Tara Schmitt

From: Josh Loewensteiner
Sent: Sunday, December 07, 2014 8:08 PM
To: Tara Schmitt
Subject: FW: Bethel Burton Patent gun PROV

This is Prov for the Bethel Burton Patent gun that came in last week. I am sending this and another email.

Thanks for your help!
Josh

From: William Mason [mailto:commonsenseengineer@hotmail.com]
Sent: Tuesday, December 02, 2014 9:03 AM
To: jloew@jamesdjulia.com
Subject:

Josh, additional data.

I have a rare firearm. This was produced by Bethel Burton (prior to Ward Burton Partnership). I have firearm #3 that was developed as part of the U.S. Patent filing #26,476 by Bethel Burton in 1859. This firearm was produced prior to Bethel Burton being imprisoned by the union for attempting to sell weapons to the confederacy, and before his partnership with Ward. This firearm has been in my family since at least the 1860's, as my great grandfather Archibald Witham indicated this rifle was received via his forefathers business dealing with Bethel Burton in the 1860's. This firearm was in a small farmhouse in Terryville, Connecticut from circa 1898 until late last year with the passing of my father. I will provide provenance, documentation and pictures. I also included (below) emails content and data from the Curator of the Springfield Armory as it relates to this firearm. The firearm is in ORIGINAL condition. It has never been restored or modified. It has the original paraffin/oil coating from the 1860's on the metal and stock surfaces.

Tara Schmitt

From: Josh Loewensteiner
Sent: Sunday, December 07, 2014 8:09 PM
To: Tara Schmitt
Subject: FW: Bethel Burton Carbine

More prov on the Bethel Burton patent gun

On Mar 4, 2014, at 4:42 PM, William Mason wrote:

> Information from Springfield Armory Curator - Alexander Mackenzie
>
> ---
>
> Date: Thu, 30 Jan 2014 16:47:51 -0500
> Subject: Bethel Burton Carbine
> From: alex_mackenzie@nps.gov
> To: commonsenseengineer@hotmail.com
>
> Dear Mr. Mason,
>
> I received your letter and accompanying photographs regarding the Bethel Burton Carbine.
>
> You have quite a piece there. I think your gunsmith is absolutely correct that this is an early production from Bethel Burton. It may be, like he said, a patent model or one submitted to the Union for testing. I also found a reference that said that he was able to make a few samples to send to Virginia as part of his contract for 50,000 during the Civil War - just before he was arrested in New York for treason. This could very well be one of those as well. It will definitely take further research to figure that out in more certain terms. Here's a link to an article I found on a later Burton rifle that includes some early information about Burton himself: http://remingtonsociety.com/rsa/journals/RMR
>
> It's interesting that you happened to send your package when you did - I currently have an offer for several hundred letters between Mr. Burton and William Ward when they collaborated on the Ward-Burton Rifle. I am considering adding these to our collection. Springfield Armory has a strong connection to both Ward and Burton. Would you consider giving the carbine to our museum? It would make an excellent addition along with the letters. It could be a tax-deductible donation, or we do have a small fund available for purchasing items for the collection.
>
> Either way, I'd be happy to recommend an appraiser who can evaluate the carbine for you.

Thanks very much for contacting us, and if you'd like to discuss this further, please don't hesitate.

Sincerely,

Alex MacKenzie
Curator

Springfield Armory National Historic Site
One Armory Square, Suite 2
Springfield, MA 01105-1299
Ph: (413) 271-3971
Fax: (413) 747-8062
Alex_MacKenzie@nps.gov

A Rare Remington-Made Military Rifle

by
Craig Riesch

I recently acquired an interesting single shot, breechloading bolt action rifle designed by Bethel Burton of Brooklyn, New York [see Figure 1, below]. Burton was a firearms designer who had the vision to design one of the early breech-loading bolt-action rifles, first patented on December 20, 1859. His design employed a percussion system, but was unsuccessful in attracting the attention of the U.S. Ordnance Department, even during the Civil War.

Part of the problem may have been due to France and Russia. During the Italian Small Arms Trial the Burton rifle was chosen as the best breech-loading rifle, but for reasons now unknown, the Italian Government manufactured and issued a different rifle to its troops.

European and American engineering publications of the period praised the new Burton design as being one of the best new breech-loading designs. During the fair hosted by the American Institute of New York in 1870, Bethel Burton was awarded a metal for â€œthe best breech-loading rifle.â€

Bethel Burton was also active in the United States, attempting to get his design accepted by the military. The second post-war, U.S. Army Small Arms Board was the 1866 Hancock Board, in which Burton submitted a .50 caliber carbine. Burton later submitted sample rifles to the State of New York Small Arms Board in 1867, and again in 1869 to the U.S. Navy Small Arms Board. None of the organizations adopted Burtonâ€™s carbine or rifle.

Burtonâ€™s arrest by federal marshals, along with two of his partners, on September 12, 1861, for attempting to manufacture his patented rifle for the Confederacy. He had secured a contract to manufacture 40,000 to 50,000 rifles for the Commonwealth of Virginia, but was only able to produce sample rifles prior to his arrest in New York. Burton was detained for less than a year at Fort Warren, and after taking an oath of allegiance to the United States, was no longer considered a threat and was released.

Burton redesigned and improved his rifle to use a metallic fixed cartridge and received a new patent on August 11, 1868. The bolt and receiver employed an interrupted thread for positive locking [see Figure 2]. Burton submitted samples of the new design to major foreign powers for military consideration. The Burton rifle was well received in Great Britain, Spain, Italy and considered in

During the New York Small Arms Board, Burton met Colonel William G. Ward, a member of the Board. Ward was fascinated with Burtonâ€™s design and the two eventually became partners. Burtonâ€™s patent was reissued on November 2, 1869 adding William Wardâ€™s name to the patent and the rifle was now referred to as the Ward- Burton.

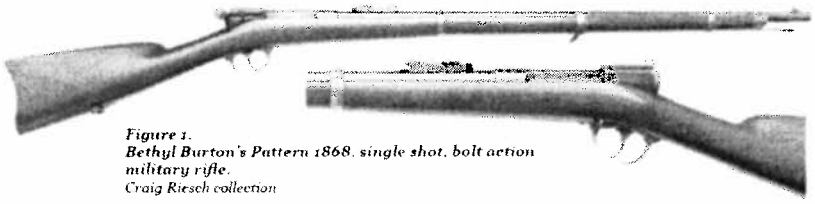
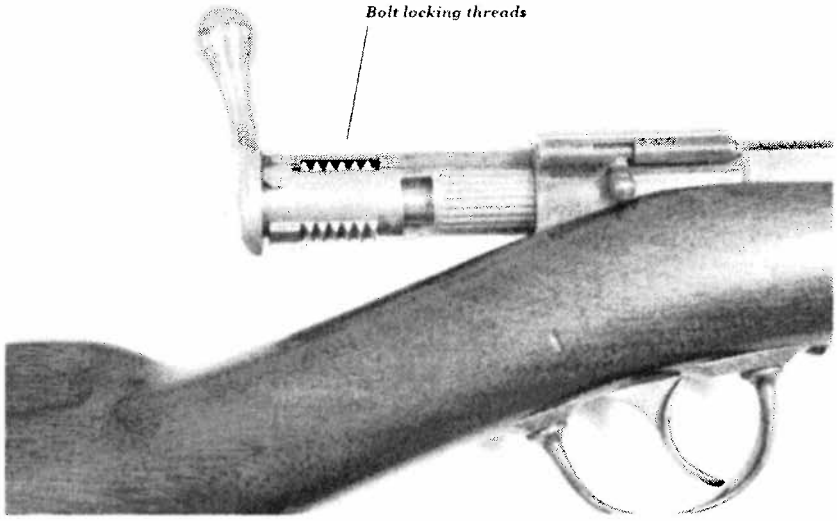


Figure 1.
Bethyl Burton's Pattern 1868, single shot, bolt action military rifle.
Craig Riesch collection



Three Pattern 1868 rifles in different calibers were submitted to the St. Louis Small Arms Board by Ward and Burton in 1870, and their .50 caliber rifle was recommended for field trials. The Burton Pattern 1868 rifle was the predecessor to the U. S. Model 1871 Ward-Burton Trial rifle, the first bolt-action rifle to be manufactured at Springfield Armory in 1871. The Armory was ordered to manufacture 1,011 Ward Burton rifles in .50-70 Govt centerfire and 316 carbines in .50-55 centerfire for field trials. The Ward-Burton design was rejected for parts breakage as well as safety concerns and the Model 1873 Springfield rifle and carbine in .45-70 Govt were eventually adopted by the U.S. Army.

Burton military rifles -- as distinct from the Ward-Burton rifle -- have been observed in four calibers: .58 conversion, .50 caliber, .45 bottlenecked case and .42 bottlenecked case, all in centerfire. My Burton rifle is chambered for the .45 caliber bottleneck cartridge and the bore has six lands and grooves. Springfield Armory produced barrels had three lands and grooves.

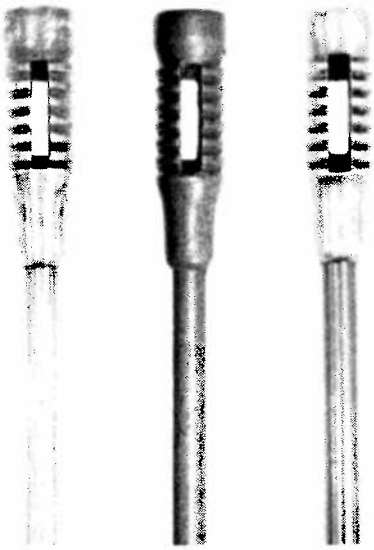
While I was researching this unusual rifle I started to think about where the rifle had been manufactured, as various parts were definitely not produced by the Springfield Armory... and Burton did not own his own production facilities. The only marking on the rifle is: BURTONâ€™S PAT. / DEC. 20th 1859 / AUG. 12th 1868 on top of the bolt [see Figure 3,

below].

The 1871 Trials rifles and carbines manufactured by Springfield Armory had both Wardâ€™s and Burtonâ€™s names on top of the bolt and were not serial numbered.

The rifle I acquired also has the fitting number 28 stamped on the receiver, barrel, trigger, trigger plate and on the stock near the butt swivel plate. The inside of the stock is marked XXVIII in the receiver bed.

As I studied the parts on the Burton rifle, the first part that caught my attention was the cleaning rod tip. The tip was formed identically to the cleaning rod tips found on both Remington rolling block rifles and Lee magazine rifles manufactured by E. Remington & Sons. [see Figure 4, to the right]



The following parts installed on my Burton rifle are typical of those parts found on Remington made military rifles of the period.

- 1. Barrel Bands: The three barrel bands on the Burton rifle have the U on the left side when the open end of the U faces the muzzle, which is consistent with Remington barrel bands. Springfield Armory and contract musket barrel bands were marked on the right side with the opening of the U facing the muzzle. [see Figure 5, below]

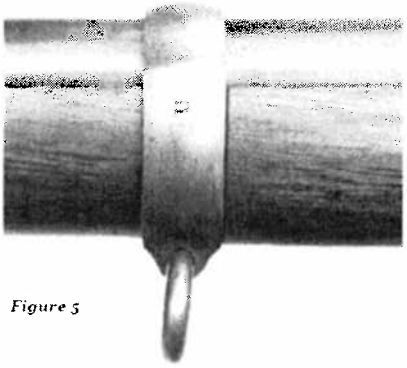
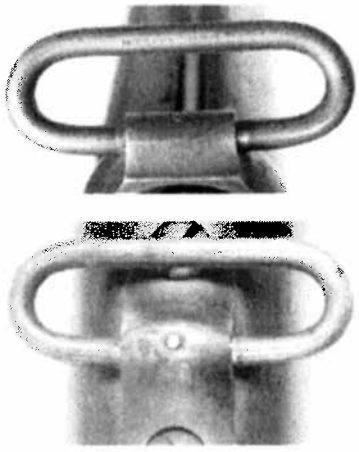


Figure 5

- 2. Middle Band Swivel: The swivel was pinned in place at the bottom, outside of the barrel band after it was installed. The swivel is marked, Patâ€™d Feb 11th 1868. The U. S. Patent number is 74,427, titled â€œImprovement In Strap-Ring For Firearmsâ€ and was assigned to Joseph Rider and to E. Remington and Sons.
- 3. Butt Swivel: After installation, the butt swivel was also pinned in place through the outside of the butt swivel plate and the swivel was marked, Patâ€™d Feb 11th 1868. This was typical of Remington manufactured butt swivel assemblies of the period [see Figure 6, to the right].



Notice how the swivel was pinned in place on the middle band and butt swivel. This was typical of Remingtonâ€™s butt swivel assemblies of the period.

- 4. Band Springs: The Burton rifle band springs are shorter with rounded ends and wider than band springs installed on Springfield Armory or contract muskets. The ends of Springfield Armory band springs were squared. Remington manufactured band springs of this period are rounded at the muzzle end and are identical to the band springs on the Burton rifle.
- 5. Rear Sight: The rear sight is the same or similar to those found on other Remington military rifles of the period. The seven Remington rolling block rifles and the two experimental Freeman Rifles (manufactured by E. Remington & Sons) that were photographed and reported in Ordnance Memoranda #15, published in 1873, clearly show rear sights and cleaning rods that are identical to the ones on the Burton rifle. [for rear sight, see Figure 7 on page 23].

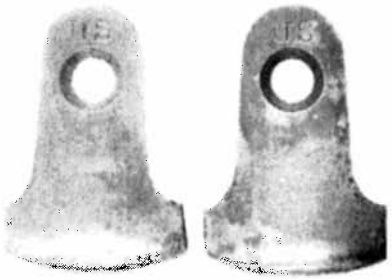
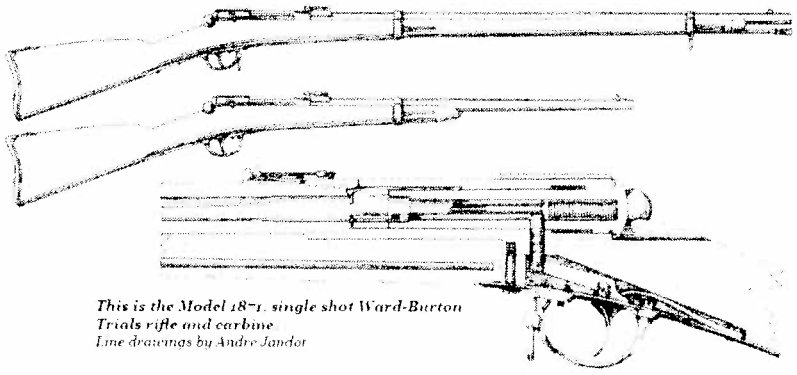


Figure 8.
Burton butt plate, left and Remington-Lee butt plate, right. Note the similarities.



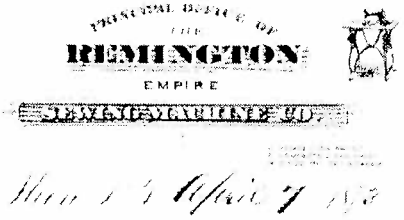
This is the Model 18~1, single shot Ward-Burton Trials rifle and carbine.
Line drawings by Andre Jandot

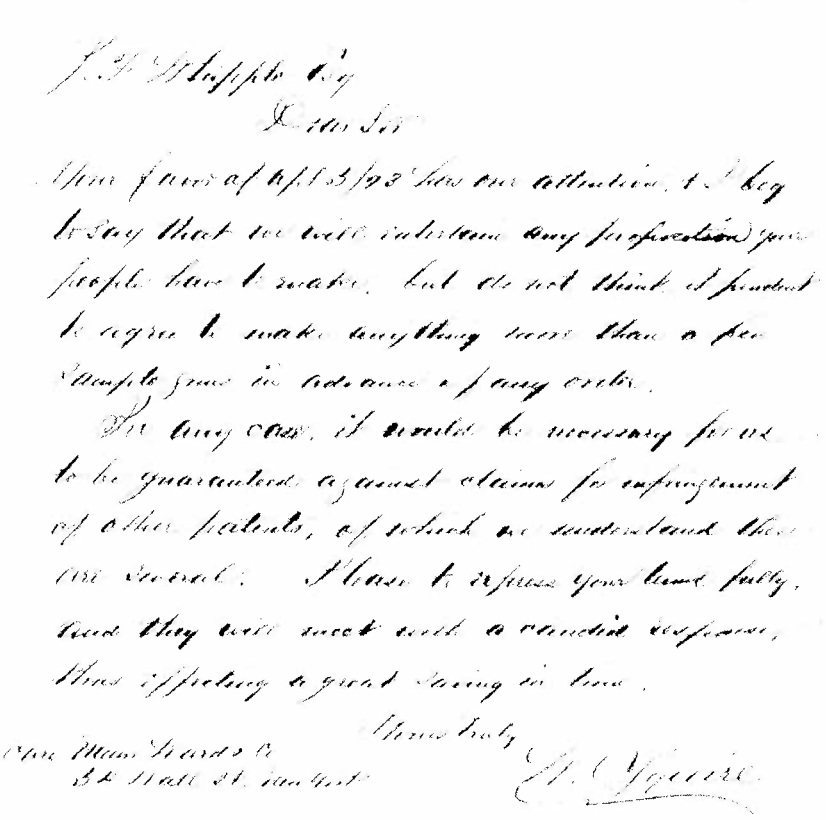
- 6. Butt Plate: The butt plate on the Burton rifle is interchangeable with the Remington Lee butt plate and the U S font is identical on both [see Figure 8, below left]. The Burton butt plate is not interchangeable with Springfield Armory or contract musket butt plates, which are slightly larger.

After further research into the component parts of my Burton rifle it is my belief that this small quantity of Burton rifles were indeed manufactured by the Remington Arms Company in the 1868-69 time frame.

Some correspondence has been uncovered between Bethel Burton and E. Remington & Sons in regard to possible patent infringements for manufacturing a few sample guns. [see Figure 10 on the next page]. It would be beneficial if some documentation showing a request from Bethel Burton, or a production order for a quantity of rifles to be made could be found.

I believe this Burton rifle to be part of a small Remington manufacturing run making it a rare E. Remington & Sons-made rifle. As a side note, Remington manufactured magazine rifles under a Navy contract for the Lee Arms Company and the only marking on those rifles was Lee Arms Co. Bridgeport, Conn. U.S.A. and Patented Nov. 4, 1879 with the serial number marked on the receiver. Like the Burton rifle, there were no Remington markings on the Lee rifle, but the rear sights, cleaning rods, etc. were clearly of Remington manufacture.





Letter courtesy Ed Hull.

Bethal Burton devoted much of his life to designing firearms and he gathered a great deal of praise and interest, but to no avail. His first patent was granted in 1859 and his last patent for a machine gun in 1905, shortly after his death. He was never able to secure a military contract, American or foreign, and his efforts in the commercial field were dismal. Perhaps the Burton bolt-action design was too far ahead of its time to gain acceptance. Even as he worked hard to sell his design concept, many nations, including the United States, were adopting bolt-action repeaters that in some respects, were inferior to his.

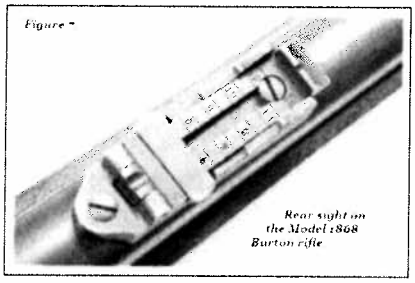


Figure 7

Rear sight on the Model 1868 Burton rifle

Today, Bethel Burton is nearly forgotten as a firearms designer. Few standard reference works on the development of the bolt-action rifle even include his name and work. Yet he was amazingly foresighted and in the 1870s and early 1880s, his designs might have been considered superior if he had obtained the backing of a major nationâ€™s ordnance engineers.

My thanks to Ed Hull and Joe Poyer for research and editorial assistance. All photographs by Joe Poyer.

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