

Handguns of the Massachusetts Arms Co.

by L. W. Jones

The subject of this paper, the Massachusetts Arms Company, has been partially covered in many sources, but never has it been completely covered. Since it is a quite complicated subject I, too, shall not attempt to cover the subject completely, but to limit myself to the percussion revolvers produced by this company. This is fitting, as the manufacture of percussion revolvers was the reason the company was formed and they were the main product of the company for the first ten years of its life.

The Massachusetts Arms Company was formed late in 1849 and incorporated on March 5th, 1850, but the story of its percussion revolvers starts much earlier.

On April 29th, 1837, Daniel Leavitt, of Cabotsville, Massachusetts, received patent #182 for a revolver which claimed "the giving of the chambered or forward end of the cylinder a convex form, by which the ignition of the charge in a chamber contiguous to that which is being fired is prevented." Very few of these revolvers were made by Leavitt. The poor success of a Leavitt carbine in a trial at West Point in 1837 probably led to the lack of development of the system.

The story now moves to 1847: in 1836 Samuel Colt patented what was to become the first commercially successful revolver (earlier revolvers of Wheeler and Miller, while made in considerable quantities, cannot be considered to have been "commercially successful"). In 1847 Colt received his first government contract for the production of 1,000 revolvers. Inasmuch as his first company, the Patent Arms Company, of Paterson, New Jersey, had failed and he was without manufacturing facilities, he contracted with Eli Whitney of New Haven, Connecticut, a manufacturer of muskets for the government, to make his revolvers. After about a year, the contract was completed and under the terms of the contract, Whitney turned over all of the special tools and machinery used in making the revolvers to Colt.

Colt moved the machinery to Hartford, Connecticut, and with the assistance of several men he hired away from Whitney, continued to produce revolvers on the same pattern as those made under the 1847 contract. This crew, which included Almon Lazell, William Miller, Thomas Peard and Joshua Stevens, had entered into a contract with Colt in November, 1847, to make parts for these dragoon-size revolvers, using some of the Walker parts made for the earlier contract. In addition to their work on the Colt revolvers, Stevens and Miller were working on a revolver of their own, of different design. On July 18, 1848, Colt discovered that the two men were working on their revolvers and fired them. The two then went to work with Edwin Wesson, also of Hartford, who had also been working on a revolver.

Early in 1848, Daniel Leavitt offered to supply the U.S. Government revolvers with "of a superior pattern" to be



manufactured by Edwin Wesson. Correspondence between Leavitt, Wesson, and the Ordnance Department continued through the end of the year, but no government orders were forthcoming.

Shortly after Stevens and Miller joined Edwin Wesson, a patent on the new revolving system, employing bevel gears to revolve the cylinder, was applied for. This patent was not granted until August 28th, 1849, nearly a year later. Several revolvers were made before the patent was issued and by the time the patent was issued Edwin Wesson had died. These revolvers are variously marked and will be covered later. With the death of Edwin Wesson, it became necessary to form a new company to carry on the business. Besides the heirs of Edwin Wesson, others included in the group which formed the Massachusetts Arms Company were James T. Ames, Timothy W. Carter, William Miller, Horace Smith, Joshua Stevens and Benjamin F. Warner. Ames was the president of the Ames Manufacturing Company of Chicopee Falls, Massachusetts and the chief financial backer of the Massachusetts Arms Company. Using a portion of the Ames Manufacturing Company factory and the tools and patterns made for the completion of early revolvers in Hartford, production was under way in a short period of time. The first revolvers made by the Massachusetts Arms Company were virtually identical to those made by Wesson in Hartford. Even though the Ordnance Department had not ordered any revolvers from Wesson, several officers thought that the form and operation was superior to Colt's and these "dragoon" size revolvers constituted a threat to the monopoly Samuel Colt had enjoyed on government contracts for revolvers, so he very shortly instituted a patent infringement suit against the new company.

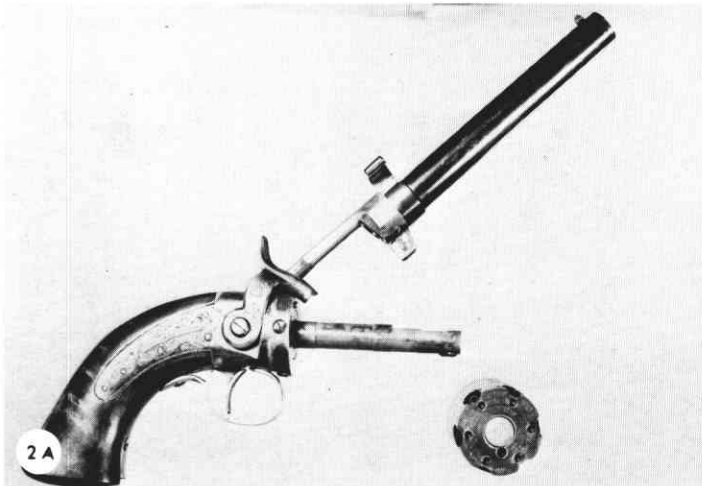
This trial, in the U.S. Circuit Court of Boston, was tried on June 30th, 1851 and is a prime source of information about both the patents and the Massachusetts Arms Company. We refer those interested in minute details either to the manuscript of the testimony in the National Archives



1 A belt size Wesson & Leavitt revolver of the preproduction type with an octagonal barrel and no markings, probably made in Europe.



2 A belt size preproduction revolver made by the Massachusetts Arms Company. The barrel is released for removing the cylinder by pulling forward on the knob at the front end of the cylinder pin. Sam Smith collection.



2a A pre-production type belt revolver and a (2B) dragoon revolver of production type with the barrels raised to show the difference in catches.



2B



3 Belt size Wesson & Leavitt revolver, showing the use of the Stevens patent barrel catch, which rotates around the main barrel and hooks over the cylinder pin to hold the barrel in place.

or to the printed record of the case, but for our purpose it is sufficient to say that Colt won the case and was able to stop the Massachusetts Arms Company from producing revolvers for more than seven years, which infringed on Colt's rather far-reaching patent. They were able to make percussion revolvers, but the patent limitations caused them to be unacceptable to the buying public and only small numbers were made.

Before we start into the production revolvers made by the Massachusetts Arms Company, let us give a brief glance at the pre-production or prototype revolvers made by the earlier companies. The first of these were made by Edwin Wesson at Hartford starting in May of 1848. These earliest revolvers were marked D. LEAVITT'S PATENT/MANUFACTURED BY E. WESSON, STEVENS & MILLER, HARTFORD, CT. It is not known how many revolvers were made with this marking, but only one specimen is known today, that in the Colt collection at the



3A The dragoon size Wesson & Leavitt revolver, six-shot, .40 caliber, and approximately 4 lbs. About 1,000 were made.



Connecticut State Library. After Wesson's death in 1849, Thomas Warner, who had been both the superintendent of the Springfield Armory and Superintendent of Whitney's plant in New Haven, was hired by the executor of the Wesson estate, Edwin G. Ripley, to finish the work in progress at that time. The revolvers made at this time were marked MAND. BY WARNER & WESSON HARd., Ct. These prototype revolvers differed from the later production revolvers only in the shape of the grip and the method of fastening the barrel. Both the prototype and production revolvers incorporated the patents of Wesson (#6669, August 28th, 1849) and Leavitt's (#182, April 29th, 1837).

After production started, the Wesson & Leavitt revolvers were made in two sizes — a .40 caliber or "dragoon" size and .31 caliber "belt" size. About 1,000 of each size were made. The first 30 dragoon revolvers were made with 6¼ inch barrels; thereafter 7½ inch was standard with an occasional 6¾ or 8 inch appearing at random. The bar-



5A The two sizes of hand revolved Massachusetts Arms Company revolvers. The top belt size in .31 caliber, and the lower is the pocket size in .28. Both are six shot and fired by a single nipple.



4 Original casing of the belt size Wesson & Leavitt revolver showing the proper accessories, which consist of the bullet mold, flask, combination screw driver and nipple wrench and separate rammer. The caps are a replacement.



6 The Maynard tape priming system showing the roll of caps. Just like today's cap guns, they are advanced by the roller, which is operated just like the cylinder on a normal revolver. The cap is cut off individually as it is fed through the notch in the top of the lock plate and smashed against the nipple.



9. Stevens 1855 patent revolver with convex cylinder face and revolved by pulling the trigger. After pulling the trigger the first time to revolve the cylinder the hammer is then cocked and a second pull on the trigger fires the gun.



10. Stevens 1855 patent pocket revolver, serial no. 15 revolved by the hammer, flat cylinder face and 3 inch barrel. This was converted from the trigger revolved type by making some internal changes, the only external change is the addition of a set screw at the rear of the trigger, this kept the trigger from being pulled too far.



11. Stevens 1855 patent pocket revolver, serial no. 398, with a convex cylinder face and revolved by cocking the hammer, 3½ inch barrel. Note also that this gun has serial no. 1005 on the bottom of the barrel. These pocket revolvers may have as many as four different serial numbers on them, which are not serial numbers at all, but a means of keeping track of the patent royalties due the various patentees.



7. Belt size hand revolved revolver in original case again showing the proper accessories. The acid etched barrel is very unusual. The cylinders on all of these revolvers were acid etched, but to find it on any other part is unusual.

rel length on the pocket revolvers ranged from 3 to inches.

As a result of the patent infringement suit with Samuel Colt, mentioned previously, the Massachusetts Armory Company was forced to make revolvers with a hand revolved cylinder which would not infringe on Colt's patent. In order to make the idea slightly more palatable to the buying public the Maynard priming device was added so that the nipples did not have to be capped. Two sizes were made, a belt size in .31 caliber and a pocket size in .28 caliber. Neither style proved to be very popular, and only about 1,000 of the belt size and 900 of the pocket size were made.

Several attempts were made to design a revolving mechanism which would not infringe on Colt's patents. The first of these, was patented by Joshua Stevens on August 9th, 1853. This system, which involved the cocking of the hammer and then revolving the cylinder and firing the gun.



8. Original case with the hand turned revolver, pocket size, again showing the original accessories. Note the tin of caps which is "Japanned" in blue rather than the normal brown or black.

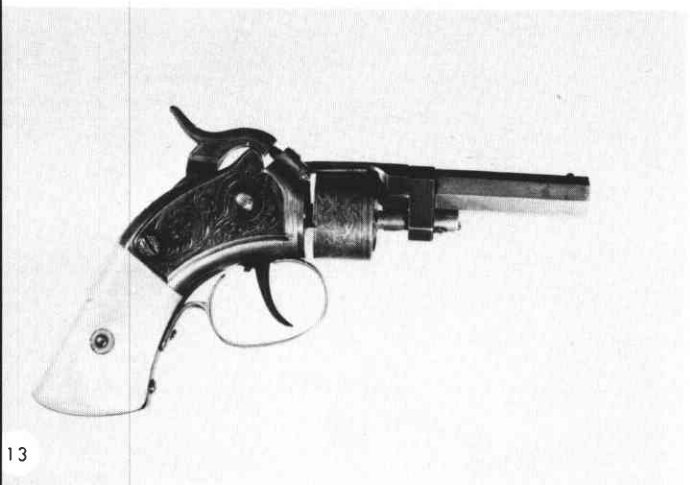


12 Stevens 1855 patent pocket revolver, flat cylinder face, hammer revolved, 3 inch barrel.

with a single pull of the trigger was rather complicated and very few (approximately 50 belt size and 200 pocket size) were made. The vast majority of the pocket size were converted to the 1855 system before they left the factory.

On January 2, 1855, Stevens received a patent on a similar system, except that the trigger was pulled to revolve the cylinder before the hammer was cocked, and a second pull on the trigger then fired the gun. A cam prevented the cylinder from being rotated when the trigger was pulled the second time to fire the gun. This new style of pocket revolver was slightly larger than the earlier type and was made with 3 and 3½ inch round barrels. The earliest style was made with the Leavitt patent convex cylinder face and the later ones were made with a flat cylinder face.

After the expiration of Colt's patent in 1857, the Massachusetts Arms Company and other manufacturers were free to make revolvers which were revolved by cocking the hammer. The Massachusetts Arms Company chose to



13 Stevens 1855 patent pocket revolver which is unusual in several respects, the octagonal barrel is very scarce on these large frame pocket revolvers, the cylinder is bored through on the Rollin White 1855 patent. This was the patent that gave Smith & Wesson the monopoly on cartridge revolvers until 1869. This particular gun was White's personal gun.



14 Rear of the cylinder of the Stevens 1855 patent revolvers. The holes around the periphery of the cylinder are the flash holes for discharging the chamber, the large holes are the cylinder stops, while the inner ring is the ratchet for turning the cylinder, this ratchet is the same whether it is revolved by cocking the hammer or pulling the trigger.



15 Rear of the cylinder for the hand revolved revolver showing the differences between it and the self cocking type. These have no ratchet for turning, only the notches the spring loaded catch goes in.



16 While these are not revolvers they fit at this place because of their relationship to the Stevens 1855 patent revolvers. These are the single shot pistols with the Maynard priming device. Very few of these were produced; the highest serial number known is #534.



17. Standard production Adams patent Navy size revolver with lanyard hole through the grips, serial no. 987, nearly at the end of production.



18. Adams patent Navy size revolver, serial no. 405, with lanyard ring on the butt and the different backstrap and checkering pattern.



19. Adams patent pocket size revolver serial no. 2, with engraved frame and etched cylinder. The barrel is the standard 3 inch barrel.

make the same style pocket revolver, which was altered to revolve the cylinder by the cocking of the hammer. Externally these are identical to the earlier type.

Perhaps the most interesting revolver made on this frame was the one made for Rollin White to demonstrate his patent for the bored through chamber (actually 12 were made of this style).

The last of the percussion revolvers made by the Massachusetts Arms Company were the Navy and pocket models made under the patents of Adams, Beaumont, and Kerr. About 1,000 of these revolvers were made in the Navy size and 4500 in the pocket size. The majority of the Navy size were purchased by the U.S. Government during the Civil War.

With the end of the Civil War there was a sharp decline in the demand for revolvers and production of them was curtailed at the Massachusetts Arms Company. In a period of slightly more than 15 years, the Massachusetts Arms Company managed to produce about 12,000 revolvers. They did not go into the manufacture of cartridge revolvers.

Other products of the Massachusetts Arms Company are primarily long guns, such as the Maynard, Greene and Smith carbines, sporting rifles of various patents and muzzle loading shotguns.

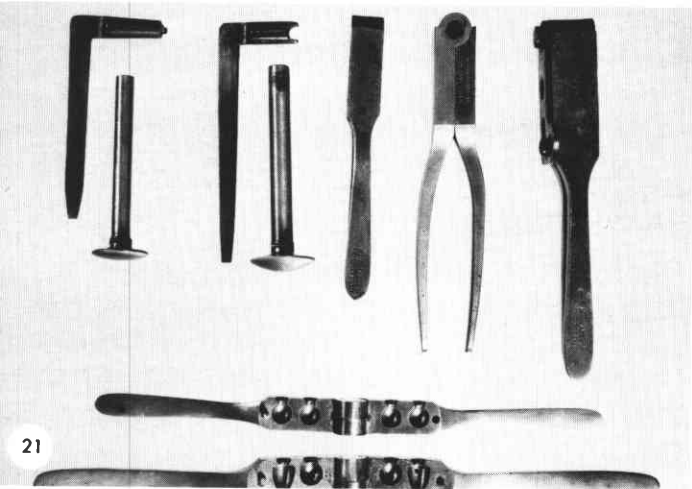
#1 For "volunteering" me to make this presentation I wish to thank Mr. Frank Sellers.

And

#2 For his unselfish assistance in preparing this paper and for allowing me to unmercifully pry upon his knowledge I also wish to thank Mr. Frank.

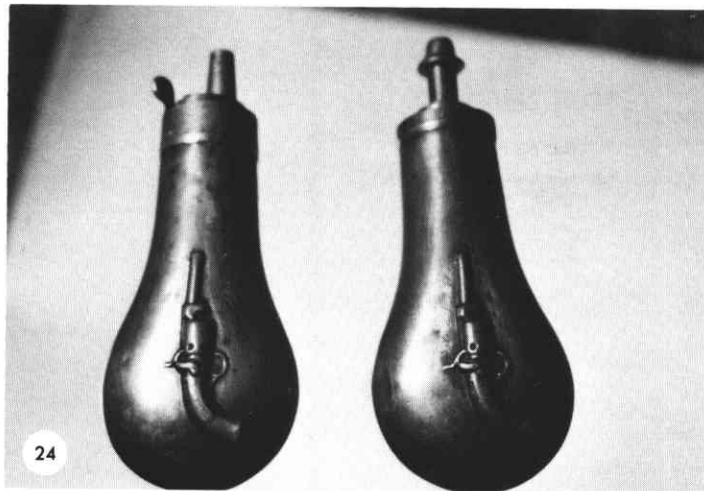


20. The Adams patent pocket size revolver with a 4 inch round barrel. Only about 200 of these round barreled pocket revolvers were made.



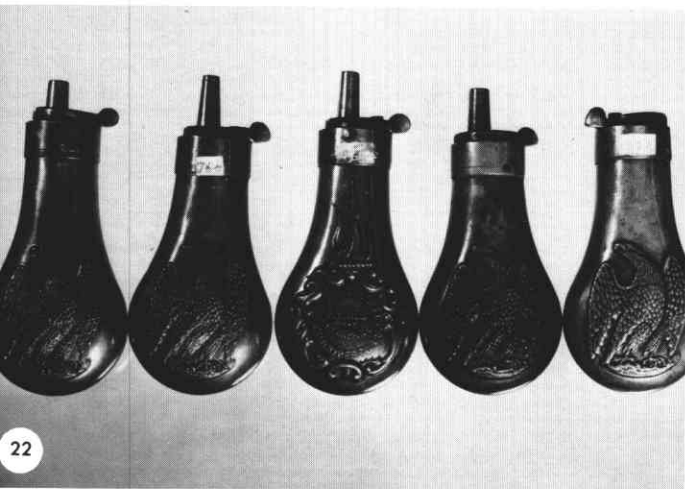
21

21. A group of the loading tools for the Massachusetts Arms Company. On the left are the combination screwdriver nipple wrenches, at top are the rammers for the Wesson & Leavitt and Stevens patent revolvers, at bottom are the bullet molds, from left to right are the pocket size revolvers in .28 and .31 caliber, .31 caliber belt size Wesson & Leavitt hand revolved, and on the right the .36 caliber for the Adams patent Navy revolver.



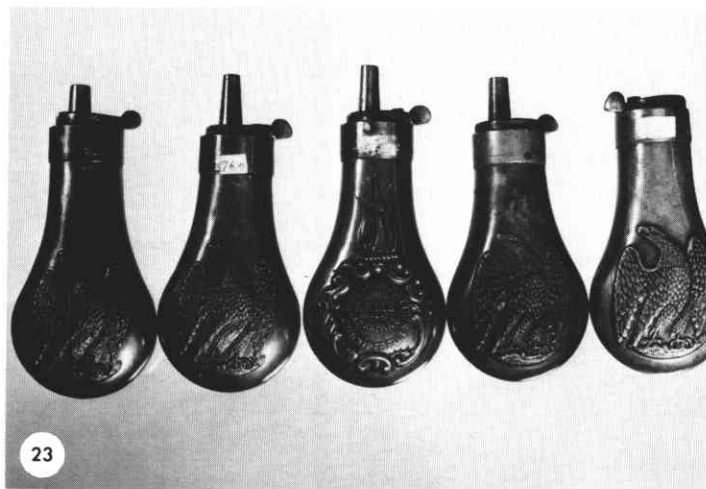
24

24. Two flasks usually associated with Massachusetts Arms Co., but not found marked. They show a Wesson & Leavitt revolver.



22

22. The various powder flasks used with Massachusetts Arms Company revolvers: those on the left have an eagle on both sides; that in the center has the Massachusetts Arms Company logo on both sides, and those on the right have the logo on one side and the eagle on the other.



23



Ysleta Mission, El Paso