

THREE SOUNDINGS IN THE JORDAN VALLEY

At the beginning of 1953, the Department of Antiquities carried out an archaeological survey on behalf of the Department of Water Resources and Agricultural Development (Point IV); the area covered by this survey was the Yarmuk Valley and the Jordan Valley.

Under the supervision of Mr. Lankester Harding, the work in the field was conducted by Mr. James Mellaart, fellow at the British Institute at Ankara, and the writer, owner of a scholarship of the Académie des Inscriptions et Belles Lettres at the Ecole Biblique et Archéologique Française de Jérusalem. They were assisted by two officials of the Department of Antiquities, Mr. Hassan Abu Awad and Mr. Nasser Nasri.

At several of the sites visited by the Point IV Archaeological Survey, small excavations were undertaken for stratigraphical purposes. The following report deals only with three of these, with which the writer was directly connected.

I. TELL ESH-SHUNEH

Tell esh-Shuna overlooks the Wadi 'Arab. Within a mile of the site, a ford called Makhadat Umm es-Sisan crosses the river Jordan; this passage, protected in ancient times by the imposing Tell Musa, opens the way to Wadi Bira, whose spring in Galilee is guarded by Tell el-Mukharkash. Tell esh-Shuna is located accordingly in a fairly important position on one of the natural routes between Transjordan and Northern Palestine.

The tell is very large, about 1 km. long, although only ten metres high at the very most; it is almost entirely covered by two villages: Khirbet esh-Shuna and Khirbet esh-Sheikh Hussein. Considerable damage has been caused by the recent progress of these settlements; building of houses, ploughing, extraction of silt have badly disturbed the ancient remains. One place however seemed especially attractive; on the southern outskirts of Khirbet esh-Shuna, a small mosque stands on the highest point of the artificial mound; almost at the foot of this monument, runs the main road from Irbid, which crosses nearby the Wadi 'Arab by a bridge; very soon, it divides into two roads: that of Jisr el-Majami, a bridge over the Jordan, and that of the Yarmuk Valley via 'Adasiye. Between the road and the mosque, during the process of widening and metalling the cross-roads, the earth has been cut away so that the archaeological layers appear in a section two hundred metres long. They were thus discovered for the first time on the 26th of January 1953 by Hassan Abu 'Awad, who opened a trench on the spot. During the following days, this sounding was enlarged to three square metres and carried down to virgin soil. At a depth of four metres under the original surface, the work was stopped on the 7th of February.

Stratigraphical sequence — (Fig. 1)

Layer	1 — Disturbed soil	0
«	2 — Brown yellowish	— 15 cm.
«	3 — Floor, yellow, very hard	— 30 „
«	4 — Grey brown, pulverulent.	

«	5	— Floor, gravel and stones, thick	— 50	„
«	6	— Brown, thick layer.		
«	7	— Floor, very hard gravel	— 90	„
«	8	— Dark brown soil.		
«	9	— Occupation layer, grey whitish ashes	—100	„
«	10	— Grey soil, with a great amount of stones.		
«	11	— Floor, gravel	—140	„
«	12	— Grey-brown.		
«	13	— Occupation layer, charcoal and white ashes	—160	„
«	14	— Brown soil, mingled with ashes.		
«	15	— Floor, stones, grey and white ashes	—180	„
«	16	— Brown reddish clay.		
«	17	— Floor, trodden earth, small pebbles, ashes in the middle of the trench	—220	„
«	18	— Red clay.		
«	19	— Pit dug in the red clay, with a filling of	—250	„
		black silt, very compact at	—280	„
		and a flat bottom at	—350	„
		— Virgin soil, red sand and gravel	—280	„
		in the centre of the trench (pit)	—350	„

Chronological sequence of the layers — (Fig. 2)

Level	I	— 19—17	— Middle Chalcolithic.	—350 to —220	cm.
		16	— Sterile.	—220 „ —180	„
«	II	— 15—14	— Late Chalcolithic.	—180 „ —160	„
«	III	— 13—8	— Early Bronze I.	—160 „ —90	„
«	IV	— 7—4	— Early Bronze II.	—90 „ —30	„
«	V		Early Bronze III: "Khirbet Kerak".		
			No evidence in this trench, but very abundant on the surface of the tell and in Mr. Mellaart's soundings.		
«	VI	— 3—2	— Mediaeval Arabic.	—30 „ —15	„
		1	— Disturbed layer.	—15 „ 0	„

Level I — Middle Chalcolithic.

Description of the layers.

Layer 19

Layer 19 is only a pit dug into virgin soil.

The latter is reddish sand mixed with gravel; it occurs here at several metres above the present level of the surrounding plain; the first human occupation was therefore settled on a terrace at the foot of the hills, safe from floods and swamps.

Layer 19 was originally a flat-bottomed silo 150 cm. in diameter. The filling is mainly black silt mingled with clay, stones reddened and split by fire, ashes and organic material, including bones of sheep and oxen; a great amount of sherds and other artifacts were found in this deposit. At a depth of 280 cm. under the surface, the stones are more frequent and

sometimes of fairly large size. Above, the black earth was less thick and much poorer in archaeological remains, especially over 250 cm. deep (Fig. 17 A).

Layer 18

All around the upper part of the silo lies a heavy deposit of red clay. This is sterile, with the exception of a narrow vertical shaft leading to the silo; here it is mixed with charcoal, ashes, a few sherds and a certain amount of flints.

Such red clay may well be the result of agricultural activity pertaining to the first settled human life on the spot.

Layer 17

All over the red clay, at a depth of 220 cm., appears a stratum of beaten earth with an addition of small red and white pebbles 10 — 15 cms. thick; the earth is clayish and reddish-brown in colour. This stratum is the occupation floor to which belongs the bottle-shaped silo or rubbish-pit already described.

In the middle of the trench, near the narrow opening of this pit, had been built a very elaborate hearth; it was a roughly circular hole about 75 cm in diameter; the walls are first straight then curve in so that the bottom is almost round; the whole structure reaches 40 cm. under the average level of the floor. The walls are made of a row of round pebbles coated with clay; these stones are entirely calcined and turned into white lime; at the bottom, an empty space measuring 30 x 25 cm. laid bare the underlying red clay. Immediately over was a deposit of compact white clay mixed with gravel 6 cm. thick; on this rested a platform of large flat unburnt pebbles. The platform itself was covered by hard clay, on which lay a thick pocket of slimy ashes between 30 and 20 cm. under the floor. The remainder of the small pit was filled up by reddish-brown earth, shingle, a lot of charcoal, pieces of red ochre, a few sherds and a small quantity of flints. The calcination of the pebbles, and the high proportion of ashes and charcoal suggest the use of that pit as a cooking hole (Fig. 17 B, C).

At the north edge of the trench, layer 17 is represented by a patch of ashes about 1 m. wide and 40 cm. thick in the middle. Very few remains were found outside the former pit.

Layer 16

Above floor 17, there lies a thick layer of reddish-brown clay; it is thicker on the western side: 35 cm. (—215 to —180 cm.) than on the eastern side: 15 cm. (—215 to —200 cm.).

This deposit recalled the one that filled the cooking-hole, but it did not contain the least archaeological evidence.

The pit 19 is identical to those found quite near Tell esh-Shuna, at Beth Shan, on the natural rock underneath Level XVIII¹; it recalls features found at the base of the pottery-bearing Neolithic layers at Jericho². A structure similar to the small pit 17, discovered in the Pre-Pottery Neolithic, was identified by Miss K. Kenyon as a silo, owing to the absence of any ashes, which, however, is not the case here.

The Pottery.

A. Technical features.

The pots are handmade, evenly and thoroughly baked; the paste is generally white; a great number of sherds have turned to black, some have a buff or orange colour. The clay is mixed with a great amount of small siliceous elements, that may have been used as a *dégraissant*; a few sherds show also a quantity of black, white or red grits. Most of the ware is handsmoothed inside and outside; very often, a white wash covers the surface; a good number of sherds have a red slip. In several cases, the surface is slightly burnished.

B. Shapes and decoration.

I. Beakers.

2 small beakers were complete; they are exactly the same size and have the same hemispherical shape.

One has red paint outside and all over the rim; it was found in silo 19 at a depth of 280 cm. (Fig. 3 : 1).

The other, found in the same locus, had also a red surface but it has become almost entirely black; the surface looks as if it had been slightly burnished (Fig. 3 : 2).

II. Bowls.

16 bowl rims have been identified in layer 19; one form is complete. 2 more come from layer 18 and several from 17, among which is a unique crude flattened rim (Fig. 3 : 21).

All the others are very simple drinking-vessels, with a smooth rounded rim, straight or slightly outcurved.

A red slip usually coats the whole surface of the bowl. (Fig. 3 : 5, 6, 8, 11, 12, 13, 14, 16, 17).

Less frequent is red paint only on the rim (Fig. 3 : 3, 4, 7, 9, 10, 15, 20).

One rim is slightly burnished (Fig. 3 : 17). Another one, from layer 18, has a red burnished slip all over (Fig. 3 : 19).

One rim is very coarse; the surface is uneven and probably rubbed with some sort of grass (Fig. 3 : 18).

III. Hole-mouth jars.

11 rims fall into this category. They all have a rather wide opening. Some vessels have a straight rim and it is difficult to say if they are big globular bowls or real hole-mouth jars (Fig. 4 : 4, 5).

However, most of those that have been excavated have an everted rim (Fig. 4 : 1-3, 6-12).

Among these, one is adorned with vertical series of red chevrons (Fig. 4 : 11).

Scalloped bands on another specimen seem to reproduce the ropes used to hang up such vessels (Fig. 4 : 1).

Bands of reddish paint often occur on the rims (Fig. 4 : 1, 2, 3, 5, 6, 7, 8, 10, 11, 12).

IV. Jars with a straight neck.

2 fragments of straight necks were collected, but they differ from the other sherds of Level I by their make: very levigated clay, use of a wheel, chocolate slip (Fig. 5 : 1, 2).

They certainly are out of their original context and may well have fallen from the overlying Early Bronze Age levels.

V. *Jars with a swelling neck.*

This type of jar has a neck with curved walls like the bow-rim jar but the rim is everted; two wide bands of red paint run around the neck, one underneath the lip and the other at the base.

4 necks of this type were identified, but only one, belonging to a large pot, could be reconstructed (Fig. 5 : 3).

Another one, of which only the lower part is preserved, belongs to a medium-sized jug with a flat bottom and probably two handles on the belly; the outer surface has a white slip and the inner one has a dark grey colour (Fig. 5 : 5).

A third neck is part of a bigger jar made of hard baked black material, with very thin walls. The rim and bottom are missing; the outside has received a white slip; three red painted bands have been preserved, two on the neck and a very broad one on the belly; the latter is interrupted by the two handles (Fig. 6).

VI. *Handles.*

Almost all the handles are big loop handles with enlarged attachment and generally flat in section. 8 samples have been found, ranging from very flat to nearly round (Fig. 6 ; 7 : 1-7).

Among these, one belonged to a large vessel whose belly was girt by a relief ornament in the shape of a rope (Fig. 7 : 1).

3 loop handles are of the same type but much smaller (Fig. 5 : 4 ; 7 : 8, 9). One of these is fastened to the shoulder of a jug whose walls, very thin and well baked, are striped by vertical bands of red paint. The other two may have belonged to one vessel of similar shape. In addition, there is only one lug, short, thick and rather coarse (Fig. 7 : 10) and a kind of nipple-lug (Fig. 7 : 11).

The handles are not decorated but often show smudges and smears produced by the painting of the pottery.

VII. *Bases.*

The bases are flat. Twenty have a sharp junction between wall and base (including one from layer 17) (Fig. 5 : 5 ; 8 : 1, 4, 5, 11, 12, 13) ; five are bulging or annular (Fig. 3 : 3 ; 8 : 7, 8, 9, 10) ; two have a smooth junction (Fig. 8 : 3, 6).

The surface treatment varies on those 27 bases :

10 have a red slip outside (Fig. 3 : 3 ; 8 : 3, 5, 8, 9) ;

3, including the one from layer 17, a red burnished slip inside and outside (Fig. 8 : 4, 6, 13) ;

2 a decoration of red bands outside (Fig. 8 : 2, 11) ;

and 2 a white slip on the outer surface (Fig. 5 : 5 ; 8 : 10).

VIII. *Raised decoration.*

9 sherds which also have painted decoration bear raised scalloped or thumb-indented bands (Fig. 4 : 1, 13, 14, 15 ; 7 : 1) ; one belongs to layer 17 (Fig. 4 : 15), another one shows also a straight horizontal incision, possibly made by means of a finger-nail (Fig. 4 : 14).

C. Comparative study.

I. *Bowls.*

A simple bowl similar to the type described has also been found in Beth Shan XVIII and pits, Tell el Far'ah *Enéo. Moyen* and Jericho VIII.³

II. *Hole-mouth jars.*

(a) with straight rim;

(b) with everted rim.

Both types are known at Beth Shan XVIII and pits, and Jericho VIII^{4, 5}.

III. *Jars with a swelling neck.*

This shape is very characteristic of Beth Shan XVIII and Tell Abu Habil. It is closely related to the bow-rim jar of Southern Palestine: Khirbet 'Ain Duq, Jericho VIII and Murabba'at⁶.

IV. *Handles.*

(a) Loop handles with enlarged or splayed attachment are a very characteristic feature, noticed at Beth Shan XVIII and pits, Tell Abu Habil, Tell el Far'arh *Enéo. Moyen*, Khirbet 'Ain Duq, Jericho VIII and Murrabba'at⁷.

(b) The lug handle or coarse ledge handle occurs in the same context: Beth Shan XVIII, Tell Abu Habil, Jericho VIII and Murrabba'at⁸.

V. *Bases.*

Flat bases area very common on all Chalcolithic sites.

VI. *Decoration.*

(a) horizontal bands of red paint are very common too at: Beth Shan XVIII and pits, Khirbet 'Ain Duq, Jericho VIII and Murabba'at⁹.

(b) chevrons in red paint, different from the Neolithic ones of Megiddo XX and Jericho IX, are also known at Beth Shan XVIII and pits, and Tell el Far'ah *Enéo. Moyen*¹⁰.

(c) simple rope-shaped and scalloped relief bands were found at Beth Shan XVIII, Tell Abu Habil, Tell el Far'ah *Enéo. Moyen*, Jericho VIII and Murabba'at¹¹.

(d) rough incisions are rare in the former sites except Khirbet 'Ain Duq and Jericho VIII¹².

To sum up the implications of this paragraph, the connections of Tell esh-Shuna I are mostly with Beth Shan pits and XVIII. There is a close relationship with Tell Abu Habil and Tell el Far'ah *Enéolithique Moyen*. Several important features are shared with Khirbet 'Ain Dug, Jericho VIII and the Murabba'at caves.

The Flint Industry.

Layer 19.

66 worked flints were found in the silo.

1 big *blade* of the Cananean type, may have been used as a knife; the bulb was thinned down by long pressure flaking to facilitate the hafting of the blade; the point is burnt; the material is chocolate flint; the piece was found at -300 cm. (Fig. 15: 1).

1 *lame de dégagement* in mauve coloured flint with a white patina (Fig. 15: 2).

3 *scrapers*: 1 on a big flake of greyish flint (Fig. 15: 3).

1 on tabular chocolate flint (Fig. 15: 6).

1 on the end of a black flint blade 45 mm. long.

3 *blades with blunted back* used as sickle blades:

1 in pale grey flint, has a fine denticulation and a lustre on the cutting edge (Fig. 15: 7); 1 is made of blond flint (Fig. 15: 8); 1, in black flint, has still part of the cortex and measures 43 mm. long and 16 mm. wide.

5 *points*: 3 in mauve flint (Fig. 15: 10); 1 in cream flint (Fig. 15: 4); 1 in orange coloured flint.

1 *tang* probably part of a broken point, is managed by abrupt retouch on a piece of mauve flint (Fig. 15: 5)

1 *borer* in black flint, with a good point (Fig. 15: 9).

1 *notched flake*, probably used as a borer, in pale grey flint (Fig. 15: 11).

2 *notched blades* of small size, possibly used as burins:

1 in red flint, with a thinned bulb (Fig. 15: 13);

1 in black flint (Fig. 15: 12).

2 *blades with blunted back*: 1 in grey flint, with fine denticulation and lustre on the cutting edge (Fig. 15: 14); 1 in black flint (Fig. 15: 15).

1 *small blade* retouched as an end-scraper, made of translucent mauve flint (Fig. 15: 16).

1 *blade section* used as a scraper; fine abrupt retouch; the material is blond flint (Fig. 15: 18).

12 *small blades* without any retouch, mostly in blond flint; 4 are chocolate coloured; 1 of rectangular shape (35 x 17 mm.) is in white blue-seamed flint; 1 is black and rounded (75 x 37 mm.).

33 *flakes*, mostly fair cream to blond in colour; 8 are black, 3 red and 2 bluish. Particles of flint charred and split by fire are very numerous.

Layer 18.

22 pieces come from this layer.

2 *endscrapers*: 1 worked on a purple blade, that has small abrupt retouch on one edge (Fig. 16: 1);

1 worked on a blade of blond flint; a notch at the other end was perhaps intended to make a tang (Fig. 16: 2).

1 *blade*, worked and worn on one edge; bluish flint; length: 43 mm.

1 *pyramidal core* in bluish flint and 47 mm. long and 30 mm. high.

3 *blade sections* : 1 is in blond flint and 40 mm. long ;
 1 in cream-coloured flint and 30 mm. long ,
 1 in blue flint with white specks, 28 mm. long.

9 *small blades* varying in size from 30 to 15 mm.; the material is also various: 4 are mauve, 2 blond, 2 grey and black.

6 *flakes*, spoilt by fire, all blond except one that is black.

Layer 17.

14 flints were found in the cooking-hole and on the floor.

1 *sickle blade* has a strong lustre and irregular denticulation on the working edge (Fig. 16: 3).

1 *borer* is made of orange-coloured chocolate-seamed flint (Fig. 16: 4).

1 *blade section*, of mauve flint, is 45 mm. long and 25 mm. wide.

1 *flake* in creamy flint, has irregular retouch.

3 *small blades* in mauve flint measure 26, 16 and 10 mm.

8 *flakes* have no retouch: 2 are made of creamy flint, 2 of mauve flint, 2 of blond red-seamed flint, 1 of blond flint with white specks and 1 of chocolate flint.

Among those 102 pieces there are very few typical artifacts. The *lame de dégagement* (Fig. 15: 2) is similar to those from Jericho, el - Khiam, Shaar ha - Golan, Abu Gosh and other sites¹³.

The borer (Fig. 15: 9) is a very common implement, well known for instance at Shaar ha-Golan and Jericho¹⁴.

The beautiful knife blade, 115 mm. long, (Fig. 15: 1) and the tabular scraper (Fig. 15: 6), although they foretell the flint craft of the Early Bronze Age, are not unfamiliar in a Middle Chalcolithic environment.

The endscraper (Fig. 16: 1) is the only piece of layer 18 that is worth noticing although it does not give any information as regards the chronology.

The sickle blade (Fig. 16: 3) from layer 17 is fashioned according to the Cananean technique; the type is known from Middle Chalcolithic onwards and this agrees quite well with the evidence given by the industry of layer 19.

The Ground Stone Industry.

All the material for this category belongs to layer 19.

A. Limestone.

Two fragments of a *bowl* have been found but they do not fit well enough to allow the reconstruction of the whole shape (Fig. 8: 14).

There was also the bottom part of a sort of *mortar* ; the actual height is 6 cm., the original diameter was about 7 cm.

B. Basalt.

A fragment of a hollow *pedestal* gives little information about what the object looked like when complete (Fig. 8: 15).

A basalt block may be the working part of a *pestle*; the broken end is cylindrical, and the other extremity is a globular mace 15 cm. in diameter.

A *quern* was found broken in two pieces; it is rather small, 20 x 15 cm., and of the plain oval type; the upper face, used for grinding, is carefully flattened.

Such implements as the five described here could be unearthed in almost every Chalcolithic or Early Bronze settlement and they are quite useless as chronological criteria; they emphasize however the agricultural character of the community.

The Bone Industry.

The pit 19 also produced several bone *awls*, all carbonised. The best preserved is 9 cm. long; unhappily, the point has been destroyed (Fig. 15: 19). This tool is most common on all sites and the remarks made in the former paragraph apply also to this.

The Chronological Situation of Level I.

According to the finds, especially the pottery, the first settlement at Tell esh-Shuna seems to be contemporary with the earliest agricultural communities at several sites of Northern Palestine, such as Beth Shan and Tell el-Far'ah.

It is also connected with several sites of the Jordan Valley: Tell Abu Habil, Khirbet 'Ain Duq, Jericho VIII; and with Murabba'at in the Judean desert.

Most scholars agree that the cultural stage defined by Beth Shan pits and XVIII, and Jericho VIII can be termed Middle Chalcolithic; so this can be applied to Tell esh-Shuna I.

A culture very similar to that of Tell esh-Shuna I was found in the 'Amuq plain, North Syria, at Tell Kurdu (*BASOR* 122, pp. 52-55). This site, typical of 'Amuq D, a phase later than the Tell Halaf culture of 'Amuq C, yielded bow rim jars, hole-mouth jars, pedestalled vessels, together with horizontal bands of red paint.

Red slipped ware, with bow rims and splayed loop handles, was also found in the lower part of Ras Shamra IV, immediately after the Tell Halaf level.

Level II — Late Chalcolithic.

Descripton of the layers

Layer 15

A layer of small stones, mixed with yellow or greyish clay, charcoal and ashes, covers the whole layer 16; it is certainly a floor, although rather uneven: —180 cm. on the western side of the trench, —200 cm. on the eastern side.

Layer 14

Set immediately on top of this floor, a wall running WSW-ENE crosses the trench and divides it into two parts (Fig. 18 A).

South of the wall, a thick deposit of ashes lies on floor 15; over this, the excavation met a thick stratum of brown earth strewn with ashes, 48 cm. thick at the west (—178 to —130 cm.), 60 cm. at the east (—190 to —130 cm.).

North of the wall, floor 15 is only covered by a thin layer of brown ashy earth, interrupted by heaps of stones and gravel.

The wall itself is well built, carefully faced on both sides; two or three courses are preserved at the western side so that the actual height is about 40 cm.; the average width is 44 cm.

One can presume that the thick layer of ashes south of the wall means that here was the inside of a building limited by the wall. After its destruction, this structure was, gradually or not, filled up with earth — while the wall decayed and collapsed towards the North; this would account for the disturbed stratigraphy of the latter part. The stony heaps in the NW and NE corners of the trench are the result of the collapse of the higher parts of the walls.

The archaeological material comes mostly from the lower part of layer 14.

The Pottery.

A. Technique, shapes and decoration.

The pottery of Level II falls into three distinct varieties:

1. Grey burnished ware.

1 *carinated bowl with nipples* of fair grey colour (Fig. 9: 1).

1 *carinated bowl with nipples*, with a high carination, is dark grey and thoroughly burnished (Fig. 9: 2).

1 *hemispheric bowl*, dark grey in colour, has a round rim and a thick wall (Fig. 9:3).

1 *jar with a short collar* of pale grey colour (Fig. 9: 4).

4 *everted rims* belonging to jars or to bowls.

12 sherds, more or less dark.

Two surface finds can be added to this category :

1 *everted bowl rim* with a shallow groove on the belly, pale grey in colour (Fig. 9:5).

1 *bowl rim or pedestal fragment* of pale brownish colour (Fig. 9: 6).

2. Red burnished ware.

1 *large bowl with an inverted rim*; two ear-handles are fixed underneath the rim; the upper part of the handle is concave. The vessel is made of pinkish clay; the outer surface and rim are covered by a red coating, that has undergone pattern burnishing (Fig. 9: 7).

1 *jug with raised handles*: on both sides of the rim stand two high and thin loop handles; the jug is red burnished inside and outside (Fig. 9: 8).

1 *collared jug* made of white paste, from which the burnished red slip that covers the whole surface peels off very easily; the neck is rather narrow, the rim fairly everted; the walls are thin and the bottom is flat. Although many sherds of this vessel have been collected, its complete shape cannot be reconstructed (Fig. 9: 9, 10).

1 fragment of a *loop handle* similar to the former one, has also a round section, but is only 12 mm. in diameter.

2 orange-coloured sherds with an outer burnish.

2 red sherds, highly burnished on both faces.

3. Coarse ware.

The third variety is by far the most numerous.

So far as technique is concerned, this ware is closely related to that of Level I, but the shapes are different.

I. *Beaker.*

The only complete vessel from the level is a sort of beaker or mug. It is made of pinkish clay; traces of a red wash appear all over the vase. The walls are thick and irregular; the base is very thick and slightly hollowed. It may have been used as a mortar (Fig. 10 : 1).

II. *Bowls.*

(a) *Globular bowls* — 6 examples (Fig. 10 : 9-11).

They are medium-sized bowls, with a curved side; the edge is thin and inverted. The clay is well levigated and smoothed; a red wash is a usual feature.

(b) *Small bowls or cups* — 4 examples (Fig. 10 : 2-5).

This type is made of refined pink clay, with traces of a red wash in and outside. The diameter of the largest is 10 cm.; the base is flat; the sides, very thin, are at first straight, then curve in towards the base. These little vessels all bear black marks of burning inside and on one side of the rim; they were probably used as lamps. A piece of white *limestone* found in the same level belongs to a bowl similar in shape and size to those just described; this object may have been made for the same purpose.

(c) *Straight-sided bowls* — 3 examples (Fig. 10 : 6-8).

They all are coated with a red wash or slip. Two have a rounded rim and thin walls (Fig. 10 : 6, 7): one has a flattened rim (Fig. 10 : 8).

III. *Pithoi.*

The pithos is a sort of large bowl or wide opened hole-mouth jar.

(a) *Ornamented pithoi* — (Fig. 10 : 12, 13).

Two vessels of this type have thick walls and a raised band underneath the rim. One is decorated by a series of fingernail incisions; a band of red paint is still visible inside the rim (Fig. 10 : 12). The other one has continuous thumb indentations (Fig. 10 : 13).

(b) *Pithos with everted rim* — (Fig. 12 : 5).

One pithos has also thick walls; the rim is very thick and everted. The clay is coarse and roughly smoothed.

IV. *Hole - mouth jars.*

(a) *With inverted rim* — 10 examples (Fig. 11).

The clay is usually smoothed outside and rough inside; the colour is very diverse: white, pink, red, ochre, pinkish with a grey core.

Sometimes, the rim is not thicker than the wall (Fig. 11 : 3, 6, 8), but in most cases the rim is thickened (Fig. 11 : 1, 2, 4, 5, 7).

One jar has a reddish brown slip inside the rim and outside (Fig. 11 : 1); another one is red slipped all over (Fig. 11 : 8).

One half of this category bear vertical or horizontal incisions not far underneath the rim (Fig. 11 : 2, 3, 4, 5, 7).

(b) *With everted rim.* — 4 examples (Fig. 12: 1-4).

The jars with more or less everted rim are of coarse fabric compared to those of the previous type. Two have a red slip (Fig. 12: 1, 2), one a thick red slip all over (Fig. 12: 3).

V. *Jar with a pyramidal neck* (Fig. 12: 6).

One big jar has a collar that becomes more and more narrow as it approaches the rim. The rim itself is everted. The clay is buff or greyish with a big proportion of white grit; the walls are very thin, but rough. There are traces of a red slip inside and outside, especially over the rim.

VI. *Potstand* (Fig. 10: 14).

A cylindrical object, open at the two ends, was probably made to support other vases; the two bases are of different size. It is fashioned with pinkish clay; the surface, hand-moulded, is irregular. The outer surface is dabbled with red paint.

VII. *Handles.*

(a) *Loop handles.* 2 broken loop handles, with a flat section, recall those of Level I; they have a red slip (Fig. 12: 7).

(b) *Lug,* made of crude black material, with a red slip (Fig. 12: 8).

(c) *Ledge handles.* 3 examples.

Two are in coarse clay, with a red slip; on the upper surface are three short incised lines: in one case, they are parallel to the wall of the vessel (Fig. 12: 9), in the other one, perpendicular.

One, made of friable greyish clay, has a deeply indented edge (Fig. 12: 10).

(d) *Ear handles with elongated attachment.* 3 examples

Among these, one bears slight indentations all along the edge (Fig. 12: 11).

VIII. *Ornamented sherds.*

A few sherds have relief or painted decoration that foretells that of the Early Bronze Age.

1 sherd has an *incised vertical line* near a broken loop handle; well levigated clay, red slip on the outer surface (Fig. 12: 12);

The neck of a large pithos has *shallow thumbmade impressions* all around the base; coarse clay, red slip outside (Fig. 12: 13).

The neck of another pithos is decorated with irregular *short and broad incisions*.

1 sherd shows a groove adorned with *long parallel incisions*; the material is pink clay, with a red slip outside (Fig. 12: 14).

The belly of a small jug with a broken loop handle is conspicuously painted; the clay is orange-coloured and the walls uneven. Traces of red paint can be seen inside; outside, a white slip is striped with *vertical strokes of red paint* (Fig. 12: 15).

B. Comparative study.

The burnished wares are closely connected with the so-called Esdraelon ware of Northern Palestine.

1. Grey burnished ware.

The *carinated bowl with nipples* is nearer those found at Beth Shan XVII — XV and Megiddo XIX than those of Tell el-Far'ah¹⁵. The *bowl with everted rim and groove* is similar to several vessels from Tell el-Far'ah *Enéolithique Supérieur*¹⁶.

2. Red burnished ware.

The following shapes are all paralleled at Tell el-Far'ah *Enéolithique Supérieur* :

*Bowl with inverted rim and crescented ear handles*¹⁷ ;

*Jug with raised handles*¹⁸ ;

*Jar with narrow neck and everted rim*¹⁹.

The two first shapes of this category recall closely red burnished Anatolian vessels.

3. The Coarse ware can be divided in two categories.

1. Shapes related to Middle Chalcolithic.

The *straight sided bowl with a thin rounded rim* recalls the Level I type ; it is related to a bowl most common in Ghassulian pottery²⁰.

The *bowl with a flattened rim* is similar to the one from layer 17.

The *rough beaker* finds parallels at Jericho VIII and Wadi Ghazzeah D2²¹.

The *pithos with relief ornament under the rim* is a very usual shape in Ghassulian pottery²².

The *hole-mouth jar with a thin rim* is quite typical of the last phase of Middle Chalcolithic²³. A few coarse *slightly everted* hole-mouth rims, a survival of Level I, are closely akin to this type.

The *jar with a pyramidal neck* is known in several Ghassulian sites but is rather infrequent²⁴.

The *potstand* occurs in the same context ; pedestalled vessels are well represented in Ghassulian pottery, but specimens of stands independent of the vessel itself are rare ; close parallels however come from Megiddo XX-XIX, Tell Abu Habil and Murabba'at²⁵.

The *small round loop handle* is not very common but has a wide distribution²⁶.

The *ear-handle with elongated attachment and indented edge* is typical of Ghassulian²⁷.

The small unpierced *lug* is more elaborate than that of Level I ; the upper face is flattened and it is very near the ledge-handle ; it comes into the same group²⁸.

2. Shapes typical of Late Chalcolithic.

The *globular bowls* and the *cups* are very numerous in the coarse ware from Tell el-Far'ah II (*Enéo. Supérieur*)²⁹.

The *hole-mouth jar with a thick rim and incised decoration* originates in the Late Chalcolithic and goes on in the Early Bronze Age³⁰.

The *pithos with a thick everted rim* seems typical of the last Chalcolithic stage³¹.

The *wide and flat ledge handle* with a plain edge and often incised lines evolves out of the lug in the Late Chalcolithic period³².

The *scalloped ledge handle* is also an innovation of the phase but it survives long into the Early Bronze Age³³.

Series of *long incised lines on raised bands* are much more common in Late Chalcolithic than formerly³⁴.

The painted decoration made of *narrow parallel red bands* often vertical, is very characteristic of the same context; it apparently foretells the painted stripes of Early Bronze pottery³⁵.

The conclusion is that the pottery of Tell esh-Shuna II is a mixture of Ghassulian and Late Chalcolithic wares.

The Flint industry.

Layers 15 and 14 only yielded 7 worked flints.

1 *borer* on a 10 mm. thick tabular flake, chocolate coloured (Fig. 16: 5)

1 square tabular *scrape*, 10 mm. thick, in chocolate flint (Fig. 16: 6).

1 big *point* or *borer* on a trimmed core flake of grey white-specked flint, probably an Upper Palaeolithic implement reused (Fig. 16: 7).

1 *point* on a blond coloured flake (Fig. 16: 8).

2 unworked *blades*: one in blond flint 50 mm. long, the other in purple flint with white specks, a sharp end, 48 mm. long.

1 thick *flake* in blond flint, 40 mm. long, 20 mm. wide and 11 mm. thick.

The stone industry has very much deteriorated compared with that of Level I; the same fact is noticeable in other Late Chalcolithic sites. The importance of tabular flint is a common feature of this phase with Ghassulian and Early Bronze industries.

The Chronological Situation of Level II.

Level II includes several distinct elements in its pottery.

First of all, the numerous features which recall Ghassulian or at least Middle Chalcolithic do not give a clue to the chronological problem, as the date of this culture is a matter of debate; their occurrence in Tell esh-Shuna II should be one more argument in favour of its long survival in Southern Palestine.

Secondly, the Late Chalcolithic component seems to be only the result of the local evolution of the Northern Chalcolithic; it is a transitional stage between the Middle Chalcolithic and the Early Bronze Age.

Finally, the burnished wares appear as an alien element, which vanishes as abruptly as it arrives; they are now believed to be the manifestation of Anatolian influence. Owing to their peculiar character, they provide very good chronological evidence.

Level II at Tell esh-Shuna is accordingly contemporaneous with the first settlement at Khirbet Kerak³⁶, Beth Shan XVII-XVI, Affuleh, Megiddo XIX, the cave near Tell el-'Asawir³⁷, Tell el-Far'ah Level II and Necropolis, and several tombs from Jericho³⁸.

Level III — Early Bronze I.

Description of the layers.

Layer 13.

The remaining parts of the wall in layer 14 still exert influence on the overlying strata. In the southern area, layer 13 is a horizontal floor made of very hard brown trodden earth, mixed with gravel and white specks, at a depth of 130 cm. under the actual surface. In the north-

ern part, it slopes down to a depth of 150 cm. and has the configuration of a deposit of black and white ashes, some patches being 10 cm. thick. In the north-western corner of the trench, a roughly circular platform of flat stones was placed on top of the heap of gravel; this structure, approximately 75 cm. in diameter, was made for some domestic use (Fig. 18 B).

Layer 12.

Only in the northern part of the trench and on top of the ashy portion of layer 13, occurs a 10 cm. deep layer of greyish-brown earth, at a depth of 140 to 130 cm. at the north-eastern corner of the sounding.

Layer 11.

A floor having the same aspect as layer 13 covers the north-eastern quarter of the trench, prolonging the previous floor that is still in use in the southern half.

Again at the north-west, it curves in and only contains ashes; the continuous trails of ashes in this corner from layer 13 onwards seem to indicate the use of the stone platform as a hearth.

Layer 10.

Immediately on top of this floor appears a deposit of grey earth strewn with stones, some of fairly large size. In the northern part of the trench, a shallow stratum of ashes divides this deposit into two stages. In the north-western quarter, two portions of walls seem to bound a circular structure; the walls are built with large pebbles between two stone facings; only one course is left of what may have been the basement of a round building (Fig. 18 C).

Layer 9.

At about 1 m. underneath the actual surface, layer 10 is interrupted by a carefully levelled floor; the previous depressions are almost filled up. The aspect of this floor is various: gravel on the eastern side of the trench, a thick bed of ashes in the north-western part. At the western side, it was destroyed by a later foundation trench.

Layer 8.

Over occupation floor 9, pockets of a very dark brown earth remain only in the north-eastern corner and in the western part of the sounding. Elsewhere, this deposit had been later removed.

The material was not evenly distributed; the sherds were especially numerous in layers 12, 10 and 8; the flints all came from layer 10. Such a distribution is exactly what could be expected from the nature of the layers.

The pottery.

A. Technique.

The vessels are wheelmade; the paste is usually coarse, often friable and not very different from that of the Chalcolithic levels. The treatment of the surface will be described with the corresponding shapes.

B. Shapes.

I. *Globular bowls.* 2 examples (Fig. 13: 1, 3).

The bowls that were predominant in Chalcolithic, especially in Level I, are now very

scarce. They are of the globular type already known in Level II (Fig. 10: 9-11), with a rounded side and inverted rim. One, from layer 11, has a band of red paint all around the rim (Fig. 13: 1). The other, from layer 8, is made of buff clay with a pink slip; some red paint is visible outside and in spots inside (Fig. 13: 3).

II. *Pithoi*. 2 examples (Fig. 13: 7).

Two medium-sized vessels have a very short neck with a strongly everted rim; the rim is thin and rounded; both belong to layer 10. One has a red slip on the outer face and a red band inside the rim.

III. *Hole-mouth jars*. 1 example (Fig. 13: 6).

The only specimen unearthed is of the thick bullous rim type, so common in Late Chalcolithic layers; a series of horizontal incisions goes around a little underneath the rim.

IV. *Jars with a short neck*.

Two different types must be considered:

(a) *Jars with a slightly everted neck*. 2 examples.

One comes from layer 12 (Fig. 13: 2), the other one from layer 10.

(b) *Big jars with a thick rounded rim*. 2 examples (Fig. 13: 4).

Sherds belonging to two huge storing jars were scattered in all Level III. The walls are very thick; the clay is white or buff, with a black core. The outer surface is decorated with broad irregular lines of red wash, laid out in horizontal series or wide lozenges; this is known as the band-slip decoration.

V. *Bases*. 2 examples (Fig. 13: 5).

They are flat bases belonging to big jars.

One is coated with a dark red slip; the other is covered with band-slip lattice pattern like the jars IV b.

VI. *Handles*. 1 example.

The handles seem very rare; there was only one specimen, a thick ledge handle of a very plain type and in quite a bad state.

VII. *Spouts*. 1 example (Fig. 13: 8).

One cylindrical spout was found, made of buff ware, with streaks of red paint. Unhappily, the end is broken.

C. *Decoration*.

A great amount of sherds have the classical *band-slip* decoration: parallel or lattice red lines on a pinkish slip; they are numerous all through Level III.

2 sherds in levigated well baked clay have a *red burnished* slip.

2 sherds have a *raised decoration*: one bears a simple band of pellet-like ornament, similar to that of Levels I-II, under a dark red slip; the other one, rather crude, shows a series of irregular impressions made before baking (Fig. 13: 9).

D. *Comparative study*.

In Level III appear the characteristic shapes and decoration of the Early Bronze Age in Palestine; they all are paralleled by those of Beth Shan; some of them however are worth further examination.

The *globular bowl with a thick round rim* is rare; a few specimens are known in Beth Shan XIII and Megiddo XVII, two EB II strata, but others figure already in Tell el-Far'ah *Ancien Bronze I* ³⁹.

The *pithos with an everted short neck* is a typical shape if not a very common one; it can be found in Beth Shan XIV and Megiddo XIX - XVIII ⁴⁰.

The *hole-mouth with a thick bulbous rim* is very frequent in Beth Shan XIV, Megiddo XVIII and Stages VII - III, and also in Tell el-Far'ah AB I - II ⁴¹.

The *large jar with a thick rounded rim* is common in Stages I and II of Early Bronze; typical examples come from Beth Shan XIV - XIII and Tell el-Far'ah AB I - IIa ⁴².

The *long narrow spout* seems characteristic of EB I, as it only occurs in Beth Shan XIV and Megiddo XIX and Stages VII-IV ⁴³.

The *band-slip decoration*, although more frequent in Beth Shan XV - XIV and Tell el-Far'ah AB I, is also well represented in Beth Shan XIII and Tell el-Far'ah AB II; at Megiddo, it occurs all through Layers XIX - XVIII and Stages VII - III ⁴⁴.

According to the pottery, Tell esh-Shuna III is most likely contemporaneous with Beth Shan XV-XIV, Tell el-Far'ah *Ancien Bronze I*, and Megiddo Stages VII - V, which correspond to the latter part of Layer XIX.

The Flint industry.

Only 6 pieces were found, all from layer 10.

1 small blade was a *saw or sickle element* (Fig. 16: 9); the edges are denticulated; it is made of creamy flint and is roughly rectangular in shape.

1 *flake*, in buff flint, 35 mm. long, has a prepared striking platform.

4 *bladelets* without any retouch: 1, in purple flint, is 37 mm. long; 2, in pale mauve-coloured flint, are 28 and 22 mm. long; 1, in pinkish flint, is 41 mm. long and 13 mm. wide.

The progress of metallurgy is certainly responsible for such a neglect of flint working.

The Chronological Situation of Level III.

There is no sign of a stratigraphical hiatus between Levels II and III; the study of the pottery gives strength to this opinion, as the correlations above suggest that Tell esh-Shuna III falls into the period known as Early Bronze I.

Level IV — Early Bronze II.

Description of the layers.

Layer 7.

A very hard gravel floor covers the whole trench quite evenly at -90cm. On the western side of the trench it joins a wall going from west to east; this wall has two facings of large ashlar; its foundation trench destroyed part of the underlying layer 9 and the lower course cuts into layer 8; two courses are preserved above floor 7. In the south-eastern part, the latter is laid directly on floor 9 (Fig. 18 D).

Layer 6.

All over the floor, a deep deposit of brown earth extends from —90 to —60 cm. It is only disturbed in the middle of the northern side of the trench by a heap of stones, which looks like the filling of a pit dug from the next layer into layers 6—8.

Layer 5.

The former layer is entirely covered by a thick floor made of stones and gravel; the base is at —60 cm. and the top at —50 cm.

Layer 4.

Over the floor comes a layer of powdery greyish-brown earth; this is very thin, except in the centre of the sounding where it almost reaches the actual surface.

In Level IV, there are very little ashes and the stratigraphy is quite regular; the finds are concentrated as usual between the floors, in layers 6 and 4.

The Pottery.

A. Technique, shapes and decoration.

The use of the wheel is quite common and the paste improves gradually; the clay is whitish or orange-coloured.

Two varieties can be distinguished :

1. Burnished ware.

This category is a possible imitation of lost metallic vessels. The only known shape is a *bowl with an inverted rim*, 5 examples of which have been found :

2 are made of red burnished ware (Fig. 14: 1),

3 of black burnished ware.

3 sherds show a *pattern burnishing* : fine strokes draw lattice decoration, more elaborate than that of the band-slip ware.

2. Coarse ware.

A great number of sherds bear the *band-slip* decoration that covers the vases with its regular patterns.

I. *Pithoi*. 3 examples

One is quite similar to the type of Level III (Fig. 13: 7); it has the same short neck and strongly everted thin rim, the same red slip outside and dark red painted band inside the rim (Fig. 14: 9).

Another one has a sharply everted square-cut rim; it may have a bronze prototype (Fig. 14: 10).

The third has a thick round rim, with a series of curved incisions, probably made with the fingernail, on the rim; a red slip, very much eroded, covers the whole outer surface (Fig. 14: 11).

II. *Hole mouth jars*. 7 examples (Fig. 14: 2-5).

The hole-mouth vessel, very close to the type known in Levels II - III, is the most common form in Level IV. The rims are mostly thickened (Fig. 14: 3-5); one is square-cut (Fig. 14: 2). 4 rims have a line of incisions parallel to the rim (Fig. 14: 5);

1 jar, made of greyish clay, is entirely striped with red horizontal bands on a pink slip (Fig. 14: 4).

III. *Jars with a short neck.*

As in Level III, there are two types:

(a) *Jars with a slightly everted rim.* 2 examples (Fig. 14: 7, 8).

Two medium-sized pots belong to this category; one is slightly burnished (Fig. 14: 8).

(b) *Big jar with a thick rim.* 1 example (Fig. 14: 6).

Like the similar vessels of Level III, this one has a well marked neck with a thick rim, but instead of being completely rounded, the rim has a sharp ridge at the lower part.

IV. *Bases.* 1 example (Fig. 14: 12).

The only base found in this Level is flat and, like those of Level III, bears traces of a lattice band-slip ornament on the outer surface.

V. *Handles.*

1 broken *loop handle* has a triangular section and a red slip outside; it is rather small (Fig. 14: 13).

1 plain *ledge handle*, thick and coarse, shows a white slip and traces of red paint on the upper face (Fig. 14: 14).

B. Comparative study.

There is little difference between the pottery of Level IV and that of Level III; owing to the exiguity of the surface excavated, too much credit must not be given to the presence or absence of a shape. An attempt must be all the same be made to fix the relative date of Level IV.

1. Shapes common to the two Levels III and IV.

These are the *hole mouth jar with a rounded rim*⁴¹,
the *jar with a short slightly everted neck*,
the *pithos with a short strongly everted rim*⁴²,
and the *band-slip decoration*⁴⁴.

All these shapes, as shown above, are attested all through EB I and EB II.

2. Shapes only found in Level IV.

The *burnished bowl with an inverted rim* is typical of EB I-II and well known at Beth Shan XIV-XIII and at Megiddo from layers XIX to XVI⁴⁵.

Pattern burnishing is very wide-spread during EB I-II, according to the finds from Beth Shan XIV - XIII, Tell el-Far'ah AB I - II and Megiddo XIX - XVI and Stages IV-I⁴⁶.

The *pithos with a sharp everted rim* is related to a large category, but the most exact parallel comes from Tell el Far'ah AB IIa⁴⁷.

The *pithos with a round rim*, also known as the rail-rimmed pithos, is identical to one of Beth Shan XIV; similar rims but without incised ornament are published from Megiddo only in layers XIX - XVIII and Stages V - III⁴⁸.

The *square-cut hole-mouth rim* appears at Tell el-Far'ah AB I, but is quite common in Megiddo XVIII - XVI and Stages V - III⁴⁹.

The *jar with a thick rim*, with its peculiar ridged section, is known from Beth Shan XIV - XIII, Megiddo XVIII and Tell el Far'ah AB I⁵⁰.

The *small thin loop handle* is not uncommon; examples come from many sites, for instance Tell el-Far'ah AB I-II⁵¹.

The *broad thick ledge handle* seems rather rare; it figures in Beth Shan XIV and Megiddo Stages V-III⁵².

The implications of these correlations will be summed up below.

The Flint industry.

A. Layer 6 — 1 piece (Fig. 16:10).

The only flint found in Level IV is a *sickle blade*, dark chestnut in colour; the two edges have denticulation and one has a very strong lustre; the end is carefully trimmed; it is a fairly good implement.

B. Surface finds — 8 pieces have been selected; they probably belong to the Early Bronze Age:

1 *scraper* on the end of a big crude blade, made out of blond flint and 12 mm. long.

1 *blade section* of Cananean technique, rather big, made of dark chestnut coloured flint; there is pressure flaking on the edges and the ridges are streaked by use (Fig. 16:11).

1 *sickle blade* in veined white and mauve flint; the back is blunted by abrupt retouch; the ends are trimmed, also abruptly.; the cutting edge has a lustre but no denticulation (Fig. 16:12).

5 *blade sections*, 4 in blond flint are 50, 35, 36, and 30 mm. long, 1 in white flint is 25 mm. long, with traces of use on the edges.

1 *pendant* can be recorded here, although the material is black schist. A hole is bored through the top, which is broken; the actual length is 53 mm.

The Chronological Situation of Level IV.

Although the bulk of the pottery is no different from that of Level III and almost all the shapes could fit into EB I, there is no objection to establishing a synchronism between Level IV and the following strata: Beth Shan XIII, Tell el-Far'ah *Ancien Bronze* II, Megiddo XVIII and Stages IV-III. As in all these sites, only a slight evolution in the pottery marks the passage to Early Bronze II.

II. TELL ABU HABIL.

Tell Abu Habil is on the eastern bank of the Jordan, almost opposit Tell Abu Sus; it is located near the extremity of the wide valley that lies south of Lake Tiberias. Immediately south, the river works its way through a rocky rift and runs through a very narrow channel. The tell is a low mound, 100 m. east of the road, in the midst of a terrace sloping from -200 to -250m. beneath sea level. This terrace has a very rich soil and is entirely cultivated; only the central part of the tell is waste ground. The terrace is strewn with worked flints.

Two soundings were opened on the tell on the 15th of February 1953. Trench II, with which we are concerned in this article, measured 3 x 2 m. The original rock was reached on the 18th of the same month.

Stratigraphical sequence — (Fig. 19).

Layer 1	— Disturbed black soil	0
» 2	— Brown soft earth	-10 cm.
» 3	— Hardened earth, gravel and charcoal	-40 »

» 4 — Brown soft earth	—50	cm.
» 5 — Hardened earth, gravel and charcoal	—70	»
» 6 — S.E., brown earth & ashes; elsewhere, white clay	—90	»
» 7 — S.E., yellow earth & ashes; elsewhere, white clay	—130	»
» 8 — Thick deposit of ashes	—140	»
» 9 — Pockets of ashes; elsewhere, white clay	—150	»
» 10 — S.E., brown soft earth and ashes	—185	»
— Virgin soil, limestone rock	N. E.:	—160 »
	N.W.:	—180 »
	S. E.:	—225 »

Classification of the layers.

All the finds belong to the same Chalcolithic culture; although at first the whole lot seems quite homogeneous, the stratigraphy may indicate some sort of evolution.

Level I: from layer 10 to layer 8.

Archaeological remains are found in pits dug into natural soil and gradually filled up by ashes, that also cover finally the whole surface of the trench.

Level II: from layer 7 to layer 6.

Whitish silt accumulates all over the sounding, except in the south-eastern corner, where a large pit remains in use.

Level III: from layer 5 to layer 2.

A very thick and hard floor occurs over the whole area uncovered; the last filling is made of soft brown earth, subdivided by patches of hard earth (layer 3) into layers 4 and 2.

Level I

At the bottom of the trench, was found soft white limestone; the top, almost horizontal, was reached at —160 cm. at the east and —180 cm. at the west. Over this lay disintegrated rock about 35 cm. thick. Finally the decay of the limestone produces white clay up to —140 cm. The three elements represent the *virgin soil*, into which have been dug *pits* that may be dwellings or bins.

One of these pits appears in the south-eastern corner of the trench; it goes down to —204 cm., being thus about 64 cm. deep. Another one is almost completely excavated; it covers the eastern half of the trench; only the southern edge is missing. This one is a circular flat-bottomed pit; the average diameter is 2 m.; the rock appears at —225 cm., and that means an original depth of 75 to 85 cm. (Fig. 20).

Description of the layers.

Layer 10.

This only occurs in the deeper pit as a deposit of soft brown earth mingled with a great amount of ashes; it is 40 cm. thick in the middle and a little thicker at the edge.

Layer 9 (Fig. 21).

This overlies layer 10 in the big pit and fills up the smaller one; it is composed of ashes mixed with charred stones, bones and charcoal.

In the north-western quarter of the trench, there appears at -175 cm. a roughly circular depression which cuts into the edge of the large pit; it has a diameter of 80 cm. and is 25 cm. deep; the bottom and walls are coated with clay which has become red under the effect of fire; such a structure can only be a cooking-hole or a hearth (Fig. 21).

Layer 8.

A thick layer of black ashes covers the whole sounding; it is practically sterile. This probably represents the occupation layer contemporaneous with the two pits and the cooking-hole.

The Pottery.

A. Technique.

The ware recalls that of Level I at Tell esh Shuna. The paste is coarse, with a degraissant of ground limestone; the colour is usually red, but black (Fig. 23: 10), grey (Fig. 23: 3), buff (Fig. 23: 7, 12) and white (Fig. 23: 2) also occur.

The pots were handmade by coil construction and sometimes on a mat (Fig. 23: 5). A small disk of black unbaked clay with fingermarks was found in layer 9.

B. Shapes and decoration.

I. *Bowls.* 4 plain bowl rims.

One has a thick wall, a flattened rim and a band of red paint over and inside the rim (Fig. 23: 3).

Another one has a thin wall; the rim is rounded and blackened by fire (Fig. 23: 4).

A bowl, very similar to the latter, is made of well baked clay, dark red to violet in colour (Fig. 23: 11).

II. *Hole-mouth jar or pithos.* (Fig. 23: 10).

A large vessel, with a wide opening and no collar, has a slightly everted rim; the clay is well baked and black.

III. *Jar with a swelling neck.* (Fig. 23: 2).

A fragment of a small vessel is quite different from the other sherds by its material, its shape and its decoration. It is made of white finely levigated clay and the surface is carefully smoothed. The preserved part is the base of a swelling or of a bow-rim neck, 8 cm. in diameter; unhappily, the middle part of the neck and the rim are missing. The decoration is unusual: outside, red paint on the body and a band of black paint crowned by a cross-hatched triangle of the same colour on the neck; inside, red paint on the neck.

IV. *Potstand* (Fig. 23: 1).

A cylindrical object can be reconstructed, open at both ends. The paste is poorly baked and gritty; the walls are uneven. The lower edge is flattened and has a wider diameter than the upper edge, which is rounded.

V. *Bases.* 3 examples.

One, quite flat, made of yellowish clay turning to red near the bottom, bears a mat impression of the coiled type; it may have belonged to the swelling-neck jar (Fig. 23: 5).

Another flattened base has thin walls and a small diameter.

The third one is slightly concave (Fig. 23: 6).

VI. *Handles*. 2 loop handles with splayed attachment.

One has a slightly flattened section; traces of red paint occur on the outer surface (Fig. 23: 7).

The other, very broad and thin, has a vaguely triangular shape; it is fixed to a large portion of the body of a big jar; the clay is buff, well baked, with small calcareous elements; the walls are carefully smoothed and the outer surface shows a red slip (Fig. 23: 12).

VII. *Ornamented sherds*.

One sherd from layer 9 has its two faces *scratched* as if it had been rubbed by grass.

Two sherds belonging to large vessels have a *modelled band* of thumb impressions; one is made of coarse red clay (Fig. 23: 8); the other is in greyish-red clay with a smoothed outer surface (Fig. 23: 9).

C. Comparative study.

The *bowls* are quite untypical and very much like those of Tell esh-Shuna I³.

The *hole mouth jar* with its everted rim is similar to those from Tell esh-Shuna I, Beth Shan XVIII and pits, Jericho VIII⁵.

The *jar with a swelling neck* is closely related to some of Tell esh-Shuna I⁶.

The *potstand* is much less elaborate than that of Tell esh-Shuna II. It is almost identical in size, shape and texture to the one from Murabba'at^{2b}.

The *base with a coiled mat impression* may be paralleled by examples from Jericho VIII^{5b}.

Loop handles with splayed attachment are most common at Tell esh-Shuna I, Beth Shan XVIII and pits, and related sites⁷.

Modelled finger - impressed bands of the coarser type are known at Tell esh-Shuna I¹¹.

The *cross-hatched elaborate painting* on the swelled neck is conspicuously unusual. The only correlation seems to be with southern Palestine, especially Teleilat Ghassul. The bichrome decoration of this vessel recalls painted wares of Northern Syria and Mesopotamia^{5d}.

However all the other features of the pottery from Tell Abu Habil I agree with those of Tell esh-Shuna I.

The Flint industry.

11 worked flints were found.

One large flake apparently used as a *scraper or a plane* (Fig. 27: 1), 15 mm. thick, made of white flint, from layer 10.

4 *blades* without any retouch:

2 have part of the cortex remaining; they belong to layer 10; one is 77 mm. long in blond flint, the other 70 mm. long in pinkish flint.

2 come from layer 9; one in blond flint is 70 mm. long and 18 mm. thick at the bulb, the other in pinkish flint is narrow and thin with a length of 65 mm.

6 *flakes* without any retouch:

3 in layer 10: one made of white flint is 40 mm. long,
the other two measure 38 and 34 mm.

3 in layer 9: one made of blond flint is 56 mm. long,
the others, 58 and 50 mm. long, are very much burnt.

The flint equipment is remarkably poor in Level I.

The Chronological Situation of Level I.

The correlation with Tell esh-Shuna means that Tell Abu Habil I is contemporaneous with Beth Shan pits and XVIII, Tell el-Far'ah I, Khirbet 'Ain Duq, Jericho VIII and part of Murabba'at. It belongs accordingly to the northern phase of Middle Chalcolithic.

Level II.

Description of the layers.

Level II is the filling of the big pit, the centre of which has shifted towards the South-east; a large portion of the pit is not excavated. In the other parts of the trench, there is a deposit of clayish white earth.

Layer 7.

Layer 7 is yellowish earth with streaks of ashes; the highest streak is thicker than the others; this succession of earth and ashes is 80 to 50 cm. deep.

Layer 6.

10 to 20 cm. of brown earth with patches of ashes and red burnt soil complete the filling.

The Pottery.

A. Technique.

The pots are handmade. The paste has a better make and is usually well baked; it is light in colour: buff, orange or pink; only one sherd is dark red (Fig. 24: 4).

The surfaces are rather rough; a red slip is almost always found on the outer surface.

B. Shapes and decoration.

I. *Bowls.* 2 rims.

One, from layer 7, is sharp with red paint inside and on a band underneath the rim (Fig. 24: 6).

The other, from layer 6, is rounded, made of white clay, with a brown slip.

II. *Hole mouth jars.*

(a) *with a wide opening.*

2 medium-sized vessels are an intermediary form between the bowl and the true hole-mouth jar; they belong to layer 7.

One is globular, with a rounded rim; there is a wide band of red paint all over the rim; on the body, curved red bands complete the decoration (Fig. 24: 2).

The second has a thick rounded rim; inside the lip is a wide band of red paint; outside the white slip is adorned with cross-hatchings of dark red paint (Fig. 24: 5).

(b) *with a narrow opening.*

2 examples, with a sharp rim, of a large vessel.

One, from layer 7, is made of dark red clay (Fig. 24: 4).

The other, in pink coarse paste, comes from layer 6.

III. *Jars with a short everted neck.* (Fig. 24: 1).

A medium-sized jar could be reconstructed. The neck is short with a flaring thin rim; a wide band of red paint covers the neck. To the body are attached two ear handles with narrow elongated attachments and a round section; the wall was slightly pushed in by the fashioning of the handle.

IV. *Bases.* 3 examples.

One belongs probably to a jar of the above type; the diameter is small, the walls are thin; a dark red slip covers the whole surface; it is similar to the second base of Level I (Fig. 24: 3).

Another one is a ring base; the material is well baked, smoothed, orange-coloured clay (Fig. 25: 1).

The third is made of well baked greyish clay, with a red slip; it is flat (Fig. 25: 2).

V. *Handles.*

(a) *Ear handles.* See above (Fig. 24: 1).

(b) *Loop handles.* This Level produced fragments of 3 flat loop handles with splayed attachment, 2 in layer 7, 1 in layer 6, similar to those of Level I.

VI. *Decorated sherds.*

(a) *Painted decoration.*

To those already described, one must add one sherd from layer 6; made of well levigated orange-coloured clay, it bears two parallel wavy stripes: one is red, the other purple (Fig. 25: 4).

(b) *Modelled decoration.*

2 sherds come from layer 6.

One has a finger impressed band similar to those of Level I.

On the other, a rope-shape ornament runs all around the collar of the jar, which has a red slip inside and out (Fig. 25: 3).

C. Comparative study.

The *hole mouth jar with a wide opening and a straight rim* derives from the Middle Chalcolithic A type; it is widely known in Middle Chalcolithic B assemblages⁵⁵.

The *hole mouth jar with narrow opening and a thin rim* is quite typical of the latter phase and occurs on several sites²³.

The *jar with a short everted neck and sloping shoulders* is not very common but characteristic of Middle Chalcolithic B⁵⁶.

The *ear handle with thin elongated attachment* is an elaborate type well known on a number of sites of the same period⁵⁷.

The *loop handles with splayed attachment* are a survival of Level I, but they are noticeably less typical than those found in this Level and the related sites⁷.

The simple *bands of red paint especially near the rim* are most common on all the sites already referred to.

Curved bands of red paint such as those of Fig. 24: 2 are paralleled at Teleilat Ghassul, Murabba'at, Bir Abu Matar and Wadi Ghazzeah O⁵⁸.

Cross-hatchings in dark or pale red call for the same correlations as the specimen from Level I⁵⁴.

Finger impressed raised bands are common in Middle Chalcolithic B sites⁵⁹.

The naturalistic style of the *rope shaped ornament* is not so frequent but still attested in the same phase⁶⁰.

The connections of the pottery of Tell Abu Habil II seem rather tenuous with Northern Palestine: Beth Shan XVII, Affuleh, Megiddo XX-XIX, Tell Fendi, Tell es-Saidiyeh el-Tahta and Tell el Far'ah I. On the contrary, they are very numerous with the south: Khirbet el-Auja el-Fôqa, Jericho VIII and t. 354-356, Ghassul, Murabba'at, Bnei Braq, Bir Abu Matar and Wadi Ghazzeah (especially Sites A and O).

The Flint industry.

Only 6 pieces came from this Level, 3 in layer 7 and 3 in 6.

A *round scraper* is a fine implement; it is made on a big flake of ochre-coloured flint; fine pressure flaking covers almost all the circumference; the maximum thickness is 12 mm.; fire seems to have altered the colour and caused part of the edge to break off. This tool was excavated in layer 7 (Fig. 27: 2).

3 thin and narrow *blades* without any retouch:

2 are from layer 7, one 60 mm. long in white flint; the other 80 mm, long in greyish flint with a prepared striking platform.

The third, from layer 6, 48 mm. long, is made of mauve coloured flint with part of the core remaining.

2 *flakes* in layer 6, both in mauve coloured flint with part of the cortex remaining, measure 49 and 37 mm.

The Chronological Situation of Level II.

This Level can be termed Middle Chalcolithic B. It may be called "Ghassulian" only in a wide sense of the word, as the most characteristic shapes (cornets, bird-vases, spouted vessels, fine cups, etc.) are missing. The survival of the loop-handle with splayed attachment seems typical of Northern Palestine.

Level III

The top layers represent the main occupation period at Tell Abu Habil.

Description of the layers.

Layer 5.

All over the trench extends a floor that possibly seals the dwelling pits of Levels I—II. It is a mixture of hard beaten earth, gravel, charcoal and bones; it is very uneven and 10 to 30 cm. thick. In the south-western corner of the trench, this floor fills up a shallow depression and a series of stone boulders appears in the section. The north-western corner is occupied by an oval platform of small stones piled up; this structure, about 12 cm. high, was packed with artifacts and was probably a hearth (Fig. 22).

Layer 4.

On top of the floor is a deposit of soft brown earth, with greyish streaks. The archaeological remains are less numerous than in the former occupation layer.

Layer 3.

Patches of greyish earth mixed with gravel, charcoal and charred bones occur in the south-east and the north-west, exactly over previous fireplaces. The reason may be that the accumulation of rubbish made necessary a rebuilding of the hearths.

Layer 2.

The brown soft earth continues to the surface, with a great quantity of sherds and flints.

Layer 1.

The last 10 cm. are a black humus that still furnishes archaeological material.

The Pottery.

A. Technical features.

From the technical point of view, there is no real difference between the Level III ware and that of Levels I — II. The surface of the sherds is more carefully smoothed and more even.

B. Shapes and decoration.

I. *Bowls.*

(a) *straight sided bowl.*

This type numbers 18 bowls, among which 14 are from layer 5, 1 from layer 4, 2 from layer 3 and 1 from layer 2.

It is a medium-sized drinking vessel, with a conical shape and straight-sided walls; the rim is sharp or rounded, very often decorated by a band of red paint.

One rather large specimen is made of well finished buff clay (Fig. 25 : 5).

Another one, also from layer 5, in orange-coloured clay, shows remains of a red slip inside and outside (Fig. 25 : 6).

The best preserved comes from layer 4; made of well levigated white clay, it has a wide band of dark red paint on the sides of the lip (Fig. 26 : 1).

(b) *hemispheric bowl.*

Closely related to the former type, this one is much less common and occurs only in layer 2 with 3 specimens. The sides are curved and the rims sharp; pink clay is used to make these cups, whose average size is similar to that of the first type; a white slip covers the outer surface, which is also adorned with a band of red paint at the lip (Fig. 26 : 7).

(c) *coarse bowls.* 3 examples.

One bowl from layer 4 is made of crude dark red clay; the surface is roughly smoothed with some sort of grass; the rim is thick and rounded (Fig. 26 : 3).

One bowl from layer 3 is very shallow and looks more like a platter; it is made of coarse pink clay, with a dark red slip all over (Fig. 26 : 5).

One bowl from layer 2 is 10 mm. thick near the rim; the diameter was presumably large; a red slip covers the surface.

II. *Pithoi*.

(a) *with a straight rim.*

2 large vessels with a wide opening were found in layer 4. They have a very short straight neck, and thick walls. A modelled band, with finger impressions runs around the shoulder, very near to the base of the neck. The paste is coarse.

One is orange - coloured. The other, in friable greyish clay, has remnants of a reddish brown wash all over the surface (Fig. 26 : 4).

(b) *with a flaring rim.*

3 medium-sized to large pots have a short neck with a flaring rim; they are also of coarse fabric.

One from layer 3 is made of greyish clay.

The second one from layer 2 is much smaller; the clay is pink; the wall is rough and uneven inside, but coated by a yellowish-white slip outside (Fig. 26 : 12).

The third, also from layer 2, made of white clay, bears patches of a red slip inside and out (Fig. 26 : 13).

III. *Hole - mouth jars.*

(a) *with a wide opening and a straight rim.*

These hole-mouth vessels have straight incurved walls; 8 examples were identified; 4 come from layer 5, 2 from layer 3 and 2 from layer 2.

Layer 5 :

One, in coarse pink clay, has a red slip outside (Fig. 25 : 8).

One has a small diameter and blots of red paint inside (Fig. 25 : 9).

One is orange-coloured, with a large band of red paint outside (Fig. 25 : 10).

The last, made of light yellow clay, has a wide band of dark red paint inside the rim; outside, there is a narrow band of red paint, then a zone of irregular cross-hatched lines, then another band similar to the upper one (Fig. 25 : 11).

Layer 3 : the 3 specimens from layer 3 resemble the second one of layer 7. One is very crude; the other, buff-coloured, has thin walls. Both have red paint outside and over the lip.

Layer 2 : one, made of coarse red paste, has a flat rim (Fig. 26 : 9); the other, very large, is of black clay with a white slip (Fig. 26 : 10).

(b) *with a narrow opening and thin rim.*

8 of this type were found, 2 in layer 5, 2 in layer 3 and 4 in layer 2, all similar to those of Level II.

Layer 5 : one is made of black clay with a white slip and a band of red paint outside the lip (Fig. 25 : 7).

Layer 3 : both are orange-coloured; one has a red slip all over.

Layer 2 :

One in buff clay is smoothed outside and pinkish inside (Fig. 26 : 11).

One, pink in colour, has a smoothed outer surface.

One, made of greyish clay, has thick walls and a thick rim.

The last differs from all the others by its large diameter; it is coarse and made with crude red paste.

(c) *hole mouth jar with a wavy lip.*

A small pot from layer 2, made of sandy greyish clay, has a peculiar rim, very sharp and undulating (Fig. 26 : 8).

IV. *Jar with a swelling neck.*

One medium-sized jar has a swelling neck with an everted rim. The material is crude grey clay. Two bands of red paint, very much eroded, appear at the rim and at the collar. This shape was found in layer 4 (Fig. 26 : 2); several fragments of the same type were recorded in layer 2.

V. *Footed vessel.*

A low pedestal was found in layer 5; it is coated inside with a red slip. It probably belongs to a goblet or bowl of the conical type (Fig. 25 : 12).

VI. *Bases.*

Numerous large pieces or fragments of bases were found all through Level III. They all are flat; the meeting with the wall is sometimes sharp, sometimes rounded; a few examples are ring bases.

One from layer 5 belongs to the last category; the clay is coarse and unevenly baked, varying from black to pink; it is decorated by parallel bands of dark red paint (Fig. 25 : 13).

Another one, also from layer 5, with a sharp edge, is made of well baked pink to grey clay (Fig. 25 : 14).

One quite similar from layer 4 has a rough surface.

A base, very much like the two preceding, in coarse buff ware with red paint outside, was found in layer 3.

The bottom of a small pot from layer 2 had a concave ring base; it is made of sandy buff clay; the walls are wavy and irregular; they have been burnt and have become greyish in colour (Fig. 26 : 14).

2 bases have *coiled mat impressions*; they belong to the rounded type. The first was found in layer 5; the clay, pink to grey in colour, is well smoothed (Fig. 25 : 15).

The second, from layer 3, is in well levigated buff material; the surface is carefully smoothed; the mat is deeply impressed in the paste (Fig. 26 : 6).

These two bases are more elaborate than the others.

VII. *Handles.*

(a) *loop handles.*

Layer 5 produced 6 fragments of loop handles : 3 look like those of Levels I-II; the 3 others are small, narrow and have a round section (Fig. 25 : 16).

Layer 2 contained several fragments of loop handles of the latter type, with an oval section. Two seem to belong to the same vessel; they are made of charred greyish black clay, with pinkish white grass-smoothed slip; traces of red paint appear on both (Fig. 26 : 15).

(b) *ear handles.*

The small ear-handle with short splayed attachment and triangular section is quite typical. 3 of this type were found in layer 5; the colour is pink (Fig. 25 : 17), orange or black.

A broken handle from layer 2, in smooth orange-coloured clay, is closely related to that group (Fig. 26 : 16).

VIII. *Decorated sherds.*

(a) *modelled bands of the primitive type.*

Modelled scalloped bands still appear on one sherd of layer 5 and one of layer 2. The second belongs to a large pot, buff-coloured; red paint covers the upper part of the sherd and produces smears over the raised band (Fig. 26 : 18).

(b) *band of large crescentiform pellets.*

This type of ornament probably derives from the former; it occurs on big jars. One sherd from layer 5, in black friable clay, has red paint on the upper part, just above the band (Fig. 25 : 18).

2 similar sherds were found in layer 4 and 2 more in layer 2, thus giving a total of 5 examples.

(c) *modelled band with thumb impressions.*

Layer 5 also has more elaborate raised bands; one is shown on Fig. 25 : 19; the other one is at the collar of a jar.

(d) *finger nail incisions.*

Series of finger nail incisions are found on 2 sherds.

One in well levigated pink clay belongs to layer 5 (Fig. 25 : 20).

The other from layer 2 is in red burnished ware, quite an unusual sherd at Tell Abu Habil (Fig. 26 : 17).

C. Comparative study.

I. *Bowls.*

(a) the *straight-sided bowl* is a very typical and widely distributed vessel of Middle Chalcolithic B⁹⁰.

(b) the *hemispheric bowl* is known in the Jordan valley and the South at the same period⁶⁰.

(c) the *shallow bowl or platter* recalls several vessels found in the same group of sites⁶².

II. *Pithoi.*

(a) the *pithos with a straight rim* is a rare type; some related vessels were found at Beth Shan XVI, Affuleh Sounding A, Bnei Braq and Teleilat Ghassul⁶³.

(b) the *pithos with a flaring rim* is better attested on Middle Chalcolithic sites⁶⁴.

III. *Hole mouth jars.*

(a) the *hole mouth jar with a wide opening and straight rim*⁵⁵ and

(b) the *hole mouth jar with a narrow opening and thin rim* have already been recorded in Level II²³.

(c) the *hole-mouth jar with a wavy or indented lip* is rare but characteristic⁶⁵.

IV. Jar with a swelling neck.

Identical with that of Tell esh-Shuna I⁶, this shape must be put into connection with the incomplete neck of Level I.

V. Footed vessel.

Low pedestals are characteristic of Middle Chalcolithic B⁶⁶.

VI. Coiled mat impressions on bases.

As was seen in Level I, they are fairly common in this period³⁵.

VII. Handles.

(a) *small, narrow loop-handles* are not very frequent, but are widely spread in the same environment²⁰.

(b) the *ear handle of the short triangular type* is one of the most usual and characteristic feature of Middle Chalcolithic B ware⁶⁷.

VIII. Decoration.

(a) *modelled bands of the primitive type*, a survival of Level II⁵⁹.

(b) the *high crescentiform pellets* are a very rare type, known only at Affuleh Sound-ing E, Tell Fendi and Wadi GhazzeH M⁶⁸.

(c) *finger impressed elaborate raised bands* on the contrary, are most common on all the involved sites⁶⁹.

(d) *incised lunulae* are typical of several contemporary sites⁷⁰.

(e) *horizontal bands of red paint* are a common feature of all the Chalcolithic ware of Palestine; so it is useless to establish comparisons on the basis of this decoration.

(f) *crosshatchings and elaborate painted designs* have already been studied in Levels I-II⁵⁴.

The pottery of Level III has several common features with that of northern sites such as Tell esh-Shuna I or Affuleh, and with the coastal plain according to the evidence from Bnei Braq. It is closely related to the neighbouring Jordan Valley settlements: Tell Fendi, Tell es-Saidiyeh el-Tahta and Khirbet el-Auja el-Fôqa. But the most significant connections seem to be with the South of Palestine: Jericho tombs 354-356 and part of Level VIII, Teleilat Ghassul and Wadi GhazzeH Site O.

The Flint industry.

The equipment is remarkably rich in comparison with the other levels and obviously adapted to an agricultural economy. Level III includes 43 pieces, among which 22 come from layer 5, 12 from layer 4, 2 from layer 3 and 7 from layer 2.

I. Hoes.

5 examples of an asymmetric tool for the purpose of tilling the soil were found.

One, complete, from layer 5, is made out of cream-coloured flint; the cutting edge is flat and straight; the butt is square; some of cortex remains in the wider part; there are numerous traces of long use (Fig. 27: 6).

One in layer 4 is broken in two pieces: the back part is missing; it is made of mauve-coloured flint; the working edge is curved and very much worn (Fig. 28: 2).

The same layer produced 2 fragments of hoes, one also in mauve-coloured flint, the other in white flint.

The finest specimen comes from layer 3; although it is worked also on the lower face like an axe, it still can be considered as an hoe. The material is fine flint, pink with purple spots. The working edge is curved and carefully ground; the butt is flat and ground, as are all the sharp ridges of the back part for the purpose of hafting the tool (Fig. 28: 3).

II. Scrapers.

4 pieces figure in this category. They all are crude *side-scrapers* and none can be compared to the one of Level II.

One in layer 5 is made from a large flat flake of cream-coloured flint; the bulb is 15 mm. thick (Fig. 27: 7).

One in layer 4 is made on a roughly circular flake of pinkish flint; the middle part is very thick, about 25 mm. (Fig. 28: 1).

The other two belong to layer 2 and are in blond flint: one is triangular, with cortex on the back (Fig. 28: 4); the other, roughly quadrangular, has the original cortex on the upper face and abrupt retouch on the two sides (Fig. 28: 5).

III. Various implements.

6 retouched flints have various uses.

2 from layer 5 are *sickle blades*:

one is of blond flint; the back is blunted by abrupt retouch, the ends are square cut, the sharp edge has fine retouch and a strong lustre (Fig. 27: 5);

the other is a terminal element, as one end is pointed; the opposite extremity is broken; the flint is cream-coloured; the two sides are finely retouched and one has a strong lustre (Fig. 27: 4).

A *borer*, also from layer 5, is made on a flat flake of blond flint, by means of two notches and small retouch inside the notches and all around the point (Fig. 27: 3).

A *wide pointed blade* in the same layer, of cream-coloured flint, has a little retouch on one edge; the piece is very much worn (Fig. 27: 8).

Layer 4 produced a *blade with irregular denticulation* on the sides; the flint is pinkish grey; the piece is 55 mm. long.

From layer 2 came a very flat *blade with a sort of tang*, made in purple blond streaked flint; the blade is pointed; one side is convex with nibbling retouch all along; the base is narrowed and thinned down for hafting; this piece may have been a razor or a sort of knife (Fig. 28: 6).

IV. Unretouched flints.

(a) *blades*. 4 examples.

3 blades without any retouch belong to layer 5: two are very flat, of cream-coloured flint, 70 mm. and 42 mm. long each; one is in fine translucent white flint and 35 mm. long.

1 blade from layer 4 was of large size: 90 mm. long, 50 mm. wide and 10 mm. thick; the material was pink flint with a greyish calcareous crust.

(b) *flakes*. 24 examples:

Layer 5: 13 crude flakes:

5 in cream-coloured flint measuring between 55 and 40 mm.,
2 in white flint 47 and 38 mm. long; 2 in pink flint 65 and 40 mm. long; 2 in mauve-coloured flint 40 and 35 mm. long; 2 in dark grey flint 45 and 35 mm. long; 1 in charred black flint 70 mm. long.

Layer 4: 6 flakes:

2 in mauve-coloured flint 50 and 33 mm. long;
3 in blond flint measuring 45, 40 and 30 mm.;
1 in black charred flint 44 mm. long.

Layer 3: 1 blond 50 mm. long flake.

Layer 2: 4 flakes:

1 is made of white flint and is 50 mm. long; the 3 others are blond and measure 45, 25 and 20 mm.

The Chronological Situation of Level III.

The correlations given by the pottery indicate that Level III belongs to the same phase as Level II, that is to say Middle Chalcolithic B. This period is almost contemporaneous with the true Ghassulian culture whose most specific features are until now missing in the northern and middle parts of the Jordan Valley.

Surface Finds

Following the excavation of the sounding described above, it may be instructive to subject Nelson Glueck's surface finds to renewed study. At the same time the numerous flint implements picked up on the surrounding plateau in the course of the excavation may add to our understanding of this settlement.

The Pottery.

From his study of the sherds collected at the so-called Khirbet Abu Habil, Nelson Glueck assumed that the place had been inhabited from the Neolithic to the Romano-Byzantine period, with great gaps in the occupation. Some of the finds are related to the Neolithic, but most belong to Early and Middle Chalcolithic⁷⁴. The very accurate plates published in the same issue give the evidence that is the basis of his statement (cf. *A.A.S.O.R.* XXV-XXVIII, Pt. II, pp. 432 ff, and pls. 12, etc.).

Neolithic.

Small ear-handle, rather clumsy and crude, with a spot of reddish brown paint on the upper part: Pl. 12 (1); 121 (1).

Ref.: Jericho IX, Wadi Ghazze O, Teleilat Ghassul.

Small jar with a sloping shoulder, rim slightly inverted, made of coarse material: Pl. 13 (9); 121 (23).

Ref.: Jericho IX.

Emphasis is laid on the relation with Jericho IX.

Early Chalcolithic.

Miniature ear-handle : Pl. 12 (10); 121[~](10).

Ref. : Wadi Ghazzeah O, Teleilat Ghassul, Tell el-Far'ah *Enéo. Moyen.*

Flat loop-handle with splayed attachment : Pl. 12 (11); 121 (11).

Ref. : Jericho VIII, Beth Shan pits under XVIII, Tell el-Far'ah *Enéo. Moyen.*

Early and Middle Chalcolithic.

Flat base with a *coiled mat impression* : Pl. 14 (7); 122 (12).

Ref. : Jericho VIII, Megiddo XX, Teleilat Ghassul, Wadi Ghazzeah O.

Flat base with a *twilled mat impression* : Pl. 14 (8); 122 (13).

Ref. : Megiddo XX, Wadi Ghazzeah O, Teleilat Ghassul.

Raised scalloped bands made of *pellets* : Pl. 14 (1, 2, 4); 122 (6, 7, 9).

Ref. : Jericho VIII, Teleilat Ghassul, Wadi Ghazzeah O and M.

Raised scalloped bands with *thumb indentations* : Pl. 14 (3); 122 (8).

Ref. : Teleilat Ghassul.

According to the definition of Early Chalcolithic in the text, the connections at this period would be with Jericho VIII, Megiddo XX, Beth Shan pits under XVIII, Teleilat Ghassul Levels II-III, Tell es-Saidiyeh el-Gharbi, Khirbet 'Ain Duq, Shaar ha-Golan, oldest sites at Wadi Ghazzeah, Tell el-Far'ah *Enéo. Moyen* and Mugharet Abu Usba.

Middle Chalcolithic.

Chalcolithic without any other precision.

Early Bronze I or II.

Middle Bronze I.

There is no discussion about the remaining figures that fall into these periods.

Here Middle Chalcolithic implies a synchronism with Ghassul IV.

A simple review of the references given for the forms of the Neolithic and Chalcolithic series discloses some discrepancies in Glueck's classification. G. E. Wright's opinion that Wadi Ghazzeah O was of Neolithic age is now discarded by most scholars; the reference to Teleilat Ghassul and Wadi Ghazzeah O is rather an indication to look towards Middle Chalcolithic. The resemblance of the two supposed Neolithic sherds to examples from Jericho IX is tenuous. Therefore it is hard to believe that there is any Neolithic at all at Tell Abu Habil either in the pottery or in the flints.

Turning to Early Chalcolithic, Glueck's concept of this period apparently involves two distinct even if partly contemporaneous groups :

A. *Early Chalcolithic or "Yarmukian" pottery*, with small loop-handles running from the neck to the shoulder of globular jars, herring-bone incisions often between bands of red paint and coarse mat impressions on bases.

These characteristic features are common to Shaar ha-Golan, Mugharet Abu Usba, part of Megiddo XX, part of Tell el-Far'ah I, a few finds at Tel Aviv and Tell es-Saidiyeh el-Gharbi, part of Jericho IX-VIII, and part of Murabba'at.

B. *Middle Chalcolithic A pottery*, with swelling-neck jars, flat loop-handles with splayed attachment and coiled mat impressions.

To this group belong Beth Shan pits and XVIII, Tell esh-Shuna I and other sites, among which is Tell Abu Habil I.

The sherds figured by Glueck on Pl. 12 (11) and 14 (1, 2, 4, 7) may be connected with the earliest Level of this site.

The former shapes, however, survive more or less through Levels II-III, our Middle Chalcolithic B, Glueck's Middle Chalcolithic. To this phase belong all the ear-handles and the twilled mat impressions.

Finally the picture given by the Middle Chalcolithic surface finds closely resembles that of Levels II - III.

I. *Straight-sided bowl.*²⁰: Pl. 13 (1); 121 (15, 19).

II. *Hemispheric bowl.*⁶¹: Pl. 13 (3); 121 (14).

III. *Pithos with a flaring rim.*⁶⁴: Pl. 13 (4 - 7, 10, 12, 14, 15);
121 (13, 17, 18, 24);
122 (1, 3, 4).

IV. *Pithos with a flaring rim and thumb impressions on the rim.*²³: Pl. 14 (13, 16);
122 (2, 5).

Unknown in the sounding, this shape is very usual in Ghassulian pottery.

V. *Hole mouth jar with a wide opening and straight rim.*⁵⁵: Pl. 13 (8, 11); 121 (22, 25).

VI. *Various flat bases.* Pl. 14 (9-13); 122 (14-18).

VII. *Base with coiled mat impression.*⁵³: Pl. 14 (7); 122 (12).

VIII. *Base with twilled mat impression.*⁷²: Pl. 14 (8); 122 (13).

Unknown in the sounding but quite typical of the phase defined above.

IX. *Loop handles with more or less splayed attachment.*

Pl. 12 (5, 9, 12) & 121 (5, 9, 12) may well be Middle Chalcolithic B.

Pl. 12 (11) & 121 (11) is certainly Middle Chalcolithic A ("Early Chalcolithic") and fits better in Tell Abu Habil I.

Pl. 12 (6) & 121 (6) is possibly EB I, as suggests the writer.

X. *Ear handles.*⁶⁷: Pl. 12 (1-4, 7, 10); 121 (1-4, 7, 10).

XI. *Small horizontal handle.* Pl. 12 (8); 121 (8).

Unknown in the sounding. Here there is an alternative:

(a) Middle Chalcolithic I — (8), considering the piece looks clumsy.

(b) Middle Chalcolithic B — (28), as this sort of lug has a concave upper face.

Glueck proposes a still later date: EB I, with a reference to Teleilat Ghassul and Tell el Hammeh.

One can presume that it belongs to Middle Chalcolithic B.

XII. *Raised scalloped bands of the primitive type.*⁵⁹: Pl. 14 (1, 2, 4, 5); 122 (6, 7, 9, 10).

XIII. *Raised scalloped bands with thumb impressions.*⁷³: Pl. 14 (3); 122 (8).

XIV. *Small jar with a short slightly inverted neck.*⁷³: Pl. 13 (9); 121 (23).

Unknown in the sounding, it is rare but recorded on several sites of the same period.

The final impression is that the bulk of the surface finds agrees with the stratified sherds to place the main occupation at Tell Abu Habil in Middle Chalcolithic B ("Middle Chalcolithic")

with strong influences of Middle Chalcolithic A ("Early Chalcolithic") at the beginning; this conclusion is not very different from that of Glueck. But he cannot be followed when he detects Neolithic remains on this site. Occasional finds of Early Bronze, Middle Bronze and Iron Ages are quite possible, but in these times the settlement shifted to some other place of the vicinity; the same statement applies to Romano-Byzantine periods.

The Flint implements.

Nelson Glueck alludes to "several early flints" found on the surface. Only one is illustrated Pl. 112 (10); it is an ordinary small *sickle blade* with two serrated edges; deeper notches on the edges are probably the result of use. This implement seems quite untypical and not obviously early.

During the recent work at Tell Abu Habil, numerous flints were picked up, among which 38 are worth recording.

I. *Hoes.*

Of a total of 9 hoes or adzes, 6 are complete.

One is almost as remarkable as that of layer 3; the material is mauve-coloured flint; the full length is 80 mm.; the cutting-edge is straight and well ground; a little cortex remains on the butt; all the middle part where the tool was fastened to the haft is carefully ground (Fig. 29: 1).

One is made of blond flint; it is 90 mm. long; the sharp edges are considerably worn (Fig. 29: 2).

One in purple and orange-coloured flint is 75 mm. long.

One in greyish blond flint has a length of 70 mm.; unlike the others, it has a splayed cutting-edge.

One in mauve-coloured flint, of coarse make, is 80 mm. long.

One in blond flint has part of the working end broken; the actual length is 70 mm.

The 3 others are reutilised portions of hoes. They may have been used as gouges.

One of blond flint is 50 mm. long (Fig. 29: 3).

One of mauve-coloured flint is 55 mm. long.

The third is made of chert; the length is 55 mm.

II. *Chisels.*

The chisel is an asymmetric tool like the hoe, but it is much narrower and has a bevelled end. 4 examples were found.

One is made of a sort of flint with yellowish patina or of chert; the upper face is retouched, the lower one being perfectly flat; it measures 75 mm. (Fig. 29: 4).

One made of yellowish to blond flint was perhaps used at both ends; it is 80 mm. long.

One in blond flint has been ground on its sharp cutting-edge; the length is 90 mm.

The last one is the longest as it reaches 95 mm.; the material is white flint; the technique is rather rough.

III. *Pick-axe.*

The pick-axe is an asymmetric tool ending in a point; the direction of the handle is parallel to the untouched lower face instead of being perpendicular as in the hoes and chisels.

2 examples were discovered.

One in blond flint is partly ground and 80 mm. long (Fig 30: 1).

The other is made of grey flint; it has a triangular section and a length of 75 mm.

IV. *Sickle blade.*

There is one complete sickle blade of blond flint; the back is blunted by large abrupt retouch; the sharp edge is denticulated and has a lustre due to use; the ends are square cut; the piece measures 43 mm. (Fig. 30: 2).

V. *Scrapers.*

7 various scrapers.

One *tabular scraper*, broken in two, with a biconical perforation in the middle; one face is convex and coated with cortex; part of the edge shows long flat pressure flaking; the material is blond flint, the maximum thickness 6 mm. (Fig. 30: 3).

One *tabular scraper*, also of blond colour and broken in two, has abrupt retouch all around; it is 8 to 5 mm. thick (Fig. 30: 4).

2 *end scrapers* on blade sections of mauve-coloured flint, well finished: one is 6 mm. thick (Fig. 30: 5), the other 10 mm.

One *discoidal scraper* made from a small round dark blond core, with abrupt retouch, is 15 mm. thick (Fig. 30: 6).

One *side scraper* made on a sort of core, 18 mm. thick.

One *scraper on a thick flake* of dark chestnut-coloured flint; the length is 40 mm., the maximum thickness 18 mm.

VI. *Borers.*

6 specimens of this implement.

One on a flake of striped mauve and white flint, with a prepared striking platform, has an Upper Palaeolithic aspect; it is 50 mm. long.

One on a blade of light mauve-coloured flint, 55 mm. long (Fig. 30: 7).

One on a cream-coloured flake, 55 mm. long.

One cream-coloured blade has two points at one end; it is very much worn; the length is 45 mm. (Fig. 30: 8).

One borer on a slender light mauve-coloured blade, 70 mm. long.

VII. *Burin.*

One burin on a violet blade 60 mm. in length (Fig. : 9).

VIII. *Points.*

2 pointed blades: one in grey flint 35 mm. long;
the other in violet flint 27 mm. long.

IX. *Notched blade.*

One notched blade of buff flint 50 mm. long (Fig. 30: 10).

X. *Retouched blades.*

5 examples.

4 are made of buff flint and measure 70, 69, 63 and 42 mm,

The last is made of blond chocolate-streaked flint; it is 60 mm. long.

The flints found on the plateau stress the agricultural character of the settlement unearthed at Tell Abu Habil.

Together with the material coming from the sounding, they provide a good idea of a Middle Chalcolithic assemblage.

III. TELL ES-SAIDIYEH EL-TAHTA

Several ancient settlements were established along the two banks of Wadi Kufrinje; the most remarkable is the huge Tell es-Saidiyeh, located on the southern border of the valley and near the western edge of the fertile plateau.

Professor Glueck made a distinction between the mound itself and a low terrace lying at its western foot; he called the former Tell es-Saidiyeh es-Sherqi and this conceals certainly the ruins of an important ancient city; the latter, named Tell es-Saidiyeh el-Gharbi, discloses evidence of very remote occupation: a few sherds with herring-bone incisions and reserved red slip of Early Chalcolithic period and a great number of EB sherds⁷⁴.

A few hundred meters westward, the plateau comes abruptly to an end over the *Zor*, a deep channel through which the Jordan river flows lazily. Half-way up the slope appears a small knoll strewn with sherds and flints; this we first called by mistake "el-Gharbi" but propose to describe under the convenient name of Tell es-Saidiyeh el-Tahta. Several Soundings made on the 15th and 25th of February 1953 proved the archaeological deposit to be very thin: the natural white clay is reached at a depth between 30 and 50 cm., except in one place where a pit goes down to 1 m. under the surface. This occurred in Trench I, a sounding 3 x 2 m. wide, thus giving a stratigraphical sequence. The artifacts however are quite homogeneous and belong to only one occupational stage.

Stratigraphical sequence.

Layer 1	— Disturbed soil, rubbish from the neighbouring farms in the <i>Zor</i> , almost sterile	0
» 2	— Soft brown earth	—10 cm.
» 3	— Grey clayish earth	—20 »
» 4	— Ashes in a pit on western side; elsewhere, natural white clay, sterile	—45 »
» 5	— Black silt in the pit	—60 »
	— Virgin soil, white clay	—100 »

Description of the layers.

Layer 5.

In the western part of the site was found a roughly circular flat-bottomed pit, about 1 m. in diameter. The filling was composed of black silt with streaks of yellow and red clay, and small slabs of white limestone; it is presumably decayed vegetable matter. At 70 cm. under the actual surface occurred a human skull lying upside down in the center of the pit; the jaw-bone was missing; unhappily, owing to the dampness, the bones were very friable and none could be saved.

The only other remains were a few coarse sherds similar to those of the upper layers.

Layer 4.

A thick deposit of ashes mixed with charcoal and charred stones occupies the upper part of the pit, that seems accordingly to have been used as an hearth; the artifacts are numerous in this stratum.

Layer 3.

A compact layer of grey clayish earth, with a high proportion of ashes, covers the whole site; 25 cm. thick, it contained a fair number of objects.

Layer 2.

Over the former layer and almost up to the surface appears soft brown earth, very rich in sherds and flints. A few rows of stones bound small square enclosures, but it was impossible to ascertain whether these structures are contemporaneous with the other remains.

The Pottery.

A. Technical features.

All the vessels are hand-made. The paste is similar to that of Tell esh-Shuna I and Tell Abu Habil; the clay comes from the site itself; fine gravel and sand is used as a temper. The ware is evenly and thoroughly baked; the colour varies from white through yellow, buff, pink, to dark red; the light coloured ware seems more refined than the dark; a few sherds are burnt and have a dark grey or black colour. Many sherds bear a calcareous crust. The faces are usually smooth, with sometimes a slip. 6 sherds show also a red burnished surface.

B. Shapes and decoration.

I. Bowls.

(a) *Small burnished bowls.*

2 small hemispheric bowls are made of well-levigated dark red clay, with burnished faces and a sharp rim (Fig. 32: 11, 12).

(b) *Bowls with a sharp lip.*

8 bowls are made of well levigated white clay; the diameter at the rim is about 20 cm.; the walls are thin and the lip sharp; the general shape is conical or slightly incurved; a band of red paint runs all over the rim (Fig. 32: 14, 17).

(c) *Bowls with a thick wall and rounded lid.*

10 plain coarse bowls have a rounded lip; they all differ by the size and details of the shape (Fig. 32: 7, 8, 15).

(d) *Big bowls with a raised band at the rim.*

2 large bowls made of red clay have a raised thumb-impressed band under the lip; the faces are smooth (Fig. 32: 18).

(e) *Various bowls.*

5 bowls do not belong to any of the previous series:

One has a *strongly inverted sharp rim*; the material is well-levigated and carefully smoothed clay (Fig. 32: 21).

One is a hemispheric bowl with a *flaring rounded rim*; the base may have been rounded; the clay is of coarse make and orange-coloured (Fig. 32: 19).

One has a rather thin wall and a *bevelled rim*; the paste is crude (Fig. 32: 16).

One is a large thick-walled vessel with a *square-cut rim*; the clay is black in colour (Fig. 32: 20).

One, very irregular, is probably a *platter*; it is shallow with a rounded rim; the paste is coarse and burnt (Fig. 32: 13).

II. *Pithoi*.

The pithoi are very numerous; 27 were identified, so that they are the same number as the bowls.

(a) *Pithos with an everted rim.*

20 vessels enter into this category; some are decorated.

One has a wide red band under the rim followed by a line of small circular depressions (Fig. 33: 7).

One has vertical parallel bands of dark red paint outside and a thin band of the same inside the rim (Fig. 33: 8).

One has a white outer slip; on top of this, parallel horizontal bands of red paint are traced on the lip and the body of the vessel (Fig. 33: 9).

One bears traces of a red slip inside and outside (Fig. 33: 10).

One has a flaring rim; it is made of yellow clay with a pinkish slip (Fig. 33: 11).

One has a strongly everted rim with a thickening at the curve leading to the shoulder (Fig. 33: 12).

(b) *Pithos with a raised or impressed band at the collar.*

7 large pithoi have relief decoration at the collar.

One has thick walls; the rim is worn; the raised band bears irregular finger-made impressions (Fig. 32: 10).

One is made of buff ware; near the outset of the body appears a series of neat bound finger-made impressions (Fig. 33: 4).

One vessel made of coarse greyish ware has the same ornament.

2 examples have a thickened rim with a sharp lip; there are traces of a red slip outside and a little underneath the edge; at the outset of the body is a series of raised scalloped pellets (Fig. 33: 5).

2 others have a slightly thinned rim; the paste is very coarse: at the bottom of the neck runs a line of incised lunulae (Fig. 33: 6).

III. *Hole mouth jars.*

The hole mouth jars are scarce: only 6 clumsy examples were found; they all have a more or less wide opening.

2 have thick walls and a smooth surface (Fig. 32: 1; 33: 1).

One is made of smooth levigated white clay (Fig. 32: 2).

One other is also rather refined (Fig. 33: 2).

One has a slight groove near the rim; the clay is coarse, red in colour with a brown outer surface (Fig. 32: 9).

One has an everted rim; made of pink smoothed clay, it bears a red painted band all over the rim (Fig. 33: 3).

IV. *Jars with a pyramidal neck.*

4 jars have a neck that becomes more and more narrow towards the rim which is everted. 2 are rather clumsy and coarse; one made of pinkish clay (Fig. 33: 13), the other of buff clay (Fig. 33: 14).

One is a small jar in buff ware; it is coated with a white slip, over which are disposed parallel vertical red painted bands outside and a red band inside all around the rim; the lip is thin and rounded (Fig. 33: 15).

The last is made of orange-coloured clay with traces of a red slip; the walls are thin and smooth; there is an ear-handle at the collar, with widely splayed attachments, one on the neck, the other on the shoulder. Another ear-handle probably existed on the opposite side of the jug. The diameter is difficult to measure (Fig. 33: 16).

V. *Jars with a straight neck.*

2 small jars can be considered together here, although they are quite different from one another.

The first is very small, made of pink coarse ware, with a brown slip; the walls are quite thin. The neck is short, straight, with a rounded lip (Fig. 32: 3).

The second is medium-sized; the material is black crude ware. The walls are thick and irregular; the rim is rounded; the body of the pot is roughly cylindrical with a slight enlarging at the base of the neck; here is fixed a small ear-handle with a round section. The base is thick and flat (Fig. 34: 6).

VI. *Bases.*

The bases are flat and similar to those of the sites described above. One however deserves special notice because of its mat impression. In the north-eastern corner of Trench I, the lower part of a large storage-jar was sunk into the natural white clay; the part remaining *in situ* was 30 cm. high but the jar was originally much higher as the fracture occurred underneath the maximum width; the top of the preserved part was 53 cm. in diameter and at the level of the ashes of layer 4; therefore the bottom was at a depth of 75 cm.

This jar is made of very hard whitish clay tempered with tiny pebbles; the average thickness of the wall is 1 cm. The inside surface is rough and uneven; the outer one is entirely smoothed with some herb or vegetable fibre.

The base has a diameter of 16cm. and a very well preserved *twilled mat impression*, the only example known at Tell es-Saidiyeh el-Tahta (Fig. 31).

VII. *Handles.*

(a) *Vertical ear-handles.*

9 ear-handles are vertical with splayed attachments and triangular in shape and section. One has a red spot on the upper attachment and vertical red painted band by its side (Fig. 32: 6).

The others are without decoration (Fig. 33: 16; 34: 6, 7).

(b) *Loop-handles.*

4 small loop-handles have slightly splayed attachments.

2 broken examples have a round section.

One is flat on the edge, so that the section is semicircular.

The fourth is flat inside and rounded outside with a vertical groove on the edge; the surfaces are smooth (Fig. 32: 5).

(c) *Horizontal ear-handle.*

One small sharp pierced ear-handle is horizontal (Fig. 34: 5).

(d) *Horizontal lug.*

A very small unpierced horizontal handle was found (Fig. 34: 1).

(e) *Horizontal ledge-handles.*

5 large unpierced horizontal handles belong to this class.

One is wide, very flat, with a plain edge and smears of red paint on the upper part (Fig. 34: 2).

The four others have a scalloped or indented edge :

three are thin (Fig. 32: 4; 34: 3).

the last is thick, upturned, and covered with streaks of red paint all over (Fig. 34: 4).

VIII. *Decoration.*

(a) *Horizontal painted decoration.*

A fair number of sherds with broad or thin red painted horizontal bands are in addition to those recorded in the earlier paragraphs; they are single or in parallel series.

(b) *Vertical painted decoration.*

3 instances of this type of decoration have already been described.

Special mention must be made of a fourth one: vertical stripes of red paint occur on a juglet or small bottle, made of pink ware, with a fragment of an ear-handle on the belly (Fig. 34: 8).

(c) *Bands of raised scalloped pellets.*

4 sherds bear the same ornament as the two pithoi of which one is figured on Fig. 33: 5 and two bowls like Fig. 32: 18.

(d) *Raised thumb-impressed bands.*

One sherd with a raised band bearing slight impressions is similar to Fig. 32: 10.

(e) *Finger-impressed circular depressions.*

One sherd has small finger impressions like those on the two pithoi of the type of Fig. 33: 7.

(d) *Incised lunulae.*

Curved nail-incisions, more carefully done than on the two pithoi like Fig. 33: 6, occur on two sherds also adorned by bands of red paint: one is made of coarse ware (Fig. 34: 10); the other in well levigated clay has one row of lunulae and another one probably of straight incisions; red paint partly covers the incisions (Fig. 34: 11).

(g) *Straight incisions.*

The base of the neck of a large jar or pithos has a slightly raised band with a series of long parallel straight incisions (Fig. 34: 9).

C. Comparative study.

Most of the pottery belongs to the Middle Chalcolithic B group, but some shapes seem to be related to Late Chalcolithic; others may pertain to one or the other of these two classes.

1. Middle Chalcolithic shapes.

The *fine conical bowl* is quite typical of Ghassulian pottery²⁰.

The *bowl with a flat rim* is similar to those from Tell esh-Shuna I - II (Fig. 3: 21; 10: 8) and Tell Abu Habil (Fig. 23: 3).

The *platter* is rare but recorded on several sites⁶².

The *pithos with an everted rim* is well represented in the same assemblage⁶⁴.

The *jar with a very short neck* is known on a few sites⁷³.

One type of *pithos with a thick rim and sharp lip* seems typical of Middle Chalcolithic B⁷⁵.

The *jar with a pyramidal neck* is also quite characteristic²⁴.

The *twilled mat impression* is a typical feature of Ghassulian⁷².

The same can be said of the *triangular vertical ear-handle* which is most common⁶⁷.

The *small loop-handle* is frequent²⁶.

The *triangular horizontal ear-handle* is widely spread in Ghassulian pottery⁷⁶.

The *small horizontal unpierced handle* is also well known²⁸.

The *raised band with series of shallow depressions*, although rare, seems attested in the same ware⁷⁷.

The *incised lunulae* are more common⁷⁰.

2. Late Chalcolithic shapes.

The *small red burnished bowls* can easily be paralleled from some Late Chalcolithic sites⁷⁸.

The *globular bowls with a sharp rim* is similar to bowls from Tell el-Far'ah II²⁹.

The *hemispheric bowl with a flaring rim* seems unusual in a Middle Chalcolithic context although no exact parallel is obvious.

The *ledge-handle with a plain edge* does not occur before Late Chalcolithic³².

The *vertical strips of red paint* are typical of this phase in Northern Palestine³⁵.

The *series of hollow round impressions* seem to belong also to this assemblage⁷⁹.

The *long straight incisions on a raised band* find their best parallels in this period³¹.

The *pithos with a thick flaring rim* can be added to the former shapes, according to the evidence from several sites³¹.

3. Shapes that are common to Middle Chalcolithic B and Late Chalcolithic.

Among the remaining shapes, some are untypical but others are well defined, although they may occur in both stages.

The *bowl with a raised scalloped band at the rim* recalls one from Tell esh-Shuna II (Fig. 10: 13). It is closely related to the Ghassulian pithos with a raised ornament under the rim²² but would not be unfamiliar in a Late Chalcolithic context.

The *pithos with raised or impressed decoration at the collar* is common to both⁸⁰.

The *more or less wide open hole-mouth with a thin rim*²³,

the *scalloped raised bands*⁶⁹,

the *painted horizontal bands of red colour*,

are very usual in both and can not serve as an argument.

The *thumb-indented ledge-handle* can also belong either to Middle Chalcolithic B⁸¹ to or Late Chalcolithic³³, where it is more common but often has deeper indentations than those shown on the present example.

The numerous relations with Jericho VIII and tombs 354-356, Teleilat Ghassul, Tell Abu Habil and Wadi Ghazzeah O suggest a date in Middle Chalcolithic — while the connections with Tell esh-Shuna II and Affuleh point towards Late Chalcolithic.

The Flint and Stone industry.

A. Sounding I — 8 pieces.

I. *Hoes.*

4 examples, of which 3 belong to layer 4 and the last to layer 2.

One in white blond streaked flint is worn at the cutting-edge; the length is 90 mm. (Fig. 35: 1).

One is made of mauve-white streaked flint; there is cortex on the upper face in the thicker portion of the piece; the cutting-edge seems worn and shows long flat pressure flaking; the length is 70 mm. (Fig. 35: 2).

One is made of greyish blue flint; the cutting-edge is curved and slightly ground; this piece, 60 mm. long, does not seem to have been very much used (Fig. 35: 3).

One is made of mauve and white variegated flint; the working-edge is broken; the piece is rather worn; a great part of it is covered by a calcareous crust; the actual length is 107 mm., the width 40 mm. and the maximum thickness 27 mm.

II. *Flakes.*

3 unretouched flakes.

One of buff ware, 53 mm. long, in layer 4.

One of pink flint, 50 mm. long, in layer 3.

One of grey blond streaked flint, 35 mm. long, in layer 2.

III. *Basalt bowl.*

The rim of a basalt bowl was also found in this sounding; it is carefully ground and smoothed (Fig. 34: 12).

B. Other Soundings and Surface — 24 pieces.

I. *Borers* — 2 examples.

One on a thick large flake of blue white specked flint (Fig. 36: 1).

The other on a slender blade of blond flint with a fine long point (Fig. 36: 2).

II. *Retouched blades* — 2 examples.

One is small and mauve-coloured; the edges are deeply retouched (Fig. 36: 3).

One is very long, made of blond flint; the back is roughly blunted; the sharp edge shows slight flaking; one end is square; this implement may have been part of a saw (Fig. 36: 4).

III. *Scrapers* — 3 coarse specimens.

One on the side of a wide flake of whitish flint (Fig. 36: 5).

One on a large mauve white-specked flake.

One on a round flat flake of purple flint is a clumsy circular scraper (Fig. 36: 7).

IV. *Sickle blades* — 8 of various size and shape.

One is made from a wide flake of cream-coloured flint and is almost square; the two ends are carefully squared; one edge has long flat pressure flaking and a very strong lustre (Fig. 36: 6).

One is very long; the back is blunted by abrupt retouch; the cutting-edge is entirely denticulated by irregular nibbling retouch and shows a strong lustre; the material is blond flint (Fig. 36: 8).

One is medium-sized and rectangular; it is made of blond flint; the two edges are sharp, but only one has been used; the latter shows some flaking on the lower face and a lustre on the upper face (Fig. 36: 9).

One is thinned down and broken at one end; one edge has lustre; the material is mauve-coloured flint; this piece is possibly the terminal element of a sickle (Fig. 36: 10).

One is not of Cananean technique as are the others and has a triangular section; the back is carefully blunted by abrupt retouch; one end is neatly straightened by long pressure flaking; the sharp edge is roughly serrated and has a lustre; this tool of blond flint is of good make (Fig. 36: 11).

One is very much like the third, rectangular with two sharp edges, only one having been used and bearing a lustre; one end is covered of long flat retouch; it is made of blond flint (Fig. 36: 12).

One is a small blade of blond flint; one end is squared by long pressure flaking; the two edges were denticulated by nibbling retouch and had the characteristic lustre, which appeared also on the central ridge; later on, part of one edge was blunted (Fig. 36: 13).

One is a blond coloured blade section with the back deeply blunted by long pressure flaking; the sharp cutting-edge is straight; this implement may have been used as a razor (Fig. 36: 14).

V. *Unretouched blades*. 5 specimens.

One made of cream-coloured flint is 48 mm. long.

One is mauve-coloured with white specks; the length is 32 mm.

One is made of grey flint and is 21 mm. long.

2 are of blond flint and measure 17 and 30 mm.

VI. *Flakes*. 4 examples.

2 are made of mauve-coloured white-specked flint; their respective length is 25 and 20 mm.

One made of white flint is 24 mm. long.

One, 24 mm. long too, is made of violet transparent flint or possibly obsidian.

The worked stones are not very abundant but are of fairly good quality. The whole equipment is well adapted to food-producing and has a typical agricultural character; it very much resembles that of Tell Abu Habil III.

The Chronological Situation of Tell es-Saidiyeh el-Tahta.

The study of the pottery and that of the flints and stone implements agree to locate this small settlement on the same horizon as Tell esh-Shuna II and Tell Abu Habil II-III. To resolve the contradictions apparently included in the former statement, one must assume for Tell es-Saidiyeh el-Tahta a late date in Middle Chalcolithic B. The possibility of a Ghassulian survival side by side with the Late Chalcolithic in the North is not entirely excluded.

CONCLUSIONS.

The results of these three soundings are necessarily provisional since extensive excavations have not been made at Tell esh-Shuna or Tell Abu Habil, nor at the imposing Tell near Tell es-Saidiyeh el-Tahta. Tell es-Shuna, however, provides us with a good stratification, which agrees well with the sequence at Beth Shan and thus confirms the findings made at the latter site. Tell Abu Habil and Tell es-Saidiyeh el-Tahta do not, unfortunately, remedy the lack of stratified material in the *Ghor* between Beth Shan and Jericho.

Finally, the writer is fully aware of the tentative nature of this limited contribution to the discussion of the Chalcolithic period in Palestine.

Jerusalem, 1955.

HENRI DE CONTENSON

LIST OF ABBREVIATIONS IN NOTES

- AASOR — Annual of the American Schools of Oriental Research.
BIES — Bulletin of the Israel Exploration Society.
BP II — Beth Pelet II, Prehistoric Fara — by E. Macdonald (London, 1932).
Gez. Exc. — The Excavation of Gezer — by R.A.S. Macalister (London, 1912).
IEJ — Israel Exploration Journal.
IPH — Institut de Paléontologie Humaine,
JPOS — Journal of the Palestine Oriental Society.
LAAA — Liverpool Annals of Archaeology and Anthropology.
M II — Megiddo II, Seasons of 1935 - 1939 — by G. Loud (Chicago, 1948).
MJ — The Museum Journal.
N. Exc. — Excavations at Tell en-Nasbeh — by W. F. Bade (Berkeley, 1947).
PEF — Palestine Exploration Fund, Quarterly Statement.
PEQ — Palestine Exploration Quarterly.
QDAP — Quarterly of the Department of Antiquities in Palestine.
RB — Revue Biblique.
RPG — Researches in Prehistoric Galilee — by F. Turville-Petre (London, 1927).
SAOC — Studies in Ancient Oriental Civilizations.
TG I — Teleilat Ghassul I (1929 - 1932) — by A. Mallon (Rome, 1934).
TG II — Teleilat Ghassul II (1933 - 1936) — by R. Koeppel (Rome, 1940).

NOTES

- 1 Beth Shan — PEF 1934, pp. 124 - 125, Pl. I 1.
MJ 1935, p. 6 - 7.
- 2 Jericho — PEQ 1954, pp. 54 - 55, Fig. 2.
- 3 Tell esh Shuna I — Fig. 3.
Beth Shan pits and XVIII — MJ 1935, Pl. II 27, III 19.
Tell el Far'ah I — RB 1947, Fig. 1 (8, 24, 27 - 29).
Jericho VIII — LAAA 1935, Pl. XL 15, 24; XLI 18.
" 1936, " XXIX 19, 21; XXXII 34 a; XXXIII 7.
Tell esh Shuna I — Fig. 4: 4, 5.
- 4 Beth Shan pits and XVIII — MJ 1935, Pl. I 26.
Jerich VIII — LAAA 1935, Pl. XL 18, 27, 28; XLII 1, 4, 21.
" 1936, " XXXII 25a, 29a, 34b.
- 5 Tell esh Shuna I — Fig. 4: 1 - 3, 6 - 12.
Beth Shan pits and XVIII — MJ 1935, Pl. I 22, II 18, 25, III 18.
Jericho VIII — LAAA 1935, Pl. XLII 29.
- 6 Tell esh Shuna I — Fig. 5: 3, 5; 6.
Beth Shan XVIII — MJ 1935, Pl. I 19, 25.
Tell Abu Habil — Fig. 23; 2; 26: 2.
Khirbet 'Ain Duq — unpublished.
Jericho VIII — LAAA 1935, Pl. XL 3 - 5.
" 1936, " XXXII 21, XXXIII 18, XXXIII 18, XLa, b.
Murabba'at — RB 1953, Fig. 1 (14); Pl. IX 3 and unpublished.
- 7 Tell esh Shuna I — Fig. 6; 7: 1 - 9.
Beth Shan pits and XVIII — MJ 1935, Pl. II 16, 18 - 26.
Tell Abu Habil — AASOR 1949/50, Pl. 12 (5, 6, 9, 11, 12),
121 (5, 6, 9, 11, 12).
Fig. 23: 7, 12.
Tell el Far'ah I — RB 1947, Fig. 1 (18, 19, 33, 36),
Pl. XIII 1 - 3, 5; XIV 15.
RB 1948, Fig. 1 (3).
Khirbet 'Ain Duq — unpublished.
Jericho VIII — LAAA 1935, Pl. XLI 14, 15, 21.
" 1936, " XXXI 19; XXXII 27.
Murabba'at — RB 1953, Fig. 1 (1) and unpublished.
- 8 Tell esh Shuna I — Fig. 7: 10.
Beth Shan XVIII — MJ 1935, Pl. II 14.
Tell Abu Habil — AASOR 1949/50, Pl. 12 (8), 121 (8).
Jericho VIII — LAAA 1935, Pl. XL 27; XLI 8 - 12.
Murabba'at — unpublished.
- 9 Tell esh Shuna I — passim.
Beth Shan pits and XVIII — MJ 1935, Pl. I 19, 26; III 19.
Khirbet 'Ain Duq — unpublished.
Jericho VIII — LAAA 1935, Pl. XL 5, 18, 27, 28; XLII 3.
" 1936, " XXXIII 34 a, 34 b.
Murabba'at — RB 1953, Fig. 1 (11) and unpublished.
- 10 Tell esh Shuna I — Fig. 4: 11.
Beth Shan pits and XVIII — MJ 1935, Pl. I 22; II 25; III 17, 18, 20.
Tell el Far'ah I — RB 1947, Fig. 1 (24).
- 11 Tell esh Shuna I — Fig. 4: 1, 13, 14, 15; 7, 1.
Beth Shan XVIII — MJ 1935, Pl. 25, 26.
Tell Abu Habil — AASOR 1949/50, Pl. 122 (6, 7, 9, 10). Fig. 23: 8, 9.
Tell el Far'ah I — RB 1947, Fig. 1 (30, 33).
Jericho VIII — LAAA 1935, Pl. XLI 28.
Murabba'at — RB 1953, Fig. 1 (23) and unpublished.
- 12 Tell esh Shuna I — Fig. 4: 14.
Khirbet 'Ain Duq — AASOR 1949/50, Pl. 15 (1 - 7).
Jericho VIII — LAAA 1935, Pl. XL 15; XLI 18, 19, 25, 27.

- 13 Tell esh Shuna I — Fig. 15: 2.
 Shaar ha Golan — IEJ 1950/51, Fig. 4 (8).
 Abu Gosh — Syria 1952, Pl. IX 9 - 10, 13.
 Jericho — LAAA 1935, Pl. LVIII a 6 - 11.
 LAAA 1937, Pl. IX B 16, 17.
 el Khiam — Archives de l'IPH N° 24, Fig. 73 (9).
- 14 Tell esh Shuna I — Fig. 15: 9.
 Shaar ha Golan — IEJ 1950/51, Fig. 8 (15).
 Jericho — LAAA 1937, Pl. VII A 1, 2; IX A 11.
- 15 Tell esh Shuna II — Fig. 9: 1, 2.
 Beth Shan XVI — MJ 1935, Pl. III 2.
 Affuleh — JPOS 1948, Pl. II 1 - 3, 9.
 Megiddo XX - XIX — SAOC 10, Fig. 6 (18 B).
 SAOC 16, Pl. 18 (20, 21).
 Tell el Far'ah II — RB 1947, Fig. 2 (12).
- 16 Tell esh Shuna II — Fig. 9: 5,
 Beth Shan XVI — MJ 1935, Pl. III 4.
 Tell el Far'ah II — RB 1951, Fig. 6 (1, 3, 4, 6), 12 (8, 10, 14).
- 17 Tell esh Shuna II — Fig. 9: 7.
 Megiddo XX - XIX — SAOC 10, Chart 21 B.
 17, Pl. 19 (32); Chart XX 8.
 M. II, Pl. I 27.
 Tell el Far'ah II — RB 1949, Fig. 1 (10).
- 18 Tell esh Shuna II — Fig. 9: 8.
 Tell el Far'ah II — RB 1949, Fig. 1 (22); 8 (17, 21); 13 (17).
- 19 Tell esh Shuna II — Fig. 9: 9, 10.
 Tell el Far'ah II — RB 1949, Fig. 1 (19, 21).
- 20 Tell esh Shuna II — Fig. 10: 6 - 8.
 Tell Fendi — AASOR 1949/50, Pl. 80 (7); 149 (17).
 Tell Abu Habil — AASOR 1949/50, Pl. 13 (1); 121 (15 - 19, 21). Fig. 25: 5, 6; 26: 1.
 Tell es Saidiyeh el Tahta — Fig. 32: 14, 17.
 Tell el Far'ah I — RB 1947, Fig. 1 (4).
 Khirbet el Auja el Foqa — AASOR 1949/50, Pl. 19 (14); 124 (14).
 Jericho VIII — LAAA 1935, Pl. XL 17, 20 - 22, 25; XLII 26.
 1936, Pl. XXXIII 6.
 Tell Ghanam — AASOR 1949/50, Pl. 81 (5); 250 (1).
 Teleilat Ghassul — TG I, Fig. 43 (3).
 II, Pl. 77 (1 - 3); 79 (9, 10, 12); 96 (1, 28).
 Umm Qatafa — Syria 1931, Fig. 6 (3, 8).
 Hederah — JPOS 1937, Fig. 6 a, b, c; Pl. IV 1.
 Bnei Braq — QDAP 1946, Fig. 2 (3).
 Gezer — Exc. Pl. XXIII 18; CXXI 1, 9, 12.
 Bir Abu Matar — BIES 1654, Fig. 3 (10, 13).
 Wadi GhazzeH D 2 — BP II, Pl. XXXVIII 6, 8.
 E — " 12.
 O — " XXXIX 14 - 16, 21.
- 21 Tell esh Shuna II — Fig. 10: 1.
 Jericho VIII — LAAA 1936, Pl. XXXIII 5.
 Wadi GhazzeH D 2 — BP II, Pl. XXXVIII 7.
- 22 Tell esh Shuna II — Fig. 10: 12, 13.
 Megiddo XIX — M. II, Pl. 2 (45).
 Tell Abu Habil — AASOR 1949/50, Pl. 14 (13, 16); 122 (2, 5).
 Khirbel el Auja el Foqa — AASOR 1949/50, Pl. 19 (7, 10); 20 (6, 7); 124 (7, 10); 125 (3).
 Jericho VIII and t. 354 - 356 — LAAA 1935, Pl. XL 7, 8, 10, 11, 14;
 XLIII 3, 18, 19.
 1936, " XXXII 23b; XXXIII 4.
 Teleilat Ghassul — TG I, Fig. 41 " (11, 13, 14); 52 (6).
 II, " 81 (18, 25); 82 (7, 8, 15) 86 (20, 27).
 Murabba'at — unpublished.
 Bir Abu Matar — BIES 1954, Fig. 3 (7).

- Wadi GhazzeH D2 — BP II, Pl. XXXII 1st row, left.
 " O — " " 4th row.
 " A — " XXXV 1st, 2d (3, 4), 3d (1, 3, 5), 6th and 7th rows.
 " B — " XXXIII 5th and 6th rows.
 " M — " " 4th row.
 " " — " " 2d and 3d rows.
- 23 Tell esh Shuna II — Fig. 11: 3, 6, 8.
 Megiddo XX - XIX — SAOC 17, Chart XIX 7.
 M. II, Pl. 1 (16 - 18); 92 (6); 93 (9).
 Tell el Far'ah I — RB 1947, Fig. 1 (5).
 Tell Abu Habil — Fig. 24: 4; 25: 7; 26: 11.
 Bnei Braq — QDAP 1946, Fig. 3 (19 - 23).
 Khirbet el Auja el Foqa — AASOR 1949 / 50, Pl. 19 (11, 12); 149 (11, 12).
 Jericho VIII and t. 354 - 356 — LAAA 1935, Pl. XL 29, 30; XLII 2, 3, 7; XLIII 13, 23.
 Teleilat Ghassul — TG I, Fig. 46.
 " II, Pl. 77 (5); 82 (8 - 12); 96 A (4, 5, 7).
 Umm Qatafa — Syria 1931, Fig. 4 a, b.
 Murabba'at — RB 1953, Fig. 1 (21).
 Bir Abu Matar — BIES 1954, Fig. 3 (3, 4, 11).
 Wadi Ghazyeh O — BP II, Pl. XXXV 2d row (2) XXXIX 17.
- 24 Tell esh Shuna II — Fig. 12: 6.
 Affuleh Sounding A — JPOS 1948, Pl. V 3; VIII 22.
 Tell es Saidiyeh el Tahta — Pl. XXXIII 13 - 16.
 Jericho VIII and t. 354 - 356 — LAAA 1935, Pl. XL 12; XLIII 14.
 Teleilat Ghassoul — TG II, Pl. 77 (7); 82 (10, 11, 13, 14).
 Wadi GhazzeH O — BP II, Pl. XXXIX 19.
- 25 Tell esh Shuna II — Fig. 10: 14.
 Megiddo XX - XIX — SAOC 17, Chart XX 18, XIX 14.
 Tell Abu Habil — Fig. 23: 1.
 Murabba'at — RB 1953, Fig. 1 (2).
- 26 Tell esh Shuna II — Fig. 10: 7.
 Affuleh — JPOS 1948, Pl. I 10.
 Beth Shan XVII — MJ 1935, Pl. II 19; III 10.
 Tell Fendi — AASOR 1949 / 50, Pl. 79 (3, 4, 11, 13, 14).
 Tell Abu Habil — AASOR 1949 / 50, Pl. 12 (5, 6, 9, 12); 121 (5, 6, 9, 12).
 Jericho VIII — LAAA 1935, Pl. XLI 13, 17.
 Tell Ghanam — AASOR 1949 / 50, Pl. 81 (10, 11); 150 (4, 5).
 Teleilat Ghassul — TG I, Fig. 41 (12); 52 (8); 56 (8); Pl. 40 (1, 2, 4 - 6).
 Wadi GhazzeH A — BP II, Pl. XXXI 4th and 5th rows.
 " B — " " 3d row (2 - 4).
 " M — " " 1st row.
 " D1 — " XXX 6, 7, 9.
 " D2 — " " 2d row (1, 2).
 " E — " " , right.
 " O — " XXXV 5th row.
- 27 Tell esh Shuna II — Fig. 10: 11
 Wadi Salhab III — RPG, Pl. XXIX C, E, F.
 Mugharet et Tawamin — JPOS 1930, Fig. 2 C.
 Khirbet el Auja el Foqa — AASOR 1949 / 50, Pl. 18, (4); 125 (12).
 Jericho t. 354 - 356 — LAAA 1936, Pl. XLIII 22.
 Teleilat Ghassul — TG I, Pl. 39 (7, 8); Fig. 54.
 " II, " 92 (7).
 Bir Abu Matar — BIES 1954, Fig. 3 (7).
 Wadi GhazzeH A — BP II, Pl. XXXI 4th row (1).
 " B — " " 3d row (1).
 " M — " " 1st row (1).
 " E — " XXX 3d and 4th row.
 " O — " XXXV 5th row (6) and 8th row.
- 28 Tell esh Shuna II — Fig. 10: 8.
 Tell es Saidiyeh el Tahta — Fig. 34: 1.
 Jericho VIII — LAAA 1935, Pl. XL 27; XLI 7, 12; XLII 35.
 Teleilat Ghassul — TG I, Fig. 41 (4, 5, 7, 8); 46; 50 (2); 54 (8).
 " II, Pl. 77 (4); 91 (1 - 4, 6); 92 (2 - 6, 8, 10, 11).
 Umm Qatafa — Syria 1931, Fig. 4.

- Murabba'at — RB 1953, Fig. 1 (4).
Hederah — JPOS 1937, Fig. 8 a, c.
Bnei Braq — QDAP 1946, Pl. XVII 9.
Wadi Ghazzeah D1 — BF II, Pl. XXX 8.
" D2 — " " 2d row, 9.
" M — " XXXI 2d row, right.
" O -- " XXIX 20.
- 29 Tell esh Shuna II — Fig. 10: 9 - 11.
Tell el Far'ah II — RB 1947, Fig. 2 (25 - 27, 29).
" 1948, " 5 (20 - 23, 28).
- 30 Tell esh Shuna II — Fig. 11: 1, 2, 4, 5, 7.
Beth Shan XVI — MJ 1935, Pl. I 1, 2.
Affuleh — JPOS 1948, Pl. III 2, 3, 8, 15, 19, 20, 40.
Megiddo XIX — SAOC 17, Chart XIX 7; Pl. 17 (1, 6).
Tell el Far'ah II — RB 1947, Fig. 1 (6, 7, 26); 2 (5, 6, 8 - 11).
" 1948, " 5 (1, 3).
Tell Umm Hamad Sherqi — AASQR 1949/50, Pl. 100 (6, 7); 104 (5); 157 (7, 8).
Tell en Nasbeh, cave-dwelling 68 — N. Exc. II, Pl. 11 (166, 167).
Murabba'at — RB 1953, Fig. 1 (20).
- 31 Tell esh Shuna II — Fig. 12: 5.
Beth Shan XVI — MJ 1935, Pl. I 14.
Affuleh — JPOS 1948, Pl. V 16.
Tell es Saidiyeh el Tahta — Fig. 33: 12.
- 32 Tell esh Shuna II — Fig. 10: 9.
Affuleh — JPOS 1948, Pl. VII 17.
Megiddo XIX — SAOC 17, Pl. 17 (9 - 12).
Tell es Saidiyeh el Tahta — Fig. 34: 2.
Tell Umm Hamad Sherqi — AASOR 1949/50, Pl. 105 (1, 2, 4); 161 (11); 162 (1, 2).
- 33 Tell esh Shuna II — Fig. 10: 10.
Beth Shan XVII-XVI — MJ 1935, Pl. II 3, 5, 7, 8.
Affuleh — JPOS 1948, Pl. VII 1 - 7, 25.
Megiddo XIX — SAOC 17, Chart XIX 8, 12, 13; Pl. 18 (11, 13, 16).
Tell es Saidiyeh el Tahta — Fig. 32: 4; 33: 3, 4.
Tell el Far'ah II — RB 1947, Fig. 2 (17 - 19).
" 1948, " 5 (8, 19).
" 1949, " 8 (31).
Tell Umm Hamad Sherqi — AASOR 1949/50, Pl. 102 (5, 6, 8 - 10); 161 (2, 4, 6 - 8).
- 34 Tell esh Shuna II — Fig. 10: 14.
Beth Shan XVI — MJ 1935, Pl. I 10.
Affuleh — JPOS 1948, Pl. III 2, 8, 19, 20, 40.
Tell el Far'ah II — RB 1947, Fig. 1 (26).
" 1948, " 5 (2).
Tell es Saidiyeh el Tahta — Fig. 34: 9.
Tell Umm Hamad Sherqi — AASOR 1/949/50, Pl. 101 (4); 160 (9).
- 35 Tell esh Shuna II — Fig. 10: 15.
Megiddo XIX — SAOC 17, Pl. 19 (22).
Tell es Saidiyeh el Tahta — Fig. 33: 8, 15; 34, 8.
Tell el Far'ah II — RB 1947, Fig. 2 (28).
" 1948, " 1 (4).
- 36 Kirbet Kerak I — IEJ 1952, p. 167.
- 37 Cave near Tell el 'Asawir — RB 1955, p. 84.
- 38 Jericho — PEQ 1954, pp. 91 - 92, Pl. XL 1.
- 39 Tell esh Shuna III — Fig. 13: 3.
Beth Shan XIII — MJ 1935, Pl. V 19.
Tell el Far'ah AB I — RB 1947, Fig. 5 (4).
Megiddo XVII — M. II, Pl. 5 (11).
- 40 Tell esh Shuna III — Fig. 13: 7.
Beth Shan XIV — MJ 1935, Pl. IV 16.
Megiddo XIX — M. II, Pl. 3 (2).
XVIII — M. II, Pl. 102 (7).

- 41 Tell esh Shuna III — Fig. 13: 6.
Beth Shan XIV — MJ 1935, Pl. IV. 4.
Megiddo XVIII & Stages VII — III — SAOC 10, type 12 D, E.
MII, Pl. 101 (4-6).
Tell el Far'ah AB I — RB 1947, Fig. 3 (1, 2, 5); 5 (15).
1948, „ 6 (5).
AB IIb — „ 1947, „ 6 (8); 7 (12).
1948, „ 9 (2).
- 42 Tell esh Shuna III — Fig. 13: 4.
Beth Shan XIV — XIII — MJ 1935, Pl. IV 8, 11.
Tell el Far'ah AB I — RB 1948, Fig. 6 (2).
AB IIa — „ „ 7 (3).
- 43 Tell esh Shuna III — Fig. 13: 8.
Beth Shan XIV — MJ 1935, Pl. V 3, 4.
Megiddo XIX & Stages VII — IV — SAOC 10, type 23.
M. II, Pl. 96 (25-27).
- 44 Tell esh Shuna III — Fig. 13: 4, 5.
Beth Shan XV — XIV — MJ 1935, Pl. IV 18, 19; V 8.
XIII — „ „ V 7.
Megiddo XIX & Stages VII — V — M.II, Pl. 99 (6-14).
XVIII & Stages IV — III — SAOC 10, Fig. 8 F — J; 9.
- 45 Tell esh Shuna IV — Fig. 14: 1.
Beth Shan XIV — MJ 1935, Pl. V 20.
Megiddo XIX — M.II, Pl. 97 (51).
XVIII — SAOC 17, Chart XVIII 21.
M.II, Pl. 102 (41).
XVII — XVI — SAOC 17, Pl. 13 (8).
M.II, Pl. 5 (16, 17).
- 46 Tell esh Shuna IV — (not illustrated).
Beth Shan XIV — XIII — MJ 1935, Pl. V 15, 20, 23.
Megiddo XIX — M.II, Pl. 97 (46, 51).
XVIII — „ „ 104 (7-14).
XVII — „ „ 5 (16, 17).
XVI — „ „ 6 (17, 18).
Stages IV — I — SAOC 10, type I E.
Tell el Far'ah AB I — RB 1947, Fig. 4 (8).
AB II — „ „ 6 (2); 7 (37).
- 47 Tell esh Shuna IV — Fig. 14: 10.
Tell el Far'ah AB IIa — RB 1948, Fig. 7 (4).
- 48 Tell esh Shuna IV — Fig. 14: 11.
Beth Shan XIV — MJ 1935, Pl. IV 17.
Megiddo XIX — M.II, Pl. 97 (21).
XVIII & Stages V — III — SAOC 10, type 16 B - F.
SAOC 17, Chart XVIII 28.
- 49 Tell esh Shuna VI — Fig. 14: 2.
Megiddo XVIII & Stages IV - I — SAOC 10, type 12 A.
„ 17, Chart XVIII 40.
M. II, Pl. 4 (7); 101 (1, 2);
XVII - XVI — SAOC 17, Chart XVI - XVII 40.
Tell el Far'ah AB I — RB 1948, Fig. 6 (3, 4).
- 50 Tell esh Shuna IV — Fig. 14: 6.
Beth Shan XIV - XIII — MJ 1935, Pl. IV 10.
Megiddo XVIII — M. II, Pl. 101 (26).
Tell el Far'ah AB I — RB 1947, Fig. 5 (14).
1948, „ 6 (1).
- 51 Tell esh Shuna IV — Fig. 14: 13.
Beth Shan XIV — MJ 1935, Pl. VI 3.
Tell el Far'ah AB I — RB 1947, Fig. 5 (18).
„ II — „ „ 7 (22).

- 52 Tell esh Shuna IV — Fig. 12. —
Beth Shan XIV — MJ 1935, Pl. VI 10, 14.
Megiddo Stage V - III — SAOC 10, type 14 D.
- 53 Tell Abu Habil I & III — Fig. 23: 5; 25: 15; 26: 6.
Tell Abu Habil Surface — AASOR 1946/50, Pl. 14 (7); 122 (12).
Megiddo XX - XIX — SAOC 17, Pl. 19 (19, 20); 20 (27, 28).
M. II, Pl. 2 (16, 17); 92 (14, 15).
Jericho VIII — LAAA 1935, Pl. XVII 37; LV a (1st and 2d lines).
" 1936, " XXXII 33 A; XXXIII 24; XLII b, 33 A.
Tell Ghanam — AASOR 1949/50, Pl. 81 (13, 14); 150 (7, 8).
Teleilat Ghassul — TG I, Pl. 39 (2, 4).
" II, " 83 (10, 13, 15, 16, 18); 84 (1, 4, 6).
Wadi Ghazzeah O — BP II, Pl. XXXIV 10.
Also LAAA 1938, pp. 3-11; Pl. I 1-4.
- 54 Tell Abu Habil I - III — Fig. 23: 2; 24: 5; 25: 11.
Teleilat Ghassul — TG I, Pl. 42 (17); 50 (97); 54; 65; etc.
" II, " 76 (12); 80; 90; 96 B (4, 5); etc.
Gezer — Exc., Pl. CXXI 5.
Wadi Ghazzeah O — BP II, Pl. XXXII - XXXIV, passim.
E — unpublished.
- 55 Tell Abu Habil II - III — Fig. 24: 2, 5; 25: 8 - 11; 26: 9, 10.
Tell Fendi — AASOR 1949/50, Pl. 80 (3); 149 (12).
Tell es Saidiyeh el Tahta — Fig. 32: 1, 2, 9; 33: 1-3.
Khirbet el Auja el Foqa — AASOR 1949/50, Pl. 19 (2, 8, 9); 124 (2, 8, 9).
Jericho VIII & t. 354 - 356 LAAA 1935, Pl. XLIII 2, 9.
" 1936, " XXXII 34 b;
" XXXIII 8, 25 a, 29 a.
Teleilat Ghassul — TG II, Pl. 81 (30, 33); 82 (17 - 21); 96 (4 - 5 A).
Hederah — JPOS 1937, Fig. 6d.
Bnei Braq — QDAP 1946, Fig. 2 (1, 2); 3 (24 - 32, 36 - 58).
- 56 Tell Abu Habil II — Fig. 24: 1.
Beth Shan XVII — MJ 1935, Pl. I 18.
Affuleh — JPOS 1948, Pl. V 9.
Bnei Braq — QDAP 1946, Fig. 3 (59).
Tell el Far'ah I — RB 1947, Fig. 1 (1, 3).
Teleilat Ghassul — TG II, Pl. 96 (5B).
Murabb'at — unpublished.
Bir Abu Matar — BIES 1954, Fig. 3 (1, 2, 8, 12; Pl. G 3).
Wadi Ghazzeah A — BP II, Pl. XXIII 23; XL 31.
" D2 — " XXXVIII 5.
" M — " XXXIX 25.
- 57 Tell Abu Habil II — Fig. 24: 1.
Beth Shan XVI — MJ 1935, Pl. II 6.
Megiddo XX — SAOC 17, Pl. 19 (21); 20 (26).
Khirbet el Auja el Fôqa — AASOR 1949/50, Pl. 18 (5, 6); 125 11, 13).
Jericho t. 354 - 356 — LAAA 1935, Pl. XLIII 10, 13, 14, 16.
Teleilat Ghassul — TG I, Fig. 39, 2d line, 1.
TG II Pl. 91 91 (5); 92 (7 - 9).
Murabb'at — unpublished.
Wadi Ghazzeah A — BP II, Pl. XXXI 4th and 5th rows.
" D2 — " XXXVIII 5.
" E — " XXX 3d and 4th rows.
" O — " XXX 5th row; XXXIV; XXXV 8th; XXXIX 17, 18.
- 58 Tell Abu Habil II — Fig. 24: 2.
Teleilat Ghassul — TG I, Pl. 54 (4).
Murabb'at — unpublished.
Bir Abu Matar — BIES 1954, Fig. 3 (7, 11).
Wadi Ghazzeah O — BP II, Pl. XXXIX 9.
- 59 Tell Abu Habil II - III — Fig. 26: 18.
Beth Shan XVII — MJ 1935, Pl. III 10.
Tell Fendi — AASOR 1949/50, Pl. 79 (1, 2, 5, 6) and unpublished.
Tell es Saidiyeh el Tahta — Fig. 32: 18; 33: 5.
Tell el Far'ah I — RB 1947, Fig. 1 (6, 30).

- Khirbet el Auja el Fôqa — AASOR 1949/50, Pl. 20 (1, 4, 5 11, 13).
 Wadi GhazzeH A — BP II, Pl. XXXIII 6th row.
 „ B — „ „ 4th row.
 „ O — „ „ XXXII 4th row.
- 60 Tell Abu Habil II — Pl. XXXV 3.
 Affuleh Soundings A & E — JPOS 1948, Pl. IX 1 - 3, 7, 27.
 Jericho VIII — LAAA 1935, Pl. XLII 5.
 „ „ LAAA 1936, Pl. XXXII 23b.
 Murabba'at — unpublished.
 Wadi GhazzeH D2 — BP II, Pl. XXXII 1st row, left.
 „ M — „ „ XXXII 5th row; XXXIII 1st row.
 „ A — „ „ XXXIII 5th row (2), 6th row.
- 61 Tell Abu Habil III — Fig. 26: 7.
 Beth Shan XVII — MJ 1935, Pl. II 15; III 12, 13.
 Tell Fendi — AASOR 1949/50, Pl. 80 (4 - 6,9); 149 (6, 14, 15, 19).
 Jericho VIII — LAAA 1935, Pl. XL 16, 23, 34; XLII 22, 24, 27.
 „ „ LAAA 1936, Pl. XXXIII 5.
 Teleilat Ghassul — TG I, Fig. 42 (1, 2, 5).
 „ „ TG II, Pl. 76 (1 - 11); 79 (6 - 9); 96 (1B, 6 - 8A).
 Umm Qatafa - Syria 1934, Fig. 6 (1, 4, 5, 7).
 Murabba'at — unpublished.
 Bnei Braç — QDAP 1946, Fig. 2 (4).
 Gezer — Gez. Exc., Pl. CXXI 4.
 Bir Abu Matar — BIES 1954, Fig. 3 (10, 13).
 Wadi GhazzeH A — BP II, Pl. XL 37.
 „ D1 — „ „ XXXVIII 1.
 „ D2 — „ „ „ 7.
- 62 Tell Abu Habil III — Fig. 26: 5.
 Tell es Saidiyeh el Tahta — Fig. 32: 16.
 Jericho VIII — LAAA 1935, Pl. XL 32.
 Wadi GhazzeH D2 — BP II, Pl. XXXVIII 2, 3.
- 63 Tell Abu Habil III — Fig. 26: 4.
 Beth Shan XVI — MJ 1935, Pl. I 12.
 Affuleh Sounding A — JPOS 1948, Pl. V 14.
 Bnei Braç — QDAP 1946, Fig. 3 (60).
 Teleilat Ghassul — TG I, Fig. 37 (7).
- 64 Tell Abu Habil III — Fig. 26: 12, 13.
 Tell Fendi — AASOR 1949/50, Pl. 80 (1, 2); 149 (11, 13).
 Tell es Saidiyeh el Tahta — Fig. 33: 7 - 12.
 Khirbet el Auja el Fôqa — AASOR 1949/50, Pl. 19 (3, 13-15); 124 (3, 13-15).
 Jericho VIII & t. 354-356 — LAAA 1935, Pl. XL 6, 9; XLII 9-11; XLIII 5, 12.
 „ „ LAAA 1936, „ XXXII 23a.
 Teleilat Ghassul — TG I, Fig. 39 (6, 9); 52 (4); 54 (1).
 Murabba'at — unpublished.
 Bnei Braç — QDAP 1946, Fig. 3 (33 - 35).
 Wadi GhazzeH A — BP II Pl. XL 32.
 „ B — „ „ XXXIX 27.
 „ O — „ „ „ 18.
- 65 Tell Abu Habil III — Fig. 26: 8.
 Affuleh — JPOS 1948, Pl. III 1.
 Jericho t. 354 - 356 — LAAA 1935, Pl. XLIII 17.
 Teleilat Ghassul — TG II, Pl. 85 (1, 2).
 Wadi GhazzeH B — BP II Pl. XXXIII 4th row.
 „ M — „ „ „ 3d row.
 „ O — „ „ „ XXXV 6th and 7th rows.
- 66 Tell Abu Habil III — Fig. 25: 12.
 Beth Shan XVIII — MJ 1935, Pl. III 16.
 Megiddo XX — SAOC 17, Chart XX 6.
 Bnei Braç — QDAP 1946, Pl. XVI 7, 8.
 Jericho VIII — LAAA 1935, Pl. XL 35.
 „ „ LAAA 1936, „ XXXIII 32.
 Teleilat Ghassul — TG I, Fig. (4, 7, 8 - 16); Pl. 49 (95 - 98).
 Wadi GhazzeH O — BP II, Pl. XXXV 5th row; (5); XXXIX 21.

- 67 Tell Abu Habil Iī — Fig. 25: 17.
 Affuleh Sounding A & B — JPOS 1948, Pl. I 3; VIII 25, 26, 28, 29, 31.
 Megiddo XX — SAOC 17, Chart XX 6.
 Beth Shan XVII — MJ 1935, Pl. II 11, 12, 15.
 Tell Fendi — unpublished.
 Tell es Saidiyeh el Tahta — Fig. 32: 6; 33: 16; 34: 16, 17.
 Tell el Far'ah I — RB 1947, Fig. 1 (13-16, 35); Pl. XIII 3, 4, 6-9; XIV 6.
 Khirbet el Auja el Foqa — AASOR 1949/50, Pl. 18 (1-4, 7-10); 125 (8-10, 12, 14-17).
 Jericho VIII and t. 354-356 — LAAA 1935, Pl. XLI 20; XLII 17-19; XLIII 11, 16.
 Teleilat Ghassul — TG I, Fig. 37 (7); 45; 47; 48; 50 (3, 4, 5); 51; 52 (1, 2, 20); 53; 56 (5); 59 (1, 2, 5)
 61 (9); 63.
 Pl. 43 (103, 104); 44 (37, 38, 50-52); 45 (1); 51 (99); 54 (7).
 TG II, " 77 (3, 6, 7); 78 (2, 5, 10, 11); 91 (10, 11); 93 (1, 4, 6, 7, 11, 12); 96 B (2, 4, 5).
 Umm Qatafa — Syria 1931, Fig. 4 a, c; Pl. XIX 6, 9.
 Murabba'at — unpublished.
 Hederah — JPOS 1937, Fig. 5.
 Gezer — Gez. Exc., Pl. CXXI 5.
 Mugharet et Tawamin — JPOS 1930, Fig. 2 a.
 Bir Abu Matar — BIES 1954, Fig. 3 (8).
 Wadi Ghazzeḥ A — BP II, Pl. XXXI 4th and 5th rows; XL 33.
 " B — " " 3d row (5); XXXIX 27, 29.
 " M — " " 2d row.
 " D2 — " XXX 2d row (3, 8).
 " O — " " 5th row; XXIV; XXXV 8th row.
- 68 Tell Abu Habil III — Fig. 25: 18.
 Affuleh Sounding E — JPOS 1948, Pl. IX 19.
 Tell Fendi — unpublished.
 Wadi Ghazzeḥ M — BP II, Pl. XXXIII 1st row.
- 69 Tell Abu Habil III — Fig. 25: 19.
 Wādi Salḥah III — RPG, Pl. XXIX D, E, F.
 Affuleh Soundings A, B, D — JPOS 1948, Pl. IX 25, 26, 28, 29.
 Megiddo XX — M. II, Pl. 2 (4, 5, 49); 94 (3, 8).
 Beth Shan XVIII-XVI — MJ 1935, Pl. I 20, 21, 23, 26.
 Tell es Saidiyeh el Tahta — Fig. 32: 10.
 Khirbet el Auja el Foqa — AASOR 1949/50, Pl. 124 (7, 10).
 Tell el Far'ah I — RB 1947, Fig. 1 (10, 12).
 Jericho VIII & t. 354-356 — LAAA 1935, Pl. XL 7, 8, 10, 11, 14; XLI 28; XLIII 3, 7, 16, 18, 19.
 1936, " XXXIII 4
 Tell Ghanam — AASOR 1949/50, Pl. 81 (1-4, 6-7).
 Teleilat Ghassul — TG I, Fig. 41 (12); 50 (5); 52 (9); 60 (17); 62.
 Pl. 39 (7, 4); 53; 54.
 " II, " 81 (11); 85 (3); 87; etc.
 Umm Qatafa — Syria 1931, Fig. 9.
 Murabba'at — unpublished.
 Bir Abu Matar — BIES 1954, Fig. 3 (7).
 Wadi Ghazzeḥ D1 — BP II, Pl. XXXVIII 4.
 " D2 — " XXXII 1st row, left.
 " E — " " right.
 " O — " " 4th row; XXXV passim.
 " M — " XXXIII 2d and 3d rows.
 " B — " " 4th row; XIV 14; XXXIX 27.
 " A — " " 5th and 6th rows.
- 70 Tell Abu Habil III — Fig. 25: 20; 26: 17.
 Affuleh Sounding A — JPOS 1948, Pl. IX 21.
 Tell es Saidiyeh el Tahta — Fig. 33: 6; 34: 10, 11.
 Khirbet el Auja el Foqa — AASOR 1949/50, Pl. 20 (10, 12).
 Teleilat Ghassul — TG I, Fig. 41 (8); 51; 60 (1, 2, 4, 6-9, 18, 19); 62; Pl. 46 (1).
 " II, Pl. 86 (1-5, 12, 16-18); 88 (1-21); 93 (12).
 Wadi Ghazzeḥ D2 — BP II, XXXII 2d row, left.
 " E — " XXX 4th row; XXXII right, 1st and 2d rows.
 " O — " XXXII 4th row; XXXIV; XXXV 2d row (1), 3d row (2).
- 71 Tell Abu Habil — AASOR 1949/50, pp. 275-276, 432-435.
- 72 Tell Abu Habil Surf. — AASOR 1949/50, Pl. 14 (8); 122 (13).
 Megiddo XIX — SAOC 17, Pl. 20 (27).
 Tell es Saidiyeh el Tahta — Fig. 31.

- Jericho VIII — LAAA 1935, Pl. LV a, 1st row, left.
 Teleilat Ghassul — TG I, Fig. 40, Pl. 39 (1).
 „ II, Pl. 83 (11, 14); 84 (2, 5, 7, 9, 10, 11).
 Wadi Ghazzeah O — BP II, Pl. XXXIV 11, 12.
 E — „ p. 7.
 Also LAAA 1938, pp. 2-11, Pl. I 5-7.
- 73 Tell Abu Habil Surf. — AASOR 1949/50, Pl. 13 (9); 121 (23).
 Affuleh Sounding A — JPOS 1948, Pl. IV 1.
 Tell es Saidiyeh el Tahta — Fig. 32: 3.
 Bnei Braq — QDAP 1946, Fig. 3 (60).
 Teleilat Ghassul TG I, Fig. 37 (7).
 „ II, Pl. 78 (9).
- 74 Tell es Saidiyeh — AASOR 1949/50, pp. 290-295, 483-487.
- 75 Tell es Saidiyeh el Tahta — Fig. 33: 12.
 Jericho VIII — LAAA 1935, Pl. XLI 1-7.
 „ 1936, „ XXXII 24 a-b, 29 b.
 Teleilat Ghassul — TG I, Fig. 38 (12).
- 76 Tell es Saidiyeh el Tahta — Fig. 34: 5.
 Affuleh Sounding E — JPOS 1938, Pl. VIII 35.
 Jericho VIII and t. 354-356 — LAAA 1935, Pl. XLII 32, 33; XLIII 6, 20, 21.
 „ 1936, „ XXXII 30.
 Tell Ghanam — AASOR 1949/50, Pl. 81 (9); 150 (3).
 Teleilat Ghassul — TG I, Fig. 43 (5); 59 (1, 2); 62 (11); 56 (4). Pl. 41 (28); 43 (34-36); 51 (1).
 „ II, Pl. 76 (12-17, 21); 78 (1, 3, 4, 7, 8) 91 (7-12); 92 (1); 93 (2, 3, 5, 6, 9, 10);
 96 A (5), B (2, 4, 5).
 Murabba'at — RB 1953, Fig. 1 (7) and unpublished.
 Hederah — JPOS 1937, Fig. 6 d.
 Bnei Braq — QDAP 1946 (not figured).
 Gezer — Gezer Exc., Pl. CXLI 8.
 Wadi Ghazzeah A — BP II, Pl. XXXI 4th and 5th rows,
 „ O — „ XXXV 8th row (2, 6).
- 77 Tell es Saidiyeh el Tahta — Fig. 32: 10.
 Jericho t. 354-356 — LAAA 1935, Pl. XLIII 12.
 Teleilat Ghassul — TG I, Fig. 52 (8); Pl. 54 (5).
 Wadi Ghazzeah D2 — BP II, Pl. XXXII 1st row, left.
 „ M — „ XXXIII 3d row.
 „ O — „ XXXIV.
- 78 Tell es Saidiyeh el Tahta — Fig. 32: 11, 12.
 Tell el Far'ah II — RB 1949, Fig. 1 (2, 3, 4).
 „ 1951 „ 7 (1); 11 (6, 7, 10).
 „ 1952 „ 10 (1, 4).
- 79 Tell es Saidiyeh el Tahta — Fig. 33: 7.
 Affuleh — JPOS 1948, Pl. III 3.
 Tell Umm Hamad Sherqi — AASOR 1949/50, Pl. 106 (1, 3, 7); 103 (6, 8, 12); 157 (6, 7, 4); 158 (1); 162 (10).
- 80 Tell es Saidiyeh el Tahta — Fig. 32: 10; 33: 4-6.
 1^o Middle Chalcolithic B:
 Beth Shan XVII — MJ 1935, Pl. I 20, 21, 23, 26.
 Jericho t. 354-356 — LAAA 1935, Pl. XLIII 12.
 Teleilat Ghassul — TG I, Fig. 39 (7, 8); 53; 54.
 2^o Late Chalcolithic:
 Beth Shan XVI — MJ 1935, Pl. I 7, 11, 13, 14, 16.
 Tell en Nasbeh — Nasbeh Exc. II, Pl. 10, No. 158.
- 81 Tell es Saidiyeh el Tahta — Fig. 32: 4; 33: 3, 4.
 Affuleh Sounding A & B — JPOS 1948, Pl. VII 2, 5, 6, 9.
 Beth Shan XVII — MJ 1935, Pl. II 9, 13.
 Megiddo XX-XIX — SAOC 17, Chart XX 21 & XIX 8.
 Tell el Far'ah I — RB 1947, Fig. 1 (32).
 Jericho VIII — LAAA 1935, Pl. XLI 6.
 „ 1936, „ XXXII 29 b.
 Teleilat Ghassul — TG I, Fig. 41 (9, 10); Pl. 103.
 Murabba'at — unpublished.
 Wadi Ghazzeah A — BP II, Pl. XXXI 4th row.

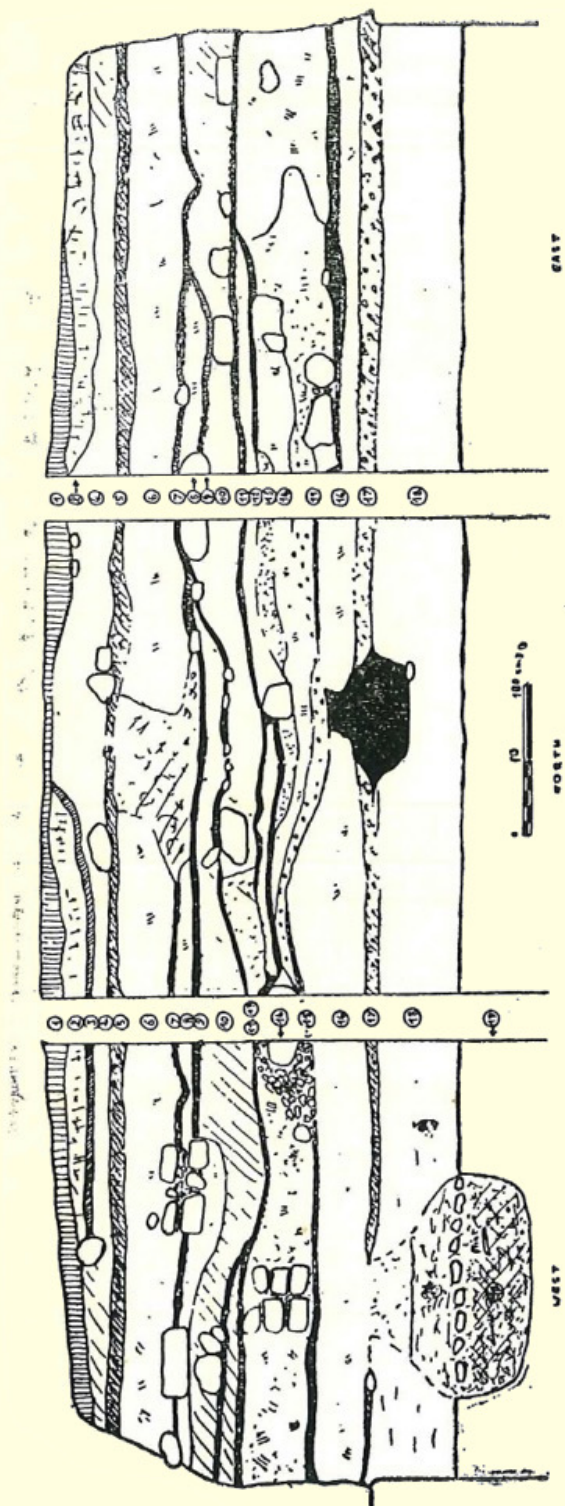


Fig. 1

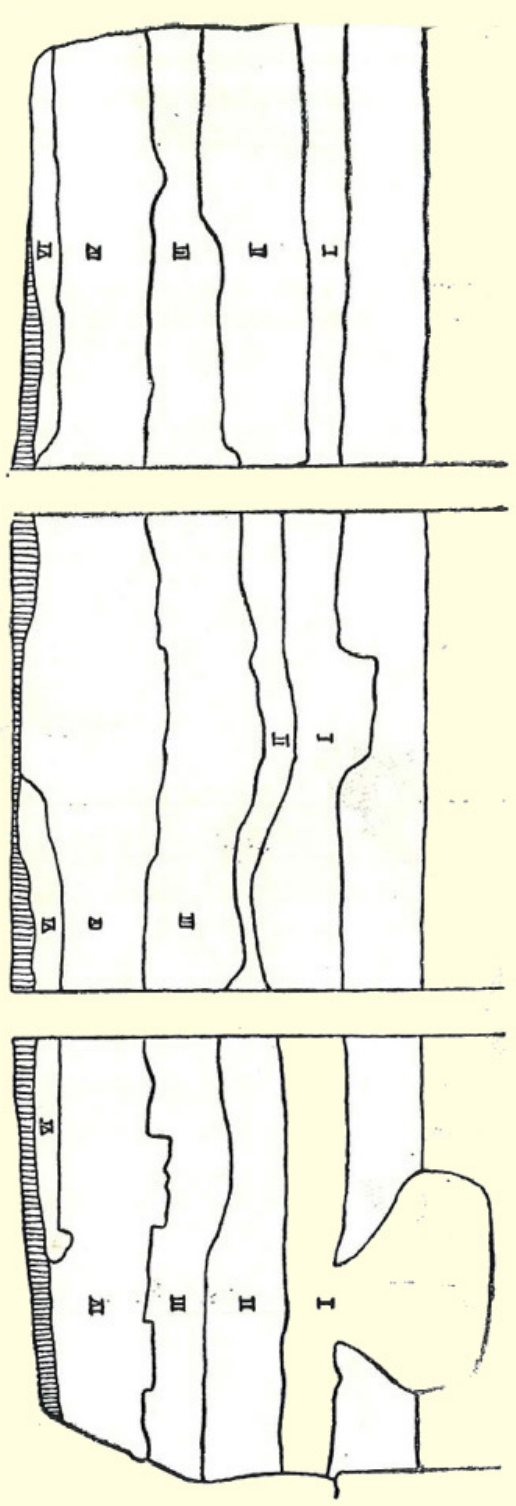


Fig. 2

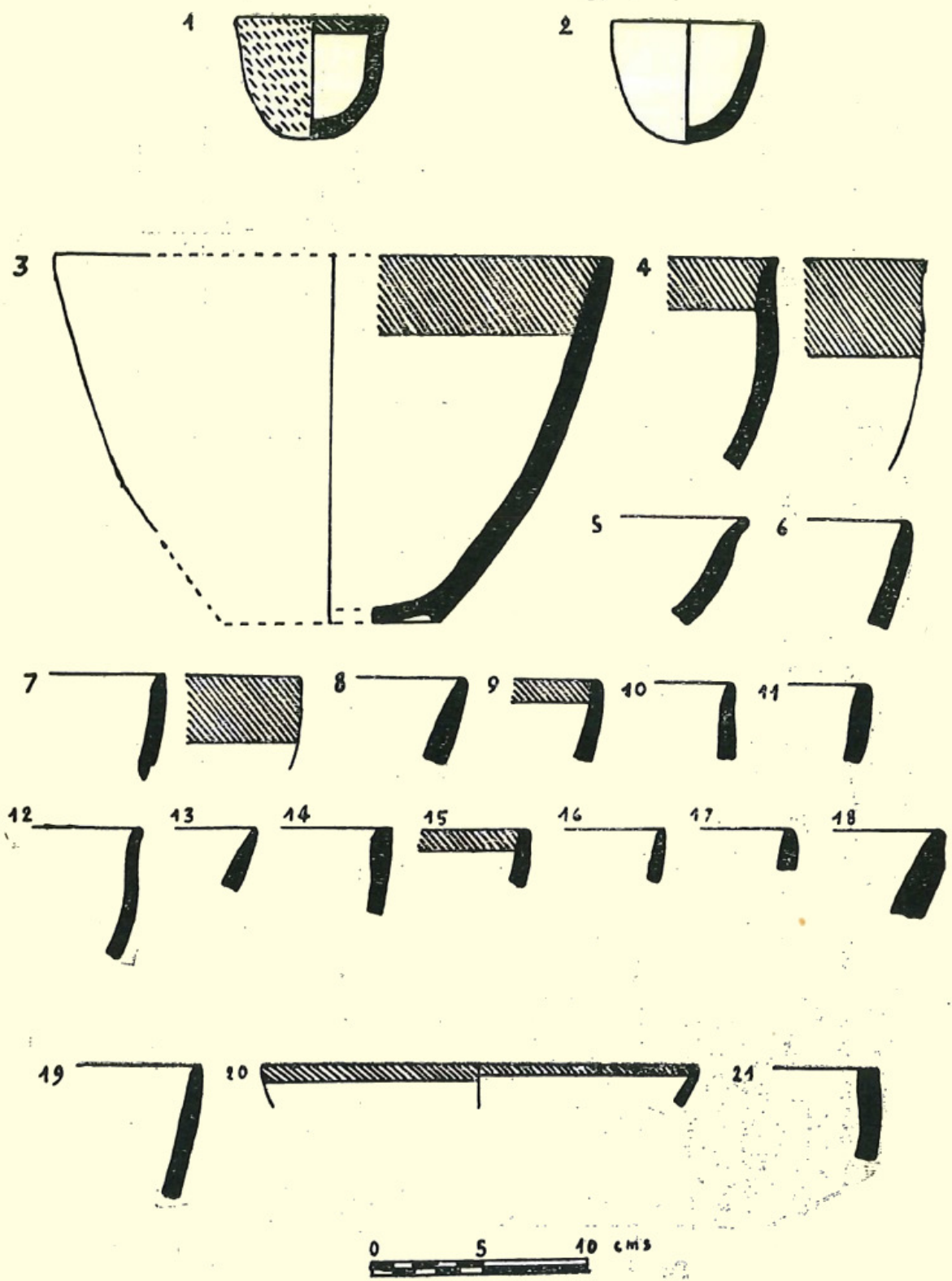


Fig. 3.

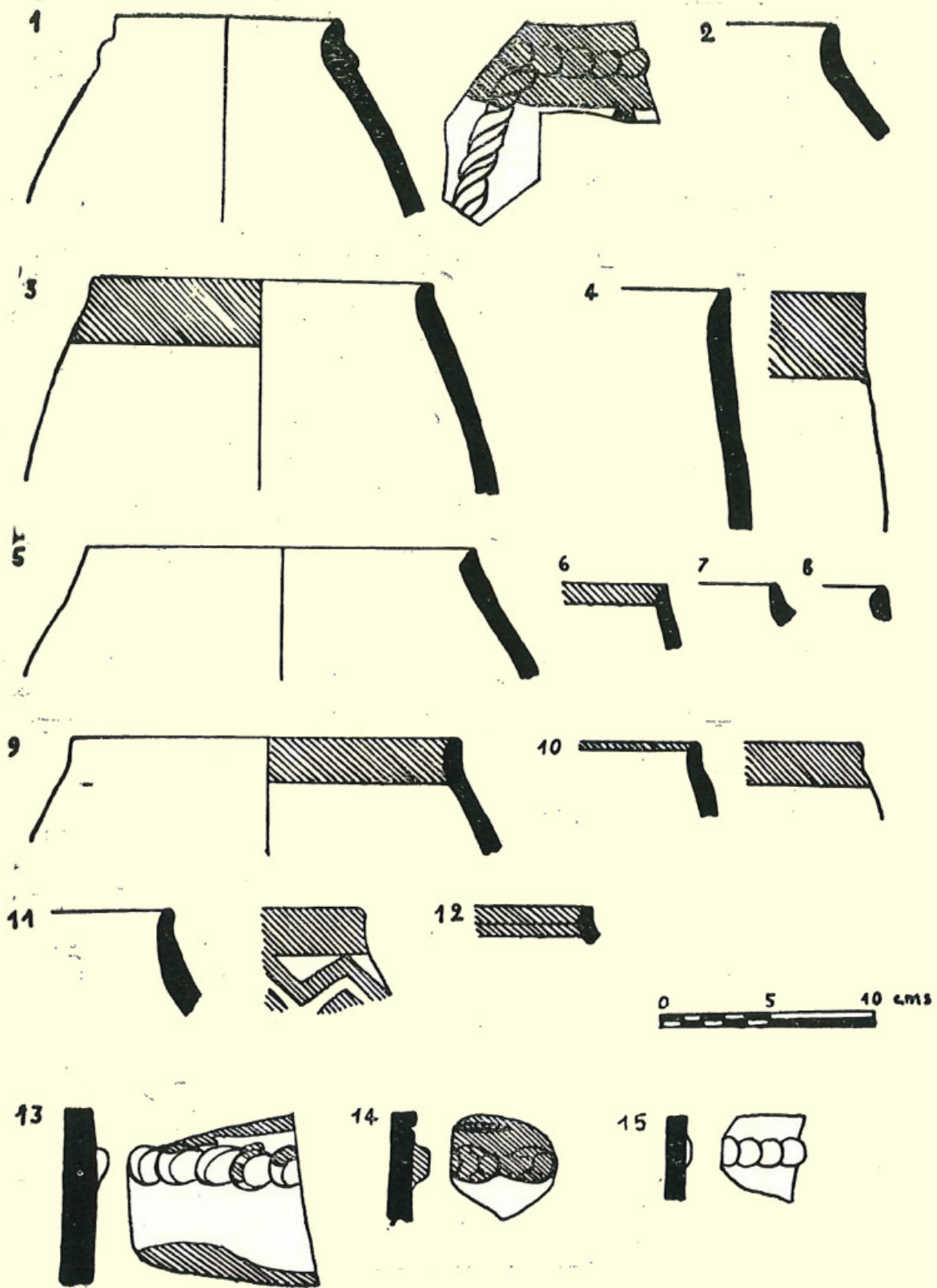


Fig. 4.

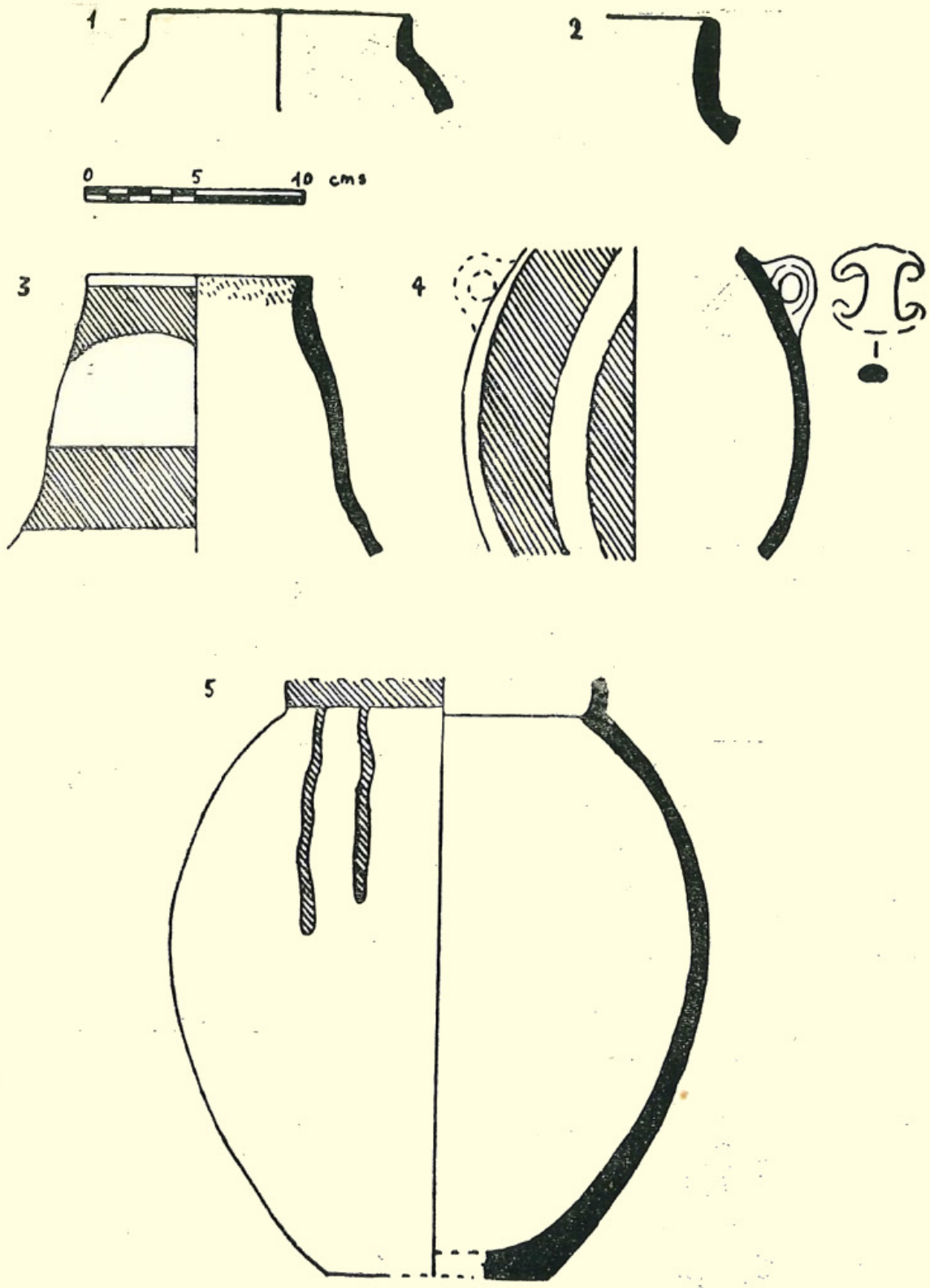


Fig. 5.

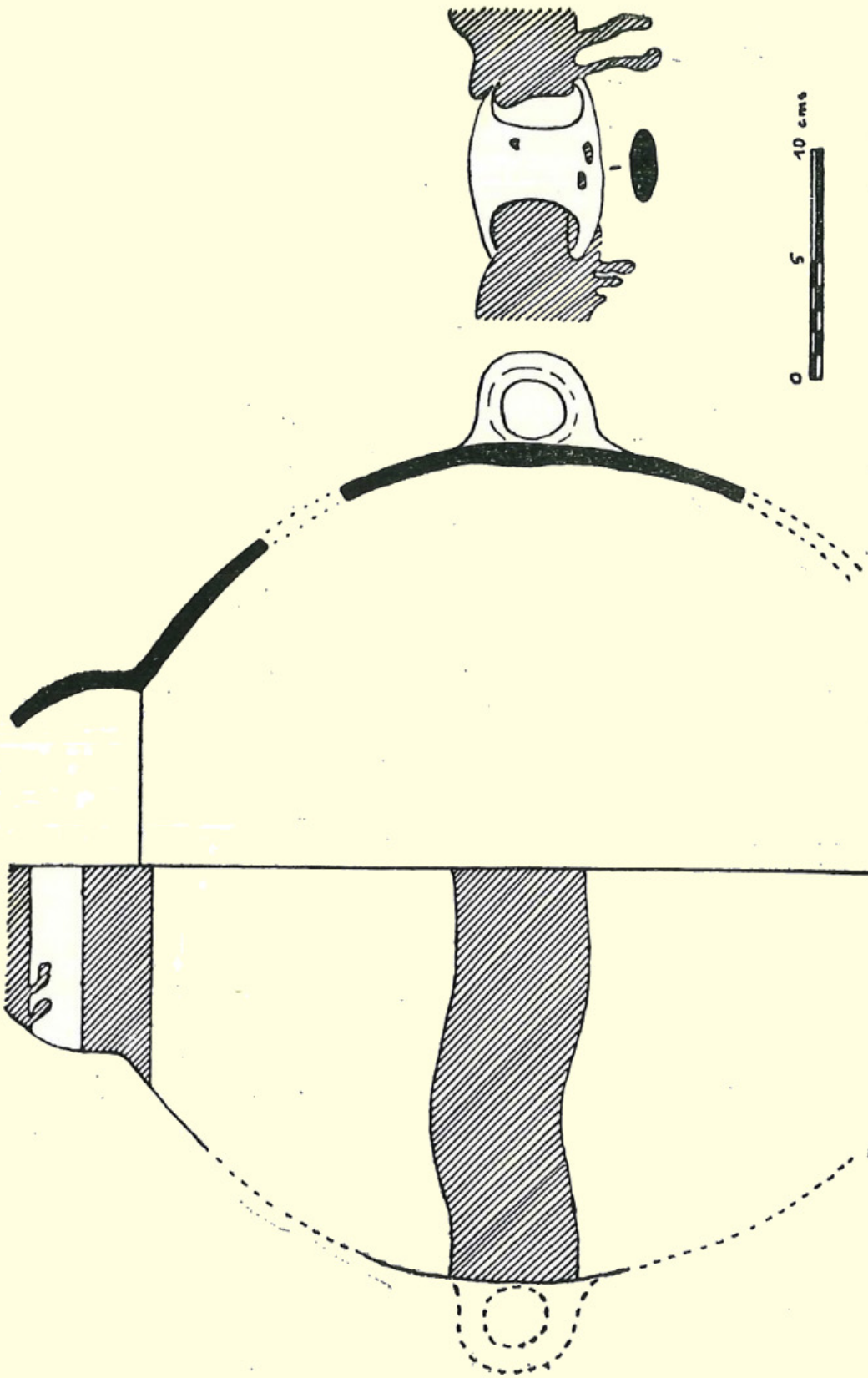


Fig. 6.

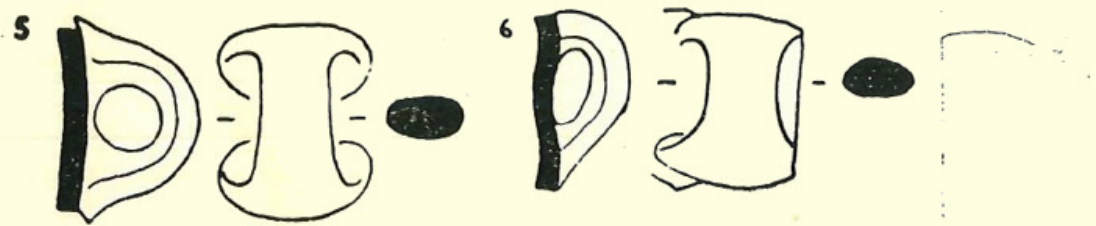
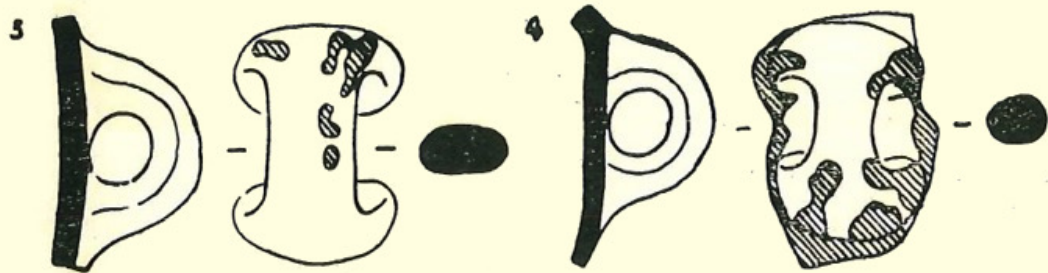
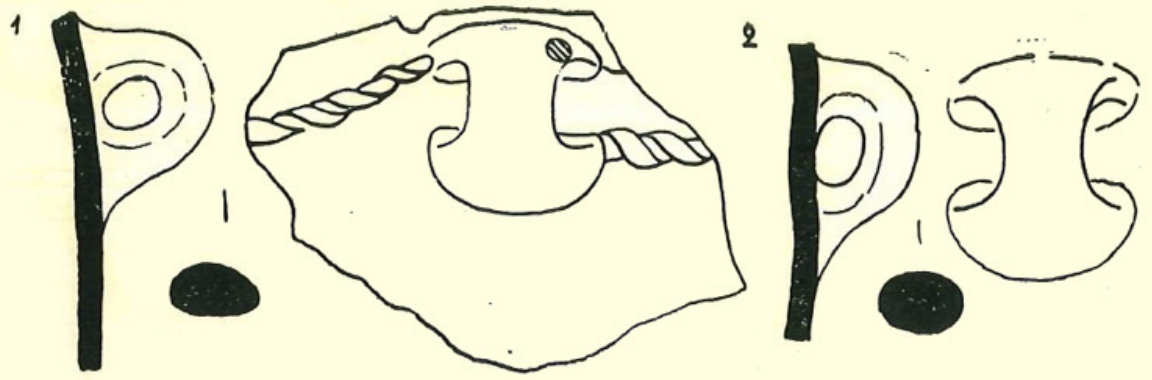


Fig. 7.

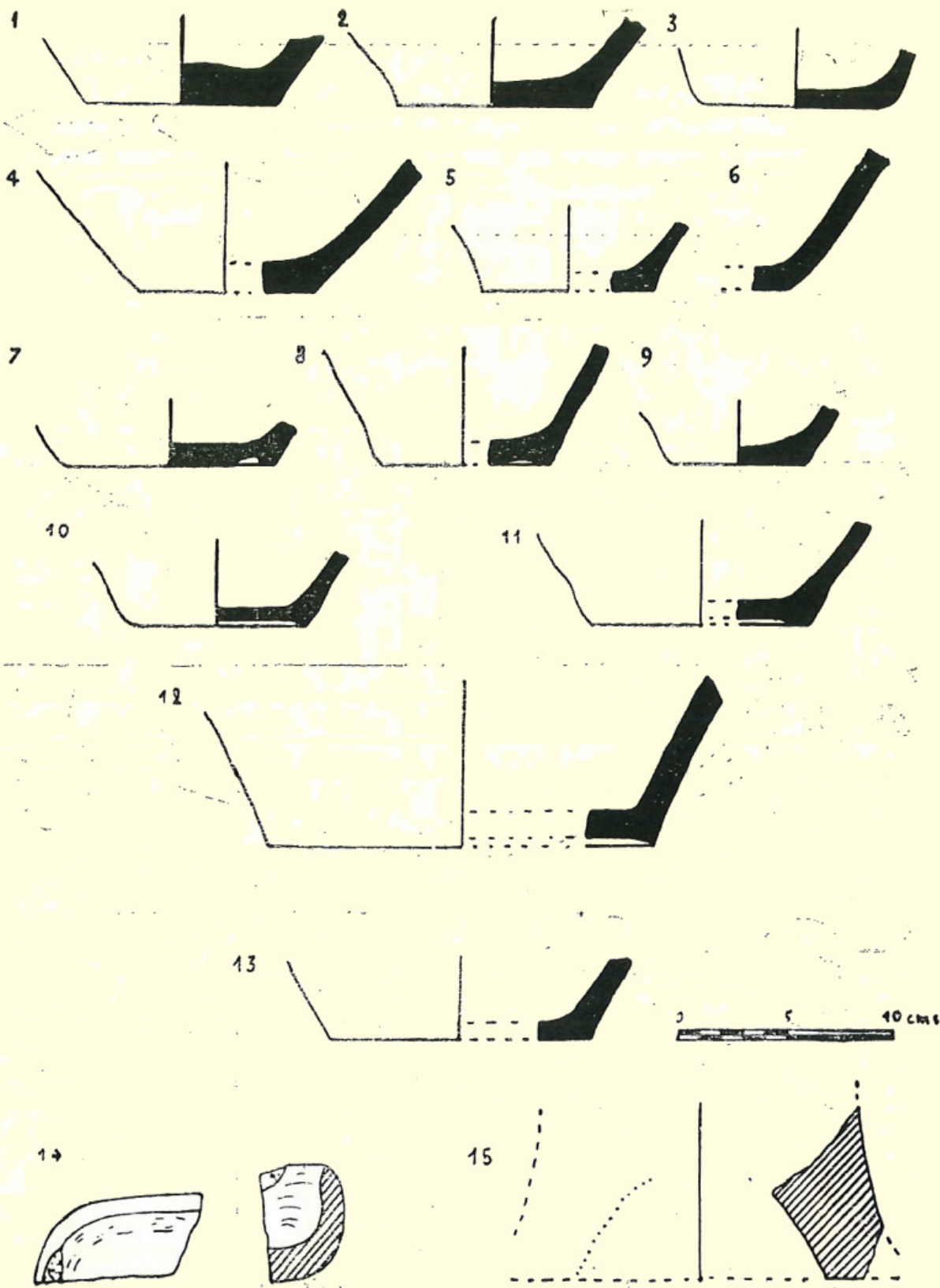


Fig. 8.

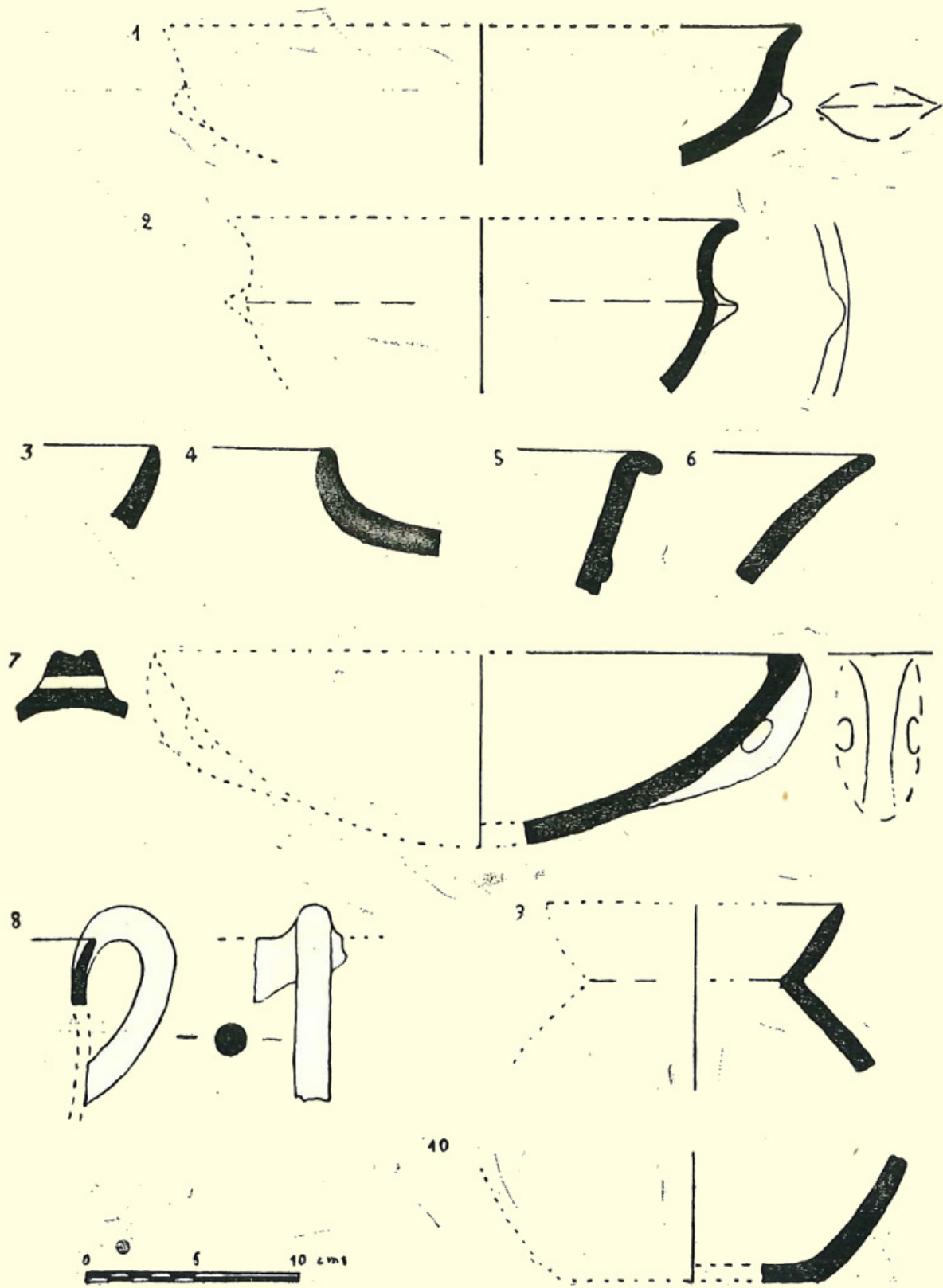


Fig. 9.

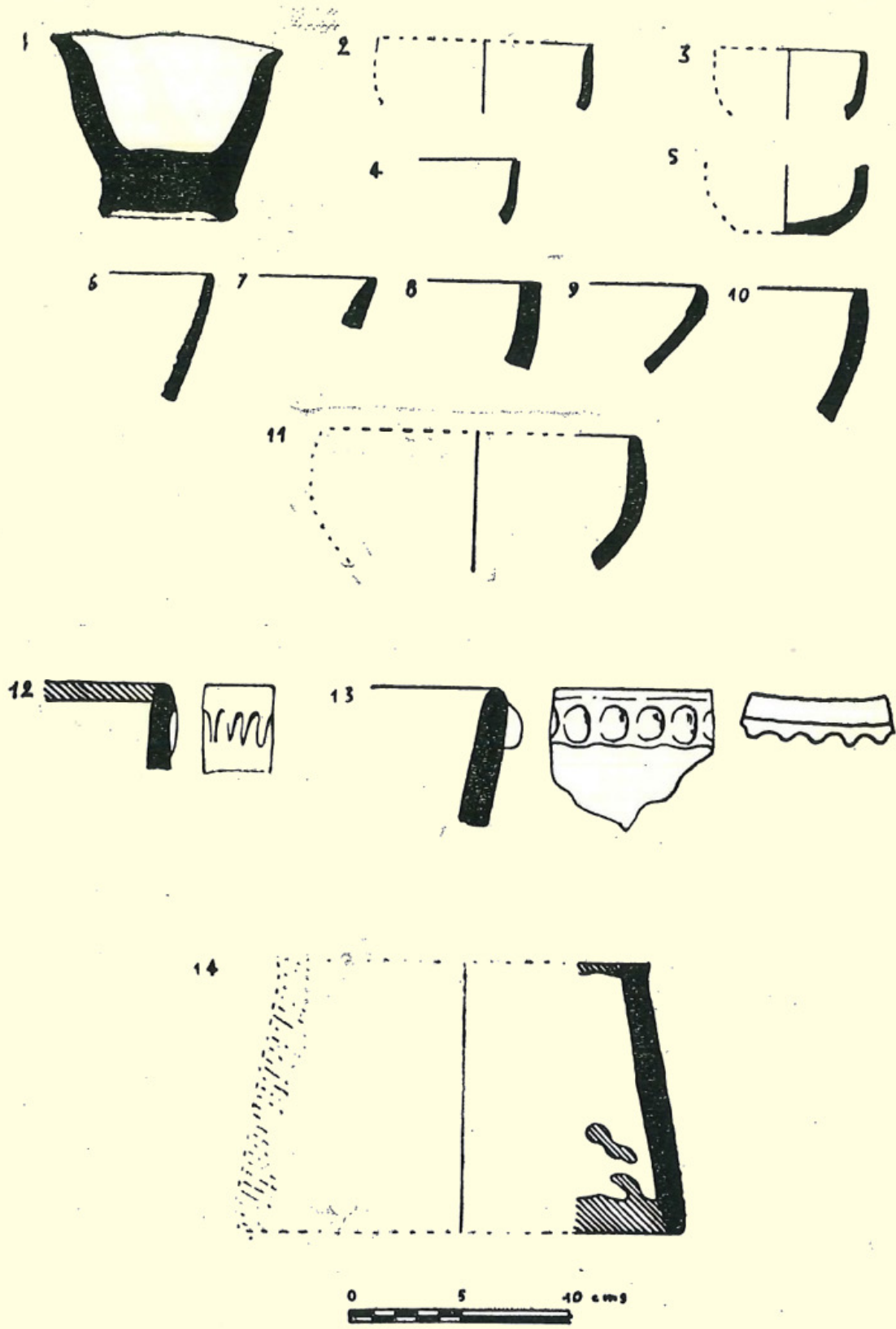


Fig. 10.

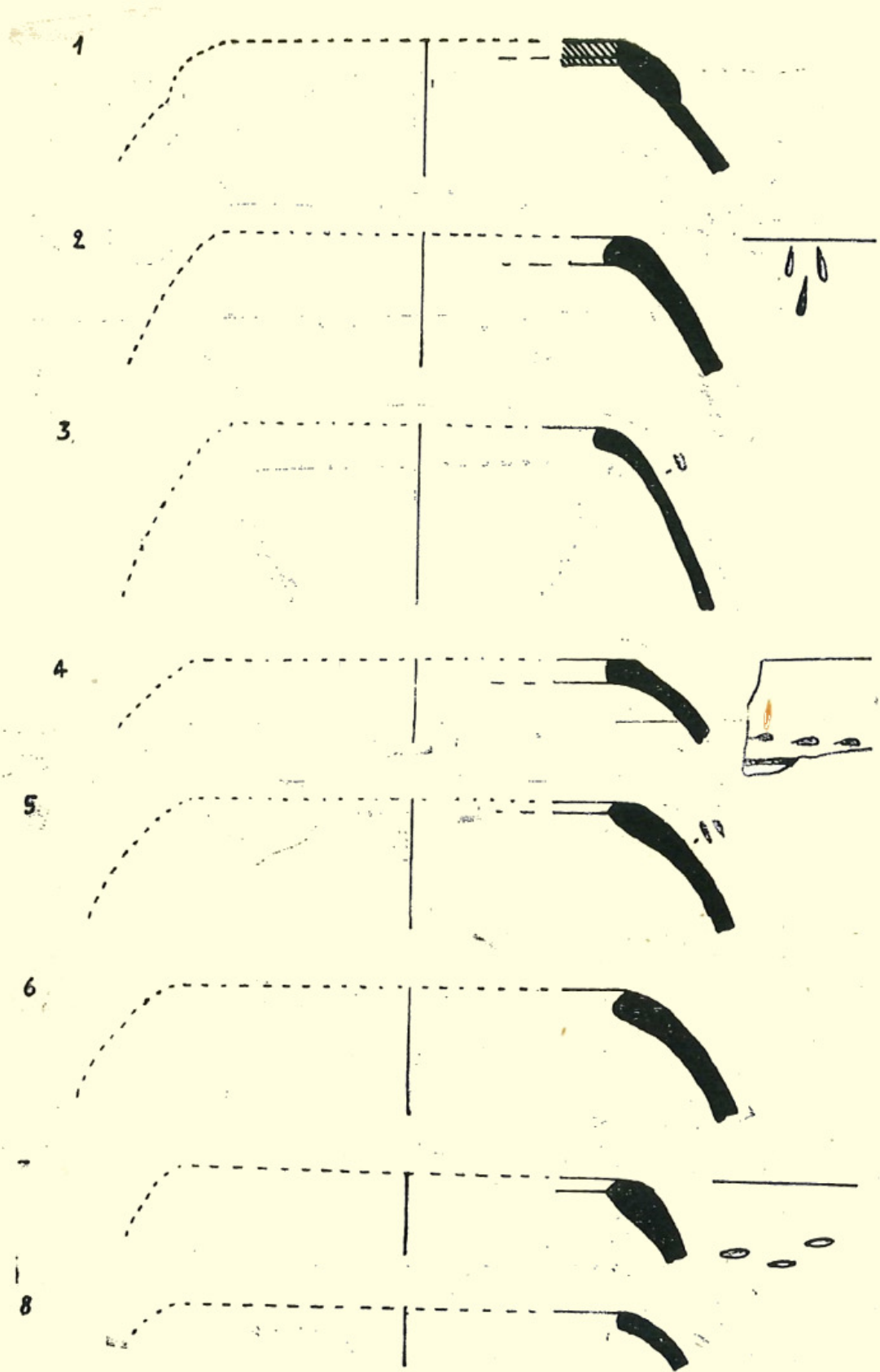
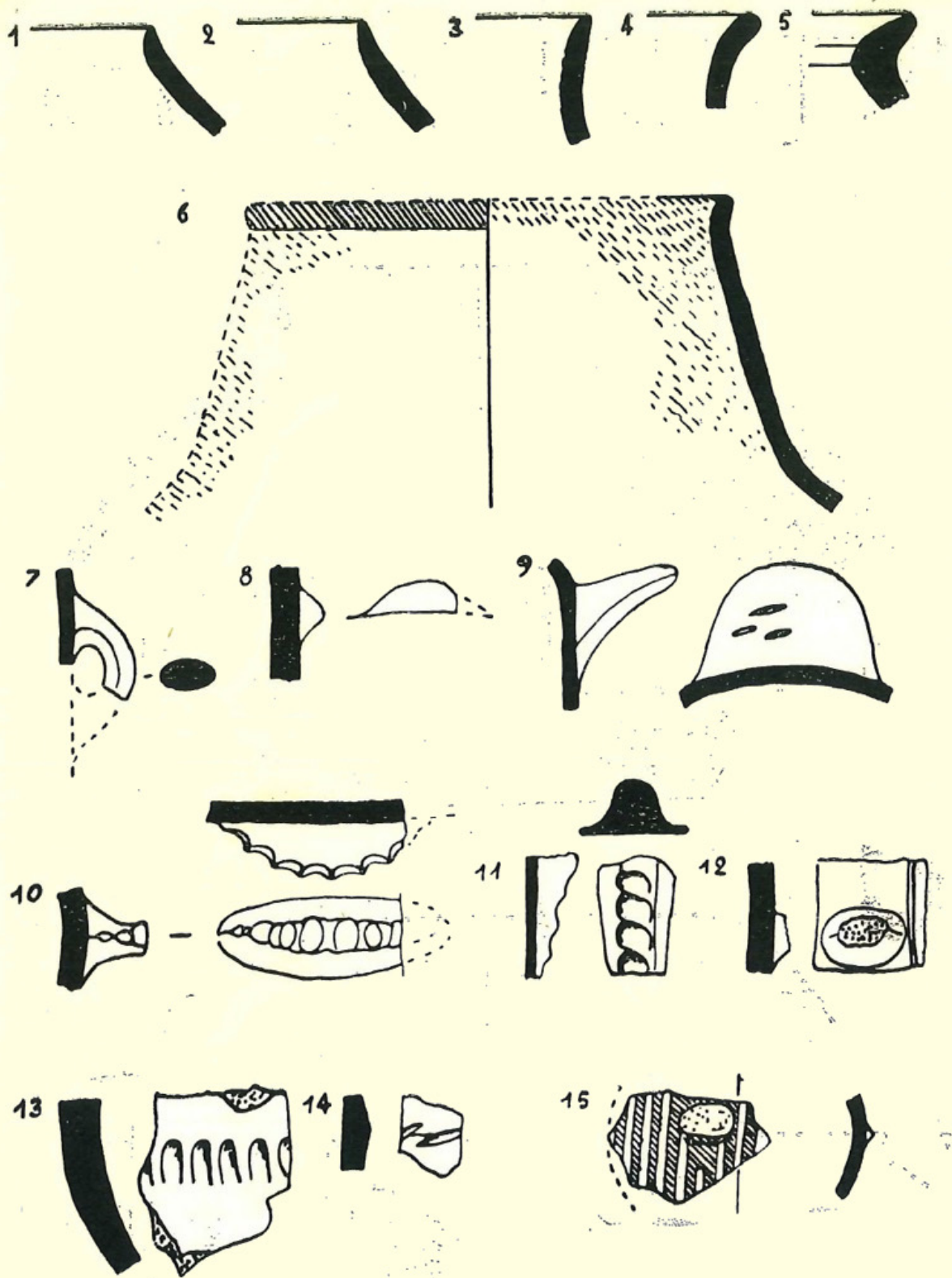


Fig. 11.



0 5 10 cms

Fig. 12.

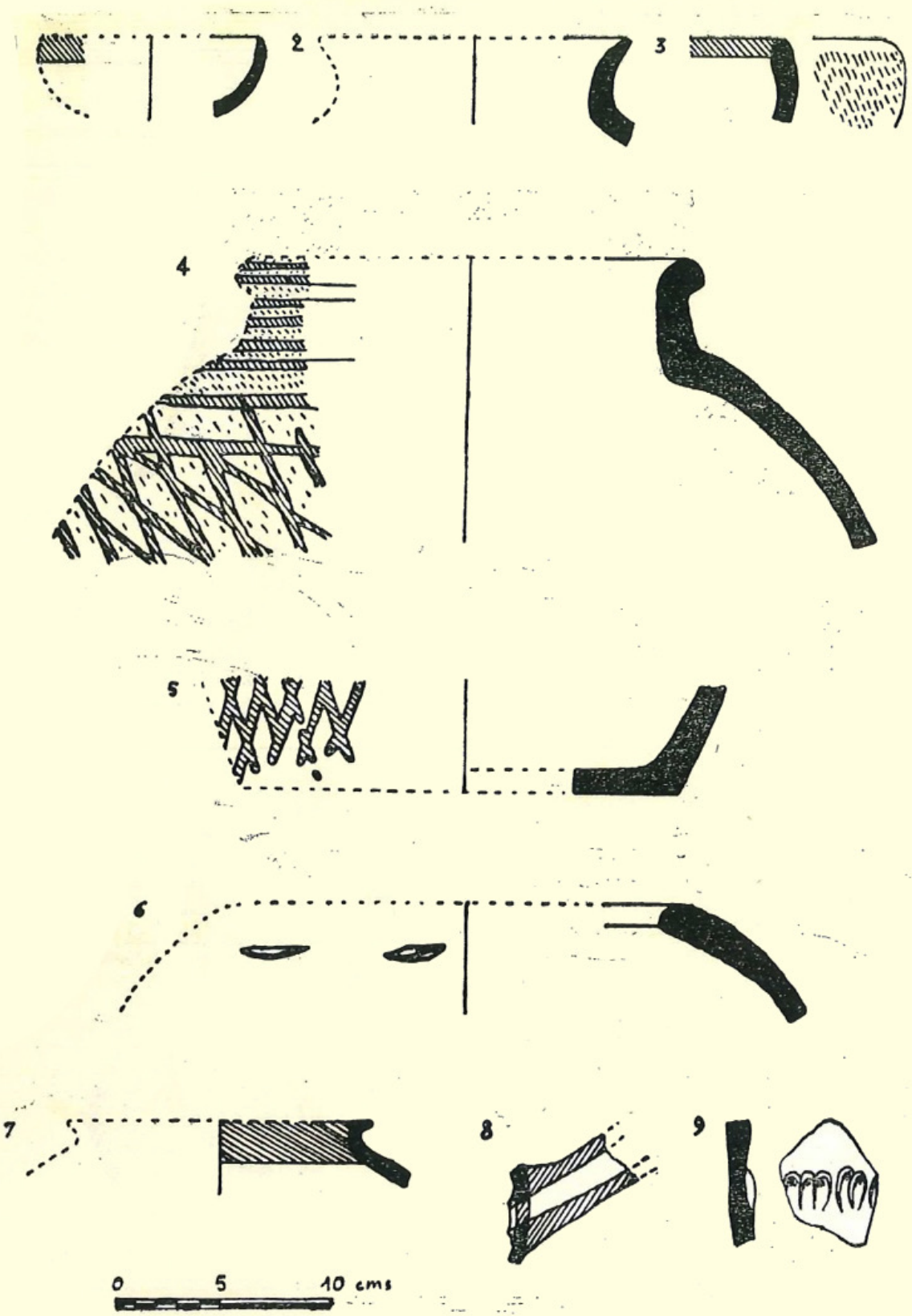


Fig. 13.

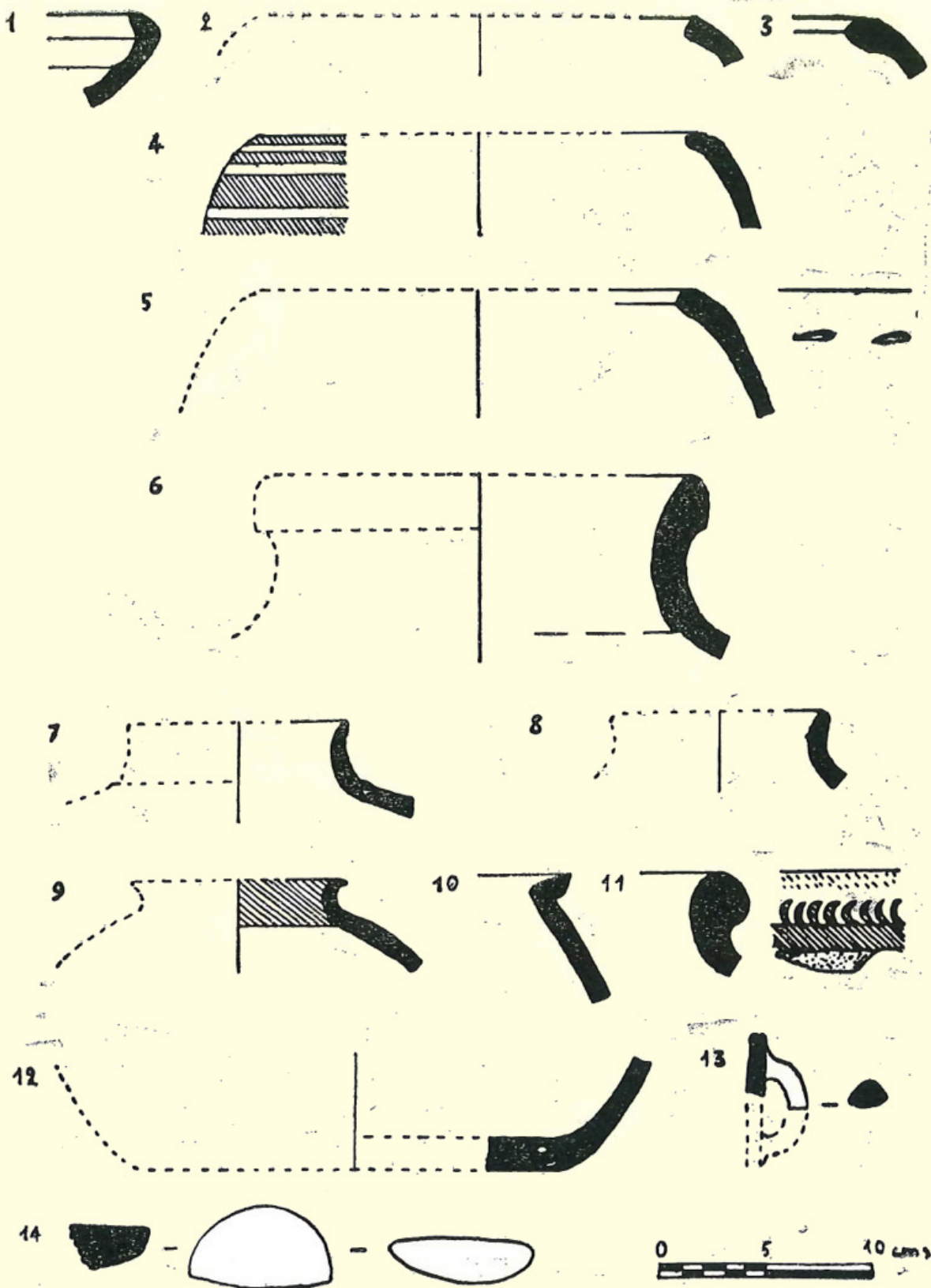


Fig. 14.

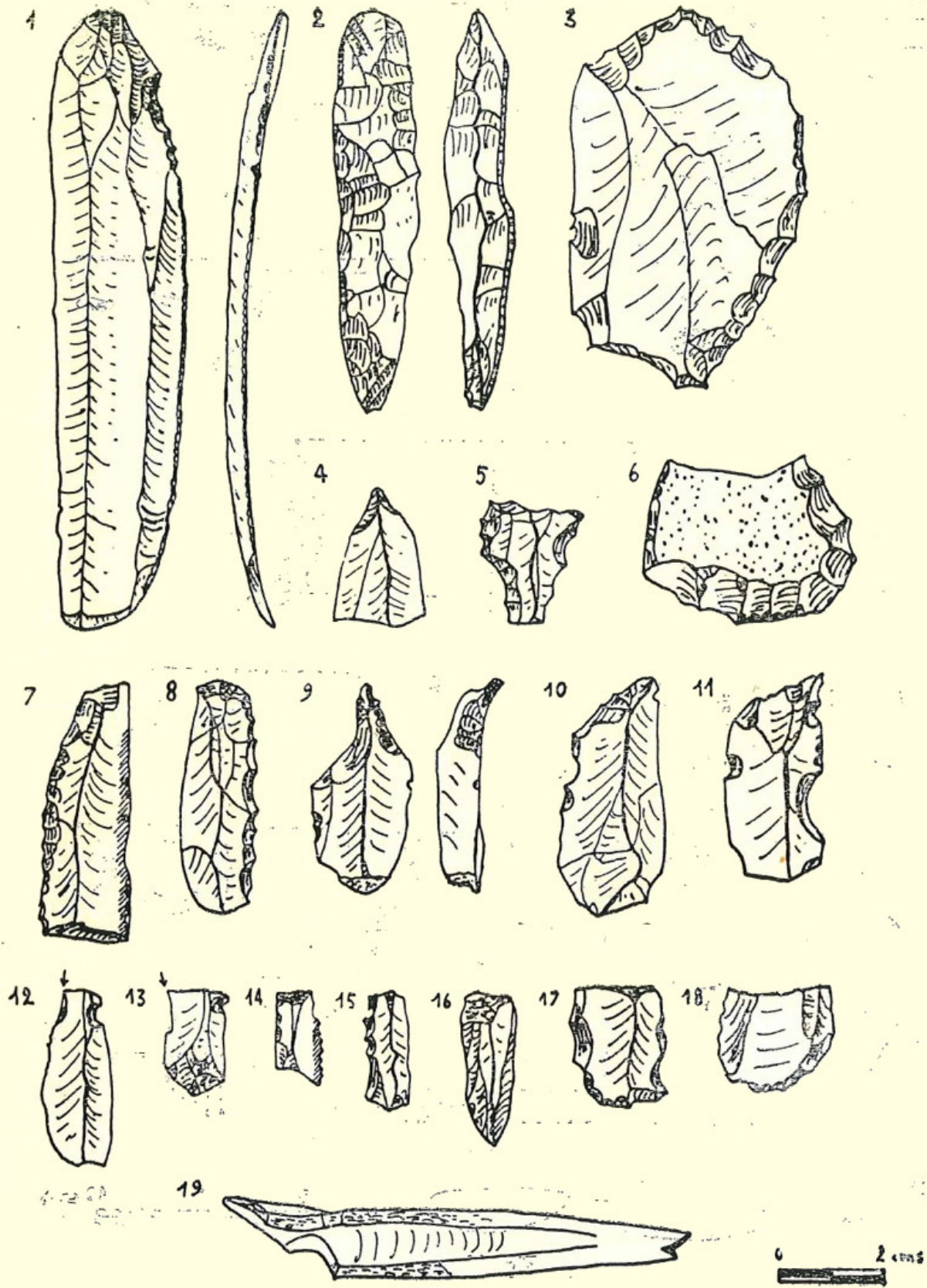
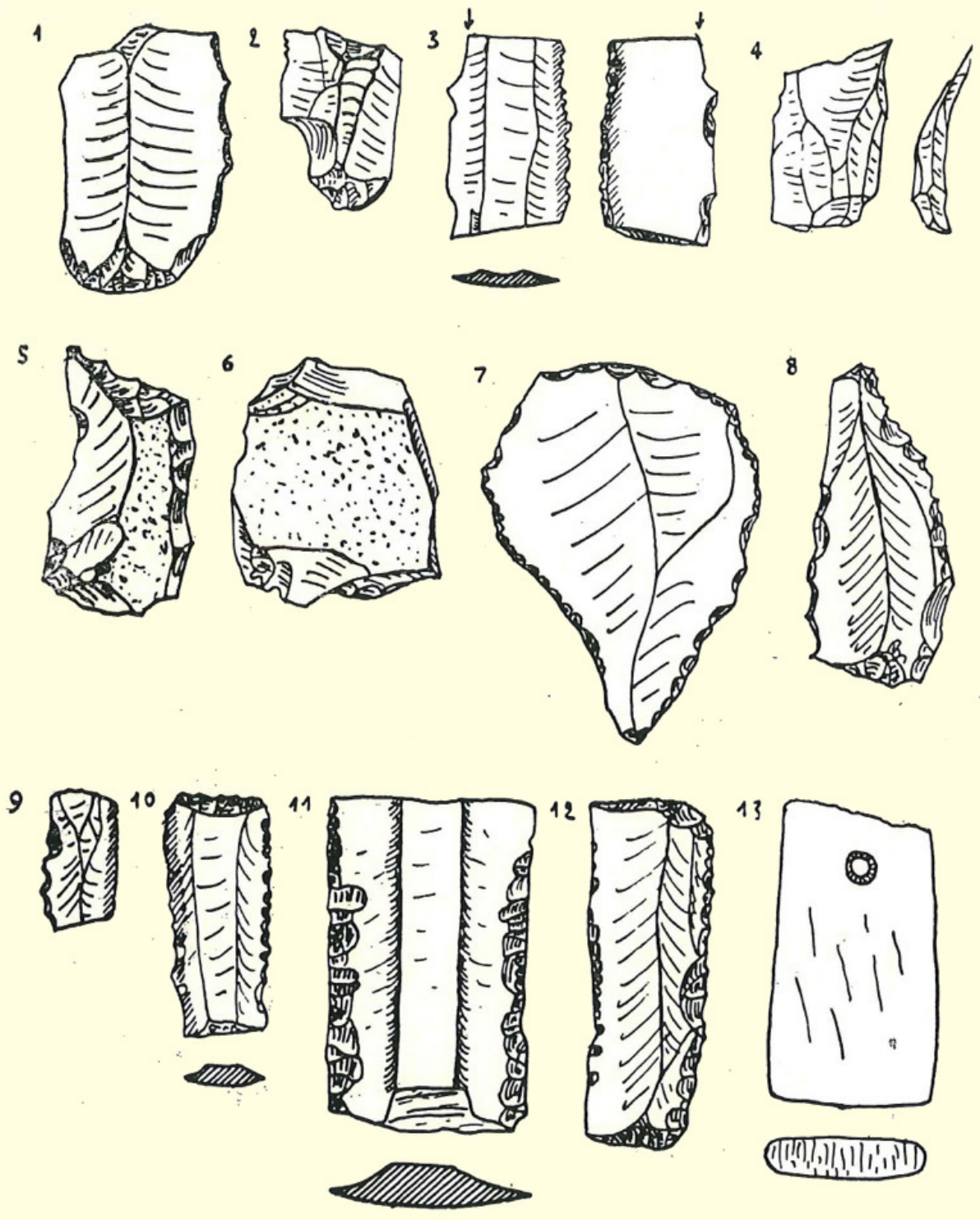


Fig. 15.



0 5 cms

Fig. 16.

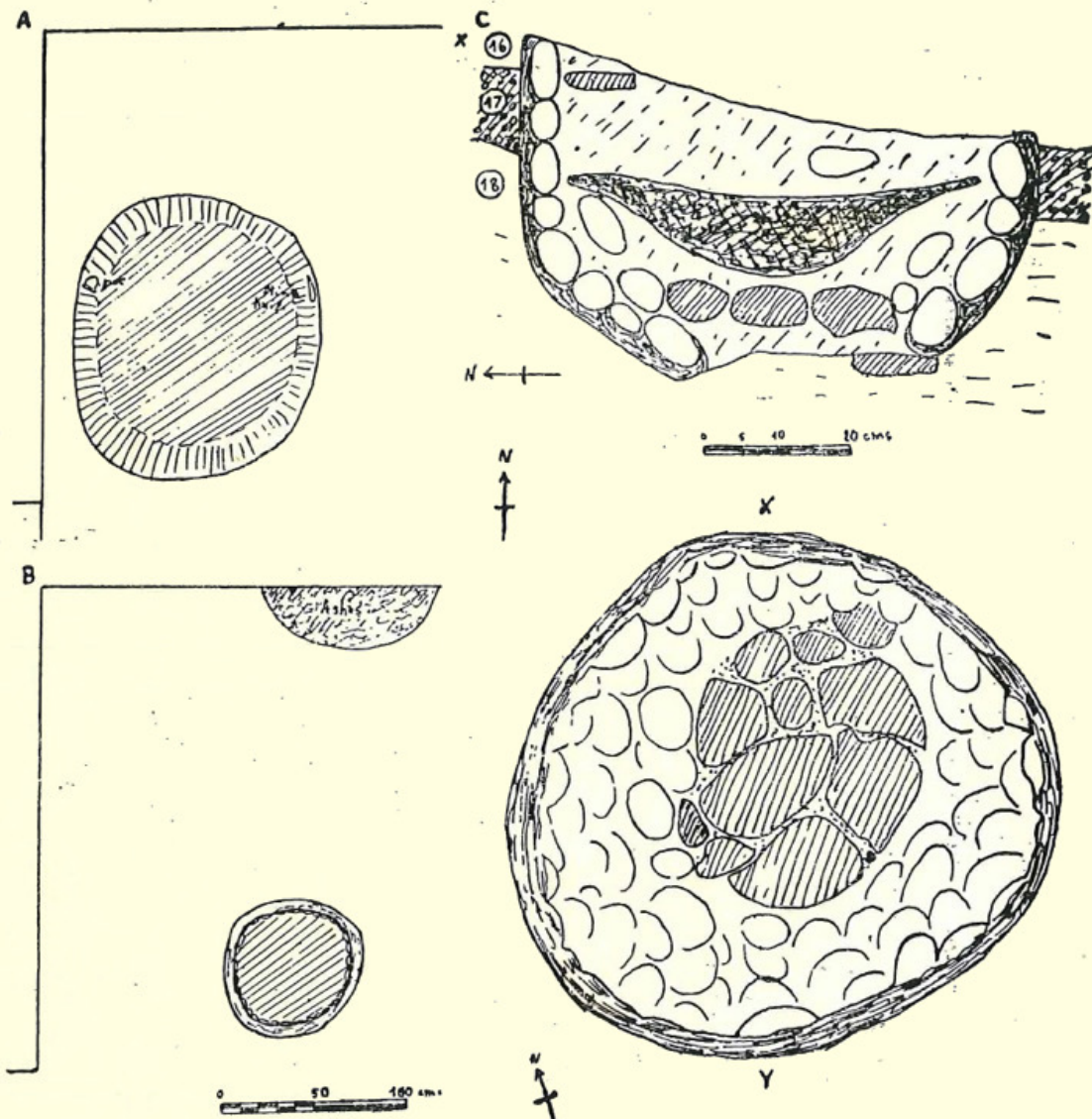


Fig. 17.

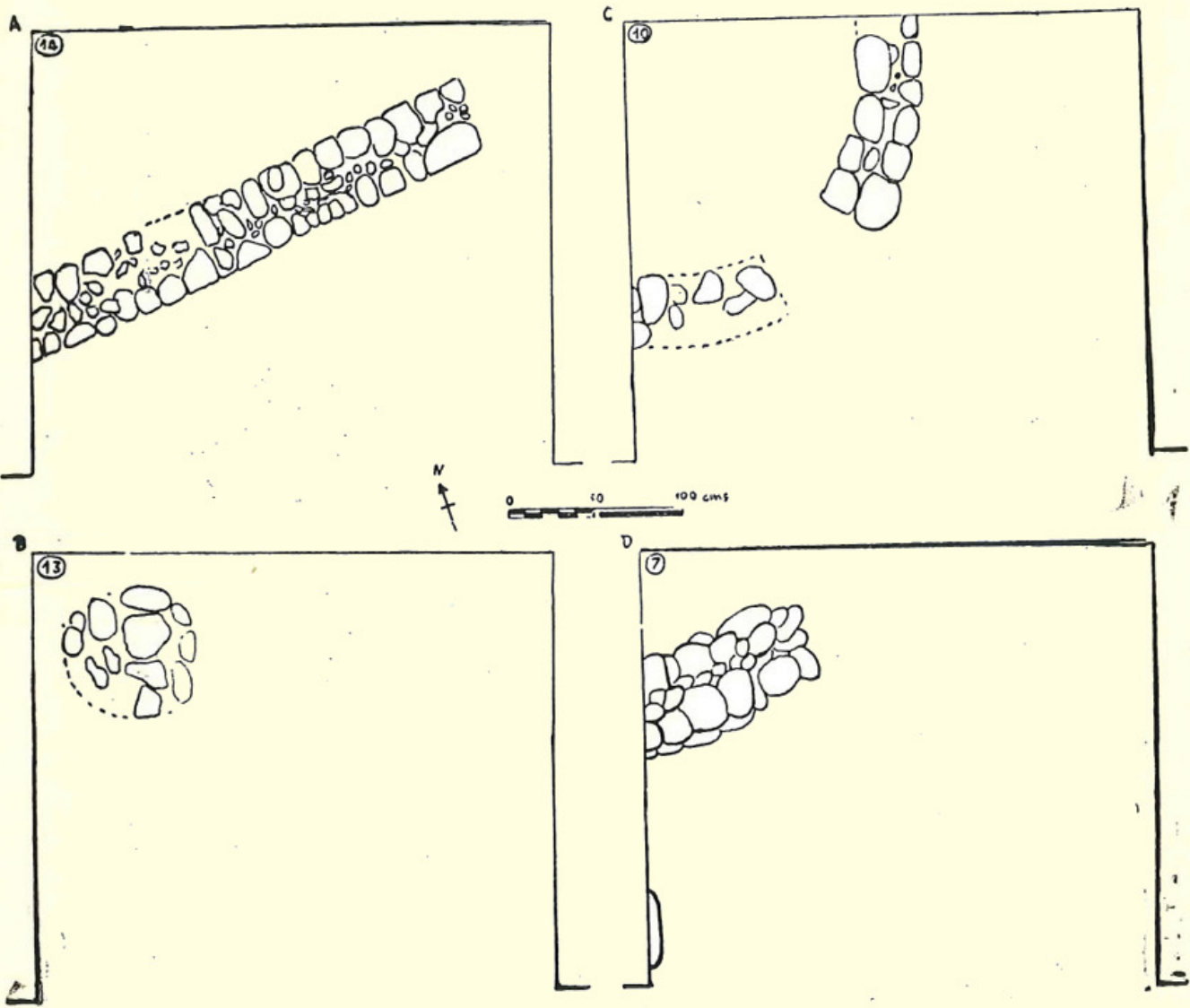


Fig. 18.

Fig. 19.

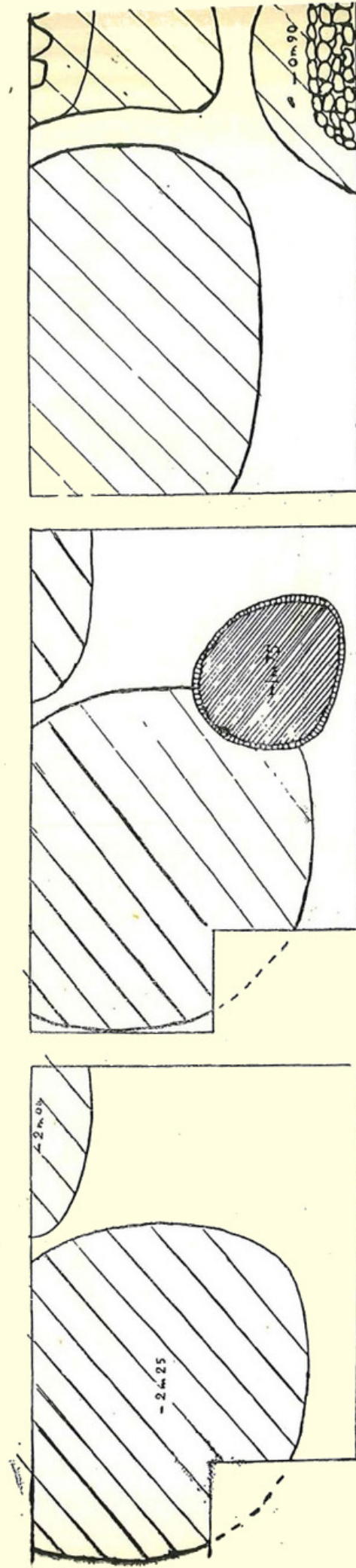
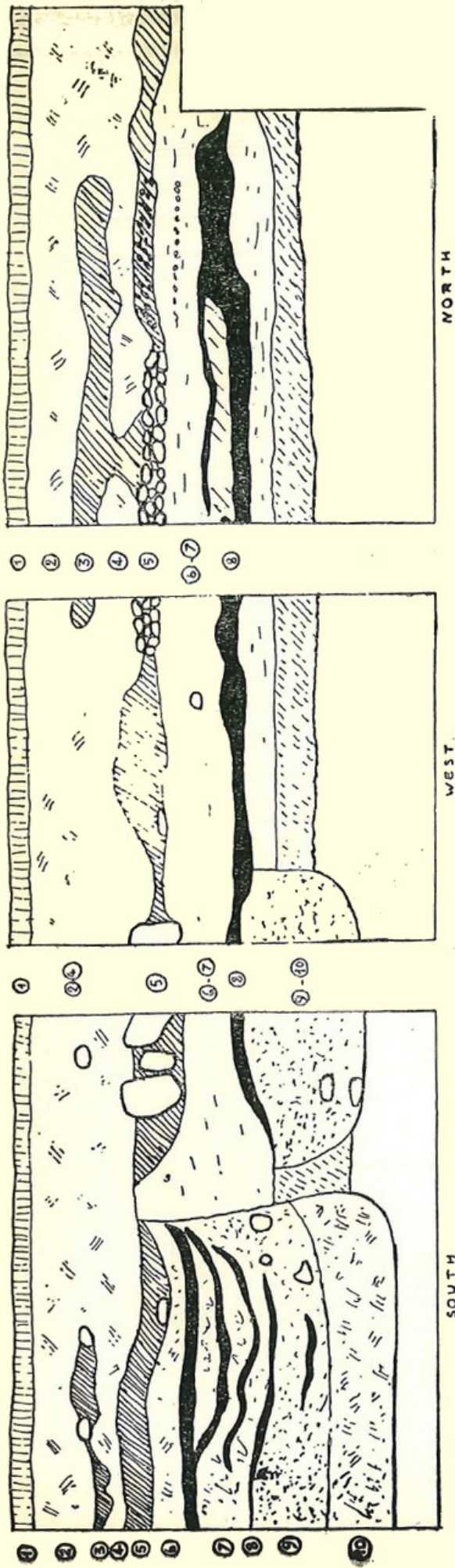


Fig. 20.

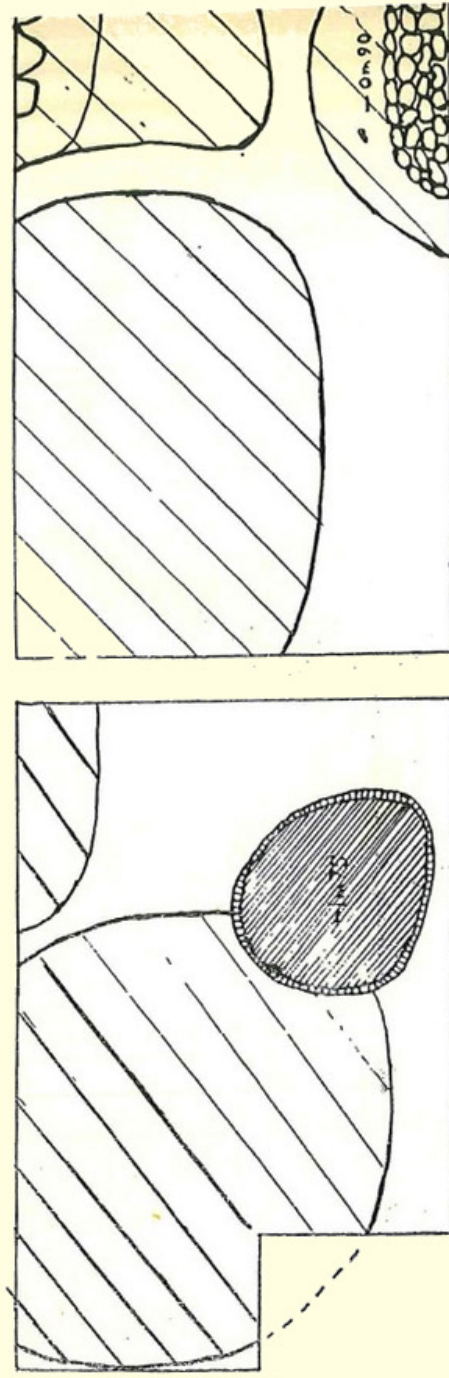


Fig. 21.

Fig. 22.

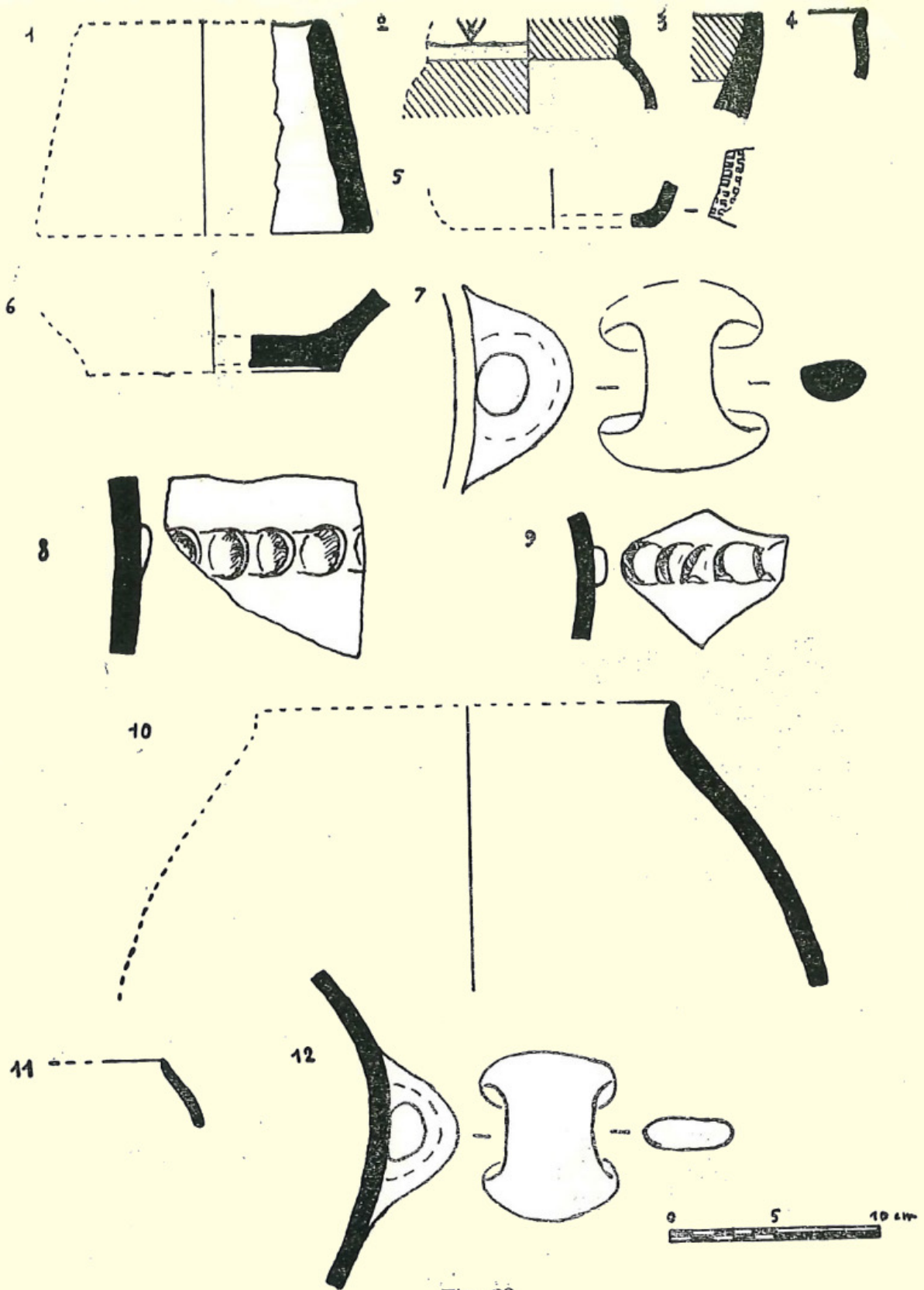


Fig. 23.

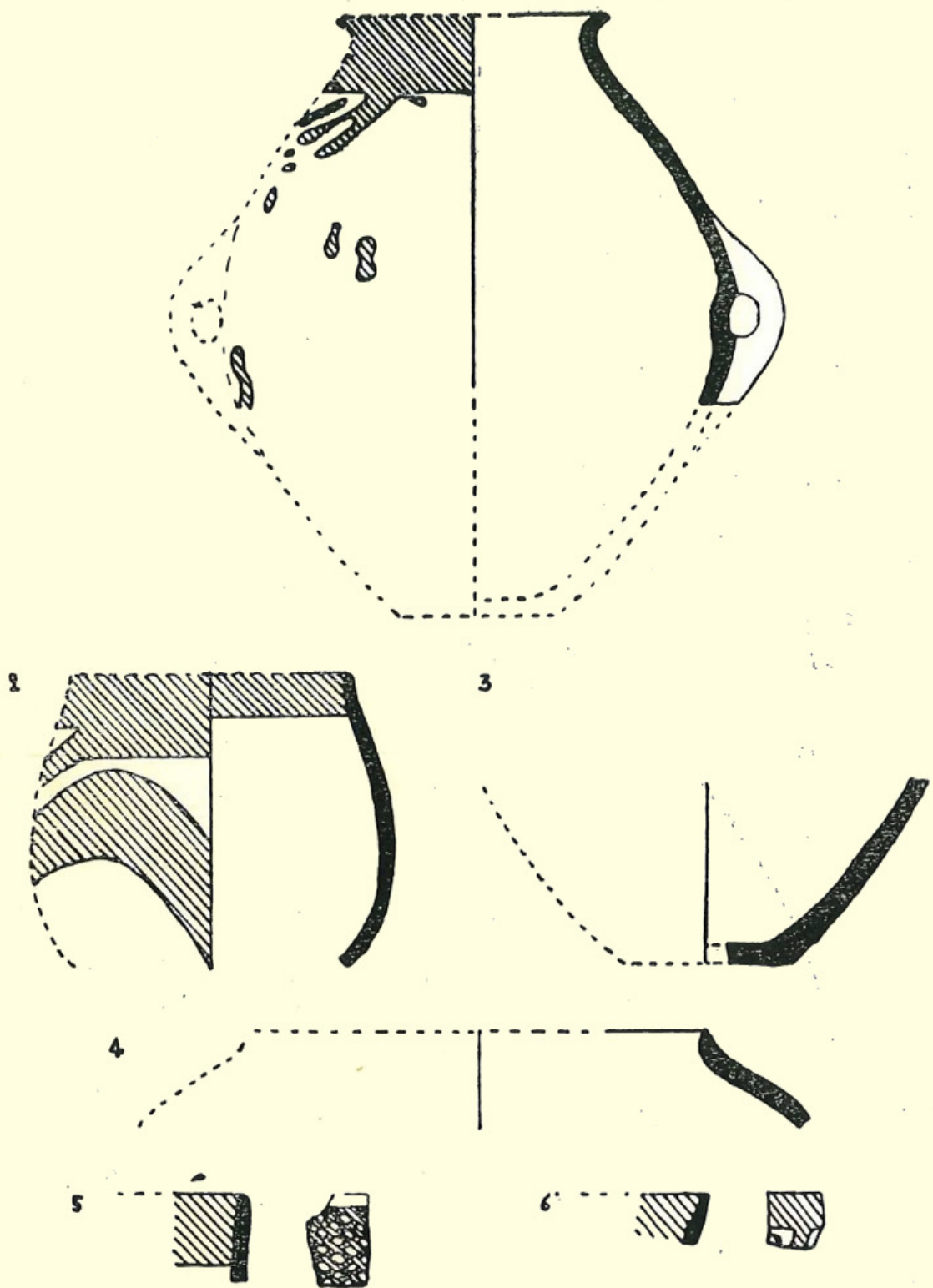


Fig. 24.

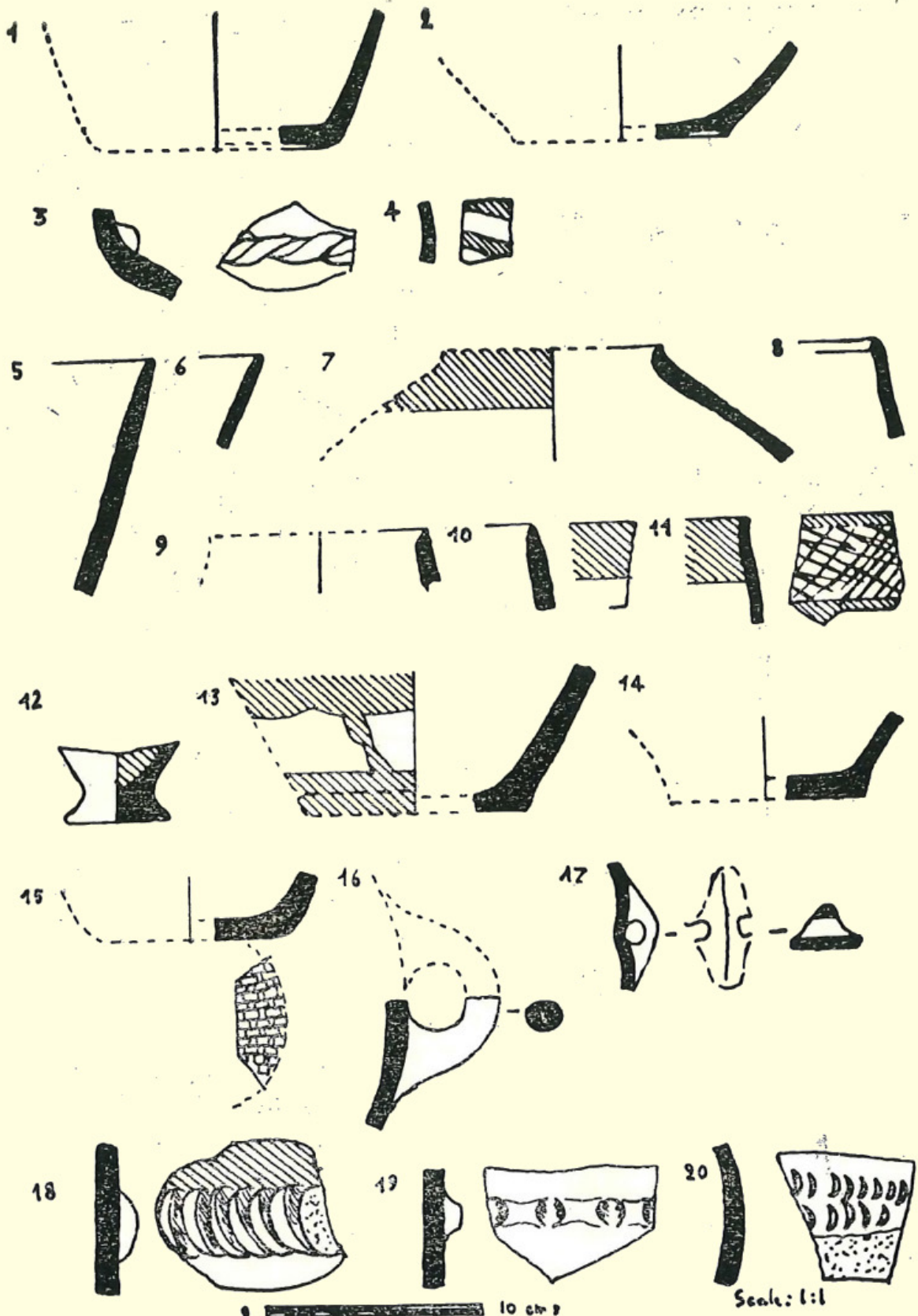


Fig. 25.

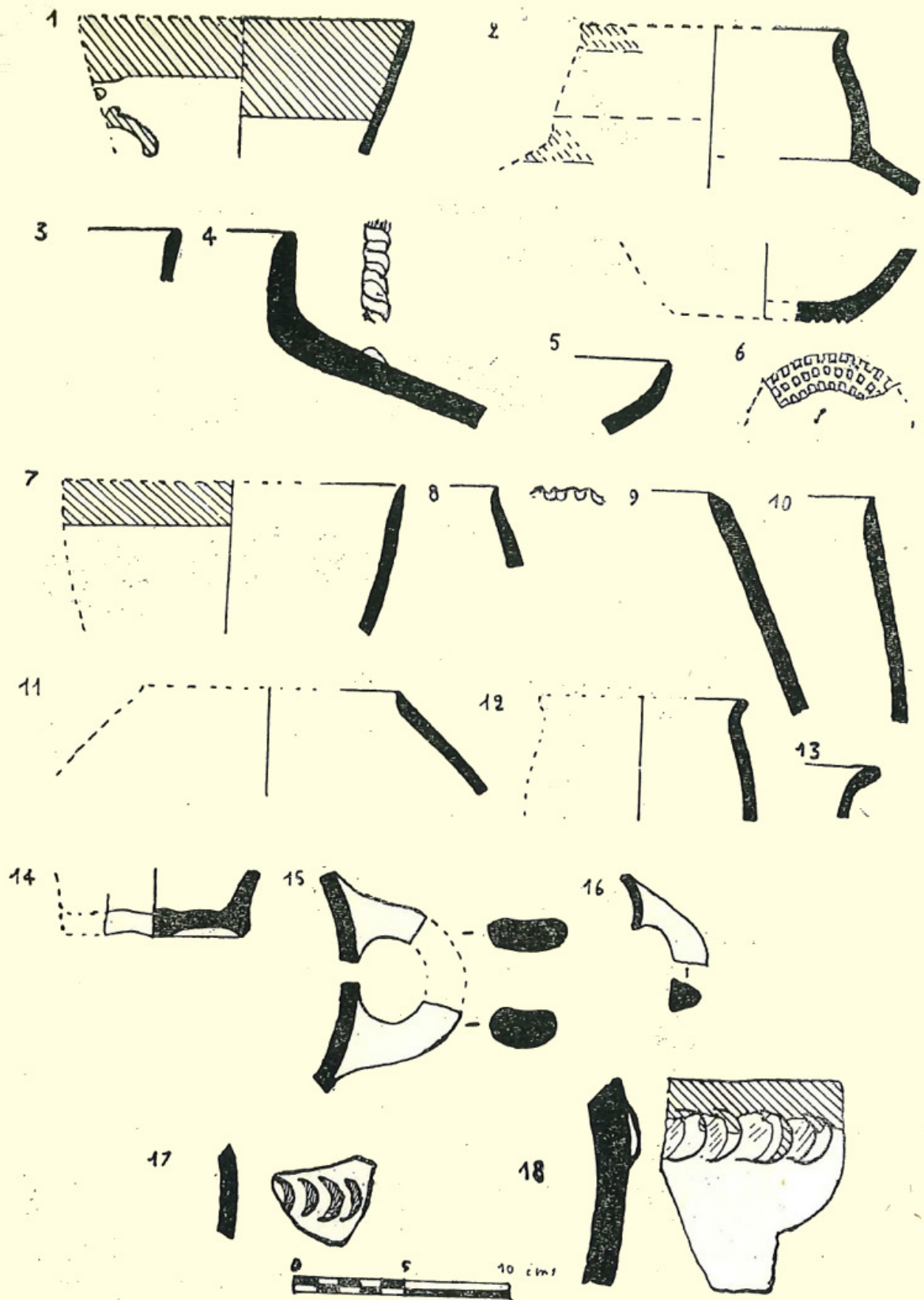


Fig. 26.

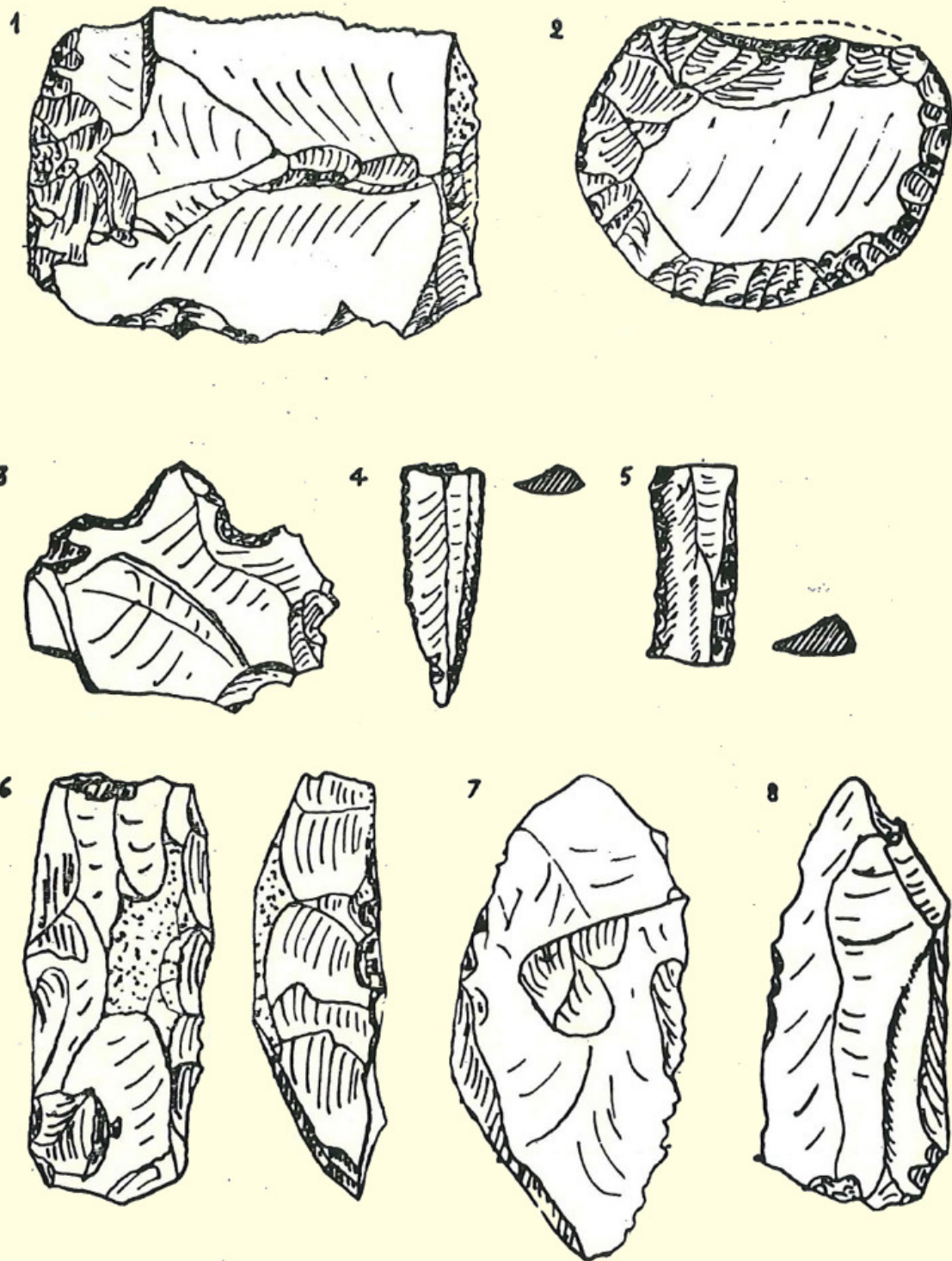


Fig. 27.

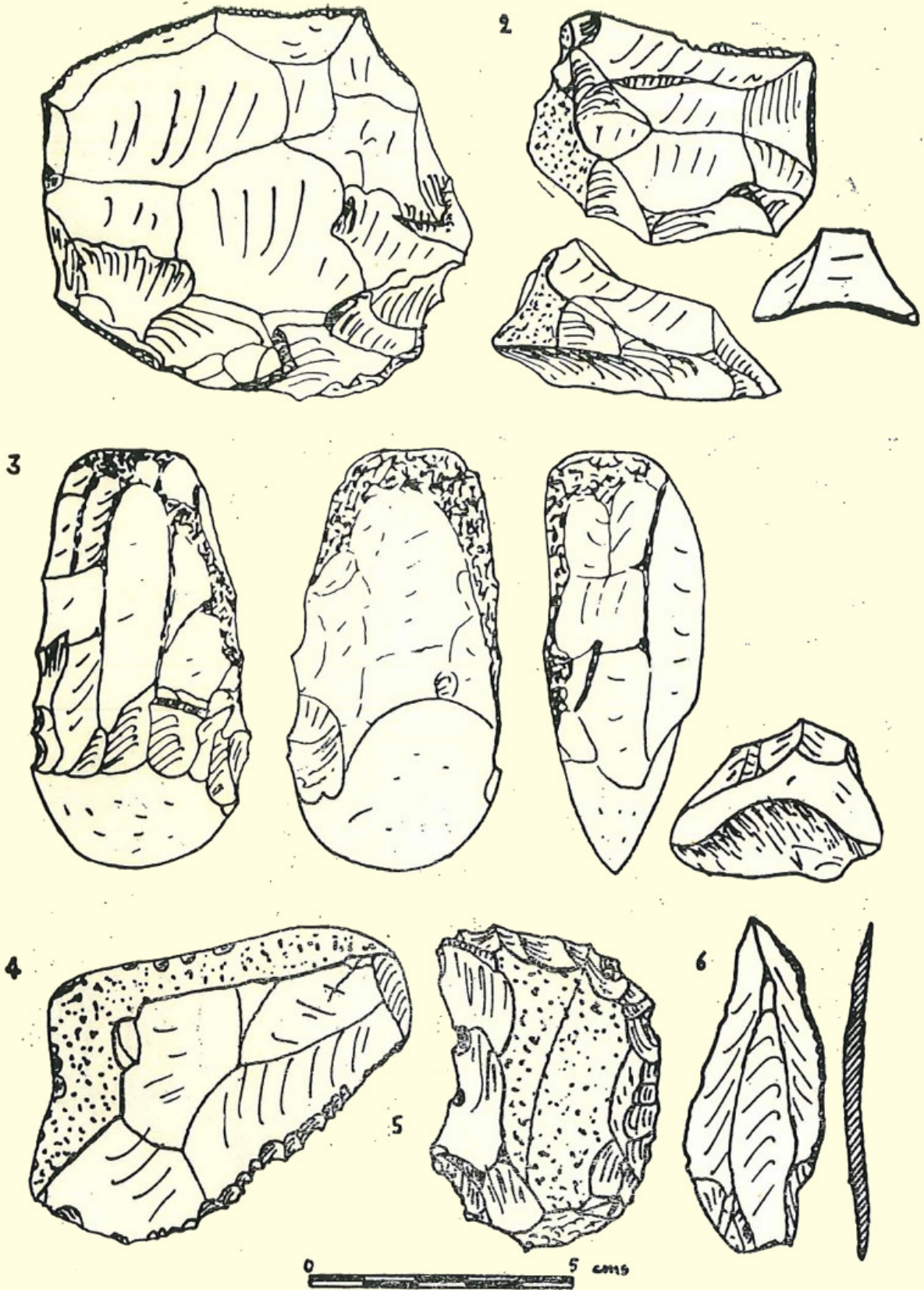


Fig. 28.

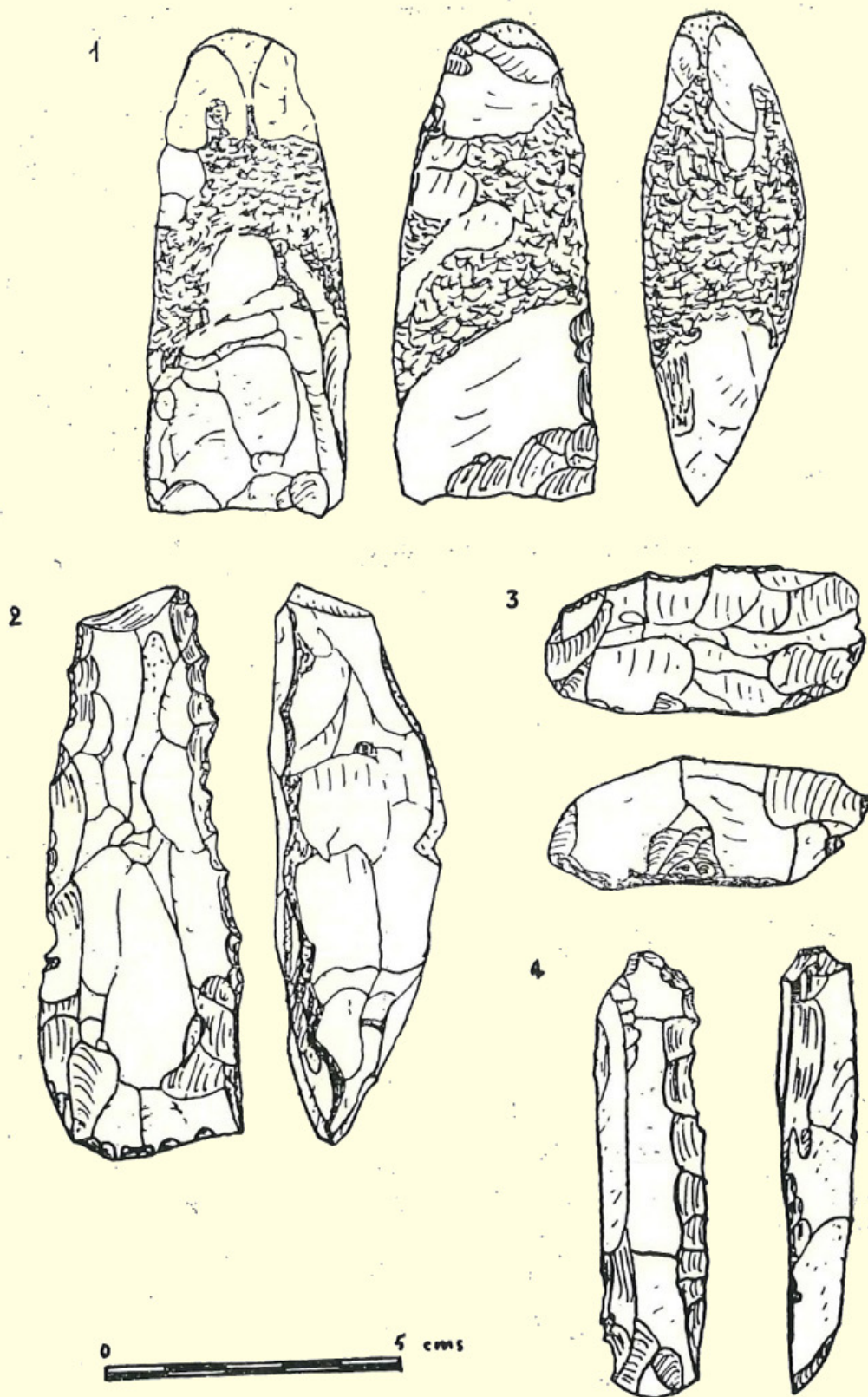


Fig. 29.

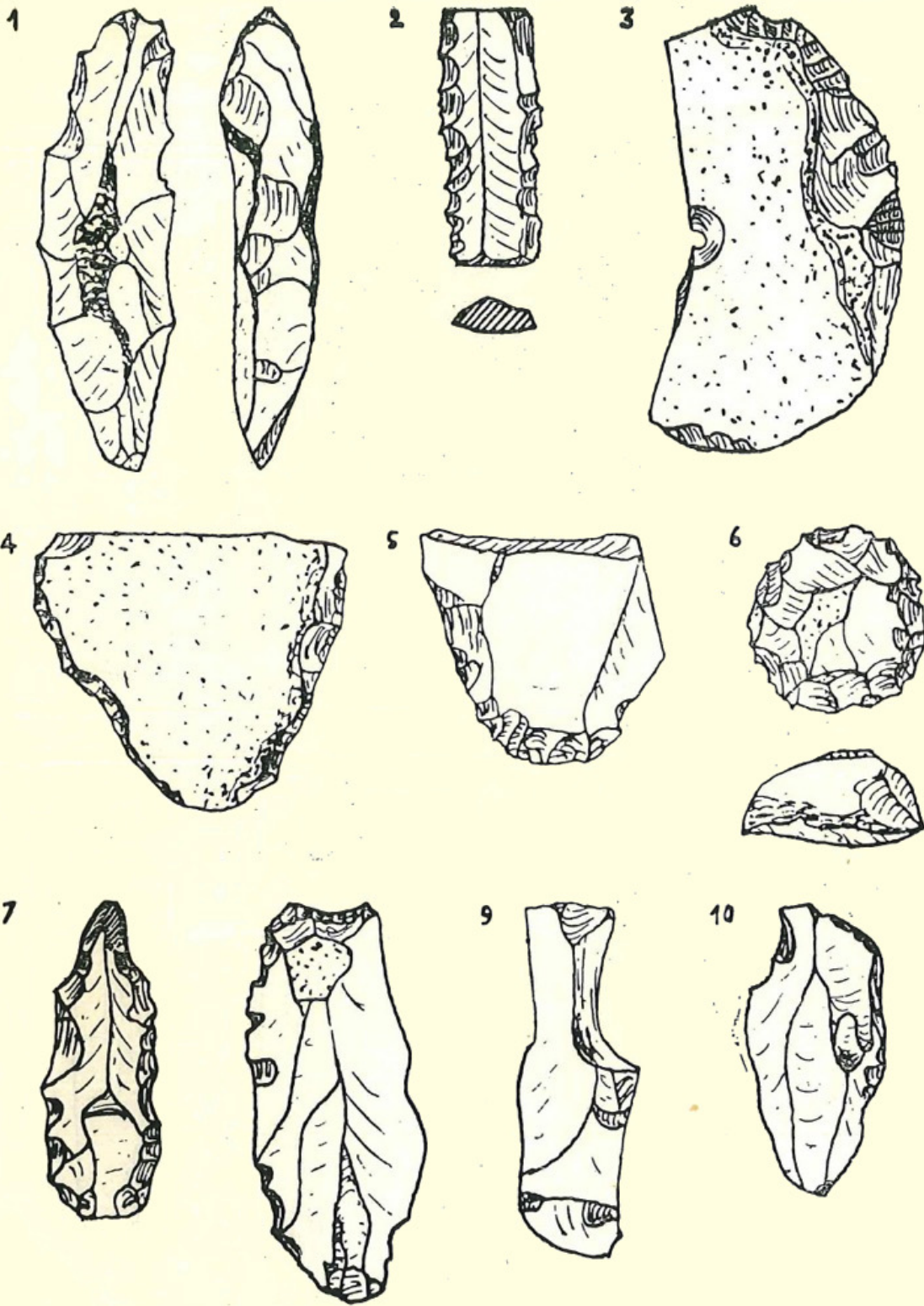


Fig. 30.

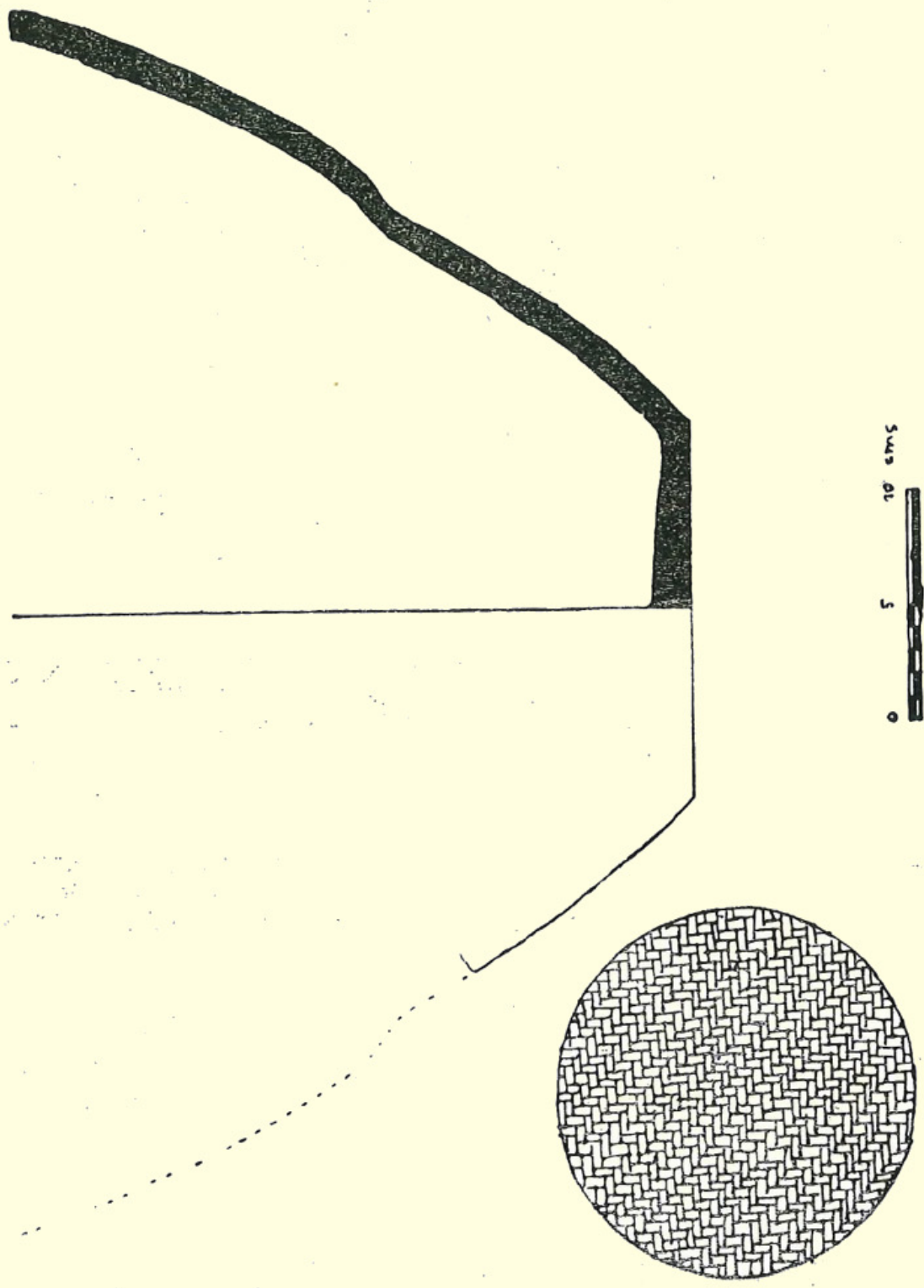


Fig. 31.

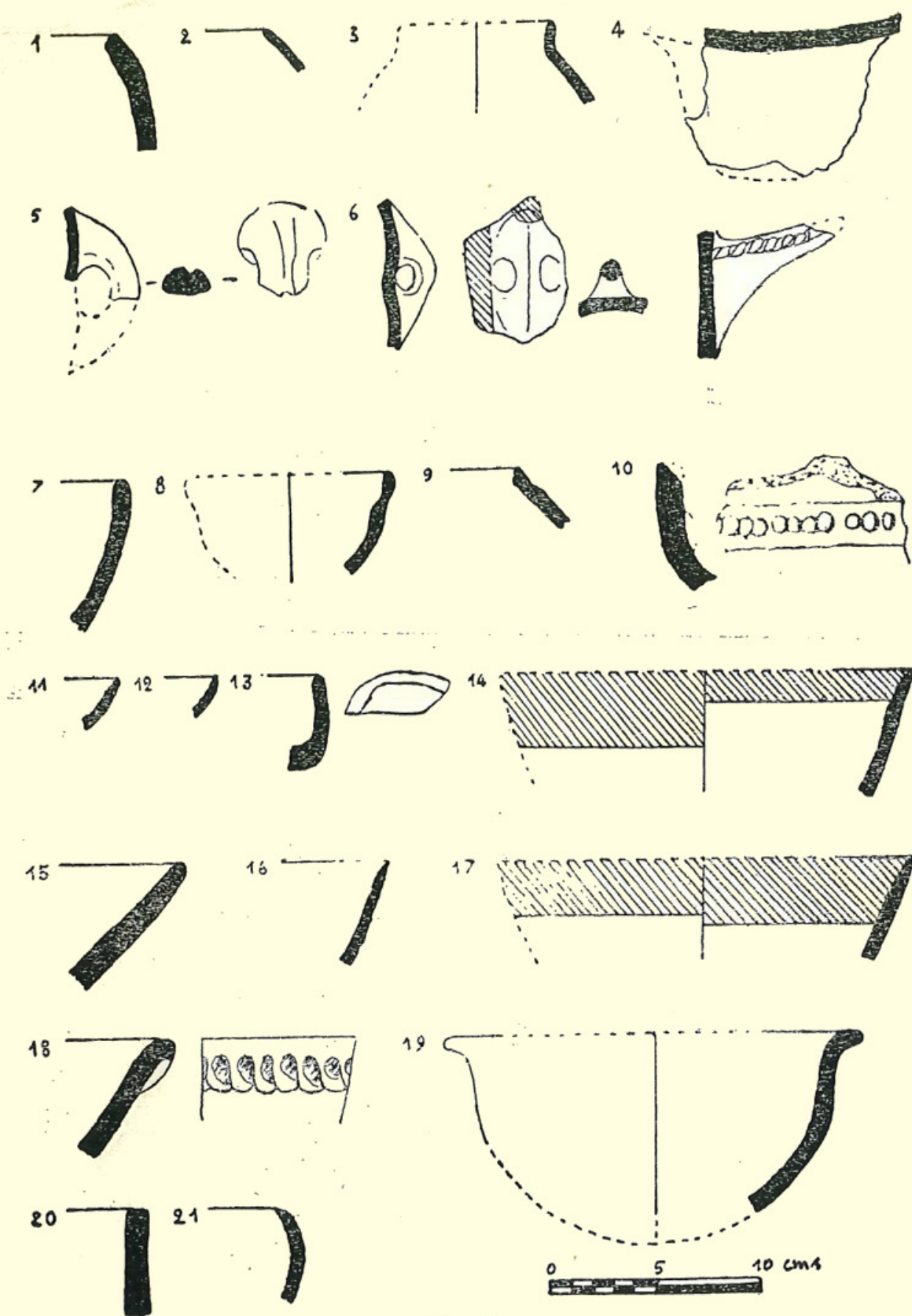
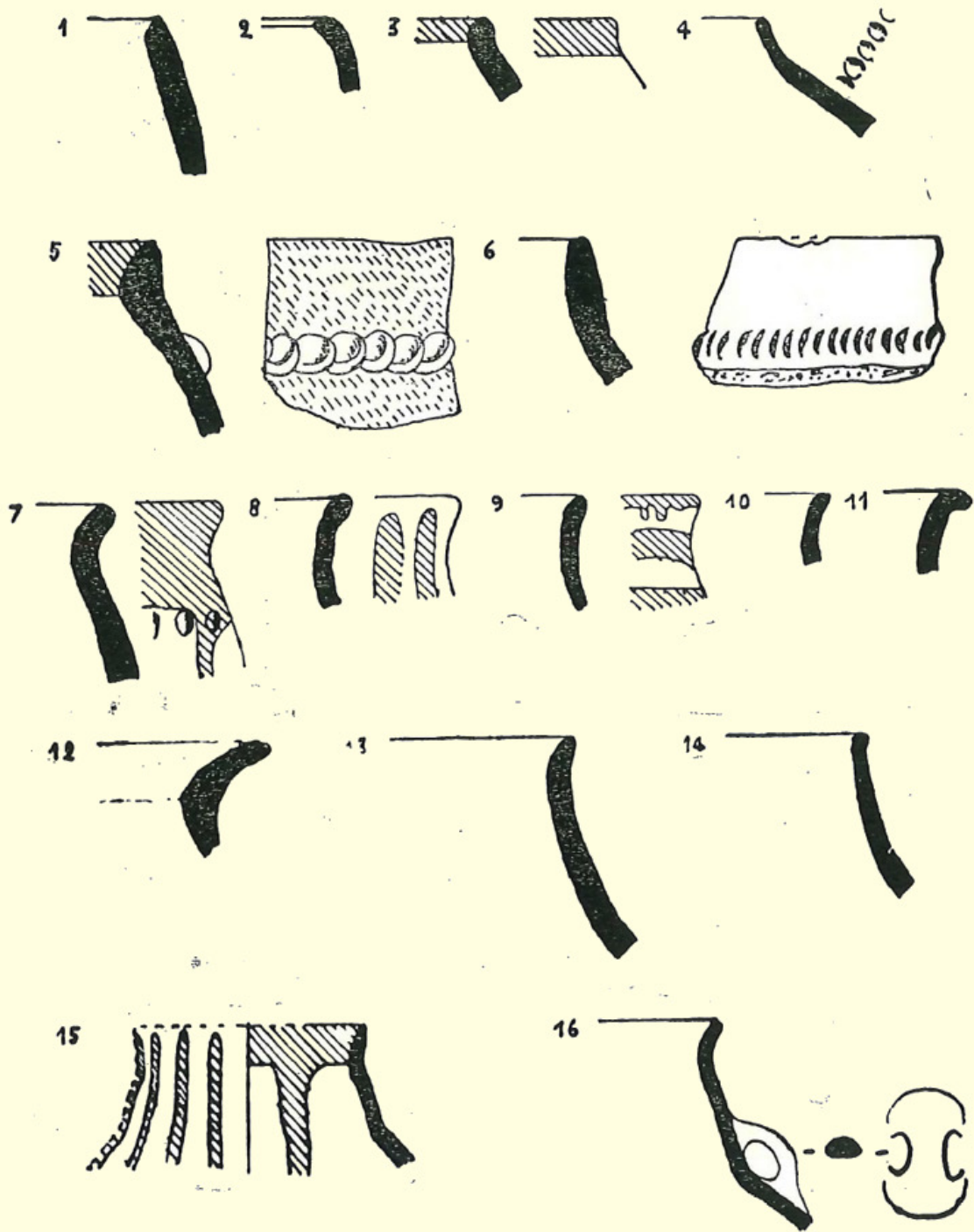


Fig. 32.



0 5 10 cm

Fig. 33.

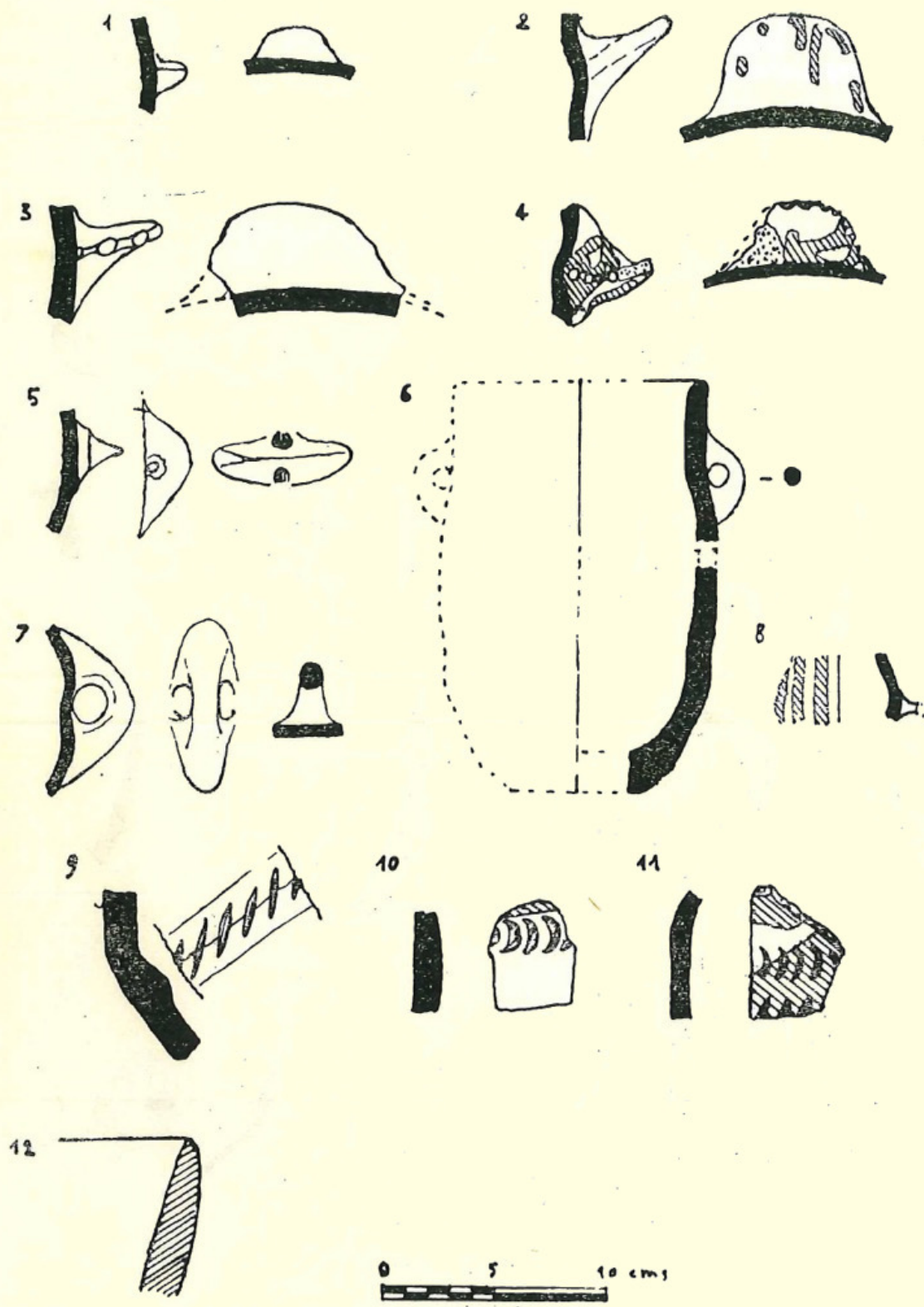


Fig. 34.

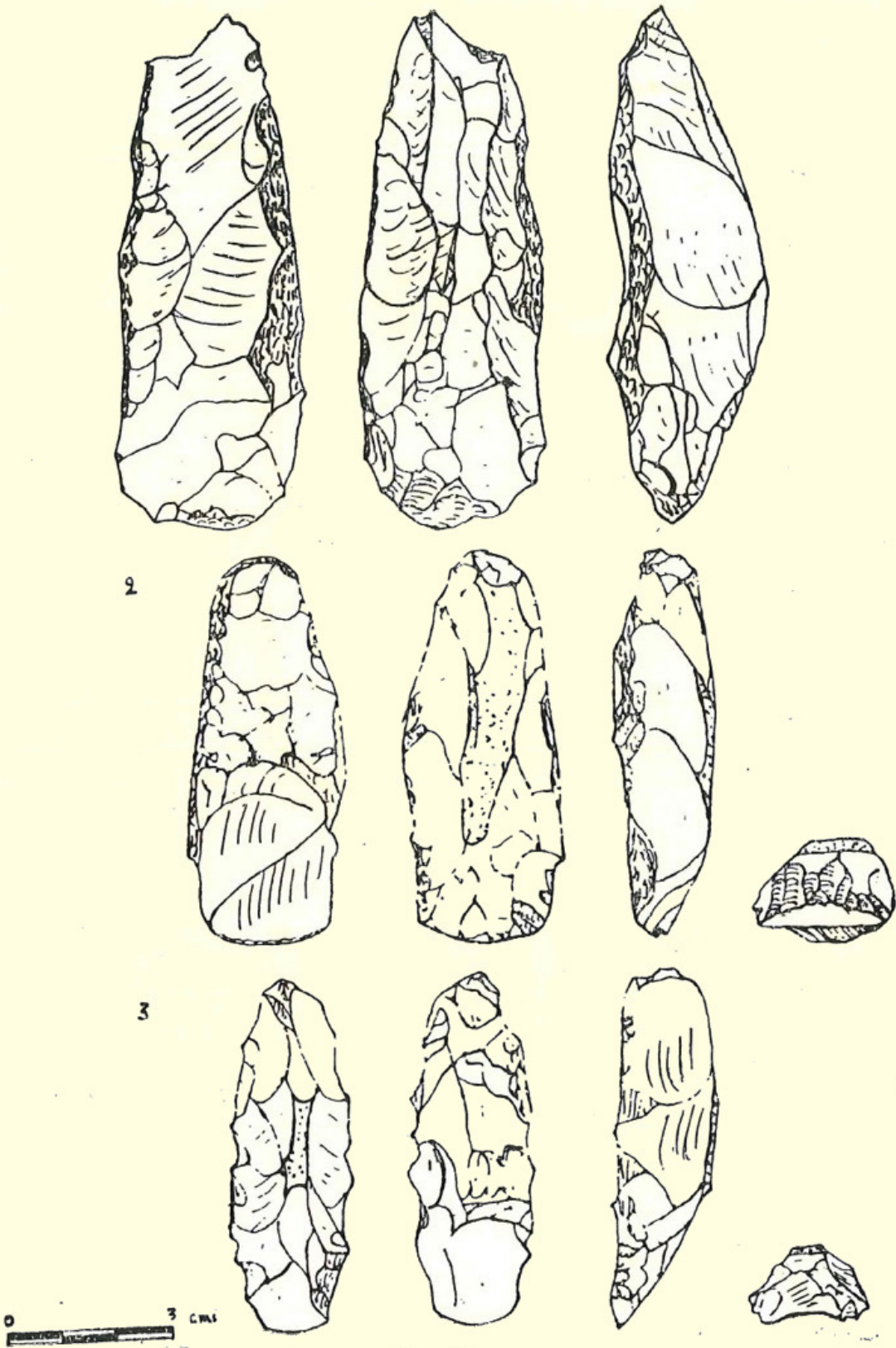


Fig. 35.

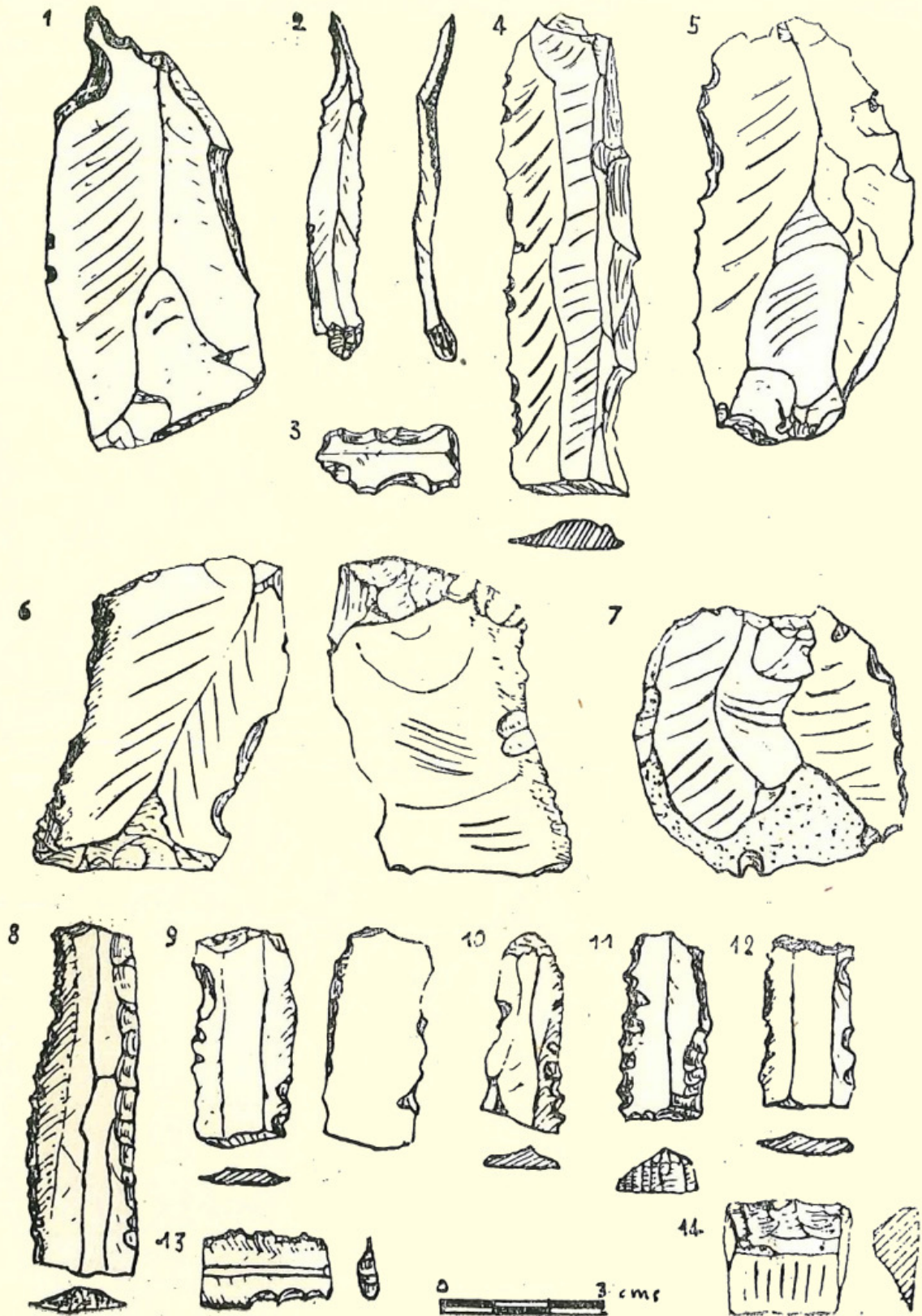


Fig. 36