

1792 and 1807 Contract Rifles

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INTRODUCTION

The amount of information bearing on the early contract rifles has significantly increased over the past few years. Starting in 1940, Major Hicks published the first letters between the Government and the rifle contractors, but this book is long out of print. More recent publications have touched on subjects related to the procurement of these rifles. It is now possible to examine the entire rifle procurement and the rifles themselves. The names 1792 and 1807 contract rifles are modern designations assigned by collectors to two large procurements of rifles by the Government for the army in 1792 and in 1807.

These contract rifles are the rarest of all Government procured long arms, based on the number purchased and the rate of survival. Several thousand were purchased, inspected and issued to troops. Today only a handful are known to collectors, making them the rarest of all US military long arms that were procured in significant amounts.

1792 CONTRACT RIFLES

The Government initiated procurement of these rifles when Secretary of War Henry Knox wrote to General Edward Hand, who was living in Lancaster, Pennsylvania, to contract for the first 1,000 rifles at twelve dollars each, in a letter dated January 4, 1792. Subsequent letters from Knox to General Hand established the configuration of the rifles as follows. The barrel to be 42 inches long and .50 caliber rifled. The lock to have a fly and the patch box to be spring opened with a button release.¹ This was sufficient specification, as everybody involved knew that a twelve-dollar rifle was a plain hunting rifle.

The requirement for a fly on the lock is superfluous, as a fly is only needed if the lock is used with set triggers. The fly on the tumbler keeps the sear from catching on the half-cock notch of the tumbler when the lock is fired. With a set trigger, there is no pressure on the sear after touching off the set trigger and the sear is free to move back in contact with the tumbler. With a single trigger lock, the trigger will restrain the sear from moving back in contact with the tumbler till the shooter removes his finger from the trigger. Since there is no mention of set triggers in the correspondence, I suspect that the requirement for a fly was dropped either by Hand or by Knox. It is also possible that the makers said



their price of twelve dollars did not include a fly on the tumbler. There is no further mention of a fly on the tumbler in any published material relating to these rifles.

The price of twelve dollars would buy only a very basic plain hunting rifle with no extras. From studies of Kentucky rifle costs, we know that in the 1815 period, plain rifles made on order for an individual cost a minimum of twelve dollars.² During this period, there was little or no inflation so that the Government was paying what an individual would have paid for a single plain rifle. Since the methods used by the makers in assembling the rifles using barrels from the specialized barrel makers and imported locks is unknown, it is impossible to ascertain what (if any) economies of scale were realized in the production of these rifles. It is obvious from the time scale of production that the contractors combined and speeded up production over the usual—one man making one complete rifle. From Anthony Fricker's ledger, we know that a journeyman working for Fricker required two weeks to produce a plain rifle using a purchased barrel blank and lock. The contractors must have utilized other makers to assist in producing the rifles, in what seems from our prospective, a remarkably short time. Jacob Dickert, Peter Gonter and Jno. Graeff managed to deliver 817 rifles by November 26, 1792. The total published deliveries of 1476 rifles delivered from all contractors were almost all delivered in 1792. This is a production of 1476 rifles in twelve months, or an average of about 120 rifles per month. Some time was required to organize production, so the actual deliveries per month were higher once production started. This is a remarkable production

achievement for what is regarded as a cottage industry and the first large-scale domestic procurement arms by the Federal Government. An additional 2,000 rifles were ordered and delivered in 1794. This is a total of 3,476 rifles delivered to the Government 1792 through 1794.

The time period between January and April was spent amassing material before beginning deliveries. The chart shows that in the month of July, over 400 rifles were delivered, which is a remarkable accomplishment for the period even with all the hardware available. To reach this rate of production, almost everybody associated with rifle making in Pennsylvania must have been involved in producing the contract rifles. For this reason, it is entirely possible that a 1792 rifle may be found that is marked with a name not on the list of makers. This is true for the 1807 contract rifles and there is no reason why it could not be true for 1792 rifles as well.

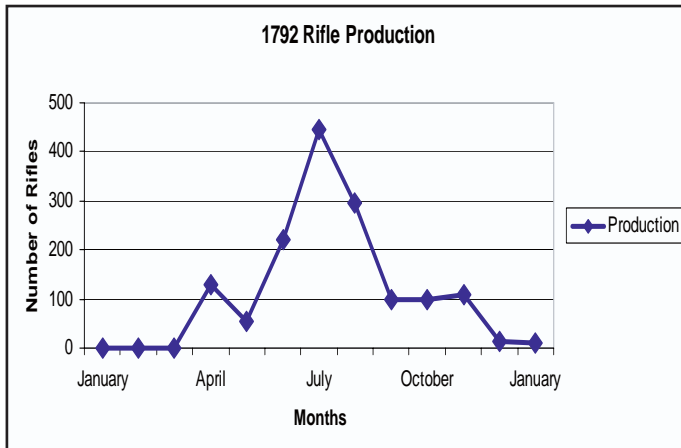


Figure 1. Contract Rifle production by month in 1792.

ISSUE OF RIFLES

General Hand shipped a total of 1,000 rifles in 1792 to Pittsburgh to arm the riflemen. The remaining rifles appear to have been parceled out in small numbers over a period of time till by 1805 only five serviceable rifles were in Schuylkill Arsenal, along with 94 unserviceable ones.³

A DESCRIPTION OF A 1792 CONTRACT RIFLE

The following description is based on a recently discovered 1792 contract rifle by Jacob Demuth. The rifle was originally purchased at a small estate auction in Carmichaels, Pennsylvania, which is south of Pittsburgh. This is where you would expect to find a 1792 rifle since the largest number was shipped to Pittsburgh. Unfortunately, the rifle has been restocked, probably when it was converted to percussion, which was about 1830 based on the stock style. The barrel was also shorted by 3/4 inches on the breech end at that time. This is the only known surviving example from the 1792/1794 contracts with the Pennsylvania Kentucky rifle makers. Prior to this, the only known surviving artifact was a full octagon barrel signed HECKERT and marked U.S.⁴

1792 CONTRACT RIFLE BY JOHN DEMUTH

The barrel now measures 41-5/16 inches overall. The barrel was shortened at the breech end when it was converted from the flintlock configuration to percussion. In this example (Figure 2), the conversion process consisted of cutting the barrel off just in front of the touch hole, reinstalling the breech plug and adding the percussion nipple. The barrel originally had a groove cut in the bottom to clear the front lock screw and a new groove was cut in the same manner to clear the screw in the restocking. The space between the two grooves is exactly 3/4 of an inch. When this 3/4 inch is added to the present length, the result is 42-1/16 inches for the original length. The length specified in the 1792 letter from Henry Knox to General Hand was 42 inches. This one-sixteenth inch difference is certainly within the measurement tolerances of the period. The barrel is typical of the late 18th century production with a long taper from the breech, which flares out again at the muzzle. At the breech it is 0.98 inches in diameter, decreasing to 0.815 inches in diameter at 5.5 inches from the muzzle and flaring to 0.9 inches in diameter at the muzzle. The present interior of the bore is worn to the point that it is about .55 caliber at the muzzle.



Figure 2. 1792 contract rifle by John Demuth.

Figure 3. US and MF markings on rear of 1792 rifle barrel.



US AND MF MARKINGS ON REAR OF 1792 RIFLE BARREL

The barrel is stamped MF and US at the breech with the U cut in half when the barrel was shortened (Figure 3). There are several letters from Knox to Hand discussing the markings to be applied to the contract rifles. From these letters, the rifles were marked US; one letter referred to the usual method of marking them US.⁵ The implication here is that all were being marked. I believe that all contract rifles were marked because the Government learned back during the Revolutionary War that unmarked arms and material disappeared unless marked US or with some form of United States.

MF is the barrel maker's mark and is probably Martin Fry as he, along with other York makers, operated a barrel mill outside of York that burned in 1800.⁶ Based on Kentucky rifles, it was the general practice for the barrel maker to put his initials on the barrel. In many cases the barrel maker's mark appears on the underside of the barrel and is not visible unless the barrel is removed. In the case of the contract rifles, the mark is usually visible on one of the barrel flats at the breech. From our perspective, this makes sense because if there were problems with the barrel, which in many cases was not made by the rifle maker, it would have been easy to identify the barrel maker. The barrel is signed in script "J Demuth" as was customary for rifle makers (Figure 4).

The lock appears to be a typical German style import lock of the late 18th century. The rear of the lock has been cut, squaring up the end instead of the typical pointed end. This could have been done because it was damaged or because the owner

wanted a more modern look. The present length of the lock is 5-1/8 inches and it was probably originally 5-3/8 or 5-1/2 inches. The lock has been reworked at least twice in its useful life. In the first, it was converted to percussion by removing the external parts and installing a new percussion hammer and nipple. The second rework consisted of making a new tumbler, sear and repositioning the main spring. The main spring was moved forward to accommodate the new tumbler, which caused the front of the spring to cover the front lock screw hole. This effectively converted the lock to a one-screw lock, but the

original side plate was retained. A pin was inserted into the lock forward of the original screw hole for the main spring to replace the retaining screw. The end of the main spring was hooked on this pin and a new hole was drilled in the plate for the original retaining pin on the spring. The repair was probably done in the 19th century when the original parts had worn or broken to where the lock would not function. While it is impossible to accurately estimate when this last lock modification or repair was accomplished, it appears that the rifle has not been used for many years. The extent and method of the repair is beyond the typical cosmetic repairing done by collectors for appearance sake.



Figure 4. John Demuth signature on the 1792 barrel.



Figure 5. 1792 lock converted to percussion.

All the brass furniture on the rifle is consistent with what was in use in the Lancaster area of Pennsylvania in the last decade of the 18th century. The new stock was slightly thinner than the original, necessitating the slight bending of the edges of the butt plate to fit the new stock. A Dickert rifle that has just been found has the same basic hardware as this rifle, including the long trigger guard bow. The moldings and other file work on the two rifles are within the tolerances of handwork. Both side plates are convex with the same outline. There is no comparison of the patch boxes as the Dickert is a fine relief carved rifle. Another Dickert rifle is illustrated in *Kindig's Thoughts on the Kentucky Rifle in its Golden Age*, page 85, no. 19 with the same long trigger guard bow. This indicates the same source for the rough brass castings for this rifle and some Dickert rifles. Since Jacob Dickert operated the largest shop in Lancaster at this time based on surviving examples, his shop may be the source of the brass castings.

The barrel, lock, butt plate and patch box do not bear any discernable marks that could be interpreted as assembly marks. Since none of these parts were marked, the trigger guard, ramrod thimbles and nose cap were not removed to look for marks.

This Demuth rifle (Figure 4) is probably from the 1794 contract where he is listed specifically as providing 104 rifles. The first contract lists Jacob Dickert, Peter Gonter and Jno. Graeff as supplying 817 rifles over a period of 6 months, so probably this lot of 817 rifles contained many rifles made by others and shipped through Dickert. Since this rifle is closely related to Dickert rifles it could have been supplied through Dickert with the 817 rifles.

John Demuth is a fairly elusive gunsmith known by a few surviving Lancaster rifles and of course the 1792 rifle documentation. A John Demuth, gunsmith, entered into an apprenticeship agreement, which is recorded in the records of Frederick County, Maryland in 1796. This is probable the John Demuth of Lancaster and he had moved to Frederick County, Maryland by 1796. An argument that John Demuth of Maryland is the same as the Lancaster one is

that he does not show up in Lancaster as a supplier of rifles under the 1807 contracts.⁷

The fact that the rifle is restocked is too bad from our historical and collecting standpoint but it was a very common occurrence in the period. The philosophy in the past was repair, make do or otherwise salvage to continue the object in use. Kentucky rifles are very fragile and often broke in the weak area around the lock or the wrist. When this happened, it was repaired if possible using iron straps or brass bands. If a gun's stock was too badly broken, it was restocked. Most Kentucky rifle collections contain examples of these repaired or restocked rifles provided misguided collectors have not restored the rifle from an aesthetic point of view. To my mind an old well done repair is far better than a modern slick cosmetic redo of an old repair.

MARKING OF GOVERNMENT ARMS

The only documents that apply specifically to these rifles are the two letters from Knox in 1794. The first asks that the rifles be marked UNITED STATES and the second letter says to mark them in the usual way. By observation of 1794 contract muskets from this period, the usual way was to stamp US on the rear of the barrel with the maker's name on the lock plate. In the case of the contract rifles from both the 1792 and the 1807 contracts, most if not all the locks were imported and the lock surface would have been hardened. This would have made it difficult to stamp or engrave the locks with either the maker's name or US. The contractors solved the marking problem by placing their name on the barrel as was customary with Kentucky rifles and marking the barrel US. There may have even been orders to mark the arms this way, but the letters have not been found. In all probability, it was handled verbally between the contractors and General Hand. With the maker's name on the barrel, along with the barrel maker's mark, it would have been possible to assign to the proper individual responsibility for any problems with the rifle. The US was necessary to show Government ownership.

The markings on 1794 contract muskets confirm to this practice with US stamped on the rear of the barrel and the maker's name on the lock. Since the locks were made by the musket contractors or purchased from local lock makers, the maker's name and US could be put on before the lock was hardened. In both the musket and rifles, the barrel would have been



Figure 6. 1792 rifle side plate, typical of late 18th century Lancaster makers.

easier to stamp or engrave with the US mark because the barrel was not hardened.

The 1807 contract rifles are marked in the same manner, with US on the barrel and with the addition of proof marks. There is no published documentary evidence that the 1792 rifles were proofed or inspected by Government arms inspectors beyond the letters asking General Hand to accept the rifles. The first surviving references to Government arms inspection or proof are for the 1794 contract muskets. In summary, I believe that all the contract rifles were marked US on the barrel for the simple reason that the Government experience during the Revolutionary War was that unmarked arms rapidly disappeared. Without any identifying marks, the Government could not reclaim them even if they could be located.

1807 CONTRACT RIFLES

There is more information available and published on these rifles than the 1792 contract arms. By the time these rifles were contracted, the Government had had contracts in 1794 and 1798 for muskets as well as various pistols during the same period. There is more documentation available on these rifles as well as more surviving examples.

Trench Cox contracted these rifles with the Lancaster rifle makers in November of 1807 for ten dollars apiece. This price was considerably lower than the twelve dollars paid for the 1792 contract rifles. The usual plain hunting rifle made by the Kentucky rifle makers was apparently around twelve dollars as one maker refused to make rifles unless he was paid twelve dollars apiece. Twelve dollars is consistent with known prices such as a plain Fricker rifle which cost \$12. The price the Government was paying was less than the current price for plain hunting rifles.

These rifles were to have a 38" long barrel with a .54 diameter bore for a half-ounce ball. In addition, barrels were to be one third octagonal and two thirds round.⁸ No other specifications were provided in writing for the makers and apparently no sample rifles were set aside as patterns. There is considerable variation between the rifles with the only common feature being the design of the barrel. Most of the rifles have imported locks from Europe or what are known to collectors as German locks.

The rifles were delivered in 1808 and 1809. These deliveries are summarized in the following table along with known surviving examples. Rifle makers appear that are not listed as contractors, but probably supplied rifles under one of the contractors as apparently was the case with the 1792 contract rifles.

Known 1807 Contract Rifles		
Maker	Number Delivered	Number Known
Dickert, DeHuff & Co.	557	
Jacob Dickert		3
Henry DeHuff		1
Peter Gonter		1
Christopher Gumph		1
		Barrel
Joseph Henry	898	3
Henry, Guest & Brong	196	
Doll		1
Guest		1
Bernise		1
A. Henry		1
		Barrel
Henry Pickel	155	1
Total Rifles	1806	14
Barrels		2

1807 PRODUCTION CHART

This table is the result of noting every 1807 rifle over the last 35 years. I do not think there are any duplicates. In trying to avoid duplicates, I may have left out some, as it is hard to differentiate between rifles of the same maker over the years of keeping records. The Brenise rifle, like the 1792 Dumuth rifle, is restocked in about the same time period. I am sure that there are a few more rifles in collections that I have missed in my count. The total number of delivered rifles differs between authors depending on which records they were using to list deliveries. It is safe to assume these numbers are a lower range on the numbers and probably all the contracts were completed.

The 1807 rifles were shipped to Schuylkill Arsenal in Philadelphia where Thomas Palmer inspected them but did not prove the barrels. He was later ordered to prove the barrels, which he did in the summer of 1808. There was considerable controversy over the quality of the rifles, with various inspectors reporting problems with the rifles. To settle the matter, Marine T. Wickham was tasked to inspect the rifles again in 1811. His report is very derogatory and he condemned all 1779 rifles then in storage. Among other things, he reported that 8 barrels burst out of 18 that he proved. He used 3/4 oz. of powder and two 1/2 ounce balls. It is little wonder that the barrels burst, as 3/4 oz. of powder equals 328 grains of powder. This is in contrast to the later proof used for the 1817 common rifle of 1/28 of a pound of powder or 250 grains.⁹ There is probably a hidden agenda behind this testing that appears designed to prove poor quality.

There is no correspondence addressing the basic issues with the rifles. Examination of the few surviving rifles does show a low cost of construction similar to a plain hunting rifle. The fundamental problem with the 1807 contract rifles is that the Government ordered ten-dollar rifles and the contractors delivered ten-dollar rifles.

TYPICAL 1807 CONTRACT RIFLES

The Peter Gonter-signed rifle is stocked in walnut with plain brass hardware and a simple, two-piece patch box (Figures 7-11). The rifle closely resembles the 1792 rifle, which it should, because both are examples of plain hunting

rifles. The side plates on some of the 1807 contract rifles are flush and not convex, as is the 1792-side plate. This is a reflection of the age difference and also probably the price difference. Sometime after about 1800, Lancaster area gunsmiths began using flush side plates rather than the earlier convex side plates. The barrel shape of 1/3 octagonal and 2/3 round is unusual for a rifle barrel, as it is the usual form for a smooth barrel. This may have been an attempt to reduce the muzzle heaviness of the typical Kentucky rifle.

The Gonter barrel as shown has two P proof marks instead of the single mark on the other examples. This



Figure 7. 1807 contract rifle by Peter Gonter. The barrel length is 37-3/4 inches with an overall length of 53 inches.



Figure 8. Cheek piece side of the Peter Gonter contract rifle.



Figure 9. Lock on the P. Gonter contract rifle. A typical imported lock used on most of the 1807 contract rifles which has been converted to percussion.



Figure 10. Interior view of Gonter 1807 rifle lock showing the typical initials found on imported European locks.

maybe one of the guns that Wickham proved over again in 1811 as he would have needed some way to account for barrels that he reproved. There is at least one other example known with two proof marks. The eagle over P proof mark that is normally encountered is the same stamp found on 1807 contract pistols. Wickham may have put on the plain P proof mark in order to keep track of which ones he reproved.



Figure 11. Gonter rifle with two proof marks.

1807 CONTRACT RIFLE BY J. HENRY

The J. Henry rifle (Figures 12-14) is stocked in maple with the markings on the barrel of a single P and US. Henry managed to produce a two piece patch box that used less brass than other known makers as well as a single screw instead of three to fasten the patch box finial.



Figure 12. 1807 contract rifle by J. Henry

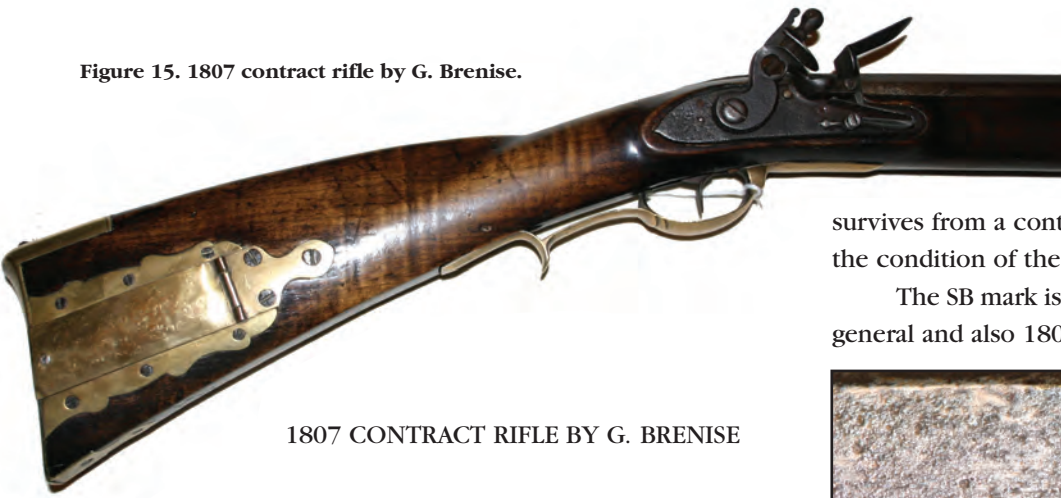


Figure 13. Henry rifle with a single screw in the patch box.

Figure 14. J. Henry's name, US mark and proof mark on barrel of 1807 contract rifle.



Figure 15. 1807 contract rifle by G. Brenise.



1807 CONTRACT RIFLE BY G. BRENISE

This George Brenise rifle (Figures 15-17) was also restocked about 1830 using all of the original rifle hardware. When restocked, the two side plates were added to the patch box. They would not have been on the original and are also a different color.



Figure 16. Original flintlock marked US in the Brenise rifle. Since the lock is stamped US on the tail, it is probably not an imported lock. There is at least one other rifle known with the same type of US marked lock.



Figure 17. The Brenise rifle is marked identically to the Gonter and Henry rifles with a P and US at the breech.

1807 CONTRACT RIFLE
BARREL BY GUMPH

This barrel is the only thing that survives from a contract rifle and illustrated here because of the condition of the marks (Figures 18-20).

The SB mark is relatively common on Kentucky rifles in general and also 1807 contract rifles.



Figure 18. Proof mark.



Figure 19. Barrel makers mark.



Figure 20. Maker's signature.

US Marking. The US on the Gonter rifle and Gumpf barrel appear to be from the same stamp (Figure 21). The US on the Henry appears to be from a different stamp. The Lancaster area makers could easily use the same stamp for marking US on their rifles. While not mentioned in the correspondence, this practice would have been in keeping with the 1792 rifle marking. The makers would have stamped the US, as they did not want any to disappear on the way to Schuylkill Arsenal.



Figure 21. US marking.

UNMARKED 1807 RIFLE

There is a Henry 1807 style rifle without any marks beyond Henry's name. This corresponds to the many unmarked militia rifles that belonged to local militia organizations all over the country. An intriguing case can be made for this unmarked rifle as to ownership. John Hall was unable to sell his rifles to the Portland Rifle Company due to their cost. The rifle company records reveal that their rifles were purchased in Philadelphia with the assistance of General John Steele, a Philadelphia militia officer.¹⁰

An 1815 letter in the Henry papers discusses Hall's inquiry about making rifle barrels, which shows that Hall was familiar with Henry. While there are many ways Hall could have learned of Henry, this unmarked 1807 style contract rifle, which may have been sold to the Portland Rifle Company, is an intriguing possibility.

WHAT HAPPENED TO THE RIFLES?

It is very difficult to estimate the survival rates of items from the 18th century. In most cases we do not know how many were originally produced or the total surviving. In the case of a few firearms, dedicated researchers have been compiling information for at least the last fifty years. Some English firearms were serial numbered in the late 18th and early 19th century, providing a starting point for estimating survival rates. Modern researchers have been able to compile serial numbers of surviving examples.

John and Joseph Manton were English arms makers who serial numbered their arms, and modern collectors have compiled lists of the known surviving examples. They produced the highest quality and most expensive arms for the upper-class Englishmen. A Manton double shotgun cost about \$300 when the Government was paying \$10 for rifles. It is amazing to me that the survival rate for these expensive arms is less than ten percent based on known serial numbers.

The 4,000 Harpers Ferry rifles produced between 1803 and 1806 were serial numbered and approximately 40 examples are known to have survived. Even if the known survivals are undercounted by 100%, it is still only a survival rate of 2%.

The 1807 contract rifle survival rate is about the same as the Harpers Ferry rifle as we know of approximately 15.

The anomaly in these survival rates is the 1792 contract rifles, of which we have only one example known out of 3,476 received by the Government. Arms students have been searching for examples for the last 50 years and this is the only one that anybody has found. There must be a few more out there unrecognized by their owners which will probably be found in old or forgotten collections.

The 1792 rifles were plain hunting rifles that were sold to the Government or to anyone else who wanted an economical rifle. These plain rifles have an extremely low survival rate whether or not the Government owned them.

It is just about impossible to find a Kentucky rifle from 1800 or before with no carving or engraving. I have never found an example and that is why I do not illustrate an example in this article. The only document that I am aware of to estimate Kentucky rifle survival rate is the account book of Anthony Fricker. He records in his ledger the production of 60 rifles, smooth rifles and guns between 1814 and his death in 1821. Only items that were not paid for are recorded in the ledger. If they were paid for before they entered the daybook, they were not recorded or if paid between the daybook and the ledger, they were not recorded. Sixty arms are a lower bound for his production and it is impossible to ascertain exactly how many he produced. Most of his production was plain everyday guns and rifles. However, he was quite able to produce exceedingly fine rifles. One of these fine rifles is the only known surviving example from his production. This particular smooth rifle is not recorded in the ledger. From this we can see that the survival rate for plain arms from the 18th and early 19th century is almost zero.

In modern times one has to only think of the plain low cost single barrel 12 gauge shotguns sold by Sears in the early 20th century, which are practically nonexistent today. The demise of fine items can be realized by noticing the vast number of fine automobiles that are in the junkyards. We should not find these low survival rates for plain rifles surprising when these examples are considered.

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