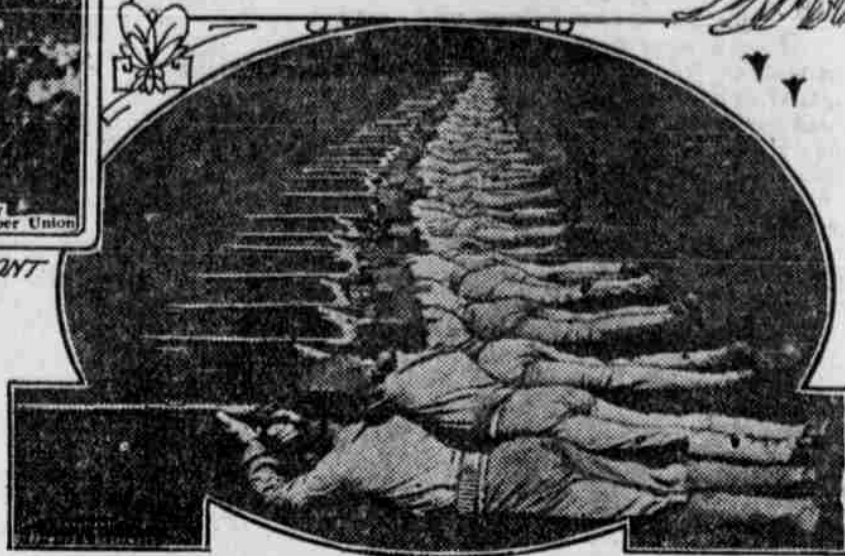




AMERICAN SHARPSHOOTER IN ACTION AT THE FRONT

# Americans Best With the Rifle

## Weapon Comes Into Its Own With Arrival of Pershing's Sharpshooters In Front Trenches



PRACTICE THAT HAS MADE AMERICAN SOLDIERS BEST MARKSMEN IN WORLD

WITH the entrance of American troops into the front-line trenches the rifle is coming into its own in the European war. Hitherto, except with the Canadians, it has not played the part that might have been expected of it.

Already the deadly accuracy of American marksmanship has taken its toll of German victims, for the rifle is the favorite weapon of our troops.

The reasons for this are several. The American is a hunter by tradition. It is in his blood because his father and grandfather before him won the wilderness with the old muzzle-loader. Daniel Boone and Davy Crockett and Kit Carson are all old friends of his. The wild West is familiar territory, even though he may never have crossed the Mississippi. For he has read the tales of trappers and hunters and practiced them on a small scale in the woods outside his village.

The American is a marksman by training. What boy has not spent long days in the woods with a gun in his hands? What youth, excepting only some born and reared in the largest cities, has not come home at night in triumph with a bag of cottontails?

The third reason why Sammy sticks to his rifle in the trenches is that it is the best military arm in the world.

For these three reasons, then—because the rifle is his weapon by tradition and by training, and because the one he carries is the best manufactured—our infantryman backs the rifle against the hand grenade and the bayonet. He can use any one of the three, but for choice give him a clean 600-yard shot at a moving spot of gray outlined against the dun Flanders background of a scar-torn hill.

It has been acknowledged for years that the American regular army, small though it was prior to 1917, is the finest body of marksmen in any army. Our teams competing at Camp Perry and at Nisley against the best shots of Europe and the western hemisphere, proved conclusively that the superiority still rests with us.

The United States government has made for its army the most perfect military rifles ever produced. These are the Springfield model of 1903 and the 1917 model, both of which are beyond question better guns than those used by any other army in the world. The cartridges for these weapons are the best now in use. Orders have been placed for 2,920,000 rifles. The production now averages 50,000 a week, sufficient to equip three divisions. One billion cartridges have been ordered for practice in the training camps. Our manufacture of rifle cartridges excels in amount that of any other country. One firm alone turned out 125,000,000 during one month.

The policy of the government has been to appropriate about \$13 a year for the rifle practice of each soldier in the army. Target ranges have been built in all parts of the country. These were available not only for the use of the army and the National Guard but also for rifle associations.

Germany has not been able to do this. With a standing army so great as the one maintained by the Kaiser in peace times, such an appropriation would have interfered with other plans. If \$13 a year had been spent on ammunition for the rifle practice of each man in the German standing army and reserve, the Teutons would be far better shots than they are today. But this gain would be at the expense of the funds necessary for the supply of munitions the general staff was accumulating against the day of need. Prior to the war the German soldier fired only about 12 ball cartridges a year on the range.

The rifle ranges in Europe are few and inferior. Land is far too valuable to permit of much being used for such purpose. Scarcely any of these ranges are suitable for practice at a distance of over 400 yards. An appropriation of \$13 to the man for ammunition would not have made European soldiers anything like as expert as ours. The lack of opportunity to shoot under the field conditions, which are the foundation of a good rifleman's work in actual battle stress, would necessarily have debared this.

The American is a hunter. He used to be a rifleman from necessity, since his safety and his food depended on his skill. He is now one from choice. There are few of our youngsters who do not own or have access to a .22 rifle, and but few who do not get an occasional chance to use a shotgun. The hunting instinct is still strong in us. It is estimated that about 3,500,000 sportsmen in this country hunt every year with a rifle or a shotgun.

Even in thickly settled districts game is still plentiful enough to offer enticing sport. The license fee is small, amounting usually to only \$1. Ammunition is cheaper here than elsewhere. The finest and least costly machine-made guns are produced in this country. Most important, we have no established aristocracy which controls the shooting preserves, to the exclusion of the general public.

The conditions in Europe are totally different. Land is owned by the aristocracy, and since feudal times hunting has been a privilege peculiar to that class. Unless he secures employment as a gamekeeper, the poor man has no chance to learn to shoot. Nor have the middle classes any better opportunity. Ammunition is expensive. The license fee is excessive, running as high as \$25. The only good guns are hand-made, for the reason that gunsmiths look only to the upper class as purchasers. Hence no good, cheap, machine-made rifles are manufactured. Lastly, there is no open land upon which to shoot.

For all these reasons, the workingman of Europe knows very little about firearms.

Man for man, the total number of troops in the field taken into consideration, our Civil war was the bloodiest ever seen. The operations in Europe during the present struggle have always been over a wide front. The numbers engaged have been enormous and the total losses staggering. Yet the wastage of human life has been relatively small compared with that of the Union and Confederate armies. There has been no Gettysburg, no Bloody Angle in the present conflict. Why? Neither the forces under Grant or Lee attained the perfection of training acquired by the armies of today, with the exception of a few star corps composed of picked regiments. The heavy casualties were due to the individual fighting ability of the troops, to their expert use of the rifle.

From the days of the minute men of the Revolution, the superiority of the American rifleman has been conceded by all. Morgan's backwoods-men proved their efficiency as marksmen in the War for Independence. The raw frontiersman demonstrated it again at New Orleans under Jackson against Pakenham's trained regulars. At the Alamo, Crockett and Bowie, with a little handful of riflemen, held the hordes of Santa Ana at bay. Our history is full of incidents in which a little band of grim men, their backs to the wall, have held off many times their number by sheer tenacity and deadly rifle execution.

The reason for this is not far to seek. In early days America was a virgin land peopled by nomadic tribes with an amazing skill at woodcraft. These natives had to be outwitted and outfought. No country in the world, with the possible exception of British Southeast Africa, ever had such a wealth of game as this. The first settlers were Anglo-Saxons, the greatest sport-loving people on earth. With them they brought little but firearms and stout hearts. They had to defend themselves against the Indians and to live by the chase. Gradually they learned to raise grain, fruit and vegetables native to the land of their adoption. But for a long time their main source of supply was wild game.

It resulted that every boy grew up with a rifle in his hands. Inevitably these frontiersmen, faced with an opportunity based upon necessity, developed the keen eye, the steady nerve and the woodmanship that made them the best shots ever known.

With the growth of the country the tide of civilization rolled westward. Clark opened the great Northwest. Pike led the way to the Rockies. Always the adventurous son pushed to the more remote frontier. The greatest trek in the history of the western hemisphere was on. For 50 years it continued. Almost every foot of the West was won by toll and hardship, at the cost of sacrifice from which men and women emerged strong and self-reliant.

The tradition of the hunt persists with us. The man used to tramping the hills for big game endures hardship and privation for the sake of the sport. He learns to shoot at fast-moving game under difficulties of distance and visibility. It follows that when he is taken out to the rifle range and instructed he learns in a few lessons the proper sighting and method of using the military rifle.

These once acquired, he is in a class by himself, for he is used to shooting under the same conditions, though with less danger to himself, that obtain at the front. No amount of practice at the rifle range can serve as a fit substitute for his experience.

It is this fundamental training which lies back of target practice that is responsible for the marksmanship of the American army. The marine corps holds the finest record in the service. Fully one-third of this organization wears the marksmanship emblem. At least one-half of the marines are first-class riflemen.

To win the expert emblem a marksman must shoot over the qualifying course at all ranges from

200 to 600 yards in both rapid and slow fire and must make above 253 points out of a possible 300. The sharpshooter must average 238 out of 300 on the same course. It is no unusual record for a candidate of either of these classes to hang up ten consecutive bullseyes out of ten shots at the 600-yard range.

The German does not rely on his individual ability with the rifle. He is inclined to shoot wildly and at random. Reports have reached us of German companies frantically wasting great quantities of ammunition after a feigned attack on the part of the foe.

This is in part due to the German theory that a certain percentage of hits will result from a given number of shots. The Boche infantryman, except at short range, does not direct his aim at a particular adversary. He fires for general results.

A German officer, for instance, learns that there are a certain number of the enemy in a given zone about 100 yards square, 500 yards in front of his position. He estimates that if his company sprays this zone for a half-hour a certain percentage of casualties will be inflicted, dependent upon the rapidity of fire, number of marksmen and size of zone.

An American farmer boy could tell him how erroneous this theory is. He knows, because experience has taught him. Time and time again he has fired with a shotgun into a flock of ducks or a covey of grouse on the wing bunched apparently so closely that a miss is hardly possible. There are 150 or 200 individual shot in the load, yet such an attempt nearly always scores a complete miss. Naturally this percentage of failures must be still higher in rifle shooting.

An attacking party may be advancing in what looks like a dense mass. There is to the eye very little space between the men. A "general result" shot ought to score a hit. In point of fact, it usually does not. Spaces between the moving men are constantly opening. Very little of the front offers a vital target. A shot through a knapsack, a helmet, through baggy breeches, or thick leggings, even through the fleshy part of the body, will not stop a charging foe. The only way to make sure of a hit is to pick an individual target, aim at dead center, and fire accurately. An infantryman in full equipment is a good deal like a hawk on a fence post. You are likely to get a lot of feathers from your shot and very little hawk.

The ability to shoot accurately has made the American rifleman dangerous. This same skill is making our infantryman superior to his foe on the western front. General Pershing recognizes the need of maintaining this advantage, for in his reports he recommends that the greatest care be taken in rifle instruction at the cantonments since this is the most valuable weapon both in offense and defense.

Put a company of crack German troops against an equal number of ours. Let them direct their fire based on the "general results" theory at our men while our boys follow the American method of selecting an individual target. An average company of Sammites would contain about ten experts, 20 sharpshooters, 35 marksmen and a large number of first-class riflemen. The result would not be hard to determine.

It is because of the deficiency of the Germans as rifleman that their general staff has resorted so largely to the hand grenade. For the same reason the French and British have done the same. We read stories of infantrymen chasing troops a quarter of a mile to get close enough to throw hand grenades at them. Well-directed rifle fire would have been far more effective. There are times at short range when the grenade is a superior weapon. One tossed into a group of men will do more damage than a single rifle bullet, but the supply of grenades a man can carry is limited and the distance at which they can be used effectively is short. Since the French and British are better shots than the Germans they send more riflemen over the top and fewer grenadiers.

The British regular army had a great reputation for shooting. Most of these had seen service in Egypt, Africa or other colonies where conditions in a degree resemble ours. The work these veterans did in the first battle of Ypres and at the retreat from Mons, where with practically no artillery they held four or five times their number shows what marksmanship can do for an army.

The Latin instinct is to use the knife. For this reason the French and the Italian revert often to the bayonet. Because the German does not like close hand-to-hand work he prefers the grenade.

The Canadian is our born brother at arms. The conditions that have made him. His effectiveness as a soldier is due to his individual initiative and to his skill with the rifle. What is true of him is true of our soldiers. Already they show a tendency to stick to the rifle. When they get going well the Germans will pray to be put against any troops except Americans—and the chief reason for this dread will be Sammy's expertness with the rifle.

## FOUR DISTINCT METHODS OF MAKING HAY—EACH FILLS PARTICULAR NEED



Hay Loader in Operation—Loader Saves Time and Puts Hay on Wagon More Cheaply Than It Can Be Done by Hand.

(Prepared by the United States Department of Agriculture.)

There are four distinct systems of making hay, each of which is divided in actual practice into several methods. Loading by hand is the oldest system and the one most generally used in the older hay-growing sections of the East. Its retention in these sections is due largely to the fact that it requires a minimum amount of equipment, which makes it particularly suited to farms where only a limited acreage of hay is grown.

The equipment required includes only mowing machine, rake, pitchfork, wagon and rack, and, in most cases, unloading apparatus such as hay forks or slings.

Nearly everyone is familiar with this system, which consists merely of pitching the hay on the wagon with hand forks and hauling to stack or barn, where it is either pitched off by hand or unloaded with horse forks or slings.

While it can be used under almost any conditions, this system involves a large amount of irksome hand labor, and for this reason, as well as the greater expense of labor, it should be replaced by some other system whenever practicable.

**Loading With Hay Loader.**  
The second system consists of loading the hay with a hay loader. This method is used most largely in the timothy and clover hay area. It is used to a certain extent in New York and Pennsylvania, and to a greater extent in Ohio, Indiana and Iowa.

In some localities there exists a prejudice against the loader. The first loaders put on the market were not mechanically perfect, and therefore did not always give satisfaction, and the delay caused by break-downs influenced many to abandon their use. Moreover, the loader often has been used on uneven or stony ground, with a resultant frequent breaking of vital parts. The use of this loader, under conditions not recommended by the manufacturers, also has tended to limit its popularity.

Another, and perhaps the most important, reason for the loader not being used more generally is that to use it economically the men on the wagon must work very hard while the load is being put on. A study of the use of the loader in several states has revealed the fact that the hired men as a rule do not like to work on the loader, and for this reason push rakes and stackers have supplanted it on some farms in the middle West.

On one farm it was noticed that when the owner was absent five loads were hauled in one afternoon, but when the owner was present and working on the wagon, seven loads were taken from the field in the same length of time.

At present there are two types of loaders. One picks up the hay with a revolving drum studded with spurs of spring wire about six inches long. The other type takes up the hay by means of a forklift arrangement fastened to long wooden or steel arms. The bed of the carrier is now made solid, so that there is little likelihood of losing leaves from alfalfa, clover and other legume hays.

The hay loader, under ordinary conditions, will increase the capacity of a crew about 30 per cent over that of the same crew pitching the load on by hand forks.

The loader is a valuable implement, and its saving in labor cost will be considerable, especially on farms where labor is scarce and expensive.

**Push Rakes and Stackers.**  
In system three push rakes and stackers are used. This system came into general use a number of years ago in the region from about the nineteenth meridian to the irrigated sections of the West.

A large percentage of the hay in this part of the country is stacked; and the comparatively large acreages grown, plentifulness of horses, scarcity of farm labor, and desire to make hay with the least amount of hand labor were incentives to the use of these two machines.

Push rakes, also known as "bull rakes," "go devils," "slip-rounds," consist of wheelless, two, three and four-wheel types. They are capable of handling from 600 pounds to a ton of hay, depending upon the type, the skill of the driver and the team.

There are several kinds of stackers, the overshot and swing-around being the most common. Home-made stackers are of various kinds, such as "dip-poles," derrick stackers of gin-

kinds, and inclines for handling hay from the large one-ton push rakes.

The push rake and stacker make an admirable combination, since nearly all of the work of getting the hay from the field to the stack is done by horsepower. The push rake takes the hay from the windrow or bunch to the stack, where it is dropped on the stacker and elevated onto the stack by horses.

These implements can be used with small crews, consisting of two men, up to crews of twelve or more men.

**Baling Hay in the Field.**  
In system four the hay is baled in the field and push rakes and a power press are used.

The practice of baling in the field from the windrow began in the semi-arid middle West, where there is but little danger of rain interfering. It has long been believed that hay is not in condition to be baled until it has gone through the "sweat" in the barn or stack. This process is usually finished from three to six weeks from the time the hay is made.

In the West, growers of prairie and alfalfa hay for the market realized that if it were possible to bale hay from the windrow a considerable saving of time and labor could be made. This saving would consist of a large part of the cost of putting the hay into the stack. They also began to doubt the necessity of allowing the hay to go through the "sweat" before it could be safely baled. Repeated trials and careful study have shown that a good quality of hay can be made when baled from the windrow under certain conditions. At the present time hay is being baled from the cock in parts of the South.

**Conditions Should Be Right.**

Hay baled from the windrow often spoils so badly that it becomes unfit for feeding. This trouble is sometimes experienced by beginners and more especially when alfalfa or other legume hay is baled. There are three causes for this. First, the hay will not keep unless it is well cured in the field, it being necessary to cure it out more thoroughly than when it is to be put into the stack. Second, hay that is baled when partly wet with dew or rain is very liable to spoil. Third, hay is liable to spoil when the bales are improperly stored by being packed away close together. In many cases if the bales are placed on edge with an air space of an inch or two between, and the next layer placed crosswise with spaces there will be much less danger of heating and spoiling.

## CAN HELP FARMERS

(Prepared by the United States Department of Agriculture.)

Each town, under the leadership of its most active spirits, such as its chamber of commerce or county council of defense, itself should immediately make a survey of all able-bodied men who have had farm experience and obtain pledges to spend a day or two out of each week, or a week if need be, out of the month at the periods of greatest demand, in order to help the farmers. There are many men working in the towns whose places can be taken by the women. I have in mind particularly men waiters, elevator boys, and clerks whose work can be well substituted, if the business sentiment of the town will act resolutely and persuade employers to use women temporarily in order that the men may be released for farm labor as the occasion may require.—Clarence Ousley, Assistant Secretary of Agriculture.

## PLAN PRODUCTS FOR MARKET

Cans, Jars and Other Containers Should Be Uniform in Pack, Appearance and Quality.

(Prepared by the United States Department of Agriculture.)

One of the first essentials to satisfactory marketing arrangements is standardized products. Cans, jars, and other containers should be uniform in pack, appearance, quality, and condition. Every container which is fully up to the standard represented by the label or brand will then be an advertisement in itself and often a guaranty to further purchases.