

KONSTANTIN PRES LAVSKY UNIVERSITY OF SHUMEN
FACULTY OF HUMANITIES
DEPARTMENT OF HISTORY AND ARCHAEOLOGY

STUDIA ACADEMICA ŠUMENENSIA

THE NORTHERN BALKANS BETWEEN
EAST AND WEST IN 6TH-15TH CENTURY

edited by
Ivo Topalilov and Svetlana Nedelcheva

Vol. 8,
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Medieval spurs from the fund of the National Archaeological Institute with Museum in Sofia, Bulgaria¹

Stoyan Popov

Abstract: This work is dedicated to eleven spurs kept in the fund of the National Archaeological Institute with Museum in Sofia (NAIM BAS-Sofia). They are deposited in the museum's fund as purchases or donations, so in most cases they cannot be linked to a secure context. They are representatives of the two main classes among the spurs, according to their working part, namely those with a spike and a rowel.

The spurs with a spike are represented by only one specimen (ill. 1, cat. № 1). The spur dates back to the period of the 10th-11th century.

The other ten artifacts discussed in this paper are spurs with rowels (ill. 2-11, cat. № 2-11). They cover the chronological period from the middle of the 13th to the beginning of the 17th century.

Key words: horseman's equipment, prick spurs, rowel spurs, medieval military equipment, Middle ages

Резюме: Работата е посветена на единадесет шпори, съхранявани във фонда на НАИМ БАН-София. Те са депонирани във фонда на музея като покупки или дарения, така че в повечето случаи те не могат да бъдат свързани със сигурен контекст. Те са представители на двата основни класа сред шпорите, съобразно работната им част, а именно такива с шип и със звезда. Шпорите с шип са представени само от един екземпляр (ил. 1, кат. № 1). Шпората датира от периода 10–11 в. Останалите десет артефакта, разгледани в тази статия, са шпори със звезди (ил. 2–11, кат. № 2–11). Те обхващат хронологичния период от средата на 13 до началото на 17 в.

¹ The presented work is part of the research under project DN 10/2, entitled 'The Bulgarian lands in the military conflicts between the East and the West' funded by the Scientific Research Fund of the Ministry of Education and Science of the Republic of Bulgaria. Also, the study is part of the activities carried out at the Research Center for History and Archaeology of War at the Department of History and Archaeology of Plovdiv University 'Paisii Hilendarski'.

Spurs are an important part of the rider-warrior's equipment. They appeared in Europe even earlier than stirrups, being used by the Celtic tribes.²

This work is dedicated to 11 spurs kept in the fund of National Archaeological Institute with Museum – Bulgarian academy of Sciences, Sofia (further NAIM-BAS). They are deposited in the museum's fund as purchases or donations, so in most cases they cannot be linked to a secure context. They are representatives of the two main classes among the spurs, according to their working part, namely those with a spike and a rowel.



Ill. 1. A prick spur. Cat. № 1.
Inv. № 1588; list 74 II; consecutive
№ 53 – NAIM BAS-Sofia
(photo: Stoyan Popov).

The spurs with a spike are represented by only one specimen (ill. 1, cat. № 1). The spur has horizontal shoulders, a rectangular vertical loop with two rectangular holes. The spike is bipyramidal, consisting of two five-walled pyramids. It comes from a cubic base. There are no sure signs that the spike is additionally riveted to the shoulders. It appears to have been made together with the rest of the spur and is a monolithic whole with it. The spur was discovered during excavations in the vicinity of Chelopech. During the subsequent archeological field excavations, coins from the end of the 10th – the beginning of the 11th century were found here.³ According to the typology of A. Kirpichnikov, the spur belongs to type I, whose appearance and use in Ancient Russ refers to the 11th-12th centuries.⁴ V. Yotov places specimens with the characteristics of this spur in type IV, variant B and dates them to the 10th-11th

century,⁵ which date I consider applicable to the spur in question.

The other ten artifacts discussed in this paper are spurs with rowels. Chronologically, they are located in the later periods than the spurs with a spike, and for a short time there is a parallel use of the two kinds. The next

² Perkhavko 1978, 113.

³ Mutafchiev 1914/1915, 264-266; Yotov 2004, 164.

⁴ Kolchin *et al.* 1985, 318; 361, tabl. 147.

⁵ Yotov 2004, 164-169.

of the considered representatives of the rider's equipment is quite interesting and, I would say somewhat unique (ill. 2, cat. № 2)! This is due to the material from which the spur is made and the characteristic location of the loops for its suspension. The shoulders of the specimen in question form an arched shape; have a slight arcuate curve and a triangular cross-section. They are relatively narrow. Above the base of the rowel holder there is a slightly protruding triangular tip.

The shape and the way of attaching the spur straps are very interesting. First of all, the two loops have a different shape – one is rectangular, with a rectangular hole, and the other is shaped like the number 8, with two round holes. The appearance of asymmetrical-shaped loops dates back to the time of the first half of the 13th century, according to Kirpichnikov.⁶ The 8-shaped loops appeared in the 12th century and are spread to the 16th-17th centuries.⁷ The next interesting feature of the spur is the different orientation of its loops. The left (rectangular) is placed horizontally and the right (8-shaped) is vertical. This divergent orientation of the loops refers to the time of the mid. 12th – middle of 13th century.⁸ After the middle – end of the 13th century, this orientation of the loops, as well as the asymmetry do not occur. The rowel holder's opening for the rowel shows that it was about 3.6 cm in diameter. This size places it among the small rowels, which, in combination with the spur characteristics discussed above, also points to dating it to the 13th century.



Ill. 2. A rowel spur. Cat. № 2.
Inv. № 338; list 811;
consecutive № 774 –
NAIM BAS-Sofia

⁶ Kirpichnikov 1973, tabl. 13. S. Vitlyanov published a spur with a rowel from the region of Madara (Vitlyanov 1996, 62-63, Cat. No. 15), which has asymmetrical loops, respectively round and rectangular. It is referred by the author to the spurs with a rowel and arched shoulders, dated to the 11th century. This spur is placed in type 8 of the typology of V. Yotov, dated in the first decades of the 11th – beginning of the 12th century. I believe that the date of the spur in question should be placed in the first half – the middle of the 13th century due to the combination of arched shoulders and the presence of a rowel, of which only the rowel holder remains.

⁷ Kirpichnikov 1973, 62-63, fig. 37, 38; Koóšová 2004, 540, tabl. 1; Krajc 2003, 121, obr. 105; 124-125.

⁸ Lagane 2010, 105-106; Ioniță 2019, 219-220; 228, fig. ¼; Ghenescu 2017, 109; 121, pl. 1/1; Ellis 2002, fig. 5/18, 20; 7, cat. 18, 20.

The location of the holes for the fastening strap, as well as the slight asymmetry of the shoulders when viewed from above, on part of the spurs, can suggest whether the object is intended for the left or right leg. The horizontal rectangular loop was used to run through it the end of the strap, which passes under the foot, pierces through the frame of the buckle and is fastened by its tongue. The other end of this strap is attached by means of a copper S-hook to the lower hole of the 8-shaped loop. Attached to the upper hole of the vertical, 8-shaped loop (probably also with such a hook, now lost) is the strap holding the buckle of the spur. As a rule, the buckle is on the outside of the foot. At the same time, the shoulders of the spur have a slightly noticeable asymmetry, in which the rowel holder is slightly oriented in the direction of the shoulder with the rectangular loop, i.e. to the belly of the horse. These marks present the spur as intended for placement on the left foot.

The third interesting and rare feature of the spur is the material from which it is made, namely a copper alloy. I am aware of a spur of such material, stored in the Italian museum Museo Civico Medievale di Bologna, dated to the middle of 13th – beginning of the 14th century.⁹ This spur also has loops with horizontal and vertical orientation, respectively rectangular and round. The difference is that the Italian spur has a spike, not a rowel.

The spur of cat. No. 2 refers to group C according to the typology of A. Ruttkai (middle of 13th – middle of 14th century).¹⁰ P. Koóšová placed spurs with rowels and a less arcuate curve of the shoulders in the 13th century.¹¹ A. Kirpichnikov puts these spurs in type V (first half of the 13th-14th century). I think that placing the date of the spur in the middle – the third quarter of the 13th century is completely reasonable.

The next spur (ill. 3, cat. № 3) is also from the group of the rowels. Its shoulders, however, have a deeper arcuate curve than those of the previous specimen. The shoulders are relatively wide with a cross section shaped like an obtuse triangle. The rowel holder is short, and the shoulders above its base do not form a pointed tip upwards. The rowel is small in diameter. The shoulders end with vertical round loops with one round hole each. One loop carries a preserved buckle attached to a hook, and next to it – a rectangular plate with two hooks, one of which holds it by the hook, and the other is designed to hang the strap. According to the location of the buckle and the plate, the spur is designed for the left foot. The plate carries the underfoot strap and the buckle is located on the outside of the foot.

⁹ Boccia 1991, 101, cat. No. 187).

¹⁰ Ruttkay 1976, 347, abb. 72; 350-352.

¹¹ Koóšová 2004, 530, 540, tabl. 1.

The deep curve of the shoulders, the lack of protrusion above the base of the rowel holder, the short rowel holder and the small diameter rowel are characteristics that point to dating in the 13th century. I believe that the date could be refined in the second half of the century because of the curvature of the shoulders. The considered spur of cat. № 3 refers to group C according to the typology of A. Ruttkay (middle 13th – middle 14th century) (Ruttkay 1976, 347, abb. 72; 350-352). Kirpichnikov puts these spurs in type V (first half of the 13th-14th century).¹² He gave an example of a spur of a similar shape, depicted on an English tombstone, dating to the beginning of the 14th century.¹³

The next spur (ill. 4, cat. No. 4) has strongly bent downward arched shoulders. The loops are round, curved downwards. Above the base of the rowel holder, the shoulders end with a triangular protrusion upwards. The rowel holder is relatively short and its shoulders end in plastic decoration. The rowel of the spur is interesting. It has a disc shape and a serrated edge and is decorated with radial, incised lines starting from the center of the disc. The specimen in question was worn on the left foot, as the buckle attaching the object to the foot is preserved for the left loop of the spur. A spur from northwestern Bohemia, discovered by a road, without context, dates to the 14th-15th century.¹⁴ According to English researchers, spurs with these specific rowels were fashionable in the second half of the 14th century, and at the end of the century these rowels were abandoned.¹⁵ The distinctive characteristics of the spur's shoulders, the specific rowel and the indicated parallels place the object in the second half of the 14th century.



Ill. 3. A rowel spur. Cat. № 3. Inv. № 265; list 74 II; consecutive № 51 – NAIM BAS-Sofia (photo: Stoyan Popov).

¹² Kirpichnikov 1973, 67-68.

¹³ Kirpichnikov 1973, fig. 35.

¹⁴ Štolba & Rypka 2014, 372, obr. 16.

¹⁵ Ellis 1995, 147-148.



Ill. 4. A rowel spur. Cat. № 4.
Inv. № 42; list 1004; consecutive
№ 564 – NAIM BAS-Sofia
(photo: Stoyan Popov).

The shape, the arcuate curve of the shoulders, the triangular protrusion above the base of the rowel holder and the downward-pointing round loops of the next spur (ill. 5, cat. No. 5) in the present exposition are the same as those of the previous specimen. The difference between the two artifacts is in the rowel. In the case of the spur under consideration, the rowel has a relatively large diameter and 8 distinct leaf-shaped rays. According to the described characteristics, the spur can be generally dated to the 14th century.¹⁶

The next spur (ill. 6, cat. No. 6) has slightly arched shoulders. They are almost straight, curving upwards in the last third of their length and ending with round loops. This spur has several interesting features. The first feature is the embossed decoration, which covers two thirds of the shoulders. Part of this embossed ornamentation is the rectangular, embossed, horizontal edge, formed above the base of the rowel holder. The shape of the rowel is very interesting and relatively rare. It has an odd (9) number of elongated pentagonal rays.

Spur with such a rowel, but with a different layout of the shoulders is known from the collection of the National Museum of Bosnia and Herzegovina.¹⁷ It dates back to the first half of the 14th century. This is why I think these rowels spread mainly during this century. The plastic decoration of the shoulders of the spurs dates back to the second half of the 14th century and is especially characteristic of the 15th century. From the end of the 14th to the beginning of the 15th century, some spurs have a relatively shallow or missing curvature

¹⁶ Koóšová 2004, 533-536; Gyórfi 2006, 104-105, 120: 34-36; Žákovský 2011, 141-142, fig. 30a.

¹⁷ Sijaric 1996/2000, 307-308, 313, 318, 337-tab. V-16.

of the shoulders which are rising up at the end to form a finish with the loops. These characteristics point to the dating of the specimen to the end of the 14th – beginning of the 15th century.

The next three spurs (ill. 7-9, cat. Nos. 7-9) of the considered group are of one type. Up to the middle of their length, the shoulders are horizontal, then they rise almost at right angles upwards, and in the last third of their length, they are again horizontal. They end with round vertical loops. The shoulders of two of the spurs are embossed. Their stars have 8 leaf-shaped rays. One of the spurs (cat. No. 9) has a preserved buckle, the location of which defines it as intended for the left foot. An image of very similar in form to the three specimens in question, we find in one of the murals in the church of the Dragalevtsi Monastery, near Sofia. This is the image of St. George, located on the outer west facade of the temple.¹⁸ According to previous research, it refers to the end of the 15th – beginning of the 16th century.¹⁹ I believe that the image in the Dragalevtsi monastery marks the upper chronological limit of the use of these spurs. In my opinion, spurs with such characteristic features appeared at the end of the 14th century and were in use until the end of the 15th – beginning of the 16th century. In the 15th century, they were used along with spurs with a long rowel holder, a small diameter rowel and a highly raised, basket-like upper shoulder.²⁰ This type of spurs are similar to the considered specimens in the main features of the shoulders: horizontal layout in the first half or 2/3 of their length, vertical part at almost right angles and horizontal end of the shoulders in their part with the holes for hanging.



Ill. 5. A rowel spur. Cat. № 5.
Inv. № 43; list 1004; consecutive
№ 563 – NAIM BAS-Sofia
(photo: Stoyan Popov).

¹⁸ Popov 2011, 45-47, figs. 6-6a.

¹⁹ Chavrakov 1978, 224-237.

²⁰ Popov 2020, 56-58, cat. Nos. 1-3, ill. 1-6.



Ill. 6. A rowel spur. Cat. № 6.
Inv. № 3328; list 1004; consecutive
№ 727 – NAIM BAS-Sofia
(photo: Stoyan Popov).

The next spur (ill. 10, cat. No. 10) can be referred to the group of the previous three specimens (cat. Nos. 7-9). This is dictated by the S-shaped appearance of the shoulders, the shape of the rowel holder and the diameter of the rowel. The difference between them is in the number of rays of the rowel – in the one considered here, they are 6, and in the previous 3 spurs, they are 8. Along with this, the shape of the rays of the rowel in cat. No. 10 is conical, and in cat. Nos. 7-9 is leafy. Another difference is the lack of ornamentation on the shoulders of cat. No. 10 and the presence of such in cat. No. 7 and 9 (regarding cat. No. 8 there are no data due to the fact that large parts of the artifact are missing!).

In all probability, the spur of cat. No. 10 was designed for the left foot. This assumption is based on the assumed location of the buckle.

For the preserved shoulder of the spur, two plates for attaching the straps have survived. One plate ends with a forked part, as the two horns of the fork are folded like hooks. I consider that this plate was part of the attachment buckle, the frame of which was suspended from the fork-shaped part, and the buckle tongue was located in the space between the two horns of the fork. In the other plate, the folded tongues of the forked part are missing. Here, at their place, survived part of the T-shaped end to which the strap was attached. I believe that the placement of the plate with the T-shaped end above the plate with the buckle is incorrect and is a product of confusion when processing the artifact in the museum or when it was first discovered. The dating of the spur of cat. No. 10 I place within the end of the 14th – the end of the 15th/the beginning of the 16th century.

The last artifact in the present exposition (ill. 11, cat. No. 11) belongs to a group of spurs distributed in Poland, Hungary and Southeastern Europe. They are characterized by straight horizontal shoulders that are relatively flat

and wide. At the end they finish with small holes for the suspension system. They have a long flat and wide rowel holder (the same width as the shoulders), ending with a medium or large rowel.

According to J. Kalmar, these spurs date back to the 15th century.²¹ At the same time, the same author deals with similar, but with some differences, spurs of Hungarian Hussars, which he classifies as tournament equipment and dates to the middle of the 16th century.²² Another Hungarian author also associates this type of spurs with the Hussars and places them in the 15th-16th centuries.²³

Polish authors believe that these spurs were used by Hussar regiments from the end of the 16th (about the last quarter of the century – 1570s – 1580s)²⁴ to the beginning of the 17th century as part of the parade equipment. During battle, Polish Hussars used shorter spurs of another type.²⁵

Similar spurs have been found in Croatia. The author of the publication considers that they are locally produced under the influence of Hungarian fashion. They are dated on the basis of older publications to the first half of the 15th century.²⁶

There are also similar specimens from the collection of the National Museum of Bosnia and Herzegovina, which are dated by the author of the publication to the first half of the 15th century, again on the basis of an older publication.²⁷

Spurs like the one discussed here are found on images from the end of the 16th century worn by Ottoman soldiers (ill. 12-13). There are also those on an Ottoman manuscript from the middle of the century, as here it is depicted in a battle scene, and not as part of the parade equipment (ill. 14).



Ill. 7. A rowel spur. Cat. № 7.
Inv. № 572; list 811; consecutive
№ 771 – NAIM BAS-Sofia
(photo: Stoyan Popov).

²¹ Kalmár 1971, 361-362, 59, kep. a, d.

²² Kalmár 1954, 65-66.

²³ Fabian 2012, 59-61.

²⁴ Gembarzewski 2017, 31, 34.

²⁵ Brzezinski 2006, 59.

²⁶ Jakovljević 2008/2009, 111-112, tabl. 6, 7, 8, cat. Nos. 15-18.

²⁷ Sijarić 1996/2000, 313, 323, 343, tab. XI-40.



Ill. 8. A rowel spur.
Cat. № 8. Inv. № 468;
list 74II; consecutive
№ 52 – NAIM BAS-Sofia
(photo: Stoyan Popov).

The dating of these spurs to the 15th century is probably dictated by the presence of a long rowel holder, characteristic of the spurs of this period. Moreover, the specimens published in the scientific literature do not originate from contexts with undeniably narrow dating. I believe that the spur of cat. No. 11 of the present work should be placed within the period of the second half of the 16th – beginning of the 17th century. This conclusion of mine is based on the presence of such spurs on images from that period and the absence of such from the 15th century. At this stage of the research, it is not possible to say with certainty where these spurs originated – whether they are the Ottoman or Central European fashion product.



The rider's equipment discussed here descended in today's Bulgarian lands, especially from the period of the 12th-17th century, needs more in-depth study. The presented work is a contribution to the study of an important and very typical for the Middle Ages equipment – the spurs.



Ill. 9. A rowel spur.
Cat. № 9. Inv. № 468;
НОВ акт I; consecutive № 1 –
NAIM BAS-Sofia
(photo: Stoyan Popov).



Ill. 10. A rowel spur. Cat. № 10. Inv. № 3499; list 811; consecutive № 775 – NAIM BAS-Sofia (photo: Stoyan Popov).



Ill. 11. A rowel spur. Cat. № 11. Inv. № 27; list 1004; consecutive № 726 – NAIM BAS-Sofia (photo: Stoyan Popov).



Ill. 12. Ottoman soldiers with rowel spurs. Codex Vindobonensis 8626, Vienna (1580-1590)



Ill. 13. Ottoman soldiers with rowel spurs. Codex Vindobonensis 8626, Vienna (1580-1590)



Ill. 14. Ottoman and Hungarian soldiers with rowel spurs. *Süleymanname*, Topkapı Sarayı Museum, written by Sinan Çavuş, Hazine 1517, folio 212r (1543-1551)

CATALOG

1. **Inv. № 1588**; list 74 II; consecutive № 53

Spur. Iron.

Total length (L) 17.3 cm

L. spike 5.3 cm

Shoulder L. 12 cm

Shoulders – straight, horizontal, with a semicircular section, height (H.) 1 cm, thickness (T.) 0.4 cm. The right is bent upwards. Due to the breakage of the end, it has a cruciform end. The left shoulder ends with the remains of a loop with 2 rectangular holes, located one above the other. The L. of the loop is 1.7 cm, the width (W.) is 1.7 cm; size of the holes 1x0.4 cm.

Spike – situated slightly obliquely on the shoulders. Its base is cubic with a W. of 1 cm, L. 0.9 cm and H. 0.9 cm. The spike is bipyramidal, consisting of 5-walled pyramids. The base of the spike measures W. 0.7 cm x H. 0.9 cm at the base of the pyramids (the widest part of the spike) and W. x H. 1.1 x 1.1 cm. The H. of the short pyramid is 1.4 cm and of the long one – 3.5 cm.

It was **found** in the Silishtar area, 4 km north of town of Chelopech, Pirdop region, by miners digging for a hut. It was collected by the mayor,

who handed it over to the Museum. At this place the Museum did some excavation in 1914 and discovered 2 bronze coins of John Tsimishi. They entered the museum on December 14, 1914.

Date: 11th century.

Ill. 1

2. Inv. №338; list 811; consecutive № 774

Spur. Copper (?). Left (?).

Total L. 14.9 cm

L. rowel holder 4.5 cm

L. shoulders 10.4 cm

Shoulders: slight arcuate curve. Joined shoulders form an arch. At the joining point, there is a strong thickening of the shoulders and a triangular protrusion upwards. Their cross-section is triangular, in size: at the loops H. 0.5 cm thickness (T.) 0.3 cm, at the rowel holder H. 1.5 cm, T. 1 cm.

Loops: One shoulder ends with a loop shaped like vertically put digit 8. The circles of the eight are round, with a d out. 1.1 cm, inn. 0.6 cm. An S-shaped hook with a L. of 2.6 cm is attached to the lower hole. Near the one end there is a hemispherical thickening with $d=0.8$ cm. The side with which the hook is attached to the hole is thicker and longer, and the now free side is thinner, shorter, and with a sharply pointed tip. The other shoulder ends with an inclined rectangular taper. It measures 1.6x0.9 cm (out.) and 1.3x0.5 cm (inn.). The cross section of the loops is semicircular.

Rowel holder: it protrudes smoothly from the shoulders and its base is almost conical. The base is 1 cm long, after which 2 plates with a triangular end come out of it. At the base their cross section is triangular, and at the end elliptical. Dimensions of the rowel holder: base – H. 0.8 cm, T. 0.5 cm; in the middle – H. 0.5 cm, T. 0.2 cm; at the hole for the axis of the rowel – H. 0.8 cm, T. 0.3 cm. The distance between the 2 plates at their base is 0.2 cm, at the axis it is 0.4 cm. The holes for the axis of the star are round, leaving parts of the axis in them. The axis itself is broken in the middle, which led to the loss of the rowel. d on the holes 0.4 cm, d on the axis 0.2 cm. Estimated radius of the rowel 1.8 cm ($d=3.6$ cm).

Discovered in the village of Smochane, Lovech region. Sent by the Lovech District Administration with №916 from 27.01.1897, ent. № 38.

Date: middle – third quarter of the 13th century.

Ill. 2

3. Inv. № 265; list 74 II; consecutive № 51

Spur. Iron. Left.

Total L. 12.5 cm

Medieval spurs from the fund of the National Archaeological Institute with...

L. rowel holder 2.5 cm

L. shoulders 10.5 cm

The shoulders are arched. They end with round loops with a d out. 1.6 cm and a d inn. 1 cm. The cross section of the loop is round. Section of the shoulders is triangular, with the edge on the outside passing along the lower part of the shoulders. Shoulder sizes at the loop W. 0.8 cm, T. 0.5 cm; at the base of the rowel holder W. 1.4 cm, T. 0.6 cm. The right shoulder is cracked and curved outwards. The protrusion up the shoulders above the rowel holder base is broken. To the loop of one of the shoulders are attached by means of hooks a buckle and 1 flat plate – rectangular with a rectangular cross section. The plate has a total L. 3.4 cm, and its rectangular part is 1.8x1.1 cm. On one side of the rectangular part of the plate there is a hook with which the plate is attached to the loop, and on the other side there is a T-shaped segment on which one half of the horizontal hasta is broken off. The lower part of the other half is beveled and slightly bent inwards. **The buckle** attached to this loop consists of a shield in the shape of a rectangular plate and measuring 2x3 cm and a frame. On one narrow side of the shield comes a hook for attaching to the loop of the spur. In the middle of the other narrow side of the shield, near the edge, a round hole with a d= 0.4 cm is made. On this side is the trapezoidal buckle frame, with the short base of the trapezoid facing the shield. It has a rectangular cross section and the outer edges are rounded. Its dimensions are: 2.3x4.1x2.5x2.5 cm. The long base of the frame is decorated with bud-shaped protrusions.

Rowel holder. It is placed obliquely on the shoulders. It consists of 2 parallel plates with a semicircular cross-section with a radius of 0.5 cm and a d=0.8 cm. They end with hemispheres with a d=1 cm and 0.9 cm, in the center of which is the axis of the rowel. The distance between the plates of the rowel holder is 0.5 cm.

Rowel. 7 beams with a diameter of 3.5 cm. The diameter of the hole in the center is 0.6 cm. The height of the rays is 1.1-1.3 cm. They have strongly pointed tips and an oval cross section.

There is no information about the finding place and circumstances of admission to the Museum.

Date: the second half of the 13th century.

III. 3

4. **Inv. № 42; list 1004; consecutive № 564**

Spur. Iron. Left.

Total L. 16 cm

L. rowel holder 3.1 cm

L. shoulders 10.9 cm

Shoulders – S-shaped. Triangular section, and trapezoidal to the base of the rowel holder. At the junction of the 2 arms, a pointed vertical arch is formed above the base of the rowel holder. The dimensions of the shoulders: at the loop 0.7x0.3x0.5 cm; in the lowest part 0.9x0.7x0.7 cm. H. at the rowel holder 1.7 cm.

Loops – the shoulders end with round loops with a d (out.)=1.7 cm, d of the hole=0.7 cm. A buckle and a round plate are attached to the one loop. The round plate has a d=1.4x1.7 cm. On its one side there is a T-shaped segment with dimensions: W. of the vertical hasta 0.4 cm, total H. 0.6 cm, L. of the horizontal hasta 0.9 cm. On the opposite side of the round plate comes out a hook by means of which the plate is attached to the loop of the spur. The hook has a rectangular cross section and triangular outlines. Dimensions at the base: W. 0.4 cm, T. 0.2 cm. **The buckle** consists of several segments: central oval plate 2x1 cm; on its one side there is a hook with which it is attached to the loop (rectangular section, at the base 0.5x0.1 cm); on the other side there is a tongue bent around one side of the buckle frame, cut in the middle part for passing the buckle tongue. The tongue of the buckle has a rectangular cross-section, a strongly pointed tip and a L. 0.7 cm. The frame of the buckle is oval with a d=2.4x1.7 cm; d opening=1.6x1.1 cm. Attached to the other loop are 2 oval plates with a d=1.4x 1.8 cm and 1.3x1.8 cm. The attachment for the loop is with hooks as in the other two. On the opposite side comes a T-shaped segment with dimensions: W. of the vertical hasta 0.5 and 0.6 cm; L. of the horizontal hasta 0.7 cm and 1 cm. In all three T-segments of the 3 round plates, the lower parts of the horizontal hastae are beveled.

Rowel holder. It consists of 2 parallel plates protruding from a common base. The base is W. 0.9 cm and H. 0.7 cm. They are at a distance of 0.4 cm. The cross section of these plates at their base is semicircular with a H. 0.6-0.7 cm and a W. of 0.4 cm. Towards the end, before the axis for the rowel, the section is rectangular with dimensions 0.9x0.4 cm. In the middle part of the plate 1 cm from the base of the rowel holder there are 3 vertical parallel lines incised. After approx. 1 cm a vertical embossed edge is formed after which the hole for the rowel axis is made. It is modeled as an oval ring at the end of which are placed 3 spherical pimples. The rowel holder is welded to the lower part of the shoulder arch.

Rowel. It is shaped like a gear wheel with a d=5 cm, the H. of the teeth with a triangular shape 0.2-0.4 cm; number of teeth 43. The wheel is disc-shaped. Radially, straight incised lines start from the center, ending on both sides at the base of each tooth.

Found in the village of Kuyudjuk (Debrene), Varna region by the villagers. Donated by the Ministry of Education together with inv. N°N° 41

Medieval spurs from the fund of the National Archaeological Institute with...

(part of a ring armor) and 43 (a spur) with protocol № 6070 from 1892. Received at the Museum on June 26, 1892.

Date: second half of the 14th century.

III. 4

5. **Inv. № 43; list** 1004; consecutive № 563

Spur. Iron.

Total L. 17 cm

L. rowel holder 3.7 cm

L. shoulders 10.6 cm

Shoulders – S-shaped curved, forming a triangular tip when merging above the capture point of the star holder. The thickness of this part is 0.3 cm. At the end of them **round loops** are formed, the openings of which are $d=0.7$ cm, out. $d=2$ cm. The shoulders have a section of an obtuse triangle, the edge passing close to the lower part of the shoulder. The inner side of the shoulders is flat with a width of 0.7 cm at the loops, and at the merging of the two shoulders – 2 cm. By means of flat hooks 2 oval plates are hung to the loops with dimensions 2.1x1.5 cm. The hooks are strongly curved with a pointed end, W. 0.6 cm at the base and T. 0.2 cm. They protrude from the wide side of the oval of the plate. On the other wide side of the plate there are T-shaped tongues with a H. 0.7 cm and a W. of the vertical segment of 0.4 cm and 0.5 cm, respectively. The two tongues are slightly curved inwards relative to the plane of the oval plate.

The rowel holder consists of 2 plates protruding from a common base. At 0.5 cm from the catchment area for the shoulders, 2 vertical parallel relief lines are formed. The W. of the rowel holder at the base is 1.2 cm and the H. 0.9 cm. The W. of the plates after the two vertical relief edges is 0.4 cm, H. 0.8 cm. The cross section of these plates is hexagonal with dimensions 0.8x0.1x0.3x0.3x0.3x0.1 cm. At 2.2 cm from the relief edges is formed a hemispherical protrusion with a d at the base of 0.9 cm and a radius of 0.8 cm. Through their center passes a circular axis with a L. 2.2 cm and a d approx. 0.3 cm, which holds the rowel.

The rowel has 8 rays with pointed tips and a slightly leaf-like silhouette. Their cross-section is four-walled and the outer walls are flat with dimensions at the base of 0.3-0.4 cm, and in the widest part – 0.5 cm. d of the rowel is 5.2 cm. The inner walls of the rays are slightly blunted. The place of welding of the rowel holder for the shoulders is flat. The T. of the shoulders is 0.4-0.5 cm.

Found in the village of Kuyudjuk (Debrene), Varna region by the villagers. Donated by the Ministry of Education together with inv. №№ 41

(part of a ring armor) and 42 (a spur) with protocol № 6070 from 1892. Received at the Museum on June 26, 1892.

Date: 14th century.

III. 5

6. **Inv. № 3328; list** 1004; consecutive № 727

Spur. Iron. Left.

Total L. 16.7 cm

L. rowel holder 5.3 cm

L. shoulders 8.3 cm

The shoulders are L-shaped, with the ends pointing upwards. Their cross-section is quadrangular, with dimensions up to the loop 0.5x0.3x0.7x0.3 cm and before the rowel holder 1.7x0.2x1.8x0.3 cm. Above the rowel holder there is a triangular rise of the shoulders upwards, here the W. of the shoulders is 2 cm. In the middle part of both shoulders there is an embossed ornament of two circles with a recess in the center, separated by two vertical relief lines. The whole described ornament is flanked by two such lines.

Loops. Round. Vertical. Oval section. d out.=1.3 cm, d openn.=0.7 cm. A buckle consisting of several elements is attached to one of the loops. The first element is a trapezoidal plate with an elongated shape and a rectangular section with a L. 3.3 cm. It is curved on both sides, and a hook is formed on the narrow side, by means of which the buckle is attached to the loop. The curve on the wide side of the plate covers the frame of the buckle. The frame of the buckle has a pentagonal shape and dimensions 1.7x1.6x1.3x1.4x1.6 cm. At two of the corners of the pentagon are made 3 horizontal parallel lines, and at the top of the pentagonal frame, where the end of the buckle tongue lies, 2 vertical parallel relief lines are made. The tongue of the buckle has a rectangular cross-section, pointed at one end, and the other end is wrapped around the base of the pentagonal frame. On the other loop of the spur a leaf-shaped plate is hung with a length of 2.4 cm. Both ends of the plate are curved in the form of hooks, one of which serves to attach the plate to the loop. By means of the other hook, which is shorter and sharper (now free), a strap is attached to the spur.

Rowel holder. It starts from the lower edge of the shoulders. It has two parallel plates with slightly arcuate outer sides with dimensions at the base 0.7x0.3 cm and before the openings for the axis of the rowel – 0.4x0.4 cm. Their ends are shaped like round rings with disc-shaped outlines and d out.=1.2 cm. The axis of the rowel has d=0.3 cm and L. 1.3 cm.

Rowel. It consists of 12 rays. 3 of them are whole, the rest have missing parts. The rays have an elongated pentagonal shape. The H. of the rays is 2-2.4 cm. The rowel d=6.6 cm.

Medieval spurs from the fund of the National Archaeological Institute with...

Found in the Lukovit region. Purchased by Vlatko Tangov from Sadovets with protocol 477 / 29.12.1942.

Date: end of the 14th – beginning of the 15th century

III. 6

7. **Inv. № 572; list 811; consecutive № 771**

Spur. Iron. Left.

Total L. 15.6 cm

L. rowel holder 3.9 cm

L. shoulders 9 cm

The shoulders are S-shaped. One is highly corroded, the other is missing a part. It is preserved at a length of 6.8 cm and at the end goes at right angle upwards. Plastic decoration can be seen on the part of the short shoulder going to the rowel holder. It consists of 3 relief circles connected by 1 horizontal relief line each. Due to the strong corrosion, this ornament is not visible on one of the shoulders. It is shaped with an arched curve (probably the layout of the other, short arm was not taken into account during the restoration!). It ends with a **round loop** with a d out=1.2 cm. In the round opening of the loop filled with corrosion products, parts of the hooks of 2 plates are visible. At the base of the rowel holder, the shoulders have a triangular pointed extension upwards. Dimensions of the shoulders: short shoulder end 0.3x0.4 cm; preserved shoulder at the loop 0.2x0.5 cm. Width at the rowel holder 1.7 cm.

Rowel holder. It comes out of the lower edge of the shoulders. It consists of 2 parallel plates with a rectangular cross section. They end in round widenings with round openings for the axis of the rowel with a d out.=0.7 cm, a d open. for the axis 0.3 cm. The cross section of the widenings is rectangular. It is located almost perpendicular to the shoulders. Dimensions of the plates: base 0.5x0.4 cm, before the openings for the axis 0.4x0.4 cm, distance between the plates of the rowel holder 0.5 cm.

Rowel. With 8 rays, 1 of the rays is missing. Rowel d=5.7 cm. The rays are strongly pointed, with a diamond-shaped cross section and 1.8-2.3 cm long.

Unknown finding place and circumstances of discovering. Donated by St. Makariev from Belogradchik, with ent. № 289.1901. Received at the Museum in 1901.

Date: end of the 14th century – end of the 15th/beginning of the 16th century

III. 7

8. **Inv. № 468**; list 74II; consecutive № 52

Spur. Iron.

Total L. 13 cm

L. rowel holder 4.8 cm

L. (preserved) shoulders 5.2 cm

Shoulders. The spur is badly damaged. 2.7 cm remain from one shoulder and 6.7 cm from the other. At the base of the rowel holder, above it, the shoulders form a slightly pointed arch. On the outside, the shoulders are concavely shaped with a pronounced upper and lower edge protruding outwards. H. first shoulder 0.9 cm, H. second shoulder 1.7 cm; H. at the base of the rowel holder 2.2 cm. The ends of the shoulders with the loops are missing.

Rowel holder. It starts from the lower edge of the shoulders. It consists of 2 parallel plates, the outer side of which is slightly arched. They have a rectangular cross section with a size of 1x0.3 cm at the base and 0.5x0.5 cm at the end before the opening for the rowel axis. The distance between them is 1 cm.

Rowel. With 8 rays and $d=6.5$ cm. The rays are flat, leaf-shaped, with a height. 2.9-3 cm. The axis of the rowel has d approx. 0.4 cm. It enters the edges of the rowel holder, shaped like rounded rings.

Date: end of the 14th century – end of the 15th/beginning of the 16th century

III. 8

9. **Inv. № 468**; HOB AKT I; consecutive № 1

Spur. Iron. Left.

Total L. 19.1 cm.

L. rowel holder 5 cm

L. shoulders 10 cm

Shoulders. S-shaped. Slightly asymmetrical, with one shoulder more open. An arrow-shaped frame is formed from the base of the rowel holder. The inner side of the shoulders is flat, and the cross section of the shoulders, at a distance of $2/3$ of the length, is pentagonal, with the edge passing along the length of the shoulders. The pentagonal section of the shoulders is limited by the expanding part by means of X-shaped relief decoration (6.7 cm from the end of the shoulders). There is also a relief decoration on one of the curves of the shoulders. From the center of the X-shaped ornament begin two embossed horizontal edges, covering the upper and lower edges of the shoulders. The ends of the shoulders are shaped like vertical loops with a round shape.

Medieval spurs from the fund of the National Archaeological Institute with...

Loops. Round, vertical. The section is four-walled. Outer $d=1.4$ cm, inn. $d=0.9-1$ cm. Flat oval plates with $d=1.7 \times 1.8$ cm are attached to one of the loops. A pointed tongue, folded like a hook, emerges from the two opposite ends. By one hook the plates are attached to the loop, and the other was used to hang the spur to a strap. There are also two plates attached to the other loop. One has an arrow-shaped form with a spike bent like a hook, by means of which it is attached to the loop. The other plate has a round central part with $d=1.9$ cm. On one side of the circle there is a hook for attachment to the loop, and on the opposite – a tongue-shaped protrusion with a rounded tip (base = 1.2 cm and W. at folding 1.4 cm). This tongued part is bent as a hook in the middle. A rectangular hole is cut in the center of the tongue, through which the buckle tongue passes. The tongue of the plate is folded around the middle part of the buckle frame. The buckle frame consists of two trapezoidal parts, the tongued part of the plate and the buckle tongue being wrapped around the common short base of the two trapezoidal figures. The L. of the frame is 4.4 cm, the W. of the long bases of the two trapezoids is 2.5 and 2.6 cm, the narrow base is 2.3 cm wide. The frame of the buckle has a semicircular cross section (radius 0.2-0.3 cm), and its middle axial part is round ($d=0.2$ cm). The tongue of the buckle is rectangular at its base (0.3×0.2 cm), immediately after the curved part, the section becomes pentagonal.

Rowel holder. It consists of two parallel plates with a pentagonal cross-section and dimensions at the base $0.3 \times 0.7 \times 0.2 \times 0.3 \times 0.7-0.8$ cm, and at the hole for the axis of the rowel – $0.9 \times 0.2 \times 0.4 \times 0.4 \times 0.2$ cm. The opening between the two plates is leaf-shaped with a W. at the rowel axis = 1.5 cm. At the ends of the plates of the rowel holder are formed rings for the rowel axis (out. $d=1.2$ cm, inn. $d=0.7-0.9$ cm). They have a quadrangular cross-section, bounded by the rest of the rowel holder by a vertical embossed edge. At the very end of the star holder, the rings are decorated with three embossed radial edges. The axis of the rowel is 2.2 cm long. It has a biconical shape with d at the base = 0.6 cm and d in the middle of the axis = 0.2 cm.

Rowel. With 8 rays, one missing. Rowel $d=8.2$ cm. The rays of the rowel are leaf-shaped with a L. = 3.5-3.7 cm, T. at the base 0.5 cm, W. at the base 0.9-1 cm. There is central edge along their entire length from base to tip.

Unknown finding place and circumstances. Purchased by P. K. Gabev together with other items (inv. №№ 463, 464, 465, 466, 467). Protocol XII-300-38-4.06.1899.

Date: end of the 14th century – end of the 15th/beginning of the 16th century

III. 9

10. **Inv. №3499**; list 811; consecutive № 775

Spur. Iron. Left.

Total L. 18 cm

L. rowel holder 4 cm

L. shoulders 11.9 cm

Shoulders. Only one shoulder is preserved. 1.1 cm remain from the other arm. The preserved shoulder is S-shaped. Ends with a round vertical loop. It has a rectangular cross section with dimensions of 0.5x0.2 cm at the loop and 1.8x0.2 cm at the shoulder holder. At the base of the rowel holder there is a slightly formed vertical edge.

Loop. It is vertical, round in shape and rectangular in cross section. Out. d = 1.5 cm; inn. d = 0.8 cm. Two plates are attached to the preserved loop, serving for the attachment of the spur-bearing straps. These plates are composed of 3 parts. One part is shaped like a hook, by means of which the plate is attached to the loop. The middle part of the plates has an oval shape, in the center of which is made a round hole with dimensions d out.=0.8 cm, d inn.=0.3 cm. The third part of the plate is preserved entirely in only one of the plates. It is trapezoidal, with a forked end, and the two tongues of the "fork" are folded like hooks. I consider that this plate was part of the attachment buckle, the frame of which was suspended from the fork-shaped part, and the tongue was located in the space between the two horns of the fork. In the other plate, the folded tongues of the forked part are missing. Here survives part of the T-shaped end to which the strap was attached. The total L. of the fully preserved plate is 2.9 cm, and the other is 2.4 cm. The W. of the two horns of the "fork" is 0.2 cm and 0.3 cm.

Rowel holder. It comes out of the base of the shoulders. It consists of 2 parallel plates with a rectangular cross-section and dimensions at the base of 0.5x0.3 cm and 0.4x0.3 cm. They end with holes with a round shape and a rectangular cross-section. Out. d=0.7 cm, inn. d=0.2 cm. The axis of the rowel is 1.5 cm long and d 0.2 cm. The distance between the plates of the rowel holder is 0.5-0.6 cm. One ring is separated from the rest of the rowel holder by an incised vertical line.

Rowel. It consists of 6 strongly pointed rays with a round cross section. Rowel d=5.9 cm. Hole for the axis of the rowel d=0.5 cm.

Unknown finding place and date of admission to NAIM-BAS.

Date: end of the 14th century – end of the 15th/beginning of the 16th century

III. 10

11. **Inv. № 27**; list 1004; consecutive № 726

Spur. Iron.

Total L. 23 cm

Medieval spurs from the fund of the National Archaeological Institute with...

L. rowel holder 8 cm

L. shoulders 15 cm

The shoulders are straight. The section is a segment of a circle with a central edge, the flat part being towards the rider's heel. H. at the base of the rowel holder is 3 cm. a slightly noticeable horizontal edge passes through the middle of the outer surface. At 1.5 cm from the end of the shoulders are formed trapezoidal protrusions, in which oval holes with dimensions of 0.8x0.5 cm are drilled. In the opposite corner of the shoulders there are round holes with d=0.5 cm. The shoulders are decorated with incised double lines in the shape of Λ . An embossed edge is formed at the end of one shoulder. There is such an edge at the opening in the corner of the shoulder.

The rowel holder has an elliptical cross-section with pointed sides and central horizontal edges running along its entire length. The rowel holder is placed at an obtuse angle to the shoulders of the spur. At its end are formed 2 parallel ears with a L. 4.5 cm. At the end they are rounded. Here 2 cone-shaped growths stand aside with a H. 1.4 cm. The axis to which the rowel is attached passes through them. The axis is 3.8 cm long and d=0.3-0.4 cm.

The rowel has 8 rays. Rowel d=5 cm. The rays are conical, with a L. 2.1-2.4 cm.

Unknown finding place and circumstances of discovery. Donated by Mr. Draginski. Received at the Museum on June 15, 1889.

Date: second half of the 16th – beginning of the 17th century.

III. 11

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