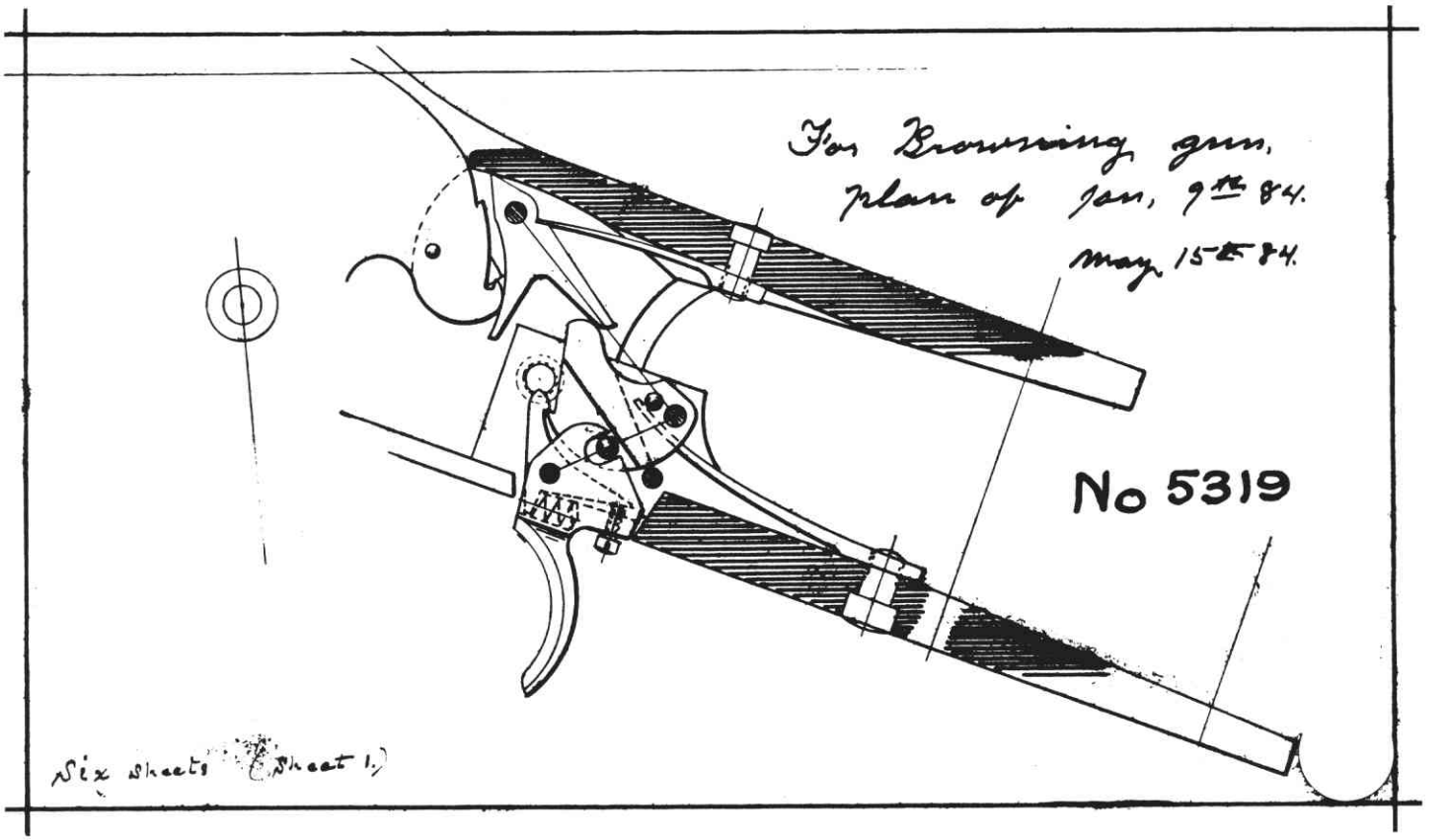
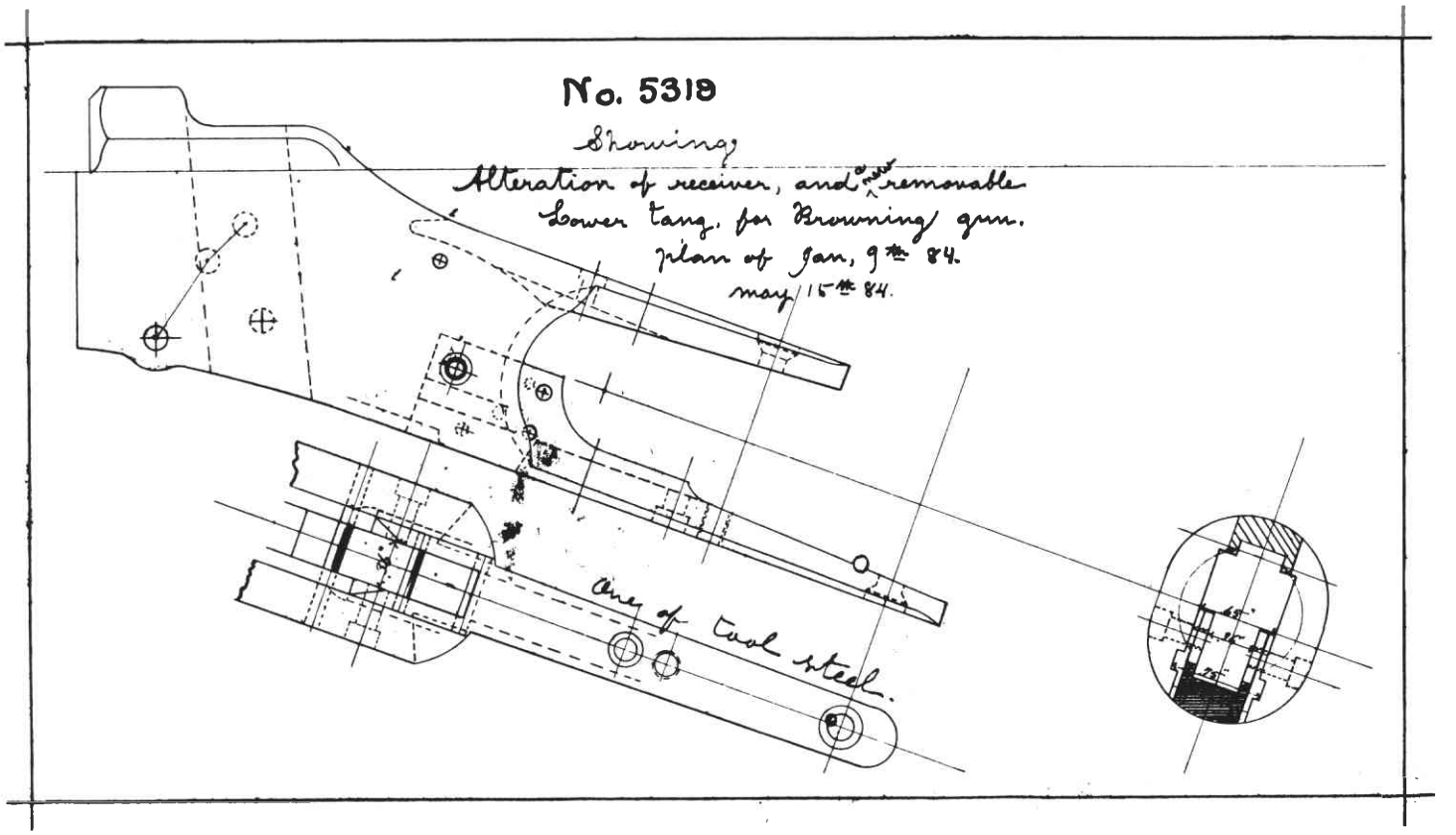


Drawing #5319, sheet 1, showing alteration of the receiver of the Browning gun. It is dated January 9th, 1884 and May 15th, 1884.



Drawing #5319, sheet 2, which shows the new removable lower tang for the Browning gun; it is also dated January 9th, 1884 and May 15th, 1884.

Variations of the Model 1885 Winchester

Lawrence W. Jones

On May 12, 1879 John M. Browning applied for a patent on a single shot rifle and the patent #220271 was granted on October 7, 1879.

It is thought that the Browning Brothers produced some 600 of these single shot rifles and/or components in their shop in Ogden, Utah.

T.G. Bennett was Vice-President of the Winchester Repeating Arms Co. at this time. He was dispatched to Ogden to confer with the Browning Brothers. It is a little known fact that his mission was twofold:

(1) To secure an agreement with the Browning Brothers for them to refrain from making and selling a loading implement or tool that was infringing on patent #232189 dated September 14, 1880. This patent had been issued to V.A. King and was owned by The Winchester Arms Co.

(2) To secure from the Browning Brothers the patent rights for their single shot rifle, which had been brought to the Winchester Company's attention by one of their western representatives. Early in 1883 Bennett purchased the patent for the single shot rifle and the remaining supply of guns and parts for $8,000.00; no records found to date give the exact number of Browning rifles that Bennett acquired in this transaction. Bennett also saw and brought back to New Haven a wooden model of a gun that later became the Model 1886, but that's a whole new story.

After the Browning single shot rifle patent purchase was delivered to Winchester, approximately two years of development work followed before production of this rifle took place.

Drawing #5319 (left) shows the alteration of the receiver and a new removable lower tang for the Browning gun, plan of January 9th, 1884 and May 15th, 1884. The original Browning single shot rifle had a fixed tang. Another drawing, "Single breech loader, Browning plan, but with set trigger," also has the date of January 9th, 1884. All of these drawings are in my collection.

The 1885 Winchester catalogue had the first listing of the Model 1885 single shot rifle, with the following description:

> This gun has the old Sharp's breech-block and is as safe and solid as that arm. The firing pin is automatically withdrawn at the first opening movement of the gun and held back until the gun is closed.
>
> The hammer is centrally hung, but drops down with the breech-block when the gun is opened and is cocked by the closing movement. It can also be cocked by hand. This arrangement allows the barrel to be wiped and examined from the breech. In outline, everything has been done to make the gun pleasing to the eye. It can be furnished either with or without set triggers, with barrels of all ordinary lengths and weights and for all standard cartridges, also with rifle and shotgun butt, plain or fancy wood, or with pistol grip.

The single shot model was produced with three frame sizes, the high wall thick side, or flat side, the standard high wall, and the low wall.

The frame width of the "thick wall" is 1 11/32"; the frame width of the "thin wall" is 1 3/16". This change was evidently made to lighten the overall weight of the guns. On the "thin wall" a "flair was added to the front of the frame to better accommodate the wood forestock.

The frames could be further subdivided to the round top receiver ring, or the octagon top receiver ring. It is impossible to determine any schedule of when, or how many, of each of the different receiver types were used, or to explain company policy in using a certain form on any given rifle. We can only generalize as follows:

High wall, thick wall, octagon top receiver ring is usually found under Serial #2500.

High wall, thin wall, octagon top receiver ring usually ranges between #2000 and #7000.

High wall, thin wall, round top receiver ring is the most common, ranges all through production.

High wall, thick wall, round top receiver ring again is fairly widely scattered but usually more common in the lower serial number ranges.

Low wall, thick wall, round top receiver ring will usually be found in the 34,000 to 112,000 range.

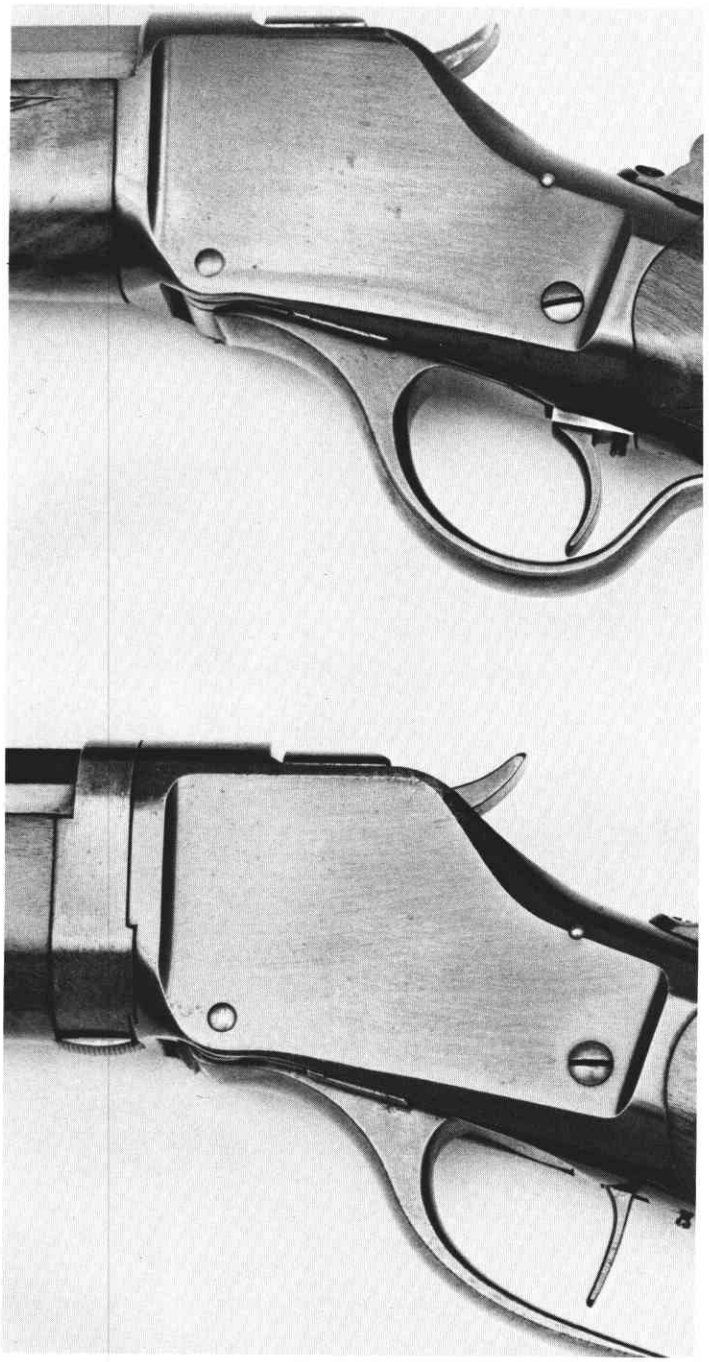
Low wall, thin wall, round top receiver ring is most common after #100,000.

The early model single shot rifle used a flat main spring attached to the underside of the barrel under the wood forearm and operating through a hole in the forward face of the receiver. In 1908 a coil spring replaced the flat spring. This, of course, allowed the takedown feature to evolve.

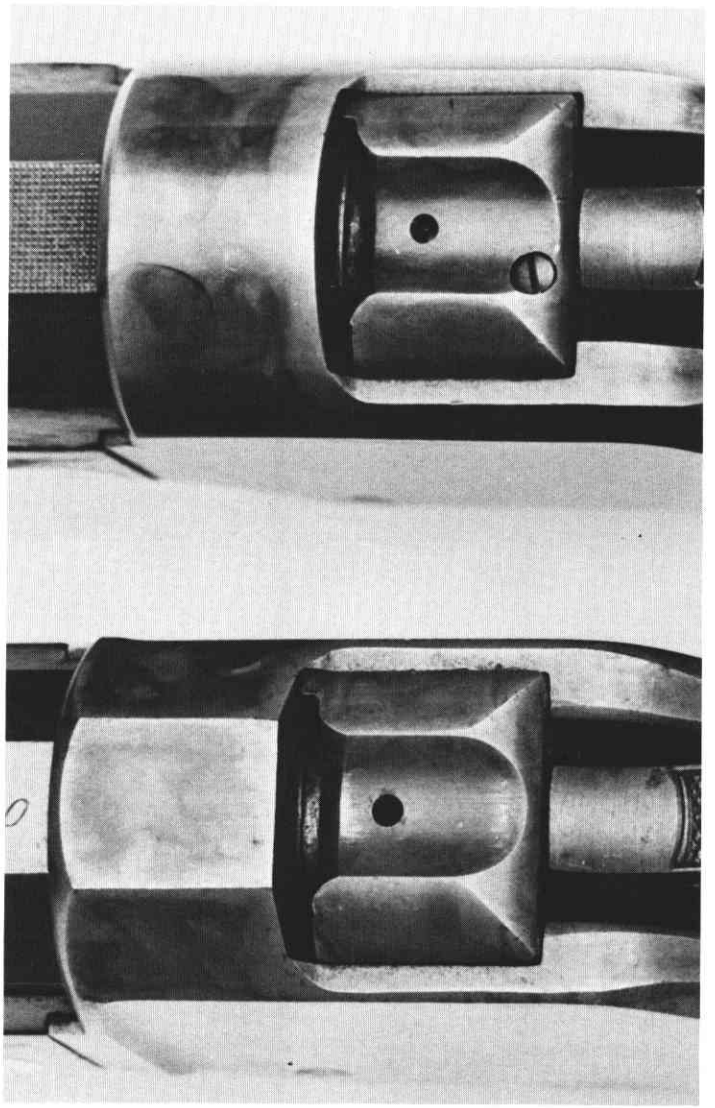
★ ★ ★ ★ ★

The top action is a high wall thick side or flat side. The bottom action is the later standard high wall with the flair at each end to accommodate the wood. Note the early case coloring. The switch to blue receivers was made in 1901.

Here we see the difference between the low wall flatside (top) and the standard high wall action.

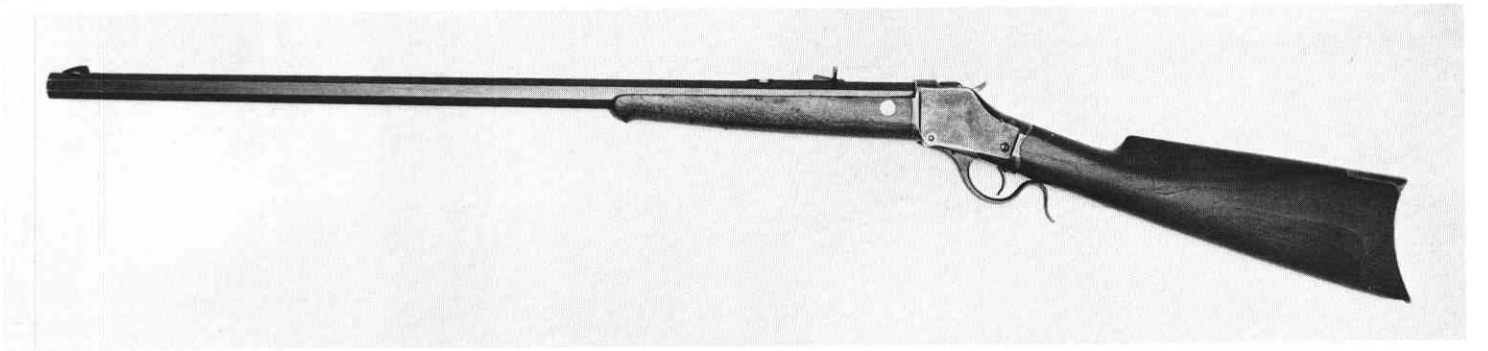


The take down option (bottom) was first offered in 1910.



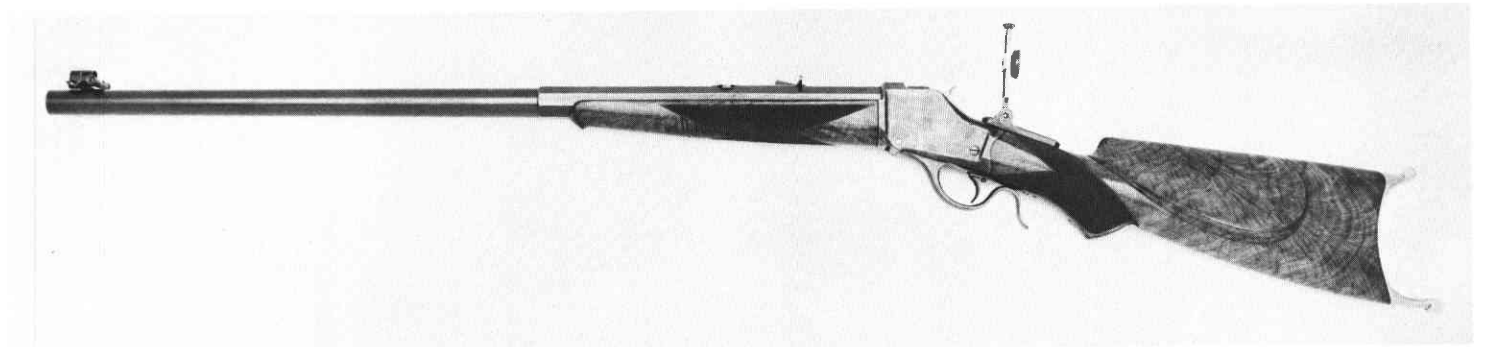
The earlier frames were usually made with an octagonal top, while the later action had a round top.

Here are the various styles in which the single shot rifle was offered, using catalog terminology:

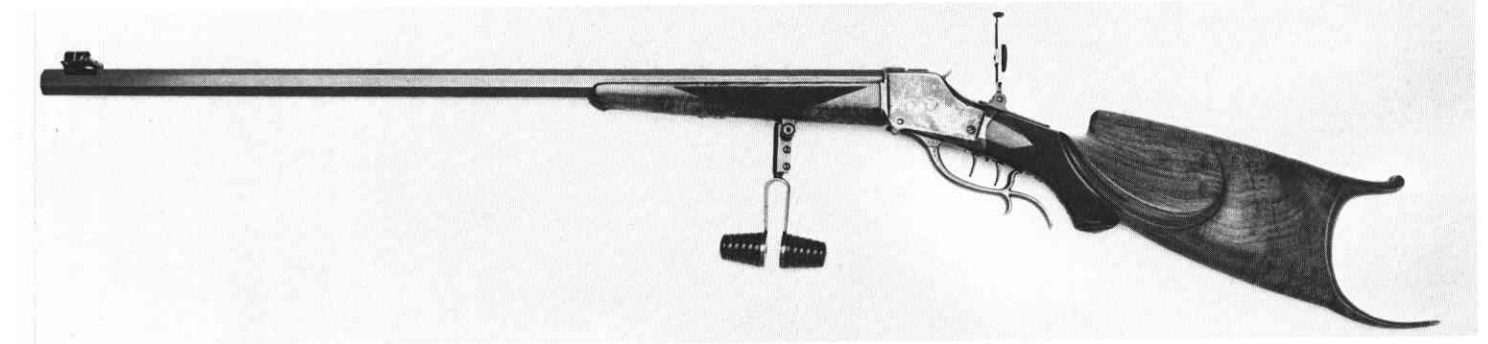


Plain Sporting Rifle. This rifle was fitted with plain straight stock and forearm, open sights, rifle or shotgun butt. It was first pictured in the catalog of 1885 and last in catalog #81 in 1919.

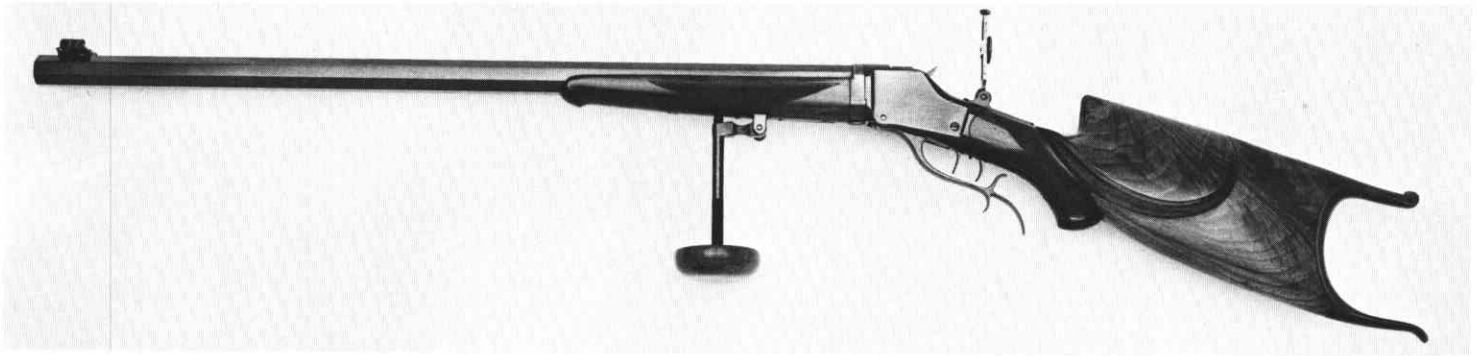
Special Sporting Rifle. This rifle was fitted with fancy checkered pistol grip stock and forearm, rifle or shotgun butt, open sights. It was pictured in catalogs at least as early as May, 1888, and continued through catalog #79, dated 1914, but it is not shown in #81.



Special Single Shot Rifle. This was described as having a half octagon barrel, fancy walnut checkered pistol grip stock with Swiss cheek piece, nickel plated Swiss butt plate, with mid-range vernier peep and wind gauge sights, without slot cut in barrel for rear sight. Pictured in catalogs as early as May, 1888, and last pictured in #75, dated 1909.

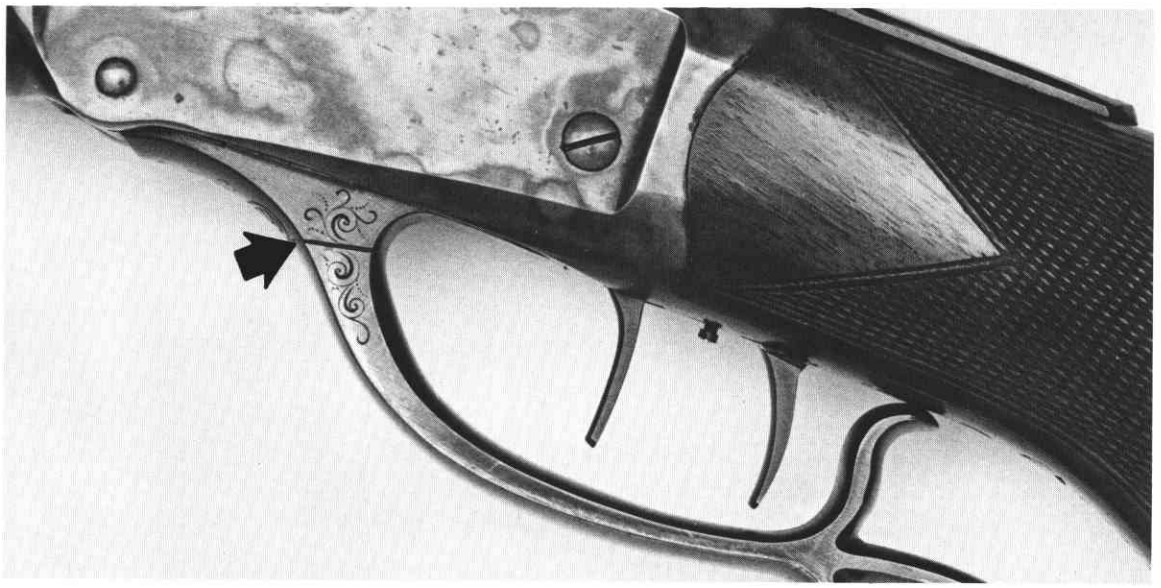


An early version of the Winchester Schuetzen rifle with the Helm's pattern buttplate, case hardened frame, Schuetzen double set trigger, spur finger lever, early "tuning fork" palm rest, mid-range vernier peep and wind gauge sights, no slot in barrel for rear sight . . .



. . . and a later Schuetzen rifle from its last year of production (catalog # 79, 1914) with new style palm rest, new spur finger lever, new Schuetzen pattern stock with cheek rest, new Schuetzen buttplate, and take down action.

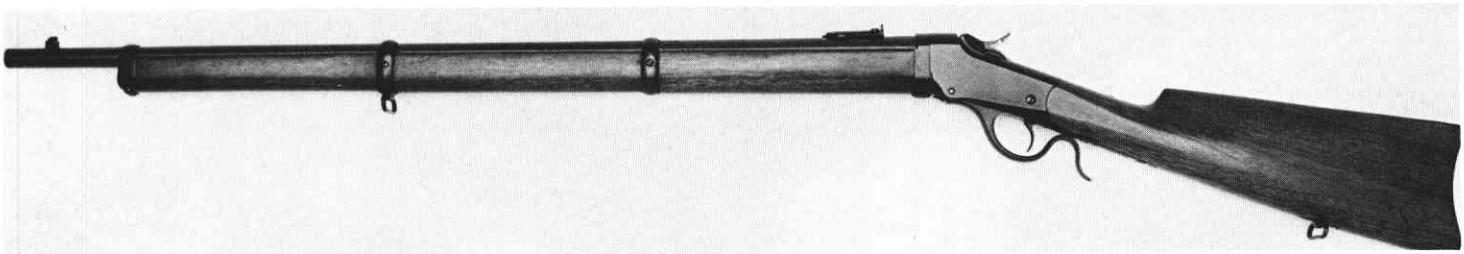
Engraving was rare on any single shot rifle, however, this Schuetzen rifle has a lovely scroll pattern of engraving on both side panels. It was listed in the factory records as $4.00 engraving.



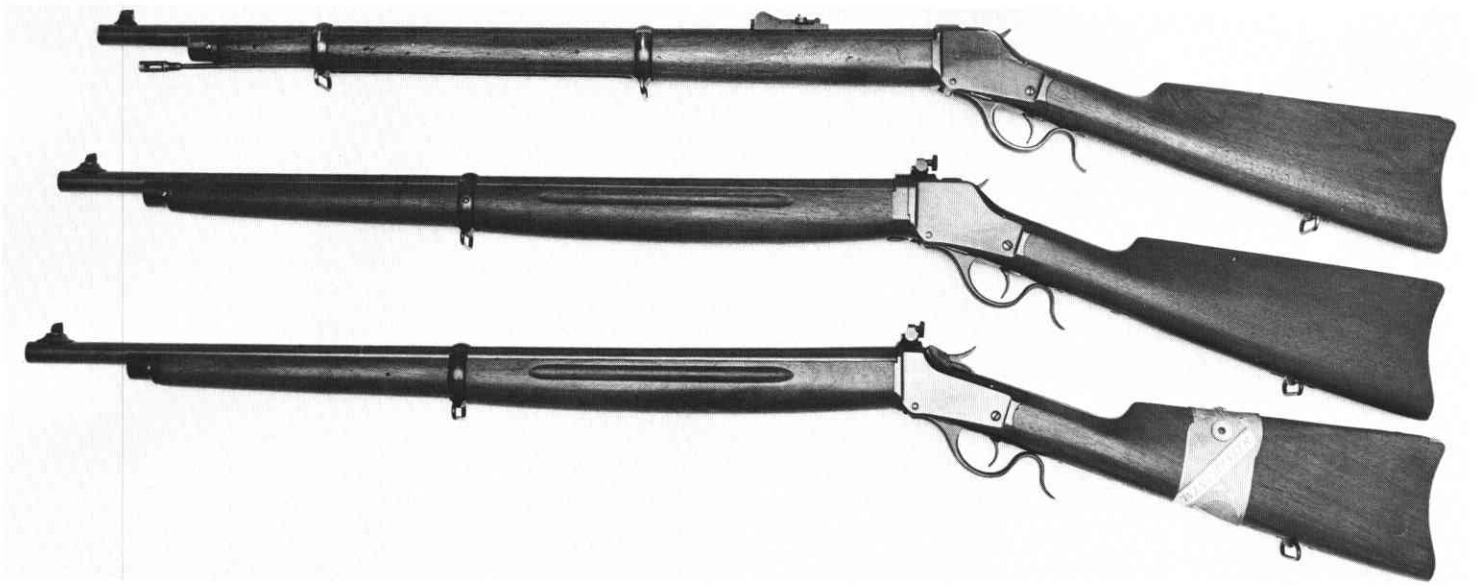
The early double set levers were welded to the standard lever and the weld line was concealed with 50¢ worth of engraving.

Light weight Single Shot Carbine. The "Baby" carbine, low wall action, had a "15 inch round barrel, plain trigger, straight grip stock and forearm of plain wood, sling ring on the frame, cal .44 W.C.F. Weight 4¼ lbs." It first appeared in catalog #61 of 1898 and was last pictured in #71, dated 1904. However, it continued to be listed until catalog #76 of 1910. It was also made in .32 and .38 W.C.F. The barrel was apparently a light weight barrel that at one point in the records at the factory was designated "1/2 weight." In addition, a few 20 inch barrel carbines were made in other calibers, including 7mm, .43 Spanish, and .40-.60; these were in high wall form. This single shot was exported to Australia and South America in considerable quantities.

The size of the baby carbine is compared to the 36", #5 weight barrelled Schuetzen.



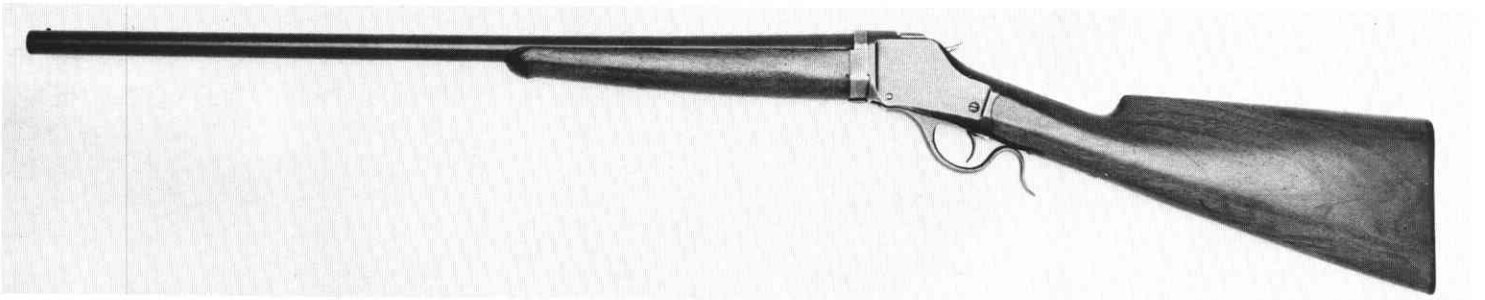
This experimental low wall musket was submitted to His Brittainic Majesty's purchasing commission as a proposed model for use by the English Home Guard during World War I. It was chambered for a .22 caliber short, had a 29 1/2" barrel and was a takedown. It was not the type wanted and the project was terminated.



Musket. The Musket was listed and priced in the catalogs as early as May, 1888, and continued in them (but never pictured) until the offering of the .22 caliber rim fire in catalog #72, dated 1905. This last catalog pictured a two band forearm with cleaning rod, and a high wall receiver, with the following description: "Standard and only style made. Round barrel 28 inches long, chambered for .22 long rifle cartridge, weight about 8½ lbs."

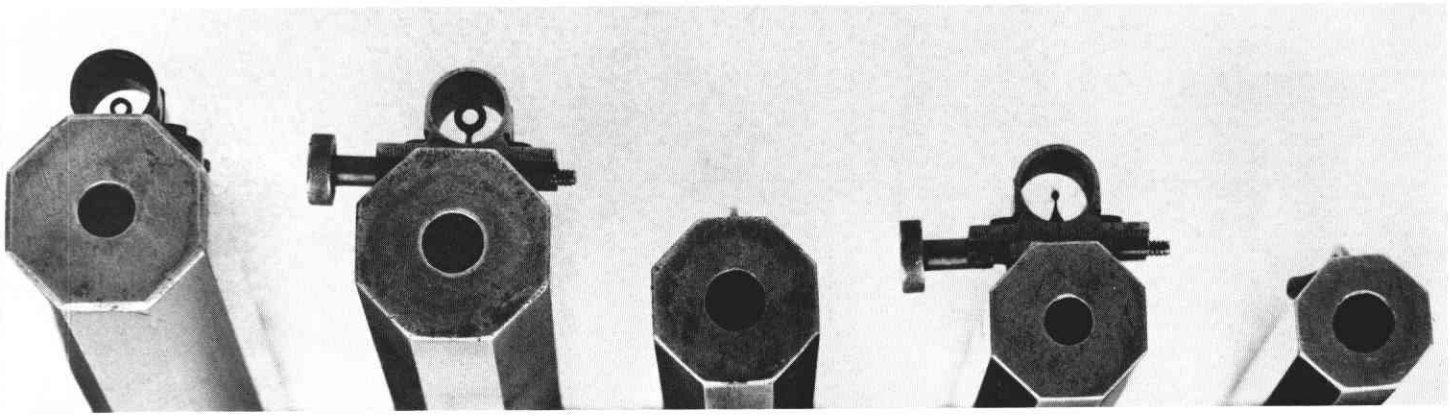
This form of Musket continued to be pictured until, in catalog #79 of 1914, a high wall musket with a one band forearm with finger groove, without cleaning rod, was shown. At this point the musket was also offered in .22 short rim fire. By catalog #81, 1919, the .22 caliber Musket had been changed again. It was offered with the low wall action and a receiver peep sight. Catalog #79 priced the solid frame musket at $16.00, and catalog #81 at $42.00. This musket is now commonly referred to as the "Winder" musket.

In addition to the muskets in .22 caliber, Winchester made them for a wide range of centerfire cartridges. At least 237 muskets for centerfire cartridges are recorded in the first 70,000 Single Shot rifles produced. Calibers include .45-2.4", .45-70, 44 WCF, .43 Spanish, .40-70 BN, .40-60, .38-56, .38-55, .32-40, .32 WCF, and .25-20. The most popular was .45-70, with .32-40 probably running second.



Single Shot Shotgun. In catalogs #79, 1914, and #80, 1916, the Single Shot was offered in solid frame and takedown as a 20 gauge shotgun. To quote from catalog #79, "The gun is made with 26" 20 gauge full choked nickel steel barrel, chambered for shells 3 inches and under. Its length overall is 41 3/4", length of stock 13 7/16", drop at comb 1 7/8" and drop at heel 2 11/16". It weighs about 5 1/2 lbs. It has a straight grip stock and forearm of plain walnut and is fitted with a hard rubber butt plate. The receiver is matted on top along the line of sight. Cylinder bore or modified choke barrels will be furnished instead of full choke barrels without extra charge; and interchangeable barrels, full choke, modified or cylinder bore will be furnished for takedown guns."

Using the Single Shot as a shotgun was not new in 1914. Every once in awhile a .38 Express, .40 Express, or .45 Express was ordered with an extra 20 gauge barrel. The majority of the shotgun production is concentrated in the 113,000 to 115,000 serial range. Production of the 20 gauge shotgun reached such proportions as to take it out of the "rare" class.



Barrels were available in five weights or sizes. The 1886 catalog said: "To accommodate all tastes as to weights, we shall make five sizes of barrels numbered from #1 to #5 and varying in weight."

The weights shown in the foregoing cover the complete weight of the gun with each style of barrel. The barrel size number is stamped on the bottom of the barrel just ahead of the wood forestock.

From right to left in the photo above:

#1 Barrel is the smallest and will be adapted to small caliber rim and center fire cartridges and will also take 22, 32, 38 and 44 WCF cartridges. Guns with this size barrel will weigh from 7 to 8 lbs., varying according to caliber.

#2 Barrel is intended for small sizes of centerfire cartridges and will weigh about 8 1/2 lbs. If light guns are desired for larger sizes of center fire cartridges, this barrel can be furnished for them.

#3 Barrel is intended for large sizes of military and sporting cartridges and will weigh from 9 to 10 lbs., varying according to caliber. With the same length and outside size, a .38 caliber will weigh about one-half pound more than a .45 caliber.

All of the above barrels will be listed at the same price, $5.00 for an octagon barrel of standard length.

#4 Barrel is made to accommodate those wanting a heavier gun and will weigh from 10 1/2 to 11 lbs. For this weight, an additional charge of $2.00 will be made over the regular price.

#5 Barrel is the heaviest that can be made and will weigh about 12 lbs. For this weight, an additional charge of $10.00 will be made over the regular price.

The #3¼ Barrel was added in June 1910. The butt end of this barrel was the same size as the #4 and the muzzle end the same size as the #3 barrel. It was developed especially for chambering the .35 WCF and .405 WCF cartridges and weighed a little more than the standard #3 barrel.

★ ★ ★ ★ ★

The Single Shot rifle was continuously offered in the company's catalogs over the next 35 years. The low wall "Winder" musket, the only style then offered, was last pictured in catalog #82 of 1920.

But like old soldiers — well, some few parts were still available from the factory! I have an old single shot log book that shows as its last entry the date "May 4, 1945, Serial #139728"; it gives no other information.

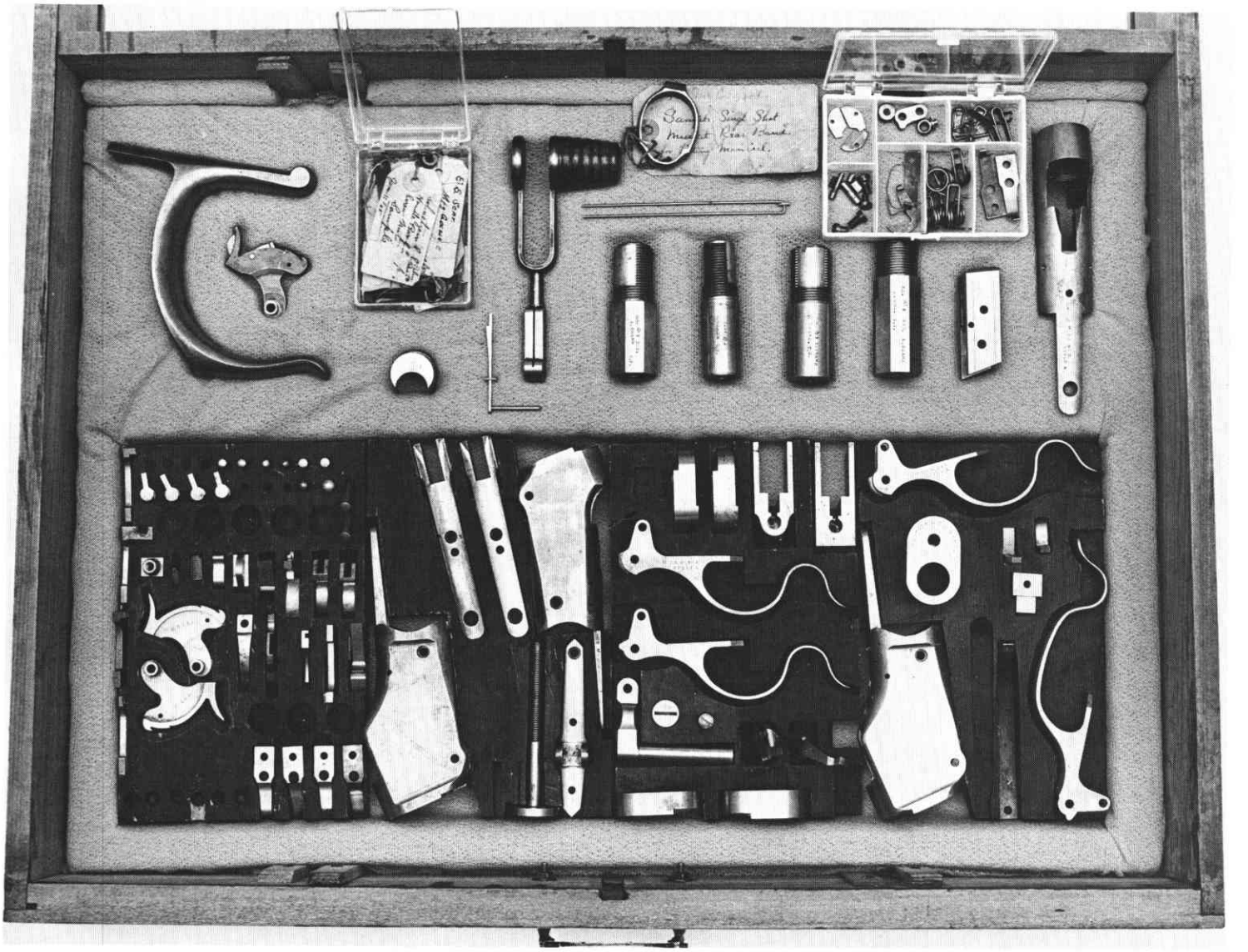
One of the rarest items in my display is a partial set of "Model" parts for the Winchester single shot rifle.

To appreciate these, one must have some knowledge of the manufacturing methods employed by Winchester from its inception until approximately World War I.

Then as now, to insure some degree of interchangeability, many gauges were used to check the configuration and dimensions of each individual part. In this way it was possible for the inspector and the production worker to determine if the manufacturing tolerances had been exceeded. Utilizing modern methods, all fixtures and gauges are designed and inspected from the dimensions and tolerances found on the detailed product drawing. The product drawing is the final word in determining all properties and specifications of the part.

In the early days at Winchester, product drawings, as we now know them, did not exist. Crude designs were made by the engineering department, but these were not of sufficient detail or quality to be used for manufacturing purposes. Instead, for each different product or part that was manufactured, a complete set of "Model" parts was maintained. All fixtures and gauges were designed from the "Model" parts and all dimensions were stated as "Model" plus or minus some tolerances. In other words, the "Model" parts were the early substitutes for product drawings and were the only thing that insured interchangeability of parts.

After the gauges and fixtures had been made, the "Model" parts were kept locked in the gauge inspection department and were used to recheck all gauges and



A partial set of "model" parts for the Winchester single shot rifle. Some are resting in the original wood storage blocks. These "model" parts were used to check the production gauges to help maintain manufacturing tolerances.

fixtures at periodic intervals. For each product or product variation, only one "Model" for each part could exist, since to duplicate any "Model" would introduce tolerance variations which would negate the concept of "Model" parts control. The Model parts were considered extremely valuable, as they were the only true definition of the product.

This partial set of "Model" parts contains many variations of receivers, finger levers, links, triggers, barrel stubs, ejectors, and miscellaneous pins, springs, screws, and small parts. All of these parts are identified with an "M" for "Model" and many have hand-written identification tags with notes explaining modifications, etc. Many of these tags are dated and are from shortly after the turn of the century. Many of these parts are in the original fitted black wooden boards in which the parts were stored.

Here we see single shot hammers, sears and an early type hammer fly with tags showing discard dates of 1905, 1906 and 1907; a single shot frame with the upper tang showing the "Model" Single Shot #2 Style A markings; three stubs of the single shot #3 weight barrel. These showed the correct threads and the end milling required for various caliber cartridge extractors.

The receiver ring is for a takedown rifle. The top lever was used with the early flat lever retention spring. Very late in production a change was made to a coil spring plunger to retain the lever. This change allowed for the development of the takedown feature. Note the difference in the shape at the front of each lever. These pieces all have the "Model" markings.

The single shot was a very strong action and has probably undergone more modern day abuse than any other gun. They have been rebarreled, rebored, restocked and remodeled in so many ways that if the Browning Brothers only knew what they had started, I'm sure they would be smiling from ear to ear.

The variations of the Winchester single shot rifle are endless. The available calibers are also endless, to the point that it's almost impossible to find any two that are exactly alike.

The only absolutely definite thing that can be said about them is this: there is nothing absolutely definite.

References

Madis, George. *The Winchester Book.* By the author, Dallas, Texas, 1961.

Williamson, Harold F. *Winchester, the Gun that Won the West.* Combat Forces Press, Washington, DC 1952.

Watrous, George R. *History of Winchester Firearms.* The Winchester Press, NYC, 1966.

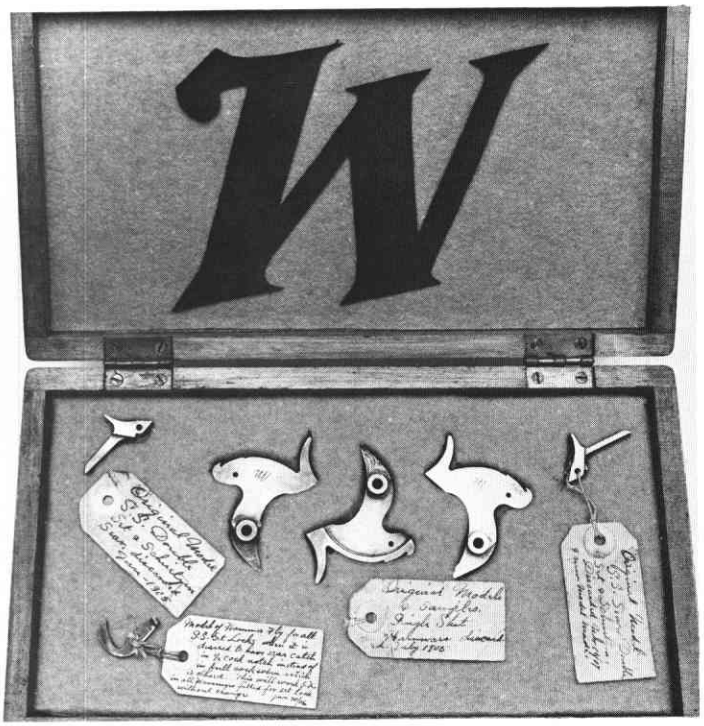
Winchester Archives, Winchester Museum, Buffalo Bill Historical Center, Cody, Wyoming

Ostendorp, Lou. "Winchester Single Shots." *Gun Digest,* 1955.

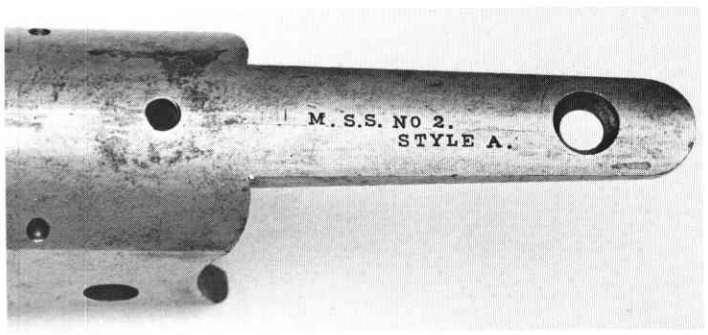
Ostendorp, Lou. "Browning's First Rifle." *Gun Digest,* 1956.

Photos by Charlie Semmer.

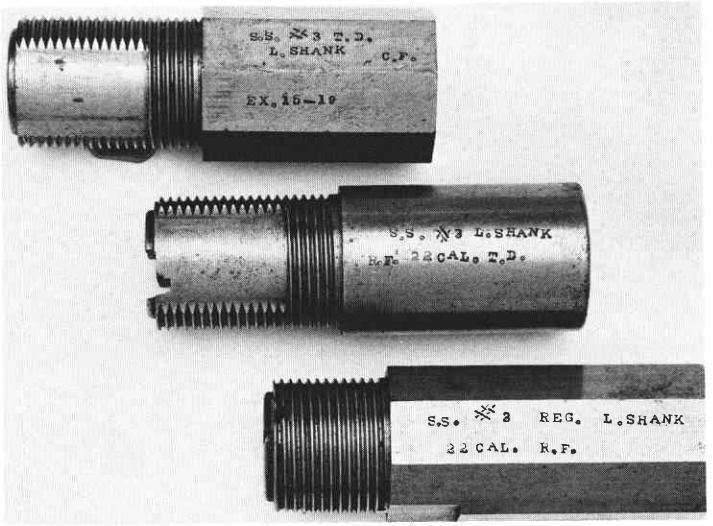
★ ★ ★ ★ ★



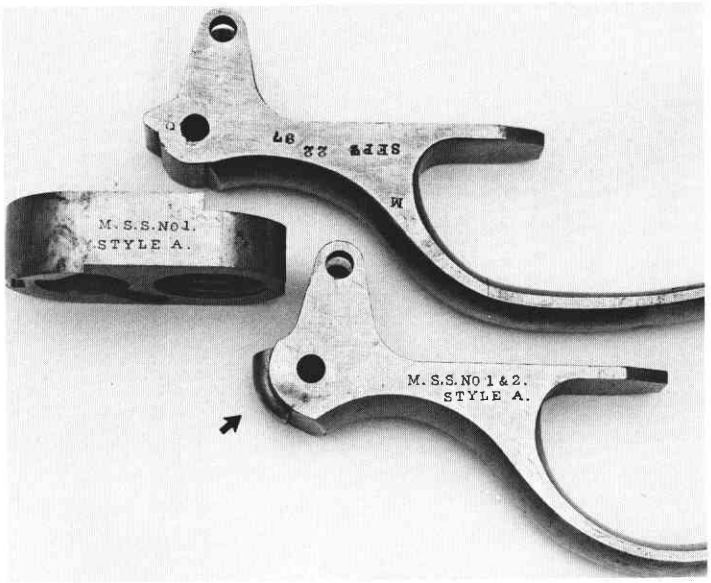
Here we see single shot hammers, sears, and an early type hammer fly with tags showing discard dates of 1905, 1906 and 1907.



A single shot frame with the upper tang showing the "model" Single Shot #2 Style A markings.



3 stubs of the single shot #3 weight barrel. These showed the correct threads and the end milling required for the various caliber cartridge extractors.



The receiver ring is for a take-down rifle. The top lever was used with the early flat lever retention spring. Very late in production a change was made to a coil spring plunger to retain the lever. This change allowed for the development of the take-down feature. Note the difference in the shape at the front of each lever. These pieces all have the "model" markings.