WEAPONS USED IN GANJA AT THE END OF THE 12TH CENTURY - BEGINNING OF THE 13TH CENTURY

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Abstract

The city of Ganja played an important role in the political, socio-economic, and cultural history of our nation, as well as in military history. From this point of view, studying weapons used in the city of Ganja during the Middle Ages is particularly important. The military art and methods of fighting any people are closely connected with their lifestyle and customs.

In the 12th-13th centuries, there were about 70 large, medium, and small cities in Azerbaijan. One of them, the city of Ganja, was a major trade and craft center of the time. In such a large city, almost all branches of craftsmanship were widespread, including metalworking (production of weapons and ammunition). The art of metalworking, especially its main field, iron processing, had risen to a higher level compared to the previous period. The development of this area was also due to the great demand for cold weapons. During archaeological excavations in various cities of Azerbaijan, including Ganjabasar, in the cultural layers of this period, along with metal products of various purposes, rhombic arrowheads, daggers, combat knives and javelins, swords, armor, helmets, spearheads, etc. were discovered. Master blacksmiths used cold forging, which is the simplest and oldest method of this art, and hot forging, which gradually became the main technological method, and carried out melting and welding operations in various ways.

Key words: Shooting guns; “turkish device”; “arabian device”; weapons; military service.

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აბსტრაქტი

ქალაქ განჯას მნიშვნელოვანი როლი ეკავა ჩვენი ხალხის პოლიტიკურ, სოციალურ-ეკონომიკურ და კულტურულ ისტორიაში, ასევე სამხედრო ისტორიაში. ამ თვალსაზრისით, განსაკუთრებით მნიშვნელოვანია შუა საუკუნეებში განჯაში გამოყენებული იარაღის შესწავლა. ნებისმიერი ერის

სამხედრო ხელოვნება და ომის მეთოდები მჭიდრო კავშირშია მის ცხოვრების წესთან და წეს-ჩვეულებებთან.

XII-XIII საუკუნეებში აზერბაიჯანში დაახლოებით 70 დიდი, საშუალო და პატარა ქალაქი იყო. ერთ-ერთი მათგანი, ქალაქი განჯა, იმ დროის მთავარი სავაჭრო და ხელოსნური ცენტრი იყო. ასეთ დიდ ქალაქში ხელოსნობის თითქმის ყველა დარგი იყო განვითარებული, მათ შორის ლითონის დამუშავება (იარაღისა და საბრძოლო მასალის წარმოება). ლითონის დამუშავების ხელოვნება, განსაკუთრებით მისი მთავარი დარგი - რკინის დამუშავება, წინა პერიოდთან შედარებით უფრო მაღალ დონეზე ავიდა. ამ სფეროს განვითარება ასევე განპირობებული იყო პირიანი იარაღის დიდი მოთხოვნით. აზერბაიჯანის სხვადასხვა ქალაქში, მათ შორის განჯაბასარში, არქეოლოგიური გათხრების დროს, ამ პერიოდის კულტურულ ფენებში, სხვადასხვა დანიშნულების ლითონის ნაწარმთან ერთად, აღმოაჩინეს რომბისებრი ისრისპირები, ხანჯლები, საბრძოლო დანები და ისრები, ხმლები, ჯავშანი, ჩაფხუტები, შუბისპირები და ა.შ. ოსტატი მჭედლები იყენებდნენ ცივ ჭედვას, რაც ამ ხელოვნების უმარტივესი და უძველესი მეთოდია, და ცხელ ჭედვას, რომელიც თანდათანობით მთავარ ტექნოლოგიურ მეთოდად იქცა და სხვადასხვა გზით ახორციელებდნენ დნობისა და შედუღების ოპერაციებს.

საკვანძო სიტყვები: შაშხანები; „თურქული მოწყობილობა“; „არაბული მოწყობილობა“; იარაღი; სამხედრო სამსახური.

Introduction

The city of Ganja has played an important role in the political, socio-economic and cultural history of our people, as well as in military history. From this point of view, the research and study of the weapons used in the medieval period in Ganja is of special importance. The military art and methods of warfare of any people are closely related to their lifestyle and customs. In this direction, the study of military history provides an opportunity to study the past of our people in more depth.

Since life continued continuously in Ganja and its surrounding areas, the area was rich in material and cultural remains such as early medieval and medieval settlements, defensive fortifications, tombs, etc. In this regard, a lot of work has been done in our republic to study medieval cities, archaeological research has been carried out in large cities and certain results have been achieved. Because the study of Ganja in connection with other medieval cities of Azerbaijan is one of the important issues from a historical and archaeological point of view.

Methods

In this article, I used historical research methods, including the analysis of archaeological findings and the examination of written sources from different historical periods.

During archaeological excavations conducted in various cities of Azerbaijan, including Ganjabasar, in the cultural layers of this period, along with metal products of various purposes, rhombic arrowheads, axes, daggers, combat knives and javelins, swords, armor, helmets, spearheads, etc. were discovered.

Results

The existence of settlements in the territory of Ganja city since the Neolithic period has been proven as a result of archaeological excavations. The archaeological excavations conducted have been reflected in special research works in recent times.

The discovery of rich and unique metal samples during archaeological research conducted in the medieval monuments of Ganja and its surroundings, and the local factors present in them, give grounds to speculate about the high level of weapons production in the area.

The study of military history in this direction provides an opportunity to study the past of our people in more depth. Protective devices occupy a very important place in the medieval defense system of Azerbaijan. The structures that have survived to this day have been relatively well studied in historiography.

Discussion

In the medieval defense system of Azerbaijan, defensive structures occupy a very important place. The structures that have survived to this day have been relatively well studied in historiography. However, the fortifications, whose names are found only in sources, have been poorly studied. The article contains substantial facts about the fortifications of the city of Ganja, making extensive use of written sources from the Middle Ages.

It is possible to trace the level of improvement of the first weapons used in Ganja on the basis of archeological excavation materials.

At the beginning of the 12th-13th centuries, there were about 70 large, medium and small cities in Azerbaijan. One of them, the city of Ganja, was a major trade and craft center of the period. In such a large city, almost all branches of craftsmanship, including metalworking (production of weapons and ammunition), were widespread. The art of metalworking, especially its main field, iron processing, had risen to a higher level compared to the previous period. The development of this field was also due to the great demand for cold weapons. Master blacksmiths used cold forging, the simplest and oldest method of this art, and hot forging, which gradually became the main technological method, and carried out melting and welding operations in their own unique ways.

Back in the 11th and 12th centuries, Ganja was a major center of metalworking, including blacksmithing. The 12th-century Ganja iron gate, a copy of which is still preserved in the Gelati Monastery in Georgia, testifies to the high craftsmanship of local craftsmen. The demand for various weapons, as well as the presence of iron and copper ore deposits in the Ganja suburbs, created conditions for the development of weapons production here. Ibn al-Asir writes that when the Mongols approached Ganja during the first raid, they “learned that Ganja had many brave inhabitants, and they had many weapons...” .

The Atabey state attached paramount importance to the fortification of the city of Ganja. If necessary, Ganja could produce a large number of well-armed warriors against the enemy. Zakariyya al-Qazvini notes that the residents of Ganja always took weapons with them. Weapon production in the city itself was at a high level. Weapons were also brought to Ganja from other countries. It is noted that “weapons are brought here from all over the Muslim world because the city is beautiful. Its young men are brave archers and warriors who fight for the sake of religion; they draw bows well and sharpen arrows”. (Bunyadov, 2007: 167)

During the Atabey period, the city of Ganja, which had a fortified fortress, had a developed handicraft industry. Among the exported goods, excellent horse saddles, quivers, weapons, etc. can also be noted.

A number of issues that existed in the state of the Atabeys of Azerbaijan before the appearance of firearms have attracted the attention of researchers.

One of the most brilliant examples of medieval Muslim military literature, the work of Mard ibn Ali ibn Mardi at-Tarsusi, “Tafsirat arbabi al-albab fi kayfiyyat an-najat fi-l-khurub” (“Information of the wise man on the methods of salvation in wars”), provides very valuable information. The part of this scientific work, known from the only copy kept in Oxford, is especially interesting for us, the part about throwing devices. Although this part was first published by the French orientalist Kl. Caen in 1948, it has not been sufficiently used in the study of Azerbaijani military affairs. (Seyfullaoglu, 2000: 78)

According to researchers, medieval throwing devices are divided into two groups: 1) pulling (here the throwing principle is implemented due to the muscular energy of people pulling the ropes attached to one end of the device's lever); 2) counterweight (here the weight of a heavy load was used to launch the projectile. Both traction and counterweight devices are divided into heavy (manjanaq) and light (arrada) types. Both Eastern and Western devices attracted the attention of al-Tarsusi, and he provided detailed information about these devices. Eastern devices are divided by the author into two types according to their origin: 1) "Persian device", also called "Turkish device" ("al-manjanik al-farsi and khuwa at-turki"); 2) "Arab" devices. The first is more ancient and appeared in the early Middle Ages. This device, built on a prismatic base, fired unilaterally (similar devices were known in China in the 7th-10th centuries). (Shkoljar, 1980: 72) According to al-Tarsusi, the "Turkish device" is the cheapest and least maintenance-intensive of all devices. The "Arab cannon" is more complex, but "more reliable." This device, standing on a base resembling a truncated pyramid, had a very strong lance. It is this type of device that is reflected in the wall paintings in Panjikand. Since it appeared during the Arab campaigns in the East, this device received the name "Arab cannon". These devices have been known in China since the 10th century.

Simple and strong towing devices were usually capable of firing at a distance of 40-60 ba (80-120 m). Light towing devices are called luba by al-Tarsusi. This is also the same as the concept of arrade. The fact that the sources show cannons with a crew of 500 and even 1200 warriors indicates the search for increasing the firing power of the devices. Despite the exaggeration of the figures, one can speak with complete certainty about devices with a crew of 250-300 people. However, although this method increased the throwing power of the projectiles, it was an unpromising development path, so engineers had to think about new constructions. As a result, lever-type counterweight cannons appeared.

The spatial and temporal problems of their creation caused a number of disputes. For the first time, information about them and their description was provided by al-Tarsusi. This person, who was considered one of the great military experts of his time, spoke in detail about the structure, appearance, and working principles of not only Eastern but also Western throwing devices and gave their descriptions. However, the information he gave about counterweight devices is very complicated and contradictory. The information he gave about counterweight devices is given with reference to the gunsmith Abu Hasan ibn al-Abraki al-Iskanderili. The description of the counterweight device is very schematic and conditional, and is not accurate. It is known that in the second half of the 12th century, almost the entire territory of the Middle East was part of the Azerbaijani Eldeniz state. Therefore, the hypothesis about the creation of the counterweight device in this state, which paid much attention to throwing weapons and military affairs in general, is also confirmed by the information of the Arab author al-Tarsusi. At the end of the 12th century, this device was so widespread in Azerbaijan that it was even reflected in fiction. Nizami Ganjavi not only provides information about these devices, but even states that they contained a wheel. Already in the 13th century, the counterweight throwing device had become the main throwing device in both Eastern and Western countries.

The issues of defense and siege of the administrative and military centers of the state played an important role in medieval wars. It was this factor that led to the emergence of throwing weapons. Until the invention of firearms, throwing weapons were considered the highest peak in the development of military equipment. Unfortunately, the throwing weapons of Azerbaijan (including Ganja) have not been studied sufficiently until now. The main reason for this is the complete disappearance of throwing weapons as a page of culture. Now, written, illustrative sources and found shells can be used as sources in the study of these weapons. All throwing devices are divided into ballista (hitting with a flat surface) and catapult (shooting vertically). According to the structure of the mechanism and the principles of firing, these weapons are divided into torsion (the elastic force of twisted and tied ropes is used to launch the projectile), traction (the short arm of the device's lever is pulled by human power using ropes) and counterweight types. Depending on the maneuverability, all devices are stationary (buried in the ground), machine-operated and mobile (Shkoljar, 1980: 6). Torsion catapults fall out of use during the Middle Ages, while other devices continue to develop. The most widespread were traction catapults and torsion ballistae.

First appearing in China (VI-V centuries BC), traction devices spread throughout the East by the 10th century, reaching the peak of their development in the 12th-13th centuries. These devices required little material, time and labor, and were capable of launching projectiles to a distance of 80-100 m. However, in order to increase the power

of the device, its dimensions had to be increased and the number of personnel had to be increased. Already in the 12th century, the devices weighed 4-5 tons, were 4-5 m high, and had a crew of 250-300 people. So many people and tall devices concentrated in one place were an easy target for the enemy, and moreover, it was very difficult to coordinate the movements of about 300 people. The gradual strengthening of the fortifications required a new, more destructive device. It is possible to say that the engineers' searches were successful for the first time in Azerbaijan. In the middle of the 12th century, the Azerbaijani Atabey state, which paid great attention to the development of military equipment, invented the first counterweight device in the world. Unfortunately, it should be noted that a number of researchers, citing the fact that the main part of the Atabey state was located in South Azerbaijan, that is, in the territory of present-day Iran, gave this device the name "Persian device". It would be more correct from a historical point of view to call the counterweight device “Azerbaijani” or “Atabeyler device”. At the end of the 12th century, the “Atabeyler device” began to spread in many Muslim states, at the beginning of the 13th century in Western Europe, and in the 70s of the 13th century in China.

The arrogant approach of the Chinese to discoveries of non-Chinese origin was disgraced by the Mongol ruler Kublai. Not satisfied with the power of Chinese traction devices, Kublai invited masters named Ibrahim, Abu-Bakr, and Muhammad from the Ilkhanate state (capital Maragha, later Tabriz) to China with the “Atabey device”. After testing in combat conditions, the devices were awarded the highest marks of Chinese engineers. The schematic drawing of Hasan al-Rammah and the miniatures of F. Rashid al-Din (13th century) allow us to study the mechanism and working principle of the “Atabeyler device”. The projectile force of the device is obtained by lowering the heavy counterweight. A lever is set up on a pyramidal bench with a ratio of 1/2. The counterweight is attached to its long arm, and a sling to its short arm. Several people use blocks and wheels to lift and fix the counterweight (a box filled with stones). After the projectile is placed in the sling, the loose loop of the sling is attached to the bent part of the lever. The warrior knocks out the fixer with a wooden hammer. Probably, since it has great power, it was impossible to hit the fixer of the device (weapon) by hand (Ahmadov, 1999 :82-83).

Sources indicate that the counterweight device was called manjanag (derived from the Arabic, Byzantine word manganon). Most of them threw 40-60 kg stones to a distance of 100-150 m. In rare cases, extraordinary manjanags were able to throw 166 kg stones to a distance of 400 m. Naturally, these devices were given special names. Nasavi indicates that Jalaluddin built 12 manjanags during the siege of the city of Khlat, and then a very powerful manjanag called “Qara Bugra” was sent to him. The advantages of the “Atabeyler manjanag” compared to other devices are undeniable: as a result of the accuracy of the fire, the shells were scattered over a small area, which seemed miraculous: heavy shells hit the target with a very large impact: the crew consisted of several people.

Studies show that in Azerbaijan there were counterweight devices called arusak. [6, p.16] They could be installed on walls and towers, since they were smaller and lighter than the manjanag. Information from medieval chroniclers and the epic “Kitabi-Dade Gorgud” show that the manjanag made loud and terrifying sounds when fired.

“Atabeylar manjanaglar” were used in Azerbaijan and in the East in general until the end of the 16th century.

Protective devices occupied a very important place in the medieval defense system of Azerbaijan. The structures that have survived to this day have been relatively well studied in historiography. However, the fortifications whose names are found only in sources have been poorly studied. That is why the famous geographical dictionary “Mujam al-buldan” (“Country Counting by Alphabet”) by Yaqut al-Hamawi (1179-1229) attracts attention (Seyfullaoglu, 1999: 80).

The medieval defensive structures of Azerbaijan consisted of several types: fortified cities, fortresses, castles, signal towers, observation posts.

The defensive structures of the city were created to protect the country's trade and economic centers. At the same time, these structures played an important role in the general defense system of the state. During the time of Al-Hamawi, one of these centers was the city of Ganja. The city was surrounded by strong fortress walls and ditches. (Qazvini, 1983: 32) The reason why the Mongols approached the city in 1221 and then retreated can also be explained

by this influence. The city of Ganja also had strong fortifications. According to Al-Hamawi, Ganja was "one of the oldest fortifications of the Arran and Muslim border zone".

During the period we are discussing, Ganja was protected by the Shamkur and Akana fortresses. Unlike cities, fortresses were purely military structures, and their military functions were superior to economic and administrative functions. The fortress had a permanent garrison equipped with weapons and food. The most magnificent among them was the Shamkur fortress, which protected Ganja from the west. This fortress, fortified by the Arabs, was destroyed at the beginning of the 9th century, rebuilt in 854, grew and was considered a "flourishing city" from that time on (Nasawi, 1973: 305).

Signal towers (burj) and observation posts (menzara) played an important role in the protection of cities and provinces. The further course of events depended on how quickly the enemy was discovered. Fire signaling has existed in Azerbaijan since ancient times and developed in the Middle Ages. Al-Hamawi shows that there is a mountain called “Dzib” (Wolf) in front of Derbent. “Every year they collect firewood on its top so that, if necessary, they can light a fire and give news about the enemy’s approach.” Signal towers have been thoroughly investigated by archaeologists and architects and it has been concluded that such devices were widespread in Azerbaijan. In general, the most advanced weapons and defensive fortifications of their time were used in the Atabey state, one of the most powerful feudal states that ever existed in Azerbaijan, including in Ganja, which was considered one of the central cities of this state, at the turn of the 12th-13th centuries.

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