

nė diržo sagtis bei įvijinio žiedo platesne vidurinė įvija dalis. Ietigaliai neapdege.

Degintinis kapas Nr. G. 0,3 m gylio ir 1,3×0,35×0,55 m dydžio šiaurės rytų—pietvakarių krypties duobėje aptikta sudegusių žmogaus kaulų. Tarp jų rasta lankinė laiptelinė segė ir ietigalis lauro lapo pavidalo plunksna. Dirbiniai neapdege.

Degintinis kapas Nr. H. 0,6 m gylio ir 0,35×0,4 m dydžio plotelyje rasta krūvelė sudeginto žmogaus kaulų. Vakariniame jos pakraštyje aptiktos 2 juostinės apyrankės, smeigtuko ar ylos dalis, įvijų liekanų, 7 stiklo karoliai ir segės adata.

Žirgo kapas Nr. I. 0,35 m gylio ir 1,4×0,55 m dydžio duobėje rasti žirgo griaučiai. Jis pa-

laidotas galva į pietryčius (120°) ant dešinio šono. Nasruose buvo žąslai su geležinėmis grandimis. Ant kairio dubenkaulio rasta įvija su kilpelėmis galuose. Ant viršugalvio aptiktos 2 įvijos — karčių papuošimo dalis.

Žirgo kapas Nr. II. 0,4 m gylio ir 1,6×0,9 m dydžio duobėje rasti žirgo griaučiai. Jis palaidotas į šiaurės vakarus (320°) ant pilvo. Priekinės ir užpakalinės kojos pagultos. Nasruose išsprauti trinariai žąslai. Išilgai apatinio žandikaulio aptikta įvija — karčių papuošalas. Prie dubenkaulio rasta apvija uodegai papuošti.

Žirgų kapas Nr. III. 0,9—1,1 m gylio duobėje rasti dviejų žirgų griaučiai, paguldyti galva į pietryčius (150°). Jie gulėjo ant kairio šono nenatūralia poza. Nasruose išsprauti žąslai.

SUMMARY

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THE PLINKAIGALIS BURIAL GROUND

Introduction. The First Millenium AD is the period of consolidation of the Baltic tribes. The middle of this period is especially important, since the great migration of nations started in the late 4th century and caused an upheaval of most of the European nations and tribes, including the Balts as well.

The Great Migration Period (5th—7th cent.) in Lithuania has not yet been thoroughly studied. We lack data for the studies of cultural layers of hill-forts, unfortified settlements have almost not been investigated, and the material of the cemeteries and barrows in some regions of Lithuania is not known enough.

The Plinkaigalis Burial Ground was investigated in 1977—1984. It is dated back to the 5th—6th centuries, located in the Kėdainiai District, Krakės parish, 1 km west of the village, 5 km west of the town of Krakės, 0.3 km north of the road Krakės—Pašušvys, and 0.1 km east of the left bank of the River Šušvė (Fig. 2).

In 1977, the burial ground was excavated by an expedition of the Academic Methodological Committee of the Cultural Ministry of Lithuania. The expedition was headed by E. Jovaiša. In 1978—1984, it was excavated by the Institute of History of the Lithuanian Academy of Sciences, the expedition having been headed by the author of this paper. An area of 4,500 sq m was investigated, 364 inhumation graves which contained 379 skeletons, 8 cremation graves, and 3 graves of horses with 4 skeletons of horses were uncovered (Fig. 9). Out of these graves, four ones belong to the Late Neolithic Corded Ware Culture. Buried in the cemetery, there were 142 children of both sexes, which constitutes 37.73%, 88 women, i. e., 23.22% and 120 men, i. e., 31.66%. 25 graves were destroyed (6.6%). Three graves were of adults of undefined sex (0.79%). Thus, during the period of 200 years, Plinkaigalis had been inhabited by a population of about 35—43 people (for more details refer to the publication by Dr. G. Česnys in this book).

The geographical environment was very favourable for the inhabitants of Plinkaigalis. The curved valley of the Šušvė was very convenient for dwelling (Figs 6,7). The soil was fertile, turf-carbonate, remarkable for a fine structure, good air-water exchange, and rich in potassium and nitrogen compounds. Therefore, a dense network of other

archaeological monuments has been found along the Šušvė River: an unexplored hill-fort of the same village Plinkaigalis (Fig. 8), the 5th—11th-century burial ground of Pašušvys, ancient 10th—16th-century cemeteries of Šulaičiai, the Vaitiekūnai hill-fort and settlement in the Radviliškis District dated back to the 1st millenium AD and the beginning of the 2nd millenium, the Vaitiekūnai barrows with inhumation graves from the 3rd—5th centuries, the 5th—6th-century Kairėnėliai burial ground in the Radviliškis District.

Burial. Archaeologists cannot give a thorough description of all the burial rites. We must rely on the traces left in the ground: the shape and size of grave pits, their inner constructions, traces of fire rituals, postures of the dead, as well as their direction according to parts of the world, bones of animals or their fragments in human burials, inventory, ceramics.

In the white sand and tawny gravel of the hill of the Plinkaigalis cemetery, grave pits were very distinctive. They were particularly significant in the places where fire had been burnt and grave fillings contained coals and charred wood (Fig. 12). In Plinkaigalis, special attention had been paid to grave pits, as could be judged from an ideally rectangular shape of the pits made according to the coffins and height of the dead. The size of grave pits of both sexes is almost the same. Grave pits of men measure from 180 to 300 cm in length and 50 to 150 cm in width (Figs 13, 14, 19). Grave pits of children were correspondingly smaller. Newborns were buried in pits measuring from 20×50 to 45×110 cm. Burial pits of children up to 10 years of age measured from 40×110 to 70×220 cm. Larger pits were dug for multiple burials which did not differ from the above-mentioned ones in length, but were considerably wider (Table 1). Irregular pits are not numerous: there are some instances of pits of trapezoid shape and a few pits of an irregular shape (6 graves) (Fig. 11). The depth of the pits varies from 0.1 to 1.8 m. As a matter of fact, this is not the initial depth, since it has been changed by natural forces and anthropogenic activities. The extent of this change is impossible to ascertain.

Stones are characteristic of the inner structure of grave

pits of the Plinkaigalis Burial Ground, which corresponds to the burial traditions of Central Lithuania in the first centuries. Stones were placed at the bottom of the pits, beside the dead or the coffins. They were found in 173 graves, i. e., 47.9% of all the graves. There were from 1 to 21 stones per grave (Fig. 18). Single stones were found in different positions: by the head, legs or side of the dead. In some of the graves, stones were laid symmetrically, i. e., one or two at the head, lumbar-pelvic region, and foot (Figs 13—16). In some cases, for instance, in Grave 205, stones of a particular size were squeezed in between the edge of the grave pit and the side of the coffin (Fig. 17). In some other graves, the stones were not symmetrical, but a complex construction could be seen as if a "box" had been built round the skeleton of the dead like in Grave 159 (Fig. 19).

In 83 graves in Plinkaigalis, traces of wooden coffins were noticed. It constitutes 22.8% of all the graves. In the coffins, 37 men, 24 women and 18 children were buried. The sex of the dead buried in 3 coffins was not established (Table II). The coffins were made of boards 2—4 cm thick, had a rectangular shape and measured from 165 to 240 cm in length and 40 to 70 cm in width (Figs 26—28). Not all the coffins were of rectangular shape. In 23 graves, trapezoid coffins were found (Figs 29—31). The coffins of children measured from 70 to 180 cm in length and 17 to 60 cm in width. In some other graves, no traces of coffins were seen, but the arrangement of grave furnishings leads to the conclusion that these grave pits must have contained coffins: axes, sickles and fighting knives were placed their blades upwards as if leaned against the sides of the coffins. Such was the position of the above-mentioned tools in Graves 2, 4, 6, 11, 17, 20, 36, 45, 57, 59, 64, 107, 125, 139, 153, 176, 178, 329, 347, 351, 356, etc. Thus, if we sum up these data, the number of coffins increases to 111, i. e., 43.3% of all the graves.

Another important burial feature is orientation of the dead. In Plinkaigalis, orientation of 376 skeletons was analysed, except for 4 skeletons dating back to the Stone Age. Direction of the dead according to parts of the world falls into 48 groups (Table IV). Most of the graves were directed E (44), which constitutes 11.61%. Buried in this direction were the bodies of 19 women, 5 girls, 4 men, 14 children of undefined sex, and 2 adults of undefined sex. 33 dead were directed W, which constitutes 8.71%. Among them were 15 men, 1 boy, 1 woman, 1 girl, 14 children of undefined sex, and 1 destroyed adult of undefined sex. A more detailed analysis of the orientation of the skeletons shows that men and women in Plinkaigalis were buried in different directions. Men were oriented W, NW, and SW with slight deviations to N, NE. Women were oriented E, SW, NE with slight deviations to S (Fig. 34).

An absolute majority of the dead were buried on their backs, their arms bent on the chest, waist or pelvis, their legs outstretched. An analysis of the position of the arms of 86 men and 69 women enabled us to determine 13 positions of the arms of men and 12 of women (Figs 35, 36). In two graves (Nos 135, 177), women were laid on their side (Figs 45, 46). One of them (in Grave 177) had suffered from tuberculous spondylitis. Children were buried on the back, as well as on their left or right side in the so-called "sleep" postures. 37 children were uncovered in such a posture: 24 were on the right and 13 on the left side (Table V).

Multiple burials comprise a separate category. Ten graves of this kind were uncovered in Plinkaigalis (Nos 16, 60, 66, 162, 197, 232, 237, 316, 322, 336). Graves 16, 60 and 322 contained skeletons of children and adults, Graves 232, 237, 316, exclusively adults, Grave 66, exclusively children, Graves 162, 336, families (Figs 53, 54, 56, 58, 59, 61, 64, 66).

There were 8 cremation graves (Nos A, B, C, D, E, F, G, H) (Fig. 9). In Plinkaigalis, the rite of cremation was accepted gradually, and for some time the dead were buried

inhumed along with cremated ones. Grave pits of the early cremated graves were rectangular (Graves A, D, E), later they became oval or round (Graves B, C, F, G, H) and very shallow (Fig. 71). They contained a layer of remnants of bones burnt elsewhere, which was 5—15 cm thick. The bones were not completely burnt down, one could distinguish fragments of skulls, the long bones of upper and lower extremities, and pieces of ribs (Fig. 72). All the cremation graves are dated back to the 7th century. The furnishings of these graves were sound or a bit burnt, mixed up with bones. On the basis of the furnishings, Graves E, F and G are classified as male, Graves A and H as female, and Graves B, C and D contained burials of undefined sex.

Three graves of horses with 4 skeletons of horses were uncovered (Figs 74—79) in the western part of the burial ground, in the region of human cremation graves (Fig. 9). They were in rectangular pits, measuring 140×55 cm (Grave I), and oval pits (Graves II, III) measuring 200×90, 320×165 cm, and 60—110 cm deep.

Above a double horses' grave (No III), there was a pavement of stones (Fig. 77). The graves of horses are dated back to the 7th century.

Position of furnishings in graves. Plinkaigalis yielded more than 2,200 artifacts of metal, glass, amber, stone, and clay. Most of these artifacts had been used by their owners according to their destination and were put into their graves when they passed away. Thus, for instance, 91 male graves contained socketed axes or narrow-edged axes with a butt. It constitutes 75.8% of all the male graves. Axes had no fixed place in graves. They were put on the left or right of the head (8 graves), at both sides of the waist (17 graves), but most of the axes were found at the foot (44 graves). Topography of both types of axes found in the cemetery is also a matter of considerable interest. Narrow-edged axes with a butt were found in graves in the western part of the burial ground, whereas socketed axes in the eastern part (Fig. 83). The fact is associated with chronology of the graves: graves of an earlier period contained more socketed axes, graves of a later period more narrow-edged axes with a butt.

In 72 men's and boys' graves, work knives were found. Thus, knives were placed in 60% of male graves. Only Grave 29 which contained a knife with a curved back most likely seems to be female. The position of knives is almost the same as that of axes. They were found on the right (9 graves) or left (4 graves) of the waist and right (7 graves) or left (4 graves) of the head of the dead (Fig. 84). Single knives were placed at the shoulders, thighs of both legs, at the knees, shins, between the legs (5 graves), or across the breast (Grave 363). Thus, no fixed place for knives existed.

Knife-sickles found in 7 graves had a more definite place in the graves and were put at the head region (Fig. 87). It was only in one grave (No 267) that this tool was found at the knee of the right leg. Other working tools in the graves of men are scarce, therefore, no regularity in their position could be established. Whetstones were found in 4 graves: 2 of them were near the waist (Graves 327, 332), one near the head, and one between the legs.

Gouges were found in 3 graves, placed at the foot, 2 steels were placed at the head, etc.

As far as weapons are concerned, 39 male graves yielded battle knives which were most often placed on both sides of the waist (20 graves) (Fig. 92). Several knives were found at the foot, head, shoulder or on the pelvis.

Six spearheads were found, 2 of which were in inhumation graves. They were placed near the head (Grave 153) and the left side (Grave 228) (Figs 11, 68).

Only in Grave 65 were the spurs found in their place, i. e., on the legs (Fig. 93), whereas in other 5 graves they were found near the head (Graves 50, 79), near the left thigh (Graves 59, 332), and on the right pelvic bone (Grave 52). Thus, men in Plinkaigalis were furnished with 2 spurs,

whereas Samogitians and Semigallians wore only one spur on the left leg.

In Graves 57 and 79, bits were found, placed near the head and between the thigh bones (Fig. 29).

Eight large drinking horns were found. They had been used in everyday life and for ritual ceremonies. Out of these horns, 6 ones were found at the foot of the dead (Figs 204, 206, 208). In Grave 50, one drinking horn was found on the left side of the head together with other furnishings (Fig. 137), in Grave 80, the bindings of a drinking horn were uncovered on the right pelvic bone.

In 18 female graves, sickles with tips bent upwards were found. Sickles were one of the most important tools of women. They were placed at the waist or the pelvic region on the left (8 graves) or right (10 graves) side. One sickle in Grave 186 was placed across the legs. In 20 graves, spinning-whorls were found. They were in different positions: on the left side (6 graves), on the right side (4 graves), at the left elbow (3 graves), at the left shin (2 graves), etc.

Awls were also placed in various positions. They were found in 54 graves at the head, one or the other side, or legs of the dead.

Adornments were in the position they were worn: necklaces and beads on the neck, brooches and pins on the chest, bracelets and rings on the hands. Few adornments were found in other places, e. g., the filling of the grave pit (a brooch in Grave 256, fragments of a brooch in Grave 123), etc.

Material Culture. Tools and weapons. A total of 103 axes were found. 91 of these were in graves, and 12 were found accidentally. They were 67 narrow-edged axes with a butt and 36 socketed ones. Narrow-edged axes with a butt were found in 57 graves, and 10 were accidental finds, socketed axes were uncovered in 34 graves, and 2 were stray finds. The former are 16—25 cm long, the blade is 4.82—9.6 cm wide, round shaft-holes measuring 2×2.9 — 3.2×3.6 cm (Fig. 104). They are massive, the butt bent towards the shaft and the blade stretched in the same direction. This form is typical of axes of Central Lithuania. Single axes have a straight narrow body, the blade widening to both sides, and oval shaft-holes. This form is typical of East Lithuania. The metallographic analysis of 20 narrow-edged axes with a butt showed them to be manufactured under 4 technological methods: free forging, the use of "packet" iron, welding of 2 and 3 iron and steel bands.

Socketed axes are 12.5—22 cm long, the blade is 3.2—6.5 cm wide, the shaft-holes being 2.5—3.6 cm in diameter (Fig. 105). Bodies of more than half of the axes were narrowed between the hulk and the blade, which is characteristic of axes of the 4th—7th centuries. 11 axes with straight sides were found as well. They are short, dated back to the 3rd—5th centuries. A metallographic analysis of 3 socketed axes was done. They were manufactured by free forging of iron, welding of 2 and 3 bands of various metals.

85 knives were found: 72 in graves and 13 accidental finds. They were 10.6—28 cm long, the blade being 1.1—3 cm wide and the back 0.3—0.6 cm thick. All the knives were handled, and most of them had wooden handles. Graves 61, 106 and 332 contained knives with handles made of horn (Fig. 110). On the basis of the form of the blade, the knives of Plinkaigalis can be classified into 2 groups: 1) knives with a straight back; 2) knives with a curved back. Specimens of Group 1 constitute an absolute majority. A knife belonging to Group 2 was in Grave 29. A metallographic analysis of 9 knives was made. 4 technological methods were applied for the production of knives: free forging of metal, "packet" forging, heating in contact with charcoal, welding of 2 and 3 bands of different metal.

Sickles with tips bent upwards were found in 18 female graves, and 2 were accidental finds. The tips of 3 more sickles were broken off. They were 15.2—25 cm long

(measuring straightly from the tang to the tip), the blade being 1.7—2.7 cm wide, the back up to 0.5 cm thick (Fig. 111). They are dated back to the 5th—6th centuries. A metallographic analysis of 6 sickles was made. They were manufactured under a free forging technique, forging of "packet" iron and heating in contact with charcoal. Sickles of this type are called Lithuanian or even Semigallian ones. The area of their distribution covers mainly Central Lithuania and the Lithuanian part of Semigallia.

8 knife-sickles were found: 7 in graves and 1 accidentally. They are 14.7—23.6 cm long, if measured straightly from the tip to the tang, the blade being 1.5—2.7 cm wide, and the back 0.4 cm thick (Fig. 112). A metallographic analysis of 1 knife-sickle demonstrated it to be forged of "packet" stuff-steel and iron bands. It is dated back to the 4th—5th centuries.

57 awls were found: 53 in graves and 4 accidentally. They were uncovered in a poor state, the tips broken off, crumbled. The better preserved awls are 11—15 cm long, their wooden handles being up to 5 cm long and 1—2.3 cm thick (Fig. 114).

Spinning-whorls were found in 20 graves. They were made of sandstone (12 graves) and clay (7 graves). In Grave 115, a bronze wheel spinning-whorl was found (Figs 116, 119). Spinning-whorls were of 2 forms: 1) a low cylinder and 2) a double truncated cone, 3.7—6 cm in diameter, 1.1—2.9 cm thick with small holes measuring up to 1.5 cm in diameter (Fig. 115).

Whetstones were found in 4 graves. They are 7.2—13.4 cm long, rectangular or square in cross-section, measuring 1.45×1.45 — 1.78×2.47 cm, slightly tapering towards the ends (Figs 121—123). Two of the whetstones from Graves 50, 92 and 1 from Grave 332 had loop-hangers. All the whetstones found in Plinkaigalis are made of red alleuritic stone which was most probably brought from Scandinavia.

Three picks were found: 2 in graves and 1 accidentally. They are 15.5—16.5 cm long, the blade is 5—6.1 cm wide, with oval shaft-holes measuring 2.6×3.3 — 3×3.7 cm (Fig. 123).

Gouges (skobtai) were found in 3 graves (Nos 2, 59, 280). Their preserved metal parts are 12.6—18 cm long, the blades being 1.6—2 cm wide and slightly convex, the bodies rectangular in cross-section and a bit bent (Fig. 124).

A two-handed gouge (lenkena) was found in Grave 232. It is a two-handed tool for processing timber, used in the initial stages of work for stripping off the bark. The blade of the tool is 1.9 cm wide, the tangs of the handles being 6.58 cm long. It must have had wooden handles (Fig. 126: 1). A lot of analogies to this tool are known in the ethnographic Lithuanian material.

Steels were found in 2 graves (Nos 232, 234). They are iron, 12—12.78 cm long, trapezoid in form, rectangular in cross-section with a ring-loop at one end (Fig. 127).

A total of 41 battle knives were found: 39 in graves and 2 accidentally (Fig. 128). It constitutes 32.5% of all the male graves. They are 28—46.8 cm long, the blade being 2—3.8 cm wide, and the back 0.3—0.9 cm thick. The shape of most of the battle knives exhibits no difference from that of the working ones: the edge of the blade is parallel to the back, rounded at the tip. Knives like these maintained a cutting-thrusting function. The edge of the blade is not sharpened as is often the case with working knives. The handles of some of the battle knives had iron and bronze binding-rings which must have been used to fasten the handles. In Graves 45 and 52, knife-daggers were found: the back of the blade of these specimens is not parallel with the edge, they gradually taper off and acquire an awl-like shape at the tip. Knives like these maintained only the thrusting function (Figs 128: 1, 10; 130). The blade of a battle knife found in Grave 289 was ornamented with two rows of tiny notches on both sides of the back. Remnants of sheaths of battle knives were rare. Remnants

of leather sheaths were uncovered in Graves 79, 107, 215, 223, and remnants of a wooden sheath in Grave 50.

A sword was found in Cremation Grave E. It was one-edged, 60 cm long, the blade being 3.4 cm wide, the back 0.75 cm thick. The sword was bent for ritual purposes (Fig. 133). It was not unsheathed when trying to stretch it, therefore, the sheath was damaged.

Six spearheads were found in Graves 153, 228, Cremation Grave F (2 specimens), and 1 was found accidentally. They had rhomboid-shaped or laurel-like blades (Fig. 73). Spearheads with a rhomboid-shaped blade were 10.6—16.5 cm long, the blade being 2.5—3.3 cm wide, the hulk 1.6—2.2 cm in diameter. Spearheads with a laurel-like blade were 14.3—28 cm long, the blade was 3.3—5 cm wide, the hulk 1.5—2.4 cm in diameter. Graves furnished with spearheads are dated back to the 7th century.

Arrowheads from Graves 162 and 336 did not belong to the furnishings, but witnessed a violent death. The arrowhead uncovered in the first grave was stuck in the left thigh of a woman, the arrowhead found in the second grave was between the lumbar vertebrae. They were 4.95—6.5 cm long, with three ridges in cross-section, which formed the shape of a star with three points (Figs 61—65). Arrowheads like that are not typical of the Baltic armour, they prevail mostly in the vast areas of Asia, and are especially characteristic of the southern regions of East Europe from the 1st millennium AD up to the 9th century.

The equipments of a horseman and his horse are: spurs, bits and bronze spirals which served as adornments of the bridle and mane.

Twelve spurs were found in 6 graves, i. e., Nos 50, 52, 59, 65, 79, 332, and one was an accidental find (Fig. 136). 7 of them were bronze, 5 iron. According to the classification of East European spurs, developed by V. Perchavka, spurs found in Plinkaigalis are of 5 types: Type V, variant A (accidental find); Type V, variant B (Graves 59, 79); Type VII (Graves 52, 65, 332), and Type VIII (Grave 50). One spur found in Grave 59 falls out of V. Perchavka's classification. It is of a triangular shape, the arch being semi-circular in cross-section and a profiled point. The ends of the shafts were flattened and must have had heddles for straps. It has no analogies either in Lithuania or in the neighbouring Baltic lands. Other types of spurs have analogies in the lands of both Western and Eastern Balts.

Bits were found in human graves (Nos 57, 79) and in graves of horses (Nos I, II, III). They were two-jointed (Grave 57) and three-jointed (Graves 7, 9, II, III) (Fig. 80). The joints of the bits found in Grave 57 are bronze.

The bridle and mane of the horses were not much decorated. Only some bronze spirals of different length and diameter which were wound round the bridle straps or hanks of the mane were found.

Adornments. Head-dress garlands are not characteristic of the women of Plinkaigalis. Some head-dress garlands were found in Graves 230, 311, 315, as well as some accidental fragments. The head-dress garland found in Grave 230 consists of two rows of bronze spirals with inserted horseshoe-shaped pendants and bronze plates, and is typical of female burials in Central Lithuania in the middle of the 1st millennium AD (Fig. 98). The other two head-dress garlands are of an original construction and have no analogies in Lithuania (Figs 99, 141). The structure of the accidentally found fragments of a head-dress garland is typically Samogitian (Fig. 145).

Spirals of the back of the head were found in Grave 19, Cremation Grave A, and in a horse grave (No I). They were widespread in Samogitia.

A total of 43 neck-rings were found. 38 objects were found in graves, and 3 were accidental finds. 29 neck-rings were made of bronze and 15 ones of silver. Neck-rings fall into 7 types: with conical and spoon-shaped ends, with a key-shaped hole in the plate, with even or ribbed bow, with hook-and-loop ends, saddle-like, rugged ant twisted (Figs 140, 148, 151—153, 157, 158, 159).

Neck-rings with conical ends were found in Graves 209, 260, 266, and fragments of one neck-ring were found accidentally (Fig. 146). They were 13.7—14.5 cm in diameter, the cones being 0.8—1.2 cm high. According to H. Moora's classification, the conical neck-rings found in Plinkaigalis can be divided into 3 groups: Group 1 (found accidentally), dated back to the end of the 2nd century and the first half of the 3rd century. They are found in the area of the Vistula in the South up to Estonia in the North. Neck-rings of Group 2 (Grave 209) are called the Klaipėda type. They are most often found in Western Lithuania. Dated back to the 3rd century. Neck-rings of Group 3 (Graves 260, 266) are called Lithuanian—Latvian. Most often found in Samogitia and Northern Lithuania. They are dated back to the end of the 3rd and the beginning of the 4th centuries.

Neck-rings with spoon-shaped ends were found in Graves 195, 256, 263, 274, 311 (2 specimens), 339 (Fig. 148). They were 9.2—15.5 cm in diameter. According to M. Michelbertas' classification, the Plinkaigalis neck-rings should be attributed to Groups 2 and 3. Neck-rings with spoon-shaped ends of Group 2 were found in Graves 195, 256, 274, 311 (2), 399. They are dated back to the end of the 4th century and the first half of the 5th century. A neck-ring of Group 3 was found in Grave 263. It is dated back to the end of the 4th—beginning of the 5th centuries. Neck-rings with spoon-shaped ends were widespread in Lithuania. Very few were found in the neighbouring territories.

A neck-ring with a key-shaped cut on the plate was found in Grave 307 (Fig. 150). It is 12 cm in diameter, the plate being 2.8 cm long. Dated back to the end of the 4th—5th centuries. This neck-ring must be an imitation of the 4th-century adornments of Middle Europe.

Neck-rings with a hook and loop fall into 5 groups:

I. Neck-rings with a smooth round ring, the ends not wound with wire (Grave 94).

II. Neck-rings with a smooth ring and wire wound over the ends (Graves 50, 101, 201, 316, B, 336, 342).

III. Neck-rings with a tapering ring, the ends not wound with wire (Graves 71, 327, 361).

IV. Neck-rings with a tapering ribbed ring and the ends wound with wire (Grave 21).

V. Neck-rings with a tapering ribbed ring and the ends not wound with wire (Graves 37, 43, 99, 130, 228, 356). They are 9.5—18 cm in diameter. The Plinkaigalis neck-rings of this type are dated back to the first half of the 5th—beginning of the 6th centuries.

Single neck-rings found in Plinkaigalis have no analogies elsewhere. Such is the case with the neck-ring from Grave 224. It has a tapering ribbed ring, with flattened hook-and-loop ends. The neck-ring is 15.2 cm in diameter (Fig. 152: 2). It is dated back to the second half of the 5th century. Grave 44 (Fig. 157: 2) contained a neck-ring with a double ribbed front of the ring and a hook and loop. It is 10.1 cm in diameter, as if made of two parts. One side is made of a round wire slightly tapering towards the ends and a hook at one end. The other end of the wire is connected with two ribbed wires which form something like a loop. It is dated back to the 5th century. Grave 332 contained a neck-ring with a faceted ring, the ends flattened and wound over with wire, with a hook and loop, sized 16.8 cm in diameter (Fig. 207). It is dated back to the end of the 5th century. Grave 98 (Fig. 157: 1) contained a neck-ring with a double ribbed middle part of the ring, twisted sides and a hook and loop. Dated back to the 5th—6th centuries.

Neck-rings of the "saddle" type were found in Graves 19 and 94 (Figs 67, 145). They were 16.4—17.7 cm in diameter. Dated back to the second half of the 6th century. Neck-rings of this type were widespread in Northern and Eastern Lithuania in the 6th—10th centuries.

Neck-rings with rugged ends were found in Graves 2, 180, 213, 329 (Fig. 157: 3, 3a). They were 15—17 cm in diameter, made of silver, dated back to the 6th century. Not

widespread in Lithuania. Few neck-rings of this type are found in other East Baltic areas as well.

A twisted neck-ring was found in Grave 335 (Fig. 158 : 1). It was 13.5 cm in diameter. Dated back to the 5th—6th centuries. It is most probably a relic of the Celtic heritage.

Beads, pendants, bronze spirals. More than 1,250 beads were found in Plinkaigalis. Among these, 513 were made of glass and enamel, 416 of amber, about 270 of tin, and 5 of clay. Most of the beads were found in strings. Strings were uncovered in 68 graves. There is a great variety in the number and composition of beads in strings. Most abundant among the finds were mixed strings, composed of glass, amber, and tin beads. The beads were of various forms, colour and size. The beads were spherical, cylindrical, of the shape of a double truncated cone, multangular, double, threefold, fourfold, fivefold. The range of colours is also very wide. Various tints of blue prevail, but also were found azure, green, red, black, yellow, violet, white beads. One of the longest strings of glass beads was found in Grave 311. It consisted of 158 blue beads. Amber beads were found in 89 graves. 20 graves contained strings which were exclusively of amber. They are not long, contain up to 21 beads (Grave 29). Single amber beads-amulets were found near the neck of the dead, as well as near the head (Graves 46, 97), on the chest (Graves 144, 189), at the lumbar-pelvic area (Graves 106, 115, 228). The exact number of tin beads cannot be established, as in most graves they were badly damaged. Tin beads are not diverse in shape: spherical, cylindrical, or of the form of a truncated cone (Fig. 160). Strings of exclusively tin beads were found in Graves 46, 118. They were often combined with other beads to brighten up the colours of mixed strings. Seven graves (Nos 163, 195, 241, 247, 278, 303 and Cremation Grave 4) contained strings of glass beads and bronze spirals. Grave 336 B yielded a string of double-folded bronze spirals (Fig. 65).

In Plinkaigalis, strings were worn by people of both sexes and different age. Women preferred mixed and colourful strings, while men wore single beads-amulets or very short strings. Short strings were also found in graves of children. Strings with pendants were found in Grave 232 B which contained 12 round gilded pendants, Grave 311 which contained some dozens of pendants of analogous forms, and Grave 314, where some tin pendants of the same shape were found in a string of beads. Grave 224 contained a pendant made of lead (Figs 163, 164).

Brooches. A total of 126 brooches were found in 117 graves. In addition, there were 24 accidental finds. The absolute majority of graves contained one brooch. Graves 42, 50, 55, 115, 224, 336 contained 2 brooches each. Three brooches were found in Grave 45 (Fig. 165). The brooches of Plinkaigalis fall into 8 types: with a long, animal or triangular prong, with rings on the shaft, with a cross-shaped terminal, with a step-like prong, as well as with flattened terminals and with plates on the ends.

Long-legged cross-bow brooches were the most numerous. 62 brooches were found in 59 graves, and there were also 13 accidental finds. They are 2.6—10.5 cm high, with spirals 2.2—10 cm long. Brooches of this type fall into 2 subtypes: 1) long-legged cross-bow brooches with a bent catch; 2) long-legged cross-bow brooches with a moulded catch. Brooches of the 1st subtype are genetically earlier. They appeared in Plinkaigalis in graves of the end of the 3rd—beginning of the 4th centuries (Grave 258) and were in use up to the 5th—6th centuries. Brooches of the 2nd subtype are dated back to the beginning of the 5th century—6th century. Iron brooches are rare. They were found in Graves 179, 358.

Cross-bow brooches with animal heads were found in Graves 106, 107. They are 7.1—12.5 cm high, the spirals being 6.4—12.8 cm long. The first one is a silver gilded imported brooch, dating back to the 5th century (Fig. 172).

The other is a bronze specimen of local production and dates back to the 6th century (Fig. 174). Not many brooches of this kind have been found in Lithuania, and they are not characteristic of the Balts.

Cross-bow brooches with triangular terminals were found in 27 graves of Plinkaigalis (a total of 30). Seven more were accidental finds (Fig. 176). They are 5.2—11.1 cm high, the spirals being 2.96—3.7 cm long. They are characteristic of the tribes of Lithuanians and Latvians in the 5th—6th centuries. In Lithuania, they are most widespread in the central and northern regions.

Cross-bow brooches with rings on the shaft were found in 20 graves (a total of 23). In addition, 4 were accidental finds. They are 6.3—11.1 cm high, the spirals being 6.8—12.4 cm long. These brooches fall into 2 subgroups: 1) with a narrow bow and leg, dating back to the first half and the middle of the 5th century (Graves 50, 327); 2) with a massive bow and leg, dating back to the second half of the 5th century and the 6th century (Fig. 177). Brooches of this type are frequent in Lithuania. According to the classification of N. Åberg, H. Moora and A. Tautavičius, brooches with rings on the shaft found in Plinkaigalis should be attributed to Groups II and III.

Cross-bow brooches with a cross-shaped prong were found in Graves 88, 140, 177, 326 (Fig. 179). They are 5—6.1 cm high, the spirals being 5.4—5.5 cm long. Dated back to the 6th century. Brooches of this type are rare in Lithuania, found most often in the western areas. Some specimens have been found in the western region of Latvia as well. These brooches were most widespread in Eastern Prussia.

Cross-bow brooches with a step-like terminal were found in Graves 19, 228 and Cremation Grave G (Fig. 180). They are 5.3—6.9 cm high, the spirals being 6.5—7 cm long. They are dated back to the end of the 6th century and the 7th century. Most often found in Western, Central and Northern Lithuania.

Fragments of a cross-bow brooch with a flattened terminal were found in Cremation Grave E (Fig. 133). Dated back to the 7th century. Not widespread in Lithuania. More frequently found in Samogitia and Northern Lithuania.

A brooch with plates on the ends was found in Grave 144 (Fig. 181). It was 21.5 cm high. Brought from Middle Europe, dated back to the beginning of the 6th century. This chest adornment is alien to the Balts.

Pins in the Plinkaigalis Burial Ground were numerous but not varied. A total of 114 pins were found. They are divided into 4 types: pins with a ring head, crook pins, pins with a cross-shaped head, and trumpet-shaped head pins (Fig. 183).

A pin with a ring head was found in Grave 266 (Fig. 184). It is dated back to the 3rd century. They are not numerous in Lithuania. Worn in the 3rd—4th centuries.

98 graves yielded a total of 100 crook pins. There were also 5 additional accidental finds (Fig. 183 : 1—3, 7, 8, 10—14). Most of the pins of this type were found in graves of infants and children. Dated back to the 4th—5th and 7th centuries. Crook pins were widespread in the East Baltic area and other lands of the Balts in the 1st millennium AD and the beginning of the 2nd millennium.

Trumpet-shaped head pins were found in Graves 56, 63, 195, 239, 251, 339 (Fig. 183 : 2, 5, 6, 9). Three of them were made of bronze (Graves 56, 63, 93), and the rest were iron ones. They are dated back to the 5th—6th centuries. In Lithuania, pins of this type are found since the beginning of the 5th century, most frequently in Central Samogitia and Northern Lithuania.

A pin with a cross-shaped head was found in Grave 9. Its silver head was well preserved (Fig. 186). It is dated back to the 6th century. These pins are not numerous in Lithuania, a total of about 20 have been found.

Bracelets are the most numerous among the adornments found in Plinkaigalis. 92 graves contained 164 bracelets. In addition, there were 17 accidental finds. They fall into 6

types: bracelets with thickening ends, bracelets of the broad-band type, spiral bracelets, bracelets with a triangular ridge, twisted bracelets, and bracelets with a round ring and tapering ends (Fig. 187). 73 bracelets with thickening ends were found. 66 of them were found in graves, and 7 were accidental finds. Bracelets with thickening ends have round, multangular, most often hexagonal or octagonal, sometimes semi-circular, oval, trapezoid, and very rarely almost flat broadening ends (Fig. 188). They are dated back to the 5th—6th centuries. Bracelets with thickening ends are abundant in Lithuania. They are found in other parts of Europe as well.

71 bracelets of the band type were found: 64 bracelets came from graves, and 7 were accidental finds (Fig. 190). They were made of a semi-circular, triangular, less often of a rectangular band, decorated with a small geometrical ornament. Usually one bracelet was worn on each hand. However, sometimes one or even 4, 6 or 8 bracelets were found on the left or right hand. Bracelets of the band type were found in 18 female graves, whereas 2 male graves contained 3 bracelets. They are dated back to the 5th—6th centuries.

Spiral bracelets were found in 19 graves (28 specimens). In addition, there were 3 accidental finds. They are 2.3—5.7 cm in diameter, composed of 2 to 5 spirals, made of a triangular, semi-circular, less often round band or wire. They were most often worn by children. One or 2 spiral bracelets were worn. They are dated back to the 5th—6th centuries.

Bracelets with a triangular ridge were found in Graves 121, 122, 126, 128, and one was an accidental find (Fig. 191). A total of 9 bracelets of this type were found. They are similar to bracelets of the band type, but they have a lower or higher ridge lengthwise the middle of the ring. They are dated back to the 6th century. Bracelets of this type are most widespread in Samogitia. Few of them were found in other parts of Lithuania.

Twisted bracelets were found in Grave 37. They measure 7×6.3 cm. They are twisted of 5 bronze wires and end in a hook and loop (Fig. 109). They are dated back to the 6th century. No more bracelets of this kind were found in the Middle Iron Age cemeteries of Lithuania. They are also found in the 8th—11th-century graves in West Lithuania and Central Samogitia.

A bracelet with a circular ring and tapering ends was found in Grave 129 (Fig. 187: 4). It is 3.0 cm in diameter, dated back to the 6th century. There are no analogies in Lithuania.

Two more bracelets found in Grave 322 were made of a broken bronze neck-ring with a hook and a round hole in the platelet (Fig. 55). Dated back to the 5th—6th centuries.

Finger-rings. A total of 96 rings were found in 68 graves. In addition, there were 11 accidental finds. They are attributed to 3 types: spirals, with a broadened middle spiral, and of the band type (Fig. 192).

63 spiral rings were found. They were in 37 graves, and 7 were accidental finds. Rings of this type consist of 3 to 9 spirals, are 1.3—2.5 cm in diameter, made of a narrow wire which is triangular, more rarely semi-circular in cross-section. The ends of the spirals of some rings are flattened and wound into a little snail. They are dated back to the 5th—6th centuries. Spiral rings appear in Lithuania since

the first centuries AD and were in use even in the beginning of the 2nd millennium.

12 rings with broadened middle spirals were found. They were in Graves 19, 20, 81, 126, 180, 212, 228, in Cremation Grave F, and 2 were accidental finds. They are 1.8—2.5 cm in diameter, composed of 3 spirals, the middle one of which is broadened and decorated with a ting geometrical ornament (Fig. 192). They are dated back to the 5th—6th centuries. Finger-rings of this type are not plentiful, found in 5th—6th-century graves all over Lithuania.

29 tape rings were found: 23 were in graves, and 2 were accidental finds. They are made of a flat band, 0.53—1.58 cm wide, unornamented, 1.2—2.5 cm in diameter. From 1 to 4 specimens were found in a grave. They are dated back to the 5th—6th centuries, not plentiful in Lithuania. They appeared in the middle of the 1st millennium AD and were worn all through the Middle Iron Age (5th—8th centuries).

Belt buckles and bindings. 90 buckles were found in 75 graves, and 1 was a stray find. They vary in size, are made of iron, bronze, silver (Fig. 193). The frame is of the same thickness, most often circular, sometimes multangular or rectangular in section. There were a few buckles of the so-called D shape (Grave 258) and multangular ones (Graves 29, 148). The size of the buckles depended on their destination: buckles from belts of the waist are larger, while specimens used to tighten high boots, or coming from the belts of spurs are smaller. Buckles were found separately and in sets, i. e., with rectangular mounts and strap end bindings (Fig. 195). In Plinkaigalis, they were found exceptionally in male graves.

Foot-wear is a rarely found and almost unknown part of the clothing of prehistoric people. In Plinkaigalis, some clues are given by the straps and buckles used to tighten high boots. Such remnants of foot-wear were found in Graves 2, 44, 45, 54, 61, 117, 180 (Figs 196, 197). The boots had been with high tops which were fastened with leather belts below the knee. The belts were with mounts and strap end bindings, bronze or iron buckles. The Plinkaigalis foot-wear has no analogies.

Drinking horns are specific artifacts of the material culture. In Plinkaigalis, they were found in Graves 2, 50, 59, 61, 64, 80, 332. They were made of the horns of aurochs (*Bos Primigenius Boj.*) and mounted with silver or bronze bindings (Figs 203, 209—212). Graves 59, 61, 80, 332 contained bindings decorated with a rich geometrical ornament. These artifacts were very rare in Lithuania, used for ritual purposes and in everyday life.

A burial ground is the best reflection of the ethnic belonging of an archaeological monument which is witnessed by the peculiarities of the burial, artifacts of the material culture, and anthropological material. Ethnic identification of the Plinkaigalis Burial Ground is very important, as it is located on the border of the ethnocultural areas of Central Lithuania and Samogitia. The burial of Plinkaigalis, i. e., stones on the bottom of grave pits, orientation of the dead men and women towards different parts of the world, beginning of cremation in the 7th century, graves with skeletons of horses, types of artifacts of the material culture and adornments, etc. points to the fact that the Plinkaigalis Burial Ground belonged to the community of Aukštaičiai (Highlanders).