



A Very Rare Breech-loading Swivel Gun, Germany, 15th Century

Length: 147 cm.

Diameter muzzle: 16 cm.

Caliber: ca. 5 cm.

The present cannon belongs to the type of early breech-loading swivel guns that were used on ships of the Hanseatic League in the 15th and 16th century.

As an innovative organisation the Hansa had also a cutting edge in securing their interests militarily and equipped their ships with the best and technologically leading weapons of their time. So as early as in the year 1352 in preserved historical documents of the city of Lübeck there is a “vüerschütte” (cannon) mentioned and in 1385 the son of the mayor of Stralsund Wulf Wulflam had six “Donnerbüchsen” (thunder pipes) on board of his ship.¹ These were the beginnings of using cannons on ships but the technology established only very slowly in the course of the 15th century since their manufacturing and employment was very expensive. Accordingly the overall number of early cannons was small even at their time of use. Since iron was sumptuous also in the following centuries those cannons that were technically out-dated were melted in order to reuse the material. As a consequence pieces like our swivel gun are extremely rare and survived the centuries as ground or water finds predominately. The majority of them are part of museum’s collections today. So it is a particular delight for us presenting such an important example for the beginnings of cannonry in naval warfare.

Back in the 15th century it was not yet possible founding cannons in iron. Hence early barrels were composed of forged iron parts and assembled. Even though the craftsmen knew how to found bronze, this material was a lot more expensive than iron and also softer, leading to a higher risk of explosion when fired.

Our swivel gun corresponds in its forged construction to 15th century examples. It has a rest with a trunnion that was inserted into the vessel’s side. The antenna served to turn the barrel and adjust the vertical angle. There is a rectangular opening at the back end where you can see a container with a handle. This is a powder chamber, firmly fixed to the barrel with a wedge. A couple of these were prepared with black powder in advance and could be exchanged quickly

¹ Fritze, K., Krause, G. (1997): Seekriege der Hanse, p. 58.

during a combat situation. So the great advantage of this principle is the high rate of firing compared to muzzle loaded cannons.²

The disadvantage on the other hand was the fact that the connection between the powder chamber and the barrel did not close completely gas-proof. Hand crafted components do not fit with the necessary precision, which was not accomplished before the 19th century. As a consequence the operating distance was limited and these breech loading cannons were rather dangerous for the gunner. Being a light cannon which could be easily angled and had a high rate of firing the main purpose of the swivel gun was fighting against the soldiers on an enemy's ship when it approached for boarding. Since 15th century naval warfare of the Hanseatic League concentrated on boarding ships (sinking them was still difficult with the equipment of the time) swivel guns were a perfect supplement. This weapon had a disastrous effect by firing langrages, a type of projectile consisting of a bag made of cloth and filled with pieces of lead or iron.³⁴

Condition

Like all comparable examples of this age our swivel gun was recovered as a ground or water found. The good state of preservation argues for a water found since iron is better protected in the sediment of waters. So it is a stroke of luck that our piece still has the antenna, the complete rest and even a powder chamber with wedge. Compared to examples in museums you will recognize that the majority is less complete and in a worse state of preservation.

Our swivel gun had been restored decades ago. In the course of time some spots of new corrosion appeared. We decided keeping the object untouched but we do offer to assist a client in arranging professional conservational measures.

2 Ortenburg, G. (1984): Waffe und Waffengebrauch im Zeitalter der Landsknechte, pp. 65-66.

3 Fritze, K., Krause, G. (1997): Seekriege der Hanse, pp. 59-60.

4 Müller, H. (1957): Historische Waffen, p. 133.

Comparable Examples

- I. Musée de l'armée, Paris.
- II. Armouries of the Tower of London,⁵ today Royal Armouries Museum.
- III. Deutsches Historisches Museum, Berlin. Missing.

Excursus: Naval Warfare of the Hanseatic League⁶

The Hansa as an association of towns exclusively followed commercial interests. In this aspect it differed clearly from the policies of aristocracy that had territorial and dynastic objectives. Primarily the Hansa tried to secure trade relationships and transit routes, not to be disturbed by wars, freebooting and piracy. Since military conflicts were also in medieval times extremely expensive, could impede the free trade massively and were risky, the leader of the Hanseatic League always preferred negotiating agreements with their opponents.

When this option was not successful the organisation exerted political pressure in various ways, like imposing commercial embargos or influencing allied sovereigns in taking diplomatic action against an enemy. Warfare was the very last choice in achieving interests – not for reasons of humanity but against the background of avoiding economic strains. However this shall not lead to the conclusion the Hanseatic League was weak in the field of military. On the contrary it was very innovative in the range of warfare. In the course of centuries the strategy and tactics had been constantly improved and adjusted to new developments based on experiences made in each conflict. This was reflected in practical rules for combat, tactics and strategy. Substantiated knowledge of naval warfare was required for members of the government of a city and in particular for the leaders of a hanseatic fleet. A constant process of innovation improved these skills by both practical experiences and theoretical consideration.

The Hansa had no ships designed exclusively for warfare until the 15th century. But their commercial ships could be changed into battleships instantly so their fleet was immense in the case of emergency. In the first half the 14th century the cogs had been equipped with platforms both at the bow and abaft that served to place soldiers when necessary. With battlements on the sides these platforms together with the crow's nest were suitable for shooters using bows and

⁵ Ffoulkes, C. J., Oxon, B. L. (1915): Inventory and Survey of the Armouries of the Tower of London, Vol. II, p. 449.

⁶ Fritze, K., Krause, G. (1997): Seekriege der Hanse, pp. 27.

crossbows. The military potential of these ships was tremendous. Their number is estimated to sum up to 900 to 1000 in the 15th century – a huge fleet for this age.

At some time in the 15th century the first specialized war ships were constructed. This task was up to the individual member city that built such ships for own purposes and had to finance this issue themselves. But until the Hansa dissolved there had never been a larger fleet of specialised war ships.

The same way merchant vessels were used for military purposes the big majority of soldiers was formed by civilians living in the member cities, like craftsmen and merchants. Depending on the necessities also professional mercenaries were hired. The backbone of hanseatic naval warfare were the vessel's crews, being trained in numerous fights against pirats. Since the end of the 14th century the Hansa finally started to recruit also freebooter in order to strengthen their power on the sea.

Naval warfare was organised in the cities by the board. In the preserved documents of Hamburg there is the election of an „officium admiralitatis“ mentioned for 1440. This institution was responsible for storing the equipment, patternings and it observed the discipline on the ships of Hamburg. However the decision about war and peace was made on a superordinate level, the common meeting of representatives of the member cities. Objectives of a war, quotas each member had to contribute and the distribution of costs among them were decided there and a detailed plan of war discussed. Normally the common interests of the members led to a cooperation. Notwithstanding especially the allocation of costs among them caused disputes.

Literature

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