

ARMS AND
THE MAN

INDIVIDUALITY, SIGHTS AND SIGHTING
REST SHOOTING AT WALNUT HILL
MY LADY MITRAILLEUSE
THE BAYONET IN HISTORY
EDITORIALS and
LATEST NEWS OF RIFLE, REVOLVER AND
SHOTGUN, THE ARMY, THE NAVY AND
THE NATIONAL GUARD

VOL. LXIII, NO. 4



OCTOBER 20, 1917

Send Us Your Good Outdoor Targets

We have been highly gratified by the remarkable targets made with our new

US .22 N.R.A. OUTDOOR CARTRIDGE

If you make any particularly good groups with this cartridge, at ranges from 100 yards to 250 yards, we would like very much to see them.

If you haven't tried this new cartridge, we recommend that you do so. It is called **US** .22 N. R. A. Outdoor Long Rifle Lesmok. The price

is the same as an ordinary Long Rifle Cartridge and regular N. R. A. discounts apply.

Try this cartridge. It will surprise you by its accuracy at ranges up to 250 yards.

Particularly prompt shipment can be obtained by sending your order to the nearest general selling agent.

GENERAL SELLING AGENTS

National Lead Company, Boston.
National Lead Company, Cleveland.
National Lead Company, St. Louis.
National Lead & Oil Co., Pittsburgh.
James Robertson Lead Co., Baltimore.

National Lead Company, Buffalo.
National Lead Company, Cincinnati.
National Lead Company, Chicago.
United Lead Company, New York.
John T. Lewis & Bros. Co., Philadelphia.

Selby Smelting & Lead Co., San Francisco.

UNITED STATES CARTRIDGE COMPANY

2201 Trinity Building

New York

TWO Shotguns for the Price of ONE

WINCHESTER

A WINCHESTER Take-Down Repeating Shotgun with an extra interchangeable barrel can be purchased at practically the same price as a high grade double barreled gun. The Model 97 with a full choke barrel suitable for duck and trap shooting sells at \$31.00, and an extra interchangeable modified or cylinder bore barrel for field or brush shooting for \$17.00 additional, making a complete gun cost \$48.00. The same combination in the Winchester Model 12 hammerless costs \$56.00. The Model 97 is made in 12 and 16 gauges. The Model 12 is made in 12, 16 and 20 gauges. Only barrels of same gauge are interchangeable.

Winchester Repeating Shotguns won the Official Season's Trap Shooting Average eleven out of fourteen times. No other repeating shotgun ever won this great shooting honor. They are easy to load or unload, easy to take down or put together, are well made and reliable in operation. That's why the U. S. Ordnance Board endorsed them as being safe, sure, strong and simple.



Send for Large Catalogue

WINCHESTER REPEATING ARMS CO.

New Haven

Connecticut



The Official Organ of the National Rifle Association of America

Volume LXIII, No. 4

WASHINGTON, D. C., OCTOBER 20, 1917

\$3 a year. 10 cents a copy

Individuality, Sights and Sighting

By L. E. EUBANKS

THE coiner of that old paradox, said to have originated with the Dutch, "The littlest is the biggest," must have been alluding to rifle sights. Though the smallest feature of the gun, none of its parts is more important. Someone has said, "the barrel is the gun," but without sights the barrel would be more useful as a club than as an instrument to be aimed.

The subject of sights suggests so many thoughts that a writer hardly knows where to begin; it would take a mammoth book to treat the subject anything like exhaustively.

All discussions pertaining to guns and their use should be prefaced with the statement that cast iron rules are of little value. Every shooter has his own ideas, his own peculiarities of movement, his own eyes, and his own judgment of distance; and he cannot remodel these exactly to suit the requirements of a brother sportsman.

These may appear to be minor items of individuality, but when it comes to sighting a rifle they are "big little things." Mere allusion to the great difference in men's eye-sight is perhaps all that is necessary; we all know that this is a great factor in shooting. What some may not thoroughly appreciate is the effect of the gun's position at the shoulder. Without going too deeply into technicalities, we may say that the interior recoil (the backward force exerted in the gun by the forward start of the bullet) affects the aim according to the position of the stock-butt against the shoulder. This does not necessarily imply that you should hold the butt particularly high nor particularly low; but it does mean that two men may get different results from the same gun because one holds the butt high while the other holds it low. It emphasizes what I often have said before, that personal peculiarities are not in themselves prejudicial to development of skill. It is freakish variation from day to day that spoils the shooter. Of course, a graceful style, according to the approved form, is preferable; but an unorthodox position is all right if it is constant—always the same. Results are what we want. The great Russian pianist, Rubinstein, said, "Play with your nose if you will, but produce harmony and I will recognize you as a master of your instrument." The same philosophy applies to "gun music"; though grace is desirable, and thoroughly compatible with the highest efficiency.

An expert gun-maker tells us that 90 per cent of rifle users tip a gun to the side. They do not realize it, generally, but a spirit level placed on the barrel would show it. Naturally, a man's rifle has been sighted to suit his habitual position. He picks up a friend's weapon and when he fails with it, says it is poorly sighted. Each gun is correct for its owner; we cannot exactly standardize the rules of sighting.

How is the gun going to be shot? This is a vital consideration when you are selecting and placing your sights. You cannot shoot equally well offhand and with a rest,

using the same gun-sight arrangement. An ordinary rifle with a two-piece stock shoots half a foot higher at 200 yards from a rest than it does offhand. It is surprising how many shooters are uninformed about this matter of vibration, as it affects sighting. A rifle barrel rested firmly on a log cannot go downward, its vibrations are all thrown one way; consequently it lands the bullet higher. Likewise, holding it firmly against a tree or telephone post would throw the bullet to one side. Simple when one thinks it over. I understand that the Mauser type of gun shows less vibration than most American rifles, because the one-piece stock absorbs a part of the vibration.

It seems a ridiculously easy thing to alter sights to correct an ill-shooting gun. An eminent authority says: "In lining up the rifle that the bullets may strike where the sights point move the front sight in the direction in which the rifle is shooting, or in the opposite direction from which it is desired that the point of impact go. If the adjustment is made with the rear sight move the sight in the direction in which it is desired that the bullets go. If the rifle shoots high lower the rear sight, or raise the front sight. If it shoots low raise the rear sight or lower the front sight."

But how much? There's the rub. Many a gun is spoiled—and many a shooter—by constant tampering with the sights. A man should get his gun correctly sighted for the work he wants to do then let it alone, as long as he sticks to that kind of shooting. Of course, occasional confirmation is desirable; because sights are often knocked out in forest travel; and that nuisance, the gun-borrower, often feels at liberty to "re-align your sights for you" while he has the gun. I once heard a sportsman tell of how the barrel of his rifle had been sprung by a fellow who thought he would "fix" the front sight. He thought it should fit more snugly, and in driving it in injured a very fine barrel. I guess the moral is obvious: Do not lend a fine gun.

The real gun lover never uses a hammer on a sight. Use a hardwood stick when you move the sight—some-what as nail-sets are used—against the base of the sight, and strike the stick only light blows. All slot-fitting sights should be driven in from the right side of the barrel and out from the left side. This is what the gun-maker intended.

The old argument of open sights versus peeps still interests every gun man. At any gathering of sportsmen, or in any of their magazines, may be found eloquent supporters of each kind. I remember of reading recently that one of California's best shots used open sights on his favorite gun; but I happen to know that this man can shoot with any thing. He rather leans to the old school, but I am sure that he could do even better with up-to-date guns. The only reliable comparison of two sets of sights is obtained by letting the same man try both at the same time (that is, on the same occasion), on the same work. Even then the important item of habituation would play a big part; that is, he would be likely to do better work with the

sights he had more frequently used. I repeat that we cannot get very far from the fact that shooting involves worlds of individuality. Open sights undeniably are better for rapid work in the woods. The rule should be for all rifles that are to be used rather like shotguns to be fitted with open sights. Speaking generally, peep sights are more reliable and preferable for most forms of practice shooting.

The peep sight has received much undeserved criticism. Most of the people who condemn it have tried it out under unfavorable conditions or in the wrong position on the gun. I noticed one remark lately from a man who knows sights better than most of us ever will. I allude to Willis O. C. Ellis, a staunch defender of the peep, but a man who tries to see things from all sides. He suggests that the graduations on the stem of the peep sight should be cut on the part facing the hammer, so that elevation may be regulated without removing the disc. Observations of this kind are constructive and desirable, but the less we hear of prejudiced criticism the better. I think it was this same man, too, who helped many of us weak-eyed gun men by the hint to remove the disc when shooting in dim light, and use the threaded hole in the stem.

The opinion of Captain Townsend Whelan on the peep sight is of great value. He says: "The theory of the peep sight is absolutely correct. The trouble is with its location and design. That many men find difficulty in using the peep sight, and therefore condemn it, is not due to any defect in the principle, but chiefly to the fact that they have probably never seen a correctly placed and designed modern peep sight, and also to an error in the instruction for aiming with the peep that has been perpetuated for years in every manual and pamphlet on shooting. If we will go through our textbooks and rule out the words "Align the front and rear sights so that the top of the front sight appears in the middle of the peep hole," and substitute therefor the words 'see the front sight through the peep, but otherwise ignore the peep sight entirely', all difficulty in the use of the peep sight will cease."

The location of the peep on the gun makes a big difference. It is a fundamental rule of shooting that distance between the front and rear sights conduces to accuracy. This would indicate that the peep should be well back. The tang peep sight being placed behind the hammer gives this desirable distance, and lends itself well to optical adjustment. In placing a rear sight well back, it is essential, as Captain Whelan says, not to put it so near the eye as to cause injury to that

organ from the recoil when shooting from the prone position.

In actual use of the peep sight, the greatest trouble seems to come from the beginner's effort to look through a certain portion of the aperture. Experience and habituation bring the ability to "see through it yet see it not." With practice the eye automatically finds the center; it really does this instinctively, because the natural inclination is to seek the point of clearest light.

But there are times, and certain combinations of sights, that allow directing the eye to definite segments of the peep circle. The beginner who is familiarizing himself with a middle sight and its influence, will naturally experiment. A middle sight is very helpful to a shooter with weak eyes. It enables him to find his front sight more quickly, seeming to bring the latter right up to the middle sight. Another point for the middle sight is that it shields the eyes from the sun's glint on the rifle muzzle. In learning to gauge elevation and range, the middle sight enables the beginner to more accurately measure the amount of stem under the head. For practice shots at short range, he will keep his eye low in the peep; for limit shots he will look through the upper half, etc. This practice should not, and will not, prevent his "forgetting" the peep sight later, as Captain Whelan advises, when he takes up military shooting.

There is considerable difference of opinion among shooters whose hobby is "sight-ology" concerning the respective merits of the U and V. One man makes a stand for a combination—a V in the bottom of the U. Each style doubtless has certain virtues, but I think the majority of leading marksmen favor the U.

We must not forget that front sights are of vital importance. Here again we find disagreement and surprising difference in personal choice. One point that seems to have been definitely proved is that the bead should have a liberal thickness; it is claimed that our service rifle, the New Springfield, will give better results with a flat-topped blade sight of .105 inch in thickness.

All shooters of experience have learned that the color of a rifle's front sight means a great deal. When a fellow is doing the same work every day—perhaps shooting in the same gallery, same light, etc.—it may not be so important; but in the field, where some of his firing will be done in sunlight and some in shadow, an unfavorable color for the front sight may make all the difference between success and failure. Dependable work demands that highly polished beads be avoided. The ivory bead, with a con-

trasting black neck, is the all-round preference, being the least affected by changing light conditions. This matter of light must be constantly kept in mind by the man who is striving to equip his rifle with the most suitable sights. The rear sight presents its particular troubles, but it is the front sight that co-operates with the sun to play freakish tricks on our eyes. A conoidal bead is the greatest offender; the light has to strike it exactly right or one part of it is shaded. By all means, have the face of the bead flat.

HUNTING NOW POPULAR IN SPAIN

In the course of an official report on Amusements and Sports in Andalusia, Consul Wilbur T. Gracey, of Seville, recently advised the Department of Commerce that hunting is quite popular in the Seville District, that several of the prominent families are maintaining large hunting preserves where the King and the aristocracy of Spain meet at intervals during the year and do considerable shooting. He says:

"Quite a little interest is taken in hunting by all classes of the people, which result in a continual call for hunting goods. There is a hunting club in Seville, known as the Asociación Centro General de Cazadores de Sevilla y su provincia, Tetuan 23, and American manufacturers of sporting goods might well send their catalogues, etc., to this club, especially if their literature is printed in the Spanish language or is so illustrated as to be easily comprehensible to one unfamiliar with the English language.

"Pigeon shooting is exceedingly popular, and the Sociedad de Tiro a Pichón de Sevilla has an excellent clubhouse on its grounds in the outskirts of Seville. Pigeon shoots are carried on there all through the year and have become especially popular from the fact that the King is an enthusiast in this line and almost always visits the grounds and takes part in the shooting when in this city. Here will be found an opportunity for supplying goods incident to the sport. Live pigeons are used. Clay-pigeon shooting does not seem to have gained the same enthusiastic support in Spain as in other countries."

Mr. Saphead—"On my army application there is a place to tell the condition of the mind. What would you advise me to answer?"

Miss Kutting—"Leave it blank."—*Judge*.

Doctor—Your throat is in a very bad state. Have you ever tried gargling with salt water?
Skipper—Yes, I've been torpedoed six times.—*Punch*.

Rest Shooting at Walnut Hill

LITTLE, nowadays, is heard of the rest shooting which for so long was a feature of the historic competitions at Walnut Hill. With the development of the military shooting game, rest shooting was gradually relegated to the limbo where it had been preceded by the old muzzle-loading match rifles.

Today the annals of rest shooting exist only in the memories of a few "old timers," and upon the yellowed pages of ancient sporting magazines. Nevertheless this form of competition played no minor part in demonstrating the possibilities of the American rifle and rifleman.

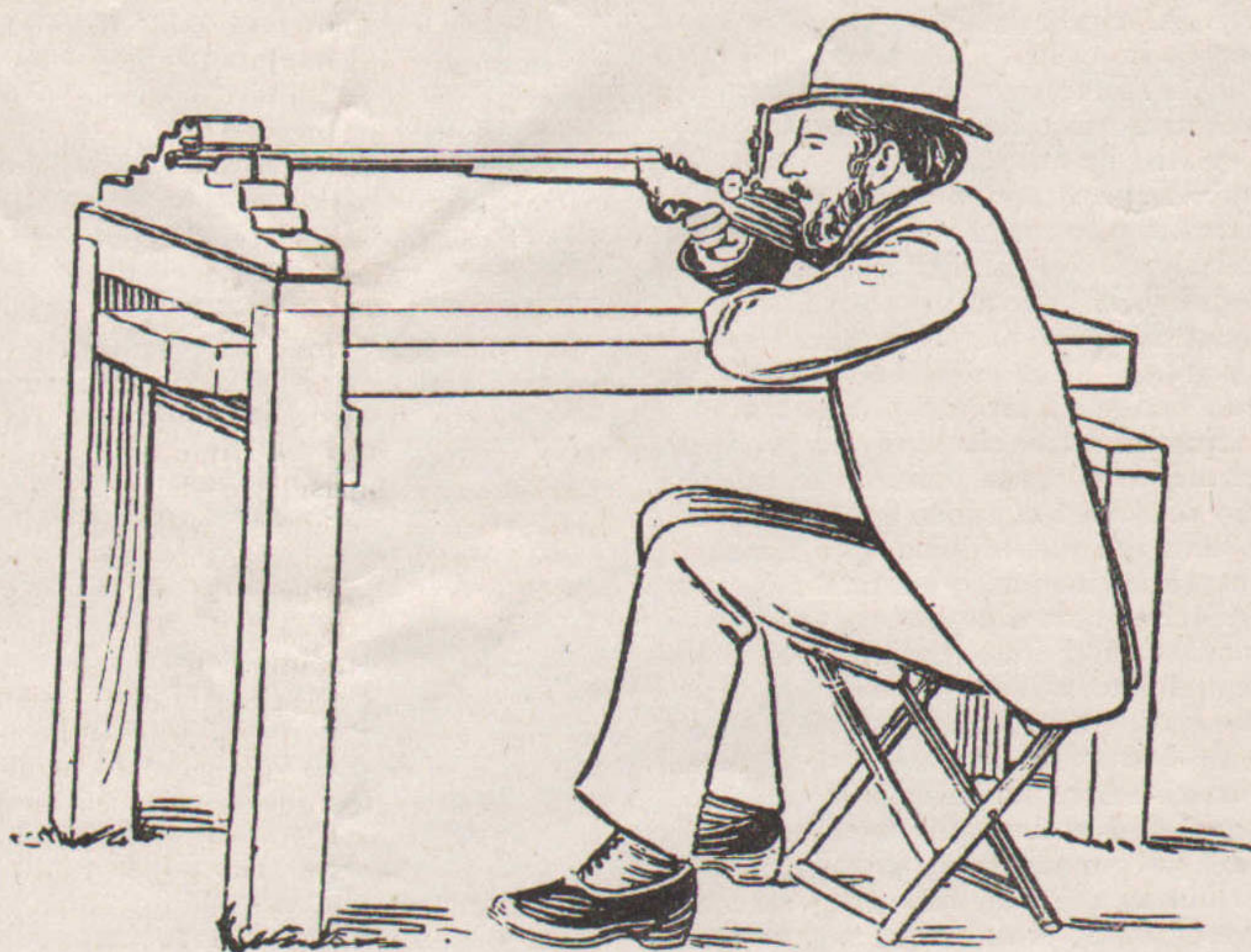
About the only time rest shooting is mentioned at present is when some seeker after data on the performances to be expected from a new rifle, rigs up a muzzle-and-elbow rest and proceeds to burn up some hundreds of rounds of ammunition, carefully doping the diagrams of his shots, and making therefrom his desired deductions, for any rifleman, old or new, will admit that when the human equation is eliminated as in the case of the machine rest, or partially eliminated, as in the case of the muzzle and elbow rest, more accurate information as to what a rifle will do under given conditions can be obtained than by simply working for off-hand scores.

This then, was the chief virtue of rest shooting: at a time when every marksman preached a doctrine of marksmanship different at least in a few phases from that of his rivals, rest shooting provided a sure means of rapidly grounding the novice in the possibilities of his chosen arm, and the treatment to be employed on widely different occasions.

From time to time, both during the height of rest shooting in the Eighties, and since then, proficient marksmen have frequently advocated rest shooting as the only proper preliminary training for the beginner, to precede all attempts at off-hand shooting.

With this style of competitive shooting, in the past have been identified many of the men who also made records in the off-hand game. The mention of rest-shooting instantly brings to mind that trio of unusually expert shots—F. J. Rabbeth, designer of the Massachusetts Decimal Target, D. L. F. Chase of the "Chase Patch," and Salem Wilder. Then there were others—among them William V. Lowe, J. N. Frye, F. H. Rideout, A. B. Small, C. H. Brown, J. R. Munroe, and Z. E. Leonard.

Rest rifle shooting differed most



The Rifle Rest as Used at Walnut Hill

essentially from every other form of competition in vogue at the time of its adoption. In the first place, the marksman fired his string while seated on a low stool, the barrel of his rifle held quite firmly in the notch of the rest, and his elbow well supported. For this reason, the old rest shooting rifles were chosen for entirely different qualities from those which recommended rifles for off-hand work. In off-hand shooting the old timers gave quite as much consideration to balance and symmetry as they did to accuracy. In rest shooting, accuracy came first, with symmetry and balance second considerations. This was principally because the elevations of a rifle are apt to be affected by resting the barrel, and it was the desire of the rest-shooters to obtain as long a barrel as possible, commensurate with a thickness which would keep its weight within the prescribed N. R. A. conditions, and in this way reduce the sensitiveness to vibration and consequent change in elevation, apparent in "resting" a thin barrel.

Rest shooting was inaugurated at Walnut Hill, Mass., in the spring of 1881, when the directors of the Massachusetts Rifle Association were seeking for some novel competitions. J. Francis is credited with having suggested the matches. The suggestion was at first met with ridicule, most of the old timers failing to understand

how men who could make nearly perfect scores off-hand could fail to hit the bull's-eye with a rest. The match, however, calling for any rifle under the rules of the N. R. A., any rest, was shot at 200 yards, and proved at once that considerable skill had to be brought into play in order to make "possibles" in this fashion.

At first the rules of the N. R. A. limited the rest rifles to a weight of 10 pounds, and the earlier rest shooting was done upon the Massachusetts Decimal Target. This target, with an 8-inch bull's-eye included 2 rings the inner being $3\frac{1}{2}$ inches in diameter and the outer, $5\frac{1}{2}$ inches in diameter, thereby favoring the men who could place their shots in a small radius.

The rests used to shoot from at first were quite crude, being nothing more than planks arranged at the proper angle, with a camp stool beside it for the shooter. Later, a more or less standard form of rest was adopted for shooting at Walnut Hill.

With rifles limited to a weight of 10 pounds, the weapons customarily used during the earlier days of rest shooting ranged from .32 to .40 calibre, but few of the exclusively rest shooters used a calibre of less than .35. The barrels ranged from 28 to 30 inches in length.

Shooting on the old Decimal Target, the records, in 1886, 10-shot possibles at 200 yards, stood:

F. J. Rabbeth, Walnut Hill, 2 perfect scores in 1882.

C. H. Brown, Walnut Hill, 2 perfect scores in 1885.

J. N. Frye, Walnut Hill, 3 perfect scores in 1885.

D. F. L. Chase, Walnut Hill, 1 perfect score in 1885.

With the adoption of the design for the Standard American Target, it was necessary to make the diameter of the inner, or 10-circle, less than in the old decimal, in order to preserve a correct ratio for the increasing size of the circles. The Standard American Target, designed for the purpose of providing an inner circle of just sufficient diameter to make possible the recording of a perfect score and yet to keep within the possibilities of the rifles of the time, instantly became a favorite with the best rifle shots, and for six months after its adoption, each of the rest-shooters of Walnut Hill strove to hang up the first possible thereon. The honor finally fell to D. L. F. Chase, after many of his rivals had registered scores of 99. Chase's possible was made June 5, 1886.

During the year following the introduction of rest shooting on the Standard American target, several new names were added to the list of rest shooters, there also appearing many names of the men who had previously established records on the Decimal target.

Between June 5, 1886, when the first possible was made on the standard American rest target, and October 30, 1886, these records on possible scores had been made:

D. F. L. Chase, Walnut Hill, perfect scores on June 5, July 5, July 24 and August 28, 1886.

J. N. Frye, Walnut Hill, perfect scores on July 5 and August 28, 1886.

F. H. Rideout, Fitchburg, Mass., perfect scores on July 10, and two on July 21, 1886.

C. H. Brown, Fitchburg, Mass., perfect scores July 22, July 28 and two on July 31, 1886.

A. B. Small, Fitchburg, Mass., perfect scores on July 22 and July 28, and two on July 31, 1886.

F. J. Rabbeth, Walnut Hill, perfect scores on August 7 and August 28, 1886.

J. R. Munroe, Walnut Hill, perfect scores on October 16 and October 30, 1886.

Double rest shooting, which was quite different from the ordinary rest shooting, was in vogue for a time. In this shooting the work was confined largely to heavy muzzle-loading telescopically sighted weapons.

William V. Lowe, who was an enthusiast of the double-rest game, at the time published this description of double-rest shooting:

"A double rest may be very simple in construction or it may be a complicated piece of mechanism. I suppose that the name 'double rest' originated from the fact that the barrel is supported at two points—one a few inches from the muzzle, the other near the breech.

"In its simplest form, the double rest simply consists of a device for resting the rifle absolutely uniformly for a number of shots. In the improved form of the machine, means are provided both to elevate and give lateral motion to the rear support, thus causing the rifle to point to any desired portion of the target.

"I will describe a double rest of the simplest construction yet which, by a little care in its use, may be made to serve a very good purpose and will enable one to prove positively the shooting qualities of his rifle.

"In the first place, a very stiff bench is required. Take two pieces of joist, 6 inches by 4 inches and about 4 feet long, sharpen one end of each, start a hole in the ground with a crow-bar and with a sledge drive the joists in line with the target, leaving about 2 feet of each sticking above the ground. On top of these securely spike a piece of plank, about 6 inches wide, 2 inches thick, and 26 inches long. The plank should project about an inch at each end beyond the posts. Now we wish two blocks in which to rest the rifle barrel. I will suppose we have a Ballard rifle with half-octagon barrel.

"Take two pieces of wood, about 1 inch by 1½ inches long. Cut a notch in one, the notch being an angle of 90 degrees so as to fit the octagon part of the barrel. Cut a half-round notch in the other piece to fit on barrel about 6 inches from muzzle, and file out bottom of notch so that the barrel will not touch there. This enables the barrel to always draw the same place in the notch. It is necessary to remove the forehand of the rifle before shooting.

"Place blocks on top of bench, lining them so that upon looking through the sights the rifle points to the middle of the target. Then fasten blocks in place in such a manner that the end of frame of rifle is against the rear block, while muzzle of rifle extends about 2 inches beyond edge of bench.

"Having all set satisfactorily, load the rifle and lay the barrel in the blocks. Carefully cock the piece and push up the rifle until the action is just in contact with the rear block. Place the right hand around wrist of stock, forefinger on trigger. Place fingers of left hand on barrel near rear support, with just sufficient pressure to steady the barrel, but be careful not to spring it, only a light pressure being required. Press trigger very carefully so as not to impart any motion

to the gun. When discharge takes place allow the rifle to recoil without restraint for a few inches. Thus continue to fire shot after shot. With a little practice you can easily tell whether the rifle is accurate or not.

"The shooter should sit on a stool of such a height that he can grasp the wrist of the stock without any effort."

(To be continued)

SIGNAL CORPS WANTS CAMERA LENSES

People of the United States are asked to help the Signal Corps of the Army get lenses enough for cameras for the fleet of observation airplanes now being built. The need is immediate and of great importance; the airplanes are the eyes of the Army and the camera lenses are the pupils of those eyes.

German lenses can no longer be bought in the open market. England met this difficulty in the earlier stages of the war by requiring lens owners to register lenses and requisitioning those needed. The Bureau of Standards of the United States Department of Commerce is now perfecting a substitute for the German "crown barium" glass used for lenses and will later be able to meet the needs, and special lenses are being designed for this work.

The situation now, however, is that, with airplanes soon to be ready for service, suitable lenses can not be bought. Hundreds are needed at once. Possessors of the required types are urged to enlist their lenses in the Army. They are asked immediately to notify the photographic division of the Signal Corps, United States Army, Mills Building Annex, Washington, D. C., of lenses of the following descriptions which they are willing to sell, stating price asked:

Tessar anastigmat lenses, made by Carl Zeiss Jena, of a working aperture of F. 3.5 or F. 4.5, from 8¼ to 20 inches focal length.

Bausch & Lomb Zeiss tessars, F. 4.5, from 8¼ to 20 inches focal length.

Voigtlander Heliar anastigmat lenses, F. 4.5, 8¼ to 24 inches focal length.

Knowledge of the rifle and all of its parts is an important part of the training given to U. S. Marines at their League Island camp, Philadelphia. At first, this proves puzzling to the recruit. During the morning inspection, recently, one of the future sea-soldiers handled his rifle poorly, and was taken to task by the officer.

"Are you acquainted with the parts of your rifle?" he asked, sternly.

"Yes, sir," the recruit replied.

"Well, where is the balance located?"

"I don't know, sir," said the Marine, glancing nervously at his rifle, "It was all here this morning."

My Lady Mitrailleuse

Unless operated by highly trained experts, the machine gun is worse than useless, but when handled by men who love and understand the arm, it becomes the most deadly weapon known

By CAPTAIN ROY S. TINNEY



Drawn by John A. Coughlin. Reproduced through the courtesy of the U. S. Marine Corps

FAITHFUL to those who love her, is My Lady Mitrailleuse,
 Of all weapons she's the born aristocrat.
 So be careful of your manners for she will not stand abuse;
 Don't misuse her or she'll simply quit you flat.
 She can speak with force and purpose; Oh! she's got a wicked tongue!
 And her voice can carry 'way beyond a mile.
 So when she joins an argument be thankful you're the one
 Behind her, not in front of her, the while.

She's by nature most exclusive and her courtiers must be
 Faithful students of her every mood and whim.
 She'll not tolerate a duffer in her chosen coterie
 And she'll not waste time in getting rid of him.
 Only men of skill and spirit are permitted in her train,
 Those who love and understand her little ways;
 Then she moves with deadly swiftiness and there's no cause to complain,
 There's no jams, or over-heating or delays.

You will find her in the vanguard, you will meet her in the rear;
 It is she who stiffens up the wavering line;
 She's a Godsend to the flankers, Lord! it's pleasant to the ear
 To hear her start a-purring just in time!
 She is worth a hundred rifles and she's mighty hard to hit;
 She's the super-gun that saves the Infantry.
 No matter where the battle swings she's there to do her bit;
 She's the one that guards the Field Artillery.



She is very unobtrusive and you never know just where
 To expect her, but her stream of scalding fire
 Comes exactly when it's needed and you realize she's there;
 She's the gun that satisfies your heart's desire,
 When the awful charge is finished and you're panting, sick and blind,
 When you know that for the moment you are done,
 It is she who re-enforces your poor, shaken, shattered line,
 And holds the ground you have so dearly won.
 She's a most exacting mistress is my Lady Mitrailleuse,
 With a temperament peculiarly her own;
 So be careful how you treat her for we have a special use
 For her service in the shell-torn fighting zone.
 And like every other woman she demands a man's whole heart,
 So mind well that your affections do not stray.
 Keep in mind that she's a Lady and she'll always do her part—
 Which is nothing more than just to save the day.

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.

THE AMERICAN IDEA AT LAST

JUDGING from the text of General Pershing's message regarding the necessity of rifle practice, the commander of the overseas forces has undertaken to preach an American doctrine of warfare based upon American ideas, and calculated not only to appeal to the American people, but to insure an American victory in an American way.

At a moment when the trend of affairs in the conduct of the war seemed to follow European ideas all too closely, General Pershing has fearlessly declared for American methods. That he possessed the ability to detect the fallacies in theories already generally accepted, and the courage to attack them, is a matter upon which the nation is to be congratulated.

History has proven that no matter what other nations can do, the United States can gain nothing of real or permanent value by trailing behind other countries, although it does not follow that the nations which have been at war for three years under hitherto undreamed-of conditions have nothing to teach us. On the contrary, their experience is of great value. Yet the fact remains that in order to get anywhere, the United States must take the experience of the Allies, thoroughly digest it, and then, in the light both of achievements and mistakes, bring to bear her own resources, applying them in a way which will result in the greatest benefit.

If the French have held their part of the great Western Front through bayonetting and bombing, their experience should be given due consideration. On the other hand, the British have won brilliant victories with the rifle. General Pershing has had ample opportunity to weigh the two methods of fighting. In addition to having General Pershing's approval, fighting with the rifle chances to be the method which appeals to Americans, by virtue of which appeal Americans seem naturally to become riflemen, and more than that it is the type of fighting which Americans do best.

Much has been said of General Pershing's message which has already resulted in a complete reversal of the army's preconceived policies regarding the necessity of rifle practice.

At last the text of the message has become public. In the light of what has followed—orders that can be counted upon to result in the training of every man as a rifleman—the mes-

sage stands out as one of the most important developments in America's preparation for active and perhaps protracted participation in the great struggle. Here is General Pershing's message, made public at Camp Wadsworth:

"Longer experience with conditions in France confirms my opinion that it is highly important that infantry soldiers should be excellent shots. Thorough instruction 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 secure areas for target ranges in France, even now when crops are off the ground. Much greater difficulty soon, when plowing begins. After ground is secured in France, considerable time will be required for troops to construct ranges and improvise target material. In theater of active operations this time should be available for intensive training with new weapons and formations.

"I therefore strongly renew my previous recommendations that all troops be given complete course in rifle practice prescribed in our firing manual before leaving the United States. Specialty of trench warfare instruction at home should not be allowed to interfere with rifle practice, nor with intensive preliminary training in our School of the Soldier, School of the Company and School of the Battalion.

"I cannot too strongly impress upon the War Department the absolute necessity of rigid insistence that all men shall be thoroughly grounded in the School of the Soldier."

It is to be hoped that while the army is putting into effect the recommendations of the men whom the President and the Secretary of War believed to be best fitted to direct the destinies of the nation on the battlefield, strict observance of the spirit as well as the letter of General Pershing's ideas will be apparent.

Up to this time, the prevalent idea seems to have been that the men of the National Army should be trained for the kind of trench fighting now going on, which does not seem to lay any particular stress upon accurate marksmanship. General Pershing's opinion that "trench warfare instruction at home should not be allowed to interfere with rifle practice" is a sound doctrine.

According to authentic reports, the War Department has selected to govern the rifle practice at the cantonments the new intensive training course, details of which were published last week in ARMS AND THE MAN. If this is done, it would seem that in one very important particular the training given the men will run contrary to General Pershing's recommendations, since the new course is based largely upon shooting from trenches.

Even if General Pershing had not advised against trench specializing, there seems to be little in the course to recommend it as a program for intensive training. Time being the essence of the problem now before the War Department, the course in question seems to embody too many changes of targets, and too many changes of range, in addition to the time lost in getting men into and out of trenches, to be a vehicle for the rapid and thorough education of green men in accurate rifle shooting.

It would be wise for the War Department to immediately establish a thoroughly up-to-the-moment school of musketry at State Camp, Florida, where shooting could be held throughout the winter, and there train a corps of competent coaches in some simple, effective course. No time would be wasted upon

construction if State Camp were chosen, and within six weeks at the most, the first crop of instructors would be ready to distribute among the sixteen cantonments, where rifle ranges should immediately be constructed.

If the War Department, perhaps, has not taken advantage of all its opportunities, no time should now be wasted in re-creation. No matter what ideas were fostered during the first months of the war as to the degree of proficiency in marksmanship the National Army would need, the fact now stands out clear and plain that *our men must be taught to shoot.*

THE ESSEX SCHOOL OF MUSKETRY

THE avowed purpose of the Essex School of Musketry which has just been put in operation near Jersey City is the production of "sergeant-instructors" for the Home Defence Units, and the introduction of the small-bore game in that locality by graphic demonstration.

Behind the school of musketry, which is a civilian enterprise, are the officers of the Verona, New Jersey, Rifle Club. In this work these men are going a step further even than other rifle clubs have done, and are pointing the way to a

broader and more useful activity than even teaching the men who are subject to the draft to shoot.

During the past two years a good many rifle clubs have discovered that a great deal can be gained by making friends with local newspapers. The Verona boys, in undertaking to establish their school of musketry, have followed this plan. It has proven highly successful.

In support of the work, they enlisted the interest of the *Caldwell Progress*. As a result of the very beneficial publicity given the project, the range was obtained and the school established. The *Progress*, however, did not stop after this had been accomplished, but branched out on a campaign to popularize rifle shooting in the West Essex, New Jersey, district. This is being done largely through a series of stories dealing with rifle shooting, prepared by Captain Roy S. Tinney for the *Progress* and distributed for simultaneous use by the *Progress* among all of the small newspapers in the many New Jersey communities. The material in these stories is interesting. It alone would sell the paper among rifle shooters. The *Progress* could be forgiven if it kept the series for exclusive publication. Therefore, all the more credit is due to this newspaper for its action in helping to give this particular bit of shooting gospel as wide a circulation as possible.

The Bayonet in History

By ALBERT KERN

NOT many years before the outbreak of the present great war, it was frequently stated that the sabre of the cavalryman and the bayonet of the foot soldier would be discarded as obsolete and of no practical use in war. Recent battles, however, abundantly prove that the bayonet is still a factor in the charge of infantry, and in repelling assaults. Machine-gun fire, bomb throwing and the use of poison gases can only precede or accompany the advance of the line when trenches are to be taken or retained.

Some account, therefore, of the history of the bayonet will not only be timely, but of substantial interest.

In ancient days the pike and spear supplemented the few missile weapons then in use, and had a reach impossible with the sword. The famous Macedonian phalanx, armed with long spears, the pilum of the Roman Legions, the Burgundian armies depended upon the ranks of spearmen, and even the native warriors of India sought to stay the advance of British infantry by long extended spears. The lance used by the knights of old, or the lancers and Uhlans, Hussars and occasional cavalry commands of more modern days, was a full sister of pike and spear held by foot soldiers. Even after the discovery of gunpowder, a squadron of infantry was not well set in the field for action unless it had pikemen on either flank. Old Cromwell understood that with his famous Ironsides.

The bayonet, then, is only a modification of the pike head and spear.

Greener, in his book on the development of guns, says that "the bayonet was the means of converting a military firearm into a pike, and so enable it to be used either as an offensive or defensive weapon, in case of its mechanism becoming disordered or through lack of ammunition, was originated in France. Some peasants of the Basque provinces, whilst on an expedition against a band of bandits, having used all their ammunition, were driven to the necessity of inserting their long knives in the mouths of their arquebuses, by means of which they routed their adversaries. This event became well known, and led to the construction in the year 1641 of the bayonette in Bayonne, a village in the south of France, from which place it took its name."

In 1649 the pike was replaced by a long, narrow blade fixed to a short wooden handle, which was inserted in the muzzle of the musket. But this prevented the firing of the arm, and the wooden end was not sufficiently stable to be effective.

In 1691 the socket bayonet was devised, and accredited to the French, who have provided more military arms devices and changes and improvements than any other nation.

Vauban, the famous engineer of King Louis XIV, caused all the French foot-soldiers to be supplied with socket bayonets, and the pike became an obsolete

weapon in France. Vauban designed the defensive works at Verdun and other forts in Belgium, now so famous in the present war.

A wonderful variety has attached to this weapon. The Brown Bess musket of old England carried a triangular bayonet with the top side flat and the other two fluted; the gun was 39½ inches in the barrel and the bayonet 17 inches long. The Enfield bayonet has all three sides fluted. The Charleville French flintlock musket was 46½ in length of barrel, and had a triangular bayonet. This gun became the model for the first American war muskets; the .69-calibre smooth-bore musket, first with flint and then with percussion system, was 42 inches in barrel length, with an 18-inch bayonet blade.

The .58-calibre Springfield percussion rifle used in the Civil War had a barrel length of 40 inches, with a bayonet blade of 18 inches, triangular in form.

The English present service rifle has a barrel length of 36 inches, with a knife bayonet of 12 inches. The United States Krag rifle has a barrel length of 30 inches, with a knife bayonet of 12 inches. The German Mauser has varied in length of barrel; with different lengths of knife bayonets.

In my collection I have one specimen of the old type of plug bayonet referred to in this article. It is 18¼ inches long in the blade, with a width of 1¼ inches. It is double-edged up to six inches from the point, and has a plain straight cross-bar or guard at base, below which is the taper wooden plug for inserting in muzzle of gun.

It is curious to note that when the

ordnance board of the War Department decided to adopt an improvement on the service Krag rifle, the Springfield, they not only shortened the barrel, but increased the length of the flat-blade bayonet to more nearly correspond with those of the old plug bayonet. The design was to so far shorten the rifle as to stock and barrel as to accommodate it to the use of the cavalry, and issued the bayonet to the foot soldier and marine guard.

The design is, in my opinion, faulty, as the weapon is rather short for bayonet work, and when the bayonet is attached to the rifle, the weight and proportion not well balanced, and the arm without the bayonet is still too long for the horseman. Of course, the excuse was to reduce the weight, but it remains the fact that the arm lacks proper length and relation to the long bayonet supplied for it.

The sabre or sword bayonets are the most interesting and peculiar forms of the "gun spear" equipment.

These differ widely in form; there are short ones, curved-bladed ones, straight-grooved types, to a length of 24 inches. The Hawkins Zouaves, of Civil War fame, had the longest ones, straight blades, brass-hilted and really effective as a hand weapon, but destroyed the balance of the gun as a rifle when seated on end of the barrel.

There are sapper sword bayonets, with upper edge cut into saw-like teeth for cutting through planking, etc.

There are trowel bayonets for digging out shallow rifle pits, and remind one of the lines about the burial of General Sir John Moore at Corunna, in Spain:

"We buried him darkly at dead of night,
The sods with our bayonets turning."

Only, the British soldiers who buried General Moore did not have trowel bayonets in those days. A broad-bladed "bolo" knife bayonet was designed for mounting on the Krag rifle soon after the Spanish-American War, but were not much in use and were tabooed by officers as more showy than useful.

History abounds with accounts of the impression made by the bayonet upon troops in actual battle.

During our Revolution the British General Gray and his detachment surprise and bayoneted the American soldiers at midnight at Paoli, near Philadelphia. General Wayne was so chagrined over this happening that he sought and obtained from Washington the command of the storming party at Stony Point, on the Hudson, and exactly at same hour when Gray cut off his men at Paoli, Wayne led his soldiers with unloaded guns up the rock hill and carried the British redoubt at the point of the bayonet. It was old Baron Von Steuben who trained the Americans in the school of

the bayonet at Valley Forge, enabling the old Maryland line at Guilford Court House, in the Carolinas, under Nathaniel Greene, to drive back the veterans of Cornwallis in a counter charge with the bayonet. At the battle of Camden the British made a decisive bayonet charge. General Gates fled, but brave old Baron de Kalb died at the head of his soldiers with eleven bayonet thrusts through his body.

In the war of 1812 the British battery on the crest of the hill at Lundy's Lane was carried by the Americans with the bayonet.

At New Orleans, Packenham's veterans from Wellington's Peninsular army came at the charge against Jackson's line, expecting to conquer with the bayonet. There were no bayonets among the American troops, and had the British ever reached the line all would have been over. But they failed to understand—beforehand—the deadly accuracy of fire of the Kentucky and Tennessee riflemen, and as a result British troops never met with a greater defeat than that. Packenham himself fell from his horse with two rifle bullets through his head, one coming from each flank of the American line, showing that two marksmen had at the same instant aimed their rifles, as either bullet would have been fatal.

In the Civil War, at Williamsburg, in Virginia, Hancock's fine division drove the confident Confederates by a bayonet charge, for the enemy did not wait for actual contact, but wisely retreated in time. In truth, one side or the other usually gives way before the cold steel gets close enough "to hurt."

At Gettysburg, Pickett relied upon the bayonet, could his men have reached the Union line; but here again the musketry fire and the deadly canister from the artillery turned the tide against him.

The present war has, then, emphasized anew the value of the bayonet, and it will remain as a weapon of war, and Mauser and Lebel, Lee and Springfield rifles fitted with the bayonet will struggle for the victory. But our interests are blended with the three great allies—France, England and the United States—and we believe that they cannot fail.

"Build our line of fighting men,
Flag of righteous wars, close mustered
Gleam the bayonets, row on row,
When thy stars are sternly clustered
With their daggers towards the foe."

MARKERS FOR UNEXPLODED SHELLS

Here and there on the battlefields of Europe, there have risen small wooden "tombstones" bearing the legend, "Please Do Not Touch." These warnings mark the resting places of unexploded shells. Reports from the war front, however, declare that few of the shells fail to function.

URGES PROTECTION OF DEER

Protection of deer, as a source of National food supply, is being urged by the Department of Agriculture.

While 15 States will have no big-game hunting this year because deer have been exterminated or because the stock has been so reduced that the season is closed, there are 33 other States which will have an open season for deer hunting. This season ranges from four days in New Jersey and six days in Massachusetts and Vermont to two months or more in some of the Southern States. These seasons will open in August in Oregon and in most parts of California; in September in the rest of California and in Idaho, South Carolina, and Virginia; in October in Maine, New Hampshire, New York, Georgia, Montana, Wyoming, Washington, Nevada, Arizona, and New Mexico; in November in Michigan, Minnesota, Wisconsin and several of the Southern States; and in December in Pennsylvania. In about one-third of the States the law allows the hunter one deer a year and in most others two.

The Department of Agriculture asks all persons to co-operate to secure the best possible protection of deer so as to get the maximum amount of venison as a source of meat. It is estimated that about 80,000 deer are killed legally in the United States each year. These produce nearly 10,000,000 pounds of venison.

EXPLOSIVES BILL BECOMES LAW

With the adoption of the conference report upon the bill to regulate the possession and storage of explosives during the period of the war, this measure will become law as soon as the President affixes his signature to it.

The measure as finally passed showed very little change from the form in which it was adopted by the Senate. The proposed legislation provides a penalty for the possession of explosives or ingredients thereof, except upon license to be issued under the direction of the Bureau of Mines, and according to regulations to be drafted by the President. The prohibition against the possession of explosives, however, does not extend to small-arms ammunition.

DOGS DISCOVER BOMBERS

The rapid detection by dogs of the presence of enemy air-planes has been one of the curious features of the recent bombing raids, according to London papers. One account says:

"Bomb dropping at a distance of three or four miles always causes the dogs in the London suburbs to bark, and the chorus of resentful yappings is remarkable.

SAVAGE ARMS CORPORATION

Manufacturer of

LEWIS AUTOMATIC MACHINE GUNS
HIGH-POWER and SMALL CALIBER
SPORTING RIFLES
AUTOMATIC PISTOLS and AMMUNITION

Factories: UTICA, NEW YORK, U. S. A.
Executive Offices: 50 CHURCH STREET, NEW YORK CITY



Range Extention in the Shot Gun

By HENRY SHARP

In the Shooting Times and British Sportsman

PART 3

AND now a few words on the other aspect of the question. Many attempts have been made to extend the killing power of the shot-gun by a mere increase of pellet speed. From time far remote in the history of sporting gunnery those desiring to kill their game or wildfowl at longer ranges have had recourse to the simple expedient of either increasing the powder charge or reducing the shot load. In many cases one such change from normal loading has not satisfied the aspirations of those anxious to kill at two gun-shot lengths any game proving difficult to approach; and so one hears on occasion of both powder increase and shot reduction. Abnormal loading of this sort has been carried to strange lengths; in course of years I have encountered men using singular combinations, and stored away in my voluminous note-books many singular examples are to be found. On a bleak island many miles from the western coast of Scotland I came across a crofter who believed in nothing less than pellets the size of good big garden peas—say, buckshot of twelve, or possibly even nine, to the ounce—for stopping the wary greylings raiding his scanty oat patches. His method was to put two or three ample charges of powder into the old muzzle-loader and about half the usual weight of shot. By these means a goose would be dropped once in a while at some astonishing distance, when, of course, the joy of such success would obliterate the remembrance of all less pleasurable experiences at closer ranges. I think it was this man who pointed out to me the place where he had killed a goose sitting out on the

sands at some fearfully remote spot something like a quarter of a mile away. Still, this example proves very little; indeed, it is highly probable that one-third of the powder charge here used would have answered quite as well. Another example of disproportionate loading is that prescribed by Mr. W. Bruce Leffingwell, an American sportsman, in his book on wildfowl-shooting. His favorite load for killing the big ten- and twelve-pound Canada geese was 6 drams of black powder to 1 ounce of big shot in, I believe, a double 8-bore gun. The gun might have been a 10-bore, but in either case the powder and shot proportions were singularly abnormal. Unfortunately, beyond remarking that this load had been in use for a long time, and that it would bring down geese within shot in a very satisfactory manner, Mr. Leffingwell does not subscribe much to the common fund of knowledge respecting the power therewith conferred in the direction of range extension.

Primarily, the object of my own "express" system of gun and loading was designed not so much to secure killing powers at abnormal ranges. My main object was to secure death-dealing qualities sufficient for bringing down wild ducks with tolerable certitude from heights of 50 or 60 yards. Thus, by getting substantial guns specially built and bored for the purpose, by accelerating velocities, and by making use of big shot, a considerable measure of success was attained in the desired direction.

A correspondent, "B. O. T.," asks "for particulars respecting the high-velocity shot-gun that a friend tells me is mentioned in your book. To procure the book would be the more preferable way,

but I should not know what to do with it here (France), so perhaps you will kindly let me have some particulars in the *Shooting Times*, and I will get your book when I return home." The following, I believe, is the information that is sought for:

Last year [I think that would be in 1904] I was discussing with Mr. Leslie B. Taylor, the managing director of the Westley Richards firm, the question of killing exceptionally high-flying wild ducks. Shooting on a coast much disturbed by the constant bombardment of native flight-shooters, I told him that I frequently had to take wild ducks at a height of 50 yards or 60 yards, or forego firing altogether. Of course, wild ducks in their winter clothing of thick down and strong feathers take a remarkably heavy blow to bring them instantly to earth when hit at the longer sporting ranges, and, although a good-shooting 12-bore of ordinary capacity will do fairly well at 40 yards, or possibly a bit over with No. 4 shot, something more powerful will be required if the sportsman desires to do thoroughly satisfactory work on wild ducks beyond those distances. There is nothing more annoying than to see birds go away hard hit, flying perhaps half a mile or more before they come down. This is a source of much annoyance, as ducks so shot in the fast-fading light of a winter evening are seldom recovered. Some one may say, "Why shoot at birds at such a distance?" and, of course, I agree that, in the abstract, the position is not too defensible. Still, it is a very easy matter to draw hard-and-fast lines whilst discussing these matters in a smoking-room, but in those situations where little shooting is to be done save at 50 yards, all such overnight resolutions are apt to be more honored in the breach than the observance by gunners who are not mere nerveless, passive automata. At the foregoing consultation, I therefore suggested the building of what may be termed a high-velocity or express 12-bore shot-gun for the purpose of killing these high wild ducks and wild game generally. Mr. Taylor responded with characteristic breezy alacrity, and in the course of a few weeks sent me what in many respects proved itself the most wonderful gun I have ever shot with.

Here let me interpolate the remark that the verdict conveyed in the last sentence was delivered after merely one or, perhaps, two seasons' use, and that now, after the lapse of a dozen years or more,

it may be said that constant use has further strengthened and confirmed that pronouncement. Dear old gun, it has seen hard work and rough usage such as few guns encounter. As my object was to secure muzzle velocities of 1,500 feet per second and over, an exceedingly strong gun was built, and from this exceptionally heavy charges of Ballistite were at first used; but the jar and recoil from these proved so heavy that I turned to Smokeless Diamond to help me out. The benefits accruing from this change of propellant were so pleasing that I have adhered to the use of S. D. ever since. It is stated in "Modern Sporting Gunnery" that this gun weighed about $7\frac{1}{2}$ pounds; but that is rather misleading, for the actual weight is $7\frac{3}{4}$ pounds. It has 28-inch steel barrels of quite exceptional substance and strength, and the chambers, originally $2\frac{3}{4}$ inches long, have been lengthened to take $2\frac{7}{8}$ -inch cases to make room for more wadding. To resume the book narrative:

I have constantly been amazed to see the remarkable deadliness of shooting accomplished by this gun at extreme ranges. At a height of 50 yards a wild duck begins to

look small, but I am positive that I have brought down ducks stone dead from this altitude, and friends out with me have constantly remarked upon the extraordinary height at which this gun reaches its birds and the truly decisive manner in which it cuts them down. I loaded some cartridges with single B shot to further test the ranging powers of this gun. Then I found that, with the gun held well forward, ducks tumbled down headlong from well-nigh incredible heights—distances that no practical shot would think of firing at with ordinary 12-bore guns and loads.

Thus, whilst securing the main objects for which this special gun was designed—that is, to kill ducks decisively at heights of 50 and 60 yards—it cannot, perhaps, be claimed that herein was witnessed anything abnormal in the way of range extension. It certainly was a good step forward to make tolerably sure the killing of those lofty wild ducks; but, all said and done, recent investigations into shot-gun ballistics rather tend to the conviction that shot acceleration may be overdone, for thus the pellets may be knocked about and defaced to an extent that will retard their flight and so defeat the effort towards range extension.

Hence my effort to obviate that difficulty by reinforcement of the shot, as in this direction it will be possible to insure non-injury to the pellets whilst driving them at express speeds. My best results in the way of high velocity were obtained with big pellets, because these, if knocked about a bit, still had energy sufficient to kill at moderately long ranges. But those 95-yard grey geese are a different proposition, although they were killed with what is really a 9-bore gun, and it is not improbable that shot starting off at a velocity of, say, 1,500 feet per second would not, owing to their greater deformation, kill those geese so well as shot which had a starting speed many feet per second slower. One of my objects in reinforcing shot is to enable it to withstand the greater pressures and more violent frictional and other bad treatment insured by express velocities. With all this overcome, velocity may be increased to some purpose, and the killing range of the shot-gun will be extended far beyond what is possible of attainment so long as there is no assured maintenance of pellet sphericity.

THE MONITOR COMES BACK

While most of the first-class powers prior to the European War had abandoned as obsolete their vessels of the monitor type, fighting craft of this character are now doing excellent and telling work in connection with the naval operations of the belligerents.

"The Engineer" of London, discussing the revival of the monitor, says:

"A few years ago the monitor was regarded as a thoroughly obsolete type of ship, the construction of which had altogether ceased. Yet today we find vessels of the monitor class taking an active part in naval operations in almost every part of the globe. It may therefore be of interest to trace the development of this type from its advent down to the monitors of the present day, though for obvious reasons little can be said about the most modern examples." The Engineer then goes on to describe Ericsson's original Monitor, and her subsequent prototypes, as well as some of the accomplishments of the present monitors, and adds:

"Of the large monitors built specially for the war, it is not permissible to give details, though some idea of their main features was obtained from Mr. Ashmead-Bartlett's letters from the Dardanelles. Jane's 'Fighting Ships,' for 1916, mentions the General Crauford, Lord Clive, and other vessels which have been specified in despatches, and adds the following note: 'According to published descriptions, these vessels are high-freeboard, sea-going vessels. Their beam is large, and they are said

to maneuver indifferently. It has been publicly stated that 15-inch guns, intended for the new "Royal Sovereign" class of dreadnoughts, were appropriate for arming these ships. The 14-inch guns, ordered in America for the Greek battle-cruiser Wasilefs Giorgios (ex-Salamis), building in Germany, were also purchased for these monitors.' Other vessels, presumably of a much smaller type, have been alluded to in official despatches from almost every theater of the naval war—one, the M 30, was reported as sunk by Turkish gunfire in an Admiralty communiqué of June 3, 1916.

"In certain quarters severe strictures were passed upon the Admiralty for having spent so much time, money, and labor on the creation of this fleet of monitors, the critics maintaining that the vessels in question were of extremely limited value. This contention, however, is not borne out by our knowledge of what the monitors have accomplished. At Gallipoli, when the appearance of German submarines compelled the Allied squadron to withdraw temporarily, the position of the invading army, bereft of naval support, would have become highly critical had it not been for the timely arrival of our monitors. Indeed, it is not too much to say that their presence saved the situation. Practically immune from torpedo attack, they were able to maintain a steady bombardment of the Turkish position with their big guns, and it was largely owing to their efficient work that the evacuation was carried out so successfully. Nearer home the monitors have rendered serv-

ices scarcely less valuable. No other vessels could have been used effectively against the German fortified positions on the Flanders coast, and without their vigorous and repeated bombardments the enemy would have been able to establish himself much more firmly at Ostend and Zeebrugge than is actually the case. The recent brilliant advance in Mesopotamia, culminating in the occupation of Bagdad, owed much of its success to the fine work of the smaller monitors operating on the Tigris.

"On the whole, therefore, the Admiralty's policy of building monitors has been completely vindicated, and it is doubtful whether their period of usefulness is yet at an end. As a rule, naval bombardment does not give results proportionate to the energy expended, but the novel methods employed both at Gallipoli and off the Flanders coast, where—as has been officially stated—aerial units were employed to control the fire of the monitors, made this form of attack unusually effective. In fact, after the last heavy bombardment of Ostend, it was established by aerial reconnaissance that the Germans had withdrawn all their naval vessels from the port. For the amphibious operations in which this war has been so prolific the monitor is admirably adapted, and we owe it to the prescience of the Admiralty experts in the first few months of the struggle that we possessed these valuable auxiliaries at a period when their services could not well have been dispensed with."

Off Hand From the Clubs

Rifle Clubs Should Establish Civilian Musketry Schools

SO FAR the War Department has not turned its attention from what the officials apparently deem more immediate needs of the war, long enough to take stock and see what use can be made of the thousands of civilian riflemen in the country.

Failing to receive definite instructions—and sometimes even replies—to their profers of service, a good many rifle clubs have naturally become possessed of the idea that there is no room for their activities.

Nothing could be more absolutely incorrect.

For a good many years, the United States Army has maintained what it terms "Schools of Musketry." From them, in short order, are turned out men trained in the use of arms, and a great percentage of men so educated, automatically become instructors.

Just now the War Department is facing the serious problem of teaching the 45,000 men in each of 16 cantonments how to shoot.

To be a good soldier and obey orders is one thing, to be a well drilled soldier is another, but to be able to hit what you aim at is everything. Let the schools for marksmanship come as quickly as possible.

Before a single American soldier is sent to the firing line in Europe he should be a qualified marksman of first class or better. Those of our soldiers who cannot be taught to shoot straight should be transferred to some other branch of the Service where they are not required to shoulder or shoot a rifle.

The best drilled soldier in the world is absolutely useless unless he knows how to use a bayonet and to shoot straight.

To teach marksmanship to 800,000 or more men is a big task. The lowest possible estimate would call for 10,000 teachers.

And all of this works right back to the fact that the material from which to develop the 10,000 instructors needed, is at hand. More than that, there is material sufficient to supply many times 10,000 instructors.

Realizing this, a few of the rifle clubs have set to work teaching non-members to shoot. This is an excellent work, in its way. For every man who is taught to handle a rifle, the government is that much better off. The country will benefit greatly by this activity.

But why not establish schools of musketry? Why not lay particular stress upon equipping men to teach shooting, as well as to become good shots? There is considerable difference between the two propositions. While every man who can handle a rifle is valuable as a single potential expert rifleman, every man who can teach others to handle rifles must be considered as valuable as the sum total of the men he can instruct.

A few weeks ago, the Essex Civilian School of Musketry came into being in New Jersey. The forces behind this project, consisting mainly of Captain Roy S. Tinney and his assistants and the owners of the Caldwell, N. J., *Progress*, have realized the difference between a man

simply taught to shoot and a man who is able to teach others to shoot. Therefore on the range now nearing completion instruction will not stop when a man proves that he is able to make a creditable rating with the rifle, but he must go on until he is so well grounded in rifle shooting that it is an easy matter, provided he has the primary qualities, to turn him into an instructor over night.

Any rifle club with a range and a supply of .22 calibre rifles can with little difficulty be developed into a school of musketry. With a few hundred such schools working throughout the United States the crop of embryo small-arms coaches would soon reach such proportions that when the War Department at last comes to a realization that it needs the civilian shooters of the country, a crop of instructors would be ready at hand.

Of course, unfortunately under present conditions, the work would have to be pushed forward under difficulties. At this time it seems as if the rifle clubs can expect very little in the way of arms and ammunition from the government. Yet the clubs who undertake to establish schools of musketry, even in the face of adverse conditions, are going to complete the work with a knowledge that they have accomplished a valuable service. If it should so chance that the government persists in refusing to recognize the value of its civilian riflemen, it would be a regrettable circumstance; but even that would not alter the fact that by helping to develop marksmen, the clubs would have contributed a service which the government could not have performed for itself except at the tragic expense of delay.

"CIVILIAN."

Zettler Shoot Arranged

Arrangements have been completed for the Gallery Season Shoot of the Zettler Rifle Club, whose headquarters are at 159 W. 23d street New York City. The program includes:

Ring Target

One hundred and thirty-three dollars to be divided in twenty prizes for the best fifty scores of each competitor, who will be allowed to shoot five 10-shot strings, 5 shots on a 25-ring target on Tuesdays during the season, October 23, 1917, to April 16, 1918. Any 22-calibre rifle, any sights, 22 short ammunition to be used.

A contestant must have shot 75 10-shot scores during the season to be entitled to any prize on this program.

Should a member be absent at a shoot, he has the privilege to shoot his arrear scores, after the members have shot their regular scores.

All disputed shots will be decided by the Shooting Master, whose decision is final.

Prizes for the Best Fifty Scores

\$20.00	\$9.00	\$5.00	\$4.00	\$3.00
15.00	8.00	5.00	4.00	3.00
12.00	7.00	5.00	4.00	3.00
10.00	6.00	4.00	3.00	3.00

Premiums for most rings during the season: First, \$5.00; Second, \$4.00; Third, \$3.00.

Bull's-eye Target

Every contestant is entitled to one shot, on the 4-inch Bull's-Eye, after every 50 shot score made.

For the best during season.....	\$10.00
" 2d " " "	8.00
" 3d " " "	7.00
" 4th " " "	6.00
" 5th " " "	5.00
" 6th " " "	4.00
" 7th " " "	4.00
" 8th " " "	4.00
" 9th " " "	3.00
" 10th " " "	3.00
" 11th " " "	2.00
" 12th " " "	1.00

Shooting Days

The shoot commences Tuesday, October 23d, 1917, and will be held every Tuesday thereafter until April 16, 1918.

On the committee are: A. Bergerow, Chairman; F. Hecking, Secretary; B. Zettler, C. A. Schrag, L. Mauer, W. A. Tewes, H. M. Pope, L. C. Buss, O. Smith, F. Busch, Jr., J. E. Huels, C. Mager, J. E. Ward, C. Zettler, H. D. Muller, L. P. Hansen, A. Hubalek, J. Johnson, F. M. Bund, T. H. Keller, J. Kaufmann, J. H. Nelson, P. Landrock, G. S. Bergman, and Gus Zimmerman.

The twenty-second 100-shot Indoor Championship Match of the U. S. and Prize Tournament will be held under the auspices of the Zettler Rifle Club, March 10 to 16, 1918.

"Pistols and Preparedness"

Dr. Paul B. Jenkins has contributed to "The Outers' Book" a discussion dealing with anti-firearms legislation which seems particularly pertinent and interesting at this time.

Dr. Jenkins says:

"The New York publication of the legal profession, 'Law Notes'—Edward Thomson Company, Northport, Long Island, publishers—printed in its May issue an editorial with the above title that was so much to the point and so refreshing a change from much that has been inflicted on the reading public that we deem it a privilege to give it the added circulation of reprinting it for the benefit of our readers. Its words, entirely unaltered, were as follows:

"In several states there has been some agitation for the enactment of a law prohibiting the possession of pistols or revolvers, and in Kansas a bill to that effect has been introduced. The argument in favor of such a measure is that a person in possession of a weapon is liable on occasion to use it in a rash and unlawful manner.

"This is precisely the argument advanced by the opponents of national military preparedness, and in that application its fallacy has been exposed by the logic of recent events. Disarmament does not prevent war. It encourages the incursion of the predatory and sends the sons of the deluded nation out empty-handed to defend their homes.

"Just so, on a smaller scale, these anti-pistol acts might well be termed laws for the protection of the lawless. New York has had such a law for years, yet "Gyp the Blood" and his like have no difficulty in obtaining a gun when they need it. The criminal who is risking the gallows or the penitentiary laughs at the added penalty of the anti-pistol act, and laughs again when

he thinks that it probably insures that his intended victim will be unarmed and helpless.

"If every household had a good weapon and was trained to use it, burglary and its attendant crimes would decrease rapidly. If the present national crisis teaches us to put a quietus on the misguided individuals who are injecting the serum of milk-and-water into our national blood, it will have served a good purpose."

"We wish we knew who wrote those words—we'd like to take off our hat to him! Mentally, we've placed him in our private Hall of Fame, Legal Section, along with Moorfield Storey of Boston (author of the great Storr Lectures, Yale Law School, 1911, on 'The Reform of Legal Procedure')."

"For the fact is, the whole argument in the case of anti-firearms legislation—and, for that matter, the anti-preparedness crowd as well—is in the quoted words, and condensed into the simplest terms. We rejoice to find an instance of 'the judicial type of mind' so alive to the dictates of common sense as to hold the views contained in those eight sentences.

"It's dying out rapidly today, of course, under the influence of the spreading realization of the world's deadly peril from the German hydrophobia, but there has been as much 'rot' talked in America on the anti-firearms proposition as on any subject within our memory. We heard a certain eminent scholar—for whom, until that time we had always had the profoundest respect—address a so-called 'peace meeting' in the words:

"The case for Peace is very simple. Firearms kill people. Therefore let all the governments in the world unite to prohibit the manufacture of firearms in every form forever—and there will be no more wars, and Peace will have come to stay!"

"And the man really believed it! (We wonder what he thought when it was later discovered that the whole so-called 'peace meeting' was in reality gotten up by pro-German propagandists in the hope of bringing influence to bear to keep the United States out of the war!) But the said scholar might precisely as well have said: Hundreds of people are killed every year by automobiles; therefore, in the interests of the preservation of human life, let us prohibit the automobile forever! He might as well have said: "Hundreds of people are drowned every year; therefore to prevent this, let us prohibit the practice of swimming!" It never occurred to him to say: "Teach people how to swim; teach people to handle automobiles intelligently; teach our youth the use and care of firearms, and you will reduce these dangers to human life to the minimum!"

"If the criminal knew that the chances were that the intended object of his attack—assault, robbery, burglary, what-not—was armed and was thoroughly capable of prompt and effective self-defense, how long would he hesitate before committing his contemplated act of violence? How long? He'd 'beat-it' in the opposite direction as fast and as far as legs and wind would let him!

"Personally, we have cultivated this firearms hobby as almost our only form of recreation for over thirty years. We have probably fired far over 50,000 shots in that time, with every kind of firearm we could lay hands on. Precisely twice in those thirty years has the emergency hour arisen when nothing but skilled and instant readiness with firearms would avail to defend one's own person or that of another. In one case we found a man breaking into our house in the middle of the night; but the muzzle of a shotgun at his head reduced him to submission, and the police identified him as a maniac escaped from an asylum for the criminal insane! Nice

chance we'd have had for immunity from his intentions if it had not been for that gun, wouldn't we? The other case was that of a woman hurrying home late one night and attacked at a secluded spot by a drunken brute. We heard her scream, and in a mighty few seconds had the villain covered by our biggest revolver—just as he had his own gun half-way out of his hip-pocket! And we have reflected innumerable times since on the comment of the good Irish policeman to whom we presently told the story and who remarked: 'Well, sorr; if there was more gintlemen as handy-like with a gun as yerself, there'd be none of this devil's work goin' on in this counthry!' In that hour we rejoiced for every bit of all our year-long devotion to the recreation of skill with firearms. It was worth all it cost, for the sake of happening to be prepared and 'quick on the draw' right then and there!

"Has the reader ever stopped to think what has kept Switzerland from attack, invasion and ruin in the present war? The Swiss themselves attribute it to this, that at the last great Swiss maneuvers before the war the German Emperor, an invited guest, looked on, and remarked: 'A fine display! But of course, we of Germany could at any day send across your border just twice as many men as your entire army!' To which the Swiss general to whom the comment was addressed answered: 'In the case, Your Highness, each of our men would have to use two cartridges!'

"Remember!—Adequate Preparedness spells Immunity!—and nothing else does!"

Sighting Shots

That no restrictions should be placed on the calibre of arms used, or upon the type of sights with which they are equipped, is the opinion expressed by W. E. Kessler, of the Kiowa Shooting Club, in commenting on the proposed pistol course. He says:

In respect to the proposed Pistol Qualification Course, would suggest that no restrictions be placed on the calibre of arms used or even the sights. I take this stand from the fact that the club members throughout the country have a varied assortment of pistols and revolvers. Some of my club members would not enter any kind of a contest if they could not use their favorite arm. For example, we have one man who is a veritable "Bull's-eye Buster" with a pocket automatic, but who could not keep on the target with a .45 auto or a military revolver. Another can score high with target sights, but can not shoot military sights, and if target sights are not allowed he simply "will not play." Personally, I shoot the .45 auto and the .44 special S. & W. New Military with plain sights; so I am eligible in any event. But I feel that this course should be arranged so that all may get in on it, and be allowed to use their favorite gun.

Mr. C. C. Crossman, of St. Louis, suggests 25 yards for all firing, Standard American target, slow, timed and rapid fire, all of which seems right to me; but I think he places the required score too high. This no doubt would be easy for a pistol shark such as he, but I think a score of Marksman 200, Sharpshooter 225, Expert 250 should be ample for Civilian Marksmen. I also would advocate the use of "any ammunition," so as to let the hand-loaders get in their work.

The rifle gallery of the Upton, Massachusetts, Rifle Club was one of the attractions

at the Upton fair this year. The range was operated for the benefit of the club. Shooting was done on N. R. A. targets at a distance of 70 feet.

More than twenty stories above the streets of New York, rifles will soon be popping. But the noise will not be heard by pedestrians below, for the new rifle range to be constructed on the roof of the Vanderbilt Hotel will be sound and bullet proof.

Inside the high, thick wall which entirely encloses the roofs of the two wings, which are to be reserved for the exclusive use of members of the new Rifle Shooting Club being organized by Miss Martha Maynard, of No. 129 East Seventy-sixth street, an English sporting ground and lodge will be built after designs by Mr. Charles Wetmore, architect.

The rifle range will be under the direction of Miss June Haughton. The club will not be limited entirely to women members, but squads of men and children are to be organized. The range will be absolutely safe.

Miss Maynard will attempt to lure men and women from the dance floor. Trophy shooting will be a feature.

Denson Reid, who has been shooting with the Birmingham Athletic Club Rifle and Revolver Team, is not yet 10 years old. Before shooting with the club outfit, he shot successfully in the Winchester Junior Rifle Corps, winning marksman and sharpshooter medals.

The University Rifle Club, of Reading, Pa., has organized among its members a Home Defence Guard, offering its service to the Mayor in case of emergency.

W. K. Morsman has been elected secretary of the Falls City, Nebraska, Rifle Club. The rifle club loaned its equipment to the men called in the recent draft and as a result many of them were speedily trained in the use of the service arm.

Because he was drafted for service in the National Army, J. H. Fenwick has resigned as secretary of the Clifton, Arizona, Rifle Club.

Discussing the matter of civilian aid in instructing the members of the new National Army in rifle practice, Herman E. Elgar, secretary of the Mt. Pleasant, Iowa, Rifle Club, says:

"Last issue contained an article in regard to civilian aid in instruction work at the training camps. I was much interested in this article and the comments thereto.

"I am sure that much good could be done in this line of work by civilian rifle instructors who have had actual experience both on the range and in the field as riflemen. This vast fund of good instruction should not be overlooked or underestimated at this time, and in support of my contention I would mention the experience of our club here in this work. As suggested by ARMS AND THE MAN and by the National Rifle Association, we made arrangements to have all drafted men shoot the Militia Course before going to the training camps. Of the first sixty-five ordered to camp, fifty-two responded to our invitation to shoot the course and did shoot same on our range, and out of the fifty-two there were only about five who had ever had a military rifle in their hands, and not one of them had ever fired a shot with a military rifle. We had score cards, and every man's score was filled in and the card given the shooter. These were taken to camp with the men, and in every case they were received with favorable comment, and we have since had word that these men were given preference over ones who had never had any experience at all. All the instructions were given by our officers. We do not claim to be finished instructors, but we do claim to have had lots of experience, and

with a short course of instructions we are sure that we could show the recruits some valuable things about the military rifle, and cite what we did for the above-mentioned men in further support of this assertion.

"I have given lots of time to the Government in this line of work and in the recruiting service since the war with the Central Powers began and am ready to do more at any time, and if I can be of any service in this time of need I am ready to report at any training camp at once."

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. Is it possible to shoot the member's match on an indoor range?

A. It is not possible. When the shortage of ammunition began to make itself felt among civilian rifle clubs, the N.R.A. officials with the adoption of a small-bore outdoor qualification course decided to permit such clubs as could not obtain service ammunition to shoot the members' match with .22 calibre rifles. The match, however, must be shot on an open range.

Q. Is it necessary for an official of the N.R.A. to inspect and measure the range of a club before the members' match is shot thereon?

A. It is not necessary.

Q. Will the equipment of the National Army with the modified British rifles have any effect upon the resumption of the free issue to rifle clubs?

A. There is no way to forecast the future policy of the War Department in respect to the free issue. It would seem plausible that if the free issue were stopped in order to insure as large a supply of rifles for training purposes as possible, that when the production of the new rifles reaches its maximum, there would no longer be a need to conserve the supply of Krags. This may turn out to be the case.

Q. What calibre in a rifle manufactured in the United States would correspond to the 8 m.m. calibre of foreign nations?

A. Expressed in terms such as are used in this country, an 8 m.m. rifle would be one taking a bullet of .284 calibre.

Q. Are the jackets of .250-3000 Savage ammunition made of pure copper or are they copper with tin plating?

A. The jackets of the cartridge mentioned are pure copper. The core is lead.

Q. By "canting" the rifle to the right while shooting, will the bullet go to the right or left?

A. The bullet moves in the direction of the cant. That is to say, if the bullet is "canted" to the right the bullet will strike to the right of the object aimed at.

Q. What are the shooting positions recognized by the National Rifle Association? Which is the most used?

A. The National Rifle Association authorizes the following named positions: Standing, kneeling, sitting, squatting and prone. The prone position is the most popular.

Q. Please give a good trap load, not too heavy but which will give a good pattern at forty yards?

A. An excellent load is three drams of powder, an ounce and an eighth of 7½ chilled shot. It is a pleasant load to shoot and gets the targets.

These Clubs Were Admitted to N. R. A. Membership During the Past Week

CIVILIAN

Pennsylvania

Ebensburg Rifle Club—W. R. Thompson,

secretary; Ira Bloom, president; F. C. Sharbaugh, vice-president; Robert Scanlan, treasurer; A. M. Bennett, executive officer. Membership, 10.

Wisconsin

Kohler Rifle Club—A. W. Mahlendorf, secretary; W. A. Jacobs, president; Eugene Pool, vice-president; Edgar Mahlock, treasurer; A. Gunderson, executive officer. Membership, 92.

ALONG THE FIRING LINE

N. R. A. Decides Matches

OFFICIAL decisions effecting the results of the Gallery College Competition fired last winter and the Intercollegiate Outdoor Rifle Match fired last spring have been announced by the National Rifle Association.

In the Intercollegiate outdoor match, the University of Tennessee Rifle Club has been declared victor.

In the Gallery College competition, Columbia University has been declared winner in Class B.

Only three teams entered the Intercollegiate Outdoor Competition—those from the University of Tennessee, the University of California, and the Massachusetts Institute of Technology.

The winning team's score totaled 858 out of a possible 900, with the University of California scoring 838 and the Massachusetts team 752.

The decision regarding the college gallery competition is the result of a protest filed by the University of Pennsylvania against the score of the Columbia University Team. The Columbia boys made a total score of 9403. The first four matches shot by this team were delayed because the range upon which the boys were shooting had been commandeered for military purposes. Official permission was given them to shoot these matches as soon as the range could be obtained.

Siefert Wins Trophy

Johnny Siefert brought out the old

sharpened eagle optic to the range of the Los Angeles Rifle Club, October 7, and departed when the shades of evening fell with legal title to the handsome Owen Council Trophy, a fine gold watch. For a while it appeared that Frankus Q. Payne, with a rifle that was fed from a bottle of powder every shot, like a real Schuetzen rifle, and that sounded like the loud reports of popcorn, was the holder of another leg on the trophy, with his fine score of 205, which would have given him two legs on the trophy, tying with Mr. Siefert and leaving yet another day of trial and sorrow to determine the final owner.

Alas, however, Mr. Siefert proved that the good, old service rifle of the U. S. A., with its bellow, and its loud holler, and its crude trigger pull, was still equal to the task of trimming up any lady-like peanut gun of the Schuetzen class. His total of 207 was only certified as taking the third leg on the trophy, and it is now no more for competition—unless it be the prize for a tug-o'-war between Mr. S. and some hold-up man.

Grove Wotkyns made a noble effort to preserve the trophy for further reference by beating Johnny out. A 25 for the last shot would have done it—but the marker, having an awful choice between getting in Dutch with the range master and the chap who pays the bills, favored the range master, and hung up a 19, giving him 201.

The Pan American Crossman Trophy is not yet the property of Mr. Wotkyns, despite his ownership of two legs on it.



IDEAL NO. 10 SPECIAL.

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. 506 Mutual Life Bldg. BUFFALO, N. Y.

Cleaning Patches for .30 caliber rifle. Send 15 cents for big sample package
IDEAL CHEMICAL COMPANY - - **Box 78, Wilkes-Barre, Pennsylvania**

Somebody shoved him hard, and he hung up but 101, while Johnny Siefert got 109, and Payne 102. High score was 121, but was made by a person entirely ineligible, wherefore Johnny Siefert took the leg, giving him two and a tie with Wotkyns to carry to the next shoot.

Owen Council trophy, ten shots 200 yards off-hand, German ring target:

J. W. Siefert.....	207
Frank Payne.....	205
G. L. Wotkyns.....	201
E. C. Crossman.....	180
W. R. Jackson.....	157
A. Pachmayer.....	155
E. D. Neff.....	143
C. J. Cadwell.....	124

Pan-American match, 300 yards, five shots each, standing, kneeling and prone:

E. C. Crossman.....	121
J. W. Siefert.....	109
Frank Payne.....	102
G. L. Wotkyns.....	101
W. R. Jackson.....	95
A. Pachmayer.....	93
E. D. Neff.....	89
Dr. A. T. Newcomb.....	77
Owen Council.....	69
Tom Jordan (ten shots prone).....	87

"Davy Crockett" Club Shoots

Sidney Freeborn, by scoring 92 out of a possible 100 with the .22-calibre rifle, took top honors in the Davy Crockett Rifle Club shooting program on its range on Military Plaza of San Antonio, Tex., recently.

"Kit" Carson and M. Winter tied for place honors, both scoring 91 out of a possible 100, while Paul Lindgren scored an even 90. Tom Noakes and M. Neussle tied for next place with 89 each.

J. W. Schofield, one of the sharpshooters of the club, failed to get up to his usual mark, scoring but 86, while Mrs. J. W. Schofield, a regular member, scored 82.

The club average for the shoot was 88 2-3.

Castaldini Makes New Record

With a total of 221 points out of a possible 250, shooting the pocket revolver at 50 yards, L. P. Castaldini, of the Springfield, Massachusetts, Revolver Club, has probably set a new record score. The score was made in the recent U.S.R.A. matches.

Major S. J. Fort, who has long followed the hand-gun game, commenting upon Castaldini's performance in his column in *The American Shooter*, says:

"The revolver used was a Smith & Wesson .38-calibre revolver with a 4-inch barrel and a 4-pound trigger-pull. Ammunition, full charge, factory loaded, .38 special cartridge. Distance, 50 yards, Standard American target, with an 8-inch bull's-eye, the 10-ring being 3.34 inches in diameter.

"Up to this part of the matter there is nothing out of the common order of shooting, but when you take a pocket revolver with a short barrel and, firing five shots in 15 seconds, reap five totals of 44-48-41-44-44, that is another story.

"It is to be hoped that the official Cerberus will be able to affix his seal to the score as being a real record.

"Apropos of record shooting, it may be of interest to mention that the United States Revolver Association provides official blanks and will supply official judges to and for any member who desires to shoot for a record score. Many times scores are sent in to the secretary claiming a record total, which may have been shot under perfectly fair conditions, but it is obvious that, while rifle and pistol shooting has been and is a clean sport, there are certain individuals obsessed with the desire to make high scores who are unscrupulous enough to make their totals without a close observa-

tion of the rules and regulations made and provided.

"In some cases this proves a curious psychological condition of mind which is difficult to understand and equally difficult to explain. For example, a man who is otherwise honest will stoop to the meanest subterfuges to obtain a high score, then not only boast of it, but endeavor to establish a record for it. In some uncanny fashion he succeeds in making himself believe he has made the score, even though he knows he evaded the rules, and this is the most curious part of the proposition.

"It is understandable, though inexcusable, that a man will cheat in any sport, but what satisfaction is there in wearing a medal thus won, or what enjoyment can be obtained from a prize of any kind? He has been able to cheat others, but how is it possible for him to cheat himself?

"I once saw a rifleman fire a shot for which he received a count of five, and it was so recorded on the blackboard. It was the ending of a fast match in which he stood to win, but when his target came up, instead of the spotter being in the bull's-eye, it was close to it, but in the four-ring. The young soldier immediately stopped his partner from shooting and called the range officer's attention to the spotter. The pit was called up by telephone and the hit verified by a range officer stationed therein as a four instead of a five, as recorded, which lost the man a point and the match.

"Now, he might very well have said nothing and taken a chance on no one else discovering the error, but, as he said later, 'I could not have taken the medal home to the kiddies if I won it unfairly.'

"That was true sportsmanship, and that is what rifle and pistol shooting should always stand for. No matter who wins, play the game fairly!"

RICOCHETS

R. Buettner, of Chicago, has tried out the skirmish run for pistols suggested by Capt. Roy S. Tinney. Here is his report:

"As I am fond of shooting, and believe in using *ARMS AND THE MAN*, I have tried out the skirmish run for pistols, described by Capt. Roy S. Tinney, in the issue of September 8th. I am a decidedly mediocre revolver shot and wanted to get acquainted with my 'six-gun.'

"No D target was available, and I had to use the only thing I could get my hands on, viz., a 50-yard Standard American target. This, of course, presents a much smaller and more difficult mark than the big, broad figure on the D target, so I assigned the same value to hits as they would have on the A target, in order to offset this handicap to some extent. As my short gun is a Colt's Officers' Model target revolver, with adjustable target sights and 7½-inch barrel, I reduced this advantage as much as possible by setting the rear sight at 'zero wind' (I usually carry about ½ point left) and the front sight at a compromise between my 20- and 50-yard marks, holding as with the fixed military sights.

"With my belt full of .38 S. & W. Specials, I went to work. My scores, with no limit on time, were:

SLOW FIRE			
Range	Shots	Position	Score
20 yds.	5	Standing	23
30 yds.	5	Squatting	22
40 yds.	5	Kneeling	22
50 yds.	5	Prone	21
Total.....			88 x 100
Total for skirmish.....			81 x 100
Grand total			169 x 200

"In the skirmish I put the first two well into the black; seventeen were fours and one was a three, at 8 o'clock.

"I think the course is much too easy, for had I been using a D target I should have made a very high score.

"As I have already said, I am a decidedly mediocre revolver shot; and, besides, this was the first time I ever attempted to fire the short gun in any other than the standing position."

Mr. Buettner is also an enthusiastic convert to small-bore outdoor shooting. His first trial, made a few weeks ago, on a cloudy day with intermittent showers, accompanied by a five-mile fish-tailing wind, resulted in a score of 209 out of 225. The day following, he fired the record course as tentatively proposed, this time in a bright light with a 10- to 20-mile gusty wind. On this occasion he made 223 out of 250. In reporting the results, he says:

"Not content with this, I also reduced the modified navy course to the same scale, and fired the marksman and sharpshooter courses in one day, qualifying as marksman, with 99 slow fire and 97 magazine fire; as sharpshooter, 87 slow fire and 80 in the skirmish. A few days later, with rather unfavorable conditions of light and wind, I fired the expert course, making 74 slow fire and 76 in changing positions fire.

"The results astounded me and opened my eyes to the possibilities with the .22 rim-fire rifle. Often while firing the longer ranges, I wondered if the bullets were really reaching the target. I found that they not only did so, but made nice round holes in the black, showing there was no keyholing. I could pick out five-shot groups here and there throughout the course that could easily be covered by a 50-cent piece. I prepared a C-4 target, but could not use it, as the rear sight on my rifle allows just enough elevation for the 150-yard range."

Harry J. Chambers, of the Saginaw, Michigan, Rifle Club, won the members' match for 1917.

The members' match of the Claremont, New Hampshire, Rifle Club was won by E. W. Wallace. G. C. Werner, of the same organization, has qualified as an expert rifleman.

J. N. Wernz has been declared winner of the members' match of the Rochester, New York, Rifle Club.

Sharpshooter decorations under the watch-fob qualification course have been won by four members of the Erie, Pennsylvania, Rod and Gun Club. Those qualifying and their scores out of a possible 200 are: R. A. Wade, 196; C. P. Kelly, 196; George M. Smith, 196; and E. J. Dear, 187.

Two members of the East Saginaw, Michigan, Rifle Club have qualified as sharpshooters. They are Charles M. St. John and Harry St. John.

Three expert, 18 sharpshooter and 10 marksman qualifications have been reported by the Westfield, New Jersey, Rifle Club. They are:

Experts—Kenneth R. Hare, 150; George E. Hayes, 146, and Dr. W. L. Loyd, 143.

Sharpshooters—A. M. Bennett, 162; A. P. Chase, 151; P. A. Cook, 165; W. L. Dallas, 157; F. S. Frambach, 151; H. M. French, 152; William Heinecke, 160; C. H. Hoyt, 168; G. H. Leggett, 165; M. D. Littlefield, 150; R. V. Meeks, 152; D. C. MacDougall, 163; E. E. McWhinney, 163; C. A. Saitta, 161; C. V. Steinhart, 153; W. A. Stryker, 163; Captain J. J. Thomas, 154, and E. R. Woodruff, 153.

Marksmen—G. F. Brown, 169; H. L. Hastings, 170; E. S. Howe, 167; R. C. King, 150;

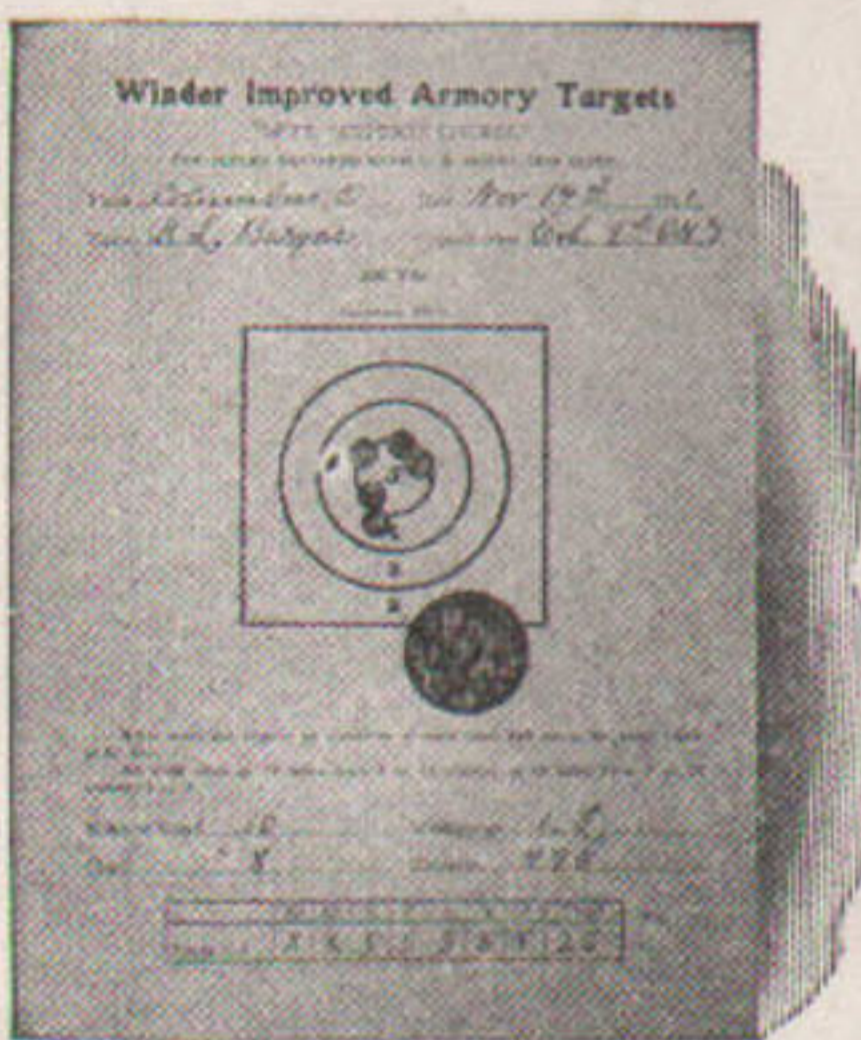
THE
Winder System
OF GALLERY TARGETS

Enables the shooter to practice under conditions accurately approximating those of the open range.

It is possible to vary distances, shooting one string on a target which has been reduced to represent the regulation target at 200 yards, another at 500 yards, and so on through all the ranges.

Individual problems in windage and elevation can be worked out. The same benefits as those resulting from out-of-door shooting in sight setting and elevation, can be obtained by indoor gallery work with the Winder System.

Winder Targets are inexpensive.



Aiming Targets, mid and long range, each .....	.05
Windage and Elevation Charts, each .....	.25
200-yard Targets, slow fire, per hundred .....	.35
300-yard Targets, slow fire, per hundred .....	.40
500-yard Targets, slow fire, per hundred .....	.40
600-yard Targets, slow fire, pin wheel, five targets to sheet, per hundred targets .....	.40
600-yard Targets, slow fire, 5 targets to strip, per hundred .....	.40
800-yard Targets, slow fire, 5 targets to strip, per hundred .....	.40
1000-yard Targets, slow fire, 5 targets to strip, per hundred .....	.40
200-yard Targets, rapid fire, per hundred .....	.35
300-yard Targets, rapid fire, per hundred .....	.35
"X"-Target, "Gallery Practice," per hundred .....	.40

Wind Allowance Tables, each .05
Spotting Targets, 1 1/4, 3 1/4 and 4-inch bullseye, each..... .05

Order through **ARMS AND THE MAN**
1110 Woodward Building, Washington, D. C.

A New Pistol Powder!

**Du Pont
Pistol Powder
No. 3**

A dense, nitrocellulose powder
Cool-burning Non-erosive Accurate
Easy to load
For revolvers and automatic
pistols

RIFLE SMOKELESS DIVISION
E. I. du Pont de Nemours & Co.
WILMINGTON, DEL.

L. H. Lewis, 162; J. D. Mumford, 152; P. M. Nickerson, 159; S. W. Reese, 164, and J. T. Tubby, Jr., 150.

Twelve members of the Clovis, New Mexico, Rifle Club participated in the 1917 Members' Match of that organization. The match was won by C. F. Blumlein.

Five marksman qualifications have been reported by the Portland, Oregon, Rifle Club. They are: E. D. Ritter, 190; Roger Newhall, 188; F. Morganroth, 176; H. F. McDonald, 168; J. A. Philbin, 160.

Three experts and two sharpshooters have qualified according to reports made by the Kansas City, Missouri, Rifle and Revolver Club. The small-bore qualification course was used.

Those qualifying included: W. H. Grueninger, 224; J. Campbell, 219; F. A. Wenzel, 215; J. R. Renner, 205, and L. C. Higday, 198.

Herman De Young won the members' match, 1917, fired by members of the Corvallis, Montana, Rifle Club.

C. E. Taylor, of the Austinville, Virginia, Rifle Club, has qualified as a sharpshooter on a score of 189.

Sam S. Sexton, of the Ventura, California, Rifle Club, has qualified as a sharpshooter on a score of 209.

William Nelson won the members' match, 1917, shot by the Brainerd, Minnesota, Rifle Club.

Owing to the number of otherwise splendid applicants rejected from the United States Marine Corps for flat feet, Marine Corps examining physicians have issued the following simple exercises and pointers, which if followed, they say, will remedy that ailment:

During exercises at all times turn the toes in.

Walk with toe of each foot pointing to the front; in straight line, if possible.

Stand with toes turned in; raise body on toes, slowly, as high as possible. Rest a second, then with weight of body borne on toes, lower slowly down to floor, and repeat.

When in the house in stocking feet, walk on toes; heels not touching the floor, and toes turned in.

When sitting, cross the legs, the foot always resting on the outer sides.

The wearing of broad toe shoes with the metal "arch supporters" absolutely abandoned, also is advocated.

It was at one of the new National Army cationments. A new recruit passed a second lieutenant, but failed to salute. The second lieutenant wheeled and said:



GARRISON PAT.
THE SPRING TEMPERED SPIRAL STEEL CORE OF MARBLE'S CLEANERS

MARBLE'S Rifle Cleaner

Used the world over by sportsmen and military men. Attaches to any standard rod and can be used in finest rifles without injury. Made of softest brass gauze washers on a spirally bent steel spring wire. Brushes are slightly smaller than bore of gun—spring forces brushes against bore. Brushes follow twist, reach into every angle and remove all lead, copper, rust or powder residue. Will last indefinitely. All calibres. At your dealer's, or by mail, postpaid, upon receipt of 50 cents. State calibre wanted.

MARBLE ARMS AND MANUFACTURING CO.
502 Delta Ave., Gladstone, Mich.

"You, there, halt! Don't you know enough to salute an officer?"

The rookie gazed at him dumbly at a loss for a satisfactory explanation.

"Now, you stand there and salute me fifty times," ordered his lieutenant.

The rookie obeyed. A major, coming up, stopped to watch the performance to its completion. At its end, he said:

"What's this?"

The lieutenant explained.

"Don't you know that an officer must return the salute of a private?" inquired the major. "Return the fifty."

The second lieutenant did.—*Journal American Medical Association.*

RECORDS BROKEN BY TRAPSHOOTING SCHOOL

By PETER P. CARNEY

As the days go by, the Trapshooting School on the Million Dollar Pier (Atlantic City) adds to its popularity.

During the six months that the school was open in 1916, 4,870 persons tried their skill in firing at the inanimate clays over the broad Atlantic, and 236,475 targets were thrown. These figures were surpassed in the five months the school has been open this season. In this period 5,315 persons have fired at 287,225 targets.

These figures are another indication of the interest manifested in the sport and the desire of nearly every one to learn to shoot. There were so many beginners applying for instruction that it was necessary to install another trap. On this trap all instruction is given. Those who are proficient in breaking the clays use the trap that has always been in use.

The Topperwins gave exhibitions daily at the school for six weeks, and these exhibitions caused many persons to become interested in the "sport alluring." Then, to add to the gaiety of the thing, Benjamin C. Kuser, a Trenton, N. J., sportsman, offered a cut-glass cigar holder with silver cover to the shooter making the best score at 100 targets during the remainder of the season. W. N. Boylston, of Boston, Mass., twice broke 97 in 100, and is the leader for the trophy at this writing.

The week ending September 8th was the greatest week in the two seasons' history of the school. Three hundred persons shot over the traps at 16,825 targets. One hundred and eight of these shooters were on hand on Labor Day and fired at 5,200 targets.

Winners of high-score spoons for men during August and September were B. C. Kuser, Trenton, N. J. (2); S. M. Goldsmith, Atlantic City, N. J.; Richard Elkins, Atlantic City, N. J.; Ward Hammond, Philadelphia, Pa.; L. W. Colquitt, South Orange, N. J.; W. N. Boylston, Boston, Mass.; R. G. Fell, Philadelphia, Pa.; P. F. Norvell, Sewickley, Pa.

Women who won spoons for the high score in the same period of time were Dorothy Huey, Philadelphia, Pa. (3); Ruth Wells, Athens, Ga.; Mary C. Anderson, South River, N. J.; Mrs. A. B. Moulton, Philadelphia, Pa.; Miss F. A. Ridding, New York; Mrs. R. G. Fell, Philadelphia, Pa.; Mrs. R. T. Donaldson, Pittsburgh, Pa.

Winners of beginners' spoons were W. H. Drennon, Kansas City, Mo.; E. W. Paxton, Washington, Pa.; G. N. Black, Wilmington, Del.; C. A. Johnson, Bessemer, Pa.; Howard Wood, Roland Park, Md.; H. J. Rhodes, St. Louis, Mo.; J. C. Brown, Vincentown, N. J.; E. T. Meredith, Des Moines, Ia. Meredith is 11 years of age.

Hand-trap winners were Dr. W. H. Hertz, Minersville, Pa.; F. W. Williams, Philadelphia, Pa.; E. B. Collins, Atlantic City, N. J.; M. G. Johnson, New York; W. E. Camping, Elizabeth, N. J.; F. D. Valentine, Wilkes-Barre, Pa.; H. R. Sullivan, Atlantic City, N. J., and Harry Watson, the comedian.

"John, you ought to get in the aviation service," a York man told a negro last week. "You are a good mechanic and would come in handy in an airplane. How would you like to fly among the clouds a mile high and drop a few bombs down on the Germans?"

"I ain't in no special hurry to fly, Cap," the negro answered. "When we's up 'bout a mile high, s'pose de engine stopt and de white man told me to git out an' crank?"—*York News*.

"Here's a real joke," writes a correspondent. "A conscript soldier of the National Army out at Camp Funston, Kan.—one of the million that sprang to arms over night—was sitting on a lumber pile in the cantonment whittling out a 'rifle.' The whole company was similarly

employed, by order. One of his old home neighbors from another company came up, looked him over, and asked, 'Bill, how do you like your new job?' 'Don't say a word, Bud; I'm mighty glad I'm not in the Artillery!'"—*Army and Navy Journal*.

It was necessary for one man to stand up and draw the enemy fire. A soldier volunteered and fortunately not one of the bullets struck him. When the charge was over, the captain said to the brave fellow, "Where did you get the wonderful nerve to stand out there and make yourself a target for the bullets of the enemy?"

The other smiled. "For five years," he answered, "I was a guide in the Maine woods."—*Boston Transcript*.

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.

FOR SALE—1 Goertz "Certar" 4½ power. Telescope rifle sight. Cross Hair reticule, with mountings. The sight is nearly new. Price, \$40.00. C. W. Linder, 623 Sheldon Building, San Francisco, Calif.

FOR SALE—1 Winchester .22 Musket, perfect condition. Price, \$10.00. 1 Hopkins and Allen .38 calibre, double action pocket revolver, 3¼ inch barrel; new. Price, \$5.00. C. B. Adkims, 34 Hendrix St., Brooklyn, N. Y.

FOR SALE—800 .30 calibre Ball Cartridges. Model 1898. Will sell at purchase price. \$15.00 per M. W. L. Dutton, Secretary Skowhegan Rifle Club, Skowhegan, Maine.

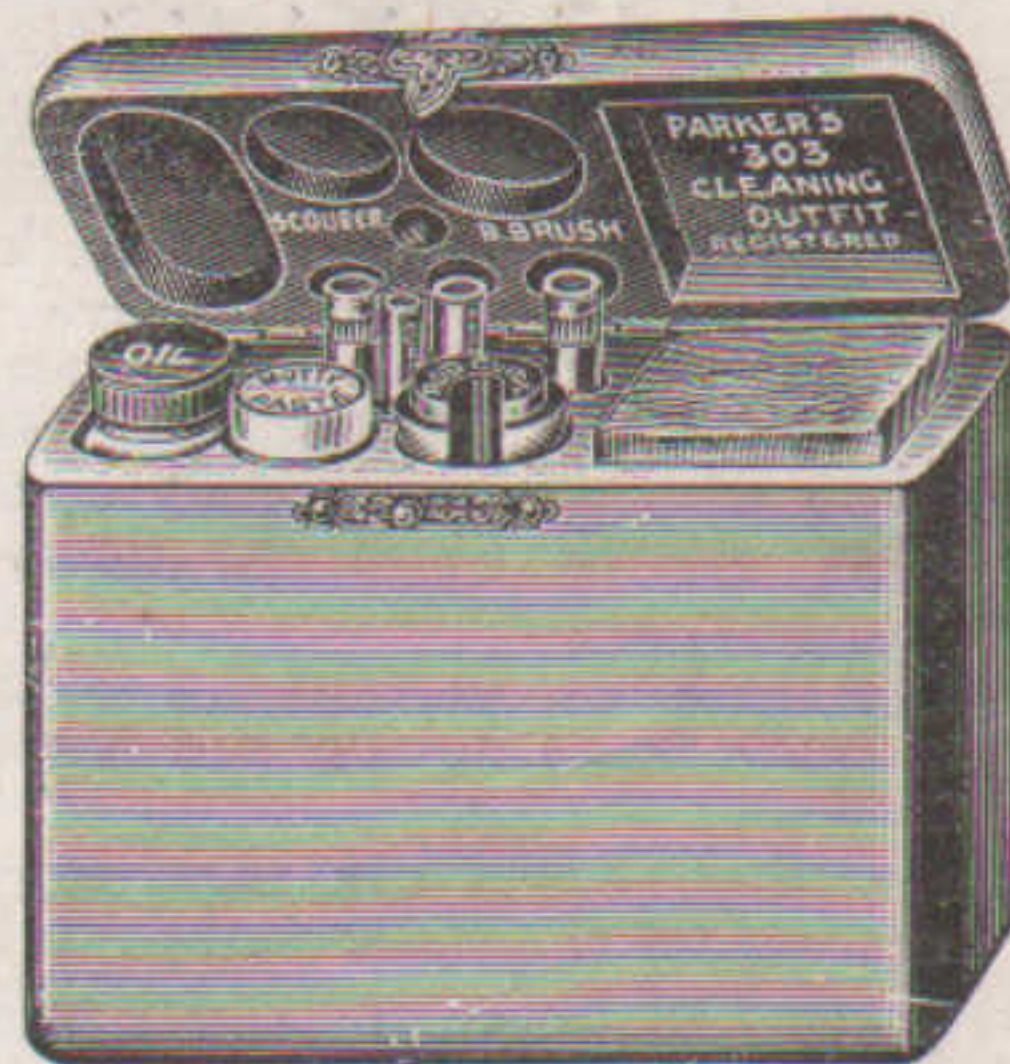
FOR SALE—1,200 rounds of .30 caliber Guard Cartridges, 1903 Springfield Rifle. Muzzle Vel. 1,200 ft. per second. Good up to 300 yards. F. W. Horenburger, 63 West 184th St., New York City, N. Y.

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

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

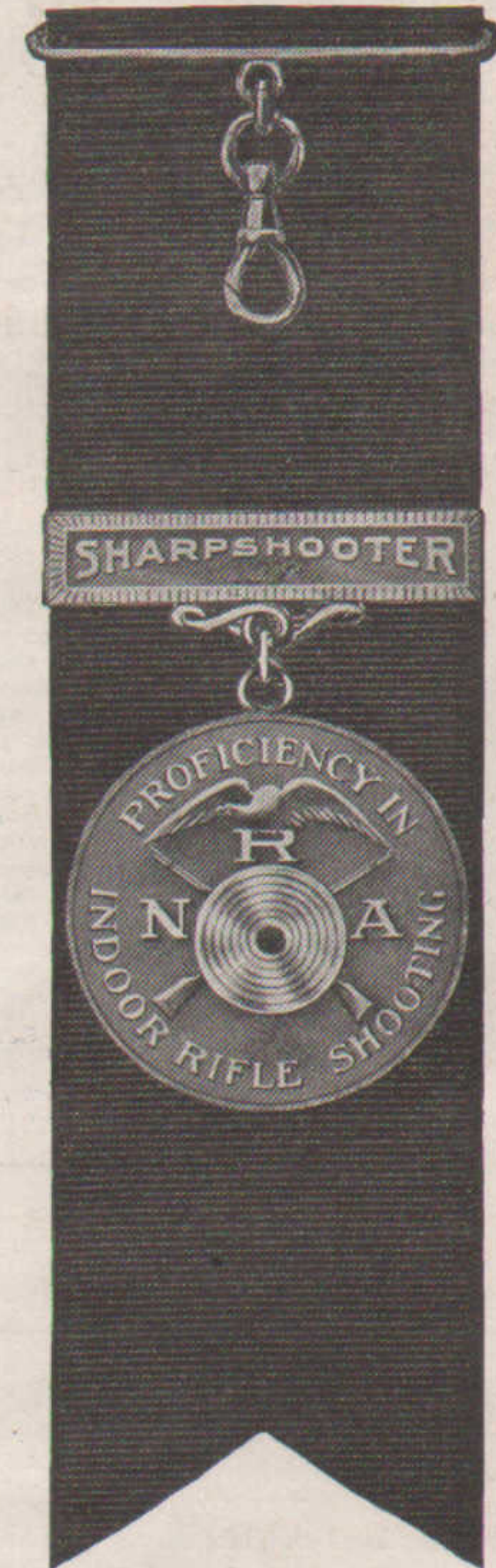


Parker's Service Pocket Cleaning Outfit for the .30 caliber Rifle, including ACCESSORIES, as shown, price \$2.50. .22 caliber outfit, including ACCESSORIES, price \$1.50.

Send for No. 4 illustrated price list and catalog.

P. J. O'HARE, Importer and Dealer
IN RIFLEMEN'S SHOOTING ACCESSORIES
33 BRUCE STREET NEWARK, N. J.

Qualifying Scores Win Watch Fobs



BRONZE 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.

5 GREAT RIFLE VICTORIES

Were won in the 1917 Indoor Matches, conducted under the auspices of the National Rifle Association, by users of

Peters .22 Cal. Semi-Smokeless Cartridges

CIVILIAN CLUB COMPETITION	-	Championship won by Peters R. & R. Club Team, of King's Mills, Ohio, 9,925 out of a possible 10,000
COLLEGE COMPETITION	- - -	Championship won by Michigan Agricultural College Team, 9,638 out of a possible 10,000
HIGH SCHOOL COMPETITION	-	Championship won by Iowa City, Iowa, High School Team, 9,517 out of a possible 10,000
HIGHEST INDIVIDUAL RECORD	-	Made by T. K. Lee, of Birmingham Athletic Club Team, 1,999 out of a possible 2,000
ASTOR CUP CHAMPIONSHIP	- -	Won by Iowa City, Iowa, High School Team, 980 out of a possible 1,000

These decisive wins, with the World's Record of 4,599 out of 4,600 points, made in 1915 and still held by T. K. Lee, clearly indicate that even in the hands of expert marksmen (P) Ammunition will make higher scores than any other kind.

THE PETERS CARTRIDGE COMPANY, Cincinnati, O.

BRANCHES—NEW YORK: 60-62 Warren Street

NEW ORLEANS: 321 Magazine Street

SAN FRANCISCO: 585-587 Howard Street

The Wonderful Results Obtained
by Using

J. L. N. Gunoyle

Makes it necessary for every rifleman to have it in his kit.

The most perfect solvent for nitro powder.

Sample on Request

E. HALSTEAD HAVEN

95 FRONT STREET NEW YORK CITY

1 Safety Razor Blade does the work of 4



When magnified, the cutting edge of a razor blade looks like a saw. After shaving, no matter how well you wipe the blade, moisture still clings between the microscopic teeth. As a consequence, very tiny particles of rust form and the blade becomes dull and "pulls".

Put 3 in-One on your blade before and after shaving. Then rust can't possibly form. A little 3-in-One on your strop keeps it soft and makes the razor "cling" when stropping.

Try it and see. Your blades will last twice as long and shave cleaner. Send for our booklet "A Razor Saver" and

FREE generous sample of 3-in-One Oil.

Three-in-One Oil Co., 165AKR Broadway, N.Y.



Sell Your Surplus Shooting Equipment

Our For Sale, Wanted and Exchange Column is at your disposal and for this service we make

NO CHARGE

if you are a subscriber and your subscription is paid up. If you are not entitled to a free insertion, send in the advertisement anyway and if it does not run more than a half inch the charge will be fifty cents; one inch, one dollar.

ARMS AND THE MAN

Advertising Department

Washington, D. C.

For Small Bore Riflemen and N. R. A. Clubs



The
Model 12C-N.R.A. "Target"
Grade Repeater



The small bore rifleman requires a rifle that combines accuracy, weight, balance and rapidity of fire.

The new Model 12C-N.R.A. Target Grade Repeater answers all of these requirements because:

It is accurate to an astonishing degree, weighs about six pounds, is fitted with practical target sights—a windgauge globe and aperture front sight and elevating rear peep, with target disc. The sling may be used in any position for either slow or rapid fire shooting. The rifle is chambered especially for the .22 long rifle cartridge.

T. K. Lee, of Birmingham, Ala., one of the leading American small bore shots, speaking of his practical experience with this rifle, says: "It is a very good rifle. My opinion of it is that it will prove the 'hold' of the most expert. It surely does shoot surprisingly well."

Proof of Accuracy

This target, reproduced full size, represents 20 shots fired by Mr. Morton W. Huttenlock of the Montclair, N. J., Rifle Club at 50 yards, with the Model 12C-N.R.A. "Target" Grade Repeater. The score is 198x200.



The Remington Arms Union Metallic Cartridge Company, Inc.

Largest Manufacturers of Firearms and Ammunition in the World

WOOLWORTH BUILDING

NEW YORK CITY



Pull Down on this strap to tighten and Up to loosen

Get Ready for Fall Practice

Every Rifleman Should Have One

Quick and easy adjustment of arm loop to steady aim and take up recoil.
No holes in material with consequent increased strength and durability.
Can be fitted to Springfield, Krag, Enfield or sporting rifle in leather or webbing; if in webbing COSTS LESS, is less bulky, more pliable and lighter.

Write for circular and prices

The Kerr Gun Sling *(Patented)*

has been adopted for use in the United States Army, Navy and Marine Corps.

Manufactured and Controlled by

KERR ADJUSTABLE STRAP CO., Inc.
40 Cedar Street, N. Y. City

Capital Publishers, Inc.

332 C Street, N. W. Washington, D. C.

*Magazine and Large
Edition Printers*

HIGH CLASS COLOR WORK

OBSERVATION—Based on Experience



"After using the Prism Terrestrial Telescope purchased from you at the National Match, Sea Girt, N. J., last summer, we . . . can only speak in the highest terms of your valuable instrument, and consider ourselves very fortunate to possess the best instrument in the market."—A Post Range Officer.

The Warner & Swasey Company
Cleveland, Ohio, U. S. A