

The Manufacture d'Armes de Versailles

by Dean Taylor

The Larousse *International Dictionary* describes CRAFT as “a trade or occupation that requires skill in the use of the mind and hands” or “an art viewed as a making that requires developed skills.” ART is described as the use of the imagination to make things of aesthetic significance; the technique involved, the theory involved; objects made by creative artists; a sphere in which creative skill is used.

The dictionary describes GUNSMITH as someone who makes and repairs small firearms and a GOLDSMITH as a craftsman who works in gold.

Nicolas Noel Boutet was all of these during the process of making the most significant contribution to arms manufacturing in the late 18th century and early 19th century. In terms of high art in arms fabrication, his most important contribution emerged in the latter period.

As an industrial designer myself, who develops new products for consumers by generating raw conceptual ideas with renderings, scale drawings and final prototypes which reach the market place, I have been able to relate to Boutet's thought processes even though we are almost 200 years apart, and are from different nationalities and cultures.

This presentation is designed to make a contribution to the Society of a complete overview to show the style, scope and creativity of Boutet's work. As in all pure research, I will make certain assumptions and conclusions based partially on intuitive relationships and await with interest for correction from other scholars to fill in blank areas of my research. At future meetings, specific presentations in greater detail can be given on pre-Napoleonic firearms made by Boutet at Versailles, Boutet presentation naval pistols, Boutet regulation arms made at Versailles, and firearms of the Consular and Imperial Guard of Napoleon.

In this presentation, I will review factors concerning Boutet, his background, political regimes he related to, his production facilities and retail operations, his machinery, power, labor factors, his art form and ornamentation relating to the broader picture of French style and taste of the period. Also, I will mention regulation arms, the luxury presentation arms, markings on the products and their meanings, and the final period in Paris concerning his modified style. I shall reveal some surprising technological innovations in firearm design for which Boutet was given very little credit. A few contemporary accounts and opinions toward the Manufacture of Versailles and its production were derogatory because of political events of the period. These negative opinions do an injustice to Boutet's creativity and superb technical ability.

Nicolas Noel Boutet was born in Versailles in 1761, one of three sons of a gunsmith, Noel Boutet. The father held high esteem and favor with Louis XVI, King of France, who gave Noel the title, “Fournisseur des Cheval-Legers de la Maison du Roi” (Gunmaker to the Horse Soldiers of the King). I have

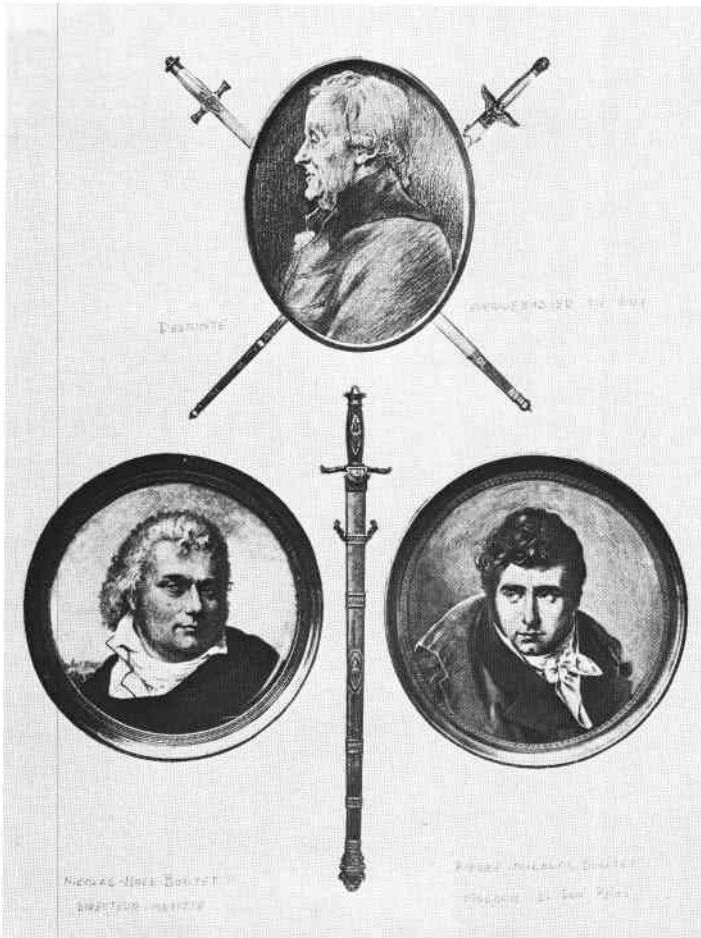


uncovered little information concerning Noel's work for Louis XVI; however, I have photographs of a pair of pistols made at Versailles which were possibly made by him. They are plain military pistols and have an unusual trigger guard finial in the form of a battle axe. (In Figure 1 and 2 the general form can be seen as well as the lockplate inscription.)

Boutet's early background with his father must have contributed much to his mastery of gunsmithing. His early products bear somewhat an influence of line, proportion, form and subdued ornament of the rococo period of art as seen in the work of La Roches (father and son) and Chasteau. This elegance will be seen later in a pair of early pistols made by him about 1789, now in my personal collection.

In 1788, Boutet married Leonie-Emilie Desainte, the daughter of Desaintes who was gunmaker to King Louis XVI. Boutet had four children: Pierre-Nicholas, born the 30th of October, 1789, and at the age of fifteen became associated with the works of his father at the manufacture, but unfortunately died in 1816. Boutet's marriage contract with Desainte's daughter gave him his father-in-law's title, “Ordinary Gunmaker to the King,” which assisted him at court with financial and prestige benefits. The pistols mentioned from my collection, which were made in 1789, are marked “Ordinary Gun-maker to the King.” They show the earlier influences of the mid-18th Century period of the gunsmith's art. (Figures 3, 4, 5, 6) In the Metropolitan Museum of Art, New York, there is a child's gun which is a scale model of a regulation fusil Model 1717 made for the Dauphin (son of Louis XVI) dated 1789-1791. Inscriptions on the lock and barrel indicate it is a royal arm. I would enjoy uncovering more of these pre-revolutionary (1792) Boutet arms for study and would welcome research from any cooperative source.

As drastic events emerged with the French Revolution in 1793, with the execution of Louis XVI, and with the fall of Robespierre, a provisional government was set up by several



Members of Boutet's family.

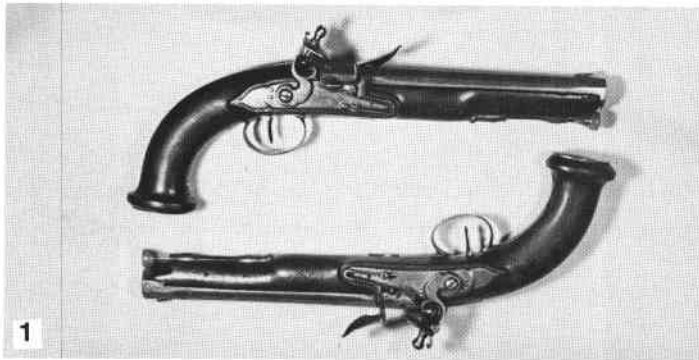


Fig. 1: Pistols possibly by Noel Boutet, ca. 1780.



Fig. 2: Lock markings of above. Courtesy Arthur Yates.

convention commissioners dominated by Barras. Because several political groups were striving for power within France, the Convention gave way to the formation of a new government, the "Directory." Again, Barras held power and consequently, was influential in the young Napoleon's career. Barras appointed him General of the Army for the interior. Later, Napoleon was made Commander-in-Chief over the Army of Italy as well and through Barras' influence he married Josephine de Beauharnais. The "Divine Right of Kings" of Europe became threatened by the people's revolution of "Liberty, Equality and Fraternity" and several European allies began military campaigns against France.

In 1792, Prussia declared war on France and an urgent armament program was needed. The National Convention, by its Decree of June 27th, through the Committee of Public Safety, called for the establishment of national arms factories throughout France.

At Versailles, by decree of the government, a new arms factory was formed under the direction of Pierre Benezech with Nicolas Noel Boutet as its technical director. This enterprise was created in the Grand Commune at 17 Rue de l'Union in the south wing of the palace at Versailles. It had fallen into terrible architectural disrepair and had been subdivided into 1000 mini areas housing rogues and prostitutes numbering over 2000. Benezech and Boutet felt the Grand Commune had adequate space and over 500 windows added the proper illumination. Designed by Mansard in 1686, the building measured approximately 272 x 250 feet with a central court of 151 x 128 feet giving about 87,200 square feet of production area.

Benezech and Boutet had control of four departments of firearms. Departments one and two fabricated locks, department three produced mounts, department four was in charge of barrel fabrication. The administration and staff functions were structured as follows:

- Boutet as Technical Director
- M. Bouny as Controller (financial manager)
- Four inspectors
- One accountant
- One outside agent
- One cashier
- Office manager
- Six clerks
- One designer (draftsman, primary function)
- Office boy
- Four storekeepers
- Supply managers
- Three office girls (concierges)

In 1793, this new factory was given the title "National Manufacture." Boutet ordered machinery, which was put at his disposal plus all the equipment which had formerly belonged to Louis XVI. With his interest in locks, Louis XVI had an extensive area for making and repairing all types of mechanicalisms for lock manufacture.

Boutet recruited skilled workmen from the gunmaking tradition of Liege, Belgium. After Louis XVI's decline, the traditional crafts guilds were abolished and many skilled workers in other areas were employed. Boutet hired many jewelers, locksmiths

sculptors, clock makers, edge tool makers and wood carvers, many of whom had been in the service of the king. We will see later how these skills were put to good use in the manufacture of luxury arms under Boutet's direction.

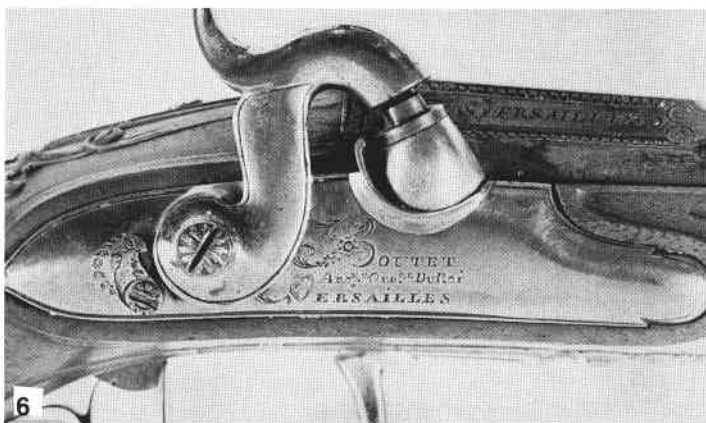
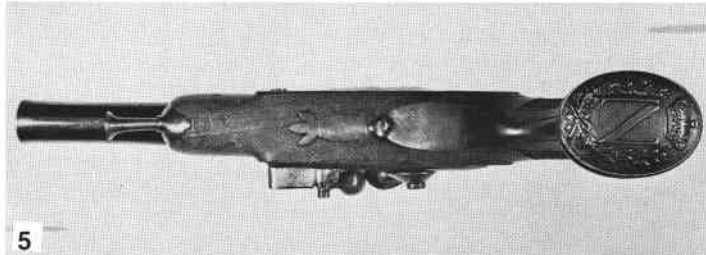
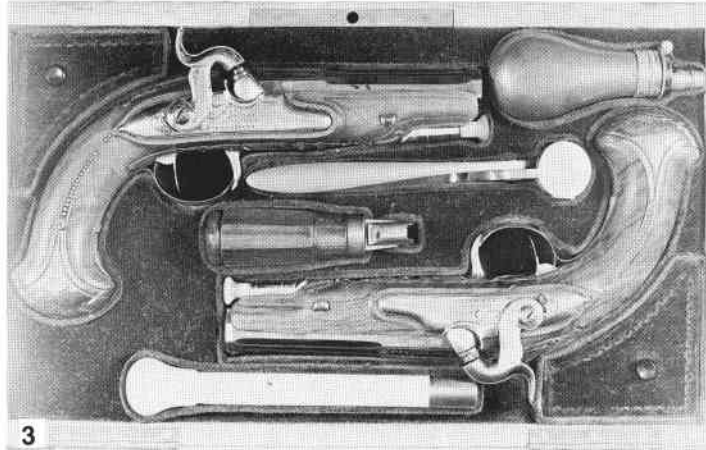
The Prussian military campaign against France had made good use of their rifled Jaeger carbines. By decree from the government, Boutet's workshops were ordered to develop similar arms for France. In 1794, the workshops were named the "Manufacture of Carbines" and all military firearms manufactured were stamped "A N" (National Arms).

Boutet had difficulties in producing these arms. He encountered problems obtaining raw materials as well as water power for machinery because Louis XIV had built Versailles on a plateau. From the beginning of the "Manufacture of Carbines," Boutet never had the qualities of an administrator for he had little or no interest in the manufacture's return on investment causing endlessly poor profit results. He also was a victim of political events and hatreds from the military administrators which constantly plagued him through most of his influence right up until 1818 with the closing of the Manufacture of Versailles. Regardless, Boutet with his technical skills and ability as a gunsmith soon laid out the machinery of production with drills, screw cutters, boring machines, forges and many of the earlier techniques seen in Diederot's *Industrial Arts Encyclopedia*.

His proofing of gun barrels was established at Meudon. Proofing of the barrels was generally marked either on the side or underneath. There were varying marks to show provisional proof, mark of acceptance and mark of guaranty. During the late years of Louis XVI's reign (1780s) the gunsmith's trade had specialists and the barrel makers of Paris belonged to a guild. In terms of the high, medium and luxury quality arms of Boutet, that one specific barrel maker (Nicolas Le Clerc) had dealings with Boutet is shown by several of his early works under Louis, the Directory, and Consulate periods bearing his stamp. It is shown in the illustration of the typical Boutet barrel stamps. Le Clerc was the only maker being breveted by the King in Paris and thus by royal decree had the right to use in his barrel mark the fleur-de-lis. Generally, on the finer Boutet arms deluxe, the Boutet mark appears as well as the Controllers. The controller was responsible for overseeing the barrel proofing process.

Boutet's water power situation was changed when Citizen Germain proposed an aqueduct from Galli to bring the required water to the manufacture. Also, the Mill of Bougival was revamped for sharpening and fabrication of the early military blades, under the direction of the three commissioners of the Manufacture, Regnier the Older, Jullien and Meynier.

The Manufacture had its title "Manufacture of Carbines" until 1799. The earliest fabricated carbines were made for officers and sub-officers of the light infantry, and light-infantry soldiers. Later, possibly in 1796, Boutet produced rifled carbines for the cavalry which were shorter in length and with saddle sling loops. These carbines were designated the "Model 1793" and had seven grooves that made a complete turn in the length of the barrel. From a contemporary account it is stated that a workman must file 2,500 times to make each groove and two men were making three grooves per day. Since Boutet also



Figs. 3, 4, 5, 6: Pre-Revolutionary Boutet pistols, made before 1789, converted in the 1820s. Author's collection.

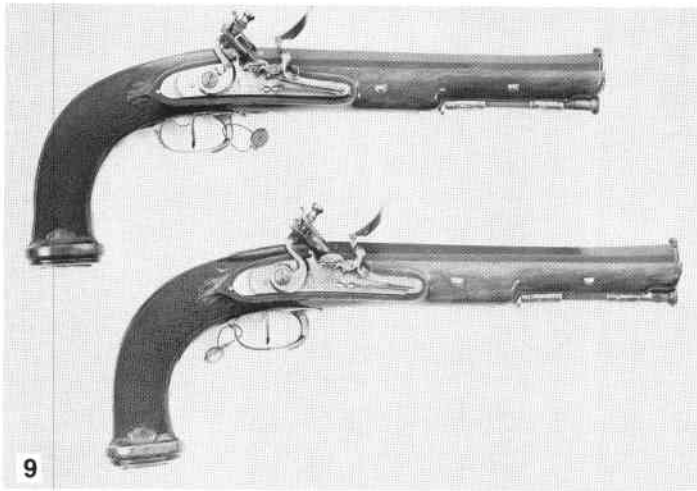


Fig. 9: Pistols of Reward, 1802. Gene Miller collection.



Fig. 13: Officer's pistols, non-regulation, ca. 1800. Courtesy Robert Abels.

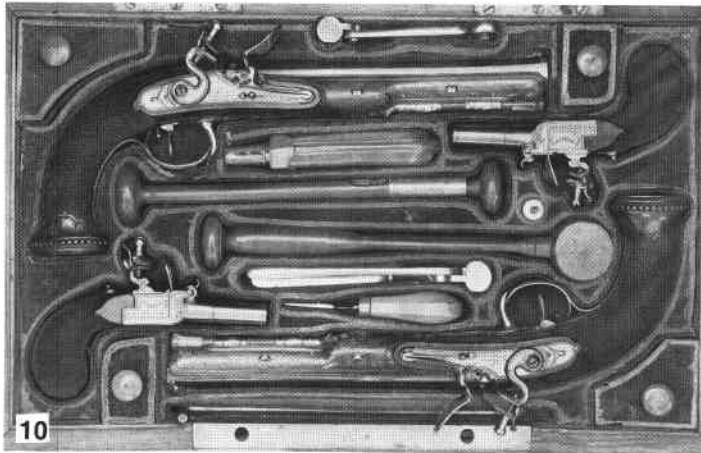


Fig. 10: Pistols of Reward, ca. 1799. H. Thomas collection.

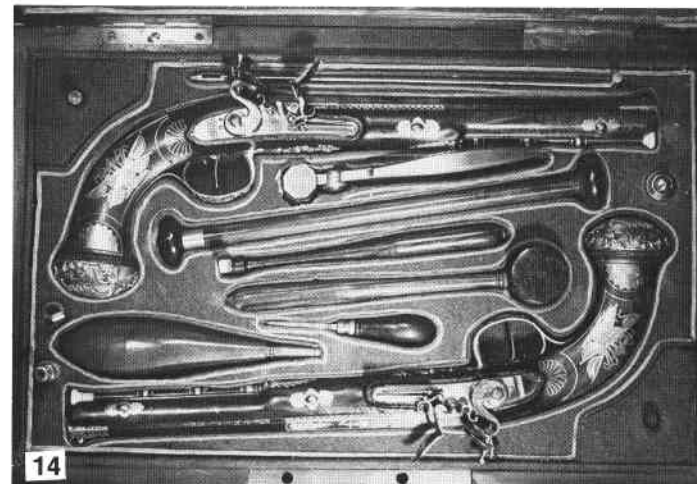


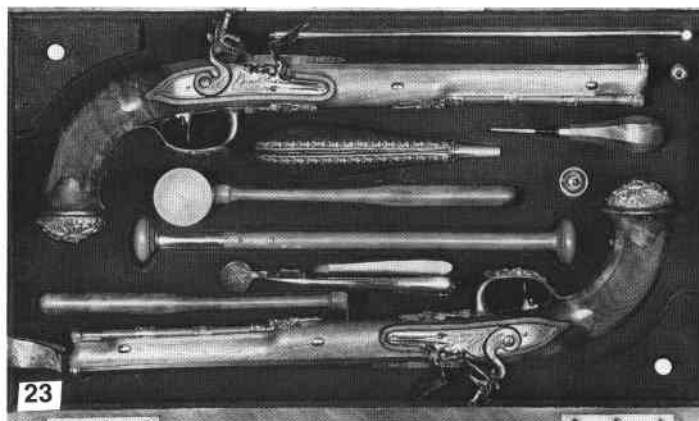
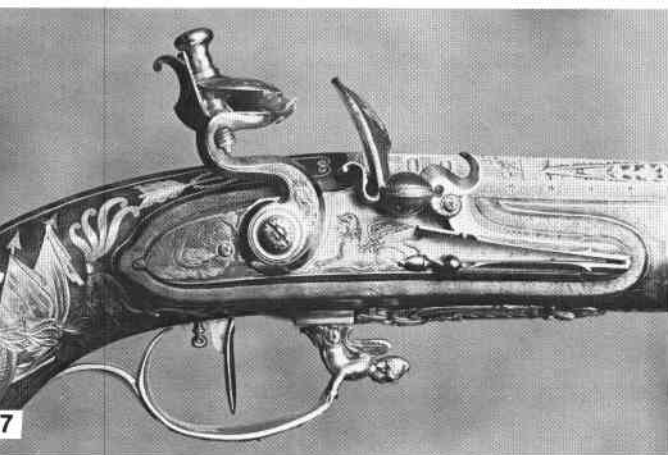
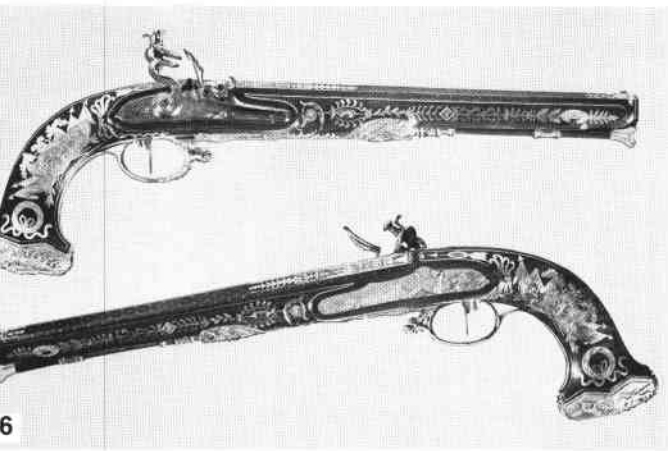
Fig. 14: Naval presentation pistols: Napoleon to General Cordova, 1802. F. Bivens collection.



Fig. 11: Consulate presentation set, ca. 1800. S. Diefenthal collection.



Fig. 19: Garniture owned by Napoleon, 1805. Musee de la Armee, Paris.



Figs. 16, 17, 18: Pair of pistols purchased in 1804 at Versailles for Count Starzenski, and details. National Museum, Cracow, Poland.

Figs. 20, 21: Manuel Godoy and a pistol presented by Napoleon to Manuel Godoy, Minister to Charles IV of Spain. Miniature by Billy Johnson. Harry Knode photo.

Fig. 23: General Officer's pistols, Model 1804. Regulation type with silver mountings. Art Gallery & Museum, Glasgow, Scotland.

Figs. 27, 28: Pistols of the Imperial Guard, 1809. Carried by Eagle Bearer of guard infantry. Silver buttcap. Author's collection.

Fig. 29: Belt pistol of the Mameluke, Napoleon's Consular Guard.

was about to be given responsibility for presentation arms of honor for the directoire, records show that ordinary luxury carbines had 33 grooves and superior luxury grades would have 133 grooves: this in a time when no rotary milling cutters were used, but this would pose no problem for Boutet's technical expertise. The small pistols in my collection fabricated by Boutet himself in 1789 are under 60 calibre and have 135 grooves cut in the bore.

Besides this production of military carbines and muskets in the year 1795, Boutet was requested to set up a department for "luxury arms" to be put at the disposal of the Minister of War and through his administration to the Directory. Here is where presentation pieces began. At Versailles, Boutet was developing his new designs. The gradual transition from the earlier rococo influence of the late 18th century became more of the neo-Roman and Grecian style. By 1798, Napoleon defeated the Mamelukes at the "Battle of the Pyramids" and his scholars who accompanied the campaign excavated antiquities which they sent back to France. A new revivalism in style swept France.

Napoleon heard news that the Directory was in trouble politically and he returned to France from Egypt. In 1799, he, along with Abbe Sieyes, Talleyrand and Fouche, overthrew the Directory and Napoleon was elected First Consul. Impressed by Boutet's talent and taste, Napoleon granted him an 18 year concession at Versailles in 1800. Boutet, by the terms of the contract, had to accept full financial responsibility, deliver 12,000 firearms a year, and train 30 apprentices in the French tradition of gunmaking.

The only existing records show that from the beginning of 1800 to 1818, Boutet's Manufacture produced a total of 145,659 military firearms, 484,450 swords, lances, daggers and various other weapons.

Boutet, now reporting to the representatives of the First Consul, Napoleon, as he did to Barras under the Directory, created beautiful products in his division of Arms Deluxe. He fabricated many variations of muskets and musketoons during both the Directory and Consulate periods. The consular guard of Napoleon originally inherited the muskets of the guards of the Directory. In 1795, the Minister of War, Du Bayet, ordered special weapons for the guards and for presentation to men distinguished on the battlefield. These were variations of the basic regulation pattern having silver mounts instead of brass with engraved plaques set in the stock and were known as "Arms of Honor."

In 1800, under the Consulate, Boutet began to manufacture two models of military long guns as well as continuing the carbines. These two models were listed in his annual report (an inventory of production for the war office as well as private orders for the Arms Deluxe) of 1801 as "velite" muskets for military students and "infantry" muskets. From 1800-1813, Boutet delivered 10,000 muskets to the grenadiers and chasseurs of the Imperial Guard.

Also, during the consulate, many beautiful presentation sets of pistols were given by the First Consul or his representatives to officers as rewards for military valor. These were known as *Arms de Recompense*. They were made in varying grades of ornamentation; even the plainest versions show exquisite form

and attention to detail (Figures 9, 10, 11).

As First Consul, Napoleon revealed his administrative power and brought about many reforms in France. He stabilized the franc, centralized power, created prefects and patronized the arts. The clouds of war again were coming and Austria resumed hostilities in Italy. The First Consul led his army over the great St. Bernard pass and defeated the Austrians at the Battle of Marengo. Boutet produced many beautiful swords of this period known as the *Swords of Marengo*. He followed no formal pattern as was done with the Lloyd's Patriotic Fund swords in England.

In 1802, Napoleon created the "Legion of Honor" military reward system and was voted Consul for Life. In 1803, war was again imminent with Britain, but it was difficult to invade England because of her great naval strength. Napoleon blockaded French ports when given the first sign of war.

Boutet's enterprise was kept busy during this period and special pistols were produced for the Consular Guard Dragoon officers and the Mamelukes of Napoleon (Figure 13). In the book, *A Sporting Tour Through Various Parts of France*, by a prominent British sportsman, Colonel Thomas Thornton, he writes: "We proceeded to the Manufactory of Firearms, of which I had previously heard such representations as absolutely astonished me. The fabrication of pistols at ten thousand francs and guns at fifty thousand livres apiece is no uncommon thing at this place. I was told that the Manufactory was under the patronage of the First Consul and that he frequently ordered the most costly pieces as presents for foreign princes, or general officers." Thornton goes on to say, "The mounting of their arms at Versailles is certainly excellent and the carving of their stocks is most beautifully conceived; but their barrels are not fitted in that workmanlike manner. They are also very inferior to my countrymen in the art of browning and in the construction of their locks."

Thornton met Boutet the next day and his quotation describes some target shooting with pistols. He outshot the French products with superior British ones, according to his statements.

Another contemporary account, written in 1802 by a visitor from England, J.G. LeMaistre, says: "Thence our guide wished to take us to the National Manufactory of Firearms which is carried on with great activity in this town, but having seen many acknowledged superior works of the same kind in England, we declined visiting it and proceeded at once to the palace." As we can see political bias had certainly brought criticism to Boutet's technical as well as artistic ability.

Many naval presentation pistols were given by the First Consul during this period. These pistols have exquisite mountings of silver and, in rare instances, have silver engraved plaques set in the stocks as in the set from Frank E. Bivens collection (Figure 14). Others were less elaborate and Boutet undoubtedly had established a structure on ornamental quality with regard for the monetary value offered him in the orders to the Manufacture.

On May 18, 1804, in the presence of the Pope, Napoleon crowned himself Emperor of France at the Cathedral of Notre Dame. A new era of grandeur affected France and Napoleon gave his full patronage to the arts, goldsmithing and the

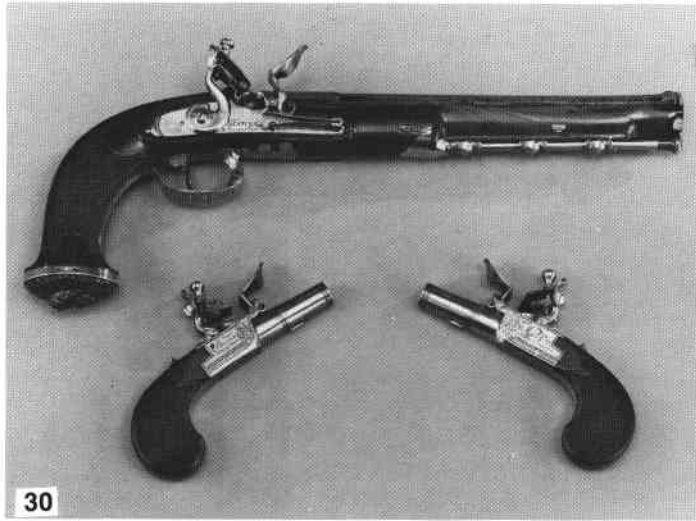


Fig. 30: Officer's pistol ca. 1799-1801. Butt cap is a silver head of Jupiter. Below: a pair of Boutet muff pistols. A.F. Roddy collection.

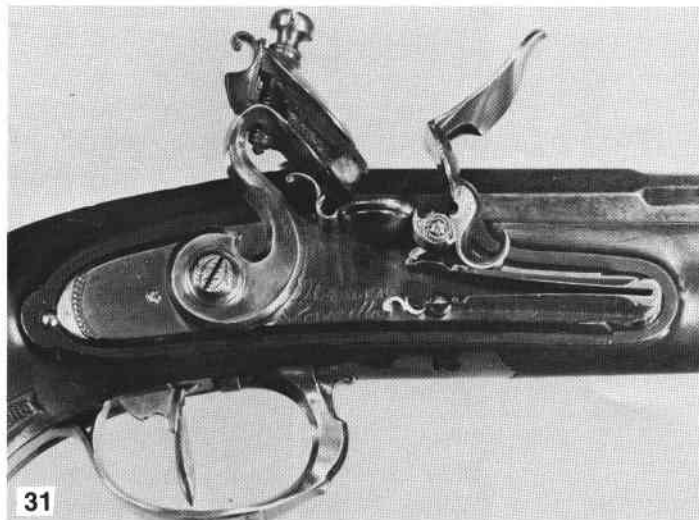


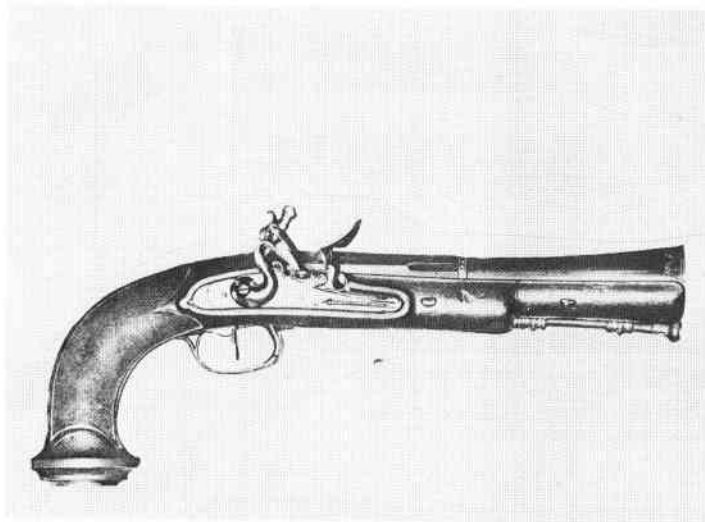
Fig. 31: Lock detail of the pistol above.



Reverse side of the pistols shown in Fig. 9.



Pistols of Count Starenski, shown on p. 41, in their case and with original bill of sale. National Museum of Cracow.



Possibly a naval officer's boarding pistol, ca. 1799-1802.



Cased percussion/pill lock presentation pistols, ca. 1825-29. Courtesy Wallis & Wallis Ltd.

development of products. The ateliers of Odier and Biennais were kept busy. The bronze ormolu and other products of Thomire were beautifully developed along neo-Roman and Grecian motifs. Boutet certainly had communication with these other industrial designers and much of their influence shows in his "Arms Deluxe" through interpretation of ornament. Napoleon offered many beautifully designed arms to his brothers and high ranking private individuals ordered products direct from Boutet, as by now he had established a showroom at Versailles and a magasin (retail store) to promote his products (Figures 16, 17, 18).

By 1805, a coalition between Britain, Austria and Russia made Napoleon realize he must defeat England. That year, Nelson defeated the French fleet at Trafalgar and many heroic rewards of Boutet naval presentation pistols were given. The fact that the style of these "Arms Deluxe" was more heavily inlaid with engraved silver plaques than those made during the Consulate reflected the new Empire style (Figure 19).

Napoleon defeated the Austrian army at Austerlitz that year and a fine heavily inlaid silver carbine by Boutet was presented to General Rapp.

In 1806, Napoleon gave the kingdom of Naples to his brother, Joseph, and the kingdom of Holland to Louis. It was recorded in Boutet's annual report that many pistols of the highest degree of luxury design were presented to Napoleon's family (Figures 20, 21).

In June 1812, Napoleon entered Russia with his grand army of 600,000 men and the Russians retreated before him. By now, he had organized his Imperial Guard. Boutet was requested to design and manufacture all of the weapons of the guard. Among the various units, Boutet designed pistols, muskets, carbines, musketons, blades, etc. for the Mamelukes (horse and belt pistols), dragoon officers (horse pistols), grenadier infantry officers (belt pistols), eagle bearers (belt pistols), and horse grenadiers (horse pistols). This entire scope of the Imperial Guard weapons is too extensive to cover in this overview and at a later meeting this could be covered as a theme (Figures 23, 27, 28, 29).

The Russian campaign was a disaster and Napoleon returned to France with only approximately 35,000 troops. Marshall Ney was the last to leave Russian soil and held off the Russians in a dramatic holding action.

Napoleon abdicated in 1814 and left for exile on the island of Elba. Louis XVIII returned to France as king and reestablished the government.

In 1815, Napoleon returned to France upon hearing of a plot to dispose of the king. He was met by hundreds of his Imperial Guards and arrived in Paris in triumph.

The Duke of Wellington, representing the countries opposed to Napoleon, took command of the armies in Brussels. On June 18, 1815, Napoleon was defeated at Waterloo and went again into exile on the island of St. Helena.

Louis XVIII returned and reigned again as King of France. Boutet still had the concession at Versailles until 1818 and was producing firearms.

In 1815, the allies entered Paris and the Versailles factory was destroyed by the Prussians. Forty carloads of equipment, parts, models, and unfinished firearms were taken to Berlin.

Before concluding Boutet's story, I would like to mention that during the Consulate and Imperial periods, he produced many types of pistols of interesting form. These include duck-bill pistols for marine officers, four barrel pistols with tap action locks and varying belt and greatcoat pocket pistols. Technically, he was innovative and is credited with the use of a roller bearing on the frizen spring and a link between the tumbler and the tip of the mainspring.

From 1800-1818, he had over 800 workmen under his artistic direction, who manipulated steel, gold and silver with magnificent sculptural artistic taste. His silver and gold castings were lost wax products, chased afterwards. Solid steel on the lock-plates were carved into designs; silver sheet was cut and engraved with designs of foliage, scrolls, and trophies of arms. Under the stocks of carbines and rifles were empire ornamentation of winged caryatids and monsters carved in ebony and ivory in minute detail. Swans, harpies, sphinxes and other mythological creatures of ancient times were used. Gold and silver details on the castings were finished with punches; their background was granulated with scribes and gilded. Barrels had matte and blued finishes with imaginative tooled patterns formed by the gilding (Figures 36, 37, 38, 39, 40, 41, 42). Marks on Boutet's silver mounts included his maker's mark, the standard mark and excise mark. I've laid out art work in ink for this article showing the relationship of Boutet's marks to his various periods of fabrication at Versailles and Paris (see page 16).

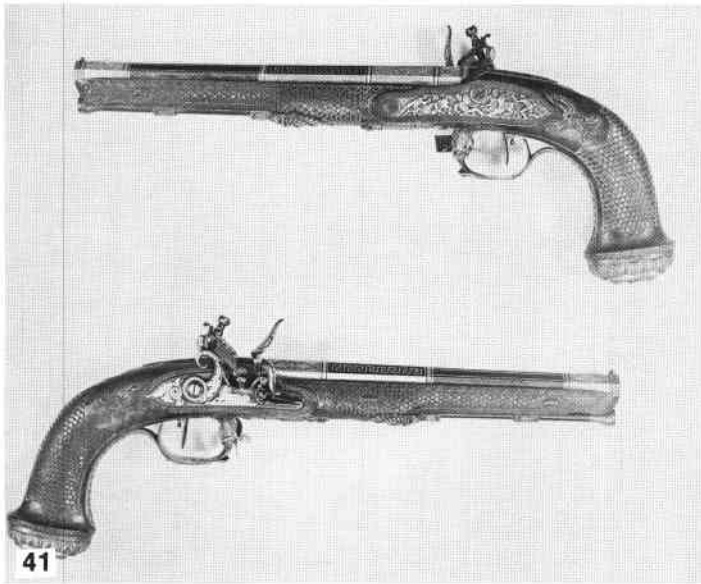
With the closure of the Manufacture in 1818, Boutet returned to private gunmaking at his Paris shop at 87 Rue de Richelieu. He attempted to compete with his former colleagues, Le Page, Manceaux and Gosset, again used the title "Ordinary Gunmaker to the King and Princes." He took out some patents and produced variations on the pill lock system, according to Jaroslav Lugs in his book, *Firearms Past and Present*. Apparently Contriner in Vienna produced some of his own pistols using Boutet's special technical design features. Boutet continued producing late percussion duelers, fowlers and coaching guns through the late 1820s but never again had the financial opportunity to produce his beloved Arms Deluxe. He died in debt on October 12, 1833, a sad ending for this genius of firearms design during the flintlock era.

ACKNOWLEDGEMENTS

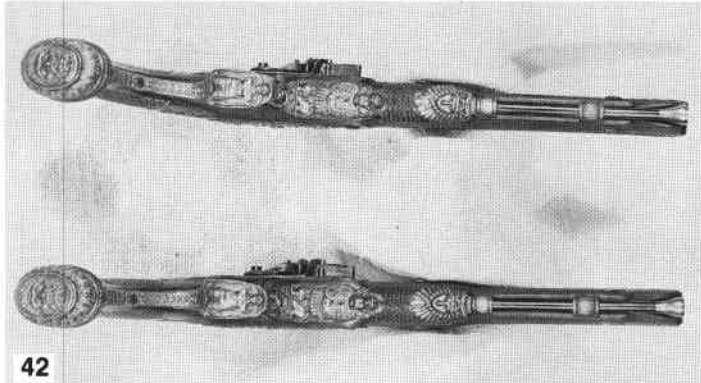
My special thanks to the following members of the Society who provided me photographs from their collections: Stanley Diefenthal, Frank E. Bivens, Merrill Lindsay and photographer Bruce Pendleton, Bud Roddy, Billy Johnson, Dudley Colton, Gene Miller, James Serven, Robert Abels, and H.H. Thomas.

Also special appreciation to Dr. Helmet Nickel and Stuart Pyhrr of the Metropolitan Museum of Art, New York, for research privilege in New York.

Appreciation to Mr. H. Houze and the Milwaukee Public Museum and all the European Museums acknowledged in this paper for photographs, and to Wallis and Wallis, Ltd., for photos from their salesrooms.

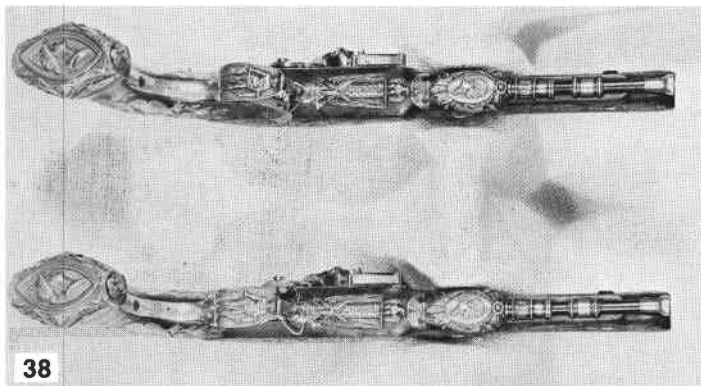


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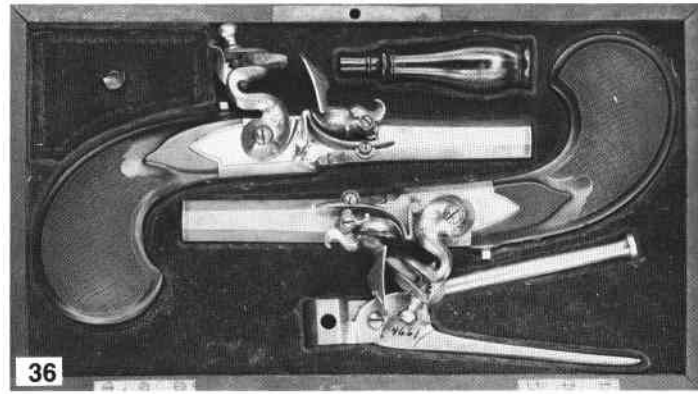
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Figs. 41, 42: Pistols of a cased set presented by Lafayette #2 to Simon Bolivar ca. 1825. Clay Bedford collection.



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Fig. 38: Detail of a pair similar to those above, owned by Napoleon, ca. 1810-12. James E. Serven photo.

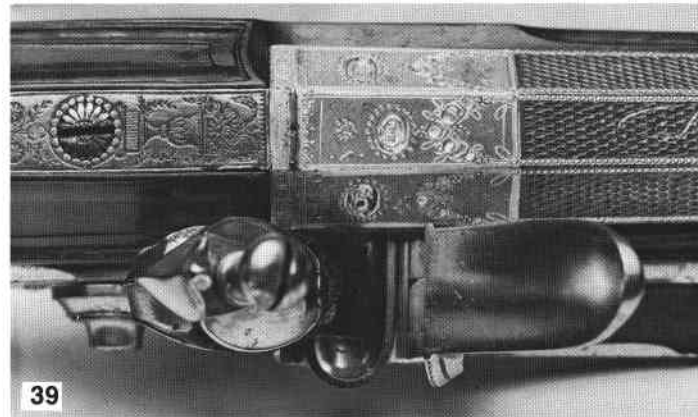


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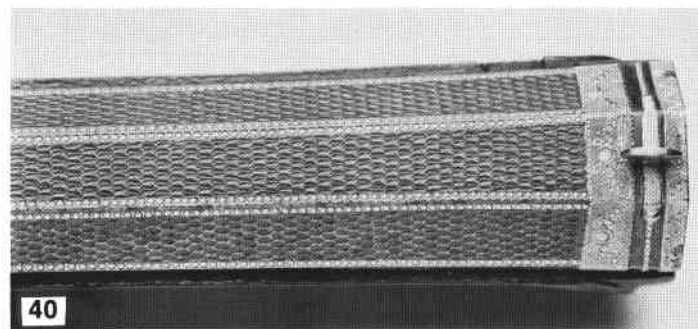


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Figs. 36, 37: Boutet traveling pistols ca. 1795 and detail. Courtesy H. Houz and Milwaukee Public Museum.



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40

Figs. 39, 40: Details of Consular Presentation cased set ca. 1800. S. Diefenthal collection.