DAMAS BERNARD, FRANCAISE & BELGIQUE

Germain Leopold Bertrand Bernard. Born in Versailles 1808. Died 7-11-1870.

Nicolas Albert Bernard worked at the *Manufacture d'armes de Versailles* of Nicolas-Noel Boutet in 1792. In 1813, he and Emile Henry Fauré Le Page (1840 - 1929) moved to Paris. In 1821, he left Lepage and moved to his own shop in Paris at 22 Rue Marbœuf with his two sons Albert and Leopold.

Albert worked with Léopold in the family workshop until 1827, then founded his own gunmaking shop in 1850 to 1872 at 25 Rue Rochechouart.

Leopold worked briefly with Albert Rajendran before returning to his father's shop in 1823, then from 1840 to 1855 he manufactured guns in Passy, and (his company) 1870 to 1879 at 49 Rue de Villejust and in 1889 129 Av de Versailles in Paris.



Pre-WW I Gastinne Renette doubles have been identified with the same mark and Whitworth steel tubes. It is not known if another barrel maker acquired the

Leopold Bernard trademark after the Bernard gun and barrel making factory ceased operation in **1890**.

More information here

http://www.doublegunshop.com/forums/ubbthreads.php?ubb=showflat&Number=3 13605&page=1

This double barrel pinfire shotgun from 1866 is on display at the Metropolitan Museum of Art. It was made by J.C.A. Brun (active 1849–72); designed by Fannières Brothers; engraved by Tissot; and has Twist barrels by Leopold Bernard. It was exhibited by Brun at the *Exposition Universelle* of 1867.



From a booklet published by E. Heuse-Lemoine 'Manufacture of Damascus Gun Barrels' **1884**

"...it was from Paris that the first imitation came to us for the researches in the combining some mixture of iron and steel in order to produce figures which we call Damascus, such as Turkish Damascus, **Bernard, Leclerk**, Parisien Damascus, etc. to an infinite number of names, as the combinations that compose the figures of the Damascus vary constantly...(and) are produced by the substance or material like the designs or patterns in our linen weavers. What is the Turkish or Curled Damascus, the Horse-shoe, the Boston, etc. that are derived from them."

Twist Bernard barrels



Twist barrels as early as 1843 bearing the Leopold Bernard name and mark exist.

Fluid steel Bernard barrels



There were several 'Bernard' gun and barrel makers in Liege http://www.littlegun.be/arme%20belge/a%20a%20artisans%20identifies%20gb.htm

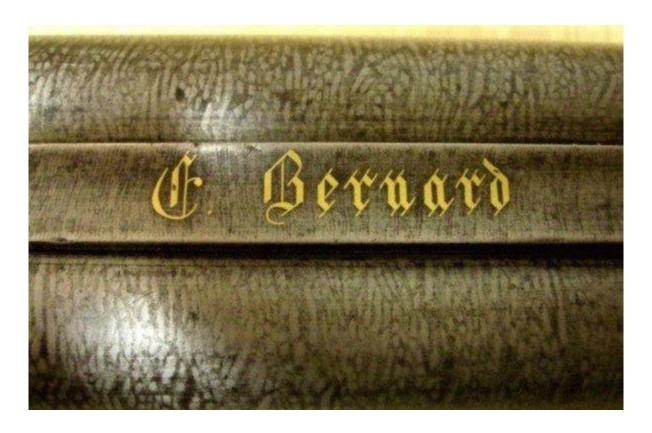


A. Bernard Dumoulin Lambinon pinfire



Henri Eugene Bernard http://littlegun.be/arme%20belge/artisans%20identifies%20b/a%20bernard%20henri%20eugene %20gb.htm

E. Bernard





Ferdinand Drissen was registered with the Liege Proof House 1874 to 1900. In 1900 the company was acquired by **Emile Bernard & Cie**, Mont St. Martin street in Liege.

http://www.littlegun.be/arme%20belge/artisans%20identifies%20b/a%20bernard%20gb.htm



This 1897-98 Ferdinand Drissen Price List shows *Heuse-Lemoine* Bernard listed **SIX times**: 'Bernard ribbon-barrel', Grades 1st - 3rd, and I & II. http://www.littlegun.be/arme%20belge/artisans%20identifies%20den/a%20drissen%20gb.htm

The most expensive barrels offered by Drissen were *E. Heuse-Lemoine* 1st quality 4-band Crolle' at 165f and 6-band Crolle' at 180f.

following list shows the prices for smoothbore barrels of caliber 12, 14, 16 and 20, browned, and fitted to a type of action with locking lever between the hammers, single bolt and rear lockplates. These prices cover cost of the damascus barrel, labor and the gunsmith's profit:

Steel with imitation damascus	28 francs
Ribbon-barrel	38 francs
Birmingham damascus	42 francs
London damascus	47 francs
"Chiné" damascus	49 francs
Bernard ribbon-barrel	50 francs
Boston damascus, four bands,	
2nd grade	54 francs
Boston damascus, six bands,	
1st grade	59 francs
Washington damascus, 2nd grade	e 60 francs
Boston damascus, superior grade	63 francs
Washington damascus, 1st grade	64 francs
Chain-pattern damascus	65 francs
Bernard damascus, 3rd grade	66 francs
Bernard damascus, 2nd grade	72 francs
Horse-shoe nail damascus,	
2nd grade	76 francs
"Crollé" damascus, 3-band	80 francs
Horse-shoe nail damascus,	
1st grade	82 francs
Bernard damascus, 1st grade	84 francs
"Crollé" damascus, 4-band	92 francs
Turkish damascus, 4-band	93 francs
Imitation Léopold Bernard	
damascus	100 francs
Turkish damascus, 6-band	102 francs
"Crollé" damascus, 6-band	105 francs
"Crollé" damascus, superior	
grade	115 francs
Bernard damascus II, made by	
Heuse-Lemoine	130 francs
Bernard damascus I, ditto	140 francs
Turkish damascus, 6-band, ditto	145 francs

"Crollé" damascus, 4-band, 2nd grade, ditto 150 francs
"Crollé" damascus, 4-band, 1st grade, ditto 165 francs
"Crollé" damascus, 6-band, superior grade, ditto 180 francs
In 1900 Jean Lejeune, of Nessonvaux, supplied Oxford Superfine at 16 F 50, Boston at 10 francs and Birmingham at 8 francs. (Plate 4).

M. le chevalier de Hontheim, head of the group comprising the S.A. Armaf, the Manufacture liègeoise d'armes á feu and the Manufacture d'Armes J. B. Rongé fils, has kindly given us figures from his records. The group's Nessonvaux works produced thousands of damascus barrels of every type, and a ledger for 1903-1904 gives the following cost prices:

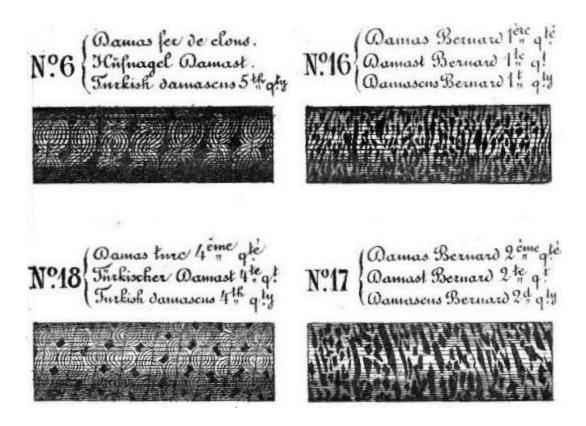
One pair of non-twisted damascu	S
barrels	14 francs
One pair of "Crollé" damascus	
barrels, 3-band	14 frs 50
One pair of "Crollé" damascus	
barrels, 4-band	22 frs 20
One pair of Boston damascus	
barrels, 2-band	12 frs 50
One pair of Boston damascus	
barrels, 3-band	16 francs
One pair of Bernard damascus	
barrels	16 frs 50
One pair of Oxford damascus	
barrels, 4-band	23 francs

On 17 July 1914, Arthur Delvaux-Heuse, of Nessonvaux quotes the following prices: Boston and Starred, 3-band: 12 F 50; the same in single-band: 9 F 75; Birmingham: 7 F 65.

The 'Bernard' patterns are examples of *Damas Mouchete'*; "blossom or floweret".

Many Belgian barrel makers had a 'Bernard' pattern with minor variations and several grades, and there were 20 makers in the *Syndicat des Fabricants de canons de fusils de la Vesdre* in Nessonvaux established in 1907.

c. 1900 product brochure for *N.J. Higny* showing Quality No. 1 and 2 Bernard http://www.littlegun.be/arme%20belge/artisans%20identifies%20h/a%20higny%20gb.htm



Patrick Mullin, New York with Bernard barrels courtesy of Dr Bill McPhail



Patrick Mullin with Bernard Twist



Kettner Acid Etched Bernard I courtesy of Greg Lee



These are Dr Gaddy's Bernard II examples and 'roses' in the pattern are apparent. "Bernard is a variation of Belgian Crolle damascus. The Crolle bars consist of rectangular strips of alternating iron and steel welded into a square bar, while the Bernard bar cross section looks like a checkerboard of alternating small square bars of iron and steel."

Please see http://docs.google.com/View?docid=dfg2hmx7_163vgh5prdf for an example of Bernard production.



Ken Waite's Manufacture Liegeoise salesman's sample Bernard II



Parker CHE



1897 No. 1 L.C. Smith with "Bernard ribbon"



End-on Bernard Ribbon rod



An unknown Bernard variant; c. 1885 Ferlach Cape Gun courtesy of Janez Hartman



Damas Moucheté

De La Cononnerie Ou Fabrication des Canons de Fusil
By M. Ronchard-Siauve, 1864
http://books.google.com/books?id=uedDAAAAIAAJ&pg=RA1-PA217

Other Damas by varying the composition was made of the lopin with iron settings and of steel. Thus, by employing square settings or a square piece seen by end formed, by alternating the settings well, in manner of *derochant la trancha* the section, it **represented the effect of a checkerwork**, divided into black and white boxes; white boxes representing the settings of steel and black those of iron. This effect, like all the effects of Damas, is produced by the different action exerted on iron and on steel the sulphuric acid, one is useful for *dérocher*; iron, struck first, becomes dull and black, while the steel remains still white and preserves its polish. The pieces are welded under the power hammer and one stretches then the rods

with the rolling mill with a dimension of 3 and 4 lines or 7 to 9 mm., then one makes them undergo a rather large torsion. One twists some even cold. Torsion more or less gives a drawing more or less lengthened. It is there what the Damas Mouchete' is named.

This moucheté Damas was created in St-Etienne in 1845. Mr. Albert Bernard, canonnier of Paris, came soon to Saint-Etienne to get the means of doing it.

Jean-Batiste Rivolier (1830-1907) et Fils à St. Etienne



Other Damas Française

1894-1895 Cizeron-Canonier Armes, St. Etienne Catalog

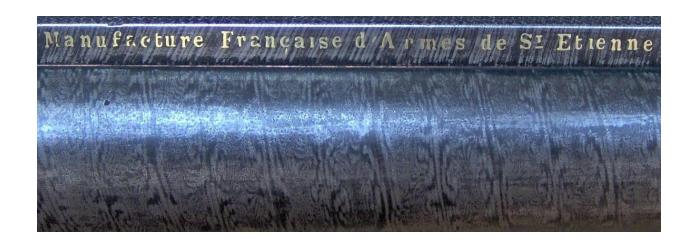
Courtesy of Robert Chambers



- 24. Facon damas, grave'
- 27. Vrai rulan torche
- 29. Damas etoffe' fin
- 31. Damas anglais platines deux
- 33. Damas anglais platines 3 piliers
- 35. Acier fondu gravure facon
- 36. Vrai ruban gravure facon
- 37. Etoffe' fin gravure legere
- 38. Vrai damas gravure fine
- 39. Vrai damas anglais ou boston, platines 3 piliers

Manufacture française d'Armes, St-Etienne

Manufrance "Eclair" or "Lightning Flash" Damascus



Lefesheau with Three Band Damas Turc ou Frisé (Turkish)



DAMAS MOIRE'

Moire' comes from the French *mouaire* (mohair) and is defined as "having a watered or wavelike pattern." *Moire* (noun pronounced "mwar") and *moiré* (adjective pronounced "mwar-ay") are now used somewhat interchangeably in English, though *moire* is more often used for the cloth and *moiré* for the pattern. Watered silk is a textile which has a moire pattern, a rippling illusory pattern

created by lines which are superimposed on each other. Watered silk resembles a body of water with small waves trembling in a breeze.



Moiré Antique effect is obtained by first damping the material and folding it with the face side inward, and with the two selvedges running together side by side. The cloth is then passed between heated cylinders and under pressure. Moire Anglaise is an imitation produced mechanically by means of engraved copper rollers. Effet de moire' refers to the pattern seen when two plates of plate glass have a thin film of water between them; not unlike oil film on water. In textiles, it is used to describe the wavy lines in silk patterns.

Modern Damascus Moire' blade



Early 1800s percussion pistol barrels courtesy of Greg Martin auctions



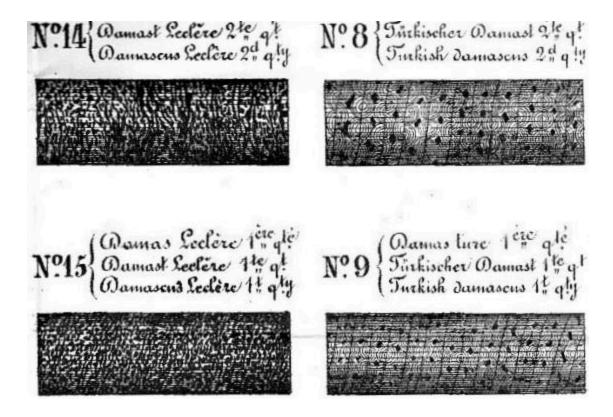
c. 1844 Valentin Funk & Sohne



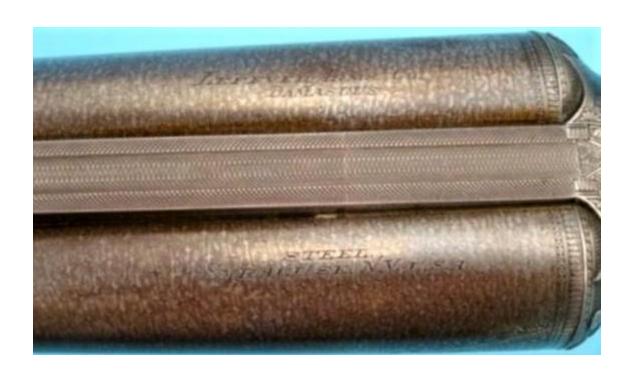


DAMAS CHINE' - LECLERC AND CHONIN

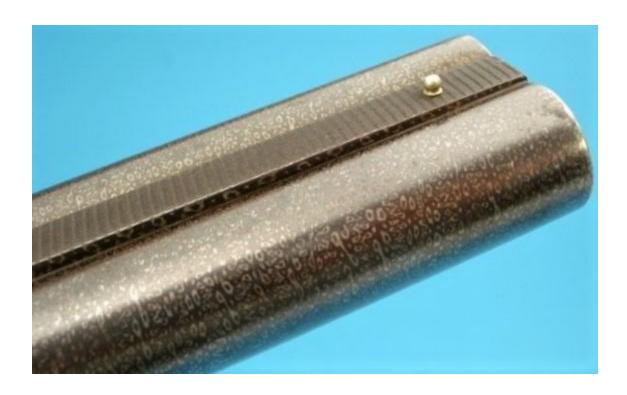
Chine' means 'mottled' or 'to have blotches of different shades or colors' (variegated) in French.



1st quality Leclerc. Lefever Optimus courtesy of Greg Martin Auctions

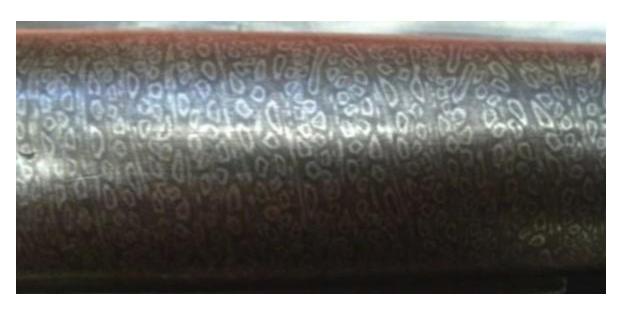


Remington "Chine P" courtesy of Greg Martin Auctions



Three Barrel Gun Co. 3 Iron Chine'





Chonin/Thonin/Remington "Pieper P."

'Chonin' means merchant or tradesman in Italian (or *commerciante*). In French; *marchand* or *commercant*, Portuguese; *comerciante*.

Remington "Pieper P." refinished by Brad Bachelder



c. 1920 Francotte No. 45e Eagle Grade





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