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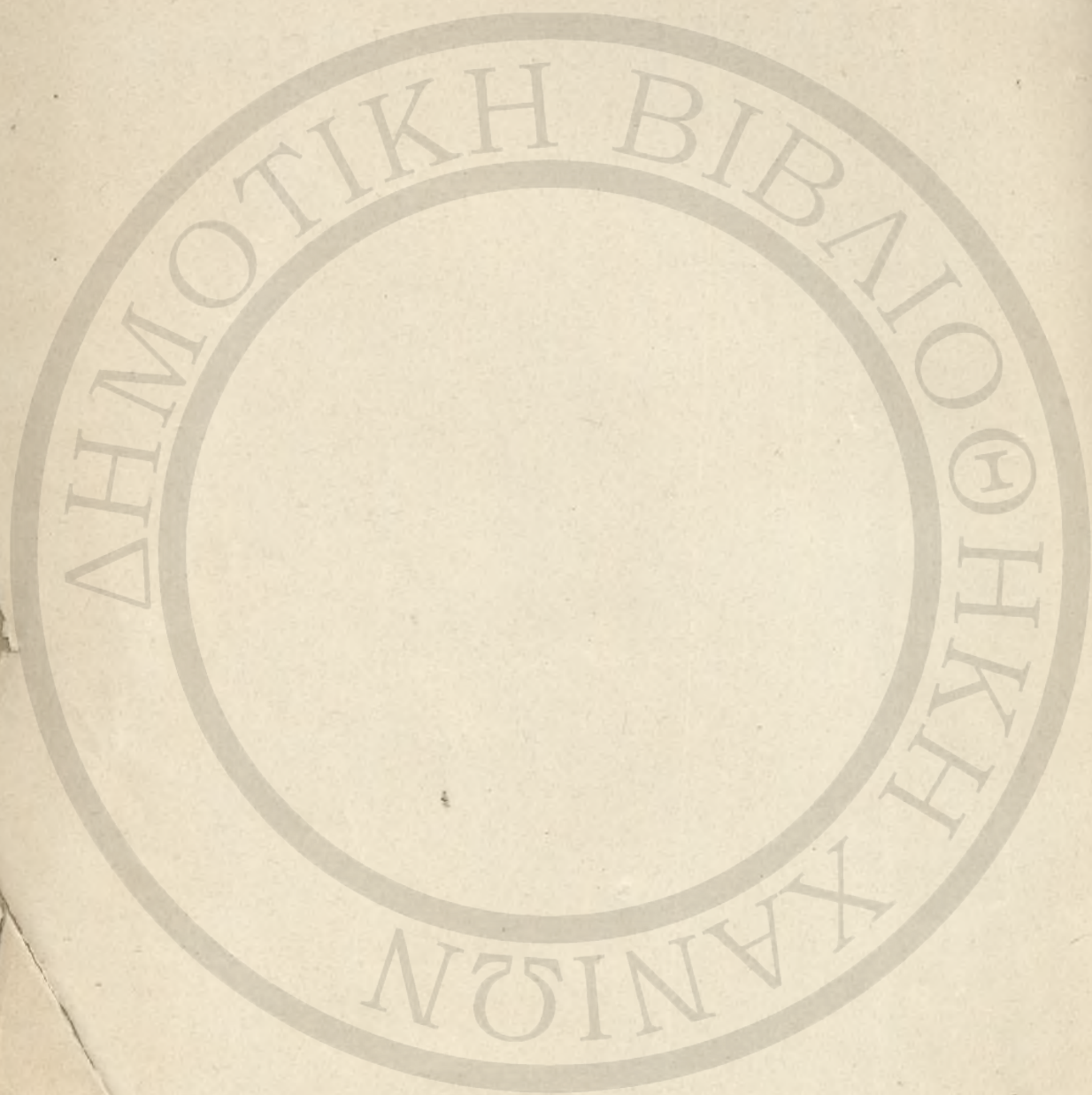
THE
PALACE OF KNOSSOS

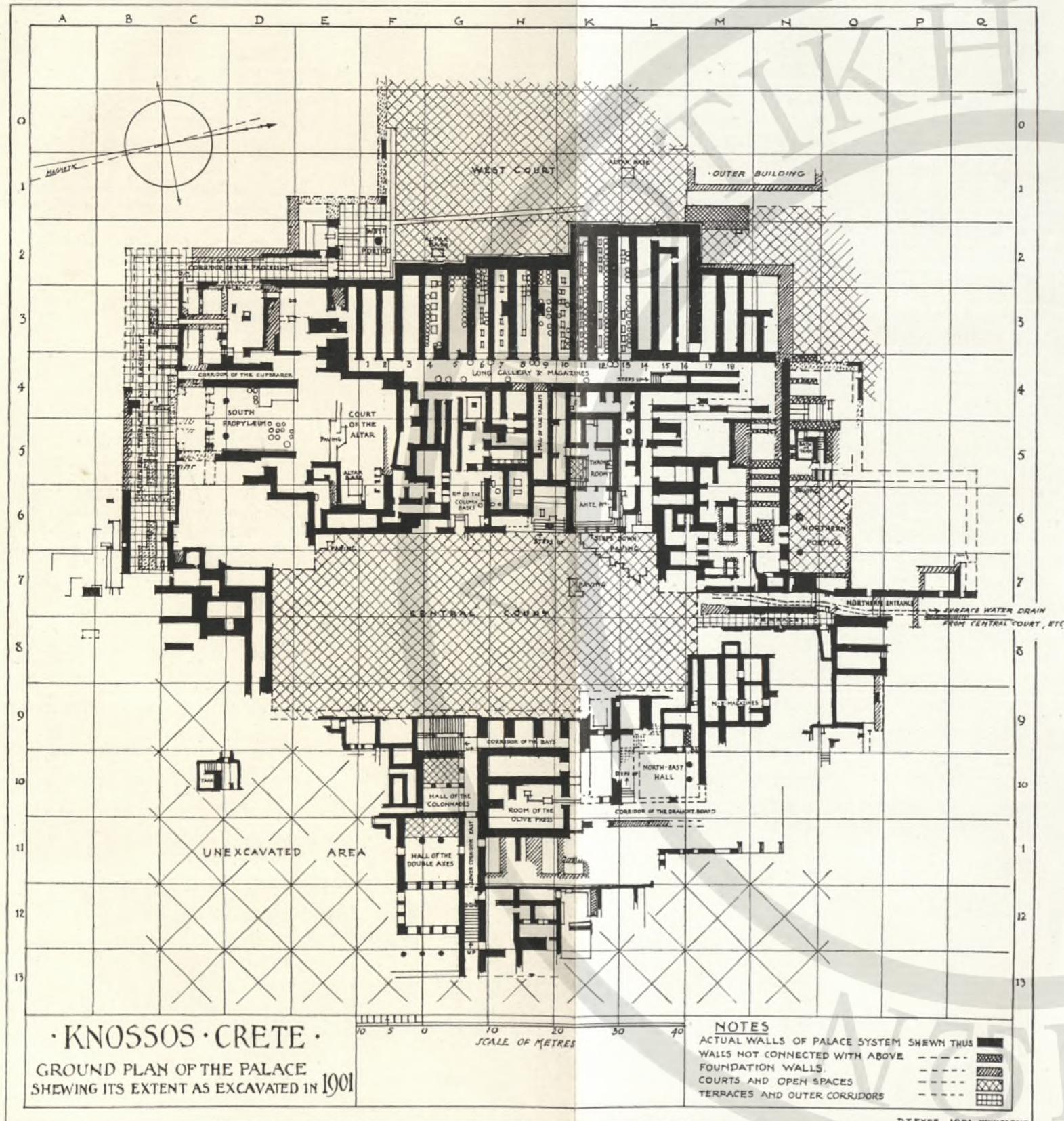
*PROVISIONAL REPORT OF THE EXCAVATIONS
FOR THE YEAR 1901*

BY
ARTHUR J. EVANS

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GROUND PLAN OF THE PALACE OF KNOSSOS, SHOWING ITS EXTENT AS EXCAVATED IN 1901.

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THE PALACE OF KNOSSOS.

Provisional Report of the Excavations for the Year 1901.

BY ARTHUR J. EVANS.

§ I.—THE CAMPAIGN OF 1901.

THE work of excavation on the Palace site at Knossos was re-opened on February 27, 1901, and continued till June 17. Various supplementary operations connected with the shoring up and underpinning of the walls of large halls brought to light on the south-east of the site, the completion of the roofing-in of the Throne Room, and similar works of conservation entailed the continued employment of a large number of workmen till the beginning of July. Throughout the excavations I again secured the valuable services of Dr. Duncan Mackenzie as my assistant in directing the works, and of Mr. D. T. Fyfe, formerly architect of the British School, in preparing architectural plans and drawings.

The building itself, as will be seen from the present Summary Report, took an even vaster development than it was possible to foresee, and as, for the purpose of delimitation, it was necessary besides to make a thorough exploration of the surrounding zone on its western, northern and eastern borders the work necessitated the employment of a large number of men. Throughout a great part of the season as many as two hundred workmen were constantly employed.

Besides the opening out of new quarters of the Palace, a good deal of attention was directed towards the more exhaustive exploration of certain parts of the building already partially excavated in 1900, and at the same time towards the solution of some of the problems suggested by the work already executed. Considerable labour was devoted to the thorough examination of the south-west angle of the building, the continuation of

the Corridor of the Procession and its relation to the Southern Terrace and Propylaeum. North of the Propylaeum, again, the walls of a series of chambers were tested and re-examined with a view to defining the outline of the upper halls or "Megara" that once undoubtedly rose above them. A series of the "Kasselles" beneath the floors of the Magazines were opened and their contents thoroughly sifted. A large number of additional shafts were also sunk both within and without the walls of the Palace in order further to explore the underlying Neolithic settlement.¹

Of the works of conservation undertaken the most important was the enclosing and roofing-in of the Throne Room—a work rendered urgent by the effect which exposure to the weather was already beginning to produce both on the throne itself and the seats and parapet. In order to support the roof it was necessary to place some kind of pillars in the position formerly occupied by the Mycenaean columns, the burnt remains of which were found fixed in the sockets of the stone bench opposite the throne. This necessity and the desire to avoid the introduction of any incongruous elements amid such surroundings determined me to reproduce the form of the original Mycenaean columns. An exact model both for the shape and colouring was happily at hand in the small fresco of the temple façade, and the work was successfully executed under Mr. Fyfe's superintendence.

In order to protect the room from wanton damage we were further reluctantly obliged to place a substantial iron railing and door across the entrance. For this, unfortunately, no Knossian model was forthcoming, and the best that could be done was to get a native smith of Candia to make a scroll-work railing of wrought iron of the kind that it is usual here to place before Mahometan shrines, the spiral designs of which at least are curiously in harmony with Mycenaean patterns. About the middle of the opening in order to give support to this barrier a stone pillar was set up in a socket of the pavement where a wooden one had once stood.

§ 2.—THE WESTERN COURT, PORTICO, AND ENTRANCE.

One of the leading features of the excavation was the great increase of area gained by the Western Court. The whole line of the West Wall of

¹ A short report of the results of the exploration of this Neolithic Settlement was made by me to the Anthropological Section of the British Association (Glasgow Meeting, September 1901). An abstract of this is printed in the Annual Report of the Association, and in *Man*, December 1901 (No. 146)

the Palace was now brought to light to a point nearly twice as far to the north of the West Portico as the portion excavated in 1900. As before, this wall formed for the most part the backing of a series of Magazines, six of them longer than any yet uncovered. At this point the course of the West Wall is again marked by one of the shallow recesses already noted in the earlier excavated part, which also recur in the outer wall of the Palace at Phaestos. After passing these Magazines, where the outer wall attains its greatest projection west, it again took a rectangular turn back and reached

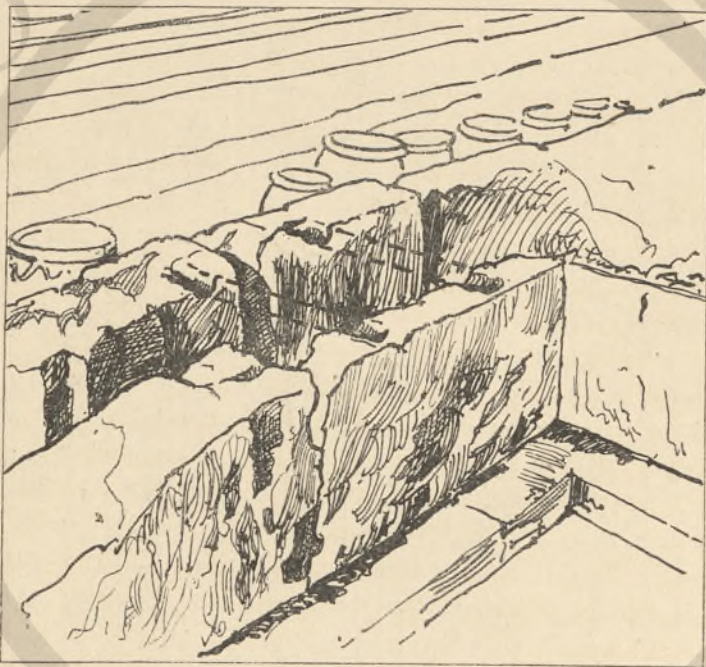


FIG. 1.—ANGLE OF WEST WALL, SHOWING SOCKETS OF WOODEN STRUTS.

the extreme north-west angle of the building in a line with its starting point outside the West Portico.

Behind the Long Magazines the method followed in the construction of this Western Wall was very perceptible and revealed that curious economy of material so characteristic of the builders of the Palace. The great gypsum slabs visible both in the outer and inner face of this wall were not in fact continuous. The actual thickness of these did not exceed 50 centimetres, and between them there was a space of about a metre filled

with clay and rubble. At the same time, to give compactness to the whole, wooden struts were set between them, the sockets of which were to be seen on the inner sides of the great slabs (see Fig. 1).

The extreme northern end of the West Wall could only be traced by means of the foundations, hereabouts about a metre and a half deep and consisting of a dry walling of smaller limestone blocks resting on a plinth.



FIG. 2.—VIEW LOOKING SOUTH TOWARDS THE FIRST NORTH-WEST ANGLE OF PALACE.

The angles of this, as may be seen from Plate II. and Fig. 2, were very finely preserved. Proceeding southwards the depth of these foundations gradually decreased with the rise of the ground.

Against the north-west angle of the wall, outside the Long Magazines,

had been set an oblong structure of large limestone blocks which had the appearance of very primitive build (see Fig. 2). It is probable, however, from its position against the corner of the wall, that this massive platform was really a later structure carried out with the object of supporting the foundations of the building at this angle, where, as is shown from the remains of frescoes, a stone frieze and other architectural fragments, there was evidently an important superstructure.

Separated from this massive buttress by about a metre's space were the foundations and lower part of the walls of an elongated rectangular building divided into three main compartments, the south end of which forms a limit to the Western Court on this side. The upper floors here were of Mycenaean date, but in the lower part of the chambers were found abundant fragments of pottery of the pure Kamáres Period, including specimens of the fine embossed "egg-shell" ware which represents the highest ceramic product of pre-Mycenaean Crete, and was evidently copied from prototypes of repoussé metal-work.

The relics of the best Kamáres Period are conspicuous by their absence in the chambers of the Palace itself, and the preservation of this building in such immediate proximity to the wall and actually abutting on the great West Court may possibly indicate that it served some religious purpose. It is noteworthy in this connexion that a double axe was painted on one of the fragments, the bottom of a vase, recalling a similar symbol on a vase found in a house to the west of this spot.¹ The double axe in a specially votive form reappears as on the Mycenaean pottery of the "Palace style."²

In the Western Court, opposite the south end of this building and 6.60 metres distant from the shallow recess already described in the wall behind the Long Magazines, was unearthed a second altar-base of limestone blocks 1.90 m. x 1.72 in dimensions,³ closely resembling that already noted nearer the West Portico. Starting from the centre of the western wing of this Portico and running somewhat diagonally north-westwards so as to avoid the great angle of the West Wall is a curious narrow causeway more carefully paved than the rest of the Court and slightly raised above its level. Its appearance at first sight suggests the base of an earlier wall, but that it is in fact a causeway is now placed beyond a doubt by the remarkable parallel discovered at Phaestos. There, running in the same diagonal

¹ D. G. Hogarth, *B. S. Annual*, 1900, pp. 79, 80: *J. H. S.* 1900, p. 87.

² See below p. 53.

³ Somewhat defective on north-west side.

fashion across the Court that lies outside the western wall of the Palace, is a precisely similar causeway leading to a step-way that ascends the tiers of seats that command the northern end of the Court. Thus at Phaestos we see a similar causeway, leading presumably from a gate of the Palace, serving as an avenue of approach to what seems to have been a prehistoric theatre—arranged like a grand stand—overlooking a very ancient altar. Whether any structure analogous to this archaic theatre existed at Knossos it is impossible now to say, but the parallelism of altars and causeways is very suggestive.

There can at least be little doubt that this Western Court outside the Palace Walls must have formed the great gathering-place, or *Agora*, for the citizens of Mycenaean Knossos. From north to south it extends some 50 metres, but on the western side no definite line of delimitation exists, and it seems to have an almost unlimited extension. The rough paving may possibly have been originally covered with a kind of cement, as was certainly the case with the area beneath the Portico. Where a test pit was dug into it, at a point about 30 metres west of the first-discovered altar-base, it was found immediately to overlay a stratum containing first Mycenaean and then Kamáres sherds. Nearer the West Wall, however, Kamáres sherds were found immediately below the pavement and went down about 2 metres to the Neolithic stratum. This seems to indicate that the Agora had been many centuries in use, during which its level had gradually risen, the stone pavement, however, for the most part dating from the earliest period of the building.¹ This Court has a distinct Western slope.

Whether or not the Agora was overlooked originally by raised seats like the Western Court at Phaestos, the long plinth at the base of the West Wall, also paralleled at Phaestos, must at all times have afforded an admirable sitting place for a large number of persons, and indeed was frequently used for this purpose by my Cretan workmen. It does not require a great stretch of imagination to see the Elders of a Mycenaean Assembly seated in the same place, while the King himself sate at the gate on the Seat of Judgment in the stately Portico beyond.

It will be remembered that this Portico gave access to a double entrance, one doorway leading directly to the Corridor of the Procession, while the other opened on a separate chamber. A re-investigation of the founda-

¹ In some places, however, the Kamáres deposit began immediately beneath the pavement.

tions has made it clear that the side chamber, which communicated with the Corridor by means of a small lateral doorway, was of somewhat larger dimensions than had been at first made out. This chamber was surely something more than a mere "Porter's Lodge." It is at least a probable conjecture that this room with its stately portal facing the great Western Court was on such occasions specially reserved for the royal use.

The Portico itself must have been an imposing structure. The column-base in the centre of its opening has a diameter of 1.25 metres, and taking as a guide the proportions of the pillars depicted in the "Temple" fresco, the wooden column which rose above it and supported the architrave would have attained a height of 5 metres or over sixteen feet. The architrave must also have been supported by substantial piers on either side. On the east side indeed the solid gypsum block which formed the base of this is visible with a dowel hole for an upright wooden beam. The pavement within the Portico, as will be seen from the plan (Pl. I.), is divided into square and oblong spaces, formerly coated with red-coloured cement, by lines of slab pathway, one branch of which finds its continuation in the causeway already described, and in another similar gangway which starts from the latter at right angles in a westerly direction. Two other branches of the pathways within the Portico lead through the middle of the doorways, one of these prolonging itself in the central line of slabs that run along the Corridor of the Procession.

§ 3.—THE CORRIDOR OF THE PROCESSION TRACED TO THE S.W. CORNER AND PROLONGED, FROM INDICATIONS, ALONG THE SOUTHERN TERRACE.

The rapid fall of the ground beyond the south-western angle of the Palace had entailed the almost complete denudation of the upper part of the neighbouring structure. It was, therefore, the more necessary to make a very careful exploration of the remains of foundations hereabouts, as a guide for reconstructing the upper lines. Happily, by very reason of the slope of the ground, the builders had here laid the foundations of exceptionally massive blocks, and the line of a thick outer wall forming the continuation of the west wall of the Corridor of the Procession was clearly indicated. West of these foundations were others of a less important character which evidently had belonged to private houses built here close

up against the Palace wall, while a little beyond was the better preserved house with gypsum pillars excavated by Mr. Hogarth in 1900.¹

In my previous Report the conjectural view had been already advanced that the Corridor of the Procession, after continuing to the south-west corner of the Palace above the lower part of the Southern Terrace, "took a turn at right angles, and following the top of the Terrace wall afforded access to the Southern Propylaeum." A valuable corroboration and amplification of this view is now afforded, not only by the existence of foundations clearly marking the prolongation of the stately entrance Corridor to the south-west angle of the Southern Terrace, but by other circumstances. Below the point where the Corridor must have abutted on the Terrace occurred a fresco fragment consisting of the foot and the corner of the robe of a male figure similar to those of the "Procession" found on the walls of the Corridor nearer the Western Entrance. Near the same spot were also found pieces of the characteristic blue slate slabs that form the border of the Corridor pavement, and many other examples of the same occurred at various spots above the floor level of the Southern Terrace—a striking indication of the continuation of the Corridor along its upper floor. A supporting wall, which seems originally to have run with small interruption along the middle of the basement of the Southern Terrace, was apparently built with the special object of supplying a base to an upper wall or colonnade which would be the continuation of the outer wall of the Corridor. It is probable that the outer face of the Corridor above this supporting wall formed a long colonnade opening on a flat terrace representing the roof of the outer division of the basement. Opposite the centre of this Colonnade was the broad opening that gave access to the Southern Propylaeum, and thus to upper *Megara* beyond, the existence of which can now be ascertained with sufficient certainty. That a similar system of wall decoration was common to all this avenue of approach from the Western Entrance is indicated by the finding of the Cup-Bearer fresco, a figure analogous to those of the Corridor of the Procession, at the back of the Southern Propylaeum in a position which showed that it had fallen backwards from its inner wall.

There can be little doubt that the Corridor and Colonnade continued east past the approach to the Propylaeum, and afforded a direct access to the Central Court and perhaps to the important *Megara* beyond it. Similar

¹ *B.S. Annual*, 1900, II. 79.

remains of blue slate paving, found above the floor levels below, marked a part at least of this continuation.

§ 4.—THE SOUTH TERRACE BASEMENT AND ADJOINING ROOMS AND GALLERIES.

Reason has been given above for supposing that the upper part of the South Terrace consisted of a long Gallery or Verandah which formed in fact the continuation of the Corridor of the Procession and opened south, perhaps by a wooden colonnade, on a flat stretch of roof. Below all this were basement rooms and galleries, a part of which had been explored at the beginning of the season of 1900. The outer limit below is formed by a long line of fine gypsum blocks resting on a slightly projecting plinth of limestone slabs, which the renewed exploration of this front made it possible to follow in the direction of the south-west corner of the Palace. The fact that this wall showed very little traces of foundations strongly corroborates the view already expressed that, above, it merely supported an outer line of terrace roof.

Between this and the innermost supporting wall of the Terrace were, as already noted, remains of a central construction parallel to the inner and outer lines, apparently intended to support the colonnade of the verandah above. The main terrace wall, within this, though a good deal reconstructed in places, showed near its base layers of fine limestone blocks, the prevailing double axe symbol on which marked them as belonging to the earliest period of the building. This wall had at later times been buttressed up in several places by masses of very poor rubble masonry; as however the superincumbent structures which this had once helped to support no longer existed it was possible to remove this later work and expose the original surface of the inner terrace wall.

Already when the excavations were first begun there were visible in the face of this wall two narrow openings leading to small inner galleries. The removal of the later rubble coating now brought into view three more such galleries, one on the extreme east and two to the west of those already visible. It was clear that the two more westerly of these, one of which ran immediately under the Corridor of the Cupbearer, had given access to inner basement rooms which had apparently served as cellars. In contiguity to the most westerly of these there were now

opened out two small chambers of this class with which it had probably had communication. The floor level of these chambers, though somewhat over two metres below the upper Palace level at this spot, was at least a metre higher than that of the basement area of the South Terrace proper, and we must therefore suppose that there were originally steps up from the subterranean passage.

In the innermost of these chambers was found a group of plain clay vases, one of which was of exceptional interest from the fact that it bore on its shoulders an inscription which had been incised while the clay was still wet. The inscription, the first found here on a vase, is written in the ordinary linear script of the Palace—a slight variation being noteworthy in the third letter, here reversed and written like an S. In Figure 3 it will be found compared with typical forms as seen on tablets of Mycenaean date.

The vase itself on which this graffito inscription appeared was of a tall

GRAFFITO INSCRIPTION
ON VASE.

NORMAL LINEAR CHARACTERS
ON KNOSSIAN TABLETS OF THE
MYCENAEAN PERIOD.

FIG. 3.—LINEAR CHARACTERS ON VASE
AND CLAY TABLETS COMPARED.

elongated form, except for its two handles recalling the shape of a Chinese jar. With it was found another similar vase (Fig. 4) and several other vessels. They were all of the same rough light-coloured clay and uncoloured, except that one two-handled jar was broadly streaked with a kind of triple spray of brown. At the bottom of a barrel-shaped vessel with tripod base, a type of which there were two or three examples, was found a grey deposit with fishes' vertebrae, showing that it had been used to store

food. In this connexion it may be mentioned that an intaglio found on the site of Knossos shows a fisherman holding in either hand a fish and a polyp. In Crete, at least, fish formed a regular part of the Mycenaean dietary.

The types of the "rustic" vases found in this chamber derive great interest from the fact that they one and all represent a degenerate "Kamáres" tradition, although, as the character of the inscription shows, belonging to a good Mycenaean period. In this respect the Amphoras with double spout and mouth of oval section, the barrel-shaped vases with a

tripod base, and a two-handled spouted bowl, are very characteristic. The cups exhibit transitional forms between the higher, often brilliantly painted, Kamáres type and the somewhat shallow receptacles of plain clay of which such vast heaps are found in the votive deposits of Mycenaean date in the Dictæan Cave and elsewhere. It will be seen that large deposits of vessels of the same transitional class were found in the chambers and magazines of the east slope, and this "rustic" fabric may with great probability be regarded as the work of slaves and handicraftsmen of the old indigenous stock who lived within the Palace walls under

Vase with
Rough Painting. Type of Inscribed Vase.



FIG. 4.—"RUSTIC" VASES SHOWING KAMÁRES TRADITION, FROM BASEMENT ROOM OF SOUTH TERRACE.

the Mycenaean lords. The appearance of a linear inscription on a pot of this class suggests many interesting questions. It must at least be taken as a proof of a considerable diffusion of the art of writing.

The comparatively early Mycenaean date of the contents of this store-room is shown not only by the Kamáres tradition in the forms of the vases but by certain structural phenomena. The vases lay in a layer of burnt wood pointing to the effect of a fire in this part of the Palace, and a little above the floor level on which they lay were the foundations of rubble walls belonging to the latest period of occupation. It is also to be observed that the gallery by which this chamber had been

originally reached from the basement of the South Terrace had had its mouth blocked at this same period by a rubble supporting wall.

Very different from this are the contents of the basement rooms and passages of the Southern Terrace itself. There the rubble walls inserted at a late period to buttress up the main south wall, together with certain contemporary chambers of the same poor construction as these buttress walls and partly built on to them, serve to bring out a very definite line in the archaeological stratification of the site. Along the foot of these later walls and in the small chambers, of which four were brought to light in the western half of the basement, were found a series of Mycenaean vases of a decidedly more recent type than those of the fine Palace style. In a room to the left of the entrance of the basement passage which runs immediately under the Corridor of the Cup-bearer sixteen Mycenaean vases were found in a more or less perfect condition, just as they were left at the latest moment of the occupation of this part of the site. The larger of these were placed on stone slabs, the smaller on pebbles. Other similar vases were found in the chamber adjoining this on the west. Among the classes represented, besides plain bowls and some rather coarse jars with flowing streak decoration, were the usual two-handled pedestalled cups of the champagne-glass form, single-handled jugs with waved and spiral pattern, and several "stirrup vases" (Bügelkannen) of high oval form and somewhat heavy fabric, with octopus designs, and large single-handled mugs with incurving sides of a type very characteristic of the tombs of Ialysos.¹ It may be remembered that among the vases of similar ceramic style found in the passage of the same basement, a little farther east, was a three-handled pyxis, in form and ornament almost identical with one from the same Rhodian cemetery.² More than this, the character of the decoration on the vases from these basement chambers, and others of similar character found elsewhere on the site, closely corresponds with that of the Mycenaean vase fragments from Tell-el-Amarna, among which, however, the octopus design seems to be wanting.

The trend of this evidence is to take us to the Fourteenth century B.C. for these latest ceramic products of the site. There was no trace

¹ Furtwängler und Löschke, *Mykenische Vasen*, Pl. ix. (56, xxxv.). Two examples of similar types from Ialysos are in the Ashmolean Museum. Another vase of this form from Nauplia is given, *op. cit.* Pl. xxi. 150.

² *B. S. Annual*, 1900, p. 8. Furtw. u. Löschke, *op. cit.* Pl. ix. (55, xxxii).

in the later chambers and passages of the Southern Terrace basement of any example of the finer Palace style. It will be seen, too, that the room of the Stirrup Vases (Bügelkannen), to the north of the building where similar ceramic types occurred, is now shown to overlay an earlier Mycenaean floor-level. Their sporadic occurrence indeed and proved posteriority make it more and more probable that at the time when these vessels were in use only a fraction of the site was still inhabited, and that the larger part of the Palace, together with the monuments of its most flourishing artistic period, was already in ruins.

On removing the later wall which blocked the entrance of the subterranean gallery that ran beneath that in which the Cup-Bearer fresco lay, an interesting find was made on the old floor level below. This was a haematite weight, with a flattened surface below, of the somewhat spindle-shaped form shown in Fig. 5. Its interest lies in the fact that it corresponds both in form and material with a class of early weights found both in Palestine and Egypt. An example from Samaria in the Ashmolean Museum and dating from the seventh or eighth century B.C., bears a Semitic inscription showing that it was a quarter *nsf*,¹ a kind of weight which recurs elsewhere in Palestine, but the name of which does not seem to be capable of a Hebrew derivation. It weighs 2.540 grammes (39.2 grains), so that the unit of which it is a quarter would have scaled 10.16

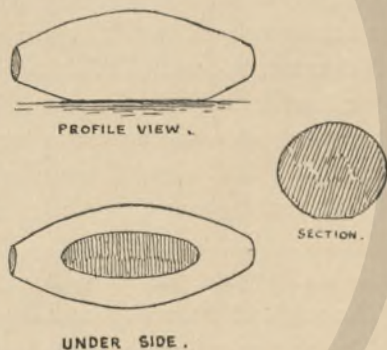


FIG. 5.—HAEMATITE WEIGHT.

grammes (c. 157 grains), an amount which bears no obvious relation either to the Babylonian or the Egyptian standards. A haematite weight, however, of the same type from Egypt weighing 46.6 grammes (about 704 grains), fits well with the Egyptian series and may be regarded as the equivalent of half an "Uten" of the lighter class, or five "Kats." The Knossian example on the other hand, which is 12.6 grammes (195 grains),

¹ For the earlier readings of this weight, see *Palestine Exploration Fund Quarterly Statement*, 1894, pp. 220-231 and 284-287. Dr. M. Lidzbarski, whose reading is adopted in the text, has now clearly demonstrated that the hitherto doubtful inscription on one side of the weight is simply a blundered and subsequently erased version of what appears on the other side (*Ephem. für Semitische Epigraphik*, I. pp. 13, 14).

does not seem to belong to any of the above systems, though it almost exactly corresponds with the weight of the Aeginetan silver staters.¹

§ 5.—THE SOUTHERN WING, AND ITS PAINTED RELIEFS.

To the east of the Southern Terrace basement three shallow steps appear leading up to what in some respects is a continuation of the same system, but which is here described as the Southern Wing of the Palace. This southern wing forms the end on this side of the great Central Court, formerly described as the East Court, and it is natural to suppose that it had some direct means of access from its southern as from its northern side. These steps are in fact in line with two short basement galleries or elongated chambers, with an intervening block, which suggest the further course of an upper passage-way leading to the Court. The Corridor that apparently ran along the Southern Terrace, and which formed, as we have seen, the continuation of the entrance Corridor from the west, would have naturally opened into this passage leading from the Southern Step-way. A direct corroboration of this view is indeed supplied by the fact that above the floor level of the basement space, over which the joint course of these two passages would have run, were found numerous fragments of blue slate slabs like those along the borders of the "Corridor of the Procession."

That there was thus direct communication both from the Western and Southern Entrances with this Central Court can hardly be doubted when the leading part played by this Court in the Palace economy is fully realised. The result of the most recent exploration has been to show conclusively that this great paved area was the real focus of the inner Palace life, just as the West Court represents the meeting point between Palace and City. It will be seen from the succeeding sections that the principal halls of the building lay on the eastern side of this Central Court. It may be further assumed indeed that a prolongation of the continued southern and western entrance ways ran along its south border and gave covered communication with the important *Megara* of the eastern quarter. The chambers actually un-

¹ Their full weight is given as 194 grains by Head (*Hist. Num.* p. 332). The value of the comparison is of course diminished by the great interval of time between the date when the weight was used and the first issue of Aeginetan staters. Another similar haematite weight found in Egypt, weighing 3 grammes (46·3 grains) may, however, be regarded as a fourth of the same unit as that represented by the Knossian example. Three leaden disks were found in the Palace which also appear to be weights. They weigh respectively 8·45 grammes (c. 131½ grains), 22·05 grammes (c. 340 grains) and 42·7 grammes (c. 680 grains).

covered in the Southern Wing are merely basements, some of them of rough construction, but the longest of these, running from west to east along the borders of the Court, certainly suggests the former existence of a gallery above.

The architectural importance of the buildings that once overlooked the Central Court on the south side is indicated by decorated remains found in the western basement space on this side. Above the floor level of this room near its east wall, from about a metre below the surface, were uncovered a series of fragments of bas-reliefs in *gesso duro* representing male subjects. Like the bull-reliefs found in 1900, these plaster fragments were coloured. The first important piece brought to light showed the back and ear of a male head wearing a crown, the upper part of which consisted of a row of sloping *fleurs-de-lys* with a taller upright one in the centre. Of the others all had a forward slant except the hindmost, which was sloped in the other direction. The colours of the diadem itself and its offshoots were evidently intended to represent inlaid metal-work. The *fleur-de-lys* ornament recurred in the shape of a collar formed of links of this shape round the neck of a male torso found near the relief of the crown. The ornament itself is typically Mycenaean, and its derivation from the pure lily type with the stamens attached may be traced on the gold-plated inlaid dagger¹ from the Fifth Akropolis Grave.

Of the natural lily as a Mycenaean hair ornament we have an example in the coiffure of the Goddess and her attendant handmaidens on the great signet from Mycenae, who wear this flower in the front of their hair. A natural wreath of this kind no doubt served as the prototype of the crown before us. But was the personage who wears it in this case royal or divine? The processional frescoes, with their apparently tribute-bearing youths, and the analogy that they present to contemporary Egyptian monuments in which the representatives of various races bear tribute to Thothmes III., suggest that in these reliefs, which may well be a more elaborate continuation of the same class of subject as those of the Corridor of the Procession, we have also to do with human personages. Among the frescoes in high relief found in a chamber on the eastern slope is an arm holding a pointed cup like that borne by the Cup-bearer of the fresco,² a fact which strongly supports this view. These analogies afford a real presumption that in this crowned head we see before us a Mycenaean King.

¹ Perrot et Chipiez, *Histoire de l'Art*, vi. Pl. xix.

² See below, p. 89, Fig. 29.

It is probable that a part of a relief of a blue mantle with curving folds, crossed by fine wavy incised lines, which was found near it, belonged to the same figure.

The male torso with the lily collar (Fig. 6) belongs to another figure. It is executed in the same low relief, and in spite of certain conventional peculiarities, such as the narrow waist and over-elongated thumb, shows an extraordinarily advanced style of modelling. The pectoral, deltoid and biceps muscles and others of the fore-arm are very accurately rendered. In addition to other minor fragments the thigh and the greater part of the leg of another figure were also found near the torso. The buttock is but slightly prominent, but great stress is again laid on the muscular development, recalling the Kampos statuette on a larger scale. The reliefs are all life-size, and the skin was originally coloured a reddish brown like that of the men in the frescoes, though this has much faded. In the case of the male torso (Fig. 6) the lilies of the collar seem to have been attached in separate pieces coloured to represent metal work. This applied decoration has, however, become detached leaving the surface below printed, as it were, in its original ruddy hue against the faded surface of the rest of the torso. The attitude and clenched hand may suggest a boxer.

§ 6.—ROOMS OF THE CLAY SEALS AND "PRIEST FRESCO."

Among the basement spaces behind the southern steps already noted was a small room containing a large number of broken impressions of clay seals. As these occurred at various levels it is probable that they were originally derived from a room above this basement. No inscribed tablets were found with these, so that they do not seem to have been used here, as in other cases, for sealing up chests containing such clay documents. The numbers of these seal impressions, on the other hand, and the frequent repetition of certain types seem to show that correspondence on non-perishable material, such as the palm-leaves said to have been used in Crete as writing material, was here both sealed and opened. Nodules of clay were found with the impressions which had evidently been prepared to supply the material for the sealings, and some small bits with partial impressions of intaglios were probably due to the preliminary and tentative use of the signets to test the consistency of the clay. A certain number of impressions belonging to the same deposit, for they repeated several of the same subjects, occurred in two neighbouring chambers to be described as



FIG. 6.—COLOURED BAS-RELIEF IN Gesso *à tiro* REPRESENTING MALE TORSO WITH *Fleur-de-Lis* COLLAR.

the room of the "Priest Fresco" and "The Lapidary's Workshop." In order to collect these more or less fragmentary seals, prolonged and careful work with the sieves was necessary.

The most frequent types found were animals, bulls or oxen, wild goats, rams or moufflons. A design exhibiting a couchant ox, looking back at a tree, recurred on eleven fairly preserved examples. Some of these seal impressions, as for instance one showing a dog with his head turned back looking upwards and with a collar round his neck, another with fish and polyp, another with a lion leaping on a lioness, and a fragment showing a man looking at the head of a magnificent bull, represent the highest level of Mycenaean glyptic art. To these must be added the half of an impres-

sion of an extraordinary large lentoid gem, upon which are seen waterfowl together with wavy lines indicating water, and a naturalistically drawn reed.

Some very curious examples show a flounced female figure of small dimensions holding what appears to be a string with the other end attached to a swallow, to which another swallow flies. Among religious subjects may be noted a Mycenaean Daemon holding an ewer and an impression, evidently from a gold signet of the usual type, showing a Goddess and votary. Two fragments exhibit what appears to be a man clad in a kind of cuirass, with his body bent towards a monster seated on a cross-legged seat, with the legs of a man, but the head, fore-legs and the upper part of the body, including the tail, of an animal resembling a calf (Fig. 7*a*). This approach to a Minotaur



FIG. 7*a*.—CLAY SEAL-IMPRESSION WITH MINOTAUR (½).

derives additional significance from the fact that several gems have been discovered in Crete—two from the site of Knossos—with the legs of a man and the head and fore-legs of a bull (Fig. 7*b, c*). The type of the Minotaur already existed in Mycenaean Crete, where it was one of a series of similar monstrous forms, such as the man-stag, the man-goat, the man-lion, and the eagle-woman.¹

¹ Gems with these types are known to me from various parts of Crete. Much new light has been thrown on these monstrous forms by Mr. Hogarth's discovery of Mycenaean seal impressions at Zakro (see below).

Besides the actual seal impressions from this deposit there came to light¹ a clay object of a somewhat different class which strongly suggests a more seamy side of the high civilisation here represented. This was a clay matrix formed by making a stamp from the impression of an actual seal, and which could thus be itself used as a signet for making counterfeit impressions of the same kind. The original of this was evidently a large gold signet-ring of a kind resembling, both in its form and the character of its subject, that found in the Akropolis Treasure of Mycenae. That this, like the other, was a royal signet is highly probable, and what adds to the interest of the matrix is that several clay impressions taken from the original ring were subsequently found in association with a very important deposit of inscribed clay tablets in the East-West Corridor on the eastern slope. These various examples allow of the complete reproduction of the design, which displays a Goddess seated in an attitude closely recalling the Goddess on the ring from Mycenae, while a female votary holds out a two-handled cup to her, immediately above which is an orb evidently representing the sun. Behind this female figure is another—half turned away—apparently performing an orgiastic dance. The group is placed on a kind of terrace amidst rock-scenery. It would seem that the clay matrix was actually used for forging the royal signature.



FIG. 7*b* AND 7*c*.—GEMS FROM KNOSSOS SHOWING MINOTAUR ($\frac{1}{2}$).

In the room where this matrix was found, east of that of the seal impressions, were two floor levels. Beneath the uppermost of these, fragments of painted stucco came to light, including a fresco fragment of great

¹ The clay matrix was found in the "Room of the Priest Fresco."

interest. It showed the heads and upper part of the body of two small male figures, each of whom was clad in a kind of white stole, with a broad band running down from the shoulder. In front of them was the upper part of a Mycenaean column, with a very prominent torus to its capital. The column was coloured yellow, perhaps intended to represent gilding.

The stoles of the two figures, very different from the ordinary Mycenaean garb, convey to the modern mind a sacerdotal association. They may be compared with the long robes worn by a certain class of male figures seen on Mycenaean signets, of which several examples have been found in Crete, including an impression of one found in the Palace itself.¹ On the latter, as in some other examples²—one from Knossos itself—the figure carries a single edged axe of the Egyptianising and also "Hittite" type found in the Vapheio Tomb.³ On another Knossian gem⁴ he holds a bird, apparently a duck—having possibly a votive significance. On one of the finest of the Vapheio gems he is seen leading a griffin. The associations here seem to be distinctly ceremonial and religious, and on the fresco fragment this element⁵ is certainly suggested by the column in front of the figures.

§ 7.—THE LAPIDARY'S WORKSHOP.

In an adjoining basement room to the south of the room of the "Priest Fresco" were a variety of objects showing that it had been used as a workshop or workman's store. These relics also partly extended over the neighbouring basement spaces. Here were found a number of peg-like objects, mostly with a groove round the top, of marble, bone and steatite, jasper and steatite studs, shell beads, low, cylindrical stone objects which had the appearance of draughtsmen, and bone pieces, apparently also connected with a game. Many of the objects were in an unfinished state, and the materials for making others were present in a more or less rough or purely natural state, as, for instance, a flat oblong piece of jasper chipped round at the edges, and crystals resembling beryl.

In the more southerly of these two workrooms was found a small *pithos* filled with small burnt beans. These were at once recognised by the workmen as *κικιά Μισιριωτικά*—Egyptian beans—a dwarf kind at

¹ Beneath the doorway of the Room of the Stone Drum (described below p. 32).

² In the Candia Museum.

³ 'Εφ. 'Αρχ. 1889, Pl. viii. 1.

⁴ In my own collection, acquired in 1894.

⁵ 'Εφ. 'Αρχ. 1889, Pl. x. 32.

present imported into Crete from Alexandria, and of which there is an abundant supply in the Candia market. Remains of another pot were also found with carbonised seeds of a smaller kind. The northern part of the other workroom had also been used as a store for grain. It was covered at a depth of 2.60 m. from the surface with large quantities of a carbonised cereal, apparently wheat, extending in a thin stratum. The wheat had probably been heaped on the floor of this room, as there was no trace here of a special recipient.

§ 8.—RESTORED PLAN OF A WESTERN UPPER MEGARON, AND OF THE HALL OF THE JEWEL FRESCO.

That the Southern Propylaeum, standing as it evidently does in direct connexion with the noble entrance Corridor from the west, should have formed the avenue of approach to some important *Megaron*, is on the face of it extremely probable. Unfortunately, last year's excavations showed that the area immediately beyond it had been much denuded, and its relation to the quarter of the building to the north of this remained obscure. From the exposure of a good deal of the primitive clay deposit of the Neolithic settlement in the intervening space, the name of "Central Clay Area" was provisionally applied to this plot in last year's Report.

But subsequent observations have led me to modify this conclusion. On the eastern margin of the area there are visible in position slabs of good paving, which seem to indicate that the whole of the area immediately bordering on the Propylaeum had originally been paved. That the slabs should have been removed over the greater part of the space in question agrees with what is now seen to have occurred on a larger scale in the great Central Court, ready-made paving slabs affording an obvious temptation to later owners of the soil. It has, therefore, been thought better to substitute for the area the name of "Court of the Altar" from what appears to be an altar-base visible in its eastern bay.

Dr. Dörpfeld, on visiting the remains of the Palace, was much impressed with the view that the Southern Propylaeum must have formed the direct avenue of approach to important halls to the north, and suggested that part of the denudation visible in the "Court of the Altar" was due to the removal of a ramp or step-way leading to a first-floor storey beyond. Of the two alternatives the former existence of a broad flight of steps is much

more in accordance with the practice of the "Minoan" architects of Crete, as is now conspicuously shown by the noble flights of the Phaestos Palace. It is also highly probable that the same agencies that were instrumental in removing so many of the paving slabs may account for the disappearance of a flight of stone steps.

It was already pointed out in my former Report that the flight of steps with a central column base running upwards from the Central Court, in juxtaposition with the downward steps of the Throne Room Antechamber, must have led to an upper hall or Megaron. Of the existence of a long upper hall at this point new evidence was, in fact, brought to light by this season's excavations. The further question now arose: Was not this again in connexion with a second upper Megaron to the south of it,—a Megaron in turn communicating with the Court of the Altar and the Southern Propylaeum by means of the broad flight of steps which *ex hypothesi* existed on that side?

Of the existence of an upper storey in this part of the Palace there has never been any doubt. At various points along the upper part of the basement walls were blocks and slabs belonging to the lower course of the upper walls or the pavement of its chambers. This year, after a heavy shower of rain, I noticed a flat block in this position with the impress, clearly brought out in black by the moisture, of two round columns side by side, about 45 centimetres in diameter, that had rested on it, the black colour being probably due to the burning of the wood of which the columns were composed.

That a columnar hall had existed on this upper level was made probable by two other circumstances. The two square pillars marked with the double axes would find their most natural structural function in the support of corresponding columns on the upper storey,¹ while a pier halfway

¹ The function of supporting does not necessarily conflict with the view that pillars of the double axes were of a consecrated nature. It coincides in fact with an aspect of the ancient cult treated of in my monograph on *Mycenaean Tree and Pillar Cult*, § 17, "The Pillar of the House." The criticism made by Mr. W. H. D. Rouse (*J.H.S.* xxi. p. 273), that there are other signs besides the double axe, and that therefore undue stress should not be laid on this, is answered by the exceptional position which the double axe holds among the Palace signs, of which the most recent excavations afford fresh corroboration—witness the Megaron of the Double Axes—(see p. 112 below), by the occurrence of the double axe in its votive form as a vase ornament of the "Palace Style" (see p. 53 below), and by the fact that several of the most constantly recurring among these signs, such as the star, the trident, the branch, the cross, and the sistrum (?), are also traditionally associated with various divinities. It is probable that some of these signs grouped together on the hieroglyphic seals represent invocations of a religious kind. The recurrence of the Double

KNOSSOS · PLAN SHEWING RESTORATION OF UPPER MEGARON, ETC

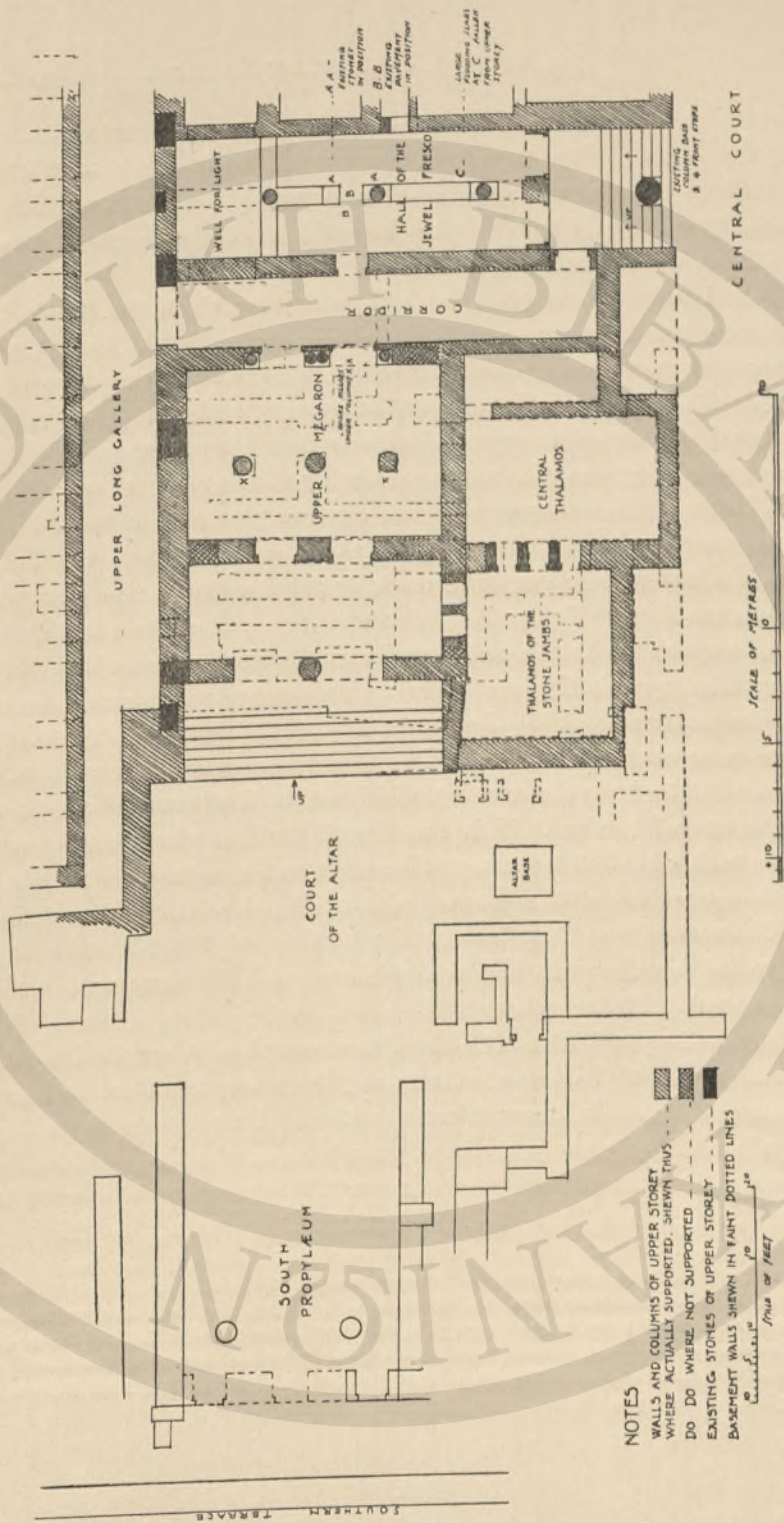


FIG. 8.—RESTORED PLAN OF WESTERN UPPER MEGARON AND THE HALL OF THE JEWEL FRESCO.

between them seems to have been devised for the support of a third column or pillar above. More than this, two column bases were actually found above the floor level of the adjoining room named from them, which in all probability had once been *in situ* above these neighbouring supports.

Taken in connexion with the lines of the surrounding basement walls, and the blocks of upper walling still visible on them, this triple line of columns gives the key to a very probable restoration of the plan of an upper Megaron opening on the hypothetical steps to the south as shown in Fig. 8. Its front almost centres on the opening of the Propylaeum beyond.

It will be seen that my restored plan does not correspond with that of the type of Megaron with which we are familiar at Tiryns and Mycenae, with its quadruple group of columns clustering round the hearth. But it exactly answers to the "Minoan" halls of Crete as seen in the Palace of Phaestos, and represented at Knossos itself in the halls now excavated on the eastern slope. The method of construction answers to a more southern type, in which the hearth no longer forms the fixed centre of the Megaron, warmth being probably supplied when necessary by some movable brazier like the modern Greek *θερμάστρα*. A central roof-opening, which could also serve as an outlet for smoke, being thus unnecessary, it was found more convenient to have the opening, which was still necessary for light, at the further end of the hall. This broad well for light was probably provided above with a kind of lantern or clear-storey as a partial shelter from rain.

A comparison of the restored plan on Fig. 8 with the great Megaron at Phaestos shows how nearly the outline of the Knossian hall, as suggested by the piers for the columns and the basement wall-lines, corresponds with the other.

A further parallelism with the Phaestian plan is supplied by the fact that along its right-hand wall, entering from the front, are some smaller rooms or *θάλαμοι* in communication with it. These rooms are apparently three in number, namely, a central chamber over the Room of the Column Bases, with a small annexe to the north, and another fair-sized chamber over the Room of the Chariot Tablets. The access to this suite of

Axe and other similar signs at Phaestos does not weigh against this view. The "Houses of the Double Axe" were probably many, and the name of Labyrinth may itself have recurred,—in fact, Gortyna as well as Knossos claimed one. The various cults associated with the Minoan dominion at Knossos would be largely common to the other princely centres throughout the island. I have purposely reserved a fuller discussion of the signs on the Knossian blocks till the evidence is complete.

θάλαμοι from the upper Megaron seems to have been by means of a door opening on the central of these chambers. The remains of the upper floor, with the jambs of a double doorway leading from this central *thamos* to the room to the north of it, were still preserved *in situ*. Owing to this it has been named on the plan "Thamos of the Stone Jambs."

The most uncertain detail is the bi-columnar arrangement shown on the slab already described. This slab stands exactly on the middle line of the Megaron, and it seems safest to suppose that there was here a double doorway in its back wall, each of the two columns of its central division answering to another on the other side of the respective doorways. The doorways thus indicated open on what from the basement wall-lines seems to have been a cross-corridor running from the portico of the elongated Hall beyond to another passage forming an upper gallery of the Long Gallery of the Magazines. In this abutment of the back of the Megaron on two galleries running at right angles to one another, we find again a certain correspondence with the arrangement of the great Megaron at Phaestos.

The Corridor on which the upper Megaron of Knossos opened at its inner end was bounded on its northern side by the long Hall already mentioned. The width of this hall is clearly marked by that of the steps at its eastern end leading down to the Central Court, and its northern boundary thus rests on the south wall of the Throne Room and the rooms in connexion with it. Along the centre of the oblong space thus defined, in a line with the column base on the steps, is another basement wall which afforded the necessary support for piers and columns running along the middle of the long upper chamber. More than this, on the top of this wall several blocks and slabs of the upper structure are still preserved *in situ*, which seem to represent the remains of a raised stylobate with a paved passage-way across it. To the borders of this some remains of the original gypsum paving slabs of the body of the hall also clung, clearly showing the original floor-level. In the basement chamber immediately behind the impluvium of the Throne Room, some fine black slabs were also found in a half fallen position. This is the finest paving that has come to light anywhere in the Palace.

The inner line of the portico, which must have had a double opening, is indicated by a cross line of basement wall, and the western termination of the stylobate by another. At this point no doubt began a light opening of

the kind already referred to in the case of the upper Megaron. Analogy and the elongated shape of the covered part of the chamber make it reasonable to assume that the stylobate supported three wooden columns. It is to be observed that the paved opening noticed in this as probably a passage-way centres with the eastern of the two back entrances of the upper Megaron and a line of doors and openings beyond. This circumstance makes it probable that the doorway by which this hall communicated with the Corridor running along its southern border would have opened opposite this, and thus have centred with the Megaron door in the opposite wall of the Corridor.

Of the brilliant and beautiful decorative designs that once adorned the walls of this upper hall some traces came to light in the shape of numerous painted stucco fragments found above the floor level of a basement magazine situated beneath its central part, to be described below as the Magazine of the Vase Tablets. Among the fresco designs painted on the flat were pieces apparently belonging to a border, including a not infrequent wave and wavelet pattern, and a very beautiful design of an olive or myrtle spray with dark brown and reddish foliage. Another fragment is still more remarkable. It represents the thumb and forefingers of a man, beautifully modelled in high relief, and of the conventional reddish colour with a white nail, holding the corner of a blue robe and the end of a beaded chain, which from its yellow hue is evidently intended to be of gold. Unlike the fingers, these are painted on a flat surface. The jewels consist of round beads with pendants in the shape of little negroes' heads, of the same yellow hue but with curly hair outlined in black, and with large rings linked in each other and coloured red hanging from their ears. The gold ornament appears to be attached to the corner of the blue robe. A dark object in connexion with it may possibly represent a lock of human hair, and the coloured fragment seems to be part of a life-sized relief of a man fastening a robe by means of the gold agrafe about the shoulders of a personage of distinction. The hand and jewels present a striking analogy to a fresco fragment found near the north portico, showing the very graceful fingers of a woman holding the end of a necklace of dark, round beads. In the present case the golden material of the necklace, coupled with the negroes' heads, seems to point to Nubia—the Egyptian "Eldorado"—as the source of the precious metal.

This interesting fragment suggests that the walls of the long Hall

from which it was undoubtedly derived, and to which the name of the Hall of the Jewel Fresco may be conveniently given, was once adorned with a series of figures like those of the western Corridor, but in this case, as in the South Gallery described above, executed in fine relief.

§ 9.—SUPPLEMENTARY OBSERVATIONS IN THE REGION ABOUT THE ROOMS OF THE COLUMN BASES AND OF THE PILLARS.

This season's work brought with it certain modifications and additions to the plan of the part of the building of which the "Room of the Column Bases" forms the central point. This Room stands to this part of the Palace in much the same relation as the antechamber of the Throne-Room to the adjoining area. It serves as a kind of forehall to the rooms behind and beside it, and the analogy is strengthened by the fact that here too the access to the Central Court was by means of a short flight of steps, and that on the north wall of the room was a stone bench of the same kind as those flanking the Antechamber of the Throne Room.

The "Room of the Great Pithos," to which that of the "Column Bases" gave access on the north, was found to open on a second well-paved store chamber¹ in the centre of which were two sunken cists, resembling the "Kasselles" of the Magazines but without a second recipient below. The white-faced stucco on the south wall of this room showed stripes of red below and above, forming a kind of dado and cornice band similar to that of the Magazines and Long Corridor. This basement chamber may be called for distinction the "Room of the Two Cists."

On the west side of the "Room of the Column Bases," two interesting developments took place. What had seemed to be a blind alley opening on the south-west corner of the hall proved to be in reality continuous and to supply a thoroughfare to the Long Gallery by the passage called in the preceding Report the Corridor of the House Tablets which is in fact a section of the same gangway. This circumstance refutes the view² that communication between this part of the Palace and the Long Gallery was at any time interrupted.

It further turned out that the doorway leading from the Hall of the Column Bases to the East Pillar Room was flanked by a second. The

¹ The floor level here was 2.10 m. below the surface. At 1.30 m. down was a deposit of burnt wood.

² Suggested in my previous Report, p. 26.

double entrance adds to the importance of this inner room and certainly enhances the probability that the pillars so significantly marked by the double axe had sacred associations. In this connexion moreover two additional facts are to be noted. On either side of the East Pillar is an oblong receptacle, too shallow to have been a store place like the "Kasselles" but well adapted for offerings or libations. On the other hand the floor round the West Pillar showed a regular border and central square like that of the Throne Room and indicating that in this case as in the other it had been adorned with varied colouring.

§ 10.—RECESS OFF CENTRAL COURT WITH SEAL-IMPRESSIONS
SHOWING LION-GUARDED GODDESS AND HER SHRINE.

On the front line of the Central Court between the "Room of the Column Bases" and the steps of the "Hall of the Jewel Fresco" is a curious oblong recess with a side niche having a cement floor at its south end. Its depth is too shallow for it to have been an ordinary room. On the other hand the finely cut limestone blocks by which it is flanked and partly faced, as well as its conspicuous position in the great Court, indicate that there was here an important structure.

The upper surface had been only partly excavated at this point during the campaign of 1900 owing to the need of leaving a passage way for barrows. On removing the superincumbent earth early in the present season, a floor level came to light about 70 centimetres below the surface covered with a deposit of burnt wood. In this layer, by means of careful sifting, was found a series of fragments of seal impressions.¹ At first sight they appeared to represent more than one sphragistic type, but a careful examination revealed the fact that though the fragments belonged to a series of clay sealings, they had all been impressed by the same signet. Although these various impressions existed only in a fragmentary state it was thus possible to complete one by another, and by means of the overlapping pieces to recover the original design in its entirety.

The seal type thus restored in all its details (Fig. 9),² presents a

¹ Two or three scattered fragments belonging to the same deposit were also found within a radius of a few feet; one in the chamber immediately to the west, another on the top of a wall on the north side.

² The figure is from M. Gilliéron's careful drawing of the overlapping fragment as arranged according to a key sketch of my own.

religious subject of great interest. The design, as is usual with such religious compositions, had evidently been engraved on the besil of a gold signet ring of the same kind as that counterfeited by the clay matrix described above.

The central figure of this design is a female Goddess in the usual Mycenaean garb, standing on her sacred rock or mountain peak, which represents, in fact, her aniconic shape, and upon which her two lion guardians and supporters rest their fore-feet on either side. In her hand she seems to hold out a kind of weapon, and in front of her stands a male votary in the act of adoration. Behind her is her shrine with sacred columns, in



FIG. 9.—IMPRESSION OF SIGNET-RING, SHOWING LION-GUARDED GODDESS AND SHRINE (§).

front of which, and again on the entablature above, the "horns of consecration" are clearly visible.

To myself this discovery was of special interest, inasmuch as it completes and amplifies the evidence I had collected of a series of Mycenaean seal-types referring to a Goddess,—the prototype of the later Kybelê and Rhea,—with lion guardians, sometimes standing herself between them, sometimes represented by her aniconic image in the shape of a column or base.¹ A seal impression found in a chamber in the eastern quarter of the Palace shows the simple type of the Goddess between two lions. In the present case we see her,—and it must be

¹ Mycenaean *Tree and Pillar Cult* § 22.

remembered that, in Crete too, there was an "Idaean Mother,"—standing on her sacred peak. The "horns of consecration," on the other hand, placed before the columns on the shrine behind her and again on its entablature show that the columns here represent the artificial pillar forms of the cult object as opposed to the holy mountain itself on which the Goddess stands.

We have here, in fact, examples of both the handmade and the natural objects of the divine possession. Either the pillar or the sacred peak itself could be equally worshipped.

The shrine itself has a special importance from the parallel it presents to that shown on the small fresco found in the Palace in 1900. In this case, indeed, we have naturally to take into account that artistic "shorthand" which characterises the gem engraver's craft. The shrine here is reduced to an entablature with columnar supports, and the lateral wings are omitted. But the basement storey below and the twin columns with the sacral horns in front of them are features of correspondence which show that we have to do with essentially the same type. It is probable that if the roof of the shrine on the fresco had been completed we should have seen additional "horns of consecration" resting upon it as in the case of the shrine on the signet. This feature, in fact, recurs on the wall-top of a fragmentary fresco apparently depicting another sanctuary.

These correspondences, and the further proofs of the cult of a similar Goddess supplied by other seal impressions found in the building, establish a real presumption that the shrine on the wall-painting was in part at least dedicated to the cult of the same Mycenaean divinity. It is, indeed, by no means improbable that the deposit of seal impressions relating to this cult in this small chamber at a prominent point of the front of the great Central Court may give a clue to the actual site of the miniature temple depicted on the fresco. It is clear indeed from the basement blocks visible below it, and the crowds in the open space in front of it, that the original of that shrine was reared on the side of a Court.

In this connexion it is interesting to recall that the tradition of a very old cult of Rhea survived at Knossos to quite late times. Diodoros records that in his day, there were still visible on Knossian soil (once, as he tells us, inhabited by Titans), the site and foundations of the House of Rhea and a very ancient Cypress Grove.¹

¹ Diod. Sic. lib. v. c. 66.

§ 11.—SUITE OF SMALL ROOMS BELONGING TO THE WOMEN'S
QUARTER.

Owing to the necessity of keeping open passage-ways above, a zone immediately to the north and west of the Room of the Throne and its annexes had been left almost completely undisturbed during the first season's work. The excavation of this area has now brought to light a series of small rooms in communication with one another and presenting certain common features.

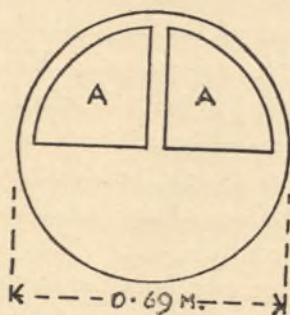
The first of this suite of small chambers is the room already opened in 1900, approached by a doorway leading from the Corridor of the Stone Basin and to which the name of "Room of the Cupboard" was given from what appeared to be a small closet in its western wall. This cupboard, however, turned out on closer examination to be a blocked doorway leading to the rooms beyond. It will be remembered that the limestone slab of a seat was found on the floor of this room, hollowed out to the form of the body, like the throne, but which from its ampler dimensions I had already been inclined to regard as a woman's seat.¹ This conclusion has, as will be seen, found a striking corroboration from the discovery in another compartment of the same suite of rooms of a seat of similar proportions fixed on the floor, and therefore belonging to a person of the female sex, the Mycenaean women, as distinguished from the men, being often depicted in a more or less squatting attitude.² It may be useful, therefore, as the name of "the Cupboard" no longer applies, to distinguish this small chamber as the "Room of the Lady's Seat."

The charred woodwork of the blocked doorway between this and the room immediately to the west was well preserved and had contributed to give its shallow recess the aspect of a cupboard. Under the rubble partition with which it was blocked were found some fragmentary remains of linear tablets which showed that the blocking had taken place at some period after the time when these clay documents had come into use. The small room thus entered had along its northern wall a low stone bench

¹ *B. S. Annual*, 1900, pp. 38, 42.

² Compare, for instance, many of the miniature frescoes of the Palace, and the representations of Goddesses on the signets. The Minotaur-like monster, on the other hand, seen on the seal impression already described, is seated on a kind of throne. The "Chariot tablets" of Knossos often show a high seat in the car, recalling the throne in outline.

On the threshold of the doorway leading from this "Room of the Stone Bench" to that adjoining it to the west was found the clay impression with the axe-holding, priest-like figure described above.¹ This room presented a most enigmatic feature. About 1.50 metres from its west wall and 1 metre from that to the south stood the drum of a column .69 centimetres in height and the same in diameter. It rested, without a base, on the cement floor and its summit was at a depth of a metre from the surface. The eastern half of its flat top surface was cut out into two shallow quadrants, as seen in Fig. 10, the base of these running almost exactly towards the magnetic north. Against the west wall of the room near the



STONE DRUM
 HEIGHT FROM FLOOR · 0.69 METRES.
 FLAT TOP · QUADRANTS A·A· SLIGHTLY SUNK

FIG. 10.

column drum was a thin gypsum slab of semicircular form, standing about the same height as the top of the pillar with its base cemented into the wall plaster.

It is evident that the purpose of the column drum and the semicircular slab was in some way connected. They must both have been made use of by a person in a standing position. The two quadrants of the column drum and the exact correspondence between its height and diameter, might well suggest some kind of instrument. It must, however, be borne in mind that the quarter in which this curious object made its appearance was certainly one set apart for women. The analogy of another room of this series to be described below, containing a table and sideboard of culinary

¹ See p. 20.

aspect certainly suggests that here too the object in view was of a domestic kind.

The "Room of the Stone Drum" opens on its western side upon an elongated chamber or small gallery divided into three compartments by projecting buttresses. These buttresses end in good limestone pillars, the upper stone of the second of which is cut down from a larger block, bearing the window sign characteristic of the first period of the building.

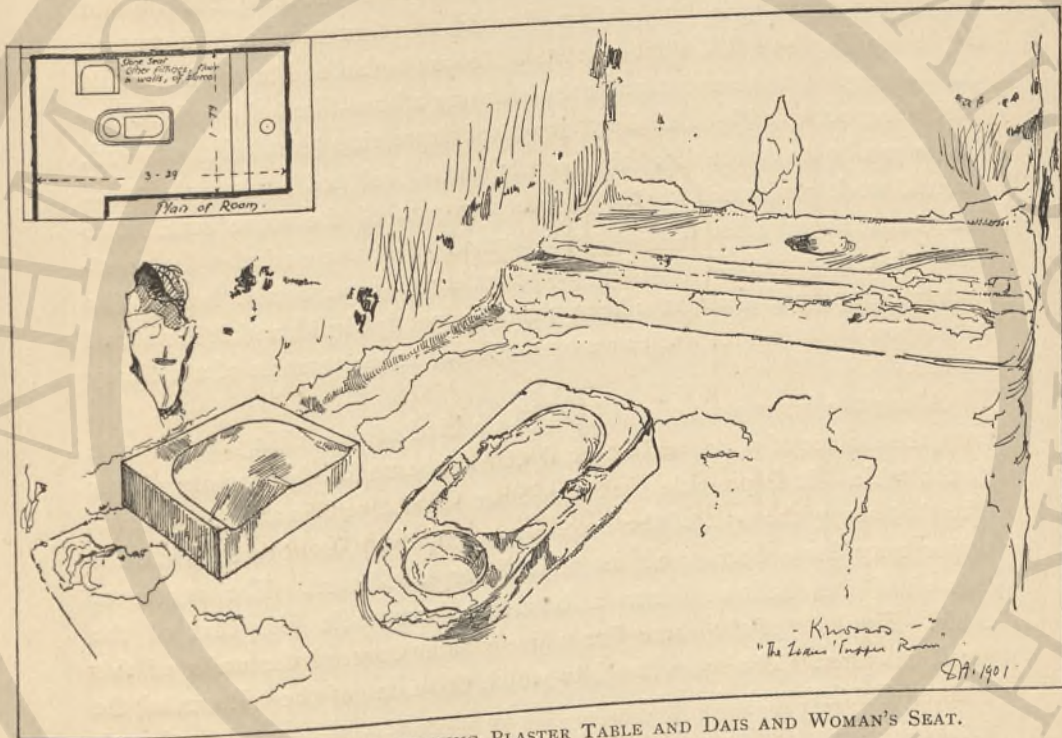


FIG. II.—VIEW OF ROOM SHOWING PLASTER TABLE AND DAIS AND WOMAN'S SEAT.

This tripartite chamber leads to another small room of considerable interest, which forms the termination of the suite with which we are dealing. Against the wall of this chamber, opposite the door (as if for better light), is another low limestone seat of the same form and approximate dimensions as the woman's seat, noted above in the first room of the series. In this case, however, it is a fixture firmly cemented into the white plaster that forms the flooring of the room. This seat is raised only 13 centi-

metres above the floor, its width is '55 centimetres and its depth '46. These figures become very significant when set beside those of the throne, the seat of which is 58 centimetres high, 45 wide and 32 deep. As already observed, the difference in capacity is naturally accounted for by that of the physical development of the two sexes, while the discrepancy in height is owing to the methods of sitting in vogue respectively among the Mycenaean men and women.

In front and on a level with the seat was a low table rounded at one end and square at the other, the surface of which was formed of a thick coating of plaster (Fig. 11). Like the seat, its table was embedded in the cement of the flooring. At the end nearest the seat was a bowl-like hollow, the other part being occupied by a shallow elongated depression rounded at one end. There can be no doubt that this low table was designed for some kind of manual work performed by the female occupant of the stone seat. The fact that the surface of the table was formed of plaster excludes the possibility that any kind of grinding or pounding was performed here. The material employed must have been plastic or partly liquid, and it is natural to suppose that the receptacles were used for some preparation of a culinary nature.

Along the inner wall of the room ran a kind of dais rising in a double step, the surface of which was covered with the same fine hard white plaster as the table. It is possible that the lower step served as a kind of bench like that along the wall of the second room of the present suite, while the upper may have been used as a shelf or side-board. The centre of this shelf was hollowed into a bowl-like receptacle like that of the table. Remains of the same fine white plaster covered the walls of this small chamber. The room itself, to which the name of the "Room of the Plaster Table" may be given, seems to have served as a kind of small kitchen.

The distinctive seats found in the first and the last of this continuous suite of small rooms, put it beyond reasonable doubt that we have here to do with a section of the Women's Quarter of the Palace. These rooms are entirely separated from those of the Throne Room system proper, or the Megaron of the Jewel Fresco which overlooked it. They form one long "apartment," the single entrance to which is supplied by the door opening on to the "Room of the Lady's Seat" from the "Corridor of the Stone Basin." But this passage communicates on the other side with the group

of chambers, some of them now ill-defined, to one of which belongs the miniature fresco with its remarkable illustrations of Mycenaean Court ladies. It is possible that the Women's Quarter extended on this northern side of the Corridor and included an important Megaron.

A natural question arises as to the lighting of the suite of women's rooms above described. The evidence of various avocations performed in these rooms certainly tends to show that their occupants were not left in darkness. Light may have been obtained for the first two rooms of the suite either by means of a kind of clear-storey above the level of the roof of the Throne Room, which does not seem to have had any other chamber above it, or from the Corridor of the Stone Basin, which may have been partly open. But the question of the lighting of the other chambers of the series involves greater difficulties, since the adjoining rooms at the back of the Throne Room seem to have had an upper storey. It is possible that the passage way of the tripartite chamber between the Room of the Stone Drum and that of the Plaster Table was left open.

§ 12.—THE WALLED PITS: SUGGESTED PALACE DUNGEONS.

The mud-built North Wall of "the Room of the Stirrup-Vases" ("Bügelkannen") excavated last year having collapsed, a good opportunity offered of exploring the layers underneath. A few centimetres below the floor level with which this wall was connected another Mycenaean pavement came to light and some inscribed tablets resting upon it. This proof that the Room of the "Stirrup-Vases" belongs to a late Mycenaean period is interesting in connexion with the painted vases found in position in it. The "Stirrup-Vases" themselves with their rather coarse octopus designs belong to the same somewhat decadent ceramic class as the vases found in the chambers and galleries of the South Terrace basement. They are far inferior to the products of the fine "Palace Style."

Immediately below this second floor level and about 50 centimetres below that of the Room of the "Stirrup-Vases" two parallel lines of wall with an interval of 1.60 metres between them made their appearance, which continued east under the neighbouring Room of the Flower Gatherer,¹

¹ The floor of this room was also found in a partly destroyed condition. Here too are two floor levels; (1) a good white cement floor 1 metre below the surface, (2) another cement floor 40 centimetres below the first with a large slab embedded in it.

where they were connected by a cross-wall running north and south. There thus revealed itself a narrow elongated chamber extending 7 metres from the line of the west wall of the "Stirrup-Vase" Room. The walls of this chamber were of small, rather roughly faced limestone blocks much resembling those of the foundations along the West and North Wall, but descending 7 metres—(24 $\frac{1}{8}$ feet)—a far greater depth than any foundations here discovered. The virgin soil here at last reached consisted of the red potter's earth elsewhere found at about the same depth beneath the Neolithic clay deposit. Several pieces of Neolithic pottery were found in this deep chamber, but they must have reached their position through some later filling in. The walls themselves belong to the same Early Palace period as the foundations already referred to and at various levels in the pit, but especially at the bottom, were found fragments of fine stucco, its surface painted a warm terracotta colour and backed with a clayey straw-bound plaster.

Immediately east of the long pit on the further side of the Room of the Flower Gatherer was found another of similar depth and construction, but of much smaller dimensions, 4.25 metres in length by about 1.20 metres in breadth.

With what object were these walled pits constructed? Going down nearly twenty-five feet through the solid clay, they were not mere foundations; neither were they cisterns. As store places for corn they do not seem to be well adapted. In finding a motive for such structures we have in the first place to remember the character of the building in which they were contained. The rubble walls of the Palace made them bad for custody. Where precious objects would have been placed in the secure cells of later buildings, we find them, as is seen by the "Kasselles," deposited in receptacles stowed far away beneath the pavement of the Magazines. The walled pits, indeed, belong to a different category from these stone chests, but it seems conceivable that they were also destined for custody of another kind. In the royal residence some place was necessary for the safe-keeping of captives and hostages, and such by the conditions of the structure could not be found above ground. It does not seem unreasonable to recognise in these deep-sunk walled chambers the dungeons of the Palace—the longer chamber holding several prisoners, the smaller perhaps for solitary confinement. In these deep pits with their slippery cemented sides above, the captives would be as secure as those "beneath the leads" of Venice. The

groans of these Minoan dungeons may well have found an echo in the tale of Theseus.

§ 13.—CONTINUED EXPLORATION OF THE WEST MAGAZINES.

During the preceding season's work eight Magazines had been opened on the west side of the Long Gallery; the rest of this series, ten in number, making a total of eighteen, were excavated during the present campaign.

Already in last year's Report attention was called to the numerous traces of an upper storey visible above the top of the walls and door-jambes of these Magazines.¹ In this respect Nos. 9 and 10 are of special interest as exhibiting well-preserved remains of the actual flooring above the Magazines. A section near the mouth of the Ninth Magazine showed, about 30 centimetres from the surface of the ground, a burnt clay band with the core of a cylindrical crossbeam impressed in it. This former roof-line started at the sides from a height of about 1.90 metres, but sagged down slightly towards the centre. Above it was a brownish layer, and above that again traces of a white pavement of gypsum cement, which in its better preserved fragments showed small pebbles embedded into its fine upper surface. About 15 centimetres again above this was visible in places a red layer of clay plaster representing a second and later floor-level.

A section across the mouth of the Tenth Magazine showed—at the same height as that of No. 9—a clay layer burnt like the other to brick-like consistency from contact with the original roof-beams. Embedded in this burnt clay were visible, as in other similar positions, sherds of rough pottery. About 20 centimetres above the lower level of this burnt clay layer, and apparently forming one whole with it, was a pavement of clay cement with pebbles stuck in its upper surface. This part was carefully excavated from above, the result being to uncover patches of the same pavement *in situ* at a height of 2.5 metres from the floor-level of the Magazine below.

Above the stone jamb that separates the Eighth and Ninth Magazines, at a height of 1.40 metres from the floor-level, is the usual lacuna backed by gypsum cement and originally partly filled by the wooden

¹ *B. S. Annual*, 1900, p. 20.

beams which formed the lintels of the low doorways of the Magazines. This cement layer is 45 centimetres in thickness, and above it again as in other cases, is a large limestone block forming the base of the upper storey wall. This block has the eight-rayed star sign engraved upon it, which also regularly recurs on the lower jambs of the Magazines from the Sixth onwards.

We have here an important piece of evidence that the original structure of the upper storey in this part belongs to the same early date as the lower, though the existence of more than one pavement on the upper floor-level implies subsequent internal changes.

This structural stratification leads to another interesting conclusion. In these and the neighbouring Magazines, at various levels, were found fragments of Mycenaean painted vases, and similar fragments, many of them actually belonging to the same vessels as the others, were also found just outside the adjoining Western Wall of the building, above the level of the Court. It follows that all these remains of vases, whether found inside or outside the Western Wall, must have been derived from the upper chambers which we know to have here existed above the Magazines. The pieces found inside the Magazines, many of them far above the lower floor-level, had worked down to their present position owing to the breaking in of the upper floor.

To these remarkable ceramic relics there will be occasion to return.¹ They are typical examples of what I have elsewhere described as the "Palace Style" and belong to the most brilliant period of Mycenaean Art. They also show the style that was in vogue when this part of the Palace was destroyed.

These fragments may be safely regarded as having been derived from vases existing on the latest of the upper floor-levels, at the moment of the destruction. It follows that the earlier of the upper floor-levels, as seen in the Ninth Magazine, belongs to a period anterior to the great days of Mycenae. This conclusion altogether corresponds with the indication supplied by the limestone block exhibiting the stellar sign, which, as already pointed out, belongs to the earliest elements of the existing building as illustrated by the stone jambs of the Magazines below. It will be seen from the contents of some of the Kasselles and from other evidence that this early architectural element corresponded with a ceramic

¹ See below p. 47, and cf. *B. S. Annual*, 1900, p. 25.

style of a transitional character forming an off-shoot of the Kamáres class, and to which the name of "Mycenaean" is certainly not appropriate.

In order to preserve the valuable stratigraphical evidence supplied by the Ninth Magazine, a section of earth was left unexcavated near its entrance, forming a strip about 3 metres in extent. At the entrance itself in front of this section, six well-preserved *pithoi* were brought into view, one of them overturned. Behind the unexcavated block of earth, in the back part of the Magazine, stood fifteen more pithoi, twelve of them whole. This Magazine, like the Seventh, was divided into two parts by a projecting buttress 2.14 metres broad and 2 metres high. It consisted of well-squared gypsum blocks and stood out a metre from the south wall, leaving a gangway between the two halves of the Magazine of about 1.25 metres. A small deposit of clay tablets was found above the floor-level at the west end of this Magazine,¹ interesting as exhibiting a pictorial sign apparently representing a granary. A chalcedony lentoid gem was also found here, showing a man grappling with a bull, on the back of which springs a dog with bristling mane.

The Tenth Magazine was comparatively narrow. At the entrance it was 1.85 metres wide but, 2.30 metres in, the north wall thickened, reducing the width to 1.60 metres. The pithoi here had been a good deal broken and the "Kasselles" disturbed, probably by later treasure-seekers. Near the mouth of the Magazine, however, stood an exceptionally fine store-jar of somewhat elegant contour, with a slender base. In its system of decoration it somewhat recalled the large pithos from the room adjoining that of the Column Bases. At intervals between the base and summit it had three tiers of perforated handles, separated by triple horizontal bands.

The next three Magazines (Nos. 11, 12 and 13) are especially long—nearly 19 metres, or 5 metres more than the preceding series—the architect having availed himself of the additional space gained by the great angle of the Western Wall of the building. On the other hand they are narrow, their average width not exceeding about 1.60 metres.

The Eleventh Magazine² proved to be very rich in pithoi which, to the number of twenty-two—seventeen more or less perfectly preserved,—were arranged along its Northern Wall. The place of the "Kasselles" had

¹ One of them had fallen into the second pithos from that end.

² The south wall of this Magazine was badly preserved, the painted stucco being visible only at its east end. At 2 metres from the entrance the south wall thickens, and the Magazine narrows to a width of about 1.40 metres.

been modified in consequence of this and instead of being as before in the middle of the gallery they were here ranged nearer the south wall. Placed thus they were accessible without disturbing the store-jars. It will be seen that this is a very different arrangement from that of Magazine No. 8, where it was only after removing the huge store-jars that the chests below the pavement could be opened. At the west end of the Eleventh Magazine, owing to the falling away of the ground the tops of the pithoi were only a few centimetres beneath the surface of the earth, or actually showed above it, but they were nevertheless for the most part intact.

A small deposit of inscribed tablets, most of them in a somewhat fragmentary condition, was found in the Eleventh Magazine from about 80 centimetres to a metre from the surface of the ground near the sixth pithos from its entrance, into which some of the pieces had fallen. Near these were the charred remains of a wooden box and, in a vertical position near the south wall, a gypsum slab, perhaps belonging to a chest of that material, in which the box had been enclosed. Here were also found two seal impressions from large lentoid gems showing two variations of the type of a bull seized by lions, and a smaller sealing with a Cretan ibex in a contorted posture. From the height—about a metre—at which this deposit occurred above the floor-level and from the discovery in the adjoining Twelfth Magazine¹ of one or two isolated tablets which from their character seem to belong to the same series, it is probable that the chest containing the tablets had originally rested on the floor above. The half of an interesting seal impression exhibiting a facing head found over the wall of the Tenth Magazine had also probably helped to secure the same batch of clay documents.

The Twelfth Magazine contained twenty store-jars of which twelve were intact. They were ranged along the north wall, except one which blocked the gangway about the middle of the Magazine. The "Kasseltes" were as in the last case set near the southern wall. They had been carefully lined with cement, perhaps to enable them to contain liquids.

The doorway of the Thirteenth Magazine had been narrowed by means of gypsum slabs set on end one over the other. The pithoi, of which thirteen were distinguishable along the North Wall, had with the exception of four been reduced to a very fragmentary condition. There

¹ The tablets, two perfect, one in two pieces, lay about 80 centimetres west of its entrance and 1.40 to 1.70 metres below the surface of the ground.

was here a long row of nine Kasselles—two at the west end out of line with the others and nearer the south wall. In this Magazine was found a glazed terracotta roundel with volute quatrefoil. About 5 metres from the entrance and a metre below the surface there also came to light a few pictographic seals—apparently forming part of a small deposit independent of those found at the back of the staircase of the Long Gallery.

The succeeding Magazines, from the Fourteenth to the Seventeenth inclusive, form a group by themselves distinguished from the others by the fact that they communicate with the Long Gallery by a single entrance. This single entrance, which leads first to the Seventeenth Magazine, abuts on the narrow passage which forms the continuation of the Long Gallery beyond the point where it is partly blocked by the stone staircase. This comparative isolation, moreover, was in the latest days of the Palace made complete by a small cross-wall of rubble masonry which blocked the narrower continuation of the Long Gallery just before the entrance to the Seventeenth Magazine. That this cross-wall was a later construction is shown by the uninterrupted continuance of the pavement slabs beneath it which mark the prolonged course of the Long Gallery.

The existence of a *revea* on the further side of the north entrance pillar of the Thirteenth Magazine makes it probable that the Fourteenth was also originally planned to have a direct entrance from the Long Gallery. According to the existing arrangement, however, it was necessary to enter by the Seventeenth Magazine, to pass thence by a door opening to the left into the Sixteenth, to skirt round the Fifteenth Magazine and thus eventually to reach the Thirteenth Magazine by a door at its back.

The floor of the Fourteenth Magazine was of rough paving, perhaps originally covered with cement. No pithoi seem to have been stored here, and the objects that came to light in this chamber were doubtless derived from an important structure of the upper storey. Chief among these were several fragments of a fine limestone frieze with reliefs and other architectural fragments to be described below. There were also found considerable remains of burnt wooden beams¹ which probably belonged to the same superstructure. Some fragmentary tablets found here were merely stray pieces from an important deposit found in Magazine No. 15.

The Fifteenth Magazine, shorter than the last, was also entered from

¹ These charred remains lay at depths varying from 1.20 metres below the surface at the east end of the Magazine to 1 metre at the west.

the Sixteenth by a door near its west end, the carbonised remains of its wooden door-posts being well preserved. The floor here consisted of isolated and irregular paving stones which had acted as a support for a cement pavement. Like the other Magazines of this group it was devoid of store-jars.

Near the west end of this chamber was found a remarkable relic cut out of the porphyry-like limestone much used here for sculptured objects



FIG. 12.—STONE WEIGHT : Height 42 cm. (17 in.).

(Fig. 12). It was evidently a large weight and had a boring near its apex for suspension. Upon both its sub-triangular faces it showed an octopus in relief, and their tentacles were also coiled over its square-cut sides. A smaller perforated object of gypsum, presenting the same general outline but without any ornament, was found in Magazine 13,¹ but from the carelessness of its fabric this may have simply belonged to the class of loom-weights.

¹ In too decayed a condition to afford a sufficient index of its original weight.

The present carefully finished and elaborately decorated example, which is 42 centimetres in height¹ and weighs 29 kilograms² has every appearance of having been a standard weight. The device of the octopus for the ornamental reliefs may well have been dictated by the desire to secure a design which would cover the whole surface and thus protect the weight from fraudulent chipping or grinding away. In this way it would have answered the same purpose as the official stamp of a coin or the milling of its edges. It is to be observed that the weight shows a close approximation to the Babylonian mina system. Weights of 30 light minas or half talents are known, scaling approximately 15,000 grammes.³ The corresponding heavy 30 mina weight would be 30,000 grammes—a talent according to the alternative calculation. It will be seen that the Knossian weight of 29,000 grammes represents a very slight reduction on this Babylonian standard. The influence of foreign weights—so far at least as form is concerned—has been already illustrated among the Palace finds by the small haematite weight of a type common to Palestine and Egypt.⁴ In the present case, indeed, the form has nothing in common with the duck or lion weights of Babylonia, though the standard seems to correspond with the light talent or with half the heavy talent.

The Fifteenth Magazine was also noteworthy for a very important deposit of inscribed clay tablets of the linear class. These were found from about 50 centimetres beneath the surface a little to the left of the entrance. Parts of many were wanting owing to the mass of the deposit lying too near the surface earth, but it nevertheless contained some of the longest inscriptions yet discovered. Among these is one of fourteen lines in which the woman-sign is constantly repeated. Like others of this series on which this sign occurs it possibly refers to female slaves. With this hoard of tablets was found a seal impression showing a bull attacked by two dogs countermarked and countersigned in the linear script, another exceptionally large impression with two bulls and another with part of the "Lions' Gate" scheme. It is possible that this deposit had been originally placed in a room of the upper storey and had fallen through into the Magazine.

In this Magazine and the adjoining space at its back between its end

¹ It is 27 centimetres wide and 13 thick at bottom and 8 centimetres wide at top. The boring is 5-6 centimetres in diameter.

² As nearly as could be determined by local weights and measures.

³ Brandis, *Münz. Mass. u. Gewichtswesen, etc.*: Head, *Historia Numorum*, pp. xxx. xxxi.

⁴ See above.

wall and the West Wall of the building were found further parts of the stone frieze and other architectural fragments. This back space, which affords passage to the entrance of the Fourteenth Magazine, is itself a continuation of the Sixteenth. Except for a stone cist against the South Wall the Sixteenth Magazine offered little of interest, and the Seventeenth was only remarkable from the fact that a line of "Kasselles" that had formerly extended along its floor had been entirely dug up at some time by treasure-hunters leaving a long square trough.

The relation of the Eighteenth Magazine to the adjoining group is not clear, as there is no visible entrance to it. In this Magazine was found a three-sided clay seal with linear inscriptions and an obsidian arrow-head of a type resembling those from the Shaft Graves at Mycenae. In this connexion



FIG. 13.—STEATITE RELIEF OF ARCHER.

may be mentioned the discovery, by a large rubbish heap on the north-east corner of the site, of a small steatite relief of an archer against a background of conventional rocks (Fig. 13). He is bearded, unlike the other male figures found here, and wears a kind of bathing drawers somewhat different from the typical Mycenaean costume as seen at Knossos but identical with that of the lion-hunters on the dagger-blade from the Fourth Akropolis tomb. His attitude greatly resembles that of the naked bowmen on the silver vase fragment

from the same grave, and his bow, like theirs, is of the European and African type. It is probable that this was part of a battle scene.

The ground here sinks so that the walls are greatly denuded towards the extreme north-west angle of the Palace, which makes it difficult to ascertain the exact interior arrangement at this point. It is certain, however, that the chambers here do not form part of the regular system of the western Magazines.

§ 14.—FURTHER EXPLORATION OF THE "KASSELLES" BENEATH THE FLOORS OF THE MAGAZINES.

One of the most interesting problems left by the first year's excavation was the purpose of the stone cists beneath the floors of the Magazines to

which the native name of "Kasselles" (*Κασέλλαις*) has been here applied. It has been already noted that in the Magazines 9-14, opened during the present season, fresh lines of these were exposed. In some cases the upper slabs had been already taken away, and in no instance were they so completely masked by the pavement as in the Eighth Magazine, it being possible to raise the top slab without first removing, as was there necessary,¹ the whole breadth of the pavement. In Magazines 11, 12 and 13, indeed, the Kasselles had been purposely placed in such a position that they could be opened or made use of without displacing the pithoi. From the entire absence of any sign of grain or other solid stores in the store-jars, the contents of which were all carefully examined, it is almost certain that they contained liquid stores. It is possible therefore that the upper receptacles of the cists in front of them were used as small vats into which oil or wine may have been poured from these clay butts. The liquid thus disposed of would then have been much more accessible for transference into smaller vessels, than when it lay within the high walls of the pithoi.

The entire absence of the upper lids of the Kasselles may in some cases be explained by the presumption that they had been always left open for this purpose or provided only with movable wooden lids.

Even in those cases, however, where the upper receptacle was found uncovered, the removal of its bottom slab, which formed at the same time the lid of the lower cist, was a work of great difficulty. Indeed the continued exploration of the "Kasselles" involved so much careful mason's work and so much necessary removal of the structure around and above that it was not found possible during the last season to open more than a few typical examples.

Fresh Kasselles were opened in Magazines 4, 5 and 6. In the Fifth Magazine the Kasella No. 5 from the west end of the chamber, the upper receptacle of which was found open, was further investigated. The floor of this upper receptacle was formed by a closely compacted and cemented slab which could only be lifted after its side walls had been partially removed. The lower cist was then found to be filled with earth and rubble of the character of builders' sweepings, amongst which, however, was found a largish piece of crumpled gold foil.

In Magazine 6, another cist, the fifth from the west end, and, like the former, open above, was also further explored. It was of the same con-

¹ *B. S. Annual*, 1900, p. 24.

struction as the other, the floor of the upper receptacle being solidly fixed and cemented into the surrounding masonry. On its removal the lower cist was found full of earth and fragments of a pithos, but here too a piece of gold foil came to light. In the lower cist of the first Kasella of the Seventh Magazine a piece of gold foil was also found amidst the earth and rubble.

These repeated discoveries of gold foil in the carefully closed lower cists, is a phenomenon of great significance. The gold foil would hardly have been found in such a position unless it had been the leavings of much more important treasure in precious metals. In other words we have here direct corroboration of the view already expressed in my last year's Report that these almost inaccessible lower repositories, the concealment of which must have been absolute when the upper cist was filled with oil or other liquid stores, were devised for the reception of treasure. These in fact are the safes of the Minoan Palace. But the bullion had been withdrawn—perhaps in all cases the framework of the Kaselles re-cemented—at a date anterior to the destruction of the building.

Of the considerable treasures in precious metals that originally existed here we have, indeed, other direct evidence. On a series of frescoes—some to be described below—tributaries or attendants are seen carrying vases, the yellow and blue colouring of which is significant of gold and silver. Not to speak of those enumerating ingots, many of the clay documents—for the most part inventories and accounts—relate to vessels the forms of which clearly indicate that they were made of precious metals. In addition to examples found last year a small deposit of tablets referring to metal vases was found during this season's work in a Magazine opening on the east side of the Long Gallery.

The second Kasella from the west end of Magazine 4 afforded some additional evidence of special interest in its chronological bearing. The lower of the two cists, which were of the same construction as those already described,¹ was found to be filled with rubble masonry and plaster probably, like that found in a lesser abundance in the preceding cists, the result of the destructive work due to the former opening of the cist at the time when what treasure it may have contained was for some reason withdrawn.

¹ The slab forming the bottom of the upper receptacle and the lid of the lower was placed at a depth of 40 centimetres below the original upper lid. The narrow bases of the upright side slabs of the upper cist overlapped the edge of the bottom slab which could not, therefore, be removed till they had been taken out. This is the regular arrangement.

Among these débris was a fragment of a block with the double-axe sign cut on it, and the remains of three clay vessels of a late Kamáres type (Fig. 14). Two of these were plain pyriform vessels with oval mouth and two handles, one of which, tinted of a purplish brown colour with faint traces of white horizontal bands, it was possible to put together. Two other fragments belonged to another round-necked jar with spirals and flourishes in white on the same ground colour. These ceramic remains



FIG. 14.—PAINTED POTTERY OF LATE KAMÁRES CLASS FROM "KASELLA."

conclusively show that at the time when this lower receptacle was finally closed, the old Cretan type of painted pottery known from the cave where it was first discovered on the southern steep of Mount Ida, as the Kamáres style—was still in vogue. The discovery of the fragmentary block with the double-axe mark further shows what was already becoming evident from a variety of indications—that the fine gypsum masonry with this and other kindred signs which mark the earliest Palace structure belong at least to the close of this Pre-Mycenaean Period.

The vases in this Kasella correspond in style with the painted jar con-

taining smaller vessels, found beneath the later floor level of the Third Magazine, a fact which confirms the view already expressed in my first Report,¹ that the jar in question was placed there after the construction of the Magazine and upon its original floor-level. A similar find was made during the present season, under the later floor-level of the First Magazine,² of a wide-mouthed Kamáres jar, broken at the rim, containing smaller vessels, among them some cups of exquisitely thin fabric.

An interesting feature of the upper receptacles of the Kaselles of the Fourth Magazine, is that their inner walls, together with the bordering slabs of the pavement and parts of the adjoining walls of the Magazine, are much blackened, evidently from the burning of some specially inflammable substance that had been contained in these receptacles. It is reasonable to suppose that this was oil.

§ 15.—THE LONG GALLERY AND THE MAGAZINES ON ITS EASTERN SIDE.

Further investigations in the Long Gallery and the adjoining area brought out several new data. Its tortuous Southern Entrance seems to have been guarded by a triple group of massive structures in a line with the western doors of the building. The access to its entrance passage is through a double gangway separated by a solid block of masonry forming an elongated oblong, and flanked by two other rectangular blocks which seem to form the bases of lateral towers. The whole must originally have formed an imposing Pylon.

The total length of the Long Gallery is about 60 metres or 200 feet. In its later as its earlier course it narrows to about half its diameter. The question arose whether the staircase at its north end and the elongated chamber behind it, where the hoard of Pictographic tablets was discovered, represented parts of the original scheme, or whether possibly the pavement of the Gallery was continued under these, in which case they would evidently be later constructions. A careful examination, however, proved that the original pavement narrowed at this point, and that the edges of the slabs corresponded to the outer boundaries of this structure. There is no reason therefore to suppose that the chamber containing this exceptional deposit of tablets and sealings was a later addition.

¹ *B. S. Annual*, 1900, p. 21.

² 1.65 metres from its west end.

An interesting indication that this Long Gallery was in the main at least lit by artificial light, was supplied by some limestone objects of which two examples were here found. These are in the form of stepped pyramids with a socket bored in their summit, and the Cretan workmen at once recognised in them "torch-holders." It appears that a similar method of fixing torches is still known in the island, and the explanation seems to be quite satisfactory.

The more recent investigations have done much to illustrate the eastern connexions of the Long Gallery. At the south-east it gave access through a low doorway, of which the carbonized posts and wooden lintel were found almost perfectly preserved, to what must be regarded as a group of slightly recessed store-rooms, consisting of bays divided by piers engraved with a cruciform sign—answering to the cross patée of heraldry.

It has been already noted that the passage to which, from the pictorial designs exhibited by them, the name of the "Gallery of the House-tablets" was provisionally given¹ affords direct access, by means of another passage that opens on to it, to the Room of the Column Bases and through it to the Central Court. The supposed isolation on this side does not exist.

At intervals along the Eastern Wall of the Long Gallery, beyond the point where this passage debouches on it, were visible several stone jambs or the remains of such, answering to those at the entrances of the Magazines on the western side, and with similar signs cut on them. It was clear that these had originally given access to rooms or Magazines on the eastern side of the Gallery. It thus appeared that a doorway led directly from the Long Gallery to a somewhat complicated group of small chambers north of the Pillar Rooms. The access to these from the east Pillar Room is indeed of a very narrow and doubtful kind. Immediately beyond this to the north were the well preserved jambs of another doorway in the East Wall of the Long Gallery leading to a chamber left unexcavated in 1900, but which proved, in fact, to be a long Magazine, like those opposite, divided into two compartments by a short projecting cross-wall or buttress towards its eastern end.

This Magazine has already been referred to as having contained fresco fragments fallen from the long Upper Hall above, including the painted stucco relief of the man's fingers holding the gold jewel. It also contained

¹ From the occurrence in the Ninth Magazine of tablets with pictorial representations of similar structures surmounted by ears of corn, it seems certain that they represent granaries.

a small but interesting hoard of inscribed tablets. This deposit, though somewhat scattered, centred round a small niche or "loculus" about half a metre below the surface near the east end of the chamber. From the abundance of decayed gypsum associated with the tablets in this loculus there seems to have been originally a kind of cist in the wall here. From its comparatively high position the contents of this deposit had shown a tendency to drift, and one or two pieces of tablets unquestionably belonging to the same hoard had made their way over the wall or through the entrance into the Long Gallery and even to the mouth of the Eighth Magazine opposite. Several tablets of this deposit exhibited pictorial representations of two-handled vases of forms characteristic of metal technique—one of them with an elaborate curved handle. It has hence been convenient to call this the "Magazine of the Vase Tablets."

With the deposit of inscriptions were also, as usual, found several clay seal impressions. Three of these, evidently taken from a gold signet ring, exhibited a female figure, presumably a Goddess, addressing a male votary. There were also the whole or part of three seals which had been impressed by a very fine lentoid intaglio of a dog with a collar round his neck,¹ looking back and upwards. Another, somewhat fragmentary, showing a lion springing at the neck of a lioness, is of noble naturalistic work and very finely engraved.

In this chamber was also found part of a bronze knife of a typical Mycenaean form and another curious implement of bronze the outline of which forms a *vesica piscis*. Beneath the later floor level which is here 2.50 metres below the surface were remains of a clay lamp, with a shallow recipient made for two wicks, of the same pedestalled class as the stone lamps found on this site. It belonged to the Kamáres class of pottery with red and white decoration on a dark ground. It appears, therefore, that this type of lamp goes back at Knossos to the pre-Mycenaean period.

A little east of the north end of the Long Gallery, near the staircase, was found a minute but very beautiful gold lion. It was formed of two embossed gold plates, the mane being indicated with filigree work of microscopic fineness. The limbs and body of the lion were modelled in the best Mycenaean style, and the whole is a little masterpiece of the goldsmiths' craft. It supplies an anticipation, in the same line and of unsurpassed delicacy, of the finest Etruscan jewellery.

¹ Other examples of this seal impression were found elsewhere on the site.

§ 16.—MYCENAEAN PAINTED POTTERY OF THE "PALACE STYLE."

It has been already noted that at various levels in the Eighth, Ninth, and Tenth Magazines, as well as in the neighbouring deposit along the outer edge of the West Wall of the building, were found numerous fragments of Mycenaean vases in a peculiarly fine "Palace Style," which had been derived from rooms formerly existing above these Magazines. It was possible to put together a sufficient part of some of these vases to complete the designs in several cases, and thus for the first time to obtain an idea of the magnificent style of vase-painting prevalent at Knossos in the great days of the Palace. Nothing among the hitherto published Mycenaean ceramic types exactly corresponds with these, but Mr. J. H. Marshall, who kindly undertook the reconstruction of the Knossian fragments, has been able to identify a large vase from a recently discovered tomb of Mycenae, and fragments of another from the Vaphio tomb (left undescribed by its discoverer) as belonging to the same fabric, and with good reason regards these and some other isolated specimens found on the mainland of Greece as of Knossian importation.

The view that this in fact represents the indigenous "Palace Style" of Knossos in its highest development is confirmed by the evident parallelism which its motives present to the decorative wall paintings of the building. The rosettes—sometimes combined with spirals—so characteristic of these designs, and certain foliated bands, are in fact taken over from the architectural frescoes and reliefs of the Palace. On the vases as in the wall-paintings occur, moreover, conventional flowers betraying reminiscences of the Egyptian papyrus.

Besides these quasi-architectonic types, characteristic of the most stately jars of the Palace chambers, there were found both here and elsewhere on the site, notably in the Room of the Bull-Hunting Fresco on the east slope, to be described below, numerous specimens of another more purely naturalistic class of vase-painting which has also a strong claim to be regarded as distinctively Cretan. Good specimens of this style were also found by Mr. Hogarth in the neighbouring houses, but the result of the present season's excavations in the Palace has been greatly to add to the material. Here again an indication of local production is afforded by the interesting parallelism exhibited between many of these designs and

the flowers and foliage seen on some of the wall-paintings. The reeds and grasses, almost Japanese in their naturalistic fidelity, the crocuses and iris-like flowers, the sprays of olive and myrtle, that decorate the vases, reappear upon the Palace walls.

Some of these fragments show marine subjects, sea-weeds, rocks of grotesque outline or Triton shells, in this case again presenting analogies with other branches of Palace decoration. The Triton shells find their reproduction in the round in the shape of an alabaster vase and in a glyptic form on seal impressions. The rocks are seen as reliefs on steatite vases and gave the suggestion for the fantastic border of a curious red limestone slab found in a chamber adjoining the Hall of the Colonnades on the eastern slope.

§ 17.—THE DOUBLE-AXE ON THE PALACE POTTERY.

Another design that appears upon a piece of one of the larger jars suggests a dedicatory intention. It is a decorative rendering of a double-axe, with a diagonal transverse band on each of its wings (Fig. 15, *a*). This transverse band and the border with which it is accompanied is not seen on the double-axes actually in use in Mycenaean times, of which so many examples have been found both in Crete and on the mainland of Greece. On the other hand it is a characteristic of some of the small votive double-axes found in the Dictaeon Cave,¹ and of certain Cretan gems presenting the "*labrys*" type of which an example was also found in the votive deposit of the same cave sanctuary. There is therefore reason to believe that the diagonal and other markings reproduced in a decorative form on the double-axe of the vase had a special religious association.

The appearance of the double-axe of the Cretan and Carian God on painted vases of the earlier Kamáres class from this site has already been noted. In my recently published monograph on "Mycenaean Tree and Pillar Cult" I had adduced evidence in support of the view that the double-axe can itself be regarded "as the visible impersonation of the divinity,"

¹ In 1895 I obtained here a part of a votive axe of this type (restored in Fig. 15, *c* above), and others were subsequently found by Mr. Hogarth (Fig. 15, *b*). In 1896 I found a somewhat rude steatite gem in the Dictaeon Cave showing an axe with the same characteristic markings. I have also come across two other examples of the same type, one, a cornelian from Kavusi (Fig. 15, *d*), the other of the same material from Girapetra. In other cases the "*labrys*" without the diagonal bands appears as the principal type on Cretan gems.

and that apart from, and in addition to, this pillar form, the God may also have been worshipped in the actual form of the "labrys."¹ I ventured

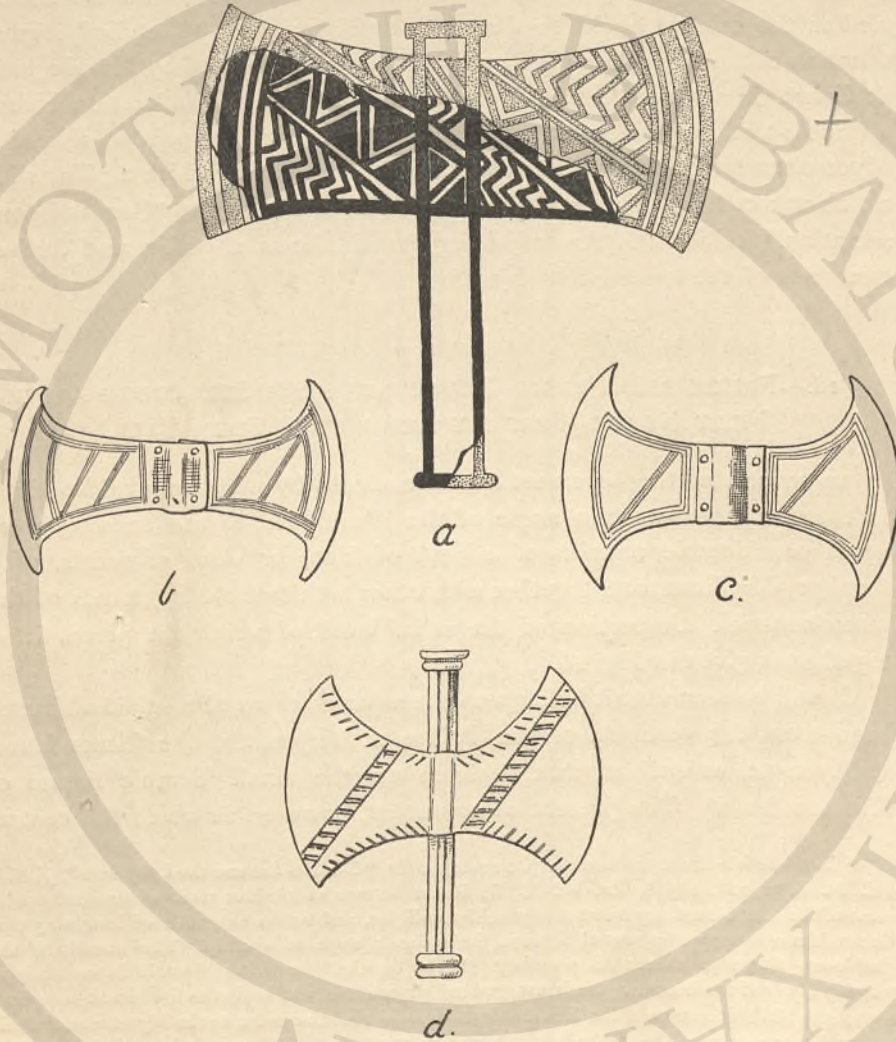


FIG. 15.

a. Double-Axe on Vase Fragment; *b.* Bronze Votive Axe from Dictaeon Cave; *c.* do. (Right Wing restored); *d.* Double-Axe on Gem (enlarged).

therefore to suggest that the derivation of Labranda and of Labyrinthos

¹*J.H.S.* 1900, pp. 106-109. In the separate publication (Macmillan and Co. 1901), pp. 8-10.

as proposed by Max Mayer and Kretschmer¹ might be taken in its most literal sense as "the place of the *labrys*." Two discoveries made this season in Eastern Crete have gone far to confirm the view that the double-axe as well as the column could be directly worshipped as a "baetylic" impersonation of the God. One is a gem impression discovered by Mr. Hogarth at Zakro, in which a female figure is seen in the act of adoration before a double-axe in an elevated position.² The other is the painted side of a Mycenaean sarcophagus discovered in Eastern Crete, in which a pillar with a slab at top forms the support of a double-axe with the "horns of consecration" before it. An adjoining panel shows a griffin and further examples of the horned cult object.³

§ 18.—FRIEZE AND FRESCO FRAGMENTS FROM STRUCTURE ABOVE
FIRST NORTH-WEST ANGLE OF THE WEST WALL.

In several of the basement spaces enclosed by what may be described as the first north-western angle of the West Wall of the building were found considerable remains of a kind of frieze or band of reliefs, of a porphyry-like limestone, together with other architectural fragments of the same material. A portion of the relief band, of which the pieces fitted together, is given in Fig. 16.

It will be seen that it belongs to the same class as the inlaid alabaster band from the vestibule of the Palace at Tiryns, and the friezes found at Mycenae, as well as that depicted on the small Temple Fresco of Knossos itself.⁴ The present arrangement, however, in which the central

¹ In the article already referred to (p. 22 note) on the "Double-Axe and the Labyrinth" (*J.H.S.* xxi. Pt. ii. p. 268, seqq.), Mr. W. H. D. Rouse betrays an obvious want of familiarity with some of the most elementary features of primitive religion, and seems incapable of imagining that Greece like other countries passed through the aniconic stage of worship. The worship of the double-axe altogether shocks his propriety. "The Greeks," he writes, "would be as likely to worship a pair of top boots.... Such exaggerated superstition was foreign to the Greek intellect"—as if the Hellenic sources of the fifth century B.C. could afford an index to the Mycenaean and still earlier Eteocretan worship of the fifteenth or the twentieth! The conclusion of the eminent philologists above cited that *Labyrinthos* is connected with *Labrys* and *Labranda*, now widely accepted among scholars, is to Mr. Rouse a mere source of merriment. "On the same principle," he writes, "Fluellen undertook to prove that Alexander was a Welshman; there is a river in Monmouth and there is a river, look you, in Macedon also."

² See below.

³ See below.

⁴ *J.H.S.* 1900, p. 192 and Plate.

band of the "triglyph" between the elongated half rosettes, is formed of a succession of spirals, finds its nearest parallel in the small glass paste relief, from the beehive tomb at Menidi. In the Temple Fresco we see a relief of this kind placed below the opening of a pillared chamber. A more detailed study of the architectural fragments found with the stone frieze may eventually throw some light on its position here.

Amongst other fragments in the same material found in this angle of the Palace Wall were parts of a huge bowl-shaped vase and the volute shaft of a small column with a spiral band running up it, the centre of which is formed by a chain of spirals like those of the "triglyphs" of the frieze.



FIG. 16.—PARTS OF A FRIEZE OF PORPHYRY-LIKE STONE WITH RELIEFS.

There can be no doubt that these varied architectural and sculptural remains indicate the existence of an important structure at this angle of the Western Wall, and it is possible that it was owing to the necessity of giving additional support to this that the platform of large blocks, apparently serving the purpose of a buttress, was here set against the corner of the wall-foundations.

There is every reason for supposing that a series of painted stucco fragments found on or near the edge of the Western Wall at this point belonged to the same structure as the stone frieze and other architectural remains. The principal subject of these wall paintings were zones of

human figures which when perfect must have been about a fifth the natural height. The figures, for the most part in a very fragmentary state, were more carelessly executed than the Cup-bearer or those of the miniature frescoes. The zones in which they were arranged were bordered above by triple bands of black, red and white, and the figures themselves were set on blue and yellow fields.

Incomplete as is the information to be derived from these fragments it is interesting as supplying some quite new aspects of the costumes as worn in Mycenaean Knossos. The bust of a girl (Fig. 17) characterised by a very large eye and brilliant vermeil lips as well as by the usual curling black hair displays a high-bodied dress of quite a novel character. It is looped up at the shoulder into a bunch—blue with red and black stripes—from which the fringed ends hang down behind, while a border of the same robe adorned with what are apparently three smaller loops is carried across the bosom. Within this border the white flesh colour is shown between narrow blue and red bands, indicating that this part of the dress was diaphanous. The men, distinguished by their conventional red tint, seem to have been clad in short-sleeved tunics, blue and yellow with black stripes, which descend to their ankles. A part of a seated figure preserved has two wing-like ends of the same material falling down behind the shoulders.

Two of the fragments show goblets held in men's hands. Both of these are of the high-stemmed type presenting in outline some resemblance to a champagne glass, but with a handle on either side of the rim. The colouring of these, blue and orange respectively, implies, according to the usual convention of the Knossian artists, that the materials of which they were composed were gold and silver. Another fragmentary painting represents the lower part of what seems to be a much larger vessel in which these two precious metals are combined.

§ 19.—THE NORTH-WEST ANGLES OF THE WALL AND THE NORTHERN PALACE QUARTER.

Beyond the first north-west angle of the building, marked by the buttress platform of large blocks, its outer wall takes a turn of a little over 6 metres to the east, and then north again for 13·40 metres to a second north-west angle. From this corner¹ again it runs east for 15·20 metres

¹ Just east of this corner the foundations had been a good deal injured. They have been since repaired.



FIG. 17.—FRESCO PAINTING OF GIRL (3).

to a point in a line with the West Wall of the Long Gallery. Owing to the comparative denudation of the surface on this side the limestone plinth and large gypsum blocks that formed the base of the wall overlooking the West Court are here wanting, and all that is preserved are the smaller faced stones that characterise the foundation structure. This foundation wall went down 1·30 metres along this section.¹ A good idea of this part of the North Wall is given by the general view on Plate II.

Beyond this there is a break in the regular line of masonry, and there are clear indications that the outer wall here originally took another turn to the north, forming a prolongation of the line of the West Wall of the Long Gallery. Owing to the slope of the original surface this northern turn of the wall probably took a step down, but its course can at present only be traced by remains of later wall. These later remains (see Pl. II.) indicate that, after running north about 10·50 metres from this angle, it again turned east towards the lower part of the Northern Entrance passage.

At the same time an interior wall of different construction, but forming a continuation of the line taken by the first section of the outer North Wall, runs parallel to this second section towards the centre of the northern passage way, the doorways opening on the Northern Portico being on this line. The first part of this cross wall, which starts from opposite the north end of the Long Gallery, has for a length of 24·15 metres fine limestone blocks superposed on two somewhat irregular courses of gypsum blocks (see Pl. II.). The wall is 2·20 metres in height and seems to have formed the support of an upper terrace.

It will be seen that this Terrace Wall together with its continuation along the Northern Portico forms the southern boundary of what must have been a very distinct quarter of the building. This Northern Quarter formed a rectangular area bounded to the west and north by the original course of the outer wall and to the east by the walls and bastion that guard the Northern Entrance way on this side.

The eastern part of this area is largely occupied by the Northern Portico already partly explored last year and by the small paved piazza on which it opens. This North Piazza was found to abut on its western side on what seems to have been a large bath with accessory chambers.

¹ A puzzling circumstance was the discovery at the base of this wall of a tough flooring of clay and red potter's earth. It perhaps belonged to some outside cellar of later construction.

On the borders of the Portico, in the corner near the bath-chamber and the "Threshing-floor Area" to the south of it, were found further remains of the tumultuary heap of deposit partly excavated last year containing fragments of painted stucco. Among the more interesting pieces discovered is part of the head of a cat-like animal with a yellow ground and white brown-bordered spots. Lying near it was another fragment exhibiting the body and the underside of the wing of a gaily plumaged bird in the act of flying. It is probable that both cat and bird formed part of the same fresco design based, like the well-known representation of the dagger blade from Mycenae, on an Egyptian Nile piece showing cats hunting water-fowls. The influence of this Nilotic cycle on the engraved gems of Mycenaean Crete is also very noticeable. We not only find water-fowl amidst papyrus clumps but in one case a cat pursuing them.

Among the naturalistic subjects of these fresco fragments were grasses of red, blue and grey on a white ground and parts of olive leaf borders. Spirals, rosettes, the wave and wavelet, and quatrefoil combinations, like that of the Cupbearer's robe on a larger scale, were among the decorative designs. One fragment seemed to represent double pipes and another a part of a sphinx or griffin. Some of the pieces were in relief, including a part of a man's leg near the thigh, life-size and showing the loin cloth. But of all the moulded fragments the most beautiful were rounded bands with a polished turquoise surface broken by fine white chevrons alternating with dotted returning spirals.

Outside the north-west angle of the Palace and the western part of this Northern Quarter are remains of a paved court with good rough limestone flags. This is separated from the second section of the North Wall by an interval of about 8 metres and itself forms a strip some 6 metres broad. As the remains of later structures were cleared away between it and the Northern Wall it is possible, however, that the pavement may originally have come up to it like that of the Western Court. This northern paved area is bounded on the west by the long outside building already described as containing fine pieces of early Kamáres pottery. At a little distance from this structure came to light a very large limestone block which had evidently formed half the arch of a "Cyclopean" gateway. The extremely massive character of this block points to a very primitive construction. It is possible that it may have originally formed part of the northern gateway of the Palace. Remains of a causeway

similar to those of the Western Court were traceable running from west to east along this northern paved area. It is probable that a continuation of this formerly led down to the Northern Entrance.

§ 20.—THE NORTHERN AND SOUTH-EASTERN BATHS.

On the western side of the Piazza outside the Northern Portico, partly obscured by later walls, were the gypsum jambs of a fine double entrance leading to what must certainly be regarded as a large bath and its accessory chambers. All this bath system belongs to the original structure of the building, but this and, as we shall see, the adjoining chambers had been destroyed by some catastrophe that took place at an early period in the history of the Palace. The basin of the bath itself had been filled up and was crossed by two later walls running from north to south, and two others from east to west. The foundations of these partly rested on the upper surface of the tank-walls. On the south side of the tank, however, where its wall follows that of the Upper Terrace Wall, described in the preceding section, there was distinct evidence that the later structure had only followed at a considerable interval after the destruction of the bath. For here, a metre from the top of the Terrace Wall, were still adhering parts of the painted wall stucco and cement pavement of a later chamber separated from the top of the tank by a metre of deposit which must have accumulated after its destruction and complete filling up. Yet this later construction is itself of very early date. The wall-stucco, in fact, shows remains of fine spiral decoration belonging to the good Mycenaean period.

The later walls above the top of the tank having been removed, it was possible to recover almost the whole original construction. The gallery or chamber to which the right-hand doorway, entering from the Piazza, had once led, had completely disappeared. The other doorway on the other hand opened directly on a passage which, passing by the door jambs of a small room on the left, led down by a double flight of steps to the square basin of the bath. A parapet descending step-wise, cased by gypsum slabs,¹ followed the inner side of the stair-way and terminated below in a gypsum pillar supporting a column-base. This gypsum pillar was 72 centimetres

¹ Several of the upper slabs of these were found in a disintegrated condition, and have been replaced in order to preserve the rest of the parapet. The walling of the parapet within the slabs was of clay and rubble.

high and 57 square, and showed on its upper surface dowel holes corresponding with others in the lower surface of the column bases. The column base itself was formed of a cylindrical drum 37 centimetres in diameter on a square block rising in a double step, and it had probably supported a wooden column. The steps, only a few of which were preserved, were 90 centimetres broad, and were separated from the inner slabs of the parapet by a low plinth, 34 centimetres in width.

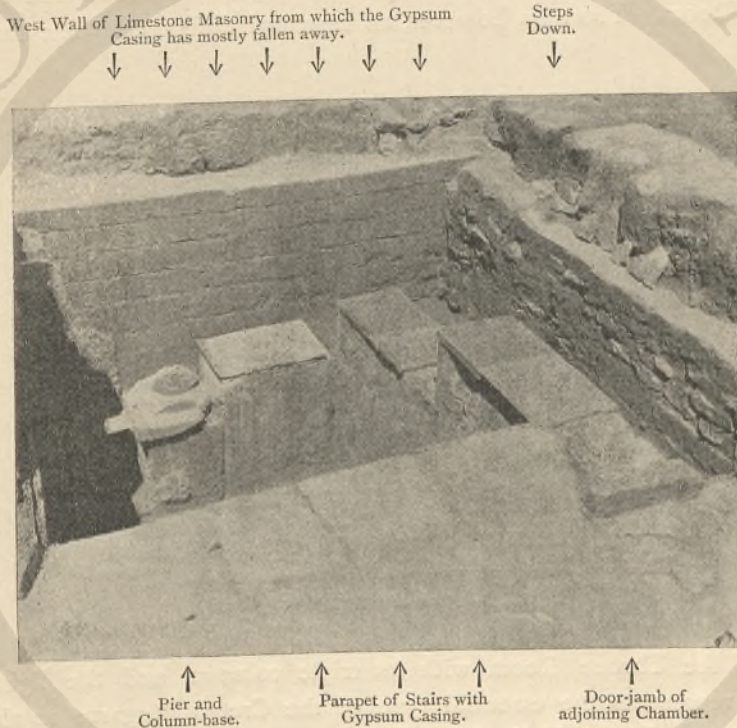


FIG. 18.—NORTHERN BATH LOOKING NORTH-WEST.

The inner basin of the bath was nearly square (2.56 × 2.45 metres) and 2 metres deep. The walls were composed of closely fitting rectangular limestone blocks faced with large gypsum slabs 2 metres high, and from 1 to 1.30 metres broad. On the west wall the gypsum facing had become disintegrated, thus exposing the fine ashlar masonry behind (see Fig. 18). The floor of the basin was formed of finely compacted gypsum slabs. Inside the basin were found fragments of painted plaster, with a dark

bluish green ground and reddish stripes. The sombre tones of these fresco pieces show that they belonged to the earliest style of fresco painting represented in the Palace—nearer in date to the Kamáres than the developed Mycenaean Period. It had no doubt decorated some part of the original superstructure of the bath.

It will be seen that this Northern Bath with its descending stairs, parapet and column base, and the fine gypsum lining of its walls, presents some obvious analogies to the smaller basin on the south side of the Throne Room. There is, however, an essential difference. The arrange-

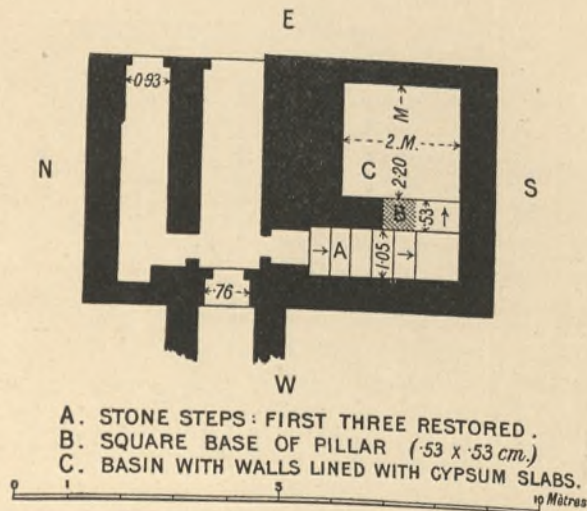


FIG. 19.—PLAN OF SOUTHERN BATH.

ment of the Throne Room with its triple columns and the light-well beyond represents the essential type of the Cretan Megaron as already noted above. In the Hall of the Colonnades to be described below we shall see on a much larger scale the same system of a parapeted staircase descending to the light-well in front of the three supporting columns of the Megaron, but the rain-water that fell into this instead of being collected made its escape through a drain. In the case of the Throne Room on the other hand the light-well has been used as an *impluvium* and the space under it is sunken so as to serve as a kind of shallow basin, perhaps for some foot-washing function. The bath here in fact—if such we may describe it—is subsidiary to the chamber. But the Northern Bath with

its much larger basin belongs to a different category. In this case the bath is evidently the principal object. The small adjoining room is quite secondary.

This type of the stone basin with descending stairs, parapet and pillar has now found other parallels. In the extreme south-eastern Palace region there was this year discovered another small bath of the same general plan, preceded by a small anteroom, or rather a double gallery, which is partly also a passage way (Fig. 19). The basin was here 2.20 metres square, lined and paved as usual with gypsum slabs. It was approached by a stepway provided with a separate door and flanked by a parapet ending in a square pillar. As there were only four steps down from the doorway the depth of the water in the basin must have been very shallow and here too was probably used in the oriental fashion for washing the feet. A small chamber of much the same construction with a doorway, four steps flanked by a parapet ending in a column base, and a shallow square basin has now been discovered by the Italian Mission in the Palace of Phaestos.¹

A common peculiarity characterises all these basins. There is no visible inlet or outlet for the water. In the case of *impluvia* like that beside the Throne Room the rain-water collected from the roof may in certain seasons of the year have provided an adequate supply. But in the hot summer climate of Crete with its long droughts, these basins could not have been permanently filled in this way. It seems probable that the water was in most cases introduced into them by means of slave labour, and that when this became foul the bath was emptied by the same agency.

§ 21.—DISCOVERY OF ALABASTER LID WITH CARTOUCHE OF HYKSÔS KING KHYAN AND LAPIS-LAZULI CYLINDER.

Bordering to the west on the later walls above the Northern Bath and forming part of one system with them were other later structures of the same rubble masonry. About 6 metres from the borders of the bath-basin on this side a wall of this kind abuts at right angles on the Upper Terrace foundations described above. This rubble wall, which runs north, shows on its western face the lower part of a painted stucco dado with blue and

¹ *Lavori eseguiti a Festos dalla Missione Archeologica Italiana. Relazione del Dott. Luigi Pernier* (Roma 1901), p. 16, No. 19 on the plan.

yellow bands, while from beneath this, at a level of 60 centimetres below the level of the top of the neighbouring Terrace Wall, jutting out parts of a cement pavement. We have here then the remains of a Mycenaean floor-level contemporary with that showing the painted stucco walling and clay pavement above the south margin of the bath-basin.

The wall-foundations went down about 30 centimetres below this

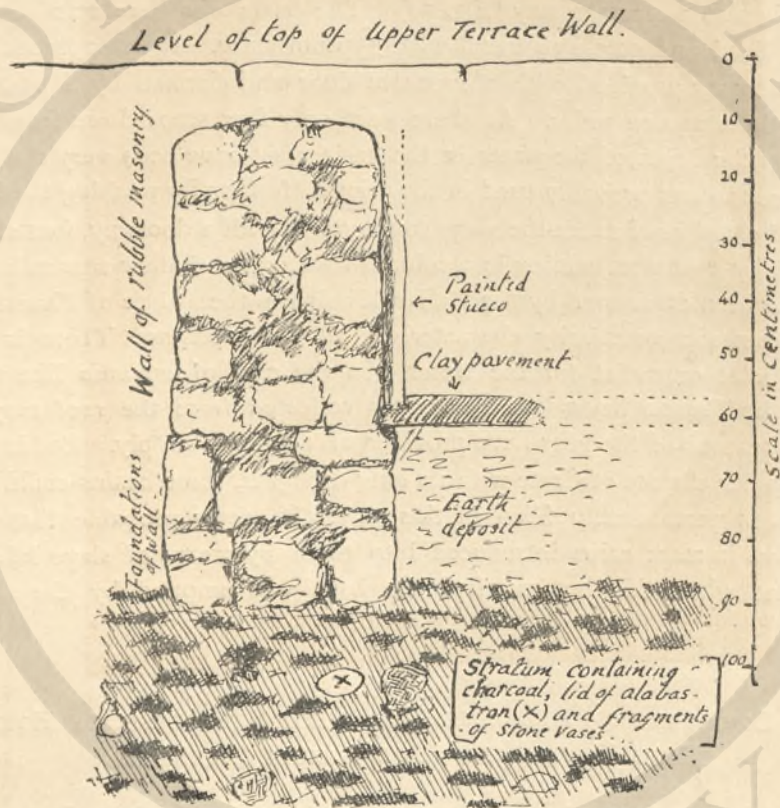


FIG. 20.—SECTION SHOWING STRATUM CONTAINING EGYPTIAN LID WITH MYCENAEAN WALL AND FLOOR LEVEL ABOVE.

floor-level, and rested on a well-marked archaeological stratum (Fig. 20) containing a large proportion of charcoal and representing the burnt remains of an earlier structure.

In this deposit immediately under the Mycenaean wall-foundations, at a depth of 40 centimetres below the later floor-level, and at a distance of 3

metres from the Terrace Wall, a remarkable discovery was made. This was the lid of an Egyptian alabastron upon the upper face of which was finely engraved a cartouche containing the name and divine titles of the Hyksôs King Khyan (Fig. 21).

The inscription, about which there is no difficulty, reads *Ntr nfr*

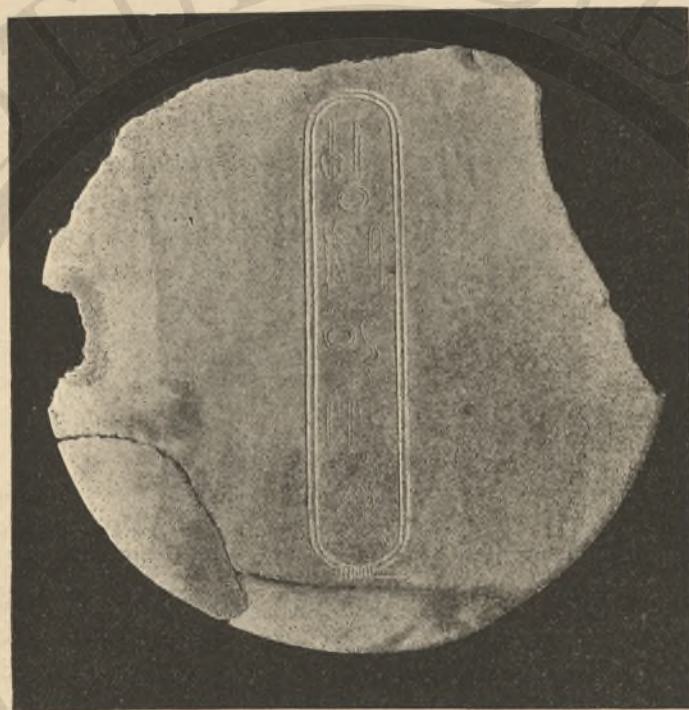


FIG. 21.—LID OF ALABASTRON WITH CARTOUCHE OF HYKSÔS KING KHYAN.

*s. wsr-n-R', s R', Hy'n*¹—"The good God Suserenra, son of the Sun Khyan."

The appearance in this early Palace stratum at Knossos of a record of King Khyan, is of exceptional interest from the fact that another monument of his, a lion of black granite, now in the British Museum, was found as far afield as Baghdad. In Egypt itself, with the exception of some scarabs

¹ I have followed Mr. F. Ll. Griffith's transcription, *Archaeological Report of the Egyptian Exploration Fund, 1900-1901, p. 37*. Mr. Griffith informs me that the form of the *user* sign seen in this inscription is not found elsewhere "except occasionally in the cartouches of the clearly Hyksôs Apepi and of Rameses II., who may have imitated it."

and two cylinders, the only records of this King are the base of a statue at Bubastis, and his cartouches on a black granite block at Gebelen.¹ The *Ka* name of Khyan *anq adebu* "embracing territories"² and his further title "ruler of foreign peoples," as well as the Baghdad lion, point to extended dominions. In this latter title, *Hq-ḥ's-wt*,—also borne by another Hyksôs prince—a plausible derivation for the name "Ἰκσῶς" itself has been found.³

The name of Khyan like that of other Hyksôs rulers appears to be Semitic. The suggestion has been made that Khyan is to be identified with the XVth Dynasty Hyksôs King *Ianias* or *Iavvas*, whose name is taken from Manetho by Josephus.⁴ In that case his date would be about 1800 B.C.⁵ In any case this is the earliest monument of a King of Egypt yet found on an Aegean site. It seems probable from the occurrence of this alabaster lid in the "pre-Mycenaean" stratum of the Palace at Knossos that its Minoan lord was in direct relations with the Hyksôs King. In the Egyptian monument found in the early stratum of the Central Court during the preceding campaign, we may see further evidence of very early Egyptian relations, if, as is the opinion of most Egyptologists, this must be referred to the period of the XIIIth Dynasty.

The well-marked deposit in which this lid occurred, contained numerous fragments of stone vases, which differed both in their form and decorative reliefs from the stone vases of developed Mycenaean style found in some of the chambers. The outer surface of these vases was covered with a very realistic plait-work in relief—in fact a complete stone imitation of basketry. One vase that it was possible to restore, presented a pear-shaped outline with a small base and a fairly wide mouth surrounded by a ring in

¹ See Petrie, *History of Egypt*, i. p. 118 seqq. Professor Petrie on the ground of his scarab style was inclined to place the date of Khyan as early as the Tenth Dynasty. But as is pointed out by Mr. Griffith, *loc. cit.*, the excavations of Mr. Mace and Mr. Garstang have now shown that this group of scarabs must be placed between the Twelfth and Eighteenth Dynasties. Mr. Percy Newberry who has been collecting further materials regarding the Hyksôs scarabs informs me that he has arrived at the same conclusion. A general consensus of Egyptologists now brings down the reign of Khyan to the Hyksôs period, and it must be said that the evidence of the Knossos find confirms this conclusion.

² Petrie *op. cit.*, p. 120.

³ W. Max Müller, cited by Griffith, *loc. cit.*

⁴ Mr. Griffith remarks, however, that none of the other scarab kings can be identified with names in the Josephus list.

⁵ According to Petrie's chronological table, *History of Egypt*, I, 236, the approximate date of *Ianias* would be 1837 to 1787 B.C.

prominent round relief. The plait-work grows gradually smaller towards the base of the vase. It is interesting to note that stone-vases with raised plait-work ornaments are very characteristic of the earliest dynastic period of Egypt, as illustrated by Mr. Petrie's most recent excavations in the Royal Tombs of Abydos.

It has been pointed out above that, if Khyan and the Hyksôs King, Iaias of Manetho and Josephus are the same persons, the date of the alabastron must probably be referred to the latter part of the nineteenth, or the beginning of the eighteenth century B.C. The minimum date to which it is possible to refer it, can in any case hardly be lower than 1700 B.C. In the absence of strong evidence to the contrary we may conclude that the alabastron bearing the name of a king, whose records are so rare in Egypt itself but whose foreign relations are known to have been so extensive, reached the Palace of Knossos during his lifetime. On the other hand, the early phase of Mycenaean civilisation represented by the chamber built above the earlier stratum in which the lid lay, shows many points of contact with the Egypt of Thothmes III. Yet this later structure, which may thus be taken to go back to the fifteenth or sixteenth century B.C., was separated by over a foot of deposit from the more ancient Palace layer. From this evidence alone we may conclude that the partial catastrophe of which we have here the traces, in all probability took place at an earlier date than the minimum time-limit above indicated. These arguments equally apply to the original upper rooms of the adjoining bath chamber, which must have been destroyed and the basin itself choked with their *débris* at the same time. The characteristic structure of that chamber, with its fine gypsum slabs, belongs therefore to a period anterior to the approximate date of 1700 B.C. This result has a very important bearing on the date of the early part of the Palace fabric as a whole, which corresponds with that of the bath-chamber.

These chronological conclusions may find support from a further discovery made in the space intervening between the deposit containing the lid and the back of the bath. Here were the remains of a solidly-cemented rectangular receptacle, apparently a cistern. It was of rubble structure, belonging to the same Mycenaean date as the later walls on either side of it, and a wall abutting on its south face showed the usual wall-stucco still clinging to it.

At the base of the western side of this cistern, about two and a half

metres from the spot where the engraved lid was found, and embedded in the rubble material, was a cylinder of lapis lazuli, mounted at each end with gold caps bearing filigree decorations. The cylinder had evidently got into its position at the base of the Mycenaean wall from an earlier deposit, perhaps not far removed in date from that containing the relic of Khyan.

The cylinder itself seems to represent the prototype of a characteristic Hittite series. It is divided into two zones, a larger below with mythological scenes and a smaller band above showing winged monsters, one of them a sphinx, and disks with or without inner radiation. The lower zone shows a beardless male figure in a long flounced robe between two groups, one of the man-bull Hea-bani and a lion crossed, the other of a lion and a bull also crossed, while the circuit is completed by Hea-bani grappling with another lion. The style of the mythological design on the lower zone fits on to the late Babylonian series and shows no trace of distinctively "Hittite" or Syro-Cappadocian elements. On the other hand the upper band with its winged monstrous forms is clearly transitional.

§ 22.—THE NORTHERN ENTRANCE WAY AND THE ADJOINING REGION
TO THE EAST OF IT.

The continued excavation of the Northern Entrance way has led to further developments which upset several of the conclusions suggested by last year's preliminary work on this part of the site. Two pieces of badly constructed wall projecting from the bastion on the west did not, as was first supposed, rest on the road level but were much later structures, built when the original passage had been covered by a thick deposit of earth. This later work having been removed the passage way was found to descend to a much lower level. The bastion itself reached down to a depth of 3.50 metres from the summit of the wall, with seven courses of good masonry. Seven courses were also uncovered of the opposite east wall which went down to the same depth. In the course of this excavation numerous fragments of Mycenaean pottery were found and some pieces of painted stucco relief including a spiral rosette forming part of the same decoration as that found last year, as well as another part of a bull's leg showing black spots on a white ground.

It had been supposed last year that the entrance way extended the

full width,—about 5 metres¹—between the western and eastern walls, and from the step-like arrangement of some blocks in the centre, it further looked as if the whole had been a step-way. Both these conclusions are now shown to be erroneous. The actual entrance way proved to be a passage along the western wall only 2·10 metres in breadth. This was bounded on the other side by a lower wall rising in steps, the well-cut western face of which, together with the plinth at its base, symmetrically corresponds with the west wall opposite. This graduated wall, which on



FIG. 22.—SECTION OF NORTH ENTRANCE WAY SHOWING EAST WALL AND STEPPED WALL OF TERRACES.

its east face had been left rough, proved to be the supporting wall of a series of small terraces which also rose in steps marked by cross-walls—these terraces filling the space between the entrance way and the high eastern wall to which it was originally thought to have extended. That

¹ Mr. Mackenzie gives the exact measurement as 4·95 metres.

the terraces were open above, is made probable by the discovery, at the foot of the lowermost, of a stone drain running into the larger *cloaca* which follows the course of the entrance way itself. For what did these terraces serve? It would be quite in keeping with Minoan taste as illustrated by the frescoes on the palace walls, to suppose that these earth platforms rising step-wise beside the entrance way served as small garden-plots, planted perhaps with palms and flowering shrubs.

On the west side of this entrance way are two elongated bastions, separated by a small gap which, as suggested in the preceding Report, might have been used by a sentry. The northern face of the upper of these two bastions—which is rendered visible by the gap—is seen to be provided with a plinth and to have been originally an exterior wall. It further appears that it is in line with the south wall and doorways of the North Portico—and thus with a line of wall—partly inner terrace, partly exterior—extending to the north-west angle of the building (see Fig. 23). A break corresponding with this is seen moreover, in the terrace wall on the other side of the entrance way. It therefore appears that the bastion to the north of this break and the lower continuation of the terrace walls on the other side are somewhat later additions, though still belonging to the finest part of the building. The second, or northern bastion, one of the best pieces of construction uncovered on the site, was built against and partly over a rougher wall running from south to north, which seems to have been the original supporting wall of the Northern Piazza on this side.

Beyond the Northern Bastion the architectural evidence becomes very complicated. (See Plan: Fig. 23.) An opening here appears in the west wall line of the Entrance Way opposite the blind inlet on the eastern side, and perhaps like it intended to serve as a place for guards to sally out from upon hostile intruders. Its mouth had been blocked by a later wall. On the northern side of this opening a door jamb is visible, and on the opposite side of the Entrance Way is another answering to it, somewhat out of place.

Beyond this opening a further section of the west wall, of good construction, extends 5 metres to another smaller break, perhaps originally giving access by means of stairs to the Northern Piazza. At this point the Northern Entrance Way was found to be entirely barred by a cross-wall. Since however this is not so well built as the western side wall on which it abuts, and since the further course of the Entrance Way and of

the drain beneath it continues uninterrupted beyond this point, it is obvious that this cross-wall represents a later block. About 5 metres north of this a flat slab, the object of which is uncertain, lies across the entrance passage from wall to wall. The western wall continues beyond this point and is composed of good limestone blocks resting on a plinth. The great stone drain or *cloaca*, which here follows the eastern border of the Entrance Way, loses itself at a point 36 metres (120 feet) distant from its upper opening.

The eastern wall of the lower part of the entrance passage from the blind inlet onwards is also preserved, but is not of such good construction as that on the west side. East of it again are two elongated chambers that have the appearance of Magazines. From their proximity to the Northern Entrance it is possible that these should be regarded as stables for the horses and chariots which occupy such a prominent place in the Palace archives.

Eastwards again a line of wall which forms the back-wall of these elongated chambers is continued to another projecting bastion with a narrow door opening. This doorway leads into what appears to have been a short gallery, the west wall of which is constructed of good limestone blocks. It seems to have led to two flights of steps, one directly facing, of which traces only are preserved, ascending south, the other, of which four steps remain,¹ approached by a turn to the east. The structure here has been a good deal dismantled, but it looks as if we had to do with a postern gate giving access to the north-east quarter of the Palace from the north.

From this point the Northern Wall becomes no longer traceable, and the investigations so far made on this side lead to the conclusion that the north-eastern angle of the building has been completely denuded. North of this point, however, there came to light a Magazine with remains of large pithoi and part of a large structure which may eventually be found to stand in direct connexion with the Palace.²

§ 23.—THE NORTH-EAST MAGAZINES.

About 9 metres south of the easternmost section of the North Wall, and within the angle which it makes with the east wall of the Entrance

¹ These steps are 1·50 metres wide, ·15 high and ·50 deep.

² The star and branch signs are visible on its blocks.

Passage, quantities of plain clay vases of various forms began to appear, only a few centimetres from the surface of the ground. It was found that these vases were methodically arranged within the rubble walls of a group of Magazines forming a square separate enclosure with a single entrance. These Magazines were grouped in uneven divisions on either side of a narrow gangway 90 centimetres in width—an arrangement which recalls on a much smaller scale that of the Magazines of the Palace at Phaestos, except that there the chambers on either side of the central gangway were of equal dimensions. A similar arrangement may be traced back on Egyptian soil to the earliest Dynastic Period.

Like the Magazines themselves, the vases here were of much smaller dimensions than the great pithoi of the Magazines of the western Palace border. Except for a limited class with brown streaks running down from their rim, the walls of these vessels were plain and unpainted. They were arranged along the walls in regular rows and piles, those with broad rims socketed into one another and the cups in *rouleaux*. A general idea of their prevailing types and distribution may be gathered from the accompanying sketch-plan (Fig. 24).

Except where these vessels had been cracked or crushed by the weight of the superincumbent earth, they stood piled in their places absolutely intact, as when left by their Mycenaean overseer. It is obvious from this, and from the fact that the whole lay immediately under the surface of the ground, that no excavation had ever taken place in these chambers. That there was so little earth left to remove was due to the natural process of denudation, which has gone on for the last 3500 years or so at this part of the north-east slope.

It will be seen that in their plain fabric, as well as in some of their typical forms, these vessels correspond with those found in the chamber near the south-west corner of the Palace, upon one of which was found the graffito inscription in linear characters. Here as there too the survival of the older Kamáres types is perceptible, but in a somewhat degenerate form and bereft of the beautiful painted decoration which characterises the vases of the Kaselles.

In the case of the chamber on the south-west corner an indication of the Mycenaean date of this rustic ware was given by the inscription in advanced linear characters, identical with those associated elsewhere with Mycenaean gem impressions found in the Palace. In the present instance

It is obvious that the tripod-stand was designed as a support for some vase of stone or metal of a very different class from the rustic pots in the adjoining Magazines. The one deposit speaks of wealth and luxury, the other connects itself with the needs of a quite lowly condition. We know, besides, what magnificent painted ware was at this time in use among the Knossian lords. It looks as if these stores of rustic vessels, representing the survival of the indigenous potters' style, were kept to supply the wants of a numerous colony of handicraftsmen, and perhaps of slaves, living within the Palace walls. Whatever new elements may have intruded themselves among the dominant caste, these humbler denizens, as the traditional types of their pottery show, belonged to the old Eteocretan stock.

East of these Magazines, and between them and the Eastern Terrace Wall, to be described below, was a great heap of sherds and small pots, for the most part of plain earthenware, probably belonging to the same, more or less servile class. From the abundance of small clay cups of the usual type found in Cretan deposits of advanced Mycenaean character, it is probable that this waste heap belonged, in part at least, to a somewhat later period than the contents of the Magazines. Near it was found the small steatite relief exhibiting an archer.

§ 24.—THE NORTH-EAST HALL AND CONNECTED ROOM SYSTEM.

South of the small Magazines described in the preceding section, for over sixty metres, stretches a continuous line of galleries and chambers, the western limits of which mark the original line of the Central Court on this side.

Immediately bordering on the Magazines is a group of rooms forming parts of a single connected system. The eastern member of this group is a rectangular hall, of the east and south walls of which only indications remain. The original interior dimensions of this north-east hall were about 9 by 6.50 metres, and at a distance of 1.10 metres from its north wall are two column bases 70 centimetres in diameter.¹ Near these, at the north end of the hall, opens one of the usual double doorways,² with gypsum jambs,

¹ The column bases are 1.40 metres apart.

² The south door jamb and a central one with a double reveal had been preserved. The northern door jamb, however, and the small adjoining return of the wall, had disappeared. The width of the south doorway was 82 centimetres.

leading to a smaller inner chamber of oblong shape. The pavement of the North-East Hall is of gypsum cement, and near the floor level were found one or two Mycenaean vases. One of these is a somewhat low "Stirrup" vase with a design of a fish, and of much better fabric than those described above exhibiting octopus designs. Another vessel is a cup which presents the early characteristic of having decorative bands of white as well as brown.

The small room to which the double doorway gave access had been somewhat obstructed by a later cross-wall running east and west, the base of which was 30 centimetres above the floor-level. In its original form however, the room had been of an elegant character, the lower part of the walls being covered with a dado of fine gypsum slabs about 95 centimetres in height, and the floor paved with the same material. This "Room of the Gypsum Dado" was 5.08 metres by 2.65 in dimensions. Near its north wall were found the remains of two steatite lamps of the ordinary kind with high columnar stands. An opening at the north end of the west wall of this room gave access, in front and to the left respectively, to two small Magazines or store-rooms. That to the left contained the remains of a small pithos, some two-handled jars of rustic fabric, resembling types found in the neighbouring North-East Magazines a small plaster seat and a tripod stand of the same material. The elongated store-room in front contained other rough pots representing the same Kamáres tradition as those of the small Magazines together with a vase belonging to an early Mycenaean class.

This arrangement of a room with small magazines opening from it is one that has been already met with in the western quarter of the Palace in the case of the Rooms of the Chariot Tablets, of the Column Bases and the Throne Room itself. Additional examples of the same arrangement will be seen in the "School Room" and other chambers of the eastern slope to be described below.

The North-East Hall apparently had its entrance on its eastern side, where it seems to have been flanked by a corridor running north and south. Near the south end of this, and at the south-east extremity of the hall, are visible four low steps ascending west, and indications of a passage leading hence round the outer walls of the group of rooms described above to the Central Court. Some five metres above the four steps preserved are traces of others turning north between passage walls of good limestone

construction. About the same distance further on the same passage takes another turn west, past a massive bastion, and thence by another angle seems to have found its way to a point near the upper opening of the Northern Entrance Way.

§ 25.—THE ROYAL GAMING BOARD.

Nearly opposite the lower opening of the North-East Stairs described above, against the east wall of the Corridor on which it abuts, and of which only remains of the lower courses exist, was made a very interesting discovery. Here, at a depth of 70 centimetres below the surface, some fragments of crystal and ivory were thrown up by the workmen from the earthy deposit. On careful examination these were found to belong to the end of a kind of inlaid board, the component parts of which were still largely in position.

The board lay somewhat unevenly near the paved surface of the Corridor, separated from it by a shallow earthen layer, into which, however, some fragmentary slabs had intruded. To raise these highly friable remains, embedded in the crumbly earth, from this irregular backing without breaking up the framework was a matter of extraordinary difficulty, there being no room in this case for the ordinary under-plastering that had been so effective in getting out the Cup-bearer fresco. As a preliminary measure it was found necessary first to surround the outer margin with a wooden framing, filling up the interstices with plaster. This having been successfully executed, and the edges of the board thus secured, wooden strips with plaster over them were gradually introduced below, as the irregularities of the broken slabs permitted. This part of the process was extremely difficult, and it was only after three days' work, and mainly owing to the skill and patience of my trained *formatore*, Kyrios Papadakis, that the whole was finally raised with the inlaid designs in the position in which they had been uncovered.

The framework had already suffered especially round the borders and at what may be called the upper end of the board, where the pick had originally disturbed it. Enough, however, remains of the original design to supply a correct idea of the whole arrangement of its essential parts.

In Fig. 25¹ the existing parts in position are given in a darker tone,

¹ From a coloured drawing carefully executed by Mr. Fyfe, who has completed the disintegrated and missing parts of the design in accordance with my suggestions.

but it must also be borne in mind that a great deal of the rest was found, though in a more or less disintegrated state. The outer zone, with the marguerites, had been entirely broken off; their fragmentary remains, however, were abundant, and as reconstituted above, form a natural frame to the design. The remaining parts of the nautilus were also found detached, but their dimensions so exactly correspond with the vacant rectangular spaces on either side of the square containing the uppermost medallion, that their position may be taken as ascertained. The restoration of the interior of the smaller circles of the lower half of the board rests on more conjectural grounds. The board as completed is 0.965 metre in length and 0.553 wide, and it is to be noted that several of the component parts are exact multiples of the whole. Thus the diameter of the larger medallions answers to $\frac{1}{8}$ of the length, that of the smaller medallions to $\frac{1}{11}$, that of the marguerites to $\frac{1}{24}$.

The framework of the board consists of pieces of ivory set and originally entirely covered with thin gold plate. A good deal of this gold foil is visible in the interstices and here and there are ragged pieces partly overlapping the face of the ivory plaques. It is possible that the gold had been worn away by use or it may be that at the time of the destruction of the Palace the superficial metal had been hastily and imperfectly scraped from the board. This chryselephantine framework contains a further mosaic of strips and disks of rock crystal, the crystal in turn being alternately backed with silver plaques and a blue paste formed of pounded lapis-lazuli-like glass, the Homeric *kyanos*, and both this and the silver plaques are underlaid with gypsum plaster. It is probable that for the support of the ivory framework there was also a wooden panel below, but the traces of this had entirely disappeared. Some pieces of ivory reliefs, including smaller nautilus for which there is no place on the board itself, point to the probability of there having been ornamental sides below; the analogy moreover of Egyptian draught-boards and of the Mycenaean specimen found at Enkomi in Cyprus suggests that the board itself may have also served as the top of a box that once contained the pieces of the game.

The daisies or marguerites of the outer border had central bosses consisting of convex disks of rock crystal, set probably on a blue paste background. Within this border round the central and lower part of the board was a second band of plaster coated with blue paste or *kyanos*, some

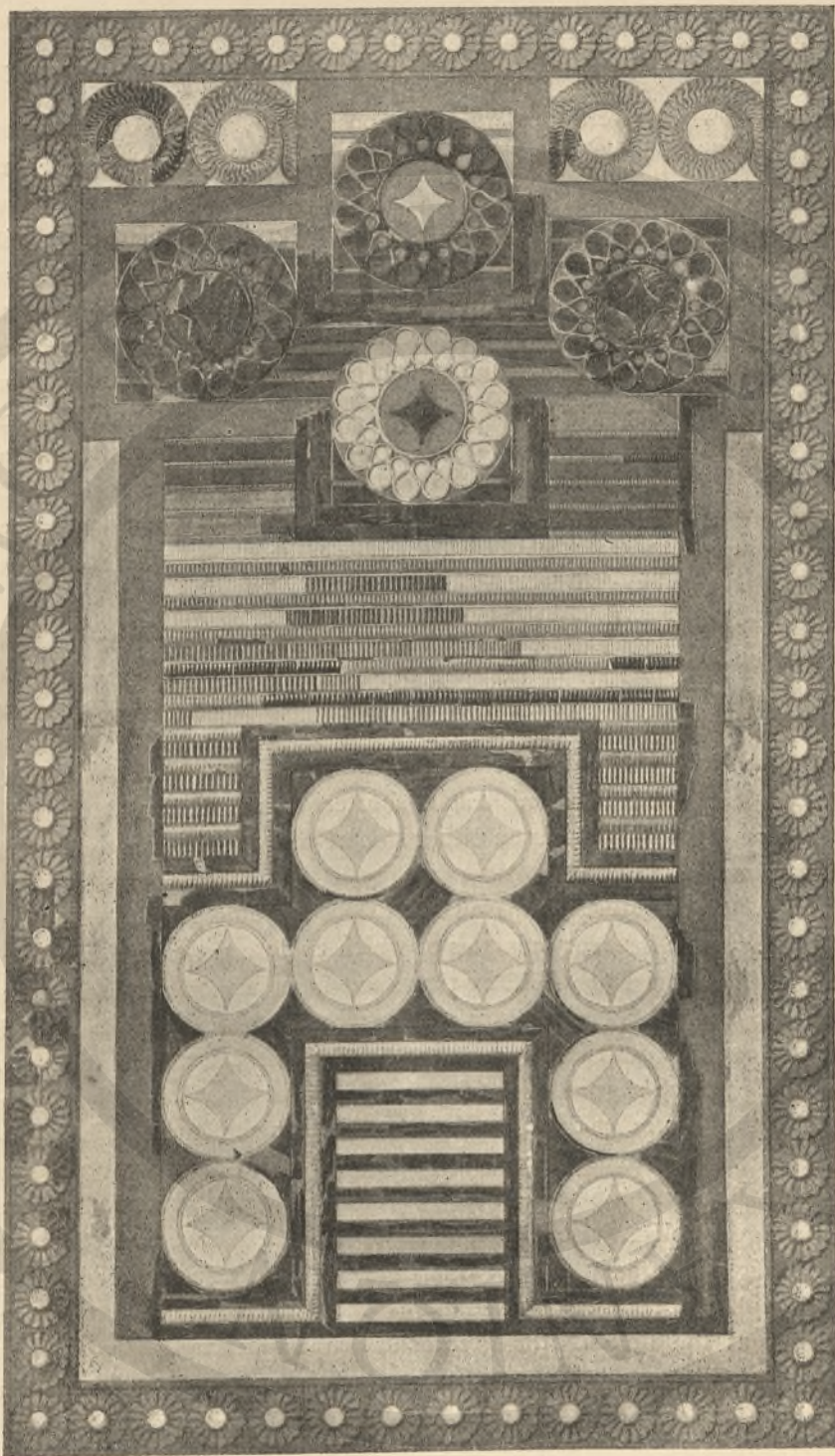


FIG. 25.—THE ROYAL GAMING BOARD.

sections of which were preserved in position. There can be little doubt that these had been covered with crystal plaques that had been removed.

Beginning now at the top of the board, the angles of the beautiful nautilus reliefs were set round with crystal plaques, one of which was found with traces of its original *kyanos* backing. Like the marguerites the nautilus had also been adorned with a central boss of crystal. There next follows a very beautiful group of four large medallions inserted among crystal bars backed with silver plates. The curving cloisons of these medallions are formed of ribbed ivory to the surface of which the original coating of thin gold plate was still partly adhering. The sockets thus formed are set with petal-shaped plaques of crystal, the outer row entirely lined with silver plates, the inner with blue eyes of *kyanos* inserted in the silver. The inner circle of these medallions encloses a design—borrowed from contemporary Egypt—composed of *vesicae piscis* of ivory surrounding a central plate of silver-lined crystal with incurved sides. Then follow eleven alternating bars of ribbed crystal and ivory. The crystal bars, which are flat, are backed with silver, the ivory are bossed and are set and partly covered with thin gold plate which originally adorned their whole surface. Eight shorter bars of crystal but with a *kyanos* lining fill the spaces on either side of the topmost section of the lower division of the board.

The principal feature of this lower division of the board is a two-winged compartment, the flat ivory plaques of which enclose ten circular openings. The medallions originally held by these had been broken out, though here and there traces of their original plaster backing were visible. In the centre of one, however, the uppermost on the left wing, were remains of silver oxide, which suggested the former existence of a plate with incurved sides like those forming the centre of the upper medallions. It is possible that the *vesicae piscis* round this were of *kyanos*. The central parts of these medallions, the design of which, except for the blue compartments, would thus have resembled those above, seem to have been covered with crystal disks, though a fragment only of one of these is preserved. It looks as if the disappearance of these medallions was due to the desire of some plunderer at the time of the great catastrophe of the Palace to secure these crystal disks. The ivory plaques enclosing the lower medallions are bordered above and below by bossed and ribbed crystal bars overlaid

on *kyanos*. The remaining space of the lower division of the board is filled with alternating flat bars of ivory, once gold-plated, and of crystal backed with the same blue vitreous paste.

The medallions of the lower division of the board give a key to its purpose, and clearly indicate that we have here the table of some kind of game. A certain analogy is suggested by Egyptian draught-boards and by the variant type of the same presented by the Mycenaean board of beautifully carved ivory found in a tomb at Enkomi or Old Salamis.¹ In the "Lapidary's Workshop" and elsewhere on the site several objects of steatite, bone, and other materials were found, which seem to represent pieces of games, but unfortunately none occurred in juxtaposition with the board itself. Considering the comparative fewness of the circles on which to move the pieces it seems possible that dice also formed a feature of the game, but further discussion of its character must be reserved for a future occasion.

In its original condition, with its ivory bands and reliefs still plated with gold, and its crystal plaques and bosses intensifying the glint and glow of the silver foil and cerulean paste beneath them, this gaming board must have been of truly royal magnificence. The intarsia work, moreover, here found in position and applied to the scheme of a game throws a new light on more fragmentary remains of the same kind found in the Palace of Knossos itself and in the royal tombs of Mycenæ. Crystal plaques of similar forms to those of the table were found on the Throne Room floor associated with roundels of enamelled terracotta, the design of which recalls the central pattern of the medallions of the gaming table.² In my former Report³ the close resemblance of these to objects in similar materials found in the Fourth Shaft Grave at Mycenæ was already noticed. There can be little doubt, in the presence of this new evidence, that these belonged to boards of the same kind, and that a gaming table was such an indispensable possession of Mycenaean kings that it followed them to another world. This close resemblance between these Knossian relics and those from the Fourth Akropolis tombs at Mycenæ is also,

¹ A. S. Murray, *Excavations in Cyprus*, p. 12, Fig. 19, and cf. *J.H.S.* xvi. (1896) p. 288, *seqq.* where Professor Ridgeway ingeniously compares the Greek game of *Polis*.

² There were too many of these roundels for them to have been all for the board on which the game was played, but a certain number may in this case have formed part of the ornament of the sides of the box below.

³ See the supplementary note on the fly leaf at the beginning of the Report for 1900.

as already noted,¹ an interesting indication that the destruction of the Palace was approximately contemporary with this interment.

§ 26.—THE ROOM OF THE OLIVE PRESS.

The Corridor of the Gaming Table leads to a spacious room about 9 metres in length by 7 broad, the cement floor of which on its western side was about 1.40 below the surface. This room contained what appeared to be two press-beds of unequal sizes with runnels leading from them. The smaller of these was drained by a tile channel, the larger by an elongated grooved slab of limestone. The larger press-bed itself was a square limestone slab (1.10 × 1.20 metres) with a square shallow basin opening on the runnel, the groove of which was 43 centimetres wide and 10 deep. This stone channel leads through a door opening into the small area to the north of the chamber where, at a distance of 4.70 metres from the press-bed, it debouches on the remains of an elongated vat, originally lined with terracotta.

To one having a personal acquaintance with the remains of the great Roman oil fabrics of the Tripolitan district of North Africa,² of which stone press-beds and runnels accompanied by vats are a constantly recurring feature, there seemed to be little doubt that we had here to do with a Mycenaean press of the same kind. It is true that in the case of the African presses and others observed by Messrs. Paton and Myres³ in Caria and the Greek islands, the stone bed itself is simply grooved while here the whole central part is slightly sunk. But the difference has little practical importance, since a small detached slab with a free space left round it, answering to the groove in the other type as an outlet for the juice would equally serve the purpose in view. This simpler type as represented by the Knossian example is in fact also known elsewhere. An ovoid example was found by Mr. J. L. Myres and myself at Astritza⁴ a Cretan hill site a few hours to the south-east of Knossos,

¹ *Loc. cit.*

² I visited these in 1895 in company with Mr. J. L. Myres who, for the first time, explained the true meaning of the so-called "Megalithic Monuments" of Tripoli in *Proc. Soc. Ant.* 1898, p. 280 *seqq.* For the North African oil-presses cf. too Tissot, *Afrique Romaine*, i. p. 294. The presses may well represent a still earlier Libyan tradition.

³ *On some Karian and Hellenic Oil-Presses*, *J.H.S.* xviii. (1898), p. 209, *seqq.*

⁴ *J.H.S. loc. cit.* p. 214, Fig. 6.

and a round Greek press-bed of the same type, with a sixth century inscription, was found by Mr. Cecil Smith at Klimatovouni in Melos.¹

In order to supply a fulcrum for the end of the wooden beam by means of which the bags of olives set above the stone bed were pressed, it was necessary to obtain a powerful support, and this may have been supplied by insertion into the west wall of the Chamber.²

Although grapes are pressed by an analogous method in large crates or baskets in parts of Greece the great volume of juice would have required a larger bed than those before us. It seems more reasonable therefore to see in these the remains of olive presses. It is evident from the numerous lamps found in the building as well as in the houses outside, that oil formed an important commodity in Mycenaean Knossos. The signs of conflagration about the upper vats in the Fourth Magazine, have been already noted as indicating a considerable storage of oil, which probably formed the contents of a large number of the pithoi discovered. The discovery recorded by Tsountas of a jar full of olive stones at Tiryns, and more isolated finds of the same at Mycenae itself had already made it certain that the culture of the olive was known on the mainland of Mycenaean Greece.³ That it was known at the same or even an earlier period in Crete is now made certain by a similar discovery of a store of olive stones in the Palace of Phaestos by the Italian explorers. At Knossos we find olive sprays appearing as a motive of decoration both for frescoes and vase paintings, and apparently also on the pictographic tablets in a commercial relation. Hehn's idea that the oil of Homeric Greece was exclusively an importation from the East has now no longer any probability in its favour.⁴

¹ *Loc. cit.* p. 215, Fig. 7.

² Compare the arrangement of a press near Latmos.—*J.H.S.* xviii. p. 212.

³ Tsountas, 'Εφ. 'Αρχ. 1891, p. 15.

⁴ It would even appear that already in Mycenaean times the olive was cultivated in Sicily. In the Necropolis of Cozzo Pantano near Syracuse, the tombs of which contain so many imported Mycenaean objects, in addition to shallow high pedestalled vessels which seem to be a simple adaptation of the Mycenaean and Minoan lamps as seen at Knossos, was found a clay vessel of native fabric, the decoration of which was supplied by the impress of actual olive leaves. (Orsi, "Necropoli Sicula presso Siracusa," *Mon. Antichi*, ii. 1893, p. 21, and Tav. 11, i. 1a.)

§ 27.—THE CORRIDOR OF THE BAYS AND ITS VASE DEPOSITS.

West of the recess in which the oil-vat is situated opens a small area which, as the remains of wall-foundations show, has not been preserved in its original condition. One of perhaps a pair of doorways is still in place opening from the end of the Corridor of the Gaming Board on this side. Opposite this, immediately under the east border of the Central Court, is a small chamber with fine gypsum paving and two side walls of massive limestone blocks. These walls form part of a series of buttress-like projections running along this line, and their massive construction was no doubt expressly designed to support the, in part, artificial terrace of the Central Court on this side. Both this and a small chamber adjoining it on the north, showed the remains of a back wall, the original line of which could only be made out by the limit of the pavement in that direction. On the other hand these rooms, like the bays that succeed them on the same terrace flank to the south, were filled with a confused mass of tumbled blocks largely due to the falling in of their back walls. This phenomenon explains the need of the buttress-like structures along the line.

To the south of the above-mentioned small chamber and the adjoining bay on that side, are two doorways, one leading to an elongated well-paved room, the other to a somewhat narrow corridor—1·42 metres in width—leading south beneath the terrace of the Central Court. Four buttress-like piers such as those described, jut out on the western side of the gangway leaving three square recesses.¹ From these it has been found convenient to call this passage "the Corridor of the Bays."

The buttress piers vary in thickness from 1·42 to 1·54 metres, and jut out 2·70 metres; the southernmost, however, has been made 35 centimetres too short, and the deficiency in the masonry was made up by means of woodwork and plaster. There is, as will be seen, a great probability that these massive blocks of masonry not only served to prop up the terrace wall, but also originally acted as the supports of the pillars of a great Megaron above.

The corridor descends by two steps at the third pier, and a third at the fourth, where it opens on the end of the upper Corridor running

¹ These were roughly square but varied a little in dimensions. The first bay north was 2·70 by 2·80 metres, the second 2·70 by 2·85 while the width of the third was only 2·40.

from east to west, and at the same time on the middle landing of the main staircase to be described below.

The bays themselves had been partly used as storerooms, and on the floor of the first was found a large heap of plain pottery. Another deposit of similar vessels was also found in a kind of *loculus* or niche, in the wall opposite the third bay. This pottery was all of a "rustic" class, unpainted, and exhibited some local Cretan forms of a remarkable character. Among these were double pots set at the two ends of a flat base, their upper rims being connected again above. They are provided with perforated conical lids (see Fig. 26), and seem to be the forerunners



FIG. 26.—TWIN VASE AND OTHER VESSELS: GALLERY OF THE BAYS.

of a Mycenaean type peculiar to Crete. In another direction they present a still more striking parallelism with the twin cups set at the two ends of a similar clay base, but without the upper connexion, found in prehistoric Egyptian tombs.¹ The Libyan relations of Crete give a special interest to the parallel.

There were also single pots of the same form and similar perforated lids with double walls leaving a small circular interspace between the outer circumference of the vessel and a low inner receptacle which sometimes rises less than half-way towards the level of the outer rim of the pot (see Fig. 27). In some cases the upper part of the inner receptacle showed a row of perforations and there was also a boring at its base which went right through

¹ As for instance those of El Mahasna.

both walls of the pot. These perforations, repeated in the lid, make it probable that some material was burnt inside one or other of the cavities of



FIG. 27.—DOUBLE-WALLED POT AND OTHER VESSELS : GALLERY OF THE BAYS.

the pot, though whether the vessel was used for incense or, with charcoal, for some culinary purpose is not so clear.



FIG. 28.—KNOBBED VASES : GALLERY OF THE BAYS.

Another interesting class of vessels found in these repositories were vases of somewhat elegant modelling, though still with a plain clay surface,

the distinctive feature of which was their adornment with small knobs (Fig. 28). They had pointed lips, sometimes raised in the early fashion, and a very distinct ring—also a primitive characteristic—round their necks. Knobs are also found, though not so systematically applied, in the earlier painted class of Kamáres ware. As seen on these vases they singularly recall the studs of metal-work, and it is probable that, as in the case of many features discernible in the Kamáres class, they show the influence of metal-work prototypes.

§ 28.—AREA OF THE SPIRAL FRESCO AND HIGH RELIEFS.

Between the east wall of the Room of the Olive Press and the end of the Corridor of the Gaming Board on one side and the southern bay of what is described below as the Eastern Terrace Wall on the other is a somewhat vague elongated space. The upper structures have almost entirely disappeared owing to the denudation of this part of the slope, and only a part of a floor level 70 centimetres below the surface, belonging to the latest Palace period, is traceable along the eastern side of the wall of the Olive Press Room. On this surface, and extending round the outer corner of the Olive Press Room, were ranged large numbers of rustic pots of the same general character as those of the North-East Magazines, the tripod types generally predominating. These lay only just below the surface of the ground.

The lower courses of the southern boundary wall of the area described are also visible, as well as a doorway flanked by massive blocks, opening on to the upper East-West Corridor. That this area, though at present so largely denuded, was once included in an important and brilliantly decorated columnar hall is evident from the remains discovered in two compartments below its original floor-level.

On the more northerly of these, from about 1·70 below the floor-level on which the tripod pots stood, were large masses of fresco exhibiting a grand spiraliform design of blue and black on a white ground, together with considerable fragments of plain red-faced stucco. Several fragments of painted bulls in stucco relief like those found near the Northern Entrance also came to light, including part of a hind leg, two hoofs, the tip of a horn, and the bushes of at least two tails. Near the wall separating this basement from the Olive Press Room, at a somewhat less depth, was found part of a

human limb in the same *gesso duro*, and a similar find accompanied by a fresco fragment was also made on the floor of the Olive Press Room near its northern wall. In the midst of the fresco remains in the basement space described there also lay two parts of column drums of a marbled grey material resembling granite.

The other compartment within this area, containing similar remains, lay under the wall separating it from the upper East-West Corridor. This compartment was not a mere basement space like the other, but lay for the most part beyond the edge of the Eastern Terrace wall, and over a small room belonging to the lower storey and characterised by fine paving slabs and a large pillar base. Above this base, marking the level of the upper floor, was a slab supporting another large block, the upper surface of which was visible above the soil before the excavation.

Here, at a depth of about a metre, were found a series of interesting fragments of painted stucco reliefs. Some of these were of a purely decorative and architectonic character, such as the top of a pilaster, and remains apparently of a ceiling design like that found near the Northern Entrance, consisting of spirals and rosettes. But the most striking objects were parts of human and other subjects in high relief, including portions of what seems to be the forepart of a Sphinx.

Among the fragments of human figures found were a right shoulder and forearm, a right hand, a left forearm holding a pointed vase, and the calf of a left leg. They seem all of them to have belonged to male figures, though the warm flesh colouring has almost entirely faded away. These "*disjecta membra*" were in considerably higher relief than those found on the south front and display an artistic perfection even beyond them. A distinctive feature of these reliefs is the great prominence given to the veins, which is carried out with an exaggerated realism that in places gives the surface of the limbs a varicose appearance. In the case of a right calf the sinuous lines of the veins seem to be somewhat conventionalised; on the other hand, on the back of a closed hand they are rendered with great fidelity to nature. Of all the fragments found, that representing the forearm of a man grasping the end of a pointed vase is the most remarkable (Fig. 29), the muscular development being rendered with extraordinary power. It will be seen that this represents a subject similar to that of the Cup-bearer fresco, and it is probable that the walls of the hall to which these stucco fragments belonged were covered with processional scenes

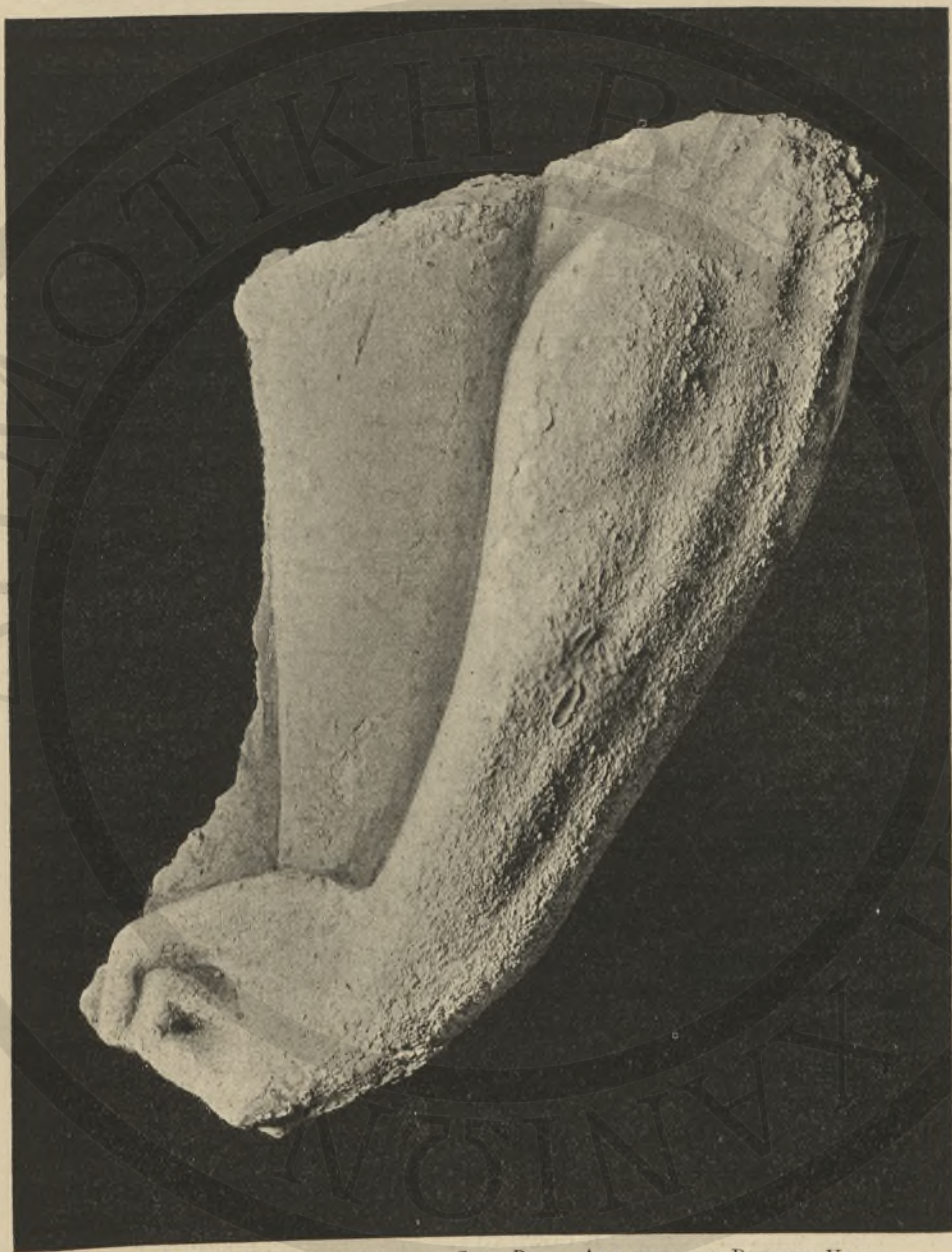


FIG. 29.—HIGH RELIEF IN PAINTED *Gesso Duro*: ARM HOLDING POINTED VASE.

analogous to those of the Western Entrance. But the wall-paintings there discovered can convey only a faint idea of the artistic perfection achieved in these coloured high-reliefs. We seem to note a crescendo scale in the scheme of decoration, which here reaches its acme.

Nor can there be much doubt as to the character of the structure to which these painted reliefs and associated frescoes belonged. The area in which they were discovered forms the east end of a rectangle of which three additional sections are supplied by the Room of the Olive Press, and the long Chamber and Gallery of the Bays beyond it. We have here, in fact, outlined section by section in the walls and piers of the lower storey, the complete plan of a large upper Megaron of the "Minoan" type illustrated by a Hall of the Double-Axes to be described below, and which must have opened to the West on a level with the Central Court. The buttresses of the "Corridor of the Bays" seem to have been, in part at least, designed to support the westernmost pillars of this hall, and in the two marble drums found with the fresco and reliefs we may actually recognise parts of the columns which bordered the "light-well" of the Megaron at its eastern end. It is probable that there stood here the great hall of the Palace, exceeding even that of Phaestos in dimensions.

§ 29.—THE STONE AMPHORAS IN THE SCULPTOR'S WORKSHOP.

Immediately to the north-east of the spot where the painted high-reliefs were found was a small upper chamber with a floor level very near the surface. Here, close against the west wall of the room, at a depth of only 25 centimetres, there came to light a large stone amphora lying somewhat on its side (Fig. 30). It was composed of a kind of veined marble-like limestone, used for some other vases found on the site, and, except for the fact that a piece of the neck was broken in and one handle cracked, it was in an absolutely perfect condition, though the part of the side nearest the surface of the ground was somewhat corroded. The vase was 69 centimetres (about $27\frac{1}{4}$ inches) in height and 2'5 metres (about 6 feet $8\frac{3}{4}$ inches) in circumference. Its walls increased in thickness from 6 centimetres at the neck to 17 centimetres at the sides, and some idea of its massiveness and weight may be gathered from the fact that eleven men with ropes and poles with difficulty carried it down to the headquarters house below. The flat upper rim was decorated with a spiral band, and a similar band, with

the central coils rising up like rows of snail-shells, ran round the shoulders. The vase had three handles, decorated on their outer side in the same spiral form as the rim, and with their sides cut out into arched hollows, communicating by means of a small perforation. These recesses had evidently been



FIG. 30.—GREAT STONE AMPHORA.

intended for some metallic inlay, which, as there was no trace of oxydisation, was probably gold.

Both for size and magnificence this vase far excels any known stone vessel of the Mycenaean age. Like the chryselephantine gaming board it was truly a royal possession. One feature very noticeable in this vase

is that to see its form and decoration to advantage it must be placed on the ground. In this respect it shows an essential difference from great modern vases or from the marble urns of later Greek tombs, though even smaller types of Mycenaean vessels require the same position. The broad-bottomed gypsum vases with spiral reliefs round their flat rims, found on the floor of the Throne Room, were made to be looked down on in a similar manner.

The style of the spiraliform decoration on this large amphora is identical with that of these alabaster vases found on the floor of the Throne Room, and it must belong to the same approximate date. The latter vases had evidently been set out to be filled, probably with oil from a clay store-jar that was found beside them, laid on its side to facilitate the process, when the operation was apparently broken off by the great catastrophe of the Palace. There was a touch of Herculaneum or Pompeii about the situation in which these vessels were found, which lends a peculiar interest to a similar circumstance connected with the present colossal vase. For although apparently completed it had never been moved from the *atelier* of the artist. Close beside it, on the floor of the same small room which evidently served as a workshop, there stood, in fact, another smaller stone amphora, about 35 centimetres high, of the same general form, but with its salient features only just roughed out of the limestone block. Here, as in the other case, the catastrophe came suddenly—this vase was left unfinished as the others were left unfilled. Both the large amphora and the vases of the Throne Room evidence in their style the most perfect development of Mycenaean decorative art. From the correspondence of the crystal, ivory and porcelain remains, in the latter case scattered beside the vases, with those of the Fourth Shaft Grave at Mycenae, we know that that artistic bloom was cut short here about the time when the unknown King of the mainland city was laid to his rest.

The discovery of a sculptor's workroom in which highly artistic stone vases were actually in the course of execution, is only one of many indications that companies of skilled craftsmen and artists lived and worked within the Palace walls. The fresco paintings were naturally executed on the spot, and more than one deposit of colours shows that the materials were also kept in the building. The Lapidary's Workshop on the Southern Terrace shows that many small objects of stone and bone were manufactured on the site, and the finding of one or two unfinished

lentoid beads of steatite makes it probable that the art of gem engraving was also practised on the spot. The amount of clay documents shows that scribes must have been largely employed, and instruction in the art of writing was doubtless also given in the Palace chambers. One, to be presently described below, is in fact arranged like a school-room. Children were taught within the walls, and apprentices instructed in the arts and mysteries of their craft. The abundance of "rustic" pottery has already been referred to as an indication that colonies of slaves or artisans of humble condition were domiciled inside the building. The Palace of Knossos, like the great Indian Palaces at the present day, was a town in itself.

§ 30.—THE EASTERN TERRACE WALL.

North of the area containing the spiral fresco and high reliefs, near an angle of the Eastern Terrace Wall, two more column drums of dark steatite were found, about 30 centimetres below the upper floor-level. Here, too, about 4 metres down, was a large deposit of vases belonging to the earliest Palace period. They represent the transition from the pure Kamáres style, some of them showing brown decoration on a pale buff ground, while others present the white and powdery red bands on a dark ground which characterise the indigenous early metal age pottery of Crete. Near here are the remains of a well only partially excavated.

North of this point is a well-preserved section of what has already been described as the Eastern Terrace Wall, running north and south. It is composed almost exclusively of good limestone blocks,¹ and its only facing is on the eastern side, showing that it fulfilled the functions of a terrace wall. The walling begins about half a metre below the surface of the ground, and goes down to a projecting base or plinth about 30 centimetres high. The upper part of the wall preserved is not continuous, being broken by embrasures. Along the northernmost part where the upper structure has vanished, stone runnels or gutters are visible at intervals, crossing the upper surface of the base of the wall. It is probable that these gutters ran out originally between embrasures.

¹ A few gypsum blocks are to be found among them.

§ 31.—THE FRESCO OF THE FEMALE *TOREADORS* AND THE BOXER
RELIEF.

South of the angle of the Eastern Terrace Wall, within which lay the deposit of early pottery, a solid piece of walling is preserved, consisting of five courses of well-cut limestone blocks, one of which, belonging to the fourth layer from the bottom, shows a square projecting gargoyle, devised, like later stone spouts of the kind, to protect the wall from the drip of a gutter. At this point a later Mycenaean chamber with rubble walls has been built up against the finer structure of the Terrace. It seems probable from the remarkable contents of this room that it was the basement of a more important chamber which once rose above the level of the Terrace Wall. A large number of fragments of good Mycenaean vases, including fine naturalistic designs of plants and marine objects, were found in this space from a considerable height above the floor level,¹ showing that they had belonged to an upper chamber. With them were abundant remains of wall paintings, some of a decorative character, including fine rosette ornaments, but the greater part belonging to a large composition exhibiting bull-grappling scenes.

Although the painted stucco was much broken up it was possible to put together parts of two galloping bulls, about a quarter (linear) of the natural size, and executed with extraordinary spirit. These noble animals are drawn to a relatively much larger scale than the human subjects with which they are associated, a feature also observable in some designs of the same *taurokathapsia* on Mycenaean gems. Over the back of one of these bulls a Mycenaean cow-boy is seen turning a somersault in most acrobatic guise.

But the most interesting feature in this wall painting is the appearance, beside the male performers in this dangerous sport, of female *toreadors*, distinguished by their white skin, the more varied hues of their costume, the blue and red diadems round their brows, and their somewhat curlier *coiffures*, but otherwise attired in precisely the same way as the "cow-boys," with a loin-cloth and very narrow metallic girdle and striped socks and slippers. One of these Mycenaean "cow-girls" is seen between the horns of a charging bull, which the acrobatic male figure has

¹ About 1.70 metres down, or about 1.50 metres above the floor level.

apparently failed to seize hold of. The horns, however, pass under her armpits, and she grasps them higher up with her hands.

The episode is sensational in the highest degree, but we have here nothing of the mere catching of bulls, wild or otherwise, as seen on the Vaphio Cups. The graceful forms and elegant attire of these female performers would be quite out of place in rock-set glens or woodland glades. They belong to



FIG. 31.—RELIEF ON PART OF STEATITE PYXIS, SHOWING BOXER ($\frac{2}{3}$).

the arena, and afford the clearest evidence that the lords of Mycenaean Knossos glutted their eyes with shows in which maidens as well as youths were trained to grapple with what was then regarded as the king of animals. The sports of the amphitheatre, which have never lost their hold on the Mediterranean world, may thus in Crete at least be traced back to prehistoric times. It may well be that, long before the days when enslaved

barbarians were "butchered to make a Roman holiday," captives, perhaps of gentle blood, shared the same fate within sight of the "House of Minos," and that the legends of Athenian prisoners devoured by the Minotaur preserve a real tradition of these cruel sports.

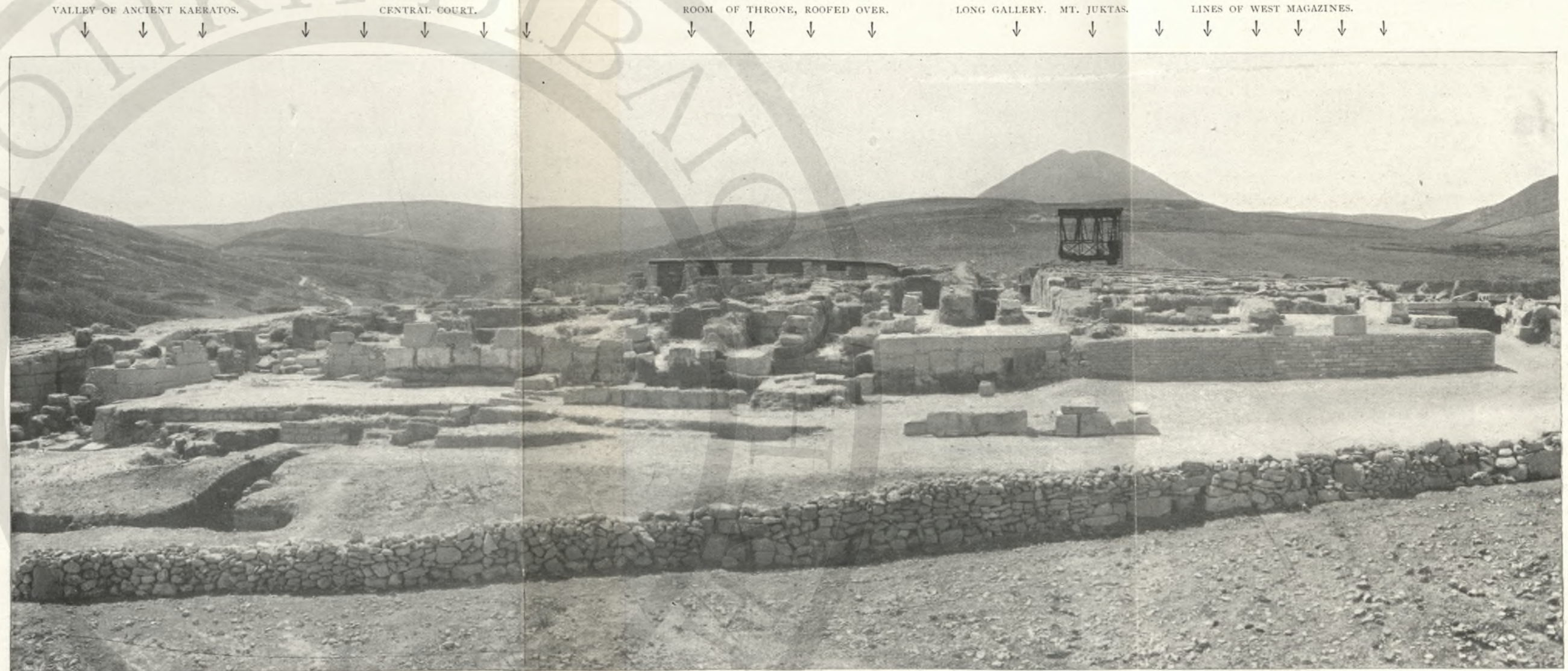
In the same chamber with these painted stucco fragments was also found part of a dark steatite pyxis—analogue to one found on the site of Knossos in 1894—with a relief showing an athletic contest of another kind (Fig. 31). It is apparently a part of a boxing match. A youth with clenched fists stands with his left arm extended as if in the act of warding off a blow, while his right arm is either drawn back to give greater force to a blow or momentarily rests on his hips.¹ The latter interpretation of the gesture is permissible, if in the bent knee of a prostrate figure before the pugilist we may recognise an adversary whom he has just knocked down. The figure has somewhat suffered, and is contracted by the usual metal band into a disproportionately small waist, but the limbs, notably the left leg, show beautiful modelling, in this case free from muscular exaggeration.

§ 32.—THE "SCHOOL-ROOM" AND ADJOINING CHAMBERS.

Immediately beyond the rubble construction which forms the south wall of the room containing the bull frescoes are what appear to be the lower courses of an older wall of solid masonry, running at right angles from the Eastern Terrace Wall. It is possible that this marks part of the course of an original outer wall, enclosing a small quarter of the Palace that lay between it and the inner wall which here represents the continuation of the Eastern Terrace line.

Several small rooms are enclosed within this area, the most interesting being that which occupies its north-west corner. Along the south wall of this room ran a low stone bench, at the west end of which stood a square pillar coated with stucco, the upper surface of which was hollowed into a bowl-like cavity. At the other end of the bench was another lower pillar of rough stone, perhaps originally plastered over, with a similar cavity—the one pillar being of a height to be used by a man, the other by a child. Opposite this bench and pillars, against the north wall, was another similar stone bench, and the masonry rising behind it at a somewhat higher level

¹ The attitude closely resembles that of the boxers—there armed with *halteres*—on the bronze situlas of Waatsch and Matrai.



VALLEY OF ANCIENT KAERATOS. CENTRAL COURT. ROOM OF THRONE, ROOFED OVER. LONG GALLERY. MT. JUKTAS. LINES OF WEST MAGAZINES.

↑ NORTH ENTRANCE. ↑ GREAT BASTION OF NORTH ENTRANCE. ↑ NORTH PORTICO. ↑ NORTHERN PIAZZA. ↑ NORTH TERRACE WALL OF LARGE BLOCKS. (EAST SECTION.) ↑ NORTH BATH. ↑ MYCENAEAN CISTERN. ↑ NORTH TERRACE WALL OF LARGE BLOCKS. (WEST SECTION.) ↑ WESTERNMOST SECTION OF NORTH WALL: MAINLY FOUNDATIONS OF SMALL STONES. ↑ WEST LIMIT OF NORTH QUARTER. ↑ NORTH PAVED AREA: OUTSIDE THE WALLS. ↑ NORTH-WEST ANGLE. ↑ BUTTRESS AT FIRST NORTH-WEST ANGLE.

NORTHERN BORDER OF PALACE OF KNOSSOS, WEST OF NORTHERN ENTRANCE WAY.

gave the appearance of a second. This, however, according to the explanation adopted above, should probably be regarded as part of an early outer wall of solid masonry. There seemed moreover to be remains of a doorway through this in the north-east corner of the room.

Along the side walls of the room are two more stone benches, which have a distinct inward slope as they recede from the south wall, an arrangement which inevitably recalls that of a modern class-room. The name of "School-Room" has therefore been provisionally given to this chamber as a distinctive title. May we, perhaps, imagine that the higher and lower stucco bowls were used, by master and pupils respectively, for keeping moist the clay lumps, out of which were moulded the tablets that serve as a vehicle for the linear script, and that the art of writing was here imparted to the Palace youth? That no written documents here came to light does not greatly weigh against this possibility, since hardly any minor relics were found within the walls of this room. Near the floor level, at the north-east corner, however, a very beautiful ornament of *kyanos* or blue glass paste was unearthed, in the shape of a Mycenaean shield with engraved scrolls on its outer surface. It showed a perforated handle on its under side. The floor, of gypsum cement, lay at a depth of from three to two metres below the surface, according to the slope.

At the south-west corner of the room were the jambs of a doorway leading to an elongated chamber which seems to have been used as a store-room. At the end and along the side walls were a number of "rustic" vases of the usual character, some piled on one another. Among these was an amphora of pyriform shape, with an oval mouth resembling in form that from the Kasella given in Fig. 14,¹ but with a plain unpainted surface, tripods and two-handled jars, shallow bowls, and cups with very high looped handles, these latter of a light paste. On a paved floor level, immediately east of the "School-Room," four jars, similar in form to some of those in the inner Magazine, stood in a row, and two of these were distinguished by showing a white band on a reddish ground, another was of the same ground colour, without the band, and the fourth of plain clay. Over one was also a plain clay bowl of fine paste, like those in the neighbouring store-room. We see here represented more than one stage in the transition from the pure "Kamáres" to the "rustic" indigenous style of the Palace, which survived in it to the great days of Mycenae. In this case a piece of

¹ See p. 47 above.

Mycenaean painted pottery of good period lay in the earth deposit a little above the jars.

Bordering the "School-Room" on the West was a small room representing the lower storey of that with the stone amphoras. It opened into a longer chamber from which a kind of vestibule led to what may perhaps be described as a small hall, presenting some interesting constructive features. In the walls were visible at intervals square upright grooves, which had formed the sockets of thick upright posts, the carbonised remains of which were visible within them in considerable masses. Upon the well-paved floor was a large deposit of lime, perhaps due to the calcination of gypsum slabs in the upper storey, under the great heat of the conflagration.

At the west end of this chamber, which may be called "The Room of the Wooden Posts," was a doorway 1.50 metres wide, flanked by a large stone pillar, or rather base, immediately under the great block of the upper floor level near which the relief frescoes were found, and which, from the fact that the upper surface slightly protruded above the surface of the earth, had always been somewhat of a landmark in this part of the site. This upper block rests on a flat slab which here represented the upper floor level 3.10 metres above the pavement below. Between these upper blocks and the base a strong supporting member must originally have intervened, perhaps in the shape of a square wooden pillar. The remarkable feature of the case is that the upper blocks had remained in place, owing to the accumulation of débris below, though the supporting pillar had itself decayed. We shall find many striking parallels to this phenomenon in the large halls beyond.

Between the base and original pillar that flanked the doorway below, and the north wall of the Room of the Wooden Posts, was a well-built balustrade, leaving an open space above it. This open space faced the doorway on the opposite eastern side of the room, and was no doubt devised to give light to the small finely-paved lobby to which the doorway beside the pillar gave access. This lobby formed the means of approach to another doorway at its southern end—its jamb and threshold exceptionally well preserved—leading into the Lower East-West Corridor, to be described below, and thus affording access to the great eastern halls of the Palace.

§ 33.—THE EAST-WEST CORRIDOR.

Adjoining the western border of the region described in the preceding section and on the same ground-floor level, is the opening of a passage-way, about 1·80 metres wide, running almost due east and west. About six metres from the point where the walls of this corridor are first visible, the passage-way mounts by means of a flight of stone steps. Ten of these are preserved in an unbroken series, after which there is a small gap succeeded by three more steps, the first, however, broken. The original flight consisted of fifteen steps, of which two and a portion of a third are now wanting. The cause of this break is due to the fact that whereas up to the tenth the steps rest on a solid foundation, at this point they reach the beginning of the lower East-West Corridor already referred to, into which the door from the lobby with the balustrade here opens. The roof of this end of the lower Corridor had collapsed, destroying the steps above it at this point.

Beyond this point, however, the floor of the upper Corridor has remained intact for some distance, running, as was afterwards made clear, above the lower gangway, the floor of which is about 4 metres below it.

Beyond the flight of steps the upper passage, to which the name of "East-West Corridor" *par excellence* may be given, passes on the right the doorway flanked by two massive blocks, already noticed as the southern entrance of the area containing the high reliefs and spiral fresco. Continuing east it slightly narrows into what appears to be a door opening, and follows the balustrade of the "Hall of the Colonnades," to be described below, to the important crossing point where the upper and lower staircase of this Hall and the Corridor of the Bays meet on a common landing.

The total length of the East-West Corridor is thus about 40 metres, representing the width of this section of the Palace, and it is a noteworthy fact that this distance almost exactly corresponds with that of the opposite quarter of the Palace as taken from the entrance of the Room of the Column Bases to the borders of the Western Court. This correspondence in the width of the two opposite sections of the Palace at this point gains significance from the fact that the East-West Corridor exactly centres on the line of the Pillar Rooms and their lateral passage on the other side, which with their ante-chamber, the Room of the Column Bases, forms a kind of central division to that wing of the Palace. The East-West

Corridor, in the same way, exactly divides the line of buildings on the eastern side of the Central Court, so that the two lines between them form a kind of *Decumanus* to the building. The *Cardo*, to continue the Roman simile, is supplied by the Northern Entrance-way at that end of the Central Court, and by the traces at the opposite end of the Court of a Southern Entrance passage.¹ Here, too, the principal or "Praetorian" front was to the East.

The whole result of the most recent excavations has been more and more to bring out the fact that, vast as is the area it embraces, the Palace of Knossos was originally devised on a single comprehensive plan. The ground scheme of a square building, with a central court approached at right angles by four main avenues, dividing the surrounding buildings into four quarters, is a simple conception which, as we now know, long before the days of the later Roman *Castra*, was carried out in the *Terremare* of Northern Italy. It was not otherwise that at a much later date Hippodamos laid out the plan of Thurii, and Frederic "Stupor Mundi" and our first Edward resorted to similar schemes for their civic foundations from Terranova to Winchelsea. But while these other plans dealt with separate units, in their aggregate composing a township, and easy of distribution, the Minoan architect may claim the credit of adapting the same root idea to an organic whole, and fitting it in to a complicated arrangement of halls, chambers, galleries, and magazines, forming parts of a single building.

§ 34.—EXTENSIVE DEPOSITS OF INSCRIBED TABLETS AND SEAL IMPRESSIONS IN THE EAST-WEST CORRIDOR.

The whole upper course of the East-West Corridor, from the top of the steps onwards, was the scene of repeated finds of inscribed clay tablets and seal impressions. Others, again, were found within the doorway leading to the area of the High Reliefs and the Spiral Fresco, and others, again, had found their way over the edge of the neighbouring Hall of the Colonnades, into the corridor below, and even to the lower recesses of the adjoining staircase. It was obvious, however, from the character of the inscriptions and recurring *formulae*, as well as from the continuous though extended area of their diffusion, that they belonged to the same deposit, or, more

¹ See above p. 14. In the plan, which only shows here the basement spaces, an idea of the Southern Entrance Passage can hardly be given.

probably, series of deposits. The scattering that had occurred seemed in this, as in some other cases, to be due to their having reached the position in which they were found from an upper floor. These tablets had suffered in an exceptional degree from the effects of fire, and in some cases had been reduced to a condition resembling blackened pumicestone. The meaning of this, however, became clear when it was found that they originally lay in what seems to have been a third storey, contiguous to the great Palace Halls, where the final conflagration has left other signs of having been more violent than elsewhere. The tablets do not present any pictorial figures. They relate to accounts of one kind or another, on the whole to higher amounts than those of any other deposit yet brought to light—the figures in one case being over 19,000. The total sums at the end of the inscriptions are often preceded by the throne-sign.

The seal-impressions were most numerous on the staircase landing at the west end of the corridor. They show examples of the finest Mycenaean style of engraving, impressions from the same intaglio being often repeated. The subjects include,—besides the usual bulls, lions, *agrimis*, rams, moufflons, dogs seizing their quarry, flying birds and flying fish—a certain number of specially interesting types. It was here that several impressions were found from the actual signet ring delineating the seated Goddess and her attendants, the counterfeit matrix of which has been already described.¹ Two designs belonged to the same religious cycle as that showing the Goddess on her sacred peak with the lion supporters. On one of these, a flounced female figure, evidently the same divinity, lays her hands on the necks of two lions who stand back to back with their heads turned towards her. Two other varieties show a male figure between a pair of confronted lions, stretching his arms over their heads in an attitude similar to the design on a gem found near the site of Kydonia.² In another impression a lion stands before a probably "baetylic" column, and a very fine seal shows a moufflon standing before a fluted column with a Mycenaean shield in the field. A sacred tree of papyrus-like appearance rises between two symmetrically grouped wild goats, and an ox is seen laid out on a sacrificial table, as on a gem from a tomb of the Lower Town of Mycenae.³ Griffins occurred both single and confronted. Two scenes refer to the *Tauroka-*

¹ See above p. 19.

² *J.H.S.* 1900, p. 163, Fig. 43.

³ 'Εφ. 'Αρχ. 1888, Pl. x. 36. Placed wrong way up on the plate. Compare the gem in the Berlin collection, Furtwängler, *Beschreibung*, &c. No. 22.

thapsia—in the first a man, who has apparently missed his grasp, is seen above a magnificent galloping bull, in the second he lies prostrate below the lower outline of another. A curious device consists of a Mycenaean shield in an upper compartment, while below is the upper part of a naturalistic design of a Triton shell. A very exceptional type, of which several examples came to light, also showed the field divided into two compartments, in the upper and lower of which are four crouching figures, apparently of men with their forearms slightly bent upwards. This device derives a special interest from the fact that seal impressions, with a type so similar that it is difficult to say whether or not they were taken from the same gem, were found by Mr. Hogarth amongst the hoard of clay sealings brought to light on the ancient site explored by him at Zakro in the extreme east of Crete—a fact which indicates a direct connexion between that early settlement and Knossos.

§ 35.—THE QUADRUPLE STAIRCASE.

The meeting-point of the East-West Corridor and that of the Bays had been originally reached by excavation from the north along the latter line, and the adjoining landing, on which so many seal impressions were found, had been naturally regarded at first as a small bay of the same Corridor. A rubble block of masonry beyond had been taken for a broader buttress of the same kind as the others that jut out along the terrace line of the Central Court, and a fifth bay seemed to have been reached beyond it.

It was at this point that the development of the excavation took an altogether dramatic turn. Hitherto, along the line of approach—in the area, that is, between the Eastern Terrace line and that of the Central Court—the ground-floor of the rooms and galleries had lain according to the slope from at most $2\frac{1}{2}$ metres to half a metre below the surface of the ground. But, as the excavation of what had been taken to be a fifth bay of the Corridor proceeded, the earth deposit was found to go down and down till a paved floor level was reached 5 metres below the surface, while a little to the east of this another cement floor was subsequently found lying 6·80 metres down, or about 8 metres below the level of the pavement of the Central Court. Steps going up and down began to appear, and it soon became clear that what had been taken to be a fourth bay of the

Corridor was the middle landing of a quadruple flight of stone stairs, while the supposed fifth bay was the landing below. The Corridor of the Bays, itself on a ground level, was seen to have emerged on the galleries and stairs of an upper storey, while the walls bounding the East-West Corridor on the north were found to represent a line along which the whole transverse section of the hill had here been cut out to a lower ground level corresponding with that beneath the Eastern Terrace. The base of the terrace wall of the Central Court, which had run from 2 to $2\frac{1}{2}$ metres below the surface, now went down nearly to 7,¹ originally 8, metres, or over 25 feet.

The western section of the East-West Corridor proved to be at the same time the upper gallery of a square columnar hall, and was flanked on the side overlooking the hall by a balustrade, a coping slab of which showed the raised socket of an original wooden column. The point where the East-West Corridor and that of the Bays converge formed, as already noticed, at the same time part of the middle landing of a staircase. From this point a flight of stone steps led up along the west line of the above mentioned hall, flanked by a similar balustrade rising in three steps, each gradation terminating in a socketed slab² for a wooden column.

At the upper termination of this flight of stairs part of a large stone slab representing another landing was still in position. The middle wall between the inner and outer staircases showed a window opening to give light to the lower flight. This wall was of rubble construction, but at its upper end by the landing was a huge limestone block, the surface of which, facing the upper landing and round the corner beyond, was cut out in such a way as to leave a graduated projection. The ends of three steps were outlined over this projection, attesting the former existence of a higher flight of stairs ascending to the level of the Central Court over what afterwards proved to be the second flight from the bottom. We have here the remains of three distinct storeys, above which was probably a fourth.

Descending the stairs to the landing above which the seal impressions were found and which was much choked by large fallen blocks, another flight of twelve steps was opened out, the west wall of which was built up against the Neolithic clay deposit that forms the base of the Central Court.

¹ On the inner line of the stairs the depth, as stated above, was only 5 metres, but further south the depth was the same as that of the adjoining Hall of the Colonnades, namely 6.80 metres, representing an original depth below the level of the Central Court of about 8 metres.

² Their sockets, like that already described, had a raised ring and their inner diameter was about .58 centimetres.

This flight led to a lower landing divided into two levels, the slab immediately at the bottom of the stairs leading to another at the top of the lowest flight by a triple step.

At this point is a large limestone base, immediately under the block that flanks the upper landing. Above this base, after an interval of 13 centimetres, was a flat slab with a raised socket like those of the balustrade above, made for the insertion of a wooden column which had formed the support of the large block above. The interval between the socket and the upper block was 1'60 in height. It had become filled with a tough red earth which had kept the upper block in position. In the earth immediately under the west side of this block were seen the charred ends of a row of square cross-beams which had intervened between it and the capital of the column.

It was at first thought that a direct access existed from this lowermost landing to the hall on its eastern side. But it was found that the floor of the hall lay at a considerably lower level, and a fourth flight of twelve stairs was gradually brought to light descending north under the second flight, with a headway of about 2'70 metres in height. The excavation of this part was of extraordinary difficulty, owing to the constant danger of bringing down the stairway above. It was altogether miners' work, necessitating a constant succession of wooden arches. Two of our workmen however had worked in the Laurion mines, and after eight days' slow progress, a passage down the steps was finally cleared along the western wall of the staircase. The outer wall was found to end below in another limestone base, with a socketed slab above it for a wooden column, like that of the landing above.

The stairs emerged below on a well-paved portico, with fine gypsum slabs on its inner walls, opening on the hall already referred to, and which, from its tiers of pillars above and below, has received the name of the "Hall of the Colonnades." The quadruple flight of stairs, leading down to this from the Central Court and the corridors of the north-east Palace region, seems originally to have consisted of fifty-two stone steps, of which thirty-eight, and the indications of five more, are preserved. The steps were about 12 centimetres high and 45 deep, those of the under flights 1'80 metres wide, those of the outer about 1'25 metres. The window opening to give light to the third flight from the top has been already noted, and there seems to have been another opening of the same kind on the lowest flight

from the Hall of the Colonnades (see Fig. 32). It is possible that a stepped balustrade with columns also ran up alongside of the uppermost stair. A burnt shaft of a column of cypress wood, which had probably fallen from a neighbouring part of the balustrade, was found in a small chamber just beyond the upper landing. It had the appearance of being fluted, but this may have been due to the effects of the burning.

§ 36.—THE HALL OF THE COLONNADES.

The descending stairs, and the parapets with sockets for wooden columns on the upper margin of the "Hall of the Colonnades," at first gave the impression that we had here to deal with a large bath, like those already discovered. But though, as already pointed out,¹ the analogy to a certain extent holds good, the doorways and circular bases, subsequently found, on the floor level, showed that the structure with which the above features were here connected was in fact a Columnar Hall.

The quadruple staircase described above dominated the western side of this Hall, while the portico, into which the lower flight of stairs led, formed the northern section of the Hall itself. This portico acted as the support of the parapeted gallery already mentioned as representing the continuation of the East-West Corridor, and might itself be regarded as the continuation of the passage-way referred to as "the Lower East-West Corridor," running below the other. It led into the lower Corridor proper by a doorway at its eastern end, with exceptionally well preserved wooden posts and lintel. The Portico had a gypsum paving and a dado consisting of thin slabs of the same material along its inner walls. It was filled with a fine earthy deposit into which some inscribed tablets belonging to the same deposit as those of the East-West Corridor had made their way through a breakage of the floor, and several seal impressions derived from the same source were found near the doorway. Two circular bases, about 60 centimetres in diameter, on the outer line of the Portico, showed the position of the wooden columns that had originally supported the stone breast-work—itsself about 90 centimetres in height—of the Upper Corridor. The columns must have been about 3.50 metres high, and in spite of the fact of their disappearance, the earthy deposit and débris which had made its way into the intervening space had been sufficient to keep

¹ See above p. 62.

the balustrade above in position. Unfortunately, the wooden framework, which had been first inserted to support this breastwork while the débris

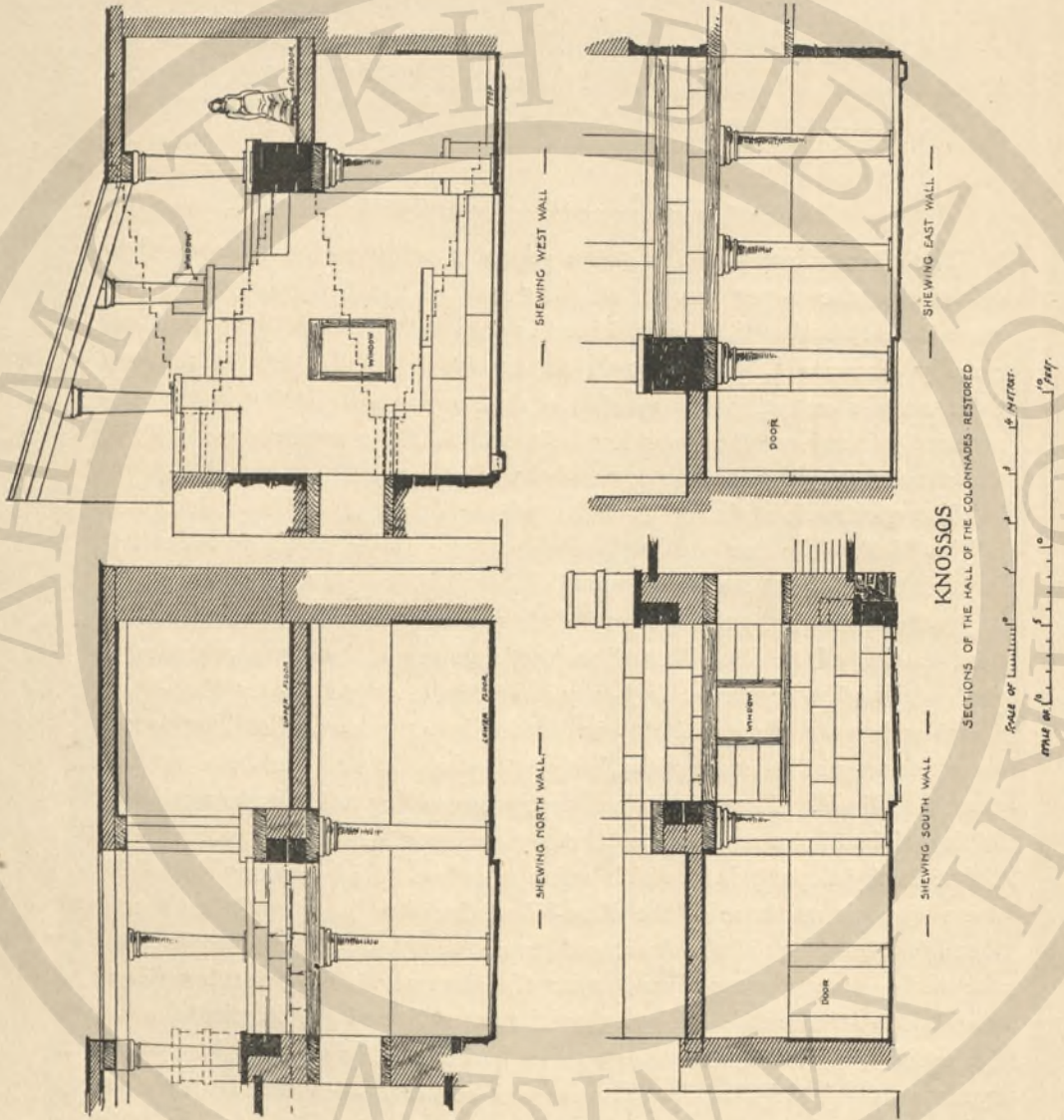


FIG. 32.—THE HALL OF THE COLONNADES: RESTORED SECTIONS.

was being cleared from below it, proved unequal to a sudden lateral strain caused by a slip of exceptionally loose earth, and a large part of it fell during the night of June 11. Owing to the presence of a heap of soft

earth below, however, the blocks did not suffer serious injury, and it was found possible to replace them in position with a stronger support.

The second column base of the portico described above forms at the same time the first of a series of similar bases¹ on a stylobate running across the Hall from north to south and dividing it into two equal spaces. The eastern half of the hall, within the column bases, had a good gypsum pavement and the lower part of the enclosing walls was covered with fine slabs of the same material, as in the case of the "portico." The western half, on the other hand, between the stylobate and the wall enclosing the staircase, had only a cement flooring, and was obviously, in part at least, hypaethral.

The three columns which originally stood on this central line had acted as supports of the front line of an upper chamber above the paved space below, the floor of which must have been on a level with that of the Upper Corridor, on which it undoubtedly opened. Curving slightly down from the borders of the gallery above the lower portico, there were visible a series of the round carbonised ends of the beams that had supported the floor of the upper chamber. Above this again were the remains of a stone breastwork, about the same height as that of the adjoining gallery, in a somewhat ruinous condition, which had doubtless originally supported some kind of wooden pillars, the openings between these affording light to the upper chamber, and at the same time a view from it into the court below. This ruinous parapet had eventually to be removed pending its replacement on a wooden scaffolding.

The comparative height of this part of the building—by the staircase, certainly three storeys—the spacious hall and the numerous wooden columns seem to have greatly intensified the effects of the conflagration. The painted stucco, which must originally have covered a large part of the walls, together with a good deal of the gypsum and limestone materials of the upper part of the building, had been reduced to a calcined mass, which greatly increased the difficulty of excavation in the upper part of the deposit within the "Hall of the Colonnades." From about $4\frac{1}{2}$ metres above the lower floor level, for a thickness of over 3 metres, a calcined stratum of pale red earth almost as hard as rock had to be cut through with the pick, and, though the lowest layer was somewhat softer, large

¹ The diameter of the central column base was 60 centimetres, that to the south 63 centimetres.

heaps of lime lay in the south-east corner of the lower room which had to be literally cut away from the pavement. Above the calcined stratum was a deposit of charred rafters.

In spite of the destructive results of the conflagration, a fortunate circumstance seems to have preserved some record of the decoration of the upper room of the hall. Into a small space immediately to the south of it, which, from its secluded position and exiguous dimensions, must have been comparatively protected from the force of the fire, there had fallen many pieces of painted stucco belonging to the decoration of a larger chamber, which were certainly derived from this area. Pieces of fresco were here found of a fine architectural character, one apparently representing a part of a façade, in which was a frieze with half rosettes of a character similar to that found near the north-west corner of the Palace.¹ Fragments of a bull in painted stucco relief were also found here.

In the same small compartment—little more than a pit in itself—about 4 metres down, together with the fragment of fresco and stucco relief, occurred a curious decorative slab of porphyry-like limestone, the border of which was cut out into a kind of grotesque rockwork outline—suggestive of Japanese or Chinese designs. There was also found here a bronze knife and a deposit of seal impressions, among which eighteen pieces repeated the same seal type containing a pair of the strange Mycenaean daemons.

Whether or not these seals had also originally found a place in the upper chamber of the Hall of the Colonnades, a very remarkable find made about on a level with its stone breastwork, near the southern wall, seems to show that some important documents had been deposited there. This was a clay tablet measuring 267 by 155 millimetres—the largest yet found—and containing twenty-four lines of inscription. The inscription showed the man-sign constantly repeated after groups of linear characters, and perhaps refers to male slaves or captives, giving the names of their owners. It is divided into three lists, prefaced by varying formulas, and with the total numbers of each list added up at the end. With this tablet were found some smaller fragments of inscriptions.

In the south wall of the lower chamber within the colonnade, at the south-east corner, was another well-preserved door way,² opening into a

¹ See above p. 53.

² Both this and the doorway at the north-east corner were 1.40 metres wide.

passage the connexions of which are not yet ascertained. The adjoining part of the south wall of the chamber, like the other interior walls, here was of rubble masonry lined with gypsum slabs. Outside the line of the stylobate, however, the character of the south wall suddenly changed. From this point onwards, as befitting a more exposed structure, it was formed of limestone blocks of good masonry, interrupted by two horizontal cement-lined grooves, which had been originally filled by wooden beams, and which in part of their length had formed the upper and lower frame-work of a window-like opening. Owing to this insertion of more perishable material the upper part of the wall had somewhat subsided towards its eastern end, though the relative position of the blocks was not affected. Near the south-west corner of the room twelve courses of masonry were preserved, in addition to the interspaces formerly filled by these cross-beams. This south wall attained a height of 5.40 metres, or about 18 feet. Upon a large number of its limestone blocks was cut a sign perhaps representing a kind of *sistrum*.

The adjoining west wall which encloses the staircase is of a more complicated structure. Above, immediately under the balustrade, are good limestone blocks, and below, again, is fine masonry resting on the ground-level, and rising in steps, following those of the breastwork of the staircase above. The intervening space, however, between these two bands of good material is now largely filled with clay and rubble, partly of a derivative nature. It appears that the upper and lower masonry must have been connected by wooden piers, and that there was a window between these giving light to the lowest flight of stairs.

The oblong space in front of this wall, and outside the line of the colonnades, was coated, as already noted, with a cement, largely consisting of pounded gypsum, in place of the stone paving which was laid down in the covered parts of the hall. A further indication that in part at least this outer area was exposed to the weather, is supplied by the fact that the floor slightly slopes towards a drain hole in the south-west corner. The upper course of this drain¹ could be traced through an adjoining chamber for some metres to the south, while eastwards its course can be followed along the whole southern wall of the Hall of the Colonnades, and across the neighbouring angle of the Hall of the Double-Axes beyond.

We have here then a Columnar Hall (see Fig. 32), about 8 metres

¹ The drain was 9 centimetres deep and 19 wide.

square, consisting of a covered space,—chamber and portico,—connected with another portico and chamber above them by a triple staircase, and the whole bordering an open space 5.40 metres long by 3.30 broad, which served as a well for lighting both storeys. It is possible that this open space may have been partly covered by a lantern above; but the drain and sloping floor, and the change of materials for pavement and walls, show that it was largely exposed to the weather. Nothing indeed in this whole structure is more remarkable than the careful adaptation of material to conditions. In the sheltered spaces were good paving, gypsum dados, and painted stucco, (of which fragments only had here been saved from the conflagration), covering inner walls of merely rubble fabric. In the exposed parts cement takes the place of the fine but perishable gypsum slabs for the flooring, and the walls change to well-cut masonry or solid wood-work. The whole structure of this hall, with its tiers of colonnades rising one above the other, and, on the west side, following in harmonious gradations the ascent of the double flight of stairs, must in some respects have anticipated the effect of the entrance court of an Italian Renaissance Palace.

§ 37.—THE MEGARON OF THE DOUBLE-AXES.

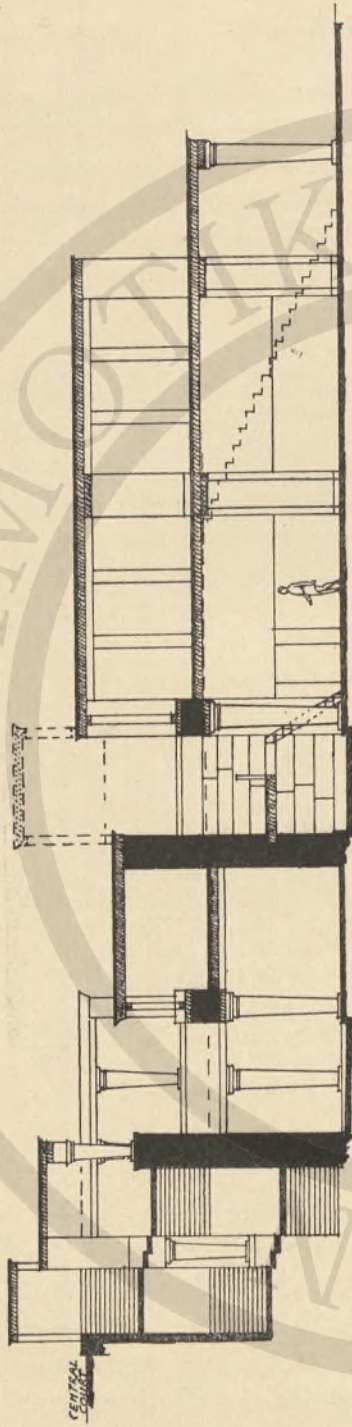
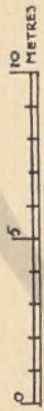
To those descending east by the quadruple staircase, either from the Central Court or from the quarter of the Palace with which the Corridor of the Bays communicates, the Hall of the Colonnades would have formed a kind of fore-hall to a larger Megaron lying immediately to the east of it.

The communication between the two halls, however, was not direct, but by means of a short section of the lower East-West Corridor entered as already described through a well-preserved doorway in the north-east corner of the Hall of the Colonnades. About four and a half metres beyond this another doorway opens in the right wall of this lower Corridor giving access to the large Megaron that bounds its southern wall.

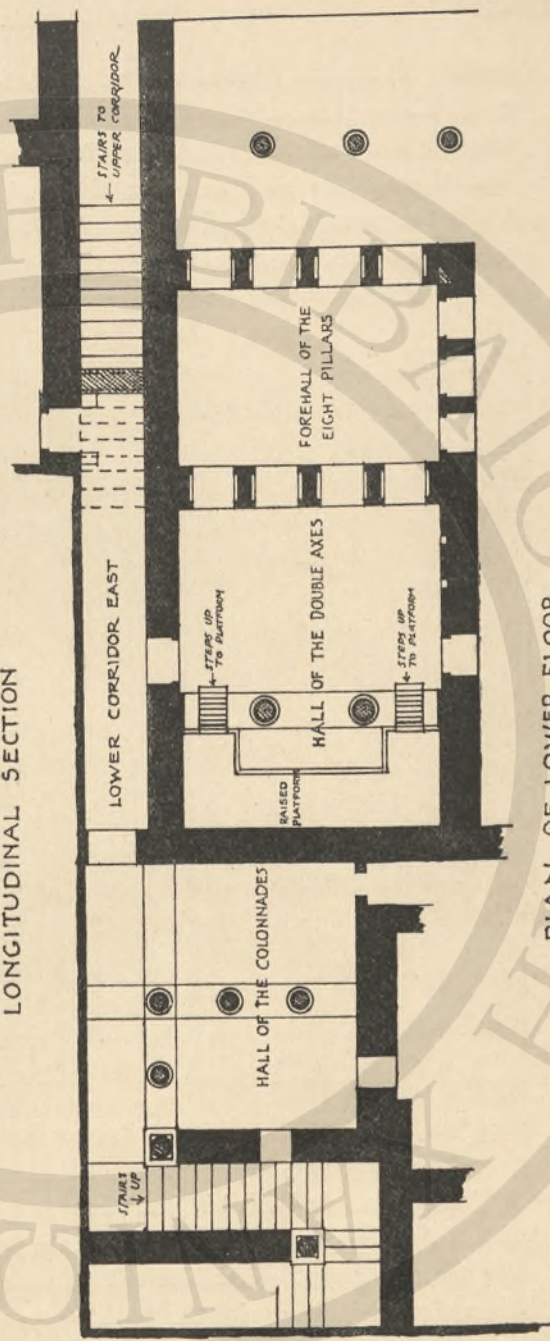
The excavation of this area to a great extent repeated the characteristics of that inside the Hall of the Colonnades. Here too were everywhere the signs of an exceptionally violent conflagration. Here too the burnt rafters of the upper layers gave place to a stratum of calcined material of a pale brick-red colour and almost as hard as the native limestone. On the floor level, moreover, below this in places, lay great masses of lime.

The structure itself in its material and arrangement recalled many

· KNOSSOS ·
HALLS ON EAST SLOPE · RESTORED



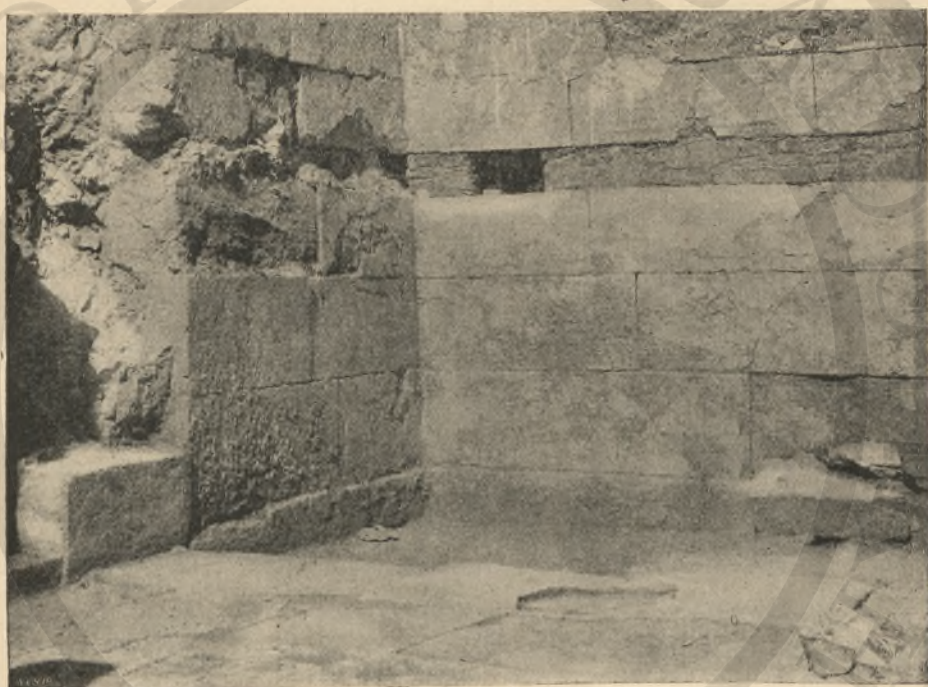
LONGITUDINAL SECTION



PLAN OF LOWER FLOOR

FIG. 33.—PLANS AND RESTORED SECTIONS OF THE QUADRUPLE STAIRCASE, THE HALL OF THE COLONNADES AND THE MEGARON OF THE DOUBLE-AXES.

leading features of that of the neighbouring hall. Here too the western end, which in this case also seems to have been comparatively exposed to the weather, was enclosed with walls of good masonry, but presented a cement-laid floor in place of the stone flags of the interior spaces. Here too, again, the covered part of the building, though well-paved, was surrounded by walls which, behind their original coating of gypsum slabs and stucco, were of merely rubble construction.



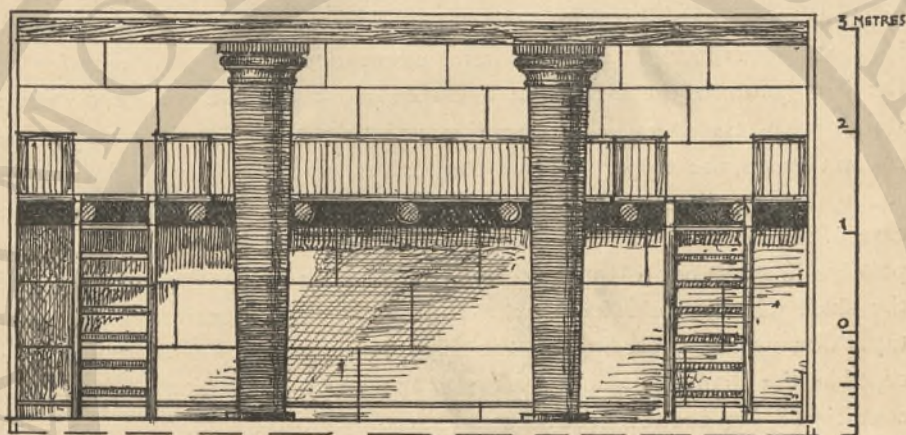
Doorway.

↑
Interstice above Fourth Course of Masonry from bottom for Ends of Wooden Beams,
refilled except at point indicated.

FIG. 34.—SOUTH-WEST CORNER OF MEGARON OF DOUBLE-AXES.

The western end of this hall was formed by a carefully constructed wall of fine limestone blocks, 8 metres wide, with two wings 4.20 metres long projecting east. The blocks here were larger than those of the other hall, and were incised with the double-axe sign which constantly recurs at the most important parts of the building, but is most in evidence in this great hall, called on that account "The Megaron of the Double-Axes."

Eight courses of this wall were preserved, rising to a height of 4.50 metres, or a little over 13 feet. Its lowest course projects so as to form a plinth, and the courses of masonry are interrupted in the middle by a horizontal cavity,¹ partly filled by coarse lime and terracotta cement, in which were visible the round hollow sockets of beams whose ends had thus been cantilevered into the wall. There were seven of these sockets along the western wall and two on each of the wings, where the same horizontal cavity continued. The only possible object of these projecting beams



·KNOSSOS· HALL OF THE DOUBLE AXES
CROSS SECTION LOOKING WEST. RESTORED

FIG. 35.—WEST END OF MEGARON OF DOUBLE-AXES RESTORED, SHOWING RAISED WOODEN PLATFORM AND STEPS.

must have been to support a raised wooden platform at the end of the hall, approached, we may suppose, by ladder steps at each end (see Fig. 34). It is possible that further wooden steps led from the platform to the *Thalamos* above the *Megaron*.

The drain already traced across the Hall-of the Colonnades was found to pass under the western wall of this Megaron and to traverse its south-west corner.² No opening to it was visible here, however, as in the other case, and this circumstance, as well as the fact that a wooden platform was

¹ In order to save the upper part of the wall from the danger of subsiding, the greater part of this cavity had to be filled in.

² The dimensions of the drain were here larger, 25 centimetres deep by 45 wide, an indication that some additional surface water was supposed to reach it.

constructed at this end of the Megaron, tends to show that it was not exposed to the weather to the same extent as the open area of the Hall of the Colonnades. It is probable therefore that here at any rate the lighting space at the west end of the Hall was partly protected by a lantern above.

The limit of the inner area of the Megaron of the Double-Axes was marked, as in the neighbouring hall, by a gypsum stylobate, beyond which the whole floor level was paved with fine gypsum slabs. On this stylobate, which terminates on either side in two massive cubical blocks, were two column-bases 65 centimetres in diameter, and above them a very interesting feature was brought out by careful excavation, namely, the remains of the two columns themselves in a carbonised condition. Both of these stood with their lower extremities pointing towards their respective column bases, the upper part of the drums sloping away slightly in a south-westerly direction. They were made of cypress wood, and in the case of the more northerly of the two, which was the better preserved, it was possible to make out a length of 2.60 metres, very nearly the full height of the shaft which would have been somewhat over 3 metres. A distinct taper downwards, according to the Mycenaean canon, was moreover perceptible, the diameter of the shaft near the lower extremity in its burnt condition being about 45 centimetres.

Immediately east of the stylobate were door openings in the side walls of the Megaron—that to the north leading, as already described, into the Lower East-West Corridor, that to the south to a finely built passage, the further exploration of which must be part of next season's work. The pavement of this section of the Megaron consisted of a central rectangle of flags of somewhat unequal sizes, surrounded by a border of very fine regular slabs. This arrangement recalled that of the Room of the Throne, and it is probable that in this case too the central area was originally distinguished by a coating of brilliant red cement. The paving of the succeeding section, or "Prodomos" of the Megaron, showed the same arrangement.

At a distance of 5.60 metres from the inner line of the stylobate were three oblong bases with double reveals, and against the walls on either side two half bases of the same kind, leaving four door-like openings across the hall, and about 1.30 metre wide. In the fore-hall, or "Prodomos," in front of these, at a distance of 5.40 metres, were the same number of

similar bases, with half-bases answering to them on their flanks. On the southern side of it, moreover, were two more bases and half-bases, with reveals however only on the side towards the hall. It does not seem reasonable to suppose that this forehall had eleven doors, and the bases, at least, along the centre of the Megaron may be preferably regarded as having supported square pillars. The object of the succession of pillars seems to have been, while keeping as large as possible an open space for the Megaron below, to afford support for similar pillars on the floor above, which possibly in their turn gave support to the structure of a third storey. A line of similar bases was found directly above the first lower row, on a floor level about 3.50 metres higher than that of the Megaron below.¹ There had probably also existed a second row at this upper level, answering to the eastern line of bases in the lower Hall, but owing to the slope of the hill the surface was here denuded to a point below the upper floor level.

Beyond this eastern line of pillar-bases the north wall of the Megaron continues east for another 5.80 metres, thus forming the *anta* of a paved portico of which three column bases were brought to light. How far this portico continues to the south, and on what it opens beyond the face of the Megaron, are questions to be decided by future excavation. The portico was paved with the same fine gypsum slabs and seems to have had a series of square columns along its outer margin. Between the column bases here were found fragments of painted stucco with spiral and rosette designs. Inside the Megaron the intensity of the conflagration seems to have completely destroyed these decorative elements. On the floor-level near its west wall, however, were found several pieces of stone vessels including the upper part of a very fine vase of a mottled red and grey colour. The cutting of this vase, which belonged to the pointed class, was bolder than any of those found in the Room of the Stone Vases. It had a very pronounced ring round its neck and deep sharply edged fluting down the sides. It seems to belong to a somewhat more archaic class than the fluted vessels of the other deposit.

The "Megaron of the Double-Axes," of which a perspective sketch by Mr. Fyfe is given in Fig. 35, is by far the largest Hall as yet laid bare on the Palace site of Knossos. Its breadth—8 metres—cannot indeed

¹ All were preserved *in situ* except the half-base that must originally have stood by the south wall of the chamber.

compare with that of the Great Megaron discovered by the Italian Mission at Phaestos, which is no less than 13·70 metres broad. Its length on the other hand—reckoning from the outer edge of the Portico 24·40 metres, or nearly 51 feet—is 2·70 metres larger than the Phaestian Megaron as measured from the top of the entrance steps. The interior

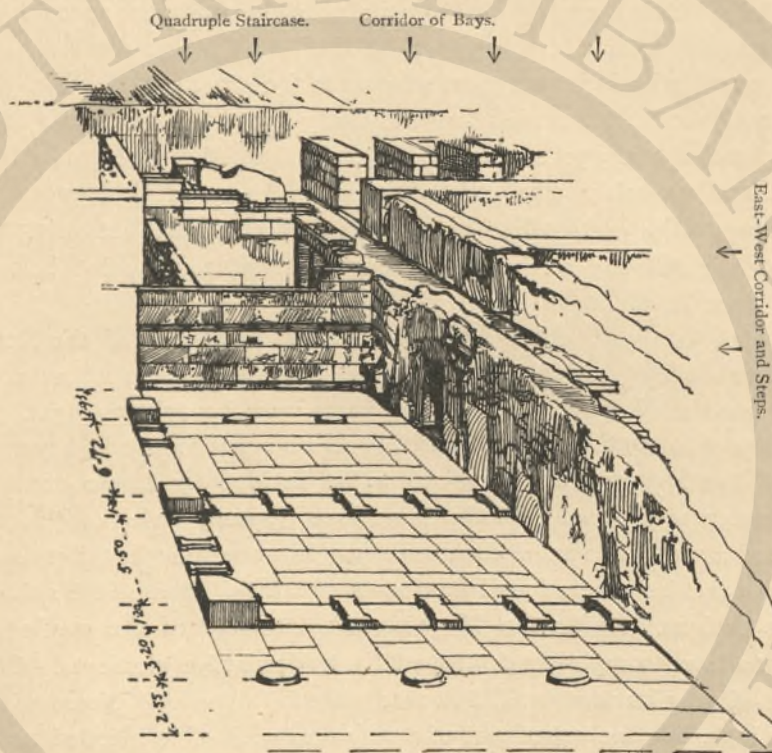


FIG. 36.—PERSPECTIVE SKETCH OF MEGARON OF DOUBLE-AXES (South Wall omitted) WITH HALL OF COLONNADES AND STAIRCASE BEYOND.

length of the inner hall with the columns,—about 10 metres,—is almost exactly the same as that at Phaestos. The great Hall which originally extended from the Corridor of the Bays to the Area of the Spiral Fresco and High Reliefs,¹ seems however to have been more extensive than either.

The upper floor seems to have consisted of a spacious room with pillars at intervals like those below, of which, as already noted, the bases of the

¹ See above p. 90.

western series remain. In the course of excavation these had to be temporarily removed but have been replaced as originally found, and at their proper level, by means of a wooden scaffolding. In the earth beneath these were embedded the carbonised remains of round beams about 40 centimetres in diameter running from east to west. A part of the rubble wall has been preserved between the eastern section of this upper chamber and the East-West Corridor, from which access had been obtained to it by means of a doorway over that leading from the Lower Corridor into the Megaron below. On this wall had been happily preserved a piece of the original painted stucco, exhibiting a design of palm-like trees, executed in a somewhat careless style and resembling one on the wall near the throne, beside which were single horn-like objects, which may have had a sacral significance. What remained of the fresco was only about 80 centimetres high, but the painted dado could be traced for about 3 metres.

Just within the eastern section of this upper chamber, near the pillar base by its northern wall, lay a large block of carbonised wood which may either have been part of a pillar or a natural trunk.

It is possible that the "Megaron of the Double-Axes" was originally approached up the eastern slope of the hill by a broad flight of steps analogous to those of Phaestos, but this point can only be decided by further investigation.

§ 38.—DISCOVERY OF PARTS OF A STONE BULL, CARVED IN THE ROUND, AND OF BONE PLAQUES INSCRIBED WITH SIGNS AND NUMBERS.

The region south of the Quadruple Staircase and the two Halls is also as yet too imperfectly explored for adequate description, though features of considerable interest have already come to light in this region. Remains of two storeys seem to have been preserved throughout the greater part of this area. In an upper chamber near the terrace of the Central Court, a stone bench and parts of the floor slabs have been preserved in position above the fine masonry of a lower room.

Two very interesting discoveries have come to light in this area, inside what appears to be a large stone drain or "cloaca" analogous to that of the Northern Entrance. It was approached by a chimney-like stone shaft, the mouth of which, closed by a slab, was partly under the

door-jamb of an upper storey floor-level, that lay 1.60 metres beneath the surface. From this point the shaft descends another 5 metres to the junction of a northern and eastern course of the conduit, which was itself spacious enough for a man to make his way along it. In the eastern passage were found pieces of a large bull, carved in the round out of a dark schist-like stone, perhaps a kind of steatite, the pieces having numerous small dowel-holes at their back so that they could be riveted together. It would appear that this comparatively soft material, which naturally commended itself to the early sculptor, could only be obtained in small lumps, so that the statue of the bull in the round had to be built up in this way. At the date when the excavations closed for the season, only a few pieces belonging to the lower part of the bull's body had been got out.

The other discovery in the same subterranean passage does not yield in interest to this. Near the remains of the bull were found quantities of bone pieces, of fish-like outline, resembling the *vesicae piscis* let into the medallions of the gaming table. With these were bits of Mycenaean porcelain, apparently for inlaying, and some crystal plaques also belonging to a similar board. There were further found segments of bone rings of various breadths, resembling bracelets, and decorated with exterior mouldings. These had been originally covered with thin gold plate, parts of which were adhering.

The upper surface of the bone "fish" was relieved with fine parallel ridges and grooves, and on their under sides were engraved a series of signs accompanied by various scores in the shape of perpendicular lines, like those which on the clay tablets with the linear script indicate units. Similar signs and figures also appeared on the inside of the bone rings. One sign only appears on each "fish," but sometimes two together on the rings.

The amount of these remains will probably be greatly added to by the continued excavation of the stone conduit. Here it must be sufficient to mention that as yet some twenty different signs have come to light, linear in type but not answering to those of the ordinary linear script of the Palace. A most remarkable phenomenon, however, is observable in the forms of these signs. Out of twenty-one varieties, ten are practically identical both in shape and position with later Greek alphabetic forms, while four more are the same though in a different position. Thus we have: Δ, Λ, Η, Ν, Ξ, Π, Ρ, Υ, +, and a form approaching the digamma,

as well as \exists , \uparrow , $-$, \leftarrow . Yet the Mycenaean date of these bone pieces is as well ascertained as anything found within the walls of the Palace. They are of similar type to pieces of the gaming table, and are associated with porcelain and crystal inlays answering in character to specimens found in the shaft-graves of Mycenae. They lay here beneath an untouched floor-level in a closed passage 6.60 metres, or over 21 feet, beneath the surface of the ground.

Each sign is associated on different pieces with various numbers; thus we have:

+ II, + III, + III II, + III III, + IIII IIII.

It must be observed with reference to these signs and ciphers that their appearance is analogous to that of the signs and dots that appear on the under side of the porcelain roundels and other plaques for inlaying, such as those found in the Throne Room.¹ The dots also appear among the numerical signs of the hieroglyphic tablets representing units, like the upright strokes on the tablets with the linear inscriptions. Some porcelain plaques found with the bone fish also show this dotted numeration. The marking of porcelain pieces for inlay with linear signs of a similar class is, as already pointed out, common to Egypt, and their appearance at Tell-el-Yehûdiyeh had even led to a theory of Greek restoration,—“probably of the time of the Ptolemies.”²

An interesting feature of the case is that, on the back of some of the Tell-el-Yehûdiyeh plaques, the Greek-looking signs are replaced by ordinary Egyptian hieroglyphs. Out of the linear signs found there, of which there seem to be twelve varieties, eight are almost or quite identical with types found on the Knossian bone fish. On the other hand, in Egypt, a series of linear signs of the same class occur as marks on pottery from prehistoric times down to the latest dynasties,³ and those

¹ Porcelain plaques, some making up a scale or feather design, with signs and dots, have now been found by the Italian Mission in the Palace at Phaestos.

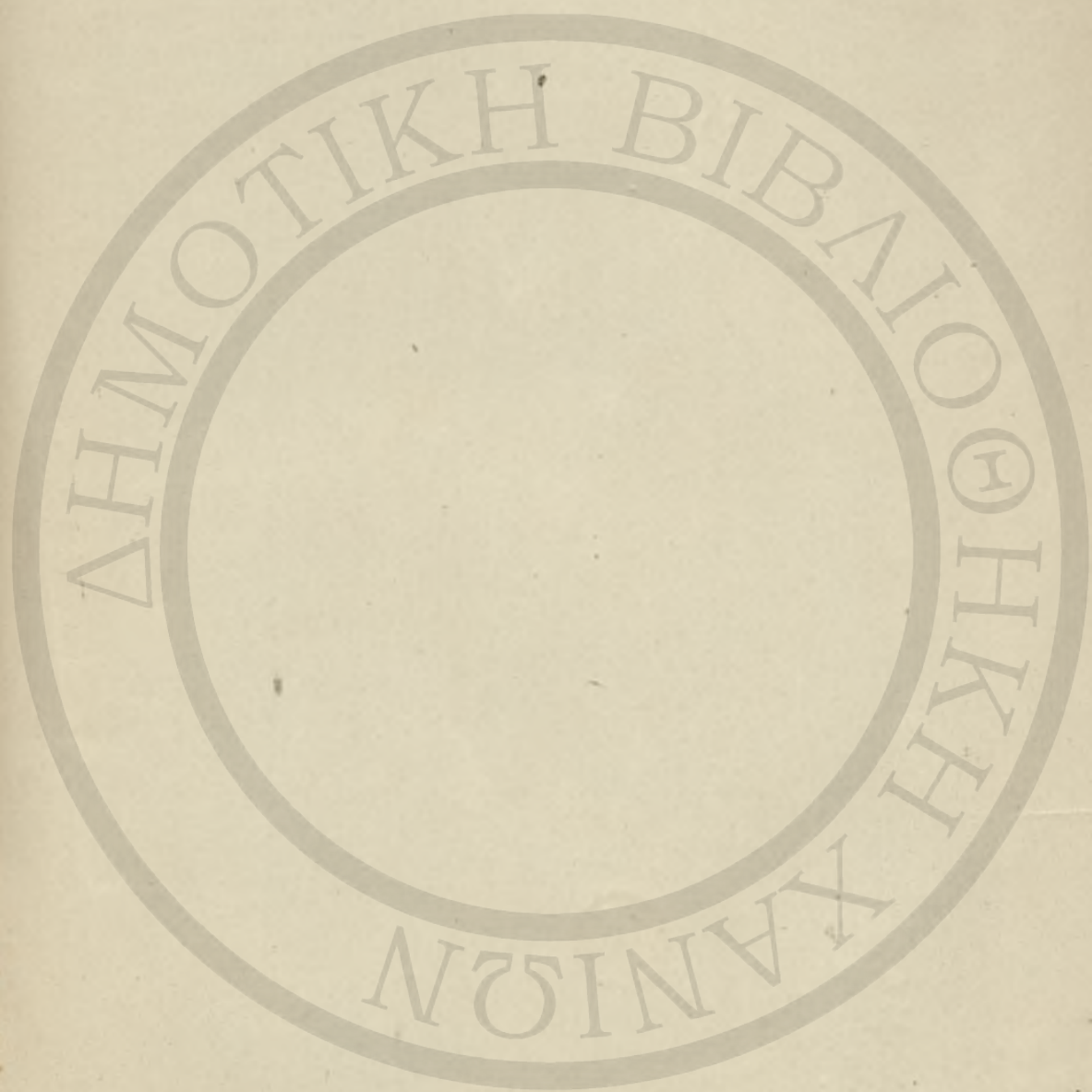
² In pointing out the parallelism of the signs as to Knossian plaques with those of Tell-el-Yehûdiyeh, in my previous Report (p. 42), I was not aware that this suggestion had been made (Brugsch Bey, *Rec. des Travaux*, etc., 1896, p. 1 *seqq.*). Dr. Von Bissing, who kindly called my attention to this, informs me that these marks on Egyptian porcelain plaques, to which he has for years directed his attention, are extremely rare.

³ See Professor Petrie's table of these signs, *Royal Tombs of the First Dynasty*, Pt. I. (1900), p. 32.

found on the porcelain plaques may be regarded as a selection from a large existing class.

It is possible that some such selection had been adopted for purposes of arrangement by an ancient guild of Egyptian inlayers. The reappearance of similar forms in Crete must in any case be taken in connexion with the fact that they are there employed by the artisans of a similar craft, who were copying the Egyptian methods and patterns of inlaid work, whether in porcelain, bone, or ivory. The bone fish, as may be seen by comparing them with the ivory pieces of the same form fitted into the medallions of the gaming board, go with the central lozenges with incurving sides to form a disk pattern of typically Egyptian character. Porcelain disks with this design occur already under the Eighteenth Dynasty, and the enamelled plaques, also presenting linear signs below, found in the Throne Room, like those of the fourth shaft-grave at Mycenae, were simply copies of these contemporary Egyptian models. It is reasonable to believe that the similar linear signs that accompany the products of this Cretan offshoot of the Egyptian inlayers' art were in many cases actually taken over from the old Egyptian series.

It is to be observed that these signs do not correspond with the character of the ordinary linear script of Knossos. They are equally distinct from the pictographic group. Neither do they agree with the signs cut on the stone blocks several of which, such as the predominant double-axe type, the trident, the star, the branch, the cross-patée and the sistrum-like character, are suggestive of religious symbolism. There is no evidence as to whether these signs on the plaques for inlaying had any phonetic values, but it is at any rate an interesting fact that forms identical with many of the later Greek letters should have been in use for technical purposes in the Aegean world centuries before the introduction of the Phoenician Alphabet. In this case, as in that of the other Cretan sign-groups, a possible survival and eventual reaction on the imported Semitic letter-forms can not be excluded.



8-4

