1816 BAYONET MANUFACTURERS AND MAKER MARKS A COMPREHENSIVE LIST

by Mark Rentschler

For over 30 years, the Model 1816 musket was the standard infantry musket of the U. S. Army. The musket was produced at both Springfield and Harpers Ferry armories and fifteen different contractors with a total production exceeding 785,000 muskets.¹ Each one would have required a bayonet.

The basic regulation bayonet is typically 19 inches long overall with a 3-inch socket and a "T" shaped mortise, known as Wilson's Patent; Wilson was an armorer at Springfield. The typical bayonet is for a top stud mount. However, many variations exist, including bottom stud configurations, "L" mortise, with and without face flutes and other dimensional changes. Most were finished bright but for a period during the 1820s examples illustrate they were finished brown as were the muskets of this era (National Armory Brown).

This article will attempt to clarify the identification of the blade markings and to list comprehensively all known combinations, their origins and the identification and meaning of the initials. In 1816, the Ordnance Department's regulations for the National Armories, intended for uniformity and interchangeability of parts provided specific instructions for the marking of not only muskets, but also bayonets.² This included formal gages to check dimensions and to test the steel for hardness and elasticity. The well documented alpha numeric numbering system used to identify and match muskets and bayonets identifies specimens that are marked in this manner were most assuredly manufactured at one of the armories.²

Confusion still exists as to the blade face marks, inspectors, manufacturers, contractors or bayonet forgers from the armories. Clarification is required to further our study of these bayonets. Peter Schmidt, noted author, researcher and member of the Society of American Bayonet Collectors (SABC), notes that it is important to discuss the method of manufacturing and the forger's mark, maker's mark, manufacturer's mark and inspector's marks found on these bayonets. This article will address the M1816 bayonets produced prior to the alterations before and during the Civil War. The blade marks associated with those altered bayonets will not be covered.

John Hamilton, American Society of Arms Collectors member, references the identification of U. S. property in an excerpt published in a Springfield, Massachusetts newspaper of the era, the Federal Spy from August 13, 1799. In this article *"bayonets are marked US on the socket and the initials of the maker's name on the blade."*³ This highlights the practice at the Springfield Armory of this method years before production of the 1816 type bayonet. The US mark would migrate to the blade along with the maker's mark on the 1816 bayonets.

The forging trade during this period was a highly skilled trade and the men were taught to be responsible for their work and quality. Therefore, having a separate inspector at the armory would have been an exception unlike modern methods. After the forger completed his work, it went on to the filer/grinder who would finish it and in the case of muskets, move onto stocking and assembly procedures. Thus, the forger was expected to apply his mark, usually a pair of initials, a standard practice as both the maker and inspector of the component. Later, during testing or at a final inspection, if there was a problem, the armorer or shop superintendent would know who to see.

In the book, *Marco Paul's Travel and Adventures in the Pursuit* of Knowledge published in 1843,⁴ they visit Springfield Armory's forging shop (Figure 1). Water powered trip hammers were used to forge bayonets and large grinding wheels five or six feet in diameter with grooves were used to shape edges of the bayonets. The author describes the stream of sparks and the disagreeable nature of the work. Anyone who has been in a grinding room in a foundry knows this. Furthermore, the piece work process is described. Workers were paid by the piece and if the final inspector found a flaw in the bayonet elasticity or strength (Figure 2), that would be deducted from his pay. Whose pay, well of course, the forger who made it. So, we can conclude because of the nature of the trade and the payment methods at the armory, that the blade marks



Figure 1. Forging area with trip hammers (left) and forging at Springfield Armory (right). Reprinted from the American Society of Arms Collectors Bulletin 128:35-41 (Fall 2023) Additional articles available at http://americansocietyofarmscollectors.org/resources/articles/ are forger's marks or subcontractor's marks. Paul Johnson has an unfinished 1816 bayonet (Figure 3), with the blade already marked US over TA from Springfield.⁵ The socket is not yet finished and is without a mortise. These bayonets were likely shipped to states where they would have been used as replacements and would have been finished there in order to match them with existing muskets in the state's militia system.



Figure 2. Bayonet Inspection at the Springfield Armory.



Figure 3. Unfinished bayonet, blade face (left) and socket (right).

In the case of subcontractors, who had their own manufacturing operations, we know they did not stand over the forge themselves to make every bayonet, but needed to identify their output should a problem arise sometime later. The initials of some of these subcontractors are known and are listed in the table. Since the government would want to inspect the work from private armories, they contain frequently, small inspector's initials on the neck of the 1816 bayonets (Figure 4). These include for example: Nahum W. Patch (P), Asabell Hubbard (AH) and Justin Murphy (JM).⁵ Many of these light marks would have been polished off during the bayonet's life or alteration to percussion during the Civil War. Now, age and corrosion would also make these marks hard to see today without magnification.

It is also important to note that bayonets were also heat treated for strength. Peter Schmidt has tested several for hardness, and discovered they were Rockwell RC30. This is too hard for an inspector to routinely stamp his initials into the blade face after the bayonet was finished. The marks on the blade could only have been done when the steel was hot, as the forger was doing his work.



Figure 4. Two examples of sub inspector's marks on the bayonet shank.

Peter Schmidt has done extensive research of the payroll records at the National Archives of both Springfield and Harpers Ferry Armories in an attempt to identify the different bayonet forgers who worked there during this time period. However, due to gaps in the records and water damage, he was able to illustrate only a sampling in his fine work *US Military Flintlock Muskets the Later Years.*² His examinations did permit an impression that some forgers worked in that capacity over a long period of time, while toward the end of production of the 1816 musket and bayonets the names changed frequently. Therefore, some sets of blade marks should be more common while some are quite rare or unusual. To add to the confusion, some forgers became inspectors later in their careers.

I have now compiled the following list of blade marks. Fifty-eight different combinations are identified. This list was prepared from the collections of several noted SABC members including Peter Schmidt, Joe Serbaroli and Tom Till. The author has not physically examined every combination but a majority are illustrated in the table with actual photographs. Even this list may not prove to be comprehensive as new makers could still be discovered. The author invites the readers to send examples/photographs not noted here to him for further inclusion. What is clear however, that we cannot identify with complete certainty all of the forgers or subcontractors who have manufactured 1816 bayonets. Further research is needed and may uncover more names. Also, there are often times multiple armory forgers had the same initials and we cannot be sure they forged bayonets, breech plugs or lock parts. Every effort has been made to attribute the forgers name to the employee with extensive service at the armory or who was noted as a bayonet forger. Other questions exist, such as why certain forger's initials do not appear on bayonets. It may be that the trade was more specialized than we realize. Or, why bayonets have no blade marks at all. Or perhaps, some combinations where no photo is included, are merely misinterpretations of the letters based on age and wear and corrosion.

Sincere thanks go to SABC members Peter Schmidt, Joe Serbaroli, Fred Gaede, the late Dick Marsden, Tommy Goodwin and Tom Till without whose assistance this article and list could not have been completed. Further thanks to Paul Johnson and Jason Kaplan for their assistance and photographs. We have learned a great deal since Bob Reilly's fantastic reference work, *US Socket Bayonets and Scabbards*.⁶ We can now conclude the blade marks are not inspectors or state marks for South Carolina or North Carolina, but are the forgers, manufacturers and sub-contractors who produced and made these bayonets in the heat and noise of the forging shop.

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- ² Schmidt, Peter A. US Military Flintlock Muskets and their Bayonets, The Later Years 1816 through the Civil War. Andrew Mowbray Inc. Lincoln, Rhode Island. 2007. Pages 11-14.
- ³ Hamilton, John D. "Arms Makers in the Pioneer Valley". *The American Society of Arms Collectors Bulletin* Number 94, pages 17-32. 2006
- ⁴ Abott, Jacob. Marco Paul's Adventures in Pursuit of Knowledge Springfield Armory. T.H. Carter, Boston. 1843. pages 47-105

Manufacturers and Subcontractors							
Blade Mark	Manufacturer	Inspection Initials	Rack Numbers	Photo	Remarks		
US AW	Asa Walters	Ρ	No	UB AM	Another example has a JM Inspectors Mark		
US RJ	Robert Johnson	W	No	US			
US NS	Nathan Star	No	No	U.9. N.9			
US SM	Springfield Manufacturing Company	No	Yes	US	Produced and then sent to the Springfield Armory		
US SM CO	Springfield Manufacturing Company	No	Yes	USE CO	Produced externally but then sent to the Springfield Armory. Extremely rare		
No Blade Marks				There are many 1816 bayonets with no blade marks at all			

Harpers Ferry						
Blade Mark	Manufacturer	Inspection Initials	Rack Numbers	Photo	Remarks	
A US	Leo Atkinson	No	Yes	A US	Examples with and without rack numbers	
US AK	Alva Keefe			No Photo Available		
B US	George Butts	No	Yes	2		
C US	Daniel Crawford			No Photo Available		
D US	Notley Dearing	No	Yes	B		
J US	Henry Jones	No	Yes	S CG		
U US	John Unsild or Unseld	No	No	Us	Multiple types and two bottom stud examples exist with the same marks	
US EH	Edward Harding	No	No	M	No fuller	
US BB	Benjamin Butterfield			No Photo Available		
US HB	Henry Baroff			INB.		
H US	Possible: Timothy Herrington			No Photo Available		
V US	Possible: Ashford Voris			No Photo Available		
W US	Possible: Lee Waters or Isaac Wood			-		
US JM	Joseph McKee or John McClelland			No Photo Available		
US JN	Possible: Joe Norman			No Photo Available		

Springfield						
Blade Mark	Manufacturer	Inspection Initials	Rack Numbers	Photo	Remarks	
US SC	Samuel Chandler	No	No	23	SC is not South Carolina	
US CB	Charles Bornham	No	Unknown	188		
US WL	William Lay	No	No	WL WL		
US TA	Timothy Allen	No	No	US		
US MM	Myron Morgan	No	No	US		
US JB	Joel Brown	Yes	Yes	UIS JB		
US LA	Lucius Allen	No	No	L¥.	Lucius Allen milled Bayonet sockets at Springfield	
US ZW	Zera Waite	No	No	US	Zera Waite was a forging jobber at Springfield	
US WR	William Ray	No	No	WS.		
US EB	Elizur Bates	No	No	RE		
US JA	Julius Appleton	No	Yes	US. JA		
US JL	Joseph Lombard			US		
US NC	Nathan Crocker			NC		
US NS	Norman Sloan			US M3		
TW US	Thomas Warner			22		

Unknown Subcontractor/Forger						
Blade Mark	Manufacturer	Inspection Initials	Rack Numbers	Photo	Remarks	
US P	Unknown	No	No	NUS R	Formerly the collec- tion of Bob Reilly and Dick Marsden	
US SE	Unknown	АН	No	UBSB		
US and Two Dots	Unknown	No	No	(1) B	One dot above the US and one below	
US EC	Unknown	No	No	SC EC		
US	Unknown	JM	Yes	TEE		
US TC	Unknown					
US SN	Likely Simeon North			No Photo Available		
US JE	Unknown			IJ~	Could also be JL not JE	
US JH	Unknown			No Photo Available		
US SK	Unknown			-		
US JR	Unknown			L BN 3		
US HT	Unknown			No Photo Available		

Unknown Subcontractor/Forger							
Blade Mark	Manufacturer	Inspection Initials	Rack Numbers	Photo	Remarks		
US ET	Unknown			22.			
US LS	Unknown			US			
US HJ	Unknown			YS.			
US MN	Unknown			No Photo Available			
US RM	Unknown			No Photo Available			
US M	Unknown			No Photo Available			
L US	Unknown			TIS			
Sunburst and Dot	Unknown		Yes	in the second se	8 is on the shank where a subinspec- tors's initials would normally be located. Perhaps a Nathan Starr variant? Brown finish.		
US SR	Unknown			No Photo Available	Noted on Page 121 in the C. Meade Patter- son Auction Catalog		

