

Deadlands Armory



Rifles Part III. Magazines In Motion: Revolvers, Turrets, & Harmonicas

Revolving Magazines

The nineteenth century was a time of great mechanical innovation, marked by thousands of inventive creators seeking patents for all manner of curiously-engineered devices. Firearms were no exception, and a glance at any “weird weapons” collection reveals dozens of oddities, often stamped between 1820–1860. Many of these utilized some form of revolving magazine, whether a cylinder, a cluster of barrels, a turret, or some form of rotary chain. This introduction offers a short history of the revolver, followed by profiles for the more unique, popular, or interesting repeaters that use some form of moving magazine. A more detailed history of revolvers and the Colt patent is found in “*Deadlands Armory—Revolvers.*”

Pepperbox Guns

The general mechanism of a revolving magazine evolved from the “pepperbox” gun of the early nineteenth century. A pepperbox gun features a cluster of smooth-bore barrels which are rotated into position and fired individually. Predating the advent of the cartridge, pepperbox guns are muzzle-loaded, and require a separate primer charge for each barrel. Pepperbox guns began fading in popularity before the Civil War, replaced by the more efficient percussion revolver.



The Percussion Revolver

One of the most significant innovations in firearm design, a revolver features a cylindrical magazine that holds each round in an individual chamber. The first modern revolver was designed by Elisha Haydon Collier in 1814, and was a self-priming flintlock with a manually-rotated cylindrical magazine. Having been exposed to the Collier revolver during a voyage abroad, Samuel Colt made the critical innovation that earned him one of the century’s most famous patents—a revolving cylinder that was mechanically rotated. Colt introduced his first revolver in 1836, the famous “Colt Paterson” percussion revolver. This gun set the standard for

the next few decades, and most percussion revolvers operate the same way. The cylinder is loaded from the front. The user fills each chamber with a measured amount of gunpowder, and uses a loading lever to seat the shot firmly in place. Once the cylinder is loaded, the user places individual percussion caps on the nipples at the rear of the cylinder. To fire the revolver, the shooter cocks the hammer, which rotates the cylinder, bringing a new chamber into alignment with the barrel. Pulling the trigger drops the hammer onto the percussion cap (or sometimes activates a concealed firing pin). The user then re-cocks the hammer to index a new chamber. Because pulling the trigger simply releases the hammer, this is known as a “single action” design. Later models employed a “double action” mechanism, in which a single trigger pull both cocks and releases the hammer, eliminating the need for the shooter to manually cock the hammer in between shots. Requiring a longer and often jerkier “trigger pull,” double-action revolvers trade accuracy for speed.

Chain Fire

Early percussion revolvers were subject to “chain fire.” Also known as “cross-fire,” this occurs when loose gunpowder escapes from a chamber and spreads into the cylinder, the action, or somewhere else it’s not supposed to be. When the primer is detonated, the stray powder ignites, often triggering a chain reaction that fires all chambers simultaneously! Not only can this damage or destroy the revolver, it may harm the user. Shooters usually prevent chain fire by greasing the mouth of each chamber with lard or tallow. Chain fire is more common in old revolvers, in which corrosion may worry holes between the chambers of a cylinder.

In terms of game mechanics, when a user of a cap and ball revolver gets a critical failure on his Shooting roll, chain fire discharges all remaining chambers and causes 1d8 DAM to the shooter. A subsequent Repair roll is required to mend the firearm, or it is considered permanently damaged.

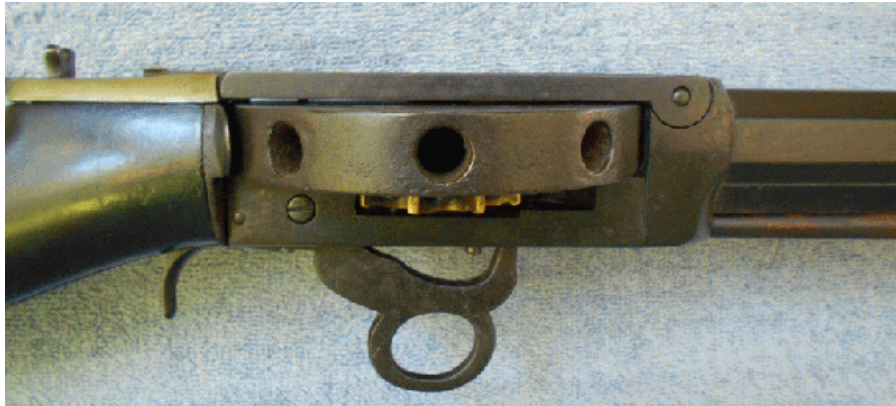
Cylinder Gap Blast

A problem inherent with all types of revolvers is “cylinder gap blast.” Because the cylinder of a revolver is traditionally unenclosed, the explosion of gunpowder in the chamber sends a scorching blast of hot gas from the gap between the cylinder and the frame. This “gap blast” may also include unreacted grains of gunpowder and shavings of hot lead known as “spall,” which splash from the bullet as it transfers from the chamber to the bore. On a handgun, the effects of gap blast on the shooter’s hand may be avoided by holding the revolver correctly, with the supporting hand reinforcing the firing hand. However, a rifle is usually held with the supporting hand gripping the forestock, which is located directly in front of the forward cylinder gap. This may result in a burned or injured forearm, wrist, or hand. Even the shooter’s anticipation of gap blast may lead to flinching, with a corresponding decrease in accuracy. Furthermore, because some of the propellant escapes the cylinder, gap blast decreases muzzle velocity, one of the reasons that revolving rifles traditionally lack the range and firepower of other rifles.

Turret Guns

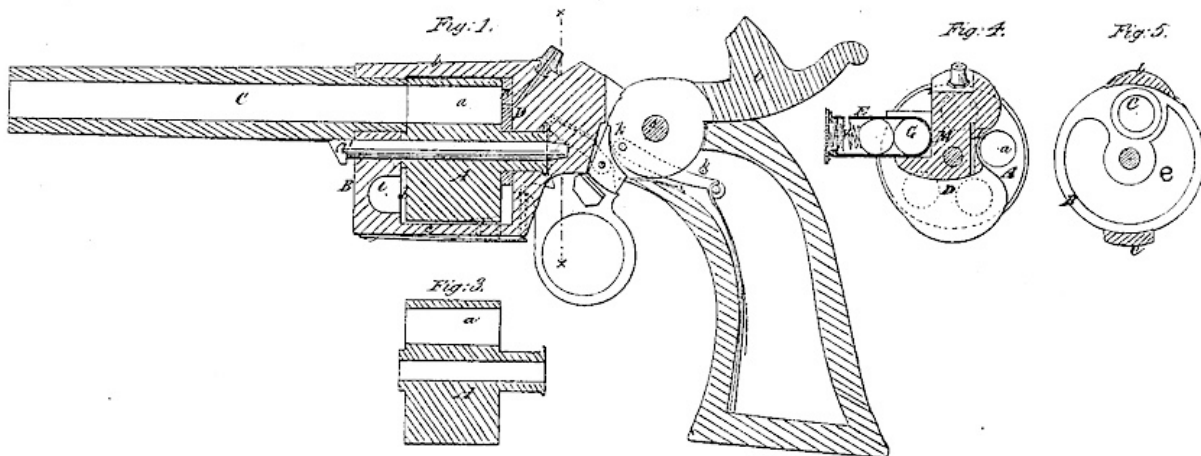
One interesting way to circumvent Colt’s patent on the revolving cylinder was to re-imagine the revolving magazine as a disc, its multiple chambers placed equidistantly along the perimeter like the spokes of a wheel. Known as “turrets,” these discs could be mounted horizontally or vertically within the frame of the rifle, and functioned by bringing a loaded chamber into alignment much the same as a revolver. Unfortunately, turret guns had two major problems. First, the turret was invariably larger and heavier than a cylinder. While this could accommodate larger calibers, it added weight to the rifle. Second and more importantly, the loaded chambers of a turret were always pointing radially outwards, with some chambers aimed uncomfortably close to the shooter

himself! Needless to say, this makes chain fire a very real concern. The Marshal should treat chain fire from a turret revolver as a “small burst,” inflicting 1d8 DAM/loaded chamber to everyone within “Short” range of the gun, including the shooter!



The Rollin White Patent

The introduction of metallic cartridges made the cap and ball system obsolete. Because the round’s primer is integrated into the cartridge, no percussion caps are required to fire the gun. For a metallic cartridge to be inserted into a revolving cylinder, the cylinder needs to be bored fully through so the entire chamber can be in alignment with firing pin and barrel. In 1855, a gunsmith named Rollin White was granted a patent for a revolver design which included this fully-bored cylinder. A year later White signed an exclusivity contract with Smith & Wesson.



In 1869, White attempted to extend his patent through legal means, but Ulysses S. Grant, acting under the authority of martial law, denied his request on the grounds that White’s patent was “an inconvenience and embarrassment” to Union forces for the “inability of manufacturers to use this patent.” The Rollin White patent expired, and cartridge-based revolvers became the standard handgun of the American west.

The Armory: Revolving Rifles

Wheeler Pepperbox Carbine

1818–1825?, USA, muzzle-loaded flintlock, pepperbox, smoothbore. Caliber .52, Range 3/6/60, Capacity 7, Rate of Fire 1/2, DAM 2d10, STR d6, Very rare. Note: Loading a Wheeler flintlock requires the standard three action rounds for each barrel.



Invented by Concord gunsmith Captain Artemas Wheeler, the Wheeler Revolving Flintlock is the first revolving firearm to be patented in the United States. It is composed of six 12½” barrels which are rotated counterclockwise into position by hand. A primer box mounted on top of the frame automatically fills each pan with powder as the new barrel ratchets into place.

Wheeler Revolving Cylinder Musket

1820–1825?, USA, flintlock, revolving cylinder, smoothbore. Caliber .52, Range 4/40/80, Capacity 7, Rate of Fire 1/2, DAM 2d10, STR d6, Very rare.



Artemas Wheeler’s musket trades the multiple barrels of his carbine for a single 32” barrel backed by a revolving seven-chambered cylinder. When the shooter pulls the trigger-guard release, the cylinder unlocks, allowing the next chamber to be manually rotated into place. As with his pepperbox, a primer magazine fills each pan automatically as it rotates. Little is known historically about this gun, which was soon superseded by Elisha Haydon Collier’s revolvers.

Collier Revolving Musket, “First Model”

1818–1820?, UK, flintlock, revolving cylinder, smoothbore. Caliber .69, Range 5/50/100, Capacity 5, Rate of Fire 1/2, DAM 2d12, STR d6, Very rare. Notes: On a critical failure, the pan flash triggers an explosion in the primer magazine, requiring a workshop and a Repair roll to fix. Some Collier models have a built-in bayonet that folds into position under the barrel.



One of Captain Artemas Wheeler’s collaborators was Elisha Haydon Collier, an inventor from Boston. Although history has not recorded their exact professional relationship, or to what extent Collier helped Wheeler design and/or manufacture his muskets, records show that Collier came up with an improved revolver mechanism in 1814. Four years later Collier moved to England and received a patent, after which he founded Collier & Co. to produce a line of firearms based on his design. Although revolving magazines were not a new concept, Collier’s revolver was the first to achieve appreciable success, and was a direct inspiration for Samuel Colt’s “Paterson.”

Collier’s revolver uses a brass cylinder backed by a spring-driven piston. This keeps constant pressure on the cylinder, pushing it against the breech of the barrel. To fire the revolver, the shooter cocks the hammer to unlock the cylinder. He then pulls back on the cylinder, manually rotates it to a new chamber, and lets the spring push it back into position over the breech. Because the chambers are rebated back from the face of the cylinder, each chamber slides over the end of the barrel to form a gas seal. This protects the user from gap blast and conserves the explosive energy of the gunpowder. Collier’s revolver also features an automatic priming system developed in 1811 by Wilson of the Minories. This system transforms the frizzen into a three-chambered “priming box.” When the box is pulled down into position, a rotating mechanism doles out a charge of priming powder into the pan. The underside of the priming box serves as a traditional frizzen, struck by the flint to create the spark.



When the frizzen/priming box is pushed down into position over the pan, the forward-curving pawl engages the attached wheel and rotates a mechanism in the priming box 120°, doling out a measure of powder. The bottom of the priming box serves as the frizzen.

Collier & Company did not actually produce the guns themselves, but contracted with various British gunmakers such as John Rigby, John Evans, Henry Nock, and Harvey Mortimer. Typical of the period, Collier's patent resulted in a wide variety of models, including pistols, blunderbusses, carbines, shotguns, and seven-shot muskets chambered for smaller caliber rounds. Collier did not differentiate the improvements he made to his patent as he produced his revolvers; so "First Model," "Second Model," and "Third Model" are modern terminology.

Collier Revolving Rifle, "Second Model"

1820–1822?, UK, flintlock, revolving cylinder. Caliber .563, Range 10/100/200, Capacity 5, Rate of Fire 1/2, DAM 1d10+1d12, STR d6, Very rare. Note: On a critical failure, the pan flash triggers an explosion in the primer magazine, requiring a workshop and a Repair roll to fix.



An improvement on Collier's original patent, the Collier rifle switched to a fluted cylinder of Damascus steel and changed the priming box mechanism, replacing Wilson's pawl-and-wheel with a single-chamber, "link-operated" system. Sights were added to better reflect the accuracy of the 28" rifle barrel. Like the Collier musket, it was produced in several different patterns, from pistols to shotguns.



When the frizzen/priming box is pushed down into position over the pan, the attached rod turns a mechanism 180°, doling out a measure of powder. The bottom of the priming box serves as the frizzen.

Collier Revolving Rifle, "Third Model"

1825–?, UK, revolving cylinder. Caliber .563, Range 10/100/200, Capacity 5, Rate of Fire 1/2, DAM 2d10, STR d6, Very rare. Note: Reduced damage reflects a substandard powder load.

Some Collier flintlocks were later converted to caplock rifles. These rifles resemble the "Second Model," but are obviously without a primer box and frizzen. Additionally, the length of the cylinder was reduced to accommodate percussion cap nipples.

Nock Pepperbox Carbine

1800–1818?, UK, muzzle-loaded flintlock, pepperbox, smoothbore. Caliber .44, Range 3/6/60, Capacity 6, Rate of Fire 1/2, DAM 2d8, STR d8, Exceptionally rare.



The Nock Revolving Flintlock Carbine is an evolution of the Nock Volley Gun, and features six 18” barrels that are manually rotated into place for individual firing. It uses a “link operated” priming system similar to the Collier Second Model, but with a failsafe that prevents the magazine from accidentally catching a primer spark.



The origins of the Nock Pepperbox are obscure. It may have been designed and produced by Henry Nock himself before his death in 1804, but it shares characteristics with the Wheeler pepperbox, so some historians believe it might have been influenced by Artemas Wheeler. There is also a possible Collier influence to consider—after working with Captain Wheeler, Collier traveled to Britain and worked with the Nock gunsmiths to make his own revolvers, so this firearm may date from that period as well. In short, few know the exact provenance of these heavy-duty weapons; but despite being easier to use than Nock’s volley gun of 1779, it remains a rare oddity.

J. & J. Miller Revolving Pill Lock Rifle, “Billinghurst Revolving Rifle”

1835–1850, USA, cap & ball, revolving cylinder. Caliber .40, Range 12/120/240, Capacity 7, Rate of Fire 1/2, DAM 1d6+1d8, STR d6, Rare. Note: There are dozens of variations on the Miller patent, with different manufacturers producing rifles of varying length, caliber, and capacity ranging from four shots to nine. The seven-shot .40 is the most common.



In 1829, James and John Miller of Rochester, New York were granted a patent for a revolving cylinder, thereby making firearms based on the Miller patent among the first “true revolvers” produced in America. Unlike the later—and more famous—Colt patent, Miller’s cylinders were not indexed mechanically, and the user was forced to select a new chamber by triggering a distinctive front-latch and manually revolving the cylinder by hand. Rifles built on the Miller patent utilized a “pill lock” priming system. To prime each chamber, the shooter used a dab of beeswax to stick a priming pellet into a flash hole drilled into the cylinder. Rifles based on the Miller patent are commonly known as “Billinghurst Rifles” after their most prolific manufacturer, the celebrated gunsmith William Billinghurst of Rochester.

Billinghurst “Over and Under” Rifle, “Buck and Ball”

1844, USA, cap & ball/shotgun, revolving cylinder. Rifle: Caliber .40, Range 12/120/240, Capacity 7, Rate of Fire 1/2, DAM 1d6+1d8. Shotgun: 12-gauge, Range 5/10/20, Capacity 1, Rate of Fire 1/3, DAM 1–3d6. STR d8, Exceptionally rare.



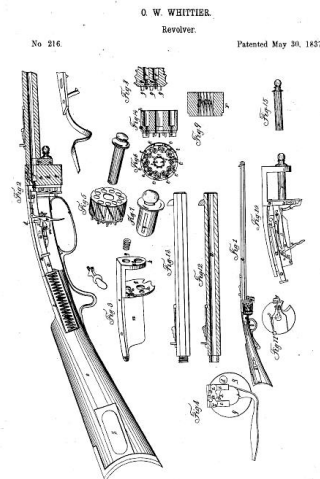
The rarest pattern to use the Miller patent is the Billinghurst “Over and Under” rifle, a double-barreled firearm with a .40 rifle barrel fixed above a 12-gauge shotgun barrel. The gun features dual triggers and opposing hammers. The rifle barrel is fired much the same as the standard Billinghurst; but a second trigger at the rear of the trigger-guard activates a small underhammer that fires the shotgun barrel. This gun is sometimes called the Billinghurst “Buck and Ball” rifle; a somewhat misleading name, as “buck and ball” is a muzzle-loading term that refers to the practice of loading a few pellets of buckshot in front of the standard musket ball. The Billinghurst “Over-and-Under” Rifle is quite rare, with only 25 or so having been produced.

Whittier Percussion Revolving Rifle

1837–1841, USA, cap & ball, revolving cylinder. Caliber .59, Range 25/250/500, Capacity 6, Rate of Fire 1, DAM 1d10+1d12, STR d6, Very rare. Note: Statistics for the 6-shot .59 caliber are provided. Given the many variations of this rifle, characters wishing to equip a Whittier must specify a specific caliber and capacity.



In 1835 Otis W. Whittier of Enfield, New Hampshire, developed a revolving rifle featuring a manually-rotated cylinder. Two years later, he received a patent for a new “zig-zag” cylinder, in which external grooving on the cylinder allowed for mechanized rotation. When the shooter pulls the rear trigger, the internal firing pin is cocked and the cylinder rotates into position. The front trigger fires the rifle. Whittier’s patent produced a host of variations, from revolving shotguns to 8-, 9-, and 10-shot rifles of differing calibers. An oddly graceful piece, the Whittier sports a 32” long barrel that tapers from octagonal to round, and its darkly varnished stock is decorated with inlays of German silver. The topstrap and frame are engraved with floral patterns, and a patchbox of German silver harkens back to the days of Kentucky rifles.



Samuel Colt is reputed to have owned a Whittier, and while he “borrowed” the Whittier’s zig-zag pattern for the Root Pocket Revolver of 1855, its most famous descendent is the Webley–Fosbery Self-Cocking Automatic Revolver of 1895. Whittier produced about a hundred of these beautiful rifles before vanishing into the fog of history.

Colt Ring Lever Rifle

1837–1841, USA, cap & ball, revolving cylinder. Caliber .44, Range 20/200/400, Capacity 8, Rate of Fire 1, DAM 2d8, STR d6, Rare. Notes: These statistics are for the No. 2 Model. Given the many variations of the No. 1 Model, characters wishing to equip a Colt No. 1 must specify a specific caliber and capacity.



Ever since the Paterson revolver, the name Samuel Colt has been synonymous with hand-held revolvers; but the first firearm mass produced by his Paterson factory was in fact the No. 1 Ring Lever rifle. Produced in various models from .34 to .44 caliber, the rifle has a 32” long octagonal barrel and a capacity for 8 rounds. (Though some lower-caliber models can chamber 10 rounds.) Unlike subsequent Colt revolvers, the “Ring Lever” has an internal hammer. The shooter pulls a ring mounted below the cylinder in order to cock the hammer and index the cylinder; the trigger fires the gun. Although the inaugural version of the No. 1 required the user to remove the cylinder for reloading, this was quickly supplanted by an “Improved Model” which eliminated this inconvenience. The cylinder itself was engraved with a “roll scene” depicting a centaur chasing a deer. A year later, Colt introduced the No. 2 Model, retaining the roll scene but removing the topstrap extension over the cylinder. The No. 2 was produced as an 8-shot .44 rifle.



No. 1 Ring Lever

Despite achieving a higher rate of fire than single-shot firearms, the first generation of Colt’s revolving rifles was judged too “delicate” for military use. Additionally, because they were chambered for smaller calibers than muzzle-loaders, Colt’s rifles lacked range and firepower. They were also subject to chain fire. Still, they saw some success in Texas and Florida, particularly during the Seminole Wars. After witnessing a demonstration by Samuel Colt himself, the notoriously cruel Colonel William Harney ordered fifty No. 1 Ring Lever carbines for his dragoons, who used them to thwart the Seminole tactic of rushing soldiers when they were reloading. Harney later remarked, “I honestly believe that, but for these arms, the Indians would now be luxuriating in the Everglades of Florida.”

Cochran Many Chambered Non-Recoiling Rifle, “Cochran Turret Gun”

1837–1840?, USA, cap & ball, revolving turret. Caliber .36, Range 8/80/160, Capacity 9, Rate of Fire 1/2, DAM 2d6, STR d6, Rare. Notes: These statistics are for Cochran’s “First Type.” Variations exist, as described below, and range from .36 to .44 caliber. On a critical failure, a Cochran only chain fires if the shooter rolls an additional 1d4 and scores a 1.



When New Hampshire inventor John Webster Cochrane was eighteen years old, he designed a multi-chambered rotary cannon. A few years later while demonstrating his invention in Europe, he was approached by an envoy from Turkey. Travelling to Constantinople, Cochrane successfully developed his “mechanical cannon” for the Sultan, who rewarded the young “Master of Cannon” with a princely sum of gold. Back in the United States, Cochran used that gold to finance a number of projects, including a turret-style firearm produced by C.B. Allen of Springfield, Massachusetts, and available as a rifle, carbine, or pistol.

To load one of Cochrane’s turret guns, the shooter lifts the topstrap and removes the metal turret, filling its nine chambers with powder and shot. Percussion caps are fixed along a ring of nipples located underneath the turret. When the turret is replaced, a brass disc at the bottom of the frame ensures the percussion caps remain intact. The shooter manually rotates the turret to index a chamber and cocks the underhammer using a spur on the trigger-guard. When the trigger is pulled, the underhammer strikes upwards and the chamber is fired. Cochran’s clever engineering also minimized recoil and significantly reduced the potential for chain fire. A “Second Type” modification made the turret easier to detach and reload, while Cochran’s “Third Type” reduced the size of the turret by decreasing its capacity to seven shots, eliminated the trigger-guard, and placed the trigger behind the cocking lever.



The Cochran “Third Type” Pistol, which nicely reveals the turret mechanism

Cochran was a tireless promoter, demonstrating his rifle during bear hunts, firearm expositions, and during the American Institute exposition at Niblo’s Garden in New York City, where he famously shot the rifle 500 times in rapid succession.

Marshal’s Note

The statistics for the Cochran may also apply to other horizontal-style turret rifles, such as the 8-shot .44 Daniels Turret Rifle of 1839.

Bennett & Haviland Many Chambered Revolving Rifle

1838–1840, USA, cap & ball, chain-driven. Caliber .40, Range 8/80/160, Capacity 12, Rate of Fire 1/2, DAM 1d6+1d8, STR d8, Exceptionally rare. Notes: On a Natural 1, a Bennett & Haviland jams, requiring a successful Repair roll to fix.



The brainchild of Maine inventors Epenetus A. Bennett and Frederick P. Haviland, the “Many Chambered Revolving Rifle” uses a chain-driven belt magazine. In some way similar to a turret gun, each chamber must be individually loaded, and features a percussion cap nipple located on the bottom of the chamber. To shoot the rifle, the user cocks the underhammer, which frees the chain mechanism. Using a round crank fixed beneath the receiver, the user manually rotates the next chamber into place. When the trigger is pulled, the underhammer snaps up, striking the percussion cap from below and discharging the chamber.



The Bennett & Haviland gains its high capacity at the cost of several critical flaws. First and foremost, the rifle is awkward to carry and operate. The upside-down percussion caps are prone to drop off during rotation, forcing cautious users to individually place them on chambers ready to be cranked into position. While this is still quicker than reloading a musket, it requires an extra step before each chamber may be fired. The forward chamber is also uncomfortably close to the forestock, producing a powerful gap blast that can scorch the shooter’s supporting hand. And finally, the mechanism simply has too many moving parts to be practical. Historically, only a dozen Bennett & Haviland rifles were actually produced; but a sympathetic Marshal may certainly increase their popularity in the Weird West!



Colt Model 1839 Carbine, “Paterson Carbine”

1839–1841, USA, cap & ball, revolving cylinder, smoothbore. Caliber .525, Range 4/40/80, Capacity 6, Rate of Fire 1, DAM 2d10, STR d6, Rare.



Achieving greater popularity and success than the Ring-Lever Rifle, the Colt Model 1839 Carbine is a simpler and less “delicate” firearm, sporting a 24” long smoothbore barrel and chambered for the powerful .525 round. It replaces the ring-lever with a standard hammer. The very essence of Colt’s patent, this hammer rotates the cylinder automatically when cocked. Known as the “Paterson Carbine,” its cylinder features Colt’s most elaborate roll scene, with separate panels depicting the Battle of Bunker Hill, a naval battle, and a lion hunt!



If you look really closely, you can see traces of the naval roll scene.

Although it was quite expensive at the time, the Colt carbine was especially popular with the Texas Navy. The Model 1839 was produced in many variations, but two are especially noteworthy: a long-cylinder model designed to accommodate high-powder loads, and a 6-shot revolving 12-gauge shotgun.

Wesson & Leavitt Revolving Rifle

1849–1853, USA, cap & ball, revolving cylinder. Caliber .40, Range 20/200/400, Capacity 6, Rate of Fire 1, DAM 1d6+1d8, STR d6, Rare. Note: On a critical failure, a Wesson & Leavitt only chain fires if the shooter rolls an additional 1d4 and scores a 1.



In 1837, gunsmith Daniel Leavitt received a patent for his “improved” design for a cylinder that revolved when the user cocked the hammer. The front of Leavitt’s cylinder features a convex bevel that comes flush with the barrel, directing the discharge forward and reducing the possibility of chain fire. After Edwin Wesson made a few modifications in 1849, the first “Wesson & Leavitt” revolvers began rolling from the newly-established Massachusetts Arms Company at Chicopee Falls. The Wesson & Leavitt Revolving Rifle is based on the Wesson & Leavitt “Navy” revolver; indeed, the rifle is little more than the revolver wedged between a shoulder stock and a barrel extension! The cylinders are thoughtfully etched, however, and the percussion nipples are recessed at a jaunty 45° angle, so the rifle isn’t completely charmless. Unfortunately, Samuel Colt was less than pleased by his rivals’ ingenuity, and won a high-profile patent suit against Wesson & Leavitt, shutting down the Massachusetts Arms Company in 1853.

Warner Revolving Rifle

1849–1852?, USA, cap & ball, revolving cylinder. Caliber .40, Range 20/200/400, Capacity 6, Rate of Fire 1, DAM 1d6+1d8, STR d6, Uncommon. Note: Although there is a wide variety of Warner rifles, the Marshal may use these statistics for them all, with the exception of manually revolved cylinders, which decrease the Rate of Fire to 1/2.



The “Warner Solid Frame Revolving Rifle” of 1851 is depicted above, fitted with a traditional percussion cap system and a manually-rotated cylinder. The tiny spur in front of the trigger unlatches the cylinder for rotation. The ramrods are removed to work the loading lever.

James Warner of Springfield Armory was another one of Samuel Colt’s early competitors, and had been tinkering with different types of revolvers for nearly as long as his rival. When Colt’s patent was unexpectedly renewed in 1849, a frustrated Warner was forced to redesign his more recent firearms in order to avoid legal infringement. During this process, he experimented with several different types of revolver mechanisms. The result is a plethora of Warner rifles varying in length, caliber, and action type, from manually-rotated retractable cylinders to grooved cylinders designed to be mechanically indexed by a rear-mounted lever. There are Warner rifles with brass frames, carbines with etched cylinders, and even some models employing a pill-lock primer system similar to the Billingshurst rifle.

Porter Turret Rifle

1851–1853?, USA, cap & ball, revolving turret. Caliber .44, Range 8/80/160, Capacity 9, Rate of Fire 1, DAM 2d8, Rare. Note: Chain fire from a Porter revolver is particularly dangerous to the shooter, causing 2d6 DAM for each loaded chamber.



This unusual rifle was designed by Memphis inventor Colonel Parry W. Porter as yet another way to circumvent Colt's patent. Unlike the earlier horizontal turret rifles by Cochran or Daniels, the Porter positions its revolving turret vertically within its frame. Pulling the trigger-guard lever cocks a side-hammer, while returning the loading lever rotates the turret and indexes the next chamber. When the trigger is pulled, the side-hammer drives an elongated long firing pin into the magazine to strike the percussion cap, which sends its charge through a flash hole into the turret chamber. Featuring an iron frame and a hexagonal barrel, the central location of the turret necessitates left-side sights.



The Porter Turret Rifle went through three main modifications during its short life. The first version featured an automatic priming system which spring-fed percussion caps into the turret from a circular magazine mounted on the right sideplate. The second model made the turret easier to remove, and the third model replaced the unreliable percussion magazine with a ring of standard nipples set into the right side of the turret. Unfortunately, all of Porter's rifles suffered from the same major flaw—a loaded turret points chambers directly toward the shooter's face and hands! In the event of chain fire, the Porter rifle discharges its .44 balls in all directions, often resulting in serious injury to the shooter. This design flaw did not bode well for the rifle's popularity, and after Samuel Colt himself spread a rumor that Colonel Porter died during such an accident, his rifle was doomed to the dustbin of historical curiosities.

Porter's Canister Magazine

Before Porter moved to New York to produce his rifle, he made a Tennessee prototype that positioned a canister magazine over the top of the turret. Crafted from German silver and engraved with Masonic symbols, Porter's canister fed lead balls, gunpowder, and primer caps into empty chambers as they rotated back through the magazine. This gave his rifle the astonishing capacity for 38 shots, but the system rarely functioned as intended. In *Deadlands*, however...?

Browning Slide Bar Repeating Rifle

1852–1866, USA/Deseret, cap & ball, sliding bar. Caliber .54, Range 25/250/500, Capacity 5, Rate of Fire 1/2, DAM 2d10, STR d6, Very rare.

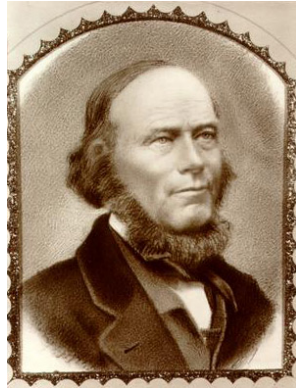


The father of the greatest gunsmith the world would ever know, Jonathan Browning was born in 1805 in Brushy Fork, Tennessee, where he worked as a blacksmith. After a brief apprenticeship to gunsmith Samuel Porter in Nashville, Browning devoted much of his time to repairing and manufacturing firearms. In 1834 Browning moved to Quincy, Illinois, where he developed a reputation as an ingenious gunsmith, experimenting with different styles of repeating mechanisms from revolvers to slide guns. During this time he was elected justice of the peace and befriended a young Abraham Lincoln. In 1840, Browning became acquainted with the prophet Joseph Smith, Jr., and joined the Church of Latter Day Saints in Nauvoo. As the Mormons were pushed west out of Illinois, Browning followed them to Council Bluffs, Iowa. In 1852, he was personally invited to Utah by Brigham Young. Browning led a team of pioneers to Deseret and settled in Ogden, a small town forty miles north of Salt Lake City. Opening another workshop, Browning served his community as blacksmith and gunsmith, repairing the Saint's firearms and making copies of Colt revolvers. Browning's Ogden workshop also produced a few original pieces, including this unusual rifle, the Browning Slide Bar Repeater.



Browning's Slide Bar Repeater is the most famous example of a "harmonica gun." Technically known as a "slide gun," a harmonica gun gets its nickname from the appearance of its magazine—a rectangular bar of chambers which slides horizontally through the receiver. To load Browning's bar-shaped magazine, the shooter cocks the hammer and lifts a lever mounted on the right sideplate. This allows the magazine to be easily pulled from the receiver and reloaded. Percussion nipples are recessed into the top of the bar at the rear of each chamber. Once the magazine is loaded, it's reinserted into the receiver with the first percussion cap lining up beneath a hole in the top of the receiver. The side-lever is pressed firmly down, an action which pushes the magazine forward onto the breech of the barrel and locks the magazine in place. Because the chambers are countersunk from the face of the magazine, when cammed forward by the lever, each chamber mates with the chamfered end of the breech to form a gas seal. Pulling the trigger drops the hammer through the hole to strike the percussion cap. To fire the next round, the shooter re-cocks the hammer, pulls the side-lever back up, manually indexes the magazine to the next chamber, and pushes the lever back down to seal the breech.

Like all of Jonathan Browning's firearms, the Slide Bar Repeater is a simple and effective design, inexpensive to produce and easy to maintain. Possessing the stately appearance of a Kentucky rifle, Browning's repeater sports a 32" long hexagonal barrel, a crescent brass buttplate, a gunmetal-bronze receiver, a scroll-type trigger-guard, and sights crafted from German silver.



Jonathan Browning (1805-1879)

Jonathan Browning was quite happy in Ogden, and made several "harmonica" guns used during various Mormon engagements with misguided Federals and recalcitrant Indians. The head of a large family, Browning had three wives and twenty-two children. When President Young asked Browning to partner with Orator II Dibble to establish the New Canaan armory in 1866, he appointed his eleven-year old son to serve as his young apprentice—John Moses Browning.

Browning Revolving Action Rifle

1853-1866, USA/Deseret, cap & ball, revolving cylinder. Caliber .44, Range 25/250/500, Capacity 6, Rate of Fire 1, DAM 2d8, STR d6, Exceptionally rare.



Jonathan Browning was best known for his Slide Bar Repeater; but he made other unusual and more expensive weapons which never saw wider production. Browning's Revolving Action Rifle was one of these. Crafted in several lengths, calibers, and capacities, his revolving rifles boast the sleek outlines and aesthetic embellishments of Kentucky rifles, and feature percussion cylinders that are manually rotated after the shooter cocks the hammer. Like his slide guns, Browning's revolving rifles feature a gas seal, with the user pushing down a right-side lever to press the cylinder against the beveled barrel breech. More expensive and finicky than his Slide Bar Repeater, the Browning Revolving Action Rifle was made in significantly lower numbers.

Hall Revolving Rifle

1855–1857?, USA, cap & ball, revolving cylinder, smoothbore. Caliber .38, Range 4/40/80, Capacity 15, Rate of Fire 1/2, DAM 1d6+1d8, STR d6, Very rare.



A Hall rifle customized with brass frame, engraved cylinder, and sportsman inlays of German silver

This bizarre rifle was designed by gunsmith Alexander Hall of New York City. Foreshadowing the Tommy Gun of the Roaring Twenties, the Hall rifle features an oversized circular magazine, chambering fifteen .38 caliber balls with percussion nipples recessed into its rear side.



The shooter unlocks the cylinder using a catch located below the trigger-guard, then rotates the cylinder manually to index the next loaded chamber. A lever in front of the trigger cocks the in-line concealed hammer, and the rear trigger fires the gun. To reload the chambers, the shooter opens a hinged floor on the receiver and removes the entire magazine. Despite being widely referred to as a rifle, Hall's 30 $\frac{1}{4}$ " long barrel is actually smoothbore.



Colt 1855 Military Rifle and Rifled Musket

1855–1864, USA, cap & ball, revolving cylinder. Caliber .44, Range 20/200/400, Capacity 6, Rate of Fire 1, DAM 2d8, STR d6, Uncommon. Notes: The .56 Military Rifle is Caliber .56, Capacity 5, DAM 1d10+1d12. Given the many variations of this rifle, characters wishing to equip a Model 1855 must specify a specific model, caliber, and capacity.



The Model 1855 is the big brother of Elijah Root’s “Sidehammer” Pocket Revolver, the revolver that helped inaugurate Colt’s new factory in Hartford, Connecticut. Built on a solid frame, the Root pattern places the hammer on the right side of the gun and utilizes a lightweight “creeping” loading lever system. The so-called Model 1855 Revolving Rifle was produced in many designs: the Model 1855 Sporting Rifle was available in full- or half-stock, chambered for .36, .40, .44, .50, or .56 caliber; the Model 1855 Military Rifle and Rifled Musket was produced with over a dozen variations in length, finish, and caliber, including a rare .64 caliber 31¼” smoothbore musket; the several variants of Model 1855 Carbine included a 24” “Artillery” model and a .56 caliber “British” model with brass trigger-guard and buttplate; and the Model 1855 Revolving Shotgun was chambered for five shells in both 10-gauge and 20-gauge versions!



Half-stock “Sporting Rifle” with checkered stock and fluted cylinder

Although the Model 1855 is less prone to chain fire than Colt’s previous revolving rifles, it still presents a danger, particularly if the shooter fails to properly clean his weapon. For those who accepted the risk, the Model 1855 often became a favorite. The 21st Ohio Volunteer Infantry used them to great effect while defending Snodgrass Hill at Chickamauga. They were also used by Berdan’s 1st United States Sharpshooters and John Chivington’s 1st Colorado Cavalry, and were the rifle of choice for many Pony Express riders. Notorious bounty hunter John Ruth was known to favor Colt’s “British” 1855 carbine before his untimely death at Minnie’s Haberdashery. Still, even the possibility of chain fire was threatening enough to keep the Model 1855 from gaining widespread popularity, and once lever-action repeaters found their footing, Colt’s Patent Fire Arms Manufacturing Company finally put the revolving rifle to bed.

Mershon & Hollingsworth Revolving “Automatic” Rifle

1855, USA, cap & ball, revolving cylinder. Caliber .40, Range 10/100/200, Capacity 6, Rate of Fire 1 or 2, DAM 1d6+1d8, STR d6, Exceptionally rare. Notes: A critical failure on the Shooting roll snaps the spring, requiring a Repair roll to fix. When the Shooter is employing “automatic fire,” all Shooting rolls after the first receive a -2 recoil penalty.



One of the world’s first automatic weapons, this strange rifle was the creation of Ohio inventors Ralph S. Mershon and Jehu Hollingsworth, and features a spring-wound cylindrical magazine. In order to shoot the rifle, the user loads the cylinder and places the percussion caps. He lifts a ratchet-lever located behind the receiver and winds up the spring. The shooter may pull the trigger to fire the revolver one cylinder at a time; or he may lock the trigger backwards, which allows the spring to automatically rotate and fire each chamber in sequence!

Unfortunately for Mershon and Hollingsworth, their “automatic rifle” failed to attract investors, and the project never entered production. They moved to Philadelphia, where they had slightly more success applying their passion for springs to the Colt revolver and producing a “self-cocking” revolver in 1863. Needless to say, the world of *Deadlands* has treated Mershon and Hollingsworth a bit differently, and they eventually relocated to the Second California Republic, where they found financial backing from Lynchburg capitalist William Shakespeare Valentine and eventually produced the “Caliban” repeating carbine described later in this section.

Treeby Chain Gun

1854–1855, UK, cap & ball, chain-driven. Caliber .54, Range 30/300/600, Capacity 14, Rate of Fire 1, DAM 2d10, STR d8, Exceptionally rare. Note: A critical failure on the Shooting roll jams the mechanism, requiring a Repair roll to fix.



A prototype developed by British gunsmith T.W. Treeby in 1854, the Treeby Rifle is an early example of a “chain gun,” and features 14 chambers that cycle through the breech on a chain-driven mechanism. Each chamber must be loaded separately, a percussion cap placed onto the nipple recessed into the rear of the chamber. To fire the rifle, the shooter pulls down on a lever located on the left side of the gun. This action smoothly unscrews the barrel forward. The large hammer is cocked, which sets the firing pin and rotates a fresh chamber into the breech. Returning the lever to its upright position screws the barrel back over the breech, creating a gas seal and preventing the possibility of chain fire.



Treeby had high hopes for his invention, and was able to successfully demonstrate its ability to fire one round every two seconds. Unfortunately, the sheer awkwardness and complexity of the gun was a serious hindrance, and the British authorities decided to stick with the P53 Enfield. As a result, only two Treeby rifles were ever produced, neither equipped with a convenient forestock. As usual, the world of *Deadlands* may differ, and it's not hard seeing Treeby's design adopted by Lynchburg gunsmiths.

North & Savage Revolving Rifle, a.k.a. North & Skinner Revolving Rifle

1856–1859, USA, cap & ball, revolving cylinder. Caliber .44, Range 25/250/500, Capacity 6, Rate of Fire 1, DAM 2d8, STR d6, Rare. Note: Because of the overlarge hammer, it is difficult to obtain a clear sight picture when aiming a North & Savage rifle. This inflicts a -1 penalty on all Shooting Rolls.



In 1852, Henry S. North and Chauncy D. Skinner of Middletown, Connecticut, received a patent for a mechanically-rotated revolver. Different from Colt's patent, the North & Skinner system uses a lever that doubles as a trigger-guard. When the shooter pulls down the lever, the cylinder rotates as the hammer is cocked. When the lever is returned, a metal wedge slides behind the cylinder, pushing it forward against the shielded frame. This creates a gas seal, protecting the shooter from gap blast. A few years later, the North & Skinner patent was put into production by Henry North. Working with a Middletown gunsmith named Edward Savage, he produced nearly five hundred of these unusual "lever-action revolvers." North & Savage also produced over a hundred .60 caliber shotgun variants.



The rifle was a worthy competitor to Colt's Model 1855, and had less problems with chain fire and cylinder gap blast. Unfortunately, the large hammer is placed awkwardly high, which makes it hard for a shooter to aim down the barrel. The rifle is also missing a forestock, making it difficult to hold. In the end, North and Savage had more success with their hand-held revolvers, including the unusual "Figure-8" revolver.

LeMat Carbine

1861–1865, France, cap & ball/shotgun, revolving cylinder. Rifle: Caliber .44, Range 20/200/400, Capacity 9, Rate of Fire 1, DAM 2d8. Shotgun: 16-gauge, Range 5/10/20, Capacity 1, Rate of Fire 1/3, DAM 1–3d6. STR d8, Very rare.



Patented in 1861 by General P.G.T. Beauregard’s cousin Jean Alexandre Francois LeMat, a French-born physician living in New Orleans, the LeMat carbine is a longer version of the LeMat “grape and shot” revolver of 1856. Like its more famous antecedent, the LeMat carbine features an “over-and-under” barrel arrangement—an upper hexagonal rifle barrel, and a lower 16-gauge, round smoothbore barrel. The rifle’s nine-chamber cylinder revolves around the lower barrel. In order to fire the shotgun, the shooter flips a toggle at the end of the hammer. This pivots the firing pin downwards, so when the trigger is pulled, the pin strikes the percussion cap mounted above the shotgun breech. Patented in England, produced in Paris and London, and smuggled into the Confederacy during the Blockade, the LeMat carbine was a very rare and expensive piece, only affordable to the most well-to-do cavalrymen.



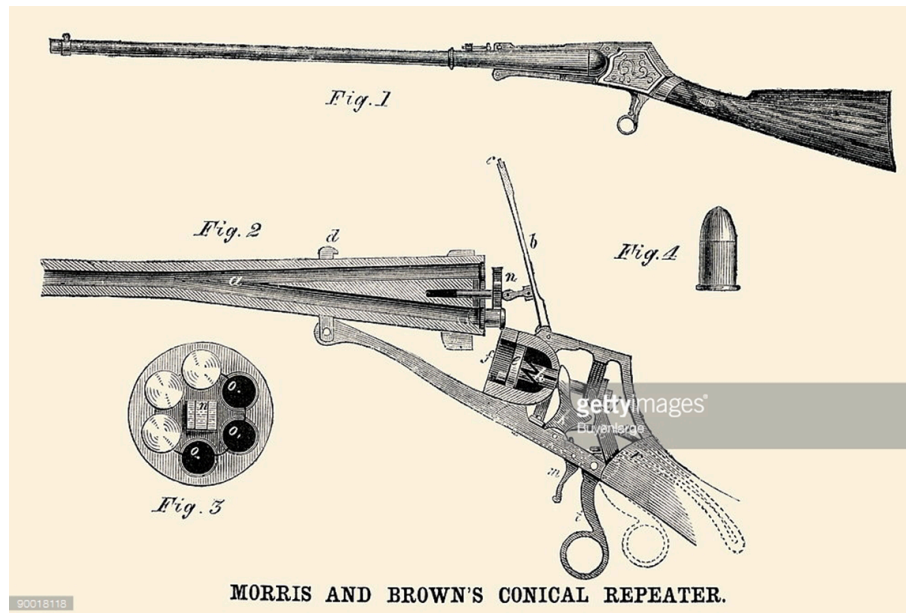
“Colonel” Jean Alexandre François LeMat

Morris & Brown Conical Repeating Rifle

1860–1862?, USA, revolving firing pin. Caliber .44 rimfire, Range 15/150/300, Capacity 6, Rate of Fire 1, DAM 2d8, STR d8, Very rare. Note: A critical failure results in a damaged breech-cone, requiring a workshop and a Repair roll to fix.



This one-of-a-kind rifle was designed in 1860 by W.H. Morris and C.L. Brown, and was described by *Scientific American* as “one of the most remarkable novelties of our time.” With a bird’s eye maple stock, bronze frame, and conical-shaped breech, the Morris & Brown is also one of the era’s most distinctive rifles. When the user lifts a latch located on top of the receiver, the frame breaks open, revealing the “six branches of the bore” within a funnel-shaped breech. After loading the cartridges and closing the breech, the shooter cocks an internal firing pin by pulling a ring lever mounted behind the trigger. When the rifle is fired, the ball is directed down its “branch” into the main barrel. The explosive gases are trapped inside the cone, protecting the user’s hand and forming an efficient gas seal. When the ring lever is pulled again, the firing pin rotates to the next chamber. (Because the magazine itself does not rotate, the Morris & Brown is technically not a revolver.) Once all the chambers have been discharged, the action of breaking open the rifle pulls out all six casings using a clever ring-extraction mechanism.



Only about fifty Morris & Brown Conical Repeaters were produced. As might be expected, the breech cones were quickly degraded by the combination of channeling lead balls and containing small explosions! This funneling technique did not promote accuracy, either, and by the early 1860s there were better options for repeating rifles, from Colt’s Model 1855 to the newly-introduced Henry repeater.

Graham Turret Rifle

1862–1865, SCR, cap & ball, revolving turret. Caliber .60, Range 10/100/200, Capacity 5, Rate of Fire 1, DAM 2d12, STR d6, Very rare.



Gunsmith Edmund H. Graham of Biddeford, Maine applied for numerous firearm patents throughout the mid-nineteenth century, the earliest of which was assigned to Artemas Wheeler in 1851. Most of Graham's patents involved variations on the revolving "turret" magazine. In 1857 he received a patent for a horizontally-mounted turret rifle which improved on the earlier designs of Cochran and Daniels. Addressing the concern of potentially fatal chain fire, Graham enclosed his turret within a protective metal ring intended to block accidental discharge. Because this prevents the chambers from being loaded from the front end, they are loaded from the top through a series of open holes. Percussion caps are placed on nipples located around the base of the turret. Once the turret is loaded, the user advances the next chamber into position by pulling a lever mounted on the right side of the frame. This action also cocks a concealed underhammer located in front of the turret's base.



Top view of the Graham turret

Unfortunately for the historical Edmund H. Graham, none of his guns ever entered mass production. In *Deadlands 1878*, however, Graham relocated to the Great Maze, where he teamed up with Lynchburg gunsmith Corin Pluto. With financial backing from William Shakespeare Valentine, they founded "Valentine, Pluto & Graham" in 1862, the first gunsmith workshop in the Great Maze. The Graham Turret Rifle was their first firearm, with over 200 placed into production before the partnership dissolved two years later.

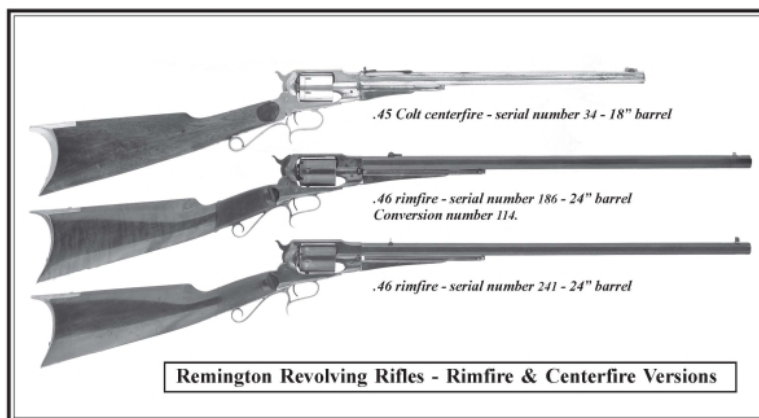


Remington Revolving Rifle

1865–1879, USA, cap & ball, revolving cylinder. Caliber .44, Range 20/200/400, Capacity 6, Rate of Fire 1, DAM 2d8, STR d6, Uncommon. Note: Given the many variations of this rifle, characters wishing to equip a Remington must specify a specific model, caliber, and capacity.



After Colt's patent on the revolver expired in 1857, the doors were thrown open for a host of variations and imitations. Among the finest of Colt's rivals was Eliphalet Remington II, the founder of E. Remington & Sons of Ilion, New York. In 1858 Remington & Sons unveiled their own version of the percussion revolver, and its clever design suggested that they had not been idle during Colt's period of domination. The revolver's most significant innovation was adding a "topstrap" to the frame, increasing its durability and making the revolver easier to disassemble. In 1865 Remington introduced a line of revolving rifles.



Like most firearms produced at Ilion, the Remington revolving rifle features an attention to aesthetic detail not always found among Remington's Hartford or Springfield competitors. Noted for its distinctive "webbed" loading lever, crescent buttplate, and elegant frame, the rifle sports a scroll-type trigger-guard with a support spur. The rifle was produced in all manner of calibers, lengths, stocks, and finishes, with additional options for checkering and engraving. In 1868, Remington paid a fee to Smith & Wesson, holders of the Rollin White patent for full-bore cylinders. This allowed Remington to produce cartridge-conversions of the revolving rifle.



Close-up of a .44 rimfire cartridge conversion

Roper Revolving Rifle

1866–1879, USA, cap & ball, revolving cylinder. Caliber .41 Range 15/300/600, Capacity 6, Rate of Fire 1, DAM 1d6+1d8, STR d6, Rare.



Sylvester H. Roper of Amherst, Massachusetts, was a prolific inventor who designed engines, sewing machines, and steam-powered vehicles, including the “steam velocipede” of 1867, widely considered the first motorcycle. He spent the early years of the Civil War working for Springfield Armory. In 1866, Roper was granted a patent for a bolt-driven revolving chamber that in some ways prefigured John Moses Browning’s machine gun. The mechanism uses reloadable steel cartridges backed with recessed percussion nipples. To load the gun, the shooter opens a loading door on top of a cylindrical breech and pulls the hammer back—but does not cock it. Requiring a longer pull than most guns, the hammer is actually attached the bolt, which slides out of the gun and exposes an empty chamber. (In some ways it’s the reverse of a lever-action repeater, in which the bolt is driven out to cock the hammer.) While firmly gripping the hammer, the shooter inserts a loaded cartridge into the empty chamber. A complete cock of the hammer rotates the loaded chamber and brings an empty one into position. The hammer is un-cocked, a new cartridge is loaded, the hammer is re-cocked, and so forth until the entire magazine is loaded and ready to fire. When the trigger is pulled, the hammer pushes the bolt in, driving the uppermost cartridge into the barrel before the firing pin strikes. After all the chambers are fired, the user must unload the empty cartridges in the same manner in which they were loaded.



Founding the Roper Repeating Arms Company in Amherst, Sylvester Roper produced several variations of rifles and shotguns that utilized his patent. The revolving shotgun was actually more popular than the revolving rifle, which had to compete against Winchester’s lever-action repeaters. In 1869 Roper relocated his factory to Hartford. He continued to tinker with his revolver mechanism, and Roper firearms were produced in the usual variety typical of the period, including bronze gunmetal variants and a rifle/shotgun combination that featured interchangeable barrels. Roper went on to invent the shotgun choke, and partnered with Christopher Miner Spencer (of the Spencer Repeater) to invent the pump-action shotgun. In 1895, Sylvester Roper suffered a fatal heart attack while demonstrating his newest steam velocipede. He was clocked at a top speed of 40 mph!

Marsh Spring-Wound Bolt-Throwing Carbine, “Communard Crossbow”

1869–present, Algonquin Commune. Caliber *special*, Range 10/25/50 for Mark I and II, 15/30/60 for Mark III, Capacity 4, Rate of Fire 1/2, DAM 2d8, STR d8, Uncommon. Notes: On a critical failure, the shooter rolls an additional d6 for a Mark I, d10 for a Mark II, and d12 for a Mark III. If this extra roll is a 1, the spring bursts the canister and inflicts 2d6 DAM to the shooter. The exploding quarrel is rated at Range 10/20/30, DAM 2d12, and is unfortunately prone to misfiring if accidentally struck. Because Marsh quarrels are subject to “arrow drop,” Shooting rolls incur an extra –1 penalty at Effective range and a –2 penalty at Maximum range. These penalties may be ignored if an Archery roll is substituted, or if the Marsh carbine is the shooter’s Trademark Weapon.

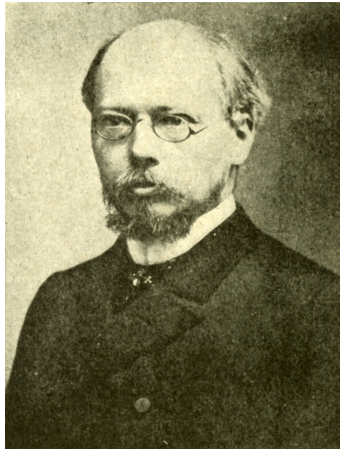
One of the original founders of the Algonquin Commune, Innsmouth-born inventor Onesiphorous Jeremiah “Jeremy” Marsh developed his ingenious “spring-wound carbine” in a small Harlem foundry purchased after the ravages of the Blue Plague. Essentially a modern variant of the crossbow, at the heart of a Marsh carbine is a flat coil fashioned from a high-tensile alloy of ghost steel. This coil is enclosed in an 18” wide “coil canister” horizontally positioned above the carbine’s receiver. Not unlike a modern film-reel canister in appearance, this broad metal disc gives the carbine the unlikely profile of a Russian DP-28 machine gun. The carbine’s tubular stock conceals a revolving four-quarrel magazine which is reloaded from the buttplate.

To chamber a quarrel, the shooter unlatches a crank set in the center of the canister and turns it counterclockwise until the coil is fully wound. The crank is snapped back into place, which springs a quarrel into a sheath-like “carrier” located inside the breech. A safety mechanism keeps the trigger locked until the shooter thumbs a small release on the right side of the receiver. When the trigger is pulled, the coil “relaxes,” a deceptively peaceful term for a shockingly sudden and violent action that generates an impressive amount of kinetic energy. Using a patented ghost-steel mechanism Marsh named the “torsion translator,” this energy is transferred to the carrier, which is propelled the length of the barrel to forcibly eject the quarrel from the muzzle at 180 feet/second. The forward motion of the carrier automatically revolves the magazine as well. As the canister crank is wound again, the carrier retracts to its original position.



A member of the New Citizen Militia proudly shoulders his Marsh Mark I carbine during the Riots of '71

Although the Marsh carbine lacks the range of a traditional firearm, it's quite devastating in close quarters such as city streets, and was used to great effect during the Great Unrest of 1871. The standard quarrel is simply a steel bolt fletched with goose feathers which expand upon leaving the conical muzzle; however, Citizen Marsh has recently introduced the "exploding quarrel." An inspired design featuring a charge of gunpowder sheathed inside a collapsible copper tip, the impact of the quarrel with the target drives a firing pin into the primer and detonates the charge.



Citizen Jeremy Marsh

The standard Marsh carbine has no muzzle flash and makes considerably less noise than a gunpowder rifle, but is hardly a silent weapon, and produces a distinctive metallic "clank" upon discharge. Generally considered to be fairly safe and reliable, occasional misfires have been known to burst the canister, snapping the coil into the user's face and causing severe lacerations, broken noses, or even mangled eyeballs. The carbine has gone through three iterations since its introduction in 1869. For the Mark II of 1871, Marsh made the canister crank more accessible, fixed a problem with the carrier mechanism which occasionally caused the magazine to jam, and reduced the possibility of accidental discharge by reinforcing the tension-pin with ghost-steel. In 1875 he increased the strength of the coil canister and made improvements to the torsion translator, allowing the new Mark III to reach a muzzle velocity of 200 feet/second.

Because of its reliance on ghost-steel alloys, the Marsh carbine is expensive to manufacture, with a quarter-ounce of azrucite required for each Mark III produced. Despite this limitation, the Communards have taken to it readily, as it frees them from the necessity of trading for firearms and gunpowder. No one outside the Commune knows how much ghost rock is in Algonquin possession, although more than a few have pointed to Marsh's origins in the insular seaside town of Innsmouth, which has always been rumored to have access to fabulous amounts of private wealth. So far, Tammany Hall has been content not to press the issue. Of course, if a Republican ever wins the governorship, that situation may quickly change....

LeMat Centerfire Carbine

1868–1871, CSA, rifle/shotgun, revolving cylinder. Rifle: Caliber .44 centerfire, Range 25/250/500, Capacity 9, Rate of Fire 1, DAM 2d8. Shotgun: 20-gauge, Range 5/10/20, Capacity 1, Rate of Fire 1/3, DAM 1–3d6. STR d8, Very rare.



When “Colonel” Jean Alexandre LeMat returned from Paris in 1867, he accepted a position at the Confederacy’s New Macon Armory. There, he began experimenting with cartridge ammunition, prototyping revolvers and carbines configured for pinfire ammunition. After creating a few “transitional” pinfire guns, LeMat settled on .44 centerfire cartridges and began producing a line of firearms chambered for this new generation of ammunition.

The LeMat centerfire carbine is immediately distinguishable by its bulbous cylinder, which is filled from a small loading gate located on the right side of the receiver. A second, “flip-up” loading gate behind the cylinder gives access to the shotgun breech, which accepts a single “short” 20-gauge shotgun cartridge. To help the shooter avoid gap blast, a flat spur beneath the trigger-guard serves as a hand support. Similar to earlier models, the hammer features a toggle that selects which barrel to fire; but instead of a rotating firing pin, the LeMat centerfire uses an extendable, basal wedge to fire the shotgun. When the hammer is dropped, the wedge slams into a spring-loaded firing pin located below the shotgun’s loading gate.



Unfortunately, the relationship between “Colonel” Jean Alexandre LeMat and New Macon’s resident genius, Potiphar “Tennessee” Howell, was not very productive, and the clashes between the saucy Frenchman and the industrious Southron were the stuff of New Macon legend. Only two hundred LeMat centerfire pistols and carbines were put into production before the situation became untenable, and LeMat left for Louisiana to found his own arms company in 1873.

LeMat Vacherie Carbine, “Lancaster”

1874–present, CSA, rifle/shotgun, revolving cylinder. Rifle: Caliber .44-40 “Vacherie” BPR, Range 25/250/500, Capacity 9, Rate of Fire 1/2, DAM 2d8. Shotgun: 20-gauge, Range 5/10/20, Capacity 1, Rate of Fire 1/3, DAM 1–3d6. STR d6, Uncommon.



After a turbulent series of “creative differences” with New Macon’s gunsmiths, the French physician Jean Alexandre LeMat relocated to Vacherie, a small town located a few miles up the Mississippi River from New Orleans. Purchasing the Oak Valley Plantation, he spent the next few years restoring its grounds, reinforcing the local dock, and constructing a small manufactory along the riverside. Christened “Fabrique de Beaux Ouvrages” in 1873, the FBO workshop is dedicated to the realization of LeMat’s mechanical innovations, from his namesake revolver to his recent work in Confederate aëronautics.

Retaining the distinctive trigger-guard and sleek frame of LeMat’s earlier percussion models, the standard-issue Vacherie LeMat carbine is a masterpiece in blued steel, with polished pecan grips and an engraving of the Battle of Lancaster encircling its wide cylinder. Like the LeMat centerfire carbine, the cylinder is loaded from a small gate located on the right side of the receiver, and the shotgun breech is accessed by thumbing a flip-up gate behind the revolver. The hammer toggle is also identical to the centerfire model. To fire the shotgun barrel, a wedge flips down at the base of the hammer to strike a spring-mounted firing pin. An extraction lever is fastened to the right side of the barrel, in the same place occupied by the percussion model’s loading lever. A small shield in front of the cylinder helps reduce gap blast. Finally, the Vacherie LeMat is chambered for the new “Vacherie” round, a .44 centerfire cartridge loaded with forty grains of blue powder. (LeMat’s Fabrique de Beaux Ouvrages has a license to produce their own variant of Loveless-Howell blue powder.)

An expensive firearm, the Vacherie carbine is a fashionable, high-end piece not intended for mass production. Each carbine is shipped in a box of polished pecan with a carving of Oak Valley Plantation on its lid, accompanied by a letter of authenticity signed by the LeMat himself. Also, many owners have paid handsomely for custom engraved models. This practice is encouraged by the “Colonel,” who shrewdly publicizes his work through an annual “Fête des Fondateurs” held every April at Oak Valley Plantation. This celebration’s highlight is the presentation of a unique LeMat to a special Confederate dignitary. The first recipient was Thomas Leroy III, who was presented with the “Pennsylvania Carbine” featuring German silver inlays and a roll scene of the Mt. Joy Raid. Next year, Fitzhugh Lee was given the nickel-finished “Shenandoah Carbine” with a stock carved from the tree under which General David Hunter surrendered the town of Winchester in 1866. British Ambassador Sir Variety Pierce-Loving has been the most recent recipient, and is the proud owner of the gilded “Recognition Carbine” engraved with Jefferson Davis’ signature. However, the *pièce de résistance* is certainly the silver-plated “Lafayette Carbine,” presented to Emperor Napoleon IV during Alexandre LeMat’s recent trip to Paris. Engraved with a roll scene depicting the Emperor’s coronation, a glass inset in the stock displays a small chamber containing a tangle of red, white, and blue fabric—reputedly a cockade worn by the Marquis de Lafayette during the French Revolution!

Pattern 1874 Revolving Rifle, “Manassas,” a.k.a. “Tennessee Twister”

1874–present, CSA, double-action, revolving cylinder. Caliber .44 “Manassas,” Range 50/500/1000, Capacity 6, Rate of Fire 2, DAM 2d8, STR d6, Uncommon. Note: When firing double-action, a penalty of –2 is applied to the second Shooting roll.



The work of master gunsmith Potiphar “Tennessee” Howell, the P74 “Manassas” is the first revolving rifle to genuinely compete with lever-action repeaters. Fastidiously engineered and costly to produce, the P74 is chambered for the proprietary “Manassas” round, and its ghost-steel bore features Harlan Stone Counterfly’s “Nashville” rifling, which enables a degree of range and accuracy previously unknown among revolvers. It is further assisted in this regard by Howell’s ingenious “double gas seal” design. When the hammer is cocked, an internal mechanism pulls back the cylinder, rotates it, and pushes it forward against the barrel breech. This works in conjunction with the “Manassas” round, in which the bullet is fully enclosed within a tapering brass cartridge. The breech end of the rifle’s barrel is slightly conical, a design that traps the cartridge and forms a temporary gas seal.



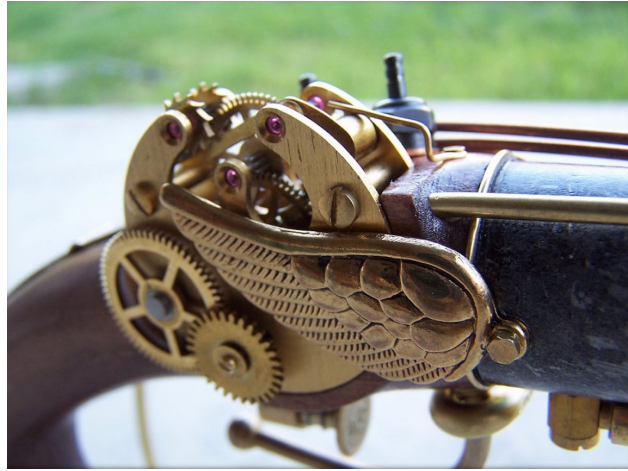
Although the standard model features a double-action trigger, the tension of the long pull impacts the accuracy of the rifle, and many shooters prefer to cock the hammer manually. Immensely popular among troops fortunate enough to be issued the rifle, the “Tennessee Twister” has already proven itself remarkably effective in combat against Indians, Mexicans, Spaniards, and Northern guerillas. Although yet untested against the Union infantry, the rifle has already created quite a stir in the North, where dour politicians have nicknamed it the “Tennessee Timekeeper”—a reference to their belief that the Armistice is being used to mass produce thousands of these deadly arms. The P74 Manassas is available in three versions—a 21” carbine, a 28” octagonal-barreled infantry rifle, and the 30” round-barreled “sharpshooter” model. Each is handsomely made from blued steel, and features a brass trigger-guard, crescent buttplate, and the trademark Macon magnolia stamped into the walnut stock.

Marshal’s Note

The general appearance of the P74 is based on the modern Uberti reproduction of the Remington revolving rifle, but its gap-sealing mechanism and tapered cartridges anticipate Léon Nagant’s M1895 by twenty years. The Mexican “Pieper” revolving carbine was also an inspiration, but was too ugly to consider as a stand-in. Needless to say, an “actual” P74 Manassas would look a bit different than this photoshopped percussion Remington, but I gave it a try!

Mershon & Hollingsworth Model 1875 Automatic Revolving Carbine, “Caliban”

1875–present, SCR, revolving cylinder. Caliber .36 BP7, Range 30/300/600, Capacity 8, Rate of Fire 1–4; DAM 2d6, STR d6, Very Rare. Notes: A critical failure on the Shooting roll snaps the winding spring, requiring a Repair roll to fix. When the shooter fires more than one chamber per action round, a –1 recoil penalty is applied to each subsequent Shooting roll after the first.



Designed by Ralph S. Mershon and Jehu Hollingsworth and produced by Valentine Arms of Lynchburg, the Model 1875 is an updated version of Mershon & Hollingsworth’s “automatic” rifle of 1855. Combining the mechanical ingenuity of its Ohio inventors with the baroque aesthetic of its California manufacturer, the ornate firearm employs a ghost-steel spring to mechanically revolve and fire an enclosed eight-chamber cylinder.

Unlike most modern revolvers, the Caliban’s cylinder must be removed to be reloaded, and is released from the receiver housing by pulling the trigger-guard lever. After the loaded cylinder is replaced, the shooter winds an internal spring by repeatedly cranking a wing-shaped lever mounted on the right side of the frame. Once the spring is at full tension, the internal firing pin cocks with a satisfying “click,” and the carbine is ready to be fired. Instead of a hammer, a brass toggle allows the shooter to set the “clock tension” and determine the rate of fire: “Manual,” “Compensated Automatic,” or “Uncompensated Automatic.” On the “Manual” setting the carbine functions like a double-action revolver. A single trigger pull cycles the firing pin and rotates the cylinder, allowing RoF 1 or RoF 2, depending on the shooter’s need for accuracy. The two “Automatic” settings keep the cylinder revolving automatically as long as the trigger is held down. The “Compensated” setting slows the rotation to a RoF 1 pace, which allows the user to accommodate for recoil and eliminates all Shooting penalties. The “Uncompensated” setting discharges all eight chambers as rapidly as the mechanism can operate, achieving RoF 4 and producing a sound one miner described as “goddamn close to chain fire!”

The Model 1875 is tremendously expensive to produce, and only takes Lei Ming’s blue powder rounds—traditional gunpowder readily fouls the delicate mechanism, and its lower mass/energy ratio results in a loss of range and accuracy. Even still, the Caliban must be diligently cleaned and maintained, and is generally found only in the hands of collectors or wealthy adventurers. Its unusual name is derived from William Shakespeare Valentine’s custom of designating projects under development by literary codenames. Despite Mershon and Hollingsworth’s best efforts to keep their names attached to their invention, Valentine’s nickname has proved more appealing, and most people refer to the Model 1875 as the “Caliban” carbine.

Locke & Becker Revolving Rifle, “Tartarus Gun,” “Lynchburg Special”

1876–present, SCR, revolving cylinder. Caliber .38-50 Tartarus, Range 40/400/800, Capacity 12, Rate of Fire 1, DAM 2d8+2, STR d6, Very rare. Note: The Locke & Becker can be loaded with standard .38 rounds for Range 30/300/600, DAM 2d8.



Designed by San Francisco gunsmith Adrian Locke, this peculiar rifle uses a conical-shaped revolving cylinder chambered for Lutz von Becker’s new “Tartarus” rounds. This fearsome cartridge contains a bullet made from “orichalcum,” an unstable alloy of lead, tin, and azrucite that decomposes upon contact with heat and light. The bullet is backed by fifty grains of Lei Ming’s powerful Blue Powder No. 7, which gives the .38 caliber slug a considerable heft. The rounds are packaged with a patch of matte-black photographer’s paper covering each bullet; this protective swaddling incinerates upon discharge. Like an early version of a tracer, Tartarus rounds produce a bright blue streak as they leave the muzzle. Their real impact is felt when they strike a living target. Undergoing immediate endothermic decomposition, the orichalcum bullets burst into blue flame as they “burn,” freezing living tissue and creating painful wounds that resist healing. Indeed, fear of being struck by a Tartarus round is often enough to elicit deep feelings of cooperation in anyone finding themselves at the business end of the rifle! Gap blast is attenuated the old-fashioned way—precise and expensive engineering designed to minimize the distance between cylinder and breech.



Produced by Lynchburg gunsmith George Tibert, the Locke & Becker is a beautiful but expensive firearm, produced in a limited run and requiring costly ammunition. As a result, it has yet to gain widespread popularity, but most Maze observers believe that when the Cocytus Rift is finally opened for production, the price of ghost rock will decrease enough to make Tartarus rounds more financially accessible. In the meantime, more than one owner of a “Lynchburg Special” has learned to make do with standard .38 rounds, which do less damage and tend to foul the barrel more easily.

Smith & Wesson Model 320 Revolving Rifle

1879–1896, USA, revolving cylinder. Caliber .320 S&W, Range 20/200/400, Capacity 6, Rate of Fire 1, DAM 1d4+1d6, STR d6, Uncommon.



Although this revolving rifle was not historically produced until 1879, A Marshal may certainly include it in a *Deadlands 1876* campaign, as the S&W 320 Revolving Rifle is little more than a redesigned Smith & Wesson No. 3 pistol fitted with a longer barrel, a forestock, and a detachable rear stock. It is loaded in the exact same manner as a “Schofield” revolver, using the latch-operated “top-break” style. In order to compensate for the decrease in muzzle-velocity caused by gap blast, the .320 cartridges are longer to accommodate an additional charge of gunpowder.



The S&W 320 also features a set trigger, and is offered with the option of a Spencer Optics scope or “peep” sights, in nickel-plated or blued finish, and with three barrel lengths, 16”, 18”, and 20.” Other factory options include ivory or pearl grips and engraving. Despite the high reputation of Smith & Wesson and the many options offered for the 320, it historically sold very poorly and was considered a flop. The .320 load could still not compete with most rifles, and by the early 1880s, lever-action repeaters had already established their dominance.

Sources & Notes

To create this resource, I leaned heavily on [Flayderman's Guide to Antique American Firearms](#). Featuring detailed descriptions and black and white photographs of thousands of historical firearms, this is an essential resource for any historical gaming campaign, and *Flayderman's Guide* introduced me to several of the more bizarre firearms described in the *Deadlands Armory*. I also used Dennis Adler's [Guns of the American West](#) and David Miller's [Illustrated Book of Guns](#). Both feature historical notes and full-color illustrations of the West's most iconic firearms, many of which are museum pieces photographed especially for these books. Particularly helpful online resources include [Wikipedia](#), the [Firearms History, Technology & Development](#) blog, and [Antique Arms](#), and [The Internet Movie Firearms Database](#). The Web is filled with antique firearm collectors, and much of the information in the Armory was gathered from the homepages of Civil War reenactors or collectors, gun-owner forums, and antique auction sites. Anyone interested in the historical firearms described in the Armory can find a wealth of additional information online, including videos of many of these guns being loaded and fired—sometimes by authentically-costumed reenactors! But without a doubt, the most useful source of information and videos on obscure firearms is Ian McCollum's [Forgotten Weapons](#). Working in conjunction with various auction houses, the always-friendly Ian produces ten-minute YouTube videos spotlighting authentic antique firearms, often outlining their history and sometimes carefully disassembling them to reveal their inner mechanisms.

Image Credits

Many of the photographs of authentic weapons used in this document were “borrowed” from online sources. Because most owners of vintage firearms are good-natured folk with a passion for promoting their hobby, I have no doubt they'll be happy to see their photographs used to promote a wider understanding of antique weaponry. Having said that, if anyone is offended that I'm using an image without proper authorization, please [contact me](#) and I'll remove it immediately. Some photographs depict modern replicas, usually manufactured by [Uberti](#), [Pietta](#), [Pedersoli](#), [Cimarron](#), [Taylor's](#), or [Dixie Gun Works](#). I like using photographs of modern reproductions because it gives the impression of newness, something more appropriate to the *Deadlands 1876* milieu than a rusty antique. When I could not find a shiny new replica, I usually turned to vintage gun auctions. Three excellent resources for detailed images of antique firearms are the [Rock Island Auction Company](#), [James D. Julia](#) of Boston, and the [Collectors Archives](#) from Collectors Firearms, Inc. Thank you!

Specific Online Sources

The following sites were invaluable in creating this resource: C.P. Bedford's [Collier and His Revolvers](#) for the American Society of Arms Collectors, John Paul Jarvis' [Bennett & Haviland Revolving Rifle](#) for Guns.com, Ian McCollum's cheerful demonstrations of the [Browning Slide Bar Repeater](#), [Cochran Turret Revolver](#), [Porter Turret Revolver](#), [North & Skinner's Revolving Rifle](#), [Treeby Chain Gun](#), and the [Nock Pepperbox Carbine](#) for Forgotten Weapons, Kymm Wilson on the [LaMat Revolving Carbine](#) for Forgotten Weapons, Robert K. Sherwood's article on [Jonathan Browning](#) for *Gun Digest* as recounted on the James D. Julia Auction site, the entry on the [Morris & Brown Conical Repeater](#) for Lock, Stock, & History, Joel Kolander's [Smith & Wesson's Biggest Fail?](#) for GunsAmerica, and Mike Strietbeck's incredibly well-researched [A Study of Remington Revolving Rifles](#)—even if Mr. Strietbeck unfortunately refers to the Civil War as “The War of Northern Aggression!” Also a few contemporary sources: an article on the [Morris & Brown Conical Repeating Rifle](#) in *Scientific American* Vol. IV, 1861, and [Cochran's Many-Chambered Non-Recoiling Rifle](#) from *The Mechanics' Magazine, Museum, Register, Journal, and Gazette* Vol. 26, 1837.

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