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THE BULLARD RIFLE
JAMES HERBERT BULLARD "INVENTOR"

by Gene Weicht

James Herbert Bullard had more than 100 patents from 1872 to 1916, the last of which was a patent that was issued after his death. More than half of the patents were for machinery or product improvements for the companies he was working for and were assigned to them. Bullard very seldom put his name on a product, machine, or improvement he patented, with the exception of the Bullard rifle. Many patents were creations of Bullard's mind and had nothing to do with the firearm industry. The outcomes of many of those patents are unknown.

James H. Bullard was born May 14, 1842, in Poultney, VT. In 1854, his family moved to Barre, MA, where he attended school until he was 15 years old. In 1858 he went to work for C.W. & J.E. Smith Mercantile House making shaker hood bonnets. From 1861 to 1865 he tried four times to join the Union Army during the Civil War, but due to a childhood accident that had disabled his leg, he was rejected. Bullard was even drafted and again rejected. During the War he worked for the Lamb Knitting Machine Company and the Wheeler & Wilson Sowing Machine Company up to 1874 when he went to work for Smith & Wesson as a Master Mechanic. He was very close friends with Daniel B. Wesson and had three patents for Smith & Wesson handguns which he assigned to D.B. Wesson. One other patent that Bullard developed in 1878 for a machine for checkering pistol grips was assigned to D.B. Wesson. This machine was very profitable for Smith & Wesson and was still in use in 1971. At the urging of his friend Daniel Wesson, Bullard left Smith & Wesson sometime around 1880 and went to work for the Springfield Sewing Machine Company, a Smith & Wesson Company. He left the company as superintendent in 1881 and devoted his full time to setting up what became the Bullard Repeating Arms Company. With the Bullard Rifle company up and running, he left his day-to-day involvement in 1885 to pursue his next venture involving the steam car and other interests. He always kept his stock in the company and was in and out of the factory frequently until his death on March 26, 1914.

From mid-1885 to 1887, Bullard worked independently on liquid fuel burners and his steam car. On June 14, 1887, The Aerated Fuel Company was formed with Bullard as its treasurer and manager until 1907 when the company was dissolved. In 1898 or 1899, his steam car became the Overman Victor Steam Automobile, and Bullard became the chief engineer for The Overman Automobile Company until 1901. In 1901 he invented speed recorders among other things. On November 14, 1907, the Bullard Specialty Company was formed to produce assorted patented speedometers.

On March 26, 1914, James Herbert Bullard died at the age of 72 in his home at 45 Warner Street, Springfield, MA. He is buried in Grave No. 1380 in Oak Grove Cemetery near his old friend Daniel B. Wesson. He has no monument.

James Bullard had been reported to be a good friend to Buffalo Bill and Annie Oakley and a staunch Republican.

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THE BULLARD COMPANY

The patent for the Bullard Repeating Rifle was filed May 5, 1879, and granted August 16, 1881. It covered both the Large and Small Frame Repeating Rifles. A British patent was granted September 23, 1881. The company started in Springfield, MA, early in 1882, as J.H. Bullard & Co. and by May 6, 1882, was called The Bullard Repeating Arms Association. On October 11, 1883, the company reorganized and became the Bullard Repeating Arms Company which remained the company name until it dissolved in January 1891. The company officers were Horace Holly Bigelow, President, who had 60% of the stock in the company from 1883 to 1891; the Secretaries were Solomon K. Hindley and Edwin S. Field, who both served in that capacity till 1891. Bullard, the inventor, only had 10% of the stock in the company, and he served as General Manager until 1885 when he left his active management of the company. He continued to invent for the Bullard Repeating Arms Company and remained partially involved. Bullard's brother, William A. Bullard, served as Plant Manager for a very short period, but that didn't work out at all. Soloman K. Hindley became Plant Manager in 1886 and filled J.H. Bullard's place as inventor to some degree for the company. He never improved the original Bullard patent, but Hindley did invent and patent the detachable magazine which became the Bullard Hindley Patent Military Repeating Musket.

The reasons to cease production of the Bullard Rifle were many. President Bigelow's failure to provide direction and planning for the future was the major downfall of the company. The loss of Bullard on a day-to-day basis must also have been a big factor. Without military contracts or plans for wider dealer distribution, the necessary improvements in design and production were never upgraded to what they could or should have been. Cost must also have played a great part in the problem of low production as a basic Model 1886 Winchester Rifle cost $19.50 and the same Bullard Rifle cost $33.00. The Bullard Rifle was second to none in design and quality, but remained basically a custom order rifle from the company to the end.

There is no evidence that the Bullard Repeating Arms Company, its machinery, or its equipment were ever purchased by any competing arms company. In fact, how or to whom the machinery and equipment were disposed of is a mystery.

The Bullard factory and property was sold to the Elektron Manufacturing Co. and the Christian Industrial & Technical School in January of 1891.

THE BULLARD REPEATING ARMS COMPANY - Closed their doors forever.

THE BULLARD RIFLES

BULLARD RIFLE FRAMES

Six basic frames were used to make all Bullard rifles, including the military and experimental models. Two are repeater actions and four are single-shot actions.

BULLARD RIFLE SERIAL NUMBERS

The main location of all serial numbers on all models of Bullard rifles is just behind the hammer on the upper tang. The serial numbers for all models of Bullard rifles ended up in assigned groups for the specific models. The production of Bullard rifles started with serial number 1 and never exceeded serial number 4100.

All serial numbers are just behind the hammer on the upper tang.

THE ASSIGNED GROUPS OF SERIAL NUMBERS END UP AS FOLLOWS:

Serial No. 1 thru 1500 Large Frame Repeaters
Serial No. 1500 thru 2000 Small Frame Repeaters
Serial No. 2000 thru 3500 Large Frame Repeaters
Serial No. 3500 thru 4100 Single Shot Rifles of all Models (Last known number to date is Serial No. 4076)
NOTE: 1300 plus serial numbers were **NEVER USED**.
The total production of all Bullard Rifles was never more than 2800 rifles.

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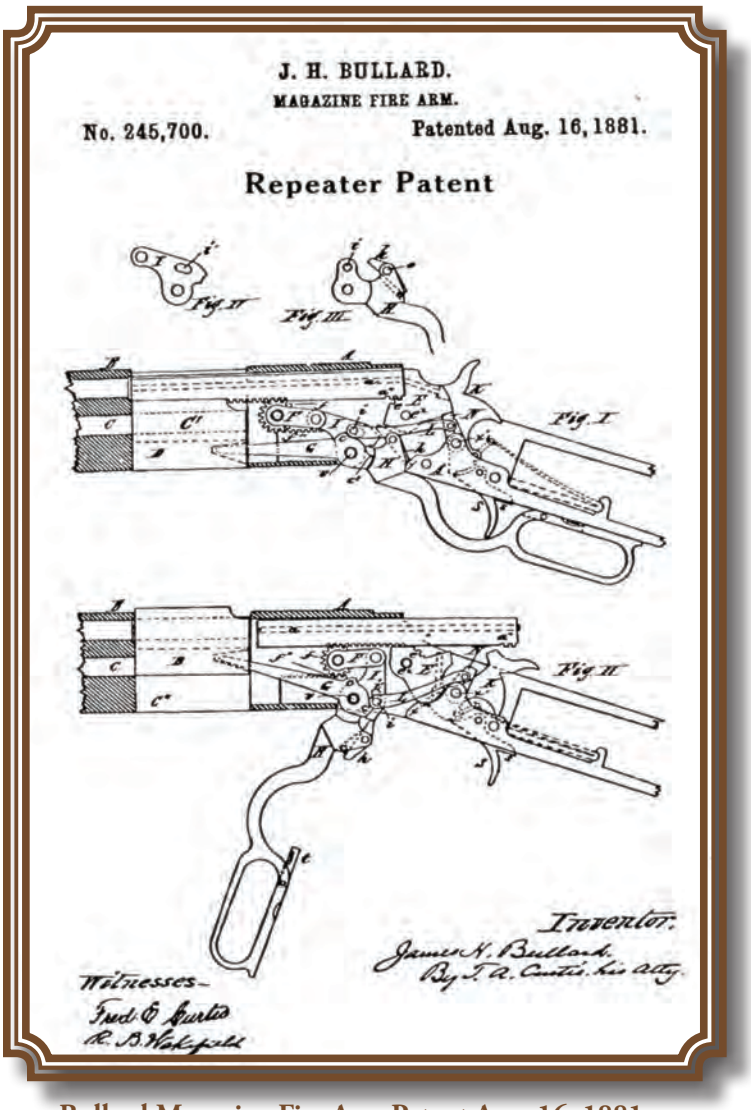
BULLARD REPEATING RIFLES

The Bullard Magazine Fire Arm Patent was for a rack-and-pinion operated action. The lever actuates the rack-and-pinion to open the bolt, open the breech block, cock the hammer, and raise the cartridge carrier. The action is extremely strong and the smoothest lever action ever made. The cartridge carrier works similar to the model 1873 Winchester. The bolt is locked up internally similar to the Remington Rolling Block Rifle. It has been noted that the action is so strong that cartridges can be resized in the chamber.

1.) Large Frame Repeaters – from Bullard have one internal access plate on the left side and were used for .40 Cal. to .50 Cal. rifles with serial numbers from 1 to 1500 and 2500 to 2700. To my knowledge, only one large-frame repeater has been noted in the 2000 to 2500 serial number range, and no rifles have ever been noted in the 3000 to 3500 serial number range. The calibers of rifles found among those with serial numbers from 1 to 35 were seldom marked on the rifles and are usually found to be .45-70 calibers. If marked, it was on top of the barrel in front of the action up to approximately serial number 175. All the later caliber markings were stamped on top of the action next to the barrel. Approximately the first 113 rifles were marked "BULLARD REPEATING ARM ASSOCIATION-SPRINGFIELD, MASS. U.S.A. PAT. AUG. 16, 1881." All the later Bullard Rifles were marked "BULLARD REPEATING ARMS COMPANY

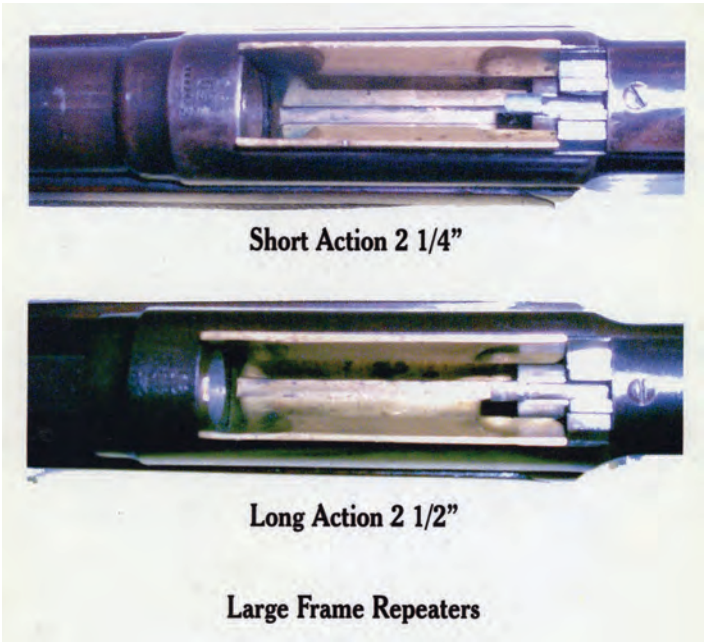

J. H. BULLARD.
MAGAZINE FIRE ARM.
No. 245,700. Patented Aug. 16, 1881.
Repeater Patent
Fig. I
Fig. II
Fig. III
Witnesses—
Inventor:
James H. Bullard.
By T. A. Curtis, his atty.

Bullard Magazine Fire Arm Patent Aug. 16, 1881.

Bullard Large Frame Repeating Rifle. "Rare only known full checkered forearm," with one internal access plate.

Bullard 8 & 7 Screw Large frame actions with Small frame action at bottom.

SPRINGFIELD, MASS. U.S.A. PAT. AUG. 16, 1881." The first large-frame rifle was produced January 23, 1883, and rifles up to approximately serial number 500 used an 8-screw frame. The balance of the production used a 7-screw frame. This was no more than a simplification of production.



Large Frame "Long and Short Actions."

A shorter variation of the large-frame action was also made. The large-frame action was designed to handle cartridges approximately 21/2 inches long. This included the .45-70 US Government cartridge and all of the .40 Cal., .45 Cal., and .50 Cal. Bullard cartridges. The Bullard Company built a complete large-frame action that was ¼-inch shorter than the regular action to accommodate the .50-95 Win. Express, .45-75 Win., and the .45-60 Win. or any 21/4 inch long cartridge. Very few large-frame short-action rifles were made or are in existence.

2.) Small Frame Repeaters – from Bullard have internal access plates on both sides and were used for .32 Cal. and .38 Cal. rifles with serial numbers from 1500 to 2000. The .44-40 Winchester cartridge was offered in this frame. (No rifles are known to exist.) The caliber markings on a very few of the rifles were stamped on top of the barrel in front of the action. Most were on top of the action next to the barrel. Most small frame action rifles are marked "BULLARD REPEATING ARMS COMPANY-SPRINGFIELD, MASS. U.S.A. PAT. AUG. 16, 1881," but at least one rifle, reason unknown, has the stamp "SINGLE SHOT JULY 6, 1886 PATENT DATE."

All repeating rifles have the company name, address, and patent date stamped on the left side of the action just below the cartridge carrier opening. After 1886 many large and small frame repeaters are marked Model 1886 on the right side of the action opposite the company name, address, and patent date. There were a few small changes internally in the year 1886, but they are hardly worthy of mentioning. There were minor changes internally all throughout the period of rifle production. It is suspected that the Model 1886 was added to compete with the introduction of the Model 1886 Winchester. It does indicate that the rifle left the Bullard Company after 1886. At some undetermined point in time, an Extractor Removal Access Hole was drilled through the left side of the action to allow a broken extractor to be changed without disas

Extractor removal access hole location

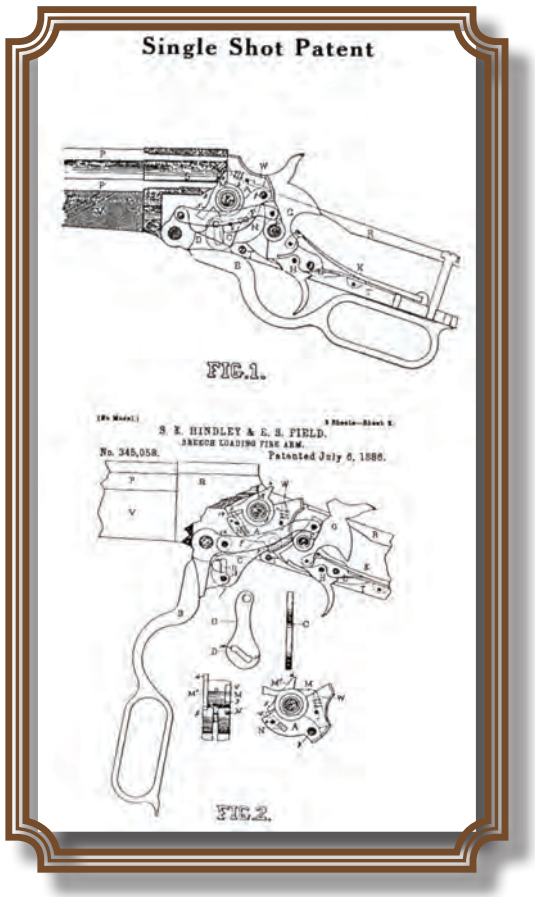
Bullard Small Frame Repeating Rifle (Left side) "Traditional Bullard checkering design," with internal access plate.

Bullard Small Frame Repeating Rifle (Right side) with internal access plate.

Large Frame (top) and Small Frame (Bottom) Rifle comparison.

sembling the whole action. The hole was drilled through the company name, address, and patent date on both the large frame and the small frame repeaters. How many were drilled by the factory and how many by gunsmiths is unknown.

BULLARD SINGLE-SHOT RIFLES



Extractor removal access hole location

The patent for the solid-frame single-shot rifle was filed by S.K. Hindley and E.S. Fields January 28, 1886, and granted July 6, 1886. The lever opens and closes a rotating breech block and is locked up internally similar to the Remington rolling block action. This action was very strong and a very simple modification of the repeater action.

Small and Large Width Single Shot Actions

3.) Single Shot Small Width Solid-Frames (1 in. wide) from Bullard were offered in models from .22 to .38 calibers. They went into production August 8, 1885.

4.) Single Shot Large Width Solid-Frames (1 1/8 in. wide) from Bullard were offered in models from .40 to .50 calibers. They went into production January 2, 1886.

*There are a few rifles of both type of Large Width Frames, Special Order, produced in calibers less than .40 Cal.

The patent for the Detachable Interchangeable Barrel Frame was filed by E.S. Fields and S.E. Hindley May 9, 1887, and was granted October 30, 1888. The action is basically the same as the solid-frame action with a provision, by removing one screw, to change the barrels. Some frames had two screws for added strength.

Single Shot Solid Frame Large Width Rifle.

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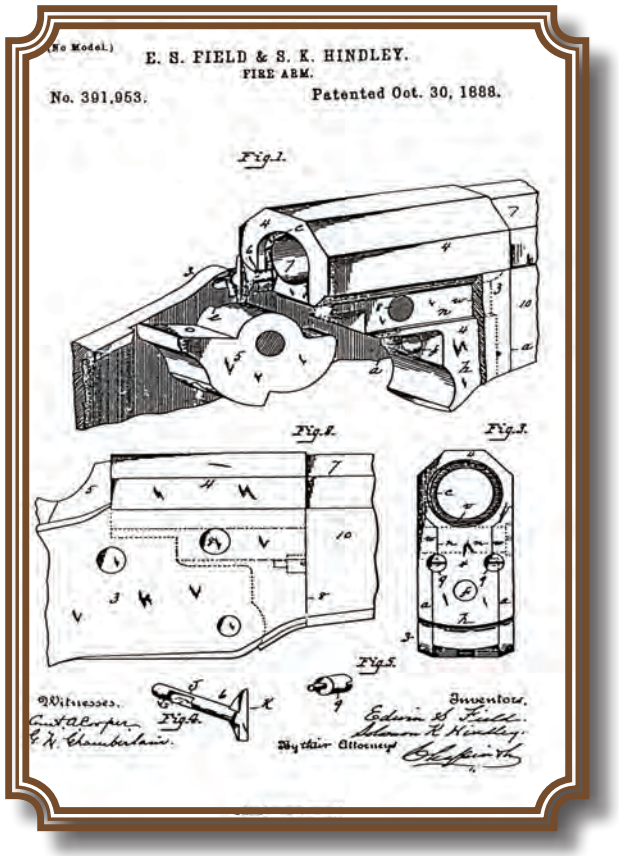
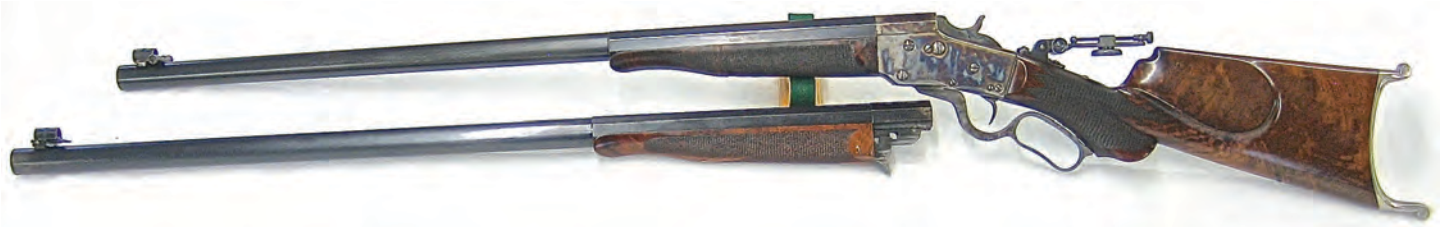

(No Model.)
E. S. FIELD & S. K. HINDLEY.
FIRE ARM.
No. 391,953. Patented Oct. 30, 1888.
Fig. 1.
Fig. 2.
Fig. 3.
Fig. 5.
Fig. 4.
Witnesses.
Inventors.
By their Attorneys

Single Shot Detachable-Interchangeable Barrel Frame Patent.

Cheek Piece (Top) and
Scheutzen Detachable Triggers (Above).



Detachable-Interchangeable Barrel Rifle with both barrels.

Detachable-Interchangeable Barrel Rifle taken apart.

(5) Single Shot Small Width Detachable-Interchangeable Barrel Frames (1 in. wide) from Bullard were offered in models from .22 to .38 calibers. They went into production January 13, 1887

(6) Single-Shot Large Width Detachable-Interchangeable Barrel Frames (1 1/8 in. wide) were offered in models from .40 to .50 Calibers. They went into production later. My guess would be May of 1887.

(7) Scheutzen Detachable Double Trigger Rifle was introduced May 21, 1887. It was offered in their catalog as: ".32 Cal. and .38 Cal. 30 in. Half-Octagon Barrel, Double Set Triggers, Pistol Grip, Cheek Piece, Swiss Butt, Mid-Range Vernier and Wind Gauge Sights with Level."

All four single-shot frame rifles have serial numbers ranging from 3500 to 4076 (which is the highest known serial number to date). Most of the first 165 to 175 serial num

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bers were solid-frame rifles of both widths. There were a few solid-frame rifles made in the higher serial number ranges, but not many.

All Bullard single-shot rifles have the company name, address, and patent dates stamped on the top of the frame as well as the caliber designation. All the single-shot rifles started production before the patent dates were granted. The single-shot rifles with serial numbers up to 3575 used the 1881 repeater patent date. The detachable-interchangeable– barrel rifles used the July 6, 1886, solid-frame patent date throughout its entire production period. The correct patent date of October 30, 1888, was never stamped on any Bullard rifle.

The Bullard Company was not consistent in using the proper patent dates with the proper sequence of serial numbers on many of their rifles. This makes for many variations and a real challenge for the dedicated Bullard collectors.

BULLARD BUTTPLATES

The Bullard Repeating Arms Association rifles with serial numbers up to 113 can have various types of buttplate depending on what Bullard could find during the time of production. I do not think the Company buttplate came into existence until the manufacturer became known as the Bullard Repeating Arms Company. There is no information available to date to justify the type of buttplates used by Bullard.

Three Gutta-Percha (shotgun type) buttplates were used on the Bullard rifles. One buttplate with an ELK motif was used on the large frame repeater rifles. Two different sized buttplates with a TURKEY motif were used on the small-frame repeater, single-shot, and just a very few large-frame repeater rifles. The average finished size of the Elk motif buttplate is 4 15/16 inches long by 1 5/8 inches wide. The average finished size of the smaller TURKEY motif buttplate is 4 5/8 inches long by 1 15/32 inches wide, and that of the larger TURKEY motif buttplate is 4 3/4 inches long by 1 15/32 inches wide.

There is a rare variation of one known ELK motif shotgun buttplate that is smaller than either size of the TURKEY motif buttplates which is only 4 15/32 inches long by 1 1/2 inches wide. This special order buttplate was hand modified by Bullard and is on a large-frame repeater .45-85 Bullard rifle with the serial number 1397. The

Bullard Butt Plates.

Other available Butt Plates.

Crescent, Schuetzen, Swiss, and Modified Military type buttplates were also available.

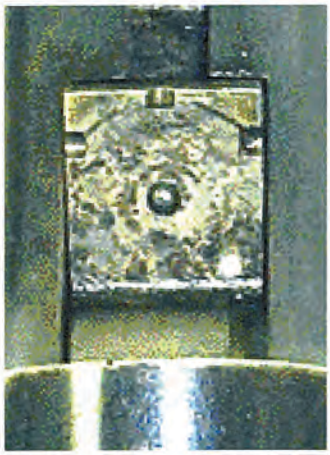
BULLARD SIGHTS

The Bullard Company offered all types of sights that were popular during that period. By far the most used sights I have observed are from Winchester. Most tang sights are Lyman. They were used on both the repeater and the

single-shot rifles. Some of the single-shot target rifles use the Winchester wind gauge front sights and mid-range vernier peep tang sights. Original Marlin Bullard wind gauge front sights with their mid-range vernier tang sights are scarce and were offered by Bullard on top-of-the-line rifles.

It is my opinion that half of all the Bullard rifles have had some sight changes or additions since they left the factory. The repeating rifles got tang sights added and rear barrel sights removed. The single shot rifle shooters had their sights changed all the time. We must accept the fact that a lot of really nice or even mint condition Bullard rifles do not have their original sights. I do not believe that this greatly affects their desirability or value to any great extent considering the very low number of Bullard rifles produced. It is just the way it is, but it is nice to have all the original sights as a collector.

Single Shot Breach Block
with unusual side and top cuts.
Reason unknown



Sr. No. 3527 with Experimental breech block cuts- REASON UNKNOWN.

Single Shot Musket Sr. No. 3527 .45-70 Cal. with 1881 Repeating Rifle Patent Date.

Sr. No. 3527 with Experimental holes to lighten weight of hammer.

MILITARY AND EXPERIMENTAL MODELS

In May 1885 and again when Hindley took over as Plant Manager in 1886, the military style muskets and carbines began production. It is my opinion that Hindley is the one who believed that military contracts would increase the Bullard production line.

There are two single shot experimental muskets known. All single shot military frames have a round top. Serial number 3527 in .45-70 caliber with the 1881 repeater patent date has the ramrod secured in the 1873 Springfield trap door fashion.

Serial number 3575 in .38-55 caliber with the 1886 single shot patent has the ramrod secured in the Remington rolling block fashion screwed into the action.

Single Shot Musket Sr. No. 3575 .38-55 Cal. with 1886 Single Shot Patent Date

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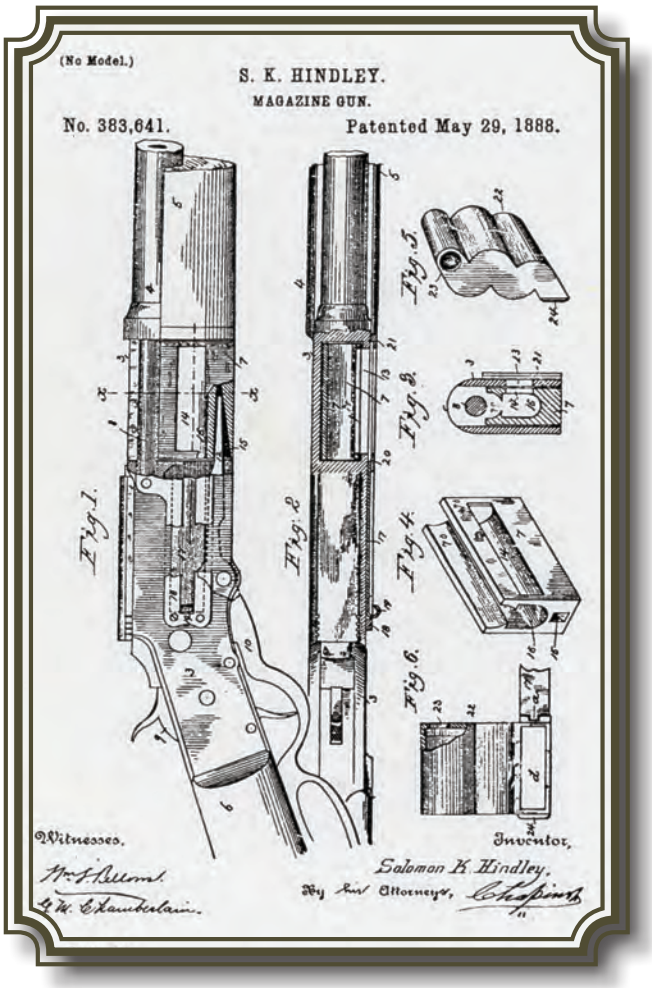
Single Shot Saddle Ring Carbine Sr. No. 3528 .45-70 Cal. with 1881 Repeating Rifle Patent Date and Saddle Ring.

One single shot saddle ring carbine with the serial number 3528 in .45-70 caliber with the 1881 repeater patent date is known. I have handled the carbine but do not have it yet in my collection. The fourth 1886 Bullard catalog shows the single shot musket and carbine. The fifth 1887 Bullard catalog shows a repeater musket and carbine, but they are shown with the tubular magazine that is found with their rifles.

On July 9, 1887, Hindley took the military muskets and carbines to Europe to promote sales. Because the Europeans liked rifles that were smaller than .45 caliber, it is probable that serial number 3575 in .38-55 caliber was built for that reason and went on the trip. There is no record that his trip resulted in any military contracts.


(No Model.)

S. K. HINDLEY.

MAGAZINE GUN.

No. 383,641. Patented May 29, 1888.

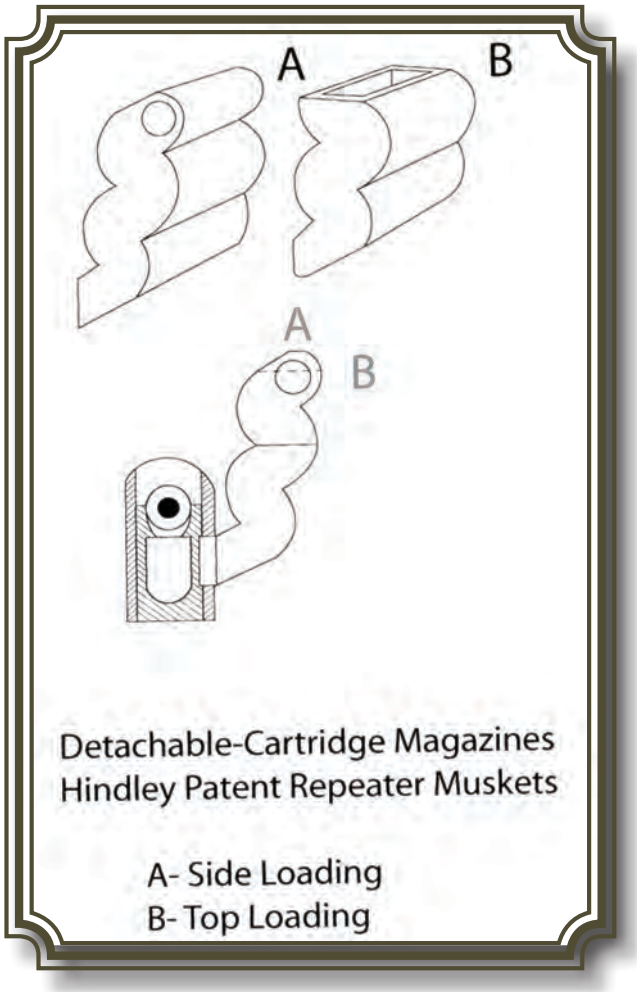
Witnesses.

Inventor,

Solomon K. Hindley.

By his Attorneys,

HINDLEY Magazine Gun Patent



First Hindley Bullard Repeating Musket Sr. No. 2524 .45-70 Cal. (Top)

Sr. No. 2524 Magazine Securing Plate. (Left) **Sr. No. 2524 Magazine Opening "Closed Up"**

On May 29, 1888, the "Hindley Magazine Gun" was patented. The rifle uses a detachable side magazine. The magazine was patented June 5, 1888, by Hindley and worked on a gravity feed principal. There were two styles. One that was fed from the top and one that was fed by pushing the cartridge in from the face of the magazine. The one important feature that was overlooked was that when the magazine was empty, a new one could be easily replaced. The clip was born. The basic Bullard rifle action was never changed.

Second Hindley Bullard Repeating Musket
Sr. No. 2529 .45-70 CaL-Heavy Magazine Securing Plate. (Top)

With single shot magazine cut off open. (Center Left)

Heavy Magazine Plate "Close Up" (Center Right)

Sr. No. 2529 (1) Single Shot Magazine Cut Off Open &
(2) Action Open. (Lower Right)

Experimental Tubular Feed Saddle Ring Repeater Carbine Sr. No. 2521.45-70 Cal. With single shot magazine cut off and saddle ring.

On May 29, 1888, the rifle with serial number 2524 in .45-70 caliber was submitted to the US Ordnance Department for trials. The rifle was not rejected but returned with the suggestion that the magazine area needed to be stronger. Hindley then built a second rifle with serial number 2529 in .45-70 caliber with the corrections to the magazine, but it was denied by the US Ordnance Department. These were the only two Hindley experimental military repeating rifles made.

One documented experimental tubular feed repeater saddle ring with serial number 2521, 45-70 caliber carbine with a single-shot cut-off was made, but no US patent can be found.

BULLARD RIFLE CARTRIDGES

James H. Bullard developed seven cartridges of his own. These were the .32-40-150, .38-45-190, .40-70-232, .40-75-258, .40-90-300, .45-85-290, and the .50-115-300 which was the first solid head semi-rimless (rimless) cartridge produced in the United States and probably the world. Bullard was the Roy Weatherby of his time. All his cartridges promoted his idea of light bullets with more cartridge case capacity resulting in more powder and velocity. For reasons unknown, the seven Bullard Cartridges were never patented. Bullard did have two cartridge patents, but they were only for improvement in cartridge manufacturing.

BULLARD RELOADING TOOLS

The first loading tool offered by the Bullard Company was the Brown Variforrn Combination Reloader. This was a handheld tong-type tool that could perform all the necessary operations to reload a cartridge. The Bullard Company produced their own line of reloading tools later. They were a series of four separate hand-operated tools. These tools were very simple, to say the least, if time meant nothing to the reloader.

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BULLARD CATALOGS

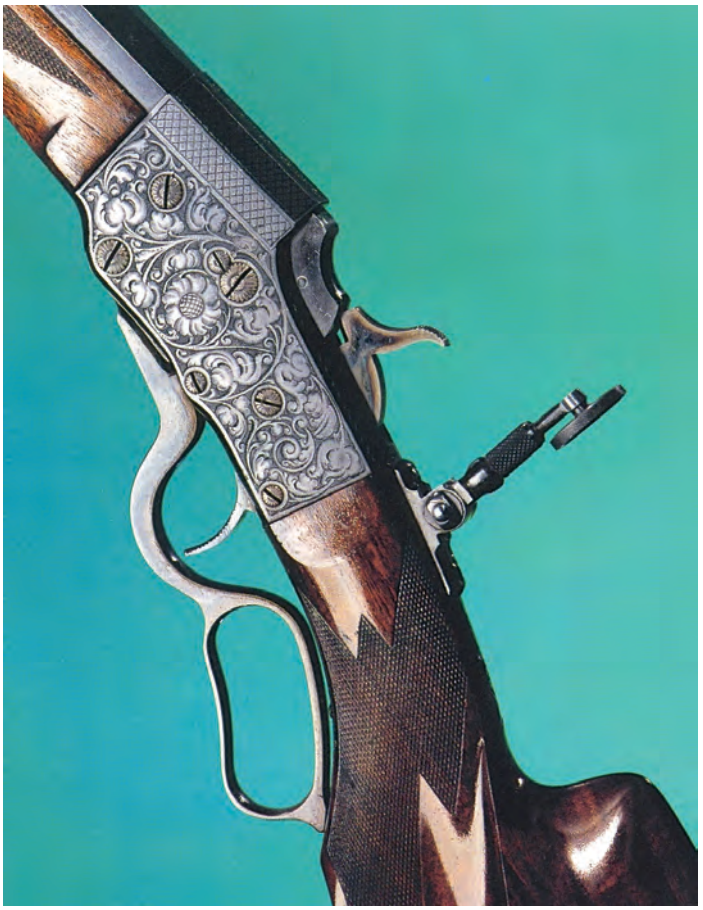
Five catalogs and at least two brochures were printed. Only the fifth catalog from 1887 is dated. There may be one later catalog that was produced, but if it was printed, it still is unknown. The Bullard Company did promote their rifles through magazine advertisements, printed media, and on the target range.

VARIATIONS:

The Bullard Company made many variations and special order rifles. Schuetzen rifles were made with interchangeable single and double set triggers. Detachable-interchangeable barrel rifles were made with two and three extra barrels. They also produced engraved rifles, sales examples, and many more.

PRODUCTION:

Without any incentive for mass production or standardization, every Bullard rifle was a custom, handmade, and fitted masterpiece. The Bullard rifle cost more than its competitors' rifles, but it had the smoothest lever action ever made. It was better made with more hand fitting and finishing. The workforce was allowed to rise and fall with the volume of production. This lack of a large permanent factory work force probably explains some of the oddities found in various rifles. Bullard rifles may look alike at first glance, but after close observation it is difficult to find two rifles that are exactly the same. Interchanging parts from one rifle to another, without lots of hand fitting, is next to impossible.



"Gustave Young Engraved" Small Width Detachable-Interchangeable Barrel Sr. No. 3922 .32-40 Cal. Single Shot Rifle. Appears on the cover page of G. Scott Jamieson's second Book "Bullard Firearms". Photo by (Carroll R. Hill)

Bullard rifles were second to none in design, durability, and craftsmanship, and without a doubt they had the

SMOOTHEST LEVER ACTION EVER MADE!

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Jamison, G. Scott, Bullard Firearms (Atglen, PA: Schiffer Publishing Ltd., 2002).