# Mace-heads

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One of the most important groups of finds from excavations conducted in Kadero are mace-heads. They were found both in settlement layers of sites and in graves, though the latter is rarer. During research at these site, three entire mace-heads and thirteen stone fragments were discovered. To date this is the second largest collection of this type found on the Upper Nile.

The occurrence of mace heads at sites belonging to the Neolithic Sudan and to sites of Predynastic cultures of Egypt forces one to reflect on the origin and mutual relations between the Prehistoric cultures of the Sudan and Egypt, as well as possible directions of cultural influence. An analysis of material originating from Kadero allows for a differentiation of two main types of mace-heads (Ciałowicz 1989).

The conical type, occurs also at other Neolithic Sudanese sites and is unusually widespread in the I-IIa phase of the Naqada culture (Kaiser 1956; 1957). The second, conical pear-shaped, is found also in the Neolith Sudan site of Shaheinab (Arkell 1953:49-50) – though infrequently in Egypt.

**Conical mace-heads**

Four of the above mentioned relicts were found in Kadero. All feature a convex upper part and sharp edge, created half-way or two-thirds of the way up (as opposed to the mace-heads characteristic for Amratian culture which only started to bulge at the top). Thus, these need to be categorized in the group featuring a convex upper part (Ciałowicz 1987:15-17).

From the Nile valley to date 12 mace-heads can be placed in this group. All are made out of hard stone, quite different to those of the Egyptian Amratian culture's conical mace-heads made mostly of soft stone, such as calcite. Ten mace-heads from this group originate from Neolithic Sudanese sites and the remaining two come from Lower Egypt.[1] Most likely, a fragment of such a mace-head was also found during excavation in Khartoum (Arkell 1949:135, Tab. 112:2). Its date, however, is imprecise and both the description and photograph are insufficient in detail to classify this mace-fragment definitely. Mace-heads found during archaeological research in the Shaheinab settlement, however, can be said to be typical for maces with a conical-shape.

Of particular interest are two such fragments made of diorite, showing subtle differences of head types belonging to the above mentioned group. The first (Arkell 1953:50, Fig.16) has a lightly convex upper part, with the sharp edge created about three-quarters of the way up. The second (Arkell 1953:50, Fig. 17), from a large head whose diame-

1 Recently two mace heads of this type were found in Jordan (oral communication, J. Lovell), which suggests a much wider dissemination than hitherto thought.

ter was at least 150 mm, features a convex shape, with the edge created half-way up. Another mace-head was found in grave 85/11 in el-Kadada (Geus 1981:15, Fig.12a), which is approximately 90 mm in diameter – its upper part being convex, though its sides are rather straight than concave. This head is very similar to the above mentioned fragment from Shaheinab.

In many respects conical shaped mace-heads with a convex upper part found in Lower Egypt are of particular interest. The first, from the Fayum (Caton-Thompson, Gardner 1934:33, Tab. XXX, 3) was not found during excavation work, is made out of diorite and has a regular discoidal shape. The second head from Maadi (Rizkana & Seeher 1984) was made out of metamorphic rock.

It ought to be stressed that the occurrence in Northern Egypt of conical shape mace-heads with a convex upper part and conical pear-shaped ones, could, if other evidence were found, form one of the arguments in favour of the existence of certain contacts between the cultures of Northern Egypt and Neolith Sudan. It may well be that such an exchange of cultures took place in the Sahara, foremost in Tibesti.

As previously mentioned, the four heads found in Kadero can be placed in the above mentioned type. The first complete head (cat. no: I,1; Fig.1) was discovered in the grave 3, made out of porphyry, with a 120 mm diameter. It has a lightly convex upper part, the lower part somewhat concave – similar to very typical conical mace-heads from Upper Egypt. Another (cat. no: I,2; Fig. 2) was found in the grave 130 (Krzyżaniak 1993:Fig. 1). It was made of porphyry, with a 110 mm diameter. It is very similar to the mace-head from grave 3 with a lightly convex upper part and a lower part a little concave. The only difference is in shape of the hole for fixing a handle. In first example the hole has straight walls, in second opening resembles a sand-glass.

A fragment of a small diorite mace-head (cat. no: I,3; Fig.3) was found in the settlement layers. It has a highly convex upper part, though the sides are straight. It is rather similar to the above mentioned fragment from Shaheinab and the complete head found in el-Kadada. The fourth conical head is made out of granite (cat. no: I,4; Fig.4) and has a somewhat convex upper part, and lightly rounded sides.

**Conical pear-shaped mace heads**

Four entire and eleven fragments of this type of mace-heads was recorded during excavation work in Kadero. This particular type is one of the least common in the Nile valley. Notwithstanding, it is very important in respect to the origin of the above mentioned finds. Thus far 18 mace-heads of this type are known, mostly from Shaheinab (15 examples), Fayum A (1 example) culture and the beginning phase of Naqada (2 examples) culture.

The oldest examples would appear to be those from Shaheinab where one complete head and fourteen fragments were found. The former is made of gneiss and has a height less than its diameter, with a lightly convex upper part (Arkell 1953:49, Fig. 14, Tab. 23:6). The remaining fragments from this site are of a similar shape and made of hard stone, in the main, granite and gneiss. Another particularly interesting example originates from Kom W in Fayum (Caton-Thompson, Gardner 1934:33, Tab. XII. 26, XXX, 2). In spite of the fact that its lower part is battered, it is possible to maintain that this is the same type of mace-head as the one mentioned above – lightly convex upper part, with a diameter greater than its height. Recent investigation into the chronology of Fayum A (Dagnan-Ginter et al. 1984:48) would appear to indicate that this mace-head ought to be considered as the oldest. It should be stressed, however, that during numerous examinations no other such mace-heads have been found in Fayum. It is therefore not possible, at least at this time to establish to which phase of Fayum A culture the mace-head from Kom W is to be dated.

A rather more flattened mace-head that ought to be categorized to the above group (Brunton, Caton-Thompson 1928, Tab. XXX, LIII. 5) was found in grave no 130 in Qau, dated to phase Ia-b of Naqada culture. A finds from area 200 in Mostagedda is a fragment of a mace-head that is very similar to those from the Sudan (Brunton 1937, Tab. XLII. 22), which Arkell (1975:34, 38) considered should be dated to the period of the Badari culture. There are, however, no data supporting this proposition. For this culture we do not have any other examples of weapons apart from arrow heads and possibly, boomerangs. It would appear therefore more likely that this mace-head should be dated to the I/a? phase of the Naqada culture.

Of the conical pear-shaped mace-heads four complete made of porphyry were from graves 60, 66, 78 and 84 (cat. no II.1, 13-15; Fig. 5, 17-19). Its shape is almost identical to the mace-head from Shaheinab, with a lightly convex upper part and diameter greater than its height. The remaining fragments in the main have shapes allowing them to be categorized without any doubt to the above type of mace-head. Only one of the fragments (cat. no: II, 11; Fig.15) has a rather more flattened shape and highly convex upper part, being rather similar to the aforementioned mace-head from Qau. It would appear therefore that it deserves to be categorized to this type. The less well preserved fragment can be classified similarly (cat. no: II, 12; Fig.16).

It should also be stressed that some of the preserved fragments (cat. nos: II, 8, 10; Fig. 11, 13) are in fact production wastes or unfinished. Proof of this lies in the unfinished openings where shafts were placed. This would indicate clearly that the production of mace-heads took place at the settlement in Kadero. It is therefore possible to maintain that this group of finds can not be considered as imports from other regions of the Nile valley.

Moreover, a clear majority of mace-heads found in Kadero was made out of hard stone such as grano-diorite, granite, diorite and gneiss-granite. Only one fragment of a mace-head (cat. no: II, 10; Fig.14) with a highly corroded surface was made out of soft stone (limestone ?).

Both conical mace-heads with a convex upper part and conical pear-shaped mace-heads occur a great deal more frequently in sites related to the Neolithic Sudan than in the Egyptian part of the Nile valley.

The peoples of early cultures such as Early Khartoum made use of bows on a large scale, as would confirm numerous finds of triangular, half-moon and trapezoid flint arrowheads discovered in the layers dated to this period (Arkell 1949, Tab 15:1-8).

Among the materials belonging to Early Khartoum there are also many fragments of sandstone rings (Arkell 1949:63, Tab. 36). – as for example found also in Shaheinab (Arkell 1953:50). Arkell (1949:64) considered that these were never used as a complete form but as half-round tools for shaping wooden or bone objects. According to Arkell he "guesses that they were used as weights on sticks and possibly connect with disc mace-heads of Predynastic Egypt"

Support for this theory could be found in the only complete find originating from Shaheinab (Arkell 1953:50, Fig.18). The sandstone ring has a diameter of nearly 87-100 mm, with a height of 33 mm, with an opening diameter measuring from 31-34 mm. The material used for these rings is highly prone to degradation and is fragile, which means that objects crack on impact. It appears therefore, that these could not be mace-heads whose main function is that of crushing and breaking objects.

All of the conical mace-heads found in the same layers in Shaheinab are made of hard stone that is difficult to break and fracture. They have a sharp edge (on various high), that enabled the weapon with a such a head to be very effective. It is important to note that sandstone rings do not possess such an edge but rather an abrasive surface that could serve as a grinding tool. Therefore it would appear that the above mentioned cannot be considered as a mace-head or indeed, its typological prototype.

Arkell (1955:32, 35; 1975:34, 33; Arkell & Ucko 1965:149) suggested on many occasions that conical pear-shaped mace heads arose as a result of a transformation of the grinder for ochre with a flat polished surface. From this type, it was argued, conical heads developed. Arkell also maintained that conical mace-heads used by the Amratian peoples were a further development of this group of products. No doubt, however, as also Arkell admits, conical and conical pear-shaped mace-heads were synchronous in Sudan at that period.

Also in Shaheinhab and Kadero, both types occur together, with the same accompanying ceramic ware. It would therefore appear that the above types arose more or less at the same time on the Upper Nile and were disseminated from there towards the north. Moreover, the use of maces in the Sudan is also confirmed in the Meroitic Age, which is supported by finds from Gebel Moya (Addison 1949:168, Tab.LXXI. B), from Sanam (Huard & Leclant 1980:189, Fig.53:4) and many other places. The find from Sanam is very similar to those found in Shaheinab and Kadero, which, naturally, only can be considered the result of a purely accidental similarity of form.

It should be noted that in Upper Egypt conical pear-shaped mace-heads are very rare, whereas

conical ones are widespread in Amratian culture. Moreover, a significant change in their shape can be observed. There are no mace-heads with a convex upper part but rather, a flat or concave one. This can be said to be related to both a less work-intensive means of producing them and a certain change of function (Ciałowicz 1987).

One point of particular interest is the occurrence of both of the above types, which are characteristic for the Sudan, also in Lower Egypt. Arkell (1955:33-35) justifiably pointed to the following traits shared by the cultures of Neolithic Sudan and Fayum A: numerous hearths in sites of both regions, domestication of the same animal species, application of the same production technique of flint tools, the polishing of ceramic ware and the use of amazonite for the production of beads.

Another factor in this context is the familiarity with bone harpoon arrowheads that were not common in Upper Egypt up to Phase II of the Naqada culture (Ciałowicz 1985). Naturally, there also exist significant differences between these regions. Nevertheless, Arkell and Ucko (1965:147) suggested the possibility of mutually indirect or direct contact between the peoples inhabiting the Fayum oasis and the area the Upper Nile. Such contacts could have taken place in Tibesti, from where amazonite, used for the production of beads, is certainly known to have originated. An additional confirmation of this hypothesis would be desirable for both of the regions where similar mace-heads were made out of hard stone. Moreover, it should be clearly stated that the mace-heads found in Fayum, as in the case of all others from the Nile region, could not have served as weights for a primitive hoe, as suggested by Caton-Thompson and Gardner (1934:33).

A comparison of weights for such devices originating from central and southern Africa clearly indicates that Egyptian relicts are too small to fulfil such functions (Goodwin 1947:67). It is difficult, however, at present to determine whether the shape of the above mentioned mace-head from Maadi is a matter of pure coincidence or indeed, the consequence of forms and ideas being 'imported'.

At present it would seem that conical mace-heads were discovered in the area of present-day Sudan and appear first in Shaheinhab, and somewhat later in Kadero – as well as in el-Kadada. The latter site according to Geus (1979:16) has many shared traits with that of the Nubian Group A. As Hays (1984:211-220) suggests, there existed relations between the peoples of Shaheinhab, the end phase of the Abkan culture in Lower Nubia and its synchronous counterpart, the Badari culture.

Similar ties also existed between the contemporary cultures of the Early Group A phase and that of Naqada I. This may serve to explain the appearance of conical and conical pear-shaped mace-heads during Phase I of the Naqada culture in Upper Egypt. According to Baumgartel (1955:38), the Amratian peoples may have originated from the south, however, this view would appear not to be entirely justified, though the existence of contacts or even migration of small groups from the Upper Nile to Upper Egypt cannot be dismissed.

## Catalogue of mace-heads

### Conical mace-heads with a convex upper part (I)

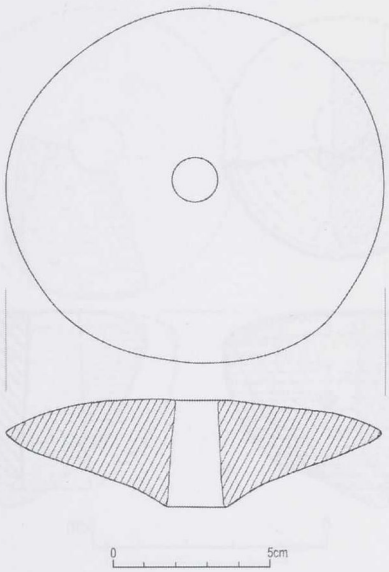


**Fig. 1.** *Conical mace-heads with a convex upper part - No. 1*
Kadero, grave 3;
Porphyry; 120 mm diam.; 34 mm ht.; Convex upper part, concave lower part, cylindrical opening

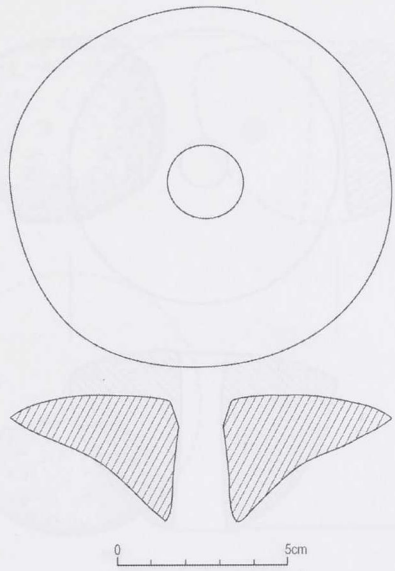


**Fig. 2.** *Conical mace-heads with a convex upper part - No. 2*
Kadero, grave 130;
Porphyry; 110 mm diam.; 36 mm ht.; Convex upper part, concave lower part,
hour-glass shape of opening

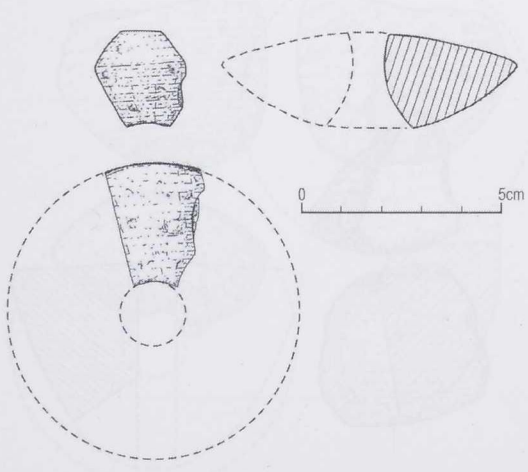


**Fig. 3.** *Conical mace-heads with a convex upper part - No. 3*
Kadero, settlement;
Diorite; 73 mm diam. (approx.); 24 mm ht.;
Entirely convex; hour-glass shape of opening;
Partially preserved

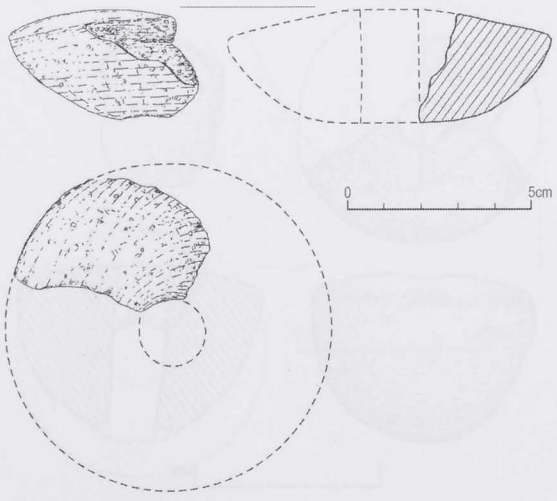


**Fig. 4.** *Conical mace-heads with a convex upper part - No. 4*
Kadero, settlement;
Granite; 88 mm diam. (approx.); ht. Ok. 31 mm;
Lightly convex upper part, lower part somewhat rounded;
Partially preserved

## Conical pear-shaped mace-heads (II)

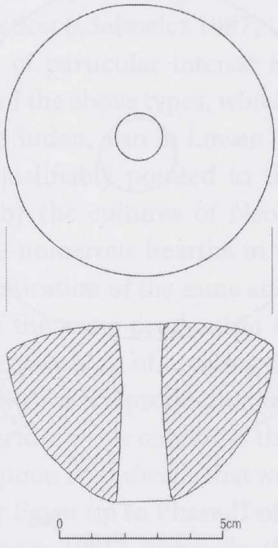


**Fig. 5.** ***Conical pear-shaped mace-heads - No. 1***
Kadero, grave nr 60;
Porphyry; 83 mm diam.; 54 mm ht.; Lightly convex upper part, diameter greater than height, almost cylindrical opening

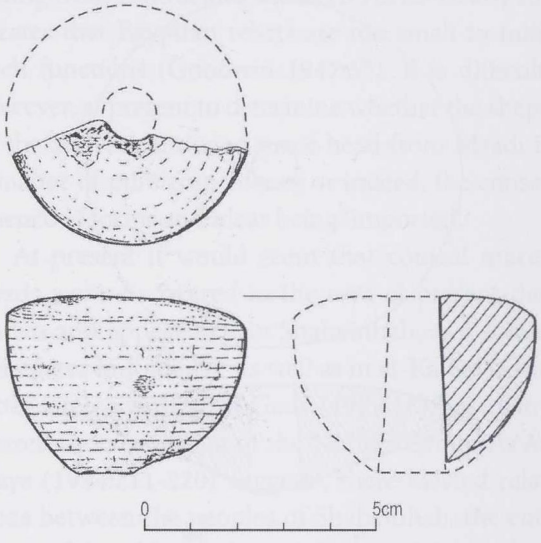


**Fig. 6.** ***Conical pear-shaped mace-heads - No. 2***
Kadero, settlement;
Granite-gneiss; 51 mm diam. (approx.); 37 mm ht. (approx.); Lightly convex upper part, diameter greater than height, cone-shape opening; Partially preserved

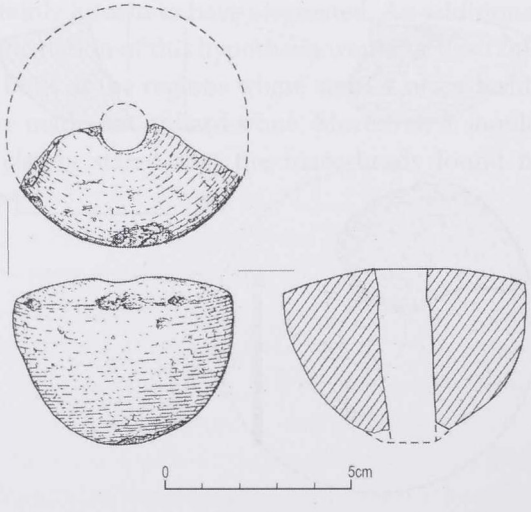


**Fig. 7.** ***Conical pear-shaped mace-heads - No. 3***
Kadero, settlement;
Granite; 68 mm (approx.) diam.; ht. 47 mm ht. (approx.); Entirely convex, diameter greater than height, almost cylindrical opening (drilled from both sides); Partially preserved, battered edges

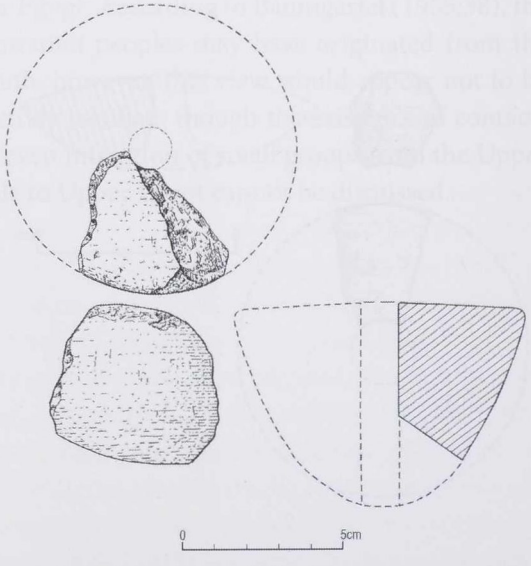


**Fig. 8.** ***Conical pear-shaped mace-heads - No. 4***
Kadero, settlement;
Granite; 90 mm diam. (approx.); 64 mm ht. (approx.); Flat upper part, diameter greater than height; Partially preserved

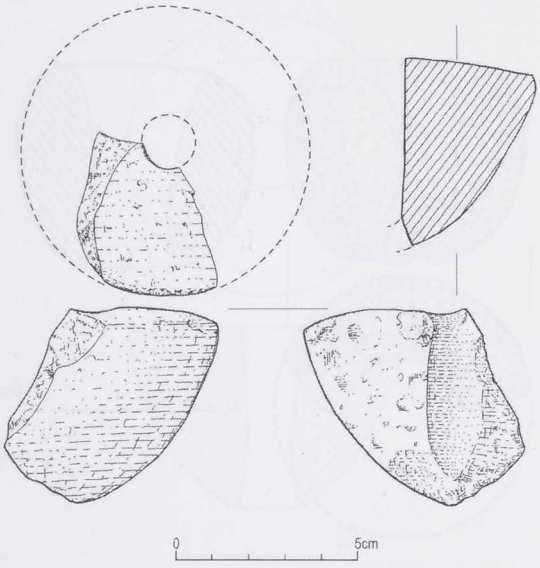


**Fig. 9.** ***Conical pear-shaped mace-heads - No. 5***
Kadero, settlement;
Granite-gneiss; 78 mm diam. (approx.); more than 53 mm ht.; Lightly convex upper part, diameter greater than height, almost cylindrical opening; Partially preserved, battered edges

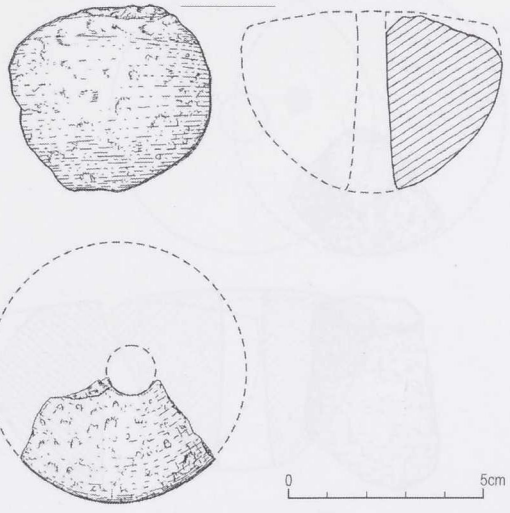


**Fig. 10.** ***Conical pear-shaped mace-heads - No. 6***
Kadero, settlement;
Grano-diorite; 70 mm diam. (approx.); 47 mm ht. (approx.); Upper part not preserved, diameter greater than height, almost cylindrical opening; Partially preserved

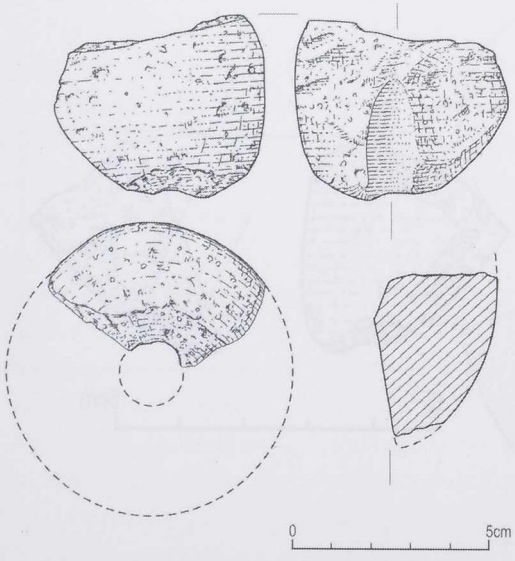


**Fig. 11.** ***Conical pear-shaped mace-heads - No. 7***
Kadero, settlement;
Granite-gneiss; 77 mm diam. (approx.); Upper part not preserved, diameter greater than height , unfinished opening; Partially preserved

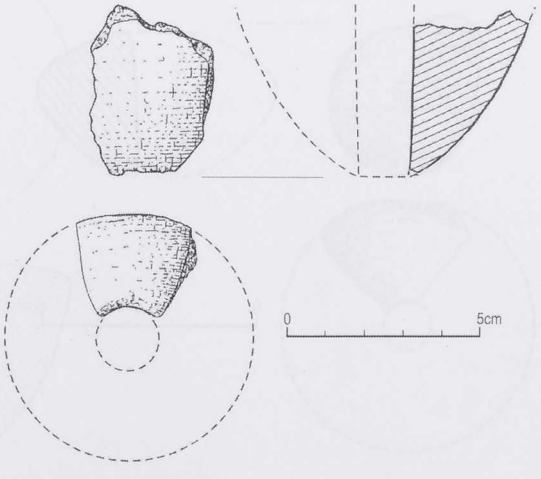


**Fig. 12.** ***Conical pear-shaped mace-heads - No. 8***
Kadero, settlement;
Granite; Cylindrical opening; Partially preserved

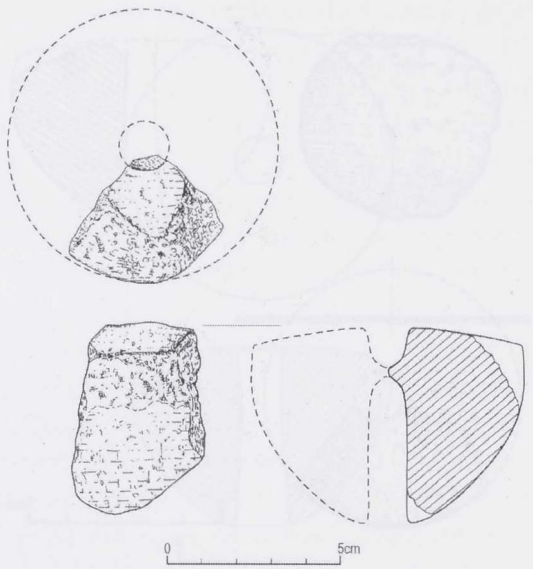


**Fig. 13.** ***Conical pear-shaped mace-heads - No. 9***
Kadero, settlement;
Granite; 77 mm diam. (approx.); 57 mm ht. (approx.); Flat upper part, diameter greater than height, unfinished opening (drilled from both sides);
Partially preserved

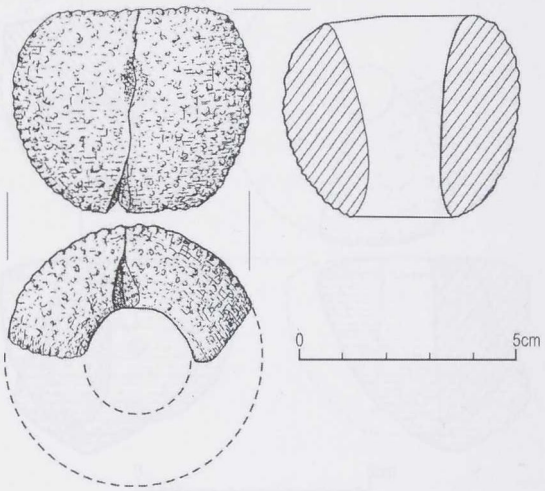


**Fig. 14.** ***Conical pear-shaped mace-heads - No. 10***
Kadero, settlement
Soft-stone (limestone?); 56 mm diam. (approx.); 45 mm ht. (approx.); Flat upper part, diameter greater than height, wide hour-glass opening;
Partially preserved

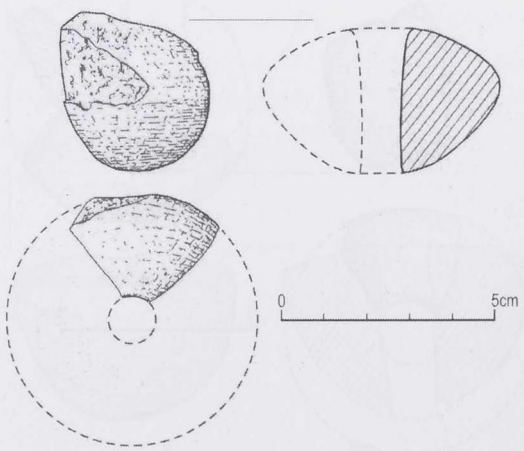


**Fig. 15.** ***Conical pear-shaped mace-heads - No. 11***
Kadero, settlement;
Grano-diorite; 57 mm diam. (approx.); 34 mm ht. (approx.); Upper part highly convex, diameter greater than height, cylindrical opening;
Partially preserved

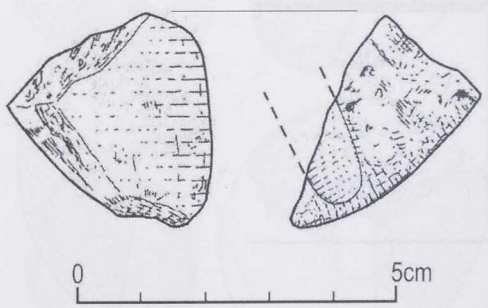


**Fig. 16.** ***Conical pear-shaped mace-heads - No. 12***
Kadero, settlement
Grano-diorite; Partially preserved

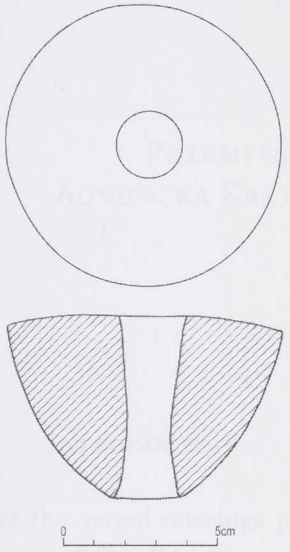


**Fig. 17.** ***Conical pear-shaped mace-heads - No. 13***
Kadero, grave 66;
Porphyry; 83 mm diam.; 55 mm ht.; Lightly convex upper part, diameter greater than height, almost cylindrical opening

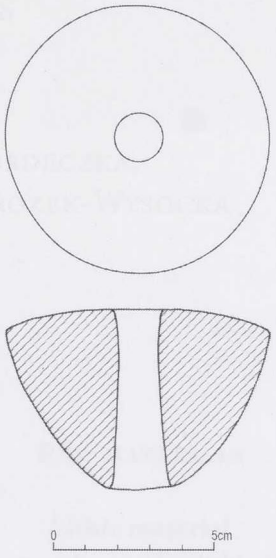


**Fig. 18.** ***Conical pear-shaped mace-heads - No. 14***
Kadero, grave 78
Porphyry; 76 mm diam.; 58 mm ht.; Lightly convex upper part, diameter greater than height, almost cylindrical opening

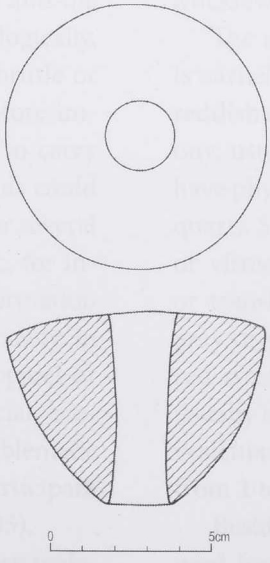


**Fig. 19.** ***Conical pear-shaped mace-heads - No. 15***
Kadero, grave 84
Porphyry; 78 mm diam.; 54 mm ht.; Lightly convex upper part, diameter greater than height, almost cylindrical opening