

Material evidence from Lithuanian *piliakalniai* – earthworks investigated by Ludwik Krzywicki in keeping of the State Archaeological Museum in Warsaw*

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Ludwik Krzywicki, born in Plock, Poland, in 1859, was one of the most educated and versatile intellectuals brought forth by European culture of the last century. *Sociology, ethnography, economy, statistics, psychology, history of material culture, anthropology, history of social movements – these are only some of the disciplines with which Krzywicki, educated in mathematics, addressed with great success* (Kowalik, 1965, p. 9). Simultaneously, he was a social activist and journalist of significant calibre. He completed his studies in mathematics in 1882 only to take up medical studies. In 1885 he went to Paris; there, under an assumed name, he devoted himself to research in the field of anthropology, archaeology and ethnology. He attended lectures at the School of Anthropology (École d'Anthropologie). These studies became a point of departure for later studies made by him during several decades in ethnology and history of culture (Kowalik, 1965, s. 12; Krzywicki, 1959, s. 444, 446). The importance of this personage for Lithuanian and Polish learning is evidenced by the fact that even in his lifetime, in 1939, two books about him were published. One, entitled 'Ludwik Krzywicki. Praca zbiorowa poświęcona życiu i twórczości' (Ludwik Krzywicki. Collection of papers on his life and output) included articles by several score authors, representatives of various disciplines of learning, who in enthusiastic manner reviewed the contribution made by Krzywicki

to each of their fields of study. The results of his excavation work were reviewed by his pupils, Jonas Puzinas and Jurgis Šaulys (Puzinas, 1938; Šaulys, 1938). Recently, an extensive article appeared in Polish archaeological literature written by Maria Magdalena Blombergowa who presented the path of Ludwik Krzywicki to archaeology, his research and his great contribution to developing this branch of learning (Blombergowa, 2007).

Krzywicki was hailed as an outstanding investigator of Lithuanian earthworks. He collected material on their subject over many years, searching for references in literature, gathering information from folk tradition, keeping track of information contained in the written sources, conducting linguistic studies. For many years he travelled in Samogitia and recorded the earthworks, verified the ones already known, looked for new ones, measured and photographed them, carried out investigations of sondage character. He set up a network of informants that included landowners, members of the clergy and even coachmen (Krzywicki, 1957, s. 361). Finally, after publishing in 1906 his work on ancient Samogitia ('Žmudz староżyтна'), in which he summed up his earlier studies of earthworks, he decided to carry out excavations on a wider scale. Starting from 1908 until 1914 he investigated a whole series of Lithuanian earthworks (Puzinas, 1938, s. 136), paying special attention to the details of their buildup, layout of their stone constructions, the development of culture deposit. Aware of the importance of these special archaeological sites, he selected for excavation sites threatened with destruction, and those which had already suffered much from destruction; he understood that digging without plan can result in great losses to learning. Because of this, he openly and firmly spoke

* An expanded version of the present article, complemented by a comprehensive catalogue of finds deriving from the research of Ludwik Krzywicki will be included in the book *Bałtowie i ich sąsiedzi. Marian Kaczyński in memoriam, Seminarium Bałtyjskie, volume II*, now pending print.

out against amateur researchers who carried out their destructive activity only to secure attractive artefacts. He compared the earthworks to the most valuable of monuments, and referred to them as masterpieces of architecture. He wrote that if some of the earthworks had been situated in Germany or Switzerland, they would have been visited by hosts of tourists, would have had numerous monographs, and the monuments themselves would have enjoyed a reputation comparable to the megaliths of Carnac or Stonehenge (Krzywicki, 1906, s. 45).

The First World War interrupted archaeological investigations of Ludwik Krzywicki in Lithuania, but not his studies of settlement (Šaulys, 1938, s. 190). Even so, he was did not complete many of his studies. He only published a number of reports from excavation work and a review of these studies in 1928, under the title 'Pilkalnis na Litwie' (Pilkalnis in Lithuania). His analyses, despite many gaps, contain detailed descriptions of the investigated layers and of archaeological features discovered, their plans, including the record of the thickness of the culture deposit, lists of artefacts, and plates with photographs of the most interesting finds. Krzywicki was more than just a discriminating observer, who traced the development of individual culture layers, he was also a precursor of experimental archaeology; when investigating Góra Derbucka (present Darbutai, r. Raseiniai) he hurled rocks to see if they might have been used as projectiles, seeking an explanation for their great concentration inside the earthwork (Krzywicki, 1913, s. 20).

The material from the research of Ludwik Krzywicki became scattered. Their decided majority is now in keeping of Lithuanian museums, in Vilnius and Kaunas; also in Petersburg, in the Hermitage. Only a very small part is held by the State Archaeological Museum in Warsaw, and not all of them have information on their provenance. We know that he had been in correspondence with Erazm Majewski, founder of the Archaeological Museum in Warsaw, but there is no evidence that their letters referred to archaeological artefacts. In the Documentations Department of the State Archaeological Museum in Warsaw there is document informing that in October 1921 9 cases and 1 basket with the material from archaeological investigations of Ludwik Krzywicki were delivered, from Museum of Industry and Agriculture (Krajewska, 2008, s. 78).

What is known for certain is that during the First World War animal bone remains originating from earthworks investigated by Ludwik Krzywicki went through ups and downs. In a report from 1936, an archaeozoologist who studied them, noted that next to material from specific sites, he had received large samples of animal bone marked only as 'Lithuanian earthworks, question mark', 'Lithuanian earthworks' and 'material from unknown localities' (Sagan, 1936, s. 176, 177).

In the State Archaeological Museum in Warsaw there are three sets of finds which originate from research of Ludwik Krzywicki: from the earthwork at Dukszty (at present, Dūkšteliai, Ignalinos r.), from the earthwork at Petraszuny (at present, Petrešiūnai, Rokiškio r.) and from a number of undetermined earthworks.

The earthwork at Dukszty (LPA, 2005, vol. 1, p. 152–153), oval in shape, approximately 25' by 30 m, according to Ludwik Krzywicki, was different even in its appearance from many others, as it had no walls or ring ditches. He investigated the earthwork archaeologically in 1909 and this was the first earthwork which he excavated on a wider scale (Krzywicki, 1914a, s. 13–18). Krzywicki was fully aware that he lacked experience in conducting this sort of research. In a publication devoted to the earthwork at Dukszty he admitted that he had not paid sufficient attention to structures built of small boulders, and he realised this only the following year, when investigating the earthwork at Petraszuny (Krzywicki, 1914a, s. 14). The excavation method used by Krzywicki, which involved the digging of trial trenches across the earthwork, from the perspective of later observations, proved to be incorrect, because it exposed the internal structures of the earthwork only to a limited extent.

In the eastern part of the inner area of the earthwork Krzywicki identified a hollow rectangular feature, measuring 12.5 by 6 m, at the bottom of which he found three concentrations of solidly packed clay, with some traces of burning (Krzywicki, 1914a, s. 15, fig. 2). The pit contained a great number of animal bone and pottery fragments. Also present were bone artefacts, whereas the remaining part of the earthwork internal area was found to contain no archaeological objects and a culture deposit of only a slight thickness. Among 15 objects made of bone there were projectile points, chisels, awls and fragments of worked bone. Stone tools included

axe-heads and diverse stones with traces of working. Other finds included a clay bead and 40 fragments of fired clay, triangular in section (Krzywicki, 1914a, s. 16, 17, plate IV). Ludwik Krzywicki interpreted these as daub and fragments of clay which was plastered over the stones of the hearths. Perhaps some of these were actually fragments of casting moulds, which escaped his notice, and the pit could be associated with bronze casting. Publishing the results of this investigation in 1914, in volume XXII of 'Pamiętnik Fizjograficzny' (Physiographic diary), Ludwik Krzywicki concluded that features within the earthwork included an pit hut and hearths lined with clay, and the burnt layer indicates that the site continued in use for a very long period (Krzywicki, 1914a, s. 18).

In the Department of Balt Archaeology of the State Archaeological Museum we have a small collection of finds from research made by Ludwik Krzywicki at Dukszty. This material includes two fragments of clay casting moulds (plate 1:4, 5), most probably used for making neck-rings, and 37 fragments of hand-built ceramics, which include 14 rim sherds from small bag-like vessels (plate 1:1–3). Approximately 70 % of these fragments are with a stroked ornament, which in most of them appears on both sides (plate 1:1, 2). This pottery – the form of the rim and the manner of ornamentation – indicates that we have to do with material from the Early Iron Age. The above dating is supported also by the fragments of two casting moulds. The lost-wax method of casting in disposable clay moulds was a common method of making bronze objects during the 1st millennium BC. Finds of casting forms for neck-rings are considered typical for Balt earthworks and settlements of the Early Iron Age (Дайга, 1960, s. 79). Fragments of casting moulds, similar to those from the earthwork at Dukszty, are known from many other settlements discovered on ancient Balt territory, for example, from a fortified settlement of West Balt Barrow Culture, dated to the Early Iron Age, at Tarławki, district Węgorzewo (Waluś, 1975, s. 200, fig. 2; Purowski, 2008, s. 348, 352, fig. 13:1–10) or from the settlement at Żubronajcie in Suwałki region, where in dwelling 1, dated to the Early Iron Age, to a period corresponding to the first phases of the West Balt Barrow Culture, several dozen fragments of clay lost-wax casting moulds were found, used for production of bracelets and neck-rings (Szymański, 1998,

s. 120, 128, plate 2:1–6, 11, 12). Fragments of comparable casting forms for neck-ring production are known also from Latvia, for example, from the fortified settlement at Kivutkalns, raj. Rīga, dated to the 1st millennium BC, which was a major centre of bronze production on the lower Daugava River (Graudonis, 1989, lpp. 44, 45, plate XXXV, 5).

The next group of artefacts held by the Warsaw Museum associated with Ludwik Krzywicki originates from Petraszuny (LPA, 2005, vol. II, p. 352–353). Krzywicki received the first news of the earthwork at Petraszuny as well as a number of finds from that site in 1909 (Krzywicki 1914b, p. 6). The earthwork was so seriously deteriorated that it appeared to be a natural hill. The local inhabitants had been extracting gravel in its area, its slopes had been ploughed over (Krzywicki, 1914b, s. 4, 5). Oval in shape, it was 55 by 35 m. In the summer of 1909 Krzywicki cut a trial trench inside the earthwork exposing a culture deposit of considerable depth which was found to contain a great quantity of ceramics and bone finds. In the second half of August 1910 he continued the investigation and this time he uncovered the entire area inside the earthwork. He found no features at its centre, and the small body of finds included only pottery fragments, a stone axe-head and a few bone finds. Numerous stone structures, a culture deposit of substantial thickness and a much greater quantity of finds were discovered on the outer periphery of the inner area of the earthwork (Krzywicki, 1914b, s. 10–14). Among them were fragments of vessels of different sizes, most of them stroked, stone axe-heads, flint tools, whetstones made of sandstone, clay spindle-whorls, and, above all – bone tools. Finds included also 19 iron objects, among them, two awls, a curved knife, fishhook and a handful of bronze objects – fragment of a wire, a spiral and a pin (Krzywicki, 1914b, s. 15–22). Ludwik Krzywicki published the results of his investigation of the earthwork at Petraszuny in 1914 in 'Rocznik Towarzystwa Przyjaciół Nauk w Wilnie' (Yearbook of the Wilno Friends of Sciences Society). Petras Tarasenska reports that the earthwork at Petraszuny is dated by its stone and bone finds to the 1st millennium BC, by the iron finds – to the first centuries of our era (Tarasenska, 1956, p. 22, 23).

The Department of Balt Archaeology of the Warsaw Museum also has in its keeping ceramic finds

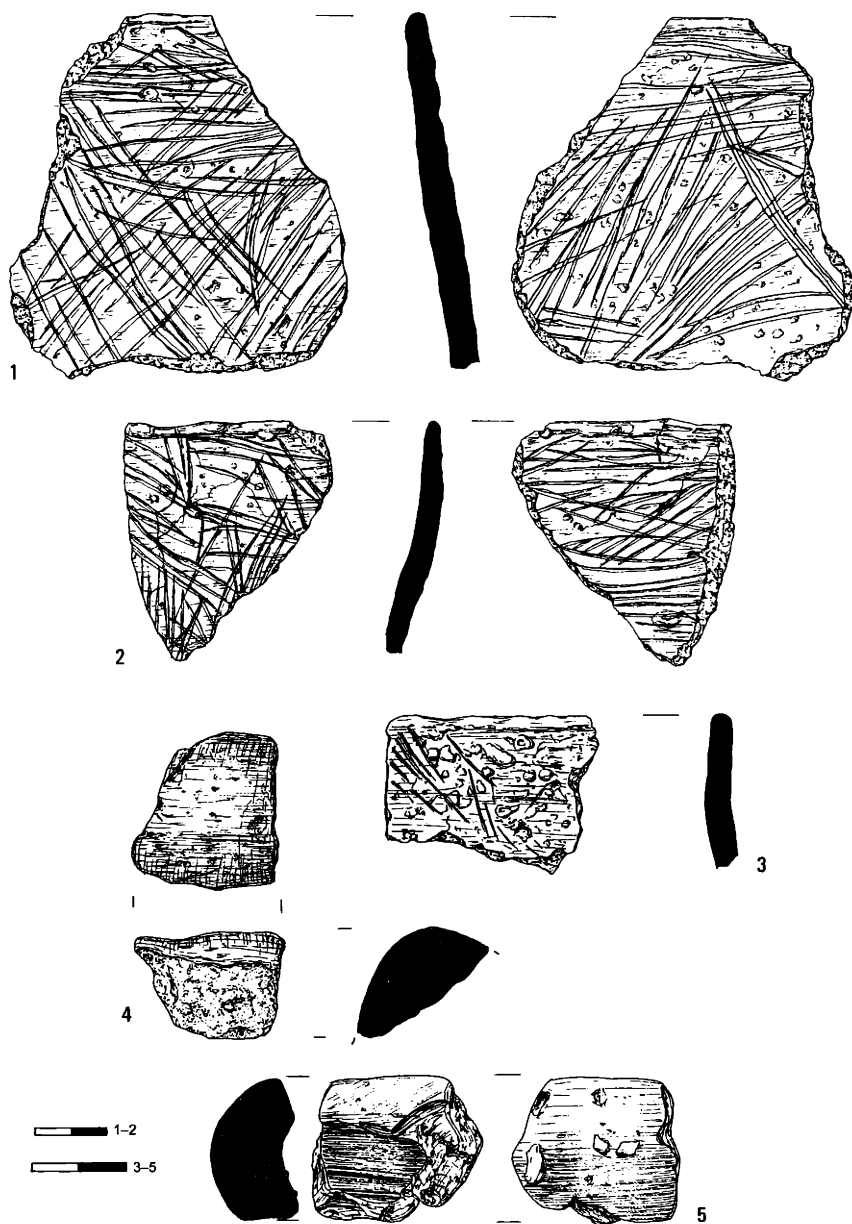


Plate 1: earthwork at Dukszty (at present, Dūkštėliai, r. Ignalina): 1-3 – fragments of hand-built ceramics – rim sherds from bag-like vessels; 4, 5 – fragments of clay casting moulds (drawn by A. Potoczny).

1 pav. Radiniai iš Dūkštų (Ignalinos r.): 1-3 – lipdytinės keramikos fragmentai – silpnai profiliuotų pakraštėlių fragmentai; 4, 5 – molinių liejimo formų fragmentai (pieš. A. Potoczny)

from the research made by Ludwik Krzywicki at Petraszuny. This material includes 33 fragments of pottery with a stroked surface, among them, 15 small rim sherds (plate 2) and 3 upper body sherds from bag-like vessels (plate 3) which can be dated to the Early Iron Age.

In the same department we also have a set of more than 60 objects, most of them iron, dated to the Early Medieval period, with a label – ‘Petraszuny’ These are the following materials:

iron padlock decorated with copper or bronze foil (plate: 4:1). An identical padlock was discovered while investigating at the foot of an earthwork at Šeimyniškiškiai, r. Anykščiai, together with materials dated to the 13th–14th c. (Zabiela, 2002, p. 48, fig. 9:1);

iron key with an ornament of horizontal grooves (plate 4:2). A similar key occurred in grave no. 361 dated to the 11th–12th c. in a cemetery at Laiviai, r. Kretinga (Gintautaitė–Butėnienė, Butėnas, 2002, p. 58, fig. 53:1);

iron key fashioned from an iron bar (plate 4:3). An analogous key originates from a cemetery in the historical centre at Trakai, grave 2 (Trakai, Vytauto g. 82) and is dated to the 15th c. (Vailionis, 2006, p. 220, 277, fig. XLVII, 2). A similar specimen is known from Kernavė, Lower Town, from the 13th–14th c. (Kernavė – litewska Troja, 2002, cat. 348, s. 159);

iron three-part sword pommel terminal, type Z, of Vytautas Kazakevičius (plate 4:4). Similar swords, dated from c. 950 until 1200 AD, are recorded mostly in the area of Northern Europe, and are noted with special frequency in the Baltic Sea region (Kazakevičius, 1996, p. 74–78);

2 iron scabbard mounts (plate 4:5, 6);

bronze zoomorphic terminal-head of a horse-shoe brooch (plate 4:7). This find has an analogy in the head of a silver brooch from a hoard from Stakliškės, r. Prienai, dated to the 13th–14th c. (Vaitkunskienė, 1981, p. 32, plate XVII; Prehistoric Lithuania, 2000, p. 105);

an iron rod (plate 4:8), fragment of an iron sheet with a square-shaped hole and 2 iron rings, presumably parts of a horse-bit with projections, type I of A. N. Kirpičnikov (typology of Ruthenian horse-bits – Кирпичников, 1973, c. 12–15, fig. 4) and type

OL of M. Ørsnes (typology of central and northern European horse-bits – Ørsnes, 1993, p. 264, 267, fig. 53b). In Lithuania horse-bits of this type are dated to the 10th–11th c. (Kuncienė, 1973, p. 102);

2 iron arrowheads with a lozenge-sectioned blade, with tang (plate 4:9, 10);

iron tip of a cross-bow bolt with a lozenge-sectioned blade, without tang (plate 4:11);

2 iron nails (plate 5:1, 2);

large iron trolling spoon (plate 5:4);

2 complete and 7 fragmented iron fittings (plate 5:5);

3 fragments of iron staples (plate 5:6, 9);

a rectangular fragment of iron sheet, with a prominent rib on one of its faces (plate 5:7);

1 complete and 20 iron knife fragments (plate 5:8);

2 fragments of rectangular iron fire-flints (plate 5:10, 11). Similar fire-flints start to appear in most early medieval sites around AD 1000. In a cemetery at Cedynia similar fire-flints were discovered in two graves, no. 63 and 145 (Porzeziński, 2006, p. 170, 171, plates XLIIIF, XLIXb);

fragment of, probably, a pin from a buckle or brooch;

iron fragment of, probably, a spur;

2 fragments of, probably, a curved knife or razor;

6 fragments of different iron objects (plate 5:3);

isolated fragments of vessels of Early Iron Age, Roman Period, Early Medieval Period and Modern age;

a bone awl.

In the report from the investigation at Petraszuny published by Krzywicki none of these objects are mentioned so – most probably – they did not originate at Petraszuny at all. None of these striking finds, as for example, the sword pommel terminal, the finely preserved keys, the padlock, or scabbard mounts, are mentioned in any of Krzywicki’s publications. Presumably, these materials do not come from his research at all.

In the collections of the Department of Balt Archaeology we have a further 21 boxes of ceramic fragments, described as containing material from Lithuania-Samogitia, earthworks, research of Ludwik Krzywicki. This set includes 2723 pottery fragments, of which not less than 60 % are body sherds, and rim sherds which make up less than 30%. It is not clear

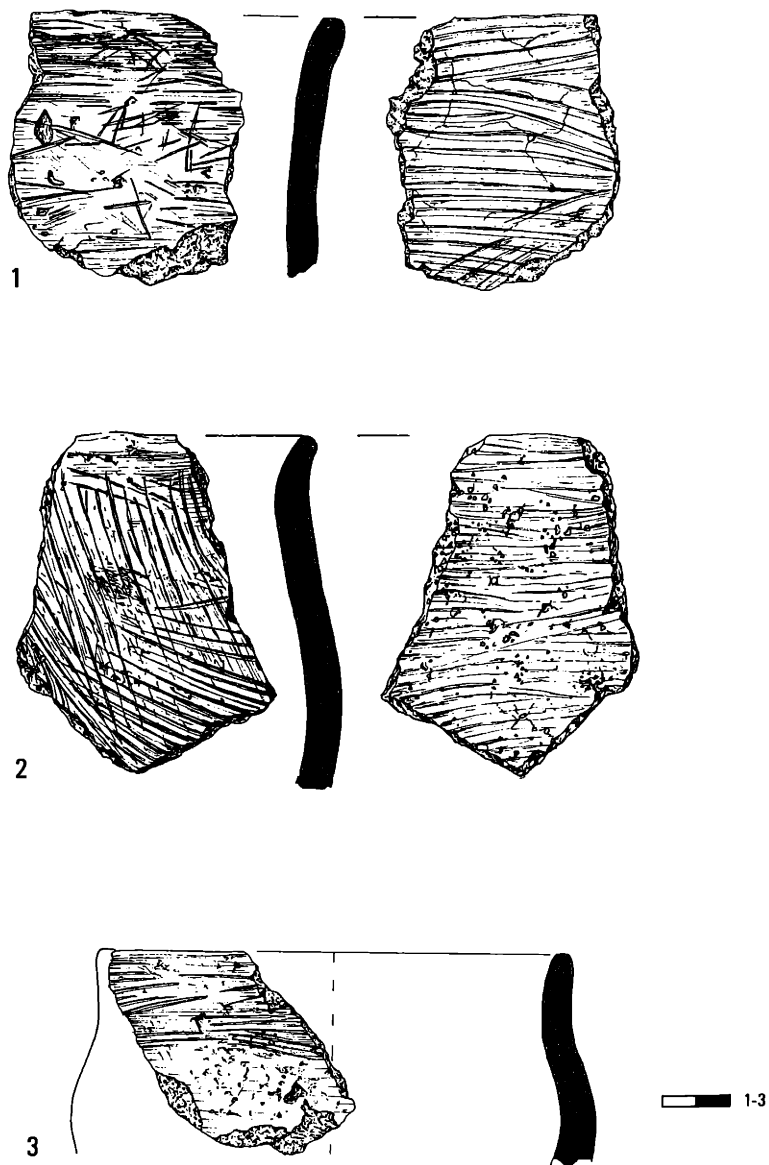


Plate 2: earthwork at Petraszuny (at present, Petrešiūnai, r. Rokiškis): 1–3 – rim sherds (drawn by A. Potoczny).

2 pav. Radiniai iš Petrešiūnų (Rokiškio r.): 1–3 – pakraštėlių fragmentai

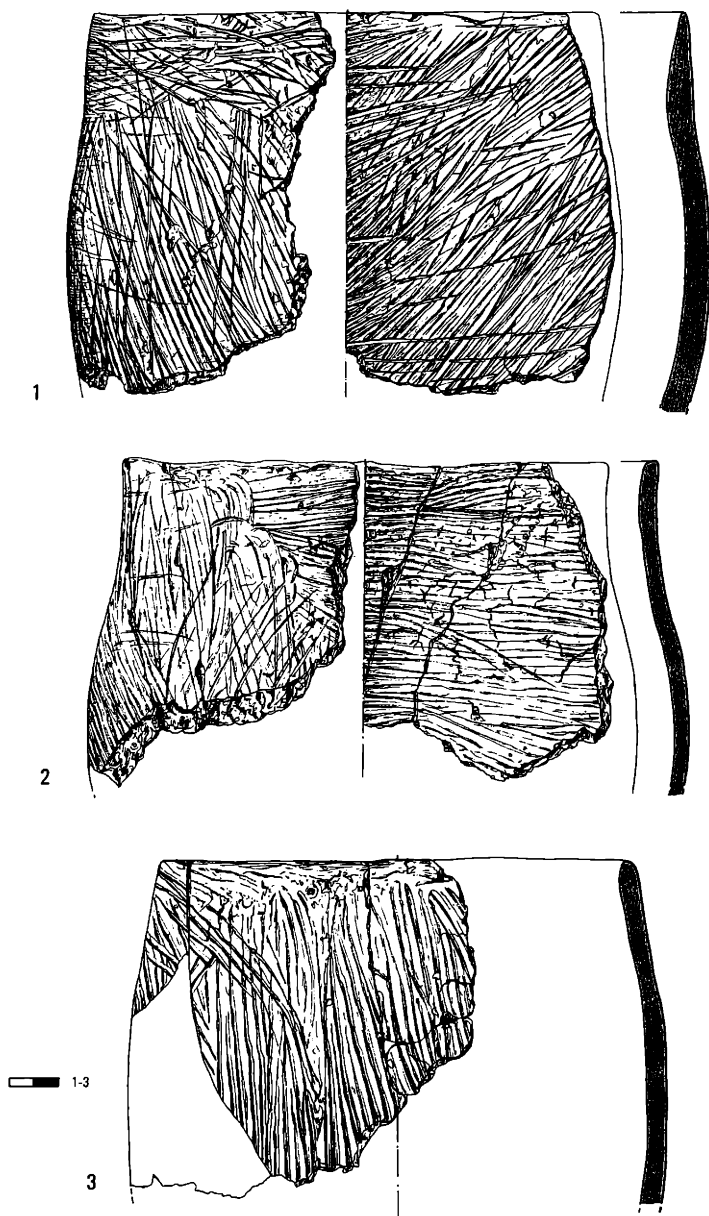


Plate 3: earthwork at Petraszuny (at present, Petrešiūnai, r. Rokiškis):
1-3 – upper body sherds from bag-like vessels (drawn by A. Potoczny).

3 pav. Radiniai iš Petrešiūnų (Rokiškio r.):

1-3 – viršutinės silpnai profiliuotų puodų dalys (pieš. A. Potoczny)

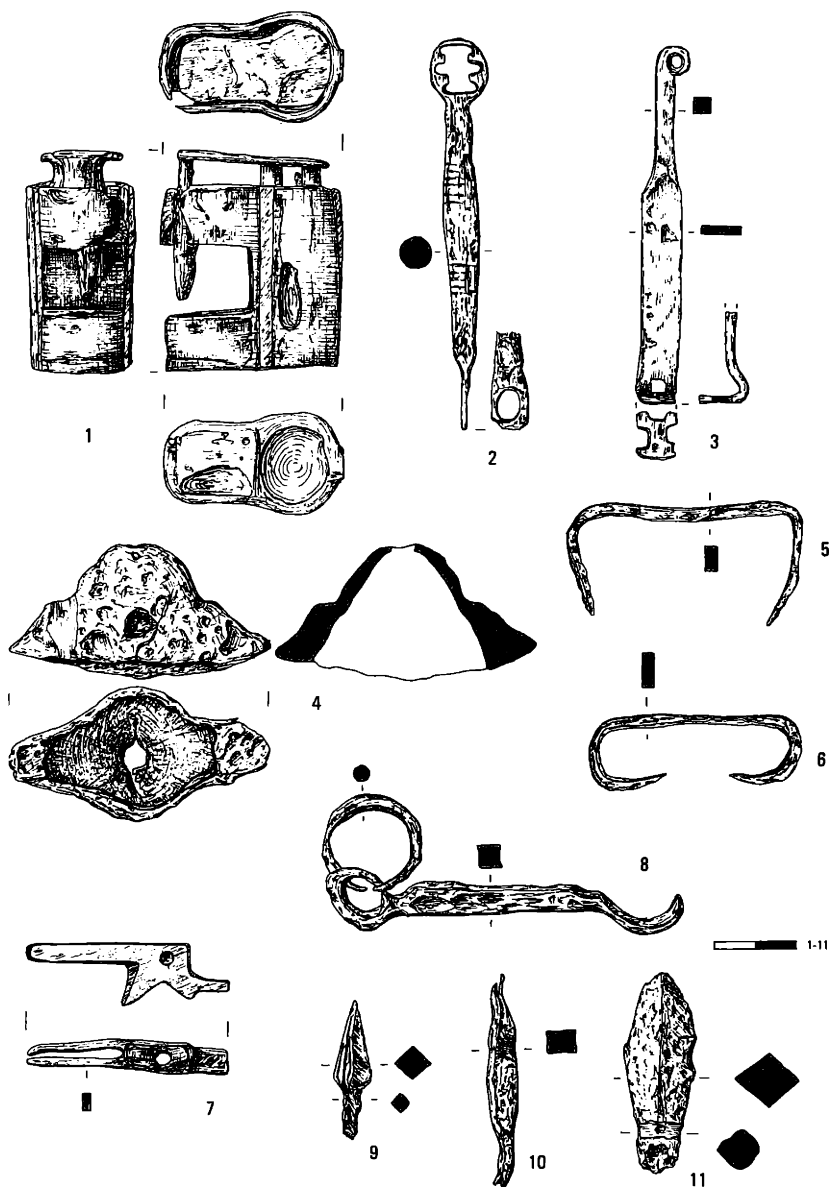


Plate 4: metal objects with a label – ‘Petraszuny’: 1 – iron padlock; 2, 3 – iron keys; 4 – iron three-part sword pommel; 5, 6 – iron scabbard mounts; 7 – bronze zoomorphic terminal-head of a horseshoe brooch; 8 – an iron rod – part of a horse-bit; 9, 10 – iron arrowheads; 11 – iron tip of a cross-bow bolt (drawn by A. Potoczny).

4 pav. Metaliniai dirbiniai su užrašu „Petrašūnai“: 1 – geležinė cilindrinė spyna; 2, 3 – geležiniai raktai; 4 – geležinė kalavijo buoželė; 5, 6 – geležiniai makštų apkalai; 7 – bronzinės zoomorfinės pasaginės segės galvutė; 8 – žąslų fragmentas; 9, 10 – geležiniai strėlių antgaliai; 11 – geležinis arbaletinis strėlės antgalis (pieš. A. Potoczny)

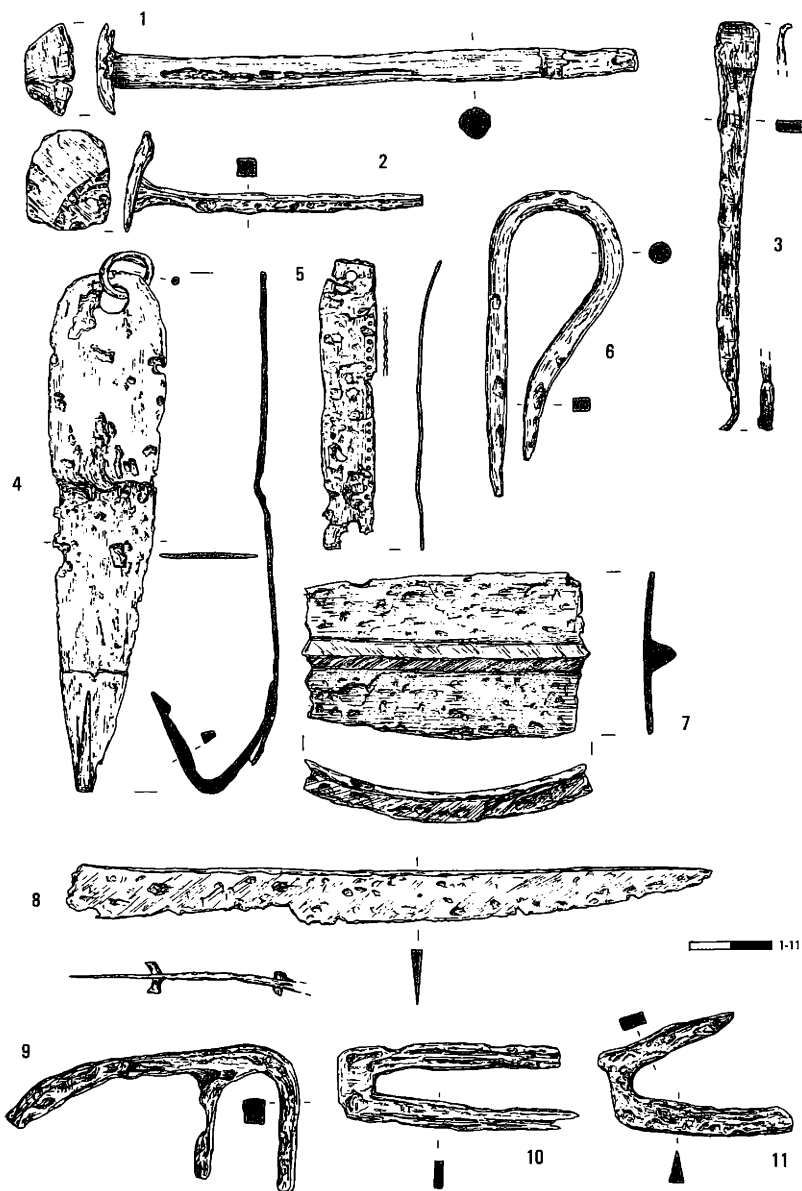


Plate 5: metal objects with a label – ‘Petrasuny’: 1, 2 – iron nails; 3 – fragment of iron object; 4 – iron troling spoon; 5 – iron fitting; 6, 9 – fragments of iron staples; 7 – fragment of iron sheet; 8 – iron knife; 10, 11 – fragments of rectangular iron fire-flints (drawn by A. Potoczny).

5 pav. Metaliniai dirbiniai su užrašu „Petrašūnai“: 1, 2 – geležinės vinys; 3 – geležinio dirbinio fragmentas; 4 – geležinė žvejybos blizgė; 5 – geležinis apkaustas; 6, 9 – geležinės kilpos; 7 – geležinio lakšto fragmentas; 8 – geležinis peilis; 10, 11 – ovalių geležinių skiltuvų fragmentai (pieš. A. Potoczny)

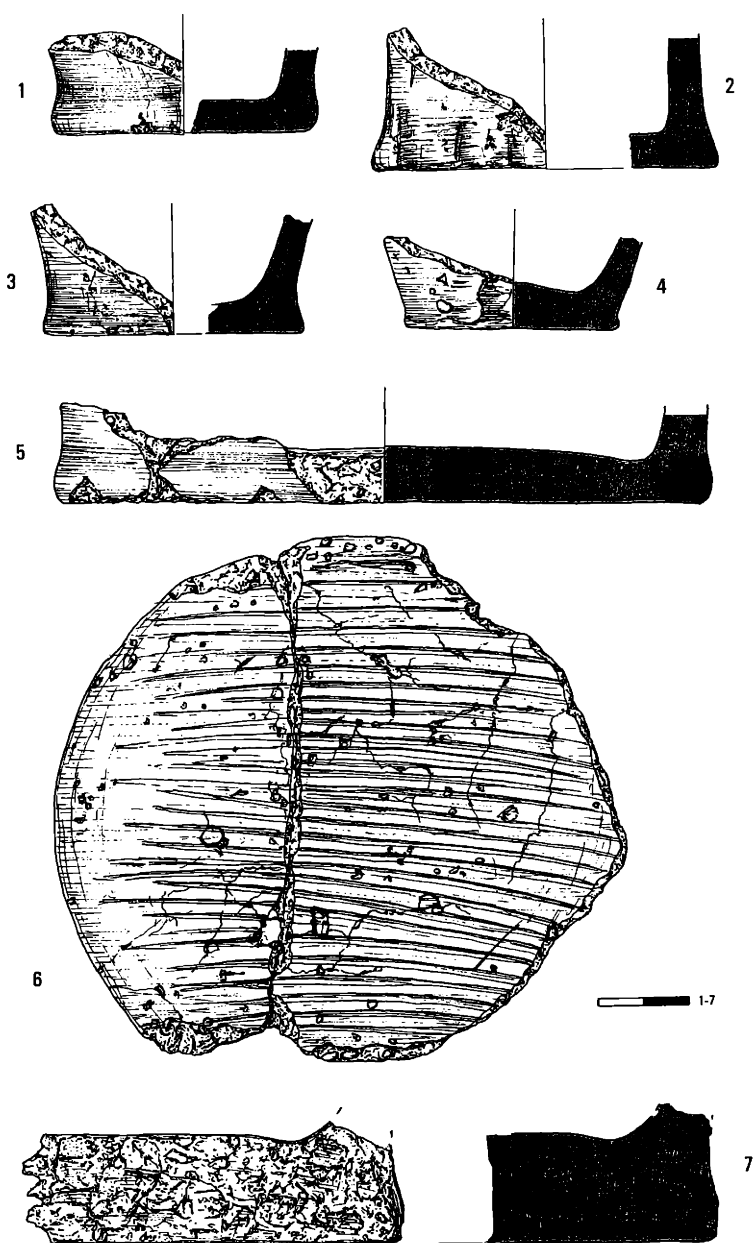


Plate 6: Lithuanian-Samogitia earthworks: 1-7 – base sherds (drawn by A. Potoczny).

6 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1 – 7 – puodų dugnai (pieš. A. Potoczny)

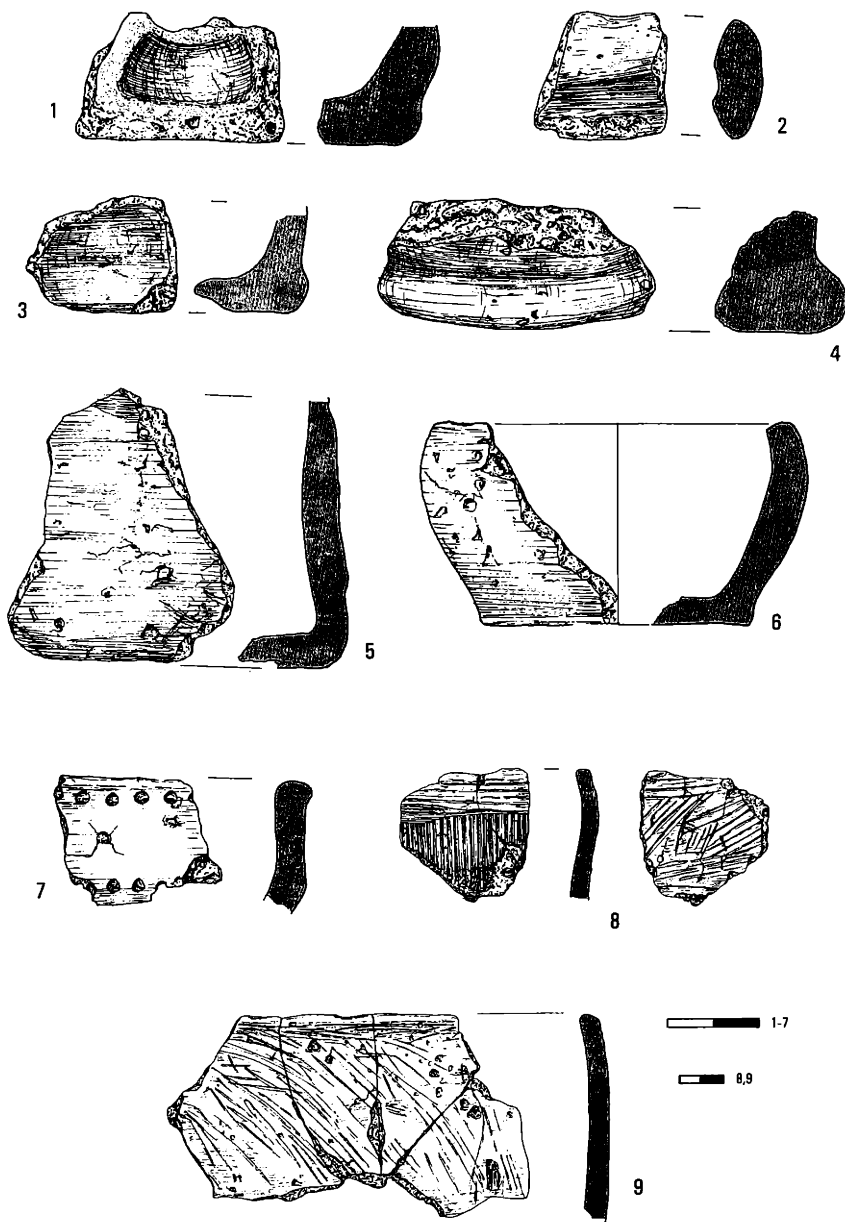


Plate 7: Lithuania-Samogitia earthworks: 1, 3 – fragments of miniature vessels – most probably, clay crucibles; 2 – fragment of a clay casting mould; 4 – fragment of a clay loom-weight; 5–9 – ceramic fragments (drawn by A. Potoczny).

7 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1, 3 – miniatiūrinių indų fragmentai, greičiausiai molinių tiglių; 2 – molinių liejimo formų fragmentai; 4 – audimo staklių svarelis fragmentas; 5–9 – keramikos fragmentai (pieš. A. Potoczny)

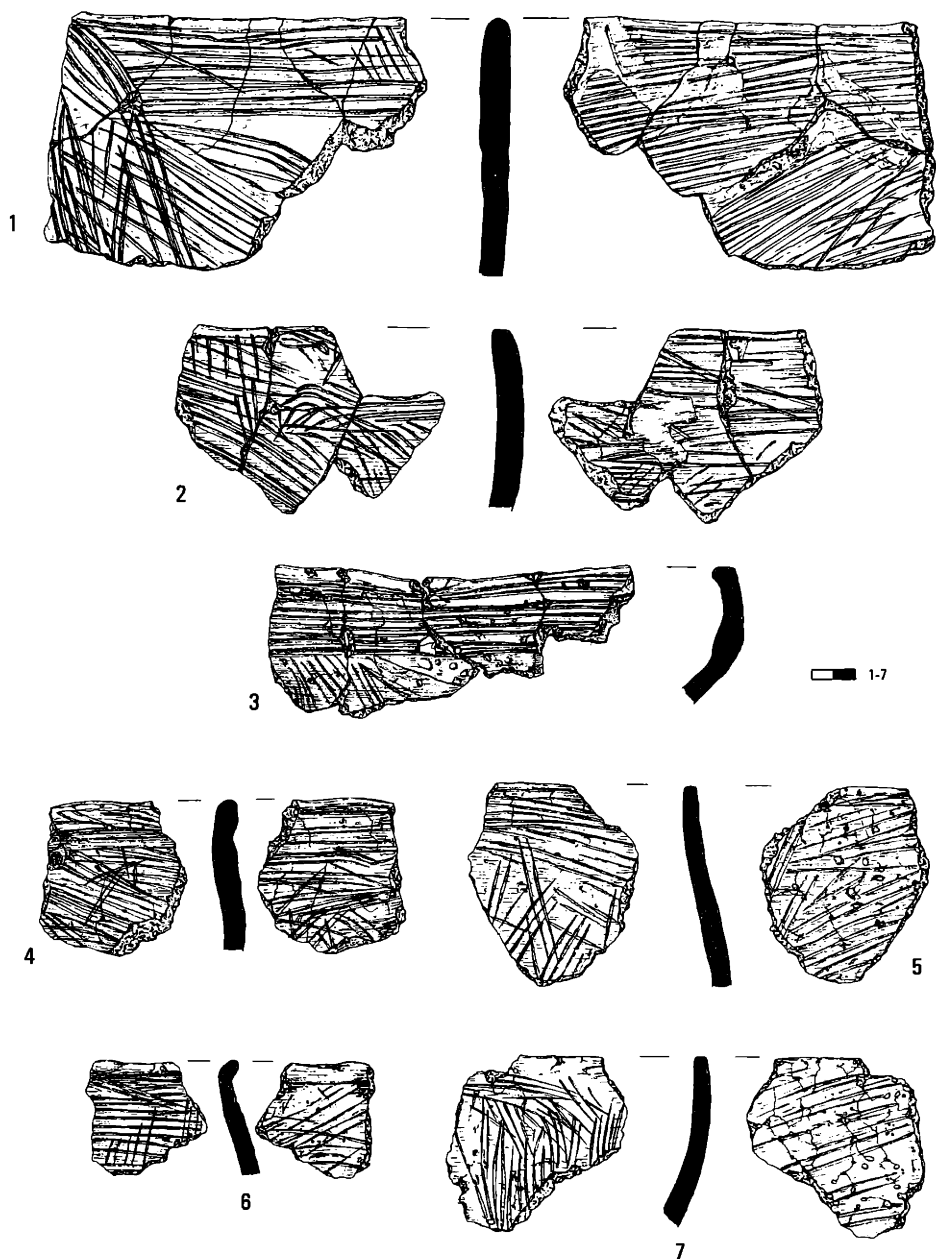


Plate 8: Lithuania-Samogitia earthenworks: 1-7 – rims of stroked ceramics (drawn by A. Potoczny).

8 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1-7 – brūkšniuotosios keramikos pakraščių fragmentai (pieš. A. Potoczny)

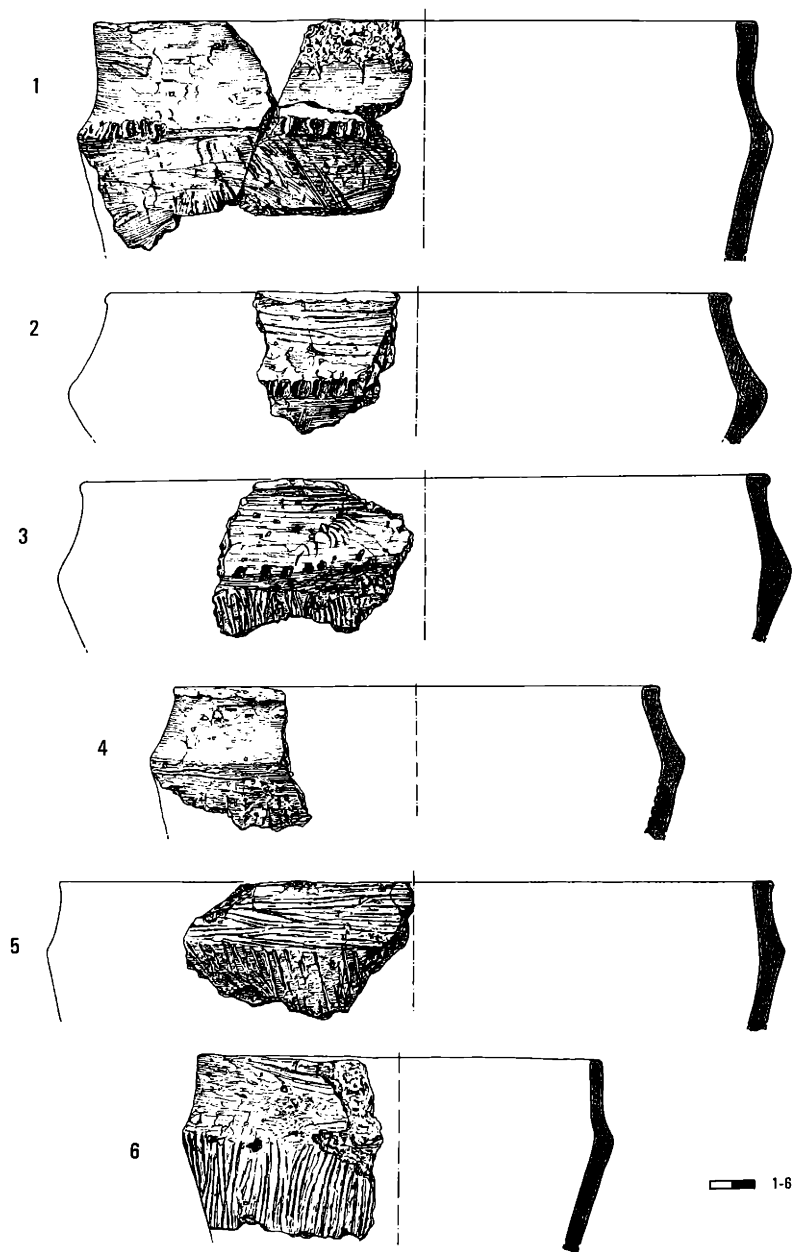


Plate 9: Lithuania-Samogitia earthworks: 1–6 – rims of stroked ceramics (drawn by A. Potoczny).

9 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1–6 – briauninės formos brūkšniuotosios keramikos puodų pakraštėliai (pieš. A. Potoczny)

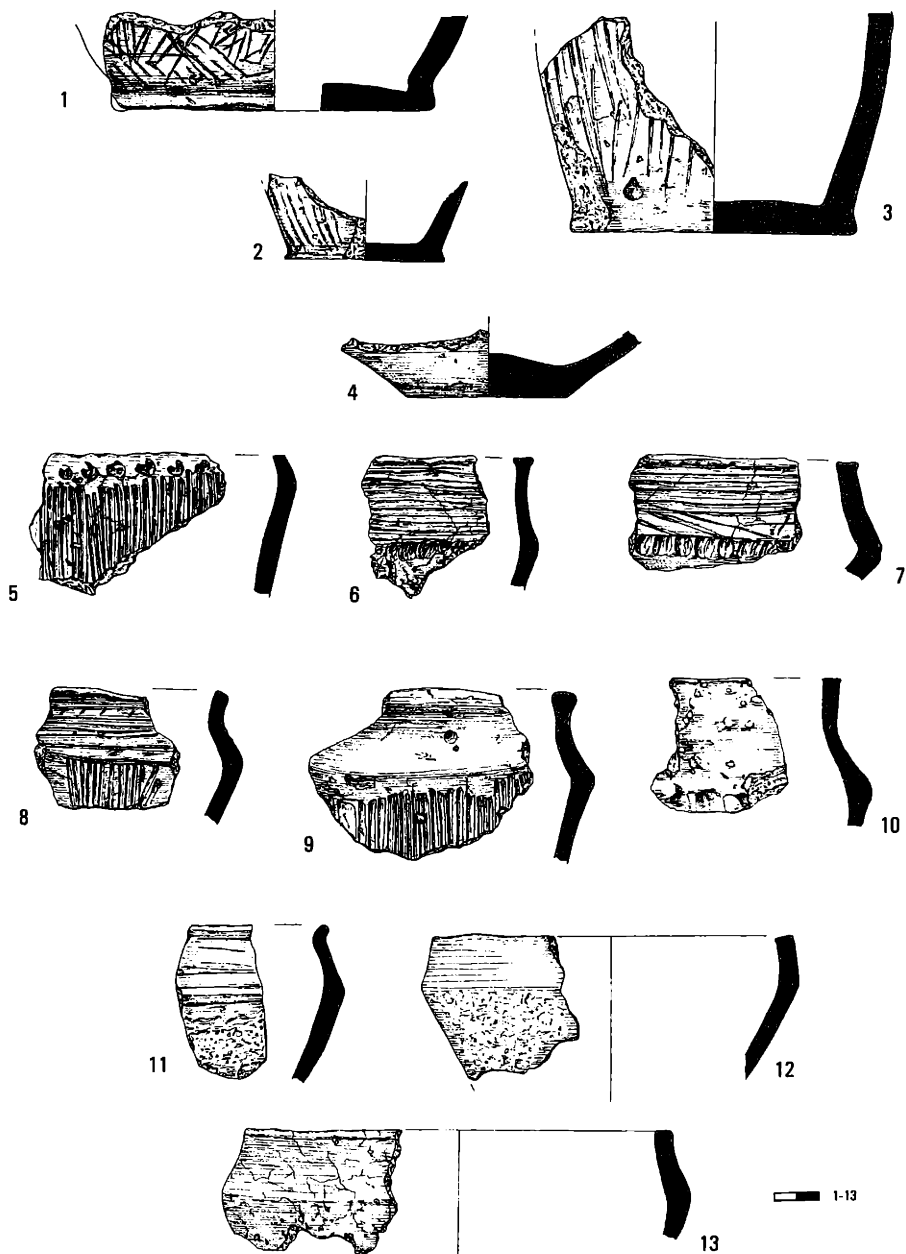


Plate 10: Lithuania-Samogitia earthenware: 1-4 – base sherds; 5-13 – rim sherds (drawn by A. Potoczny).
 10 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1-4 – puodų priedugniai; 5-13 – puodų pakraščėliai (pieš. A. Potoczny)

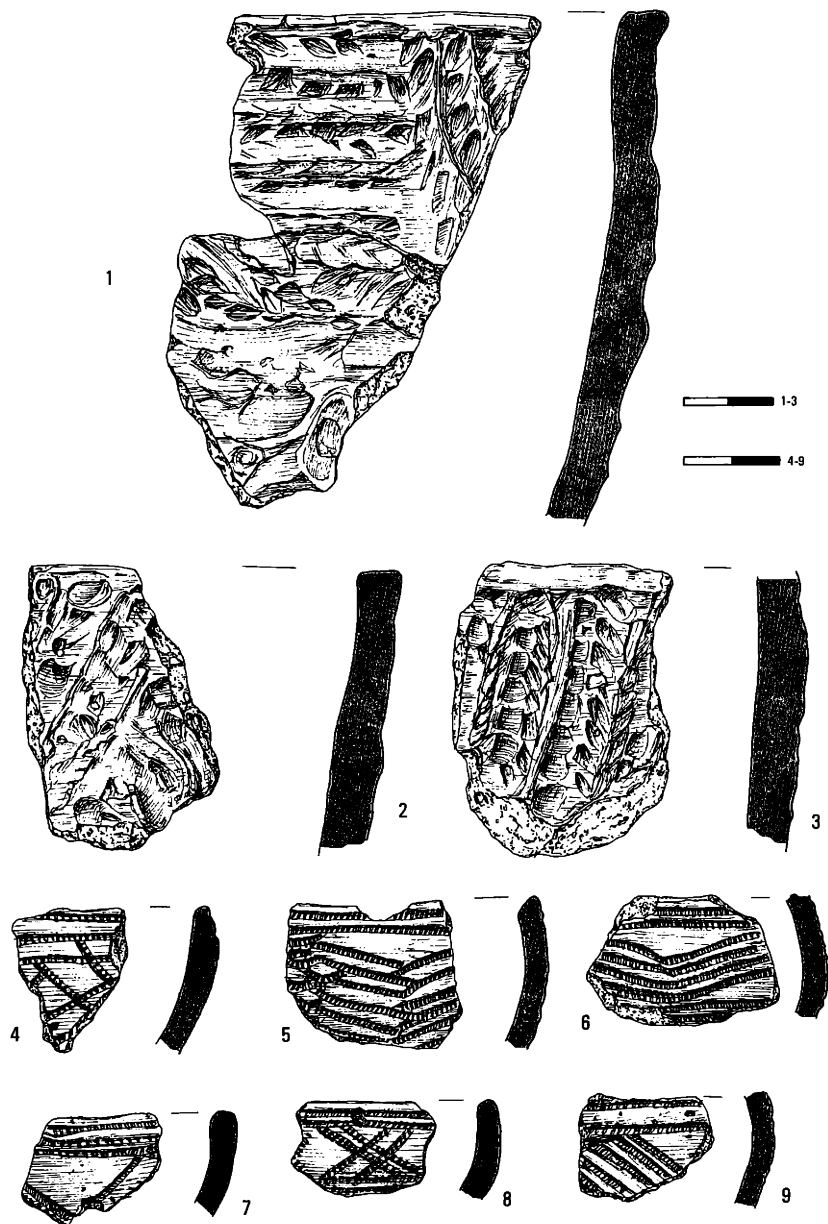


Plate 11: Lithuania-Samogitia earthworks: 1-3 – rim sherds ornamented with oblique and horizontal bands of pinching; 4-9 – ceramics decorated with roulette designs (drawn by A. Potoczny).

11 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1-3 – gnaibytinės keramikos puodų pakraštėliai; 4-9 – keramikos, puoštos ratelio įspaudais, fragmentai (pieš. A. Potoczny)

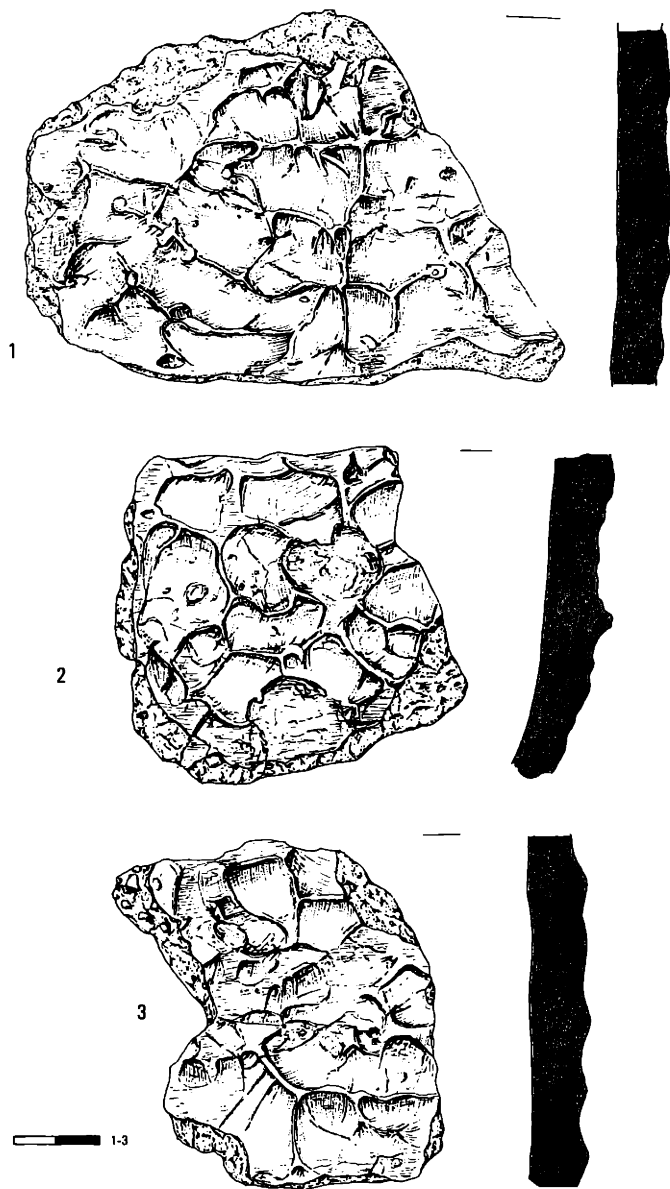


Plate 12: Lithuania-Samogitia earthworks: 1-3 – ceramics with a roughened surface (drawn by A. Potoczny).

12 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1-3 – grublėtosios keramikos fragmentai (pieš. A. Potoczny)

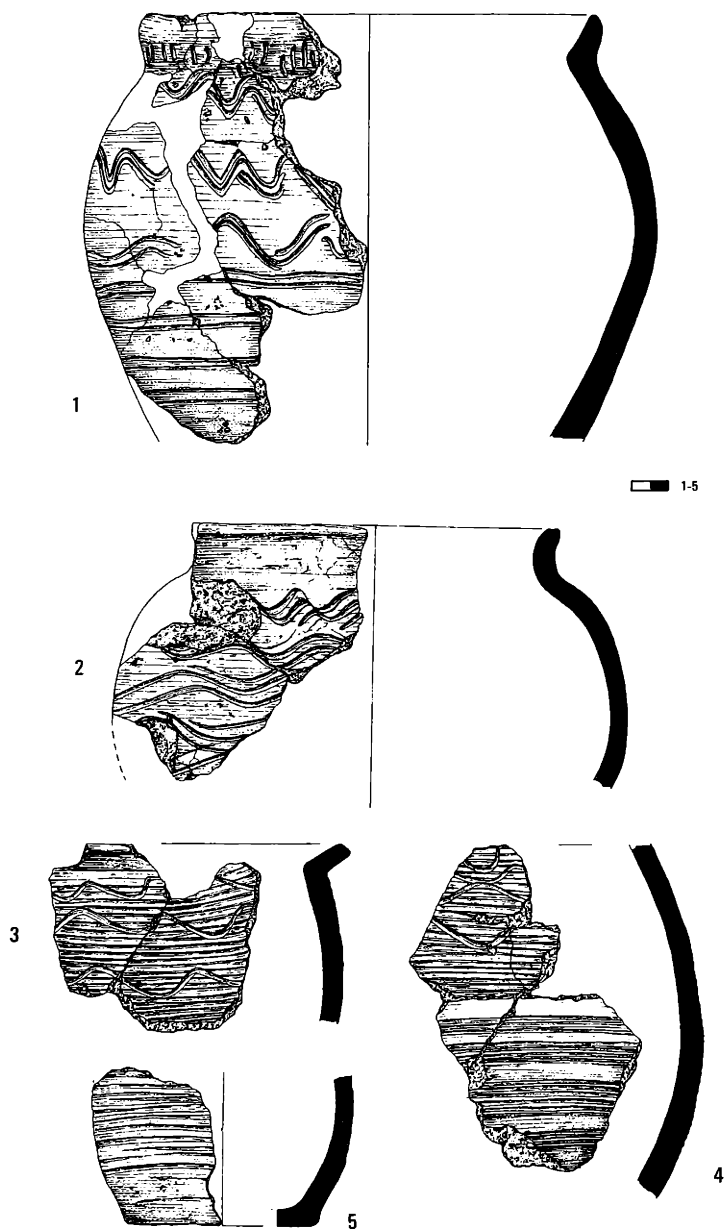


Plate 13: Lithuania-Samogitia earthworks: 1-5 – parts of the Early Medieval vessels ornamented with wavy linear designs and horizontal grooves (drawn by A. Potoczny).

13 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1-5 – ankstyvųjų viduramžių indų fragmentai, ornamentuoti bangele ir horizontaliomis linijomis (pieš. A. Potoczny)

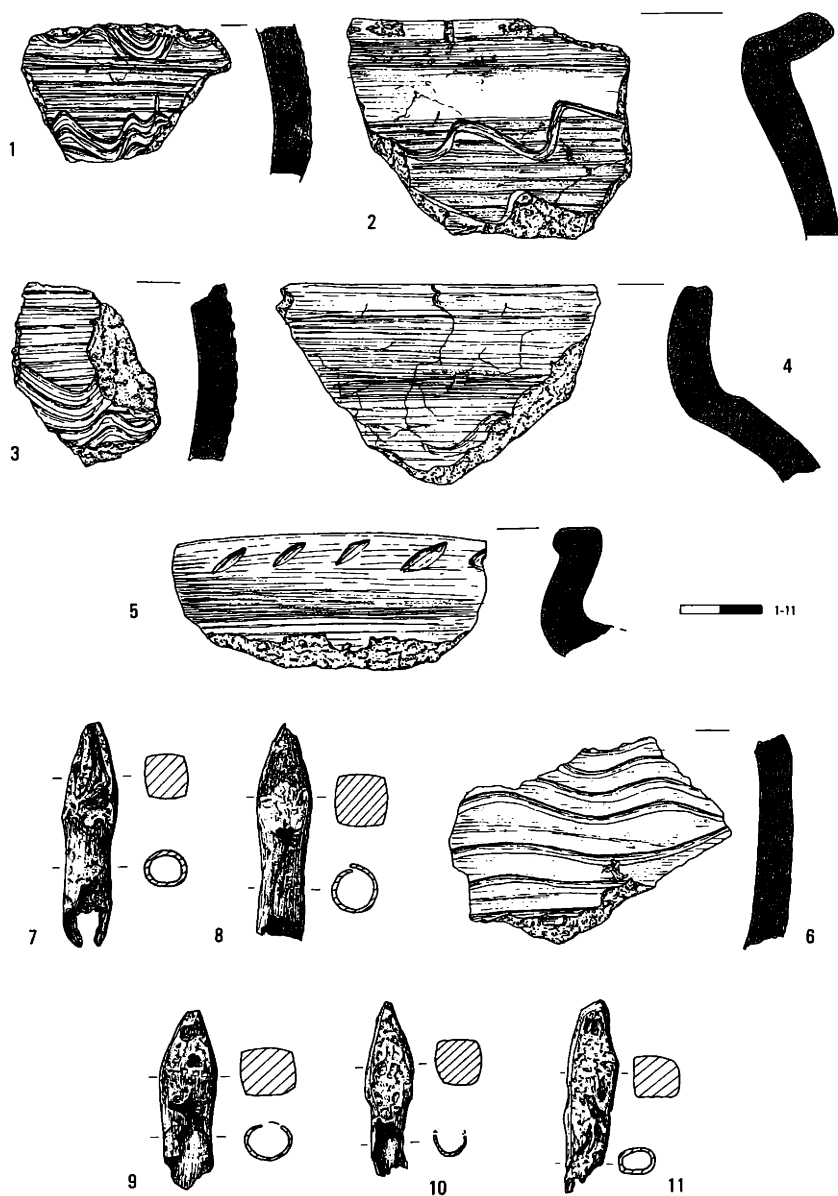


Plate 14: Lithuania-Samogitia earthworks: 1-6 – fragments of the Early Medieval pottery; 7-11 – iron cross-bow bolt heads (drawn by A. Potoczny).

14 pav. Dirbiniai iš Lietuvos – Žemaitijos: 1-6 – ankstyvųjų viduramžių keramikos fragmentai; 7-11 – geležiniai įmoviniai arbaletinių strėlių antgaliai (pieš. A. Potoczny)

when this material was packed in the cases in such a way that now some of them contain only base sherds (plate 6) or pottery of one specific type – with similar ornamentation or of similar dating. It may happen that fragments of a single vessel occur in several different boxes. The decided majority of this material (more than 60 %) are ceramics with a stroked surface, and a smaller quantity of sherds without ornament (24 %). A large proportion of stroked ceramics can be dated on the basis of surviving rims to Early Iron Age (plate 7:8, 9; 8:1–7), similarly as a fragment of a clay casting mould found among the pottery sherds, used in casting neck-rings (plate 7:2), 2 fragments of miniature vessels – most probably, clay crucibles (plate 7:1, 3) or a fragment of a clay loom-weight (plate 7:4). A small number of the stroked sherds which also are ornamented on their shoulder by pinching or pits (36 pieces), represent a later phase of the Stroked Pottery Culture, from the first half of the 1st millennium AD (plate 9; 10:5–10). Another case of similar dating are 2 fragments of black burnished pottery (plate 10:4, 11). The Roman Period and the Migrations Period are represented by pottery ornamented with oblique and horizontal bands of pinching (25 pieces, plate 11:1–3), pottery with a roughened surface (163 pieces, plate 12), and ceramics decorated with roulette designs (26 pieces, plate 11:4–9). Early Medieval pottery is also present, ornamented with wavy linear designs and horizontal grooves (45 pieces, plate 13; 14:1–6). Only in case of this group it was possible to reassemble larger parts of the vessels (plate 13:1, 2, 4), the rest of the ceramics were too fragmented. In one of the boxes

containing the pottery just described were found also 12 iron cross-bow bolt heads with a lozenge-sectioned blade and circular sleeve: 2 complete specimens, 5 with a fragmented sleeve and 5 missing the sleeve (plate 14:7–11). They all represent type I of A. Nadolski, dated from the 12th to early 14th c. (Nadolski, 1954, s. 65). Type I is subdivided further into variant 2, forms with a blade which passes into the socket dated to the period 13th–14th c. (Strzyż, 2006, s. 93). In the typology of Ruthenian materials similar cross-bow bolt heads were classified to type 3 and are dated to the 13th–15th c. (Медведев, 1966, с. 94).

To sum up the above overview of archaeological material originating from the research of Ludwik Krzywicki now held by the State Archaeological Museum in Warsaw we may say that it includes a highly interesting set of ceramics, representative for the material culture of Lithuania spanning Early Iron Age to the Early Medieval Period. It is only to be regretted that the decided majority of this material is now without provenance and as such its value is mainly of illustrative type. Without doubt, the most interesting set by far is that of more than 60 iron objects which in the past was associated incorrectly with the earthwork at Petraszuny. My sincere hope is that the continued search of the archives will help us determine the true place of origin of these finds and helps in resolving the question of whether this series originated from one location (an earthwork?) or it is a collection of objects discovered at a number of different archaeological sites.

Translated by Anna Kinecka

LITERATURE

Blomborgowa M. M., 2007. Ludwik Krzywicki bada pilkalinie. In: *Archaeologica Historia Polona*. Nr. 17. Toruń, p. 319–338.

Gintautaitė-Butėnienė E., Butėnas E., 2002. Laivių kapinynas. In: *Lietuvos archeologija*. Nr. 22, p. 9–198.

Graudonis J., 1989. Nocietinātās apmetnes Daugavas lejtecē. Rīga.

Kazakevičius V., 1996. *IX–XIII a. Baltų kalavijai*. Vilnius.

Kernavė – litewska Troja, 2002. Kernavė – litewska Troja. Katalog wystawy ze zbiorów Państwowego Muzeum-Rezerwatu Archeologii i Historii w Kernavė, Litwa. Warszawa.

Kowalik T., 1965. Krzywicki. Warszawa.

Krajewska M., 2008. Spuścizna Erazma Majewskiego w Pracowni Dokumentacji Naukowej Państwowego Muzeum

Archeologicznego w Warszawie. W 150. rocznicę urodzin Erazma Majewskiego (1858–1922). In: *Wiadomości Archeologiczne*. Nr. LX, s. 9–95.

Krzywicki L., 1906. Żmudź starożytna. Dawni Żmudźni i ich warownie. Warszawa.

Krzywicki L., 1913. Grodzisko Derbuckie na Żmudzi. In: *Pamiętnik Fizyograficzny*. Nr. XXI, s. 15–29, plates I–VI.

Krzywicki L., 1914a. Grodziska górno-litewskie. I Grodzisko w Dukaszach. II Grodzisko w Warańcach. In: *Pamiętnik Fizyograficzny*. Nr. XXII, s. 13–32, plates I–IV.

Krzywicki L., 1914b. Piłkalinia pod wsią Petraszunami. In: *Rocznik Towarzystwa Przyjaciół Nauk w Wilnie*. 1911–1914. Nr. 5. Wilno, s. 1–27.

Krzywicki L., 1957. Wspomnienia. Vol. I. Warszawa.

Krzywicki L., 1959. Wspomnienia. Vol. III. Warszawa.

Kuncienė O., 1973. Katkuškių pilkaliniai. In: *Lietuvos*

TSR Mokslų akademijos darbai, A serija. Nr. 4 (45), p. 91–106.

LPA, 2005. Lietuvos piliakalniai. Atlasas. Vol. I, II. Vilnius.

Nadolski A., 1954. Studia nad uzbrojeniem polskim w X, XI i XII wieku. In: *Acta Archaeologica Universitatis Lodziensis*. Nr. 3. Łódź.

Ørnsnes M., 1993. Zaumzeugfunde des 1.–8. Jahrh. nach Chr. in Mittel- und Nordeuropa. In: *Acta Archaeologica*. Nr. 64 (2), p. 183–292.

Porzeziński A., 2006. Wczesnośredniowieczne cmentarzysko szkieletowe na stanowisku 2a w Cedyni, województwo zachodniopomorskie. Szczecin.

Prehistoric Lithuania, 2000. *Prehistoric Lithuania. Archaeology exposition guide. National Museum of Lithuania*. Vilnius.

Purowski T., 2008. Wyniki badań wykopaliskowych osady obronnej w Tartawkach, pow. węgorszewski. In: *Wiadomości Archeologiczne*. Nr. LX, s. 335–360.

Puzinas J., 1938. Ludwik Krzywicki – badacz grodzisk litewskich. In: *Ludwik Krzywicki. Praca zbiorowa poświęcona życiu i twórczości*. Warszawa, s. 135–138.

Sagan L., 1936. Materiały osteologiczne z pilkalni żmudzkich. In: *Wiadomości Archeologiczne*. Nr. IV, s. 176–188.

Šaulys J., 1938. Ludwik Krzywicki – badacz pilkalni. In: *Ludwik Krzywicki. Praca zbiorowa poświęcona życiu i twórczości*. Warszawa, s. 185–191.

Strzyż P., 2006. Uzbrojenie we wczesnośredniowiecznej Małopolsce. In: *Acta Archaeologica Lodziensis*. Nr. 52, Łódź.

Szymański P., 1998. Żubronajcie – przyczynek do badań nad wczesnożelazną ceramiką Suwalszczyzny. In: *Ceramika zachodniobałtyjska od wczesnej epoki żelaza do początku ery nowożytnej. Materiały z konferencji – Białystok, 14–16 maja 1997*. Białystok, s. 119–137.

Tarasena P., 1956. Lietuvos piliakalniai. Vilnius.

Vailionis E., 2006. Žvalgomicieji tyrinėjamieji Trakuose, Vytauto g. 82. In: *Archeologiniai tyrinėjamieji Lietuvoje 2005 metais*. Vilnius, p. 219–222.

Vaitkunskienė L., 1981. Sidabras senovės Lietuvoje. Vilnius.

Waluš A., 1975. Sprawozdanie z badań osiedla obronnego w Tartawkach, powiat węgorszewski. In: *Rocznik Olsztyński*. Nr. XI, s. 197–203.

Zabiela G., 2002. Šeimyniškiųjų piliakalnis ir senojo kelio vieta. In: *Archeologiniai tyrinėjamieji Lietuvoje 2000 metais*. Vilnius, p. 47–49.

Дайга Й., 1960. К вопросу о литейных формах и литейном деле на территории Латвии (до XIII в.). In: *Советская археология*. № 3, с. 78–92.

Кирпичников Ф., 1973. Snarjzenie vsadnika i verchnogo konja na Rusi IX–XIII vv. In: *Археология СССР, Свод археологических источников EI–36*. Ленинград.

Медведев А., 1966. Ручное метательное оружие (лук и стрелы, самострел) VIII–XIV vv. In: *Археология СССР, Свод археологических источников EI–36*. Москва.

MEŽZIAGA IŠ LUDWIKO KRZYWICKIO TYRINĖTŲ LIETUVOS PILIAKALNIŲ, SAUGOMA VARŠUVOS VALSTYBINIAME ARCHEOLOGIJOS MUZIEJUJE

Grażyna Iwanowska

Santrauka

Varšuvos valstybiniame archeologijos muziejuje Baltų archeologijos skyriuje saugoma garsaus lenkų ekonomisto, politiko, sociologo, vieno iš Lenkijos sociologijos mokyklos kūrėjų Ludwiko Krzywickio (1859–1941) kasinėjimų medžiaga. Archeologija jis susidomėjo XX a. pradžioje, kai, 1900 m. atostogaudamas Žemaitijoje, atliko pirmuosius savo gyvenime archeologinius žvalgymus. Vėliau kelerių metų atostogas jis praleido kasinėdamas Lietuvoje. Jo kasinėjimų rezultatai iš dalies paskelbti Lietuvos prostorei skirtuose straipsniuose ir knygoje. Tyrinėdamas ilgus metus, Ludwikas Krzywickis tapo profesionaliu archeologu, ir daugelis jo pastebėjimų neprarado reikšmės ir mūsų dienomis. Už nuopelnus Lietuvos archeologijos mokslui Kauno Vytauto Didžiojo universitetas 1940 m. suteikė jam garbės daktaro laipsnį.

Varšuvos valstybinio archeologijos muziejaus Baltų archeologijos skyriuje saugomi neskelbti radiniai iš dviejų

Ludwiko Krzywickio tyrinėtų piliakalnių – Dūkštų (Ignalinos r.) ir Petrešiūnų (Rokiškio r.). Dūkštų medžiagoje yra dviejų molinių liejimo formų (1 pav.), greičiausiai naudotų gaminant antkakles, fragmentai, ir 37 lipdytinės keramikos fragmentai (1:1–3 pav.). Maždaug 70 % sudaro brūkšniuotoji keramika, kurioje šis ornamentas yra tiek vidinėje, tiek išorinėje pusėje (1: 1, 2 pav.). Šios keramikos pakraštelių profiliavimas ir ornamentavimo būdas rodo, kad tai yra ankstyvojo geležies amžiaus medžiaga. Anksčiau minėtas datavimas paremtas dviejų liejimo indų fragmentais.

Medžiagą iš Petrašiūnu tyrinėjimų sudaro 33 brūkšniuotosios keramikos fragmentai, iš kurių 15 yra pakraštelių fragmentai (2 pav.) ir 3 viršutinių mažai profiliuotų puodų dalių fragmentai (3 pav.), kurie gali būti datuojami ankstyvuoju geležies amžiumi. Taip pat turime 60 daugiausia geležinių dirbinių rinkinį, datuojamą ankstyvaisiais viduramžiais (4, 5 pav.), su įrašu „Petrešiūnai“. Tarp jų yra du geležiniai rak-

tai (4: 2, 3 pav.), geležinė spyna, apkaustyta vario ir bronzos skarda (4: 1 pav.), geležinė Z tipo pagal Vytauto Kazakevičiaus klasifikaciją kalavijo rankenos buoželė (4: 4 pav.), du geležiniai makštų apkalai (4: 5, 6 pav.), dviejų ovalių skiltuvų fragmentai (5: 10, 11 pav.). Ludwiko Krzywickio paskelbtoje Petrešiūnų tyrinėjimų ataskaitoje nėra vienas šių radinių nėra paminėtas, todėl tikėtina, kad jie iš viso nėra iškasti Petrešiūnuose. Nepaminėti jie ir jokioje kitoje Ludwiko Krzywickio publikacijoje. Gali būti, kad ši medžiaga

yra ne iš jo kasinėjimų. Tikimės, kad tolesnės archyvinės paieškos padės nustatyti šių dirbinių kilmę.

Didžioji dalis medžiagos iš Ludwiko Krzywickio tyrinėjimų saugoma Baltų archeologijos skyriuje – tai tūkstančiai keramikos fragmentų iš nežinomų Žemaitijos vietovių, datuojamų nuo ankstyvojo geležies amžiaus iki ankstyvųjų viduramžių, įdomūs savo formų ir ornamentų gausa (6–14 pav.).

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