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EARLY MEDIEVAL WAR-FLAILS (KISTENS) FROM POLISH LANDS

Undoubtedly, one of the most interesting and exotic forms of weapons once in use in Polish lands is the war-flail (kisten). Until recently, this category of archaeological finds was given relatively little attention in our country¹. The situation has changed dramatically as a result of the discovery of new sources and a thorough quest for information in museum collections and older literature².

As it is only lately that the author has discussed the issues connected with the origin and distribution of

kistens in Central Europe³, the subject of the present paper will be limited to the presentation of a number of fundamental facts and the data found in the most recent, relevant publications.

It has been assumed that in early medieval Europe, kistens made of horn or bone first appeared among nomadic peoples, the Avars (the 7th-8th centuries) and the Khazars (the second half of the 8th-10th century)⁴. At the same time (the 8th-9th centuries), roaming nomads brought kistens to Volga Bulgaria⁵. However, some finds discovered in Panjakent, Sogdiana, as well as in Tuva, the southern part of Eastern Siberia, and dated to the time before the mid-8th century seem to suggest that this kind of weapon had originated in Asia⁶ and was subsequently brought to Eastern and Central

¹ J. Gurba, A. Czerepiński, *Ciekawy staroruski zabytek z Czerwienia*, „Z otchłani wieków”, vol. 31:3, 1965; by the same author, *Rogowy kiścień z Czerwna*, [in:] *Liber Iosepho Kostrzewski octogenario a veneratoribus dicatus*, ed. K. Jażdżewski, Wrocław 1968; A. Szpunar, *Zabytki archeologiczne w kolekcji Państwa Szymanowskich w Tarnowie*, „Rocznik Tarnowski”, 1991/92, pp. 241-242, Fig. 5:d.

² A. N. Kirpitchenkov, *Bulavy i kistenii iz kolekcii I. Chojnovskogo v sobranii Muzea Vojska Pol'skogo*, „Archeologičeskie Vesti”, vol. 7, 2000, pp. 232-234; B. Rokitowska, M. Wołoszyn, *Wczesnośredniowieczne zabytki pochodzenia wschodniego z wykopalisk w Pełnatyczach, pow. Przeworsk*, „Rocznik Przemyski”, vol. 37:1, 2001, pp. 45-50, Figs. 2:a, 3:a-b; O. Ławrynowicz, P. Strzyż, *Nowe zabytki broni obuchowej z okolic Roztocza*, „Archeologia Polski Środkowowschodniej”, vol. 6 (for 2001), 2003, pp. 258, 261, Fig. 1:1-2; J. Ginalski, P. N. Kotowicz, *Elementy uzbrojenia i oporządzenia jeździeckiego z grodziska wczesnośredniowiecznego „Horodyszczce” w Trepczy, pow. Sanok, stan. 2*, „Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego”, vol. 25, 2004; M. Wołoszyn, *Obecność ruska i skandynawska w Polsce w X-XII w. – wybrane problemy*, [in:] *Wędrówka i etnogeneza w starożytności i średniowieczu*, ed. M. Salamon, J. Strzelczyk, Cracow 2004, p. 262; J. Wrzesiński, *O broni wczesnego średniowiecza rzadziej postrzeganej*, [in:] *Z dziejów Kujaw i Pałuk. Studia dedykowane pamięci dr. Czesława Sikorskiego*, Inowrocław 2005, p. 51, Fig. 10; P. N. Kotowicz, *Uwagi o znaleziskach kiścieni wczesnośredniowiecznych na obszarze Polski*, „Acta Militaria Mediaevalia”, vol. 2, 2006, pp. 51-66; by the same author, *Przemiany w uzbrojeniu plemiennym i wczesnopanstwowym (VI – poł. XIII w.) w polskiej części dawnych księstw ruskich – wybrane przykłady*, „Visnik Nacional'nogo Uni-

versitetu L'viv's'ka Politekhnika”, vol. 571, pp. 26-28, Fig. 5; P. N. Kotowicz, A. Michalak 2006, „...I poszedł Włodzimierz na Lachów...”. *O recepcji orientalnych militariów we wczesnośredniowiecznej Polsce*, „Z otchłani wieków”, vol. 61:1-2, 2006, pp. 81-84; J. Kuśnierz, *Z badań nad militarnym znaczeniem Gródka nad Bugiem (Wołyń) we wczesnym średniowieczu*, „Acta Militaria Mediaevalia”, vol. 2, 2006, p. 88, Plate V:16; W. Mazurek, *Słowiańskie początki*, [in:] *Badania archeologiczne na Polesiu Lubelskim*, ed. E. Banasiewicz-Szykuła, Lublin 2006, pp. 110-111, Photo 8; P. Strzyż, *Uzbrojenie we wczesnośredniowiecznej Małopolsce*, Łódź 2006, pp. 61-64, Fig. 12:1-6.

³ P. N. Kotowicz, *Uwagi...*, passim.

⁴ A. V. Kryganov, *Kistenii saltovo-mayackoy kultury Podon'a*, „Sovetskaya Archeologiya”, vol. 2, 1987, pp. 63-69; É. Garam, *Avar kori csont vagy korbácvégek és ostorbuzogányok*, „Communicationes Archaeologicae Hungariae”, 1998, pp. 109-121; V. S. Aksenov, V. K. Miheev, *Pogrebeniya s krymskoy posudoj mogil'nika Saltovskoy Kultury Krasnaya Gorka*, „Vita Antiqua”, vol. 5-6, 2003, p. 184, Figs. 3:18,44, 4:42, 5:9.

⁵ I. L. Izmajlov, *Vooruzhenie voennoe delo naseleniya Volzhskoj Bulgarii X – natchala XIII v.*, Kazan'-Magadan 1997, p. 103.

⁶ V. V. Gorbunov, *Voennoe delo naseleniya Altaya v III-XIV vv. Tchast II. Nastupatel'noe vooruzhenie (oruzhie)*, Barnaul 2006, p. 87.

Europe by the Avars. Kistens were in use in Rus⁷ and the woodlands and steppes of the Altai⁸ from the tenth century onwards.

This type of weapon was remarkably widespread in Rus. It became popular in Slavonic territory, where it may have been brought directly by the Khazars, who had close though not always peaceful relations with their western neighbours. Among archaeological finds dating back to the 11th-13th centuries⁹, kistens are the most numerous category. Later artifacts of this type are rarer, though war-flails dating from more recent periods are also unearthed on archaeological sites¹⁰. Most probably, kistens reached Romania from Rus lands in the 11th century at the latest and Bulgaria between the 11th and the beginning of the 12th century. Finds discovered south of the Danube are generally considered to be a result of the Pechenegs' expansion, who traveled there from their home in Ukraine¹¹. Single objects of Russian provenance can be found in Finland¹², Germany¹³ as well as Poland.

A collection of kistens from Polish territory (Fig. 1) consists of 13 objects and fragments¹⁴. These finds were

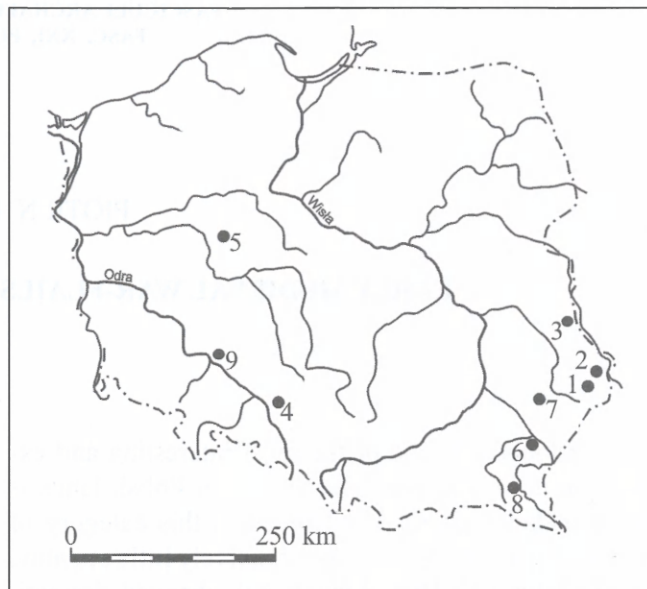


Fig. 1. Distribution of early medieval war-flail (kisten) finds in the territory of Poland: 1 – Czermino, Tomaszów Lubelski powiat (county); 2 – Gródek, Hrubieszów powiat (county); 3 – Kulczyn Kolonia, Włodawa powiat (county); 4 – Opole, Opole powiat (county); 5 – Ostrów Lednicki, Gniezno powiat (county); 6 – Pełnaticze, Przeworsk powiat (county); 7 – Szarajówka, Biłgoraj powiat (county); 8 – Trepcza, Sanok powiat (county); 9 – Wrocław, Wrocław powiat (county). Elaborated by P.N. Kotowicz

⁷ A. N. Kirpichnikov, *Drevneruskoe oruzhe. Vypusk II. Kopya, sulicy, boevye topory, bulavy, kisteni IX-XIII vv.*, Moscow-Leningrad 1966, pp. 58-64.

⁸ V. V. Gorbunov, *Voennoe...*, pp. 86-88, Fig. 69:6-7.

⁹ A. F. Medvedev, *Oruzhe Novgoroda Velikogo*, „Materialy i Issledovaniya po Arkheologii SSSR”, vol. 65, 1959, pp. 137-138, Figs. 5:7-9, 7:4-6,8-9; A. N. Kirpichnikov, *Drevneruskoe...*, passim; A. R. Artem'ev, *Kisteni i bulavy iz raskopok Novgoroda Velikogo*, „Materialy po arkheologii Novgoroda 1988 g.”, Moscow 1990, pp. 5-10, Figs. 1-6; Sh. I. Bektineev, *Bulavy i kisteni XI-XIV vv. na territorii Belarusi*, [in:] *Syarednevyakovya starazhytnasci Belarusi: Novya materyaly i dasledavanni*, ed. V. M. Lyauko, Minsk 1993, pp. 101, 105, Figs. 31:11-16; P. N. Kotowicz, *Przemiany...*, p. 28.

¹⁰ A. N. Kirpichnikov, *Voennoe delo na Rusi*, Leningrad 1976, pp. 27-28, Fig. 6:3; L. Ī. Vinogrodsk'ka, *Predmeti ozbroennyya ta obladunkiv XIV-XV st. z rozkopok zamkiv na Pobuzhzhzi*, „Visnik Nacional'nogo Universitetu L'vivs'ka Politekhnika”, vol. 571, p. 78, Fig. 3:33-35.

¹¹ I. Barnea, *Arme și piese harnașament*, [in:] *Dinogetia I*, Biblioteca de Arheologie, vol. XIII, București 1967, pp. 340-341; V. Jotov, *Väoräzhenieto i snaryazhenieto ot bälgarskoto srednevekovie (VII-XI vek)*, Varna 2004, p. 112.

¹² J. P. Taavitsainen, *Kisten from Mulli, Raisio - a Manifestation of Middle Europe in Southwestern Finland*, „Eesti Arheoloogia Ajakiri”, vol. 8:1, 2004, pp. 33-48.

¹³ E. Vamers, *Die Frühmittelalterlichen Lesefunde aus der Löhrrstrasse (Baustelle Hilton II) in Mainz*, „Mainzer Archäologische Schriften“, vol. 1, 1994, p. 154, Fig. 90:246.

¹⁴ 28 lime objects from Czersk, Piaseczno powiat (county), interpreted by the author as mace or kisten heads, have not been included here. M. Głosek rightly argues that any weapon made of this material would have been damaged

analysed using the most universal typology of this category of specimens invented by A.N. Kirpichnikov, who in 1966, divided the 127 finds he had at his disposal into 6 main types¹⁵. Since then, the source basis

after a few blows on the enemy's armour: M. Głosek, *Późnośredniowieczna broń obuchowa w zbiorach polskich*, Warsaw-Lodz 1996, pp. 54-55. It may only be noted that some objects discovered in Bulgaria, Romania, as well as in Khazar Khaghanate territory have been interpreted as kisten weights: I. Barnea, *Noi descoperiri din epoca feudalismului timpuriu la Dinogetia-Garvă, jud. Tulcea (1963-1968)*, „Materiale și cercetări Arheologice”, vol. 10, 1973, p. 340, Fig. 182:18-22; A. V. Kryganov, *Kisteni...*, p. 66, Fig. 2:15; V. Jotov, *Väoräzhenieto...*, p. 111, Fig. 61:685. Recently, the author of the present publication received information about the 'discovery' of yet another bronze kisten weight among the material coming from some earlier excavations. Most probably, the find was unearthed during works carried out by the Monument Conservation Bureau (PKZ) in Sandomierz, Sandomierz powiat (county). The find is kept in the collection of the Regional Museum in Tarnow. I would like to thank Andrzej Szpunar MA from the Museum of Tarnow for providing me with the information.

¹⁵ A. N. Kirpichnikov, *Drevneruskoe...*, passim. As a result of the influx of new finds, this typology was subject to modifications and improvements in various areas. Six types, only partly corresponding to A.N. Kirpichnikov's classification, were identified by A.V. Kryganov (*Kisteni...*, passim)

of this category of relics has been enriched¹⁶. Kistens coming from Polish lands generally fall into six types: I, II, IIA, III, IIIA and IV. The majority of the finds were unearthed along the eastern borders of the country, in the area being part of the Duchy of Halicz and Włodzimierz in the early Middle Ages. However, at least two kistens were found outside this zone in Great Poland and Silesia.

The most numerous type, consisting of six specimens¹⁷, is Type I of A.N. Kirpichnikov's classification. At first, 35 kistens dated at the 10th-13th centuries¹⁸, made of horn and bone and discovered in Rus territory, were classified as this group. Original objects of this type had openings for fixing iron tangs with leather straps attached to them¹⁹. However, the latter are hardly ever found with the weapons. There were also kistens without tangs but lugs through which the

for finds coming from Saltovo-Majackoe culture. Relics found in Volga Bulgaria fall into 9 types (I. L. Izmajlov, *Vooruzhenie...*, Fig. 70), and the ones unearthed in Bulgaria can be classified into only three types (V. Jotov, *Väoräzhenieto...*, pp. 109-112).

¹⁶ Not all finds discovered so far can be listed here. Besides the larger collections presented in the synthetic publications mentioned above there is a numerous group of more recent single finds, for example, I.K. Sveshnikov, *Issledovanie prigoroda drevnerusskogo Zvenigoroda*, [in:] *Trudy V Mezhdunarodnogo Kongressa Arkheologov-slavistov*, vol. 2, Kiev 1988, Fig. 2:9; V. Kovalenko, A. Mocy, Yu. Sytiy, *Arkheologicheskie issledovaniya shestovickogo kompleksa v 1998-2002 gg*, [in:] *Druzhinni starozhitnosti central'no shidnooy Evropi VIII-X st.*, Tchernigiv 2003, Fig. 7:30,33; S. Ters'kiy, *Peresopnitsya*, Rivne 2003, p. 66, Fig. 39; by the same author, *Arkheologichni materiali z Plisnes'ka u fondah L'vivs'kogo Istorichnogo Muzeyu z nadhodzhen' 1940-1972 rokov. Analiz kolekcii*, [in:] *Konferenciya Ol'zhini tchitannya*, Plisnes'k 2005, p. 2:7; O. Veremeytchik, *Druzhinni starozhitnosti z poselennya Liskove*, [in:] *Druzhinni starozhitnosti central'no shidnoy Evropi VIII-X st.*, Tchernigiv 2003, Fig. 1:1; Ė. M. Zagorul'skiy, *Vishtchinskiy zamok XII-XIII vv.*, Minsk 2004, Fig. pp. 116-117, 27:4, 29.

¹⁷ A bone fragment of an object found in Gródek, Hrubieszów powiat (county) has not been included in this set, though the relic used to be interpreted as the lug of a kisten (J. Rogatko, *Zabytki z kolekcji Piotra Kani z Gródka nad Bugiem, woj. Zamojskie*, „Lubelskie Materiały Archeologiczne”, vol. 3, 1990, p. 194, item 16, Fig. 16). Probably, the object is a bone buckle: P. N. Kotowicz, *Uwagi...*, p. 60.

¹⁸ Most recent discoveries suggest that such kistens may have been in use in the 14th-15th centuries too: cf. L. I. Vinogrod's'ka, *Predmeti...*, p. 78, Fig. 3:33-34.

¹⁹ A. N. Kirpichnikov, *Drevneruskoe...*, p. 58; A. V. Kryganov, *Kisteni...*, Fig. 1:5-7; Sh. I. Bektineev, *Bulavy...*, p. 101; V. E. Flërova, *Reznaya kost' yugo-vostoka Evropy IX-XII vekov: Isskustvo i remeslo*, Sankt-Petersburg 2001, Figs. 18:8,19.

leather straps passed. Similarly, according to A.V. Kryganov²⁰, all bone kistens coming from Saltovo-Mayackoe culture territory belong to Type I. According to P.Sh. Huzin and I.L. Izmajlov²¹, this type comprises all finds from Volga Bulgaria. Also, V. Jotov²² considers kistens from Bulgaria to be Type I specimens. Analogous relics can be found in Romanian territory²³. While analysing horn and bone kistens with no iron tangs, the relics might actually be interpreted as mace heads as kisten weights and mace heads are frequently almost identical in shape. If in doubt, the most reliable hint is the diameter of the opening in the middle of the find examined. Among maces, most of the finds have an opening more than 2.0 cm in diameter. Therefore it seems that all values below the above fixed limit are to be regarded as characteristic of kisten weights²⁴. The above assumption could, however, be questioned as a result of the discovery of a number of relicts identified as maces because of fragments of wooden handles attached to them but with openings smaller in diameter²⁵.

The first published kisten belonging to Type I was a fragmentarily preserved pear-shaped body of a relic from Ostrów Lednicki, Gniezno powiat (county), unearthed during the excavations of 1932-1935 and originally regarded to be a horn frame (Fig. 2: 3). On the find (height: approx. 9.2 cm; breadth: approx. 5.0 cm; kept in the collection of the Beginnings of the Polish State Museum in Gniezno) there are two symbols: a trident with its side prongs bent with a contour on both sides and the middle prong shaped like a cross and a fragmentarily preserved symbol in the form of an analogously bent outer prong. They are regarded to be the representations of the symbols of the Rurykowicz family or representations of crosses. It has even been suggested that they might be associated with the Polock branch of the family. The relic was tentatively dated to

²⁰ A. V. Kryganov, *Kisteni...*, p. 63.

²¹ P. Š. Huzin, *Predmety vooruzheniya*, [in:] *Kul'tura Bilyara. Bulgarskie orudiya truda i oruzhie IX-XIII vv.*, ed. A. H. Halikov, Moscow 1985, p. 183, Plate LXII:6; I. L. Izmajlov, *Vooruzhenie...*, pp. 104-106.

²² V. Jotov, *Väoräzhenieto...*, pp. 109-111, Figs. 61:661-685, 62:663-665, Plates LV:661-673, LVI:674-685.

²³ I. Barnea, *Arme...*, p. 340, Fig. 182:5-17.

²⁴ For further information see: B. Rokitowska, M. Wołoszyn, *Wczesnośredniowieczne...*, pp. 45-50; also cf.: A. Michalak, *Głowica buławy z Trzciana, pow. Międzyrzecz. Wstępne uwagi w kwestii występowania buław na ziemiach polskich w średniowieczu na tle znalezisk europejskich*, „Archeologia Środkowego Nadodrza”, vol. 4, 2005, p. 199.

²⁵ A. Michalak, *Jeszcze o buławach średniowiecznych z ziem polskich. Refleksje na marginesie odkrycia z Bogucina, pow. Olkusz*, „Acta Militaria Mediaevalia”, vol. 2, 2006, p. 107, note 5.

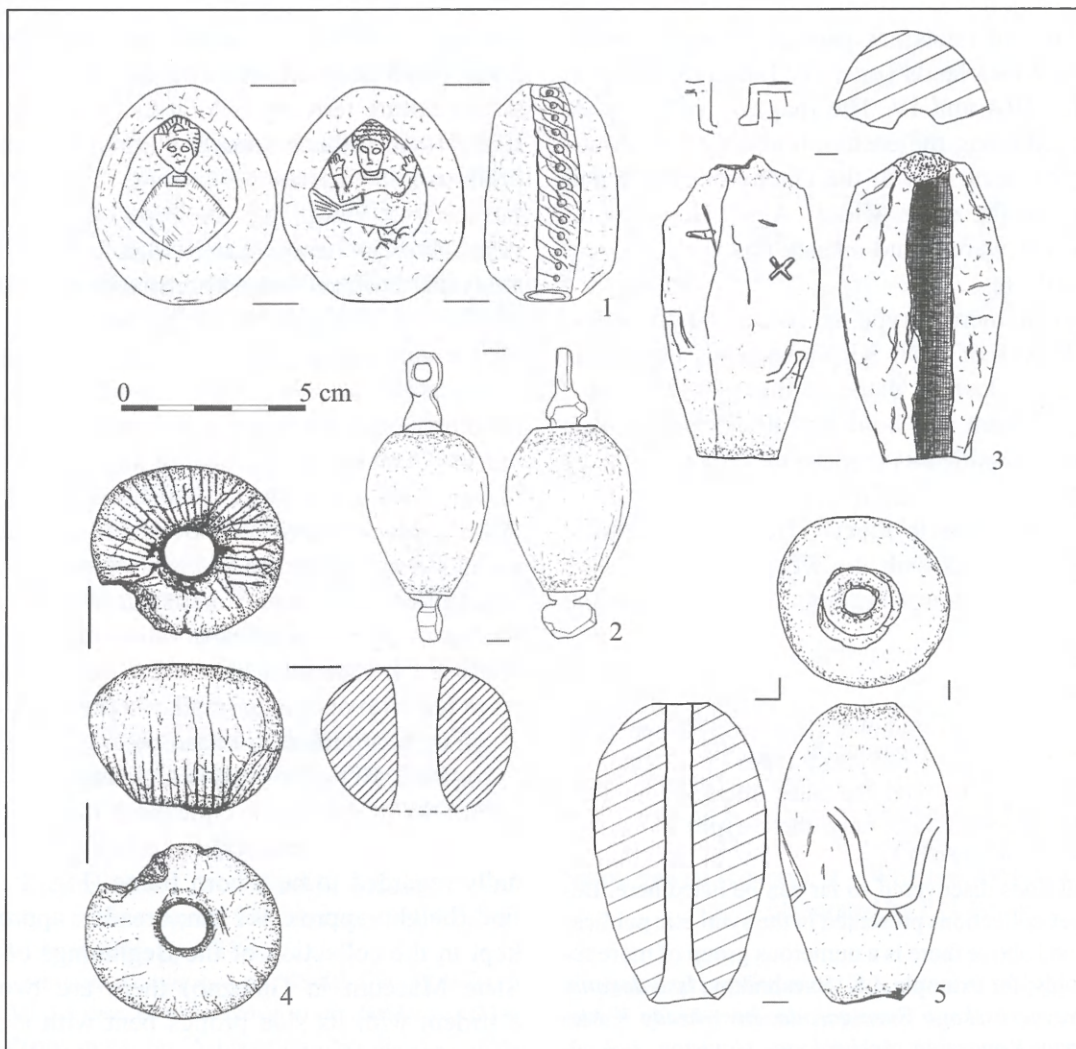


Fig. 2. Horn war-flails (kistens) from the territory of Poland: 1 – Czeremo, Tomaszów Lubelski powiat (county) (after Gurba, Czerepiński 1965; drawing by P.N. Kotowicz); 2 – Opole, Opole powiat (county) (after Gediga 1968; figure 12:a); 3 – Ostrów Lednicki, Gniezno powiat (county) (after Wrzosek 1961, plate I:12); 4 – Pełnatycze, Przeworsk powiat (county) (after Rokitowska, Wołoszyn 2001, fig. 2:a); 5 – collection of Mr and Mrs Szymanowski from Tarnów (after Szpunar 1991-92, fig. 2:o).

the Early Middle Ages²⁶, though the fact that it was unearthed in or near a 12th-14th century cemetery²⁷ might suggest a different chronology, sometimes narrowed to the 12th-13th centuries²⁸.

²⁶ A. Wrzosek, *Zabytki wczesnośredniowieczne z Ostrowa Lednickiego, pow. Gniezno*, „Fontes Archaeologici Posnanienses”, vol. 12, 1961, p. 250, plate I:12; A. N. Kirpichnikov, *Drevneruskoe...*, p. 59: note 16; A. Szpunar, *Zabytki...*, p. 241, Fig. 5:d; S. V. Beleckiy, *O znakach na rogowych kistenyakh*, [in:] *Voennaya archeologiya. Oruzhie i voennoe delo v istoricheskoy i social'noy perspektive*, Sankt Petersburg 1998, pp. 188–189; J. Wrzesiński, *O bronii...*, p. 51, Fig. 10; P. N. Kotowicz, *Uwagi...*, p. 57, Fig. 2:3; P. N. Kotowicz, A. Michalak, *I poszedl...*, pp. 83-84, Fig. 2:2.

²⁷ M. Łastowiecki, *Stratygrafia i chronologia Ostrowa Lednickiego*, „Studia Lednickie”, vol. 1, 1989, pp. 17, 27–32.

²⁸ S. V. Beleckiy, *O znakach...*, p. 188.

An almost identical relic is to be found in the collection of Mr and Mrs Szymanowski in Tarnów (Fig. 2: 5). Regrettably, it has not been clearly established whether it comes from Polish or Ukrainian territory. The kisten has a smooth, shiny, bone body (height: 8.2 cm; breadth: 4.6 cm) covered in symbols. The first symbol is a two-pronged spear with a stand resembling legs at the base. The second one represents a smaller double fork where one of the prongs of the upper fork has a seemingly added topping in the form of a double schematic swastika. The above representations are frequently compared to ducal symbols placed on, for example, seals and associated with symbols connected with Duke Oleg Swiatoslawicz (1055-1115). This assumption makes it possible for researchers to date the above form to the second half of the 11th-the first half of the 12th century. A. Szpunar, who published the find, argues that the relic may have been brought to the region of the Dunajec and Vistula rivers in the

summer of 1076, when Oleg Swiatoslawowicz, Vladimir Monomach and a Rus crew took part in Boleslaw the Generous expedition to Bohemia. However, the slightly altered shape of the kisten might suggest that the owner of the symbol was a person from the ducal circle. In addition, yet another symbol is to be seen on the find. Such cases have been interpreted as instances of inheriting a father's symbol by his son. The second symbol, much more schematic and complex appears to date back to a later period, which could mean that the weapon was actually lost later than it was suggested above. The possibility that the larger symbol denoted a member of a crew belonging to a Rurykowicz, a descendant of Swiatoslaw, and the smaller symbol was the personal symbol of the warrior-owner cannot be excluded²⁹ However interesting, the latter conception requires further evidence.

The closest analogues of the above-discussed relics are longish, pear-shaped forms known from Avar³⁰, Khazar³¹ and Rus³² sites dated to the period between the 8th and 13th centuries. The interesting thing is that a large number of finds of this type are ornamented. Such relics come from sites connected with the Khazars and Rus³³. Among them, the most attractive ones are the specimens covered in ducal symbols associated with the Rurykowicz family, just like the 'Polish' finds. One of them was unearthed at the bottom of the stratum identified with settlement by Slavs at Sarkel-Biala Wieza³⁴. At least four symbols regarded as ducal depicted on the find suggest that the relic dates back to the beginning of the 12th century³⁵. Another find with some signs of repair is a horn kisten dated to the second half of the 11th century, discovered in Minsk, Belarus. The symbols represented on its surface are associated

with the Polock branch of the Rurykowicz family, like the symbols visible on the find from Ostrow Lednicki³⁶. Finally, a kisten of this type unearthed in the village of Hulash, Volga Bulgaria, has a set of symbols resembling the ones known from the Bilyar find, Volga Bulgaria. One of the letters is interpreted as a symbol B coming from the runic Turkish alphabet, which might have denoted the first letter of the word 'Bilyar' or 'Bulgarian'. The symbol is also known from Bulgarian coins dating from the 10th century³⁷. Finds covered in various symbols come from, among others, Novgorod, the close of the 11th-the first half of the 12th century³⁸; Brest, Belarus, the 13th century; and Plisnensk, Ukraine³⁹. They confirm the above-mentioned chronology of the relics found in Polish territory.

Among the ornamented kistens, the crowning achievement of Old Rus craftsmen is a unique specimen in the form of a horn, egg-shaped weight from Czermno Kolonia, Tomaszów Lubelski powiat (height: 6.0 cm; breadth: 5.5 cm; thickness: 3.5 cm; originally kept in the collection of the High School in Tyszowce; the present place of storage remains unknown). On both sides of the middle part of its body, there are relief sculptures: A representation of a man in a cap and a loose garment round his shoulders, which might suggest a Rus boyar, a member of the upper stratum of Russian society and a half-woman half-bird, a mermaid, with her hands up, curly hair and a fish-like tail. The mermaid has got two schematically represented thin bird-like legs with three sharp curved talons. The sides of the kisten are ornamented with braid (Fig. 2: 1), which was common on early medieval horn and bone objects⁴⁰. Using analogous representations and ornamentation, the find was convincingly dated at the 12th- the beginning of the 13th century⁴¹. Analogous images of characteristic caps with their brims rolled up

²⁹ A. Szpunar, *Zabytki...*, pp. 238, 241–242, Fig. 2:0; B. Rokitowska, M. Wołoszyn, *Wczesnośredniowieczne...*, pp. 49–50, note 19; P. N. Kotowicz, *Uwagi...*, pp. 54–55, Fig. 2:5, Photo 1; A. Michalak, P. N. Kotowicz, *I poszedł...*, p. 84, Photo 2.

³⁰ É. Garam 1998, *Avar...*, Figs. 2:4, 5:6.

³¹ A. N. Kirpitschnikov, *Drevneruskoe...*, Plate XXX:8, catalogue no. 34; A. V. Kryganov, *Kisteni...*, p. 63, Fig. 1:3; A. R. Artem'ev, *Kisteni...*, p. 7, Fig. 2:3; V. E. Flërova, *Reznaya...*, pp. 58–61, Fig. 1.

³² A. F. Medvedev, *Oruzhe...*, p. 137, Figs. 5:9, 7:5; A. R. Artem'ev, *Kisteni...*, pp. 5–7, Figs. 1:4–5; 2:2; 4:2; V. Kovalenko, A. Mocya, Yu. Sytiy, *Arkheologiticheskie...*, Fig. 7:33.

³³ V. E. Flërova, *Reznaya...*, p. 59, Figs. 18:9, 17–18.

³⁴ S. S. Sorokin, *Zheleznye izdeliya Sarkela-Beloy Vezhi*, „Materiály i Issledovaniya po arkheologii SSSR”, No. 75, 1959, p. 188, Fig. 32:2; A. R. Artem'ev, *Kisteni...*, p. 7, Fig. 2:3; V. E. Flërova, *Reznaya...*, Fig. 18:18.

³⁵ V. Beleckiy, *O znakach...*, p. 189.

³⁶ V. R. Tarasenko, *Raskopki Minskogo Zamtchishta*, „Kratkie Soobshcheniya”, No. 35, 1950, pp. 126–127, Fig. 42; É. Zagorul'skiy, *Vozniknovenie Minska*, Minsk 1982, p. 217, Fig. 69; Sh. I. Bektineev, *Bulavy...*, p. 103, Fig. 31:12; S. V. Beleckiy, *O znakach...*, p. 188.

³⁷ V. I. Izmailov, *Vooruzhenie...*, p. 106.

³⁸ A. R. Artem'ev, *Kisteni...*, p. 7, Fig. 2:2.

³⁹ Š. I. Bektineev, *Bulavy...*, p. 101, Fig. 31:11; S. Terskiy, *Virobi z kosti i rogu X–XIII st. Z teritorii Prikarpatiya i Volini u fondach L'vivskogo istoritchnogo muzeyu*, „Naukovi Zapiski”, No. 1, L'viv, 1993, pp. 73–75, Plate VI:8; by the same author, *Arkheologitichni...*, Fig. 2:7.

⁴⁰ M. Wołoszyn, *Między Wschodem a Zachodem: pochówek wojownika ze stanowiska 1C w Gródku, pow. hrubieszowski, woj. lubelskie*, „Acta Militaria Mediaevalia”, vol. 1, 2005, pp. 94–95, Figs. 5–6.

⁴¹ J. Gurba, A. Czerepiński, *Ciekawy...*, pp. 239–241; by the same authors, *Rogowy...*, pp. 484–489; P. N. Kotowicz,

are often found on seals and icons depicting Rus saints and men of high social status. Relief representations of mermaids-birds are known from, for example, tiles most probably used as flooring in Rus temples⁴². So far no Old Rus objects analogous with the relic from Czermno have been discovered. The rather squat and stubby weights of kistens from Sarkel-Bialaya Viezha, coming from the strata associated with the Khazars and Slavs, are similar in shape⁴³. As far as the ornamental patterns are concerned, a horn relic found in Zvenihorod, Ukraine, with a representation of a griffon is the only comparable specimen⁴⁴.

An equally interesting and so far unique fully preserved kisten weight belonging to Type I was unearthed on 'Ostrówek', Opole, Opole powiat (Fig. 2: 2). Its horn body with a tang and an iron (?) lug was discovered in stratum E_{II}, dated at the first half of the 11th century, in 1965 (the collection of the Institute of Archaeology and Ethnology of the Polish Academy of Sciences, Branch in Wrocław). The authors interpreted the find as a bob of a pendulum or a scales weight made of horn with a metal shaft⁴⁵. However, Rus, Khazar, Romanian and Bulgarian analogues, including both fully preserved specimens and separate tangs, undoubtedly suggest that the object was a kisten⁴⁶. Against a background of East European relics, the find from Opole

is characterized by an originally shaped end of the tang, which has the form of a separate, flat polygon. In his typology of Khazar relics, A.V. Kryganov classified specimens with iron tangs as a separate Variant 3 of Type I⁴⁷. However, it has been rightly argued that Variant 3 corresponds to Variant I, composed of finds with a channel cut through the middle, introduced by the same author⁴⁸.

Another slightly damaged kisten weight was found at Pelnatycze, Przeworsk powiat (Fig. 2: 4). It is made of antlers of an elk or deer. Being shaped like a pumpkin (height: 4.1 cm; breadth: 5.7 and 4.9 cm; diameter of the opening: 1.2-1.8 cm; weight: 72.5 g), this find differs from the above-mentioned specimens of Type I. $\frac{3}{4}$ of the lower part of the relic are decorated with cuts radiating from the opening. It is dated at the second half of the 10th-the 13th century⁴⁹. The kisten has no close analogues in the material published. Horn forms similar to the relic from Pelnatycze and dating back to the mid-11th century were unearthed in Avar Khaganate territory, on Khazar sites and in Novgorod⁵⁰.

The last kisten of this type was found during archaeological excavations in the village of Kolonia, Włodawa powiat, in the stronghold's satellite settlement (site 8). The first publication suggests that the specimen was an unfinished object made of elk or deer antlers with a symbol of a diagonal cross incised on the surface. The interesting thing is that the kisten and the lug form one whole. As some remains of a workshop for producing horn objects were unearthed in the direct vicinity of the place where the kisten was found it might be assumed that the object was discovered in its place of manufacture.

The settlement at Kulczyn Kolonia is dated to the close of the Tribal Period thanks to the earthenware material found on the site. The kisten itself has so far been considered evidence of contacts between the Lublin Polesie (Woodlands) and the Khazar Khaganate⁵¹. As was stated above, Type I kistens, characterized by this method of fixing the leather strap or chain, come from Central and Eastern Europe

Uwagi..., p. 57, Fig. 2:1; by the same authors, *Przemiany...*, p. 26, Fig. 5:1.

⁴² See e.g.: V. Zhishkovitch, *Plastika Rusi-Ukraini. X – persha polovina XIV stolit'*, L'viv 1999, pp. 144–146, 218, 221–222.

⁴³ A. N. Kirpichnikov, *Drevneruskoe...*, p. 59: note 16; Plate XXX:6, 9.

⁴⁴ V. M. Petegiritch, *Oruzhie i snarâayzhenie vsadnika*, [in:] *Arkheologiya Prikarpat'ya, Volyni i Zakarpat'ya (rannoslavianskiy i drevnerusskiy periody)*, Kiev, p. 167; P. N. Kotowicz, *Przemiany...*, p. 27.

⁴⁵ B. Gediga, *Wyniki badań na Ostrówku w Opolu w latach 1964 i 1965*, „Sprawozdania Archeologiczne”, vol. 19, 1968, Fig. 12:a; by the same author, *Dwadzieścia lat polskich badań archeologicznych na Ostrówku w Opolu*, „Opolski Rocznik Muzealny”, vol. 4:1, 1970, pp. 28–29, Fig. 13; M. Norska-Gulkowa, *Wyroby z rogu i kości z wczesnośredniowiecznego grodu-miasta na Ostrówku w Opolu*, „Opolski Rocznik Muzealny”, vol. 8, 1985, pp. 285–286, Fig. 28:i.

⁴⁶ A. F. Medvedev, *Oruzhe...*, p. 137, Fig. 5:9; I. Barnea, *Arme...*, Fig. 182:9; A. V. Kryganov, *Kisteni...*, Fig. 1:8; A. R. Artem'ev, *Kisteni...*, pp. 6–7, Figs. 2:1–3; 3:1–4; A. V. Komar, V. I. Pioro, *Kurgani khozars'kogo tchasu Luganshtchini*, „Vita Antiqua”, vol. 2, Plate II:10; A. V. Komar, O. V. Suhobokov, *Vooruzhenie i voennoe delo Khazaraskogo kaghanata*, „Vostotchnoevropejskiy Arheologitcheskiy Zhurnal”, vol. 2(3), 2000, Fig. 2:25-26; V. Jotov, *Väorâzhenieto...*, p. 112, Figs. 61:671, 62:663,665., Plates LV:663-664, LVI:676; M. Wołoszyn, *Obecność...*, p. 262; P. N. Koto-

wicz, *Uwagi...*, p. 57, Fig. 2:2; P. N. Kotowicz, A. Michalak, *I poszedł...*, pp. 83-84, Fig. 2:1.

⁴⁷ A. V. Kryganov, *Kisteni...*, p. 63.

⁴⁸ V. E. Flërova, *Reznaya...*, p. 58.

⁴⁹ B. Rokitowska, M. Wołoszyn, *Wczesnośredniowieczne...*, pp. 45–49, Figs. 2:a, 3:a–b; P. N. Kotowicz, *Uwagi...*, p. 57, Fig. 2:4; by the same author, *Przemiany...*, p. 26, Fig. 5:2.

⁵⁰ A. N. Kirpichnikov, *Drevneruskoe...*, Plate XXX:1-2; É. Garam, *Avar...*, Figs. 3:2,8; 4:5–6; A. V. Kryganov, *Kisteni...*, p. 63, Fig. 1:8; A. R. Artem'ev, *Kisteni...*, p. 6, Fig. 1:1.

⁵¹ W. Mazurek, *Słowiańskie...*, pp. 110-111, 116-117, Photo 8.

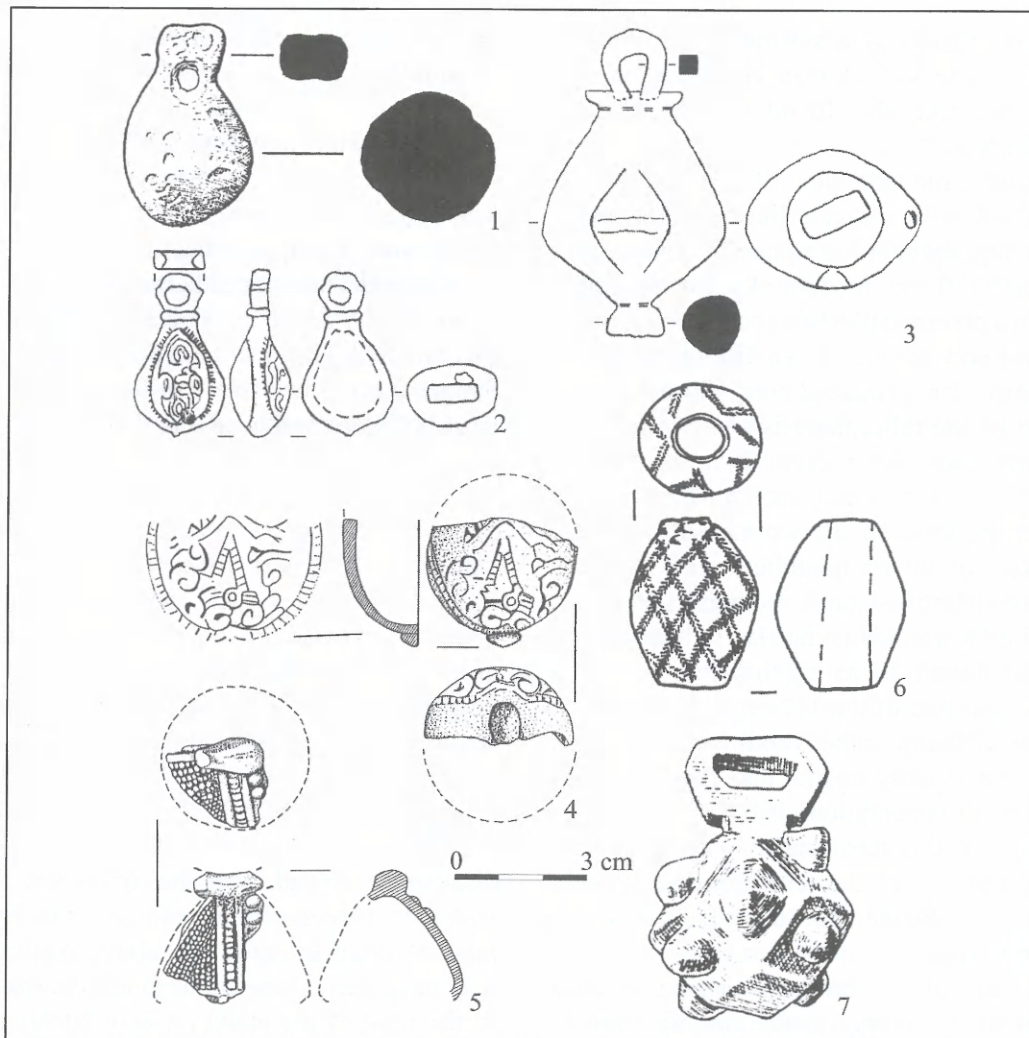


Fig. 3. Metal war-flails (kistens) from the territory of Poland: 1-2 – Gródek, Hrubieszów powiat (county) (1 – after Kuśnierz 2006, plate V:16; 2 – after Ławrynowicz, Strzyż 2003, fig. 1:1); 3 – near Szarajówka, Biłgoraj powiat (county) (after Ławrynowicz, Strzyż 2003, fig. 1:2); 4-5 – Trepcza ‘Horodyszczce’, Sanok powiat (county) (after Ginalski, Kotowicz 2004, plate I:1-2); 6 – Wrocław, Wrocław powiat (county) (after Kaźmierczyk 1995, fig. 35:2); 7 – Chojnowski Collection I at the Polish Army Museum in Warsaw (after Kirpitschnikov 2000, fig. 2:8).

territory, however rare they are. So far, the only known specimens have been unearthed on Khazar sites (Variant 2 Type I after A.V. Kryganov; Type II after V.E. Flërova) and in Romania⁵².

Type II is associated with a lead kisten, (height: 4.8 cm; diameter approx.: 3.0 cm; weight: 198.9 g; collection: lost) shaped like an irregular ball with a lug (Fig. 3: 1), found next to the rampart in the southern part of the stronghold yard at Gródek, Hrubieszów powiat, site 1A. It was unearthed in the upper part of stratum III, dating back to the times of 9th-mid-13th century settlement. According to J. Kuśnierz, who published it,

the find could be dated to the 11th-13th centuries. The author does not exclude the possibility that the relic from Gródek may be the lead core of a bronze kisten⁵³. According to A.N. Kirpitschnikov, Type II comprises 24 iron and bronze, smooth and angular weights dating back to the second half of the 10th-the 13th centuries⁵⁴. The specimen from Gródek differs from the others in the material used. However, this is not the only lead kisten known from the scientific literature.

⁵² I. Barnea, *Arme...*, pp. 340-341, Figs. 182:5-6,10,16; by the same author, *Noi descoperiri...*, Fig. 12:10; A. V. Kryganov, *Kisteni...*, p. 63, Fig. 1:5-7; V. E. Flërova, *Reznaya...*, p. 60, Figs. 18:8-9,19.

⁵³ J. Kuśnierz, *Z badań...*, p. 88, Plate V:16. A similar assumption was made regarding the kisten from Bilâr, Volga Bulgaria: I. L. Izmailov, *Vooruzhenie...*, p. 106, Plate XIa:1, Fig. 73:5. This interpretation is considered probable in the case of the kisten from Novgorod: A. R. Artem'ev, *Kisteni...*, p. 7.

⁵⁴ A. N. Kirpitschnikov, *Drevneruskoe...*, pp. 59, 62, Plates XXXI:1-4; XXXII:1-4.

A.V. Kryganov introduced a separate type comprising such finds (Type V)⁵⁵. A lead kisten ornamented with small knobs was also found in the village of Zvenigorod, Ukraine⁵⁶.

An iron kisten the side view of which resembles a rounded deltoid with a saucer-like piece in its upper part and a slightly bent lug square in cross-section attached (height: 7.0 cm; breadth: 4.2 cm; thickness: 3.2 cm; kept in a private collection) comes from Szarajówka, Biłgoraj powiat (Fig. 3: 3). The lower section of the body ends with a rounded cone. On one side of the upper part of the relic, there is an opening about 4mm in diameter and 4mm deep. Two curved lines with their ends almost touching each other are incised on the surface. Between them, two incised horizontal lines form a kind of narrow heraldic stripe⁵⁷. No close analogues were identified until recently⁵⁸. However, a strikingly similar iron kisten has lately been discovered on a burial mound site dating from the second half of the 10th-the first half of the 11th centuries in the village of Blizhnie Elbany in the woodland-steppe areas of the Altai⁵⁹. It is slightly smaller than the relic analysed here with no ornamentation visible on the surface. The chronology of this territorially remote find may not correspond to that of the relic from Szarajówka, but it is evidence of the fact that such weapons were in use in Eastern Europe.

A fragment of a bronze, originally pear-shaped kisten weight empty inside coming from the Horodyszczce stronghold at Trepca, site 2, Sanok powiat (Fig. 3: 5) falls into Type IIA. According to A.N. Kirpichnikov, 22 round pear-like bronze specimens with characteristic rich ornamentation in the form of tiny grain-like and larger pea-like knobs cast by means of a special technique in two-chamber clay moulds also belong to this type⁶⁰. A fragmentarily preserved find (preserved height: 3.0cm; weight: 10g; in the collection of the Historical Museum in Sanok, inventory no. MHS 649/9) found in the forest floor in the yard of a stronghold in 1995, which used to have a now clearly broken lug, is decorated with

a pattern imitating granulations varying in size enclosed in a number of fields formed by horizontal and vertical plain borders⁶¹. The majority of kistens belonging to this type are relics with bronze bodies filled with lead in order to make them heavier. Such a technique of making kistens appears as early as the 10th century and comes into widespread use in the 12th-13th centuries. Like Type III, mentioned below, kistens of this type are considered to be the most perfect artifacts produced by Rus molders. They are usually unearthed in gardens in Southern and South-Western Russia, where they were most probably produced and from where they spread. For instance, very similar kisten weights, probably coming from the workshop of one craftsman, were discovered on the Ukrainian sites at Knazha Hora, Liplava i Rayki. Kistens of this type were also found in Volga Bulgaria and they used to be regarded as Rus imports⁶². Nowadays the above interpretation is frequently questioned⁶³. Ukrainian finds from Verbitchka, Grigorivka and Peresopnica, dating back to the 12th-13th centuries⁶⁴, as well as from Izaslav, most probably dating from the first half of the 13th century⁶⁵, are the closest analogues of the relic from Trepca. They all have grain-like, relief ornamental design analogous with the discussed relic and the bodies of the first two are filled with lead. It seems highly probable that because of the kind of ornamentation the above mentioned kistens may have been made at one single bronze workshop⁶⁶. In the light of the above, it may be assumed that the fragment of the kisten from Horodyszczce dates back to the 12th-13th centuries.

⁶¹ J. Ginalski, P. N. Kotowicz, *Elementy...*, Plate II:1, catalogue no. 3; P. N. Kotowicz, *Uwagi...*, p. 58, Fig. 3:5; by the same author, *Przemiany...*, p. 28, Fig. 5:5.

⁶² A. N. Kirpichnikov, *Drevneruskoe...*, pp. 59-62; P. Š. Huzin, *Predmety...*, p. 183, Plate LXII:8.

⁶³ I. L. Izmailov, *Vooruzhenie...*, pp. 106-107, Figs. 71:8 10, 72.

⁶⁴ L. Rauhut, *Wczesnośredniowieczne materiały z terenów Ukrainy w Państwowym Muzeum Archeologicznym w Warszawie*, „Materiały Wczesnośredniowieczne”, vol. 5, 1960, Plate XIX:2; A. N. Kirpichnikov, *Drevneruskoe...*, p. 136, items 65, 80, Plates XXIX:4, XXXI:9; S. Ters'kiy, *Peresopnicya*, p. 66, Fig. 39.

⁶⁵ A. N. Kirpichnikov, *Massovoe oruzhie blizhnego boya iz raskopok drevnego Izyaslavlja*, „Kratkie Soobshtcheniya”, No. 155, Moscow, 1977, Fig. 4:7.

⁶⁶ The fragment of an analogous bronze artifact found in Mstislavl', Mogilev oblast (province), Belarus, which was identified as a fragment of a stick, may also fall into his category see: L. V. Alekseev, *Drevniy Mstislavl' (po materialam raskopok 1959-1964, 1968 i 1969 gg.)*, „Kratkie Soobshtcheniya”, No. 146, p. 46, Fig. 2:1.

⁵⁵ A. V. Kryganov, *Kisteni...*, p. 66, Fig. 2:11-14; A. R. Artem'ev, *Kisteni...*, p. 7, Fig 1:3; V. Jotov, *Väoräzhnieto...*, p. 111, Fig 63:686.

⁵⁶ I. K. Sveshnikov, *Issledovanie...*, p. 147, Fig. 2:9.

⁵⁷ O. Ławrynowicz, P. Strzyż, *Nowe...*, p. 258, Fig. 1:1.

⁵⁸ P. N. Kotowicz, *Uwagi...*, pp. 57-58, Fig. 3:2; by the same author, *Przemiany...*, p. 28, Fig. 5:3; P. Strzyż, *Uzbrojenie...*, pp. 61-62.

⁵⁹ V. V. Gorbunov, *Voennoe...*, pp. 86-87, Fig. 69:7.

⁶⁰ Z. A. Volodčenko, *K voprosu o technike tcherni na Rusi*, „Kratkie Soobshtcheniya”, No. 52, 1953, p. 11; A. N. Kirpichnikov, *Drevneruskoe...*, p. 59.

In A.N. Kirpichnikov's classification, the bronze weight of a miniature kisten empty inside (height: 3.7 cm; breadth: 2.1 cm; thickness: 1.4 cm; kept in a private collection) coming from the vicinity of Gródek, Hrubieszów powiat, falls into Type III, referred to as the type with 'black', *niello* ornamentation. Both sides of the find are decorated with shallowly incised, egg-shaped fields, blurred on one side, filled with triangles and scrolls (Fig. 3: 2). The object has got two openings placed at the top and bottom of its body. The lower hole is filled with lead⁶⁷. A.N. Kirpichnikov lists 20 kistens belonging to Type III, dating them to the first half of the 13th century. The relics are empty inside and differ from each other in size as well as form of ornamentation. These kistens are considered to be the crowning achievements of Rus craftsmen. The ornament is usually composed of triangles and scrolls arranged in a cross. The main centre of production of such kistens was Kiev, where 14 such objects (70 per cent of the collection) were found. Most probably, weapons of this type were not used in battle but constituted a kind of status symbol, a manifestation of the owner's financial position. In addition, the authors of the publication argue that because of its size the find from the vicinity of Gródek may have been a toy. If that was the case, the object must have belonged to a young member of the boyar elite⁶⁸. Practically, all the finds discovered in Rus and published by A.N. Kirpichnikov are close analogues of the relic from Gródek⁶⁹. A number of similar miniature kistens, 3.7-4.0 cm in height⁷⁰, dating back to first half of the 13th century, were unearthed in the village of Rayki⁷¹. A larger (4.1 cm high), single find of this type coming from Volga Bulgaria is regarded as evidence of trading or military contacts between local society and the Rus in the first half of the 13th century⁷². It may also be noted that analogous though larger specimens from Kiev and Verbitchka are to be seen in the Archaeological Museum and the Polish Army Museum in Warsaw⁷³.

The most geographically remote specimen was recorded in Mainz, Germany⁷⁴.

According to A.N. Kirpichnikov, a fragment of a bronze, originally round kisten empty inside found in Trepcza (preserved height approx.: 2.5 cm; original diameter approx.: 3.5 cm; knob diameter: 0.8 cm; weight: 21.07 g; kept in the collection of the Historical Museum in Sanok, inventory no. 314/98) falls into Type IIIA. The only surviving part of the relic found in the forest floor at the outer eastern slope of the first rampart of the stronghold in 1998 is its lower section with a round, slightly filed knob (Fig. 3: 4), whose surface was covered with incised relief ornamentation⁷⁵. All bronze kistens, frequently empty inside, with their bodies filled with lead, like in the case of Type IIA, belong here. In A.N. Kirpichnikov's publication, Type IIIA comprises 10 relics. These are mostly round objects, though several of them are pear-shaped. They are characterized by rich, relief ornamentation in the form of patterns, symbols and inscriptions. Two finds of this type, coming from Novgorod and Kiev, are decorated with images of a bird and a lion and two others, from Novgorod and Piskon, Russia, are covered with the symbols of the Rurykovich family⁷⁶. Type IIIA have been dated at the second half of the 11th-13th centuries, though a couple of finds date back to the 12th-13th centuries⁷⁷. Their rich ornamentation and the symbols visible seem to suggest that, like Type III, these kistens were used by the Rus elite. Moreover, on the relic from Trepcza, there is an image resembling bird's legs, one of which ends with symbolically marked talons (?). As was stated above, an image of a bird is also depicted on one of the finds from Novgorod, where it is silhouetted in an oval surrounded by a floral pattern⁷⁸.

Finally, an iron specimen (Fig. 3: 7) of unknown provenance from I. Chojnowski's collection (height 6.5 cm; breadth 4.0 cm; thickness 2.5 cm; weight 207 g; kept in the Polish Army Museum in Warsaw, inventory no. 24133) belongs to Type IV

⁶⁷ O. Ławrynowicz, P. Strzyż, *Nowe...*, p. 258; P. N. Kotowicz, *Uwagi...*, p. 59, Fig. 3:1; by the same author, *Przemiany...*, p. 28, Fig. 5:4.

⁶⁸ A. N. Kirpichnikov, *Drevneruskoe...*, pp. 62-63; O. Ławrynowicz, P. Strzyż, *Nowe...*, pp. 258, 260, Fig. 1:2.

⁶⁹ A. N. Kirpichnikov, *Drevneruskoe...*, Plates XXIX:5; XXXIII:1-4; XXXIV.

⁷⁰ The remaining kisten weights of his type are markedly bigger, approximately 5-7cm high: A. N. Kirpichnikov, *Drevneruskoe...*, catalogues nos 82-101.

⁷¹ Ibidem, Plate XXXIV:6-7, catalogue nos 97-98.

⁷² I. L. Izmailov, *Vooruzhenie...*, p. 107, Plate 11:20, Fig. 71:6.

⁷³ L. Rauhut, *Wczesnośredniowieczne...*, p. 254, Plate XIX:4; A. N. Kirpichnikov, *Drevneruskoe...*, Plate XXIX:5,

catalogue no. 99; by the same author, *Bulavy...*, pp. 233-234, Fig. 2:2-3.

⁷⁴ E. Vamers, *Die Frühmittelalterlichen...*, p. 154, Fig. 90:246.

⁷⁵ J. Ginalski, P. N. Kotowicz, *Elementy...*, Plate II:2, catalogue no. 4; P. N. Kotowicz, *Uwagi...*, p. 59, Fig. 3:4; by the same author, *Przemiany...*, p. 28, Fig. 5:6.

⁷⁶ A. F. Medvedev, *Oruzhe...*, p. 138, where it is classified as Type 2, Fig. 7:5, Plate 4:8-9; A. N. Kirpichnikov, *Drevneruskoe...*, p. 63, note 29, Fig. 12, Plates XXXII:5, XXXIII:6; A. R. Artem'ev, *Kisten...*, Figs. 5:4-5, 7.

⁷⁷ A. N. Kirpichnikov, *Drevneruskoe...*, p. 138, nos 102-111, Plate 16.

⁷⁸ A. F. Medvedev, *Oruzhe...*, p. 138, Plate 4:9; A. R. Artem'ev, *Kisten...*, Fig. 5:4.

of A.N. Kirpichnikov's classification. A.N. Kirpichnikov argues that the relic may come from Polish territory. After the collector's death in 1919, it was presented by the family to the museum. The kisten is shaped like a polygon, equipped with a lug and decorated with semicircular projections⁷⁹. Similar objects can be found all over Rus territory. The majority of them date back to the 12th-13th centuries, though there are several later objects as well. Such kistens have also been discovered in Volga Bulgaria and dated at the first tierce of the 13th century⁸⁰.

In A.N. Kirpichnikov's classification, no analogues were found of a lead object found in Wrocław, Wrocław powiat and recently interpreted as a kisten (Fig. 3: 6)⁸¹. The relic is richly ornamented with interlacing stripes of herringbone patterns which form empty, rhombus-shaped fields. It was found in Building 5 on Tum Ostrów, in the stratum dated to the third quarter of the 11th century and was originally identified as a lead mace head or a scales weight⁸². The former interpretation ought to be refuted because of the diameter of the opening for fixing the wooden shaft. The opening was 1.0-1.5 cm in diameter while the standard opening in a mace was over 2.0 cm in diameter⁸³. However, the latter possibility that the object was a weight cannot be excluded. As was stated above while discussing the lead find from Gródek, relics analogous to this one regarding the material used and frequently the form too can be found in Khazar cemeteries. These are pear-shaped or round objects which in A.V. Kryganov's classification fall into Type V⁸⁴. An object similar in form was also unearthed in Novgorod, in the stratum dated to the last quarter of the 14th century⁸⁵. None of them, however, is decorated in a similar way. Ornamentation resembling the pattern in question is to be found on one of the mace heads discovered in Pliska, Bulgaria and dated to the 10th-11th century through analogy⁸⁶.

Whether the above finds are complete kistens, as was the case with the Khazar relics, or their parts

which were originally the core of empty, bronze weapons (see the assumption regarding the find from Gródek) is open to question. If the latter was the case, the objects were used to increase the weight of a kisten and helped reduce the use of precious materials such as bronze. On the other hand, Ukrainian scholars notice that these kistens are not deformed in any way, which might suggest that they were never used in battle⁸⁷. Are they kistens? This question cannot be satisfactorily answered here.

To sum up: The above source material does not allow precise dating based exclusively on analogy in the case of specimens coming from Polish or Rus territory. It seems, however, that the earliest postulated date of the appearance of bone kistens in Central Europe, that is, the Avar period, is to be rejected. This conclusion is confirmed by the chronology of the sites where kistens were found in Polish territory, the presence of other Central European finds on the sites, their ornamentation as well as the symbols depicted. Therefore, it may be assumed that in present-day Poland, such kistens were in use from the second half of the 10th to the 13th centuries. Moreover, the find from Kulczyn Kolonia should be dated to the close of the Tribal Period, the kisten from Opole was most probably used during the first half of the 11th century and the ornamented specimens from Czermno and Ostrow Lednicki as well as the bronze and lead ones coming from Gródek and Trepcza can safely be said to date back to the period between the 12th and the 13th centuries.

The majority of kistens found in Poland come from sites where other objects of eastern provenance were also unearthed. The abundance of such relics should not be surprising on the sites where the kistens discovered come from the eastern extremities of Polish lands, which were part of Rus duchies in the period in question. That is the case with the early medieval strongholds at Czermno Kolonia, Gródek and Trepcza as well as the early medieval settlement at Pełnaticze. The interesting thing, however, is that eastern relics are also to be found on standard sites situated in the territory belonging to the first Piast dynasty, including Opole⁸⁸,

⁷⁹ A. N. Kirpichnikov, *Bulavy...*, p. 234, Fig. 2:8; P. N. Kotowicz, *Uwagi...*, p. 60, Fig. 3:3.

⁸⁰ A. N. Kirpichnikov, *Drevneruskoe...*, p. 63, Plate XXXIII:7, catalogue nos 112-117; by the same author, *Bulavy...*, p. 234, Fig. 2:7; I. L. Izmailov, *Vooruzhenie...*, p. 108, Plate XI:21-25, Fig. 73:1.

⁸¹ P. N. Kotowicz, *Uwagi...*, p. 60, Fig. 4.

⁸² J. Kaźmierczyk, *Ku początkom Wrocławia. Cz. 3*, Wrocław 1995, p. 133, Fig. 35:2 and Fig. 111.

⁸³ A. Michalak, *Głowica...*, p. 188, note 6.

⁸⁴ A. V. Kryganov, *Kisteny...*, p. 66, Fig. 2:11-14; V. S. Ak-senov, V. K. Miheev, *Pogrebeniya...*, p. 184, Fig. 3:18.

⁸⁵ A. R. Artem'ev, *Kisteny...*, Fig. 2:14.

⁸⁶ V. Jotov, *Väoräzhenieto...*, p. 109, Plate LIV:649.

⁸⁷ A. V. Komar, O. V. Suhobokov, *Vooruzhenie...*

⁸⁸ K. Wachowski, *Militaria z grodu na Ostrówku w Opolu*, [w:] *Studia nad kulturą wczesnopolskiego Opola. Militaria – wyroby bursztynowe*, Wrocław-Warsaw-Cracow-Gdansk-Lodz 1984, pp. 65-67, Figs. 6:e, 46:a; by the same author, *Elementy rodzime i obce w uzbrojeniu wczesnośredniowiecznym na Śląsku*, „Acta Universitatis Lodzianis. Folia Archaeologica”, vol. 23, 2001, p. 170, Fig. 18:a; W. Świętosławski, *Elementy...*, p. 8, Figs. 1:a,h, 3:e; by the same author, *Archeologiczne ślady najazdów tatarskich na Europę Środkową w XIII w.*, Łódź 1997, pp. 50-51, Fig. 17:a-d; W. Panasiewicz,

Ostrów Lednicki⁸⁹ and probably Wrocław⁹⁰. Therefore, it may be assumed that kistens belonging to well documented sets of finds coming from Polish territory can be placed in a source context confirming the fact that they are not single, random finds.

The qualities of most of the finds coming from western extremities of the early medieval Duchy of Halicz and Włodzimierz suggest their festive character. Their rich floral and zoomorphic ornamentation as well as the use of various decorative techniques is evidence of the outstanding skills of the makers. It could be argued that a number of kistens were not necessarily imports from, for example, Kiev, but may have been produced by craftsmen employed by the local wealthy. Finds suggesting the existence of workshops for casting various artifacts seems to confirm production of this type of objects in the territory in question. Among them are lead matrices used for production of encolpions, discovered in Gródek and Trepca⁹¹, and bronze moulds for making ornamental pendants used to decorate the head coverings of early medieval Rus women, which were unearthed in Chełm, Chełm powiat⁹². In the case of horn and bone objects, the find

from Kulczyn Kolonia seems to be evidence of their local place of production. This relic is a semi-manufactured product discovered near a workshop for producing horn objects⁹³. A similar find, dating back to the 12th century, comes from eastern Rus Zvenigorod, Ukraine, where a semi-manufactured bone kisten was found directly in a workshop for producing bone and horn objects⁹⁴.

It may only be noted that richly ornamented kistens are known exclusively from southern and western Rus territory and only single finds are to be found in main centres of North Rus dukes' authority. Thus, weapons discovered in the area in question must have been very expensive specimens regarded as status symbols⁹⁵.

In the case of major Early Polish centres, Ostrów Lednicki, Opole and Wrocław, the situation appears to be quite different. Kistens discovered in this area were mostly imports from eastern territory. It remains unclear whether they reached Polish lands as a result of trading activity or were brought to the region by the armed forces. If the latter were true, two possible variants of their presence in the Piast monarchy need to be taken into consideration. In the case of Ostrów Lednicki, foreign members of the duke's crew, including Rus and nomadic warriors, may have been positioned in important centres of Early Piast Poland⁹⁶. Probably, the situation was similar in Opole and Wrocław, though the kistens may have been brought there as a result of the Tartar Invasion of 1241 as Rus warriors are known to have participated in the event⁹⁷. The possibility that the kistens discovered in these two places were property of Polish warriors and considered valuable foreign imports cannot be excluded. Analysis of particular specimens reveals that the majority of the finds have qualities being a proof of their owners' high social status. The material, production technique, rich relief ornamentation and patterns commonly associated with the Rurykowicz family's ducal symbols clearly suggest that besides its purely war application this kind of weapon had some prestigious significance and was considered to be a symbol of authority, possibly military in character.

M. Wołoszyn, *Staroruskie...*, p. 254; B. Rokitowska, M. Wołoszyn, *Wczesnośredniowieczne...*, p. 52.

⁸⁹ See e.g.: A. Wrzosek, *Zabytki...*, Plates VIII:19, X:3; Z. Hołowińska, *Uwagi...*, pp. 389–393; A. Wrzeńska, J. Wrzeński, *Grób z miniaturowym toporkiem z Dziekanowic gm. Łubowo, woj. Poznańskie, stan. 22*, „Wielkopolskie Sprawozdania Archeologiczne”, vol. 4, 1996, pp. 197–204; J. Górecki, *Kultowo-rezydencjonalny ośrodek pierwszych Piastów na Ostrowie Lednickim*, [in:] *Civitates Principales. Wybrane ośrodki władzy w Polsce wczesnośredniowiecznej. Katalog wystawy*, Gniezno 1998, pp. 35–44; by the same author, *Gród na Ostrowie Lednickim na tle wybranych ośrodków grodowych pierwszej monarchii piastowskiej*, „Biblioteka Studiów Lednickich”, vol. 7, Lednogóra 2002, p. 139, Figs. 86:11,13; by the same author, *Waffen und Reiterausrüstungen von Ostrów Lednicki – Zur Geschichte des frühen polnischen Staates und seines Heeres*, „Zeitschrift für Archäologie des Mittelalters”, vol. 29, 2001, pp. 41–86; A. Kola, G. Wilke, *Mosty sprzed tysiąca lat. Archeologiczne badania podwodne przy rezydencji pierwszych Piastów na Ostrowie Lednickim*, Bydgoszcz 2000, p. 72, Fig. 56:s–t; W. Panasiewicz, M. Wołoszyn, *Staroruskie...*, pp. 254, 270.

⁹⁰ K. Wachowski, *Elementy...*, p. 170, Fig. 18;c–e; C. Buśko, *Dzwon z Nowego Targu świadectwem pobytu Tatarów we Wrocławiu*, [in:] *Archaeologia et Historia Urbana*, Elbląg 2004, pp. 529–534.

⁹¹ M. Wołoszyn, *Archeologiczne zabytki sakralne pochodzenia wschodniego w Polsce od X do połowy XIII wieku (wybrane przykłady)*, [in:] *Cerkiew – wielka tajemnica. Katalog wystawy*, Gniezno 2001, p. 39.

⁹² A. Haduch, R. Liwoch, *Kołtki z południowo-zachodniej Rusi*, [in:] *Seminarium Trepcańskie*, Sanok 2006, pp. 47–48, Figs. 32–34.

⁹³ W. Mazurek, *Słowiańskie...*, pp. 110–111.

⁹⁴ S. Ters'kiy, *Virobiz kosti i rogu X–XIII st. Z teritorii Pri-karpattya i Volini u fondah L'vivs'koho istorichnoho muzeyu*, „Naukovi Zapiski”, No. 1, Lvov 1993, p. 75, Fig. IX:1.

⁹⁵ P. N. Kotowicz 2006, *Przemiany...*, p. 28.

⁹⁶ J. Wrzeński, *O broni...*, pp. 52–53; P. N. Kotowicz, A. Michalak, *I poszedł...*, p. 89. For further information see: M. Bogacki, *Charakter występowania wojowników obcych w siłach zbrojnych monarchii wczesnopiastowskiej*, „Studia z dziejów polskiej historiografii wojskowej”, special issue, ed. K. Olejnik, Z. Pilarczyk, Poznań 2005, pp. 21–45.

⁹⁷ W. Świętosławski, *Archeologiczne...*, pp. 19–20.

This small but interesting collection of kisten weights coming from Polish territory enriches our knowledge of early medieval military science in central Europe to a large extent. Finds of this type discovered in the eastern extremities of Poland, which used to be part of the West Rus duchies in the early Middle Ages, suggest that these lands were not underdeveloped regarding military thought in comparison with the main centres of contemporary Rus but, on the contrary, they may have played the role of outposts from which cultural novelties spread over western territories. Finds from *sensu stricto* Polish sites illustrate the possibility

of adaptation of exotic kinds of weapons to a foreign environment. The fact that they were part of equipment of foreign warriors at the service of Polish rulers seems to be of secondary importance. Their presence in Polish lands is evidence of contemporary Polish military experts' openness to various, sometimes most original novelties. In contrast to Rus lands, the military accessories in question were never in widespread use here, which seems to suggest that they did not fulfill the local military requirements⁹⁸.

Translated by Zuzanna Poklewska-Parra



⁹⁸ P. N. Kotowicz, A. Michalak, *I poszedl...*, p. 95.