

Chapter I

INTRODUCTION

THAT Lesbos was important in the prehistoric period is obvious from its geographical position and the pre-Greek character of its place-names. In 1928 I visited the island in the hope of finding a site which should throw light on its early culture and provide a link between Greece and Anatolia, but the search proved less easy than one would suppose. Arisba was inspected and rejected because the deposits seemed too shallow; Methymna was examined and yielded nothing earlier than the Late Bronze Age; exploration of the north and east coasts was for several days unrepaying until the journey ended at a village called Pyrgi Thermes. This village lies 10 km. north of Mytilene, nearly 2 km. east of Thermi, and about half a kilometre south-east of the hot springs which give the district its name. Between the village and the sea, a low mound rises from the fields (Pl. XXVIII, 1, 2); sherds lying on the surface of the soil indicate that there is a settlement below; while the face of the cliff above the sea exposes walls, pebble floors and fragments of vases like plums in a cake.

Here obviously was material which would repay investigation, and in 1929 I obtained from the Greek Government through the British School at Athens permission to excavate. Work was continued during the seasons of 1930, 1931 and 1932, and ended with a short campaign in 1933. Some of the results have already appeared in preliminary reports published in *B.S.A.* xxx and xxxi: see also *Anz.* XLVIII, pp. 363–9.

The permanent members of the staff were, besides myself, Mr R. W. Hutchinson, Miss N. Six and, from 1931 onwards, Mr J. K. Brock. Miss Six was responsible for the finds and the card index, as well as executing a large number of drawings, and Mr Hutchinson and Mr Brock supervised definite areas: I am indebted to their notebooks for some of the information contained in the following chapters, to Mr Hutchinson in particular for an intensive study of hearths and house-pits (Chapter III), to Mr Brock for researches on the Middle and Late Bronze Age material, some of which are incorporated in Chapter IV. Miss E. Haspels and Miss I. Horner gave invaluable assistance during part of two seasons: besides supervising, Miss Haspels dealt with the photography and Miss Horner (in the temporary absence of Miss Six) with the index. Mr J. Cullen, Mr W. Cuttle and Mr Burton Brown each spent part of one season at Thermi, Mr Cullen and Mr Cuttle being in charge of the early work in Z and Λ respectively, Mr Burton Brown both excavating and surveying area Γ. Mr Tait,

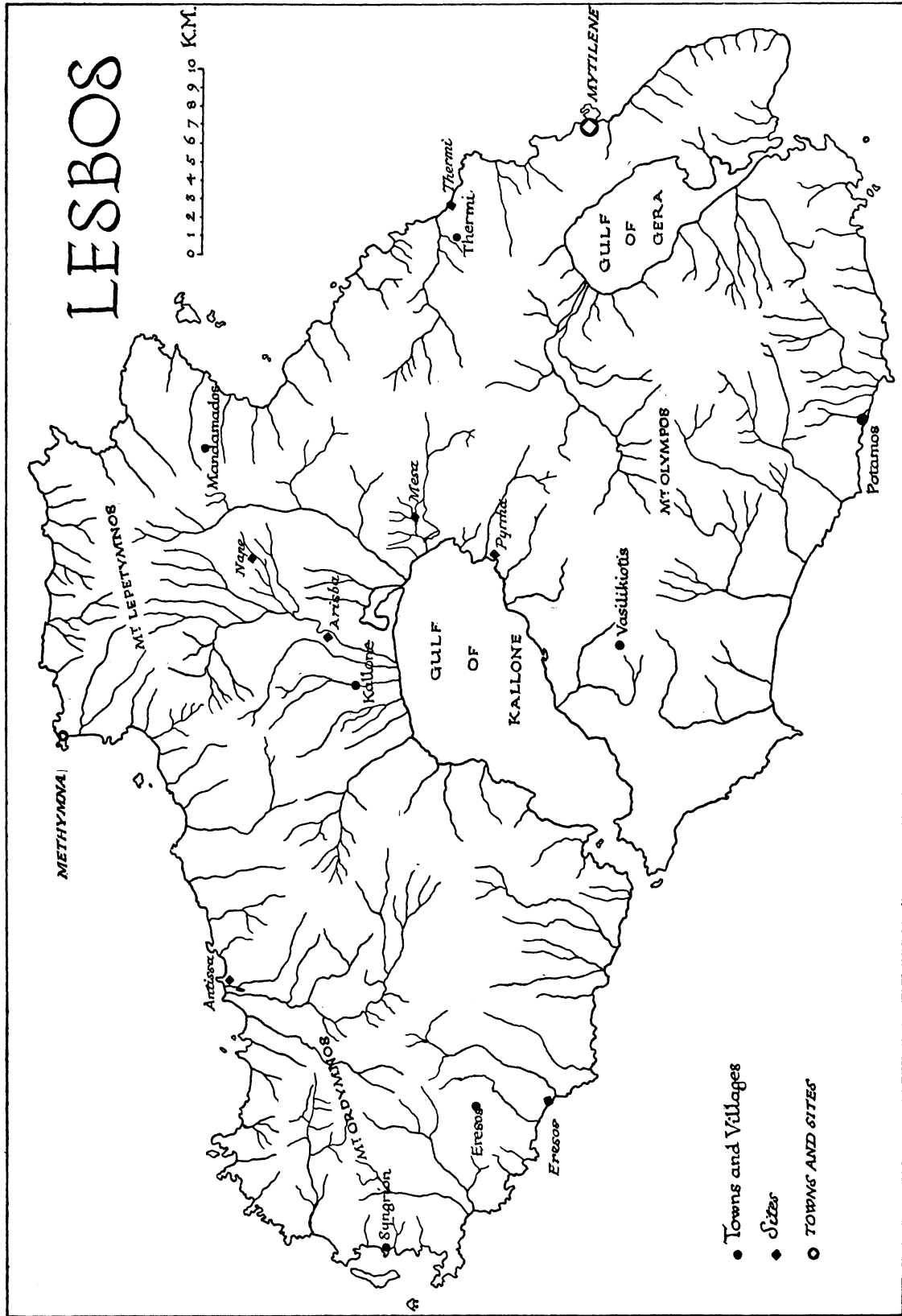


Fig. 1. Map of Lesbos.

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Mr Wason and Miss B. Burn were present for shorter periods. The foremen were Andonios Mastrogiorkakes and Akindynos Tzanes.

During the greater part of the 1931 season Miss J. Mitchell relieved me of the duty of map making, which was otherwise in my hands, but our obligation to her is not confined to that year, for she has subsequently assisted in compiling the large plans of all five settlements and has given constant help till the date of publication.

Most of the photographs taken on the spot are by Mr Brock, Miss Haspels, Mr Burton Brown and myself: those taken in the museum are by Herr Wagner, supplemented by Miss Six, Mr Petritses and Mr Emile Serafi.

The drawings are by N. Six, Youry de Fomine, C. Waterhouse (from originals made by myself and others at Athens) and Piet de Jong. The sections are by myself but many have been copied out by Emery Walker Ltd., and some by Piet de Jong. Three elevations are by J. Mitchell. Miss Six has helped in the arrangement and preparation of the whole series of plates and figures; so much is due to her taste and care that no acknowledgement is adequate.

I should like to express my gratitude to the British School at Athens for applying for the permit; to Dr Kourouniotis and the Greek Archaeological Service for granting it; to Professor Oikonomos for the hospitality and the many conveniences provided by the National Museum; to Mr Paraskevaïdes, Ephor of Antiquities in the Aegean Islands, for his friendly support and unfailing assistance in dealing with local problems; to Professor Blegen for information on the new discoveries at Troy; to Mr Patterson, H.B.M. Consul at Mytilene, for his great kindness to our party. Also to Professor Zahn, Professor Unverzagt, Mr Forsdyke and the staff of the British Museum, Mr Leeds and Mr Harden who have given me access to the vases in Berlin, London and Oxford, as well as supplying references and photographs.

Permission to use illustrations which have appeared in *B.S.A.* xxx, xxxi has been given by the British School at Athens.

Warm thanks are due to the Worts Fund at Cambridge for financial help and to the members of the Anglo-Hellenic League and others who sent contributions enabling us to relieve economic distress in 1930.

Several experts have most generously put their knowledge at my disposal, and it is a privilege to be allowed to incorporate in this book the reports of Professor Desch on analyses of metal, of Professor Ktenas and Dr Kokkoros of the Athens University on petrology; of Professor Koumares also of the Athens University on the skull from Area Π; of Miss D. Garrod on the other human bones, Mrs Reid on seeds, Miss Bate on animal bones, Mr Robson and Mr Tomlin on shells, Miss Caton Thompson on flints. To interrupt one's own research in order to help that of another is one of the rarest forms of self-sacrifice.

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Introduction

METHODS OF EXCAVATION AND PUBLICATION

Before architecture or finds are described, an account must be given of the method of excavation and of the special problems which the site presented.

The prehistoric remains cover three properties, which run in parallel strips towards the sea. The owners of the two strips on the south gave us every facility: the owner of the land on the north put every conceivable obstacle in our way and each new campaign involved a fresh struggle. Experience shewed that compensation (which was fixed by a commission according to the amount of crop damaged) was less expensive if we excavated one or two areas each year to virgin soil and filled them in at once: this, therefore, was what we did.

The division into areas coincided with the blocks of houses in the top stratum. We gave each area a letter of the Greek alphabet, so that the workmen could read the labels if necessary, and we maintained the lettering throughout the lower strata where the areas and the blocks of houses coincided no longer. In consequence, certain rooms on the maps of Towns I–III have two letters instead of one; ΒΓ 7 means that room 7 is partly in area Β, partly in area Γ.

Our system of digging piece by piece proved to have one advantage that would have recommended it apart from economy: it automatically produced sections in the four sides of the areas by which strata could be checked in addition to the evidence given by floor levels. These sections were particularly helpful in warning us of any drop in the occupation level or any unexpected sinkage like those above the stream beds described in Chapter II.

The pickmen were taught to work slowly and carefully, taking off very little earth at a time. Those who had a delicate touch were soon identified and trained till they became really skilful, but they were none the less under constant supervision by members of the staff. After the first year, 1929, earth could be conveniently dumped on the spaces cleared during the previous seasons.

One area in the settlement was not dug to virgin soil. It is nowadays considered desirable to leave unexcavated a sample of each site, in case new factors in archaeology should some day arise and necessitate re-examination: we chose for the purpose certain houses in blocks Θ, Η and Ι because they were so attractive that we could not bring ourselves to remove them. A long narrow trench, *c.* 5 m. wide, was, however, dug through Θ and Η to shew their history and define the boundaries of the lower towns, though undoubtedly the stages thus revealed are less certain than if the whole vicinity had been cleared completely.

The plans and sections were kept up to date, often by dint of working after the men had stopped. Stone for stone maps obviously provided the only adequate way of

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recording walls so irregular and of justifying the removal of houses in order to reach those below: though such maps reproduce only the layer which is preserved at the top of a ruined wall, they give an idea of the type of construction employed in each period and even of the material used. Levels were taken from the larger of the modern gun emplacements, which turned out to be 5.99 m., practically 6 m., above sea-level.

Architecturally, the settlement has been divided into five main stages, which we call Towns I–V.¹ Often the division is unmistakable, emphasised by different houses, fresh orientation, or intervening strata, but in places it is obscured by the frequent renewal of floor levels, the gradual development of a group of buildings, or the survival of walls and houses from one town into the next. Doubtful features like these are always indicated in the text. In preparing the maps the following system was adopted with a view to isolating each settlement. A key map was marked with the levels of floors, thresholds, etc., and with the tops and foundations of all walls and hearths. The relation of floors to foundations shews which walls and floors were contemporary, and the same process determines which hearths belong to which floors. In publishing, it was found too confusing to print all these figures, so I have numbered only floors, tops of hearths, bothroi ('house-pits'), sockets, thresholds, etc., omitting the tops and foundations of the walls. The surfaces of the hearths are, of course, higher than the floors to which they belong, so too are the door sockets and thresholds, while the edges of the bothroi should more or less coincide (see below, p. 61). It is safe to assume that we rarely overlooked the upper edge of a bothros, since the clay of which it is made is at once conspicuous: if the sides are missing, as in the example described on p. 28, they must have been removed deliberately by the inhabitants, an operation which would entail digging below their floors. As has been already explained, a useful check on the relations of the settlements was given by the sections in the side walls of each area, and these were not only studied during excavation but also drawn for future reference.

It would have been ideal if a few extra maps could have been published illustrating intermediate stages, such as late phases of Town II: as this is not practicable we have tried to shew what was early in each town by hatching, and what was late by stippling.

Since the actual layer where the division between two towns occurred is, in some cases, a matter of opinion, what system of publication best suits the finds? If they are classified according to settlements alone, the attribution of examples from inter-

¹ In the chronological table published by Burkitt and Childe, a supplement to *Antiquity*, June 1932, the formulae Thermi I, II and III are used to denote the ceramic periods described

here in Chapter v: they occur also in Bittel, *P.F.K.* p. 23. They may cause confusion and should be replaced by the system used in Chapter v or the one in *B.S.A.* xxx, pp. 17 ff.

mediate levels rests on the excavator's deductions from the architectural evidence: this method therefore is only appropriate to small and numerous objects like sherds. In describing the more important objects of clay, metal and stone, I have indicated the approximate find-spot of each and the town wherein we believe such a find-spot to lie: thus the reader can, to a certain extent, check the evidence. In dealing with the thousands of bone tools, a more summary method was adopted: only the finer or more individual bone tools were indexed, and statistics kept of the rest. The conclusions appear in tabular form on p. 198. It should be added that the provenance of the objects was entered on the card index while the work was in progress and the index numbers are used in this book for objects other than vases. As the materials—terra-cotta, metal, stone—are treated separately, the fact that objects of different materials may bear the same number should not cause confusion.

The finds from Thermi are now on exhibition in the new museum at Mytilene, but the buildings surviving on the site have been covered with earth in order to insure their preservation.

Chapter II

EARLY BRONZE AGE

THE BUILDINGS

GENERAL CHARACTERISTICS

THE earliest inhabitants built their houses on the banks of two shallow streams between which was a scarcely perceptible eminence. Beyond, on the east, was the sea which has encroached since their day, undermining the low cliff and carrying away part of the settlement. The subsoil on this part of the coast is a stony clay, with a surface weathered to a smooth reddish clay in places. A white calcareous deposit can be detected beneath the clay on certain parts of the cliff face and in some of the wells.

The five towns which succeeded each other on the site, and the individual houses in each town, will be described in due course, but an account of general characteristics such as walls, floors and hearths forms a necessary prelude.

Walls. Walls are of stone, and many are preserved to a considerable height, *e.g.* 1.30 m. (Pl. I, 2, III, 3). The stone is either local limestone, schist, or a soft volcanic rock, which is still quarried near the site: earth fills the interstices. Characteristic of Town I are the very large blocks of volcanic material, unexpectedly light and easy to shift (Pl. II, 5), which were often used for the lowest courses, while Town V is marked by a preference for schist (Pl. III, 4). An arrangement of stones to form a rough herring-bone pattern gives distinction to certain walls in Town I, areas K, A and E (Pl. II, 1, 6), and to a Town IV cross-wall in Π. This construction is already known from a wall in Troy I where, however, it was hidden by some kind of plaster, from the Early Helladic village at Hagios Kosmas in Attica, and from an Early Helladic II wall at Eutresis.¹

Were the walls faced with clay as at Troy?² There is no trace of any coating, except on some walls in Town IV *a*, where we detected the white substance mentioned below on p. 32. Elsewhere the earth falls away from the walls easily, giving the impression that they were uncovered.

If mud brick was used in Towns I and II, it was used sparingly. Yellow deposits in A and Δ, and later ones in K and P, will be described below. They may be collapsed walls or ceilings, for the evidence is inconclusive. In Town III *b* large patches of burnt earth occur containing lumps of terracotta, which we believe to be the remains of mud

¹ Troy, *Troja und Ilion*, 1, p. 47, fig. 9; *A.J.A.* xxxviii, p. 9. Hagios Kosmas, *A.J.A.* xxxviii, pp. 260, 261, fig. 2. *Eutresis*, fig. 12.

² *Troja und Ilion*, 1, p. 48; *A.J.A.* xxviii, p. 225.

brick originally unbaked and eventually destroyed by fire. From that period onwards other evidence of bricks appears here and there, but the material never seems to have been used in any quantity. At Troy, on the other hand, actual fragments of bricks are frequent in Towns II–V,¹ while thick deposits conjectured to be the remains of crude brick are a feature of Troy I.²

Traces of wooden beams and fencing will be enumerated in due course. They are not common. Beams were, no doubt, constantly re-used and finally, when they became rotten, turned into fuel.

Houses. Most of the houses in all five settlements are long and narrow like those of Troy II, but a shorter, broader type, recalling that of Crete and the Cyclades, is not unknown in Towns I–III. Already in Town I we find the tendency to build a smaller room in front, a larger one beyond, prototypes of the houses with anteroom and living room which were popular in the later towns. Contrast the practice in the Greek mainland where, as Fimmen points out,³ the smaller room is at the back.

The comparative scarcity of inner partitions in Town IV is reflected in Troy II A, which is more or less contemporary. There the long rooms may have been divided by partitions of some perishable material, and this may also have been the case at Thermi.

Doorways are often marked by a door socket or a threshold. The socket stands sometimes in line with the wall, sometimes in front, and consists of a round or squarish block of stone with a hole in the top for a post to turn in (Pl. I, 2, 6). There are excellent parallels for these in House L at Eutresis (E.H. II) and a good one in House T (E.H. III).⁴ Compare also the sockets at Zygouries,⁵ Sesklo⁶ and Hagios Kosmas.⁷ The thresholds are less common in the lower towns than in Towns IV and V. They are frequently made of a slab of schist (Pl. IV, 3), sometimes of smaller stones laid close together, and rarely of stones arranged like a step or stile (see Fig. 14 on p. 37). Door sockets and thresholds are hardly ever found in the long side walls of the houses in areas where many rooms exist side by side: the most notable example of an entrance in such a position is in the large building A 1 (Towns I and II), but other cases will be pointed out when their turn comes. The fact that most doorways occur in the short walls shews that the normal house was of the type described above. Occasionally door sockets are associated with fragmentary walls from which no reconstruction can be made, and from time to time a socket stone was found reversed and built into a wall.

¹ *Troja und Ilion*, I, pp. 36–7.

² *A. J. A.* xxxviii, p. 224.

³ *Kretisch-Mykenische Kultur*, p. 45.

⁴ *Eutresis*, pp. 16, 17, fig. 13 and pp. 26, 27, fig. 27.

⁵ *Zygouries*, pp. 10, 11 and fig. 9.

⁶ *Δ.Σ.* pp. 92–4, fig. 20.

⁷ *A. J. A.* xxxviii, p. 260 and fig. 4 on p. 262.

Mylonas makes the excellent suggestion that the doors were probably made of wood and skins.

The Buildings

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Pebble Deposits and Floors. Floors are covered with layers of pebbles¹ from the sea shore. These layers may be distributed over the whole room, but more often survive in patches only: they are usually thin, though three or four of them attain a thickness of 10 cm. through being mixed with earth. A tendency to spread pebbles over any flat space, indoors or out, is shewn by the deposits in the streets and open spaces of the later towns. Pockets of pebbles were also observed, and, since several of them surround the bases of cooking pots, I am inclined to believe that all such pockets mark the position of a vase. The uses of pebbles in hearths will be demonstrated in Chapter III.

A few important rooms were paved with slabs of schist, but, even in such cases, pebbles are found between the slabs.

Roofs. The width of many of the rooms emphasises the problem of how roofs were supported. The prevalent type of room, as will be seen, is long in proportion to its width; yet a width of 4 m. is not uncommon, and 5 m. occurs. We looked constantly for any traces of post holes or pillar supports. The only post hole was in a gap in a wall belonging to Town II, and obviously had no connection with our problem. A possible pillar support in the form of a round shallow block was found in the east corner of A 1, not *in situ*, at a level of 3.01 m. Plainly there is no evidence that posts or pillars were used.

Timber suitable for roofing may well have grown in the island in prehistoric times, since the survivors of magnificent cedar forests still exist. To fell such trees, however, must have presented great difficulty to a people who used chiefly stone tools.

Flat roofs would be appropriate to a town where nearly every house touched its neighbour. They are conjectured to have been the type used at Troy,² just as they are today in many primitive villages. Hagios Galas, in Chios, with its low stone houses, narrow streets, and flat roofs covered with earth, looks much as Thermi and its neighbours must have looked five thousand years ago.

Hearths. These are very numerous and are found both inside the houses, and in the unoccupied spaces outside. Their position varies; they may be in the middle of the room or at the sides. Where two hearths occur in one room, they often belong to different floor levels, but there exist, nevertheless, cases where two or more hearths belong to the same floor level and are contemporary (see below, p. 55).

The ordinary hearth is made on a foundation of stones. Above the stones comes a layer of pebbles, another of potsherds, and a surface of burnt brick. This theme is subject to variations: the order of the pebbles and potsherds may be transposed, layers may be omitted or, if a hearth was repaired or raised to correspond with a new floor level, they may be duplicated. Chapter III gives a full discussion of the Thermi hearths

¹ Cf. the gravel floor of the Early Helladic house I at Eutresis. *Eutresis*, p. 15.

² *Troja und Ilion*, p. 41. Dörpfeld thinks that the earthy surface was not quite flat.

and their foreign counterparts, an analysis of the types which predominate in each settlement, and an account of the best examples.

The *bothroi* or *house-pits* of Towns III, IV are described in the second part of Chapter III.

Magazines. Many rooms of Town I are distinguished by rows of holes running more or less parallel with the walls. Some holes are empty, some contain fragments of pithoi, and a few the lower half of an actual pithos. It seems probable, therefore, that these rooms were store chambers, provided with rows of jars for such things as grain or oil, or even water. The holes are unmistakable in the hard virgin soil. Whether later towns arranged their store jars in the same regular way we cannot be sure: isolated pithoi exist, but the stratification shews no trace of groups or rows.

Furnishings. Inside many rooms of the later towns and a few rooms of the first town we found small platforms, alcoves and the like. A paved platform, approximately square, occupies the corner of room A 1 b in Town II. Its exact purpose cannot be determined, for no remains were found connected with it: it may have been a seat, or a support for household or religious objects—not, I think, vases, which, with their round or uneven bases, would have been safer on the ground.

A curious type of platform is associated with Towns I and II. It is usually oblong, made of large slabs of schist, which rest on parallel rows of stones like the sleepers of a railway line (Fig. 7). The best example is in Town II, but there is a small one in the first town, in Γ 8, and the parallel rows of stones, stripped of their platform, occur in A, E, Z, and possibly K. Were they beds, daïses or altars? No objects, no sign of burning, no discoloration of the soil can be associated with them.

Pretty, round platforms like the one in Fig. 10, from Town III, K 8, may possibly have been the bases of hearths, but were more probably meant to be seen, for the pieces of schist which form them are unusually large and well laid.

Wells of various periods were dug by the ancient settlers down to the water-bearing stratum in the subsoil. Subsequently, of course, they became filled with earth, ash, stones and debris. A *terminus ante quem* for each well is determined by stratification or architecture; but a *terminus post quem* sometimes presents difficulties. If a well passes through the levels of four towns, which of these towns used it? Here we must be guided by the contents. Working on these principles, we find that three wells belong to Town I (two in A, one of which precedes the architectural remains, and one in Δ), two to Town IV (in Z and K), three to the Middle or Late Bronze Age (two in Λ, one in N). We believe that the Town I well in Δ was in use during the occupation of the second town. It was not closed down or built across like the wells in A, and its contents, early black and red wares, might belong to both periods. The well in K contained brown wares of a late type: it cannot, therefore, have been used by the dwellers in Town III