# A Brief Winchester Lever Action Rifle Chronology and History

# By Chuck Hawks

This brief introduction to the subject covers Winchester lever action rifles from the New Haven Arms Henry rifle to current Winchester (Herstal Group) production centerfire rifles. It is certainly not a definitive history, as that would require a very large tome and such books have already been written by people more knowledgeable than I.

To provide a bit of back story, in 1855 the little known Volcanic Arms Co. moved to New Haven, Connecticut. Volcanic was owned by three partners, financier Courtlandt Palmer, Horace Smith and Daniel Wesson. Volcanic manufactured lever action repeating pistols, and a few rifles based on the same action, for primitive self contained cartridges. Although patented by Smith and Wesson, the Volcanic lever action was actually designed by Horace Smith and a brilliant firearms designer named Benjamin Tyler Henry.

That same year, Oliver Winchester became a director of Volcanic, providing capital to keep the struggling Company afloat. At this time, Oliver Winchester was successfully manufacturing mens' shirts of an improved type in Hew Haven and had become a wealthy businessman with sufficient capital to branch out into other fields of interest.

Long story short, the Volcanic pistols were not commercially successful, the Company went into receivership early in 1857 and Winchester wound up owning all of the Company's remaining assets. Winchester reorganized the Company under the name New Haven Arms and B. Tyler Henry became the plant manager and chief designer, a position that had been held by Horace Wesson at Volcanic Arms.

This was a time of flux in the arms industry, as designers in both North America and Europe were experimenting with self contained cartridges and breech loading actions that would soon largely replace the muzzleloading firearms that had dominated arms design for centuries. The cartridges used in Volcanic pistols were unreliable and under powered, so by 1858 B. Tyler Henry was designing and experimenting with a big bore (.44 caliber) rimfire cartridge that became the .44 Henry.

At the same time, Henry was redesigning and improving the New Haven Arms lever action. The result was the famous 1860 Henry rifle, chambered for the .44 Henry rimfire cartridge, which hit the commercial market in 1862.

# Model 1860 Henry Rifle



Henry Rifle. Image courtesy of Henry Repeating Arms Co.

The Henry rifle never bore the Winchester name, as it was produced during the New Haven Arms years, before the Company name was changed to Winchester Repeating Arms. However, it featured the toggle-link lever action used, with little change, in all subsequent Winchester rifles for the next 16 years.

The Henry rifle's design included a brass frame (a few iron frame Henry's were built), full length magazine mounted beneath an octagon barrel, exposed hammer and a top ejection receiver. The Henry action is a controlled feed design and it can be operated on its side or upside down with complete feeding reliability.

This was not a strong action by modern standards, as the rimfire cartridge for which it was designed did not operate at high pressure and a brass receiver is not as strong as a steel receiver. However, it was a high capacity, fast, reliable and exceptionally smooth action; clearly the most advanced rifle of its time.

The magazine, which was integral with the barrel, was loaded from near the rifle's muzzle end and the magazine follower had an external tab that extended from a slot in the bottom of the magazine tube. This tab allowed the shooter to manually compress the magazine spring, so the rifle can be loaded.

Although fancy and engraved Volcanic guns had been made, the Henry rifle marked the real beginning of what became a long Winchester tradition of building high grade rifles with fancy walnut stocks, plated receivers, engravings and inlays of all sorts to special order. (After 1873, fancy stock carving and checkering patterns also became available.) Before the Henry rifle was replaced by the Winchester Model 1866, a total of 14,094 Henry rifles had been produced.

Today, an accurate reproduction of the <u>Original Henry Rifle</u> is produced by the modern Henry Repeating Arms Company. The only significant change is the use of a modern (stronger) brass alloy receiver. The new Original Henry Rifle is chambered for the .44-40 centerfire cartridge, as production of the .44 Henry rimfire cartridge was discontinued long ago.

#### **Model 1866**



Model 1866. Illustration courtesy of Winchester Repeating Arms.

1866 brought major changes. Nelson King succeeded B. Tyler Henry as the plant superintendent by the beginning of the year. In May, the Company's name was changed to Winchester Repeating Arms Company. An improved version of the Henry rifle was introduced, becoming the first rifle to wear the Winchester name.

The Winchester Model 1866 was initially referred to as the "Improved Henry." One major improvement was the addition of a wooden fore arm. (The original Henry rifle had no fore arm; the shooter simply held onto the magazine tube.)

Another was the incorporation of a spring-loaded loading gate in the right side of the receiver through which cartridges were fed into the magazine. The magazine became a closed tube, separate from the barrel, that no longer needed a slot in the bottom for a magazine follower. This design improvement was the creation of and patented by Nelson King and it is still used in most lever action rifles today.

The Model 1866 fired the same Henry .44 rimfire cartridge used in the Henry 1860 rifle. B. Tyler Henry's toggle link lever action remained, as did the brass receiver, which is why the Model 1866 was also called the "Yellow Boy."

Initially an octagon barrel was standard, although later round barrels were offered in both rifle and carbine versions. Although superseded by the Model 1873 and subsequent Winchester models, the Model 1866 was sufficiently popular to remain in the Winchester line through 1898, with the total production being 170,100 rifles.

In modern times, as the relevant patents have long expired, companies like Uberti have made a profitable business producing quite accurate reproductions of various Winchester lever action rifles. (Also other historic rifles and early Colt, Remington and S&W revolvers.) Among these successful reproductions is the Model 1866. Of course, these rifles cannot legally bear the Winchester name, but they are popular with the cowboy action shooting crowd and others who simply want to shoot a classic Winchester rifle.

Today, the rights to the Winchester name are owned by the Olin Corporation, which makes Winchester ammunition. Olin licensed the Winchester name to the Herstal Group (FN/Browning) for the production of Winchester firearms in 1989.

In 2018, realizing a market exists for modern, shootable versions of classic Winchester rifles, FN reintroduced the Model 1866 into the Winchester product line. The bottom line is that you can again buy a <u>Winchester Model 1866</u> rifle bearing the Winchester name. The available calibers are .38 Special, .45 Colt and .44-40 Winchester, relatively low pressure numbers suitable for use in the Yellow Boy's brass receiver.

### **Model 1873**



Winchester Model 1873 Sporter. Illustration courtesy of Winchester Repeating Arms.

The '73 Winchester became one of Winchester's most famous models ever and ultimately became known as "The Gun that Won the West." The Model 1873 was basically an 1866 improved by making the receiver from iron (later steel), instead of brass. The new receiver was normally color case hardened, although other finishes could be ordered.

This change in receiver material made possible the use of a revolutionary, higher performance and higher pressure centerfire cartridge, the famous .44-40 Winchester. It is said the .44-40 has been used by hunters to kill more deer than any other cartridge, except for the .30-30 Winchester. Later, the .38-40 and .32-20 Winchester cartridges were added to the line and the famous Colt Single Action Army revolver (also introduced in 1873) was chambered for all three of these Winchester cartridges, simplifying ammo supply for individuals on the frontier.

The 1873 action featured removable side plates that made access to its internal parts easier. A less significant, but also visually obvious change to the '73 rifle was the addition of a manually closed, sliding cover on the top of the receiver. This was used to cover the ejection port when the rifle was not in use. This cover automatically slid open when the lever was operated, so it did not cause a failure to eject.

Many variations of this famous rifle were produced over its production lifetime. Barrels of various rifle and carbine lengths could be octagon, round, or half

octagon / half round style. Magazine lengths and stock styles also varied, as did sights and minor action details.

Model 1873 rifles were produced until 1923. Total production numbered some 720,609 units, making it one of the most popular Winchester rifles ever.

In 2013, the <u>Winchester Model 1873</u> rifle was restored to the current Winchester "Historic" line. As of this writing, New '73 rifles are produced only in .357 Magnum/.38 Special caliber.

## **Model 1876**



Model 1876 rifles. Illustration courtesy of the Winchester Arms Collectors Assn.

Despite the success of the Model 1873, a demand remained for a Winchester lever action designed for more powerful centerfire cartridges. Single shot breech loaders, such as the trapdoor Springfield, Remington Rolling Block and Sharps rifles could handle the .45-70 Government and similarly powerful cartridges, which far outstripped the killing power of the smaller .44-40 Win.

The Model 1876 was introduced at the Philadelphia Centennial Exposition and consequently became known as the "Centennial Model." It used a lengthened version of the basic Henry action used in the Model 1873 and was initially chambered only for the new .45-75 Winchester centerfire cartridge.

Later, the .45-60, .50-95 Express and .40-60 were added to the line. For a short time in 1878 a few Model 1876 rifles were built in .45-90 caliber, which was quickly discontinued. The Model 1876 was never offered in .45-70 Government caliber, as its action was considered marginal for the heavy .45-70 rifle load using a 500 grain bullet.

Like the Model 1873, Model 1876 rifles and carbines were offered in a bewildering number of variations with barrels of various lengths and types, magazines tubes of different lengths, with and without ejection port dust covers, straight hand, pistol grip and musket style stocks, etc. Manufactured until 1898, a total of 63,871 '76 rifles were eventually produced. It was the last Winchester model to use the Henry toggle link action.

## Model 1886 and Model 71



Model 1886. Illustration courtesy of Winchester Repeating Arms.

The Model 1876 had stretched the Henry toggle link action to its practical limit in terms of both length and strength. If Winchester rifles were to remain competitive in power with newer designs from other manufacturers, an entirely new, stronger and more compact action was required.

The solution, and a radical design departure from the Henry action, was provided by John Moses Browning. Browning had sold Winchester the rights to his falling block rifle, patented in 1879, which Winchester improved and introduced as their Model 1885 High Wall. This was and is one of the best falling block rifles ever made.

Winchester's initial association with Browning led to the Model 1886 lever action, also designed by Browning. This new action used vertically sliding locking bolts at the rear of a lever operated breech bolt running in tracks machined into the sides of the receiver. When closed, the top of the bolt itself sealed the top of the receiver, so no separate dust cover was required; this latter feature was common to all of the Browning designed Winchester lever actions.

A typical Winchester style tubular magazine was located beneath the barrel of the new rifle and loading was via a typical loading gate in the right side of the receiver. Like previous Winchester lever actions, ejection was through the top of the receiver.

The Model 1886 action was not only much stronger than the Henry action and could handle longer cartridges, it also used a shorter receiver, due to its more compact operating mechanism. This is an important consideration when chambering long cartridges, such as the .45-70, .45-90 and 50-110. In addition, it was a very smooth operating action, perhaps the smoothest of all the John M. Browning designed Winchesters.

In 1903 the Model '86 was offered for the new, smokeless powder, .33 Winchester cartridge. This made the '86 the first Winchester medium bore rifle of the modern (i.e. smokeless powder) era. In all, between 1886 and 1932, some 159,994 Model 1886 rifles were built.

The reconstituted Winchester company has again made the <u>Model 1886</u> available. For 2018, it is offered in Short Rifle and Deluxe Rifle configurations. The former comes with a blued receiver and a round barrel, while the latter features a color case hardened receiver and an octagon barrel. .45-70 is the only caliber available.

A later variation of the Model 1886 was the <u>Winchester Model 71</u>, introduced in 1935, with a coil main spring replacing the Model 1886's leaf spring. The Model 71 was offered only in a new caliber, the .348 Winchester, a powerful medium bore cartridge intended to replace the .33 Winchester offered in the Model 1885.

Although the Model 71 was discontinued in 1958, after 47,254 had been built, the .348 Winchester cartridge is still produced. I have heard the Model 71 remains popular in Alaska for protection from bears.

Model 71 rifles came with a round 24 inch barrel and short rifles (carbines) were supplied with a round 20 inch barrel. The Model 71 was provided with a tubular half magazine that held four cartridges and protruded only a couple of inches from the front of the fore end.

The Model 71 rifle was brought back as a limited production item by Browning in 1986-1987 (some 13,000 units produced) and by Winchester in 2011-2013. These rifles were built by long time Browning/Winchester partner Miroku of Japan and came with holes drilled and tapped in the left side of the receiver for Lyman or Williams aperture sights.

## Model 1892 and Models 53 / 65



Winchester Model 92. Illustration courtesy of Winchester Repeating Arms.

The Model 1892 was another John Browning design, this time for short action cartridges. Its action was essentially a miniaturized version of the Model 1886. It was basically intended to supplant the Model 1873, which it eventually did.

In addition to the .44-40, .38-40 and .32-20, the Model 1892 was offered in .25-20 Winchester. In the late 1930s, a few Model '92 rifles were built in .218 Bee. The Model 1892 became the second best selling Winchester lever action rifle, with a total of 1,004,951 built before it was discontinued in 1941.

A variation of the Model 1892 was the Model 53. This was a Model 92 with a 22 inch round barrel, half magazine, rifle fore end and straight hand stock with a

shotgun butt plate. Take-down Model 52s were also available. Model 52's had their own serial number series and a total of 24,916 were produced between 1924 and 1932.

The Model 65, which used a Model 1892 receiver and was serial numbered in the Model '92 series, was introduced primarily for the .218 Bee, which is actually a .22 caliber varmint cartridge. Calibers .25-20 and .32-20 were also offered in the Model 65.

The M-65's round barrels were normally 24 inches long in .218 Bee and 22 inches long in the other calibers. Rifle type fore ends, half magazines and pistol grip stocks with shotgun butt plates were the typical Model 65 configuration. A total of 5,714 Model 65s were completed between 1933 and 1947.

Today, the Model 1892 lives again. It is available from Winchester in Short Rifle and Carbine configurations, both with 20 inch round barrels and full length magazines. Calibers include .357 Magnum, .44 Magnum and .45 Colt. Uberti and others offer Model 1892 reproductions.

## Model 1894 and Model 64



Winchester Model 94. Illustration courtesy of U.S. Repeating Arms.

Winchester's association with John M. Browning reached its pinnacle with the Model 1894, which became the most popular sporting rifle in North America and the best selling Winchester rifle ever made. The Model 1894 is, arguably, John Browning's greatest creation. (After 1907, the Model 1894 nomenclature was shortened to simply "Model 94") Part of the production records have been lost, but it is estimated that well over 7,000,000 Model 94s have been sold.

The Model 1894 action uses a one-piece, vertically sliding locking bolt at the rear of the breech bolt, an improved version of the principle used in the Model '86 and Model '92 actions. Prior to 1982, fired cases were ejected vertically out of the top of the action when the lever was operated. However, to allow low and over bore scope mounting, in 1982 the action was modified to eject fired cases from the top of the receiver at an angle to the right. This Angle-Eject Model 94 action is still in use today and all AE rifles are drilled and tapped for scope mounts.

In 1894 the rifle was introduced in black powder calibers .38-55 and .32-40, but a year later the new, smokeless powder .30-30 and .25-35 Winchester cartridges

were added. This made the Model 94 the first American sporting rifle chambered for smokeless powder cartridges.

The .30-30 and .25-35 are based on a necked-down .38-55 case and the similar .32 Winchester Special followed in 1902. The .38-55 was successfully converted to smokeless powder and this solidified the enduring Model 94 cartridge line-up. To this day Model 94's are offered in .25-35, .30-30, .32 Special and .38-55. With these four cartridges all North American big game animals can be hunted.

The Model 94 action was revised for cheaper production in 1964, the year most Winchester firearms were revised to reduce production costs. Winchester customers were outraged and most of the improvements in the Model 94 since 1964 have been to restore the pre-'64 rifles' quality.

Model 94s have been produced in countless variations, both rifle and carbine, far too many to enumerate here. The most popular Model 94 variation is the carbine, with a 20 inch round barrel, full length magazine tube, straight hand stock and flat shotgun style butt plate. This is the quintessential American deer and black bear woods rifle, as well as the cowboy's traditional saddle rifle.

One of the most notable Model 94 variations was given its own model number, the Model 64, although not its own serial number series. Produced between 1933 and 1957, this was essentially a deluxe Model 94 rifle with a pistol grip stock, rifle fore end and a 24 inch round barrel with a five shot half magazine. The Model 64 was briefly revived in 1972-1973. Calibers were the same as the Model 94, plus the .219 Zipper, a 1937 vintage .22 varmint cartridge based on a necked-down .25-35 case. Altogether, some 75,033 Model 64s were produced.

The Herstal Group acquired the manufacturing rights to Winchester firearms in 1989 (licensed from Olin Corporation) and set about restoring Winchester's reputation. There was a hiatus in Model 94 production between 2006 and 2010, during which time production was moved to Browning/Winchester's long time partner Miroku, in Japan.

These Miroku built Model 94's are perhaps the best Winchester lever actions ever made and certainly the best since 1964. *Guns and Shooting Online* has reviewed the new Model 94s in all four available calibers. See the <u>Product Reviews</u> index page.

#### **Model 1895**



Model 1895. Illustration courtesy of U.S. Repeating Arms.

The John Browning designed Model 1895 rifle represents a substantial change in the design of Winchester lever action rifles. Lever actions had long been THE American hunting rifle, but by 1895 European style bolt action rifles were starting to make inroads, particularly the Krag-Jorgensen rifle in caliber .30-40 (.30 US), which was adopted by the US Army in 1892.

As a result, the Model 1895 incorporated certain bolt action rifle features, including a single stack, internal box magazine loaded from the top. Locking the action closed was accomplished by means of a twin lugged, vertical sliding locking bolt at the rear of the breech bolt that kept it firmly closed.

Ejection of fired cases was out the top of the receiver, like most bolt action rifles. However, unlike bolt actions, there were no front and rear receiver bridges, which made it impossible to mount a riflescope low and over the bore. This was not an issue when the Model 1895 was introduced, but it became one later, as the popularity of riflescopes increased.

The Model 95's box magazine allowed the use of pointed bullets, which in turn allowed the Model 95 to be chambered for high intensity cartridges. These included the .30-40 Krag, .30-03 Springfield, .30-06 Springfield, .303 British, 7.62x54R Russian, .35 Winchester and .405 Winchester. In addition, the Model 1895 was offered in .38-72 Winchester and .40-72 Winchester, cartridges intended to be loaded with either black or smokeless powder. However, the most popular Model 95 caliber was .30-40.

Most Model 95s came with crescent rifle butt plates, which along with a stock design with plenty of drop at comb and heel, amplified the effect of recoil. The most common fore end was a slender Schnable type. Although no lightweight, the Model 1895 quickly developed a reputation as a hard kicking rifle, particularly in .30-06, .35 Win. and .405 Win.

The Model 1895 was a popular rifle in its day and a total of 425,881 were built. Like all popular Winchesters, it was made in many configurations, including rifle, carbine, musket and even takedown models. Fancy, engraved rifles were also available by special order.

Today, the Model 1895 is included in Winchester's Historic product line and it occasionally appears in the Winchester annual product line in rifle or takedown form. Calibers in recent Historic Model 1895s have been .30-40 Krag, .30-06 and .405 Winchester. These rifles are produced by Winchester's partner Miroku.

## Model 88



Winchester 1962 catalog illustration showing Model 88 rifle courtesy of Winchester Repeating Arms Co.

Introduced in 1955, the Model 88 combines bolt action features with a lever action operating system; it was essentially a lever operated bolt action rifle. Features included a front locking, three-lug, rotating bolt; solid top receiver drilled and tapped for scope mounts; right side ejection; short throw lever action; detachable box magazine; factory iron sights and a one-piece walnut stock of the sort found on contemporary bolt action rifles.

The trigger guard and trigger moved with the lever when the action was stroked, a feature intended to prevent inadvertently spearing the trigger finger if the lever was closed carelessly. However, this became the rifle's weakest feature. Disconnecting the trigger from the sear when the lever was operated resulted in a creepy and relatively heavy trigger pull that was much criticized at the time. (It was no worse, and probably better, than many modern triggers, though!)

The Model 88 was chambered for Winchester's then new .308, .243 and .358 short action cartridges. Shortly after its introduction, the .284 Winchester was added, but the best selling calibers remained .308 and .243. The Model 88 was discontinued in 1973.

Somewhat surprisingly, since it does not seem to be widely remembered today, the Model 88 sold reasonably well, although the actual production number (284,965 units) is an estimate, as factory records between 1955 and 1961 have been lost. The Model 88 concludes this timeline, as it is the most recent Winchester lever action rifle design to reach production (so far).

# The Winchester Historic product line

As mentioned in various places in this article, several of the classic Winchester lever action rifles have returned to production in what is called the Winchester

Historic product line. As stated in the 2018 Winchester catalog, these rifles are made in limited quantities and rotate in and out of production on an ongoing basis. Included in the Historic line are the lever action Models 1866, 1873, 1886, 1892, 1894, 1895 and 71, as well as the Model 1885 High Wall and Low Wall single shot falling block rifles.

The Historic rifle line gives today's shooters the opportunity to own and shoot genuine Winchester classic rifles chambered for smokeless powder cartridges available in the Winchester (Olin) ammunition line, as well as from other sources. I strongly suggest taking advantage of this wonderful opportunity! (*Guns and Shooting Online* has reviewed most of these historic rifles; see the <a href="Product Reviews">Product Reviews</a> and <a href="Rifle Information - Reviews">Rifle Information - Reviews</a> index pages.)

#### References

I have been a lifelong fan of lever action rifles in general and Winchester lever actions in particular. Most of the information in this article is a result of my decades of interest in, personal experience with and research about these famous rifles.

However, to give credit where it is due, the production numbers, some specific dates and other important details used in this article were taken from *The Winchester Book (1 of 1000)* by George Madis. This big volume's 654 pages provides a wealth of information about all Winchester firearms from their inception to 1985, not just the lever action rifles, and I consider myself lucky to have a copy in my personal library.