THE EB IV (EB-MB) CEMETERY AT TIWAL ESH-SHARQI IN THE JORDAN VALLEY, 1983

by
S.W.Helms

Introduction

During the first season of excavations at Umm Hammad esh-Sharqiya in the Jordan Valley (Figs. 1: 1; 2: 1; 3: TUHe) under the auspices of the British Institute at Amman for Archaeology and History (BIAAH), a number of EB IV (EB/MB) tombs was rescued from modern road building activity in the area (Figs. 3: TS; 4). Further investigation led to the discovery of a large cemetery, Tiwal esh-Sharqi (Fig. 2:5), whose full extent is still not established. It is likely that it curves about the adjacent occupation site, from south of Umm Hammad esh-Sharqiya (Fig. 2:1), south and east of Umm Hammad el-Gharbiya (Fig. 2:2 to 4), along the heavily dissected "lisan marls" beside Wadi Zarqa in the east and the Jordan River to the west. Tell Umm Hammad, east and west, is a text book example in terms of settlement pattern or, rather, site choice. Agricultural land lies to the north and along the flood plains of the two rivers. The occupation site is located between this and the dissected marls. The cemetery lies beyond this, portraying a logical progression of land use: the least useful land being preserved for the dead. Further work at Umm Hammad will concentrate on the occupation sites (Fig. 2:1 to 4).

Following the excavations of 1982 at Umm Hammad esh-Sharqiya, the project continued in the cemetery area of Tiwal esh-Sharqi as a Department of Antiquities rescue mission. I am most grateful to Dr. Adnan Hadidi, Director of Antiquities, for offering this opportunity and for his constant interest in and concern for the rapidly vanishing archaeological heritage of Jordan, particularly in the Jordan Valley which is now the most intensively developing sub-region of the land. It is hoped that we will be able to establish shortly a permanent rescue facility within the Department of Antiquities in cooperation with Jordanian Universities and foreign archaeological missions.

The five weeks of work from January 15th to February 15th were conducted by Mr. Muhammad Jamra and Mr. Muhammad Darwish of the Department of Antiquities, A. V. G. Betts and the writer. We were comfortably accommodated in the new archaeological station at Deir 'Alla through the kindness of Yarmouk University and Dr. M. Ibrahim, the Department of Antiquities and Leiden University represented by Dr. G. van der Kooij. Surveying equipment was lent by BIAAH and work space was offered by Dr. D. McCreery at the American Center for Oriental Research (ACOR) in Amman.

Additional studies are in progress and include work on the human skeletal remains by Mr. S. L. Rolston (Yarmouk University), study of botanical material by Dr. D. McCreery, soil conductivity exploration by Dr. B. Frølich (Smithsonian Institution) and examination of the chipped stone industry by A. V. G. Betts.

EB IV (EB-MB) In The Jordan Valley

For Palestine the late third millennium B.C. has been a problematical period whose definition and interpretation represents one of the great debates in Syro-Palestinian archaeology. Like so many such establishments, it goes back to Albright and Tell Beit Mirsim (Albright, 1932; 1933: 55; 1938) and traces its development via Kenyon's reinterpretation (i.e., 1952, 1957; 1966), Prag's excavations at Tell Iktanu and her international survey (1974), Lapp's alternative terminology and even broader international survey (1966) and numerous divisions of funeral ceramics into families (Amiran, 1960; 1969), reorganized by Albright (1962), all of which was documented and further catego-

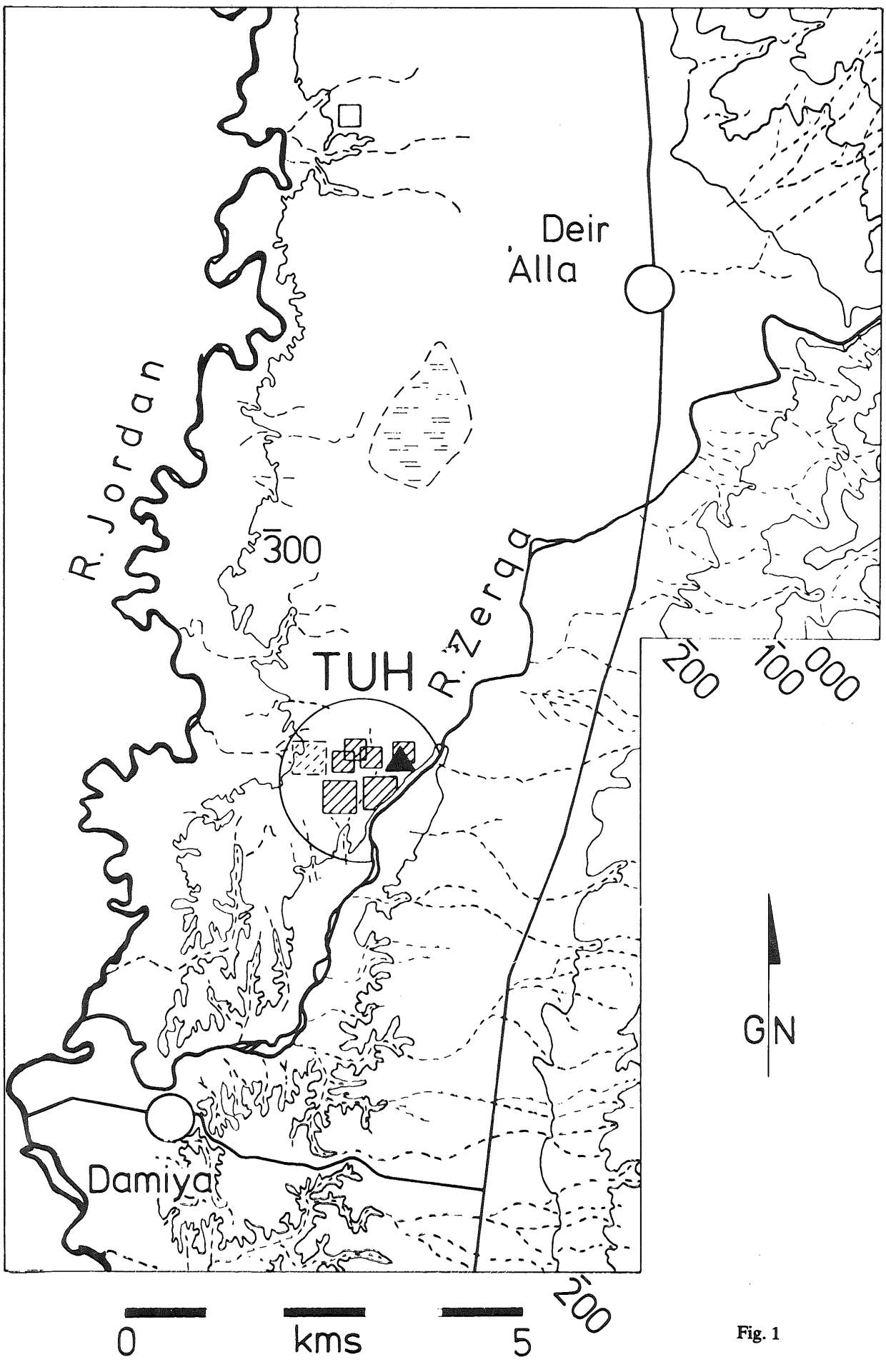
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Fig. 1

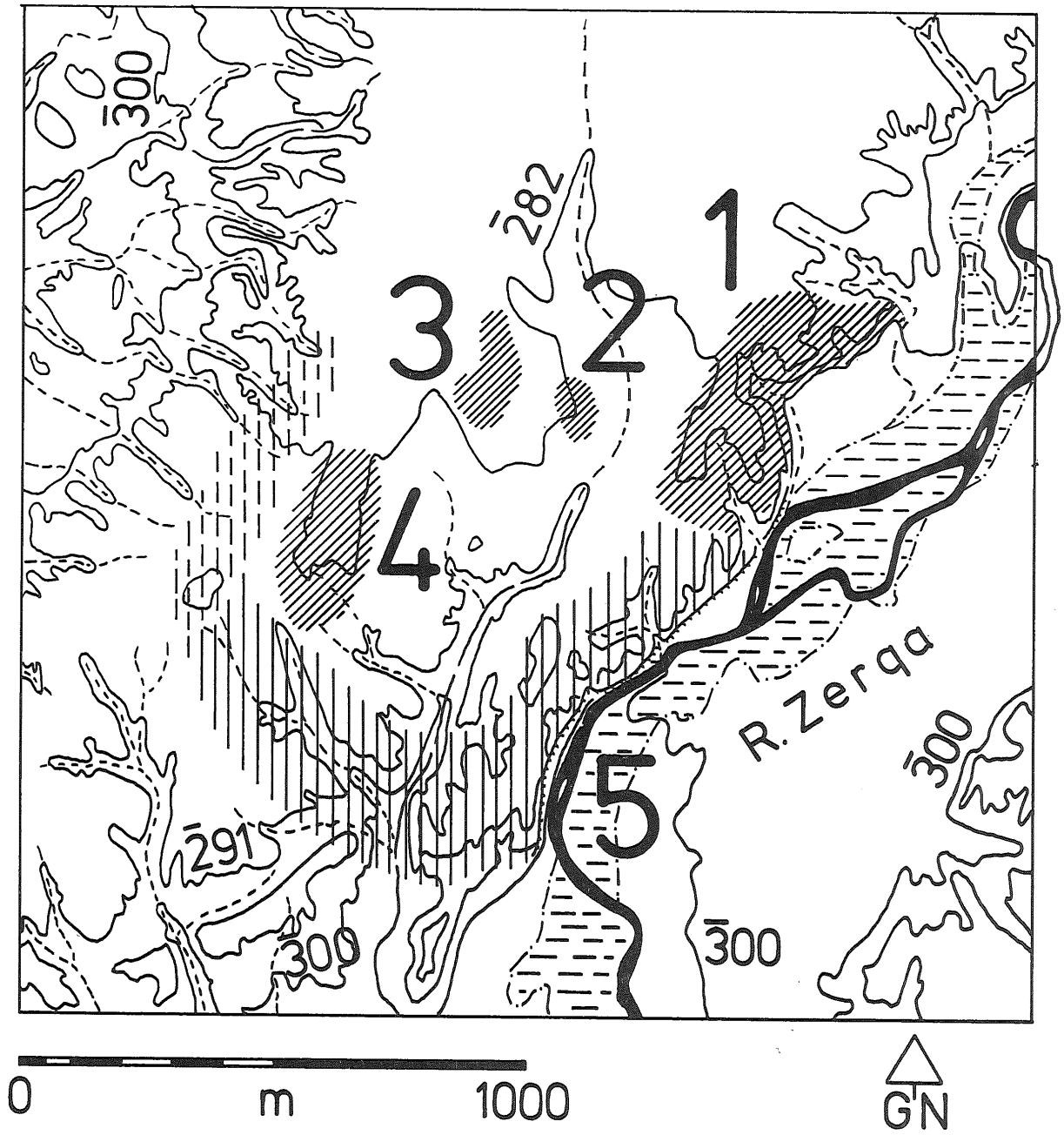
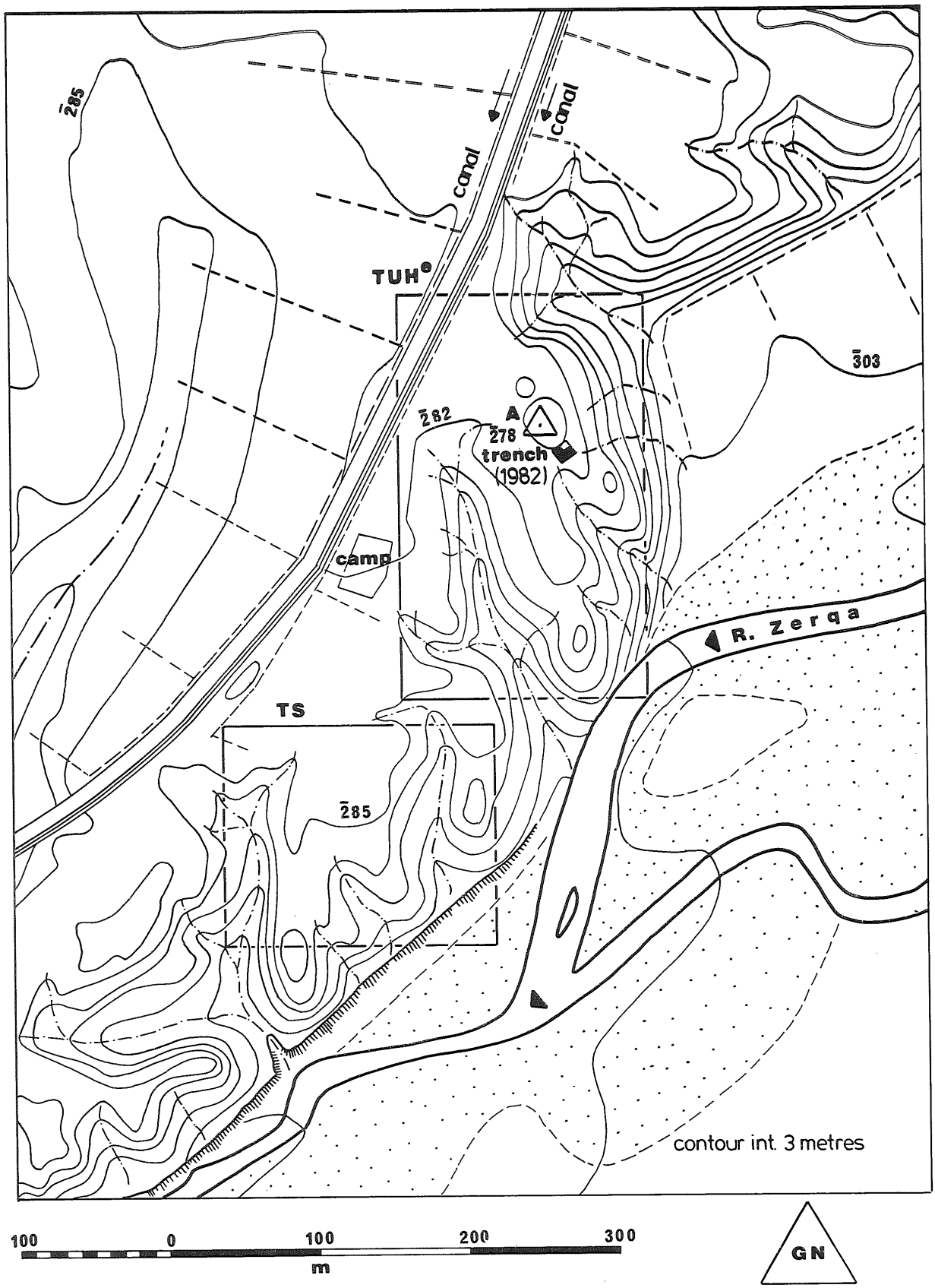


Fig. 2


285
canal
canal
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303
282
A
278
trench
(1982)
camp
R. Zerqa
TS
285
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300
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Fig. 3

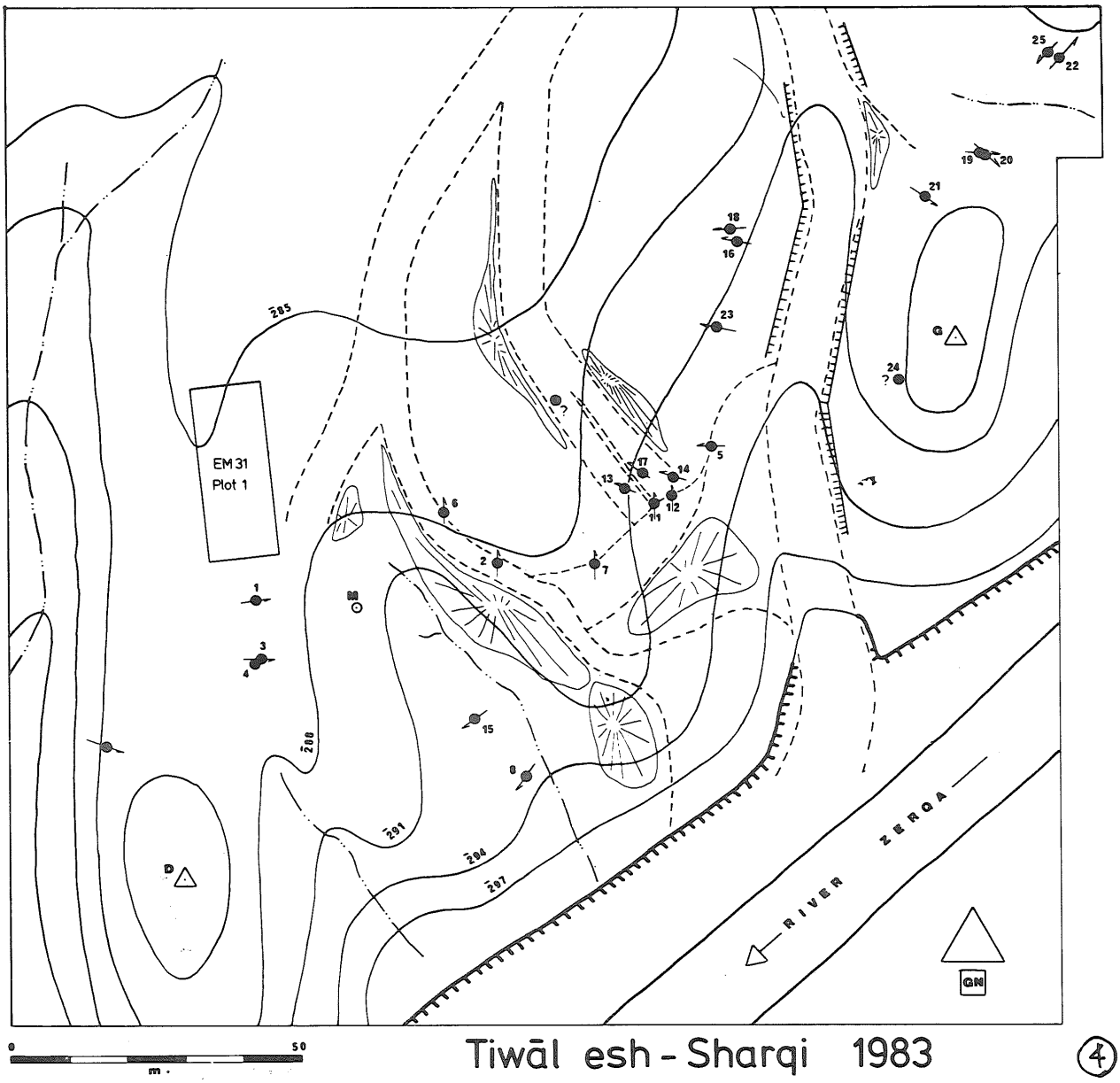
rized thoroughly by Dever since about 1970 (Dever, 1980). The bulk of evidence, mostly unpublished, comes from Palestine and the Sinai peninsula; very little from Transjordan. A survey of the "current" ideology still gives the impression that we are far from the truth everywhere.

The occupation site of Umm Hammad el- Gharbiya has been known since Nelson Glueck surveyed the area in the 1940's. He placed the site within MB I (1945b). Since then Umm Hammad el-Gharbiya has entered the still limited typological discussion regarding EB IV (EB-MB), notably at one of the few excavated occupation sites of the period in the eastern Jordan Valley, Tell Iktanu (Prag, 1974) and related to Jericho (Kenyon, 1960; 1965). Prag tabulated various Transjordanian pottery types in comparison with her two phases at Iktanu in a necessarily preliminary way that will have to be revised upon further excavations in the subregion. More general interpretations have been attempted by Dever (1980) for the areas west as well as east of the Jordan River: his families 'J' for Jericho *and* the Jordan Valley and 'TR' for Transjordan, an area as large as Palestine. Of particular interest is his "gap" in this one-family land for his EB IVC (*idem.* Fig.1). During this period he describes an occupation in southwestern Palestine (family 'S') suggesting that the earlier occupation in the east (family 'TR') was the *Vorlage* for the west. Ceramic types quite possibly contemporary with this subdivision of the period (EB IVC) (cf. also Amiran, 1960; 1969) have been found at Tell Umm Hammad el-Gharbiya and Tiwal esh-Sharqi (see below). That such a qualification of the "current" interpretations is possible is due to the lack of comparable material available to scholars abroad. Before the present work in the Jordan Valley very little pottery of the period was found or published with the exception of Jericho (Kenyon, 1960; 1965) and Beth Shan (Oren, 1973a; 1973b). All that we had from Transjordan, apart from Glueck's survey (1951) and that of Mittmann (1970) was Khirbet Iskander (Parr, 1960; Richard, 1982), Bâb edh-Dhrâ' (Schaub, 1973), Ader (Albright, 1924; 1943; Cleveland, 1960), 'Arô'er (Olávarri, 1965; 1969) and Amman (Dajani, 1967/8; Zayadine, 1978). In the Jordan Valley several new occupation sites have been identified recently (Ibrahim, *et. al,* 1976), including Tell el-Hayyat in the north of the Jordan Valley. Tell el-Hayyat is being excavated and is beginning to produce some stratified occupational material of the period, perhaps contemporary with phase 2 of Tell Iktanu (Falconer and Magness-Gardiner, pers comm). Thus there is very little useful evidence at hand at the moment and for that reason the fortunate recovery of complete vessels from the tombs at Tiwal esh-Sharqi is a welcome addition. Work on the occupation site of Umm Hammad el-Gharbiya will commence in 1984 and will complement this and perhaps form part of the basis for further studies and interpretations. The present work is an effort to present information without expansive speculation.

The Tombs

Since the area chosen for burials lies for the most part along the steep bluffs of Wadi Zarqa the chances of soil disturbances throughout time have been great. Whether we will be able to blame the often drastic shifting of whole blocks of marls on erosion or earthquakes or a combination of both remains to be seen. The results are the same. Nearly all chambers opened during the 1982/3 season were damaged in this way. We have begun to calibrate soil conductivity instrumentation (Frohlich: Simthsonian Institution) in two areas (Fig. 4: EM31) with good preliminary results in determining soil disturbances. It remains to be seen whether Frøhlich's success at Bâb edh-Dhrâ' can be duplicated at Tiwal esh-Sharqi (Frøhlich and Ortner, 1982) in differentiating collapsed and open burial chambers. We will also see whether field computing systems and be implemented. Such mechanical aids are essential in terms of strategy in view of the extreme depth of some of the shafts. Note for example the six metre deep shaft of Tomb 3 below.

In addition to natural causes we have begun, like many other "scientific" tomb robbers before us, to understand a human factor that is often understated. One takes


EM 31
Plot 1
285
288
291
294
297
RIVER ZERQA
0
50
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Tiwāl esh - Sharqi 1983
4

Fig. 4

heart in Dever's admonition that it "...is a well-known but deplorable fact that most of our relative phasing, as well as our absolute dating, rests heavily on typological analysis of tomb groups, which cover a very brief time-span and in any case are never reliably stratified" (Dever, 1980: 45). We recognize the practice of re-burial and the disturbing notion of either ancient respect for the near-recent dead or simply expediency where tomb offerings may have been left in the chambers along with new depositions (see below). Such a notion introduces a note of caution regarding uncritical acceptance of tomb groups as typologically and chronologically closed. Perhaps the only constructive way of resolving this is the concurrent excavation of the adjacent related occupation sites when these can be found. This too has been said often but rarely done.

Tomb 1 (Fig. 15)
Small rounded shaft with irregular chamber. No blocking of access. Loose fill in chamber with a small human bone fragment. Possibly a baby burial.

Tomb 2 (Fig. 12)
No shaft left: chamber cut by bulldozer to within 0.20 m. at one end, through the floor at the other. Chamber had collapsed before this. Soil very compressed. Shattered bone fragments.

Tomb 3 (Fig. 5)
Rectangular shaft 6. 00 m. deep, cut in trapezoidal sections and provided with foot- holds. Chamber blocked by large flat stone slab. Chamber round, domed with small niche for lamp to right of access. Signs of re-burial attempt above blocking-pick marks and skeletons pushed aside followed by roof collapse. No re-burial.

Tomb 4 (not illustrated)
Circular shaft near Tomb 3. Unfinished.

Tomb 5 (Fig. 10)
Rectangular shaft (not cleared) and round chamber cut by bulldozer. Access blocked by large mudbricks (0.55 x ? x 0.11 m.).

Tomb 6 (Fig. 14)
Rectangular/square shaft, round chamber cut by bulldozer. Access blocked by stone slab. Small earth sill left between shaft and chamber.

Tomb 7 (not illustrated)
Small section of chamber left on side of bulldozer cut; all else gone.

Tomb 8 (Fig. 15)
Shaft eroded away. Access to small rounded chamber blocked by river pebbles.

Tomb 9 (Fig. 14)
Rectangular/square shaft and round chamber cut by erosion. Access blocked by stone slab on low earth sill. Some large mudbricks in shaft, perhaps left from previous blocking.

Tomb 10 (not illustrated)
Shaft and chamber almost completely removed by bulldozer. Small section of chamber floor remaining.

Tomb 11 (Fig. 13)

Shaft removed and chamber cut in half by bulldozer. Shattered bone fragments.

Tomb 12 (Fig. 13)
Shaft removed and chamber almost completely cut away by bulldozer. Shattered bone fragments.

Tomb 13 (Fig. 9)
Rectangular, trapezoidal shaft with footholds. Access blocked by field stones. Signs of re-use. Chamber collapsed and not excavated.

Tomb 14 (Figs. 7, 8)
Rectangular/trapezoidal shaft with footholds. Access blocked by field stones and pottery deposition. Very complicated stratigraphy due to collapse of Tomb 17 shaft and part of chamber. Signs of re-burial.

Tomb 15 (Fig. 15)
Shaft eroded away. Chamber small, round. No blocking found. Child burial (?). Small bone fragments.

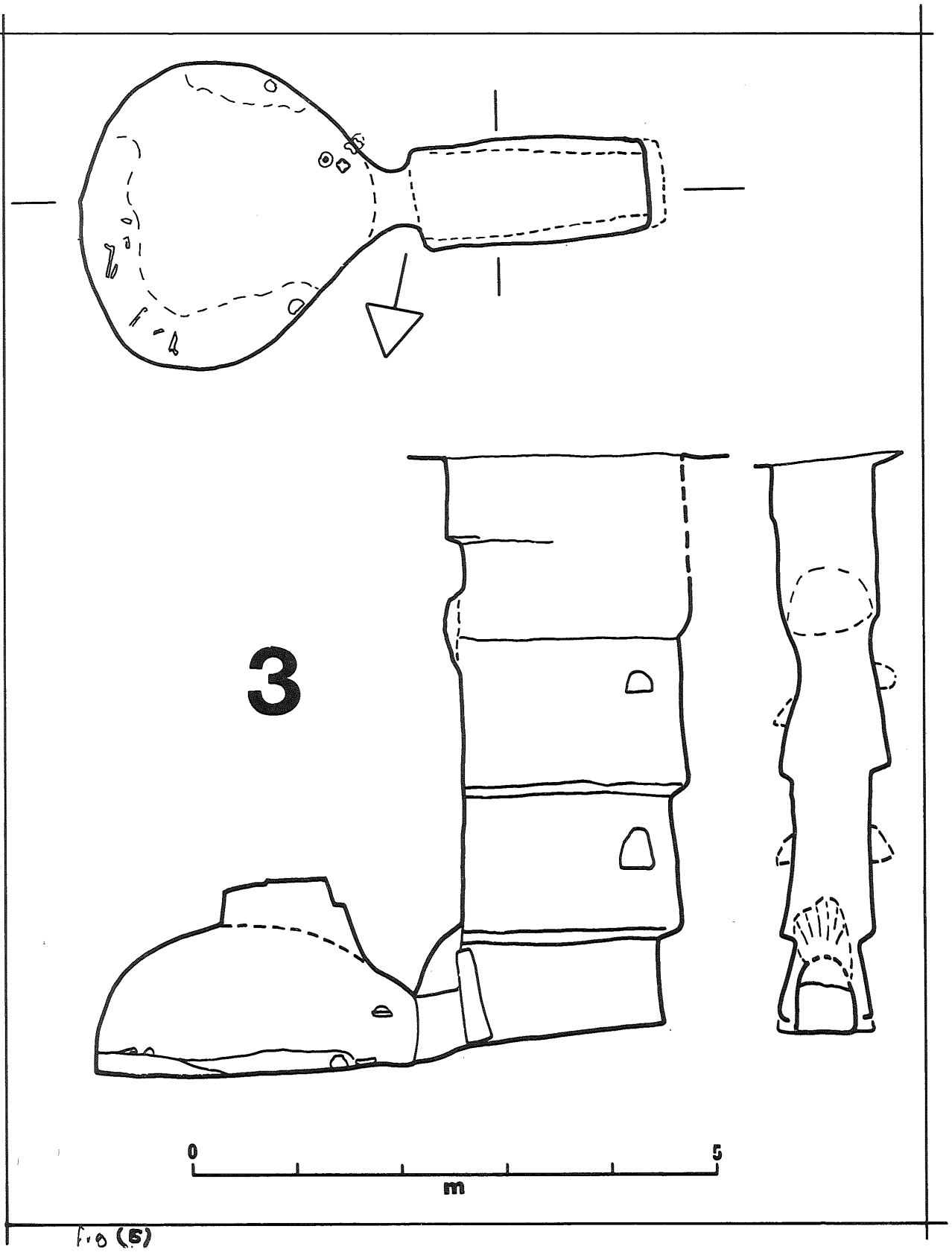


Fig. 5

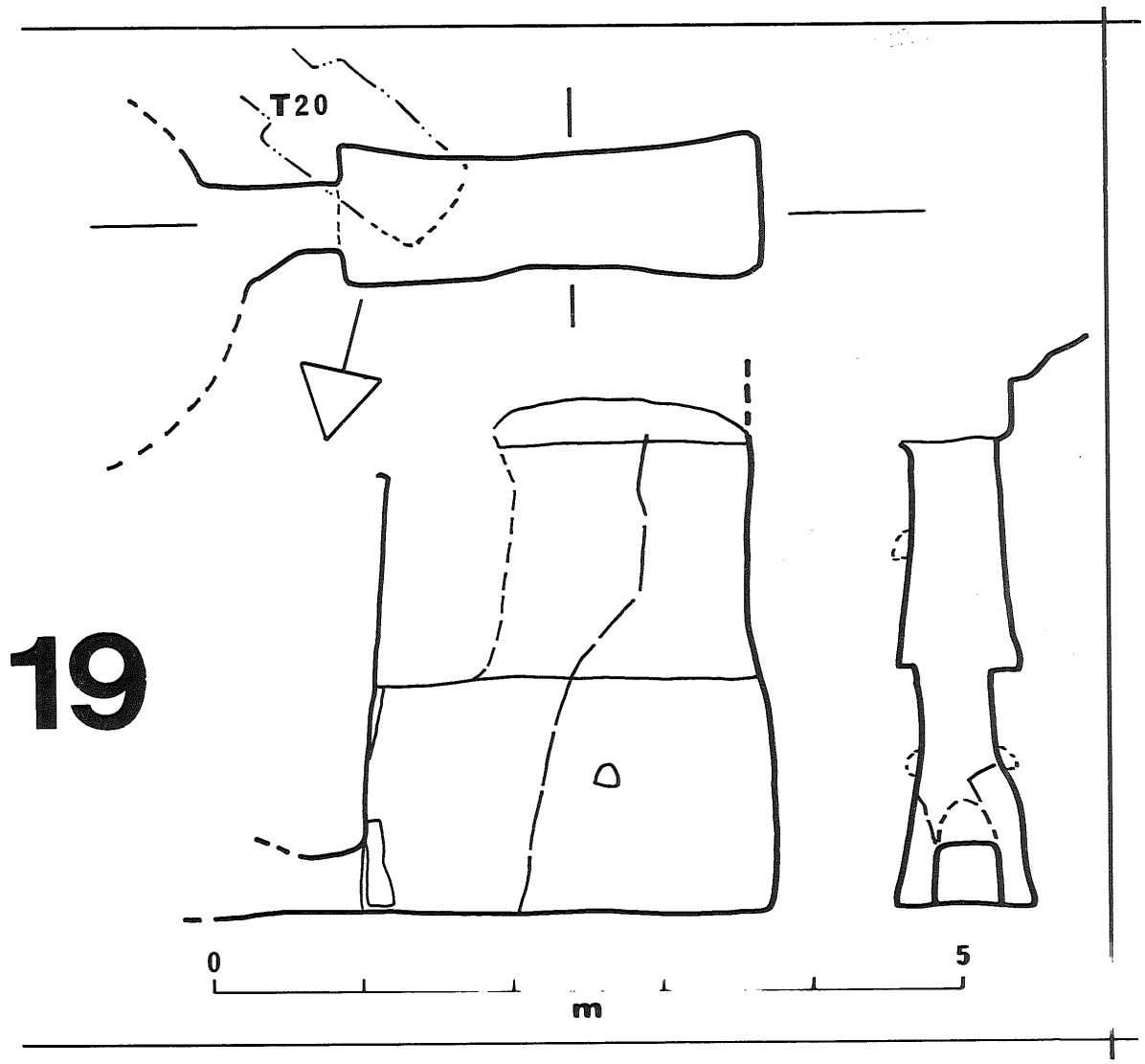


Fig. 6

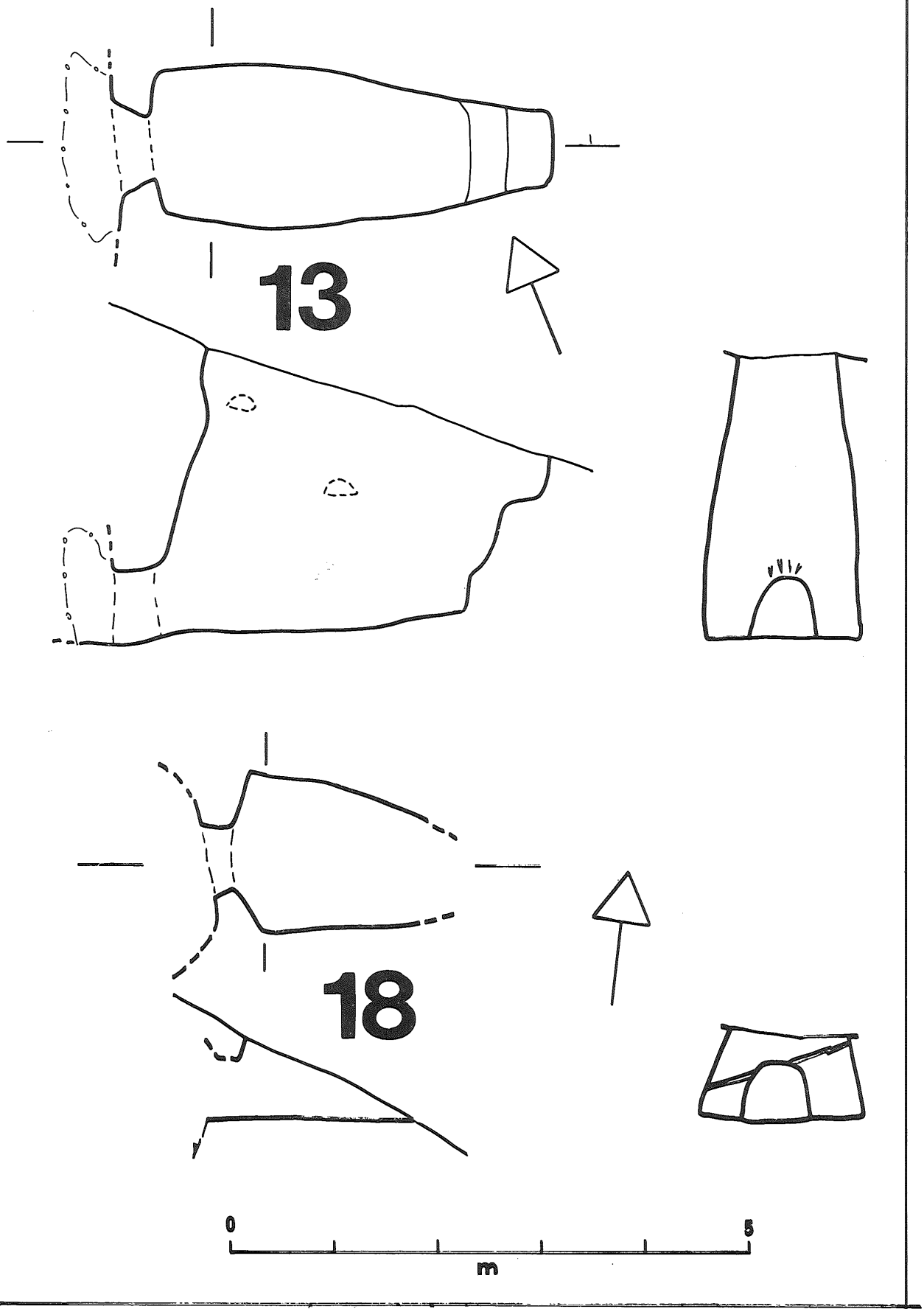


Fig. 9

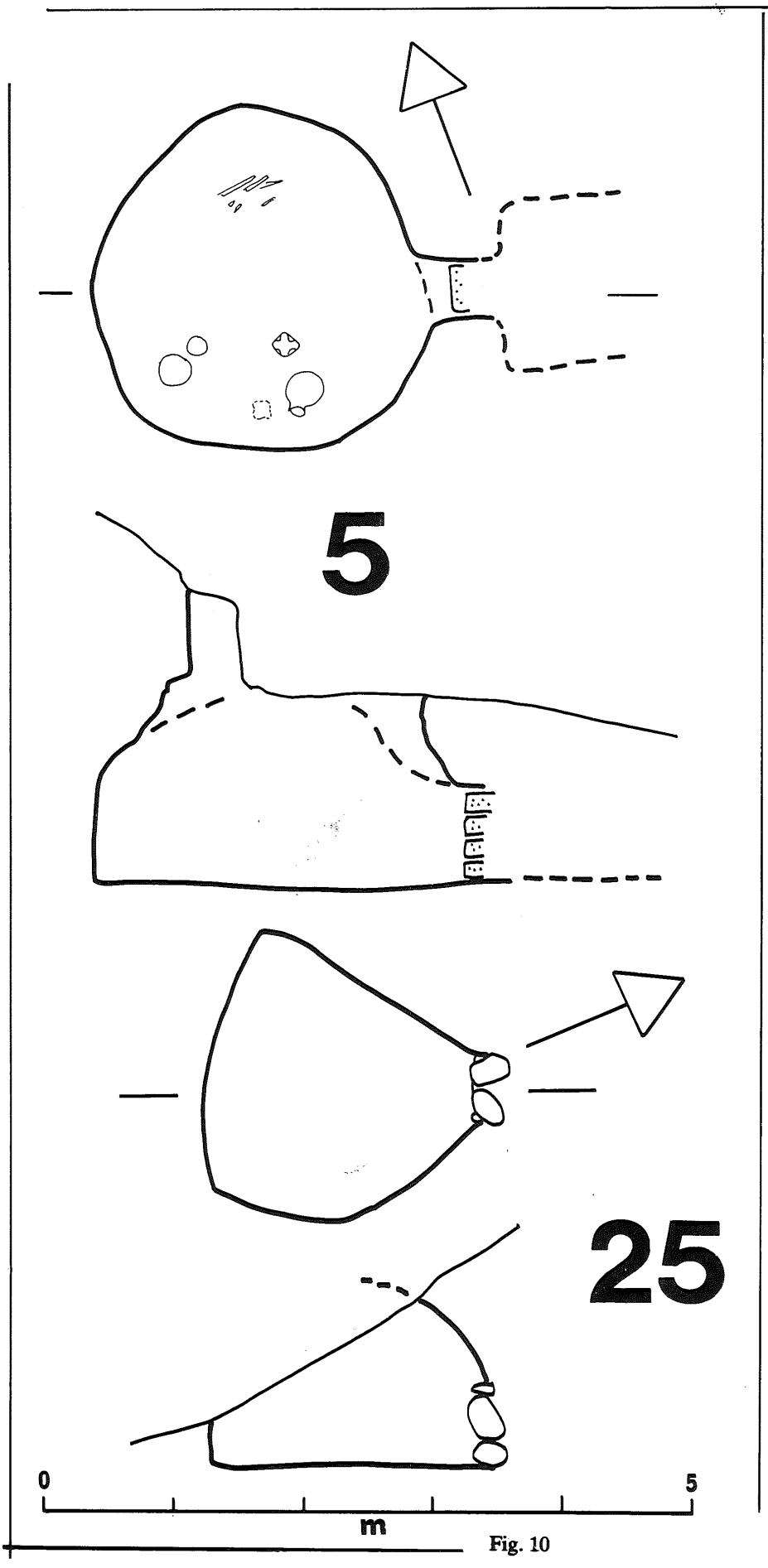


Fig. 10

Tomb 16 (Fig. 13)
Rectangular shaft, partly eroded. Very small rounded chamber, collapsed roof. Crushed human bones scattered over shaft floor. No blocking found.

Tomb 17 (Fig. 7)
Rectangular/trapezoidal shaft. Stone blocking. Chamber not excavated.

Tomb 18 (Fig. 9)
Rectangular/trapezoidal shaft. Chamber blocked by river pebbles. Shaft cut by erosion. Earth shift completely blocked chamber. Some shattered bone fragments.

Tomb 19 (Fig. 6)
Rectangular/trapezoidal shaft with footholds. Chamber blocked by stone slab. Roof collapsed. Crushed bone fragments and one pot near entrance. Signs of re-burial attempt: pick marks above blocking.

Tomb 20 (Fig. 6)
Rectangular/square shaft cut by shaft of Tomb 19. Access blocked with large mudbricks. Collapsed chamber. Not excavated.

Tomb 21 (Fig. 15)
Rectangular/square shaft. Access to small rounded chamber blocked by one and one half mudbricks (0.56 × 0.36 × 0.11 m.). Child's disarticulated skeleton on top of a layer of roof collapse.

Tomb 22 (Fig. 13)
Shaft eroded away. Rounded chamber badly disturbed by earth shift. Bone fragments. Loose stones near access.

Tomb 23 (Fig. 13)
Rectangular/trapezoidal (?) shaft, eroded. Access blocked by stones. Chamber sheered off *ca.* 40-50 centimetres displacement. Not excavated.

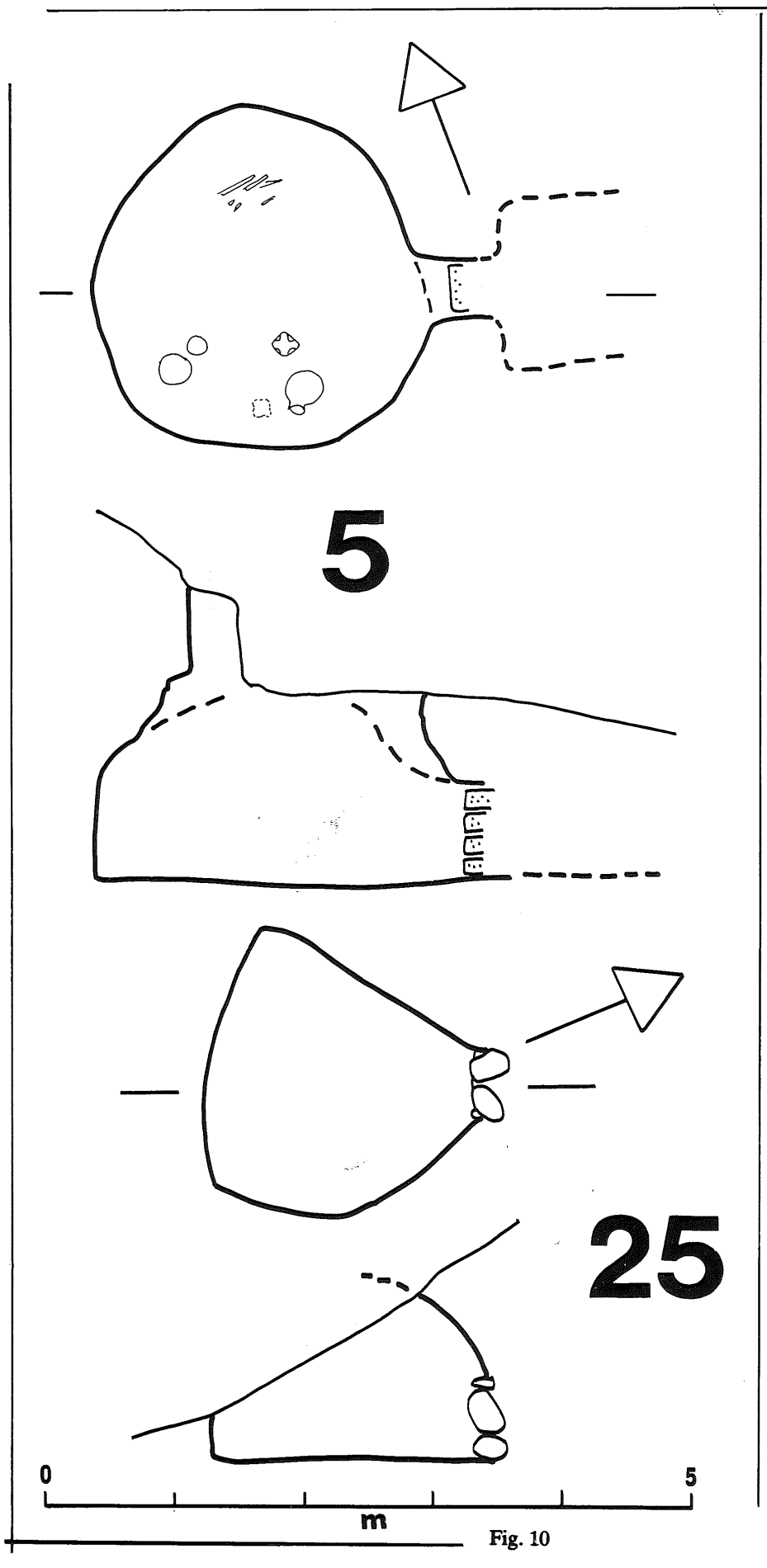
Tomb 24 (not illustrated)
Shaft (?) and chamber badly disturbed by soil shift. Not excavated.

Tomb 25 (Figs. 10, 11)
Shaft not excavated. Access blocked by field stones. Chamber badly disfigured by soil shift. Articulated skeleton in flexed position.

Far too few burials have been recorded to describe tomb "architecture" in anything but a preliminary way. We appear to be dealing with two general types of single chambered shaft graves, one of which might be further sub-divvided. The criterion is size, related to the size of the corpse. Thus we have small rounded chambers with very few grave goods, if any, for children or babies (Figs. 15; 13: Tomb 16?) and almost but not quite uniform burial chambers with deep rectilinear shafts and rounded chamber. Blocking methods might be significant, the use of stone being a later choice over mudbrick (i.e., Tomb 6: Fig. 14). These larger burials might be divided according to the shaft type, one type being rectangular/trapezoidal (Figs. 5, 6, 7, 9, and probably also 10, 12, 13), the other square/rounded with an earth sill between the shaft and chamber (Fig. 14).

In very general comparative terms the EB IV (EB-MB) shaft graves at Tiwal esh-Sharqi are normal and probably more detailed subdivision according to "architectural" style is either meaningless or premature at this stage. Only the astonishing depth of Tomb 3 (Fig. 5) is new but may simply be a function of topography and soil mechanics. At Tiwal esh-Sharqi the more stable layers of marls tend to lie deep beneath topsoil. Similar structural idiosyncrasies can be observed at other sites such as Bâb edh-Dhrâ' (Schaub, 1973: figs. 2, 3), there related to repeated re-use of the shaft according to the excavators.

The orientation of the burials (shaft-chamber) is noted in Figure 4, the arrow pointing towards the chamber. Nothing has been made of general tomb alignment throughout the cemetery. This could become a valid investigation when more tombs are located. It may also then be possible to derive some geomorphological information from the alignment and relative depth of the shafts, although in the present work no patterns could be discerned.



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Tomb 20 (Fig. 6)
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Shaft (?) and chamber badly disturbed by soil shift. Not excavated.

Tomb 25 (Figs. 10, 11)
Shaft not excavated. Access blocked by field stones. Chamber badly disfigured by soil shift. Articulated skeleton in flexed position.

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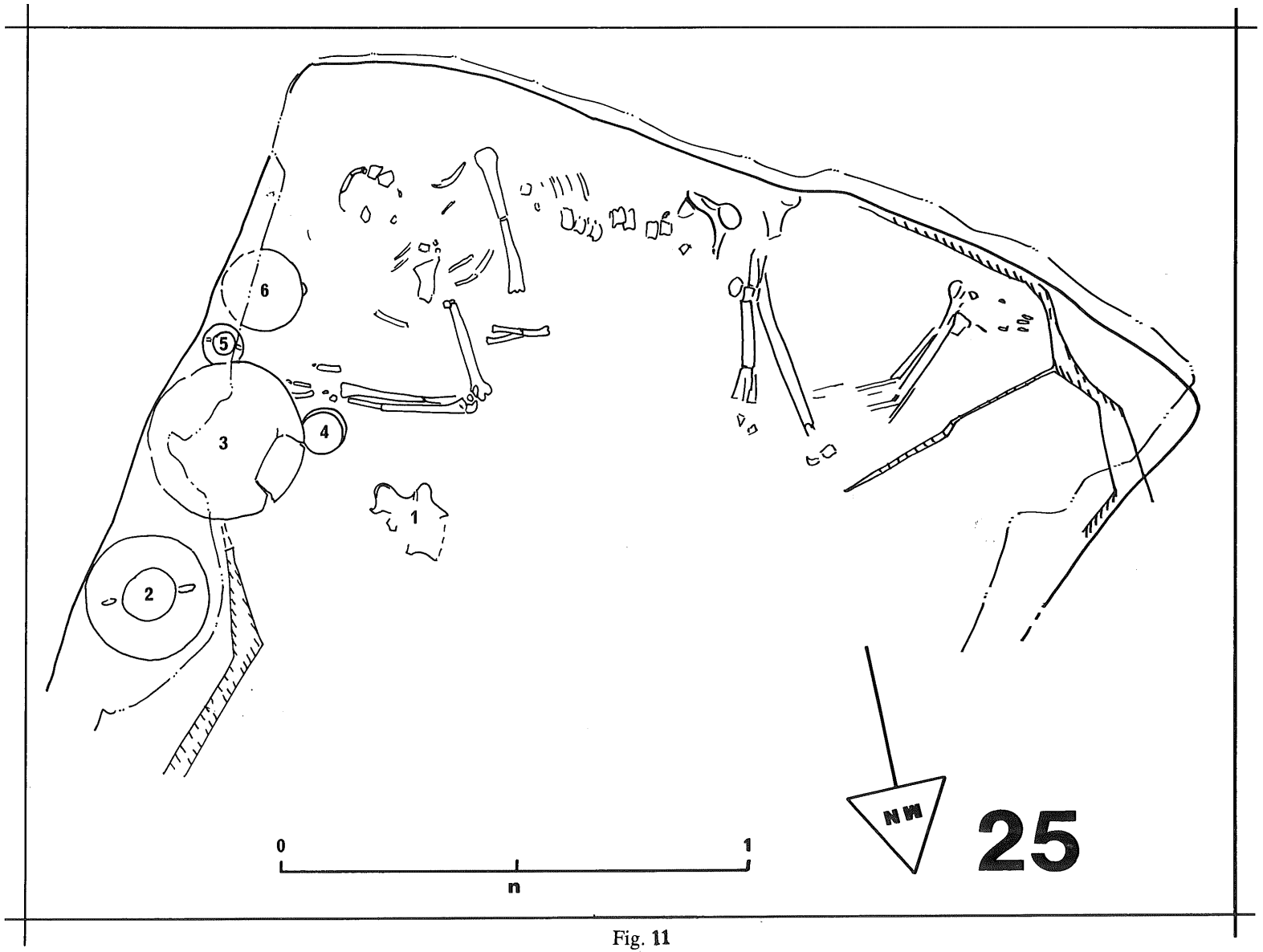
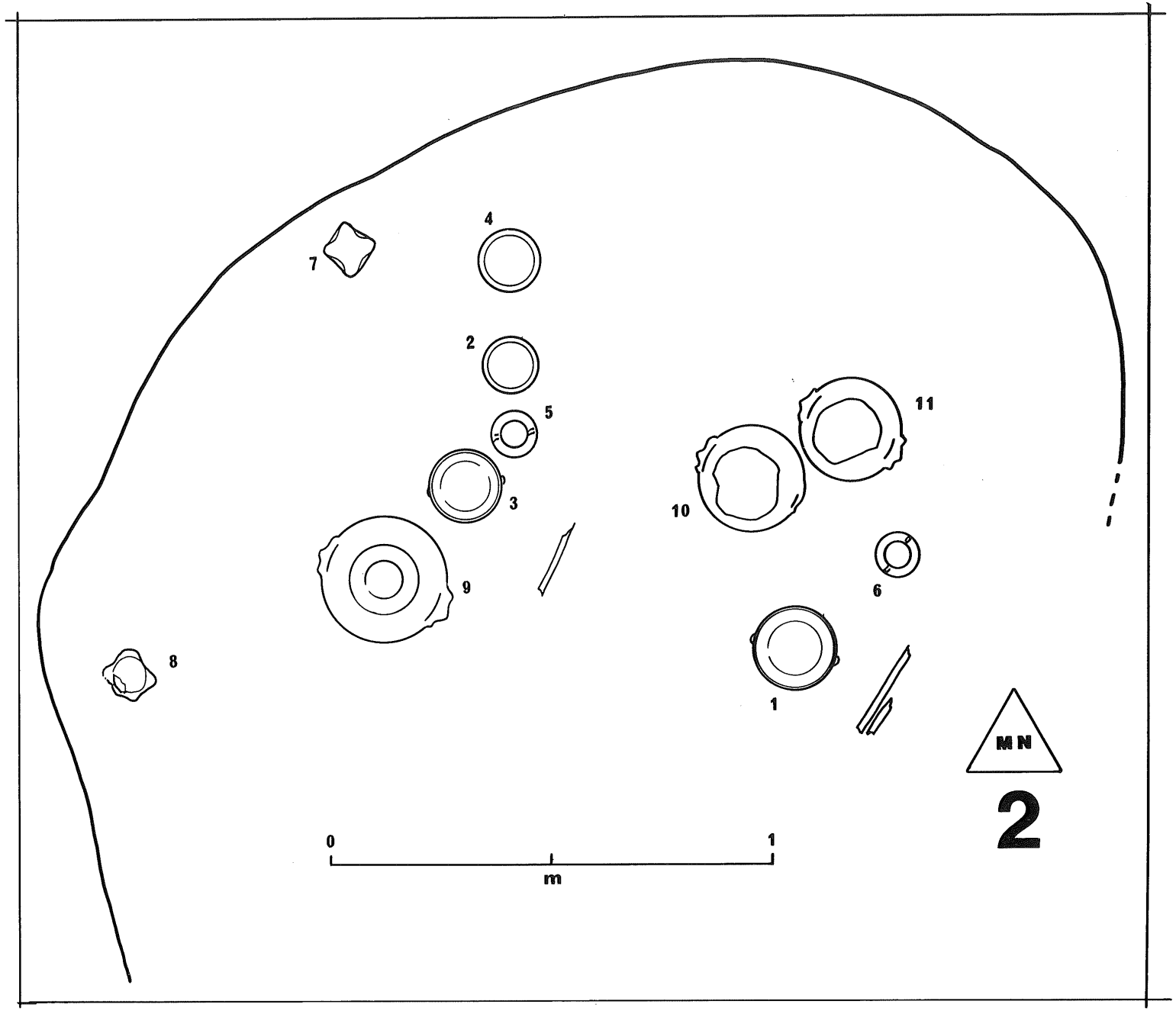


Fig. 11



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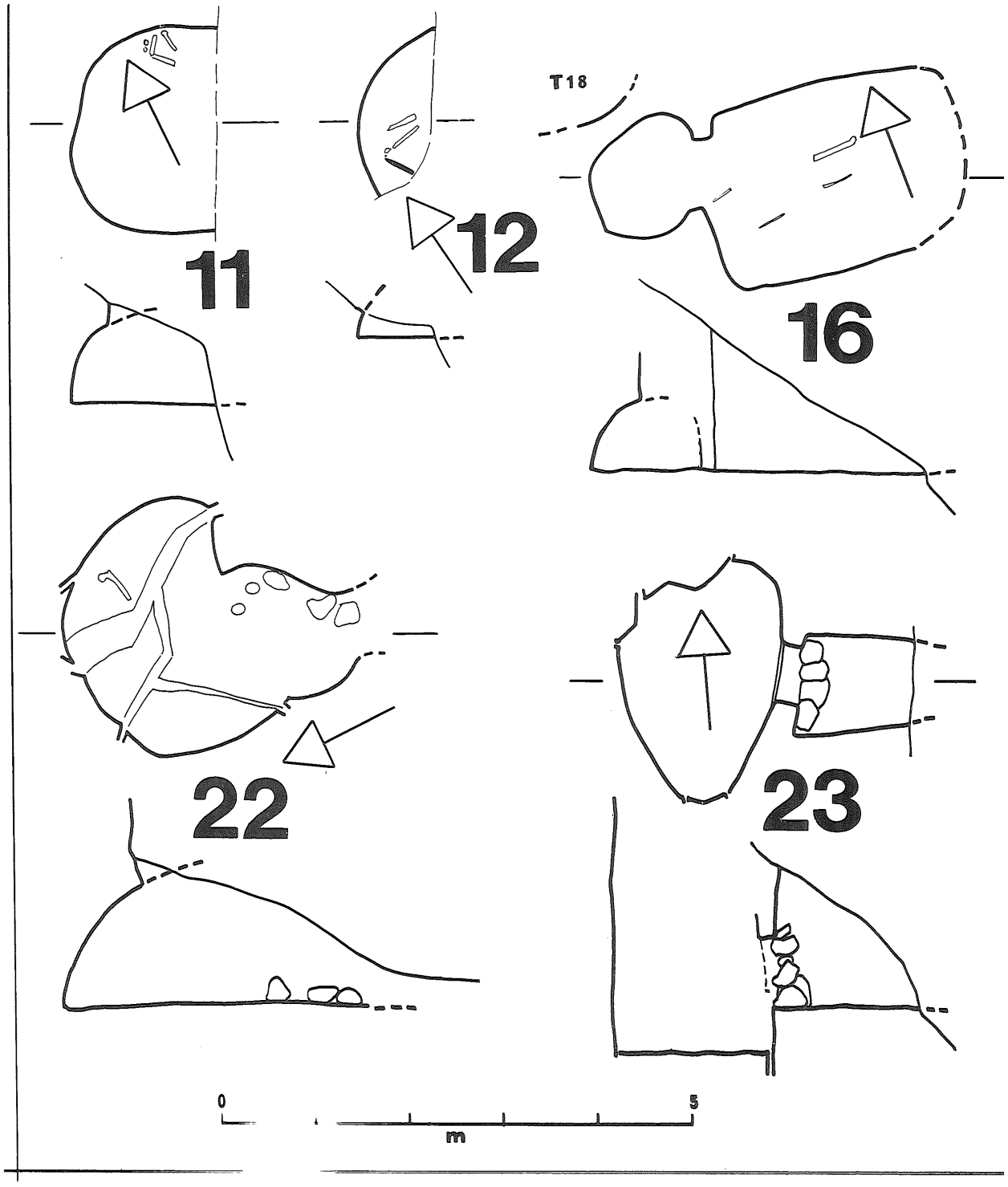


Fig. 13

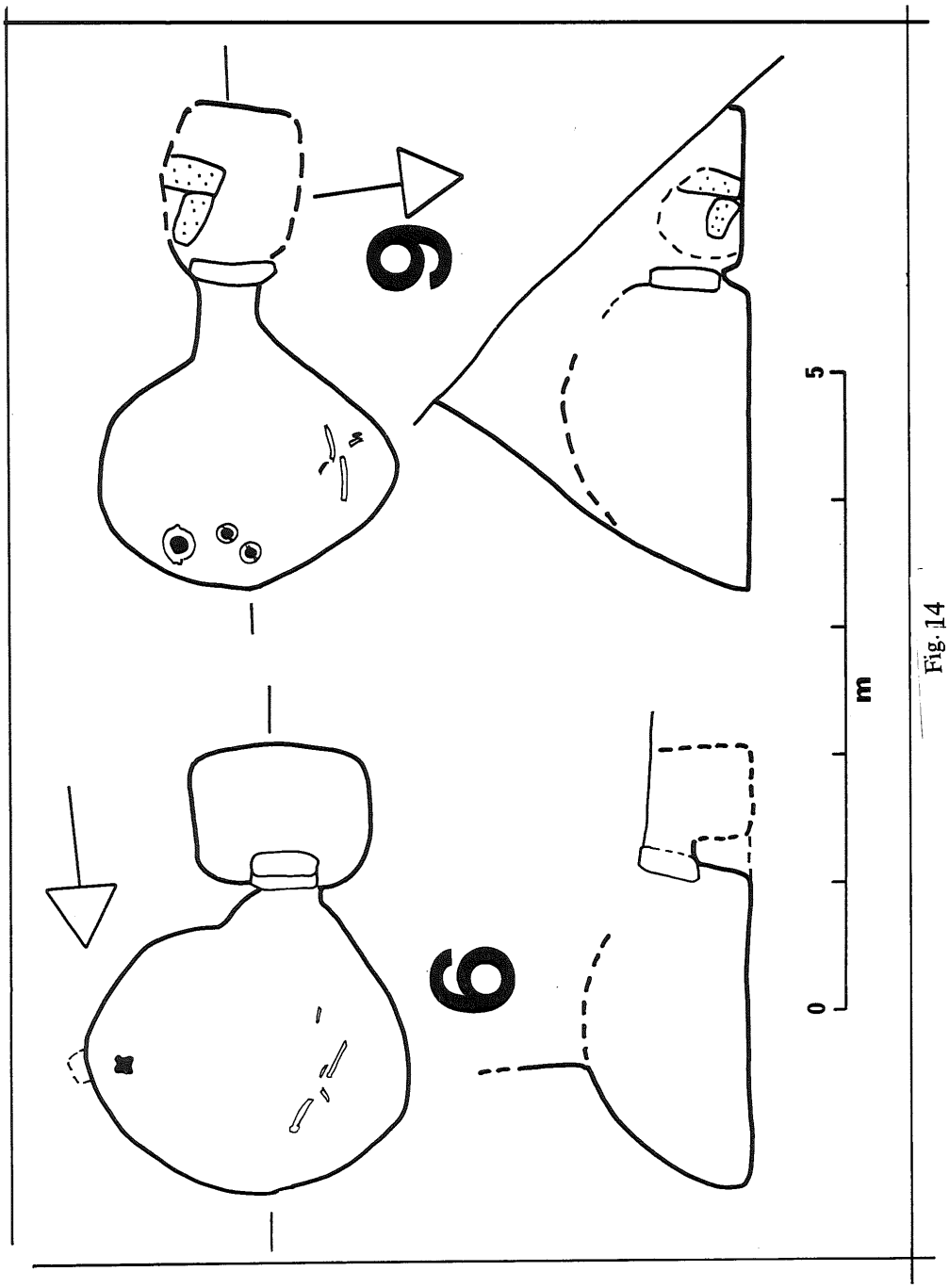


Fig. 14

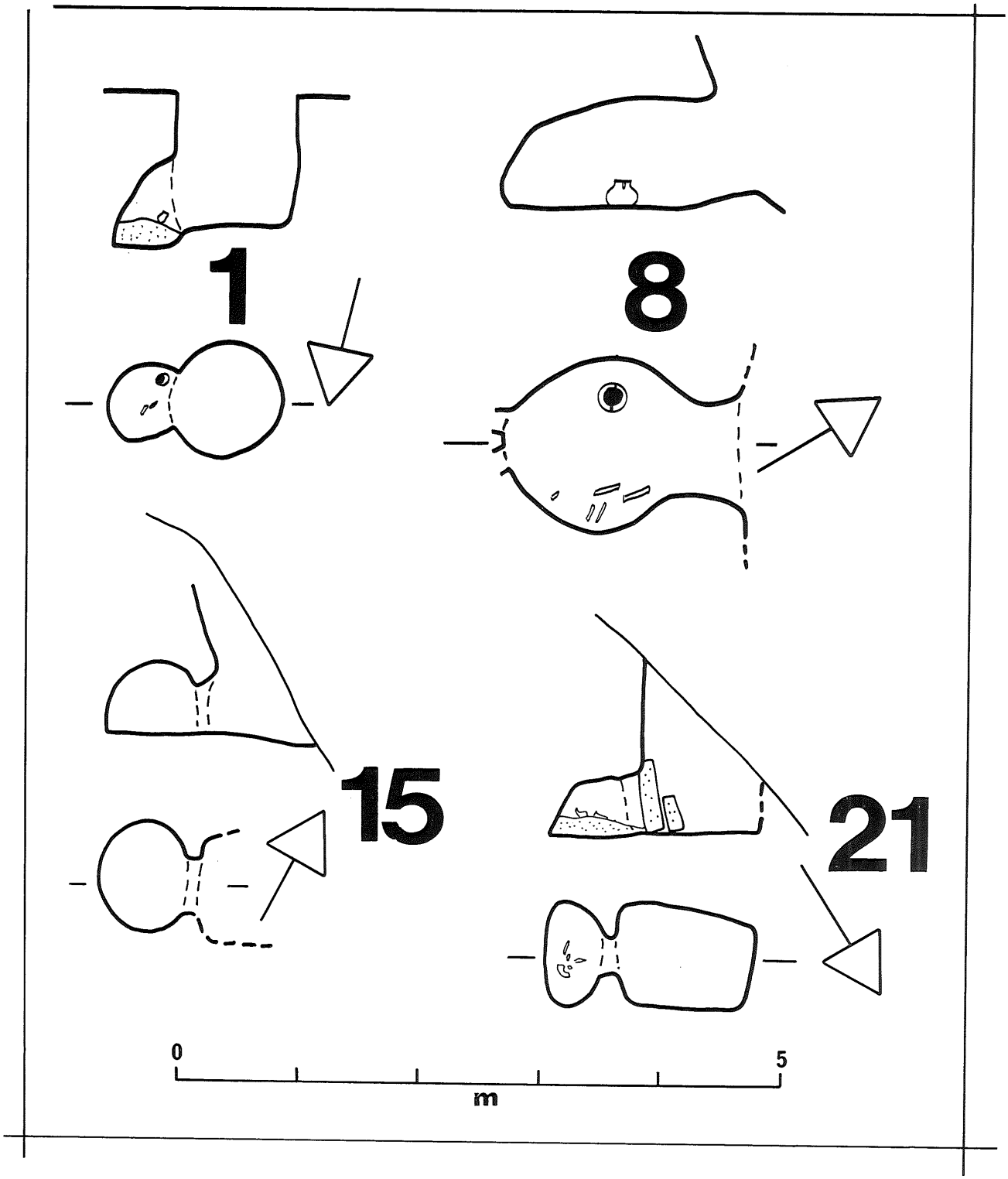


Fig. 15

The Objects

As I noted earlier, a full typological appraisal will be attempted elsewhere. Pottery from the shafts as well as from the occupation site of Umm Hammad el-Gharbiya (purposive intensive survey) will be incorporated. In this catalogue presentation only one stratigraphic matter must be discussed and that is the complex nature of Tomb 14, typically the richest in the group.

We are dealing with two depositions, one from Tomb 14, the other from Tomb 17 above whose floor collapsed into the lower chamber (Figs. 7,8). The two groups of pottery are stylistically close but show some diversity to make the division on these grounds. This was substantiated during the excavations. However, the transported pottery and metal objects and the earth slide from the upper tomb chamber came to a halt precisely on the line of the deposition in Tomb 14. Therefore there will always be some uncertainty as to attribution. The following is a preliminary sorting of the evidence.

Material almost certainly from Tomb 17 is shown in Figure 16: 1 to 9 and Figure 17:1 and 2. Figure 17:3 and 17:4 may belong here or with Tomb 14. Similarly, the metal objects in Figure 18:2 and 18:3 could belong to either assemblage. The amphoriskos-teapot (Fig. 18:1) is an interesting example of forensic archaeology pretaining to the relationship between the two burials. One half of the pot was found carefully placed beside the stone blocking at the entrance of Tomb 14 (Fig. 8:29) together with an amphoriskos (Fig. 18:4). The other half came from the problematical depositions within Tomb 14 (Fig. 8: 29). Three—or even more — interpretations are possible. The sherd in the chamber might have been placed in a similar way at the entrance of Tomb 17 and been washed down with the collapse; it might have come from the chamber of Tomb 17; or it might have come from the chamber of Tomb 14. In all cases we have a possible example of direct awareness of previous burials and/or a relationship between the final burials in Tombs 14 and 17. What is a little disturbing, typological arguments aside, is the siting of the two tombs, so close together, if a relationship did exist . In the end we are left with the note of caution expressed before, that tomb groups are never absolutely reliable.

Figures 18:5 to 16 and 19:1 to 4 belong to Tomb 14. The subsequent groups illustrated are self-explanatory as to locus.

Relative Chronology

Only a general statement can be made at this time. A little more will be added in due course when the study of the present excavations is completed. Further clarification will follow with the proposed excavations of the occupation site at Umm Hammad el-Gharbiya and the separate excavations at Tiwal esh-Sharqi. These will contribute to the study of the EB IV (EB-MB) period, particularly in relation to other current and planned work in Transjordan. An absolute resolution, excluding divine revelation, will never be achieved, no matter how categorically we format the meagre evidence.

There are several indications in the present assemblage that allow us to place the burials at Tiwal esh-Sharqi in the fragile and evolving relative chronology of the period. In doing so we must recognize that our repertoire may in the end only refer to the subregion of the Jordan Valley. Synchronisms farther abroad might be less precise.

The amphoriskos-teapot (Figs. 18: 1; 21: 6) has been placed late in the period by Amiran (1969). Similarly the painted amphoriskos (Fig. 22:3) was late in Amiran's families (1960) that were re-organized with some general consensus by Albright (1962). Bowls with two plain ledge- handles may be a little more indicative of relative chronology (Figs. 16: 6,7;17:4;20:10; 21:5,14 and 22: 4, 5). We can demonstrate that these bowls are later than shapes with similarly placed "envelope" ledge-handles which come from the shafts at Tiwal esh-Sharqi as well as the occupation site of Umm Hammad el-Gharbiya. These earlier forms appear in

number	tomb	catalogue	description
Figure 16			
01	14.33	252	lamp
02	14.26	189	goblet, slr rm
03	14.17	190	funnel (inside 14.13)
04	14.19	191	funnel
05	14.13	291	jug, strap hnd, slr rm
06	14.31	261	bowl, two pln hnds, slr
07	14.2	292	bowl, two pln hnds, imp dec bse
08	14.27	295	jar, two env hnds, slr rm, inc+comb dec
09	14.25	299	jar, slr rm
Figure 17			
01	14.12	300	jar, two env hnds, slr, imp+comb dec
02	14.28	293	jar, imp dec (bs)
03	14.11	255	lamp
04	14.8	251	bowl, two pln hnds
Figure 18			
01	14.29	035	amphoriskos-teapot
02	14.24		spearhead, copper alloy
03	14.30		spearhead, copper alloy
04	14.1	195	amphoriskos
05	14.23	254	lamp
06	14.32	253	lamp
07	14.15	188	goblet, slr rm, comb dec
08	14.7	187	goblet, slr rm, two inc lines
09	14.3	186	goblet, slr rm, three inc lines
10	14.10	194	goblet, slr rm, one hnd
11	14.22	193	cup, comb dec
12	14.18	249	amphoriskos, slr rm, imp dec bse
13	14.5	197	amphoriskos
14	14.16	196	amphoriskos
15	14.21	260	bowl, imp dec bse
16	14.9	(04)	pin, copper alloy
Figure 19			
01	14.14	294	jar, two env hnds, slr rm, comb dec
02	14.6	296	jar, two env hnds, slr rm
03	14.20	297	jar, two env hnds, slr rm, inc+comb dec
04	14.4	298	jar, two env hnds, slr rm, inc+comb dec
Figure 20			
01	01.1	262	amphoriskos, inc dec
02	08.1	263	amphoriskos, comb dec
03	02.7	264	lamp
04	02.8	265	lamp
05	02.2	266	goblet, slr rm
06	02.4	267	goblet slr rm
07	02.5	268	amphoriskos, pln
08	02.6	269	amphoriskos, slr rm, comb dec
09	02.1	270	bowl, slr rm
10	02.3	271	bowl, two pln hnds, inc dec, comb dec
11	02.11	272	jar, two env hnds, imp dec bse
12	02.9	273	jar, two env hnds, inc dec
13	02.10	274	jar

Figure 21

01	03.3	275	lamp
02	03.2	276	lamp
03	03.1	277	amphoriskos, pln
04	19.1	192	funnel
05	10.1	278	bowl, two pln hnds
06	07.1	279	amphoriskos- teapot
07	06.1	280	lamp
08	09.3	281	amphoriskos
09	09.2	282	amphoriskos
10	09.1	283	jar, two env hnds, inc dec, imp dec bse
11	05.4	284	lamp
12	05.5	285	lamp
13	05.3	286	amphoriskos
14	05.2	287	bowl, two pln hnds, comb dec
15	05.1	288	jar, two env hnds, inc dec

Figure 22

01	25.1	259	lamp
02	25.4	185	goblet, two hnds, inc dec
03	25.5	250	amphoriskos, slr rm, pnt
04	25.6	248	bowl, two pln hnds
05	25.3	247	bowl, two pln hnds,
06	25.2	289	amphoriskos, slr rm
07	16.1	257	lamp
08	16.2	052	cup
09	22.5	258	lamp
10	22.4	256	lamp
11	22.2	183	goblet, slr rm
12	22.1	184	goblet, inc dec
13	22.6	290	base, comb dec
14	12.1	(007)	copper alloy blade fragment

Abbreviations

bse	base
comb	combed
dec	decoration
env	envelope (handle)
hnd (s)	handle (s)
inc	incised (punctate)
pln	plain
pnt	painted
rm	rim
slr	slurred (wheel turned)

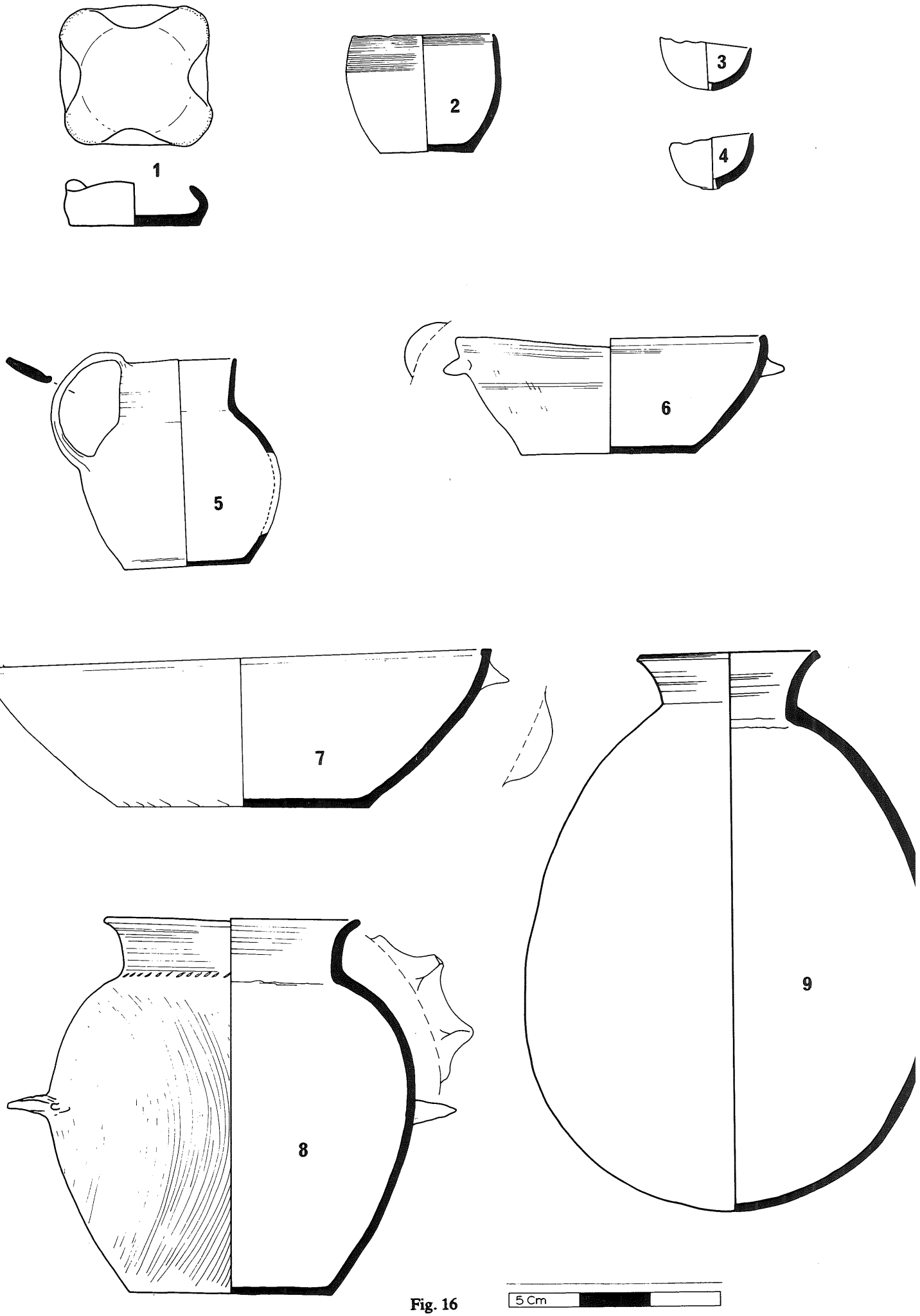
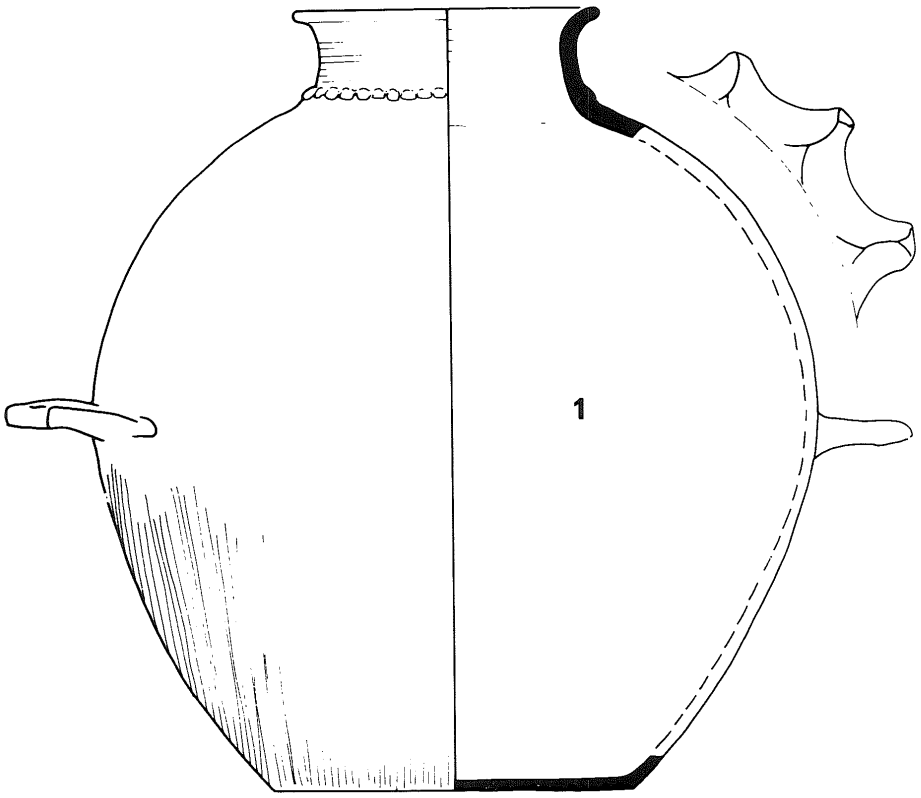
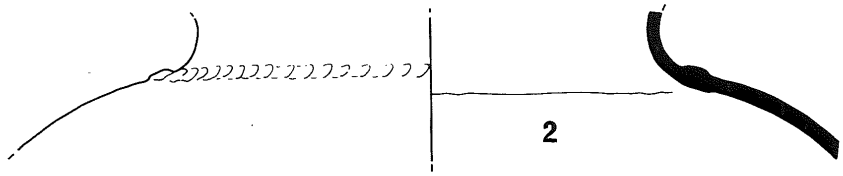
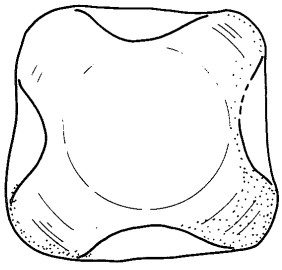
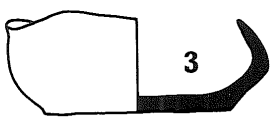


Fig. 16









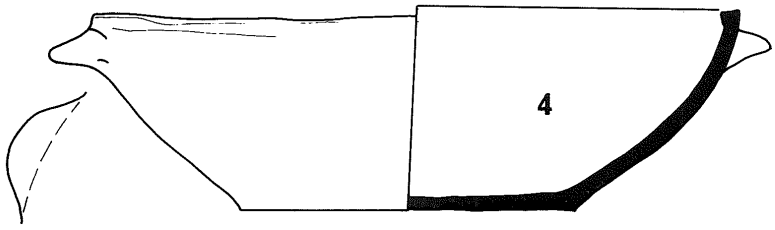


Fig. 17

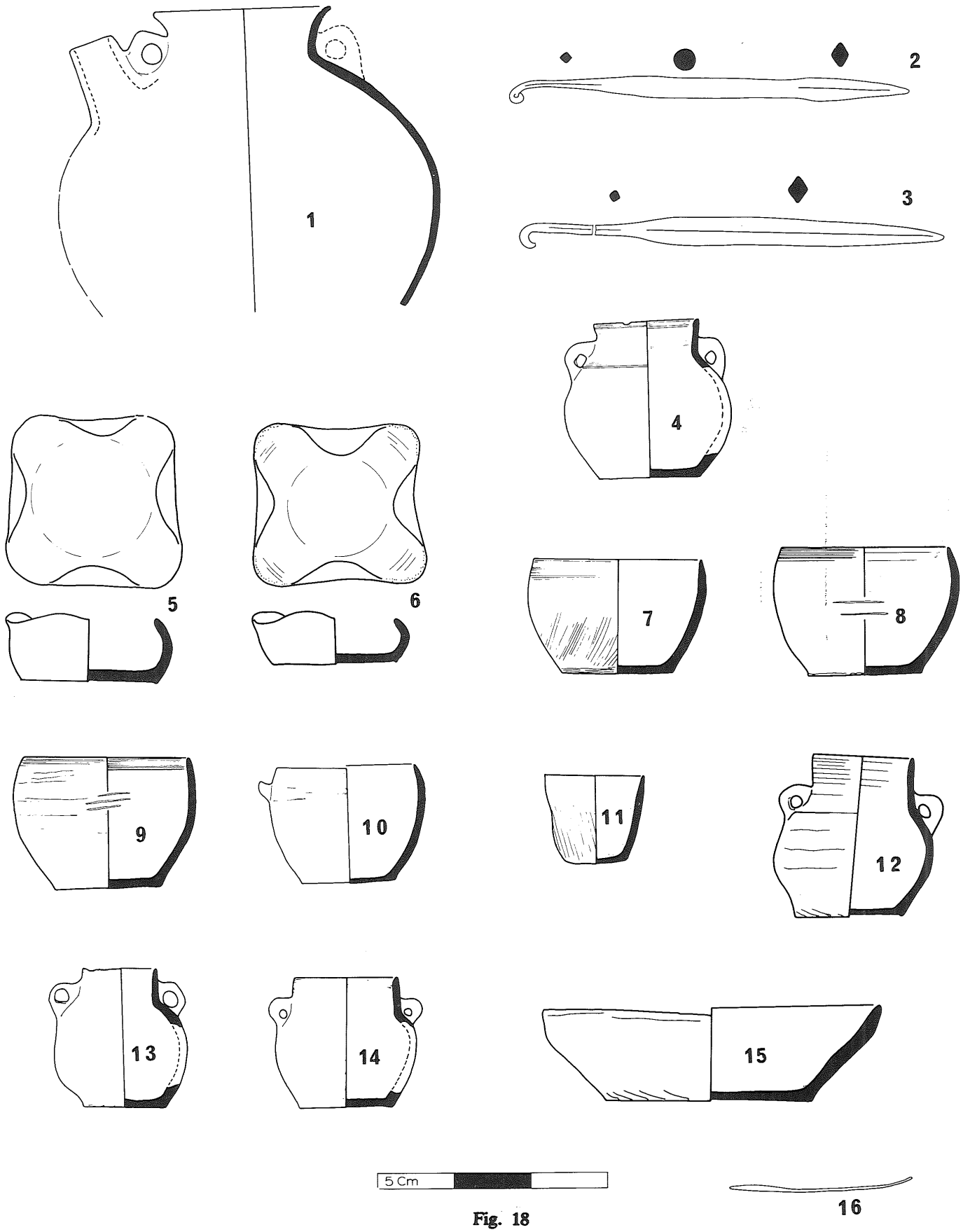


Fig. 18

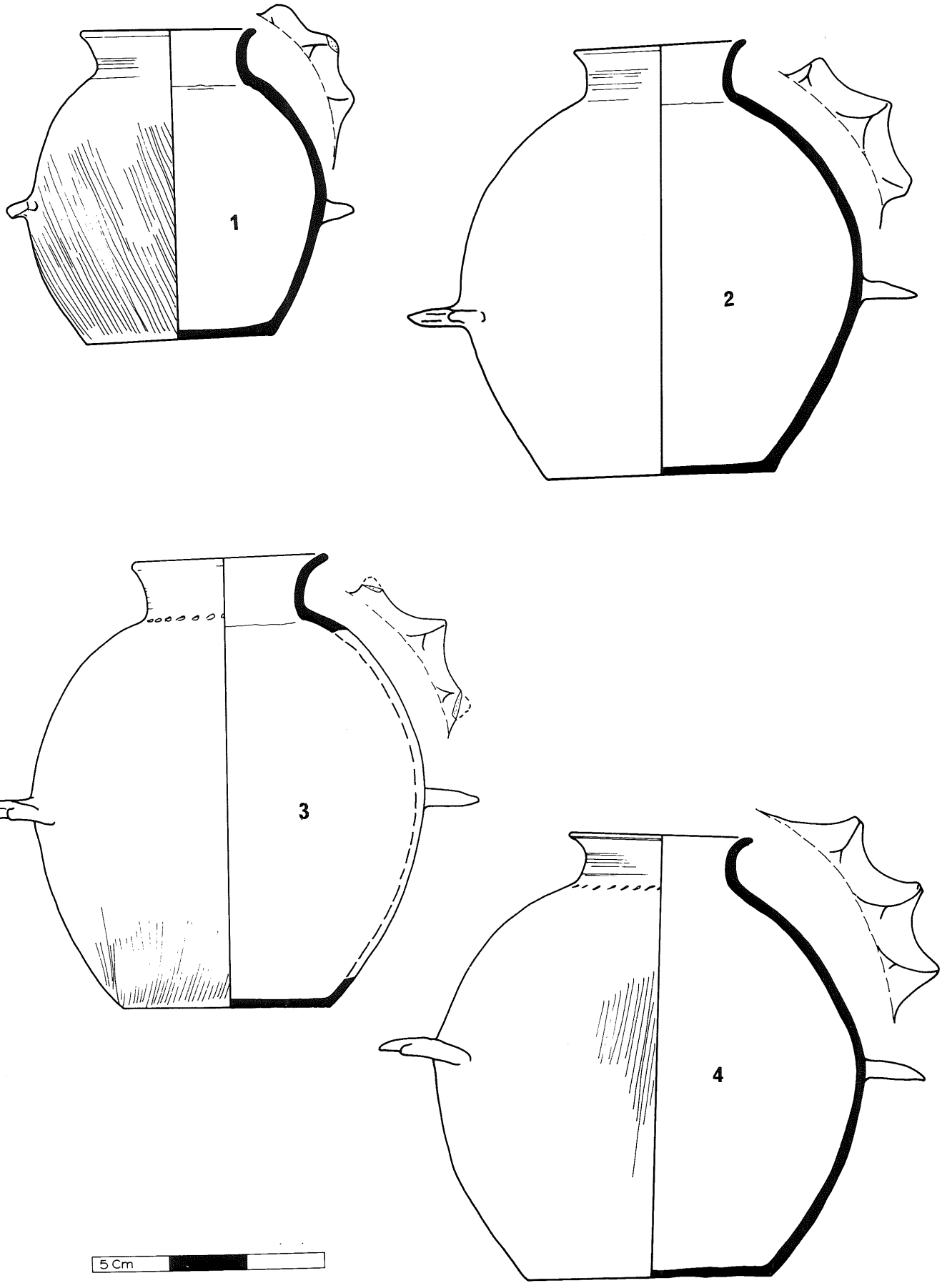


Fig. 19

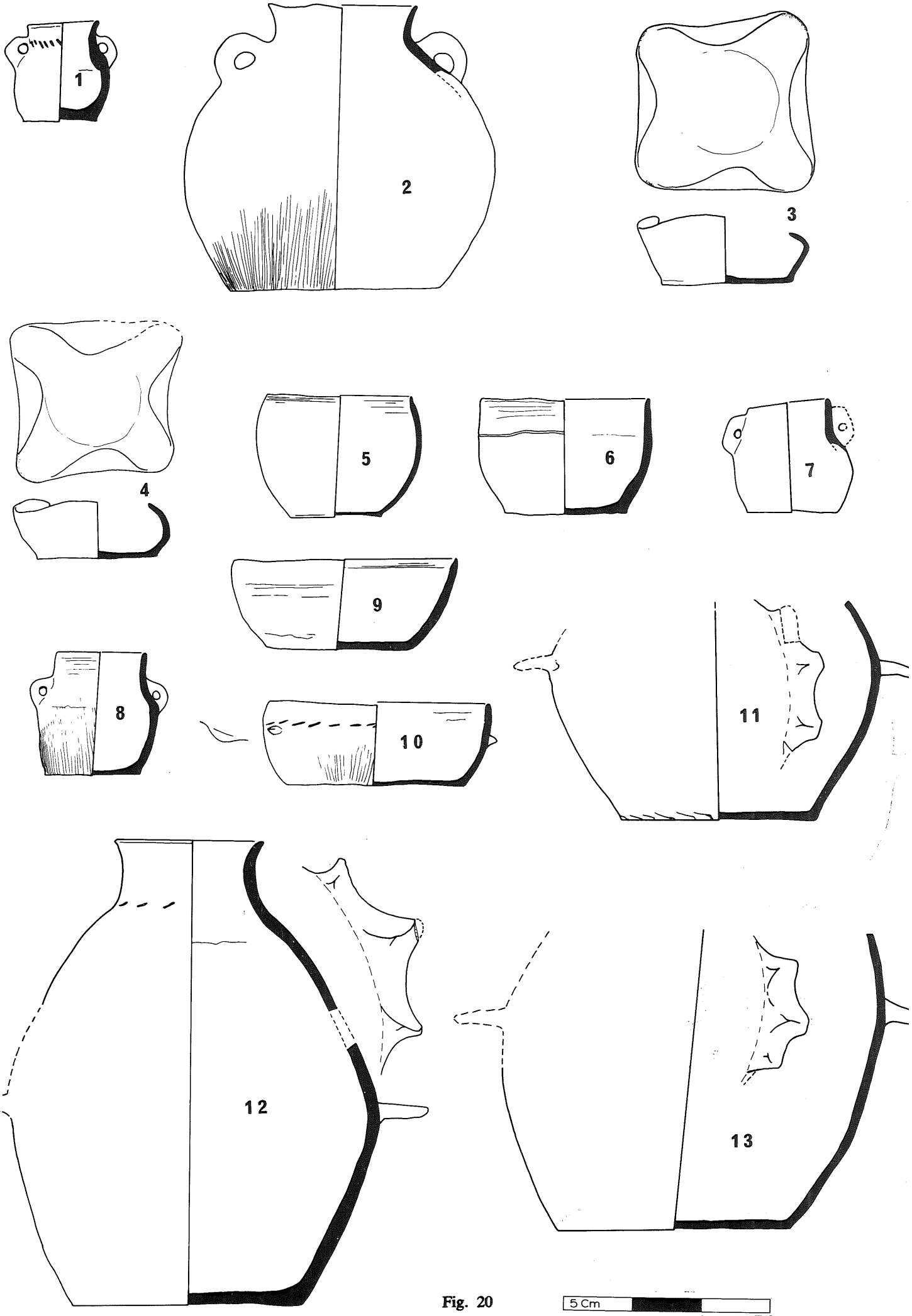


Fig. 20

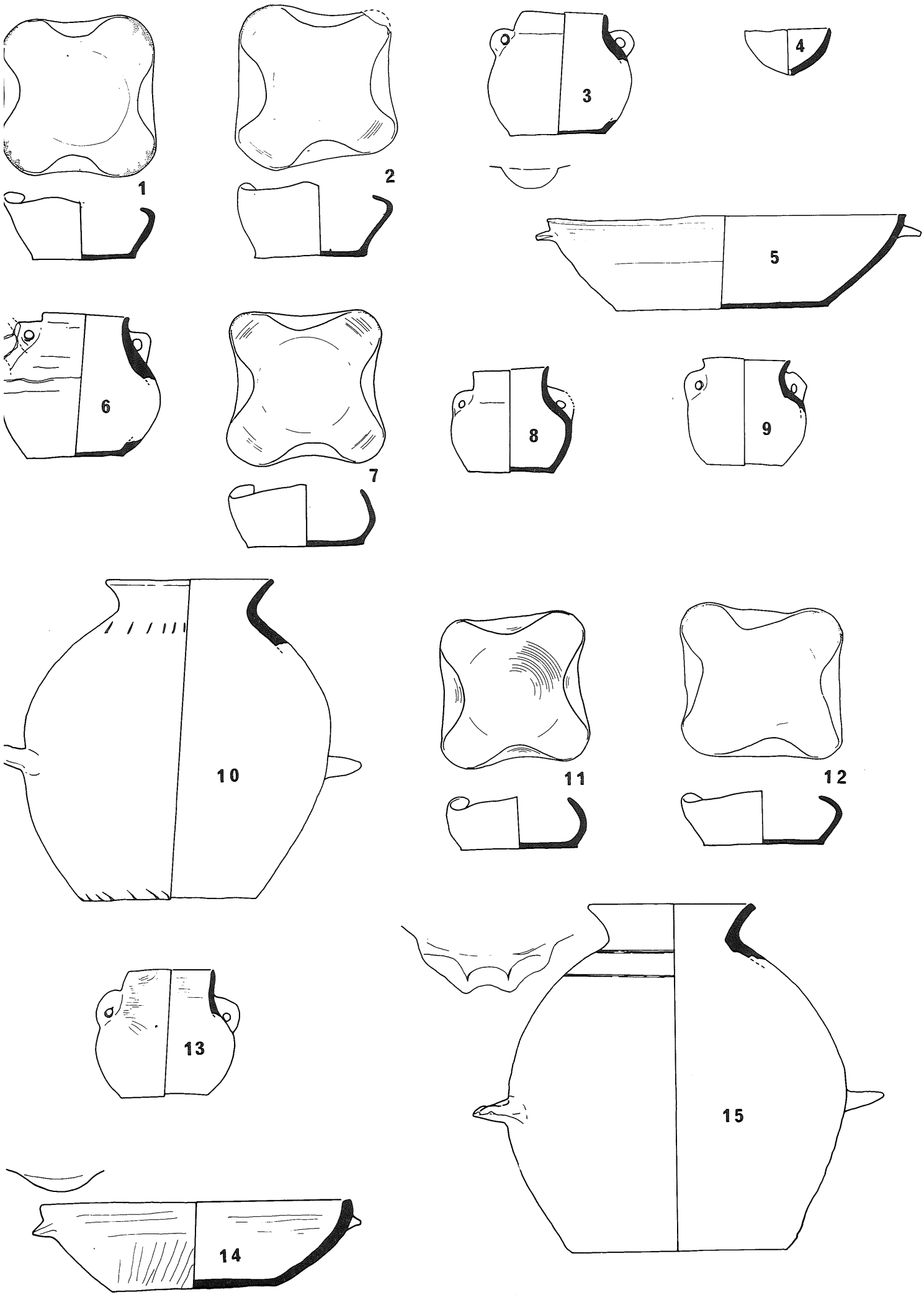


Fig. 21 5 Cm

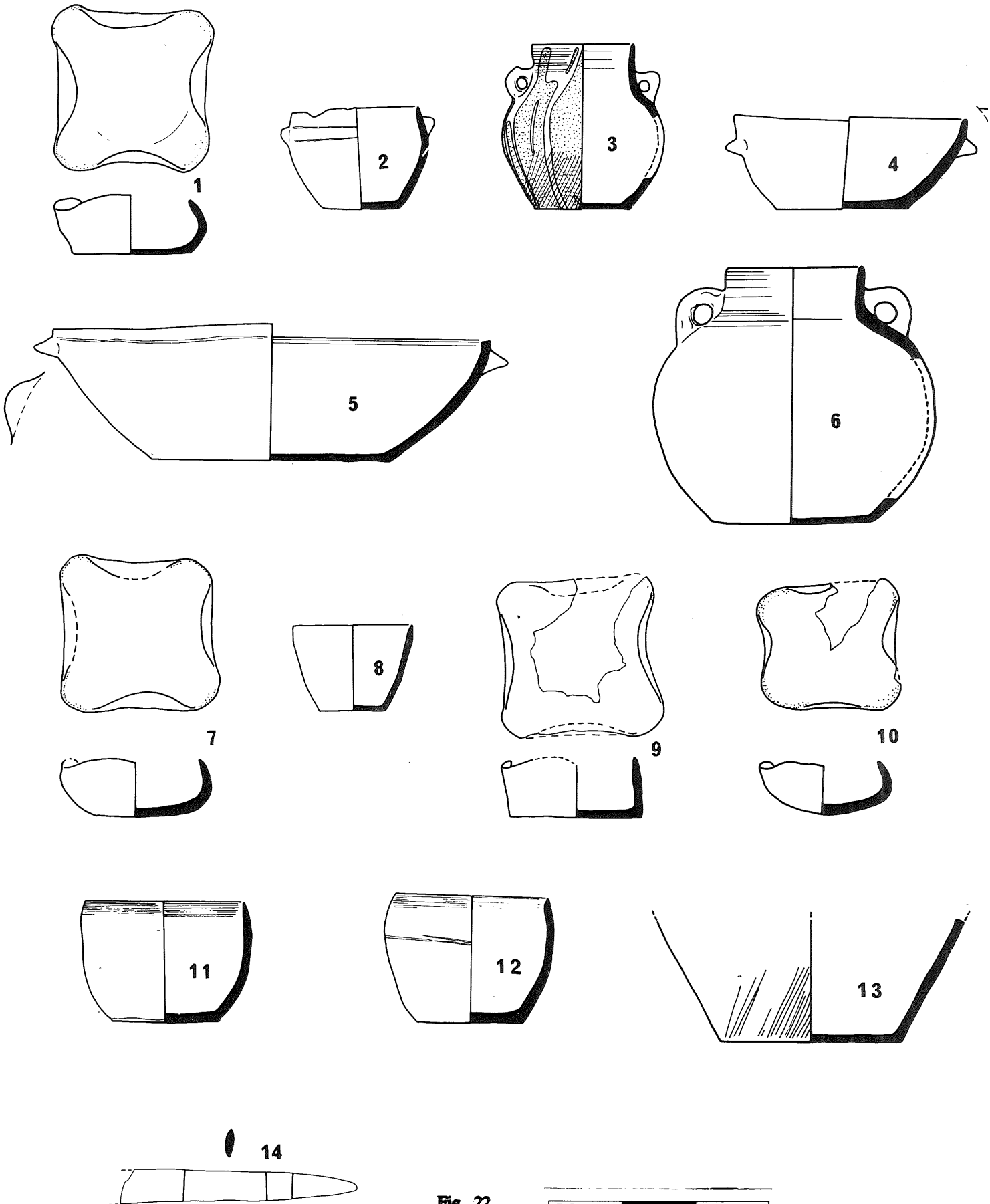


Fig. 22

phase 2 of Tell Iktanu (Prag, 1974: fig. 7: 6). Note also similar plain handles in Dever's family 'S' (1980: fig. 4: 8, 17) which he places in his EB IVC. Funnels (Figs. 16: 3, 4; 21: 4) appear, among other places in Dever's Family 'S' (1980: fig. 4: 5), at Jericho (Kenyon, 1965: Fig. 36: 11; 47: 15; 80: 3) and at Khirbet Kirmil southeast of Hebron (Dever, 1975: fig. 5: 28, 29?). A funnel of this type is included as a type in Dever's most recent illustration of family 'S' (1980: fig. 4: 5). Storage jars might be relevant here as well. Thumb-impressed decoration seems to be an earlier feature than the incised type (Fig. 17: 1, 2 compared with Figs. 16: 8; 19: 3, 4; 20: 12; 21: 10). The former come from the shafts at Tiwal esh-Sharqi to the exclusion of the latter—just as was the case with the bowls above—and can be compared with the jars from Iktanu, phase 2 (Prag, 1974: figs. 5: 13; 8: 5). Judgement is reserved for the time being for lamps, goblets, plain amphoriskoi, the jug with strap-handle in Figure 16: 5, jars such as Figures 16:9 and 21:15 and the metal objects (Figs. 18: 2, 3, 16). The javelin points particularly have a wide distribution throughout the land.

The preliminary conclusions regarding relative chronology is that the bulk of our assemblage belongs late in the EB IV (EB-MB) period. It is later than Tell Iktanu, phase 2, though related to it, and is perhaps contemporary with Dever's family 'S', if that is where this sub-division belongs. Tiwal esh-Sharqi and the occupation site beside it (Umm Hammad el-Gharbiya) may therefore fill the "gap" in Dever's most current chronological table (1980: Fig. 1) in the period between his EB IVB and MB I (Dever and Kenyon) or MB IIA elsewhere in the literature. The occupation period, whether it turns out to be continuous or intermittent, seems to cover at least two thirds of the EB IV (EB-MB) period, from Tell Iktanu, phase 2 onward.

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