











# The M-1 Carbine Goes to War

# Highlights of Army Talks

**T**HE luckiest thirteen days in the invasion of Europe were from August 1st to August 13th, 1943. In those thirteen days, Uncle Sam's new carbine sprang from the brains of its inventors into the new semi-automatic weapon that transforms an ordinary infantryman into a one-man machine-gun nest.

Long before we were at war, experts of the Ordnance Department of the United States Army saw the specific uses for a new kind of military weapon that would give American troops a winning edge over any future enemies.

Up to that time more than 60 per cent of army personnel did not carry a rifle. The automatic .45 caliber pistol was the only weapon carried by engineers, the Signal Corps and officers up to the rank of Major. Because of the weight of their equipment, many men could not carry the additional burden of a rifle.

The gun the experts wanted was a carbine, a shorter and lighter rifle than any before used by the Army. It was to have a fire-power higher than that of any other American infantry rifle. It was to fire a .30 caliber carbine cartridge, be three feet long, and weigh no more than five pounds, about half the weight of the Garand.

It was the gun destined to become a "must" for Rangers, paratroopers, and other shock troops. When Lord Mountbatten saw the gun on a visit to this country, he remarked that it was exactly what his Commandos needed.

While no one has yet decided whether it is the chicken or the egg that comes first, in gun-making it is always the cartridge that comes first. The cartridge embodies the performance the gun is to deliver, and the gun must be made to fit the ballistic requirements of the cartridge.

The Ordnance Department specified that the new carbine cartridge be .30 caliber (slightly less than one-third of an inch in diameter), with an effective range of 300 yards and a muzzle velocity of 2,000 feet per second, not as fast as standard .30 caliber government ammunition, but 500 feet faster than the ammunition used in the Japanese Arisaka rifle.

The job of making the cartridge was given to the Winchester Repeating Arms Company, a division of Western Cartridge Company. The New Haven plant delivered the original shipment of the new cartridges in record time and the gun designers were ready to begin making models of the guns which were to be entered in the competition to select America's new military carbine.

When the Ordnance Department asked the gun inventors of the country to tackle the problem it gave no hint as to how the new gun was to look or how it was to operate. The Army depended upon the designers to produce the gun. In the preliminary trials held in June, 1942, six of the nation's leading gun designers submitted sample guns which they hoped would meet the Army's rigorous specifications.

Completely occupied with defense work, Winchester did not enter a gun in the preliminary trials but suggested certain possibilities for a gun which the Ordnance Department insisted be incorporated in a gun for the next test.

On Aug. 1 and for the next 12 days, the 77 years of gun-making experience of every department in the big New Haven plant were contributed to the new gun. In their rush to finish the "guinea pig" model of the carbine, the engineers even borrowed a trigger guard assembly complete from one of the sporting rifles in their peace-time line.

Later on the afternoon of Aug. 13, the carbine that has now become an historic gun fired its first clip of cartridges. The next morning Ordnance Department experts rushed up to New Haven, fired the new gun, liked it, and made an appointment to submit it to Gen. Courtney Hodges, Chief of Infantry, and other high-ranking officers.

The gun was so light and its recoil so negligible that it could be fired holding it at arm's length in one hand like a revolver. The general was so pleased with this preliminary test he demanded a more finished model, to fire in the competitive tests on the following September 15th, just one month later.

It wasn't until Friday night, September 12th, just four days before the deadline, that all of the 63 parts were finally finished. But when the parts were put together the gun would not work satisfactorily although it showed signs of wanting to work.

Finally, the engineers sensed what was wrong with the gun. A change of almost infinitesimal size had to be made in the gas port-hole.

The gas to operate the "short stroke" piston mechanism is taken from the barrel through a tiny port-hole about three inches from the mouth of the chamber of the gun. The original port-hole was sixty-thousandths of an inch in diameter.

That mere hair of a hole, it was decided, should be enlarged.

As this was being done, the drill broke off inside the hole. It was 10 o'clock that night before the bit was removed, the hole completed with a new drill and the gun sent to the testing range. Without a stutter the carbine fired 300 shots as fast as the cartridges could be fed into the breech. Enlarging the hole by only 13 thousandths of an inch has done the trick.

Where the Garand was 20 years in developing, and 88 years were necessary to bring the Springfield rifle to its present high state of perfection, the carbine, with few alterations, such as reducing the magazine from a 20 to a 15 cartridge capacity, jumped directly from the testing ground into full production. It is a feat in gun-making never before equalled.

"Our country ought to get down on its knees and thank the Ordnance Department for taking a chance on the Garand,"

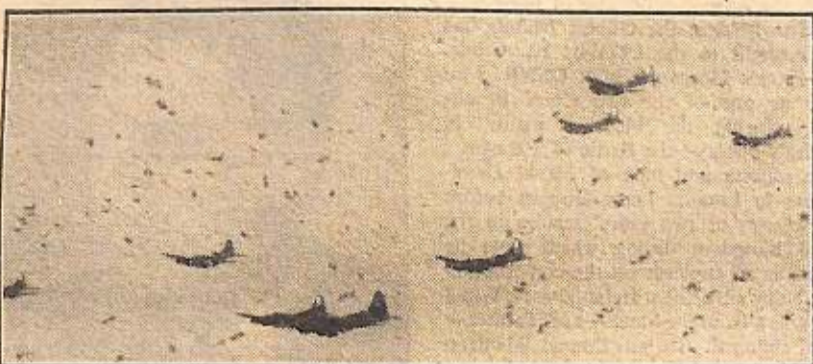
said a Winchester engineer. The greatest transition gun in the history of small arms, it marks the change-over from the slow hand-operated bolt action Springfield rifle to the revolutionary semi-automatic rifle. The Garand has bridged what might otherwise have taken several more years of slow trial and error to achieve. But where the Garand is made for the expert rifleman and sniper, the carbine is the weapon for every soldier.

The carbine is already a favorite weapon of the infantry not only because it can be fired as fast as a soldier can pull the trigger, but because the cartridges weigh only half as much as standard ser-

vice ammunition and a carbine soldier can carry more than twice as much ammunition as a soldier using either a Garand or a Springfield.

The carbine is one of the best "night fighters" in our Army because it has the minimum of muzzle flash, and therefore does not reveal the position of the soldier to enemy snipers. Because of the carbine's clever design, a soldier can "dismount" and reassemble the gun within two minutes.

Descended from the famous old lever-action carbine that won the West the modern carbine is now at work winning World War II.



## MEN OF THE 'FORTRESS'

There have been some great traditions  
Through a thousand years of kings,  
Long centuries of battles fought,  
Crusades, campaigns and things—  
That gave to many regiments  
Traditions tried and true,  
Honors aged and multiplied,  
As they fought decades through,

The echo of the trumpeter  
Whose repertoire at large,  
Embraced but one great battle call:  
"Forward! Bayonets! Charge!"  
There's the spirit of the Alamo,  
Of courage unsurpassed;  
Concord Bridge and San Juan Hill,  
Verdun's "They shall not pass!"

Such fighting makes tradition,  
But today, unlike the past,  
A fledgling code without prelude  
Becomes tradition fast.  
The Air Force carved its heritage  
On the highways of the skies,  
Blazing there the fighting code  
Of every man who flies.

Yet few know this tradition  
The armadas built upstairs,  
Where the bombers blazing fifties  
Defy the flak, and dare  
The fighter packs, the rocket bombs  
And shell blasts—to attack!  
It's a mighty proud tradition  
To have "never been turned back!"

Cpl. Ellsworth B. Laurence

**T**HE United States Government could finance the nation's war effort without the sale of a single War Bond to John Q. Citizen, if it so chose. It could get all the credit at the banks that it needs to pay the war bills—and with considerably less trouble than a nation-wide bond-selling program involves. But the Treasury Department knows that it will be a lot better for the economic health of the country in the long run if it can borrow at least a part of what it needs from the dollars already circulating, rather than to pay the freight all the way with special credits.

Soldier Savings, the current issue of Army Talks, explains the government's position in issuing War Savings Bonds for sale to the general public, and points out the excellent opportunity for investment that these bonds represent—especially to the serviceman. This week's discussion guide also covers the various other means of saving money that are available to men and women of the armed forces. Soldier Savings was originally prepared under the direction of the Theater Bond Officer, Col. J. H. Fulton, and was adapted for publication by the Army Talks Section.

National Service Life Insurance is probably the most familiar method of saving known to soldiers in this theater. The fact that approximately 98 per cent of them carry such insurance is proof that its value is appreciated. Total premiums paid in this theater in the month of November, 1943, amounted to \$3,580,206.03.

Soldier Savings emphasized the fact that the insurance policy known as "The Five Year Level Term," which is the policy offered to military personnel, can be converted to the types of insurance most common in civil life, and so be continued after the war.

"Soldier Deposits," says Army Talks, "furnish a convenient and profitable method of investment by enlisted men of their surplus pay. Any sums of five dollars or more deposited for a period of six months or longer carry interest at the rate of four per cent per year. Deposits are exempt from liability for soldiers' debts, may be withdrawn by the soldier when needed, on approval of his commanding officer, and are not subject to forfeiture except in cases of desertion.

"This form of saving," the article continues, "is not a substitute for war bond purchases, but is an additional means of accumulating reserves against emergencies or for the time of discharge."

The average soldier needs no urging to make provision for the upkeep of his dependents, according to the article. Most men accomplish this by having regular deductions made from their pay. In this connection, the Army offers three classes of allotments or allowances of interest:

- (a) Class "E"—a direct allotment to an individual or a bank for the support of the allotter's family or dependent relatives.
- (b) Class "F"—Family Allowances to dependents of enlisted men of 1st to 7th grades inclusive who make deductions of \$22 or \$27 per month. A recent amendment to the Servicemen's Dependents Allowance Act of 1942 increases the government contribution to the various dependent individuals.
- (c) Class "X"—Authorized for use by military personnel serving in the theater whose dependents reside in the theater.

In addition to family allotments, the War Department offers the Class "B" allotment to military personnel for the regular purchase of War Savings Bonds. The Class "B" Allotment including eleven separate plans, takes the place of the original Class "A" Pay Reservation, which was discontinued March 31, 1943. Under any one of the Class "B" plans, the issue of bonds by the War Bond Office is automatic. Every month the serviceman allotting part of his pay to this purpose may buy a full bond, or receive credit toward the purchase of one.

The Army has made the transmittal of money to the States a simple matter. A soldier who finds himself with extra money that he would like to send home can do so easily through the facilities of the Finance Disbursing Section, or by Postal Money Orders purchased at the Army Post Office.

As evidence that soldiers overseas are wisely availing themselves of the unique opportunity to save for the future, Soldier Savings recounts the record established by the Seventh Army in Sicily in August, 1943, when only 14 per cent of its total payroll was retained for personal use; 30 per cent was invested in War Bonds, Soldier Deposits and Money Orders, and the remaining 56 per cent went for allotments.

Army Talks points out that only 11 per cent are drawing, and presumably spending, their entire pay in the ETO, and some of these men have married English girls. In December bond sales alone in the theater amounted to approximately \$3,200,000, ending a six months' period in which sales approximated \$11,000,000. The following questions are typical of those to which the answers may be found in Army Talks:

Q—What is the purpose of War Bonds?  
A—War Bonds serve a double purpose: they help pay the immediate cost of the war and, in so doing, are the best possible means of preventing the degree of inflation that could tip the nation's economy too far out of balance.

Q—Where can United States War Savings Bonds be purchased in the ETO?  
A—From any Bond or Finance Officer, at the PX, through such British banks as Barclays, Bank of Northern Ireland and branches of U.S. banks in the U.K. Orders may also be sent direct to the Treasurer of the United States.



## GI Joe

By Lt. Dave Breger





