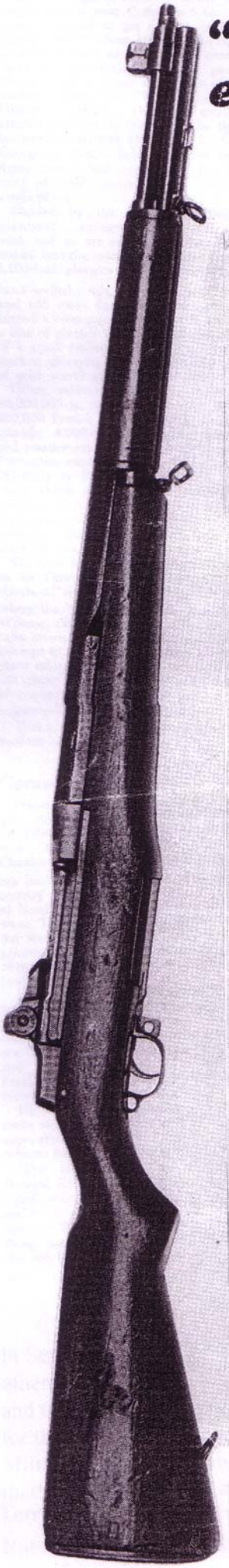
"The greatest battle instrument ever devised." –General George S. Patton

The Garand M1 rifle and M1 carbine



The Garand M1 rifle

THE GARAND M1 RIFLE

America was the only country to enter World War II with its infantry already equipped with a semi-automatic rifle: the Garand M1. By September of 1941, about two months before the declaration of war on Japan and the Axis powers, only 60,000 Garands had been issued, but everything was set for an enormous production. In the three-and-a-half years in which the U.S.A. was directly involved in the war, over 4 million rifles were supplied to the Army.

The story of the M1 rifle began in 1920, when John Garand (whose semi-automatic rifle had been tried out but not yet approved by the Army) was taken on and designated by the Springfield military arsenal to work on a new weapon. Nine years later, his prototype rifle was tested and eventually chosen as the best weapon from a number of other automatic rifles.

Garand's rifle had been made and tested in two calibres: .30-inch and .276-inch. With the first version, the .30/06 cartridge was used (from the ordinary Springfield bolt action rifle used by the American Army); with the second, a new cartridge made by J. D. Pedersen was used. In 1932, however, the .276 was finally abandoned in favour of the .30/06, and four years later, the greatly improved rifle was officially adopted and production was begun at the Springfield arsenal.

The M1 Garand is a gas-operated semi-automatic rifle. Just after firing, a proportion of the gas is bled off through a small vent in the front of the barrel, near the muzzle. The resultant pressure operates a piston that ejects the case and reloads the weapon. This rifle also works as an ordinary, single-shot rifle. It can also be used in its single-shot capacity, with the addition of a grenade launcher fixed on the barrel.

The Garand is 43.6 inches long without its bayonet. The empty rifle is heavy, weighing 9.5 pounds; eight rounds are held in a box magazine housed in the wooden stock; the rear sight is calibrated from 1 to 12 (100-1,200 yards); the bullet has a maximum muzzle velocity of 2,800 feet per second, its maximum range is 3,600 yards; and the rate of fire is from 16 to 24 shots per minute.

The post-war rifle – the M14 – was largely based on John Garand's original design.

THE M1 CARBINE

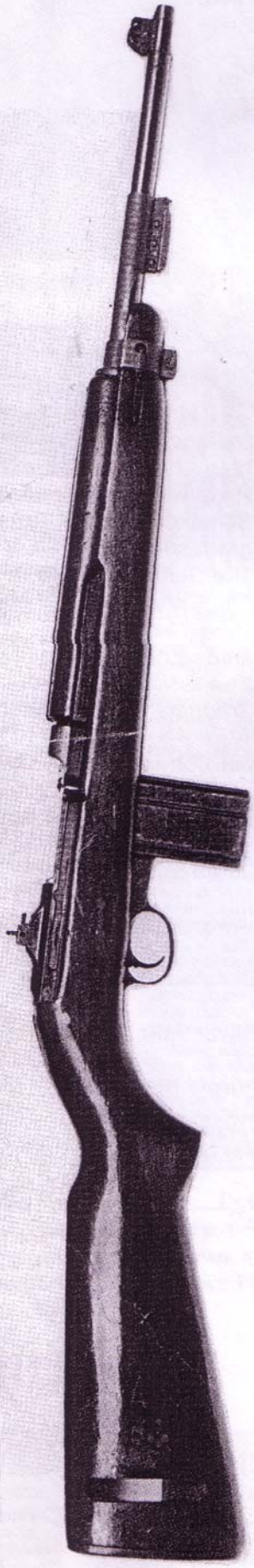
Although it was an excellent weapon, with ballistic qualities comparable to those of a machine gun, the M1 rifle still had one drawback – its great weight. It was necessary, therefore, to supply the Army with a lighter all-purpose gun. With this in mind, the American armament authorities organised a competition in 1940 for a semi-automatic carbine weighing no more than 5.5 pounds.

The competition was won by the Winchester Repeating Arms Company. One of the best-known armourers in the world, this firm had been founded by Oliver Winchester, whose name was linked with all the most famous American repeating rifles of the last century.

Winchester's technicians had prepared the carbine in record time – just 48 days – and the weapon was introduced as the US M1 carbine. During the war, it had ample opportunity to prove its multi-purpose qualities, and even if it was not as versatile as had originally been intended, it earned great respect as a useful weapon.

The M1 carbine, like the Garand, was gas-operated. It was different from the rifle, apart from a few technical changes, in its weight, its very compact dimensions, and its cartridge. In fact, although the calibre was the same as that of the rifle, the cartridge, also created by Winchester, was much shorter: about 43 mm. The M1 weighed 5.5 pounds and measured only 35.6 inches long. Accurate range was about 300 yards, although maximum range was 2,000 yards. The magazine held 15 or 20 rounds.

The carbine was also adapted in a different version for assault troops, with a folding metal stock (M1A1), and in one which could fire automatically, in bursts (M2). In the latter the 30-round magazine was normally used.



The Garand M1 carbine