The "Evolved" Longarm in North America 1750-1850

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This presentation is, in reality, an appeal to the membership. It is an appeal to recognize an opportunity to collect Americana currently avoided and overlooked by a majority of the collecting fraternity. I refer to this collection opportunity as "The Evolved Longarm". For the purpose of the presentation I have restricted the title to "The Evolved Longarm in North America 1750-1850". The presentation is an appeal because so many examples are being destroyed through lack of understanding and appreciation. Hopefully this appeal will encourage interest, study, and increased acceptance of these arms.

HISTORICAL PERSPECTIVE

To appreciate the magnitude of the subject, a brief historical review suggests that the quantity of firearms used in North America during the eighteenth century probably exceeded anything experienced in the world up to that time. The political, social, and economic events in both Europe¹ and North America contributed to the North American continent being awash in firearms, by eighteenth century standards². Time constraints do not allow me to discuss the details of these events and their influence on the volume of firearms^{3,4}.

INTRODUCTION

The title concerns the period 1750 to 1850, but the "evolved longarm" is not restricted to development during that period, nor to North America, nor even to longarms⁵.

Each longarm was a handcrafted item reflecting the skill, personality, and experience of its maker⁶. As we know, this specific talent, craftsmanship and enterprise almost became extinct during the nineteenth century with the advent of more machine made firearms.

One question raised is what happened to all these firearms that were reflections of individual craftsmanship? There are, of course, many answers to this question and the theme of this presentation deals with one of the answers: they became "evolved firearms" in far greater quantities than is currently realized. The thesis of this presentation is that careful study and evaluation of the lock, stock, barrel,



furniture, and stylistic features of these examples will yield much information that is currently missing or misunderstood.

CONDITION

The condition of firearms is of great importance to collectors and the urge to find more pristine specimens has been irresistible. Yet, like coins that are in "proof" or "uncirculated" condition, arms from the eighteenth century remaining in pristine condition saw limited service. The reality was that arms in North America from the eighteenth and early nineteenth centuries were used in an extremely harsh environment. As parts were worn, replacement parts were crafted or salvaged in order to maintain service⁷.

An "evolved" firearm is difficult, if not impossible, to precisely define. Although relatively easy to describe, it can be a challenge to identify individual examples. A definition should not be rigid during this early stage of research and study; it should have the flexibility to be challenged and changed as the results of additional studies and research become available.

DEFINITION

I have developed the following initial definition of the "evolved" firearm: It is: a firearm that has been altered intentionally to continue its useful life, including stylistic and technological improvements, by someone contemporary to the useful life of the piece.

This definition would include a repair, or any assembled piece, provided it was assembled during the

contemporary period of its useful life. But not a reconversion or reproduction. I am not suggesting that reconversions or reproductions are unacceptable, only that they are not examples of "evolved" firearms. Often when "evolved" firearms are offered for sale they are erroneously described, not necessarily on purpose, but because the seller is genuinely unaware of the nature of the piece. Frequently the pieces are dismissed as assemblages of mismatched parts. Sometimes these seemingly mismatched pieces are the product of eighteenth or early nineteenth century necessity and economics. Others are the results of currently unscrupulous assemblages of mis-representations. Many historically interesting pieces may have been destroyed by dealers, gunsmiths, and collectors in an overzealous attempt to re-establish an eighteenth century provenance for the piece. Such action can completely destroy the historical integrity⁸ of the firearm. This action is even more sad if the piece is remade because of ignorance of any historical sense of continuity. For example, every time a reconversion from percussion to flintlock ignition is made, we lose as many as fifty years of historical integrity from the piece. The sad part regarding this process is that there may be fewer examples of hand crafted firearms originating in the eighteenth century and converted to the percussion ignition than there are examples of reconversions to flintlock.

As collectors become more sophisticated and respect the historical integrity of pieces, it is possible that we may see reconversions to the flintlock ignition converted back to percussion in an attempt to regain historical integrity. There are, of course, many examples of machine or armory made weapons converted to percussion. But the early handcrafted specimens are becoming rare and it is these examples that are historically important to preserve.

DESCRIPTION

A good description of the "evolved" firearm is that it was a "working class" piece during its useful life. Some examples are very close to their original form; however, many have evolved, taking numerous forms during their period of useful life. Their changes reflect the contributions and skills of various craftsmen. The arms are a reflection of the history and needs of the society they served and represent a true form of vanishing Americana. These are the tools used by settlers, frontiersmen, farmers, hunters and yeomen to feed, clothe, and protect themselves and their families⁹. In some cases they served several generations during their useful life.

The "evolved" firearm was not the "pristine" tool of the aristocrat or wealthy citizen: it was the firearm used to forge this nation.

I have chosen four examples of longarms to illustrate varying aspects of an evolved longarm during the 1750-1850 period. Every effort has been made to carefully identify these pieces and their characteristics in a scholarly manner. But because information and study of this subject is relatively lacking, the risk of errors is increased. I sincerely apologize for any such errors uncovered by future investigation.

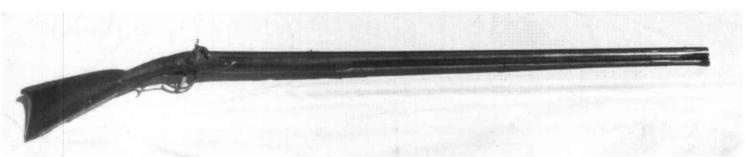
EXAMPLE 1: A "Kentucky" Musket

This "Kentucky" musket (Figure 1) evolved from its earliest part, the barrel, to the latest technological addition, a conversion to percussion ignition. It has an over all length of 60 inches, with a 45%" barrel, and .80" bore. The markings on the barrel yield a treasure of information; the following approach was used to evaluate the evolution of this piece. The barrel is marked "*VIRGINIA 1750*" (Figure 2) and has a crown over crossed scepters and GR with the initials FG between private British proof and viewing marks (Figure 3).

Research revealed that Colonial Virginia placed an order in England on or about November 6, 1750, for five hundred muskets to be marked "*VIRGINIA 1750*"¹⁰. The barrel from this evolved example is the only known survivor of that contract. A review¹¹ of the remaining barrel marks by Dr. DeWitt Bailey suggests that FG stands for Farmer and Galton, Birmingham gunsmiths, 1746-1774¹². The crown over crossed scepters and GR mark is something of a puzzle. It may be an early form of the King's proofmark or an early private Tower proof that was part of the contract with the purchases for Virginia¹¹. In addition, a rear sight has been added and the front bayonet lug has been thinned to enhance its use as a front sight.

Evaluation and attribution of the stock, while not precise, is made easier by comparison with pictures in *Thoughts On The Kentucky Rifle In Its Golden Age*, by Kindig, as well as comparisons with signed pieces. It would appear to be the work of Andrew Kopp (1781-1875).

A review of the carving on the stock suggests that it may be an early form of his work, perhaps in the first or second decade of the nineteenth century (Figure 4).



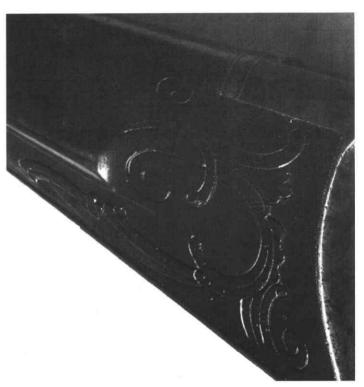
1. Profile of the "Kentucky" musket.



2. The "Virginia 1750" barrel mark.



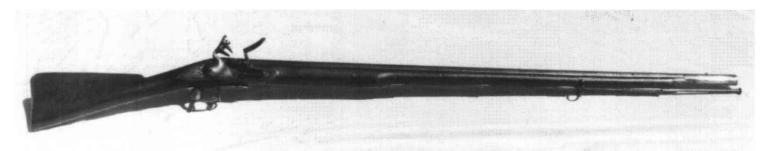
3. View, proof, and maker's marks on the barrel; Tower mark above.



4. The stock carving, attributed to Andrew Kopp.



5. The converted lockplate marked "W. Ketland & Co."



6. Profile of the Federal and Militia musket.



7. The barrel marks on the Federal and Militia musket.



8. Its stock marks, "US" and a faint "IP" in front.



9. Its lockplate with "US" mark.

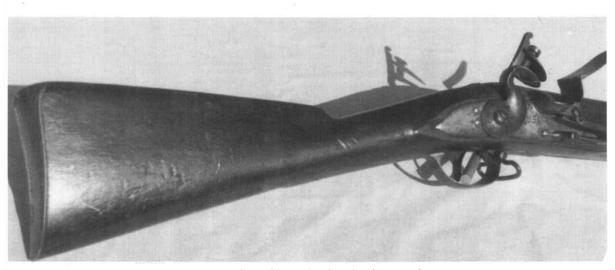
The lock (Figure 5) is an simple trade type, originally flintlock, marked W KETLAND & Co. and probably manufactured between 1808 and 1831¹². The period of the lock manufacture corresponds with the gunsmithing activities of Andrew Kopp and it is reasonable to assume that a restocking of this musket to its "Kentucky" style took place during the second decade of the nineteenth century. Precise dating of the conversion to percussion is difficult; however it was probably completed by 1840.

If one accepts that the piece was used for ten or twenty years after its conversion, we have a useful life of a century. It is difficult to find a clearer example of an "evolved" firearm than this "Kentucky" musket. Its significance is that its historical integrity does not appear to have been interrupted or changed. The barrel was not removed in an attempt to regain a presumed original form.

EXAMPLE 2: A "Federal and Militia" Musket

This example originated in a manner similar to the previous piece. The earliest feature is the barrel from a British Short Land Pattern musket. Its evolution is a purely American phenomenon, but as the "Kentucky" musket evolved into a civilian or non-military example, this piece appears to be an "evolved" American military longarm.

It has (Figure 6) an overall length of 58 inches, with a 42" barrel and .75" bore. It is stocked in American black walnut. The barrel marks (Figure 7) offer an interesting array of information. The FG indicates manufacture by Farmer & Galton (same as the "Kentucky" musket), English gunmakers between 1746 and 1774¹². There are British proof and viewing marks indicating a military origin for the barrel. The M stamp would appear to suggest an association with the state of Maryland. The style and form of the M suggests a period late in the eighteenth or early nineteenth century, but it could be as early as the American War for Independence¹³. The "76" inscribed is thought to be a rack number or some form of identification of the



11. Stock profile, Federal and Militia musket.

piece.

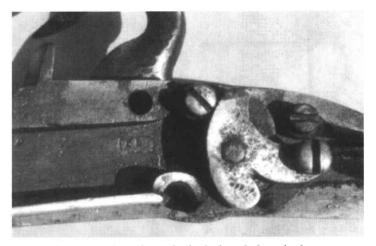
The left side of the stock behind the sideplate (Figure 8) has a US brand and right in front towards the side plate a faint IP mark. The IP may signify inspection by Joseph Perkins. Perkins was an arms inspector for the Continental Army, the Federal Army, and was the first superintendent of the Harpers Ferry Arsenal¹⁴. The lock is inscribed with a US (Figure 9). These US marks suggest a Federal period or early nineteenth century origin. Further analysis of the lock reveals that there is a mark on the inside (Figure 10). A review of the mark by Dr. DeWitt Bailey suggests that the lock was part of 1778-1781 British Board of Ordinance contract executed in Liege and probably sold commercially after 1783¹¹. It is possible that these locks were a surplus procurement by the United States or some American gunsmith.

An examination of the stock form and style (Figure 11), with a low comb and no bottom rail, suggest a late eighteenth or early nineteenth century manufacture.

It is not unreasonable to attribute an evolution of this piece from the American War for Independence through the Federal period or perhaps militia use by the state of Maryland during and after the War of 1812. It is interesting that the piece remains in its original flintlock state¹⁵. Continued study and research on this firearm will hopefully reveal additional information. The jaw screw is a modern replacement.

EXAMPLE 3. An American Stocked "Fusil Fin"

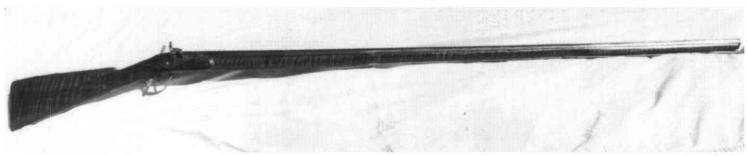
This musket is an example of a purely civilian



10. The internal mark on the lockplate, below the hammer.

"evolved" piece where no military association is present (Figure 12). It has an overall length of 67½ inches, with a 51¾" barrel, and .63" bore with a slightly swamped muzzle. In its fully evolved form it is a percussion ignition "fowler". It is stocked in American maple and the barrel and furniture suggest that they may be from the original piece. An examination of the barrel, furniture and lock suggest a French origin and a date of circa 1750. In its original form this firearm was probably a "fusil fin" or high grade trade gun⁴ (Figures 13, 14, and 15).

Its American stocking has an interesting feature: removing the barrel, one sees that it burst about half way down on the bottom edge and was conveniently reformed and brazed by a process known in the late eighteenth century and then restocked. The lock is French and has been converted to percussion (Figure 16) in a style commonly done in North America. It was

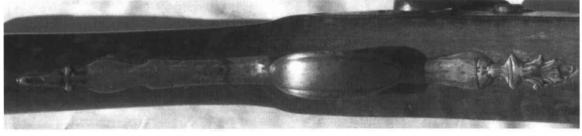


12. Profile of the American-stocked "Fusil Fin".



used in North America and restocked late in the eighteenth or early nineteenth centuries, eventually converted to percussion, showing an evolution and useful life of a century. This piece may be one of the answers to the question, "what happened to the many trade guns of the eighteenth century?"

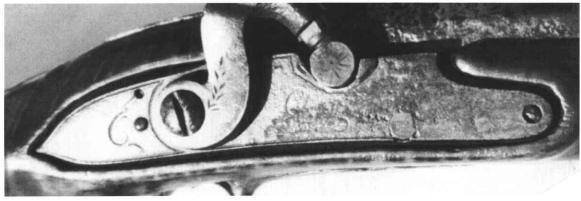
13. The French pattern buttplate tang of the "Fusil Fin".



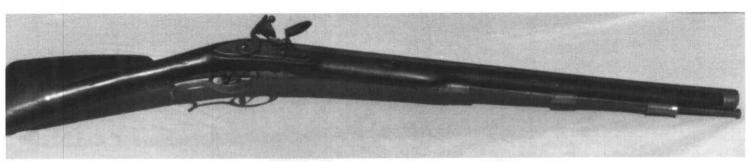
14. Its trigger guard, also a French pattern.



15. And its French pattern sideplate.



16. The rather crude percussion conversion, probably American.



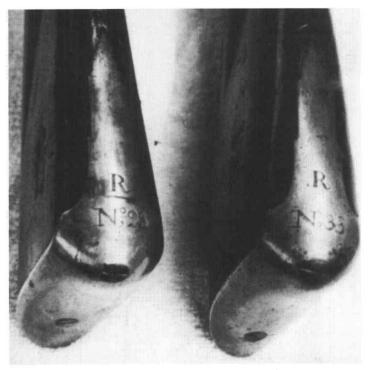
17. Profile of the 1776 British muzzle loading rifle.

EXAMPLE 4. 1776 British Military Rifle

While this story originates in 1776, the modern research and study began in 1961 with Howard Blackmore's publication of his classic *British Military Firearms 1650-1850*. He mentioned a British Board of Ordinance contract in 1776 for one thousand rifles, but he had no idea of what they looked like¹⁷. These rifles were presumably for use by British forces during the American War and are of obvious interest to American collectors.

It was not until 1972 that one of our members, "Chuck" Darling, identified one of these rifles. In a marvelous piece of investigative journalism in *The Canadian Journal of Arms Collecting*¹⁸, Chuck evaluated a British rifle in the collection of Mr. John Bicknell and suggested that it was an example from the 1776 British rifle contract. It was the first piece from that contract to be identified.

Since Chuck's initial identification. I am aware of six more examples that have been identified¹⁹ (Figure 17). It has an overall length of $43\frac{1}{2}$ inches, with a 28" barrel, and .65" bore. The barrel has a two leaf rear sight. During 1989 and 1990, Dr. DeWitt Bailey, Kit Ravenshear (a contemporary gunsmith who specializes in colonial arms), and I reviewed five of the known examples.20 All had the same stock, barrel and furniture design, which appears unique to this contract. It is probably the rifle's unique design that contributed to the difficulty and delay in its identification. We have found no other British Board of Ordinance or private contract pieces with these designs (Figures 18, 19, 20, 21, and 22). Another interesting discovery was some puzzling features on the muzzle and forend on all of the examples examined (Figure 23). We concluded that these features suggested some kind of swivel ramrod design. Up to that time no examples had been found with a swivel ramrod mechanism intact; no known swivel ramrod designs of a later date seemed to fit the ramrod vestiges on the five rifles we had examined



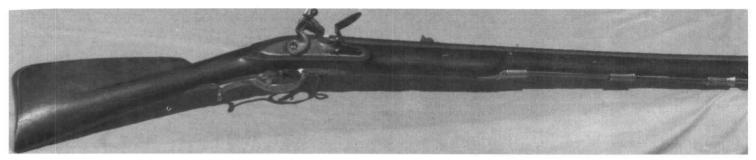
18. Two buttplate tangs with inscriptions, 1776 British rifles.



19. 1776 rifle trigger guards and ramrod pipes.



20. The WG (William Grice) barrel mark and others.



24. Profile of the reproduction rifle.



21. MB and IW (Matthew Barker and John Whately) barrel marks and proof marks.



22. The lockplate of a 1776 rifle, showing conversion to percussion.

and the rammer vestiges on the examples were all in the same state of repair. This led us to conclude that either what we thought was the remains of a swivel ramrod design was not, or the original design was found to be impractical and removed intentionally. We speculated that the latter was the case and decided that we would attempt to reconstruct the design. Dr. Bailey and I asked Kit Ravenshear if he thought he could reproduce the rifle and he quickly responded in the affirmative. Figure 24 is the result of the design and reproduction of the rifle. During our examination and review, Dr. Bailey had informed both the Tower of London and the British National Army Museum of the progress. Both institutions ordered replicas from Kit, as did Dr. Bailey and I.

The importance of this story in the study of the "evolved" firearm cannot be over-stressed. It has taken thirty years of study and investigation by a number of individuals to identify and describe examples from a military contract issued two hundred and fifteen years ago. All the known examples had evolved in some manner during their useful life.

In December of 1990 an example of the rifle was uncovered in England. It had been incorrectly identified as a variant form of a British Baker rifle. The swivel ramrod mechanism was intact! I am pleased to report that our speculated design was similar. The modern design was more substantial than the original²¹, but the basic design was the same (Figures 25 and 26).

This specific example indicates the ability to study "evolved" pieces in order to determine, with a reasonable degree of accuracy, the original form, even in the case of unusual or unique forms.

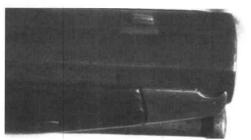
SUMMARY

I hope this appeal for the "evolved" firearm will encourage some of you to recognize, and develop an interest in this subject.

It is important that we are alerted to the necessity of discovering and protecting the historical integrity of the "evolved" firearm. From it we can learn a great deal about the technology, economics and society of its origin. I am concerned that in our quest for the more pristine examples of our collecting endeavor, we are excluding, and significantly altering, some historically important examples of Americana. The tragedy of this situation is that the early examples may be becoming extinct through our ignorance of the subject, as we alter, restore, and salvage them.

I do not wish to leave you with the idea that the "evolved" long arm is unique to the 1750-1850 period. It certainly is not. The "evolved" concept was evident many years prior to this period and is currently continuing. It is not unusual for us to use firearms nearly a century old. Witness the number of Krags and bolt action Springfields used by hunters.

While I have restricted my presentation to longarms, there is ample evidence that pistols, swords and other arms have experienced the same "evolved" development.





25. Muzzle end of the reproduction rifle, with reconstructed swivel assembly.

23. Muzzle end of a rifle, showing vestiges of the original swivel ramrod assembly.

NOTES

1. Francis Jennings in *Empire of Fortune*, W.W. Norton & Company, New York, 1988, makes the point that by the time England and France declared war in 1756, their combat encircled the globe and was often called the first world war. They drew into the conflict Austria, Russia, Prussia, and Spain (pgs. xx and xxi, overview).

2. The European conflicts that influenced the colonial period in North America originated in the 17th century. An excellent overview on this subject is *The Colonial Wars 1689-1762*, Howard H. Peckham, The University of Chicago Press, 1964.

3. One normally thinks of the American War for Independence as the period associated with mass importation of firearms by the individual colonies, and it was, but this was not a new occurrence.

Colonial Virginia ordered 500 muskets from England on October 25, 1750.

New Jersey authorized the purchase of 2000 muskets in October, 1757.

The City of New York authorized the purchase of 1000 muskets in 1755.

North Carolina was sent 3000 arms in 1754 and Georgia received 500 arms in 1756.

4. An informative text on the firearms used by the native Americans is *Colonial Frontier Guns*, T.M. Hamilton, The Fur Press, Chadron, Nebraska, 1980.

5. The period 1750-1850 is an arbitrary selection that the author feels best illustrates his message.

6. Two excellent sources with gunsmiths accounts are:

The Gunsmith in Colonial Virginia, Harold B. Gill, Jr., The Colonial Williamsburg Foundation, Williamsburg, Virginia, 1974.

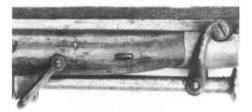
Thoughts On The Kentucky Rifle In Its Golden Age, Joe Kindig, George Shumway Publisher, Annotated Second Edition, 1983.

7. William H. Guthman in *U.S. Army Weapons 1784-1791*, The American Society Of Arms Collectors, 1975, details the use, repairs and evolution of some military arms after the American War for Independence.

8. Historical Integrity is meant by the author to describe the natural and contemporaneous evolution of an arm to continue or prolong its useful life.

9. An excellent graphic and illustrative description of the frontier expansion and peopling of North America is contained in the *Historical Atlas of the United States*, Centennial Edition, National Geographic, 1988.

10. Personal letter to the author from Mr. Jay Gaynor, Colonial Williamsburg, regarding research done by Mr. Howard Gill indicated that *The Executive Journals of the Council of Colonial Virginia*, Vol. V, November 1, 1739-1754, p. 344, published by the Virginia State Library and edited by Wilmer L. Hall gives the details of the purchase.



26. Muzzle of a 1776 rifle with original swivel assembly, found and identified after construction of the reproduction rifle.

11. Personal letter from Dr. DeWitt Bailey to the author.

12. *English Gunmakers*, DeWitt Bailey and Douglas A Nie, Arms and Armour Press, London & Melbourne, 1978.

13. Arms Makers of Maryland, Daniel D, Hartzler, George Shumway Publisher, York, Pennsylvania, 1977.

Page 30 shows copy of bill indicating purchase of four "M" stamps, and page 31 illustrates an "M" stamp similar to the one on EXAMPLE #2.

14. American Gunsmiths, Frank Sellers, The Gun Room Press, Highland Park, New Jersey 08904, 1983.

15. The top jaw and screw are modern replacements.

16. A precise definition for a "trade" firearm is difficult, however a good description may be "a firearm used in the trade" as opposed to a military weapon designed for use by armies and usually having a provision for a bayonet. The difficulty lies in the fact that there were occasions when the military firearms were used in the trade and "trade" firearms were used for military purposes. ["Trade Gun" in america is primarily a term used to designate arms used to trade with the Indians for furs and other goods. Editor.]

17. While Blackmoore had no idea of what these one thousand rifles looked like, he did know who made them. There were orders placed for two hundred in Germany and two hundred each with the following English gunsmiths: Mathew Barker and John Whately, Samuel Galton, William Grice, and Benjamin Willets.

There are no identified specimens from the German contract; however examples from the English contracts are known with the exception of Galton.

Research by Dr. DeWitt Bailey has uncovered receipts for all one thousand rifles, suggesting completion of the contract.

Another interesting note is that the English gunsmiths on this contract were the same ones that produced twenty-five each of the Board of Ordinance contract for the breech loading Ferguson rifles later in 1776.

18. The Canadian Journal of Arms Collecting, Vol. 10, No. 2, 1972.

19. Personal file information of the author.

20. *Monthly Bugle*, Publication by The Pennsylvania Antique Gun Collectors Association, Inc., No. 252, October 1990, The Board of Ordinance "1776 Contract Rifle" by Kit Ravenshear.

21. After seeing the original ramrod mechanism, it was interesting to reflect why our contemporary design was different from the original. The conclusion was that we had built on the experience of the original designers, probably unconciously realizing the weaknesses they encountered. They, as pioneers of the design, had little benefit of practical experience. Our design had corrected some of the original weaknesses.