

some comments on

THE BLAKE RIFLE

By Albert C. Ross

The Blake Bolt Action Repeating Rifle was developed and manufactured from about 1890 to 1910. The Board of Army Officers appointed in 1890 to select an arm for the U.S. Army had been in session nearly two years when John Henry Blake learned that few, if any, arms of American invention had been presented to the Review Board and that the award for a new service rifle was likely to go to foreign inventors. From his determination to present a rifle of American invention, the "Blake Rifle System" was born. The Army Review Board selected the Krag-Jorgensen in 30-40 Krag caliber and although still a black powder cartridge, it represented the first .30 caliber to be adopted for the standard service rifle.

The Rifle pictured with this article, shown in its military form, was one of those submitted to the Army Board on Magazine Arms, which reported May 20, 1893, in favor of the Krag-Jorgensen, invented in Norway and adopted by the Army of Denmark, for the standard issue rifle of the United States. The tests were held at the Springfield Armory. In all, over 55 different rifles representing the latest designs from all over the world were tested. At the time it was the most extensive test of rifles ever held.

Although John Henry Blake and his rifle did not prevail over the now famous Krag in the Army tests, he did pioneer many innovative ideas for his time. The Blake Rifle was the first American sporting rifle to be put on the market with a central magazine. It helped establish the use of round pointed bullets in place of the flat pointed bullets then in use. Blake felt his rifle had two distinctive features: FIRST — charging as a MULTIPLE LOADER the magazine with seven cartridges "en bloc", that is in one movement.

SECOND — a POSITIVE movement instead of a spring to feed the cartridges in the magazine.

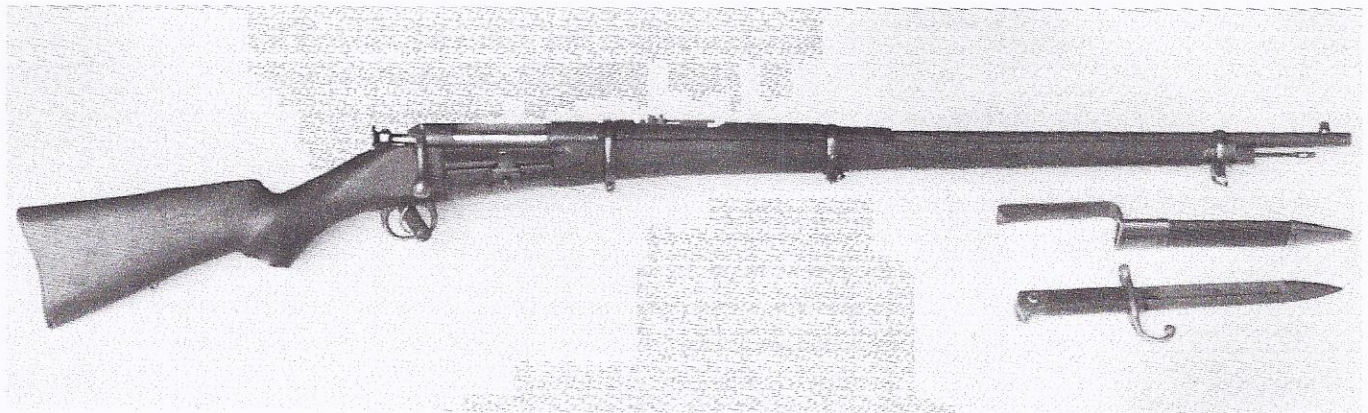
Blake also claimed to have the strongest action ever put into a repeater and that his rifle could regularly handle cartridges having nearly 50 percent more power than the standard 30 caliber Army. The initial test by the Army

Board on Magazine Rifles was reported on August 19, 1892. In this test, the Blake No. 1 was listed as rifle No. 38 and the Blake No. 2 listed as rifle No. 47 of those rifles tested. The recommendation of the Army Board was that the Krag-Jorgensen No. 5 rifle be adopted and the Army began plans to put that rifle into production. The American inventors who had submitted rifles for consideration were disturbed that a foreign rifle was to be adopted by the Army as their new service rifle. As could be expected, politics then entered the picture. Congress, supporting the inventors' position, added stipulations to the funding for the initial production of the Army's new rifle. Those stipulations required that the Army conduct an additional test of the American inventions only, before the authorized funds could be spent. The Congress also required that the new tests be conducted by a new board. As a result of these stipulations, on March 1, 1893, a new board was appointed to test the American inventions and commencing on April 7, 1893, an additional period of 30 days was allowed for the presentation of additional requests for arms to be evaluated. Blake again submitted his No. 1 and No. 2 Rifles for these tests. The report from the Board's evaluation on these 1893 tests relating to the Blake Rifle was as follows:

"No. 8 Blake - The system violates a number of the standard conditions. Great force is required to operate the mechanism; the cutoff can be moved, and the magazine loaded only when the bolt is in a particular position. The cartridge packet, besides being an essential portion of the magazine, in itself a serious defect, is bulky and awkward to carry and not easy of insertion in the magazine box. The system is not suited to the military service."

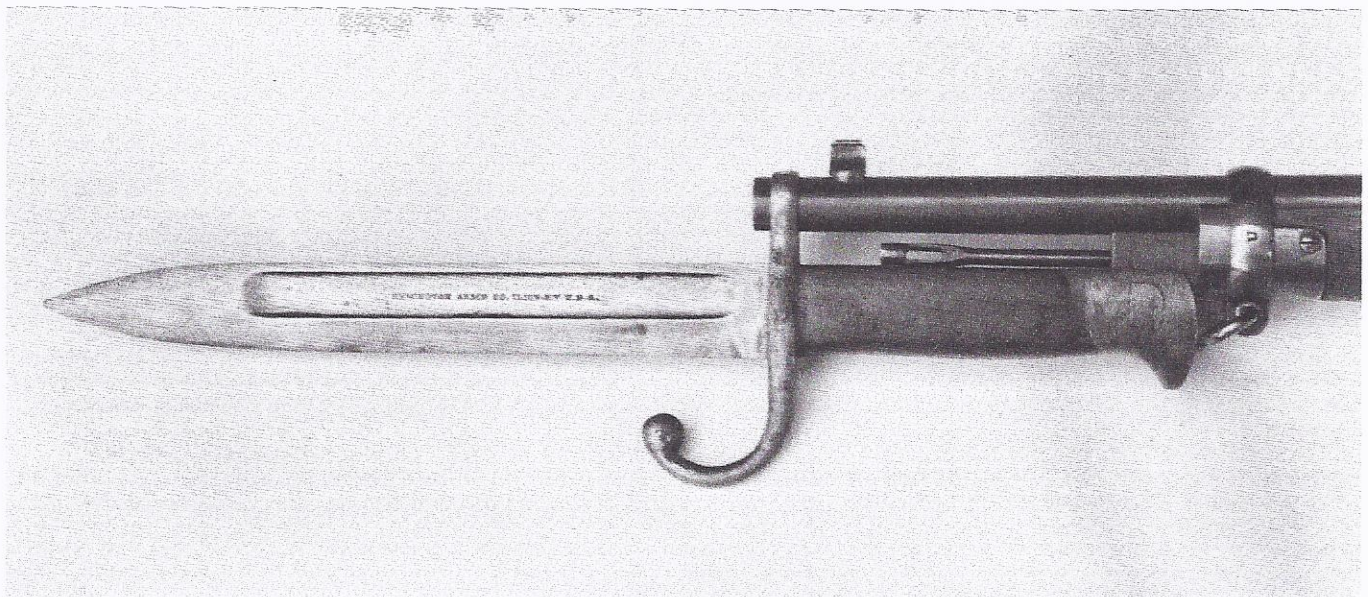
"No. 14, Blake No. 2 - This was the only arm submitted after the first period assigned in the original order, and before May 1, 1893. The system being identical with the Blake No. 1, it is, for the reason previously stated, considered unsuited to the military service."

The history of these tests for the adoption of a new

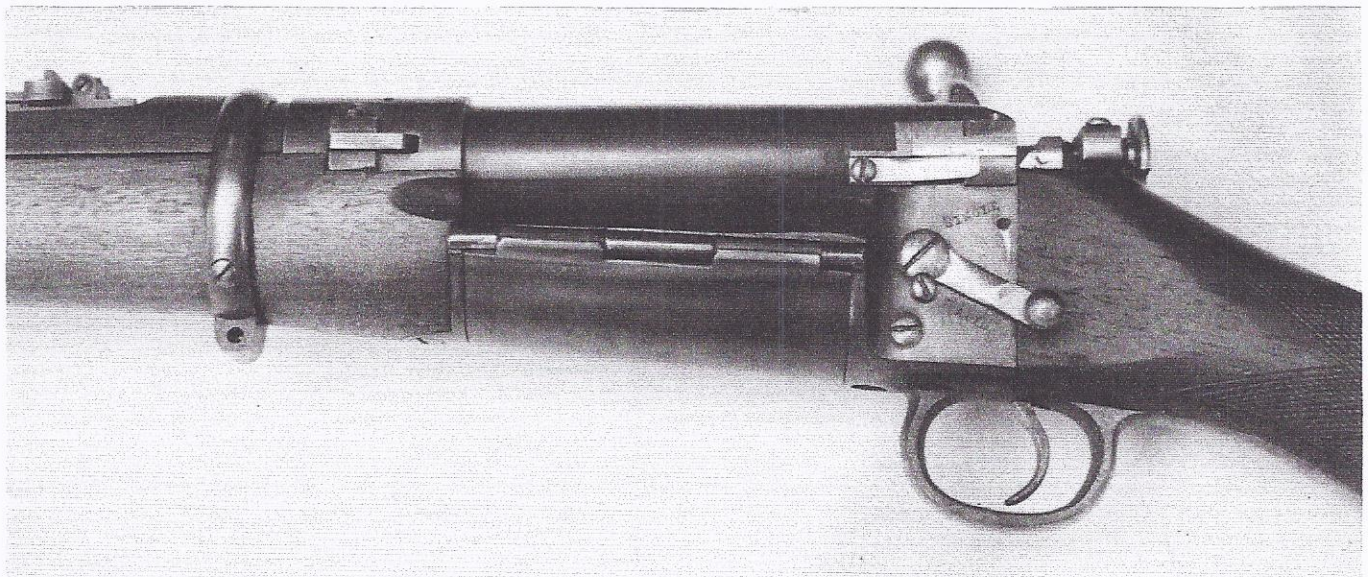


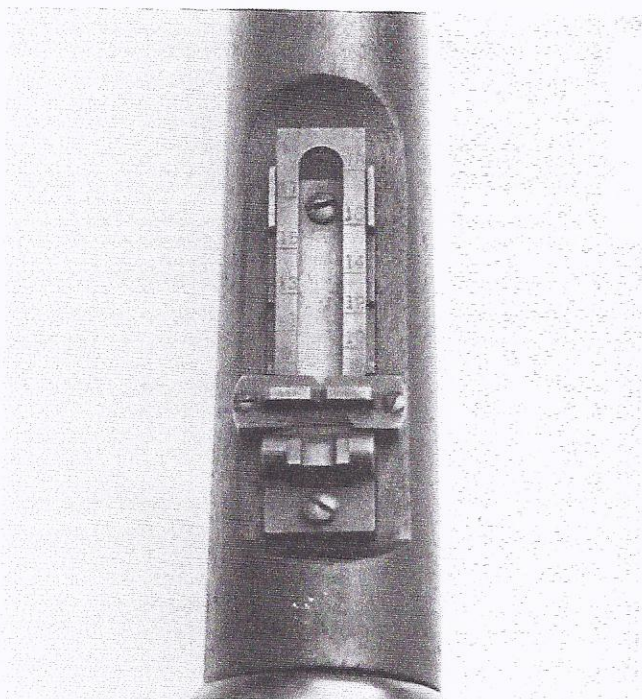
Blake rifle with issue bayonet.

Blake rifle issue Remington bayonet on rifle. Short blade was unusual for 1896.



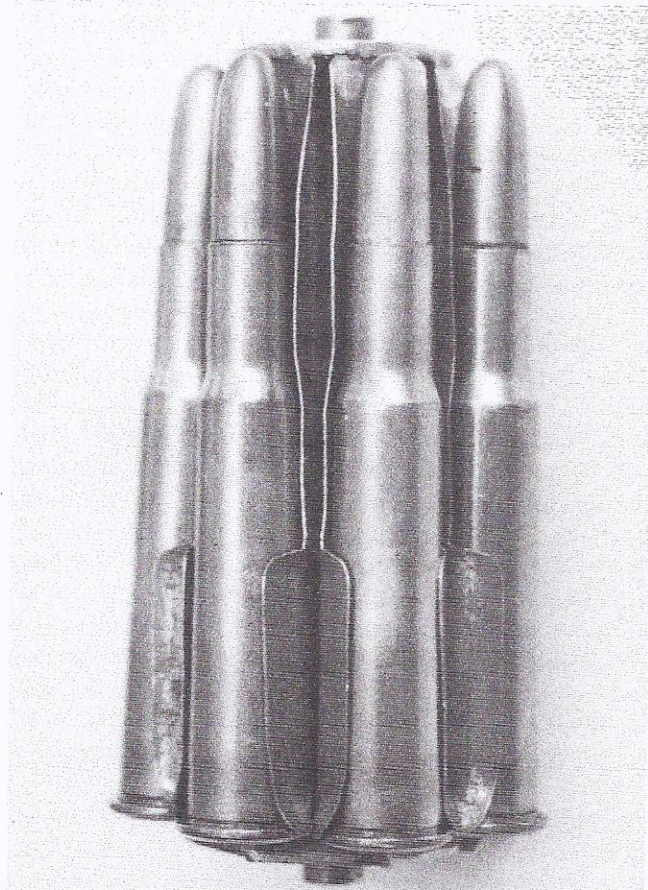
Blake rifle magazine selector in rapid fire position.





Blake rifle rear sight, military model.

Side view of fully charged *en bloc* clip for Blake rifle. .30 US (30-40 Krag).



magazine rifle for the United States Army can be found in the very excellent work by Lieutenant Colonel William S. Brophy, USAR RET., *The Krag Rifle*, published by Beinfeld Publishing, Inc., in 1980. These reports are found in Section I, Chapter I of Colonel Brophy's book.

Although Blake was unsuccessful with the Army, he continued for a number of years after the 1893 tests to try to convince the Army that they had made a mistake and that his rifle should be adopted. He compiled a list of 27 outstanding principal advantages of the Blake Rifle and incorporated them in much of his correspondence with the Army and War Department in his continuing attempts to have the Krag Rifle scraped and the Blake adopted. Those 27 advantages are as follows:

1. The system of carrying the cartridges in a cylindrical revolving packet, with which the magazine is charged in one movement.
2. Uniform balance of the rifle whether the magazine is full or empty. This is assured by the magazine being centrally located immediately in front of the trigger guard so that the position of the center of gravity is not altered as each shot is fired.
3. Positive feed of cartridges in magazine, avoiding the use of a magazine spring for the purpose. This is a great convenience in loading, and also reduces liability of disablement. The positive feed enables the full strength of the operator to be used in feeding the cartridges in front of the bolt ready on its forward movement to be pushed into the chamber of the barrel, and avoids the dependence on a weak spring easily clogged to do this.
4. Choice of ammunition caused by the cartridges being separated from each other in the magazine. For example: paper patched bullets, which are so popular, may be used, as the shell is not required to be crimped on the bullet to prevent the end spring pressure setting up the bullets or shortening the cartridges, as in rifles with tubular magazine.
5. Cartridges may vary in length to the extent of a quarter of an inch, enabling the user to vary the weight of bullet and charges of powder.
6. Bullets with round or pointed ends may be used, as the cartridges are not disposed in front of each other and liable to have their primers exploded by the point of bullet in rear. That bullets have greatest accuracy and greatest range with round or pointed ends, is proven by the universal adoption of pointed projectiles by all governments, both for small arms and ordnance.
7. The combination of all the advantages of single shot rifles and repeaters into one arm.
8. When the bolt action is removed from the receiver, which can be done almost instantly, the breech is open so that the rifled bore of the barrel can be readily examined and cleaned.
9. The empty shell when extracted and ejected, is thrown to the right and away from the operator.

10. The breech mechanism can be taken apart and a new main spring and extractor substituted and replaced in 40 seconds between shots, without the use of any tools.
11. Great simplicity and great strength of breech closing, there being but one piece to resist strain of firing.
12. The packet is large enough to give a good finger-hold, and in cold weather with gloves or mittens on, may be readily put into the magazine.
13. The magazine may be quickly opened to examine, refill or remove the packet, or to replace any cartridges that have been fired. It therefore needs no INDICATOR.
14. The flanged base of shell is completely surrounded by the cup shaped end of bolt at the firing position, so that in case of a ruptured shell or primer pierced by the firing pin, the gas is prevented from blowing back in the face of the operator.
15. The mechanism being so accessible, dirt or sand getting into the action may be removed and the arm cleaned by the hands alone, if necessary.
16. Accuracy in shooting is assured by the strain of firing, being properly distributed in the breech.
17. Not liable to explosions in the magazine.
18. Barrel and receiver may be removed from the stock in 3 minutes by the use of a screw driver, and the arm may be packed in an ordinary length trunk, or carried in a Victoria gun case. It may be mounted in the same time.
19. Carrying 8 cartridges in the rifle, 35 percent more than any modern rifle.
20. Fifty shots may be fired by an expert in 1 minute.
21. In case of jammed cartridges due to double loading, the jam may be instantly removed by opening the magazine door. (At the N.Y. state test the lever gun exhibitors jammed each others rifles badly.)
22. Double extractors.
23. No slight of hand performance is required to load the rifle, and no artful dodging to prevent the ejected shell striking the eye.
24. A number of loaded packets may be carried, or the same packet may be kept in the magazine and refilled many times with single cartridges.
25. The arm may be fired from the shoulder easily and rapidly.
26. No danger of cutting or jamming the fingers as with lever actions.
27. The entire arm is so simple that any gunsmith or mechanic can put it in order or make any extra parts.

Blake also attempted to develop a market for his rifle in sporting configuration. Barrels could be ordered in any length, including 30 inches, in round, half octagon or full octagon styles. The *Blake Rifle Book* of 1899 features rifles with 28 inch barrels, carbines with 20 inch barrels and one .400 caliber sporting rifle with a 30 inch full octagon barrel. Butt stocks were furnished with either "crescent" or "shotgun" style. The Rifle was offered in .236 Navy

Caliber with rifling of one turn in six and one half inches; .30 American Army (.30-40 Krag) and 303 British Army with rifling from one turn in nine to one turn in twelve inches; and the .400 Blake with rifling from one turn in twelve to one turn in eighteen inches.

The *1899 Rifle Book* lists four grades of hunting rifles. Grade "A" was priced from \$100.00 upward and had "Whitworth Fluid compressed steel barrels" guaranteed to wear for 5000 rounds of full mantled bullets without affecting accuracy. Finest figured imported walnut stock. Finest checking and engraving combined with the finest workmanship and finish throughout. Also of interest is the statement on accuracy — this grade was guaranteed to shoot accurately into a four inch circle at 200 yards with black powder and into a six inch circle with smokeless rifle powder at 200 yards and "may shoot better". The Grade "B" rifle was listed at \$80.00, Grade "C" at \$60.00 and Grade "D" at \$50.00. These all had a nickel steel barrel guaranteed to wear for 2500 rounds of full mantled bullets, checkered walnut stocks either straight or pistol grip, and guaranteed to shoot accurately into a five inch circle at 200 yards with black powder and an eight inch circle at 200 yards with smokeless powder. The dealer discount on Grades "B", "C" and "D" was 40%.

The Blake Rifle is a Magazine Rifle that by the use of a "cut-off" can be used as a rapid single loader where the seven round magazine is held in reserve or as an eight shot repeater when the cut-off is thrown in. The distinctive feature of the system is that of the cartridges being carried in the revolving cylindrical packet which is charged into the magazine, located under the receiver and just forward of the triggerguard. The seven-round packet is loaded "en-bloc" in a manner somewhat like an M-1 Garand. When the cartridge packet is empty, the magazine door is opened, the empty packet drops out and a full packet is recharged. An empty packet may be refilled with cartridges many times if desired.

The bolt has four locking lugs at the forward end which lock behind four projections in the breech. Blake describes his bolt locking design as "...consisting of an interrupted screw, and is very much like the breech closing system used in heavy ordnance."

A review of the microfilm records from the National Archives on correspondence between John Henry Blake and the War Department and other agencies of the government concerning the adoption of his Rifle, reveals an interesting fact. The correspondence between Blake and various agencies of the government, up through mid to late 1899, is all done in long hand and beginning in January of 1901, both Blake's correspondence with the Army and their responses are all done on the typewriter. It thus appears that both government and industry became mechanized with typewriters at or about the same time. A copy of Blake's June 8, 1899 hand-written letter is en-



Blake rifle, issue bayonet, 1899 factory book and Nat'l Archives microfilm on correspondence with army.

closed for review. Also included are copies of an exchange of correspondence between Blake and Springfield Armory in May of 1901. It is certainly interesting and somewhat amusing to note that the people at Springfield Armory felt that, "a rifle that would develop a velocity of nearly 3,000 feet per second would develop pressures in

known, unique seven shot rotary magazine inserted from underside, 30 inch barrel usual with full walnut stock, having checkered pistol grip and fastened by three barrel bands, wood cover over breach of barrel.

Although not a great deal is in print about this maker, he was a great maker of rifles and was a great maker of