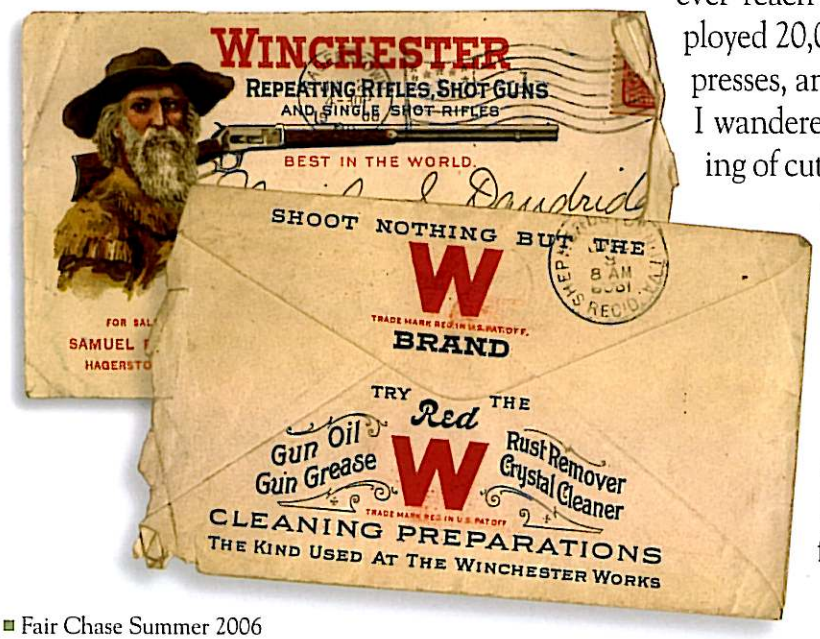
LOST & FOUND

Saying Goodbye to an Old Friend

The Model 70 — Rumors of its demise after 70 years may be exaggerated. Or not. Here's the story of Winchester's Model 70, by most measures the best of its kind. Successors to the Rifleman's Rifle? You bet!

By Wayne van Zwoll
B&C Professional Member

An e-mail on my screen one gray morning this January declared that Winchester Models 70 and 94 would no longer be manufactured. "This is surely a hoax," said I. The preposterous claim wouldn't last long in cyberspace. But then I recalled my visit to the original New Haven plant 30 years earlier. Its bricks darkened by decades of industrial soot, the mammoth structure brooded over a city whose people hardly knew it. Stark, square, and silent, its windows still painted black to conceal night-time operations should Axis bombers ever reach the Eastern Seaboard, this factory had employed 20,000 people during World War II. Lathes, mills, presses, and deep-hole drills had run 24 hours a day. But I wandered through long chains of empty rooms smelling of cutting oil for machines no longer there. I'd come occasionally to a place still functioning, an aproned worker tooling up an old Bridgeport or stacking a handful of boxed guns onto a pallet. The men seemed out of place, as if even their pallid, expressionless features held too much life for a factory gutted, a brick shell in which echoes of the Great War, the Depression, Pearl Harbor and The Bomb had faded, with no sounds to replace them.



Is it true? Is Winchester dead?

No. But all manufacture of Model 70 and Model 94 rifles ceased a week ago as I write this. The news makes sense only if you're privy to more than the last decades of Winchester history....

Beginnings

In 1848, Walter Hunt received U.S. Patent No. 5701 for a conical lead bullet he called a "rocket ball." The "Volition Repeater" he designed to fire it came a year later. The hollow-based balls fed from an under-barrel tubular magazine, the primers from a pill-lock mechanism. The rifle's trigger doubled as a lever to move the breechbolt. Complex and trouble-prone, Hunt's repeater found a home with New York engine maker George Arrowsmith, who hired gun designer Lewis Jennings to improve it. Jennings did. But flaws remained, and Arrowsmith wanted out. He sold the design to New York financier Courtland Palmer.

Palmer hired Horace Smith to refine the Jennings. Daniel Wesson and a brilliant young mechanic, Benjamin Tyler Henry, soon joined Smith, forming a limited partnership called Smith & Wesson. They not only revamped the rifle but came up with a metallic cartridge for it. Alas, the cartridges were hard to make on contemporary machines, so they returned to the rocket ball. In 1855, a group of 40 New York investors bought out Smith, Wesson, and Palmer. (Henry had earned no patents). The new owners formed Volcanic Repeating Arms and elected one of their own, shirt-maker Oliver F. Winchester, as chief executive.

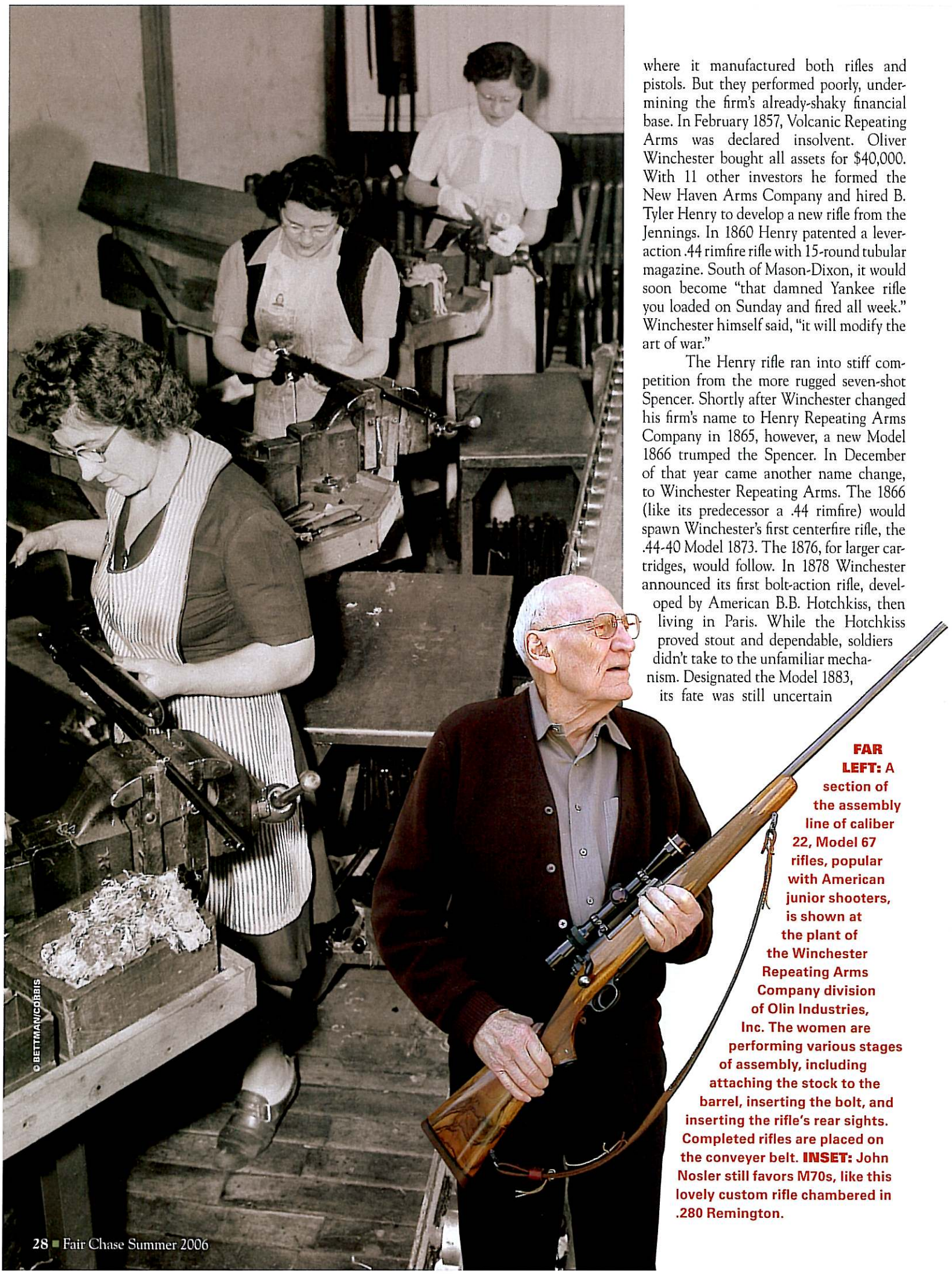
Winchester promptly moved the company from Norwich to New Haven,

I doubt we've seen the last of Winchester's Model 70. But even after your rack holds a full stable of the Rifleman's Rifle, you'll do well to explore the hardware that's evolved in its tracks: the Dakota 76 and Montana/Serengeti rifles, the Kimber 84M and 8400.

John Browning designed Winchester's enormously popular Model 92 in less than a month.

where it manufactured both rifles and pistols. But they performed poorly, undermining the firm's already-shaky financial base. In February 1857, Volcanic Repeating Arms was declared insolvent. Oliver Winchester bought all assets for $40,000. With 11 other investors he formed the New Haven Arms Company and hired B. Tyler Henry to develop a new rifle from the Jennings. In 1860 Henry patented a lever-action .44 rimfire rifle with 15-round tubular magazine. South of Mason-Dixon, it would soon become "that damned Yankee rifle you loaded on Sunday and fired all week." Winchester himself said, "it will modify the art of war."

The Henry rifle ran into stiff competition from the more rugged seven-shot Spencer. Shortly after Winchester changed his firm's name to Henry Repeating Arms Company in 1865, however, a new Model 1866 trumped the Spencer. In December of that year came another name change, to Winchester Repeating Arms. The 1866 (like its predecessor a .44 rimfire) would spawn Winchester's first centerfire rifle, the .44-40 Model 1873. The 1876, for larger cartridges, would follow. In 1878 Winchester announced its first bolt-action rifle, developed by American B.B. Hotchkiss, then living in Paris. While the Hotchkiss proved stout and dependable, soldiers didn't take to the unfamiliar mechanism. Designated the Model 1883, its fate was still uncertain



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FAR LEFT: A section of the assembly line of caliber 22, Model 67 rifles, popular with American junior shooters, is shown at the plant of the Winchester Repeating Arms Company division of Olin Industries, Inc. The women are performing various stages of assembly, including attaching the stock to the barrel, inserting the bolt, and inserting the rifle's rear sights. Completed rifles are placed on the conveyer belt. **INSET:** John Nosler still favors M70s, like this lovely custom rifle chambered in .280 Remington.

when, in December 1880, Oliver Winchester died at the age of 70.

The Browning era

The next chapter at Winchester would be written by Thomas Bennett and John Moses Browning. In 1883, Winchester salesman Andrew McAusland bought a used single-shot rifle and sent it to company president Bennett (also Oliver Winchester's son-in-law). Bennett admired the strength and simplicity of the dropping-block mechanism. He'd never heard of the name stamped on the rifle, but he booked the next train from New Haven to Ogden, Utah. There he found what was billed boldly as the biggest gun establishment between Omaha and the Pacific. In the modest shop he found a handful of men who looked barely out of their teens. John, in his mid-twenties, introduced his brothers and asked if he could be of service. Bennett got right to the point: "I want to buy your rifle." No, not one rifle; the rifle, all rights.

As legend has it, John didn't even blink. "Ten thousand dollars," he said. In 1883, that was a huge sum. Bennett countered at $8,000 and struck the deal. Then he boarded the train for the six-day trip back to Connecticut. It was the start of a 19-year relationship that confirmed Winchester as America's foremost name in firearms. John Browning designed 44 guns for Winchester; 10 were produced in quantity. Bennett bought all the others just to keep them from the competition. Browning's 1886 lever-action, the strongest repeater of its time, earned Browning $50,000 — "more money than there was in Ogden," chuckled John.

Bennett wanted a lever-action shotgun, and Browning complied with what became the Winchester 1887. The Browning-designed 1897 later validated John's opinion that "a slide-action shotgun would sell better." Browning sent sketches to New Haven. When his idea for a slide-operated .22 drew tepid response, he built it anyway, sending the prototype with a note: "You said it wouldn't work, but it seems to shoot pretty fair for me." The Model 1890 Winchester .22 sold like lemonade in July.

Browning liked to put his genius on the line. When Bennett asked him to update the Model 1873 with a modern short-action lever rifle, the offered price was $10,000. "But get it here in three months," said Bennett, "and I'll pay $15,000."

John allegedly scratched his head, smiled and replied: "The price is $20,000, and you'll have it in 30 days or you owe nothing." The prototype for the Winchester 92 arrived in just a little over two weeks.

John Browning's last gun for Winchester was a self-loader. Tapping the force of the fired cartridge to cycle the action was a radical idea then, and Bennett wanted no part of it. If the autoloader worked, there was no guarantee the public would buy it. If it sold briskly, it would undermine the market for Winchester pump guns. Bennett could have bought the design and shelved it — except that Browning was asking a huge cash advance plus royalties. The two men parted company.

John Browning pedaled the self-loader to Fabrique Nationale in Belgium. Under tariff pressure, F.N. offered U.S. rights to Remington. Far-sighted Remington executive Marcy Dodge snapped it up and sold it as the Model 11. The Belgian version made history as the Auto 5.

John Browning went on to develop the Model 1911 pistol for Colt, the Browning Automatic Rifle for U.S. infantrymen, and machine guns that the German high command would later finger as a decisive factor in air combat during World War II. John died in 1926 at age 71.

From 54 to 70

In 1924, after 30 years of trying to perfect a bolt-action rifle, Winchester designers came up with the Model 54. They borrowed the 1903 Springfield's coned breech, Newton's ejector, and the Mauser's extractor. The stock was patterned after popular Sedgely sporters. A nickel-steel barrel on a cyanide-hardened receiver bottled pressure from Winchester's new .270 cartridge, whose 130-grain bullet at 3,100 fps left hunters open-mouthed. Though the 54 never earned the accolades piled on the later 70, it appeared at a pivotal time. The 54 gave Winchester a nimble, dependable bolt-action with greater reach than lever rifles of the day.

Despite the Model 54's success, the 1920s were hard on Winchester. The Depression felled many firms; it merely finished off Winchester, which dissolved in February 1929. Reorganizations followed. In December 1931, Winchester assets were acquired by Franklin Olin's Western Cartridge Company for $3 million cash and $4.8 million in Western stock. Franklin's son, John, took the reins. During the next decade he would bring 23 new Winchester guns to market.

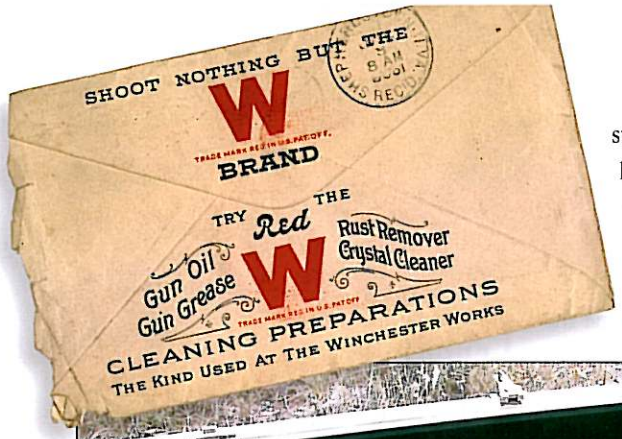
Western kept the 54 alive, allowing T.C. Johnson and his staff to refine the rifle they'd engineered. One flaw was a trigger that served as a bolt stop. Hunters balked at the top safety, which interfered with low-mounted scopes. Beginning in December

I spent Saturday mornings ogling a Winchester 67 single-shot .22 in the rack behind the dusty counter of a local hardware store. I couldn't afford it either, not at $16.

1934, Winchester started work on an improved rifle. The 54 would remain available for seven more years, partly because people were still eating in soup kitchens. The need for a more sophisticated sporting rifle was hardly urgent. The measured pace of Johnson's crew surely contributed to the appealing qualities of the new Model 70, whose first receivers were serial-numbered on January 20, 1936. Not until January 1, 1937, did Winchester announce the official release of 2,238 rifles.

The 70's barrel and receiver looked like the Model 54's, but a separate sear permitted trigger adjustment for take-up, weight and over-travel. The bolt stop was also separate. To eliminate misfires (too common with the 54's speed lock), striker travel on the Model 70 was increased 1/16 inch. The first Model 70 safety was a tab on top of the bolt shroud; two side-swing configurations followed, each with a middle detent that blocked the striker while permitting bolt manipulation. The 70 wore a hinged floorplate secured by a spring-loaded plunger in the separate trigger guard.

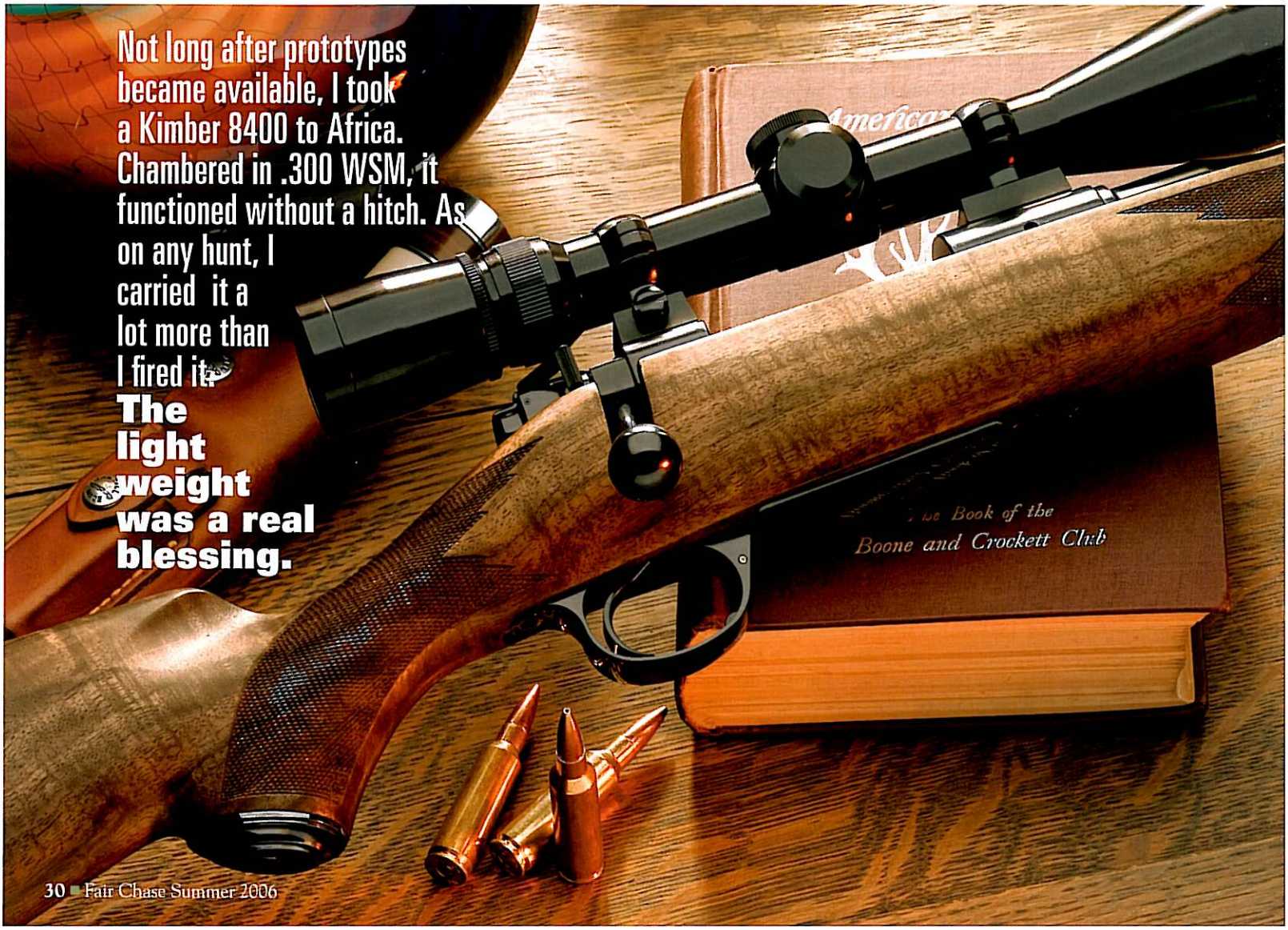
Model 70 receivers were machined from bar stock, each beginning as a 7 1/2-pound chrome-moly billet. After 75 machinings, a finished receiver weighed 19.3 ounces. Spot-hardening the extraction cam behind the bridge preceded a full heat treatment. Each finished receiver spent 24 hours in a 1,200-degree salt bath to test 47C, Rockwell. The test left a dimple in the tang. Most small parts were drop-forged, then machined. The extractor was fashioned from 1095 spring steel.



This Dakota rifle has the lines and features of the Model 70.

Barrels were drop-forged, then straightened by hand with a 15-pound hammer and turned true on a lathe. They were deep-hole-drilled, then straightened again. Bores were reamed and hook-rifled by a cutter slicing progressively deeper on progressive passes, a groove at a time. Model 70 stocks were roughed by bandsaw from 2x36-inch black walnut blanks. A duplicating machine contoured them eight at a time. Final shaping and inletting was done by hand. Lacquer finish (over stain) was applied to the first stocks before checkering. Because these lacquers contained carnauba wax, they produced an oil-like glow. After the war drained supplies of carnauba wax, harder lacquers appeared.

The first Model 70s retailed for $61.25. They came in .22 Hornet, .220 Swift, .250-300 Savage, .257 Roberts, .270 WCF, 7mm Mauser and .30-06, plus .300 and .375 H&H. M70s in .300 Savage were later produced in limited numbers but did not appear in catalogs. The .35 Remington is likewise rare. The 1950s brought the .243, .308 and .358 — and, in 1952, the first Featherweight M70. Between 1956 and 1963 Winchester added its new belted magnums, the .458, .338, .264 and .300, to the cartridge list. Eventually "pre-64" Model 70s would come in 29 basic styles and 48 sub-configurations.



A stumble, a fall

"The Rifleman's Rifle" became less and less profitable as labor costs escalated. In 1960 company accountants insisted on an overhaul. Engineers implemented 50 changes in 1963. None were well received. In fact, the M70 faithful were incensed. They abhorred the stock's crude, pressed "checkering," the barrel channel gaps wide enough to swallow laboratory mice. They sneered at the tiny hook extractor, the alloy bottom metal. Solid pins were replaced by roll-pins, the bolt stop's coil spring by music-wire. A painted red cocking indicator stuck out like a tongue from under the bolt shroud.

Though Winchester improved the "new Model 70" with an antibind bolt in 1966, Remington's Model 700 (introduced in 1962) benefited hugely from the disenchantment of hunters with the Model 70 of that day. Prices of pre-64 M70s rose. Winchester was slow to react, but in 1980 a sleek new Featherweight stock, with crisp, wrapped, machine-cut checkering, helped blunt criticism. A short-action Model 70 came in 1984, followed by a "Classic" version with Mauser extractor and controlled-round feed. Synthetic stocks and stainless steel have since endeared themselves to hunters. The myriad M70s cataloged in 2005 feature versions that don't appeal to traditionalists but are still functional, dependable, and accurate.

The best 70s have spilled from the shops of custom makers. Model 70 actions have provided the foundation for elegant hunting rifles by Jerry Fisher, Gary Goudy, David Miller, D'Arcy Echols and Gene Simillion. A pair of Featherweight .270s Al Biesen built for Jack O'Connor made the Spokane riflesmith famous and boosted the 70's status among a post-war generation of gun enthusiasts — even the destitute. In 1961 a factory-plain Model 70 cost $154. Convinced then that I'd never own such a rifle, I spent Saturday mornings ogling a Winchester 67 single-shot .22 in the rack behind the dusty counter of a local hardware store. I couldn't afford it either, not at $16.

About six years before I discovered that hardware store, Franklin Olin's ammunition enterprise was engulfed by the Mattheson Chemical Corporation. A decade later came the 1964 debacle. Olin divested itself of Winchester Repeating Arms in 1981, licensing the name to a group of investors that formed U.S. Repeating Arms Company. But USRAC found the cavernous New Haven factory no more profitable than had John Olin. In 1984, beset by rising costs in a stagnant market, USRAC filed for Chapter 11 bankruptcy. Three years later, five investors bought the company. One of them, the Belgian firm of FN, wound up with a 44-percent share. Early in 1991 the French conglomerate Giat bought FN. The president of USRAC that year was Jack Mattan, who came from Belgium to oversee the Giat acquisition. I interviewed him.

"Winchester is the greatest name in the world of guns," he declared at the time. "But it has focused too long on production at the expense of marketing. This isn't the 1940s, when every gun was sold before it was built. Now the market is very competitive. Guns are durable. You don't need a new one every year, so steady sales depend on customer recruitment."

To boost production efficiency, a smaller, single-story factory sprang up in 1992, and the old plant was abandoned. Still, Connecticut is a costly place to operate. Wages are high, and the new building didn't come with the latest machinery. Union contracts squeezed profits from sales of the Models 70 and 94, both manufactured exclusively at that plant. Losses mounted. From a business perspective the recent shut-down was logical and inevitable. But to the dozens of Winchester employees it is a real jolt. And riflemen are still stunned. The Model 70, like the Model 94, is more than a rifle. It's an American institution. And it's gone.

Will it come back? Probably not soon. According to people at Browning, the union contract that added drag to Winchester revenues has a couple of years yet to run. It prohibits the manufacture of M70s anywhere else. America has, however, produced some alternatives. Don Allen's classy Dakota 76 was first. It and the later Montana 1999 rifle, finely stocked by Serengeti, are essentially M70 clones, better finished. More widely used by the average person, however, is the Kimber 84M.

Lighter is better

Winchester's 6 1/2-pound Model 70 Featherweight, now 54 years old, hardly qualifies as the first lightweight big-game rifle. Hunters were toting sub-7-pound Mannlicher-Schoenauer carbines before the Great War. Slender lever-action Savage 99s, with Winchester and Marlin saddle guns, came in at or under 6 1/2 pounds. Custom makers have since shaved bolt-gun weight to less than 6 pounds with alloy bottom metal and super-light synthetic stocks, by turning barrel walls to fuel-line dimensions and making Swiss cheese of magazine boxes. But a lightweight rifle chiseled from one of standard dimensions differs from a rifle designed from scratch to handle like a wand. You can't build a sports car on a Buick chassis.

Excepting New Ultra Light Arms, Melvin Forbes's semi-custom shop, no gun company has put as much effort into designing lightweight rifles as has Kimber. Established in the early 1980s in Clackamas, Oregon, Kimber first came out with a high-end .22 rifle, the Model 82. The later Model 89 centerfire was patterned after early M70 Winchesters and chambered for the likes of the .30-06. Chapter 7 bankruptcy in 1989 left Kimber's future in doubt. Original owners Jack and Gregg Warne kept some machinery and use of the Kimber name (from Jack's native Australia). Investor Les Edelman became majority stakeholder in a new gun company that would move to Yonkers, New York.

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Edelman correctly divined a surging public interest in handguns, for defense and sport. Kimber enlisted the expertise of ace pistol shooter Chip McCormick and began manufacturing 1911-style pistols. The projected run of 5,000 fell far short of slaking demand. Scrambling to fill orders, Kimber resisted the urge to sacrifice quality for speed. Proliferation of different Kimber 1911s since has not only served but fueled a market for various finely built iterations of John Browning's brilliant design. Sales figures show that many buyers own more than one Kimber. These pistols appeal to handgunners like — well, like early Model 70 Winchesters do to rifle connoisseurs. Now, a decade after the first Kimber pistol, the company is the leading manufacturer of 1911s in the world!

But as handgun sales took off, Kimber stood by its plans to re-establish a line of rifles. Marketing VP Dwight Van Brunt saw a gap in the market between ordinary bolt rifles and the semi-custom products turned out by Melvin Forbes, Lex Webernick, and Mark Bansner. In 1998 Kimber unveiled a new .22 rifle designed by Nehemiah Sirkis. Called the Kimber 22, it looked like the 82 but wore the side-swing safety of the Winchester Model 70. About the same time, Kimber brought a centerfire Model 770 to

The author's Kimber Montana in .308 weighs just 5 pounds 2 ounces, but shoots 3/4 inch groups!

prototype stage. Designed by Jack Warne and custom gunmaker Pete Grisel, the rifle was never marketed. But a successor, the short-action Model 84M, fared better.

The Kimber 84M boasts the lean, clean proportions of a super-model. Crack stockmaker Darwin Hensley helped shape the 84M's checkered Claro stock, which is glassed and pillar-bedded to the action. The 22-inch barrel floats. The 84M looks trim but not cheap. It wears a Mauser-style extractor, a Model 70 safety, a steel grip cap. The steel floorplate has a release button in the guard. Steel scope bases are satin-blued to match and can be interchanged on the Kimber 22, as hole spacings and receiver diameters are the same. And the Kimber 84M weighs just 5 3/4 pounds! It is also entirely American made. In fact, Kimber makes lock, stock, and barrel — even the small parts that other manufacturers often buy. The only items on any Kimber rifle not made at Kimber are the recoil pad, firing pin spring, and sling swivel studs.

Magnums, inevitably

The 84M was fashioned for the .308 and its offspring — the .243, .260, and 7mm-08. Despite their versatility, short rimless magnums by Winchester soon earned enough celebrity to prompt a redesign at Kimber. The Model 8400 rifle appeared in 2003. At 6 pounds 10 ounces, it weighs a pound more than its forebear. The 24-inch barrel is 2 inches longer, but most additional weight lies in the receiver. The 8400 got its start with three WSM rounds: .270, 7mm, .300. The .325 WSM came later. Now there are Classic, Select Grade, Super America, and Montana versions. Fancy walnut and wrapped 24-lpi checkering distinguish the Super America. Select Grade guns come with Claro or French walnut stocks; they wear the 20-lpi panel checkering of the Classic version, the black forend tip of the Super America. The Montana is half a pound lighter. Its stock of Kevlar and carbon fiber owes its design to Mel Forbes. The Montana features stainless steel barrel and receiver. All 8400s (including a left-hand Classic) are pillar bedded. Glass abutments in the recoil lug mortise ensure the metal will not march through the tang.

Not long after prototypes became available, I took a Kimber 8400 to Africa. Chambered in .300 WSM, it functioned without a hitch. As on any hunt, I carried it a lot more than I fired it. The light weight was a real blessing. The 8400 looks the same from the side as the 84M (save for an additional 2 inches of barrel). For me, it points like a shotgun, thanks to near-perfect balance and a straight, no-nonsense comb that puts my eye directly behind a low-mounted scope. The grip is slender and properly open; deep, wide comb fluting accepts the heel of my hand. Sure, I had criticisms — details that actually got some attention when I brought them to the Kimber design team.

As on the 84M, the 8400 has an adjustable trigger said to be set at 3 1/2 pounds. The trigger on my prototype broke at a crisp 2 1/2 — ideal, in my view. Feeding was reliable. The big Mauser claw controlled fresh rounds and pulled fired hulls with authority. From sandbags, the rifle drilled tight groups. A dozen of 18 factory loads and handloads tested shot into 1 1/2 inches. Three clusters measured less than 1 moa.

In 2006 Kimber added a long-action rifle to its 8400 line. Chamberings include the .25-06, .270, and .30-06 (24-inch barrels), plus the .300 and .338 Winchester Magnums (26-inch barrels). They hold five and four cartridges in the well, respectively (8400s bored for WSMs hold three). Weights are 7 pounds for the standard long-action chamberings, 7 1/4 for the magnums. As with the 84M and short-action 8400, you can subtract half a pound if you specify the synthetic-stocked Montana.

The lightest rifle Kimber makes is the 84M Montana. In .308, it registers a feathery 5 pounds 2 ounces. As soon as it appeared, I ordered one — just to shoot it, mind you. I'd ship it back. There's no need for a rifle that light. Indeed, its lack of heft would prove troublesome in wind, or if I was puffing hard.

But when I pulled it from the box, ghosts of Model 70s past rode it to my shoulder. Model 70s like the new .35 Remington that I declined for $400, the lovely .257 Roberts I sold for $285, the .338 that took a bull elk on the run in the Bob Marshall, and the .300 with the tiger-tail stock that I'd carried on more hunts than any other 70. I'd pay dearly to have those rifles....

I attached a Leupold 2.5-8x36 to the .308 and benched it. My first three bullets punched a 3/4-inch group. I wrote a check while letting the barrel cool.

I doubt we've seen the last of Winchester's Model 70. But even after your rack holds a full stable of the Rifleman's Rifle, you'll do well to explore the hardware that's evolved in its tracks: the Dakota 76 and Montana/Serengeti rifles, the Kimber 84M and 8400. If you're looking for a lightweight, short-action rifle with Model 70 features, better workmanship and a price well below what Winchester would have to charge for even a late-production pre-64 M70, the Kimber is your only choice. It's a worthy successor to the rifle against which all other American bolt rifles have been measured since 1937. ■