

F Grade Hammer Guns with High Quality Damascus Steel Barrels

By Stephen Wesbrook

As the Nineteenth century closed, the era of expensive, graded hammer shotguns was coming to an end. Things could not have looked good to the Hunter Brothers when they considered the future of their hammer shotgun line in 1897. In 1896, the Hunter Arms Company made 828 hammer guns compared to 2,555 hammerless. Moreover, sales were spread among seven models, ranging from Quality AA at \$300 to Quality F at \$55.¹

To put these prices in perspective, the median wage of a metal machinist at that time was \$12 for a 60-hour work week.² It would have taken 28 days' wages to purchase the least-expensive L.C. Smith hammer gun.

The Hunter Brothers made a bold decision. In 1898 they committed most of their hammer gun production resources to a new model, the F Grade. A catalog described the rationale for the new model as being "To meet the demand for a variety of cheap hammer guns"³

The new F Grade (see catalog illustration) had low circular hammers and much-simplified back-action locks,⁴ which were introduced in two stages beginning in 1900. Hunter Arms offered the F Grade in three styles based on the barrels. The lowest priced style, \$20, had fluid steel barrels. The second style, \$23, had twist steel barrels. The third, at \$25, was advertised as having "Good Strong Damascus" barrels. All three styles had the same stocks and checkering. (The new F Grade should not be confused with the pre-1898 Quality F. The latter is a bar-action hammer gun with English stub twist barrels. It was priced at more than twice the cost of the new F Grade.)

By adapting to the changing market conditions at the end of the Nineteenth century, the Hunter Arms Company increased its hammer gun production dramatically, peaking at 7,354 in 1905. It continued to make the F Grade until 1934.

F Grade guns remain very popular today with shooters of vintage guns. Whereas guns with fluid steel barrels are generally available at affordable prices, twist steel- and Damascus steel-barreled guns are not common.

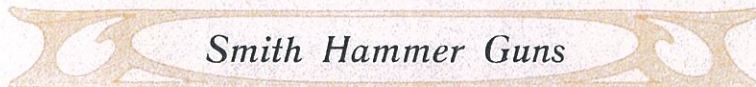
Serial Number 89971

Professionally I am a conservator of antique and vintage shotguns. I founded Doublegun Preservation, LLC (www.doublegunpreservation.com) with a mission of preserving late Nineteenth and early Twentieth century double shotguns so they could be used and enjoyed. Many of the shotguns that come to me are fathers' and grandfathers' guns that the owners intend to pass on to their sons and daughters.

But I am also at heart a gun rescuer, and will on occasion buy a shotgun simply because I think it deserves to be given a new life. Thus a 10 gauge L.C. Smith F Grade hammer gun, serial number 89971, caught my eye when it came up at auction in February 2019. Although the photos were not as detailed as I would have preferred, enough of the grain in the stock was visible through the old varnish to know it was made of figured English walnut. More significantly, the barrels were distinguishable as being high quality Damascus steel. Although it did not fit into any category of L.C. Smith hammer gun I knew of, it had an underlying quality. Apparently, at least one other person thought the gun was special, because the bidding proceeded well beyond what I had anticipated.

My priority after receiving the gun was to restore it to a condition similar to what it would be in after a few years' use by its original owner. I also began attempting to find out more information about the gun itself, including contacting the previous owner. Unfortunately, the trail was cold. Although the restoration was not complete, I showed the gun to a number of people at the April 2019 Southern Side by Side. None had seen another F Grade with this quality of Damascus barrels and wood. The restoration, shown in Photos 1 and 2, was completed in February 2020.

In early March I posted pictures on the LCSCA website Forum and invited comment. The responses were very informative. A number of members also gave me leads to other F Grade guns with barrels of higher quality than those described in the Hunter Arms sales catalogs. Two examples are shown in Photos 3 and 4.



THE L. C. Smith Double Barrel Hammer Guns need no introduction. There are thousands and tens of thousands of them in use now; they have been on the market for years and have always given satisfaction.



To meet the demand for a variety in a cheap hammer gun, we are now making our F Grade in three different styles. SOLD THROUGH THE DEALER ONLY.

F—Royal Steel barrels; imported English walnut stock; pistol grip; checkered neatly; twelve or sixteen-gauge	Net price \$ 20 00
F—Best English Stub Twist barrels; imported English walnut stock; pistol grip; checkered neatly; ten, twelve or sixteen-gauge	Net price 23 00
F—Good strong Damascus barrels; imported English walnut stock; pistol grip; checkered neatly; ten, twelve or sixteen-gauge	Net price 25 00

This 1901 catalog excerpt describes the new F Grade.



Photo 1: This 10 gauge F Grade, SN 89971, was manufactured in 1901 and restored in 2020. The stock is figured English walnut with a Prince of Wales grip and 22-point checkering. The 32-inch barrels are made of very fine Damascus steel. Both barrels are choked extra-full. log excerpt describes the new F Grade.

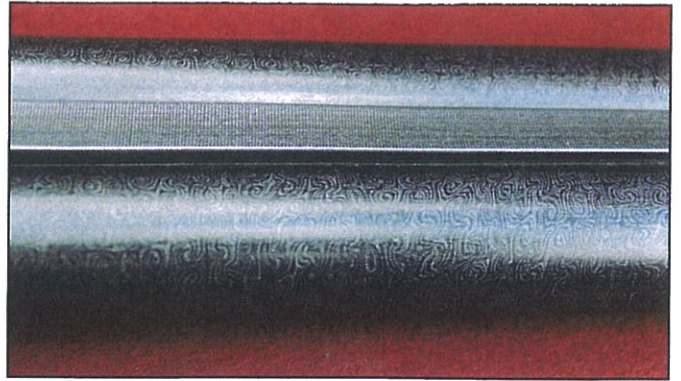


Photo 2: The barrels of F Grade SN 89971 are made of 4-rod Turkish Crolle Damascus steel. They are similar to the barrels used on L.C. Smith's \$200 Quality A hammer guns. When sold separately, the barrels cost \$100.

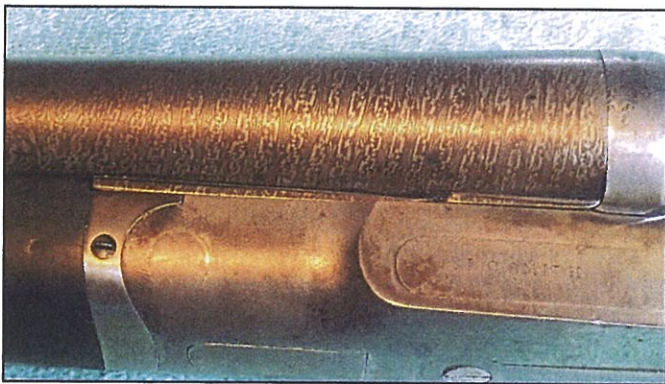


Photo 3: This 1903 16 gauge F Grade, owned by Tom Garver, has Damascus barrels in the "Chain" or "Chainette" pattern. This type of barrel was used from 1892 to 1913 on Quality No. 2 hammerless guns. A database maintained by J. David Williamson, which has information on more than 600 F Grade guns, documents three more with Chain Damascus barrels.

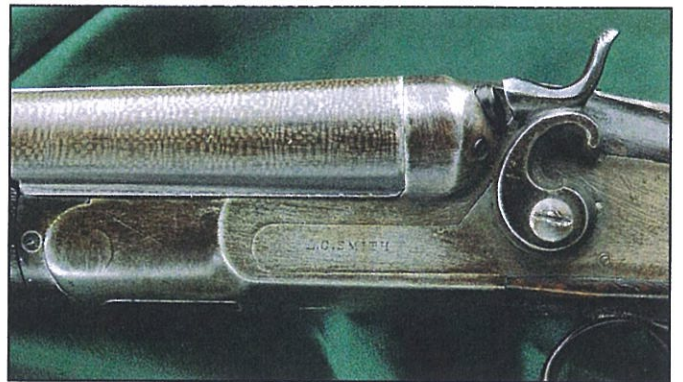


Photo 4: This 1902 F Grade has Bernard Ribbon barrels. This type of pattern-welded barrel has been found on some Quality No. 1 hammerless guns from 1892 to 1898. J. David Williamson's database documents another F Grade with Bernard Ribbon barrels made in 1900.

How Many Are There?

The number of F Grade guns manufactured with Damascus steel barrels of higher quality than advertised isn't known, nor is the number that have survived. One of my goals with this article is to find more of the survivors. To this end, I want to discuss the quality and appearance of the standard F Grade Damascus barrel and then what higher quality potential alternatives were being used circa 1900 on L.C. Smith guns.⁵

There was no industry-wide standard in the late Nineteenth and early Twentieth centuries that defined quality levels. Hunter Arms used a hierarchy of adjectives in its catalogs: "good" to characterize two-rod, "fine" for three-rod, and "very fine" for four-rod. The table shown uses data from the 1906 Hunter Arms catalog. Prices are suggested retail; actual selling prices were lower.

Photos 5 and 6 show Damascus barrels from F Grade guns that are consistent with the Hunter Arms descriptive hierarchy and the price differentiation shown in the table. They are both 2-rod Oxford Crolle.

Chain Damascus and Bernard Ribbon barrels are two types of higher quality Damascus barrels used on F Grade hammer guns (Photos 3 and 4). Photos 7 and 8 show two other types of higher quality barrels, both in the Damascus Crolle pattern, that were being used by Hunter Arms and hence potentially available for F Grade guns.

Why Do Such Guns Exist?

The existence of multiple F Grade guns with higher quality, more expensive barrels than are listed in sales catalogs – even if the number is small – suggests there was a company policy or consistent process that governed their production. There is no documentation available, but we can speculate.

One explanation is that the guns with higher quality barrels could have been made by mistake. It argues that rough-forged barrels could have been put in the wrong bins. The pattern of a rough-forged tube is difficult to determine. It seems likely, for example, that different 2-rod barrels with slightly different patterns would occasionally be improperly paired. But it is less probable that sets of high quality, properly paired Damascus



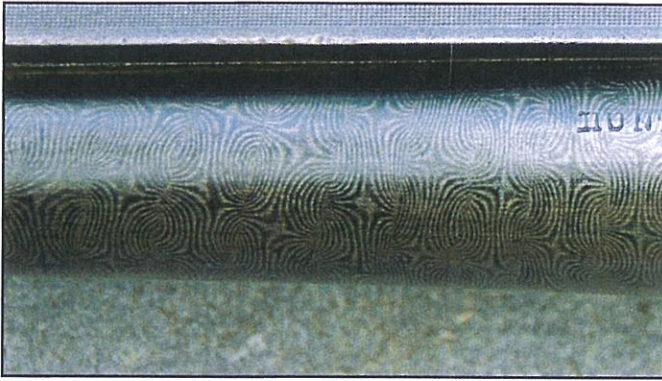


Photo 5: These reconditioned barrels are from a 12 gauge F Grade, SN 88757, manufactured in 1901 and owned by J. David Williamson. They are 2-rod Oxford Crolle, which was standard on Damascus-barreled F Grade guns. When sold separately they cost \$14.

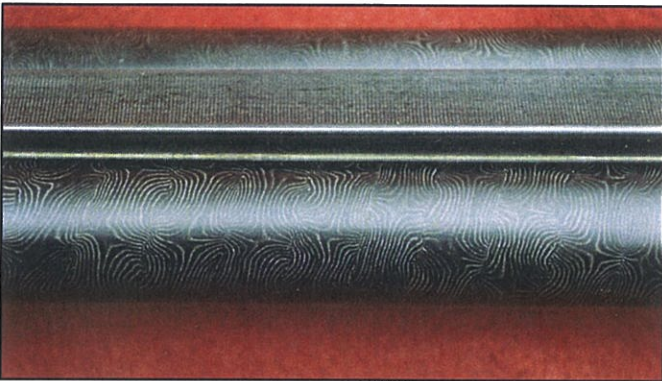


Photo 6: These reconditioned barrels are also from a 12 gauge F Grade, SN 169200, manufactured in 1912 and owned by the author. They are 2-rod Oxford Crolle.

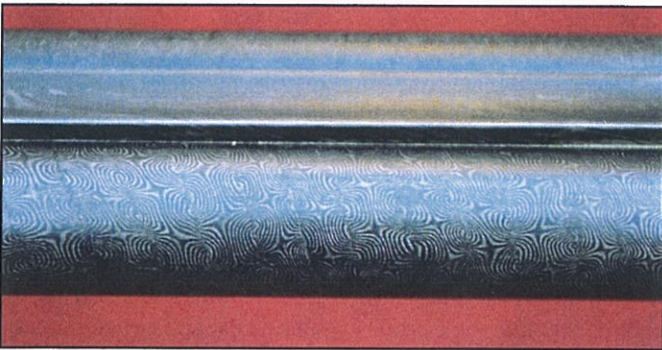


Photo 7: These Damascus barrels, from a 12 gauge Quality E hammer gun, are 3-rod Oxford Crolle. Sold separately they cost \$40.

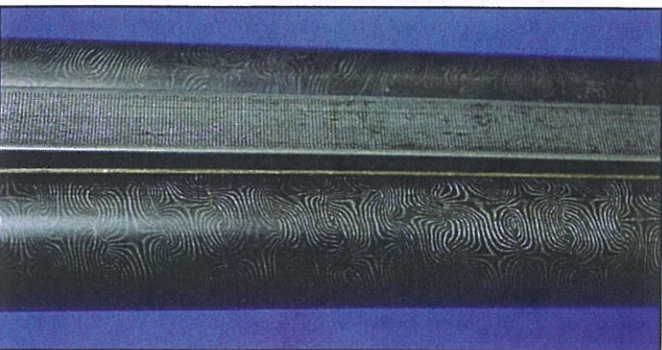


Photo 8: These Damascus barrels, from a 16 gauge Quality No. 1 hammerless, are 2-rod Oxford Crolle. Sold separately they cost \$25.

barrels were mistakenly being milled to fit receivers intended for lower-quality guns. Because this would have been a costly mistake, production managers would have done their best to keep it from happening.

Another explanation is that higher grade barrels with small flaws were deliberately put on lower quality guns and offered to distributors as seconds.

A third possibility is that the company was using up excess inventory. This seems reasonable, for example, in the case of the Grade F gun with Bernard Ribbon Damascus barrels (Photo 4). However, it seems a less likely explanation for a Model F gun with “very-fine” or “fine” Damascus barrels, because Quality A, B, C and D were still available by special order. It would have been a very costly way of reducing inventory.

A fourth explanation is custom or special-order guns. It is easy to imagine customer interest in replacing the \$14 standard barrels with \$28 Chain Damascus barrels. It is difficult to imagine why Hunter Arms would not have done so as long as it could make money. The company clearly accepted commissions to customize guns for some clients, such as the hammerless gun built for Annie Oakley with “finest” Chain Damascus barrels.⁶

In any case, it is difficult to explain why Hunter Arms would have made a gun such as SN 89971 unless it had been commissioned as a special order. Unfortunately, the factory records for its time period do not include where guns were shipped.

Perhaps There Was a Sportsman Who...

Why would someone, 120 years ago, put \$100 barrels on a field grade gun that listed for between \$20 and \$25? Why would he add a cast-on fitted stock that listed for almost the price of the base gun? And if he went that far, why did he not have it nicely engraved for another \$15?

This gun exists, in my view, because someone of means valued tradition and the shooting qualities of the F Grade.

For 40 years after the break-action cartridge shotgun was invented, sportsman judged the quality of their shotguns by the quality of the Damascus steel barrels. For those affluent Americans who could afford an L.C. Smith, a Damascus barrel was a recognizable sign of status. It was something of which to be proud. For many, it was also a beautiful work of art. For a 50-year-old man buying a shotgun in 1900, it was what his father had taught him on and what he had been shooting for all of his life.

At the end of the Nineteenth century, medium-carbon fluid steel was the high-tech of the age. Initially, affluent sportsmen were willing to pay a high premium for guns with Whitworth Steel or Krupp Steel barrels.

Nevertheless, there were surely sportsman around 1900 who were attached to Damascus steel barrels, and were willing to pay more for them. Preserving tradition was important to them, and a hammer shotgun with Damascus steel barrels epitomized their hunting and shooting heritage.

So along comes the new F Grade. It was made to compete in the low-price market; which is to say, made for the average American at the time. But it shoots exceptionally well, which is why it is so popular today among some of the best sporting clays shooters.

My theory is that SN 89971 was commissioned by an affluent sportsman with strong attachment to L.C. Smith shotguns. As such, he may have owned a Quality A or Quality B gun. Because the F Grade was a field grade gun, he may have seen one on a waterfowl hunt. Given the chance to shoot it, he discovered how well it shouldered and pointed. He especially liked having the hammers below the line of sight when swinging through a rising goose or acquiring a second target.

I suspect he had to grapple with the thought of owning a gun that Hunter Arms candidly advertised as “cheap.” In the hierarchy of barrels, fluid steel ranked below plain twist steel. He would have concluded that there was a reason Hunter Arms did not offer fluid steel in 10 gauge. He also would have known that the Damascus steel barrels it did offer were of the lowest quality used on L.C. Smith guns.

He was probably competitive, and the prospect of being able to shoot a little bit better got him over his hesitation. I would speculate his competitive sport was long-range waterfowl shooting, popular at the time, given the gauge and the extra-full chokes in both barrels of SN 89971.

To achieve the full benefit of the shooting qualities of the F Grade, however, it would have to be fitted to his specifications. This would explain the custom stock.

Safety alone could have been a sufficient motivation to special-order “very fine” quality barrels – especially if he intended to use the highest power shells of the day to drop large waterfowl at long distances. He almost certainly would have appreciated the beauty of these barrels as well. But he was not a pretentious man, which would explain why he did not have the gun engraved.

This is just a theory, unlikely ever to be proved. But whomever the original owner was, I think he’d be pleased that the quality of his gun and its barrels is still being appreciated more than a century later.



Editor’s Note: If you have an L.C. Smith F Grade hammer gun, please contribute to David Williamson’s database by sending serial number and information to: jdavidw1@comcast.net. If your hammer gun has Damascus barrels, please include a close-up photograph of the barrels so the type and quality of the Damascus steel can be determined.

Acknowledgements. I would like to thank LCSCA members Phil Carr, Tom Garver, Rick Ghenn, Jent Mitchell, and J. David Williamson for the help they gave me with their photos, information and time. I would especially like to acknowledge that this article would not have been possible without the contributions of Dr. Drew Hause and his DamascusKnowledge website.

This article uses descriptions and production data about L.C. Smith shotguns drawn from the five sources below. Unless a description or piece of data is unique to one source, it is not cited.

- *L.C. Smith Guns*, Hunter Arms Company, Inc., 1892.
- *L.C. Smith Guns*, Hunter Arms Company, Inc., 1906.
- *L.C. Smith Shotguns*, by William S. Brophy, 1983.
- *L.C. Smith The Legend Lives*, by John Houchins, 2006
- *L.C. Smith Production Records: The Numbers Behind the Legend*, by James Stubbendieck, 2013.

² U.S. Census, 1900-1909.

³ Quality E and D guns were listed in the catalog at \$70 and \$95, respectively; higher grades could be ordered.

⁴ The main spring is ahead of the hammer in a bar action shotgun and behind the hammer in a back action shotgun.

⁵ My top references about Damascus barrels are: <http://DamascusKnowledge.com>, which was created and maintained by Drew Hause (Please insert <http://DamascusKnowledge.com> into Google or another search engine to access this website) and a 1999 article in *Shooting Sportsman* by Charles Fergus, “Iron & Steel Intertwined: Unraveling the Mysteries of Damascus Barrels.” A 1925 documentary film, *The Making of Damascus Barrels*, is also useful and can be found on YouTube (in French with captions). My website, DoublegunPreservation.com, has good images of various types of Damascus, laminated and twist steel barrels.

⁶ Houchins, pp. 342-343.

Standard Damascus Barrels in Hammer and Hammerless L.C. Smiths (1906)

Damascus Steel	Hammer Gun Grade/Price	Barrels Sold Separately	Hammerless Grade/Price	Barrels Sold Separately
Finest	Quality AA \$300	\$150	A3 \$740	Not Specified
Very Fine	Quality A \$200	\$100	A2 \$390	Not Specified
	Quality B \$150	\$75	Monogram \$350	Not Specified
Fine	Quality C \$125	\$60	No. 5 \$200	\$70
	Quality D \$95	\$50	No. 4 \$150	\$52
			Pigeon \$125	\$43
			No. 3 \$100	\$35
Good	Quality E \$70	\$40	No. 2 \$80	\$28
			No. 1 \$60	\$25
			No. 0 \$47	\$20
Good-Strong	F Grade \$25	\$14		