



Man-Portable Machine Guns in WWI

Hundreds of thousands of men died from wounds inflicted by machine guns in World War I. During that war, the term “heavy machine gun” referred to those that were too heavy for one man to carry and operate. After that war, the term came to mean bigger caliber guns such as the .50 caliber or 12.7 mm. The “heavies” in WWI fired rounds that were around the .30 caliber range. These are described in a separate article.

The lightest machine guns used in WWI were the automatic rifles. Those available to American forces were the French Chauchat and, later, the Browning Automatic Rifle—the BAR.

At the squad and platoon level, the French Chauchat (or CSRG 1915) machine rifle was used by American forces during 1917-1918. This was originally chambered for an 8 mm Lebel cartridge with a semi-circular magazine that held 20 rounds. It weighed 19 pounds and had a bipod. This was one of the first automatic weapons designed to be carried by one operator, though it required an assistant to carry ammunition. It could be fired from a stationary position, but could also be fired from the hip while walking. The magazines were open on one side to reduce weight, but this allowed mud, dust, and water to enter. This debris led to many stoppages. The weapon tended to overheat with sustained automatic fire. The US version was chambered in the US .30-06 Springfield cartridge as well, an experiment that failed. The only reason it was used was the fact that it was the only man-portable light machine gun available to US troops. The Browning Automatic Rifle replaced it as the Browning became available later in the war.

The rate of fire was about 240 rounds per minute with a muzzle velocity of 2,100 feet per second, an effective range of 220 yards and a maximum of 2,200 yards.

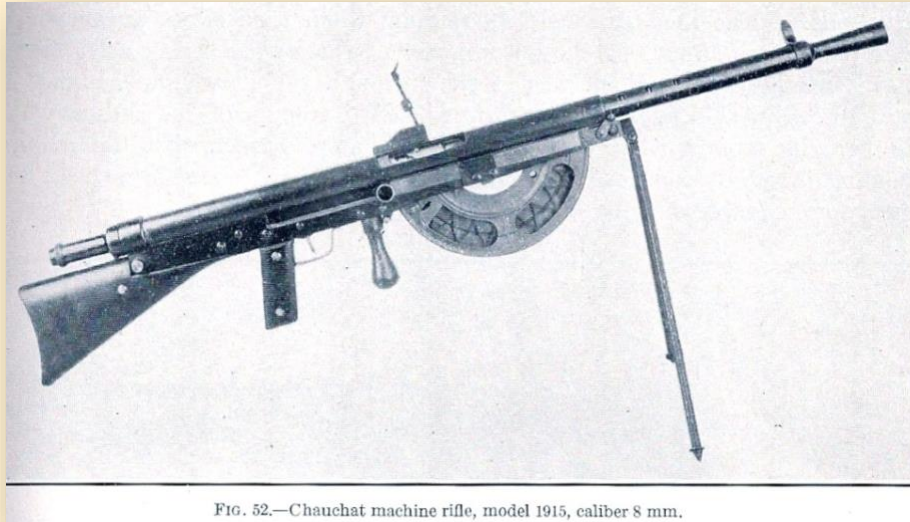


FIG. 52.—Chauchat machine rifle, model 1915, caliber 8 mm.

The Browning Automatic Rifle was everything the Chauchat was not. It was reliable, accurate, and devastating. It weighed 19 pounds and could be fired from the hip while walking. It fired the Springfield .30-06 cartridge, allowing simplification of ammunition resupply. It was gas operated and air cooled with a rate of fire between 500-650 rounds per minute with a muzzle velocity of 2,822 feet per second with an effective range of 356 yards (up to 1,500 yards according to some sources) and a maximum range of 4,500-5000 yards. It was fed from a 20-round detachable box magazine, though a 40-round magazine was also available. It was a squad-level weapon. Due to the weight and rate of fire, it often was used by a three-man crew—one to operate the gun, a loader, and a carrier. Between them, they could carry 48 magazines (960 rounds). The 20-round magazine was a limitation. It had selective fire, allowing the operator to use it as semi-automatic or full automatic weapon.

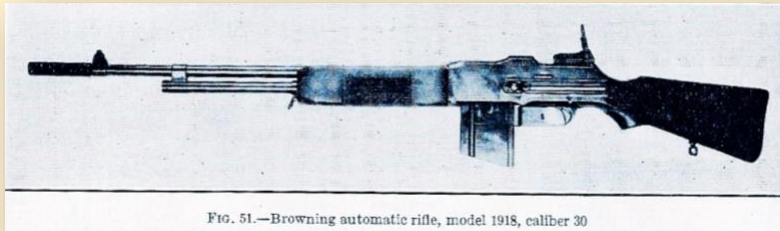


FIG. 51.—Browning automatic rifle, model 1918, caliber 30

This weapon came on line in the last two months of WWI, with about 5,000 available to the US Army at the end of the war. It was

not available at Belleau Wood. They were first in action with the US Army 79th Division in September, 1918.

The above information was obtained from:

References:

Medical Department of the US Army in the World War, Vol. XI, Surgery; Ireland, ed. 1927.

Ballou, James L, Gary Paul Johnston, and George Kontis. "John Browning's Automatic Rifle." *American Rifleman*, 8/25/2015.
<https://www.americanrifleman.org/articles/2015/8/25/john-browning-s-automatic-rifle/>

Wikipedia, The Free Encyclopedia, s.v. "Chauchat" (accessed 10/22/2016), <https://en.wikipedia.org/wiki/Chauchat>

The following websites have extensive information about the arms and other systems used in World War I. The machine gun section is: <http://www.militaryfactory.com>
<http://world.guns.ru/index-e.html>