

# TREASURES OF THE TØJHUS MUSEUM

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The Tøjhusmuseum (Royal Danish Arsenal Museum) in Copenhagen, Denmark, is situated just in the middle of the old town. The museum building is the old arsenal, completed in 1604. In figure 1, the 156m long vaulted hall the ordnance collection is displayed, but also the room itself, quite a cathedral to look at, is worth seeing. At the second floor, again one big room, we find the small arms, some 4,500 guns and pistols, flanked by swords and pole-arms, while the middle of the hall is occupied by the armour, of which the museum is best represented in late types. The reason for this is that the main armour of the Danish kings were destroyed at a fire in the attics of the building in '47 (which here means: 1647!).

A small hand-gonne, the so-called Vedelspang gun, is the oldest firearm in the collection (figure 2). Found in 1859 at the castle-site Vedelspang in South Schleswig the gun was first thought to be a worthless agricultural instrument, but was soon recognized as one of the oldest firearms existing. Vedelspang castle was built in 1416 and destroyed in 1426, but the traces of long use makes it reasonable to date it around 1400. Shooting experiments with a modern copy of the gun, using blackpowder specially made to a contemporary receipt, shows that the direct effect of the gun was very little, while of course at so early a stage of firearms the psychological effect of this noise-, flame- and smoke-producing arm must have been considerable.

Wheellock gun in figure 3, dated both on barrel and stock to 1548, is the eldest dated gun in the Tøjhusmuseum. The lock has a curious



sickle-shaped cockspring, typical of Augsburg und Nürnberg in the middle of the century. Inlaid in the stock are engraved plates of bone (Christ Rising, Samson slaying the lion) and on the butt-plate the portrait of the Elector Johan Friedrich of Saxony with his devise: Tu decus omne tuis crux fidelis (Ye trustworthy cross, the only honour of your followers). At this time the Elector was prisoner of the Emperor Charles V after the first clash between Lutherans and Roman Catholics in Germany, so probably the decoration of the gun has been a token of sympathy with the unfortunate prince.

Figure 1. Cannon Hall



Figure 4 is a wheellock rifle signed on the barrel Hans Stifder Prag. The lock is nicely engraved with a bear-hunt. The gun is a so-called "teaser". Superficially seen there are no means of taking it apart. The secret is that when the screw at the fore-end of the trigger-guard has been removed, the lock may be taken out, and when this is removed, the barrel which is fastened to the forestock by means of hooks, could be pushed forward and thus come loose from the stock.

Two Danish wheellock guns (figure 5), the topmost is a rifle signed on the barrel with the I.T. of Jørgen Tressler, a wellknown gunmaker in Elsenore, and dated 1618. Still some 40 rifles of this type exist, all dated between 1611 and 1621 and all marked with a crowned C, the cypher of King Christian IV. They have most probably been used by the King's bodyguards and are as such the oldest military rifles we know. The gun below is a typical Danish hunting gun by Søren Rasmussen of Aalborg and dated 1636. An inscription on a silver plate attached to the left side of the butt mentions that in 1652 the owner with this gun had the rather unusual good luck to kill two stags, who were fighting each other and had their horns entangled, with only one ball.

Wheellock pistol pair (figure 6), has been signed on the barrel Aegidi Gsell, Artzberg. Of the lock only a circular plate is seen on the right side of the stock, while the spanning of the wheel is done from the left side where a small lid might be turned away, uncovering the wheel-axis. On the lockplate is engraved the name and coat-of-arms of the owner, Duke Julius Heinrich of Sachsen-Eisenach-Weimar together with the date 1653.

The cock is here a box-shaped lid covering the pan.

The gun on top, in figure 7, is a flintlock fowling-piece made at Tula, about 100 miles south of Moscow. On the barrel it is dated 1752 while the thumbplate has a portrait of the Empress Elisabeth Petrovna, a daughter of Peter the Great. The elaborate silver inlays in the butt are copied from a French book of gun ornaments by Nic. Guerard.

Below is a gun, presented to the Danish King Frederik IV in 1707 by a young boy Johannes, son of the royal gunmaker Heinrich Kappel. The intention was no doubt that he should inherit his father's position. But a few years later Johannes Kappel died in the great plague in 1711 together with his young bride and one year old daughter.

The two oldest airguns in the museum (figure 8), one is signed by George Fehr, Dresden, and they

Figure 2. The Vedelspang gun.



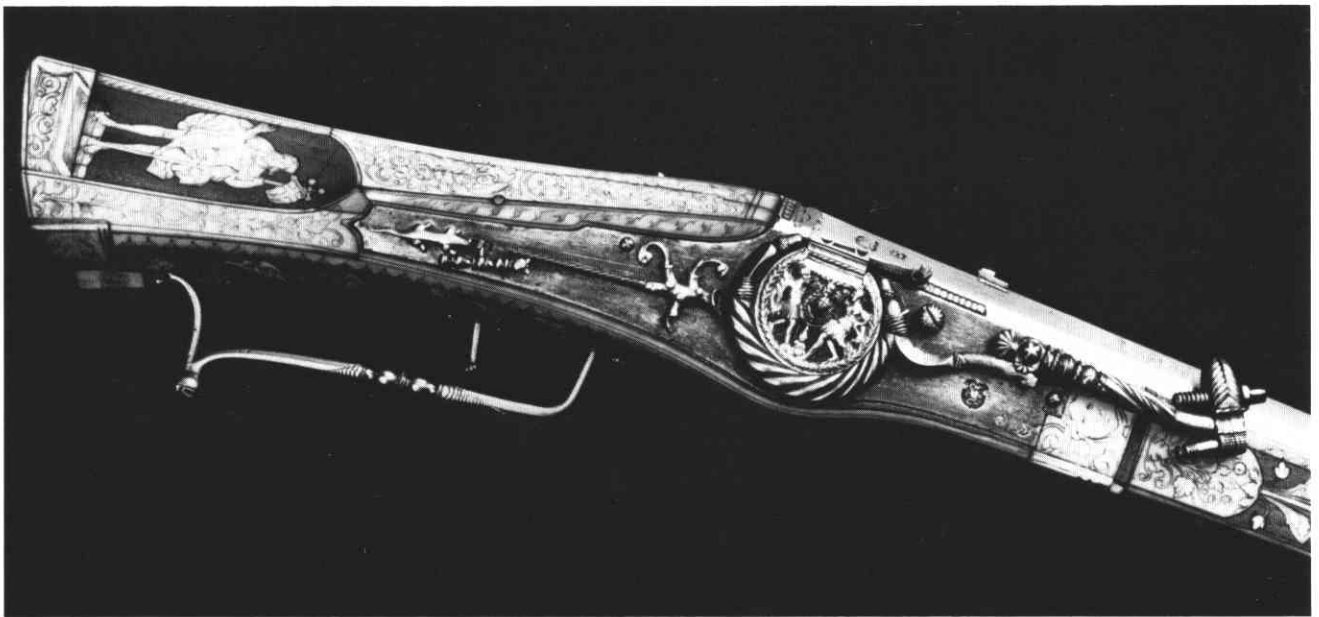


Figure 3. Gun dated 1548.

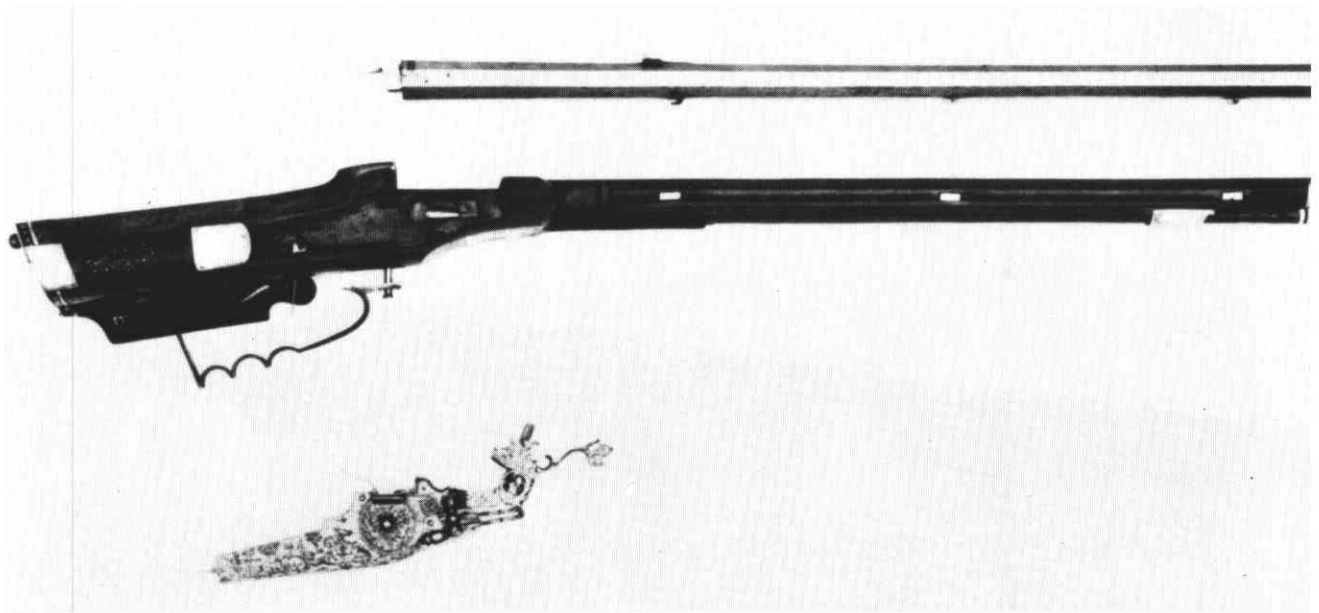


Figure 4. The Hans Stifter gun.

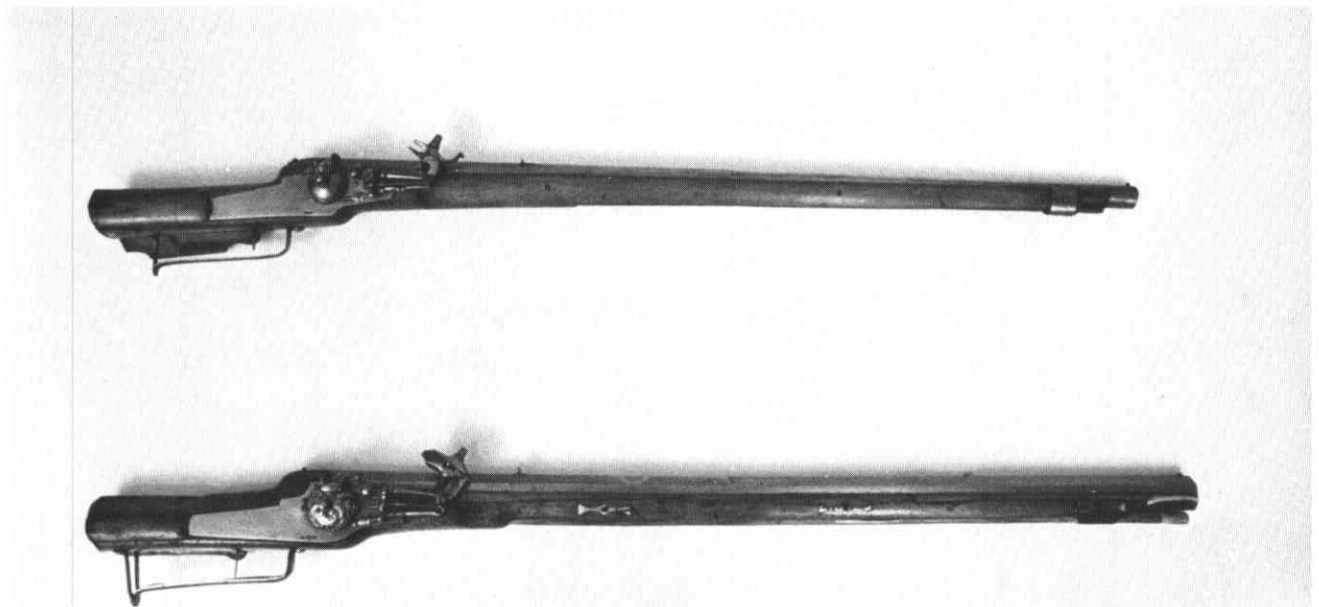


Figure 5. Two Danish wheellock guns.

are dated respectively 1653 and 1655. The barrel is in fact two tubes, one inside the other, and the space between the outer and inner tube represents the air compression chamber. A pump, not unlike a bicycle pump of today, is built into the stock. The lock-mechanism is of underhammer type, kicking upwards and thus opening a valve and setting free enough of the compressed air to drive out the ball.

Flintlock pistol pair in figure 9 were produced by the court gunmaker Valentin Marr in Copenhagen and have barrels by the famous Spanish gunmaker Juan Santos of Madrid. The pistols were presented to King Christian VI in the Spring 1742 by the Spanish ambassador to the Danish court Count Cogorani. The King used the pistols for-Carousel tournament and they have been kept together with the royal saddles at the stables of Christiansborg castle until 1938.

Figure 10 is a Danish wheellock magazine rifle of the so-called Kalthoff-system. Signed on the lockplate: Anno 1645, 6 OCTBR, and with the proud postscript Das Erste (the First). This rifle was made by Peter Kalthoff who had just entered the service of the Danish King Frederik III. In the following years Kalthoff and a younger brother produced more than 100 of those magazine rifles, all mounted with flintlocks. From archive-sources we know that two companies of the Royal Foot Guards during the siege of Copenhagen 1658-60

were armed with these rifles of which still some twenty exist. Peter Kalthoff himself ended up as head of the Copenhagen arsenal and a very wealthy man.

Figure 11 is a Snaphaunce gun with 8 superimposed loads and a barrel moveable in relation to the lock. By turning the handle on the underside of the gun a full turn the barrel will move so much forward that a new priming hole will align with the pan. Most probably the gun is the work of the watch- and gunmaker Heinrich Habrecht who was in the service of the Duke of Gottorp, a sideline of the Danish royal house. Gift from Duke Frederik III to the contemporary Danish King, also a Frederik III, about 1650. Only some twenty guns of this system are known.

Figure 12 is a twenty-seven pounder brass cannon, cast in Copenhagen in 1633 by the royal gun-founder Felix Fuchs. The gun, one of a pair, was part of a gift from King Christian IV to a relative, Count Anthon Günther of Oldenburg. On the entire surface it is covered by three genealogical trees, the Oldenburg family (the actual royal house of Denmark), starting in the year 642, the house of Brunswick, starting in 636, and the descendants of Charlemagne (d.814). In all the names and titles of more than 500 persons are mentioned on the gun, so it is easy to understand the sigh of relief with which Felix Fuchs drove in a

Figure 6. Left-spanned wheellock pistols.

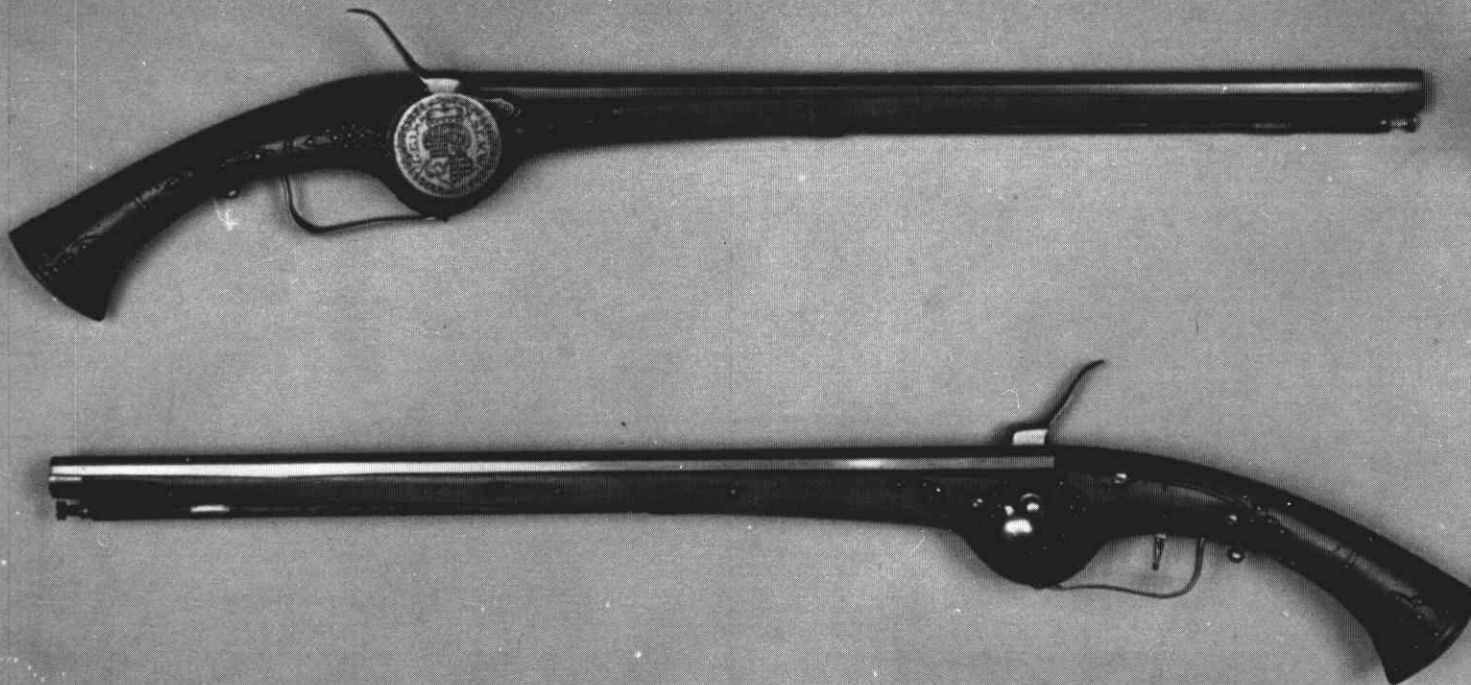


Figure 7. The "Empress" and a Danish flintlock gun.

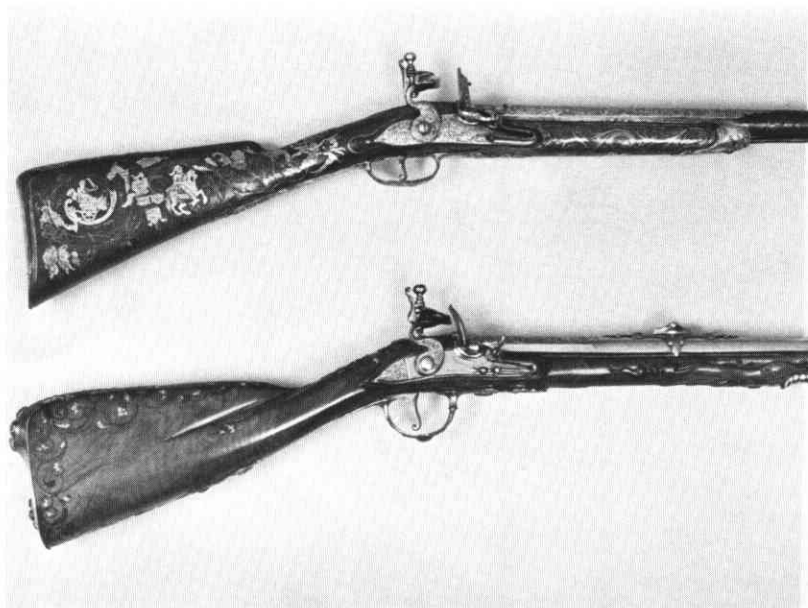


Figure 8. Air guns.

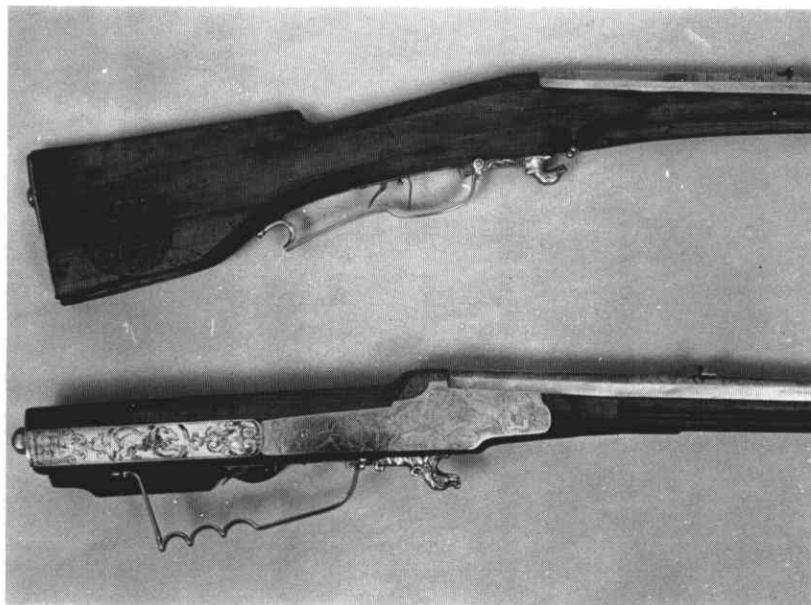
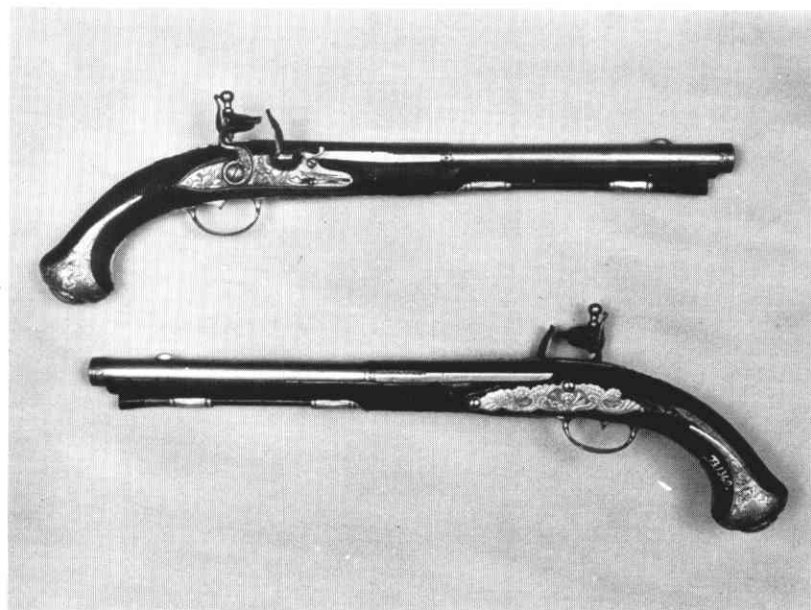


Figure 9. Valentin Marr pistols.



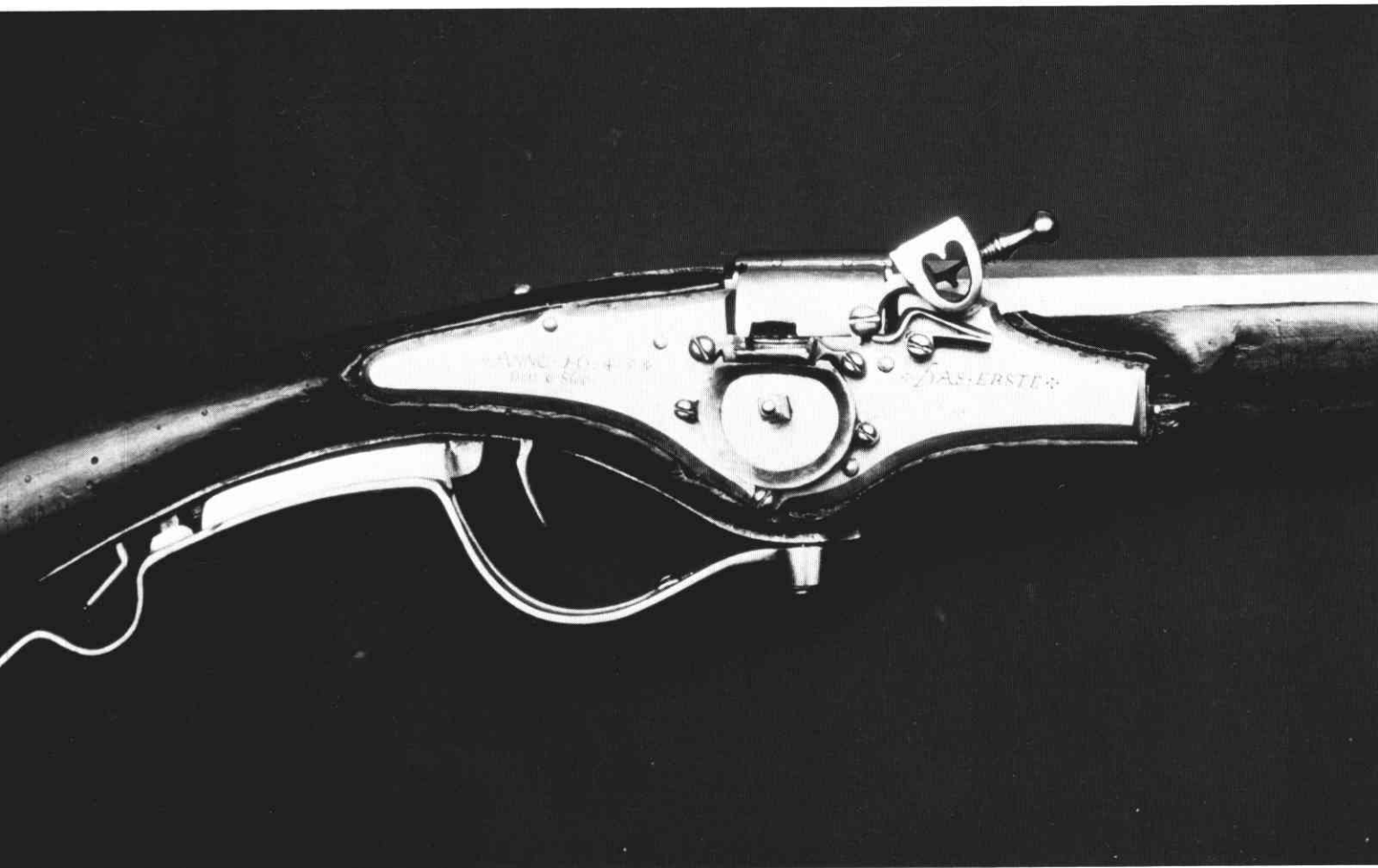
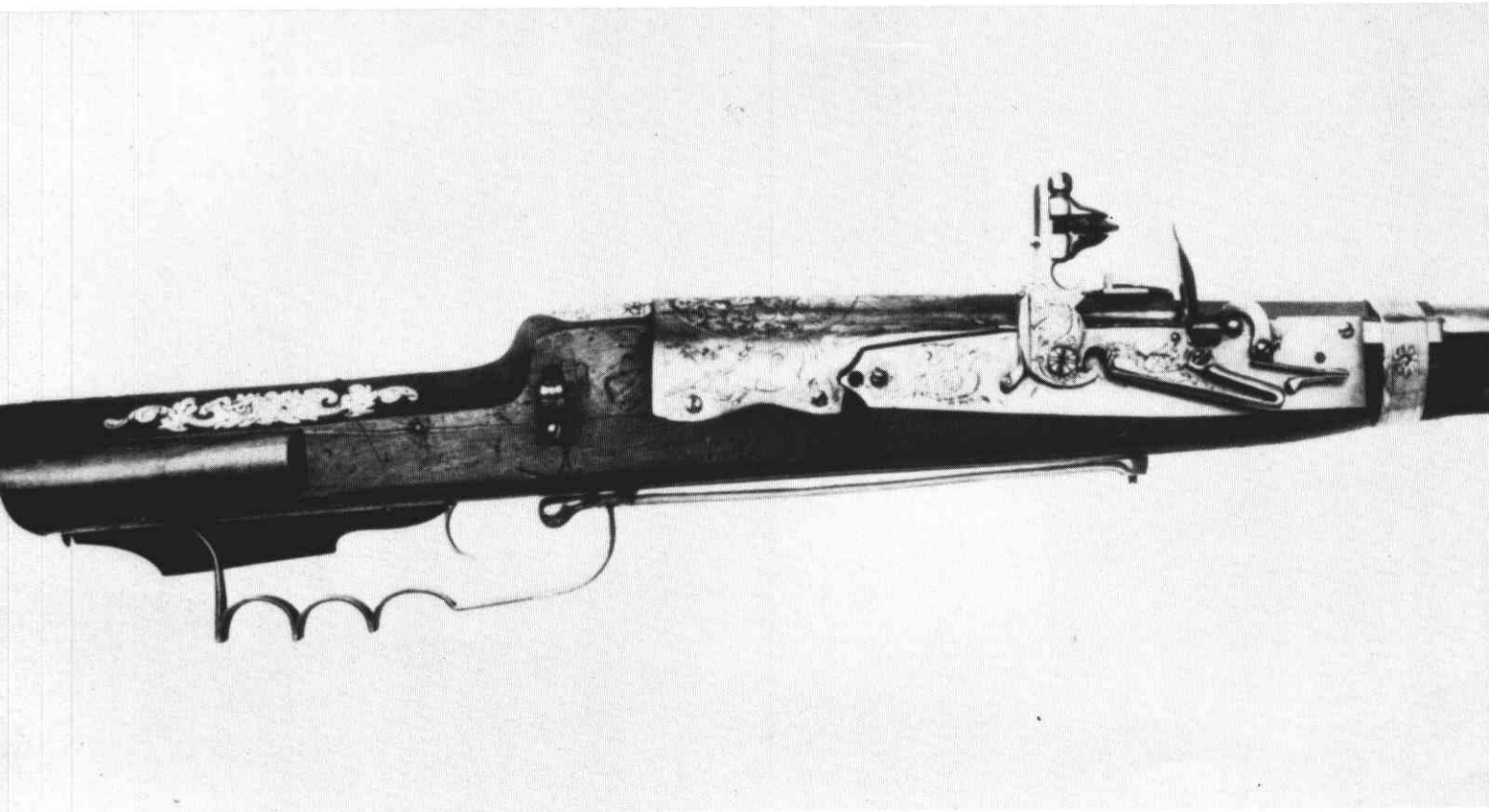


Figure 10. The Kalthoff gun.

Figure 11. The Wandering barrel gun.



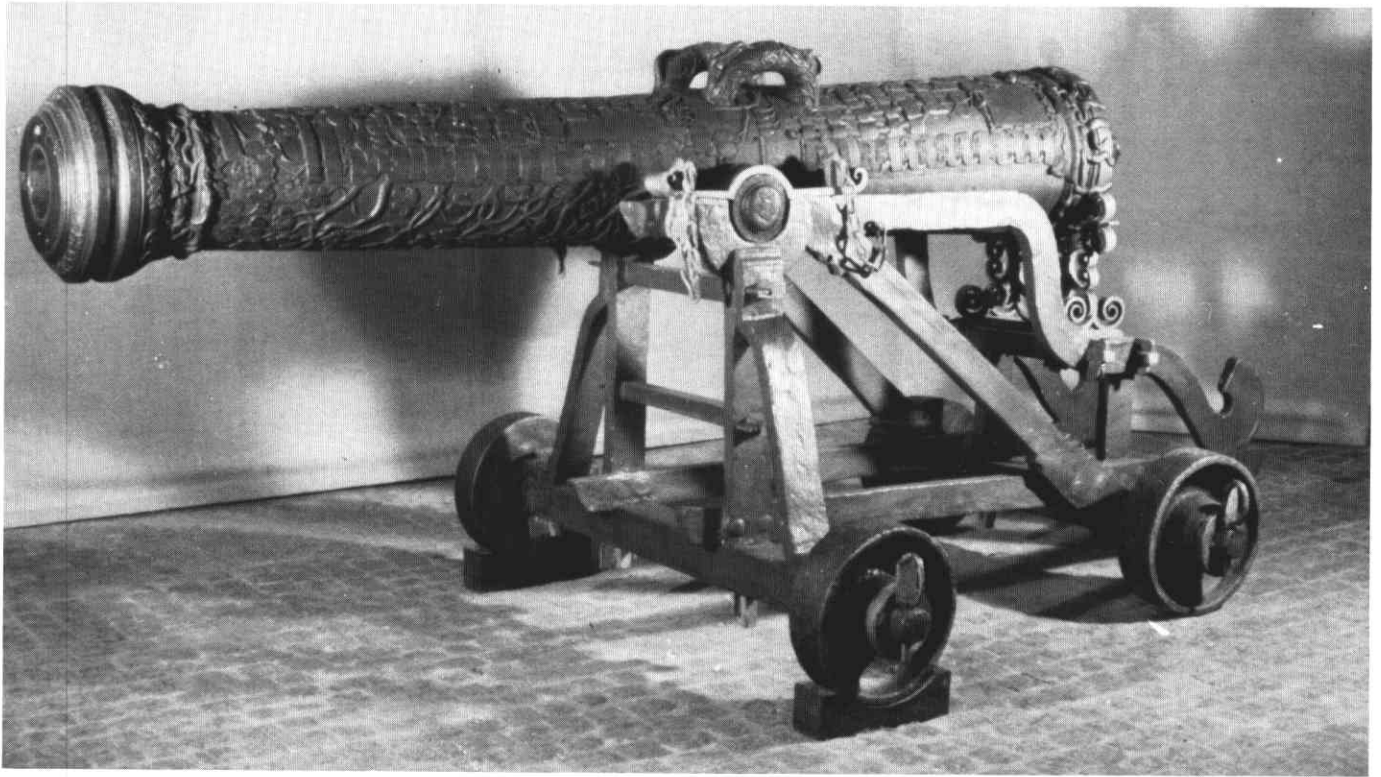


Figure 12. Danish presentation cannon.

Figure 13. S. North pistols dated 1826.



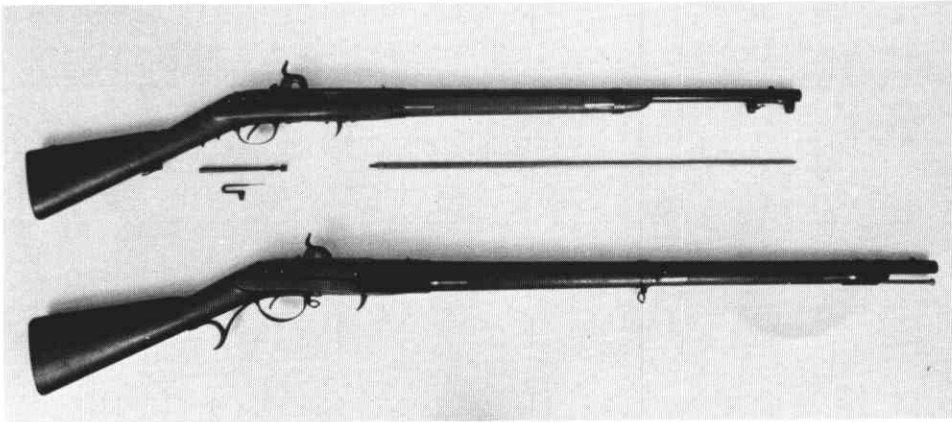


Figure 14. Hall/North 1833.

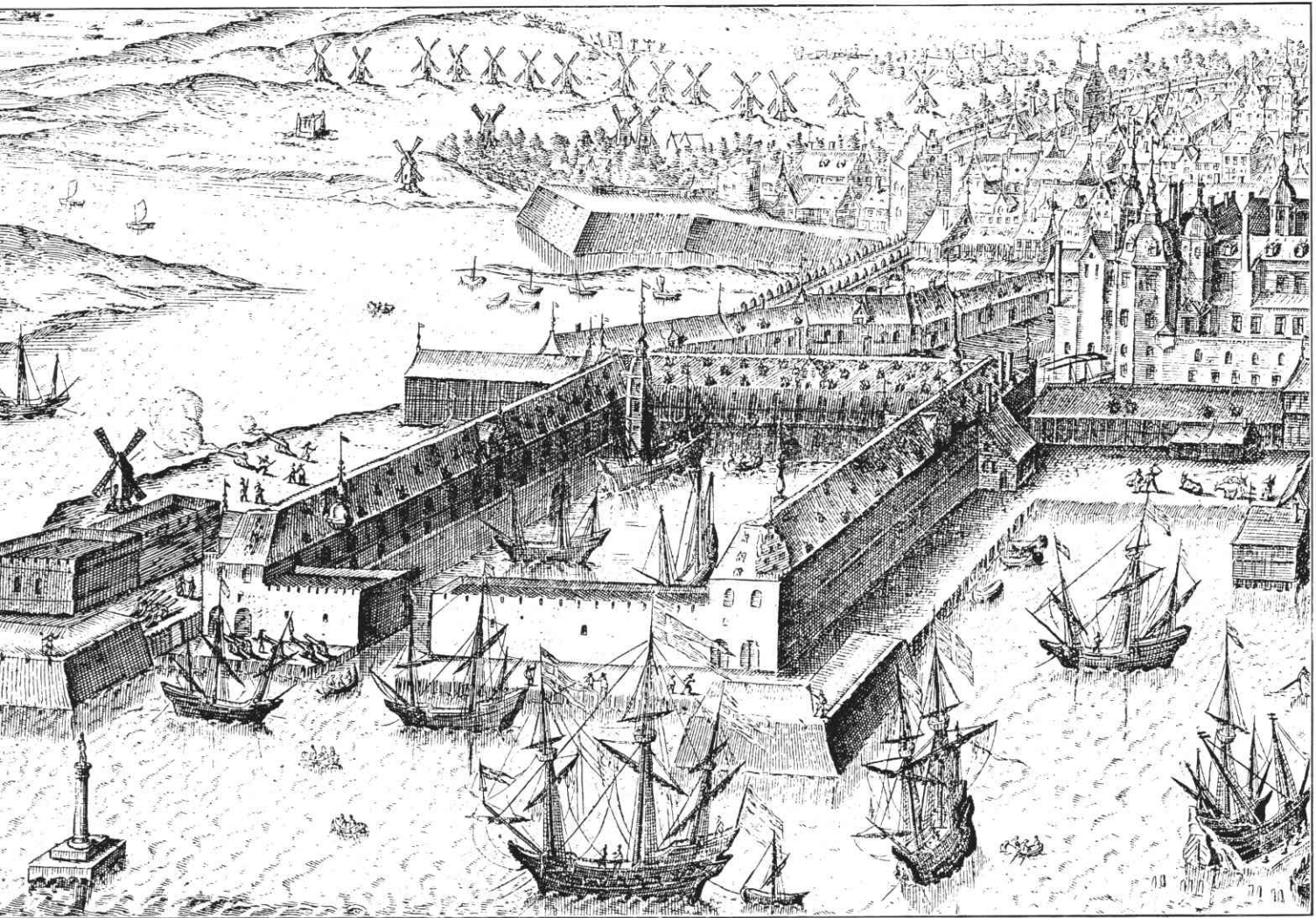


Figure 15. Smith & Wesson.



Figure 16. Shooting at the Tøjhusmuseum.





Tøjhus complex drawn during 1611.

little verse at the bottom of the gun: "This I have done/and now let who/a better one/can make, so do!"

Figure 13 is the U.S. Martial pistol Pattern 1826. On Nov. 11th, 1826, Simeon North of Middletown, Conn., contracted to make 1,000 flintlock pistols for the American cavalry. Most of the pistols were delivered in 1827 and bear this year on the lockplate, while the pistol in the Tøjhusmuseum has the year 1826. Probably they are the only pair still existing with this date.

In 1833 North began the production of a breechloading carbine on the principles of John H. Hall whose patent expired in 1828. This carbine, U.S. Pattern 1833, was equipped with a sliding ramrod bayonet, located under the barrel, while a compartment in the butt housed a screwdriver and a worm. These equipments which still are lodged in the stock of the carbine in Copenhagen (figure 14), are extremely rare. The carbine at top is the real Pattern 1833, only without governmental marks, which probably means that it has been sold

directly from the factory to the Danish King who was vividly interested in military innovations. The gun below seems to be a presentation model from 1832. It has the signature S. North Middletown in a gold oval at the breech.

Among the Smith & Wesson rarities are the revolvers equipped with a thumb safety very similar to one described in Colonel John C. Kelton's patent of Dec. 19, 1885. Of the Model No. 3 New Model only seven revolvers of this type were made. Five of them have previously been found. Here is the sixth, serial number 24 518 (figure 15).

From time to time the courtyard of the Tøjhusmuseum resounds the noise of old blackpowder guns being fired. In figure 16, Chief Curator F. Askgaard demonstrates the loading and firing of matchlock, wheellock, flintlock and percussion firearms. Not only is this a performance much loved by the visitors, but it is also very important for an ardent student of the history of firearms to have tried firing the different types of ancient arms.