

THE ARTILLERY OF ZAHIRIDDIN MUHAMMAD BABUR'S ARMY

Dustov Asrorjon Gadoyevich,

Head of Training Cycle, Institute of Land Forces

Abstract. On the basis of historical sources, the article analyzes the organization and combat use of artillery units (referred to in the terminology of that era as "cannon and musket") in the army of Zahiriddin Muhammad Babur, and their contribution to the development of military art. It discusses the distinctive tactical aspects of the use of firearms in Babur's army, the role of Ustad Ali Quli, and the influence of this experience on subsequent military affairs.

Keywords: Zahiriddin Muhammad Babur, artillery, cannon, wagon warfare, military art, medieval weaponry, combat tactics.

In the wars waged in Central Asia and India at the end of the fifteenth and the beginning of the sixteenth centuries, the combat significance of firearms grew increasingly. Zahiriddin Muhammad Babur was known not only as a skillful statesman and poet but also as an advanced military thinker of his time, and he was one of the commanders who consistently organized artillery in his army and employed it with high effectiveness. Babur's work "Baburnama" is an invaluable source for the historical study of this process.

Babur set about organizing artillery in his army on modern lines, drawing on the experience of the Ottoman Empire. In this connection, the services of Ustad Ali Quli, a skilled master gunner, deserve special mention. On Babur's orders, he directed the casting of large- and medium-caliber cannons and their placement on the battlefield.

According to the account in "Baburnama," in the Battle of Panipat in 1526 Babur's army employed the tactic of wagon warfare (known in Ottoman terminology as "tabur cengi"): cannons were placed behind a defensive line formed by wagons linked with chains, and the attack of the enemy's cavalry was halted by cannon and musket fire. This tactic was one of the decisive factors in defeating the numerically superior army of Ibrahim Lodi.

Two types of firearms were used within Babur's army: heavy cannons (mainly for siege and defense) and light muskets, called "tufang." Musketeers were organized as a separate combat unit and fought in coordination with the infantry and cavalry. This, in turn, was a fairly advanced military-organizational solution for its time.

"Baburnama" also provides valuable information on the process of casting cannons, the raw materials used, and the methods of transporting cannons and muskets to the battlefield. Babur ordered his commanders to use cannons not only for defense but also in siege

operations — including the destruction of strong fortress walls — which attests to his understanding of artillery as a multifaceted instrument of warfare.

Babur's experience in using artillery later became the foundation for the development of military affairs in India during the Mughal dynasty. This experience made a significant contribution to the development of medieval military art, not only in technical but also in organizational-tactical respects. Under the Mughals, artillery forces were further improved and became a distinct branch of the army with its own command system.

Comparing Babur's artillery with that of other contemporary states, in particular the Ottoman and Safavid empires, is of particular scholarly interest. At that time, the Ottoman Empire possessed the strongest school of artillery in Europe and Asia, and it was precisely this experience that directly influenced Babur's military reforms. Ustad Ali Quli himself was a specialist well versed in the traditions of the Ottoman school of gunnery. This shows that the artillery system in Babur's army was a direct continuation not merely of a local, but of a broader Islamic military-technical heritage.

According to the sources, Babur's artillery train was specially organized, with dedicated wagons and oxen for transporting cannons, and separate warehouse personnel for storing gunpowder and ammunition. The existence of such a logistical system attests that, in Babur's army, not only the combat but also the supply and command aspects of artillery were organized at a high level. This aspect has often been insufficiently covered in historical research and requires separate, in-depth study.

In addition to the Battle of Panipat, Babur's artillery was also successfully employed against the Rajput army led by Rana Sanga in the Battle of Khanwa (1527). In this battle as well, the same wagon-defense tactic was applied, halting the attack of the numerically superior enemy cavalry. The successful repetition of the same tactic in two major battles attests that Babur's artillery-tactical system was formed not by chance, but as a carefully considered strategic solution.

The artillery-wagon system employed by Babur laid the foundation for the development of military art on the Indian subcontinent over the following two centuries. Under Akbar, artillery forces were further expanded, and a special institution of "artillery officers" was formed. Thus, Babur's military-technical reforms served as an important factor in ensuring the state's military power not only in his own time but throughout the reign of the Mughal dynasty.

REFERENCES

1. Ahmedov B. Temuriylar davri yozma manbalari. Toshkent: Fan, 2017.
2. Bobur Z.M. Boburnoma. Toshkent: G'afur G'ulom nomidagi nashriyot, 2019.

3. Mo'minov I. Buyuk sarkardalar. Toshkent: Sharq, 2020.
4. Rtveladze E.V. O'rta Osiyo harbiy tarixi ocherklari. Toshkent, 2016.
5. G'aniyev A. Boburiylar davri harbiy san'ati. Toshkent: Yangi asr avlodi, 2021.
6. Nizomiddinov I. O'rta asr Sharq artilleriyasi tarixi. Toshkent, 2018.

