

## SOURCES

Mihailo Y. Videiko

### ARCHAEOLOGICAL CHARACTERISTICS OF THE SOFIEVKA TYPE CEMETERIES

This publication was prepared using archival materials - not only reports, but daybooks, drawings, lists, photographs. We tried to present fuller and more correct information than in a previous publication [Dergachev, Manzura 1991]. At first it was necessary to present all descriptions and illustrations of complexes according to the existing interpretation (cremation grave = cultural point). This does not mean, however, that we fully accept it, because „graves” identified during field exploration are in most cases fragments of larger ritual areas, which means that they are exclusively features. A full determination of ranges of these actual graves-tombs has not been, however, possible at present [cf. in this volume: Videiko, „Cemeteries. . .”, Koško, Videiko, „Origins. . .”]. Therefore, the term „grave” is used in this text in accordance with the nomenclature convention justified by „tradition”.

Corrections of grave inventory structures concern mainly flint artefacts, which were comprehensively analysed for the first time by J. Budziszewski [see in this volume: Budziszewski, „Flint. . .”]. This led him to examine the correspondence between the data included in the field daybook, drawings and inventories (object call numbers). An outcome of the examination has been comments on „information asynchronisms” or stressing in the text certain doubts concerning the connection of a particular artefact with a given grave. Such doubts are signalled by „?” or „commenting footnotes” marked with an asterisk.

The numbering of the graves in this part is as follows:

*Chernin*: according to the report of V. Kanivets.

*Krasny Khutor*: our new numbering resulted in putting in brackets the numbers used in the report and the publications of V. Danilenko and M. Makarevich, and V. Dergachev in the following way: 1) report number, 2) present publication number. In their report, V. Danilenko and M. Makarevich at first described cremations in urns under numbers 1-101, but some of them were empty vessels. Then they described cremations - from 1 to 94, reserving some numbers for destroyed „graves”. Then, when the first publication was prepared, V. Danilenko and M. Makarevich numbered all cremations (in vessels and without) from 1 to 165. This numbering was used by V. Dergachev [Dergachev, Manzura 1991]. For example: grave 162(75C-158):

162 - our numbering, 75C - from the report, means „cremation 75”, 158 - number of present publications.

*Sofievka*: the enumeration of 1947 excavations - following I. Samoylovski; of 1948 - following Y. Zakharuk - according to the text of his dissertation, not of his report in which under number 94 is listed an empty pot. The numbering in the publication of V. Dergachev is from the text of the report, and we give it in brackets, after our numbers.

*Zavalovka*: according to reported publications [Kruts 1968; Dergachev, Manzura 1991].

*Illustrations*. Most of the illustrations are new, but in the case of objects which did not survive, the original illustrations from reports and daybooks are used. Consequently, both forms and scope of documentation differ, e.g. there have been difficulties in determining the scale of drawings.

## 1. TOPOGRAPHY OF THE CEMETERIES

The Sofievka cemetery was situated on a sand dune on the left bank of the Dnieper. The cemetery occupied a part of the top and slope of the dune. The cemetery at Krasny Khutor was situated on the top of a sand dune on the left bank of the Dnieper. The length of the dune was 75m, the width 50m, and the height 12,5m. The Chernin cemetery occupied the top of a narrow sand dune (length 380 m, width 40-90m). The height of the dune was 5m over the Dnieper valley. This dune was a part of the sand hills which divided the left river of Dnieper from the old riverbed. The Zavalovka cemetery was situated on a sand dune on the left bank of the Dnieper. The height of the dune was nearly 9m over the level of riverbed. The top of the hill was 50m x 30m size. So all the cemeteries were situated on the sand dune on the left bank of the Dnieper with a height 5-12m over the riverbed, not far from the water. Only one grave of the Sofievka type was on the right, high, bank of Dnieper (near Tripolye settlement and inhumation cemetery of B-II period at Chapayevka) [see in this volume: Videiko, „Cemeteries...”, Fig.1].

## 2. STRATIGRAPHY

All cemeteries have similar stratigraphy, because they are situated on sand dunes.

*Chernin*

Layer 1, 0 -0,03m - grass soil.

Layer 2, 0,03-0,34m - yellow sand.

Layer 3, 0,34-0,48 (or 0,66) m - buried soil.

Layer 4, from 0,48 (0,66) m - yellow sand, then - white sand.

All graves were in yellow sand (level 4), at a depth of 0,36-0,59m. Level 3 (buried soil) was not destroyed by graves, so it appeared after the cemetery.

*Krasny Khutor*

Layer 1, 0 - 0,2m - dark soil.

Layer 2, 0,2-0,6m - yellow sand with remains of cemetery.

Layer 3, from 0,6m - white sand.

All cremation graves were opened in yellow sand (level 2) at a depth of 0,5m.

*Sofievka*

Layer 1, 0-0,2m - grey-yellow sand.

Layer 2, 0,2-0,4m - grey sand.

Layer 3, 0,4-0,5m - buried soil.

Layer 4, 0,5-0,85m - yellow sand with cremation graves.

Layer 5, from 0,85m - white sand.

Some finds were opened in levels 1-3 (a result of contemporary ploughing).

Also on the dune were excavated inhumation graves of Kiev Rus (tenth-twelfth century AD), among surface finds was included pottery of the Middle Dnieper culture and the Early Iron Age.

*Zavalovka*

Layer 1, 0-0,2m - grey sand.

Layer 2, 0,2-0,6m - yellow sand.

Layer 3, from 0,6m - white sand.

All cremations were opened in yellow sand (level 2), at a depth of 0,4-0,6m.

Some graves were destroyed by pits of the Early Bronze Age (Middle Dnieper culture).

Results of the excavations of four cemeteries show us that all the graves were in yellow sand, under the buried soil. The upper soil horizon was not destroyed by graves. Buried soil appeared later than cemeteries.

## 3. CEMETERIES, GRAVE DESCRIPTIONS

In grave inventory descriptions, typological identifications of the following authors have been used: J. Budziszewski - flint artefacts [Budziszewski, „Flint...”, in this volume]; V.I. Klochko, A. Koško - stone axes-hammers [Klochko, Koško, „Weapons...”, in this volume]; V.I. Klochko - copper artefacts [Klochko, „Copper...”, in this volume]; R.F. Mazurowski - amber artefacts [Mazurowski 1983].

In the case of pottery, in the absence of appropriate classifications of pottery for the Tripolye culture, general assumptions have been used of systematic typology of the pottery of the Funnel Beaker culture [Koško 1981:23-42]. In respect to the macromorphology, the following typological groups (hereafter: „t.g.”) have been distinguished: „basic” t.g. - I = platter, II = vase, III = pot, and „special” t.g. - IV = amphora, V = beaker, VI = jug, VII = cup, VIII = cover. While decorations have been classified by decoration zone (a - edge, b - external under-edge, c - belly) and by decoration technique (a - pressing/incising with a die, b - pressing/incising with a cord, c - engrave, d - painting, e - relief-convex, 0 - no decorations). Thus, a record reading t.g.I-b-e stands for platter, externally decorated under the edge with a relief ornament. The purpose of this classification is to adapt the data published now to future interregional and intercultural comparative studies<sup>1</sup>.

Anthropological analyses attempted in this study have not broadened the characteristics of the „Sofievka” populations<sup>2</sup>.

## 3.1. CHERNIN CEMETERY (FIG.1)

To determine the locations of individual graves (references to squares), two kinds of call numbers have been used. One corresponds to the attached plan of the cemetery (Fig.1) [foll. Dergachev, Manzura 1991:311 - with the editor's adaptations] and the other one to the author of the study.

## Grave 1

Sq.A-3 [D-IV-1/D-IV-2], depth 36-42cm. Pile of ashes, oval in plan, 25x25x6cm. Above the cremation is the horizon of sand (10cm), on which grave 2 was found.

## Grave 2

Sq.A-3 [D-IV-2], depth 23-31cm. Pile of ashes, oval in plan, 23x32x8cm.

<sup>1</sup> Typological data have been included at the editor's request.

<sup>2</sup> In the opinion of Dr S. Segeda (National Academy of Sciences of Ukraine, Institute of Archaeology) who analysed the osteological sources, their state of preservation and type of storage make it impossible to broaden our knowledge of the subject.

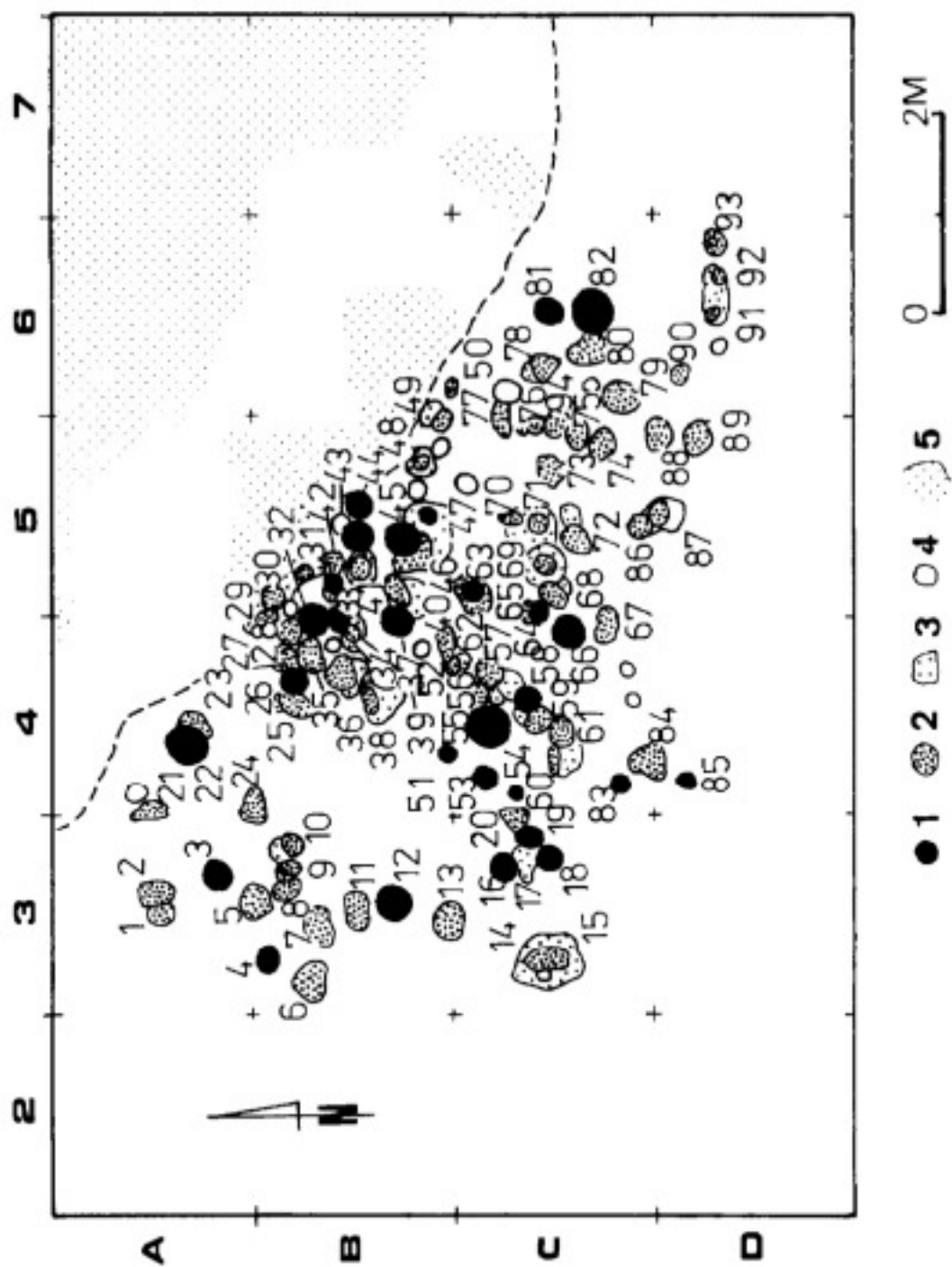


Fig. 1. Chernin cemetery; the general plan (after V. Kanivets). 1 - vessels with burnt bones and ashes; 2 - pile of burnt bones; 3 - spot of ashes and scattered burnt bones; 4 - empty vessels; 5 - destroyed part of site .

## Grave 3

Sq.A-3 [D-IV-2], depth 42cm. Vessel (t.g.III-0) and burnt bones. 3cm to the west of vessel, in the sand is an ordinary flint arrowhead with straight base (Fig.2:2).

## Grave 4

Sq.B-3 [C-IV-3], depth ? Large vessel (t.g.?) with burnt bones. On the bones was a small vessel with ashes (t.g.II-b-a), Fig.2:1.

## Grave 5

Sq.A/B-3 [C-IV-4/D-IV-2], depth 25-40cm. Pile of burnt bones, circular in plan, 30x30x15cm. In the center of pile is a fragment of vessel (t.g.), Fig.2:3.

## Grave 6

Sq.B-3 [C-IV-3], depth 30-39cm. Pile of burnt bones, pear-like in plan, 40x-35x-9cm. In the central part are bones mixed with ashes.

## Grave 7

Sq.B-3 [C-IV-3], depth 45cm. Spot with burnt bones, pear-like in plan, 36x32cm.

## Grave 8

Sq.B-3 [C-IV-4], depth 18-32cm. Pile of burnt bones, 25x23x14cm, under the west part of grave 9. In the central part are bones mixed with ashes. The NW part of the cremation is divided from grave 5 by a 7cm sand horizon.

## Grave 9

Sq.B-3 [C-IV-4], depth 18-37cm. Pile of burnt bones, oval in plan, 28x28x19cm.

## Grave 10

Sq.B-3 [C-IV-4], depth 18-28cm. Pile of burnt bones, oval in plan, 22x16x10cm. In the central part are bones mixed with ashes. Under the pile is a broken vessel (t.g.). Among the bones is a flint flake (lost).

## Grave 11

Sq.B-3 [C-IV-centre], depth 30-45cm. Pile of burnt bones, circular in plan, 20x20x15cm, covered by spot of burnt bones, oval in plan, 35x28cm. In the central part of the pile are bones mixed with ashes. Between the bones is a cylindrical copper bead (type IIBe2). To E of pile is part of an ordinary flint blade knife refitted from 2 burnt fragments - variant B (Fig.2:4). It is refitted with an artefact from grave 52.

## Grave 12

Sq.B-3 [C-IV-1/C-IV-2], depth 60cm. Vessel (t.g.IV-?) with burnt bones of adult man. Among bones - 4 copper beads (types 3x IIBe2, 1x IIBe3) and 3 flint tools (ordinary blade knife - variant B, flake side-scraper and refitted from 5 burnt fragments two parts of undefined blade tool used as striker), Fig.3:1. Bones and goods with traces of red ochra paint.

## Grave 13

Sq.B/C-3 [B-IV-3/4,C-IV-1/2] depth 38cm. Spot of burnt bones, oval in plan, 34x30cm.

## Grave 14

Sq.C-3 [B-IV-1/3], depth 29-54cm. Northern part of the spot burnt bones, in central part mixed with ashes, diam. 18cm. To W from spot - small vessel (t.g.III-0), Fig.3:2.

## Grave 15

Sq.C-3 [B-IV-1/3], depth 29-54cm. Southern part of spot of burnt bones, in central part (7x5cm) mixed with ashes.

## Grave 16

Sq.C-3 [B-IV-4], depth 49cm. Low part of the vessel (t.g.?) with burnt bones.

## Grave 17

Sq.C-3 [B-IV-4], depth 35-43cm. Pile of burnt bones, oval in plan, 42x23x8cm.

## Grave 18

Sq.C-3 [B-IV-4], depth ?. Vessel (t.g.IV-?) with burnt bones and ashes (Fig.3:3).

## Grave 19

Sq.C-3 [B-IV-4], depth ?. Vessel (t.g.IV-0) with burnt bones (Fig.3:4).

## Grave 20

Sq.C-3/4 [B-IV-4,B-I-3], depth 33-50cm. Pile of burnt bones, pear-like in plan, 29x34x17cm. In central part bones mixed with ashes (diam.13cm, thickness 3cm).

## Grave 21

Sq.A-3/4 [D-I-3/D-I-1], depth 41cm. Pile of burnt bones, irregular in plan, 24x34cm. To NE of pile - low part of broken (?) vessel (t.g.?).

## Grave 22

Sq.A-4 [D-I-1], depth 43cm. Vessel (t.g.IV-?) with burnt bones and ashes (Fig. 4:1).

## Grave 23

Sq.A-4 [D-I-1], depth 41-54cm. Pile of burnt bones, circular in plan, 17x27x13 cm, covered by spot of burnt bones 25x32cm. On surface of spot - spiral copper bead (type IIBe3).

## Grave 24

Sq.A/B-3/4; [C-I-3/C-IV-4/D-I-1/D-IV-2], depth 32-43cm. Pile of burnt bones, oval in plan, 30x22x11cm.

## Grave 25

Sq.B-4 [C-I-4], depth 24-30cm. Pile of burnt bones, oval in plan, 18x24x6cm, covered by spot of burnt bones, irregular in plan, 25x40cm.

## Grave 26

Sq.B-4 [C-I-4], depth 34. Vessel (t.g.?) with burnt bones (Fig.4:2)

## Grave 27

Sq.B-4 [C-I-4], depth 20-31cm. Pile of burnt bones, circular in plan, 18x19x11 cm, covered by spot of burnt bones, circular in plan, 28x28cm.

## Grave 28

Sq.B-4 [C-I-4], depth 34-42cm. Pile of burnt bones, circular in plan, 18x18x8cm. In central part bones mixed with ashes. NE part of pile covered of burnt bones.

## Grave 29

Sq.B-4/5 [C-I-4/C-II-3], depth 23-36cm. Pile of burnt bones, oval in plan, covered by spot of scattered burnt bones.

## Grave 30

Sq.B-5 [C-II-3], depth 23cm. Pile burnt bones, circular in plan, 20x20cm. Covered by spot of burnt bones. Among bones - ordinary blade striker made from fragment of flint knife. Near the pile broken vessel (t.g.II-0?), Fig.4:3.

## Grave 31

Sq.B-5 [C-II-3], depth 23cm. Pile of burnt bones under the SW part of large spot of burnt bones. Circular plan, 10x10cm.

## Grave 32

Sq.B-4/5 [C-I-4/C-II-3], depth 44cm. Vessel (t.g.V-0?) with burnt bones (Fig. 4:4).

## Grave 33

Sq.B-5 [C-II-3], depth 44cm. Vessel (t.g.III-0) with burnt bones. Among bones - 5 copper beads (type IIBe1). Near the vessel - flint ordinary arrowhead with straight base (Fig.5:1).

## Grave 34

Sq.B-4/5; [C-II-3/C-I-4], depth 44cm. Vessel (t.g.?) with burnt bones.

## Grave 35

Sq.B-4 [C-I-4], depth 34-41cm. Pile of burnt bones, irregular in plan, 28x18x7cm, covered by spot of burnt bones.

## Grave 36

Sq.B-4 [C-I-4], depth 34-47cm. Pile of burnt bones, circular in plan, 30x28x13 cm, partly covered by spot of burnt bones. Among bones - refitted from 3 burnt fragments part of ordinary blade knife - variant B (Fig.4:5).

## Grave 37

Sq.B-4 [C-I-4/C-I-2], depth 34-41cm. Pile of burnt bones, oval in plan, 16x-20x-7cm, covered by spot of burnt bones, irregular plan, 32x20cm. In center bones mixed with ashes. To S and NW from the pile - 2 small vessels (t.g.III-c-c; III-0), Fig.5:2.

## Grave 38

Sq.B-4 [C-I-2], depth 34-44. Pile of burnt bones, oval in plan, 25x14x10cm. In central part bones mixed with ashes, covered by spot of burnt bones.

## Grave 39

Sq.B-4 [C-I-2], depth 54cm. Vessel (t.g.IV-?) with burnt bones of man 16-18 years old and ashes. Low part of the vessel was broken in past (Fig.5:3).

## Grave 40

Sq.B-5 [C-II-1], depth 32-53. Pile of burnt bones, in central part mixed with ashes, 37-26cm, covered by spot of burnt bones, 40x50cm. Among bones - 10 burnt flint arrowheads (5 ordinary pieces with straight base - Fig.5:4a-e, 3 slim pieces with straight base - Fig.5:4g-i, 1 big piece with concave base - Fig.5:4f, 1 undefined - lost).

## Grave 41

Sq.B-5 [C-II-1], depth 37-47cm. Pile of burnt bones, 20x20x10cm under the S part of spot of burnt bones 30x42cm. In central part, bones mixed with ashes.

## Grave 42

Sq.B-5 [C-II-3], depth 37-52cm. Pile of burnt bones, 14x14x15cm, under the N part of spot of burnt bones. Among bones - 5 flint tools: asymmetric blade perforator made from knife and used as striker, burnt bifacial flake knife and 3 burnt arrowheads (2 ordinary pieces with straight base and fragment of slim atypical piece), Fig.6:1.

## Grave 43

Sq.B-5 [C-II-3/C-II-1], depth 41cm. Vessel (t.g.III-0) with burnt bones. Among bones - 2 small copper shackles (type IISH) and burnt arrowhead (slim with straight base). Near the NE side of pot was vessel (t.g.II-0) without remains of cremation (Fig.6:2).

## Grave 44

Sq.B-5 [C-II-2], depth 41. Vessel (t.g.III-0) with burnt bones (Fig.6:3).

## Grave 45

Sq.B-5 [C-II-1], depth 41cm. Vessel (t.g.III-c-a) with burnt bones adult man and adolescent 13-15 years old, which was on the remains of cremation 46 (Fig.6:4).

## Grave 46

Sq.B-5 [C-II-1], depth 30-62cm. Pile of burnt bones, oval in plan, 40x25x32cm, covered by the spot of burnt bones, 70x50cm. In central part of pile bones mixed with ashes (diam. 13cm.) Spot surrounded by the circle of horse teeth, thrust in sand. Among bones flint flake (lost), to the S - broken vessel. On remains of grave 46 - vessel with bones of grave 45.

## Grave 47

Sq.B-5 [C-II-2], depth 60cm. Low part of the vessel (t.g.IV-0?) with burnt bones (Fig.7:1).

## Grave 48

Sq.B-5 [C-II-2], depth 47cm. Pile of burnt bones, 15x11x12 cm, covered by circular spot of burnt bones, 30x28cm. Among bones - 2 flint artefacts: side-scraper with bifacial retouch and ordinary chip. Near the pile 3 vessels (t.g.I-0; III-0; IV-0), Fig.7:2.

## Grave 49

Sq.B-5/6 [C-II-2/C-III-1], depth 46-60cm. Pile of burnt bones, circular in plan, 17x17x14cm, covered by circular spot of burnt bones, 30x30cm. In central part of pile bones mixed with ashes (diam.14cm). Among bones - 2 fragments of flint artefacts: scaled piece made from flake and ordinary chip (Fig.8:1).

## Grave 50

Sq.B/C-6 [C-III-1/B-III-3], depth 40-44cm. Pile of burnt bones, 20x11x4cm. Among bones flint flake (Fig.8:5).

## Grave 51

Sq.B-4 [C-I-1], depth 40cm. Part of vessel (t.g.?) with burnt bones of the child. In 10cm to NW - vessel (t.g.I-0), Fig.8:2.

## Grave 52

Sq.B/C-4 [C-1-2/B-1-4], depth 43-54. Pile of burnt bones, circular in plan, 20x20x11cm, covered by spot of scattered burnt bones, irregular in plan, 60x20cm. Among bones - 2 copper beads (type IIBe?) and refitted from 15 burnt fragments (between them singular pieces from graves 11 and 63) 2 flint ordinary blade knives - variant B. In 10cm to N - broken vessel (t.g.?), Fig.8:3.

## Grave 53

Sq.C-4 [B-I-3], depth 52cm. Vessel (t.g.III-0) with burnt bones (Fig.8:4).

## Grave 54

Sq.C-4 [B-I-3], depth 55cm. Broken vessel (t.g.?) with burnt bones.

## Grave 55

Sq.C-4 [B-I-3], depth 63cm. Vessel (t.g.?) with burnt bones and ashes (Fig.8:6).

## Grave 56

Sq.C-4 [B-I-4], depth 43-50. Pile of burnt bones, circular in plan, 18x18xcm. In central part bones mixed with ashes. Among bones burnt fragment of flint ordinary blade knife - variant B (?). To NW from pile on depth 43cm - burnt flint arrowhead (ordinary with straight base), Fig.9:1.

## Grave 57

Sq.C-4 [B-I-4], depth 47cm. Pile of burnt bones, oval plan, 25x20x7cm. In central part bones mixed ashes. Partly covered by spot of scattered burnt bones, circular in plan, 27x28cm.

## Grave 58

Sq.C-4 [B-I-4], depth 45cm. Vessel (t.g.IV-0) with burnt bones. In low part of vessel - two holes (5x4 and 3,8x5cm), Fig.9:2.

## Grave 59

Sq.C-4 [B-I-3], depth 36-41cm. Pile of burnt bones, irregular in plan, 32x36x5cm. Among bones - clay spin-wheel (Fig.9:3).

## Grave 60

Sq.C-4 [B-I-1], depth 51-59cm. Pile of burnt bones, irregular in plan, 30x15x8cm, covered by sand (11cm). On sand - scattered burnt bones of cremation 61.

## Grave 61

Sq.C-4 [B-I-1], depth 40-57cm. Pile of burnt bones, rectangular in plan, 32x-21x-17cm. To SW continued by spot of scattered bones, 50x25cm.

## Grave 62

Sq.C-5 [B-II-3], depth 49cm. Vessel (t.g.II-0) with burnt bones. To N from vessel - in sand - undefined flint arrowhead (lost), Fig.9:4.

## Grave 63

Sq.C-5 [B-II-3], depth 49-75cm. Pile of burnt bones oval in plan, 40x28x26cm. Near the pile is part of a copper tool (type ?) and 17 flint artefacts: 8 ordinary chips (Fig.9:5l-s) and 9 chunks. Among the bones lie fragments of a vessel (t.g.?) and 14 flint artefacts: 3 burnt ordinary arrowheads with straight base (Fig.9:5a-c), a flake perforator (Fig.9:5d), an ordinary flake (Fig.9:5e), 5 burnt fragments of blade tools - Fig.9:5f-h (between them 2 pieces refitted - Fig.9:5f, and 1 piece refitted with a knife from grave 52), 2 burnt fragments of an undefined flake tool (Fig.9:5i-j) and 1 fragment of burnt chip (Fig.9:5k) and chip - lost.

## Grave 64

Sq.C-4/5 [B-I-4/B-II-3], depth 44cm. Vessel (t.g.III-a,b-a, near t.g.II-?) with burnt bones of adult man. Among the bones are 4 flint artefacts: a fragment of plunging flake and 3 chips from scaled pieces (Fig.10:1). The vessel of grave 64 was on the bones of grave 65.

## Grave 65

Sq.C-4/5 [B-I-4/B-II-3], depth 44-66cm. Pile of burnt bones, 25x35x22cm. Under the pot of grave 64 is an asymmetric perforator, refitted from 4 fired fragments and made from a blade knife and used as a striker. Among the bones are 3 flint artefacts: the fired fragment of an undefined blade tool, an amorphous flake presser and a fragment of a micro-scaled piece (Fig.10:2).

## Grave 66

Sq.C-4 [B-I-2], depth 70cm. Vessel (t.g.IV?-?) with burnt bones of adult man. Among the bones are 5 flint artefacts (an ordinary blade knife - variant C, refitted from 5 fired fragments two parts of an ordinary blade knife - variant C, a slim

arrowhead with straight base, a flake spike-ended presser and a fragment of an undefined blade tool and 10 small oval-round stones (Fig.11).

#### Grave 67

Sq.C-4/5 [B-I-2/B-II-1], depth 35cm. Spot with burnt bones, irregular-oval in plan, 30x42cm. In the central part lie bones mixed with ashes.

#### Grave 68

Sq.C-5 [B-II-1/B-II-3], depth 37-60cm. Pile of burnt bones, circular in plan, 25x2x3cm. In the central part (diam. 15cm) are bones mixed with ashes. Among the bones is part of an ordinary flint flake refitted from 3 burnt fragments (Fig.12:1).

#### Grave 69

Sq.C-5 [B-II-1/B-II-3], depth 53-60cm. Pile of burnt bones, circular in plan, 40x42x7cm, covered by sand. On the sand, in W part are remains of cremation 68, in E part are scattered bones of cremation 71. In the sand is an ordinary flint arrowhead with concave base (Fig.12:2).

#### Grave 70

Sq.C-5 [B-II-3/B-II-4], depth 40-55cm. Pile of burnt bones, circular in plan, 20x22x15cm, partly covered by spot of scattered burnt bones. 45x58cm. To NW from pile (depth 40 cm) - fragment of vessel (t.g.).

#### Grave 71

Sq.C-5 [B-II-3/4], depth 40-54cm. Pile of burnt bones, circular in plan, 20x-20x-14cm, partly covered by spot of scattered burnt bones. Among bones - burnt flint side-scraper (Fig.12:3).

#### Grave 72

Sq.C-5 [B-II-1], depth 40-67cm. Pile of burnt bones, circular in plan, 22x22x27 cm, partly covered by spot of scattered burnt bones, 30x25cm.

#### Grave 73

Sq.C-5 [B-II-2/B-II-4], depth 30. Spot of scattered burnt bones, circular in plan, 38-36cm. To S of spot - part of broken vessel (t.g.).

#### Grave 74

Sq.C-5 [B-II-2], depth 39cm. Spot of scattered burnt bones, irregular in plan, 38-36cm. May be the part of cremation 75(?).

#### Grave 75

Sq.C-5 [B-II-2], depth 39-73cm. Pile of burnt bones, oval in plan, 34x28x34cm.

#### Grave 76

Sq.C-5 [B-II-4], depth 39cm. Spot of scattered burnt bones, 14-26cm.

#### Grave 77

Sq.C-5/6 [B-II-4/B-III-3], depth 39cm. Spot of scattered burnt bones, irregular in plan, 70x22cm. Among bones - flint micro - scaled piece. Near the spot - small vessel (t.g.II-0), Fig.12:5.

## Grave 78

Sq.C-6 [B-III-3], depth 39-50cm. Pile of burnt bones, 24x20x11cm, partly covered by spot of scattered burnt bones. Among bones - flint ordinary flake (Fig.12:4).

## Grave 79

Sq.C-6 [B-III-1], depth 39cm. Spot of scattered burnt bones, circular in plan, 40x42cm. Near the spot - vessel (t.g.III- 0), depth 54cm; in 10cm to S - flint ordinary arrowhead with concave base (Fig.12:6).

## Grave 80

Sq.C-6 [B-III-1], depth 45-57cm. Pile of burnt bones, irregular in plan, 30x-38x-12cm. Among bones - part of burnt horn hammer-axe (Fig.12:7).

## Grave 81

Sq.C-6 [B-III-4/B-III-3], depth 62cm. Low part of vessel (t.g.?) with burnt bones of adult woman (?) and ashes. On bones - traces of red paint.

## Grave 82

Sq.C-6 [B-III-1/B-III-2], depth 53cm. Vessel (t.g.?) with burnt bones.

## Grave 83

Sq.C-4 [B-I-1], depth 37cm. Vessel (t.g.?) with burnt bones.

## Grave 84

Sq.C/D-4 [B-I-1/A-I-3], depth 36cm. Spot of scattered burnt bones, pear-like in plan, 35x35cm. Among bones - 3 burnt flint artefacts: ordinary arrowhead „with straight base”, ordinary blade striker and refitted from 2 fragments part of flake. Near in 18cm - broken vessel (t.g.), Fig.12:8.

## Grave 85

Sq.D-4 [A-I-3], depth 37cm. Small vessel (t.g.?) with burnt bones.

## Grave 86

Sq.C-5 [B-II-1], depth 39-70cm. Pile of burnt bones, circular in plan, 20x20x31 cm. Southern part of pile covered by spot of scattered burnt bones.

## Grave 87

Sq.C/D-5 [A-II-3/A-II-4/B-II-1/B-II-2], depth 39-70cm. Pile of burnt bones, circular in plan, 20-20-31cm. In sand, over the pile - ordinary flint arrowheads with concave base (Fig.12:9).

## Grave 88

Sq.C/D-5 [A-II-4/B-II-2], depth 39-47cm. Pile of burnt bones, 32x22x8cm. Among bones - flint scaled piece (Fig.12:10).

## Grave 89

Sq.D-5 [A-II-4], depth 39cm. Spot of scattered burnt bones, oval in plan, 32x26cm.

## Grave 90

Sq.D-6 [A-III-3], depth 50-66cm. Pile of burnt bones, irregular in plan, 35x-20x-16cm. To NW in sand - part of broken vessel (t.g.). Among bones part of burnt stone axe (type ?), 2 stones and 2 flint tools: burnt double spike-ended presser on blade and side-scraper with bifacial retouch (Fig.13:1).

## Grave 91

Sq.D-6 [A-III-3], depth 50-70cm. Pile of burnt bones, mixed with ashes, 7x-7x-20cm, partly covered by spot of scattered burnt bones, oval in plan, 36x22cm. In 10cm to W - large vessel (t.g.).

## Grave 92

Sq.D-6 [A-III-4], depth 50-61cm. Pile of burnt bones, mixed with ashes, 13x-13x-11cm.

## Grave 93

Sq.D-6 [A-III-4], depth 63-75cm. Pile of burnt bones, mixed with ashes, 20x-20x-12cm. In central part of pile - low part of small vessel (t.g.), Fig.13:2.

## Grave 94

Sq.C-5 [B-II-2], depth 39cm. Spot of scattered burnt bones, irregular in plan, 25x30cm. To E from spot - broken vessel (t.g.).

## Destroyed graves

Some materials that were obtained at the cemetery do not have sufficient documentation to connect them to the inventories described above. They include copper articles of IIBe1 x2 and IIBe3 types (Fig.13:3) and five flint artefacts: 2 burnt ordinary arrowheads with straight base, an initial scaled-piece made from a natural piece, a fragment of an undefined tool on a pseudo-blade and an imitation of a bifacial flake knife (Fig.13:3).

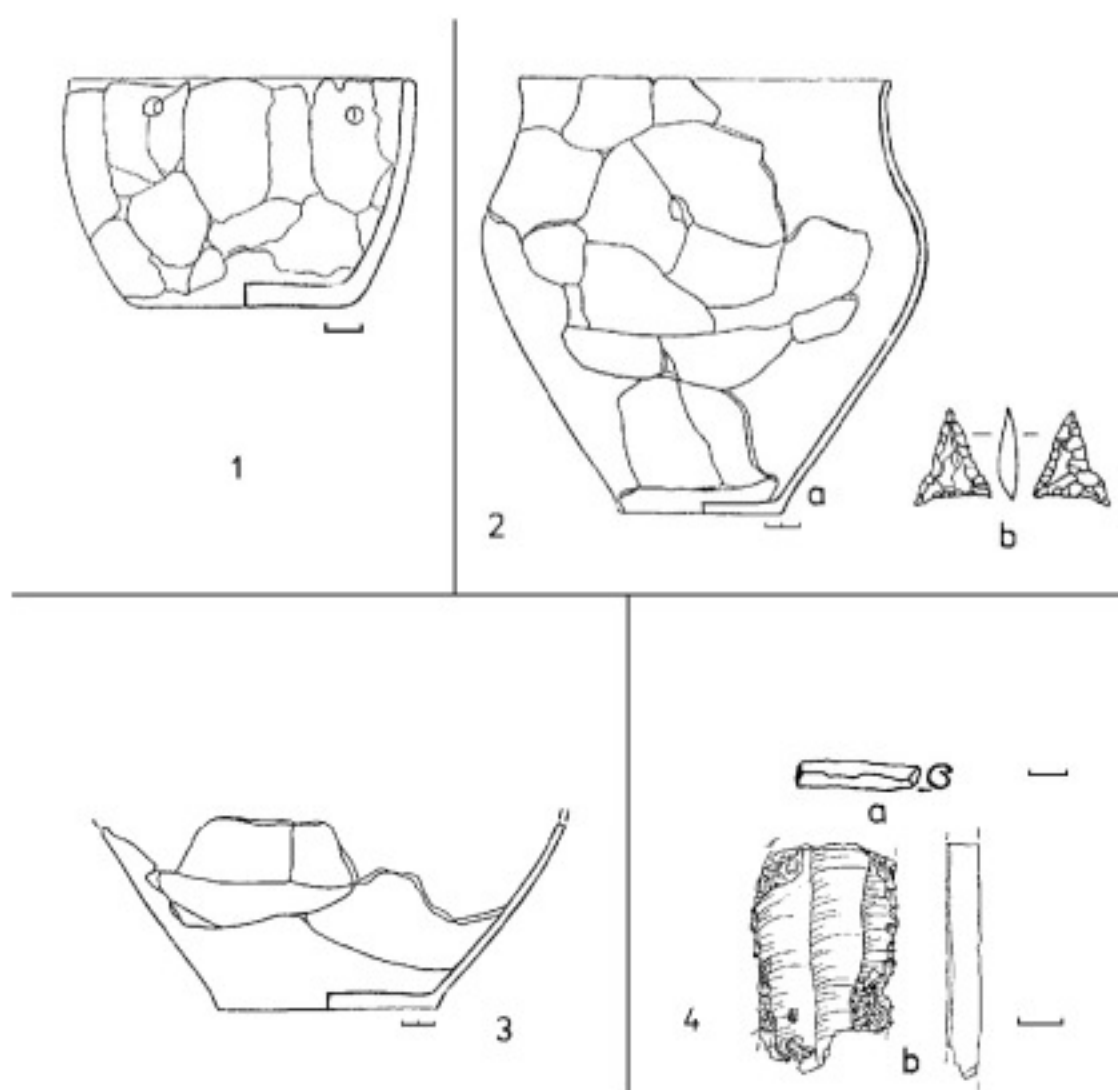


Fig. 2. Chernin. 1 - grave 4; 2 - grave 3; 3 - grave 5; 4 - grave 11.

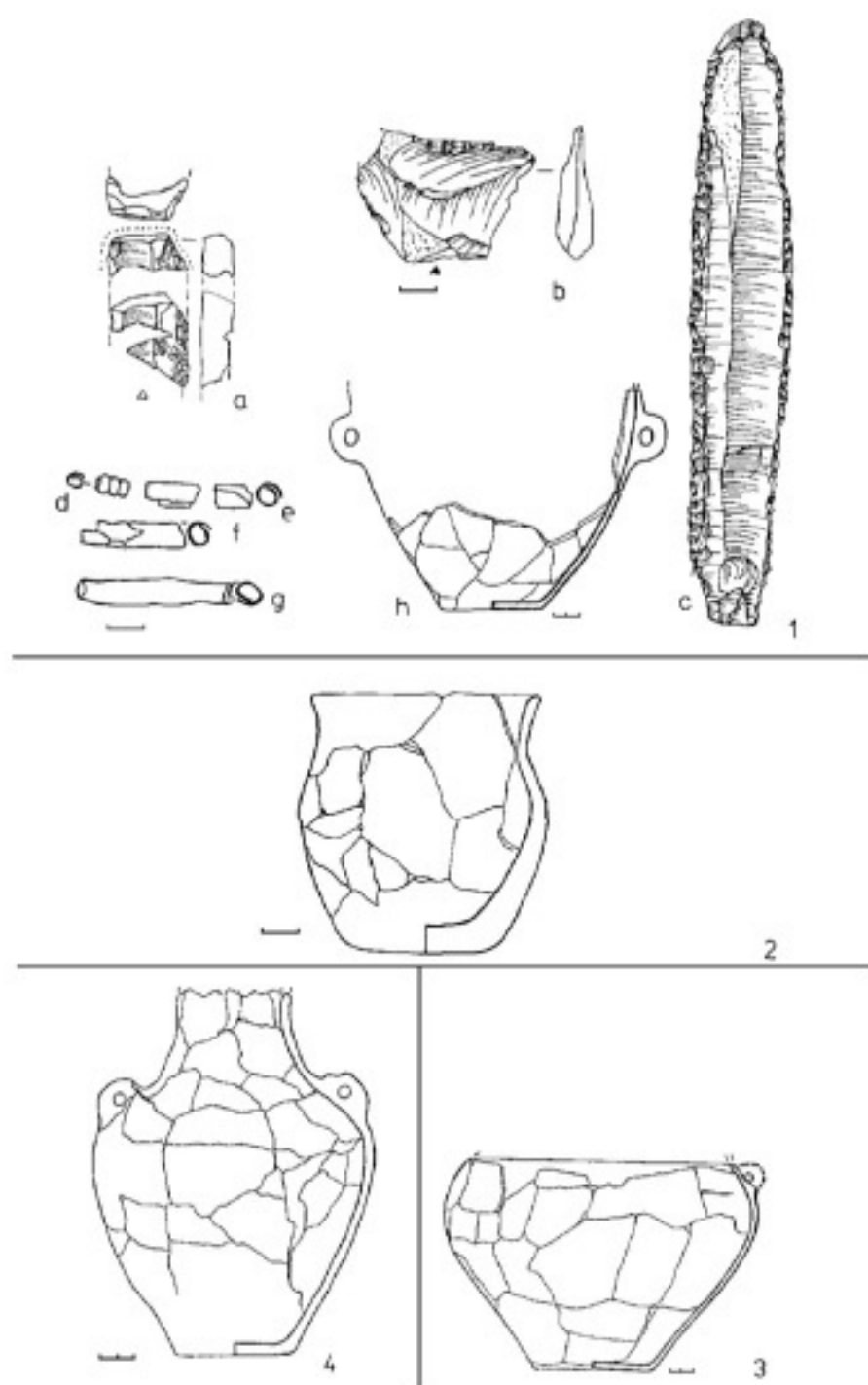


Fig. 3. Chernin. 1 - grave 12; 2 - grave 14; 3 - grave 18; 4 - grave 19.

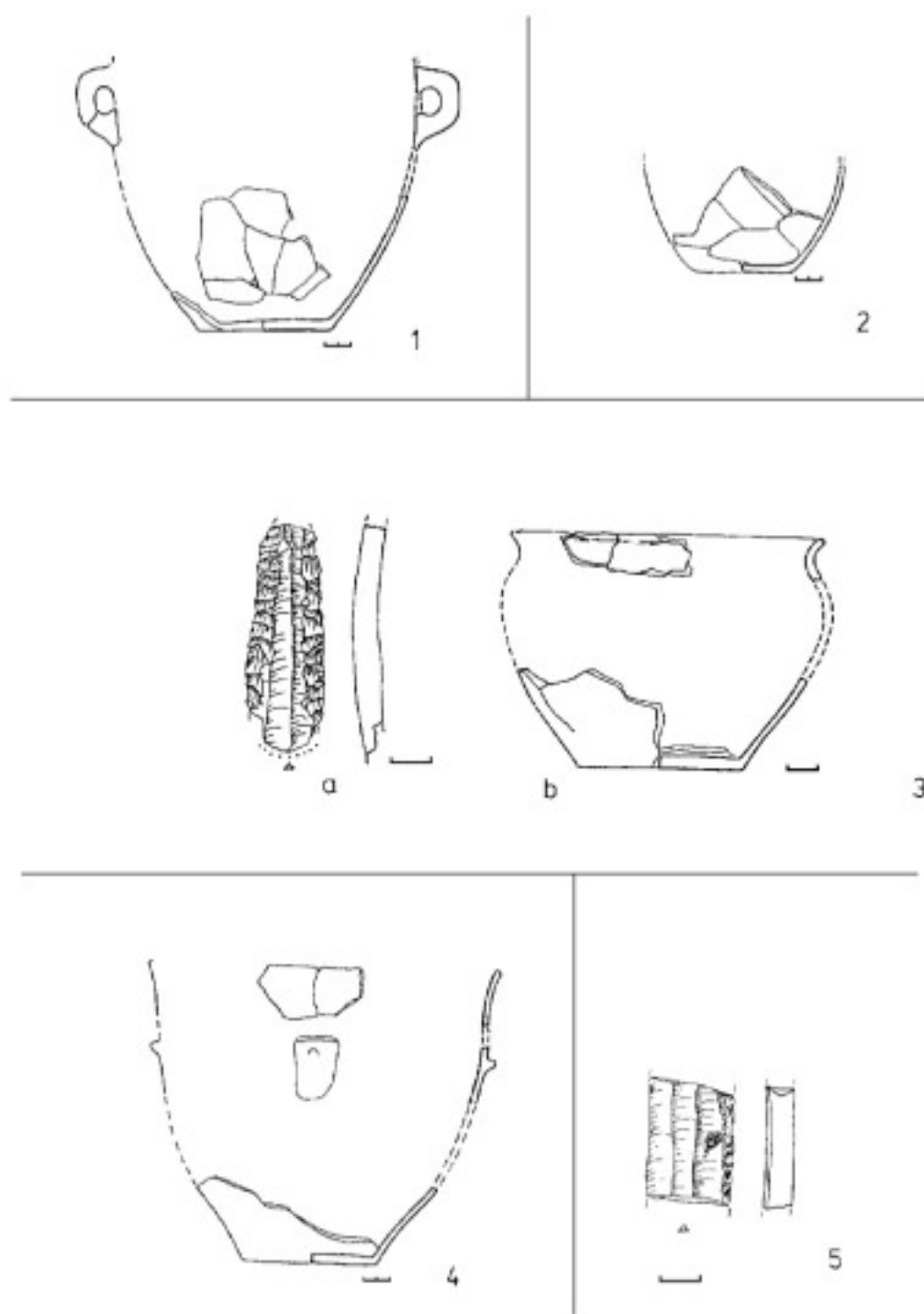


Fig. 4. Chernin. 1 - grave 22; 2 - grave 26; 3 - grave 30; 4 - grave 32; 5 - grave 36.

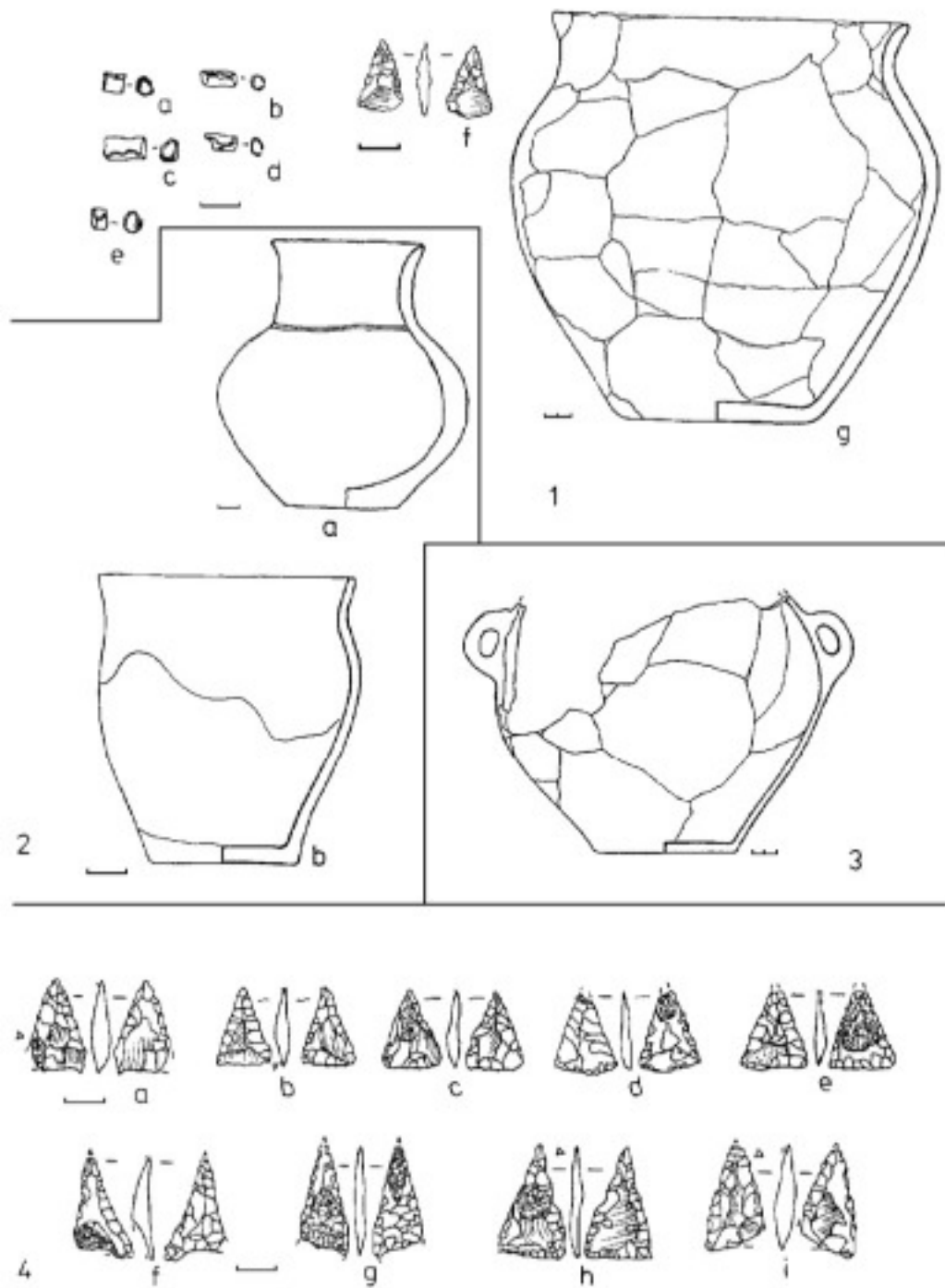


Fig. 5. Chernin. 1 - grave 33; 2 - grave 37; 3 - grave 39; 4 - grave 40.

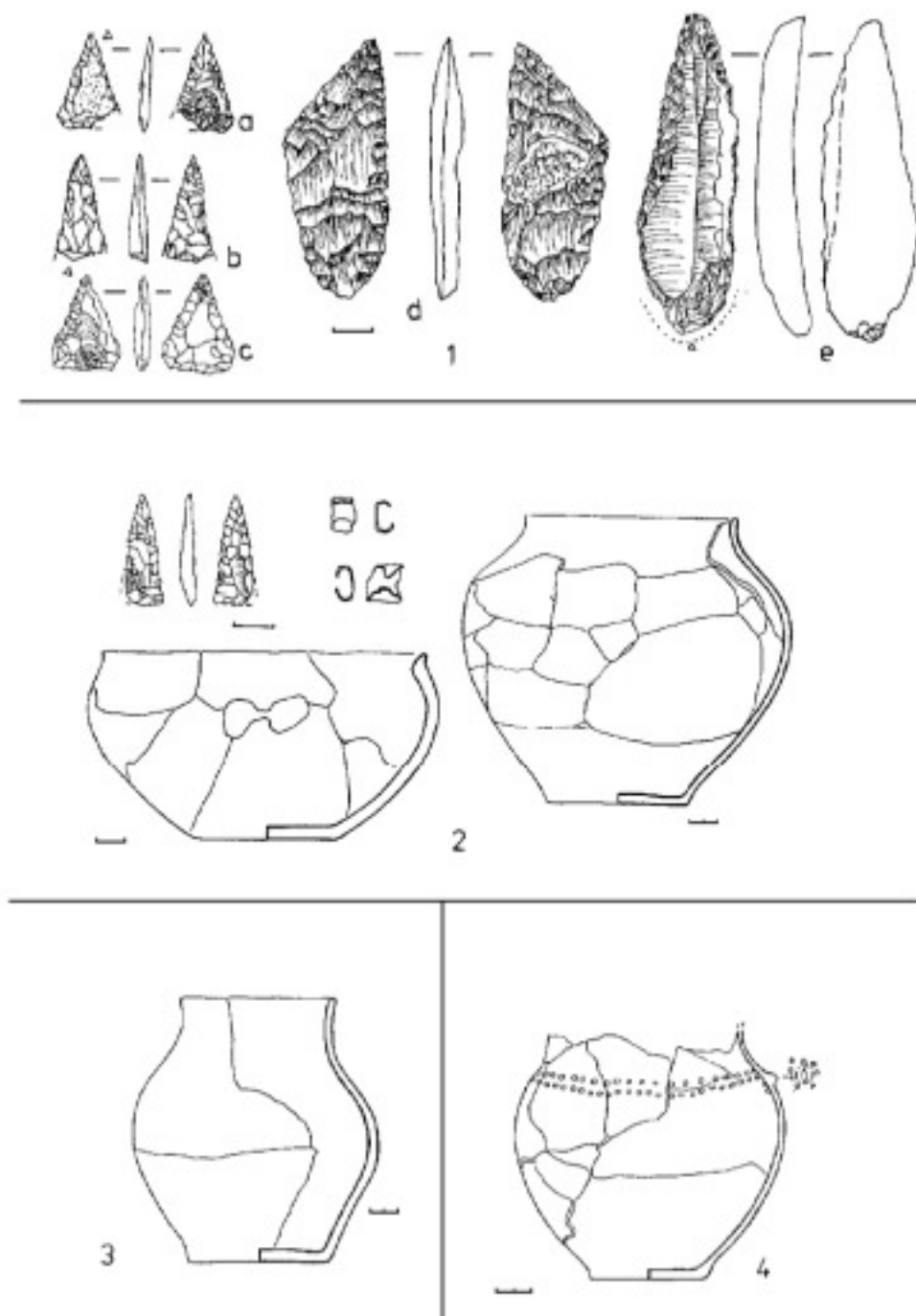


Fig. 6. Chernin. 1 - grave 42; 2 - grave 43; 3 - grave 44; 4 - grave 45.

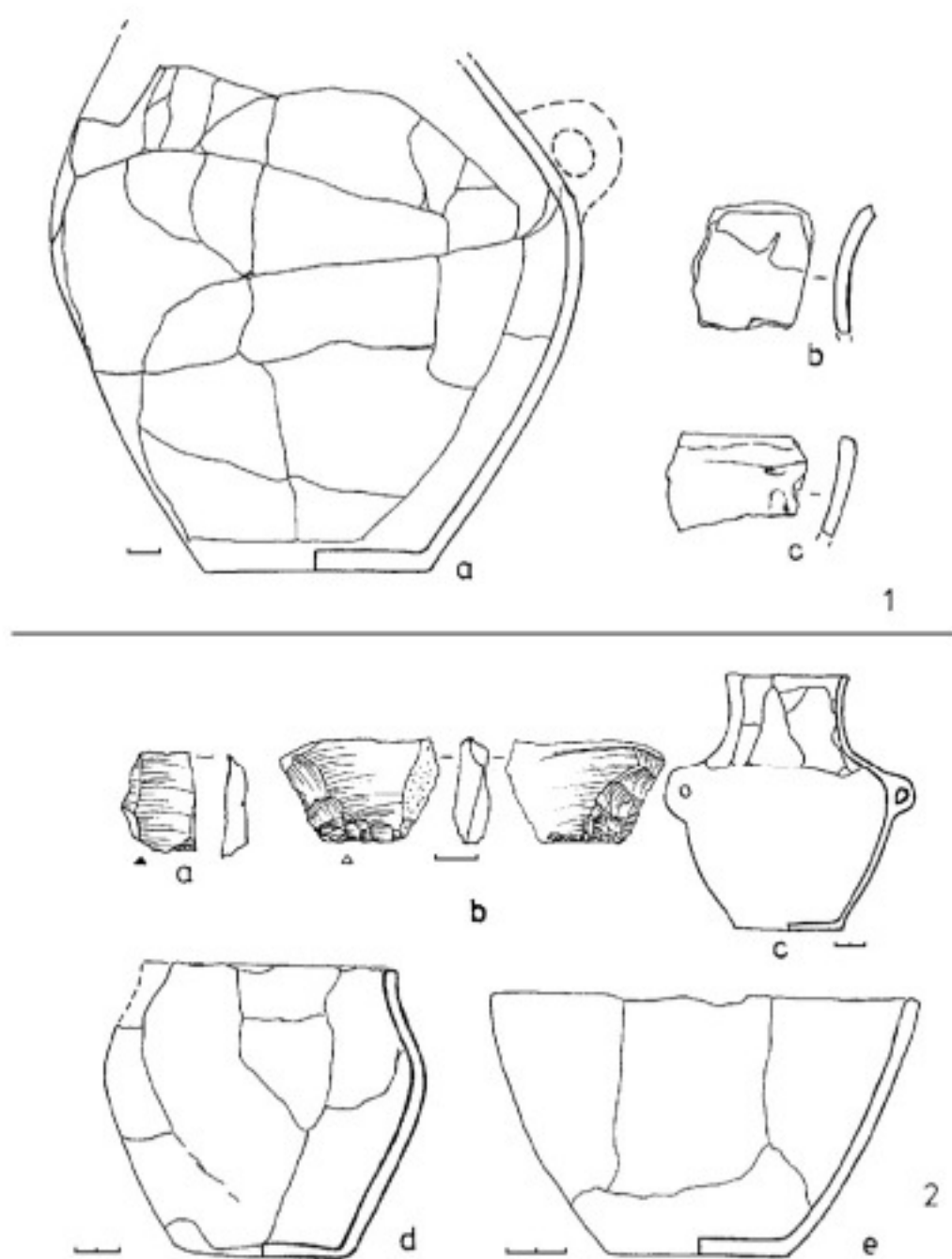


Fig. 7. Chernin. 1 - grave 47; 2 - grave 48.

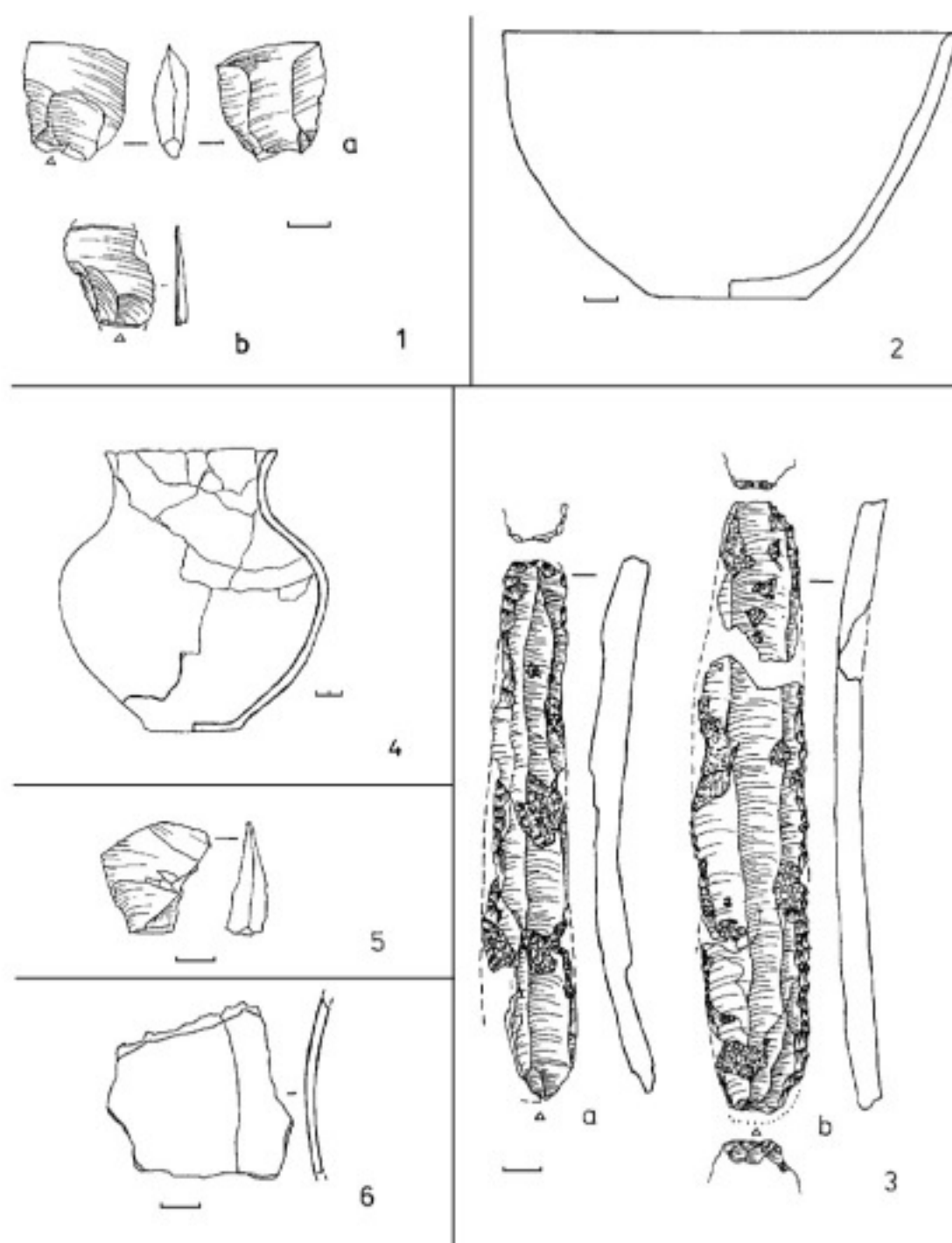


Fig. 8. Chernin. 1 - grave 49; 2 - grave 51; 3 - grave 52; 4 - grave 53; 5 - grave 50; 6 - grave 55.

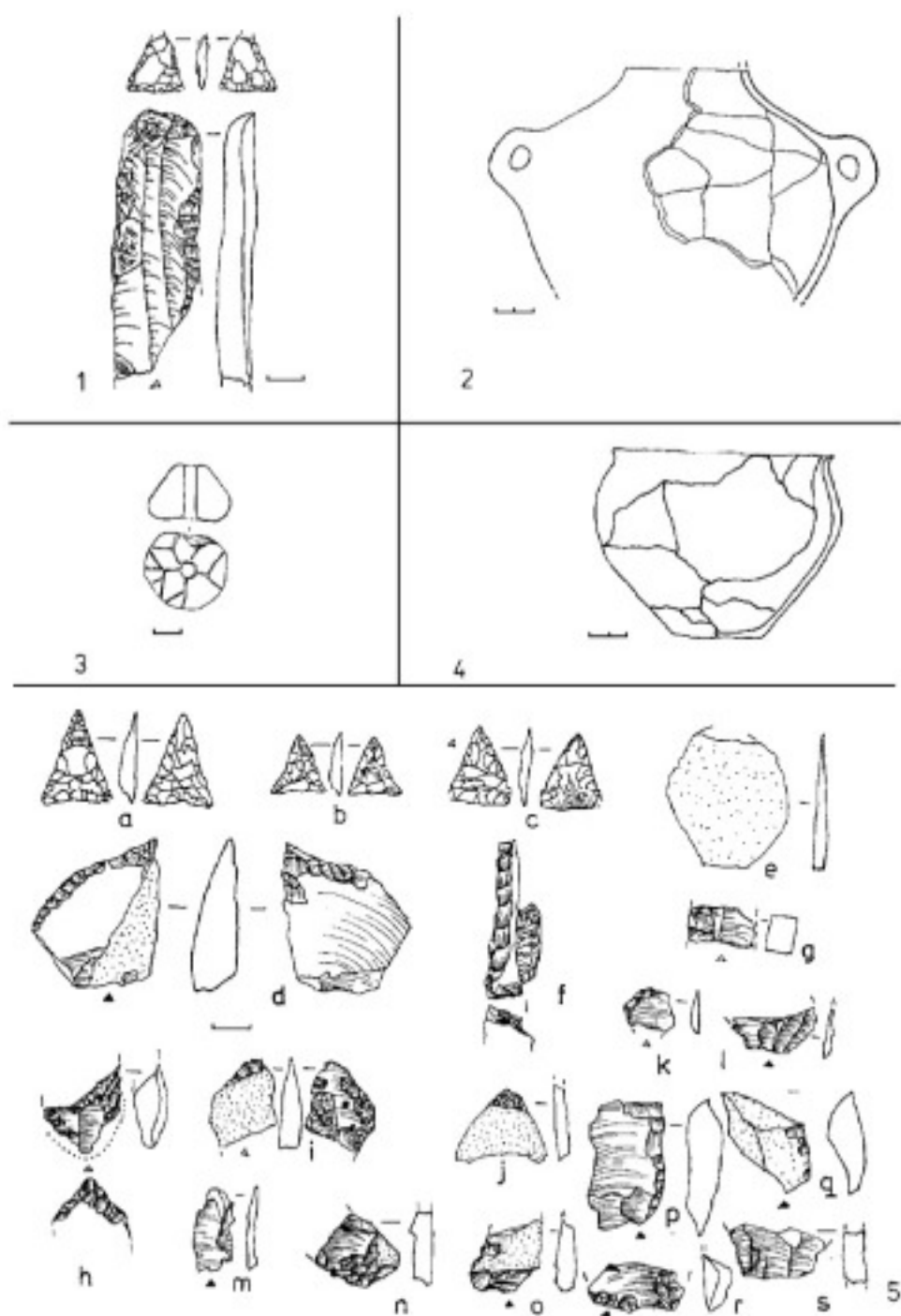


Fig. 9. Chernin. 1 - grave 56; 2 - grave 58; 3 - grave 59; 4 - grave 62; 5 - grave 63.

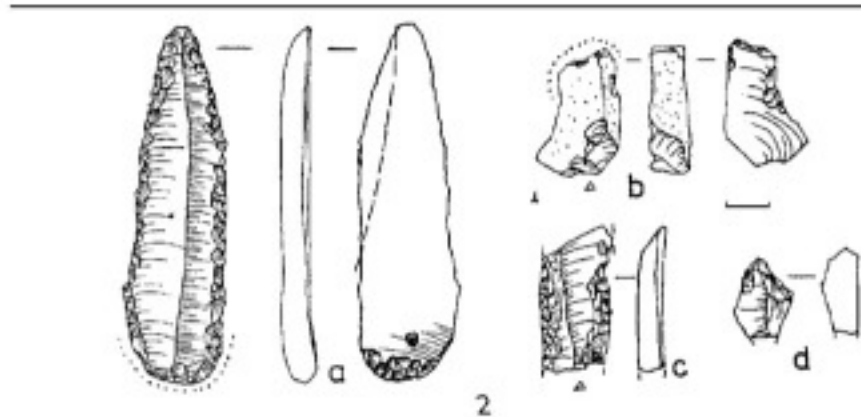
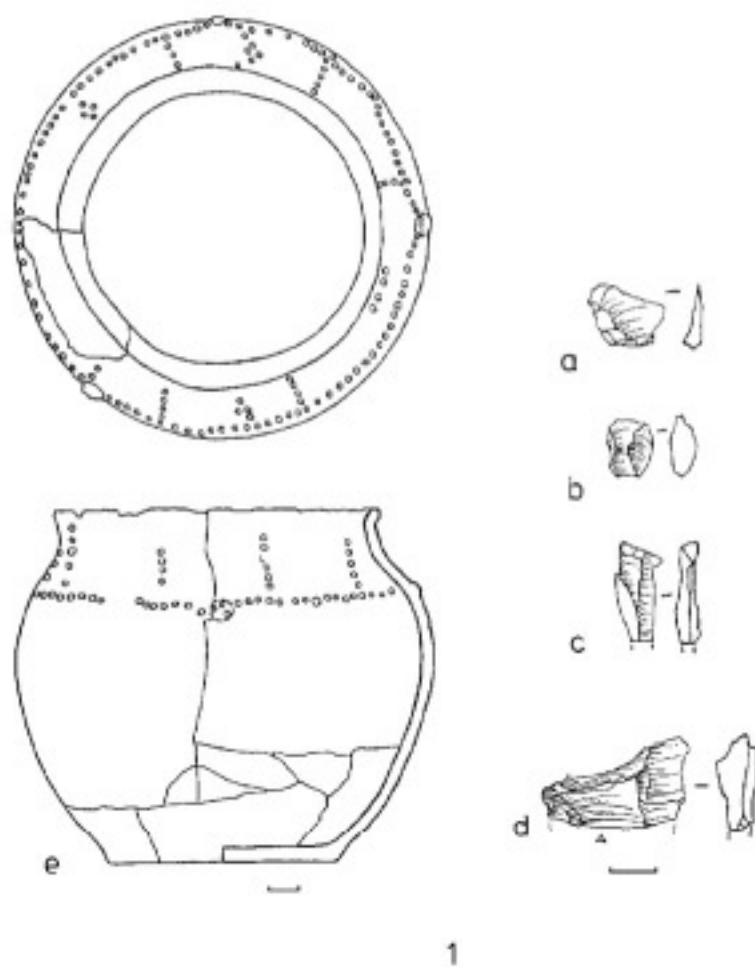


Fig. 10. Chernin. 1 - grave 64; 2 - grave 65.



Fig. 11. Chernin. Grave 66.

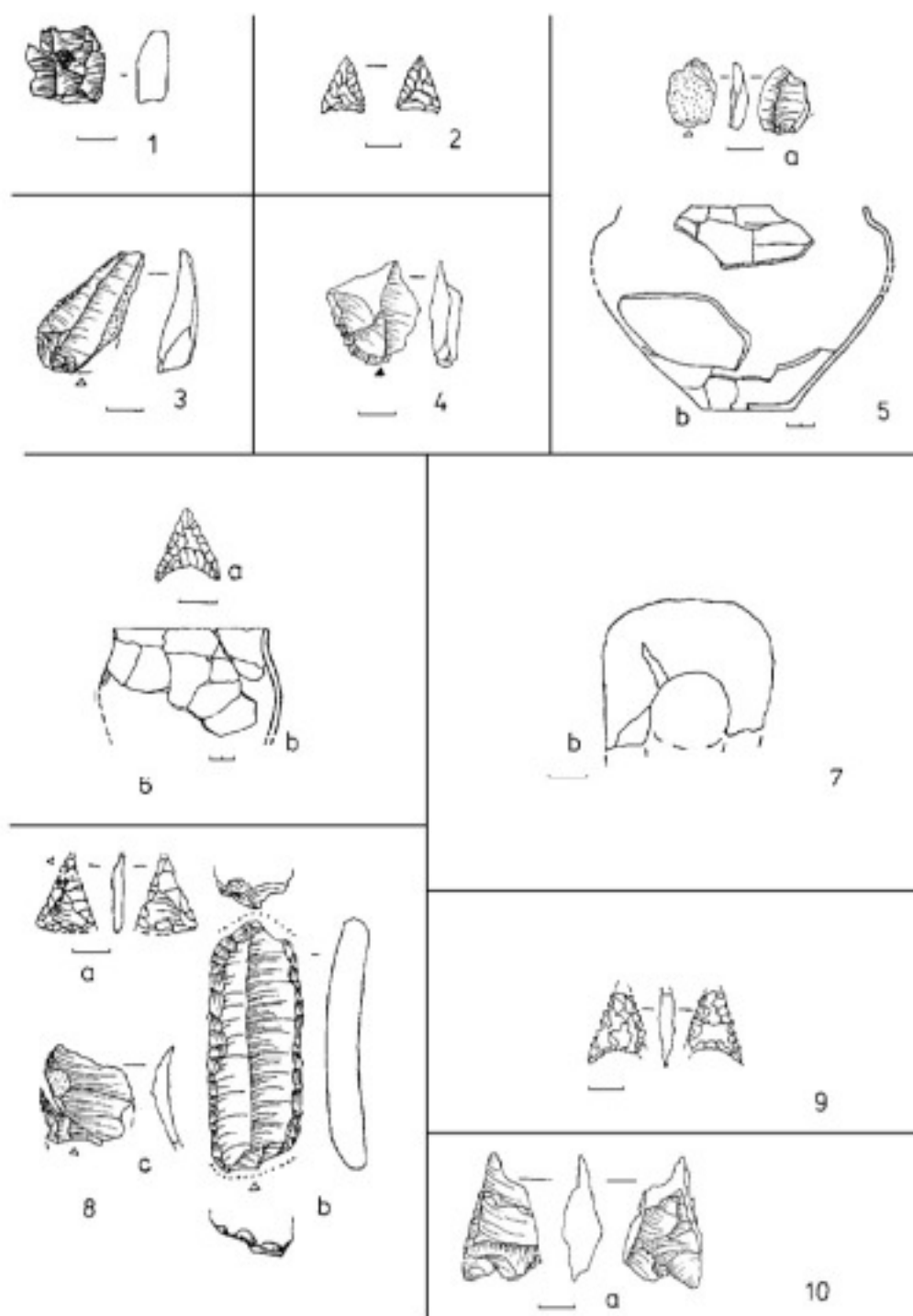


Fig. 12. Chernin. 1 - grave 68; 2 - grave 69; 3 - grave 71; 4 - grave 78; 5 - grave 77; 6 - grave 79; 7 - grave 80; 8 - grave 84; 9 - grave 87; 10 - grave 88.

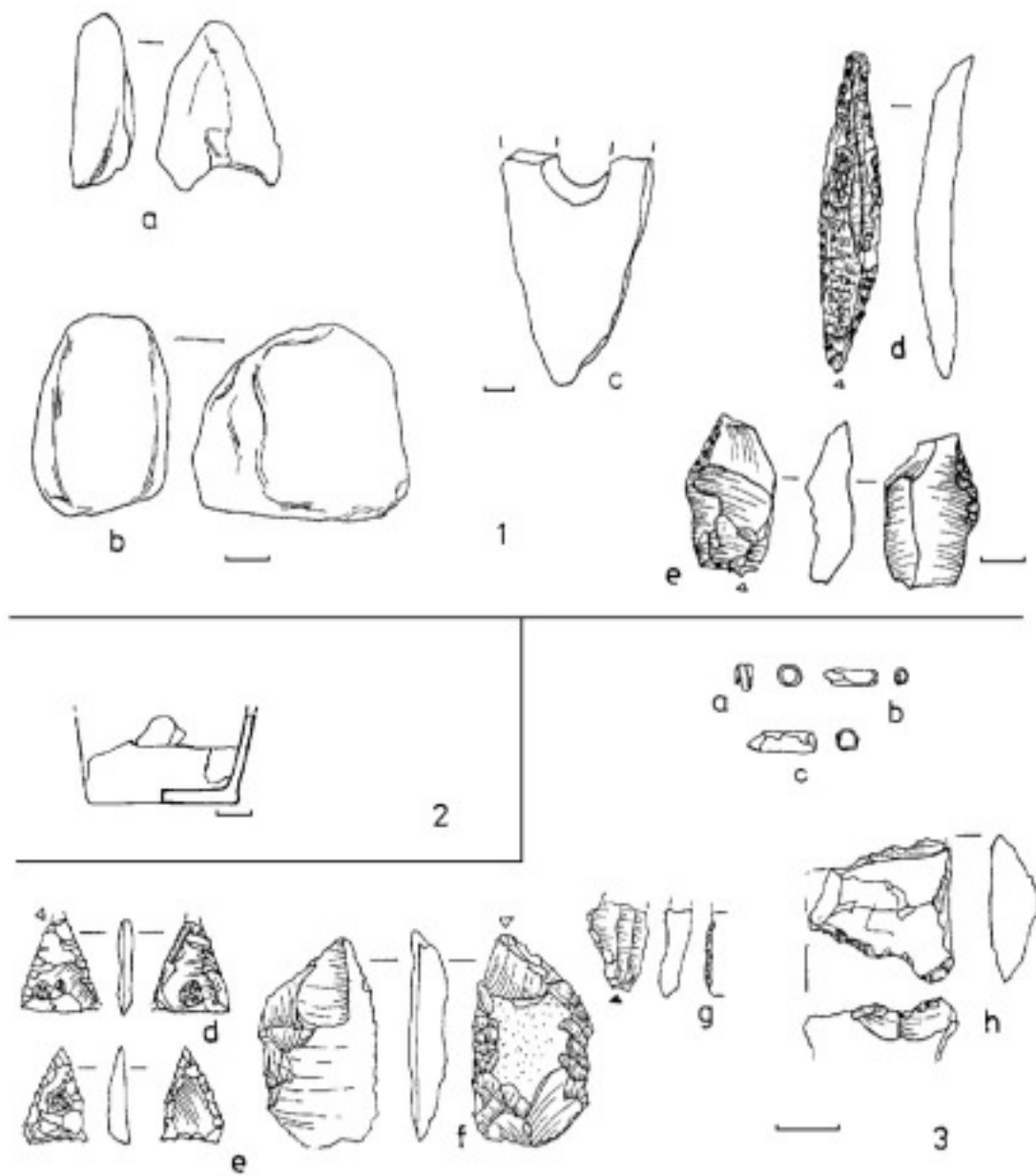


Fig. 13. Chernin. 1 - grave 90; 2 - grave 93; 3 - from the destroyed graves.

## 3.2. KRASNY KHUTOR CEMETERY (FIG.14)

In the text, besides the grave call numbers adopted here, also „historical call numbers”, which were used in earlier studies are given in brackets. The reasons for this have already been given in the introductory remarks to Chapter 3. When determining the location of features, square metre call numbers according to the field daybook have been taken into account (in Dergachev and Manzura's publication of 1991, the numbering is moved by 1 metre to N).

All graves were registered 50cm below the surface.

## Grave 1(1)

Sq.H/I-4. Vessel (t.g.III-0) with burnt bones of adult man (Fig.15:1).

## Grave 2(2)

Sq.H/I-4. Broken vessel (t.g.III?-0?) with burnt bones of adult man (Fig.15:2).

## Grave 3(3)

Sq.G-4. Low part of vessel (t.g.?) with burnt bones. Among the bones are 3 flint artefacts: two parts of blade spike-ended presser used as striker and refitted from 6 fired fragments, a scaled-piece made from the flake of an axe and an amorphous striker made from a flake tool (Fig.15:3).

Sq.G-4: [i.e. near graves 3(3), 9(9) and 168(81C-164)]. Initial scaled-piece made from fragment of blade tool (Fig.15:5)

## Grave 4(4)

Sq.E-4/5. Vessel (t.g.III?-c-a) with burnt bones of adult man (Fig.15:4).

## Grave 5(5)

Sq.D-4. Vessel (t.g.III?-0?) with burnt bones of young man. Under the bones, in pot - flint undefined blade tool (lost) with traces of brown substance (may be remains of skin case), Fig.15:6.

## Grave 6(6)

Sq.I-5. Large vessel (t.g.III-0) with burnt bones (in the anatomical order). To SE from vessel (30cm), among pile of burnt bones - copper bead (type IIBe?), Fig.16:1.

## Grave 7(7)

Sq.H-4/5. Vessel (t.g.III-a-a) with burnt bones (Fig.16:2).

## Grave 8(8)

Sq.H-5. Vessel (t.g.III-c-e) with burnt bones of adult man (Fig.16:3).

## Grave 9(9)

Sq.G-5. Vessel (t.g.?) with burnt bones of young man.

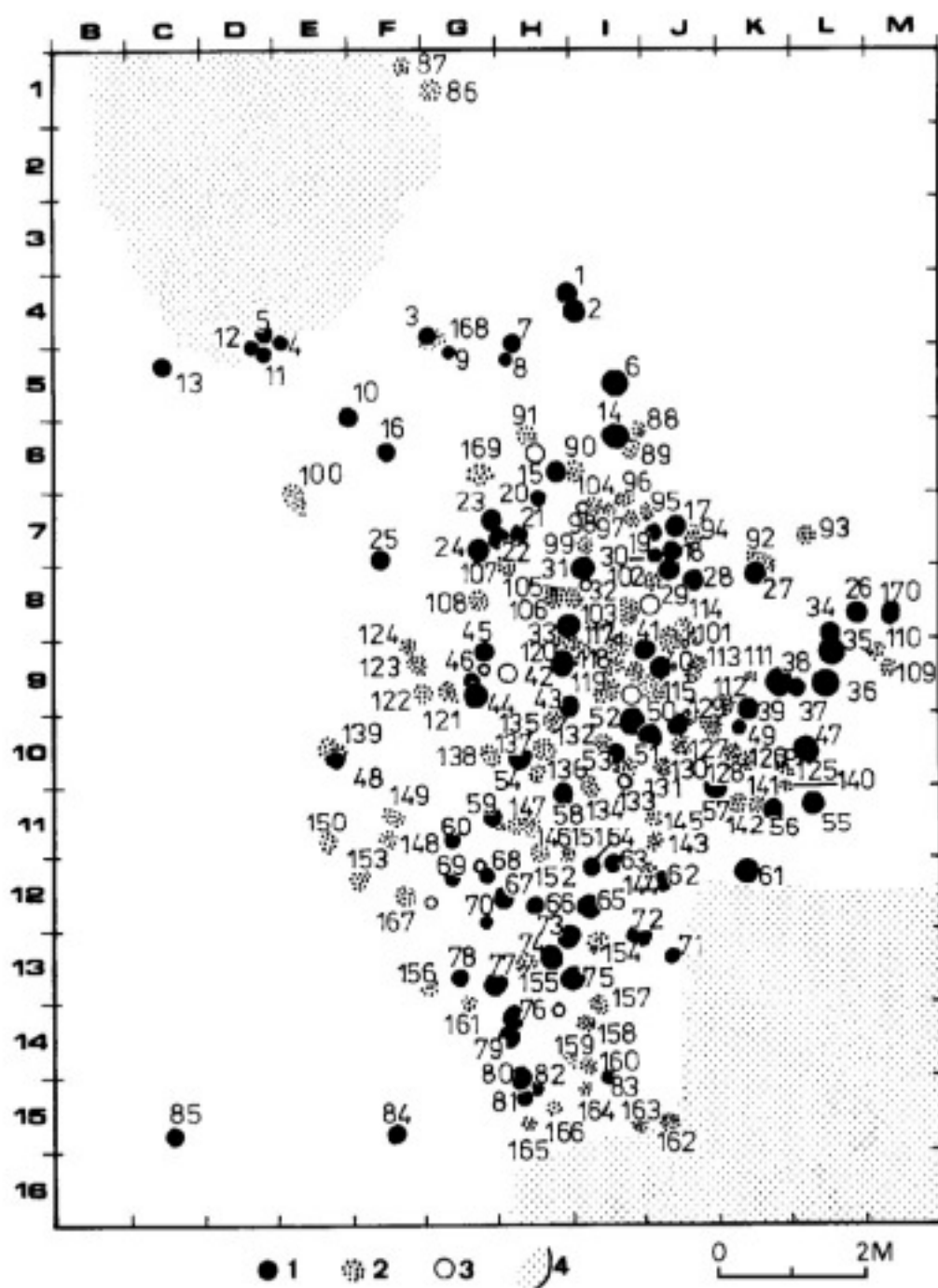


Fig. 14. Krasny Khutor cemetery: the general plan (after V. Danilenko and M. Makarevich). 1 - vessels with ashes; 2 - empty vessels; 3 - spot of ashes and scattered burnt bones; 4 - destroyed part of site. Plan with our new numeration, the first numbers in text.

## Grave 10(10)

Sq.E/F-5/6. Vessel (t.g.III-0) with burnt bones of young man (Fig.16:4).

## Grave 11(11)

Sq.D-5. Vessel (t.g.III?-0) with burnt bones of adult man (Fig.16:5).

## Grave 12(12)

Sq.D-4/5. Broken vessel (t.g.III?-0) with burnt bones of adult man. To SE near pot - stone axe (type 1B), Fig.17:1.

## Grave 13(13)

Sq.C-5. Low part of the vessel (t.g.?) with burnt bones of adult man.

## Grave 14(14)

Sq.I-6. High vessel (t.g.III-c-b,e) with burnt bones of adult man. Among bones - copper bead (type IIBe?), Fig.17:4.

## Grave 15(15)

Sq.H-6. Vessel (t.g.III-c-a,e) with burnt bones of adult man. Near the pot - small vessel (t.g.), Fig.17:2.

## Grave 16(17)

Sq.F-6. Vessel (t.g.III-c-b,e) with burnt bones of adult man. Near pot - flint spike-ended presser on blade used as striker (Fig.17:3).

## Grave 17(18)

Sq.J-7. Vessel (t.g.III-c-b,e) with burnt bones of adult man (Fig.17:5).

## Grave 18(19)

Sq.J-7. Vessel (t.g.III-0) with burnt bones of adult man (Fig.18:1a). Near - empty vessel (t.g.III-0) - Fig.18:1b.

## Grave 19(20)

Sq.J-7. Broken vessel (t.g.?) with burnt bones.

## Grave 20(22)

Sq.H-7. Vessel (t.g.?) with burnt bones of adult man.

## Grave 21(23)

Sq.H-7. Vessel (t.g.III-0) with burnt bones of adult man (Fig.18:2b). Near\* - empty broken vessel (t.g.III-0), Fig.18:2a.

[\* The connection between the vessel and the object is not certain. It may be vessel 16-sq. H-6, near grave 91 (6C-98)].

## Grave 22(24)

Sq.G/H-7. Vessel (t.g.?) with burnt bones of adult man.

## Grave 23(25)

Sq.G/H-7. Vessel (t.g.III-0, near t.g.II. . .) with burnt bones of adult man (Fig. 18:3).

## Grave 24(26)

Sq.G-7. Vessel (t.g.?) with burnt bones of adult man. Among bones - two pieces of skull with traces of trepanation.

## Grave 25(27)

Sq.F-7. Vessel (t.g.III-c-e) with burnt bones (Fig.18:4).

## Grave 26(28)

Sq.L-8. Vessel (t.g.III-c-e) with burnt bones of adult man (Fig.19:1).

## Grave 27(29)

Sq.K-8. Broken vessel (t.g.IV-0?) with burnt bones of adult man. Among bones - copper bead (type IIBe2) and refitted from 3 burnt flint fragments two parts of tanged blade dagger (Fig.19:2).

## Grave 28(30)

Sq.J-8. Low part of the vessel (t.g.?) with burnt bones of adult man.

## Grave 29(31)

Sq.J-8. Broken large vessel (t.g.III?-c-e) with burnt bones of adult man. Among bones - copper bead (type IIBe2) and flint double perforator on flake (Fig.19:3).

## Grave 30(32)

Sq.J-7. Vessel (t.g.III-0) with burnt bones of adult man (Fig.20:1).

## Grave 31(37)

Sq.I-8. Vessel (t.g.III-c-b) with burnt bones of adult man (Fig.20:2).

## Grave 32(37a)

Sq.I-8. Broken vessel (t.g.II-III-0?) with burnt bones. On the pile - small vessel (t.g.?) and spiral copper bead (type IIBe3). Among bones - 3 flint artefacts: refitted from 2 burnt fragments ordinary blade striker, blade blunt-ended presser made from striker and ordinary chip (Fig.21:1).

## Grave 33(38)

Sq.H/I-8. Low part of the vessel (t.g.III-0) with burnt bones of adult man. Among bones - 2 flint artefacts: refitted from 2 fragments double end-scraper made from blade knife and burnt fragment of undefined blade tool used as striker. To W from vessel - stone axe (type 1B), Fig.21:2.

## Grave 34(39)

Sq.L-8. Vessel (t.g.III-0) with burnt bones of young man (Fig.22:1).

## Grave 35(40)

Sq.L-9. Vessel (t.g.III-0) with burnt bones of adult man (Fig.22:2).

## Grave 36(41)

Sq.L-9. Broken vessel (t.g.?) with burnt bones of adult man.

## Grave 37(42)

Sq.K/L-9. Vessel (t.g.IV-c-b) with burnt bones of adult man (Fig.22:3).

## Grave 38(43)

Sq.K-9. Large vessel (t.g.III-0) with burnt bones of adult man (Fig.22:4).

## Grave 39(44)

Sq.K-9/10. Low part of the vessel (t.g.?) with burnt bones of adult man.

## Grave 40(45)

Sq.J-10. Vessel (t.g.III-0) with burnt bones of adult man. Under the bones - 4 flint artefacts: refitted from 2 burnt fragments part of blade dagger or asymmetric knife, burnt fragment of second similar tool, burnt fragment of ordinary arrowhead with straight base and ordinary blade striker (Fig.23:1).

## Grave 41(46)

Sq.I/J-9. Vessel (t.g.III-c-b,e) with burnt bones of adult man (Fig.23:2).

## Grave 42(48)

Sq.H-9. Vessel (t.g.III-c-e) with burnt bones of adult man (Fig.23:3).

## Grave 43(49)

Sq.H/I-9/10. Broken vessel (t.g.?) with burnt bones of adult man.

## Grave 44(51)

Sq.G-9. Vessel (t.g.?) with burnt bones of adult man.

## Grave 45(52)

Sq.G-9. Broken vessel (t.g.?) with burnt bones of adult man. Among bones - broken bone bead and 5 flint artefacts: two ordinary arrowheads with concave base (lost) and 3 strikers (first made from flake perforator, second - from ordinary flake, third - from scaled-piece), Fig.23:4.

## Grave 46(54)

Sq.G-9. Part of vessel (t.g.III-0?) with burnt bones of adult man. Near - low part of empty vessel pot (t.g?), Fig.24:1.

## Grave 47(55)

Sq.L-10. Vessel (t.g.III-c-e) with burnt bones of adult man. Near - empty vessel (t.g.IV-0), Fig.24:2.

## Grave 48(55a)

Sq.E-10. Low part of the vessel (t.g.?) with burnt bones of adult man.

## Grave 49(57)

Sq.K-10. Low part of the vessel (t.g.?) with burnt bones of adult man.

## Grave 50(58,58a)

Sq.J-10. Vessel (t.g.III-0) with burnt bones of adult man. Among bones - copper bracelet (type IIBr) and 2 flint artefacts: tanged blade dagger and blade end-scraper (Fig.25:1).

Sq.J-10. NE from vessel 50(58,58a) - copper bead (type IIBe3), Fig.25:2

Grave 51(59)

Sq.I/J-10. Low part of the vessel (t.g.?) with burnt bones of adult man.

Grave 52(60)

Sq.I-10. Vessel (t.g.III?-c-e) with burnt bones of adult man. Among bones - 2 fragmentary spiral beads (type IIBe3). Near - empty vessel (t.g.IV-0), Fig.25:3.

Grave 53(61)

Sq.I-10. Vessel (t.g.III-c-e) with burnt bones of adult man. Among bones - amber (?) bead (type ca 1EII) and 2 flint tools: blade blunt-ended presser used as striker and amorphous flake presser (Fig.26:1).

Grave 54(63)

Sq.H-10. Vessel (III-IV-?) with burnt bones of adult man. Among bones - copper bead ? (type IIBe?) and 2 blade amorphous strikers made from fired fragments of tool which can be refitted (Fig.26:2).

Grave 55(64)

Sq.L-11. Broken vessel (t.g.?) with same burnt bones of adult man.

Sq.L-11. 50cm to SE from grave 55(64) - copper bead (type IIBe2), Fig.26:3.

Grave 56(65)

Sq.K-11. Broken vessel (t.g.?) with burnt bones.

Grave 57(66)

Sq.J/K-10/11. Vessel (t.g.III-0) with burnt bones of adult man (Fig.26:4).

Grave 58(66a)

Sq.H-11. Vessel (t.g.?) with burnt bones of adult man. Among bones - 2 copper beads (type IIBe1-2).

Grave 59(67)

Sq.G-11. Vessel (t.g.?) with burnt bones. Between bones - 4cm level of sand. May be remains of two cremations (?). Under the bone - piece of sandstone.

Grave 60(68)

Sq.G-11. Broken vessel (t.g.?) with same burnt bones. Near (to W) - fragment of flint undefined blade knife (Fig.26:5).

Grave 61(69)

Sq.K-12. Low part of the large vessel (t.g.III?-c-e) with burnt bones of adult man (Fig.26:6).

Grave 62(70)

Sq.J-12. Vessel (t.g.?) with burnt bones of adult man.

Grave 63(71)

Sq.I-12. Vessel (t.g.III-0) with burnt bones of adult man. Among bones - flint amorphous striker made from axe fragment (Fig.26:7).

## Grave 64(72)

Sq.I-12. Vessel (t.g.?) with burnt bones of adult man.

## Grave 65(73)

Sq.I-12. Vessel (t.g.III-c-b) with burnt bones of adult man. In the pot - copper bead (type IIBe1) and 9 flint artefacts: amorphous striker/hammer made from natural piece and 8 ordinary chips (Fig.27:1).

## Grave 66(74a)

Sq.H-12. Broken vessel (t.g.?) with burnt bones of young man. Near - the low part of empty vessel (t.g.?).

## Grave 67(75)

Sq.H-12. Broken vessel (t.g.?) with burnt bones of adult man (Fig.27:2).

## Grave 68(76)

Sq.G-12. Vessel (t.g.III-0) with some burnt bones. Near - empty vessel (t.g.?), Fig.27:3.

## Grave 69(77)

Sq.G-12. Vessel (t.g.?) with burnt bones. Near - vessel (t.g.?) with animal bones (?).

## Grave 70(79)

Sq.G-12. Broken vessel (t.g.III?) with burnt bones of adult man (Fig.27:4).

## Grave 71(80)

Sq.J-13. Broken vessel (t.g.?) with burnt bones of young man.

## Grave 72(81)

Sq.I/J-13. Vessel (t.g.?) with burnt bones of adult man. Among bones - part of bone awl (Fig.27:5).

## Grave 73(82)

Sq.H/I-12/13. Vessel (t.g.III-0) with burnt bones of adult man (Fig.28:1).

## Grave 74(83)

Sq.H-13. Vessel (t.g.III-b,c-a,e) with burnt bones of adult man. Among bones - flint arrowhead made from tip of bigger specimen, amorphous striker made from flint flake and 4 burnt fragments from at least 3 blade tools (one of them - undefined knife), Fig.28:2.

## Grave 75(84)

Sq.H/I-13. Vessel (t.g.III-0) with burnt bones of adult man. Among bones - 7 burnt flint artefacts: 4 ordinary arrowheads with concave base, 1 ordinary arrowhead with straight base, 1 amorphous arrowhead and small chunk. To S from grave 75 - broken empty vessel (t.g.?), Fig.28:3.

## Grave 76(85)

Sq.H-14. Vessel (t.g.III-c-b,e) with burnt bones of adult man (Fig.29:2)

## Grave 77(86)

Sq.G/H-13. Low part of the broken vessel (t.g.?) with burnt bones of adult man (was covered by low part of another vessel), Fig.29:1.

## Grave 78(87)

Sq.G-13. Low part of the broken vessel (t.g.III?-c-a,e) with burnt bones of adult man (Fig.29:3).

## Grave 79(88)

Sq.H-14. Broken vessel (t.g.III-0) with burnt bones of adult man (Fig.29:4).

## Grave 80(89a)

Sq.H-14/15. Low part of vessel (t.g.III?) with burnt bones of adult man. Among bones - small vessel (t.g.VI-0), tooth of animal and 9 flint artefacts: double blunt-ended presser on blade, 6 burnt arrowheads (2 big specimens with concave base, 2 ordinary specimens with concave base, 1 slim specimen with straight base, 1 ordinary specimen with straight base), fragment of undefined tool and small chunk (Fig.30:1).

Sq.H-14 - burnt fragment of flint big arrowhead (Fig.30:2).

## Grave 81(89b)\*

Sq.H-15. Vessel (t.g.?) with burnt bones of young man. Among bones - large copper bead (type IIBe2) and burnt flint big arrowhead with concave base (Fig.30:3).

[\* The rationale for isolating this feature raises certain doubts. This is most probably the lower part of grave 80(89a).]

## Grave 82(89c)

Sq.H-15/16. Vessel (t.g.III-0) with burnt bones of adult man. Among bones - copper bead ? (type IIBe?), bird bone ? and 4 flint artefacts: amorphous arrowhead, burnt ordinary blade striker and 2 burnt fragments maybe the same ordinary blade knife - variant B (Fig.30:4).

## Grave 83(90)

Sq.I-14/15. Broken vessel (t.g.?) with burnt bones of adult man.

## Grave 84(91)

Sq.F-15. Broken vessel (t.g.?) with burnt bones of young man. Among bones - part of flint blade. Near, on sq.F-15 - refitted from 3 fired flint fragments part of ordinary blade knife variant A and refitted from 2 fragments part of undefined blade tool used as striker (Fig.30:5).

Sq.F-16. South from grave 84(91) - refitted from 2 fragments part of stone axe (type 1A/B) and 4 burnt flint artefacts: ordinary arrowhead with concave base, chip from blade tool and 2 fragments of ordinary blade knife - variant B (Fig.41:1)

## Grave 85(92)

Sq.C-15. Low part of the vessel (t.g.?) with burnt bones of adult man.

Sq.D-15 - burnt fragment of flint ordinary blade knife (variant C) or tanged dagger (Fig.31:1).

Grave 86(1C-93)

Sq.G-1. Pile of the burnt bones of adult man, oval in plan, 26x10x10cm. Among bones - 2 burnt ordinary arrowheads (first with concave base, second with straight base) and 15 pieces of bone beads (Fig.31:2).

Grave 87(2C-94)

Sq.F-1. Pile of the burnt bones of adult man, circular in plan, 20x20x6cm. Among bones - flint scrapper (lost).

Grave 88(3C-95)

Sq.I-6. Small spot of scattered burnt bones of young man.

Grave 89(4C-96)

Sq.I-6. Pile of burnt bones of adult man, circular in plan, 20x20x7cm. Among bones - copper bead (type IIBe2) and flint ordinary dagger made from blade knife and used as striker (Fig.31:3).

Grave 90(5C-97)

Sq.H/I-6. Pile of burnt bones of young man, oval in plan, 20x28x8cm. Among bones - copper bead (type IIBe?) and flint scrapper \*.

[\* The connection of the artefacts with the feature raises particular doubts. The existing documentation lacks positive verification].

Grave 91(6C-98)

Sq.H-6. Pile of burnt bones of adult man, circular in plan, 20x20x9cm. Among bones\* - empty broken vessel (t.g.III- 0), Fig.31:4.

[\* The identification with the object is not certain.]

Grave 92(7C-99)

Sq.K-7/8. Pile of burnt bones of adult man, circular in plan, 30x30x10cm.

Grave 93(7aC-99a)

Sq.L-7. Pile of burnt bones.

Grave 94(8C-100)

Sq.J-7. Pile of burnt bones, circular in plan, 20x20x12cm. Among the bones - flint double spike-ended presser on blade (Fig.31:5).

Grave 95(9C-101)

Sq.I/J-7. Pile of burnt bones of adult man, circular in plan, 20x20cm.

Grave 96(10C-102)

Sq.I-7. Pile of burnt bones of young man, circular in plan, 18x18x9cm.

Grave 97(11C-103)

Sq.I-7. Pile of burnt bones of adult man. Circular in plan, 20x20x7cm. Among bones - copper bead (type IIBe2), Fig.31:6.

## Grave 98(12C-104)

Sq.I-7. Pile of burnt bones of adult man, circular in plan, 21x21x8cm.

## Grave 99(13C-105)

Sq.I-7. Pile of burnt bones of adult man, circular in plan, 19x19x5cm.

## Grave 100(14C-106)

Sq.E-6/7. Pile of burnt bones of adult man, oval in plan, 25x35cm.

## Grave 101(15C-107)

Sq.J-8/9. Pile of burnt bones of adult man, circular in plan, 20x20x7cm. Near the pile - 3 small vessels (t.g.: II-0 + VIII-0; III-0; III-0). Among bones - copper bead (type IIBe2) and refitted from 4 fragments ordinary blade knife - variant B (Fig.31:7).

## Grave 102(16C-108)

Sq.J-8. Pile of burnt bones of adult man, oval in plan, 23x15cm. Near - empty vessel (t.g.III-0), Fig.32:1.

## Grave 103(17C-109)

Sq.I-8. Pile of burnt bones of adult man, circular in plan, 23x23x6cm. Among bones - copper bead (type IIBe1) and part of copper knife (type IK?), Fig.32:2.

## Grave 104(18C-110)

Sq.I-7. Pile of burnt bones of adult man, circular in plan, 20x20x14cm. Among bones - broken vessel (t.g.III-c-b,e) and 2 flint artefacts: asymmetric blade perforator used as striker and refitted from 3 burnt fragments part of ordinary blade knife (variant B) used as striker (Fig.32:3).

## Grave 105(19C-111)

Sq.H/I-8. Pile of burnt bones of adult man, circular in plan, 20x20x14cm. Among bones - stone axe (type 1B), Fig.32:4.

## Grave 106(19aC-111a)

Sq.H-8. Pile of burnt bones of adult man, oval in plan, 30x20cm.

## Grave 107(20C-112)

Sq.G/H-7/8. Pile of burnt bones of adult man, oval in plan, 35x20cm.

## Grave 108(21C-113)

Sq.G-8. Pile of burnt bones of adult man, circular in plan, 20x20cm.

## Grave 109(22C-114)

Sq.M-9. Pile of burnt bones of adult man, oval in plan, 25x20cm. Among bones - copper bead (type IIBe1), Fig.32:5.

## Grave 110(23C-115)

Sq.L/M-9. Pile of burnt bones of adult man, oval in plan, 26x19cm.

## Grave 111(24C-116)

Sq.K-9. Pile of burnt bones of adult man, circular in plan, 20x20cm.

## Grave 112(25C-117)

Sq.K-9/10. Pile of burnt bones of adult man, circular in plan, 23x23cm.

## Grave 113(26C-118)

Sq.J-9. Pile of burnt bones of adult man, circular in plan, 18x18cm. Among bones - flint tanged blade dagger (Fig.33:1).

## Grave 114(27C-119)

Sq.J-8/9. Pile of burnt bones of adult man, oval in plan, 27x21x16cm. Among bones - 6 copper beads (types 4x IIBe1, 2x IIBe2) and 2 flint artefacts: refitted from 3 fired fragments ordinary blade dagger used as striker and chip from square axe (Fig.33:2).

## Grave 115(28C-120)

Sq.I/J-9. Pile of burnt bones of adult man, circular in plan, 22x22cm. Among the bones are located 2 flint artefacts: a double spike-ended presser on a blade (lost) and an amorphous striker made from a square axe fragment (Fig.33:3).

## Grave 116(29aC-121)

Sq.I-9. Pile of burnt bones of adult man, circular in plan, 26x26x19cm. Among the bones are 2 copper beads (type IIBe2) and 9 burnt fragments of flint blade tools (probably from 2 tools, one of them a tanged dagger or asymmetric knife). Above the pile is an ordinary blade striker (Fig.34:1).

## Grave 117(29C-121a)

Sq.I-8/9. Pile of burnt bones of adult man, circular in plan, 22x22x17cm. On the pile is a small vessel (t.g.VIII-0), a copper bead (type IIBe1) and 11 burnt flint artefacts: 4 arrowheads (a large specimen with a concave base, an ordinary one with a concave base, an ordinary specimen with straight base and an arrowhead made from the tip of a bigger one), a flake (lost) and four parts of, probably, one undefined blade tool, refitted from 6 fragments (Fig.33:4).

## Grave 118(30C-122)

Sq.I-9. Pile of burnt bones of adult man, circular in plan. Among the bones are 2 copper beads ? (type IIBe?). Under the pile is a fragment of a stone axe (type 1B), which is refitted with an artefact from grave 119(31C-123); see Fig.34:2.

## Grave 119(31C-123)

Sq.I-9. Pile of burnt bones of adult man, circular in plan, 24x24x16cm. Among the bones lie 4 copper beads (types 1x IIBe1, 2x IIBe2, 1x IIBe3), part of a stone axe (type 1B) refitted with fragments found under grave 118(30C-122) and above grave 120(32C-124), 13 flint artefacts: 8 burnt arrowheads (1 large specimen with concave base, 3 ordinary specimens with concave base, 1 slim specimen with straight base, 1 ordinary specimen with straight base and 2 arrowheads made from the tips of larger specimens), refitted from 2 burnt fragments of a large asymmetric blade knife, a

spike-ended presser made from the fragment of a blade knife, a side-scraper, a chip from an axe and a small fragment of an undefined tool (lost), Fig.34:2.

Grave 120(32C-124)

Sq.H/I-9. Pile of burnt bones of adult man, circular in plan, 25x25x18cm (under the vessel of cremation 42(48)). Among bones - stone axe (type 2) and 2 flint tools: tanged dagger and ordinary blade striker (Fig.35). Above pile - fragment of stone axe, which is refitted with artefact from grave 119(31C-123) - see Fig.34:2.

Grave 121(33C-125)

Sq.G-9. Pile of burnt bones of adult man, circular in plan, 20x20x13cm.

Grave 122(34C-126)

Sq.G-9. Pile of burnt bones of adult man, circular in plan. Among bones - 2 flint tools: ordinary blade striker and amorphous striker made from flake (Fig 36:1).

Grave 123(34aC-126a)

Sq.F/G-9. Pile of burnt bones of adult man, circular in plan. NE from pile (depth 25cm) - stone axe (type 1B), Fig.36:2.

Grave124(35C-127)

Sq.F-9. Pile of burnt bones of adult man, circular in plan, 18x18x16cm.

Grave 125(36C-128)

Sq.K-10. Pile of burnt bones of adult man, circular in plan, 23x23x16cm. Among bones - 4 copper beads (types 3x IIBe1, 1x IIBe2), Fig.36:3.

Grave 126(37C-129)

Sq.K-10. Pile of burnt bones of adult man, circular in plan. Among bones - 6 flint artefacts: atypical large arrowhead with notch in base, striker made from flake tool and 4 flakes (Fig.36:4).

Grave 127(38C-130)

Sq.J-10. Pile of burnt bones of adult man, circular in plan, 21x21x17cm. Among bones - copper bead (type IIBe2), copper dagger (type ID1), copper awl (type IAw2), whetstone shale, 2 stone axes (types 1A/B, 1B) and 5 flint artefacts: refitted from 3 fired fragments big asymmetric blade knife used as striker, small asymmetric blade knife, 2 fragments of undefined blade tools ( 1 lost) and amorphous flake striker (lost), Fig.37.

Grave 128(38aC-130a)

Sq.K-10. Pile of burnt bones of adult man, circular in plan, 19x19x14cm. Among bones - burnt flint ordinary arrowhead with concave base and hammer made from flint square axe (Fig.38:1).

Grave 129(39C-131)

Sq.J-10. Pile of burnt bones of adult man, circular in plan, 20x20x18cm. In 15cm to N (on sq.J-9) - ordinary blade knife - variant C (lost), Fig.33:5.

## Grave 130(40C-132)

Sq.J-10. Pile of burnt bones, circular in plan, 22x22cm. Among bones - 2 burnt flint big arrowheads with concave base (Fig.38:2).

## Grave 131(50C-133)

Sq.J-10. Pile of burnt bones of adult man, circular in plan.

## Grave 132(51C-134)

Sq.I-10. Pile of burnt bones of adult man, circular in plan. Among bones - copper bead (type IIBe?).

## Grave 133(51aC-134a)

Sq.I-10. Pile of burnt bones of adult man. Among bones - big asymmetric blade knife (Fig.38:3).

## Grave 134(52C-135)

Sq.I-10/11. Pile of burnt bones of adult man, circular in plan, 20x20x18cm. Among bones - copper dagger (type ID2) with bone rivet, 4 copper beads (types 2x IIBe1, 2x IIBe2), fragment of bone bead and 3 flint artefacts: fragment of undefined blade tool and 2 ordinary arrowheads with concave base (Fig.38:4).

Sq.I-11. 25 cm to E from pile 134(52C-135) - ordinary flint arrowhead with concave base (Fig.38:5).

## Grave 135(53C-136)

Sq.H-10. Pile of burnt bones, of adult man, circular in plan. Among them - copper bead (type IIBe2), Fig.39:1.

## Grave 136(54C-137)

Sq.H-10. Pile of burnt bones of adult man, circular in plan, 22x22cm. Among bones - 2 copper beads ? (type IIBe2), Fig.39:3.

## Grave 137(55C-138)

Sq.H-10. Pile of burnt bones of adult man, circular in plan, 20x20cm. Among bones - copper bead (type IIBe2) and 4 flint artefacts: ordinary blade knife - variant B, blade spike-ended presser used as striker, striker made from flake from axe and hammer made from fragment of axe (Fig.39:2).

## Grave 138(56C-139)

Sq.G/H-10. Pile of burnt bones of adult man, circular in plan.

## Grave 139(57C-140)

Sq.E-10. Pile of burnt bones of adult man, circular in plan.

## Grave 140(58C-141)

Sq.K-10/11. Pile of burnt bones of adult man, circular in plan. Among bones - 4 copper beads (type IIBe2), Fig.39:4.

## Grave 141(59C-142)

Sq.K-11. Pile of burnt bones of adult man, circular in plan.

## Grave 142(60C-143)

Sq.K-11. Pile of burnt bones of adult man.

## Grave 143(61C-144)

Sq.J-11. Pile of burnt bones of adult man. Among bones - part of flint tool\*.  
[\* The attachment of the artefact to the feature raises particular doubts].

## Grave 144(61aC-144a)\*

Sq.I-13. Pile of burnt bones of adult man, circular in plan. Among bones - 3 copper beads (types 1x IIBe1, 2x IIBe2), Fig.40:1.

[\* Taking the complex of artefacts to be a feature is highly debatable. There is no sufficient justification in the daybook]

## Grave 145(62C-145)

Sq.J-11. Pile of burnt bones of adult man, circular in plan, 19x19x16cm. Among bones - 2 copper beads (types 1x IIBe1, 2x IIBe2) and copper flat arrowhead (type IAr), Fig.40:2.

## Grave 146(63C-146)

Sq.H-11. Pile of burnt bones of adult man, circular in plan. Among bones - refitted from 2 fired fragments ordinary blade striker (Fig.40:3).

## Grave 147(64C-147)

Sq.H-11. Pile of burnt bones of adult man, circular in plan. Among bones - piece of copper bead ? (type IIBe?).

Sq.G-11. Between graves 60(68) and 147(64C-147) - burnt fragment of big arrowhead (Fig.40:4)

## Grave 148(65C-148)

Sq.F-11. Pile of burnt bones of adult man, circular in plan. Among bones - 4 copper beads (types 3x IIBe1, 1x IIBe2), Fig.40:5.

## Grave 149(66C-149)

Sq.F-11. Pile of burnt bones of adult man. Near the pile - 2 flint tools: atypical, small ordinary blade knife - variant A and striker made from flake from axe (Fig.40:6).

## Grave 150(66aC-149a)

Sq.E-11. Pile of burnt bones of adult man, circular in plan.

## Grave 151(67C-150)

Sq.H-11/12. Pile of burnt bones of adult man, circular in plan.

## Grave 152(68C-151)

Sq.H-11/12. Pile of burnt bones of adult man, circular in plan.

## Grave 153(69C-152)

Sq.F-12. Pile of burnt bones of adult man, circular in plan.

## Grave 154(70C-153)

Sq.I-13. Pile of burnt bones of adult man, circular in plan. Among bones - copper bead (type IIBe2), Fig.40:7.

## Grave 155(70aC-153a)

Sq.H-13. Pile of burnt bones of adult man, circular in plan. Among bones - 3 copper beads ? (type IIBe?).

## Grave 156(70bC-153b)

Sq.G-13. Pile of burnt bones of adult man, circular in plan. North from pile - fired flint ordinary arrowhead with concave base (Fig.40:8).

## Grave 157(71C-154)

Sq.I-13/14. Pile of burnt bones of adult man, circular in plan.

## Grave 158(72C-155)

Sq.I-14. Pile of burnt bones of adult man, circular in plan.

## Grave 159(73C-156)

Sq.I-14. Pile of burnt bones of adult man, circular in plan.

## Grave 160(73aC-156a)

Sq.I-14. Pile of burnt bones of adult man, circular in plan.

## Grave 161(74C-157)

Sq.G-13/14. Small pile of burnt bones of adult man.

## Grave 162(75C-158)

Sq.J-15. Pile of burnt bones of adult man, circular in plan. Among bones - fragments of vessel (t.g.).

## Grave 163(76C-159)

Sq.J-15. Destroyed pile of burnt bones.

## Grave 164(77C-160)

Sq.I-15. Pile of burnt bones of adult man, circular in plan.

Sq.I-15. Flint end-scraper on flake (Fig.40:9).

## Grave 165(78C-161)

Sq.H-15. Pile of burnt bones of adult man, circular in plan.

## Grave 166(79C-162)

Sq.H-15. Pile of burnt bones of adult man, circular in plan.

## Grave 167(80C-163)

Sq.G-12. Pile of burnt bones of adult man, circular in plan, 30x30x12cm. Among bones - copper dagger (type ID1) and stone axe (type 1A), Fig.41:2.

## Grave 168(81C-164)

Sq.G-4/5. Pile of burnt bones of adult man. Near the bones - flint double blunt-ended presser made from blade knife used as striker (Fig.40:10).

## Grave 169(165)\*

Sq.G-6. Destroyed pile of burnt bones. Among the bones are 3 flint artefacts: part of ordinary blade knife refitted from 2 fired fragments - variant A; a striker made from a scaled-piece of flake from an axe and an ordinary burnt arrowhead with straight base (Fig.41:3).

[\* The complex of artefacts is not directly documented; it is an effect of an „office reconstruction”].

## Grave 170(28a)?

Sq.M-8. Vessel with burnt bones. Among the bones are 2 copper beads (type IIbE1) and 2 amber beads (type 1A1b), including one semi-finished product (Fig. 41:4).

## Destroyed graves

At the cemetery, some materials were collected without methodical documentation (Fig.42-43). This applies to copper goods: beads (type IIbE1, Fig.42:a-c); stone: axes (types 1B and 2, Fig.42:d-e); and 20 flint artefacts: burnt fragment of a large blade (Fig.43:a); part of an ordinary blade knife refitted from 3 burnt fragments - variant A (Fig.43:b); fragments of 2 ordinary blade knives - variant B (Fig.43:c-d); 2 burnt fragments of blade daggers or knives (Fig.43:e-f); a burnt fragment of a blade spike-ended presser used as striker (Fig.43:g); 5 burnt fragments of undefined blade tools used as strikers (Fig.43:h-l); 3 burnt fragments of undefined blade tools (Fig.43:m-o), fragment of ordinary chip (Fig.43:p), fired chip from axe (Fig.43:q), amorphous flake striker (Fig.43:r) and 2 burnt arrowheads (large and ordinary specimens with concave base, Fig.43:s-t).

Among materials from the cemetery at Krasny Khutor are three flint artefacts without „tags”, which cannot be identified today with any artefacts missing from the inventories described above. These are: a burnt fragment of a large asymmetric blade knife and 2 big arrowheads with concave base (Fig.42:f-h).

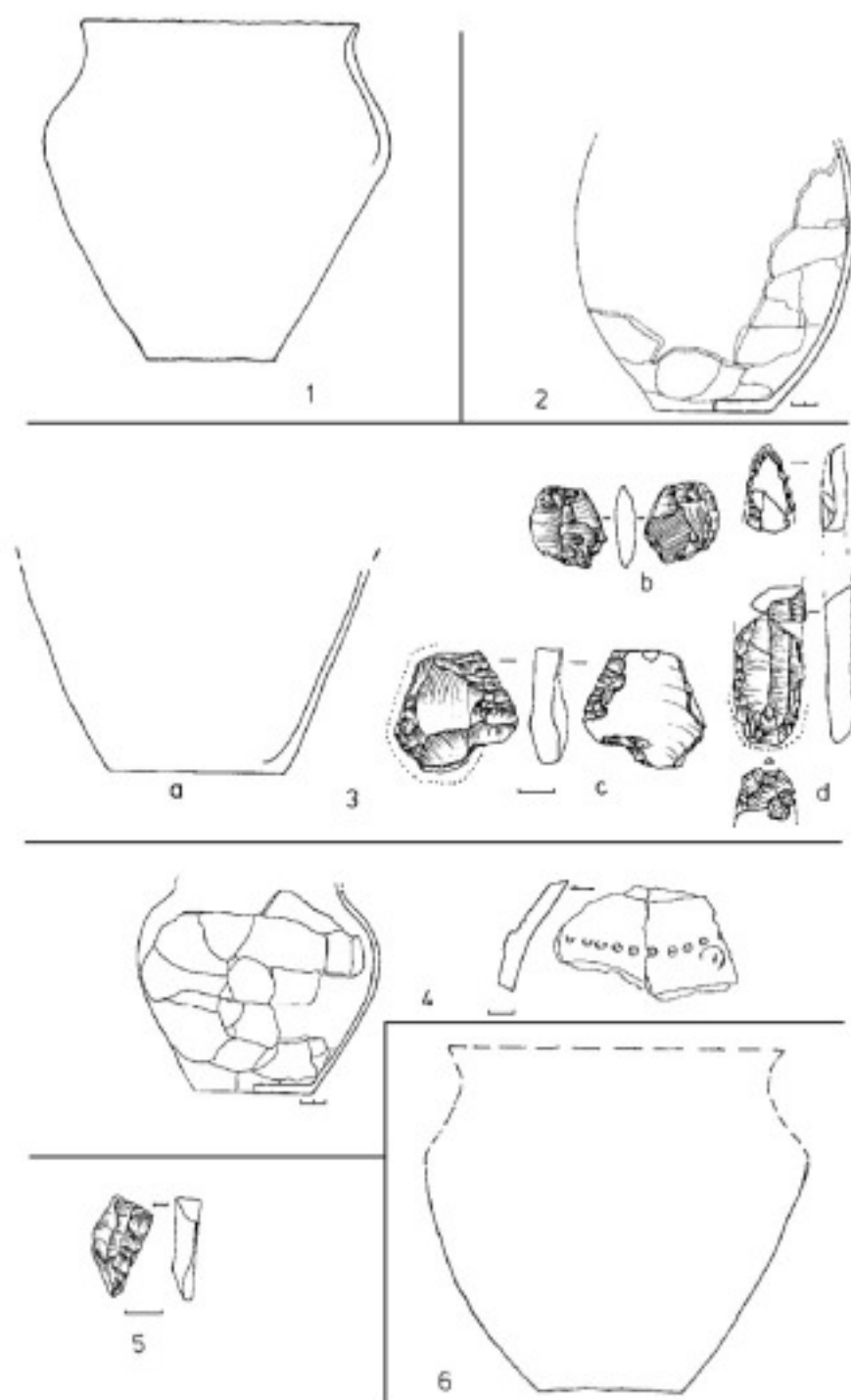


Fig. 15. Krasny Khutor. 1 - grave 1; 2 - grave 2; 3 - grave 3; 4 - grave 4; 5 - near graves 3,9,168(81C-164); 6 - grave 5.

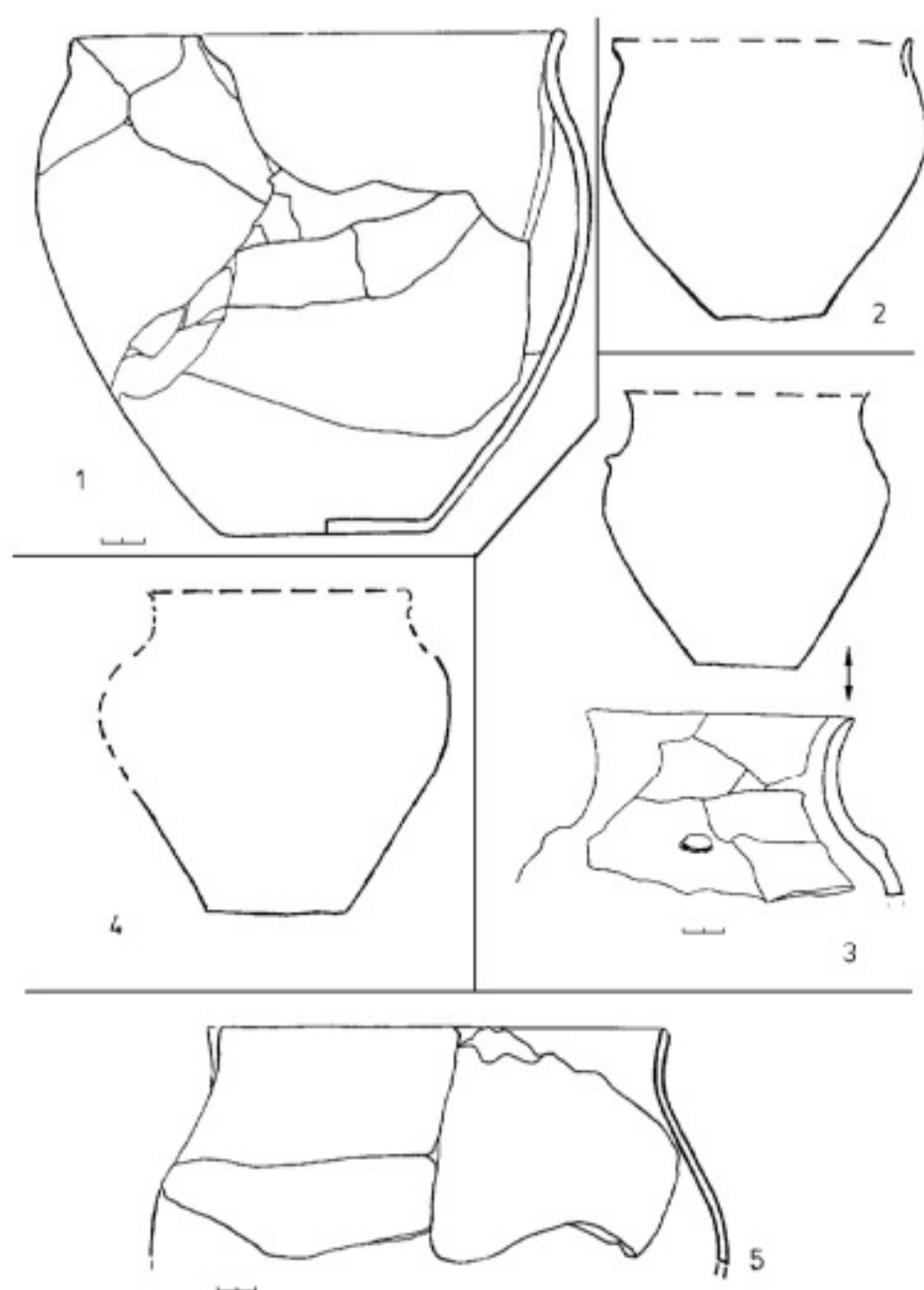


Fig. 16. Krasny Khutor. 1 - grave 6; 2 - grave 7; 3 - grave 8; 4 - grave 10; 5 - grave 11.

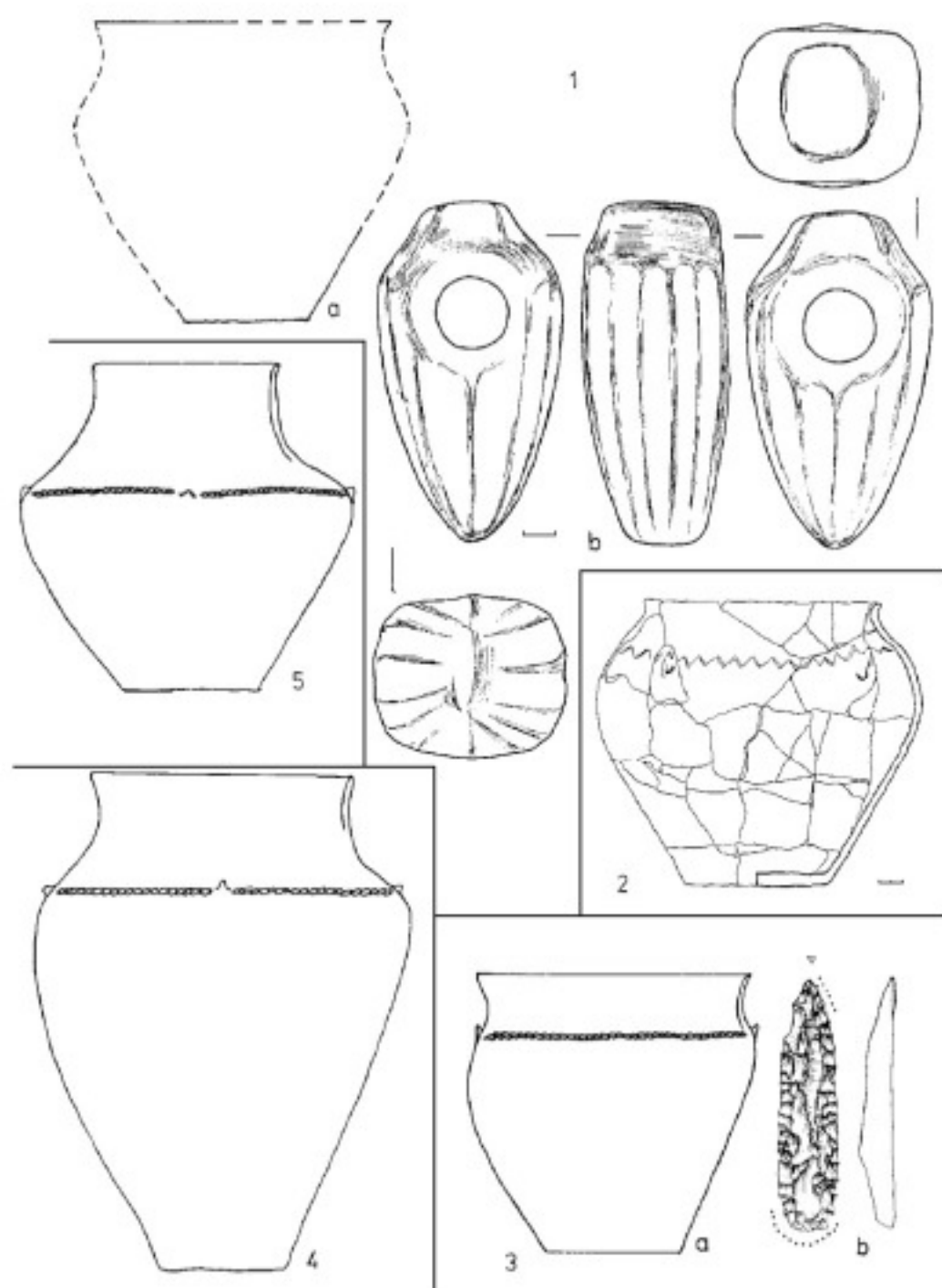


Fig. 17. Krasny Khutor. 1 - grave 12; 2 - grave 15; 3 - grave 16; 4 - grave 14; 5 - grave 17.

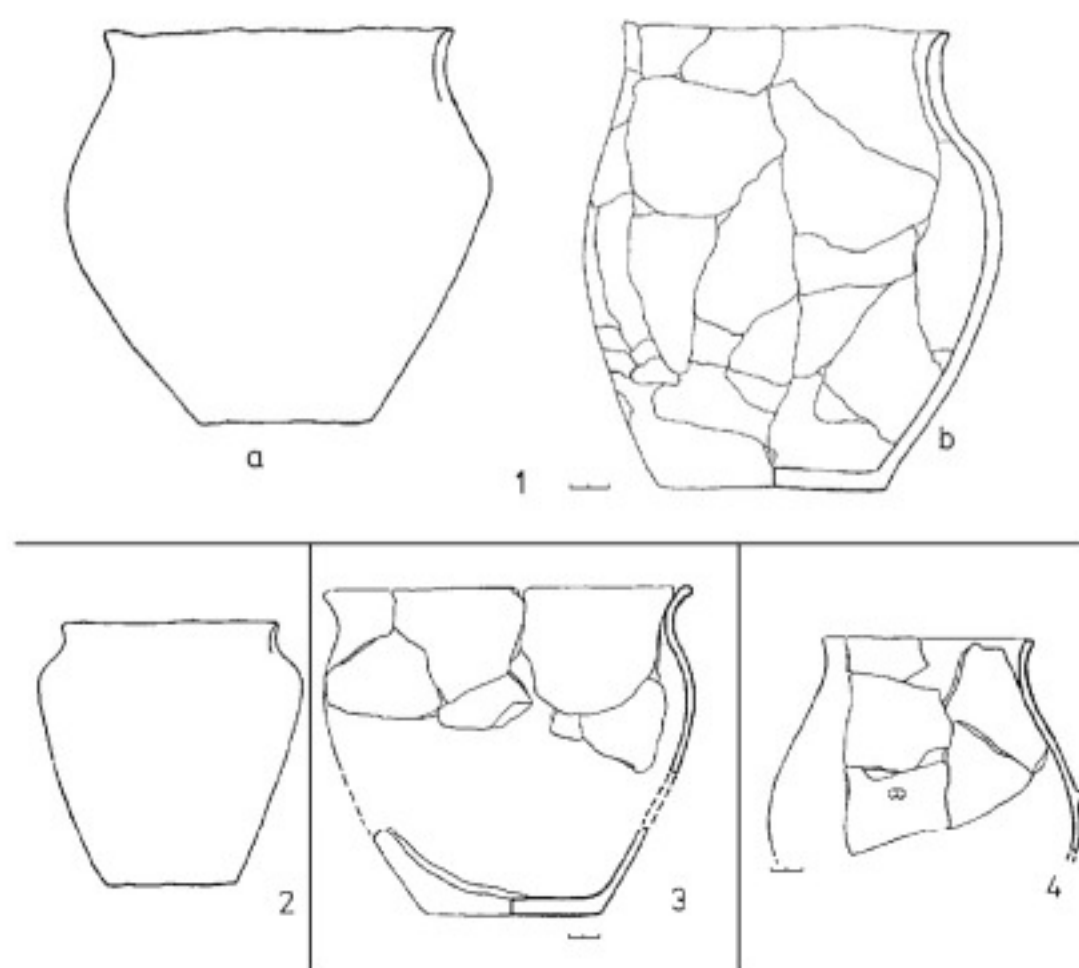


Fig. 18. Krasny Khutor. 1 - grave 18(19); 2 - grave 21(23); 3 - grave 23(25); 4 - grave 25(27).

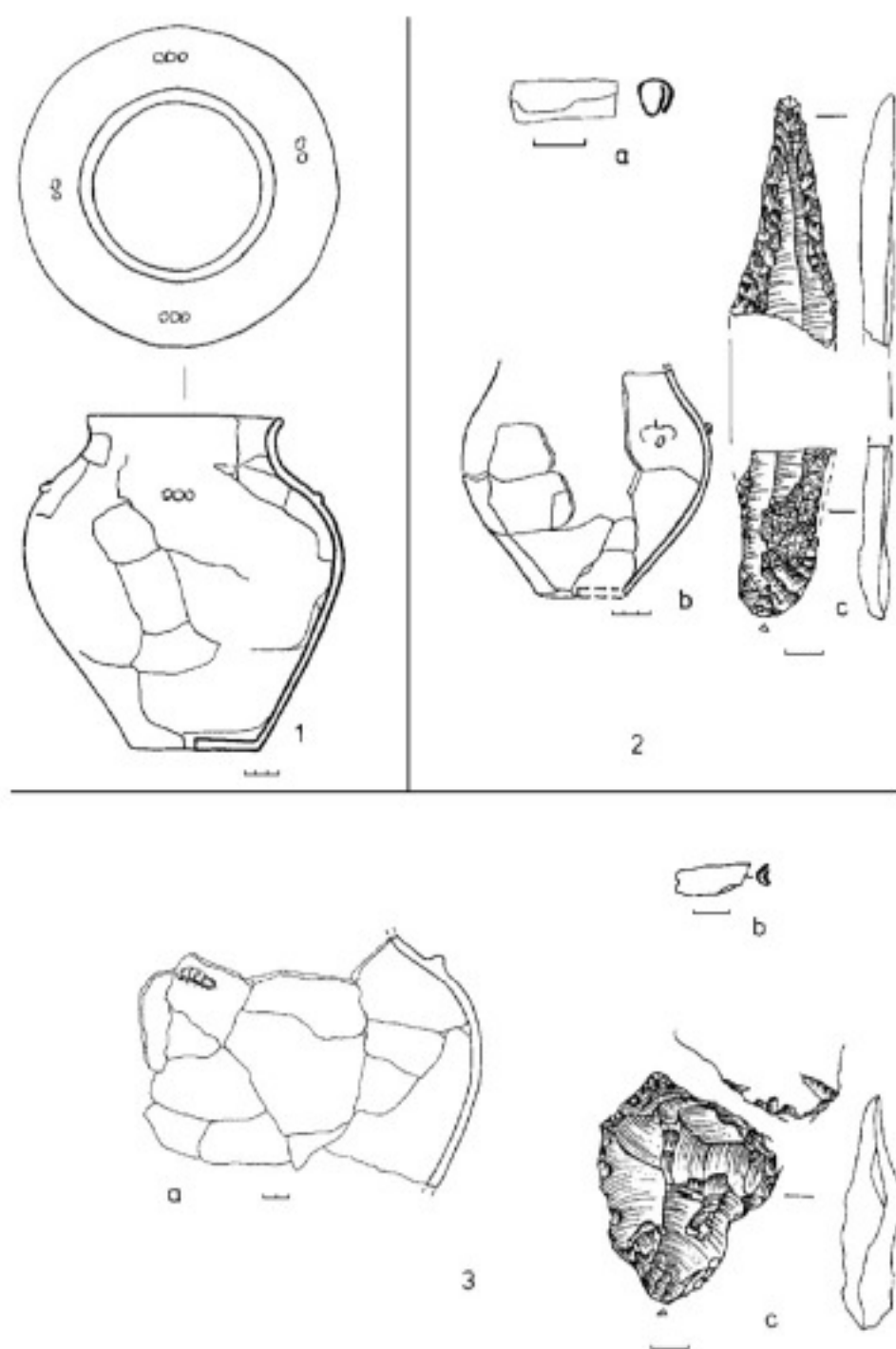
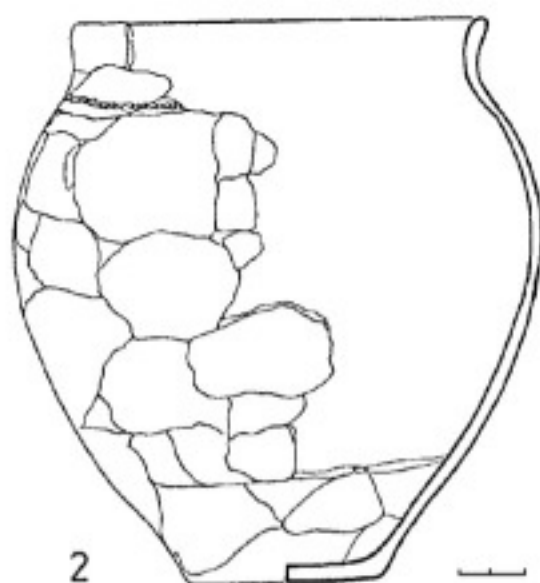


Fig. 19. Krasny Khutor. 1 - grave 26(28); 2 - grave 27(29); 3 - grave 29(31).



1



2

Fig. 20. Krasny Khutor. 1 - grave 30(32); 2 - grave 31(37).

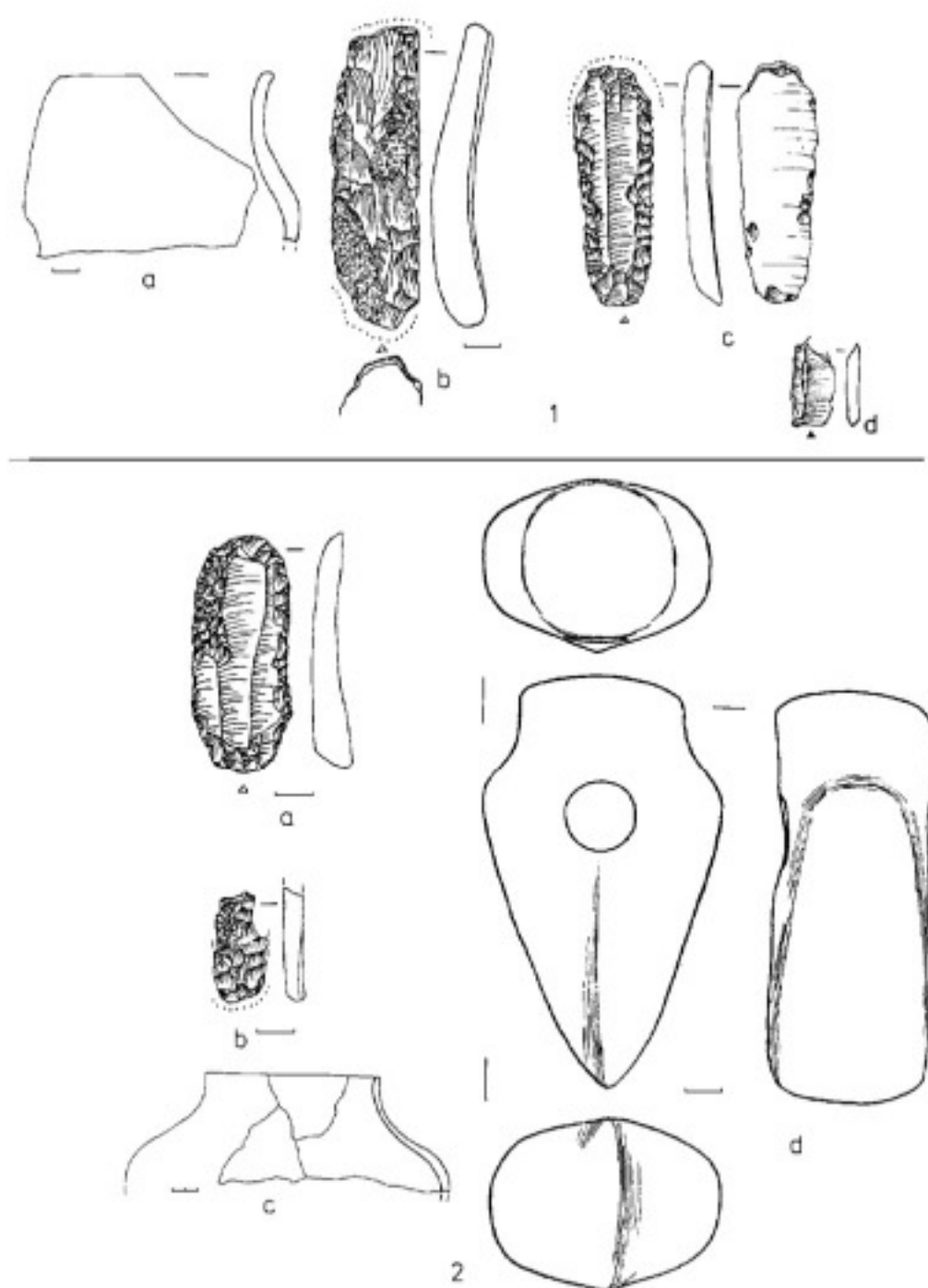


Fig. 21. Krasny Khutor. 1 - grave 32(37a); 2 - grave 33(38).

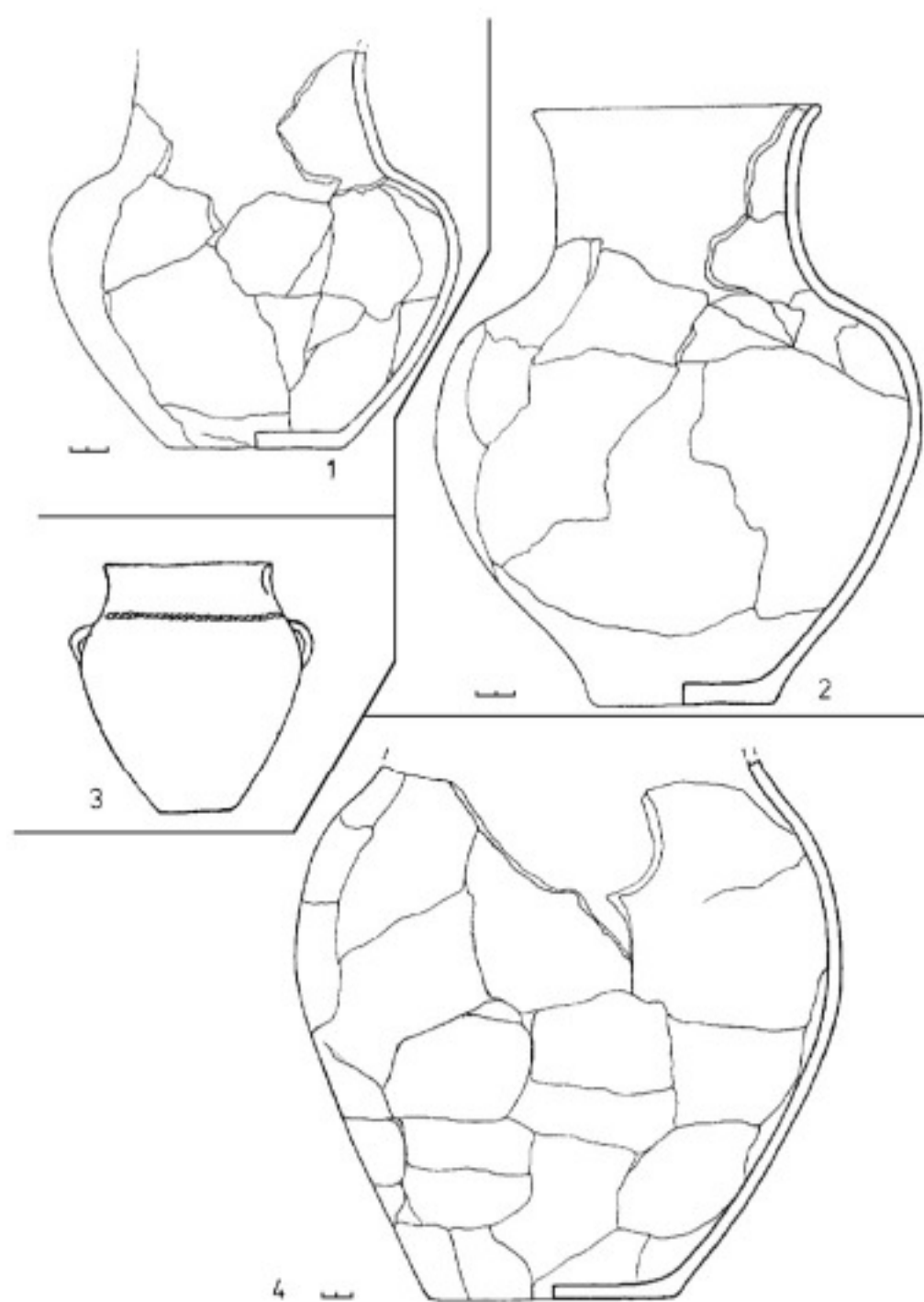


Fig. 22. Krasny Khutor. 1 - grave 34(39); 2 - grave 35(40); 3 - grave 37(42); 4 - grave 38(43).

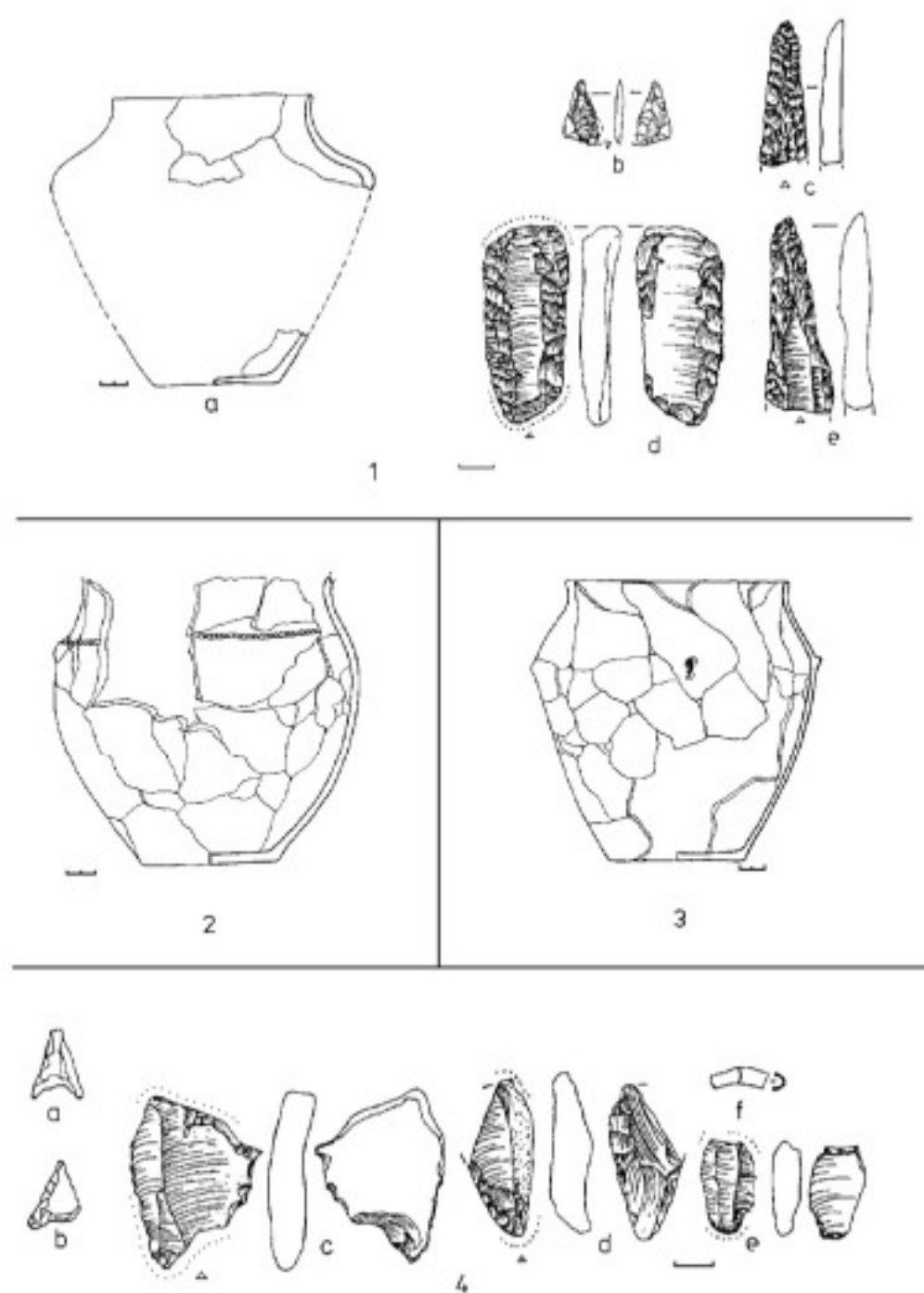


Fig. 23. Krasny Khutor. 1 - grave 40(45); 2 - grave 41(46); 3 - grave 42(48); 4 - grave 45(52).

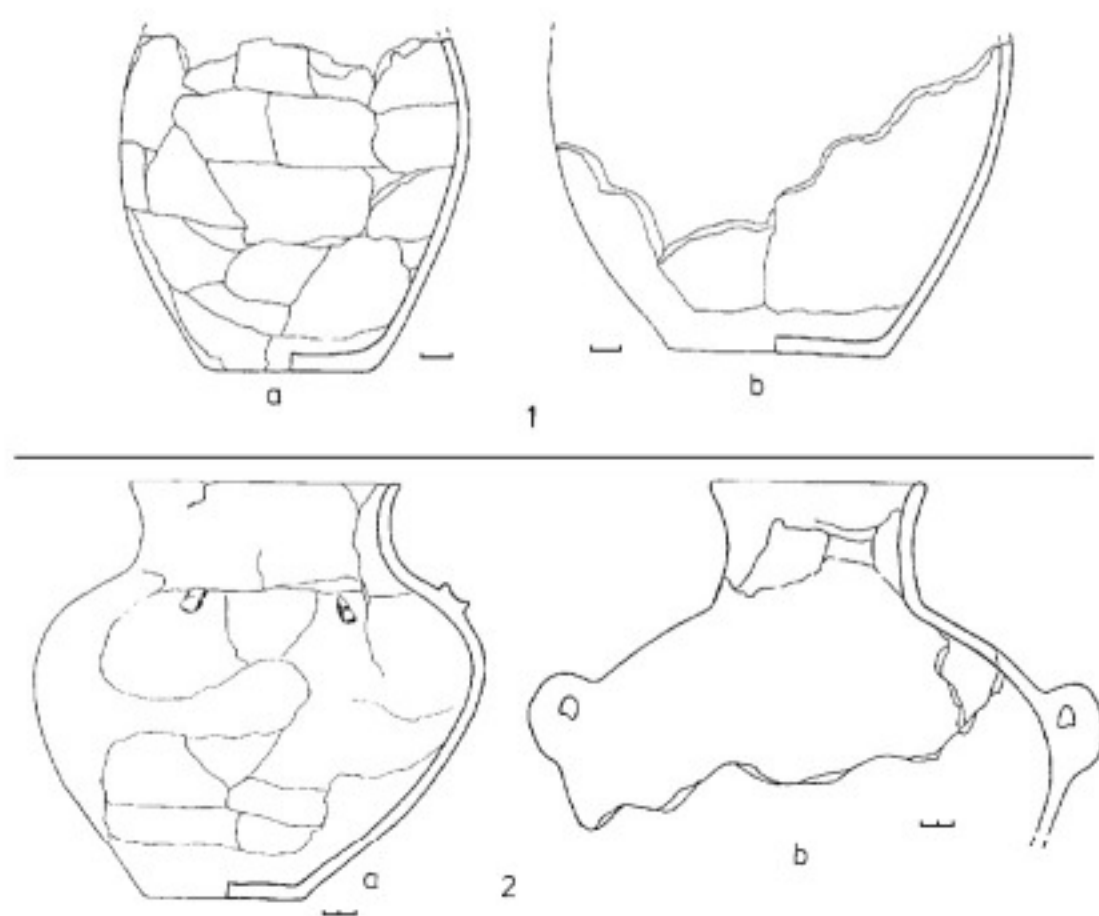


Fig. 24. Krasny Khutor. 1 - grave 46(54); 2 - grave 47(55).

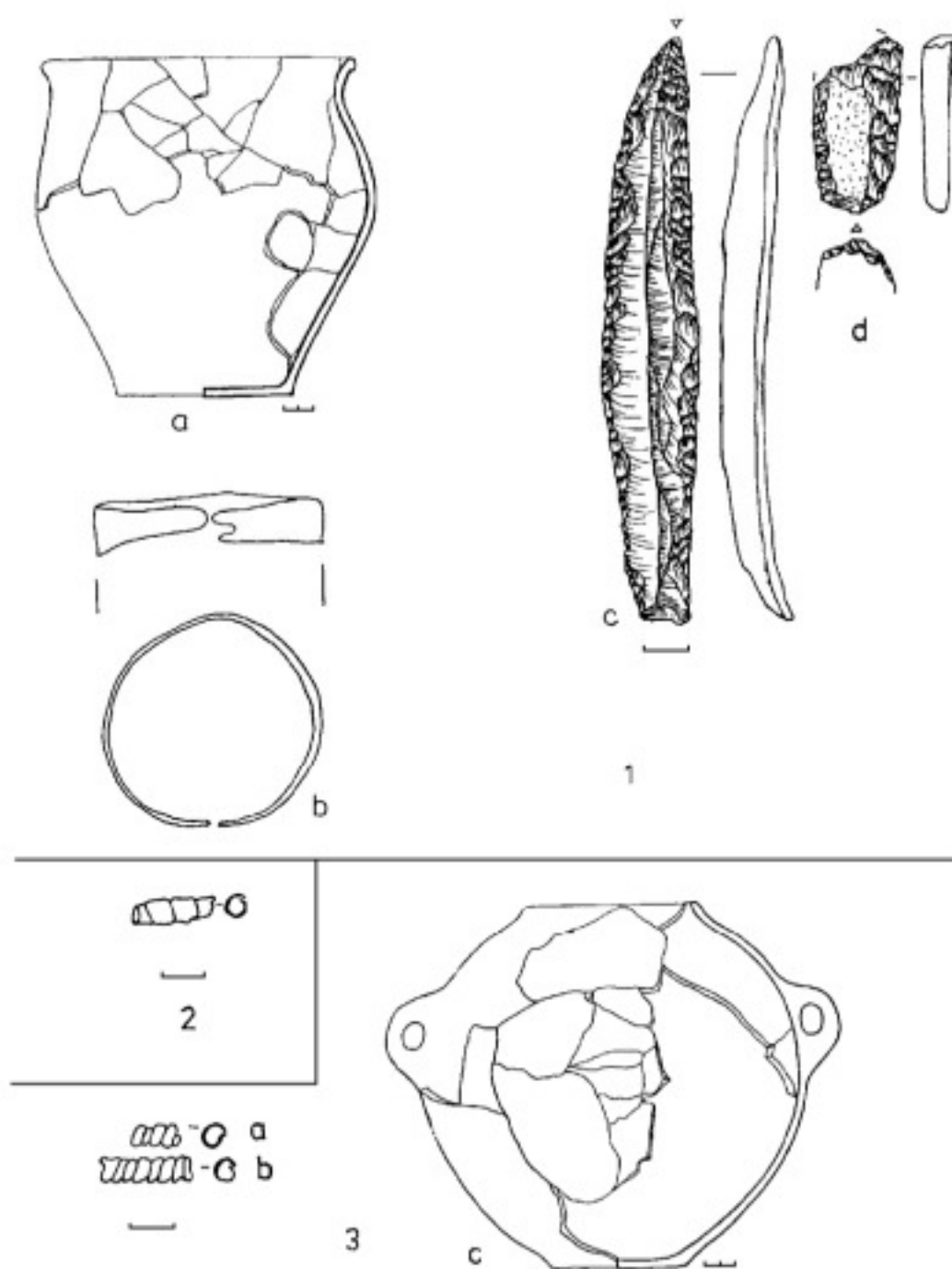


Fig. 25. Krasny Khutor. 1 - grave 50(58,58a); 2 - near grave 50(58,58a), sq.J-10; 3 - grave 52(60).

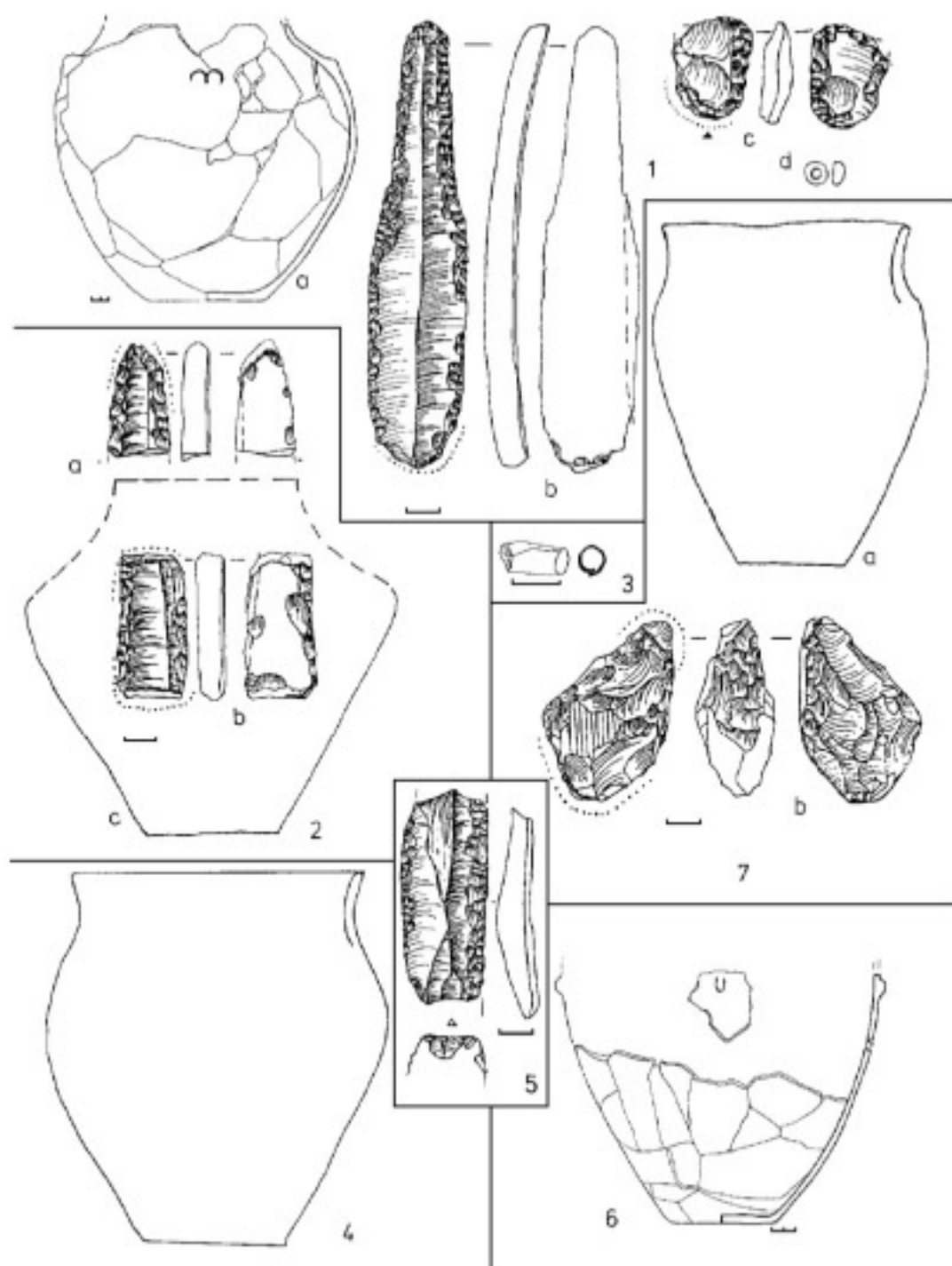


Fig. 26. Krasny Khutor. 1 - grave 53(61); 2 - grave 54(63); 3 - near grave 55(64), sq.L-11; 4 - grave 57(66); 5 - grave 60(68); 6 - grave 61(69); 7 - grave 63(71).

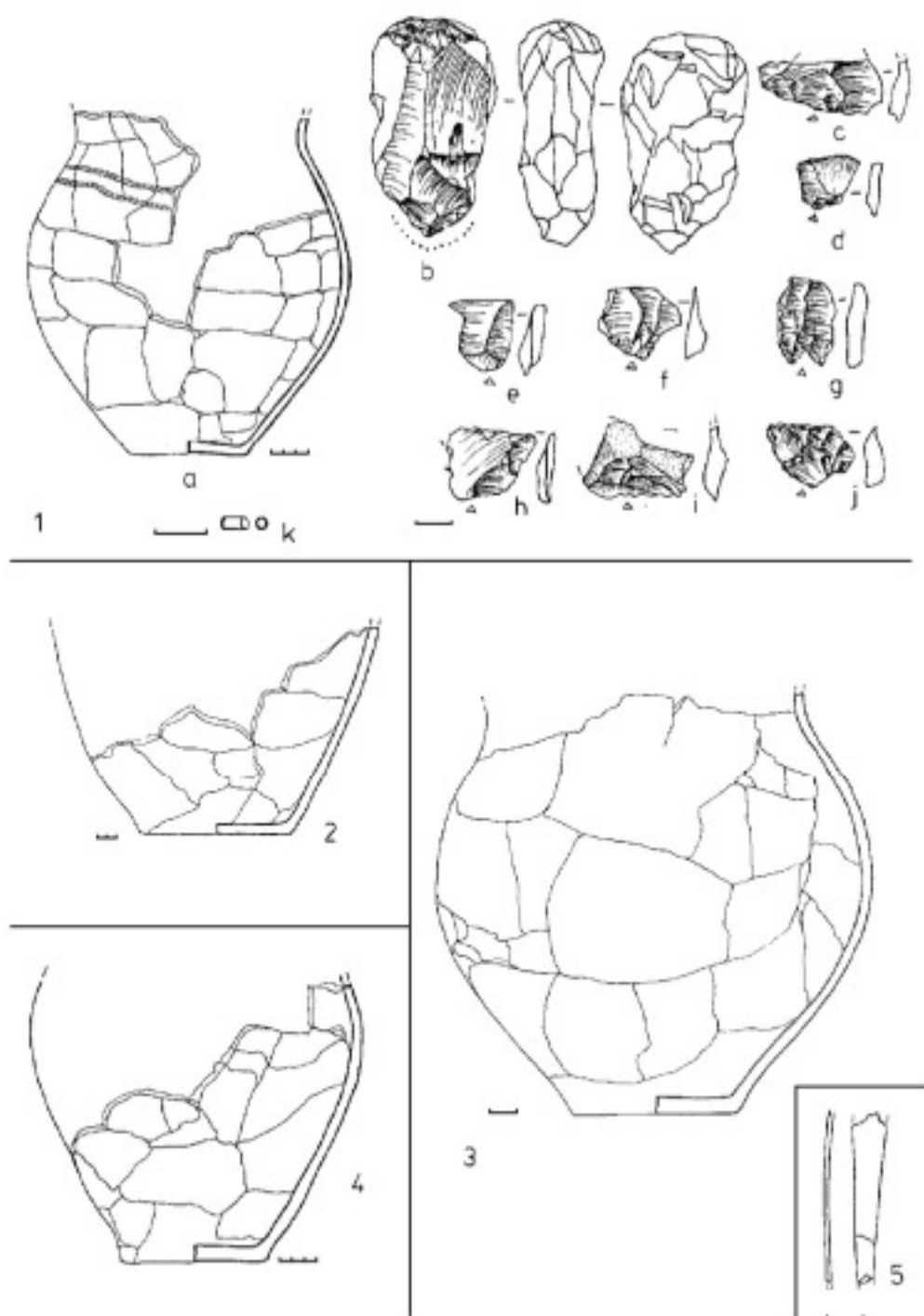


Fig. 27. Krasny Khutor. 1 - grave 65(73); 2 - grave 67(75); 3 - grave 68(76); 4 - grave 70(79); 5 - grave 72(81).

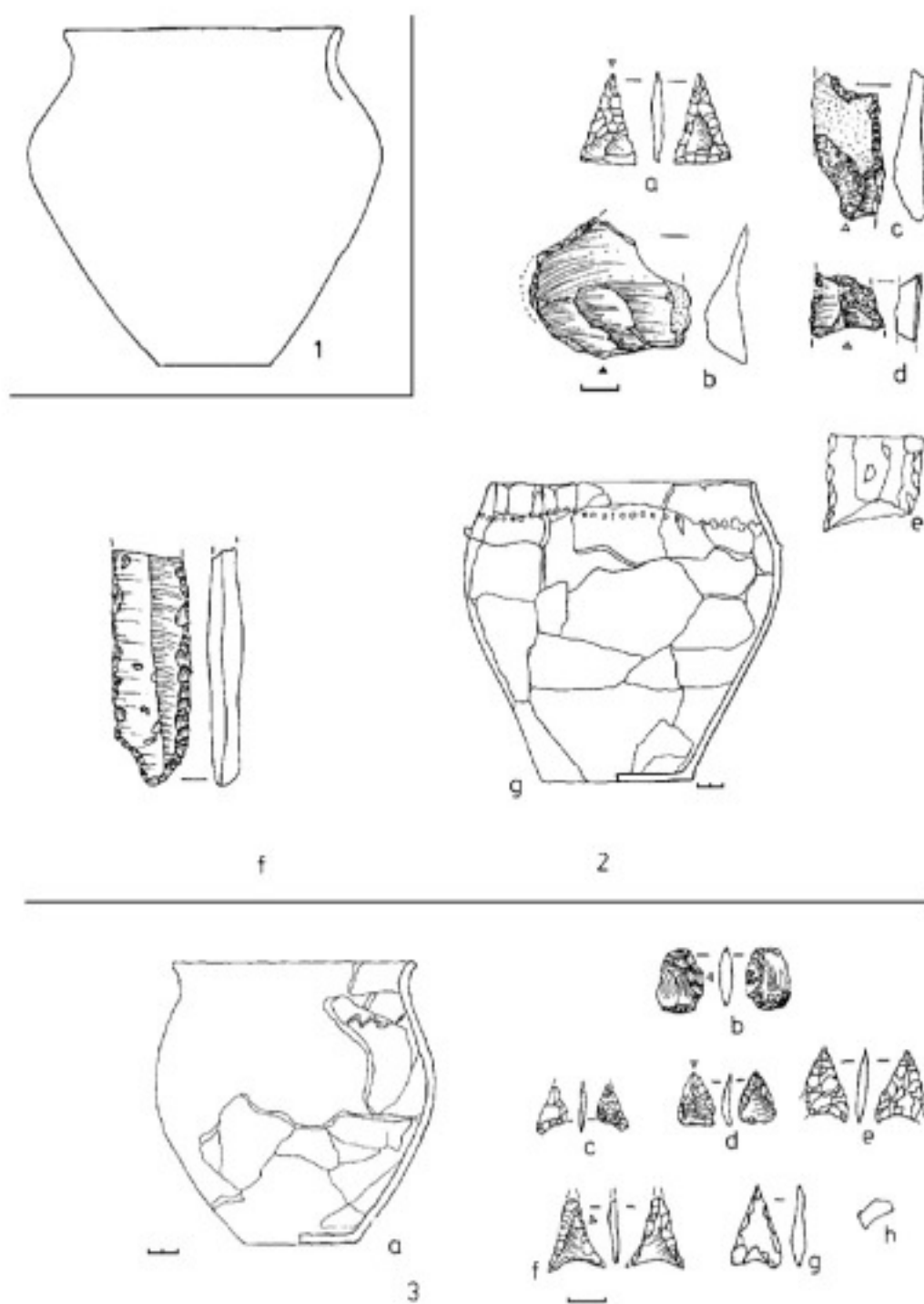


Fig. 28. Krasny Khutor. 1 - grave 73(82); 2 - grave 74(83); 3 - grave 75(84).

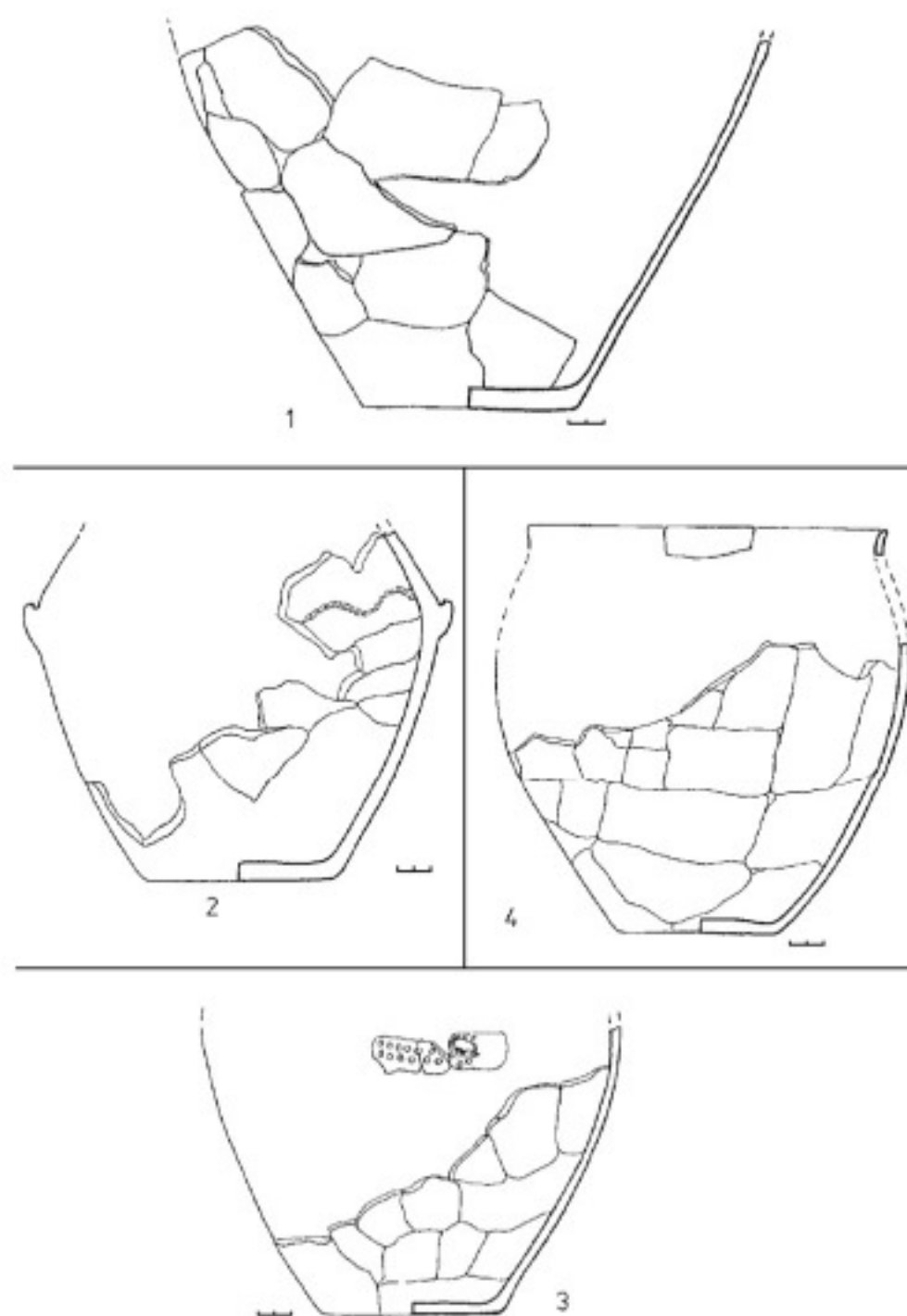


Fig. 29. Krasny Khutor. 1 - grave 77(86); 2 - grave 76(85); 3 - grave 78(87); 4 - grave 79(88).

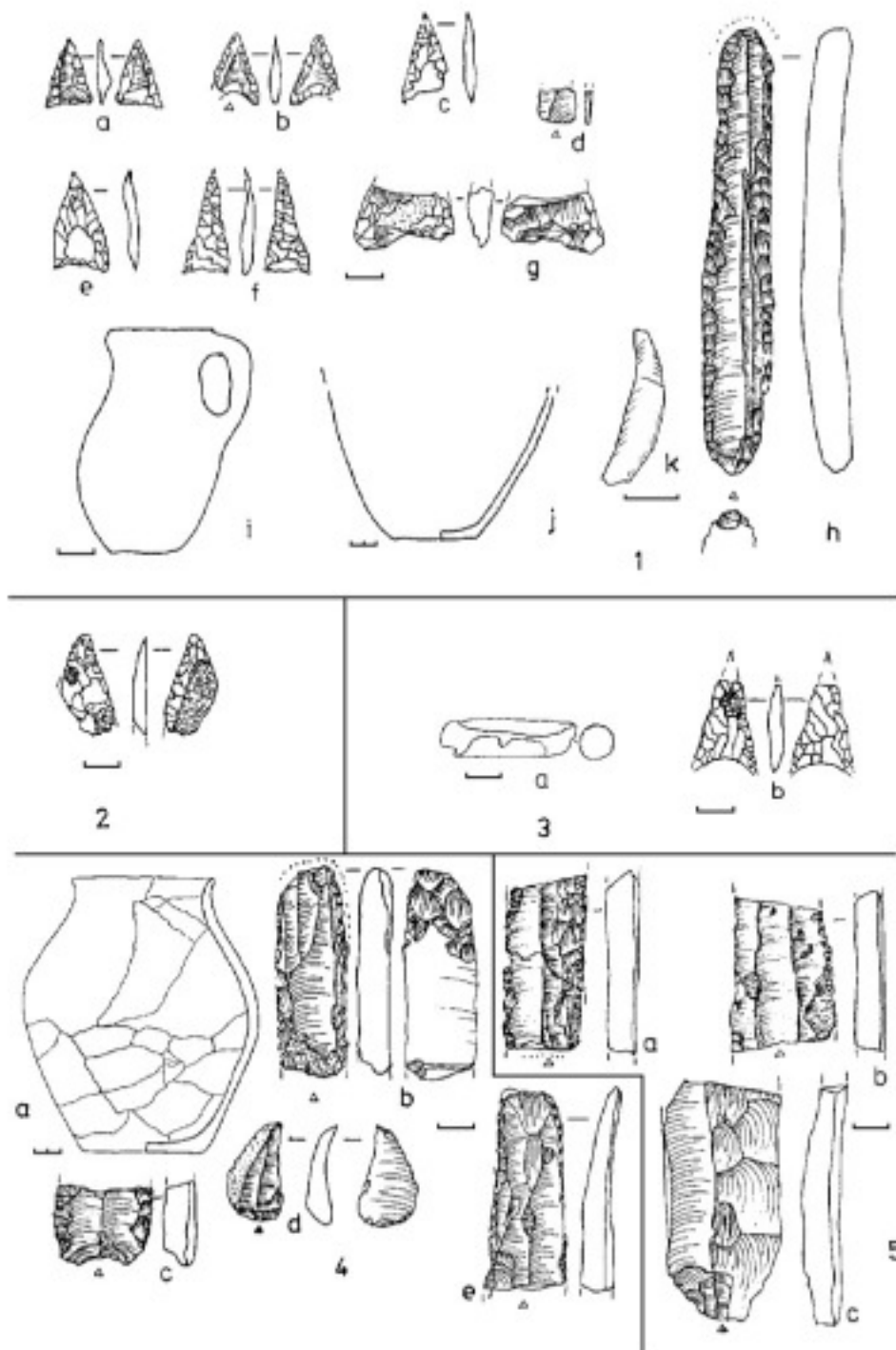


Fig. 30. Krasny Khutor. 1 - grave 80(89a); 2 - near grave 80(89a), sq.H-14; 3 - grave 81(89b); 4 - grave 82(89c); 5 - grave 84(91).

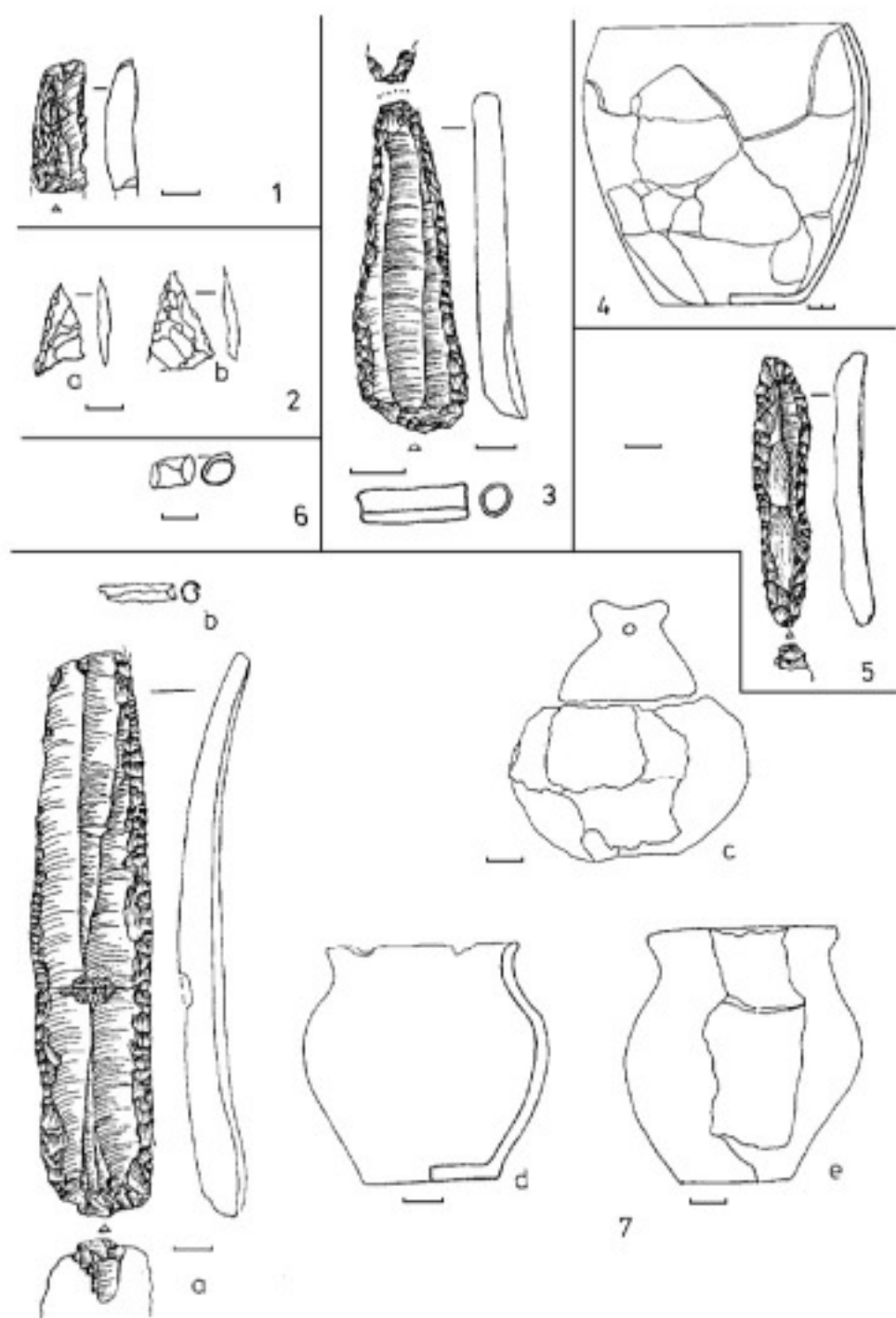


Fig. 31. Krasny Khutor. 1 - Sq.D-15; 2 - grave 86(1C-93); 3 - grave 89(4C-96); 4 - grave 91(6C-98)?; 5 - grave 94(8C-100); 6 - grave 97(11C-103); 7 - grave 101(15C-107).

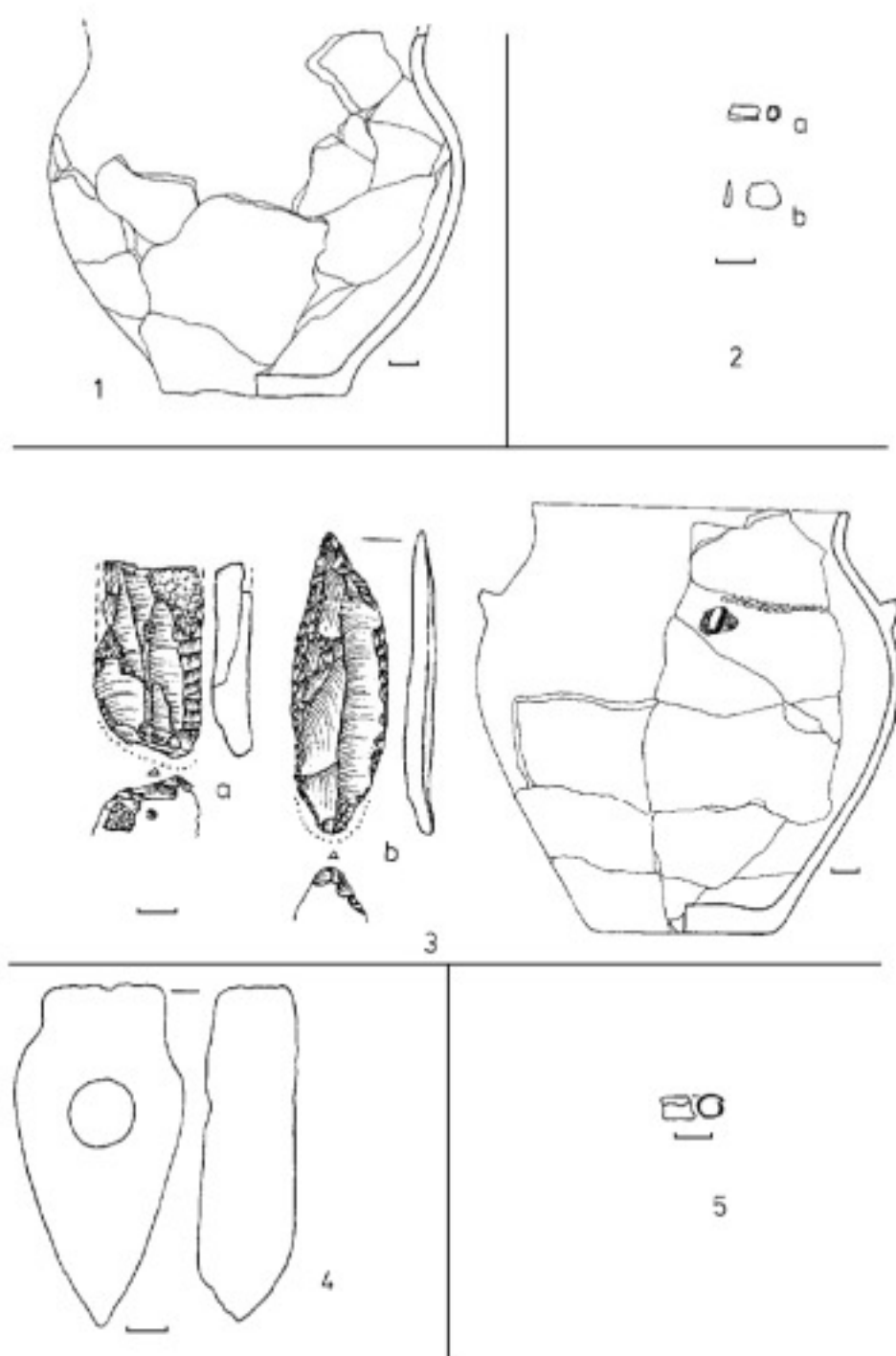


Fig. 32. Krasny Khutor. 1 - grave 102(16C-108); 2 - grave 103(17C-109); 3 - grave 104(18C-110); 4 - grave 105(19C-111); 5 - grave 109(22C-114).

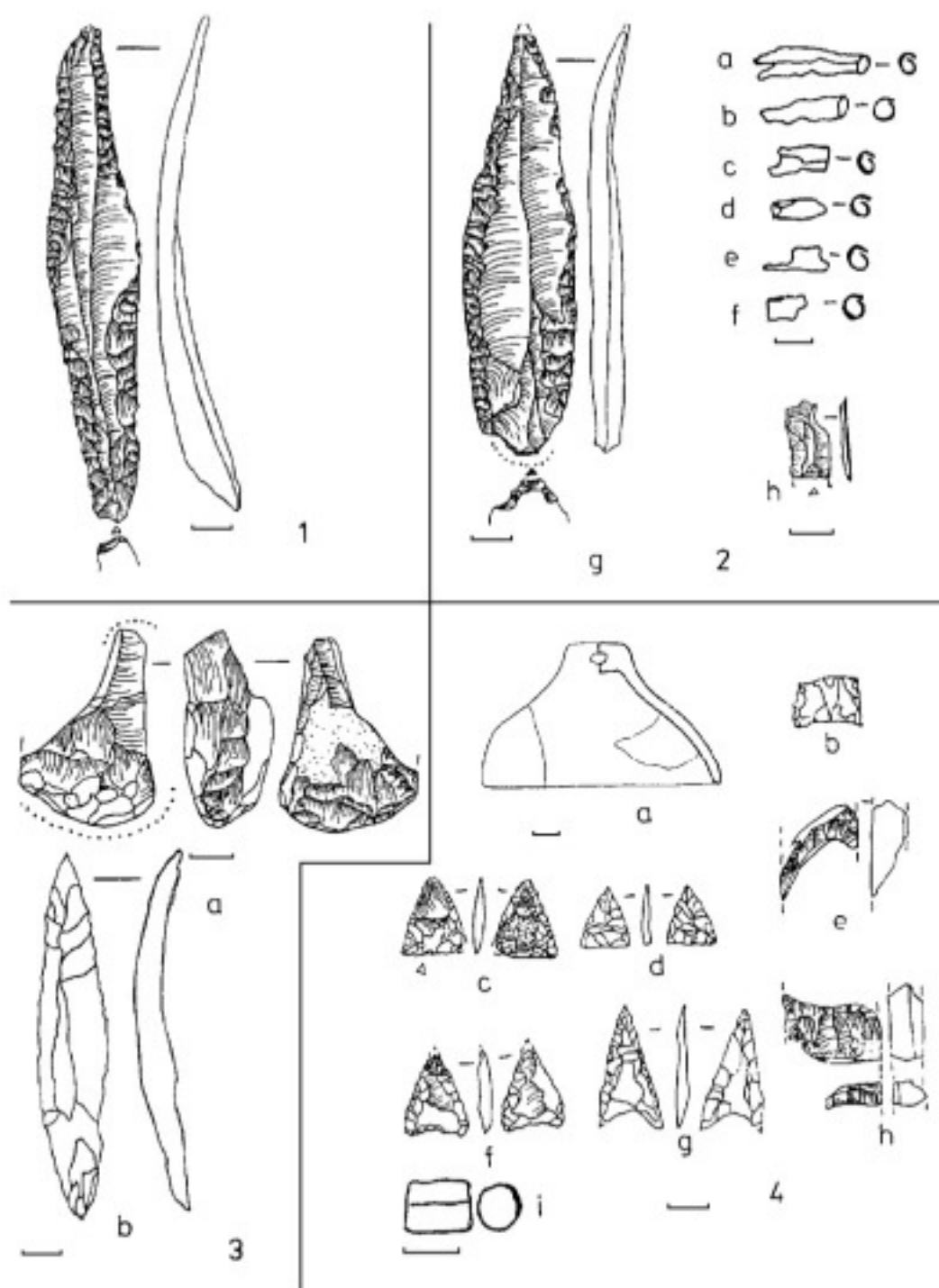


Fig. 33. Krasny Khutor. 1 - grave 113(26C-118); 2 - grave 114(27C-119); 3 - grave 115(28C-120); 4 - grave 117(29aC-121a).

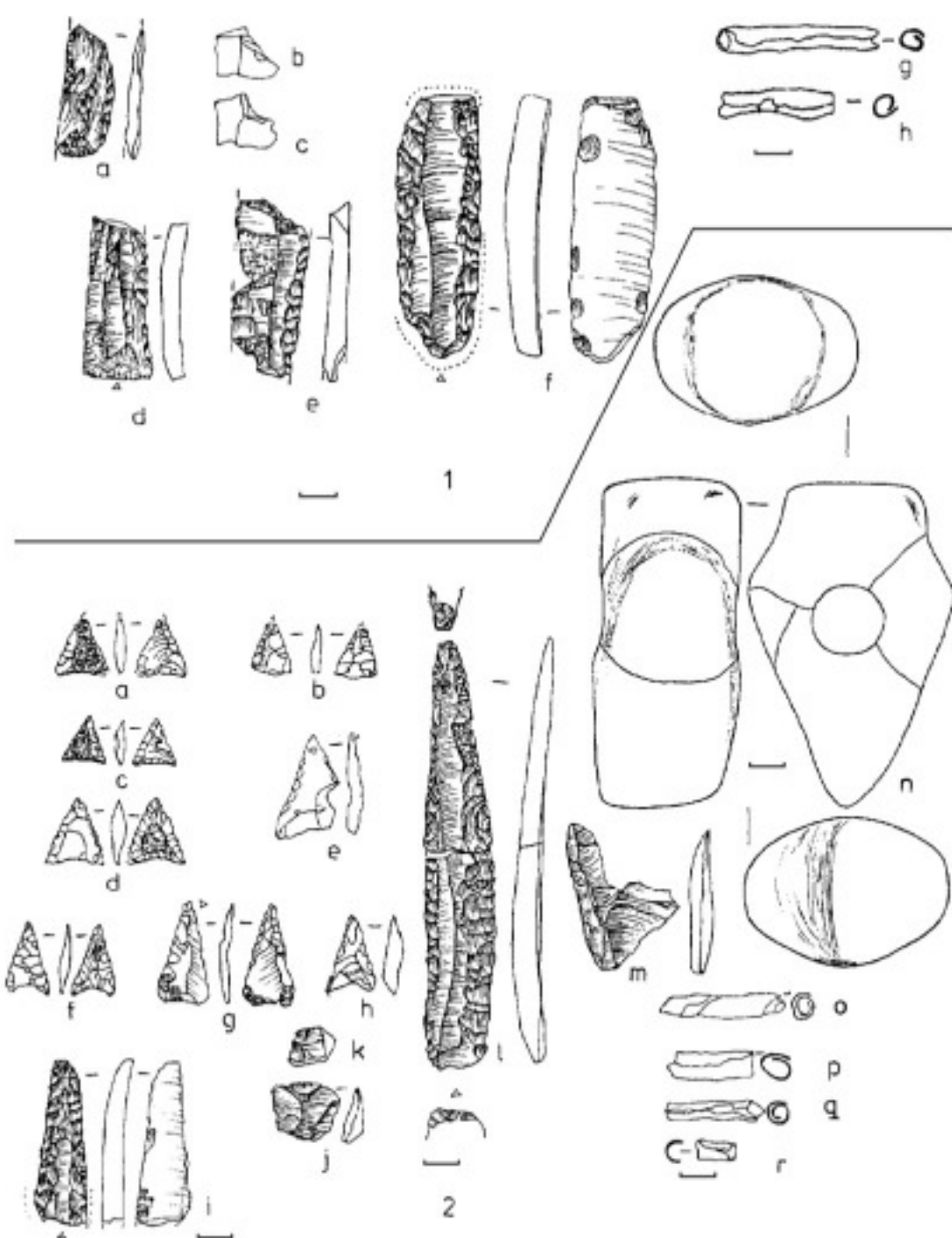


Fig. 34. Krasny Khutor. 1 - grave 116(29C-121); 2 - grave 119(31C-123).

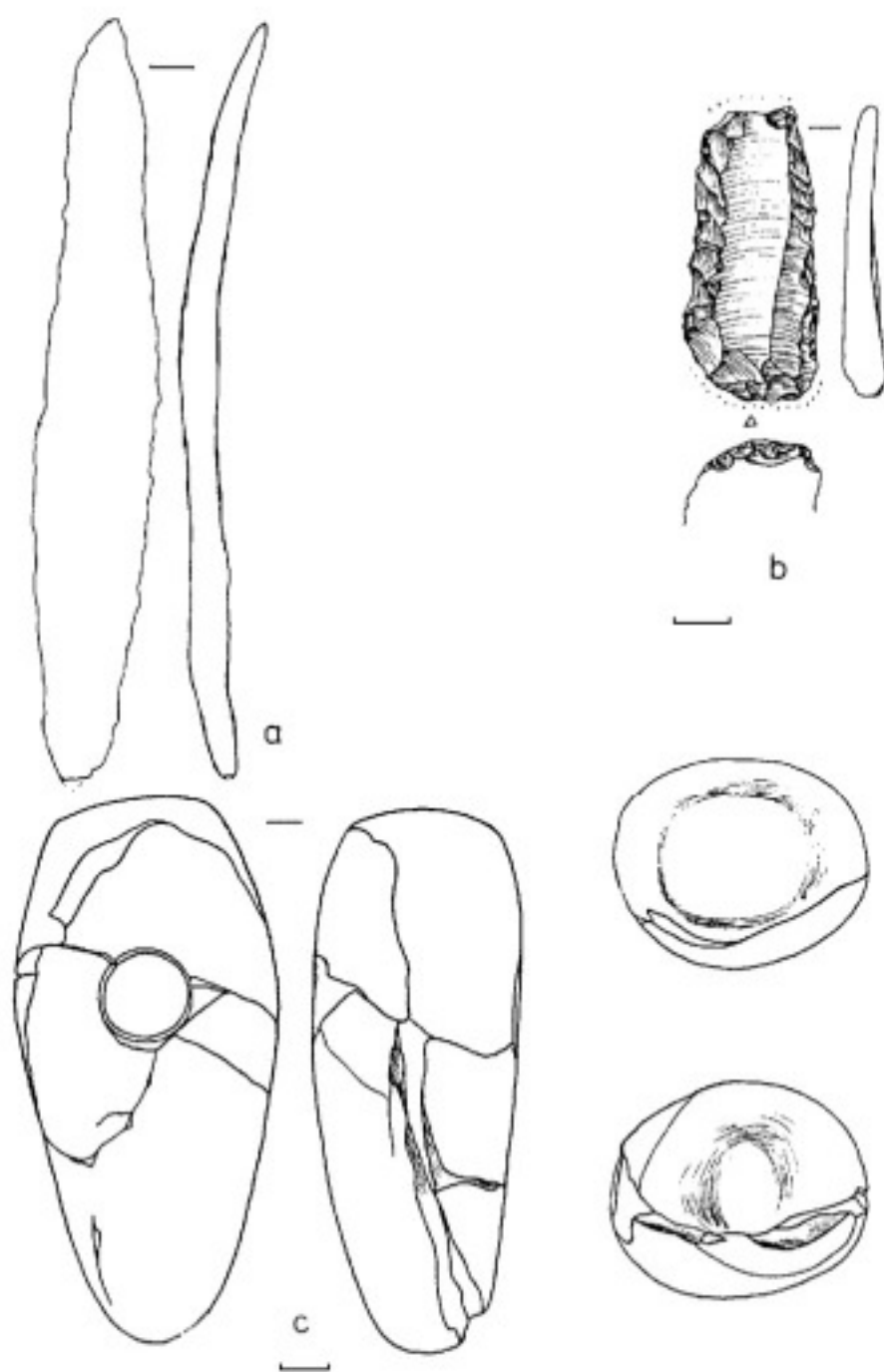


Fig. 35. Krasny Khutor. Grave 120(32C-124).

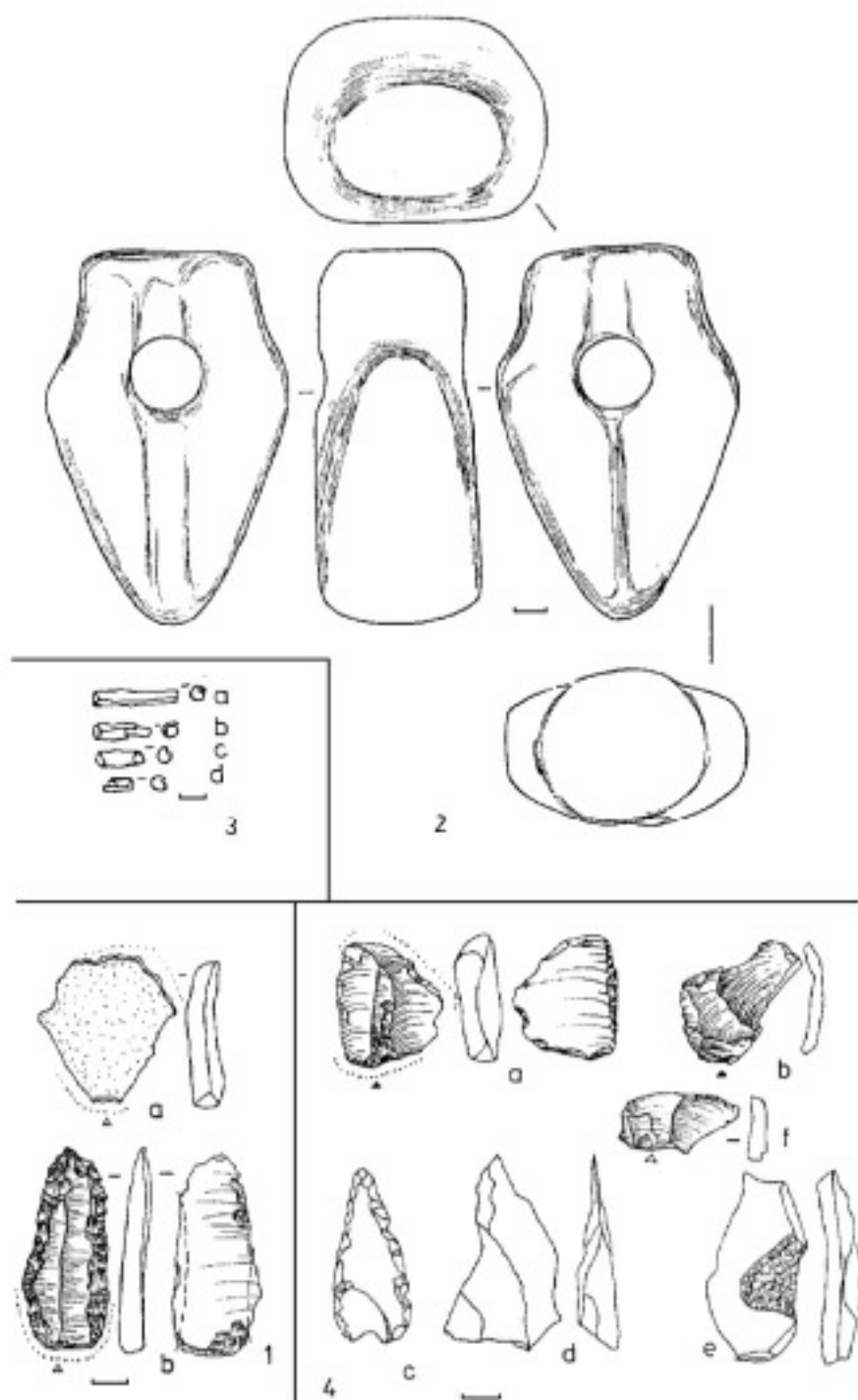


Fig. 36. Krasny Khutor. 1 - grave 122(34C-126); 2 - grave 123(34aC-126a); 3 - grave 125(36C-128); 4 - grave 126(37C-129).

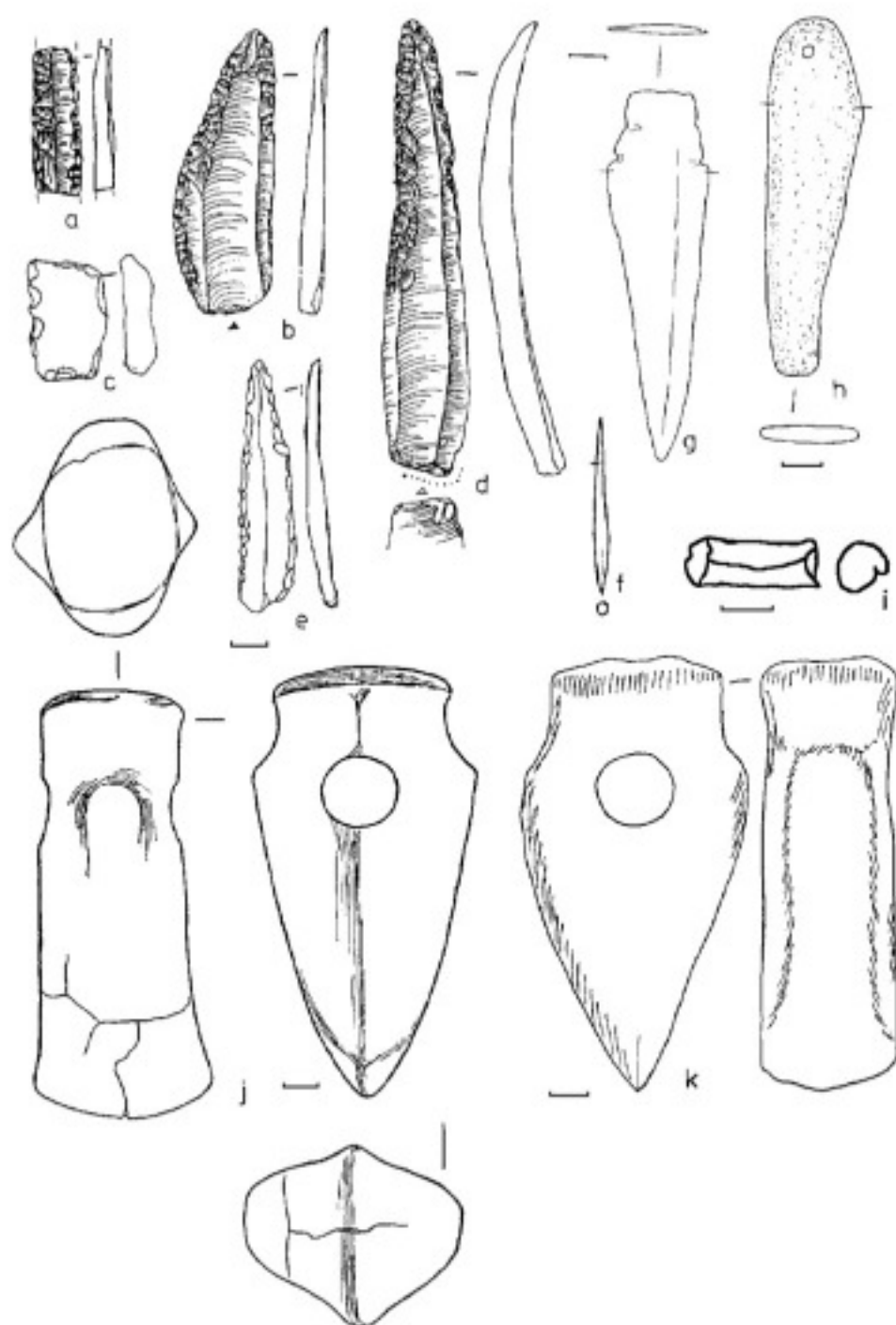


Fig. 37. Krasny Khutor. Grave 127(38C-130).

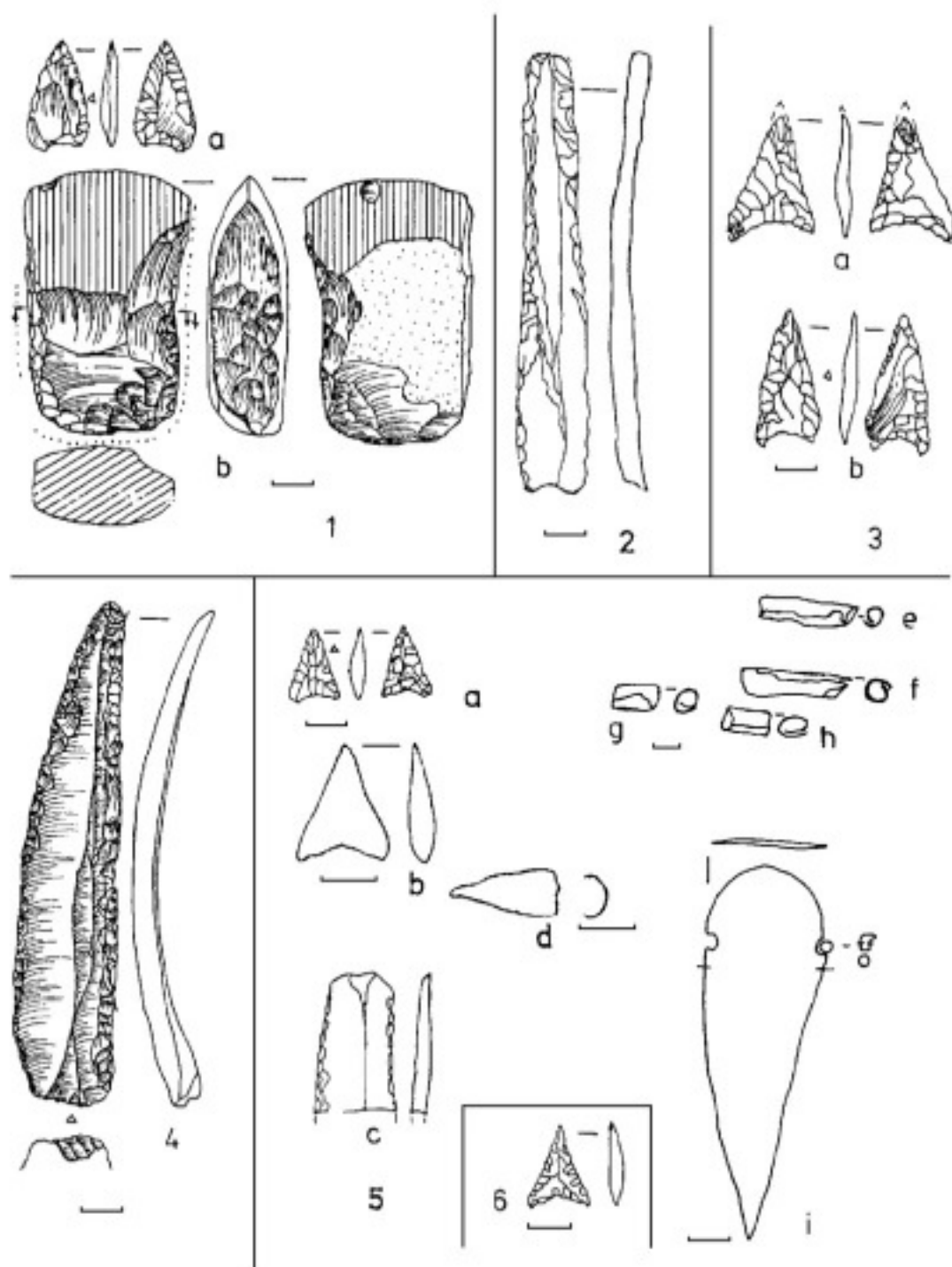


Fig. 38. Krasny Khutor. 1 - grave 128(38aC-130a); 2 - grave 129(39c-131); 3 - grave 130(40C-132); 4 - grave 133(51aC-134a); 5 - grave 134(52C-135); 6 - near grave 134(52C-135), sq.I-11.

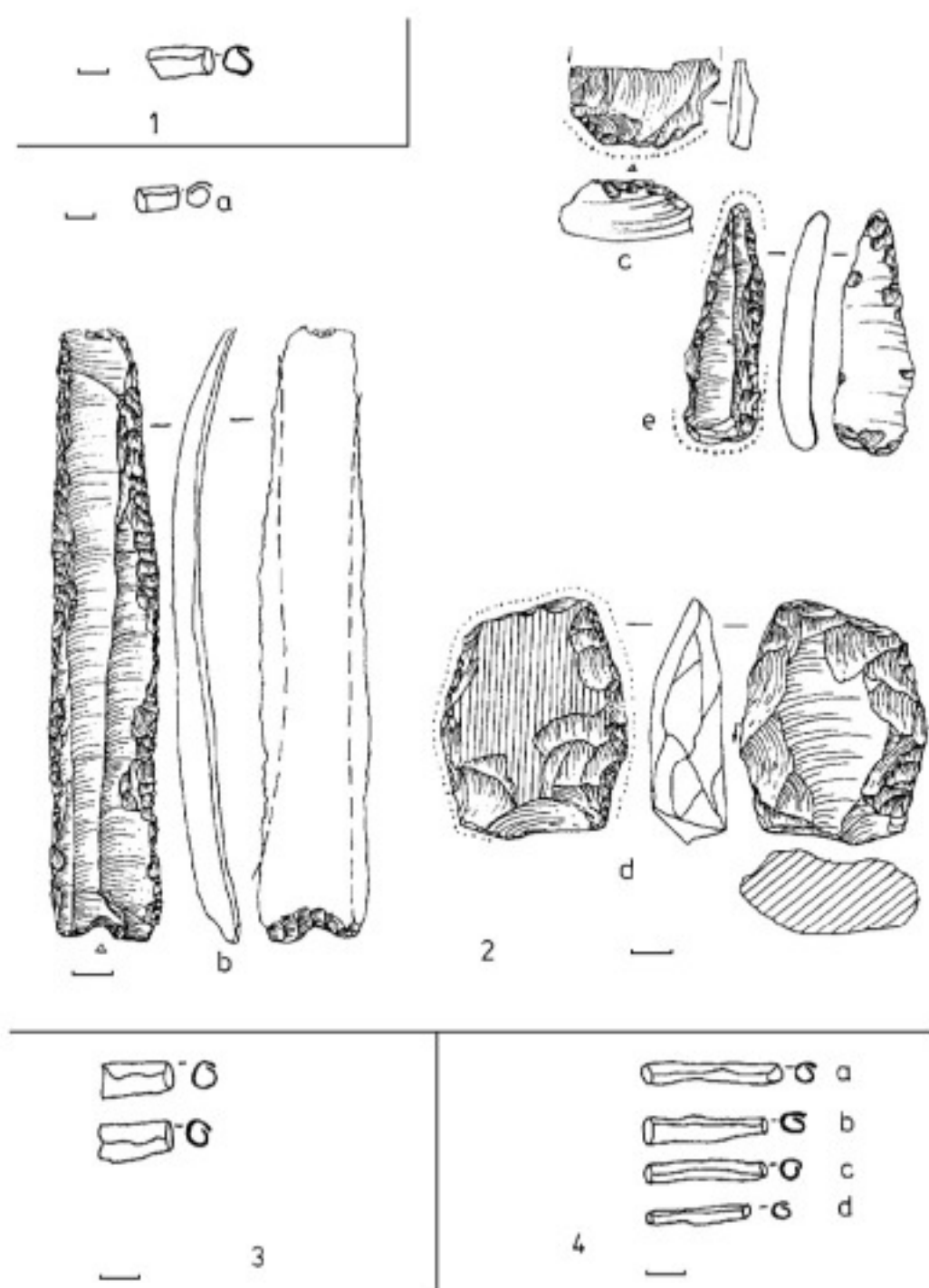


Fig. 39. Krasny Khutor. 1 - grave 135(53C-136); 2 - grave 137(54C-138); 3 - grave 136(55C-137); 4 - grave 140(58C-141).

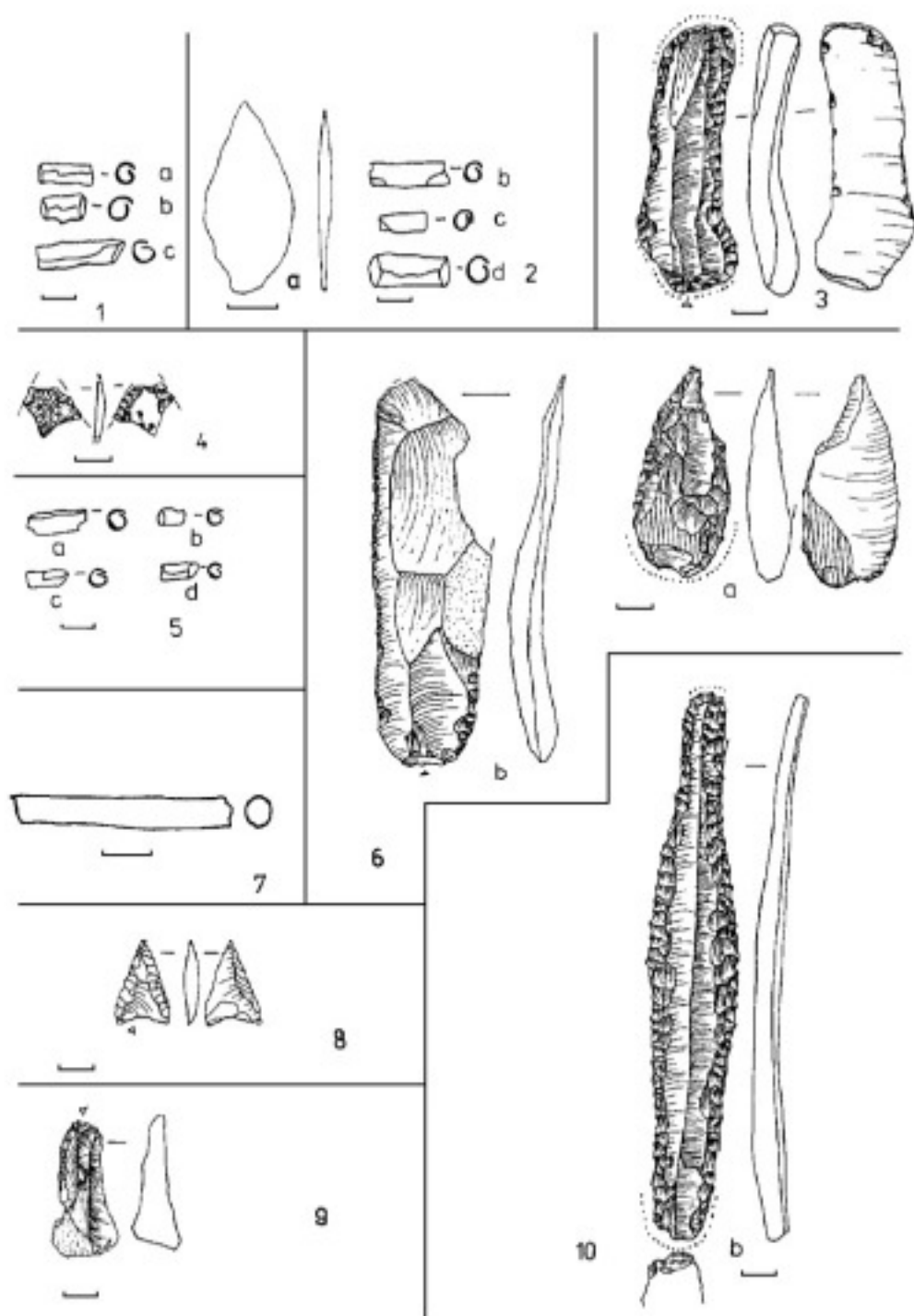


Fig. 40. Krasny Khutor. 1 - grave 144(61aC-144a); 2 - grave 145(62c-145); 3 - grave 146(63C-146); 4 - near grave 147(64C-147), sq.G-11; 5 - grave 148(65C-148); 6 - grave 149(66C-149); 7 - grave 154(70C-153); 8 - grave 156(70bC-153b); 9 - near grave 164(77C-160), sq.I-15; 10 - grave 168(81C-164).

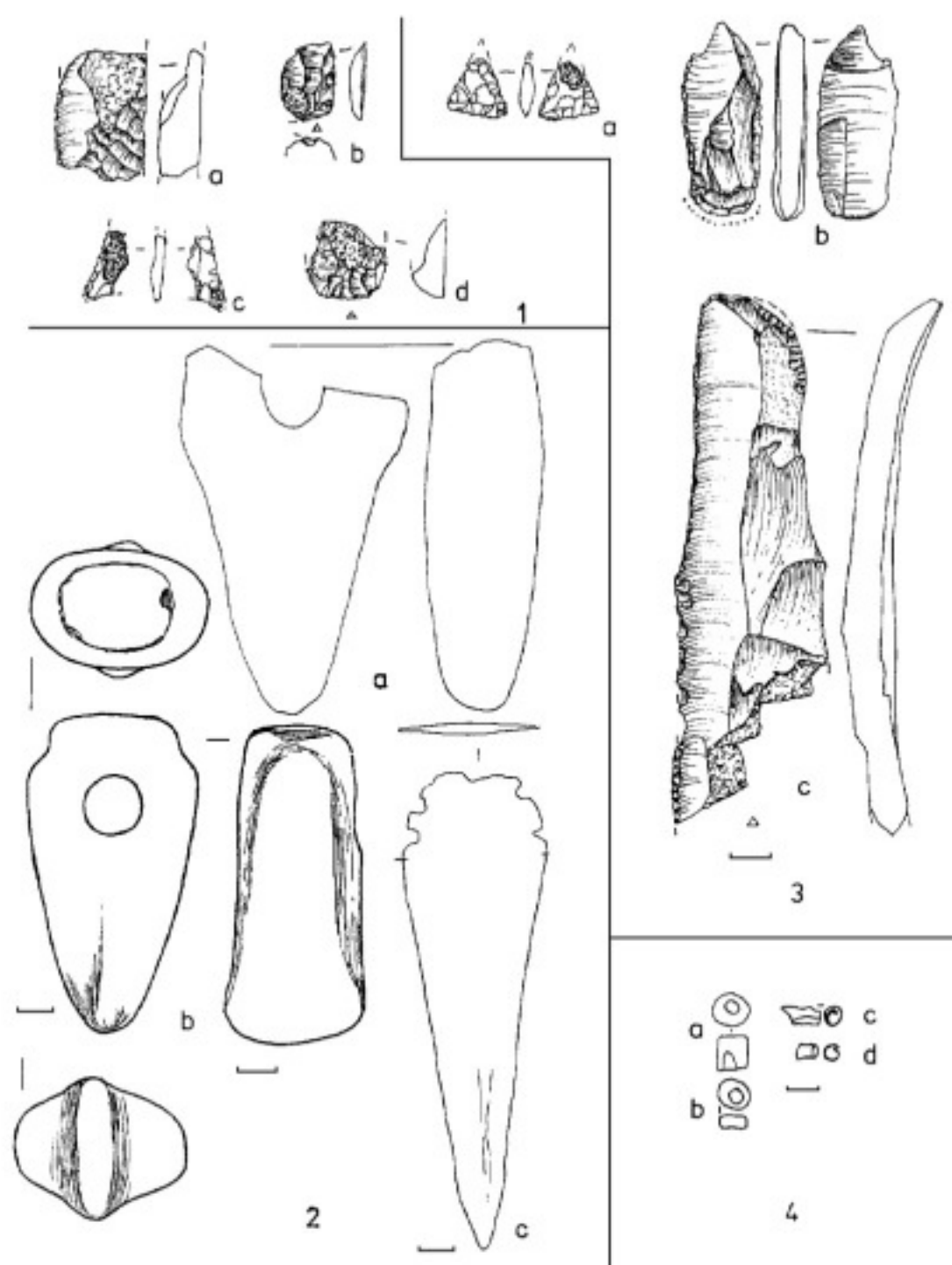


Fig. 41. Krasny Khutor. 1 - near grave 84(91), sq.F-16; 2 - grave 167(80C-168); 3 - grave 169(165); 4 - grave 170(28a)? Copper, stone and flint finds from the destroyed graves.

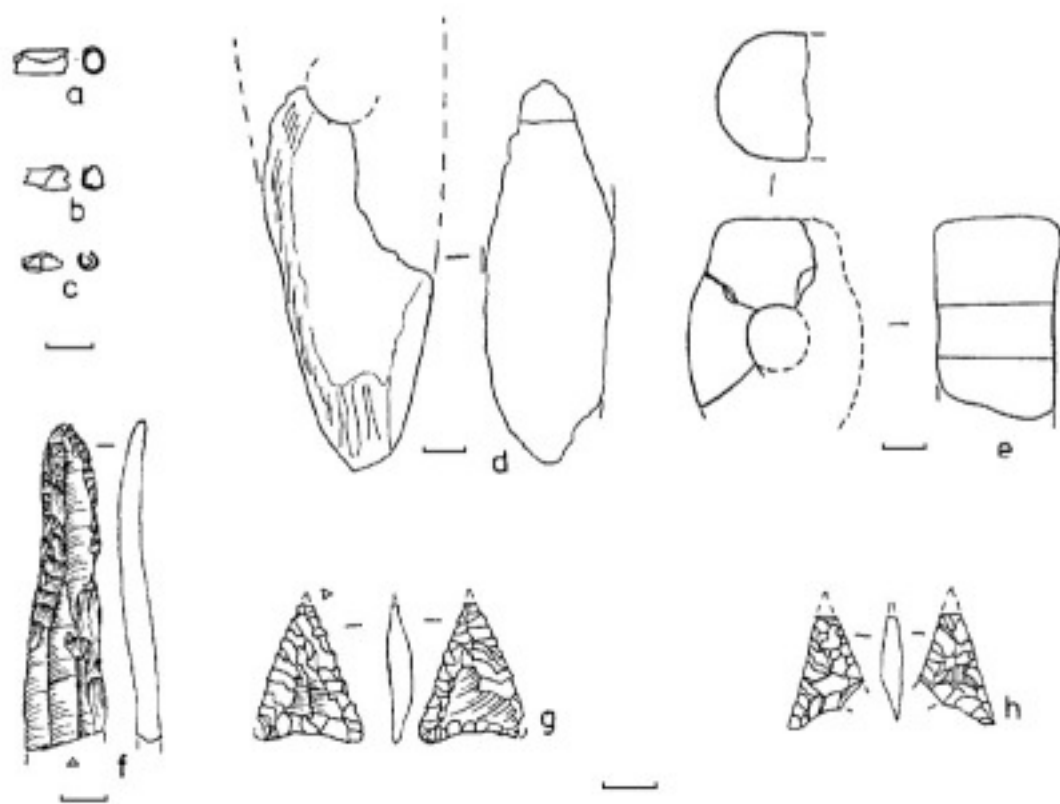


Fig. 42. Krasny Khutor. Copper, stone and flint finds from the destroyed graves.

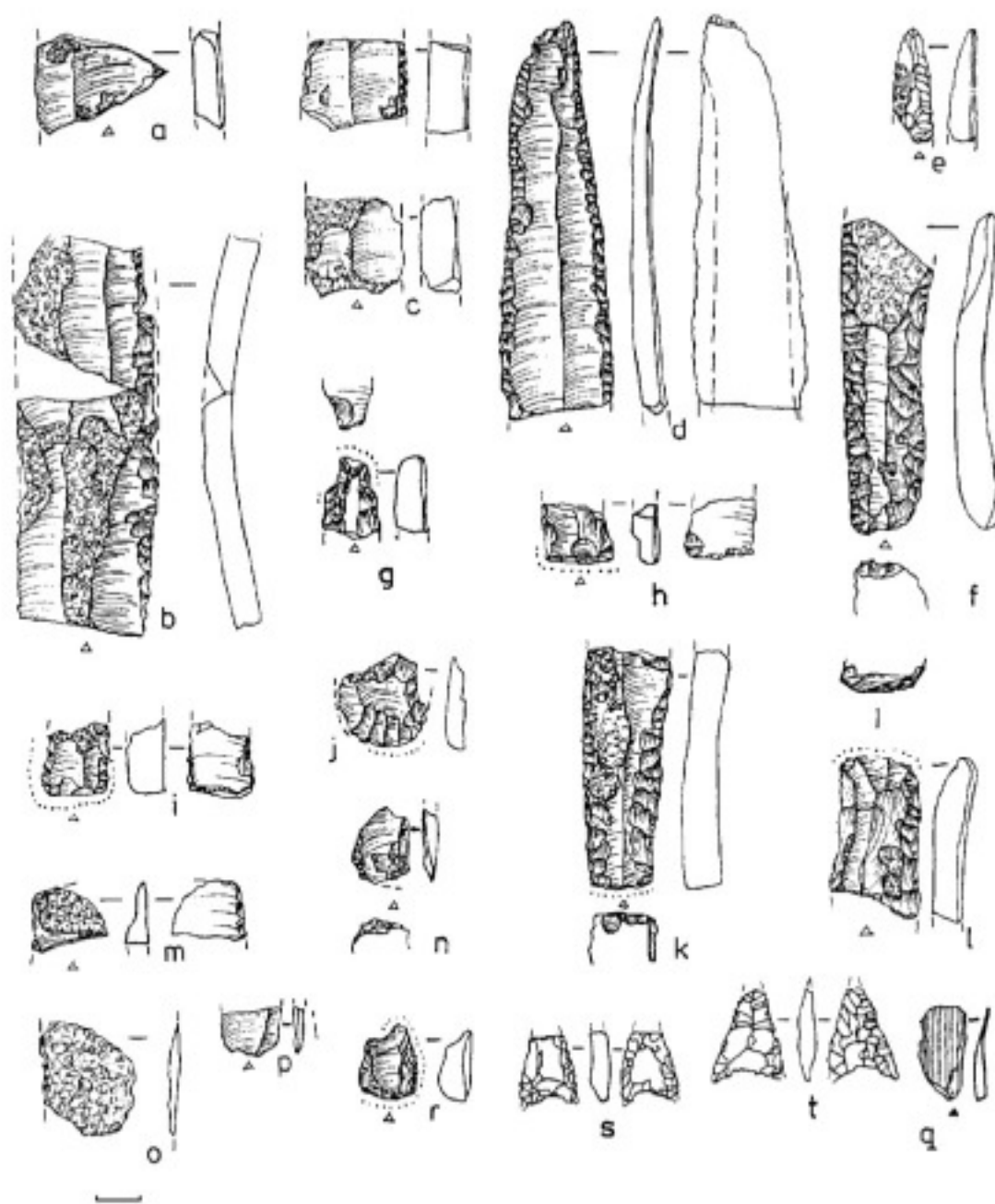


Fig. 43. Krasny Khutor. Flint finds from the destroyed graves.

A complex, also methodologically, history of excavations at the cemetery, justifies emphasising the three stages of its exploration.

### 3.3.1. EXCAVATIONS OF 1947 (BY I. SAMOYLOVSKI)

#### Grave 1

Exc.IV, depth 3-18cm. Vessel (t.g.?) with burnt bones. 80cm from the pot to SWW was a fragment of flint from an ordinary blade knife - variant B. In the same distance, but to the other direction from the pot was a broken vessel (t.g.?) and a lower part of the vessel (t.g.), which may have been the remains of another cremation (?). The second half of a flint tool from this grave was found on the surface in an undefined part of the site in 1948 (Fig.45:3).

#### Grave 2

Exc.V, depth ?. Pile of burnt bones. On the bones was a copper chisel (type IC) and 3 copper beads (types 1x IIBe1, 2x IIBe2). Nearby were two broken vessels (t.g.), Fig.45:1).

#### Grave 3

Exc.V, depth 3-20cm. Vessel (t.g.III-a,c-a,e) with burnt bones. Among bones - flint big asymmetric blade knife. Near - small vessel (t.g.?) and two broken vessels (t.g.), Fig.45:2.

#### Grave 3A

Exc.V, depth ?. Vessel (t.g.?) with ashes in 40cm from grave 3.

#### Grave 3B

Exc.V, depth ?. Broken vessel (t.g.?) with burnt bones.

#### Grave 4

Exc.V, depth 3-20cm. Broken vessel (t.g.III-0) with burnt bones (Fig.45:4).

#### Grave 4A

Exc.V, depth 18cm. Broken vessel (t.g.III-c-a,e) with burnt bones in 65cm from grave 4 (Fig.45:5).

#### Grave 4B

Exc.V, depth ?. Vessel (t.g.III-c-b) with burnt bones, Fig.46:1.

#### Grave 5

Exc. - . Large vessel (t.g.III-0) with burnt bones. Among bones - fragment of undefined blade tool (lost). Near - broken vessel (t.g.), Fig.46:2.

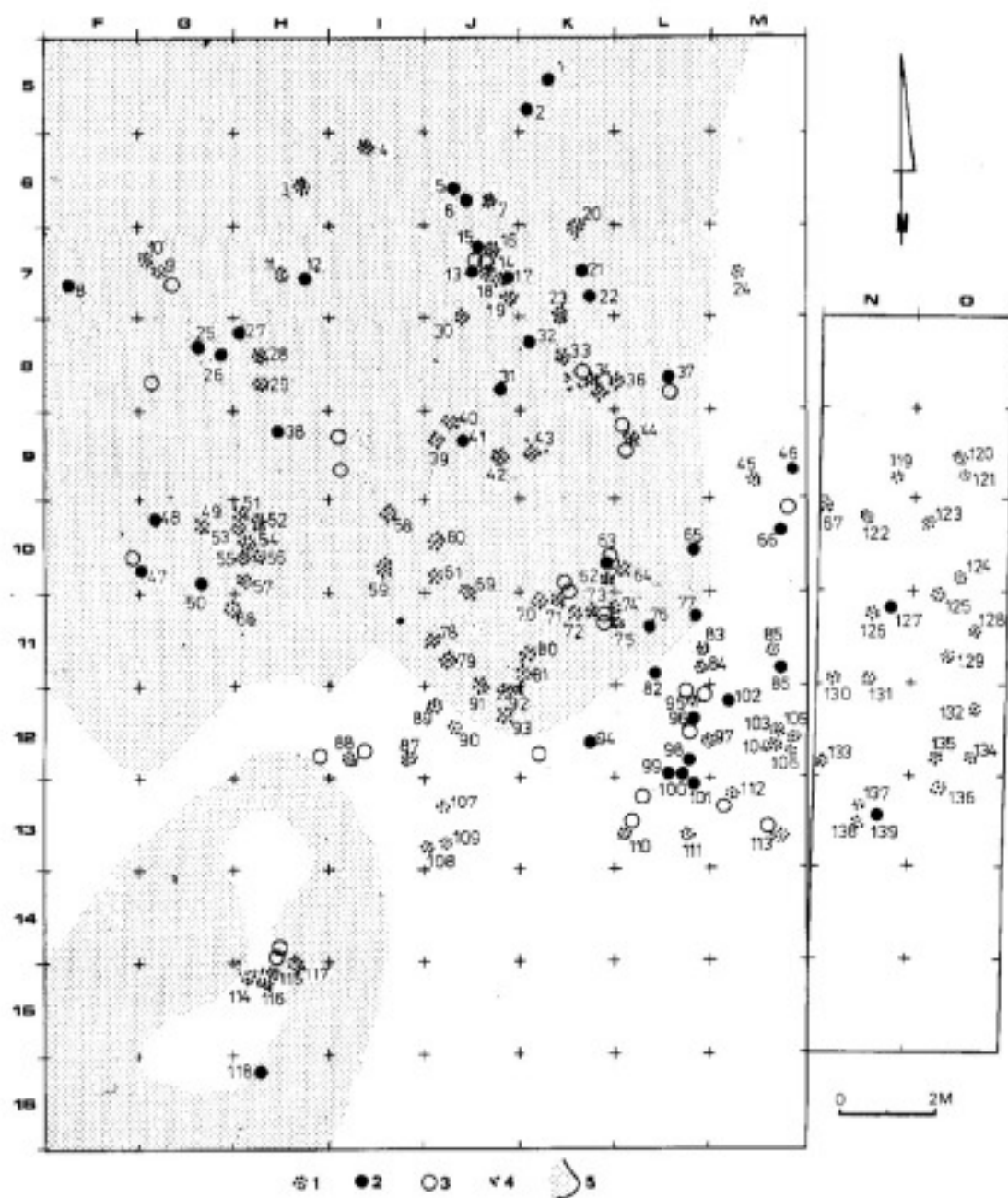


Fig. 44. Sofievka cemetery: the general plan (after Y.Zakharuk). 1 - pile of burnt bones; 2 - vessels with burnt bones and ashes; 3 - empty vessels; 4 - "isolated" flint artefact; 5 - remains of destroyed graves. Plan with our new numeration, the first number in text.

## Grave 6

Exc. - . Large vessel (t.g.) with burnt bones. Among bones - fired slim arrowhead with straight base (?) made from chip from flint axe (Fig.46:3).

## Destroyed graves

At the cemetery, some materials were collected „from the surface”, e.g. 2 vessels (t.g.III-0), stone axe (type 1A) and burnt fragment of flint undefined blade tool (Fig.47:1).

## 3.3.2. EXCAVATIONS OF 1948 (BY Y. ZAKHARUK)

On the surface of completely destroyed, NW part of the site were found several flint artefacts:

Sq.A-2 - fired fragment of undefined blade tool used as striker (Fig.47:2a);

Sq.F-2 - chip from axe (Fig.47:2b);

Sq.A-3 - ordinary arrowhead with concave base (Fig.47:2c);

Sq.G-4 - ordinary arrowhead with straight base (Fig.47:2d) and ordinary arrowhead with concave base (Fig.47:2e);

Sq.H-4 - amorphous striker made from natural piece (Fig.47:2f).

## Grave 1

Sq.K-5, depth 36cm. Spot of burnt bones, triangular in plan. Among bones - part of 3 broken vessels (t.g.), stone with traces of red paint.

## Grave 2

Sq.K-5, depth ?. Spot of burnt bones. Among bones - 8 fragments of 3 vessels (t.g.). Near the spot - triangular flint arrowhead.

Sq.G-6. On the surface - flint ordinary arrowhead with straight base (Fig.48:5).

## Grave 3

Sq.H-6, depth ?. Small pile of burnt bones, 8x8x5cm. Near the pile - copper flat square axe (type IAx), Fig.48:1.

## Grave 4

Sq.I-6, depth 39cm. Pile of burnt bones of child (?), 21x10x6cm. Among bones - 9 copper beads (types 2x IIBe1, 2x IIBe2, 3x IIBe3, 2x ?), 4 copper rings (type IIR), 2 cylindrical grey-green stone beads (all finds without traces of fire), Fig.48:2.

## Grave 5

Sq.J-6, depth 34cm. Vessel (t.g.) with burnt bones.

## Grave 6

Sq.J-6, depth 30cm. Burnt bones and small broken vessel.

## Grave 7

Sq.J-6, depth 36cm. Pile of burnt bones. Among bones - two small stones.

Sq.J-6. On the surface, not far from the graves 5,6,7 - two burnt flint arrow-heads: slim specimen with straight base and big one with concave base (Fig.48:3).

## Grave 8

Sq.F-7, depth 21cm. Low part of the Vessel (t.g.?) with burnt bones. Among bones - 2 small copper nails (type IIN). Near the vessel - small stone axe (type 1A), Fig.48:4.

## Grave 9

Sq.G-7, depth 17cm. Pile of burnt bones, 12x9x5cm. Near the pile - broken vessel (t.g.?).

## Grave 10

Sq.G-7, depth 16cm. Pile of burnt bones, 14x14x12cm.

## Grave 11

Sq.H-7, depth 29cm. Pile of burnt bones, 26x15x12cm (see Fig.49:1).

## Grave 12

Sq.H-7, depth 27cm. Broken vessel (t.g.?) with burnt bones. To S (between graves 11-12) on depth 28cm in sand - stone axe (type 1B), Fig.49:1.

Sq.I-7, depth 70 cm. Fragment of flint ordinary blade knife - variant B. It is refitted with artefact from grave 44 (Fig.55).

## Grave 13

Sq.J-7, depth 39cm. Vessel (t.g.III-b,c-d,e; red painting) with burnt bones (Fig.49:2).

## Grave 14

Sq.J-7, depth 36cm. Pile of burnt bones, 4x3x3cm. On bones - copper awl (type IAw1). Near the pile - miniature vessel (t.g.IV- 0). NW of the grave s boundary, another vessel was recorded (t.g. IV-0), Fig.49:3.

## Grave 15

Sq.J-7, depth 35cm. Small vessel (t.g.III-0) with burnt bones (Fig.49:4).

## Grave 16

Sq.J-7, depth 35cm. Pile of burnt bones.

## Grave 17

Sq.J-7, depth 38cm. Vessel (t.g.III-0) with burnt bones (Fig.50:1).

## Grave 18

Sq.J-7, depth 33cm. Pile of burnt bones, 10x14x5cm.

## Grave 19

Sq.J-7, depth 33cm. Pile of burnt bones. On the pile stone axe (type 2), flint square axe and copper awl (type IAw?). Among bones - two pieces of copper flat axe (type IAx) and copper knife (type IK1), Fig.50:2.

## Grave 20

Sq.K-6/7, depth 20cm. Pile of burnt bones. Among bones - tooth of animal.

## Grave 21

Sq.K-7, depth 35cm. Broken vessel (t.g.?) with burnt bones.

## Grave 22

Sq.K-7, depth 33cm. Vessel (t.g.III?-b-a) with burnt bones. Among bones - copper bead (type IIBe3) and flint ordinary blade knife - variant B (Fig.51:1).

## Grave 23

Sq.K-7/8, depth 30cm. Pile of burnt bones, 20x14x6cm.

Sq.L-7. On surface - flint ordinary arrowhead with concave base (Fig.51:2).

## Grave 24.

Sq.M-7, depth 39cm. Pile of burnt bones, 24x20x4cm.

Sq.F-8. On surface - flint amorphous striker made from axe (?) fragment (Fig.51:3).

## Grave 25

Sq.G-8, depth 15cm. Broken pot with burnt bones.

## Grave 26

Sq.G-8, depth 28cm. Broken vessel (t.g.III-c-a) with burnt bones (Fig.51:4).

Sq. G-8, depth ? A single vessel (t.g.?)

Sq.G-8. On surface - 2 flint artefacts: chip from square axe (Fig.51:5) and fragment of small, probably palaeolithic blade.

## Grave 27

Sq.H-8, depth 32cm. Large broken vessel (t.g.?) with burnt bones. On the vessel - traces of copper oxide.

## Grave 28

Sq.H-8, depth 9cm. Pile of burnt bones, 20x19x5cm.

## Grave 29

Sq.H-8, depth 11cm. Pile of burnt bones, 25x22x8cm. Among bones - piece of belemnite.

Sq.I-8. On surface - fired flint ordinary striker on blade (Fig.52:2).

## Grave 30

Sq.J-7/8, depth 31cm. Pile of burnt bones, 17x15x6cm. On the bones - copper shakle - holder (type IISH), Fig.52:1.

## Grave 31

Sq.J-8, depth 26cm. Broken vessel (t.g.?) with burnt bones.

## Grave 32

Sq.K-8, depth 32cm. Large vessel (t.g.III-c-e) with burnt bones. Among bones - tooth of animal. Near the pot - small vessel (t.g.VIII-0), Fig.52:3.

## Grave 33

Sq.K-8, depth 40cm. Pile of burnt bones, 10x8x4cm.

## Grave 34

Sq.K-8, depth 45cm. Pile of burnt bones, 20x16x6cm. Near the pile vessel (t.g.III-a,b,c-d,e; red painting), stone axe (type 1B) and 3 flint artefacts: damaged square axe, massive amorphous striker made from flake tool and refitted from 2 fragments ordinary blade knife - variant A (Fig.53).

## Grave 35

Sq.K-8, depth 22cm. Pile of burnt bones, 14x12x4cm.

## Grave 36

Sq.K/L-8, depth 24cm. Pile of burnt bones, 10x10x4cm.

## Grave 37

Sq.L-8, depth 31cm. Small broken vessel (t.g.III-c-e) with burnt bones. Among bones - flint ordinary blade striker. Near the pot - small vessel (t.g.?-?-d; red painting), Fig.54:1.

## Grave 38

Sq.H-9, depth 22cm. Vessel (t.g.II-0) with burnt bones. Among bones - copper bead (type IIBe1-2), Fig.54:2.

Sq.I-9, on depth 21-23cm two small vessels (t.g.), maybe from grave 38 or 39.

## Grave 39

Sq.J-9, depth 30cm. Pile of burnt bones, 20x16x9cm, partly coloured by red paint. Among bones - flint amorphous striker on flake Fig.54:3.

## Grave 40

Sq.J-9, depth 38cm. Pile of burnt bones, 20x11x3cm. Among bones - flint nodule (probably amorphous striker made from natural piece), Fig.54:4.

## Grave 41

Sq.J-9, depth 41cm. Broken pot with burnt bones.

## Grave 42

Sq.J-9, depth 26cm. Pile of burnt bones, 13x9x4cm.

## Grave 43

Sq.K-9, depth 25cm. Pile of burnt bones, 13x10x7cm. In 5cm from the pile, on depth 34cm - flint amorphous striker made from natural piece, on other hand - small flint blade (Fig.54:5).

Sq.K-9, depth 32cm. Flint square axe probably from grave 43 (Fig.54:6).

Grave 44

Sq.L-9, depth 75cm. Pile of burnt bones, 25x20x10cm. Near the pile - broken vessel (t.g.III-c-a,e), vessel (t.g.?) and stone axe (type 1A/B). To NE from pile, depth 66cm - 2 flint artefacts: damaged square axe and fragment of ordinary blade knife - variant B, which is refitted with piece from sq.I-7 (Fig.55).

Grave 45

Sq.M-9, depth 48cm. Pile of burnt bones, 20x16x5cm. Among bones - fragment of flint undefined tool on blade with low angle retouch on end-scrapers front. Near the pile - flint amorphous striker made from square axe fragment (Fig.56:1).

Grave 46

Sq.M-9, depth 70cm. Vessel (t.g.III-b,c-d; red painting) with burnt bones (Fig.-56:2).

Grave 47

Sq.F/G-10, depth 1cm. Broken vessel (t.g.?) with burnt bones. Near - next vessel and flint fragment of undefined blade tool used as striker (Fig.56:3).

Grave 48

Sq.G-10, depth 2cm. Pile of burnt bones 30x24cm. Among bones - 4 broken vessels (t.g.?).

Grave 49

Sq.G-10, depth 2cm. Scattered burnt bones.

Grave 50

Sq.G-10, depth 7cm. Broken vessel (t.g.?-?-d; red painting) with burnt bones.

Grave 51

Sq.H-10, depth 16cm. Pile of burnt bones, 22x15x5cm.

Grave 52

Sq.H-10, depth 15cm. Pile of burnt bones, 30x23x5cm.

Grave 53

Sq.H-10, depth 15cm. Pile of burnt bones, 16x12x9cm.

Grave 54

Sq.H-10, depth 18cm. Pile of burnt bones, 14x9x8cm.

Grave 55

Sq.H-10, depth 11cm. Pile of burnt bones, 7x7x4cm.

Grave 56

Sq.H-10, depth 19cm. Pile of burnt bones, 34x12x5cm.

Grave 57

Sq.H-10, depth 18cm. Pile of burnt bones, 18x15x6cm.

## Grave 58

Sq.I-10, depth 26cm. Pile of burnt bones, 24x16x3cm.

## Grave 59

Sq.I-10, depth ?. Small pile of burnt bones.

## Grave 60

Sq.J-10, depth 26cm. Pile of burnt bones, 8x4x3,5cm.

Sq.J-10. On surface - flint chip and 2 micro-chunks. Depth 51cm - flint spike-ended presser on blade maybe from grave 60 (Fig.56:4)

## Grave 61

Sq.J-10, depth 19cm. Spot of scattered burnt bones, 20x25cm.

## Grave 62

Sq.K-10, depth 47cm. Pile of burnt bones, 16x14x4cm.

## Grave 63

Sq.K-10, depth 49cm. Broken vessel (t.g.?) bones. Near the grave - flint fragment of undefined blade tool used as striker (Fig.57:1; see also Fig.57:2).

## Grave 64

Sq.L-10, depth 52cm. Pile of burnt bones, 23x15x5cm. Among bones - burnt flint fragment of undefined blade tool. Near the pile broken vessel (t.g.III-b,c,d; red painting) and stone axe (type 1B), Fig.57:2. Above the pile, on depth 35-52cm - 4 flint tools: ordinary blade dagger, small asymmetric blade knife, ordinary blade striker and amorphous presser made from chunk (probably from axe), Fig.57:3.

Sq.L-10. On surface - 2 flint ordinary arrowheads (first with concave base, second with straight base). Depth 32cm - flint amorphous (pseudo-tanged) arrowhead. Depth 68cm - flint ordinary arrowhead with straight base (Fig.57:4). Probably all these tools are connected with grave 64.

## Grave 65

Sq.L-10, depth 50cm. Vessel (t.g.III-0) with burnt bones. Near the pot - stone hammer (type 3), Fig.58.

## Grave 66

Sq.M-10, depth 61cm. Broken vessel (t.g.?) with burnt bones. North of the grave another vessel was recorded. (t.g.?).

## Grave 67

Sq.N-10, depth 71cm. Pile of burnt bones, 18x10x5cm. Among bones - flint flake. Near the pile - flint square axe, Fig.59:1.

## Grave 68

Sq.G/H-11, depth 2cm. Pile of burnt bones, 20x16x5cm. Among bones - 12 small pieces of copper things (type ?) and 2 burnt flint arrowheads (ordinary specimen with straight base and tip fragment of big specimen), Fig.59:2.

Sq.I-11. On surface - flint arrowhead (lost).

Grave 69

Sq.J-10/11, depth 32cm. Pile of burnt bones, 20x17x12cm. In 12cm to E, on depth 32cm - flint flake (Fig.59:3).

Grave 70

Sq.K-11, depth 34cm. Pile of burnt bones, 16x14x6cm. Among bones - flint spike-ended presser made from pseudo-blade knapped from square axe (Fig.59:4).

Grave 71

Sq.K-11, depth 42 cm. Pile of burnt bones, 27x24x8cm. Among bones - flint big asymmetric blade knife. On the pile - copper awl (type IIAw1) with traces of wooden handle on one side. Near the pile - fired flint amorphous blade striker and 2 broken vessels (t.g.III-0; ?), Fig.60:1.

Grave 72

Sq.K-11, depth 62cm. Pile of burnt bones, 20x15x4cm. Near the pile - flint amorphous striker made from natural piece (Fig.60:2).

Grave 73

Sq.K-11, depth 62cm. Pile of burnt bones, 24x18x6cm.

Grave 74

Sq.K/L-11, depth 20cm. Pile of burnt bones, 18x15x14cm. Near the pile - 2 vessels (t.g.III-c-e), Fig.60:3. One of the vessels - partly covered by cremation 75.

Grave 75

Sq.K/L-11, depth 56cm. Pile of burnt bones, 25x24x12cm.

Grave 76

Sq.L-11, depth 67cm Small vessel (t.g.III-0) with burnt bones (Fig.61:1).

Grave 77

Sq.L-11, depth 68cm. Vessel (t.g.III-c-e) with burnt bones (Fig.61:2).

Grave 78

Sq.J-11, depth 25cm. Spot of scattered burnt bones, 14x3cm.

Grave 79

Sq.J-11, depth 21cm. Pile of burnt bones, 19x14x9cm. To N from the pile - piece of sandstone.

Sq.J-11, depth 65cm - Flint big arrowhead with concave base (Fig.59:5).

Grave 80

Sq.K-11, depth 30cm. Pile of burnt bones 16x4x8cm.

Grave 81

Sq.J/K-11, depth 24cm. Pile of burnt bones, 22x20x9cm. Among bones - animal tooth.

## Grave 82

Sq.L-11, depth 70cm. Vessel (t.g.?-?,c-d; red painting) with burnt bones.

## Grave 83

Sq.L-11, depth 86cm. Pile of burnt bones, 18x22x9cm. Among bones - two burnt flint fragments of undefined blade tool. Near the pile - broken stone axe (type 2), Fig.61:3.

Sq.L-11, depth 19cm - flint amorphous blade striker; depth 85cm - flint ordinary blade striker (Fig.61:4). Maybe both of these tools are connected with grave 83.

## Grave 84

Sq.L-11, depth 77cm. Pile of burnt bones, 20x12x8cm. To W from the pile, between graves 83 and 84 - copper ring (type IIR), Fig.61:5.

## Grave 85

Sq.M-11, depth 80cm. Small pile of burnt bones, 7x6x3cm.

## Grave 86

Sq.M-11, depth 84cm. Burnt bones and 4 broken vessels (t.g.?) in one pile. On the pile - large vessel (t.g.I-0), Fig.62:1.

## Grave 87

Sq.I-12, depth 22cm. Pile of burnt bones.

## Grave 88

Sq.I-12, depth 24cm. Pile of burnt bones, 13x6x3cm. In 25 cm to E - fragments of the broken vessel (t.g.III-0), Fig.62:2. Near the pile of grave 88, on surface (depth 2cm) of sq.H-12 - small vessel (t.g.II-b-a), stone hammer (type 3) and fragment of flint square axe (maybe striker?), Fig.62:3.

## Grave 89

Sq.J-12, depth 35cm. Small pile of burnt bones, 11x7x3cm.

## Grave 90

Sq.J-12, depth 37cm. Burnt bones.

## Grave 91

Sq.J-11/12, depth 34cm. Pile of burnt bones, 22x20x7cm.

## Grave 92

Sq.J-12, depth 60cm. Pile of burnt bones, 10x11x4cm. On the pile - stone with traces of red paint. There are some red paint also on the burnt bones.

## Grave 93

Sq.J-12, depth 42cm. Pile of burnt bones. To W from the pile (on depth 50cm) - clay spin-wheel (Fig.63:1).

## Grave 94(94,95)

Sq.K-12, depth 61cm. Small vessel with burnt bones (t.g.III-b-a). In 50 cm to SW - vessel (t.g.II-0) with clay spin-wheel in him (Fig.63:2).

Sq.K-12, depth 39cm - flint fragment of ordinary blade knife - variant C, probably from the grave 94(94,95), Fig.63:3.

Grave 95(96)

Sq.L-12, depth 82cm. Pile of burnt bones, 10x6x3cm. Near the grave 95(96) - 2 vessels (t.g.III-0, Fig.63:4a; III-?-d; red painting, Fig.63:4b)\*.

[\* The identification of the vessels with the object is not certain.]

Grave 96(97)

Sq.L-12, depth 71cm. Broken vessel (t.g.?) with burnt bones. In 20cm to S, on depth 75cm - broken vessel (t.g.).

Grave 97(98)

Sq.L-12, depth 56cm. Pile of burnt bones, 30x20x12cm.

Grave 98(99)

Sq.L-12, depth 69cm. Small vessel (t.g.?) with burnt bones.

Grave 99(100)

Sq.L-12, depth 70cm. Low part of broken vessel (t.g.III-c-e) with burnt bones. Among bones - animal tooth. Near the grave - vessel (t.g.III-b-a), Fig.64:1.

Grave 100(101)

Sq.L-12/13, depth 77cm. Large vessel (t.g.III-c-b,e) with burnt bones (Fig.64:2).

Grave 101(102)

Sq.L-13, depth 77cm. Vessel (t.g.III-0) with burnt bones (Fig.64:3)

Grave 102(103)

Sq.M-12, depth 32cm. Vessel (t.g.III-0) with burnt bones (Fig.64:4).

Grave 103(104)

Sq.M-12, depth 78cm. Pile of burnt bones, oval in plan, 16x4x6 cm.

Grave 104(105)

Sq.M-12, depth 84cm. Pile of burnt bones, oval in plan, 14x12x6cm.

Grave 105(106)

Sq.M-12, depth 85cm. Pile of burnt bones, oval in plan, 18x12x6cm.

Grave 106(107)

Sq.M-12, depth 40cm. Pile of burnt bones, oval in plan, 26x18x6cm.

Grave 107(108)

Sq.J-13, depth 31cm. Pile of burnt bones, oval in plan, 25x20x5cm.

Grave 108(109)

Sq.I/J-13, depth 38cm. Pile of burnt bones, oval in plan, 16x14x4cm.

Grave 109(110)

Sq.J-13, depth 48cm. Pile of burnt bones, oval in plan, 26x22x7cm. Among bones - two conic clay spin-wheels.