of the process of glass-making, as early as the 12th dynasty. And it must be allowed that the use of a vitreous silicious glaze or enamel upon pottery, which was the case in Egypt as early as the 6th dynasty, is virtually a proof of the knowledge of the material of glass at that extremely early date. In Dr. Birch's "Ancient Pottery," chap. ii, he describes the Egyptian wares, some of which are called porcelain, though they are not what we now understand as porcelain, upon which this vitreous glaze was put. Of this porcelain body he says, "It is of a white or grey colour, and of a sandy, friable texture, the particles of which it is composed being hard, but having little or no cohesion . . . . this paste or body, which was the core of the glaze, could have very little plasticity, presenting a gritty, sandy mass, difficult to form into vases . . . . It was

“more easily stamped into moulds. The reason why the  
 “Egyptians used this kind of paste appears to have been that  
 “their argillaceous clays would not combine with their  
 “silicious glazes. When the object had assumed the intended  
 “shape, the glaze was laid on. It was composed of silica,  
 “probably a finely ground or triturated sand, and soda, to  
 “which was added certain metallic oxides to produce the  
 “colour required.” This you will see is glass used as a  
 glaze. And supposing this glaze to have been discovered  
 previous to the employment of glass as a material for making  
 large objects, the transition at any rate is not a great one from  
 the use of glass as a coating to its use as a body.

The first objects that I have to show you will illustrate  
 practically what I have been saying. Here are some figures  
 of deities in this sandy, gritty material, covered with a fine  
 bright blue vitreous glaze. The mouldings of some of them  
 are exceedingly sharp and beautiful. This figure of the god  
 Nefer-Atum, No. 11651,\* is an example of very good work,  
 and as it is unfortunately broken, we have an opportunity of  
 seeing the inner body, with the outer glaze attached to it, very  
 distinctly. Another specimen, remarkable for the brilliance of  
 its colour, is a sepulchral figure, No. 16. 4. 61. 49. These  
 sepulchral figures are very numerous among Egyptian  
 antiquities. They represent deceased persons mummied, and  
 are found in the tombs, sometimes scattered on the floor,  
 sometimes in painted wooden boxes. Some are plain, others  
 have inscriptions, either painted on them, or moulded into  
 them. These give generally the names and titles of the  
 deceased, and sometimes a portion of the Ritual of the Dead.  
 This specimen has on it the name of Muthetep, who is  
 described as a singing woman of the temple of Amen. It was  
 presented to the Museum by Mr. William Crosfield.

\* The numbers attached to these descriptions are the Museum registration numbers.

Passing from this early use of glass as a glaze for pottery, we must now consider the objects found in Egypt composed altogether of glass. Of these there are, roughly speaking, three species. (1) True native Egyptian glass; (2) glass imported from Phœnicia; and (3) glass made in Egypt under the Roman rule.

It is not always possible to determine exactly to which class a given piece may belong, but the subject has had a good deal of attention given to it lately, and a great variety of considerations have been brought forward which materially assist in the classification. Among the objects found are small vases for holding unguents and perfumes, bottles for ordinary use, and small figures of deities for suspension among the beadwork decoration of the mummies, or for inlaying into sarcophagi, &c. Besides these, there are also a large quantity of beads and pendants in various forms. I have here several specimens of these.

No. 11539. Opaque blue glass figure of the goddess Isis, walking, wearing a throne on her head.

No. 11554. Figure of Isis, in turquoise-coloured glass. The hand is raised in grief to the face. The goddess is lamenting the death of Osiris. The figure is made in relief, on a ground, with a flat back, and has been inlaid in a coffin.

Nos. 11558 (*Plate IV*) and 11567. Glass heads of Bes. They have been pendants from necklaces.

No. 11603. Figure of Taur or Thoueris, wife of Bes, as a female hippopotamus, walking. Pierced for suspension.

No. 11624. (*Plate IV*.) A pendant, in turquoise opaque glass, representing the hawk head of "Ra," surmounted by a disk and urœus, and wearing a collar on the neck. The colour and workmanship of this object are very fine indeed.

No. 11469. Transparent blue glass pendant, representing

PLATE IV.



№11363



№11480

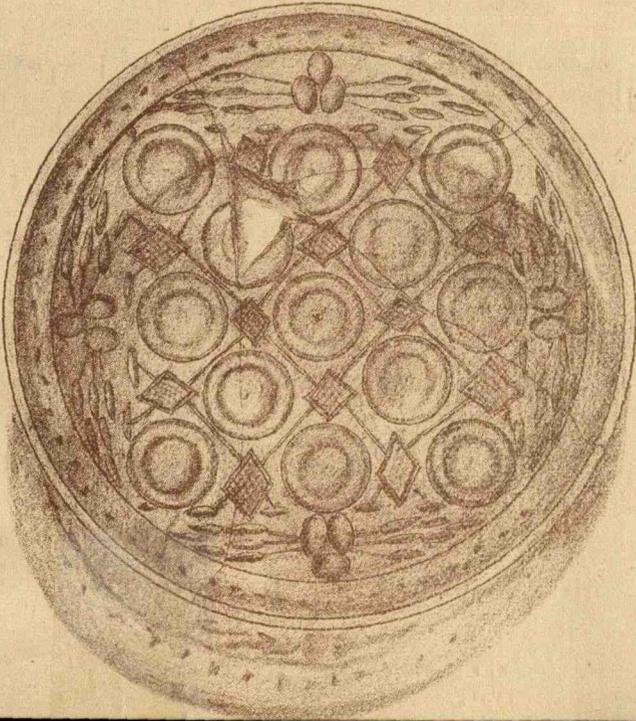


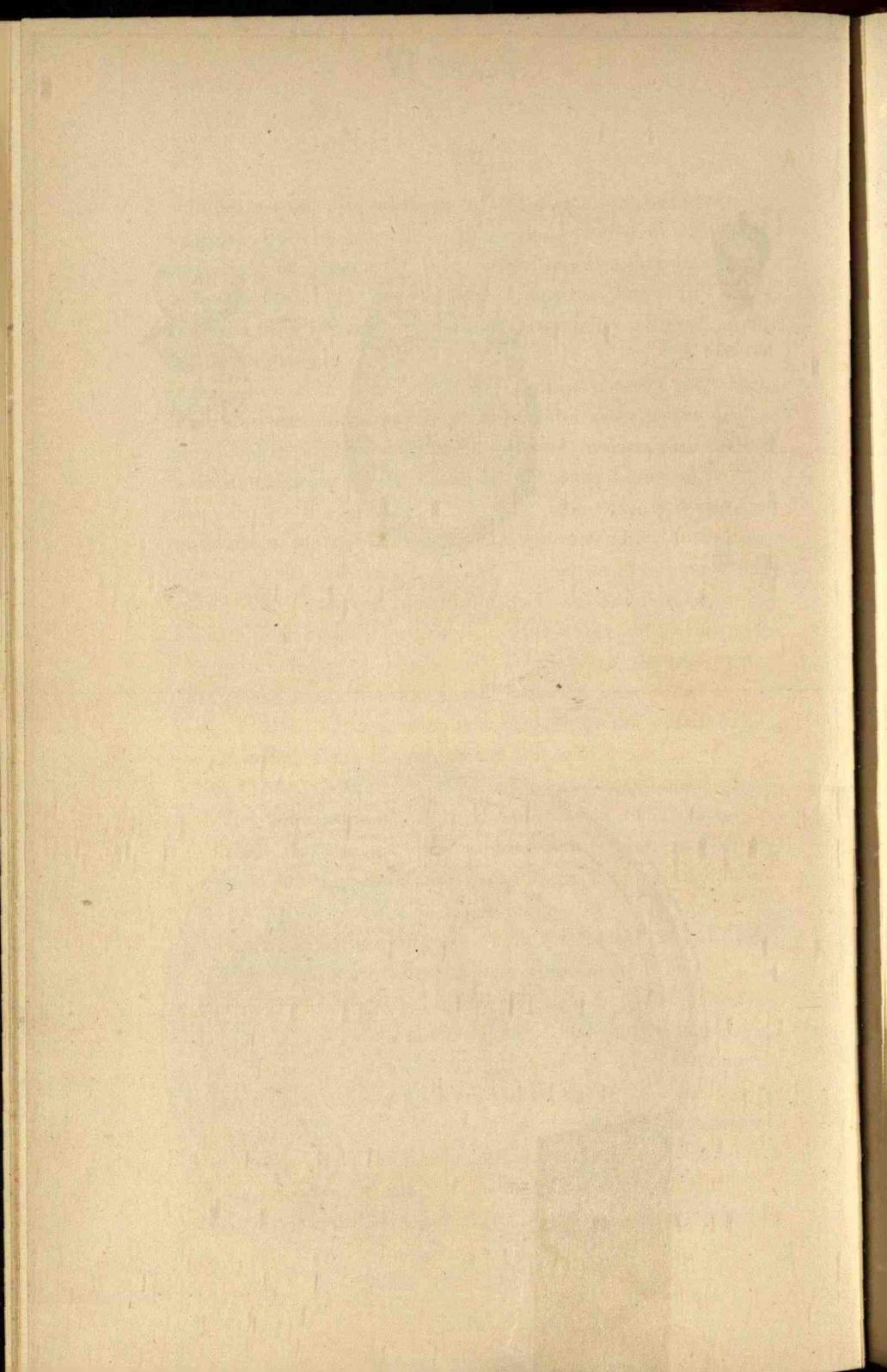
№11358

ACTUAL SIZE.



№11624





a squatting female figure, probably Baubo. A similar piece is engraved p. 3, fig. 5, of the Slade Collection Catalogue. This piece is of the Roman period.

Of the sacred animals there is a fine scarabæus in blue glass, recently obtained from the Rev. Greville J. Chester. No. 10. 8. 76. 10. Also, a frog, in dull red glass, imitating jasper very cleverly. No. 11570.

Of amulets and emblems, there are several hearts and eyes, and two in shape of the papyrus sceptre. Such amulets were ordered by the Ritual of the Dead to be placed round the necks of the mummies.

Amongst the general specimens there are several interesting pieces :

No. 11184. Opaque turquoise glass bezel of a ring, (now in a modern setting,) bearing the name and titles of Thothmes III.

Nos. 11361--3. Human heads, two of them caricatures of Ethiopians. They have been pendants from necklaces. The smallest, No. 11363, (*Plate IV*) is a very clever representation of a negro head.

A quantity of bugle and other beads, in various colours. An eye from an inlaid mummy case, No. 11478 ; the pupil and white part in obsidian and alabaster, and the case for the eye of blue opaque glass.

No. 11762 (*Plate V*) is a very interesting specimen : a glass stibium case for holding the preparation of antimony with which the Egyptian ladies painted their eyes. It has still inside it the glass rod used for applying the colour. The tube of the vessel is a transparent blue colour, with opaque white bands at either end and round the centre.

No. 10150 is another unguent vase, of dark green glass, with wavy lines of blue and red ornamentation upon it.

If this is not native Egyptian work, it is probably Phœnician, and imported into Egypt.

Nos. 11763 (*Plate V*) and 11765 are two glass unguent vases, of a class which it is nearly certain was imported from Tyre and Sidon. Similar pieces are found in Greek tombs of about the third century before Christ. There are many of the class in the Mayer Collection, but only two identified with Egypt.

The form of these vases is generally Greek. No. 11765 is in shape of a Greek amphora. The material is very often a dark blue ground, with wavy lines of turquoise and yellow ornamentation. Small stands were used for these vases, such as one of gold in the British Museum, which is figured on page 4 of the Slade Collection Catalogue.



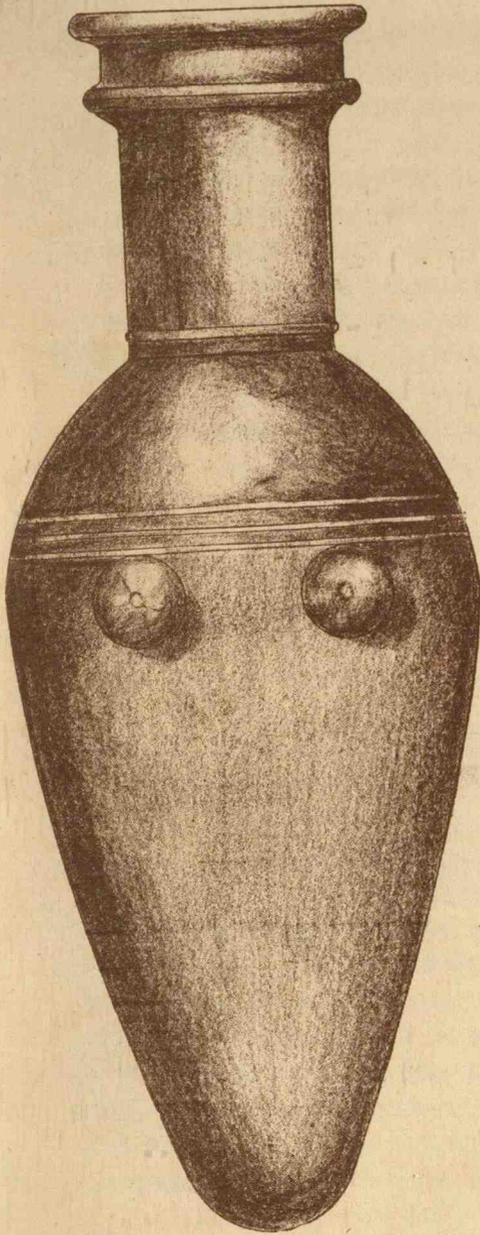
Unguent Vase, No. 11765.

Another interesting piece found in Egypt, and doubtless made there, is No. 11392, a conical bottle of transparent pale green glass, with a long neck. It is wrapped round with papyrus rush, no doubt for protection. A bottle is engraved by Sir Gardiner Wilkinson with the rush tied round it, as he remarks, "like a modern Florence oil flask."\* These pieces are dated by Dr. Birch at about 600 B.C.

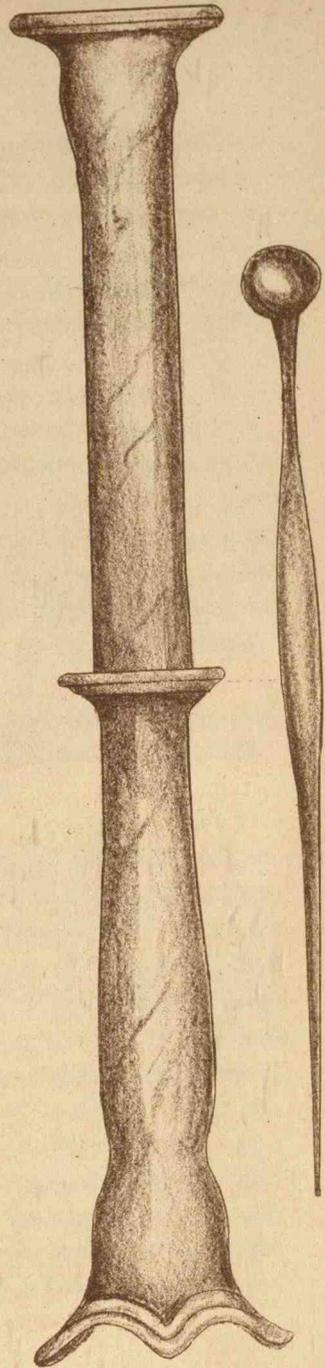
Among the pieces of the Roman period found in Egypt there is a green glass dish, No. 11569, (*Plate IV*), with ornamentation ground upon it. It was purchased by Mr. Mayer from Mr. Sams of Darlington. It is pronounced to be of a very late period.

Another piece, No. 11480, (*Plate IV*) is a specimen of Romano-Egyptian mosaic glass. The ground is blue, and

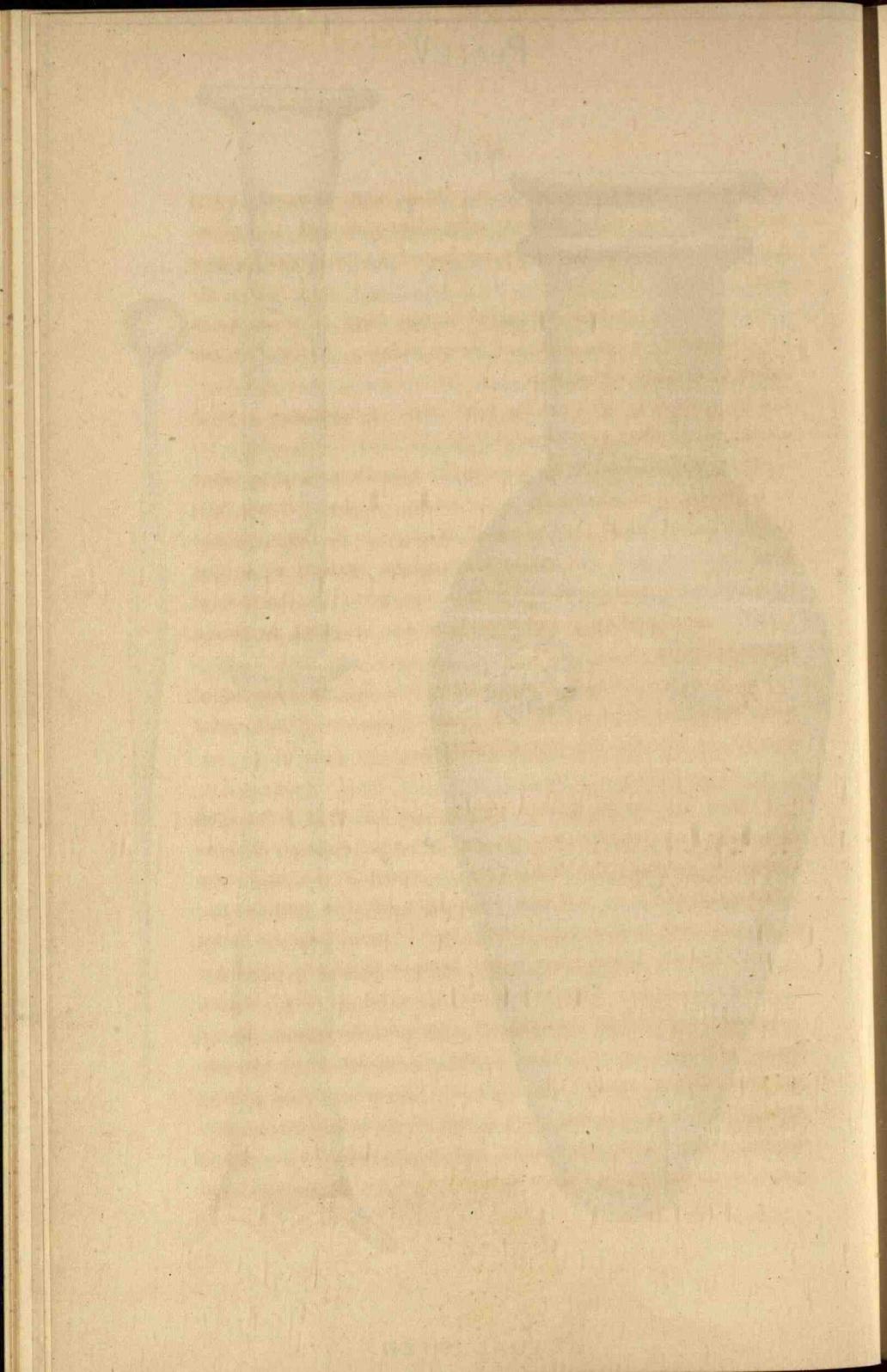
\* *Wilkinson's Ancient Egyptians*, vol. iii, 1st series, p. 107.



Nº 11763



Nº 11762



the pattern, which is rather indefinite in form, is in white and yellow and red. The pattern goes right through the piece. From the shape we may suppose that it was originally set in a ring.

Several most interesting pieces of this class of work are in the British Museum, and are described and figured in the Slade Collection Catalogue.

The process by which they were made is ingenious. Rods of coloured glass are arranged (as a bunch of asparagus is) into a cylindrical form, so as to make a pattern, such as a face or a flower, when examined at the ends. These rods are then fused together until they are soft enough to be drawn out at both ends to a considerable length, the pattern of course holding good throughout. The rod is then cut into horizontal slices, which are duly polished and set in rings or inlaid ornamentation.

For a description of this process, and for an account of some remarkable pieces in the British Museum, I must refer you to the Slade Collection Catalogue.

I have spoken of glass imported into Egypt from Tyre and Sidon, and shewn two specimens which belong to a class generally considered Phœnician in origin. I shall now enumerate a few of the best specimens of this manufacture in the Mayer collection. And first, I must express great regret that all these have come to us without any localities attached to them. Antiquities may go through many stages. They are appreciated simply for their market value in the hands of the dealer, for their beauty in the hands of the fine art connoisseur, and by the time that the antiquarian gets to them, the dealer has forgotten where he picked them up, and probably the auctioneer's man has destroyed the old bit of paper with the clue to their locality, and which certainly did

not help their appearance at the sale. We know, however, that these vases are generally found in tombs on the shores and islands of the Mediterranean, associated with antiquities which are dated about the third or fourth century before Christ. Of these the most important are—

No. 10081. *Cœnochoe*, of deep blue glass, with trefoil lip, and ornamentation of white and yellow bands. A very beautiful piece. It is exactly similar in form to fig. 16, page 9, of the Slade Collection Catalogue.

No. 10082. *Cœnochoe*, of transparent very fine blue glass, with ornamentation of yellow and turquoise bands.

No. 10160. *Cœnochoe*, of green glass, with ornamentation of yellow and white wavy bands.

No. 10083. *Cœnochoe*, of chocolate-coloured glass, with ornamentation of white, yellow, and blue bands.

No. 10080. Amphora, of deep blue glass, with ornamentation of yellow and pale blue bands.

No. 10079. Alabastron, of deep blue glass, with ornamentation of yellow and white and turquoise, chevron pattern.

No. 10129. Fragment of the handle of a dark blue transparent glass drinking cup, similar to pieces in the British Museum. It is inscribed on one side, in Greek, "ΑΡΤΑΣ ΣΕΙΔΩ," and on the other, in Latin, "Artas Sidon." This interesting piece gives the name of the maker, "Artas," and the locality, "Sidon."

Amongst the many glass beads in the Mayer collection, there are a few specimens of a class which has lately attracted the notice of some of our London antiquaries. To these beads a Phœnician origin has been assigned, but as yet, neither the localities in which they have been found, nor the kinds of antiquities with which they appear have led to a

conclusive settlement of their date and manufacture. There are several specimens in the British Museum and elsewhere, and these have been found in America, England, France, Egypt, Italy, &c. They have all been made evidently in the same way. They have been cut from a long stick of glass, which has been composed of combined rods of different colours, forming a pattern, similar to the process we have before spoken of, with reference to the Alexandrian mosaic work.

We have one specimen, No. 6363, which was said to have been found by Mr. Faussett, with his Anglo-Saxon antiquities at Gilton, in Kent, but it was engraved in the *Inventorium Sepulchrale* (pl. 5, fig. 2) by a mistake; for it does not appear in the original MSS.

We have another broken specimen, No. 6688, with no locality.

Another, No. 7338, a very small one of the same class came with Mr. Rolfe's antiquities, and was labelled as having been found by him at Ozengell, in Kent.

A string of beads, No. 6121, of this class is also in the collection, and is labelled as having been found during the last century in Kent, but these are of perfectly modern Venetian manufacture. The Italian beadmakers still retain this pattern in use. It has been suggested that all these beads are of Venetian origin. This question will no doubt be determined like many others, in the course of time. Speaking of beads makes me wish that some member of this Society would go even a little way towards some classification of those beads accessible in books and collections—a geographical, historical, and material classification. I have not the slightest doubt that, however great the confusion might appear on the surface, some good information might ultimately be reaped. Beads have easily found their way all over the world, and

their distribution at given periods in given places, would be borne out, no doubt, by the facts of history.

When I next have the honour to address you on ancient glass, I shall hope to give the results of my slight examination of our Roman glass beads, and of those found in British interments. And I shall be glad if, on some future occasion, I may bring before you other specimens of glass less ancient but not less interesting.

Any one wishing to make himself further acquainted with Egyptian and Phœnician glass, I would recommend to go through the early portion of the Slade Collection Catalogue ; Mr. Franks' paper in the *Art Treasures of the United Kingdom* ; Sir Gardiner Wilkinson's *Ancient Egyptians*, vol. iii, p. 89 ; a paper by Mr. Pettigrew in the *Archæological Journal*, vol. xiii, p. 211 ; and the plates in Deville's *Histoire de la Verrerie* ;—all which works are in our Free Public Library.