The Marvelous 99

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Arthur Savage's ingenious lever rifle followed his torpedo – then rocketed past its competition.

Marble's tang sight was justly popular on Model 1899 and early 99 rifles. The small aperture and long sight radius enhanced accuracy. "Up to your eye" placement made it a very fast sight too.

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The Savage Model 99, discontinued now for just over a decade, endured for a century because it has those indefinable qualities that make it more than a rifle. A lever-action, slim and flat and saddle-ready, it cheeks like a wish and points like a wand. But unlike the tube-fed, exposed-hammer rifles of Wild West fame, the 99 carries its reserve cartridges (and heft) in a machined-steel receiver. There's no outside hammer, and the bolt locks against the receiver itself, not against rails.

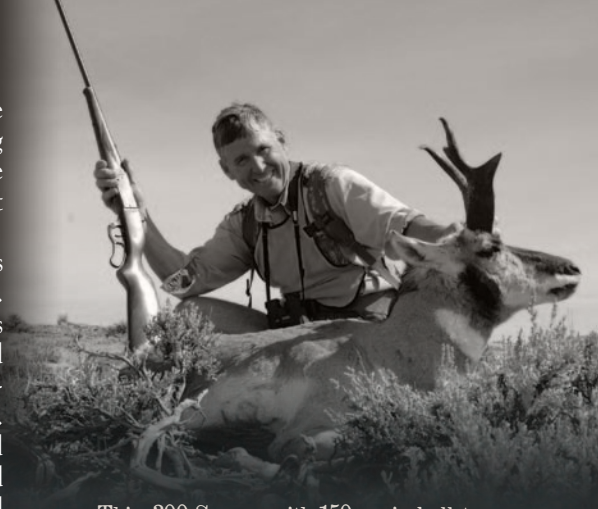
.32-20 (prototype rifle) .303 Savage .30 WCF (.30-30) .25-35 .38-55 .250 Savage

The Savage 99 appeared when labor costs were much lower. "Today," say Savage engineers, "the machining and final fit would make it too expensive to sell." But given rifle trends in the late 1800s, it's a wonder the 99 got beyond blueprint even then!

Arthur William Savage was born May 13, 1857 in Kingston, Jamaica, where his father, a Special Commissioner from England, established schools for newly freed slaves. Unlike most celebrated firearms designers of the 19th century—frontier gunsmiths like Remington and John Browning, for example—Arthur Savage got a fine education in England and the U.S. After university he sailed for Australia, where he met and married Annie Bryant. While managing a cattle ranch, the young couple started a family, soon to include eight children. One of their four sons was born in a wagon during an overland trek. Savage proved an able stockman. Over the next 11 years, he built a cattle empire.

Sale of the ranch funded Arthur's next enterprise, a Jamaican coffee plantation. While building that business, he turned his hand to designing firearms, explosives and heavy machinery. With a colleague, he engineered the Savage-Halpine torpedo. Evidently political complications prevented its adoption by the U.S. Navy. Savage sold it to the Brazilian government, then indulged his interest in repeating rifles.

His prospects for success with a new mechanism must have seemed dim. The last half of the 19th century was by far the most



This .300 Savage with 150-grain bullets is a flat-shooting round; but iron sights limit your reach! Wayne bellied to within 100 yards of this pronghorn.

Cartridges for lever-action Savages, in chronological order, from left. Not shown: .32-40 (dropped in 1919), .22 Hi-Power (dropped in 1941) and .22-250 (in 99-C only, from 1977).

productive in the history of firearms. Metallic cartridges, interchangeable parts and smokeless powder fueled innovation and prompted corporate backing of promising projects and inventors. During the 1880s and '90s Winchester jealously guarded the services of the brilliant John M. Browning, who delivered its 1886, 1892 and 1894 rifles. John M. Marlin designed a timeless series of side-ejecting lever rifles. Remington struggled with its Lee bolt-action—but in 1888, Marcellus Hartley bought all Remington assets for $200,000. Hartley had earlier joined four partners in forming the Union Metallic Cartridge Company, which would eventually merge with (and salvage) Remington. By 1912 U.M.C.C. would earn $15 million in gross receipts, or 30 times Remington's revenues!

Still, Arthur Savage pursued a new rifle. He was 35 years old when, in 1892, he fashioned the Savage No. 1, a hammerless lever-action operated with the near (or little) finger. An ingenious rotary magazine held eight cartridges. The rifle had a 29-inch barrel, a musket-style stock. Then living in the U.S., Savage submitted his repeater to U.S. ordnance trials at Governor's Island, New York. It lost to the Norwegian-designed Krag-Jorgensen bolt gun, which became the official U.S. service arm. Convinced of the merits of his rifle, Savage reconfigured it for sportsmen. He reduced magazine capacity to five for a trimmer profile, and shaped the lever to accept three fingers. Patents awarded him early in 1893 described a prototype model in .32-20. Savage followed with his own smokeless round that outperformed not only the anemic .32-20 but the more powerful and popular .30 W.C.F. On April 5, 1894 he formed the Savage Repeating Arms Company in Utica, New York. Rifle production began the next year. Marlin Firearms Co. of New Haven, Connecticut supplied tooling and actually built the first Savage rifles, their magazines lengthened for the new .303 Savage round. Dubbed the Model 1895, Arthur Savage's lever-action was truly hammerless. In lock-up, its bolt abutted the stout web of steel forming the rear of a forged receiver.

Because the 1895's mechanism was almost totally enclosed, it protected the shooter better than other lever guns in the event of case failure. Unlike Winchester and Marlin lever-actions, it had no slot for a hammer. Not even a loading port. Still, loading was easy: you thumbed cartridges through the ejection port, designed so spent cases flew to the side, out of the sight-line. As iron sights gave way to scopes, that side ejection became an even bigger asset.

The 1895 had a coil mainspring, the first ever on a commercial lever gun. Coil springs were more durable than leaf springs, standard on the competition. A through-bolt held butt-stock to receiver, a more secure arrangement than wood screws in tang extensions. The rotary magazine was shielded from water, debris and impact by the receiver. A window on its forward left side showed the cartridge count. Unlike tubes, this spool magazine had no contact with the barrel, so it didn't impair accuracy. Because cartridge weight stayed between the hands, balance was unaffected by the number of rounds in reserve. Perhaps most importantly, Savage's spool also permitted safe use of pointed bullets. Stacked end-to-end in tubes, cartridges could fire upon recoil unless bullet tips were flat or round. Shooters weaned on black-powder rifles accepted blunt bullets at modest speeds. But as smokeless fuel and fast, pointed bullets extended the reach of bolt rifles, lever-action enthusiasts found the Savage magazine a most worthwhile feature.

The cartridge Arthur Savage developed for his new rifle looked and performed like the best of its competition—in fact, a little better. The .303 Savage resembled the .30 WCF, or .30-30, with a rimmed, generously tapered case and a long neck. But its 190-grain bullet had more punch. The .30 W.C.F. was first loaded with a 160-grain bullet at 1,970 fps. The .303 Savage launched 190s at about the same speed. Incidentally, these were .308-diameter bullets, not the .311s of the .303 British, Great Britain's service round. Designed for smokeless powder, the .303 Savage listed a black-powder loading until 1903 (when the company also discontinued a target load with paper-patched bullet). The .303 Savage wooed hunters worldwide. One from British Columbia claimed 18 kills with a box of 20 cartridges, with two grizzlies in the tally. Harry Caldwell, who dedicated his life to mission work in China, used a Savage rifle in .303 to shoot tigers. In its 1900 catalog, Savage ran an excerpt from a letter by an Alaskan hunter who applied his .303 with lethal effect on a whale! That tale may have choked off further testimonials!

Still, W.T. Hornaday, author of *Campfires in the Canadian Rockies*, wrote: "I have just [shot] one bull moose and two bull caribou, all killed stone dead in their tracks with one of your incomparable .303 rifles. I shot the moose at a distance of 350 yards… [and my guide] killed a very fine large mountain sheep [with] the first shot 237 yards off and in a very strong wind…. [The] barrel is small and [has] no long magazine to catch the wind…."

Savage's Model 1895 was cataloged with 20-, 26- and 30-inch barrels, in .303 only. About 6,000 rifles were built between 1895 and 1899, when Savage modified the action. The resulting Model 1899 became available in .30 WCF a year later. In 1903 the .25-35, .32-40 and .38-55 joined the list (all were dropped in 1919). So similar was the new rifle to its predecessor that for $5, Savage offered to convert the earlier version with a new bolt and bolt components,

TOP: F.H. Rigall harvested this Alberta sheep in 1906 with his Savage 99. **LEFT:** When protruding, this peg shows a Savage Model 99 is cocked. It debuted on the Model 1899. **ABOVE:** This 1971 Model 99-A has the two-position tang safety standard on all post-1961 Savage 99s.

hammer, sear, and hammer indicator. The indicator was a small bar at the top front of the bolt. In a cocked rifle, the bar was up. Not long into production of the Model 1899, the bar was replaced by a pin that protruded from the top rear of the receiver.

Many hunters are unaware that the 1899 (and the later 99) has a rebounding firing pin. Besides assisting ejection, this feature allows for de-cocking and safe carry with a round in the chamber. To de-cock, simply lower the lever a couple of inches, past its resistance, then pull the trigger as you close the action. The cocking indicator will lie flush with the top of the receiver, showing the rifle is not cocked. To cock without extracting or ejecting, just lower the lever the same distance, then close. As Arthur Savage designed his rifle to cock near the end of lever travel, cycling is easier than with traditional lever guns. Primary extraction also occurs with the loop close to the grip, where fingers have their greatest leverage.

The 1899's charter fan club included "Cougar Pete" Peterson. The first government hunter in the Pacific Northwest, he was known to remove the safeties of his Savage lever rifles and carry them loaded but uncocked. Once, running to the yelps of his hounds, he met a huge bear with an Airedale clamped in its mouth. A .303 bullet clipped the dog's whiskers en route to the bear's brain. Pete liked that cartridge so well, he re-chambered a Model 94 Winchester to .303—without setting the barrel back. Cases came out with a double shoulder.

The Model 1899 appeared in many forms. Barrel lengths of 20 to 28 inches were mated to several stock profiles. Barrel contours had letter designations: A for round, B for octagonal, C for half-octagonal. The 1899-F saddle-ring carbine, with 20-inch barrel, proved especially popular. Savage announced the CD Deluxe and H Featherweight in 1905. The Model 1899-D, a .303 with musket stock and bayonet, died in 1905—though a batch of D rifles appeared in 1915. In 1907 Savage announced take-down versions of the rifle. In 1913 the hot new .250-3000 cartridge supplanted the .25-35, chambered in the 22-inch barrel of the 1899-A since 1903.

The .250-3000 was the brainchild of Charles Newton, an attorney who spent most of his career designing rifles and cartridges. This new case had the same base diameter as the .30-06, but was shorter. Newton suggested a 100-grain bullet at 2,800 fps; Savage chose an 87-grain bullet at 3,000—blistering speed in those days. That claimed velocity became part of the cartridge name. Later,

The Leap to Lever Action

The self-contained cartridge, a requisite for repeating rifles, emerged in stages. In 1847 Stephen Taylor patented a hollow-base bullet with a powder charge secured by a perforated heel cap that admitted sparks from an external primer. A year later, New York inventor Walter Hunt had a similar bullet, its heel covered with paper. Primer sparks shot through the paper to ignite the charge. To fire his "Rocket Ball," Hunt fashioned a tube-fed repeating rifle with a pillbox primer feed. But the lever-action mechanism often malfunctioned. Lacking money to promote or improve his "Volitional" repeater, Hunt sold patent rights to fellow New Yorker George Arrowsmith. Lewis Jennings, a bright young engineer in Arrowsmith's shop, refined the rifle. Arrowsmith then sold it for $100,000 to railroad magnate Courtland Palmer.

With Palmer's financial backing, Horace Smith and Daniel Wesson modified the Rocket Ball. In 1854 Palmer joined his designers in a limited partnership, contributing $10,000 for tooling in a firm that would become Smith & Wesson. A year later a group of 40 New York and New Haven investors bought out Smith, Wesson and Palmer to form Volcanic Repeating Arms Company. Company Director Oliver F. Winchester, a shirt merchant, moved the firm from Norwich to New Haven. Sluggish sales of Volcanic guns sent the firm into receivership in 1857. Buying all assets for $40,000, Winchester reorganized it to form the New Haven Arms Company. He hired Benjamin Tyler Henry to redesign the balky repeater. In 1860 Henry received a patent for a 15-shot lever-action rifle in .44 rimfire. Confederates called the brass-frame Henry "that damned Yankee rifle you loaded on Sunday and fired all week." Marlin and Browning and other able men came up with stronger mechanisms. By the advent of smokeless powder near the turn of the century, lever rifles had become more reliable and fired much more potent cartridges.

Arthur Savage's prototype lever rifle was chambered in .32-20 (near right). He designed and lengthened the action for the .303 Savage. Its 190-grain bullet upstaged the 160-grain in the .30 WCF. ABOVE: The 99 has a long-lever stroke, but cycling is easy, as cocking and primary extraction happen with the lever close to the grip.

Stevens: Strength from the Shadows

The Marvelous 99

In 1920, as the .300 Savage cartridge appeared and the Model 1899 lever rifle became the Model 99, Savage Arms Corporation bought the J. Stevens Arms Company. Founded in the wake of the Civil War to build firearms and machine tools, the firm got its first power from a water wheel, its first lighting from candles. Joshua Stevens was 50 years old then. The talented Massachusetts native had grown up working with Cyrus Allen, Samuel Colt, and Edwin Wesson; all would produce notable firearms. Stevens moved to Chicopee Falls in 1849 to work for the new Massachusetts Arms Company, which was then sued by Sam Colt for patent infringements. The $15,000 settlement almost broke the fledgling enterprise; but it slowly recovered.

Stevens stayed there until he joined with two other men to form J. Stevens & Co. in 1864. From 1888 to 1915 it was known as the J. Stevens Arms & Tool Company. During its prime, it employed more than 900 workers in a plant a factory of 180,000 square feet! After celebrated barrel-maker Harry Pope agreed to work on contract, the operation grew by half. Stevens added energy, vision, and a clever tip-up mechanism for rifles, shotguns, and pistols. It fueled much of the company's growth. Ideal hinged-breech target rifles and 44 ½ sporting rifles, with Crack Shot and Favorite .22 rifles, were extremely popular. Joshua Stevens retired in 1895. When he died 12 years later, his was the largest sporting arms firm in the world.

Perhaps because Mr. Stevens had been unwilling to arm troops in the Spanish American War, the J. Stevens Arms & Tool Company received no contracts to supply allied forces in the Great War. In May 1915, the firm sold to the New England Westinghouse Company—which set to filling a contract for 1.5 million Russian Nagant rifles! A new name followed: J. Stevens Arms Company. A decade after Savage's 1920 purchase, Stevens became a division of Savage arms. During World War II its prodigious capacity went to production of the British Lee Enfield No. 4 Mark I infantry rifle. In 1960 the Chicopee Falls plant shut down. Assets went to the Savage factory at Westfield, Massachusetts, a facility built in the 1940s.

New-manufacture .38-55 ammunition puts some early Savages back in service. A great cartridge!

the round was called simply the .250 Savage. Factory loads with 100-grain bullets are now standard. Newton also gave Savage the .22 Hi-Power, or "Imp." It debuted in the Model 1899-CD rifle in 1912. A 70-grain .228-inch bullet clocking 2,700 fps seduced hunters; but the Hi-Power couldn't guarantee kills on heavy game. Its place in the 'chuck pastures' was later snatched by the .22-250. The .22 Hi-Power would vanish by World War II.

To diversify its business after the Great War, Savage bought the J. Stevens Arms Company of Chicopee Falls, Massachusetts. Joshua Stevens, who had died in 1907 at age 92, had built from his 1860s gun shop a powerful enterprise that sold affordable but well-made firearms to millions of hunters and target shooters. Savage's 1920 purchase of Stevens' arms company was the first of several acquisitions. A 1929 deal put Philadelphia's A.H. Fox Gun Company under the Savage umbrella. At that time, Fox double shotguns were highly esteemed. Savage-Stevens-Fox catalogs reminded shooters of the merger. The name spoke of deep American roots, clever innovation, and impeccable craftsmanship.

Also in 1920 the Savage Model 1899 became the Model 99. The mechanism didn't change much. The first production runs delivered five styles: solid-frame standard rifle and saddle gun, and take-down standard rifle, saddle gun, and featherweight. Letter designations—excepting the A—remained. But they appeared on different rifles. The new 99-D was a welter-weight take-down, not a military musket! New use of old letters would continue. The original 99-E, circa 1920 to 1933/34, was Savage's "light weight" with a sleek, schnabel-style forend. The 99-E arriving in 1961 had a rounded, press-checkered hardwood stock: E then meant economy. The 99-A debuted in 1926/27 to supplant the original 1899-A. It vanished a decade later, then emerged in different form in 1971.

From the start, Savage lever rifles and their ammunition were touted for their accuracy. The 1903 catalog showed a 10-shot, 100-yard group measuring 1-5/16 inches. Smokeless powder, claimed Savage, improved accuracy, produced higher velocities with smaller charges, reduced fouling, and cut recoil by 45 percent! Surely that last assertion raised eyebrows, but the drumbeat to smokeless lured shooters from rifles engineered for black-powder rounds. The Savage 1899, not incidentally, ran on smokeless.

Endorsements from famous outdoorsmen helped sell 99s. In 1901, Savage got a letter from Teddy Roosevelt describing his Model 99 as "the handsomest and best turned out rifle I have ever had." T.R.'s affinity for Winchester 1886 and 1895

lever-actions are better known. But he adored his Savage!

Roy Chapman Andrews, explorer for the American Museum of Natural History, carried a Savage. He called the .250-3000 "the most wonderful cartridge ever developed." On his third Asian expedition in 1920, Andrews relinquished his 99 for a bolt-action Model 1920 Savage. But another hunter on that trek, Harry Caldwell, brought his 99.

The .300 Savage cartridge arrived in 1920 with the 99's debut. Designed to perform in the same class as the .30-06, it operates at about 47,000 psi, roughly 5,000 psi higher than average pressure from a modern .30-30 load. Still, the case measures only 1.871 inches, and the .30-06 mikes 2.494. The .300's limited capacity puts it 250 fps behind the '06. Hunters of that day didn't seem to mind, however. Great numbers snapped up Savage 99s in .300. They used the stubby round to down elk and moose as well as deer. In Model 99 barrels rifled 1-in-12, the .300 remained the rifle's most potent chambering until the .308 Winchester appeared in 1952.

By some accounts, the .308 owes its development to the .300 Savage. During the early 1950s, a search began for a short-action round to replace the .30-06 in battle rifles. U.S. Ordnance people turned right away to the .300 Savage. But the minimal neck and 30-degree shoulder impaired function in some mechanisms. A slightly more capacious round, with longer neck and 20-degree shoulder, evolved as the T-65. Three years after it became the .308 Winchester in 1952, the Army adopted it as the 7.62 NATO.

During World War I the Savage Corporation had partnered with Pennsylvania's Driggs-Seabury Ordnance Company to produce Lewis machine guns. In the Second World War, the entire Savage-Stevens line turned to the manufacture of military weapons. At peak production, Savage was turning out 8,500 guns a month on 1.2 million square feet of factory floor in four facilities! Its payroll grew to 13,000—10 times the peace-time total. By war's end, the firm delivered more than 2.5 million firearms. Half of these were Thompson submachine guns. Savage also built 330,000 Lee-Enfield rifles for Great Britain after the huge losses at Dunkirk. Then, following the Lend-Lease Act, Savage agreed to double production of the Short Magazine Lee-Enfield rifle, to 60,000 per month. By mid-1944 the company had manufactured a million of these iconic rifles.

Arthur Savage did not see the end of the Second World War. During the preceding two decades he had no doubt reveled in the popularity of the .300 Savage among hunters. New versions of the 99 rifle had appeared while he dabbled in other enterprises. He prospected for oil, ran a tire company, and managed a citrus plantation in California. Arthur Savage died in 1941 at age 84.

Five years later, Savage Arms consolidated its firearms production at Chicopee Falls and closed the original Utica facility. It also trimmed the line of Model 99 rifles down to the 99-EG and the beefier 99-R and 99-RS. The EG, a svelte, well-balanced rifle with 22- and 24-inch barrels and schnabel forend, had been exceedingly popular before the war. The RS was simply a deluxe R, with a Redfield receiver sight, and a 7/8-inch sling in QD (quickly detach) swivels. All three rifles were of solid-frame design and chambered only in .250 and .300 Savage. Prices: $89, $101 and $121.

Passing the million-rifle mark in the 1950s, Savage's 99 added short-action cartridges introduced by Winchester that decade: the .308, .243 and .358. The .284 joined the list in 1964, the .375 Winchester in 1980. During the 1960s and '70s eight new versions of the 99 appeared, including DE and PE engraved presentation rifles (1965) and a 75-year anniversary rifle (1970). All told, the Savage 99 has been sold in 14 chamberings, including, briefly, the quick-stepping .22-250. Catalogs have listed 31 versions, as many as 10 at a time—plus a take-down 99 with a .410 shotgun barrel.

The 99 mechanism has endured few changes during its long life. The two most noticeable arrived in the 1960s, when (in '61) the lever safety was moved to the tang and (in '65) a detachable box magazine replaced the spool. Stock changes included a switch from walnut to beech; checkering progressed from hand-cut to pressed (in '65), then to machine-cut. A minor change that set the 99 apart from other rifles of its generation was the addition of scope-mount holes, beginning in 1950. No other 19th-century rifle was so easily converted during production for top-side optics.

Even as bolt rifles upstaged lever-action mechanisms in post-war deer camps, the Savage 99 hung on. It was more than a whitetail rifle; in .300 Savage and .308 it had the reach and power for the Mountain West. It lay flat in scabbards as elk hunters on horseback plied the Dannaher, the Thoroughfare, and the San Juans. It ranged far afield with Frank Buck of the Bring 'Em Back Alive TV series. To catch arboreal beasts, Buck would reportedly lop limbs with bullets from his 99, dumping the animals into waiting nets.

While during the last century bolt-action rifles have become more economical to manufacture, the same is not true of the 99. The Savage design mandates hand fitting and timing—costly steps complicit in the 99's demise. During the early 1990s, Savage tried to salvage the 99 by shipping parts to a Spanish gun firm, which produced investment-cast receivers and shipped barreled actions back to Savage for stocking. But that arrangement didn't last.

Savage's first catalog, circa 1900, listed Model 99s for $20, with engraving from $5, checkering from $2. A Lyman tang peep sight (or wind-gauge globe front sight) cost $3.50; sling and swivels added $1.50. Custom stock dimensions could be special-ordered, but in 1905 Savage admonished buyers that: "…deviation from (standard dimensions) requires the stock to be cut from the solid block by hand. This is expensive work and there is an extra charge of $10…." The last Savage 99, described in 1997 editions of *Shooter's Bible and Gun Digest*, retailed for $650. It had a 22-inch barrel in .243 or .308, a detachable box magazine. That year the company also fielded its 99-CE, or Centennial Edition, in .300 Savage only. A thousand were built. List price: $1,660.

I've hunted with Model 99s for decades, killing mule deer, whitetail, pronghorn, elk and caribou. This is one of those rare rifles that fly to the shoulder and seem to cycle themselves. Tang sights are an elegant addition to 1899s and early 99s, especially long-barreled versions with integral front ramps. Even late rifles are stocked for iron sights, so when attaching a scope, I pick low power and straight front ends – Leupold's M8 3x, Weaver's K2.5 and K3. One .300 Savage in my rack wears a Lyman All American 2.5x, as perfect a match as a vintage Alaskan. I still troll for secondhand 99s. Alas, they show up less and less frequently. Most in circulation evidence hard life afield. Scabbard shine and scratched stocks are the rule, tang splits common. Many early rifles were drilled for scope mounts—often on the side and, judging from the results, by people who'd never run a power tool. But the 99 takes abuse in stride. A friend forgot he'd left his rifle leaning against his pickup—until he backed over it and bent the barrel. Loath to abort his hunt, he flipped the rifle and drove over it again. The barrel came out straight enough to kill a moose.

There's still no rifle quite like the Savage Model 99. Sako's Finnwolf, and Winchester's 88, both hammerless, front-locking lever rifles, gave it brief and token competition. But they pulled few hunters from their 99s. Arthur Savage probably couldn't have predicted his rifle would last a century (the .30-40 Krag-Jorgensen that beat it in military trials was upstaged by the 1903 Springfield within a decade!), or that it would spark fierce loyalty among riflemen. Then again, he might not have been surprised. ■