

The Story

He made his first rifle in prison



When there's a gun to be tested, Williams just throws open the back door and lets fly

ON a January morning 19 years ago, Major Julian S. Hatcher, Chief of the Small Arms Division, U.S. Ordnance Department, sat in his office in Washington's Munitions Building, wrestling with a thorny problem in gunnery. It looked, as he recalled recently, insoluble. The Army urgently wanted a new type of trainee's machine gun, one with the weight and feel of the standard combat Browning .30 caliber, but capable of shooting .22-caliber cartridges.

Such a weapon, using practice bullets costing 80 per cent less than regular ammunition, would save the Army hundreds of thousands of dollars. And—unlike full-powered machine guns which can be safely fired only on long, open ranges—it would enable troops to get gunnery training indoors or on short ranges. Finally, the milder explosion and lighter recoil of a .22 would reduce the nervousness that often afflicts trainees when they fire a gun for the first time.

But the specification ".22-caliber machine gun" appeared to present a contradiction in terms. A machine gun uses the energy of one shot to load and fire the next one. At that time, only cartridges of high power had sufficient recoil to activate a heavy automatic gun. To obtain that power from a puny .22 seemed about as feasible as operating a massive catapult with a rubber band.

Hatcher, now a retired major general who is widely considered the dean of American small-arms authorities, recalls: "The armory at Springfield, Massachusetts, doubted that it could be done at all, but it was willing to try—if given \$50,000 and five years' time."

As Hatcher was weighing this unpromising prospect, his secretary announced a civilian caller, one David Marshall Williams, of North Carolina. The day before, Williams had telephoned, introducing himself as a gun inventor and requesting an interview. Hatcher had never heard the name, but the man's assured tone had compelled the major's interest. Now, on the stroke of the appointed hour,

Williams strode in with an air of indestructible self-confidence.

He was an arresting figure: In his early thirties, trim and hard-bodied as fresh-hewn timber, with reddish hair and piercing blue eyes, he wore a Stetson longhorn hat, flaring sideburns, high-topped brown shoes—and an automatic pistol in a holster strapped to his hip. His wide, knobby hands gripped a wooden crate held together with screws.

"Howdy, Major," said he in a rich Tarheel drawl, giving Hatcher a bone-cracking handshake. "I'm Marsh Williams."

Without further preamble, he whipped out a screw driver and unfastened the crate. Inside lay two automatic rifles, which he deposited, together with his pistol, on Hatcher's desk.

A brief examination indicated that all three weapons embodied a completely original mechanism, one now familiar to gunmakers the world over as the floating or movable chamber. It was and is the only mechanism ever developed for firing .22-caliber cartridges out of heavy automatic guns. That the inventor happened to turn up with it at that particular moment was pure coincidence. He had no inkling whatever of the problem on Hatcher's mind. The major was, understandably, flabbergasted.

"Like you know, suh," Williams explained, "the chamber and barrel in ordinary automatics form a single, integrated piece. In these here, the chamber is separate, something like the cylinder of a revolver. Only instead of being outside the barrel, it fits snug into the rear end. When you fire the gun, the gas from the explosion is forced between the chamber and the barrel, exerting the maximum breech pressure against the face of the chamber and driving it violently backward. That action is all you need to operate any heavy automatic."

Hatcher drove Williams to a rifle range near Washington. The guns stood up under every test he could devise. The ensuing discussion convinced Hatcher that this obscure Southerner was a me-

chanical genius with a profound grasp of firearms. "Where did you build your first models?" Hatcher asked.

"Prison," said Williams.

The story he told, forthrightly and without seeking sympathy, probably has no parallel in the annals of inventions. He had drawn, then built his first models while doing time for murder at a North Carolina penal farm. Although the warden had a reputation for being unusually hard-bitten, he had trusted Williams enough to let him construct firearms within the prison gates. With no schooling beyond the seventh grade, ignorant of mechanical draftsmanship and mathematics (as he still was when he met Hatcher), the inventor had drawn his designs freehand on scraps of cardboard and wrapping paper. For steel he had salvaged axles from junked automobiles. The prison smithy, which he was allowed to use, contained neither milling machines nor lathes, and he worked entirely with hand tools. The first rifle took almost a year.

When Hatcher recovered from his astonishment, he asked: "Could you convert a Browning into a .22-caliber belt-fed machine gun?"

"Sure," Williams replied. "Ain't nothing hard about that."

"How long would it take?"

"Three weeks, if you give me the Browning."

"Take six," Hatcher suggested, remembering the arsenal's estimate. "How much money would you want?"

"I got no idea."

"How about a thousand dollars?"

"That's a lot of dough. You certain you want to pay me that much?"

Hatcher was certain. In addition, he reminded Williams, if the Army accepted the gun the inventor would naturally receive considerable royalties.

In six weeks Williams was back with the converted Browning. "The cartridge belts gave me a little trouble," he remarked. "Had to stitch each pocket by hand. I ain't too hot with a needle."

He demonstrated his brain child before an amazed assemblage of top brass from the War College, the Ordnance Department and the Infantry. It is today a regular training weapon for GIs, costing \$50 per thousand rounds of ammunition less to operate than the Browning.

Vast Income Derived from Royalties

But compared to other firearms engineered since by the ex-convict, its importance is secondary. Today, at fifty-one, Williams ranks among the world's greatest gun inventors. More than 60 patents have been issued to him; royalties have made him a millionaire.

Appointed machine-gun specialist to the Ordnance Department in 1935, he supervised production of his .22-caliber machine gun at Springfield.

Later the Colt Firearms Manufacturing Company retained him to adapt his floating chamber principle to the Army's standard .45-caliber training pistol. Now famed as the Colt Service Model Ace, it too has enormously decreased ammunition costs. While with Colt, he also developed a "conversion unit" for the .45 Army automatic pistol. Later, a "trainer unit" was developed for large-caliber machine guns which enabled them to fire .22 cartridges by a simple manual substitution of parts.

For the Remington Arms Company, Williams accomplished a feat which had eluded gunmakers for years. He produced an automatic sporting rifle, which served as a model for the Remington Model 550. This operates with three kinds of .22 cartridges, short, long and long rifle, interchangeable in the same magazine.

At the outset of World War II, Williams was working with the Winchester Repeating Arms Company. During this time he invented the U.S. Army carbine. The Army had felt a real need for a good

of "Carbine" Williams

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By JOHN KOBLER

semiautomatic weapon of this type—a short, light rifle which could be fired repeatedly merely by pulling the trigger. The problem here was to combine lightness with power; conventional rifle parts were too heavy to use.

Williams was one of five topflight inventors to accept the challenge. In the incredible time of 13 days—with the aid of the Winchester staff of gun designers—he was ready with what proved to be the winning design: a new twist on the principle he had conceived in prison. On the word of General Mark Clark, chief of Army Field Forces, it was "a significant development in small arms."

In any gun, a tremendous pressure, often amounting to 50,000 pounds per square inch, builds up behind the projectile between the time it is fired and the moment when it leaves the gun. In the famous Garand rifle, this pressure is drained off near the muzzle—where it is weakest—and is used, in conjunction with a spring, to operate the firing mechanism. Williams took the pressure at an earlier point, where it is stronger; instead of having it push a long piston about three inches, as in the Garand, he had it drive a short piston about a tenth of an inch. The effect was that of a punch, rather than a push.

The short-stroke piston was a great success: The carbine required no internal cleaning, the pressure

and heat being so intense as to burn out all elements of combustion, and its short mechanism was light and relatively easy to manufacture. From eight companies, among them Winchester, General Motors and Underwood, the Army ordered an estimated 8,000,000 carbines during World War II. They outnumbered any other Allied single weapon and were reported to have increased infantry fire power by one third.

Ancestral Farm Is Not for Sale

Today, "Carbine" Williams, as he is called in gunnery circles, lives with his wife and twelve-year-old son on a 3,000-acre farm near Godwin, North Carolina, a whistle stop on the Atlantic Coast Line Railroad. He is descended from pre-Revolutionary Scotch Presbyterians who were among the first settlers there. Parts of the farm have been in the family for more than a hundred years, and neither Williams nor any of the four brothers with whom he shares it would dream of selling so much as a square foot of it.

Williams' feeling for the old homestead, as well as for practically everything else in Cumberland County, is one of fierce, aggressive pride. He bears little love for any region beyond it, least of all the North. A man with a deep sense of the past, he is

outraged by a good many aspects of twentieth-century life (the list includes such things as modern art and college professors) and he tends to associate them with damyankee culture.

Although his research work with Winchester kept him for 10 years in New Haven, where he bought a 20-room mansion valued at \$250,000 ("Because I like big houses"), he never permitted his family to join him there. "No boy of mine," he says, "is gonna be raised up No'th. He'll go to college, if he wants college, right in this state. Anything he can't get here he don't need."

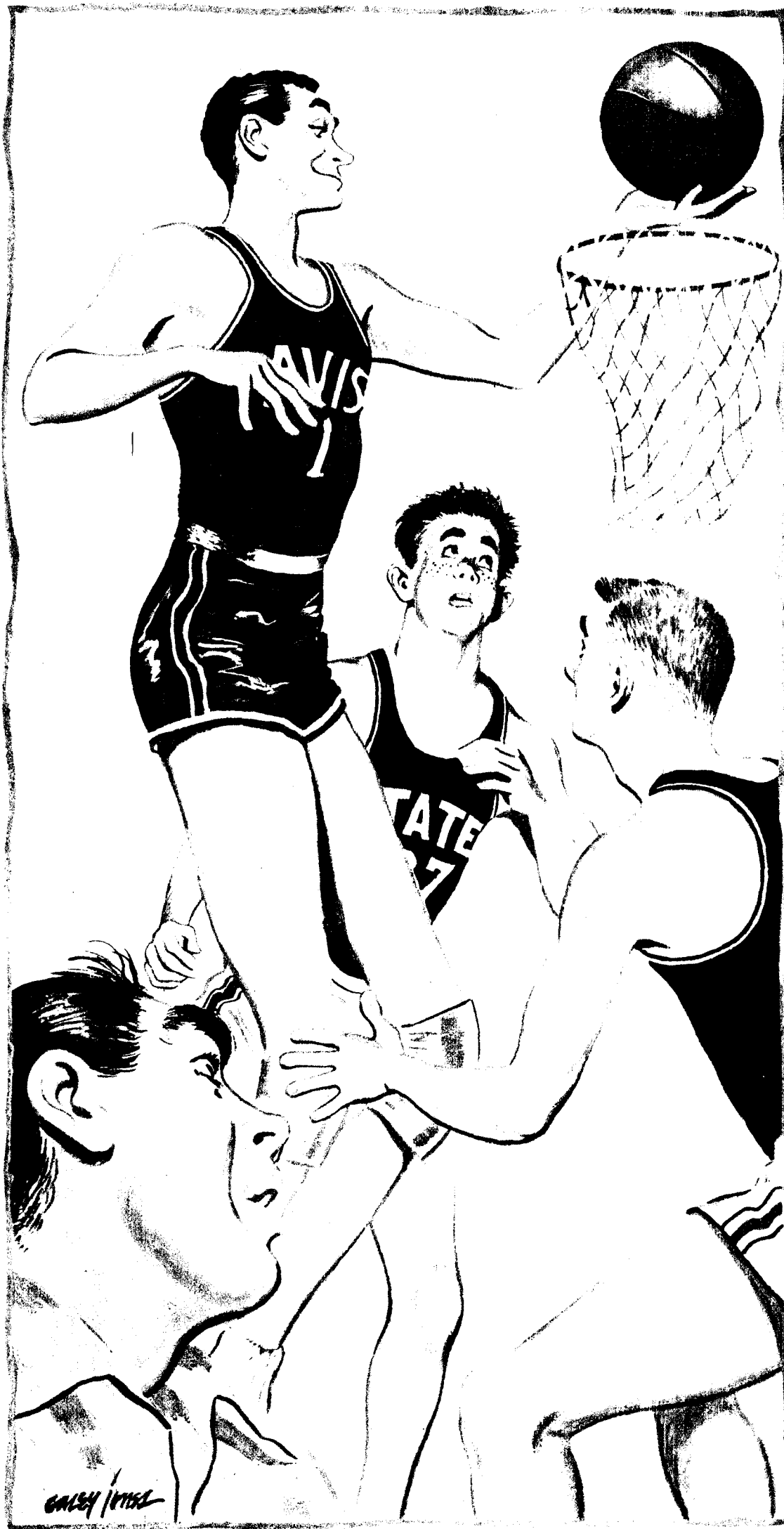
Except to answer the call of business or duty, he does not intend to budge again from the Williams farm. His father's house, a majestic Southern colonial structure, was dismantled because the needed repairs appeared impractical, and Williams plans to erect a residence of equal splendor on the same site. Pending the availability of materials, he is content to occupy a four-room cottage facing it. "Camping out," he calls it, as he pores over architects' blueprints and builders' estimates. He has no telephone and no automobile.

"People who got something important to tell me know how to reach me," he says. "I'm fixing to get me a car when the house is ready, but right now about the only cause I got to go to town is for a haircut."

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The inventor and his son David do a lot of hunting on his North Carolina estate. Williams and his brothers inherited the place





Says this critic: The trouble with the game is, it's made demigods of freaks. Basketball's become a refuge for acromegalic accidents never meant to be exhibited in their underclothes

Anyone

Here's a bill of complaints by

ONCE upon a time there lived a basketball player who was also an athlete. Naturally, being an athlete, he found something else to do besides play basketball. He punched people. His name was Willie Stribling.

He walked timidly, apologetically, into the dressing room of the New York Celtics one night after a game in Macon, Georgia. The Celtics were a touring team of professionals so able and so colorful that they managed to give basketball a good name. They were young guys then and themselves sports fans, and of course they had heard of Young Stribling, who was, in a manner of speaking, in the same racket as they.

That is, he was a touring professional, too, who made the tank towns and the whistle stops and whacked the local heavyweight pride senseless and caught a rattler for the next town. They called him the King of the Canebrakes—Damon Runyon gave him the name—a handsome kid with a glorious body and a right-hand punch that stiffened 127 opponents, or enough to populate some of the towns he played. He was at the time one of the two or three outstanding contenders for the heavyweight championship of the world.

Naturally, the Celts welcomed him when he came in, diffident and fresh-faced, and showed his pleasure at meeting them and confided that he hated to fight, that the only thing he'd ever really wanted to do was play basketball. That gave one of the Celts an idea.

"Willie," he said, "how'd you like to play with us tomorrow night in Atlanta?"

"Gosh," said the almost heavyweight champion of the world, "could I?"

They took him aside and explained things. They told him he was a pretty famous guy and that if it were announced that he would play with them, it would mean more money at the box office—but he wouldn't get any of it. He said gosh, he didn't care if they'd just be kind enough to let him go along to Atlanta.

Next day he took them all joy-riding in his private plane. He piloted several of them over to Atlanta, and that night he played about half the game and did pretty well, handling himself like the athlete he was. Joe Lapchick, who was one of the Celts, can't remember for sure, but he thinks Stribling stayed with them for one more game in one more town before his training chores called him back to Macon.

In Memory of a Lover of the Game

They never saw him again. He rode his motorcycle into a car and suffered fatal injuries. But they never visited that area again without going out to a small cemetery on a knoll overlooking a river and saying a prayer at the grave of a nice young guy, an athlete who had loved basketball.

It wouldn't be fair to say that athletes haven't been welcome in basketball since Willie Stribling's day. The coaches don't discriminate against them. But the rules do.

The trouble with basketball is, it has made demigods out of carnival freaks. It has become a refuge for acromegalic accidents whom nature never meant for public exhibition in chemise and step-ins. It is the only sport in the world which places a bigger premium on a hyperpituitary condition than on muscles, speed, agility or combativeness.

In basketball, combativeness is the deadliest sin of the flesh. Reduced to its essentials, the basketball rulebook is a code consisting of a single admonition: "Burny, burny, mustn't touch!" It makes

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