

GUNS OF THE MUNICH COURT WORKSHOP AND OTHER GERMAN WHEELLOCK GUNS OF THE PERIOD

by Charles S. Hendricks

For centuries a piece of steel and flint with a box of dry tinder remained the universal lighter. The soldier and sportsman of the hand gun and matchlock eras wearily rekindling their matches with their tinder-boxes longed for a mechanism which could be applied directly to their guns so that the spark fell into the priming pan.

This opened the way and made the time ripe for the developing of the wheellock gun. Because of its intricate mechanism it was a wonderful opportunity for the highly skilled German gun makers. By tradition the wheellock is said to have been invented in Nürnberg in 1517 by Johann Kietuss. Although the place and time of the invention of the wheellock is open to a great deal of controversy we definitely know that the German gun makers were the outstanding mechanics of the times. It was a fact that there was a considerable export trade in both guns and gun makers. This was particularly so in the case of German gun makers. Some are known to have gone to Italy, where they were employed by the Duke of Mantua. Members of the Marquart family of Augsburg migrated to Madrid to become Royal gun makers in 1573. This is the reason why German characteristics are found on the wheellock guns of most European Countries. A majority of these guns have the usual type of mainspring seen only in the early Augsburg wheellock guns.

The earliest dated wheellock gun is the carbine in the Royal Armory of Madrid whose barrel bears the two sickles mark of Bartholme Marquart of Augsburg, and the date 1530. This carbine was probably purchased by the Emperor Charles V when he visited Augsburg in 1530.

In order to prevent failure of the wheellock, ingenious combinations were made such as wheellock with matchlock, wheellock with crossbow, wheellock with sabers, swords, rapiers, axes, picks and hammers. To overcome failure by fracture of the pyrite, two locks or two cocks were fitted. The loss of the spanner wrench put the gun out of action. To avoid this possibility an ingenious gun maker constructed a wheellock with a self spanner mechanism connecting the base of the cock or the trigger guard with the wheel spindle.

For more fire power or sureness of firing, double



or triple locks, double and triple barrels and wheellock revolving arms were designed. Ingenious guns were designed to shoot multiple shot, forward load and breech loading fire arms.

Credit for the invention of the rifled barrel definitely goes to German gun makers. Rifled barrels long continued to be almost a monopoly of the German gun makers. However, the rifled barrel was used only in the rifle used for target shooting or sporting rifles and was not generally used in warfare before the 19th Century.

While the German locksmiths and barrelsmiths were busy designing, carving, engraving and improving lock plates, barrels, cocks, trigger guards and other iron furniture of the wheellock, the stockers were not to be outdone. Because of the intricate mechanism of the wheellock, the time required to make a gun and the tremendous expense involved in the fabrication, only the nobility could afford them. This provoked the stocker to make very elaborate and expensive stocks with elaborate inlays and engravings. The decorations used on German wheellocks were intricate in variety and reached some of the highest standards of workmanship. The more popular form of decoration was the use of the engraved staghorn and bone inlays on the best quality guns. Most of the decorations consisted of classical and biblical scenes, sometimes copied from well known engravings.

Several shapes of the butt appeared, but by far the most popular form of butt fitted to the wheellock guns was the short thick butt and was generally classified as the German butt. This butt was held to the cheek in firing. A round iron knob screwed into the heel of the butt to protect the decorated surface from contact with the ground.

Gun making has always flourished in Germany, but it did so particularly during the 16th and 17th Centuries. This was during the time the country was divided into a large number of Principalities.

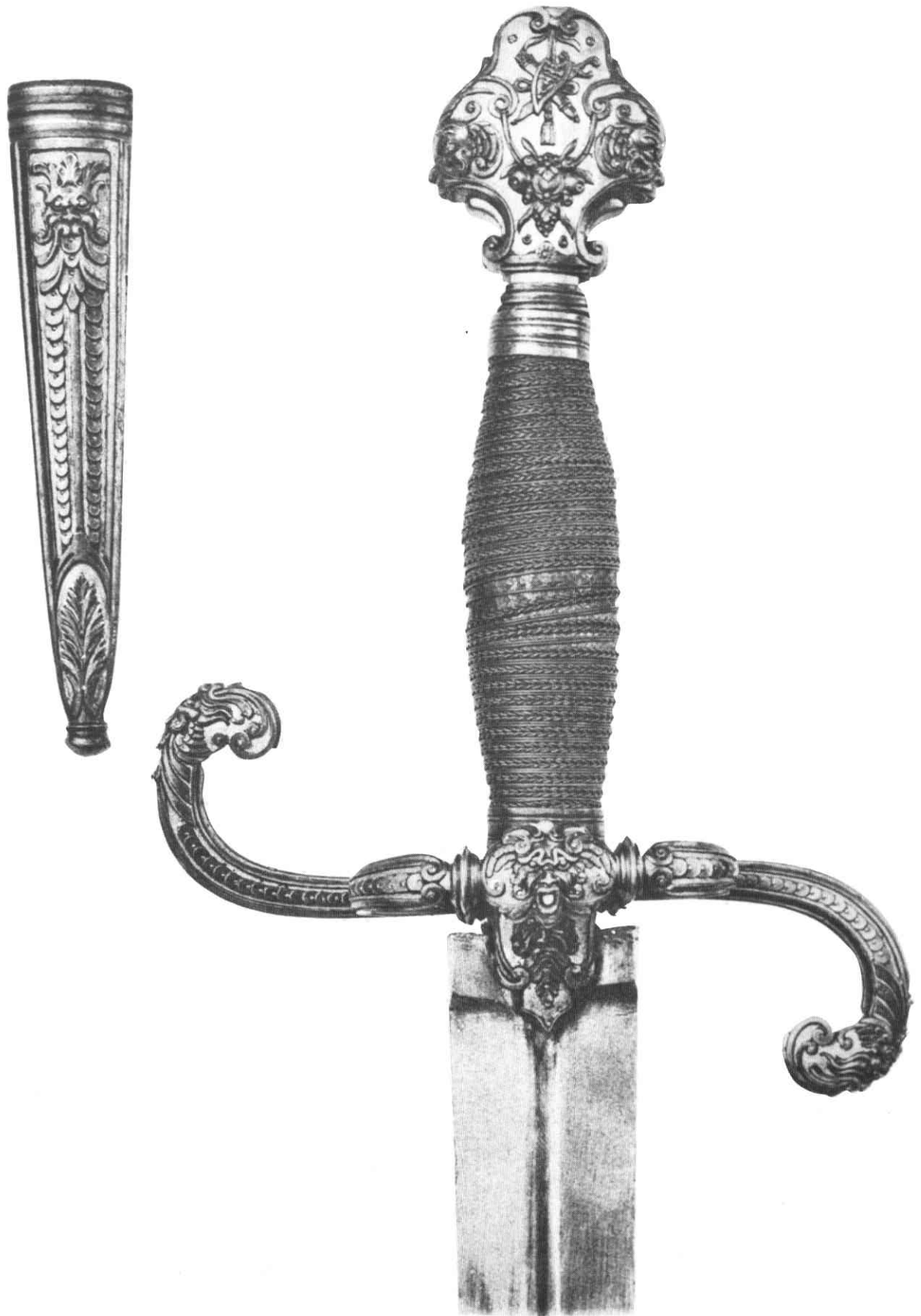


Figure 1. Dagger by Emanuel Sadeler from Stöcklein's book, "Meister des Eisenschnittes".

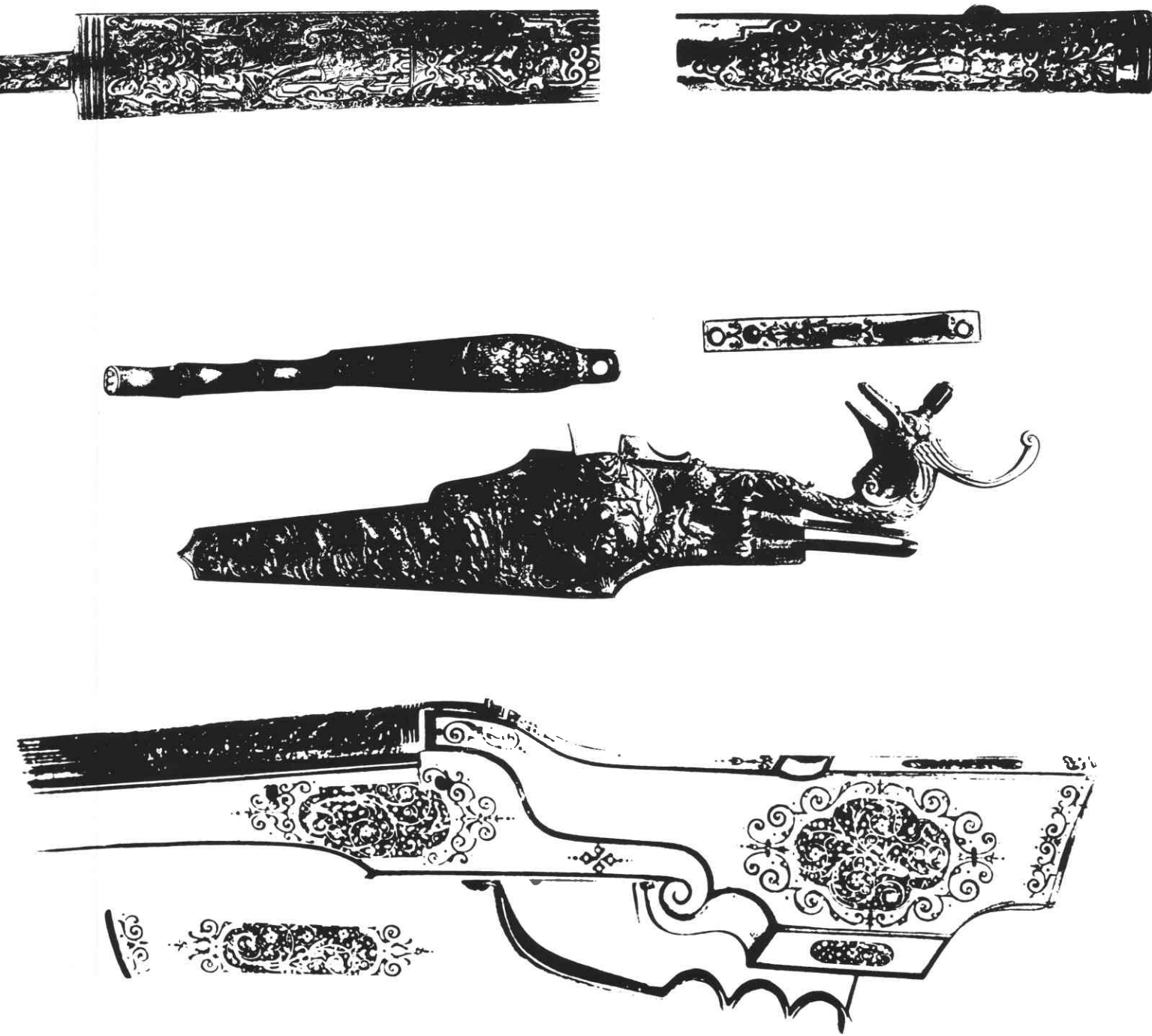


Figure 2. Radschlossbüschse in the Ermitage in Lenningrad with metal work by Emanuel Sadeler and stock by Hieronymus Borstorffer (also taken from Stöcklein's book).

This was a big influence in gun making as the Principalities were always competing with each other to produce the most elaborate and attractive guns. Each of the ruling Princes had his own court, and even if he did not employ a court gun maker, he required large numbers of guns for the hunting parties that were an inseparable feature of the aristocratic life in Germany.

At the beginning of the 17th Century a distant geographical diversion can be recognized in German gun making and two different styles can be isolated. There was the west and the northwest, with the main center in the Rhineland and the

south and the east with its main centers in Augsburg, Nürnberg, Munich and Dresden. Guns from the western region, or the Rhineland area, had definite markings. The stock was employed instead of the German cheek stock. The locks with the lower edge of the lock plate rounded to correspond to the profile of the wheel. The tail of the lock plate curved slightly downward and ended in a point. They have superbly decorated stocks. The ornamentation takes the form of inlaid silver wire and silver sheets cut to shape and engraved with birds and flowers.

The guns of the wheellock period from the south

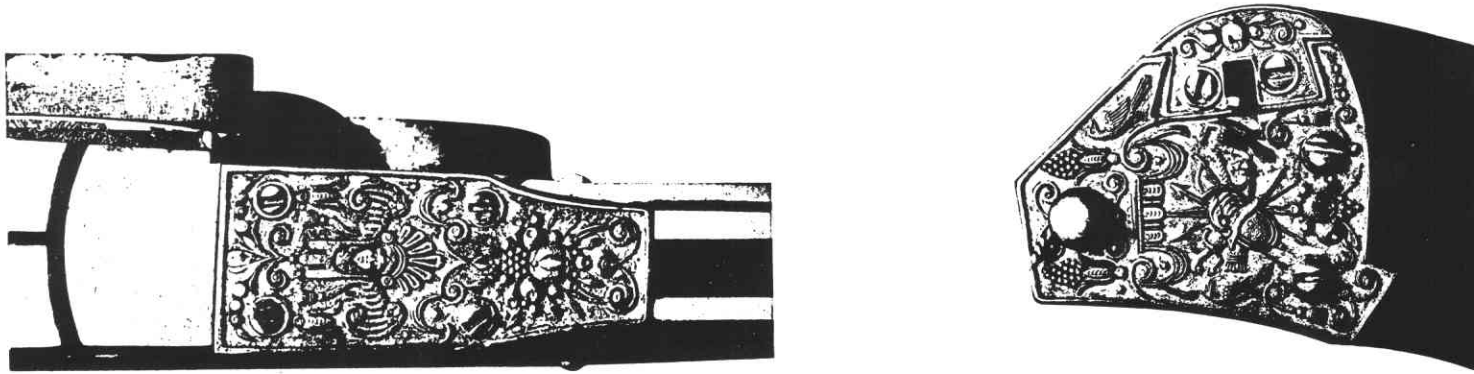
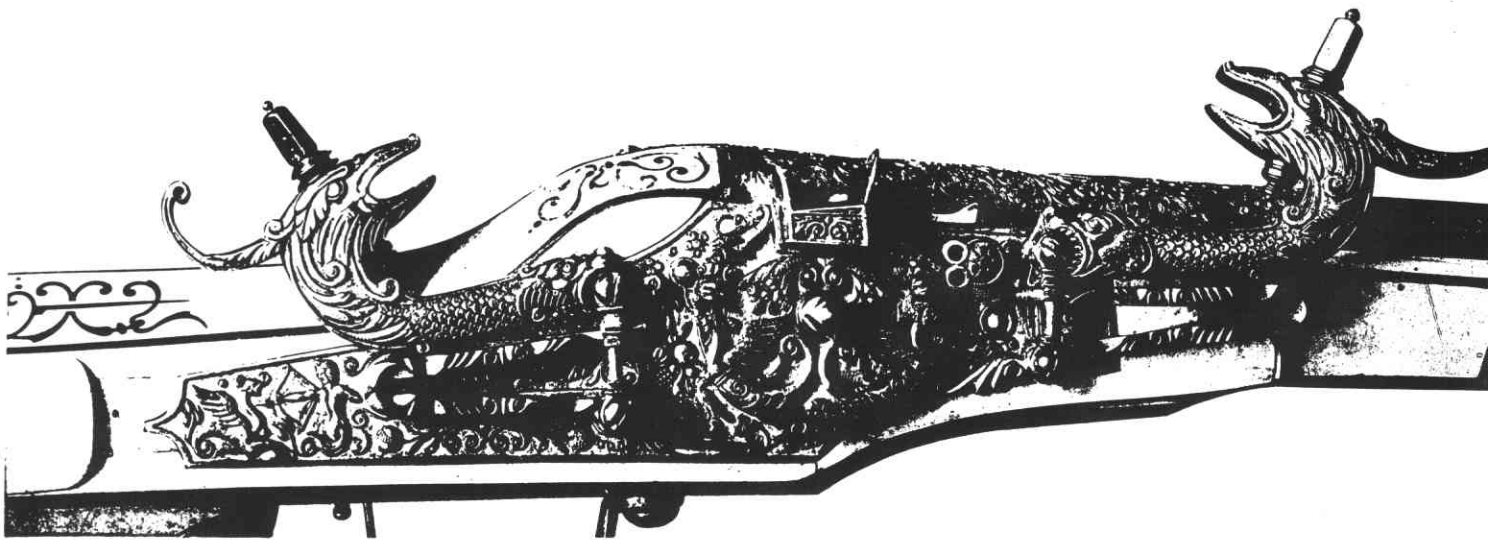


Figure 3. Radschlossbüchse in the Vienna Kunsthistorisches Collections. Metal work by Daniel Sadeler, stock by Hieronymus Borstorffer (from Stöcklein's book).

and eastern region can best be described by a discussion of one of the most popular and glorified German principalities of this time, the electorate of Bavaria. In the latter part of the 16th Century there was established what was known as the Munich Court Workshop. Some of the most magnificent wheellock fire arms ever fabricated were the work of a group of artists who were in succession employed in this workshop by the Dukes of Bavaria. The first of these artists was Emanuel Sadeler, son of an Antwerp sword cutter by the same name. He was appointed by Duke Wilhelm V of Bavaria in 1594, Eisenarbeiter (Worker in Iron). This position he retained until his death in 1610. He was succeeded by his younger brother, Daniel Sadeler. Daniel Sadeler came to Munich the year of his brother's death. The prospect at Munich must have been quite promising as Daniel Sadeler abandoned an appointment at Prague at the Court of Rudolph II to come to Munich. He was immediately employed by Duke Albrecht VI, the younger brother of the new ruler of Bavaria, Maximilian I. Daniel was probably attracted to Munich by the fact that his brother Emanuel had been Knighted and given a commission at the Court of Munich. In fact, Daniel never received a permanent court appointment.

The fact was that he never received any commission from Maximilian I. But according to the rate book he was employed by the Workshop until he died of the plague in 1632. In 1623 Maximilian I received the title of Kurfurst (Elector of the holy Roman Empire). Like many of our present day politicians, Maximilian I was interested only in obtaining honors for himself.

The Munich workshop was then carried on by Casper Spat who had evidently been trained by the Sadelers, as his style differed very little from theirs. Casper Spat was employed by the court from 1635 to 1665, according to the records in the Book of Payment for this time. In 1672 he was Knighted and given the appointment - Hof-Kammer-Rat-diener (Servant to the Court Chamberlain). It was a court office of few duties but provided a regular stipend. He died in 1691.

The Sadeler-Spat Workshop was therefore employed by the Bavarian court for three quarters of a century. As Emanuel and Daniel Sadeler were trained together in their father's workshop in Antwerp, they never developed individual styles. Individuality was not at this time as highly appreciated as it might be today. The fact that Casper Spat was still content to use the same sources of design in the third quarter of the 17th

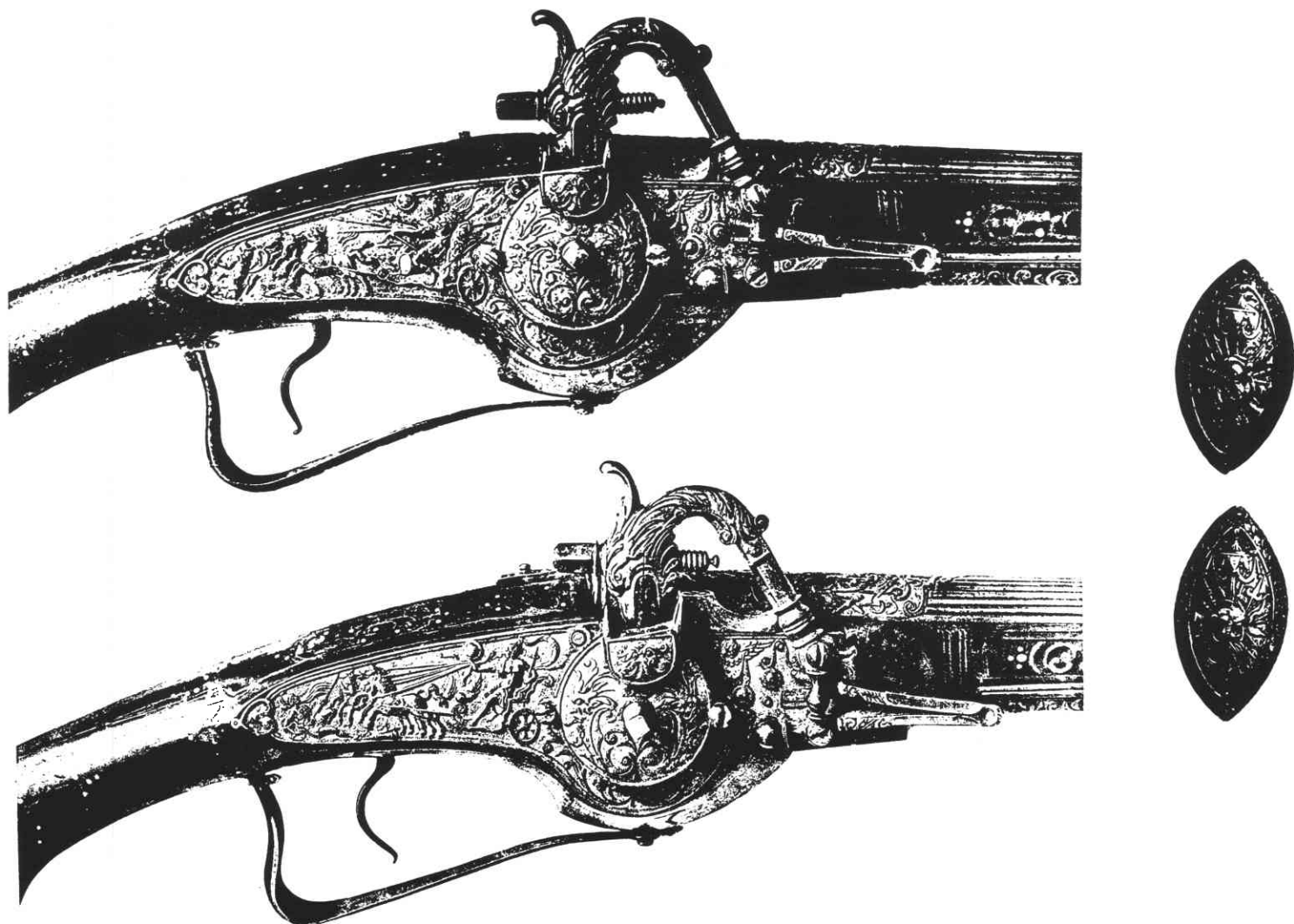


Figure 4. Two pistols by Caspar Spät (Budapest National Museum) from Stöcklein's book.

Century as Emanuel Sadeler had used almost 100 years before shows how little the style and ornamentation of guns changed during this period.

The style of the two brothers was so much alike that at times it was hard to distinguish the individual's work so that it could only be determined by the date of the gun in question. Since Casper Spät was doubtless apprenticed to Daniel Sadeler, his style differs in no important respect from that of the Sadelers. However, the quality of his work was not generally as fine as the Sadeler brothers. In particular, his chiseling was usually carried out in lower relief which was noticeable in the fine arms he decorated.

The Munich School had one idiosyncrasy which set it apart from most of the arms decorated at that time. Other artists carved out the detail of the ornament in gold or silver while the ground was iron. The Munich artists all used the opposite technique and chiseled the ornaments in the iron and confined the gilding to the ground. The color contrast between the dark blue of the detail and the gold ground was not only in itself unusual but

also served to emphasize the ornament in relief, a remarkable feature of the Munich school. The luxurious effect of the Munich arms was further increased by encrusting the blue surface with small gold studs.

The workshop at Munich was not carried on in recognizable form after the death of Spät. By this time it had become old fashioned in both method and style.

Even though the workshop of the Court of Munich is referred to as the Sadeler-Spat workshop and the guns made there were associated to and bore the name of the steel chiseler, the gun was far from completed when turned out by these men. In fact it would require at least six specialists to finish one gun:

1. a locksmith to make the lock in rough iron
2. a barrelnsmith to make the barrel in rough iron
3. an Iron Chiseler to decorate the lock, barrel and iron furniture for the gun
4. a gilder to finish the iron parts different from the chiseler

5. a stocker to make the stock and assemble the parts and place the inlays
6. an engraver to engrave the staghorn, bone and ivory inlays of the stock

Some of these specialists were employed by the workshop while in other instances the guns were taken to the specified specialist.

The locks and barrel chiseled by the Sadelers and Spat certainly were worthy of the very finest stocks. These were provided at first by Adam Vischer and subsequently by Hieronymus Borstorffer both of whom worked at Munich. Adam Vischer was admitted as master at Munich in 1599 but is not referred to in the rate book after 1610 at which time he either died or left Munich. His signature A.V. in monogram is usually engraved on his work on a small panel of bone inlaid behind the tang of the barrel. In order to account for the high quality of the engraving it is suggested that he must have employed a professional engraver, Johannes Sadeler, a cousin of Emanuel. Johannes, like Emanuel, learned his art in Antwerp. He subsequently became the official engraver of the Munich Workshop.

The second master gun stocker who furnished stocks for the Munich Workshop was Hieronymus Borstorffer who was admitted master of the Munich Gunshop in 1598. He was employed regularly with commissions by the Bavarian court until he died in 1628. He introduced a more individual and highly effective style. He dispensed with engraved ornaments and thereby with the expense of an engraver. He relied on the effect of color contrast alone. His stocks fell into two groups:

1. The stock was veneered with white staghorn inlaid with black horn, ebony or stained wood.
2. The stock was veneered with a dark wood such as ebony or palisander. This was inlaid with white horn or ivory.

A feature of his work was the delicacy of his designs. This is confirmed by the numerous payments to him recorded in the Munich account book for stocks covered with white bone and inlaid with Indian wood. The initials H.B. are found behind the barrel tang of many stocks of this reverse decoration. He died three years before Spat's appointment.

It was necessary for Spat to go outside of Munich

to find a stocker. He obtained Elias Becker of Augsburg. His signature E.B. is found in the customary place behind the barrel tang. The characteristic ornaments of Becker's stocks were composed of thin delicate scrolls and innumerable minute roundels. A further typical feature is the distribution of a series of groups of ornaments on the inner face of the butt without any relationship to each other. Becker worked in Augsburg between 1633 and his death in 1671. These were the years Casper Spat was employed at the Munich Court.

To appreciate the magnificence and beauty of the guns produced in the wheellock period and the one hundred years bridged by them in the progress of arms, we must consider primarily the artistry of the Munich Workshop. To give credit to this workshop and to the fine guns it produced, we need only to listen to the words of Dr. Stocklein, who carried out a most detailed research into the history of the Munich Court Workshop. He quoted as follows, "If I were invited to pick out the finest single gun in existence, I should certainly choose the Musket that was given to Duke Carlo Emanuel of Savoy by Elector Maximilian I of Bavaria on the occasion of the marriage of the Crown Prince of Bavaria to the sister of the Duke of Savoy in 1650". This wheellock Musket was made about 1600 for Duke Maximilian I in the Munich Workshop. The steel parts were chiseled by Emanuel Sadeler, stocked by Adam Vischer (signed A.V. in monogram), with the inlays engraved by Johannes Sadeler. The serpentine is on the same lock plate. The barrel and the lock is chiseled with figures of gods and goddesses within arabesque panels against a gold plated ground. The chiseled detail is blued and enriched with inlaid gold studs. The stock is inlaid with engraved horn (gold and silver). This musket is still preserved in the Royal Armory at Turin.

Guns produced by the Master German Artists were a variety of magnificent specimens. These guns are now in Museums or the proud possessions of the dedicated gun collector of today. The more investigative collector can appreciate the artistry of those talented German gun makers who worked by hand and created such magnificent specimens. These men are regarded as the top collectors today. They boast of reaching their ultimate goal by owning a Sadeler.

Figure 5. Barrels, detail of pistols in Figure 4.

