


RIFLE  
ASSOCIATION  
OF AMERICA

# ARMS AND THE MAN



RELOADING FOR THE .30 SPRINGFIELD  
SNIPERS AND SNIPING  
Weapons and Tricks of the Trade  
MORE ABOUT THE REAL "OLD TIMERS"  
O. M. Jewell  
SENATE COMMITTEE GETS FACTS ON SMALL  
ARMS  
IN DEFENCE OF THE ARMY COLT  
THE SPEED OF BIRDS  
EDITORIALS and  
LATEST NEWS OF RIFLE, REVOLVER AND  
SHOTGUN, THE ARMY, THE NAVY AND  
THE NATIONAL GUARD

VOL. LXIII, NO. 14



DECEMBER 29, 1917



# Why Prefer Peters Ammunition?

- BECAUSE**—
1. It is made of the finest materials that science and money can produce.
  2. Peters methods of manufacture are unique in thoroughness and efficiency.
  3. Peters standards are higher than most manufacturers think possible of attainment.
  4. You can secure in the (P) brand many important features not found in any other line—such as Semi-Smokeless Powder in Rifle and Revolver Cartridges at the same price as common black powder goods; the “steel where steel belongs” feature in smokeless shotgun shells. Gun wads, shot, primers, and other components made in the Peters plant for the exact use intended—insuring perfect co-ordination in the finished product—and many other improvements designed to give greater efficiency and absolute uniformity.

**HENCE**:—QUALITY that can be always depended upon to produce results, and produce them with a deadly regularity and precision that can only be found in a perfect shell or cartridge.

## *On That Fall Hunt of Yours*

You must have the advantage of superior ammunition—quality such as you can secure only in **Peters** goods. See that the boxes bear the (P) brand and avoid any doubt as to this part of your equipment.

**THE PETERS CARTRIDGE COMPANY, Cincinnati, O.**

Branches—NEW YORK: 60-62 Warren Street

SAN FRANCISCO: 585-587 Howard Street

## General Pershing Urges Rifle Practice



We quote from General Pershing's statement in the New York Tribune, October 5th:

“Longer experience with conditions in France confirms my opinion that it is highly important that infantry soldiers should be excellent shots.

Thorough instructions in range practice prescribed by our small arms firing manual is very necessary. Our allies now fully realize their deficiency in rifle training. It is difficult to procure areas for

target range in France even now, when crops are off the ground. Much greater difficulty soon when ploughing begins.

“I therefore strongly renew my previous recommendations that all troops be given a complete course in rifle practice, prescribed in our firing manual, before leaving the United States. Specially, trench warfare instruction at home should not be allowed to interfere with rifle practice nor with intensive preliminary training in our schools of soldiers, companies and battalions.”

Its close similarity to the .30 caliber army service rifle together with its excellent accuracy shown in the tests to which it has been submitted, especially recommend for use in Military target practice, the

**WINCHESTER .22 CALIBER SINGLE SHOT MUSKET**

Chambered for .22 Short and .22 Long Rifle Cartridges

Winchester Repeating Arms Co.

New Haven, Conn.



# ARMS AND



# THE MAN

The Official Organ of the National Rifle Association of America

Volume LXIII, No. 14

WASHINGTON, D. C., DECEMBER 29, 1917

\$3 a year. 10 cents a copy

## Reloading for the .30 Springfield

By C. S. LANDIS

**T**HE first thing to do when contemplating reloading is to obtain a good supply of empty shells. This is usually quite a problem to a lone rifleman and at present prices is no joke. If, however, one is fortunate enough to belong to a large rifle club this is a simple matter if the other fellows have not yet caught onto the reloading stunt. If the other men are reloading, or expecting to do so, 'tis far easier for half a dozen rich men to enter heaven than to get a supply of empties in that club.

For convenience, and to keep from looking on the dark side of things unduly, we will suppose that the shells are secured. These shells will have been fired in probably a dozen or more different rifles, each of which have individual peculiarities in chambering that manifest themselves in no uncertain terms in these fired shells. The thing to do is either to resize the whole shooting match in a full length Ideal shell resizer, or else to place the shells in a pile on the floor, sit down and make the bolt of that rifle fly until every shell is tested for perfect fit in that particular rifle chamber.

Cast out every shell that sticks at all or refuses to allow the bolt to close. These large shells must all be resized. Then they will fit unless they have been damaged around the head. I always keep the shells that have been resized their full length in a place by themselves as they are likely to be very slightly more accurate than the others, but very little difference can be noticed up to 500 yards range, unless very tight shells are used. In that case there is certain to be trouble from wild shots, even at 200 yards, and to be considerable more trouble from the extractor slipping over the head of the shell and leaving the shell in the rifle chamber from which it must be pounded with the help of a cleaning rod and considerable profanity.

It is necessary to use a wooden mallet in resizing the shells as a steel mallet will ruin both the resizer and the shells.

In theory the shells obtained in this manner will not shoot for nuts but in practice I have often taken 20 to 40 of these shells to the range and averaged 90 per cent or better on the military targets at either 200 or 500 yards. Applied to game shooting it means that practically every shot at 200 yards would hit a woodchuck, fox or similar animal; or a moose, caribou or elk at 500, and half of the shots would kill. This, of course, where the ranges are known exactly and a man of moderate ability shoots from the military prone position with sling.

This is not very good shooting compared to what some men will do, but it is better than I have ever seen done on our range or anywhere else by anyone using a sporting rifle and any old kind of ammunition.

So far we have the shells—all chambered and ready to load.

The first thing to do is to screw the muzzle resizer into the No. 10 Ideal Tool and resize the neck of every shell on

hand that will be reloaded with metal-cased bullets. It is better to do this before the shells have been chambered as in that case quite a few of them will work all right that will not go in otherwise. The shells that will be reloaded with cast bullets are occasionally found small enough to hold the bullets without resizing but this depends on the particular rifle that they have been fired in.

A little practice with two or three shells will soon show how far it is necessary to screw up the muzzle resizer to resize the necks properly. *It will be necessary to resize the neck of every shell that has been resized its full length in the full-length shell resizer, as that resizer does not resize the necks small enough to hold the metal-cased bullets, although the shells will work freely in any rifle except those occasional rifles that have been chambered unusually small.*

After the shells have been all resized at the neck, unscrew the resizer and screw the loading chamber into its place. Place the decapper inside the loading chamber and screw the chamber up until the tip of the decapper just clears the jaw face in a shell, inverting the tool over it and closing the jaws. This forces out the primer. No force is necessary and if nothing happens at once it means that the decapper nose is not down into the primer pocket and closing the jaws with considerable force will break the tip off the decapper.

After the shells are all decapped in this manner or with the aid of a sharpened nail and a hammer, take the little contrivance that comes with the tool to hold the shells in the tool, fit the tip in the hole in the jaw face, place a shell in the recapping hole and after fitting the holder in the groove in the shell and a primer over the head of the shell, close the jaws. This recaps the cartridge. This operation usually deforms the primer somewhat with a crescent shaped mark. This is likely to scare the operator but so far as I can see it does not hurt matters at all.

There is no use trying to reload shells one at a time. Get all the shells done up to this point at one time, before bringing out any powder as it is the only way to make time.

Now we have the shells all lined up in a row ready to charge. We get out the scales and powder can and get busy.

First balance the scales with a blank piece of paper on each scale pan and add or take off small pieces of paper or tin until the pointer always stops at zero on the scale. Place the small bits of paper under the big ones, then add the small weight for the full charge onto the one pan.

This weight will be from 46 to 50 grains if loading the full charge and be most mighty sure that if this small weight, or collection of weights, is or are marked 50 grains that it does weigh exactly 50 grains and not any old thing between 45 and 55 grains as is often the case. Also be very certain that you are opening the right powder can.

Anyone who has loaded for some time is not likely to



make such a mistake except possibly that he might slide in No. 18 instead of 15 or 20 if he was in a hurry and was not looking at matters very carefully, but a person who cannot tell the difference between fine powders like 80 and 75, medium powders like 18 or lightning, or coarse powders like 15 or 10, should not walk up behind a strange horse in the dark. *The fellow who loads 50 grains of fine-grained powder in the Springfield is going to get very decided results the first time he shoots.*

I always take a teacup and dump a supply of powder into it—being sure the cup is perfectly dry—and dip the powder from the teacup onto the scales with the little dipper that comes with the tool. The dipper that comes with the Ideal tool is not large enough, or at least mine is not, because it takes one and two-thirds dippers full to weigh 50 grains, using No. 15 or the latest F. A. Government powder. I suppose this is purposely made small to keep anyone from measuring his powder by this small measure and therefore getting into trouble in case the dipper happened to be slightly large.

I have a small funnel, that I had made especially for this purpose, that I use to pour the powder through into the shells. Most funnels are too large at the spout and do not have a sharp enough pitch in the funnel to load the coarse powders readily. The fine powders up to and including 18 will pour through most anything but 15 will clog and that means a waste of time tapping the shell to get the powder settled.

After the powder is in the shell, place a bullet in the neck of the shell with the fingers, invert the tool over the shell and bullet and close the jaws. This loads the shell if the tool has been set properly.

To set the chamber at the correct depth, take a loaded cartridge and insert it in the tool. Screw up the main or upper part of the double adjustable chamber until it is tight, and bind it with the binding screw. Then repeat the process with the small part that fits over the bullet. With the tool with single adjustment chamber there is only one part to screw up. Both styles will do the job.

I always make it a point to seat the bullet as soon as the powder is placed in the shell as this prevents loading any shells without powder, or with a double charge of powder, as might happen when loading reduced charges. When two men load together one should do all the powder weighing and the other seat the bullets.

I formerly charged a whole evening's supply at one time and then seated the bullets, but on one occasion I got up to get a drink, water by the way,

fell over the table leg and spilled 40 shells, that had had their charges very carefully weighed for match shooting. I suppose that I said more than was absolutely necessary because the Mrs. has put the can on this style of loading in our house for the future.

Full charge loads for the Springfield requires some little thought.

Whether to use du Pont powders No. 15 or No. 20 depends mostly on personal taste. Number 15 corresponds to du Pont or Schultz in shotgun powders and No. 20 to Infallible and Ballistite—at least that is how the recoil feels. The 15 has the lesser chamber pressure but a terrific muzzle blast in short barrels like the Springfield. This muzzle blast causes one to be most heartily damned when shooting in a squad and the other fellow inches up. It also gives one the reputation of shooting a terrific load when such is not the case.

The 15 also seems to give considerable more flame at the muzzle that is very noticeable when shooting late in the evening and is likely to cause some people to flinch near the end of a long string of shots, especially late in the day. I get very much less metal fouling from the 15 than I do from the 20 and prefer it for that reason.

There are occasions, however, when I get to flinching while using it due either to the report or the flame late in the day, although I can stand it to shoot a Springfield all day without flinching so far as the recoil is concerned, as that never affects me excepting occasionally I get one on the back of the neck. I have never seen these little points taken up and which powder to select depends, I believe, mostly on a person's failings. I have very little trouble from split shells using 15 and never had a primer leak to date, after using several hundred 50-grain charges of it.

At 200 yards I require 410 yards elevation, at 300 yards 460 yards elevation and at 500 yards 625 yards elevation on the service sight when using 50 grains of 15 behind the service bullet. With No. 20 I require 235 yards elevation, at 200 yards and 600 yards elevation at 500 yards. As can be seen the 15 is the speedier charge but the muzzle flip is entirely different and must be allowed for accordingly.

I have used a charge of 48 grains of No. 18 as well behind the service bullet. This charge is very accurate at 500 yards in my rifle but seems to be a pretty strenuous charge so far as chamber pressures are concerned. It gives more metal fouling than any other charge I have used. It requires 100 yards less elevation at 500 yards than the 50 grains of No. 15. I believe that any one of these three charges will put practically every shot

into about ten-inch groups at 500 yards when carefully hand loaded in good shells, with weighed powder charges and bullets.

I admit quite frankly that I cannot make such groups with service sights but from the ease with which I can call the shots I should judge this to be the case. At 200 yards on one occasion I had one fellow declaring emphatically that I could see the bullet holes as I was spotting pretty fair that day with 15.

The cost figures out to 0.35 per box of 20 shells, using government components. Buying the bullets, etc., at present prices runs about 0.65 per box against retail of about \$1.50 per box for ammunition that will not begin to shoot with it.

The only mid-range load that I have used to any extent is Ideal gas check bullet No. .308334 and 25½ grains of 18. I have not tried any of them at longer range than 200 yards but it does very nice shooting at that distance. It is even more satisfactory to use the service bullet and the same powder charge. Some persons prefer 25 grains of Lightning or 23 grains of No. 80.

Twelve to 14 grains of No. 75 or 80 and the service bullet are very accurate short range loads. With these loads and the service bullet I have scored 595 out of 600 at 50 yards on a 2-inch bull. In other words 55 bulls out of 60 shots. This is the best shooting that I have been able to do with service sights as a telescope suits my eyes considerably better. These two loads will shoot with exactly the same elevation and windage at 50 yards in my rifle, a point that may be of value to others. Elevation, 720 yards; W. G., one-third point left. That is 12 grains of No. 75 and 14 grains of No. 80. One of my friends swears by 15 grains of No. 18 for the same purpose.

Ideal bullet number S.308241 is the standard short range cast bullet for the Springfield. Quite long strings of consecutive bulls have been made at 100 to 200 yards with 10 or 12 grains of 75 or 80 and this bullet. These bullets sized to .311 will often seat in the necks without any resizing if the rifle is chambered pretty close around that part. I have tried the 125-grain Kephart bullet for the .303 Savage but for some reason while I can get splendid shooting for about five shots up to 50 yards, the bullet will begin to lead after that and the groups are poor. The bullets for some reason tip vertically but not horizontally.

The bullet is larger than the bore to the bottom of the grooves and makes a nice little load for short range for a few shots.

In general there are four things to

(Concluded on page 271)



# Snipers and Sniping

By STEPHEN TRASK

## PART 2—WEAPONS AND TRICKS OF THE TRADE

IN THE highly expressive and unusually descriptive vocabulary of the Western-front trenches, snipers are known as "body snatchers." There is nothing opprobrious in the name. On the contrary, it is a tribute to the uncanny efficiency which marks the frequent excursions of these expert riflemen into danger-ridden terrain, and the success which marks the plying of their gruesome but vitally necessary trade.

Yet, while the fast-shooting marksmen of the Allies have well earned their local sobriquet, it is none the less applicable to the lone riflemen of the enemy; wherefore, as a sniper's activities seldom last more than ten days or two weeks before he is either wounded or killed, and because his education, when the brief period of the sniper's usefulness is considered, is a protracted, expensive process, every care is taken that the man goes into the field not only thoroughly conversant with the theories and practices of rifle shooting, but is equipped with the best weapons as well.

From this it might be argued that a sniper's rifle should be an example of the finest in the gun-making art. Thereupon would arise the question: "What is the finest weapon for this work?"

The British have answered by selecting sniping rifles from their stores of service arms. Still it must not be assumed that the rifles are picked at haphazard and judged suitable merely because they have passed government inspection as being good enough for trench use. In picking rifles for sniping, every care is taken to see that each weapon is as nearly perfect as possible.

For instance, the bolt of every weapon must be especially fitted to that arm, and if it should chance that upon some later occasion the original bolt should be broken, no makeshift, interchangeable bolt is countenanced. This is because a change of bolt, unless the new part be mechanically a perfect fit, invariably causes a change in the shooting of the rifle. Not only will the lateral shooting of the arm be affected, but the weapon may develop a tendency to "shoot wild." British army officials explain this by the statement that it is absolutely essential to the accuracy of any bolt-action gun that the force of the discharge be taken evenly on the lugs. Given a rifle with a well-fitted bolt, the English experts contend that for every one-thousandth of an inch taken off one of the lugs, the lateral shooting of the rifle will be changed one inch per hundred yards of range; and if five-thousandths of an inch

be taken off, the rifle will begin to shoot wildly.

When a rifle which is theoretically as nearly perfect as possible is obtained, and when actual shooting proves it to be an accurate weapon, it is set aside for snipers' use, after being equipped either with telescopic or with optical sights.

These special sights are not issued upon the theory that a 'scope will convert a poor shot into a good one; but when a man has once attained the Bisley standard, the telescope, British experts argue, does away with the necessity of focusing the back sight, the front sight, and the object aimed at, as well as giving a clearer definition of the target.

Because of the great demand for telescopic sights and the necessity of obtaining them whenever possible, there is no standard British telescopic sight. Upon rifles of the British snipers may be found Woodward, Lancaster, Atkins, Rigby, Purdey, Holland and Holland, Warner and Swasey, Winchester Jeffery, and half a dozen other makes of 'scopes, each one of which has its own peculiarities of focus and of lateral and vertical adjustment. Added to this list are the optical sights—the Lattey, the Martin and the Ulster prominent among them. Sometimes the telescopic sights are also periscopal in nature. Sometimes they are mounted on the rifle barrel, and sometimes they are fixed to the weapon by a side mounting.

Since there is no standard at present in the British army as far as the rifle telescope is concerned, the sniper sent into No Man's Land may find that the weapon given him is equipped with any one of these optical aids. Therefore he must be conversant with the characteristics of each of them, *and with the characteristics of the rifle which he is required to use.*

There are a good many rules which have been formulated in the British sniping schools which give the sniper a basis from which to draw conclusions. The riflemen of the United States have similar general rules, and therefore those of the English expert rifleman may be of interest.

One of the points which is most thoroughly impressed upon the candidate for sniping honors is the fact that the same rifle in the hands of two men will shoot quite differently, due to individual peculiarities in holding. If a rifle be held so that the whole of the recoil is taken on the heel for one shot and the whole of the recoil is taken on the toe for the next shot, a considerable difference in elevation will be apparent.

Not very long ago some experiments along this line were conducted at the Winchester plant, and the results of these tests bear directly on the sniper problem, because sniping rifles are sometimes used by one man and sometimes by another. In the test two of the best professional experts of the company went to the 200-yard range with 5 rifles. There, from muzzle and elbow rest, each man shot 10 shots from each rifle, using the same sight adjustment, assuming as nearly as possible the same position, and holding on a fixed point, supervised by a third expert rifleman. The result of this test showed that Expert No. 1 hit on an average of 8 inches higher and 3 inches farther to the left than did Expert No. 2.

On account of the undeniable difference in performance the same rifle will show in the hands of different shooters, the British sniper is required to train himself to take the recoil from his weapon in the same manner for every shot.

Before he can become conversant with the individual peculiarities of his rifle, the sniper must study his weapon particularly from the standpoint of what the British call "The Errors of the Day." These are of great importance, especially when the rifle is to be used at long ranges; and even for short ranges they may account for a rifle, with the characteristics of which a sniper may believe himself thoroughly familiar, shooting higher or lower than might be expected.

In dealing with the errors of the day, a sniper is cautioned to remember that in a mountainous country the barometer falls rapidly as the altitude increases, and the rough rule is that for every 1,000 feet of altitude there is a fall of one inch in the barometer.

The effect of rain is also of importance—not so much because of any effect it may have upon the flight of the bullet, but because if any water gets on a sniper's cartridges, or into the barrel of his rifle, a puff of steam which will give away the marksman's hiding place may follow the discharge of the rifle.

Now as to cover, which is really one of the best weapons a sniper can have, since upon it depends whether the lone wolf of the battlefield will return from his foray, or whether, betrayed by insufficient shelter, he is searched out by the rifle fire of enemy marksmen. Concerning the general rules to be followed, but which of course must always be considered in connection with the specific instance in point, a sniper should be impressed with the fact that cover from



view is more often attained by a suitable background than by a parapet of earth, a clump of brush, a pile of stones, or some such obstacle which affords actual shelter, and that cover from view is often more important than cover from fire. No matter how well he is protected behind a bullet-proof barrier, if the sniper puts up his head and it comes against the skyline he will be seen at once. Snipers now often wear masks, or blacken their faces, to render themselves less visible.

Sniping is rarely done direct to the front; it is almost always diagonally and at some very well-concealed firing spot. Therefore the sniper must take care that his background does not give him away to a side view.

Where possible, consideration should be given to the penetration of bullets, remembering that the following are not bullet-proof:

Less than 6 inches—gravel between one-inch boards.

Less than 10 inches—brickwork with cement mortar.

Less than 18 inches—sand in bags.

Less than 48 inches—average earth.

Snipers should always work in pairs, the one sniping and the other searching the ground and observing with glasses or periscope the result of any shot, so that he can tell the other if he is going high or low, or right or left. The same pairs should work together as far as possible; they get accustomed to each other's work. Of course, the spotter should not be too near the sniper—only sufficiently near to be able to keep in communication.

They should fire and observe in turn; observation, particularly with a telescope, is very tiring.

Here are a few tricks of the snipers' trade as practiced on the battlefields of France:

When firing from the window of a house, the sniper always stands at the back of the room.

When shooting through a small aperture in brickwork, the sniper always waters the opening. This prevents the gas of the explosion from blowing out any dust and betraying the spot from whence the shot came.

In constructing a new loophole, in earth, the sides are invariably boarded or otherwise protected to prevent the explosion from blowing out dust.

Loopholes are always "gagged" at front and curtained behind. The sniper drops the back curtain before he removes the "gag," since light striking through a loophole will invariably betray it.

When a new loophole is made, or a new sniper's post established, it is left unused for a day or two, but kept under observation, to see whether the enemy snipers have spotted it and are firing into it.

Dummy posts are established wherever possible, in order to mask the real posts. They are never placed less than 50 yards away from the real post, how-

ever, so that they will not be in the same field of view searched by the enemy spotter.

Nothing gives the position of a sniper away so much as movement, and a hasty movement into or out of an exposed position attracts attention much more quickly than a slow movement. Hence the sniper avoids all hasty movements.

In searching out the enemy marksman, the trained sniper, knowing that the central portion of the eye is the part least susceptible to movement, and that the other portion of the eye will detect movement much more quickly, has taken a leaf out of the notebook of the American Indian. If an Indian believes his quarry will appear from behind a particular tree or rock, he does not fix his gaze on that spot, but looks some yard or two away and lets his gaze roam slowly around the spot, so that if any object moves from behind the tree or rock, the eye will catch it at once and instinctively swing to the right spot.

When a post has been discovered by the enemy, a sniper leaves it at the first opportunity. But before he goes, he puts up a notice "Dangerous" to warn incomers.

Experience has taught the sniper that a telescope is preferable to field glasses for observation and reconnaissance work. When using the 'scope he is extremely careful to note the position of the sun, since a reflection from the lenses would prove fatal.

Allowance for elevation and windage are especially important to the sniper, and the general rules which have been formulated by the British are of interest.

As to elevation, every man must know what corrections to make if his shots are going too high or too low. As a rule, riflemen, unless ripe in experience, are not bold enough in making corrections. Of course the sniper of the Allies is trained to make careful adjustment of his sights, being thoroughly taught the reason for every change and the effect which may be expected. But for practical purposes, when using the British rifle, and even for the close shooting of the sniper, it is only necessary to remember that if at 200 the sights are raised to 300—twice three are six—next the shot will go six inches higher. If at 300 the sights are raised to 400— $3 \times 4 = 12$ —and the next shot will go 12 inches higher, and so on. Rule: multiply the first figure of the range you are at by the first figure of the next hundred yards, and the result will give you the number of inches your shot will go higher. If a raise of 100 yards is not sufficient, you must again multiply the first figure of the range you are at by the first figure of this longer range and add this further number of inches. Thus if at 200 you put your sights to

500—2 (3 4 5)—24 you will go 24 inches higher. (This method of calculation applies to Mark VII only.)

Similarly if you are going too high—if you put your sights down 100 yards—multiply the first figure of the range you are at by itself, and that will give you the number of inches your shot will strike lower. For instance if at 600 you put your sights down to 500— $6 \times 6 = 36$ —your shot will strike 36 inches lower.

Bearing these two rules in mind the sniper will know how much to move his sight at any range, to make any necessary correction.

No matter how free the rifle may be from oil, there is a tendency for the first few shots with Mark VII British ammunition through a clean rifle to go a little higher than the subsequent shots. At 200 yards the second shot may be an inch lower than the first, the third down another inch; the fourth down again the same amount; then the elevation holds constant.

If therefore the first shot is a little high, the trained sniper does not lower the elevation—or at any rate not much—but if the first shot be low he corrects at once and makes a full correction.

The position from which the sniper will probably have to fire will very likely make a difference in the elevation required. He will probably fire with his rifle rested. Resting the rifle lightly makes no practical difference; but nine men out of ten when they come to resting the rifle do not rest it lightly, nor do they support the support the weight of the rifle with the left hand, but on the contrary drag it down firmly onto the rest. This is not wrong but they must know and appreciate the consequence which is as follows: With a rifle so held down the bullet will strike  $3\frac{1}{8}$  inches per 100 yards higher if the rest be taken at the nosecap and half that amount if the rest is taken at the band, and so in proportion if any other part of the fore-end is rested. This fact must always be in the sniper's mind.

It is undoubtedly best to always rest the rifle on the hand, as by this means you will always obtain the same bed and resistance, but such a rest is often impracticable.

The sniper must be trained to accustom himself to make allowance for wind and the instructions given in the British small-arms manual are considered too rough for his work. He must know that for his fine work he must reckon on having to make an allowance for wind even at 200 yards.

Observation on the range is the only true method of instruction, and such instruction can be had with the expenditure of very few rounds of am-

(Continued on page 270)



## More About the Real "Old Timers"

O. M. JEWELL

SHOULD inquiries be made among those conversant with the men who made the match-rifle history of the past as to who among the many pioneers of the shooting game presented on the firing line a model of ease and grace, the answer would unhesitatingly be—O. M. Jewell.

Jewell's shooting position, in the old days, was admired by thousands. He was a fine physical specimen, standing 5 feet 10 inches tall, and weighing around 170 pounds. Many years of exemplary habits had given him the muscular development of a trained athlete. When he went to the firing line, he stood firm on both feet, raised his rifle to the shoulder, keeping his arm entirely free from his body. Once the rifle had been raised, he seldom lowered it for a second sight, but, holding it with a steadiness attested by many brilliant scores, he would add new records to his already notable achievements.

Much of O. M. Jewell's shooting was done before any sporting publication devoted time and space to the compilation of rifle records; therefore his earlier accomplishments have not been preserved in their entirety or in any way made of record. Later, however, Jewell became a member of the Massachusetts Rifle Association and of the Lawrence, Massachusetts, Rifle Club, and the records made by him during the early Eighties have been preserved.

When O. M. Jewell began his shooting career, he used a .40-calibre, 28-inch-barrel Maynard breech-loading rifle. In fact, he was one of the first riflemen to adopt this weapon, which used a charge of 60 grains of powder and 225 grains of lead. He was never known to bring loaded ammunition to the range, and was one of the first riflemen to set the fashion of using a single shell, reloading after every shot, a custom which became almost universal among the riflemen on

the Walnut Hill Range. Later Jewell changed his weapon for another Maynard, this time of .38 calibre, carrying 50 grains of powder and 255 grains of lead.

On the rifle range, Jewell was one of the most fastidious of all the shots, so far as the care of his rifle was concerned. When cleaning he would repeat the operation many times, in order to be certain that the bore contained no powder residue.

He customarily shot with an aperture sight of very small size, and reloaded his single shell only after the cartridge case had been scraped inside and wiped clean on the outside. He never seated his bullet ahead of the shell, as did most riflemen, but inserted it in the cartridge case. After each shot, Jewell insisted upon knowing the exact result before he would fire the next shot.

Among the early records of this excellent marksman, details of which have become obscured by the passage of time, there is reference to a clean 10-shot score made at 1,000 yards with a Maynard long-range rifle. At the time this was done, the performance was regarded as phenomenal. He was also one of the first to use a .22-calibre barrel, and for many years his work with the small-bore was unequalled, Jewell having held for a year or more the record of being the only man making clean scores of eight consecutive bull's-eyes at 50 yards. This shooting was done at one of the Boston rifle galleries, on a target where the shots had to be within a 2-inch circle to count as a bull's-eye.

Here are some of the clean scores made by Jewell:

The records made with the old .40-calibre Ballard include—

August, 1879, Walnut Hill, on Creedmoor target, 35.

July 4, 1880, Walnut Hill, on Creedmoor target, 50.

October 16, 1880, Fall Meeting,



O. M. Jewell  
(From an old cut)

Walnut Hill, Creedmoor target, 35.

October 16, 1880, Fall Meeting, Walnut Hill, Creedmoor target, 35; Massachusetts target, 81.

September, 1881, Fall Meeting, N. R. A., Creedmoor range, Creedmoor target, 25, and another on Creedmoor target, 25.

April 29, 1882, at Walnut Hill, Creedmoor target, 50, and Decimal target, 84.

June 15, 1882, Spring Meeting, Walnut Hill (Herald Cup Match), Creedmoor target, 35; another on the Creedmoor target, 35, during the same competition; and a third in the Decimal Match, 67.

June 17, 1882, Spring Meeting, Walnut Hill (Decimal Match), Creedmoor, 35, and Decimal 67.

Of the records made with the .38-calibre Maynard, 50-255, these have been preserved:

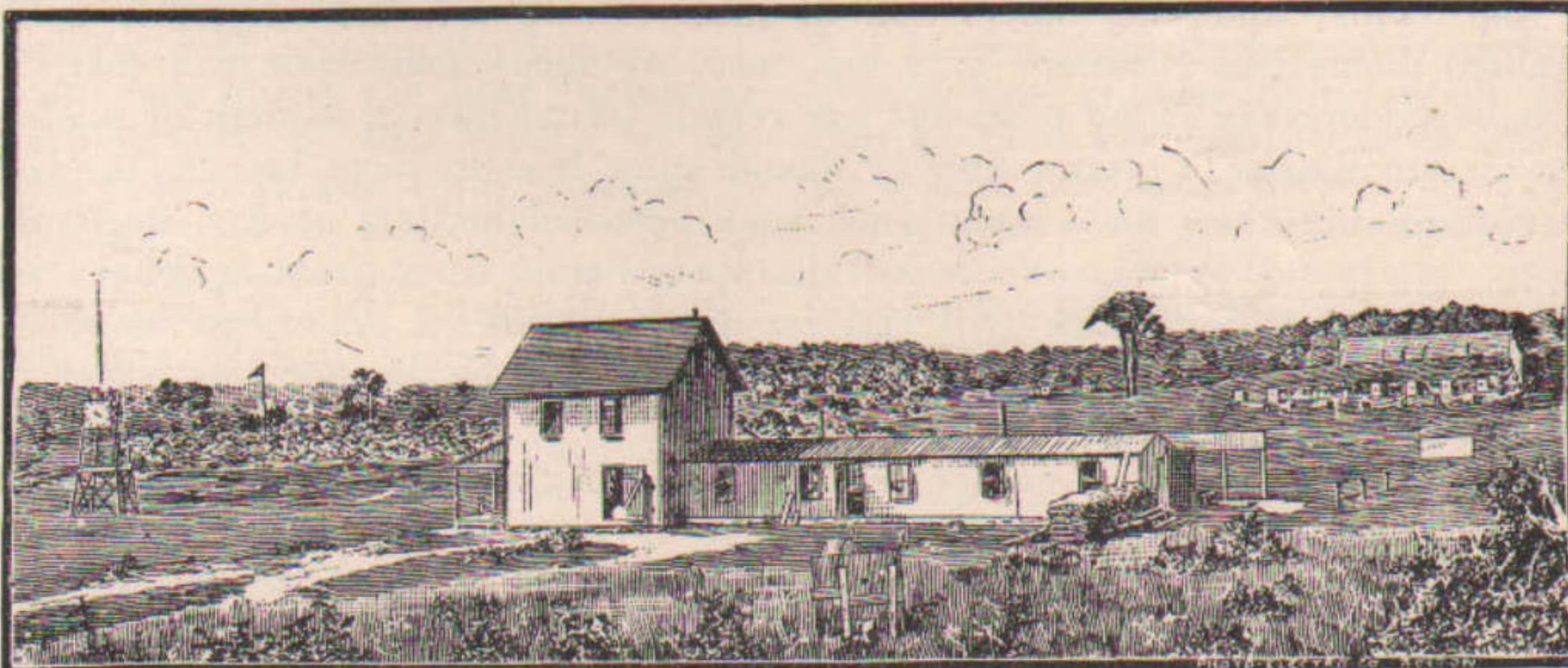
September, 1882, Creedmoor range, Fall Meeting of the N. R. A., on the Creedmoor target, 25.

April 5, 1883, Walnut Hill range, Creedmoor target, 50, and Decimal target, 89.

October, 1883, Fall Meeting of N. R. A. at Walnut Hill, Creedmoor target, 35, and Decimal target, 64.

October 11, 1884, Fall Meeting at

(Concluded on page 272)



Range of the Massachusetts Rifle Association, Walnut Hill, Where Most of the Early Records Were Made.



# ARMS AND THE MAN

1110 WOODWARD BUILDING, WASHINGTON, D. C.

EVERY SATURDAY

Editor

BRIG. GEN. FRED H. PHILLIPS, Jr., Secretary N. R. A.

Associate Editor

KENDRICK SCOFIELD

Entered as second-class matter, April 1, 1908, at the post office at Washington, D. C., under the Act of Congress of March 3, 1879.

That the man shall serve his country in time of war is noble, brave and patriotic; but that a man shall properly prepare himself in time of peace to serve in war is all of these things and more. It is noble with a nobility which is real, not ideal. It is brave with a bravery which assumes in time of unemotional peace many burdens, among them that of bearing the lack of appreciation of those who do not consider military preparation or training necessary.

## HOME GUARDS AND RIFLE CLUBS

CONSIDERABLE food for thought may be found in the decision of the War Department to organize an auxiliary military force of 25,000 men to be known as the U. S. Guards.

This organization, it is announced, will be made up of 40 battalions, recruited by volunteers between the ages of 31 and 45 and filled out, if necessary, by recourse to the draft. The organization is to be officered by men of military experience who are deemed unfit for the strenuous life of the trenches, and will be used "to perform duty incident to the war, such as guarding military supplies."

From the number of battalions, it would appear that a unit will be organized in practically every State. From the fact that the U. S. Guard is to be uniformed in the obsolete army blue, and armed with Krag Jorgensen rifles, it would seem that in establishing this force, the War Department means business.

Can it be that the officials charged with the conduct of the war have lost faith in the Home Guard movement, and are preparing to strip these semi-official forces of what up to this time has been their only reason for existence?

There is no doubt that many Home Guard units have been organized by men not subject to military duty, and as the result of a sincere desire to be of service to the Nation. Many of these units have organized rifle clubs, and affiliated with the N. R. A. Others have allied themselves with the already existing rifle clubs and have undertaken to perfect all members in the use of service small-arms. For such organizations, there should be nothing but the highest praise.

But, unfortunately, there is reason to believe that at least some of the Home Guard units are not alive to the responsibilities of the work which they have undertaken. If this is true, the entire movement has been seriously injured. Here is a case in point.

Not very long ago, a Home Guard unit was organized in one of the Eastern States, and forming its members into a rifle club, applied to the government for arms and ammunition. Although the organization never obtained its

equipment, because of the suspension of the free issue, it nevertheless had access to an excellent range, and the members, by popular subscription, purchased some .22 calibre rifles. But there the matter of rifle practice stopped. The reason? Let us quote the statement of one of the officers: "Don't bother us with learning to shoot. We have more important work to do. The Home Guard will never be called upon to fire a shot; all danger of internal trouble has long since passed. And, anyway, the war will be over before we can get the men trained, so what's the use? And another thing: none of us would shoot a man under any circumstances; consequently our very lack of skill is a good thing. We are training our men along constructive lines, not to destroy or to take life."

Perhaps the officials of the War Department have heard some such utterly absurd utterance emanating from a Home Guardsman. If so, the reason—and the necessity—for the U. S. Guards is perfectly apparent.

Now it is very true that should a Home Guardsman who is a member of an organization of semi-official character shoot and kill a rioter grave complications might follow. Yet it is equally true that there is just one thing which will win the war for Germany and force us to pay the price in blood and money: the brand of skimmed-milk patriotism displayed by this misguided home guardsman.

This spirit of smug complacency is more dangerous than the most vicious form of German prapaganda and in these times the chap who would not "shoot a man under any circumstances" is not worthy to be an American. To permit such a man to wear a uniform is a crime, for his presence in the ranks means the toleration of moral cowardice, the one thing that will destroy a military body beyond all hope of redemption.

YOU may ask: If the Home Guardsman who shoots a rioter may find himself involved in serious trouble, of what use is the Home Guard and why should its members be taught to shoot?

The answer is that a properly organized Home Guard unit, composed of reliable, thoroughly trained and thoroughly patriotic men can be of vastly more service to its community than it would be if its activities are merely confined to guard duty and the suppression of possible riots.

Unquestionably Home Guardsmen should know how to shoot. They should be able to handle firearms in order that they may perform the great patriotic service of teaching others how to shoot—others who are subject to active military duty and who are ready and willing to take the field when the call comes, yet who know nothing of military arms. And he should know how to shoot because the time may come when such personal matters as age limits and dependents will disappear before some great national crisis which will call for the full tide of American manhood. Then the men who can shoot will be the men whose services will count.

Another year in the history of rifle shooting is about to begin. It can be made to count heavily in the war against the Hun. Every Home Guard in which a rifle club has been organized should spare no effort in encouraging and sustaining this phase of Home Guard work. If the rifle club of any Home Guard unit has been permitted to



degenerate into "a paper club," steps should immediately be taken to resuscitate it; obtain a range; get to work.

Every semi-military unit should realize that the assumption of such a designation as "Home Guard" carries with it a grave responsibility, and that the Home Guardsman who fails in the trust which he has voluntarily accepted is false to himself and to his nation.

But most of all he should remember that no matter how unofficial the status of his organization may be, that it can do a world of good by promoting rifle practice among the citizens of the community in which it exists; for, whether they come from heavy or light artillery, from machine guns or from rifle, the only shots that will count in the big war game overseas, are the shots that hit.

### BUILD THE GUNS

**N**OW that an adequate supply of serviceable service rifles for the National Army has been assured, the plea of the Allies for big guns should engross the attention of the War Department.

To insure France and England against a shortage of heavy and light artillery, and ammunition therefor will be as little as the United States can do in return for the inestimable service which these two nations have rendered to this country.

When the United States prepared to take the field, we had few machine guns and fewer modern pieces of artillery. As a result, our first overseas army landed on French soil woefully unequipped so far as these weapons were concerned.

But France was prepared to step into the breach. From the French we first borrowed the powerful "Seventy-fives" with which our men on the western front are now fighting,

while awaiting our own big guns which are just now in the process of manufacture. From France we borrowed the wicked little *Chauchat* machine rifle for use while our army officials await deliveries of the new "light Browning." And by virtue of France's generosity, we are able now to stand unashamed before the world, our men in the trenches fighting shoulder to shoulder with the Allies.

Now comes this message to the American people sent by General Petain:

*"Make guns. Send us guns and ammunition rather than steel bullets. We are grateful for the little force you have sent us. The echo of its footfalls carried hope to every hearth in France; but as it grows there must be a period when we shall be taxed to supply it. \* \* \* You will understand how urgent it is to send us guns, 'middle heavies' and shells, in order that we may be armed to win victories and to defend ourselves so that some of us may be alive to fight by your side when at last America is ready."*

This, of course, is in the main, similar to the policy which the French officers advocated for the United States at the beginning of the war, when the importance of the rifle was belittled and the effect of infantry fire regarded as of slight importance. The United States did well at that time to disregard such suggestions, and to proceed with the manufacture of millions of rifles.

Those rifles are now on the way. There is little danger that this country will in the months to come consider any suggestion which will interfere with the output of service arms. Yet, while we are turning out rifles and machine guns, it might be just as well for us to turn our attention toward the time when France may stand in need of a return of the munitions which she, in our time of stress, freely gave to us.

Therefore let us make the guns.

## Senate Committee Gets Facts On Production of Small Arms

**W**HILE all the factories in the United States which have the proper facilities are working overtime to supply the army with Lewis, Colt, Browning and Vickers-Maxim machine guns, yet another type of automatic rifle has been temporarily added to the equipment of our fighting forces.

The new gun is the light *Chauchat* machine rifle of the French forces. This weapon is now being supplied to contingents of the American forces, by the French government. As it stands, the *Chauchat* uses a heavier charge than the United States .30 calibre government cartridge, although steps have been taken to supply guns of this type that will use service ammunition.

Announcement that these guns were being used came as part of General Crozier's statement this week before the congressional committee charged with making a survey of the war situation.

The committee went exhaustively into the machine gun questions and into the reasons why so few were available for the Army. General Crozier informed them that there was no lack of machine guns of any type for the Army in France; and that there will be none now or hereafter, as the French have undertaken to supply all that we need until such time as those made here become available. General Crozier informed the committee that last June the War Department had adopted the Browning gun, both types, heavy and light. At the beginning of the war the output of machine guns was about nothing. Development of the Vickers gun was going on slowly at the Colt plant, but it now is turning them out at the rate of 500 Vickers and 1,500 Lewis guns a month.

General Crozier said that there were really three types of machine gun used—the heavy, the intermediate and

the light—sometimes called the automatic gun. The War Department has adopted the heavy Vickers and the heavy Browning; the intermediate Lewis, which will be used chiefly for training and for some of the airplanes; and the light Browning. The heavy guns weigh about thirty-six pounds and their tripods about the same; the intermediates twenty-five to twenty-six pounds and they fire from the hip or from a light rest; and the light guns weigh sixteen to nineteen pounds.

Meantime, he said, the French have a first rate light gun—the British do not use the light type at all—the *Chauchat* which uses a cartridge heavier than ours; but it is otherwise a satisfactory piece. They have undertaken to supply for the U. S. forces in France all of these guns that they need together with ammunition for them; and at the same time they are beginning to modify their factory so as to make a piece that will carry the American ammunition; and they will continue this supply until the Browning guns are ready for use in sufficient numbers. Already some of these



French pieces are in this country and in use for purposes of training certain of the troops in the use of the light or automatic machine gun.

Answering specific questions, the General said that it would take from 70,000 to 80,000 machine guns to supply an army of a million men. An infantry division will require about 225 heavy and 775 light machine guns and a corps will have more in proportion.

In response to the questioning on the subject of the Army rifle, General Crozier repeated his previous statements, that at the time war was declared there were available about 700,000 Springfields and that at the present time the arsenals at Springfield and Rock Island were, by running two shifts, turning rifles out at the rate of 1,200 a day, which was quite sufficient, General Crozier said, to supply both the Regular Army and the National Guard even though at the outset the Rock Island Arsenal was closed and the Springfield running on part time for lack of appropriations. The difficulty in putting them in running order was that the skilled workmen and inspectors attracted by high pay had gone to work for the concerns that were making rifles for the Russians and British.

In answer to further questions as to the possible delay caused by the modification of the so-called Enfield rifle, General Crozier said that it was obvious that the Government could not supply Springfields in sufficient numbers for the Army and that rifles must be sought from the private manufacturers; that the three firms he had mentioned had nearly finished their foreign contracts and could make the rifles for the United States; that there were many objections to the use of cartridges of different sizes in the same army; and many reasons why the standard U.S. rimless cartridge, both for the rifles and machine guns, was preferable to the flanged cartridge taken by the British Enfield; that in the haste to turn out these rifles for the Allies the three companies had not so standardized the parts of the rifle they made that they were interchangeable. Here at a conference at which the Secretary of War, General Pershing, the Chief of Staff, the President of the War College, the Commandant of the Marines and General Crozier were present the decision was reached to adopt the Enfield, so modified in design that it would take the U.S. rimless cartridge and that all the parts would be interchangeable. Asked whether the Bureau had not made further changes in the design after giving the orders to the factories, the General explained that at first not all the parts had been made interchangeable, but that when it was found that they could be made so by a slight

additional delay he had ordered them made.

There was a margin of time between the departure for the theater of war of the first contingent of the National Army so that we could take a little time to secure this result, General Crozier said. No American soldier will be delayed five minutes for the lack of a rifle to use on foreign soil although they may not have had many of the Enfields to train with at the outset. But there were 160,000 Krag-Jørgensen rifles that made excellent substitutes as far as training goes; and 5,000 of them were ordered to each cantonment as soon as they were asked for. They would have been sent earlier, but there was no place at the camp to store them and no one to take care of them. If they did not arrive as soon as they were wanted it was due to lack of transportation. Subsequently we sent two deliveries of 2,500 Krags to each cantonment; and since that time we have sent, although not all of them have been delivered, 11,000 of the modified Enfields (now known as the U.S. Model of 1917).

Asked whether a supply of rifles was now assured to the Army General Crozier replied that a stroke of the pen would call into the Service 10,000,000 men, and that it would not be possible to supply them at once, but that there was little doubt that any army that would probably be raised could be supplied adequately with rifles. He informed the committee that the companies were not making as many rifles now per day as when they were running at full blast for the Allies because they had lost so many of their skilled operatives. In order to keep some of the highly skilled men and inspectors during the slacking off time of the change of the types produced the Government had paid some of these men to keep them on their jobs; and he considered that money well spent. Other factors of delay were difficulty in obtaining all the steel they needed and all the wooden gunstocks. Our cartridges fit no other rifle used by the Allies.

It was decided when the British and French commissions were here last summer that the U.S. troops should enter the sectors held by the French, and they were not to operate with the British; this, the testimony brought out, was one reason why no advantage would follow the adoption of the identical rifle the British was using. It is true that one officer was radically opposed to the delay in adopting the new rifles instead of the unchanged Enfield, since the men would be hindered in target practice, which they could not get with the Krags, but General Crozier believed that most of the officers approved the change. The cost of the change was not inordinate;

and was more than offset by retaining in the Service the half million or more of the Springfields and the 100,000,000 or more standard cartridges on hand. The machine guns use the same cartridges as the military rifle, and for them in particular a great advantage is found in the use of the rimless cartridge.

## SNIPERS AND SNIPING

(Continued from page 266)

munition. The snipers are assembled on the range on a windy day. Only one or two of the rifles with 'scopes are taken, and one or two men fire a few shots only, taking careful aim at 6 o'clock. Then the whole party observes how far the bullet has been carried in that wind and remembers the effects so observed for future occasions. At 200 yards the wind allowance seldom exceeds 6 inches, but 3 or 4 inches is often required. At longer ranges the allowances are often very considerable.

The sniper must train himself to appreciate the effects of wind rather than to calculate them and he is taught to think of this allowance in minutes of angle, called "degrees" instead of in feet and inches.

If any man in the snipers' unit is known to be a good judge of wind the snipers can be taught by taking them out anywhere in the open when a wind is blowing and pointing out to them what wind allowance is required in that particular wind for a shot fired at a given range in a given direction.

For a wind blowing straight across the line of fire at the rate of 10 miles an hour, these allowances are taught to the snipers:

	Ft.	in.
200.....	0	4
300.....	0	10
400.....	1	7
500.....	2	6
600.....	3	9
700.....	5	5
800.....	7	6
900.....	10	1
1000.....	13	2

For heavier, lighter, or diagonally-blowing winds proportionately greater or less allowance is made.

The sniper must be taught the meaning and effect of drift, which in the fine work of the sniper must not be neglected. The true drift of the British snipers' rifle at 1,000 yards is at least 20 inches.

Taking the drift at 1,000 yards as 20 inches, the sniper is taught that the drift at the shorter ranges is approximately when the rifle is being sighted "dead on" at 200:



# OFFICERS AND MEN

Lives, Maybe Your Own Depend On Knowledge. Experience is a great teacher. The experiences of these capable officers as set forth in these books on Gas Attacks, Bombing, Trench Raiding, Compass, etc., certainly will be helpful and maybe save your life. No advertisement I can write would do justice to the practical knowledge imparted in them.

## "The New Platoon Instructor"

By CAPTAIN T. H. GILLMAN, C. E. F., "CANADIANS"

Containing the latest information and drill from overseas, Platoon Organization, Anti Gas Measures in the Trenches, Bombing Rifle Grenades, Lewis Guns and other Automatic Rifles, Wire Entanglements, Modern Trenches and Trench Tactics, with fifty-six sketches, colored plates and photographs.

Comments on MSS.—I can say that they are by far the most up-to-date and comprehensive collection of notes, plates, and photographs on the different subjects that I have ever seen. And I know from personal experience in France that these books will be of the greatest assistance to officers and men in preparing for active service abroad.—P. E. BOWEN, Lieut.-Colonel, O. C. 202nd "Canadians."

### PRICE

Single Vol.  
Postpaid  
**\$2.50**

Both Vols.  
Postpaid  
**\$5.00**

Full  
Flexible  
Leather  
Cover

## "MILITARY MAP READING AND INTELLIGENCE TRAINING"

By CAPTAIN C. D. A. BARBER, C. E. F., "CANADIANS"

All the new training in Military Map Reading, French, English, German and Canadian Service Maps. Training of Officers, Scouts, Snipers and Observers. Aeroplane Scouts and Photographs. Trench maps. Compasses, Protractors, Periscopes, Sniperscopes. Fixed rifles and Fixed Rifle Fire. Gas Masks. Translation German Documents. Thirty-four new plates and colored maps.

Remit by Registered Letter, Money Order or Bank Draft

**EDWARD C. McKAY**

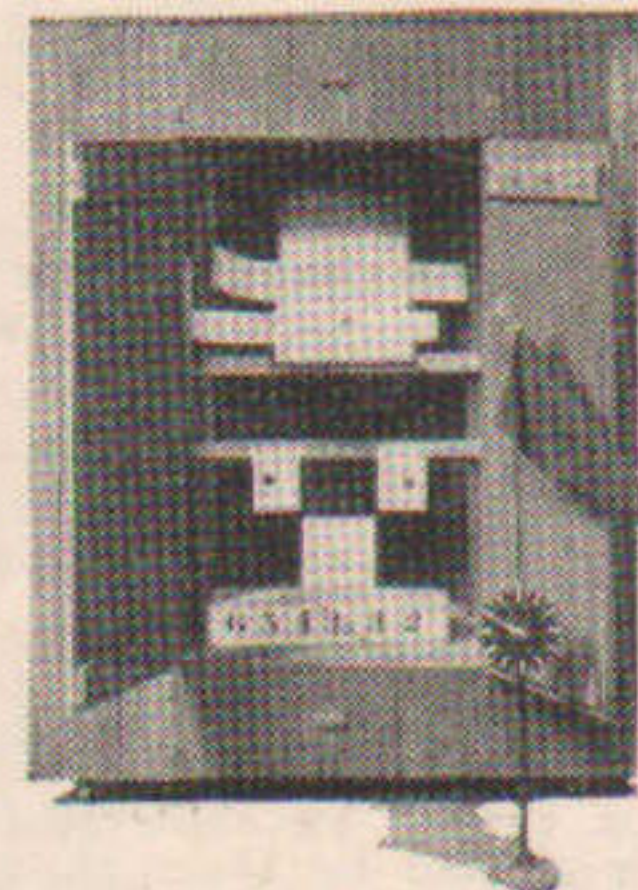
409 Swetland Building

Cleveland, Ohio

**Capital Publishers, Inc.**  
332 C Street, N. W. Washington, D. C.

*Magazine and Large  
Edition Printers*

**HIGH CLASS COLOR WORK**



## The Winder Locker Butt

EQUIPPED WITH

### The Winder System of Gallery Targets

Forms a complete and satisfactory indoor range. It can be installed in any corner of your home where a 50 foot distance can be obtained.

The Winder Locker Butt is constructed on the "safety first" principle, and the targets permit of shooting which takes into consideration problems of windage and elevation. Order through

**ARMS AND THE MAN**

1110 Woodward Bldg.

Washington, D. C.

Range	in.
300.....	1
400.....	3
500.....	5
600.....	7
700.....	9
800.....	12
900.....	15
1000.....	20

It is this matter of drift which probably accounts for the statement that a wind from the right affects the Mark VII bullet much more than a similar wind from the left.

### RELOADING FOR THE .30 SPRINGFIELD

(Continued from page 264)

watch in reloading and in using reloaded ammunition.

1. Be sure that the shells will all chamber before loading a large supply of them.

2. Be certain that you are using the particular kind and amount of powder that you suppose you are using.

3. Be careful to keep reduced and full charge loads separated as once they are mixed up it is impossible to tell them apart except by the use of a pair of scales.

4. If using late issues of government primers do not load up more shells than are needed for present use for otherwise defective primers may ruin your total supply of precious ammunition.

### EXPLOSIVES INSPECTORS CONFER

For the purpose of familiarizing themselves with the details of enforcing the act recently passed by Congress regulating the manufacture, sale, distribution and use of explosives in time of war, the newly appointed State explosives inspectors are in conference in Washington.

The conference began December 19, at the Department of the Interior, with an address by Secretary Franklin K. Lane. Other speakers were Van. H. Manning, Director of the Bureau of Mines, who is charged with the enforcement of the

measure; Francis S. Peabody, designated to assist Mr. Manning in the new work; and A. Bruce Bielaski, Chief of the Division of Investigation of the Department of Justice.

The law, which went into effect on November 15, is designed to keep alien enemies or disloyalists from obtaining possession of explosives and to prevent incendiary explosions and fires, which have been frequent within the past three years. Within the past month between 4,500 and 5,000 explosives licensing agents have been appointed in various sections of the country. A large force of employees is kept busy in Washington attending to the clerical details of administration and answering the thousands of inquiries regarding the workings of the new legislation.

Old Farmer (to soldier son just returned from the front)—"Well, Dick, what be these tanks like that there's so much talk about?"

Son—"Why, they're just wobbling thing-amabobs, full o' what-you-may-call-'ems, and they blaze away like billyo!"

Old Farmer—"Ay, I heard they was wonderful things, but I never could get any details afore."—*Tit-Bits.*



# Machine Gun Fire Control

By CAPT. GLENN F. WILHELM, 4th U. S. Infantry

A complete text book fully illustrated, of the use of the mil system in the control of machine gun fire with particular reference to modern trench warfare methods.

For beginners as well as experts. All terms are fully defined and illustrated. Tells how to calculate ranges and elevations from contoured maps for indirect fire. Valuable tables are in the book to be found in no other publication.

Do you know how to elevate and direct your machine gun in order to safely fire over your own troops at an invisible enemy trench over a hill?

Do you know what elevation and direction to use on your machine gun in order that you may fire over your own front line trenches and search with long range fire enemy supply dumps and communications on the reverse slope of a hill?

This book tells you how.

## THE MILOMETER OR BALLISTIC COMPUTING SLIDE RULE

Have you a natural dislike for mathematical data required for indirect fire? If so, you need this book which is furnished with a most ingenious fire control slide rule that will mechanically figure ranges, measure angles, determine widths, calculate any sight setting or elevation for direct fire, indirect fire, searching fire, combined sights, overhead fire, barrage fire, night firing, etc., and determine a manner of fire control and map problems.

Will do all any mil scale will do and more.

Will do all any fire control computing slide rule will do and more.

The milometer is constructed on the usual rectangular slide rule design and is simple in appearance and operation.

### EXCLUSIVE FEATURES

Common or Mannheim style of slide rule similar to majority of slide rules.

Mil and trajectory scales are on the same side of rule.

Direct reading scales for angles of departure and angles of fall.

Six inch scale in inches and tenths of inches.

Twelve inch scale in inches and sixteenths inches.

Fifteen centimeter scale in millimeters.

Least reading on mil scale is two mils, by estimation one mil.

Rectangular protractor reading to one degree.

Fourteen formulas for range, mil scale, and indirect fire.

Mechanically converts metric units to English and vice versa, with the conversion indexes on the rule.

Made of heavy white celluloid. Graduations cannot be obliterated by wear or soiling as the face of the rule is protected by transparent celluloid.

Each rule is equipped with a catgut cord conveniently located for use with either the mil scale, the protractor, or as a slope board.

Price \$2.50, includes Slide Rule

Price \$1.75 for Book or Rule separate

Remit by Registered Letter, Money Order or Bank Draft.

**EDWARD C. MCKAY**

409 Swetland Bldg.

Cleveland, Ohio

# Are You Reloading



Send Us the Name and Caliber of Your Rifle

RIFLE SMOKELESS DIVISION

**E. I. DUPONT DENEMOURS & COMPANY**

WILMINGTON, DEL.

## MORE ABOUT THE REAL "OLD TIMERS"

(Concluded from page 267)

Walnut Hill, two scores on the Creedmoor target of 25 each.

October 11, 1884, Fall Meeting, Walnut Hill, Creedmoor target, 25, and another score on the same day and same target of 25.

September 18, 1884, at Lawrence, Mass., Creedmoor target, 50, and Decimal target, 88.

May 30, 1885, during the Herald Cup Match, at Walnut Hill, Creedmoor target, 35.

In addition to his many perfect scores, Jewell made many which were notable for their excellence.

At Dover, New Hampshire, on April 7, 1882, he won first prize in the All-comers' Match.

At Walnut Hill, October 16, 1880, shooting off-hand on the Creedmoor target, he made 49 out of 50, which was the highest individual score in a team match between the Massachusetts Rifle Association and the Rod and Gun Club.

A score of 190 out of a possible 210 won the Decimal Match at the Walnut Hill Spring Meeting in June, 1882, for Jewell, and in August of the same year, during a team match at Gardner, Mass., when the Massachusetts Rifle Association shot against the Gardener Rifle Club, he made a score of 100 out of a possible 120 on the Gardner Ring target. This target had a bull containing four rings, counting 9, 10, 11 and 12, the "twelve" being only two inches in diameter.

An excellent illustration of the steadiness of Jewell's shooting was shown in his performance at the Spring Meeting of the Massachusetts Rifle Association in 1885. The meeting ran over three days, but Jewell was present only on the last day. During the day he fired 104 shots, the first two being sighting shots on bull's-eye tickets. The total for the first 50 shots was 234 out of a possible 250; the second 50, 240 out of a possible 250. The scores ran in seven-shot strings, but to show the average shooting the following record is made in 10-shot strings:

5	5	5	5	4	5	5	5	5	5-49
4	5	5	4	5	5	4	5	4	5-46
5	5	4	5	5	4	4	5	4	4-45
5	5	4	4	5	4	5	5	5	4-46
5	5	5	4	5	5	5	4	5	5-48
5	4	5	5	5	5	5	5	5	4-48
4	5	5	5	5	5	5	5	5	5-49
5	5	5	5	4	4	4	5	5	5-47
5	4	5	5	5	4	5	5	5	5-48
5	5	4	5	4	5	5	5	5	5-48
5	4	5	5						

The Halifax disaster brings to mind that in 1769 the square tower of Brescia, containing 160,000 pounds of powder, went up in the air, demolishing nearly a thousand houses and killing or wounding 800 persons. During the siege of Almedia, Spain, a magazine with 150,000 pounds of explosives blew up, killed and wounded 500 people and demolished three-fourths of the town. And in 1840 the combined British and Turkish fleets exploded a powder depot within the lines of the defenses of St. Jean d'Acre, which put 1,600 soldiers out of business.

But two of these were directly incident to war.—John C. Stiles, in *The Army and Navy Journal*.



# Off Hand From the Clubs

## In Defense of The Army Colt

By W. M. PUGH

IT IS good to read in a recent number what Captain Tinney has to say about the Colt .45 Automatic, as opposed to some of the published objections of Mr. Montagu Sterling in criticism of this pistol.

If ever there was a worthy weapon put on the market, it is seen in the Colt Automatic, Model 1911; at least, that is the opinion of the writer and some four or five of his best-known fellow shooters, who have used the pistol freely with loads and reloads for four full years.

As an instance of the enduring qualities of the arm and its free working, the experience of one of these men, now truly told, is deserving of note. His testimony would be that after shooting some twelve hundred rounds of metal-jacketed ammunition through this gun, he began to reload for it and kept account of his bullets as moulded and reloaded. According to his notes and supported by others who saw most of his firings, in a space of four years he discharged forty-eight hundred and odd shots from this pistol, which with the full metal-jacket cartridges fired would give an actual firing record of some six thousand shots. Then, his business time being much in demand, with consequent temporary abandonment of the shooting game, he sold this pistol for just one dollar and a half less than its new, first price. So well had he cared for it, inside and outside, that he made the sale to one who is well informed on arms and knew this particular gun well.

During these trials no trouble was ever experienced with the functioning of the pistol, the owner having noticed from his first efforts that the shells for reloads needed some little attention at the muzzle, the mouth being a bit dented at each ejection, compelling the muzzle sizer's use. Doing this, the loads rattled from the magazine with the regularity of a finely adjusted exhaust on the best automobile made.

Another word on this matter of functioning is, that several of us divided one afternoon on the purchase of a box of .45 metal jackets, and we got out of the fifty cartridges just twenty-one barks. Divided among four different pistols this looked bad, and on investigation found it due to bad shells, they being so soft that the extractor and ejector of the pistol slipped; this was no fault of the arms used, but of the ammunition; and speaking of this ammunition matter, it may here be said that cartridges made the past year or so for several makes of arms and from different manufacturing companies, have shown many instances of loose manufacturing and inspection methods; this however is another story.

Of the other .45 auto pistols owned and used in our crowd, not one has been shot less than two thousand times, with proportion of about 75 per cent of reloads, yet no one has had trouble in functioning except the one reported box of faulty ammunition.

Next point is accuracy divided into slow and rapid-fire, and in this those now shooting the Colt .45 auto find it at slow fire to shoot with the best target revolver up to twenty-five yards and at rapid-fire, any distance, to outshoot revolvers hitherto used; beyond that distance some uncertainty is found—or rather beginning at about fifty yards range the targets fired do not seem to give such regular distribution and grouping as is given by the

best target revolvers. We have all noticed this and talked it over together, settling down to the fact that the short sighting base of the auto pistol is the responsible factor, and yet with this possible loss of long distance accuracy all who have owned and regularly used the Colt .45 auto pistol say that if ever they had the misfortune to be called into a gun fight, their pick of one hand arms would by all odds be the Colt .45 auto, and this opinion is given after years of familiarity with revolvers of all makes and calibers, including the Frontier Colt .45.

Coming back to the matter of long distance accuracy, news is out down this way, that a Mr. Reissing has no trouble in making his regular percentage at fifty and more yards with his Colt .45 auto, and also there be others; now would some of these gentlemen tell us their dope. Try as we may, not one can quite come up to his old-time revolver fifty-yard record with his Colt .45 auto; yet at twenty-five yards or less can beat his old-time shooting with his new automatic, either quick or slow fire.

The Colt Automatic .45 must be cleaned and kept clean, differing in this respect from no other weapon, and it is a matter of perhaps not over five minutes to dismount, clean and assemble the .45 auto, it having only the one barrel and no chambers and cylinder bushings to scrape and oil; in cold weather, or rather very cold weather, it is best to wipe the slide grooves and bearings free of oil and rub with graphite; so treated the arm will function in the coldest spells, either with full loads or reloads.

Those who are disposed to doubt what is above written, should talk to some of the boys back from Mexico if they would have good news about this fine old automatic .45 Colt; however, it is hard to find one of these border boys, most of them have gone "Over There" to give Fritz a dose from the fast functioning Colt .45 automatic.

### Here's a Good Suggestion

From P. L. Johnson, of the Liberty Rifle Club, Pittsburg, Pa., comes a timely and sane suggestion. He urges that one of the best ways in which to encourage practice with the .22-calibre rifle is for the government to distribute new small-bore barrels. Incidentally he gives some interesting news concerning the Liberty Club. He says:

"The Liberty Rifle Club is in flourishing financial condition, and has a very good supply of fixed ammunition; also enough reloading material on hand to help perceptibly in the outlook for next year.

"While little has been done in qualifying, on account of only having a 200-yard range, very satisfactory progress has been made as to our own improvement in shooting.

"About three weeks ago, our target and everything connected with it was destroyed by fire. A case of deliberate vandalism.

"We had a very satisfactory outfit. Well made and operated to our own satisfaction.

"The chances for an indoor range are exceedingly poor. Any possible situation is either beyond our financial ability or not to be leased on any definite time; and we have been refused existing and unemployed spaces that are not in use, by both the municipal authorities and State officers.

"The city officials reason was 'Got to let everybody have the same privileges, if we allow you,' and I really think that the Guard officials were chary on account of the almost certain ill feeling caused by likely superiority of civilians over their men.

And the Guard officers have their troubles, anyway.

"I would like to suggest that the easiest way to supply .22-caliber rifles for shooters would be to furnish barrels only. There are thousands of good single shot rifles lying idle that could be made available by the insertion in them of good .22 barrels.

"Any gunsmith or machinist could fit them, and if barrels were put out at somewhere around four or five dollars, such guns would be much more widely used than if it cost twenty dollars and upward for a gun.

"Even if there was much opportunity to have complete rifles manufactured under the existing state of affairs.

"It is practically impossible to even obtain material for barrels by a private individual. I know that I cannot.

"As to using the .22: a really good .22 barrel will do surprising work at 200 yards, when no wind is blowing. I feel confident that such a gun can be expected to stay in a four-inch circle at the distance.

"And I know of one .22 that I sold lately, whose owner tried it out to the extent of ten shots. As the marker showed them, four inches was ample. And it was a .22 short. This was witnessed sufficiently to be proved.

### Another Squirrel Load

Editor ARMS AND THE MAN:

The article on "Tips on Squirrel Shooting," by Mr. Landis, in the issue for December 15th, is very interesting. However, to my way of thinking his load in a 25-caliber rifle is too heavy. I find the Stevens 25 rim-fire rifle and cartridge about right. Have tried the 25 rim-fire hollow point bullet, but quit as it left very little of the squirrel. I am not trying to start a discussion, but simply giving my own experience.

Respectfully,

A. L. MCGOUGH, M. D.

Detroit, Michigan.

### INQUIRIES OF GENERAL INTEREST

In this column will appear excerpts from requests for information and for official interpretations, made to the National Rifle Association, the replies to which may be of a generally informative nature.

Q. What are the approximate ballistics of the new-model army revolver—the one which was obtained by modifying the old army-type revolver to shoot .45-calibre automatic ammunition?

A. The only tests which have so far been reported showed that the Smith & Wesson type has a velocity of 799 feet a second at 30 feet, and that in this test penetration of 7½ pine boards ⅞ inch thick was obtained.

Q. In providing a uniform for a rifle club, would the use of a rifle-green collar on the officers' blouses and a green hat cord for privates constitute a sufficient difference to make the use of uniforms otherwise in army style permissible?

A. The plan suggested would probably give the desired distinction. It is suggested that a more satisfactory distinction, and one which would give a better finish than a solid green collar, would be a band of rifle green about ¼ of an inch wide around the base of the collar.



Q. Please tell me the best gun and ammunition to use in hunting rabbits, partridge, duck, etc.?

A. For all small game or ducks a 12 gauge shotgun is most generally used. A good load for quail is 3 drams smokeless powder,  $1\frac{1}{8}$  oz. of No. 7 $\frac{1}{2}$ , 8 or 9 shot. For wood-cock and snipe,  $2\frac{3}{4}$  drams of powder and  $1\frac{1}{8}$  oz. of No. 9 or 10 shot. For ruffed grouse and partridge, 3 drams of powder and  $1\frac{1}{8}$  oz. of No. 6, 7 or 7 $\frac{1}{2}$  shot. For rabbits and squirrel, 3 drams powder and  $1\frac{1}{8}$  oz. of No. 6 or 7 shot. For ducks,  $3\frac{1}{4}$  drams powder and  $1\frac{1}{4}$  oz. of No. 4, 5 and 6 shot. Three drams of powder to  $1\frac{1}{8}$  oz. of No. 4, 5 and 6 shot is also a good load for duck shooting.

Q. Some years ago there was much discussion in the sporting monthlies on ventilated barrels for firearms. Will you tell me what was the outcome of this discussion?

A. The term "ventilated" was applied to a system invented by Perry E. Kent of Utica, N. Y., consisting of bored holes in the barrel of rifles near the muzzle. The inventor claimed that by this process the gas partly escaped through the holes, which relieved the great pressure and spread of gas around the bullet as it left the barrel, thus causing greater accuracy and increased penetration. The discussion died a natural death and nothing further has appeared on the subject.

Q. What is a good lubricant to use on high-power jacketed bullets in the Krag or Springfield rifles? Does the use of grease prevent erosion and wear on the barrel? Also, does the sling help in rifle shooting?

A. A heavy grease employed for automobiles and machinery is most generally used. Completely cover the bullet with the grease, but it is just as well not to allow any of the grease to reach the shell. The use of grease most certainly eliminates to a great extent erosion and wear on the barrel. The sling is a great aid in shooting, but as in everything else it must be used properly. The pressure on the sling must be on the arm between the elbow and shoulder. There should not be any tension where the hand or fingers meet the stock or forearm of the rifle. Steady pressure for each shot is necessary, otherwise there will be varying elevations.

Q. In match shooting under the rules of the United States Revolver Association, what trigger pull is required on the different arms eligible for these competitions?

A. For the target pistol the minimum pull is 2 pounds; military revolver or pistol, 4 pounds; target revolver,  $2\frac{1}{2}$  pounds; pocket revolver, 4 pounds.

Q. Is there a device for throwing clay targets by hand, similar to the regular trap used by trapshooting clubs? If so, where can I see one of these?

A. What you refer to is undoubtedly the hand trap which is used quite extensively by trapshooting clubs, country clubs, vacation parties, week-end gatherings, etc. The hand trap is carried in stock by most sporting-goods dealers. It is a very practical device.

Q. Have any arrangements been made to supply rifle clubs with the new small-bore outdoor qualification course targets?

A. Arrangements are being made. The production of the targets has been temporarily delayed, because it has been impossible to obtain the proper kind of paper for use in this connection.

## U. S. R. A. Column

EDITOR'S NOTE: *The President of the U. S. R. A. has requested ARMS AND THE MAN to co-operate with him in an endeavor to broaden the scope of that organization and to insure for it a progressive future.*

*In his efforts to do this, ARMS AND THE MAN is thoroughly in sympathy, and will be glad to accord space in its columns for full and free discussions of suggestions which come from members of the U. S. R. A.*

*This publication, however, cannot permit itself to become a vehicle for unpleasant personalities, and the editors reserve the right to exclude any communication which might come under this head.*

C. C. CROSSMAN'S article on the U. S. R. A. in the issue of December 8, is in my humble opinion, about as timely a shake-up as I ever saw.

With opportunities galore, the Association has done exactly nothing. Some few of the local clubs no doubt have been doing what they can to help Reserve officers master the hand gun, but so far as I know, nothing in the way of organized or extensive effort has been attempted.

Yesterday our Executive Officer received word from our Secretary that the first U. S. R. A. Indoor League match was to be shot some time before Christmas and that the schedule of the clubs and matches would follow later. It seems that only eleven clubs have entered so far and that surely can not be entirely due to the war. Our little club has lost several members because of the war, too, but we are entering the match with the prospect of never having ten first-class pistol shots to make our scores with.

The winners of national medals in the out-door matches shot last September were just published in your last issue but even then those of us who go into the game with little or no chance of getting up among the winners, do not know yet where we stand and judging from past experience can look for state or honor medals about next April.

I think that friend Crossman himself is about as well qualified as any one I know to suggest remedies for the ailments he so well describes, but since he has asked for constructive criticism, I will attempt at least to make a suggestion or two.

Since the Association needs members, why not induce all local clubs to raise their dues \$1 per year and so make every club member an association member as well.

The writer is a member of several local commercial clubs and intends, just as soon as the club has a presentable range and club room, to post an invitation on the bulletin board of each of his clubs, to all Reserve Officers to come up and practice or receive additional instructions if they need it. The invitation will also be extended to any club member, not a Reserve Officer, and it seems that many new and desirable members for both the local club and the association could be procured in that way.

Publicity is a great help to any organization, and a little of it should do the U. S. R. A. a world of good.

The suggestions above are, of course, of secondary importance, when one remembers that there is still much to be done to put the affairs of the association on a sound basis that will contain among other things a proper percentage of "pep" which now seems to be entirely lacking.

I sincerely hope that there will be a well deserved enthusiastic response to Mr. Crossman's appeal and if local clubs can be of any service, The Rifle and Revolver Club of New York can be counted on in

spite of its youth and lack of size, to do its share and more.

J. A. L. MOLLER,

President.

Rifle & Revolver Club of New York,  
No. 104 East 126th St., New York,  
(Open house every Thursday evening.)

AFTER reading Captain Crossman's statement, written as chief executive of the U. S. R. A., and the editorial comment thereon, I desire to first pay a sincere compliment to the moral courage displayed by the Captain in frankly admitting there is "something rotten in Denmark" and inviting an open discussion of the matter in the hope of lifting the organization out of the rut that resulted from years of nominal management. This alone is sufficient to prove that Crossman is the "logical man" to reconstruct the U. S. R. A. and make it "a live, hustling national representative body of revolver shooters." Also I desire to frankly admit I am not yet a member and appreciate that, as an "outlander," I can be at once "non-suited and thrown out of court" by any one who might "rise to a point of order" and challenge my right to speak by inquiring why I am "horning in" on the discussion. But as one who has learned the real value of the short arm by using it for self preservation upon various regrettable occasions, and a veteran gun bug, I plead at least the "color of right" and use this means of sending Captain Crossman an open letter of appreciation, assuring him of my hearty and unqualified support.

His crisp, concise statement covers the situation with satisfying completeness, but the one big point I fail to understand is why there should be two organizations, one for the pistol and another for the rifle? These two weapons are so closely allied in construction and operation, theory and practice, that to use the former means at least a workable knowledge of the latter, and in the grim theater of application the two guns go into action side by side, the pistol being an auxiliary and useful little brother to the larger weapon.

The consolidation of the U. S. R. A. and the N. R. A. is the one practical, logical and effective means of serving the best interests of both organizations, also it would enable us to bring about concrete results with a minimum loss of time, a most vital consideration just now, when the immediate development of the nation's latent shooting ability is so sorely needed. Yet I have no desire to pile further burdens upon the already heavily laden shoulders of General Phillips, the work should be carried on as suggested, by some one ready, able and willing to devote his entire time to the job; the sort of man to whom the presence or absence of a salary is a matter of supreme inconsequence; a man who will "carry on" as a matter of pure patriotism and be big enough and patient enough to weather the storms of unjust criticisms that are sure



## Ackerman's Bureau For Sportsmen

OWNED AND CONDUCTED BY  
MORRIS ACKERMAN, for the  
PURPOSE OF OBTAINING AND  
TRANSMITTING TRUTHFUL IN-  
FORMATION TO OTHER LOVERS  
OF THE GREAT OUTDOORS.

1900 EAST SIXTH STREET

CLEVELAND, OHIO Dec. 7/17.

National Lead Comapny.

City.

Att. Mr. Chas. E. Senior, Jr.

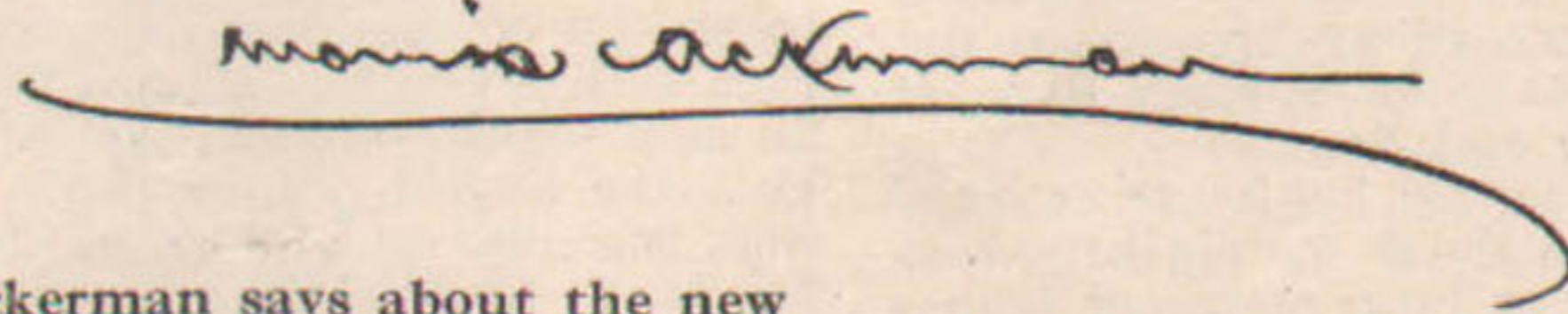
Gentlemen:-

I beg to state that I have returned home from a hunting trip in Quebec where I had an opportunity to use your new 22 long rifle cartridges.

These pills sure woke our guides and our hunting companion, Dr. E.F. Romig, of East Cleveland. The new 22s are the most shootiness little splints of lightning any of us had ever seen.

Please accept our endorsement of this new cartridge for field work. Dr. Romig is taking one hundred of them to try out at the range of the Cleveland Rifle Club, of which he is a member.

Sincerely Yours,



This is what Mr. Morris Ackerman says about the new

**(US)** .22 N. R. A. Outdoor Cartridge.

to rise about him. I admit the finding of such a chap is a rather large order, but the necessity creates the man and he is to be found if we will only search him out, and he must be found if the thing is to be done that is at once so obvious and so necessary.

In the last paragraph Crossman says: "This is an age of centralized power." That means consolidation, not reorganization, so why use half-measures? Why not do the necessary thing *when it is necessary*? Call a doctor not an undertaker. The N. R. A. has been hard hit by the war, the U. S. R. A. needs the injection of added interest and material support, not a journalistic "shot in the arm." The basic principles, objects and intentions of both organizations are identical. Why should they be separate and each work alone when they could both accomplish so much more by working as a common unit? Co-operation between individuals makes states, co-operation between states makes empires, and co-operation between empires is now needed to save the world from the maniacs of autocracy.

The mistakes of the old organization are burnt powder, the future alone concerns us; now is the time for us gun bugs to use the printed page as we never used it before. Publicity and more publicity, a constant stream of it that will extend to the newspapers and other publications that are read by the chap who doesn't know a six-gun from a siege howitzer. Tell a man a

thing often enough and he will believe it. The German Junkers brought about the present war by applying exactly that principle. And let our slogan be "GUN DOPE," rifle, pistol and shotgun, the triumverate of hot lead, each playing its part in the greatest preparedness propaganda yet instituted, even in these days of gigantic accomplishment. Drive home to our people the fact that a man who can not shoot is unworthy to be an American. That the stern code of our ancestors can alone guarantee our continued existence as a nation. Use Pop Young's formula, "red blood and gun powder." A game that will automatically create a race of fighting men who do not fear violence because they know how to meet it. And this can not be accomplished so long as we indulge in hair-splitting distinctions between weapons, and pander to the vanity and petty ambitions of the individual. All shooters are one great fraternity, the weapon used is not a material matter. Teach 'em how to shoot and leave the choice of the gun to the man.

Also there must be a qualification course laid out along the same lines now used by the riflemen and the percentage medals issued to the clay bird hunters; and this course must permit of the use of a cheap cartridge, one any man can afford to buy in sufficient quantities to permit of a substantial amount of practice; a small bore qualification course for the pistol as well as the rifle. Men love to "qualify." All

last summer I worked along those lines with the most unexpected degree of success.

But to leave generalities and "get down to brass tacks." The Essex School of Musketry has a range that is ideal for pistol shooting and a crew of bugs who firmly believe in using the "22-5-40" cartridge to the full extent of its usefulness, as most men get shy when their shooting costs over a cent a shot, and if Captain Crossman will accept us, we will be mighty glad to come in as an organization, as we are going to start our pistol shooting next month in any event and cold weather does not close the outdoor range we have established near Verona Lake, N. J. Also we would like to send a delegation to that meeting in January, just to sit by and listen, so we may know what is going on and how best to help during the coming year. As to publicity, we can help there too, because we have our own peculiar way of putting over our news stories and feel very friendly toward the U. S. R. A.

We patiently await orders from Captain Crossman, and he will find among us men who love all three weapons equally well, men whose sole purpose and intent is to boost the good old shootin' game in all its branches, and stand ready to do their bit and not quibble about methods and procedure.

Just as I was about to mail this the December 15th issue of ARMS AND THE MAN arrived and I note that "Tack-hole" Lee



has "beat me to it" with the same idea—affiliate with the N. R. A. This indicates that I do not stand alone in my contention, that it is the U. S. R. A.'s one way out of a serious difficulty. The suggested discussion has taken root, let it grow, but don't forget that words which do not result in action are blank ammunition, a species of "cyc wash" possessed of no practical value. I did not use the new term "camouflage," because the U. S. R. A., with all its faults, has nothing that needs to be hidden from the public eye.

ROY S. TINNEY,  
Jersey City, N. J.

#### Editor ARMS AND THE MAN:

I have noted with considerable interest the inconsequential communication of one C. C. Crossman in the latest issue of ARMS AND THE MAN. However, as long as he's asking for suggestions and inasmuch as suggesting is the best little thing I do in preference to real work, I hereby tender my own mite in that line.

The trouble with the U. S. R. A. seems to be that it is run along Bolsheviki lines, when like the blasted Russians, it needs a strong centralized and preferably honest government. Not that the present administration is not honest, but it is not centralized.

Kidding entirely aside and stating the facts as they are, the shooting game of all varieties save that in the army, is shot between wind and water. You can't buy a revolver of standard make save what happens to remain in stock, even if you've got the price and the disposition, and you can't buy ammunition for it unless you're lucky to find that size in stock and have a fat purse.

In rifle shooting the game is confined to those men who were canny enough to put aside some ammunition for a rainy day. It is now pouring cats and dogs.

Trap shooting, a purely hot-house artificial sport, is confined mostly to the old boys with either much money or little sense—or both—who can get enough fun out of ammunition at 4 cents per shot to justify staying with it.

Wherefore if you add both the rifle and the pistol game together, you don't get an awful slough of live ones. Apart, both games are likely to pass into a state of innocuous desuetude before the war is over.

I dunno how much Government aid the pistol game will get if it decided to come into the rifle fold and affiliate with the N. R. A. I suspect that if the Government aid is no more than the encouragement now given to civilian riflemen to get into the service as instructors, which same consists in the War Department applying to arms companies for men to teach the use of the *shotgun*, then the pistol game won't profit a whole lot by such affiliation. However it will profit by the organization of the N. R. A. by what financial strength is possessed thereby, by the salaried and competent pilot of this organization and by the quasi-official standing the N. R. A. has in Government circles.

Looking ahead, if this war lasts another year, I cannot see what will prevent the U. S. R. A. from disappearing into thin air merely from lack of support. We have lost half of the members of this rifle club, one of the oldest and strongest in this country. Sixteen of whom we know, have gone into the service. The others have fallen by the way-side, overcome either by the high cost of living, or by the impossibility of obtaining ammunition. This is typical of many of the clubs in the country. Wherefore it is also typical of the U. S. R. A., and we haven't even gotten into the war.

This being the case, to prevent the disappearance of the Association, I can see no other solution but affiliation with the National Rifle Association. The details are obviously for sober discussion. Whether the affairs should be handled by a sub-committee of the

**SAVE YOUR FACE  
OIL YOUR RAZOR**



Rust causes razor dullness. 3-in-One absolutely prevents rust on the minute "teeth" of every razor blade. Always do this before and after shaving: Draw blade between thumb and forefinger moistened with a little 3-in-One. If an "ordinary" razor, oil strop, too. Then strop and have the most luxurious shave of all your life. Oil blade again before putting away.

3-in-One is sold everywhere in 3 size bottles: Trial size, 15c; 3-oz., 25c; 8-oz., (half pint) 1.00 Also in Handy Oil Cans, 25c.

**FREE**—Generous sample and scientific "Razor Sealer" cream.

**3-IN-ONE OIL COMPANY**  
165 AKR. Broadway, New York

N. R. A. of which Secretary Phillips would be a member, or just how the interests of the pistol shooters should be protected, I do not know. I do know, by the way, that the archaic and misleading name of United States Revolver Association should be abandoned, because with shooting confined chiefly to either the .22 pistol or the Government arms, the revolver will play a minor part. Also as the word "Pistol" includes every sort of handgun including the revolver or revolving pistol, there is need for a change of name in the midst of other changes.

In the past the officers of the Association have been "selected" from the Arctic Circle to the tip of Florida, if not clear down to Panama. This might have tickled the vanity of those selected and those in geographical juxtaposition with them, but it didn't make for efficient handling of Association affairs any more than electing a Congress from gentlemen restrained in jail from changing their locations, would benefit our National Government. Of course there have been times when even such a Congress as this would have been an improvement on what we had—but let this go. The Executive Committee didn't execute, that was the weak point of the handling of the U. S. R. A.

As I am informed by those attending annual meetings, the secretary appeared camouflaged under a bundle of proxies—signed but unfilled otherwise proxies—that would choke several cows. That's all there was to it, so far as power went. *There is no implication that the secretary voted them wrongfully*—but the process was sure wrong.

At the present time matters of much importance to the Association must be discussed by the Executive Committee now in office or by the Executive Committee to be elected, at the annual meeting in January. You can't handle such things by long distance correspondence either by members or by officers.

I do know that for the sake of expediency and efficiency I for one can worry along without the geographical compliment of having a California pistol shot on said committee, if the committee as elected, can be so arranged with reference to place of residence that it can get together and thrash out the matters for it to discuss.

Wherefore I suggest here and now that every member of the U. S. R. A. fill out a ballot—not a proxy—with his vote for members of the committee for 1918, let the said committee, on being elected, consider the matter of the election of the secretary or business manager, if the by-laws or constitution permit the Executive Committee to elect a secretary. If the association is going to merge with the National Rifle Association, then officers are superfluous, particularly a secretary or business manager.

For the sake of getting something done at the annual meeting, and of having the interests of the members represented, I suggest that the following men be placed on the ballots, as the next Executive Committee:

President, C. C. Crossman; first vice-president, A. C. Hurlburt, Hartford, Conn.; second vice-president, Gen. F. H. Phillips, Wash-

ington, D. C.; third vice-president, F. J. Kahrs, New York City; secretary, G. C. Olcott, Missouri.

I note that the Executive Committee of the U. S. R. A. has five vice-presidents, in which case two additional men should be placed on the ballot. Such men as A. P. Lane, New York, Dr. J. H. Snook of Ohio, R. H. Sayre, New York, or L. M. Rumsey, Missouri, would line up well with the others suggested.

There is no excuse for such a committee failing to get together—I believe they will all be present at the annual meeting in New York City, and would be so available for an immediate session.

Also in the matter of the form of ballot: To some of the members, before the annual meeting last year there was sent, I am informed, the following:

"Date \_\_\_\_\_"

"We, the undersigned members in good standing of the United States Revolver Association, desire that our votes be cast for the following officers for said Association for the year 1917.

"President, —; first vice-president, —; second vice-president, —; third vice-president, —; fourth vice-president, —; fifth vice-president, —; secretary-treasurer, —.

"I hereby appoint J. B. Crabtree our proxy and authorize him to vote for us at the annual meeting of the United States Revolver Association January 15th, 1917, for the above-named officers and upon all other matters that may be brought before said meeting or any adjournment thereof.

"Signed \_\_\_\_\_"

Blanks sent to most individual members were different in form, and did not contain Mr. Crabtree's name as proxy. However, this form quoted above seems quite legal and I see no reason for departing from it.

Therefore I suggest that any member of the U. S. R. A. interested in its future write out such a form, filling in the blanks with the names suggested or with those seeming more satisfactory, changing the plural "We" to "I," and substituting for the name of Mr. Crabtree as proxy for you, the name of any one of the men suggested as making good officers for the future, whom you feel you'd like to have act as your proxy. Better still, as a person entirely neutral and well known to the readers of ARMS AND THE MAN, I suggest that the Associate Editor of ARMS AND THE MAN be asked to vote our ballots for us, and that his name be filled in the form quoted, as proxy, if proxies are in style at the meeting. This will obviate any necessity of any man running for office being compelled to vote for himself.

The list suggested above includes nobody in California, Alaska or Panama, and consists of men known well and favorably in the shooting game. The election of the slate would put the President and Secretary in the same town, which is the only way in which efficient action can be had if the President is to be more than a mere figurehead, which role does not suit C. C. Crossman a little bit.

Then, with such committee elected, it could consider the future of the Association and the duties of the Secretary in case there is to be any occasion for the only active working member on the list.

I believe the U. S. R. A. members will recognize the desirability of having a committee that can get together, and decide immediately on the future of the Association.

If they so agree with me, then the next step is to fill out the ballots as I have suggested, with such alteration of names as they deem preferable, and send them to any one of the men named on the list as trustworthy and with the interests of the game at heart.

There is of course no time to lose, the meeting is to be held early in January.

EDWARD C. CROSSMAN,  
Secretary Los Angeles Rifle & Revolver Club.



St. Louis, Mo., Dec. 19, 1917.

Editor ARMS AND THE MAN:

This letter has been sent to clubs in the U. S. R. A. League by the St. Louis-Colonial Revolver Club.

"Referring to letter published in ARMS AND THE MAN of December 8th, reprint of which is attached hereto, and acting on the suggestions contained therein, the Colonial Revolver Club held a special meeting December 15th to discuss U. S. R. A. conditions from the standpoint of a national organization.

After much discussion in which the subject was approached from many angles, the following resolution was adopted by unanimous vote.

*Whereas*, The Colonial Revolver Club is heartily in accord with the President of the United States Revolver Association in his effort to rejuvenate the revolver game, as evidenced in his letter to ARMS AND THE MAN of December 8th, and

*Whereas*, This Club having enjoyed the confidence and friendship of similar organizations throughout the country for many years, views with alarm the prospect of having the Association disintegrate, therefore be it

*Resolved*, That a committee be appointed to formulate plans whereby this Club acting in conjunction with other affiliated organizations, can immediately take necessary steps to bring about needed reforms in the methods of management of the U. S. R. A. Be it further

*Resolved*, That the Secretary communicate with other revolver clubs and request them to refrain from taking final action or signing proxies until the report of our committee can be placed before them.

In accordance with above and for the best interest of the game, let me urge you to give the matter your earnest attention. A report from our committee will be sent you within the next two or three days, and I request that you call a meeting of your Club and place the matter before your members.

Yours very truly,

ST. LOUIS-COLONIAL REVOLVER CLUB.  
E. A. KRONDL, Secretary.

### SPORTSMANSHIP IN SHOOTING

The very foundation of sport is the competitive spirit of the contestants, be it baseball, tennis, golf or any sport, in fact, that requires a high degree of skill.

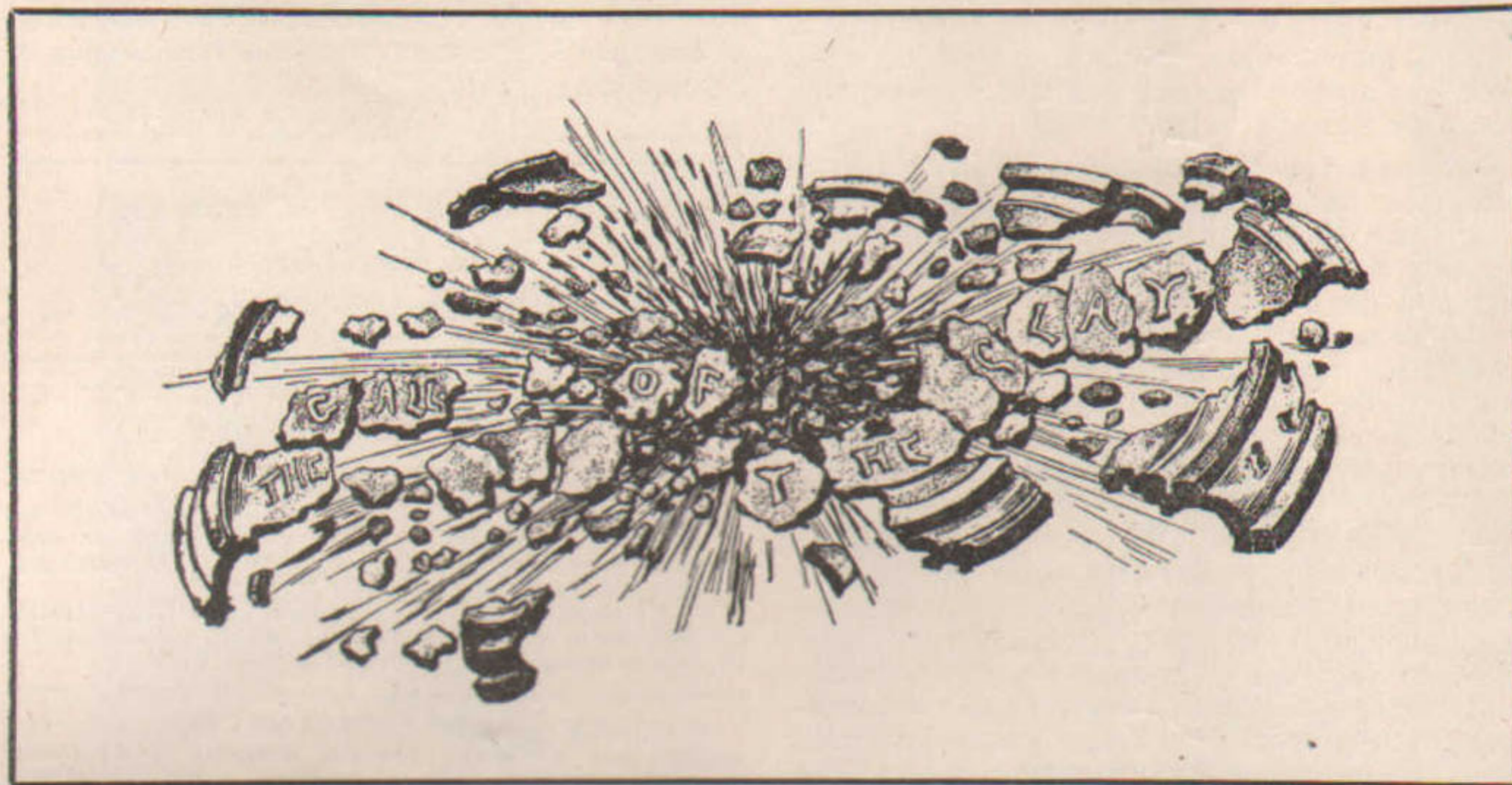
The true sportsman is defined as one who engages in field sports, a hunter of big game; a participant who competes fairly, playing the game for its own sake and not necessarily for the prize awarded. Figuratively one who bears up manfully under adverse circumstances. At one of the big national rifle shooting contests a few years ago, the writer had the good fortune to witness what he still considers to be the finest exhibition of clean sportsmanship that has ever come under his

observation. The contest was for the Military Rifle Shooting Championship of the United States, the winning of which is an honor second to none in any sport.

The marksman in question had fired several shots at the target, all of which were bull's-eyes. The scorer, whose duty it was to record each shot as fired, announced in audible tones the value and the number of the shot. On the eighth shot a bull's-eye was flashed from the pit and the scorer announced, "Captain Blank's eighth shot for record a five!" Whereupon Captain Blank, who had "spotted" the shot through his telescope, immediately protested that the shot was a four and refused to allow his score to be credited with any higher value. No one can conceive of a more genuine exhibition of clean sportsmanship.

The temptation of the sportsman in the field and of the big-game hunter to deviate from well-known and accepted rules are many and occasionally violation of these comes to light. It is encouraging to note, however, that a greater respect and a more strict observance of the State and Federal laws for the protection and propagation of game are now the rule rather than the exception.

The ambition of every sportsman should be to play the game "fair," to take no unfair advantage and to observe without mental reservation the wise rules and regulations designed for the protection of our American game and the sportsman himself.



## The Speed of Birds

By EDWARD C. CROSSMAN

THE bird hunter, particularly of the duck shooting variety, is apt to get a bit careless with his chatter of the speed of the game bird. Miles per hour are scattered around with the lavish hand that marks the apportioning of inches to the length of fish when the fishing clan foregather. Most duck hunters are persuaded that a duck coming down wind is something like two wing strokes behind. Sudden Death, but several jumps ahead of a streak of lightning in speed. A hundred miles an hour is apparently a handy figure on which to pile still more figures—or occasionally to cut down a bit.

While a gale boosting at the tail feathers of a duck that is a swift duck anyhow does add perceptibly to the speed of the bird, yet there is no record of the marvelous speed claimed for game birds under ordinary conditions.

There is used in ballistic science, an instrument called the chronograph, which in the form most used, consists of a weight held up by an electro-magnet. A spring-

impelled knife blade is held by another magnet in such fashion that if released, it springs out and marks a coating of soot first applied to the weight. First a mark is made in the soot in the weight opposite the knife.

When the bullet or charge of shot goes through a screen of wires connected with the magnet holding the weight and placed at the muzzle of the gun, the wires are cut, and the weight starts to fall. When the bullet or shot charge passes through the second screen of wires, say 90 feet from the muzzle, the cutting of the wires permits the knife to fly out and mark the falling weight. Then the distance between the marks on the weight is measured, and as heavy weights fall a short distance always at the same speed, it is easy to translate the distance between these marks into time, and so to find how long the bullet took to cross the space between the screens.

A canny British ballistic shark rigged up a pair of such screens much closer together, and made them of fine silk and wire. The

gallery had a lighted end and a dark one. Various British game birds were released back of the screens, promptly flying for the light at the end of the gallery, and so their speed was taken by the chronograph just as is the bullet.

A dozen tough "blue rock" pigeons, birds living in the rocky cliffs of England and much used for old-time live birds, recorded 33 miles an hour or 50 ft. per second for the fastest one, 26 miles an hour for the slowest one. Out in the open, flying over measured course and timed with stop watch, the fastest pigeon registered 27 miles an hour.

British pheasants, bred purposely for shooting and noted for their speed and rocketing flight, flew through the chronograph at the rate of 33.8 miles an hour, maximum. Out in the open one bird made 38 miles, or 56 ft. per second. Partridges, much like our Bob White, made from 26 to 34.5 miles an hour through the chronograph, and in the open ranged from 27.6 to 32 miles an hour, or 40 to 42 ft. per second.

The average of 12 carrier pigeon races in England and the continent, ranged from 87 to 309 miles, showed an average of 36 miles an hour. The fastest bird flew 55 miles an hour, the slowest in all the races, but still a winner, 15 miles an hour. Doubtless the difference was due to wind force and direction.

These are the fastest birds possible to breed, and developed for winning races.

No argument is possible with the chronograph, little argument is possible with the official time taken for carrier pigeons, provided Brother pigeon didn't sit somewhere on a limb and make love to a lady pigeon instead of keeping on his way.

An interesting check on some of these gunners who know their bird was flying a hundred miles an hour because they had to lead him 'steen feet, would be to paint a duck on a long board at the end of an express train running at say 60 miles an hour, and let the gunner blaze away at the painted duck at normal duck shooting ranges to check up the speed of the painted bird, with the "lead" necessary to give the charge to hit the wild duck alleged to have gone a hundred miles per. Neither train nor long-winged honker gives a fair idea of their actual speed, because they are both large, the little bird often deceives.



### Championships Scheduled

Sportsmen's associations in thirty-seven States have chosen the cities in which the 1918 trapshooting championships will be held. Here they are:

State	City
Arizona	Phoenix
Arkansas	Texarkana
Alabama	Birmingham
Atlantic Flect	Not selected
California	San Jose
Colorado	Colorado Springs
Connecticut	not selected
Delaware	Wilmington
(a) Dist. Columbia	Baltimore, Md.
Florida	Jacksonville
Georgia	not selected
Illinois	Peoria
Iowa	Mason City
Indiana	Indianapolis
Idaho	Boise
Kansas	Dodge City
Kentucky	Latonia
Louisiana	not selected
Mississippi	Gulfport
Maine	not selected
Maryland	Baltimore
Massachusetts	not selected
Missouri	Kansas City
Michigan	not selected
Minnesota	Minneapolis
Montana	Bozeman
North Dakota	Grand Forks
North Carolina	Charlotte
New Jersey	Lakewood
New York	Rochester
(b) New Mexico	Col. Springs, Col.
New Hampshire	not selected
(c) Nevada	San Jose, Cal.
Nebraska	Fremont
Ohio	Chillicothe
Oklahoma	Sapulpa
Oregon	not selected
Pennsylvania	Lancaster
Rhode Island	not selected
South Carolina	Spartanburg
South Dakota	Sioux Falls
Tennessee	Memphis
Texas	Houston
Utah	Salt Lake City
Vermont	Morrisville
Virginia	City Point
West Virginia	Fairmont
Wyoming	Douglas
Washington	Tacoma
Wisconsin	Wausaw

(a) Affiliated with Maryland.  
(b) Affiliated with Colorado.  
(c) Affiliated with California.

### On Protection of Quail

There is one thing about feeding quail which should not be forgotten. When grain is continually placed at certain points, the birds seldom wander far from the food, and this fact is speedily grasped by fox, hawk, and prowling cat.

These rascals are also likely to establish themselves near the food, and as they don't eat grain the rest is easy to guess. The man who places food will probably, on his second or third visit, see a hawk near the place, or one of those scourages, a half-wild cat, sneaking off through the cover. He should, therefore, make it a rule to carry a gun and a couple of fat shells, and to make sure work of every freebooter.

Another excellent plan is to prepare one or more stout poles, long enough to rise well above the cover. A small bit of board, just large enough to afford a convenient point of observation for a hawk and, incidentally, to support a steel trap, should be nailed flat on one end of the pole, the trap set and fixed on it and the pole placed on end at what appears to be the best point near the food.

Hawks are given to alighting upon just such convenient perches for observations, and one or two traps so placed will do fine work during the severe weather. The poles are

## RIFLES AND REVOLVERS WILL RUST UNLESS—

**YOU USE**—Cleaning Patches for Rifles and Revolvers. Send 15 cents for Big Sample Package. Ideal Anti-Rust Ropes Saturated with Rust Preventing Oil. Sample 25 cents.

THE IDEAL CHEMICAL COMPANY.

26 McLEAN STREET, WILKES-BARRE, PA.

easily lowered for the resetting of the traps, and what little trouble the process entails is confined to the initial arrangements. If they are set in cover which offers too many natural handy perches, a few strokes with an ax and a little knocking down of dead stuff will remedy the difficulty.

The pole and trap should form the most commanding perch from which a hawk could study the cover, and if well placed is very sure. Such a trap is always ready, save when a victim is fast in it; it is out of the way and also liable to nab a great horned owl now and then, which same is no great sin.

### FANCY SHOOTING

In order to become proficient in marksmanship it is necessary to practice, then practice some more, and take advantage of every thing that might help one to better shooting. Some men are natural born shots, while others strive for years and then only become mediocre.

The late Buffalo Bill was a great marksman because he was quick on the trigger. He was what we might term a "Natural Gun Pointer," that is, one who points a gun as accurately and instinctively as the finger. It takes practice and years of it to become expert as a natural gun pointer, but like everything else, once you master the trick you will wonder why you ever thought it hard at all.

Although she has not appeared in the lime-light for many years, it is hard for us to forget the wonderful stunts of that clever little woman, Annie Oakley, the idol of the small boy and the older folks alike. In our mind's eye we can still see her dash into the arena astride her favorite horse and perform almost unbelievable feats of marksmanship under most difficult conditions, and yet with apparent ease and utter absence of excitement. And so it was with Johnny Baker and many more who thrilled us in days gone by.

The elements which enter into the making of an expert marksman are not many, but they are important. For instance, good eyesight is indispensable, for unless the eye see accurately and clearly, all other talent is of no consequence whatever. Contrary to the general belief, a nervous temperament is a handicap rather than a help. It is true that the mind, the eye, and the nerves co-ordinate, but they must do it intelligently and deliberately, yet instantly. Every movement must be smooth and as sure in action as a well-oiled piece of machinery.

In order to become proficient in fancy shooting, such as breaking marbles and other small objects thrown into the air, a .22-calibre repeating rifle, chambered for the .22 short cartridge, should be selected for the first lesson. Whenever a firearm is used "Safety" is the first consideration. The tiny .22 bullet is just as deadly as any of its larger brothers and proper precaution must be taken before shooting at the mark to be sure no one is in the line of fire.

For the first lesson it is best that some one throw the objects for the shooter to hit. Any kind of tin can makes a good target, as they offer fair marks and are light enough to be jarred perceptibly when the bullet strikes. The proper time to press the trigger is when the object has reached the top of its flight and is ready to descend. But if it is desired to fire while it is still mounting upward, you must lead it just enough for the bullet to catch up with it after the eye has signalled the trigger finger to fire. And the same rule follows for the falling object.

The size of the target to shoot at depends

upon the skill of the pupil. This may be determined by shooting quickly at ten or fifteen targets. If all shots are hits it is safe to assume that a smaller target is needed, and so this rule may be followed until finally the empty cartridge shells offer a fair mark as they are ejected from the rifle after each shot.

It is well to remember that the rifle must be held properly at all times. It should be grasped firmly but without tension. The stock should fit into the cheek the same for each shot. The rifle should move with the head or as a part of the body. Do not throw the head up when the target is thrown; let the rifle and head be as one. Do not stop the rifle while pressing the trigger; keep the target in view at all times and while pressing the trigger move with it or just ahead, as the case might be.

There are many bona fide expert fancy shots exhibiting on the stage and elsewhere, but likewise quite a few are fakers of the first water. There is a world of difference between the two. The genuine performs well and leaves the audience to judge of the merits of the act. The faker may usually be detected through his eagerness to impress the audience with almost impossible and hairbreadth shots. Happily, however, the faker is gradually disappearing and before long we may expect him to linger as a memory only.

Get the Book of the Machine Gun

POSTPAID \$2.75

Arms and The Man, Washington, D. C.

### WANTS AND FOR SALE

Each subscriber of ARMS AND THE MAN is entitled when his subscription is paid up for one year, to one free insertion of a half-inch want ad in this column.

All he needs to do is to send in the advertisement for insertion at the same time calling attention to the date when his subscription was paid.

**FIREARMS AND ANTIQUES**—Buy, sell, exchange old time and modern firearms. Antiques wanted. Stephen Van Rensselaer, 805 Madison avenue, New York City.

**WANTED**—Springfield rifle, 1903 Model, in A. No. 1 condition. Give best cash price for shipment by express, subject to inspection. Also want Bayonet for Krag rifle if in good condition. Clayton H. Waite, Bellows Falls, Vermont.

**FOR SALE**—.22 Colt Automatic in perfect condition. Only been used enough to adjust sights. Price, \$20.00. Will ship C. O. D. with examination privileges. A. L. Cushman, Cushman Electric Co., Concord, N. H.

**WANTED**—Colt, officers model; also some Luger 7.65 cartridges. **WILL SELL**—New Springfield with special chamber and scope blocks; Colt .45 automatic. Also lot of '06 Springfield ammunition. C. Vonrick, Wilkes Barre, Penn., Box 37.

**WANTED**—500 pounds of used cartridge clips, the kind issued with .30-caliber service rifle cartridges. State quantity on hand and price F. O. B. Address Hollifield Target Practice Rod Co., Middletown, N. Y.

THE ENORMOUS DEMAND FOR

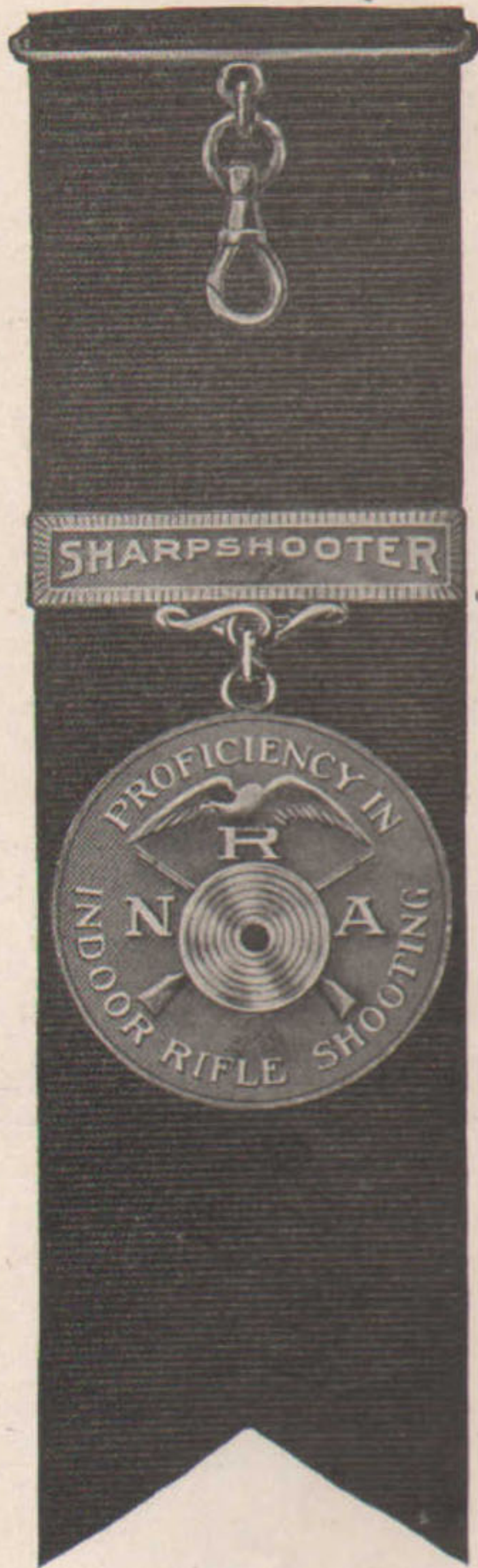
### Hoppe's Nitro Powder Solvent, No. 9

has caused us to greatly increase manufacturing facilities, and we are now located at

2314 North Eighth Street, - Philadelphia, Pa.  
FRANK A. HOPPE, Manufacturer



# Qualifying Scores Win Watch Fobs



**B**RONZE and silver-plated watch fob medals are offered by the N. R. A. for proficiency in indoor, small-bore shooting.

A score of 85 standing and 90 prone entitles the rifleman to the marksman's bronze decoration.

A score of 90 standing and 95 prone wins the sharpshooter's silver-plated decoration.

Ten shots are fired from each position, with a rifle weighing not more than 10 pounds and equipped with any sight which does not contain glass. The distances are 50 feet or 75 feet as desired.

The shooting must be done on registered targets which can be obtained at a cost of 20 cents for each target.

Address

The Secretary of the  
National Rifle Association  
of America

1108 Woodward Bldg., Washington, D. C.

LOOK ON THE TOP WAD FOR "INFALLIBLE" OR "E. C."



# HERCULES Smokeless Shotgun POWDERS

When you buy loaded shotgun shells you buy by name. You ask for your favorite make and see to it that you get it.

But if this is all you do you omit an important detail. You overlook the matter of powder.

It is just as easy to obtain a powder with which you are familiar, a powder in which you have full confidence, as it is to obtain your favorite make of shell. You ask for the powder by name just as you ask for the shell.

Hercules Smokeless Shotgun Powders, Infallible and "E. C.", may be obtained in the standard makes of shells given at the left. The shell you shoot is among them. You can obtain a Hercules powder in that shell by asking for it when you buy.

On the top wad of every shell, and on the side of the box in which the shells are sold, is printed the name of the powder with which the shell is loaded. Look for the name when buying. See that it is either Infallible or "E. C."

These powders are of high quality and uniform quality. They give light recoil, even patterns, and high velocity. Write for a free booklet which describes them fully.



**HERCULES POWDER CO.**

1053 Market Street

Wilmington

Delaware

**Peters**

HIGH GUN  
IDEAL  
PREMIER  
TARGET

**Remington  
UMC**

ARROW  
NITRO CLUB

**SELBY LOADS**

CHALLENGE  
SUPERIOR

**US BLACK SHELLS**

AJAX  
CLIMAX

**Western**

FIELD  
RECORD

**WINCHESTER**

REPEATER  
LEADER

## IDEAL RELOADING TOOLS

Solve the Wartime Ammunition Problem  
Reloads Are Safe, Inexpensive, and Accurate

Outfits for reloading both Krag and Springfield cartridges are ready for IMMEDIATE DELIVERY.

Orders for single tools will receive the same careful and prompt attention accorded to orders for armory outfits.

Send 6 cents in stamps for Ideal Hand Book No. 26.

The Ideal Manufacturing Co.

Phineas M. Talcott

271 Meadow Street

New Haven, Conn.



**Newton High Power Rifles** Highest velocity rifles in the world. A new bolt action rifle, American made from butt plate to muzzle. Calibers .22 to .35. Velocity 3100 f.s. Price \$50.00. Newton straight line hand reloading tools.

Send stamp for descriptive circular

NEWTON ARMS CO., Inc.

74-78 East Jewett Avenue

BUFFALO, N. Y.





CLOSE GROUPING WITH THE REGULAR

*Remington*  
UMC

**.22 LONG RIFLE LESMOK CARTRIDGE**

The small bore sportsman insists that the .22 Long Rifle cartridge gives the smallest possible groups at all distances up to 250 yards.

Therefore, tests of the regular Remington UMC .22 Long Rifle Lesmok cartridge were recently made, and these proved conclusively the sterling merits of this excellent cartridge for small bore rifle shooting at all short range distances. The tests referred to consisted of firing ten targets of ten shots each from fixed rests at 200 yards distance.

The maximum measurement for any one target was 3.20 inches; the minimum 1.80 inches. The average mean radius for the entire 100 shots was 2.45 inches.

The significance of this is important. It means that the Remington UMC .22 Long Rifle Lesmok cartridge, which for years has been standard with riflemen the world over, is exceptionally accurate and dependable for all requirements of the small bore rifleman.

In order to insure a good supply of ammunition for the entire shooting season, rifle club secretaries should place their orders immediately specifying either Remington UMC .22 Short or Long Rifle Lesmok cartridges.



**The Remington Arms Union Metallic Cartridge Co., Inc.**

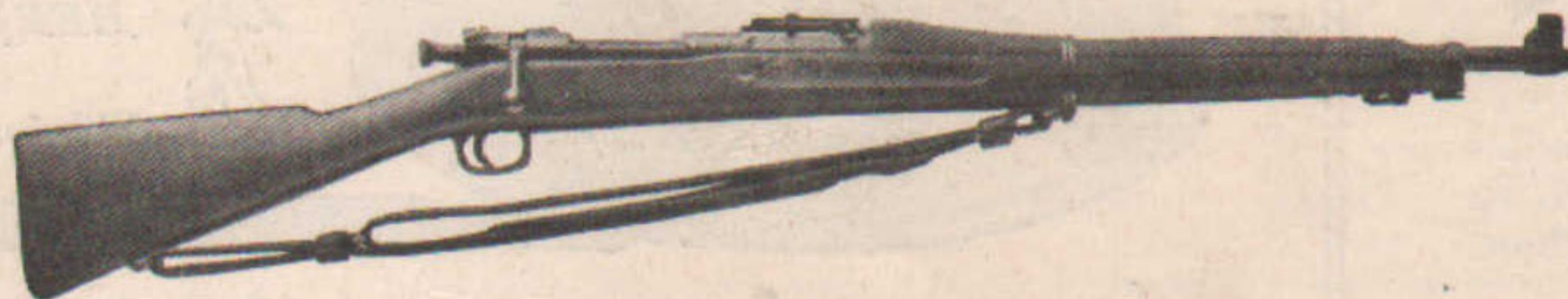
*Largest Manufacturers of Firearms and Ammunition in the World*

Woolworth Building

New York City



## A Rifleman's Instructor— The Marine Corps Score Book



For use in Army, Navy, Marine Corps, National Guard, Naval Militia, Schools and Civilian Clubs. For beginners, advanced riflemen and rifle teams. For self-instruction and for use in instructing others.

It is the boil-down of the shooting game. Its contents are the digest of range practice and experience. Everything in it is practical, easy to learn and easy to teach. It is the last word in accuracy of the art of shooting, instructing and range service.

Supply it to your Company, Club or Team. It

will save you labor. Your men will then instruct themselves. Your subordinates can teach it. It will produce results for you with the minimum of work.

Adopted by the War Department and issued by the Ordnance Department to organizations of the Army, and to the Organized Militia

Remittance should accompany order. Stamps accepted for orders less than \$1.00. 20% discount on lots of 50 or more, freight paid by purchaser.

Price, 20 Cents, Post Paid

**ARMS AND THE MAN**

WASHINGTON, D. C.