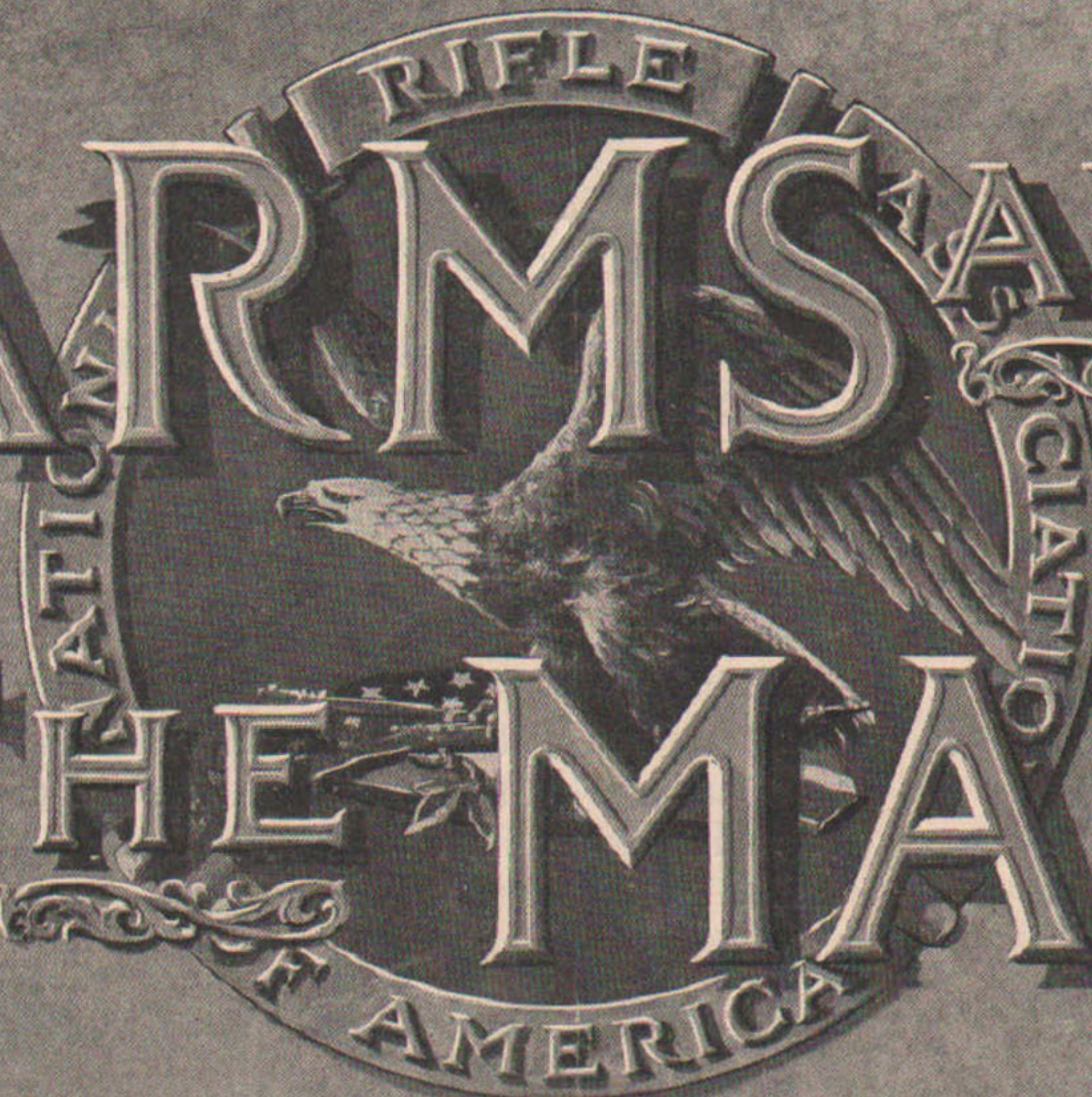


RIFLE
ASSOCIATION
OF AMERICA

ARMS AND THE MAN



MORE SHOOTING FOR LESS MONEY
BENJAMIN ROBINS, PROPHET OF FIREARMS
(Conclusion)

THIRTY YEARS AGO ON THE FIRING LINE
No. 8

THUMB TRIGGER PRINCIPLE APPLIED TO
MILITARY RIFLE

EDITORIALS

and

LATEST NEWS OF RIFLE, REVOLVER AND
SHOTGUN, THE ARMY, THE NAVY AND
THE NATIONAL GUARD

VOL. LXII, NO. 8



MAY 19, 1917

MEN!

Those of us who go to France to fight in the trenches will, from present indications, use the Lee-Enfield or British rifle re-chambered for the American Ammunition.

For the 1914 model the BRITISH WAR OFFICE has adopted the LYMAN SYSTEM OF SIGHTING, the superiority of which, for all types of shooting, was very pointedly and specifically brought to their attention years ago by William Lyman, and its extensive use now for years by the British N. R. A., has acquainted English riflemen with its advantages.

It behooves each and every one of us, whether in the Army or not, to be as familiar as possible with this system of sighting, which in a nutshell is "Look through the aperture at your target (game or man), cover him with your front sight, pull the trigger and HE'S YOURS.

Get out your rifle, any caliber, any make.

Get a Lyman Sight on it.

Go to the range or out on the field and practice!

PRACTICE!! PRACTICE!!!

You'll be twice as efficient a marksman which may some time save your life, and which will certainly double your value in the army.

"The Shots That Hit are the Shots That Count"

Get Lyman Sights from your dealer. If he hasn't them for your particular gun, write us.

All our manufacturers make provision on their rifles for the mounting of

LYMAN SIGHTS

The world's record in quick and snap shooting was made with LYMAN SIGHTS

The Lyman Gunsight Corp.

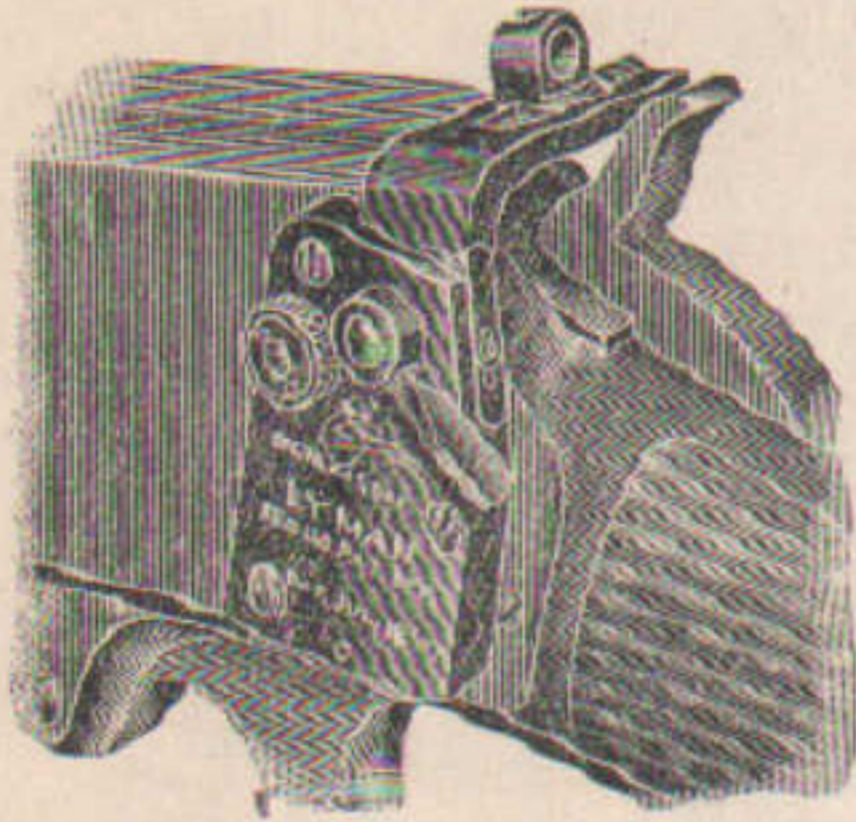
MIDDLEFIELD, CONN. DEPT.

PIONEER MANUFACTURERS OF GUN SIGHTS

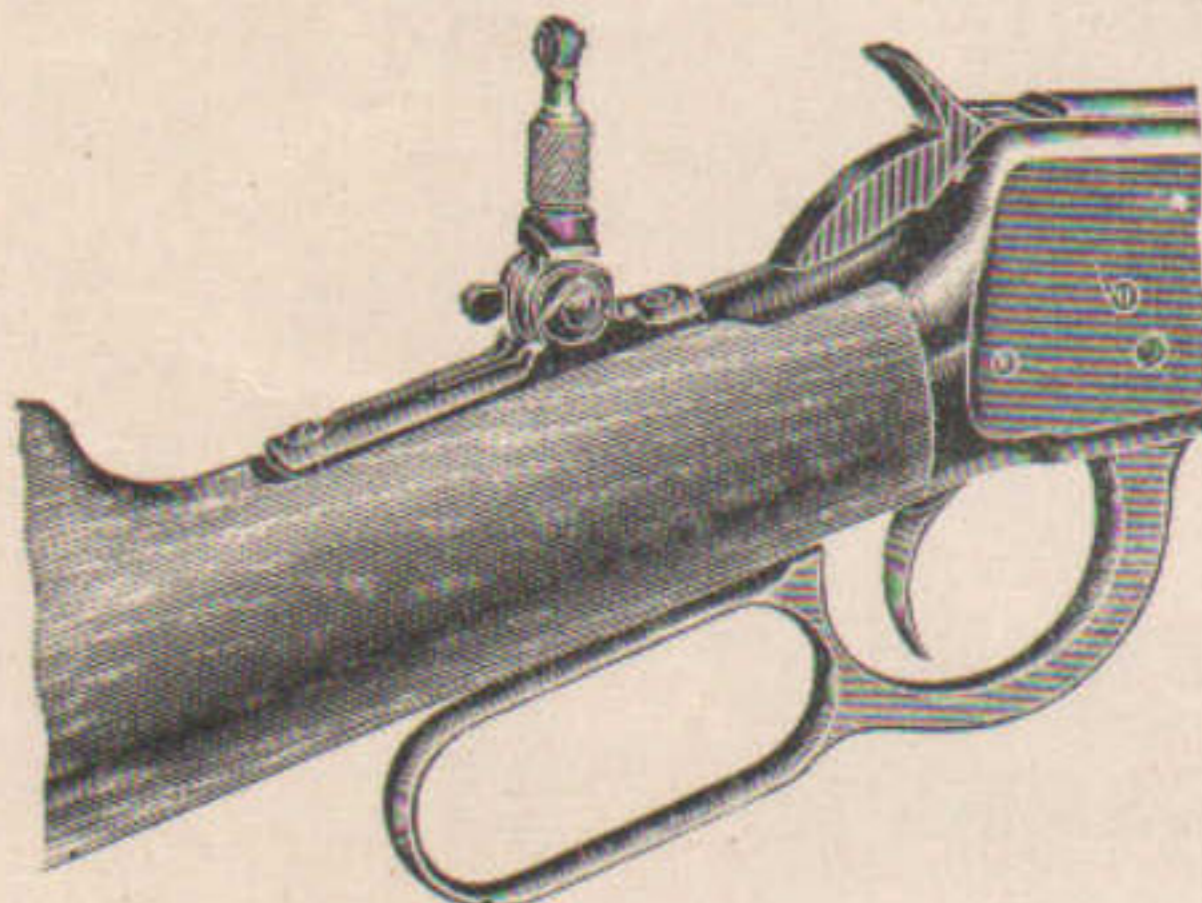
Send for catalogue showing our complete line of sights.



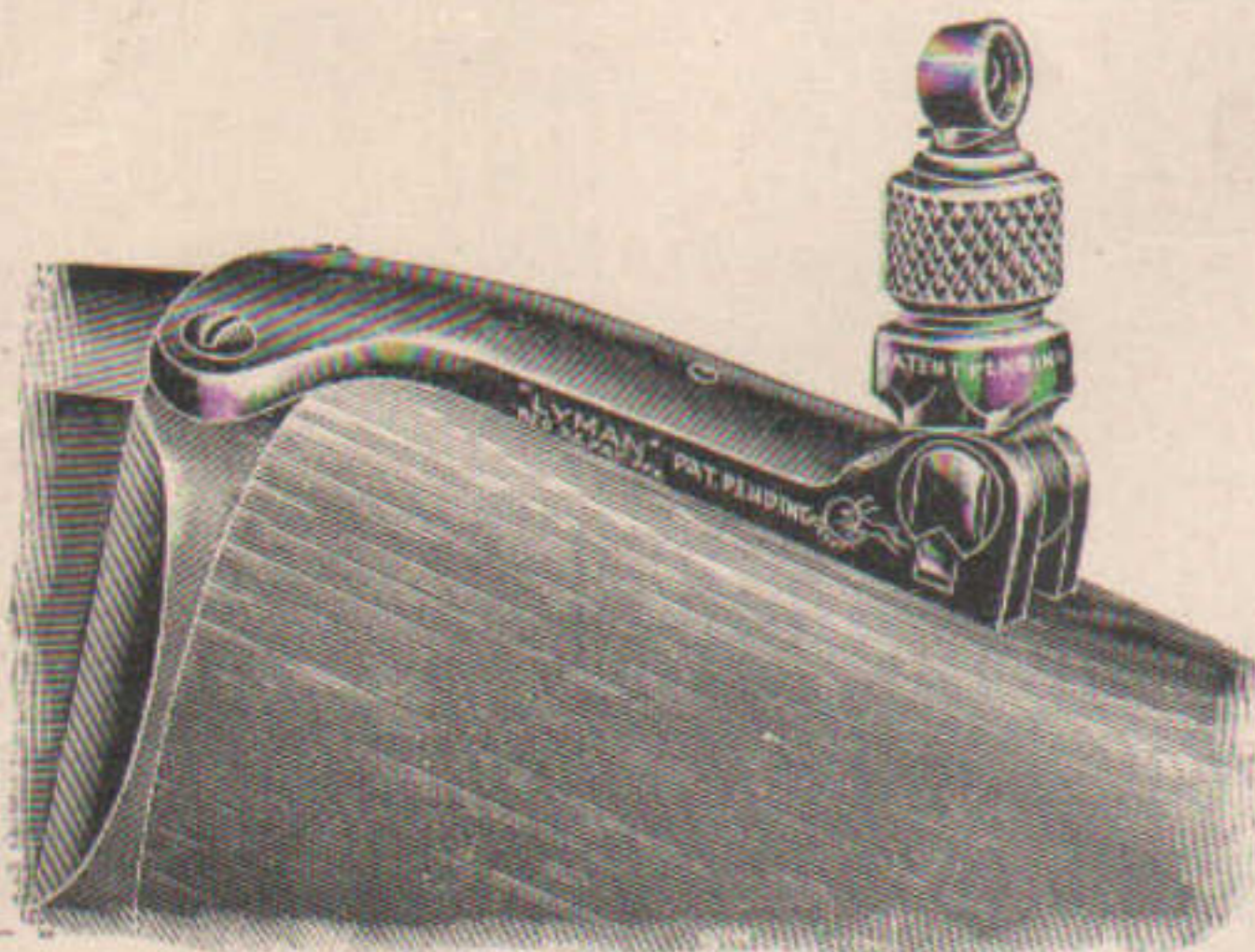
No. 1 A, \$3.00



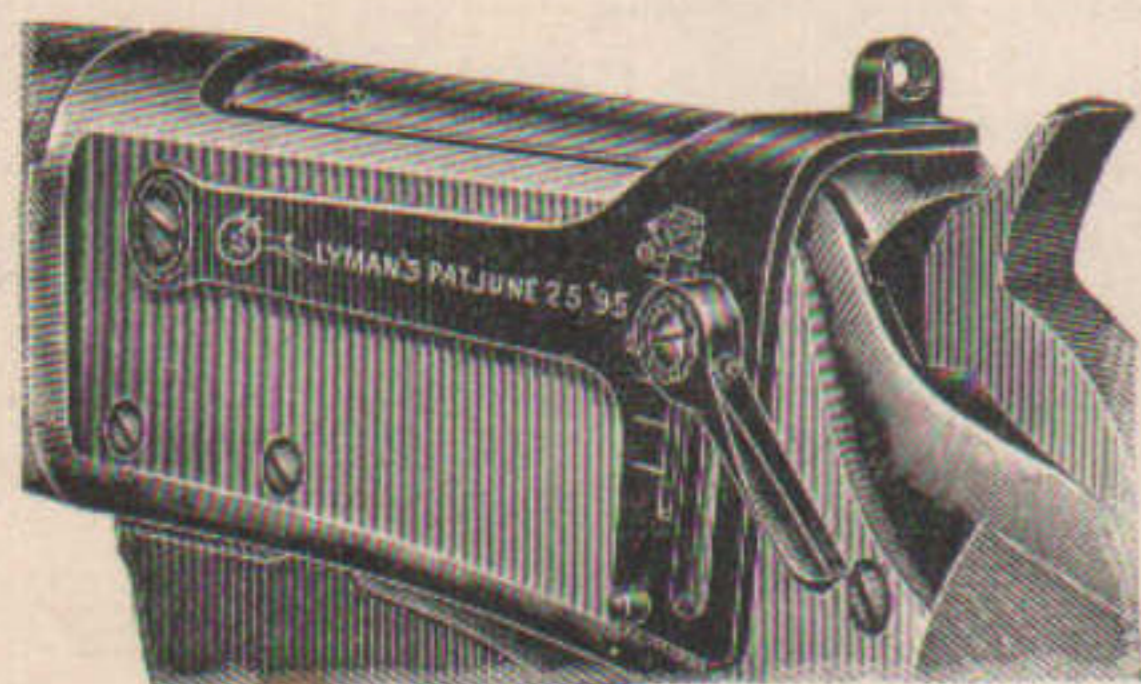
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(Mounted)



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No. 1 A, Sav. \$3.00

ARMS AND



THE MAN

The Official Organ of the National Rifle Association of America

Volume LXII, No. 8

WASHINGTON, D. C., MAY 19, 1917

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More Shooting for Less Money

By J. R. MATTERN

ONE of the reasons for low scores is lack of familiarity with the rifles used and with their practical aiming and handling under range and field conditions. It is saying a good deal, though perhaps not too much, to state that every member of a rifle club should fire at least a thousand shots in what is called instruction practice. It takes a thousand shots to familiarize a man thoroughly not only with the location of the point where his bullets strike at the various ranges, but with the feel and balance of the rifle, the trigger pull, the action of the bolt and with the nature and appearance of the sights under all conditions.

Practice in aiming, and working the rifle with dummy cartridges, will help a great deal at the beginning, but dependability in shooting can be attained only by cultivating an intimacy with the actual throb of the gun as the bullet leaves the muzzle, which the seasoned rifleman so enjoys. The reliable rifle shot must be able to call his shots instantly from a sense of where the sights were lined at the instant of fire. He should be on terms of such close acquaintance with his rifle that hands, shoulder, eye and sights automatically align themselves without delay of a second when a target appears before him.

It is probably correct that most men shoot for the pleasure there is in it. Few men, indeed, join a rifle club or arrange for their shooting in some other manner from a sense of duty. The enjoyment increases just as the amount of ammunition is increased.

But the man with only about \$50 a year to spend on his shooting—a sum which must cover the cost of a rifle, extra sights in many cases, ammunition, and often a hunting trip in the fall—finds himself in difficulties if he attempts to buy his thousand cartridges ready loaded. This year, especially conditions are against him. Cartridges which a few years ago could be secured for \$3.50 to \$4.50 per hundred now cost \$5.50 to \$7.50 when bought of private make, and even Government ammunition is up 40 per cent or more. In these days of the need for economy in all things, the expense of factory cartridges is not desirable. As it happens, it also is not necessary.

It is practicable for almost any shooter to provide himself with a large supply of ammunition and at the same time keep the total cost down to a satisfactory figure. It can be done by reloading, and by using, for most of the practice shooting, lighter loads than the full-power service load put out by the Government and the factories. A few full-power cartridges should be kept on hand. Many successful reloaders buy all their full-power cartridges, and use them only in shooting for record or qualification. Others reload practically all the cartridges they shoot. This article, however, considers only the reloading of reduced loads. The preparation of full-power charges at home was described recently in a number of ARMS AND THE MAN in an excellent article by T. C. Barrier, which it is hoped readers will have on file, as references to it are made here.

Before proceeding with the detailed recommendations, it is well to consider some advantages of reduced loads other than the great one of less cost. Years are required, when nothing else is fired, to establish that familiarity with the action of the service load in the Springfield or Krag rifle that gives the desired amount of control. The 1906 load is a stiff one, especially to the beginner. Full-power loads in many hunting rifles are equally disturbing to the unbroken shooter. The use of a lighter load, with less recoil, less barrel flip, and more of certain other features, will break in the beginner faster and much easier.

The absence of recoil is one of the elements of the cure of those who tend to be gun shy. They can keep the rifle in position, after a few shots show them that the butt will not punish them, and shortly will find themselves with a distinct knowledge of where the sights were on the target at the moment of discharge. The plentiful supply of cartridges which the use of reduced loads makes possible permits enough shooting to bring out individual peculiarities of eyes and aiming. Less shooting will not do this. As an instance of the importance of such a point, one shooter known to the writer finds his bullets going low and to the right when he fires in the squaring and other such positions. He can make better scores by setting his sights a little higher and with some left windage—but only practice brings out the existence of this condition, or establishes the amount of sight correction that should be made.

Many shooters do considerable hunting, or take short trips on which they like to shoot crows, ground hogs or other small animals, or game such as squirrels in open season. The reduced load provides a means of using the same rifle for these purposes, and in the gallery as well if one is available. Some even use silencers on their regular rifles for crow and other such shooting and for shooting indoors, and for this prepare a special charge giving a velocity of about 1,100 feet—the maximum that can be used if the silencer actually is to “silence” the report. The advantage of using the one rifle is obvious and well understood by most men. The one-gun man knows his rifle, knows its pull, drop and hang, things which are all-important in the woods and in skirmish, magazine and change-position fire on the range.

The reduced load is more satisfactory for shooting at 50 to 100 yards than the full power. Many shooters are situated so that they can go to a short range such as these without much trouble, but must travel miles to get to a longer range. Then, too, there is the matter of targets. Short range requires only small targets, which are easily procured. Long range demands the use of large ones, which cost considerable money and must be mounted on frames put up for the purpose. The man who is equipped for shooting at short range can go out without a pit boy or even without a companion, and can set up his targets and verify his firing frequently without having to walk so far as for long-range shooting.

The reduced loads, owing to lower velocity and to different shaped bullet, require more sight elevation, and, in some instances, more windage than regular cartridges. From a standpoint of convenience this is a disadvantage. A saving point about it, however, is that the very necessity of taking care of higher trajectory and more wind drift teaches the beginner how to meet those problems. The full training in looking after elevations and windage does not come to the man using service ammunition till he fires much at ranges longer than 500 yards; but the lighter loads duplicate in ranges of 200 to 400 yards all the conditions of double those distances.

The windage tables in the score books for the Springfield and Krag rifles naturally will not apply to the lighter ammunition. New tables must be worked out, but this is a simple matter for the man who can afford to shoot a few strings for the purpose. Similar tables must be worked out for hunting rifles that are used, in any case.

The accuracy that can be secured with loads other than those for which the rifles are intended is surprisingly good. It is sufficient to make clean scores on standard bulls at any ordinary range—say up to 400 or 500 yards.

In general the finer shooting of the reloads will group in a $\frac{3}{4}$ -inch circle at 50 yards. Many others that are extremely serviceable will not group into any circle smaller than $1\frac{1}{4}$ inches with regularity. So long as all the bullets go into a 2-inch circle at 50 yards, however, the load is a good one, and one that will give satisfaction for practice work. At 100, 200 and other ranges the accuracy is about in direct proportion to the distance, experience shows, and is not proportioned "on the square of the distance," or diminished outrageously in any other manner, as has been stated on several occasions. The accuracy of the service load in the Springfield, in a good barrel, is, of course, much superior to anything stated above. That is, groups very much smaller at 50 yards than 1 inch can be secured.

This brings up a consideration of bullets. It is not generally known that the regular 150-grain service bullet, as made by the Government and by all the private arms factories, can be loaded in front of small charges of powder with great satisfaction. It is one of the very best bullets that the beginner can use, as its handling and loading is the simplest thing imaginable, and good results are assured. These bullets could be bought by rifle clubs up till recently for about \$4.50 per thousand. The price perhaps is higher now, but even at a 50 per cent advance these bullets are cheap.

The only objections to the metal-cased bullets are that they do cost a few dollars and they do wear the barrel more than softer bullets. For those men who desire the greatest economy and want to

preserve the fine edge of their barrels as well as possible, it is a good practice to buy molds, lead, tin and one or two other items, and manufacture the bullets at home. (Cast bullets can be bought from the Ideal Company, ready made, for about the same price as metal-cased bullets cost from the Government.) The use of cast bullets does away with metal-fouling problems, hence simplifies cleaning.

The pointed Government bullet of 150 grains for Krag or Springfield, or any other 30-calibre rifle, perhaps is the most accurate projectile it is possible to load into cartridges at home. The cartridges loaded with it are clean and fit well, which sometimes is not the case with carelessly loaded cast bullets. And the power of the load may be as great or as little as desired, from the standard 2,700-foot velocity down to less than 1,000.

Of cast bullets for Krag and Springfield rifles, perhaps the Ideal 308,334 should be given first place, as it usually is considered most dependable and reliable for all-round use. There are other good ones, however, including both plain base and gas-check ones. Bullet 308,329, a spitzer gas-check one, is accurate, but can not be crowded very fast. No. 308,241, without gas check, is accurate and excellent for very light loading and shooting up to 200 yards. For rifles of other calibres, the reader is referred to the Ideal handbook, which is almost the last word on bullet molds that are available today. Clubs that are interested in loading should not overlook the advantages of the armory mold, as it is called, which casts ten bullets at once. With a single mold the average man can turn out bullets, after the metal is properly melted, at the rate of about 300 per hour.

Cast bullets should be about three thousandths of an inch larger than the groove diameter of the bore. For the 30 calibre, which measures in most rifles about .308, the bullets should be .311 in diameter. On this account little resizing of the muzzles will be required. Only one shell in ten will be so large that it will not hold the cast bullet tightly. The metal-cased bullet, however, being smaller, calls for resizing. It is well, therefore, to have two resizing dies—one of a size that will reduce the necks of shells properly for the bigger cast bullets; the other of a size to reduce them for the smaller metal-cased bullets. Two such dies are needed particularly for .280 Ross reloading, owing to the fact that there is a difference of fully five thousandths instead of the usual three thousandths between cast and metal-cased bullets for that cartridge.

Here the reader is referred to the article by T. C. Barrier recently printed in ARMS AND THE MAN for many useful comments on reloading, as well as to the Ideal handbook. Only special points will be mentioned here. For instance, it is well to try all shells in the chamber of

the rifle they are to be used in after they have been resized and cleaned, and before they are loaded with powder and bullets. Then, after they are loaded, the cartridges should be run through the same process, particularly those that are to be used in magazine or other rapid-fire practice. Sticking cartridges do little harm in slow fire, provided it is not something that will cause inaccuracy which makes them tight. The test can be made rapidly by piling the shells or cartridges on a bed, couch or floor, and allowing the extractor to throw all normal ones to one side.

Weighing the powder is necessary for accurate results when full-power charges are used, but not with reduced loads. The coarser powders do not pass through the No. 5 measure (which is almost a necessity) well, owing to the catching of grains by the edge of the revolving cylinder. The finer powders, however, give no such trouble, and seem to be measured the more accurately because of it. The main caution in handling powder is to avoid getting two loads in the same shell. When charges of 25 grains or less are used in a shell as large as the Springfield, two loads will go in without being noticed at the time—but they will give notice of their presence when the cartridge is fired.

The powder, no less than the bullets, proves a good example of the economy of loading at home. One can well go twice as far (or even farther) when standard reduced loads are used as when full-power charges are used. A marksman, sharpshooter or expert course can be shot over in practice or even for record, with about one-seventh pound of powder, which is less than a quarter's worth. All three courses can be covered with less than half of a pound can. It is mighty cheap shooting—comparable in cost only to the use of .22 rim-fire ammunition.

An Ideal lubricating and sizing machine is an excellent help in preparing cast bullets. Other tools that are useful can be located without trouble by anyone interested, and need not be mentioned here.

Primers of any standard manufacture, including that of the Government, are good. It is stated by authorities that the non-mercurial primers so necessary in order to avoid deterioration of brass shells when full-power loads are prepared need not be used when the loads are reduced. Government primers, U. M. C. Nos. 8, 9, $8\frac{1}{2}$ and $7\frac{1}{2}$; Winchester primers No. $2\frac{1}{2}$ W and others; U. S. primers, Nos. 8 and $2\frac{1}{2}$, and Peters primers of the right sizes are all good. The club secretary should have prices on each grade of them. Do not buy non-mercurial primers that are old, as they tend to deteriorate with age more than the other type.

The powders to use depend somewhat on the kind of bullet to be used and the
(Concluded on page 152)

Thirty Years Ago on the Firing Line

Being short sketches of men who a generation back burned black powder; hand-loaded their own shells; seated bullets apart from the cartridge which contained the charge; made high offhand scores on the Creedmoor target, and kept alive for posterity, the art of marksmanship.

No. 8—FREEMAN R. BULL

WHILE the fine match rifle, with Vernier sights, built to exactly meet the needs and theories of the individual shot, was the rule rather than the exception on the Creedmoor, Walnut Hill and other ranges in the black-powder days, the military rifle as a weapon of exactness and accuracy had its staunch supporters on firing lines more than a quarter of a century ago.

Of such was the membership of the National Armory Team of Springfield, Mass. They were armed with the national weapon, which, then as now, was the Springfield rifle. They were the men who made the old 45-70. They were familiar with every part of it. Not only was it the work of their hands, but they tested it and improved it.

And so, even more than the devotees of match rifle shooting, were these men the real sponsors of a sport which today almost literally numbers its enthusiasts among the inhabitants of every village. Consequently, the scores made by these men with the low-velocity charge and the 550-grain leaden bullet are better standards for comparison than are the match rifle scores.

So far as proficiency with the service arm was concerned, the members of the National Armory Team were "fast company." Their average of accuracy was pretty close to "two down" from a possible 50. And the star shot of the National Armory Team was Freeman R. Bull, whose target groups, shot in the early eighties while testing the Springfield at distances ranging from 100 to 2,000 yards, were made the basis for the scale of graduation on the old Buffington rear sight.

Freeman R. Bull commenced rifle shooting in 1875, and from the start practically confined his work to the military arm. His off-hand shooting was regarded as excellent, and equaled the best results obtained by contemporaneous expert shots who used the match rifle.

To those who today are following the military shooting game the position adopted by Mr. Bull may be of interest. In shooting he stood perfectly erect, the butt brought firmly to the right shoulder, the trigger guard resting on the left thumb, and the forestock just in front of the trigger guard, resting on the fingers. In this position he gained some support from the body, but the elbow was clear and no support was received from the hip. He handled the somewhat unsymmetrical Springfield as daintily as any



Freeman R. Bull
From an old cut

rifleman ever handled a lean, graceful match rifle.

While Mr. Bull was a member of the Second Regiment, Massachusetts Volunteer Militia, his off-hand shooting was largely confined to rifle tournaments at Springfield and the vicinity and at Creedmoor.

Recognizing Bull's proficiency with the rifle, however, the officers at the Springfield Armory frequently called upon him to shoot the Springfield rifle at long ranges, and as a result he gained a knowledge of mid- and long-range shooting which was second to none. During the first year of his shooting, he succeeded in scoring 47 out of a possible 50, which in those days with a military rifle was considered nothing short of remarkable. In 1877 he outdid even this performance. Switching to the Springfield carbine, which for long-range work was much less esteemed than the rifle, he hung up his then brilliant and unparalleled scores of 48 and 49 out of 50 at 200 yards off-hand.

He was a member of the Armory team when that organization won the team match at Creedmoor in 1879. The course of fire was 200 and 300 yards. On that occasion, the Armory shots used

military rifles, without allowance, against the fine match rifles of competitors.

During the first decade of his career he made many other fine scores, including one of 110 and another of 111 out of a possible 120 on the Massachusetts target, February 29, 1884; 72 out of a possible 75, Creedmoor count, on a Man target, at Riverside range, July, 1886; and at Creedmoor, September, 1887, scored in the Hilliard Trophy out of a possible 35, 32 at 200 yards, 33 at 500 yards, and 31 at 600 yards.

One of the most consistent of his shooting performances is to be found in the record he made for the gold medal offered by the Armory Club in 1887. The course of fire called for ten scores of 10 shots each, every one fired on a separate day and with a different Springfield rifle, taken from the daily product without alteration. During this series he made 7 scores totaling 49 out of 50 and 3 scores totaling 48 out of 50.

On February 18, 1877, he made a perfect score of 10 consecutive bull's-eyes with service rifle and service ammunition at 500 yards in the prone position.

The results obtained by Freeman R. Bull while making tests of the Springfield rifle, and which were made for the purpose of graduating the Buffington sight, are of unusual interest to the student of obsolete arms. The targets made were all shot under similar conditions of wind and light, with the object of fixing elevations, the conditions being checked up by placing a man in the butts to frequently telephone the condition of the wind there to Mr. Bull on the firing line. The service ammunition was used: 70 grains of powder, 550-grain bullet. The conditions were: wind, calm; light, bright. The shooting was done with a muzzle rest, from 100 to 2,000 yards, 10 shots at each distance. The records show:

100 yards, with 8-inch bull's-eye, grouped in 4½-inch circle; all in bull's-eye.

200 yards, 8-inch bull's-eye, grouped in 6-inch circle; all in bull's-eye.

300 yards, 8-inch bull's-eye, grouped in 12-inch circle.

400 yards, 22-inch bull's-eye, grouped in 12½-inch circle.

500 yards, 22-inch bull's-eye, all in 21-inch circle; all in bull's-eye.

600 yards, 22-inch bull's-eye, all the shots in a 22-inch circle; all but one in bull's-eye.

(Concluded on page 150)

TURTLES HUNTED WITH RIFLE

HOW a Connecticut game preserve was cleared of snapping turtles by a rifleman is interestingly described in the Bulletin of the American Game Protective Association. The account says:

"The large lake, a body of water containing an area of about two hundred acres, and which was being made an attractive breeding-ground for water-fowl, was found to be infested with large numbers of these voracious reptiles. Young ducklings are a choice morsel for the snapping turtle, and full-grown birds are often pulled down, and either wholly destroyed, or else badly mutilated. In such a large body of water, containing so many ledges and convenient rocks upon which these turtles could sun themselves, traps were found to be useless. The trap referred to is one so constructed that when a turtle has crawled up the plank, which inclines into the water, and reaches the flat top it is immediately precipitated into the trap itself, the two boards forming the top being pivoted at their outer edges and weighted, so that after releasing they return at once to a level position. The trap itself consists of a rectangular framework of wood covered with heavy galvanized wire netting, the mesh of which is about $\frac{3}{4}$ of an inch square. The top has in addition to the trap doors, an overhang of tin to prevent the turtles from crawling out. Several of the small painted turtles, and two or three muskrats, were caught in these traps, but none of the snapping turtles.

The manager finally decided that the most effective method of ridding the lake of these undesirable denizens was by shooting, using a rifle for the purpose. A hook forged by the blacksmith, having a large barb with a keen cutting edge, was used with much success. This was securely bolted to a light but strong pole about twelve feet in length. Paddling along slow in a canoe in the shallow water near shore, turtles were often seen on the bottom of the lake and taken. By devoting part of each day to this work, from the time the turtles appeared in the spring, until they hibernated, 135 were destroyed.

When this turtle first appears after its winter sleep, and until the water in the lake reaches its highest temperature, it may be found on sunny days sprawled upon some convenient rock or ledge enjoying a sun bath. With the beginning of July, few are seen upon the rocks, and from now until the period of hibernation begins it may be seen swimming about or floating on the surface of the water, the back

showing slightly above the surface like a submarine partly submerged.

Early in the season all rocks and ledges were carefully scanned with a field-glass, and as soon as a turtle was discovered, a stalk was made by canoe, and a careful shot did the rest. A rifle of .303 caliber and soft-nosed bullets were used. The impact of a bullet of this sort would usually knock the turtle four or five feet into the air, like a ball. The turtle's sense of hearing is not acute, for the report of the rifle did not seem to disturb one of these creatures when shot at and missed. Its sight is, however, very keen and the larger specimens were very much on the alert, often taking alarm and slipping into the water when one was at a long distance from them. It became evident that turtles possess a certain degree of inquisitiveness, and will swim from a long distance to inspect closely a strange object on the shore of the lake. After locating any turtles floating or swimming about, a convenient ledge on the shore was chosen where one could sit motionless but in full view. This curiosity on the part of the turtle would soon prove fatal. On one occasion I shot six large specimens within a space of time not exceeding two hours, without once moving from the spot I had chosen. One must, however, remain perfectly motionless and be ready to shoot the moment the turtle appears close at hand, for they approach by a series of short stages of swimming, coming to the surface several times to inspect the object of their curiosity before they are within easy range of the rifle. Like all reptiles, the turtle is tenacious of life. Very few of the turtles shot in the water were recovered at the time, as they invariably sank at once. Usually within two days, or as soon as gas distended the intestines, they would be found on the surface and were at once removed.

"Many of these turtles were dissected and the contents of their stomachs examined. During the spawning season of the red perch these were found to contain large masses of the eggs of this fish. These eggs are deposited among the thickly growing water plants to which they cling, and the stomachs of the turtles were jammed full of this vegetation, which is, of course, eliminated in the process of digestion, the contents of the intestines proving this. Later in the season the stomachs were found to contain fish in various stages of digestion. Judging from the size of gill covers found thus, a large turtle is capable of swallowing a good-sized fish. The remains of a bass that must have weighed nearly two pounds was taken from one stomach. On one occasion a snapping turtle was discovered in the act of devouring a large muskrat.

Possibly because of the fact that there was an abundance of fish in the lake, and also by reason of the gradual extermination of this reptile from day to day, the water-fowl were not molested.

The turtle has the habit of wandering from one pond to another in the autumn just prior to the period of hibernation, and small ponds in which water-fowl are kept often become tenanted with this unwelcome visitor. A small pond, containing an area of two acres or less, may be surrounded by a fence of coarse-wire netting, $2\frac{1}{2}$ or 3 feet in height, firmly imbedded in the ground. This will be an effectual barrier.

ABOUT KHAKI

The word "khaki" was derived from East Indian "khak," meaning dust; it is now applied both to the cloth and its color. The name was first given to a dust-colored fabric, something like holland linen, which was worn by the East Indian troops, both British and native. A mixed regiment of frontier troops, known as the Guides, were the first (1848) to don the khaki uniform.

During the Indian mutiny (1857-58), some of the British troops wore khaki and from that time it was in almost universal use by the British and native armies in Asia and Africa. The uniform of all the British soldiers in the South African war (1899-1902), was made of khaki drill; but it was found to be of too light a texture for cold weather in the South African uplands. Since 1900, all drab and gray-green British uniforms are popularly known as khaki.

The khaki uniforms worn by the British troops in the present European war are made from British wools, and manufactured in the well known cloth mills of the West Riding, in Yorkshire. The warp of the cloth is of worsted and the weft of woolen. Its weaving entails the use of a heavy, complicated, and expensive loom, and the work is so difficult and particular that a weaver who can "mind" two looms of ordinary cloth, can "mind" only one of khaki cloth. The following are the British official prices charged for khaki uniforms: Service uniforms made to measure, tunics, 30s (\$7.50); for the rank and file, 35s (\$9.75); for officers—trousers, 12s (\$3.00); knickerbockers, 16s (\$4.00); Bedford cord riding breeches, 42s (\$10.50).

Khaki uniforms were first worn by the United States troops in the Spanish-American war (1898). The material was of neutral olive drab rather than regulation khaki color, and is now officially known as cotton service uniform.

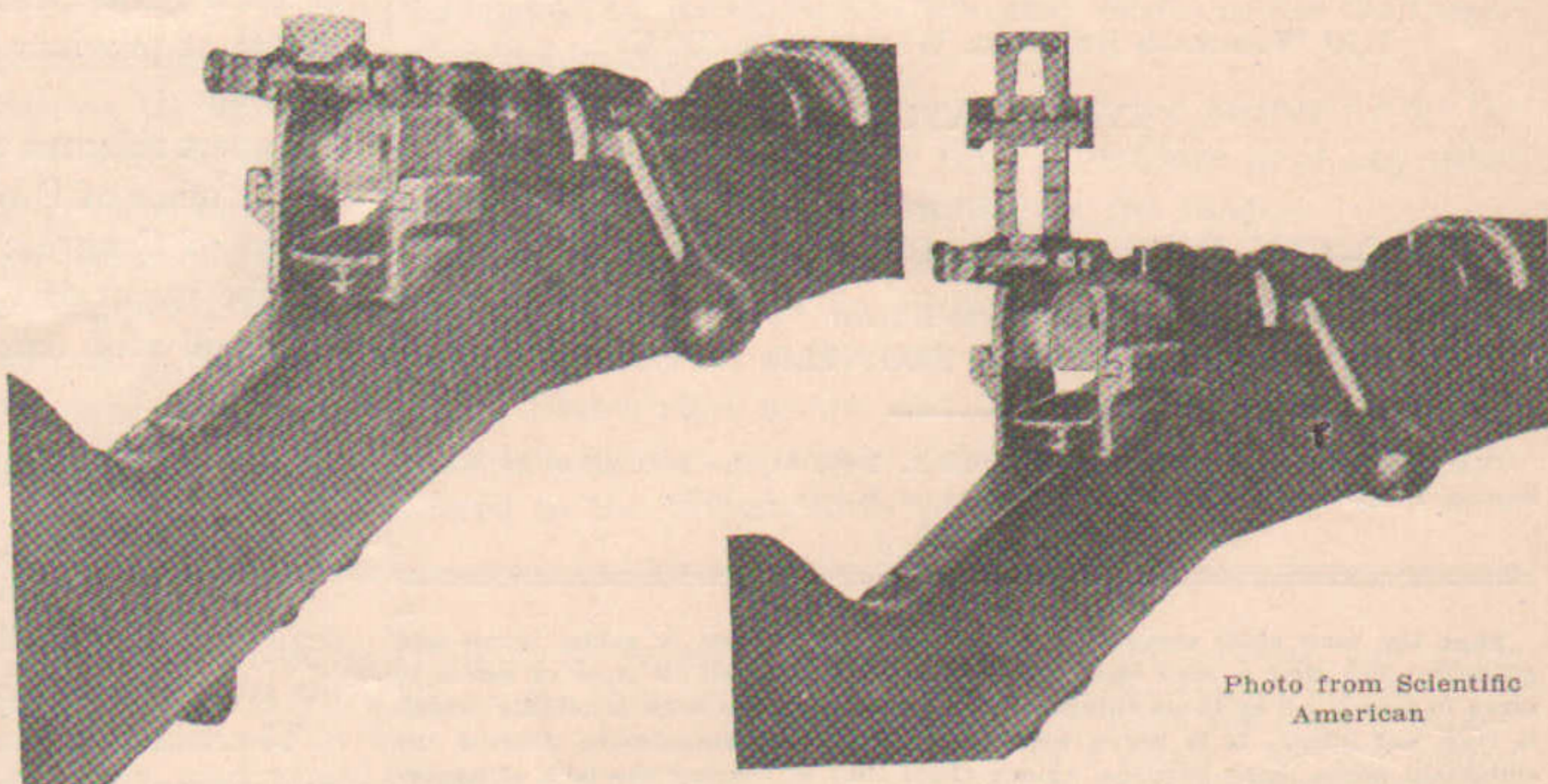
K. J. M.

Thumb Trigger Principle Applied to Military Rifle

UPON the age-old general principle of the thumb trigger, a Brooklyn inventor has based what may develop into an unusual military rifle, constructed more or less along the Springfield bolt-action lines, and equipped with that boon to riflemen, a practical receiver sight.

Very little has been made public concerning the new rifle. From its outward lines, it strongly suggests the Springfield, and its firing mechanism is on the bolt-action principle. If the weapon is a success its inventor has made an important discovery.

Rifle history definitely records thumb triggers at dates contemporary with those which marked the perfection of the earliest percussion-cap firearms. Even at those now remote times, firearm experts had experienced and recognized one drawback to the finger trigger, such as appears on practically all firearms: the likelihood of "pulling off" the proper alignment of sights when pressing the trigger, and the consequent necessity of perfecting a gentle trigger squeeze to



Left, the rear-sight in normal position with the trigger under it; right, the rear-sight elevated for long range work.

Photo from Scientific American

But, regardless of whether the new style of escapement is a success or a failure, the inventor is to be congratulated upon the sights which he has provided, and which, by bringing the aperture much

and downward movement of the whole barrel sufficient materially to affect accuracy of aim.

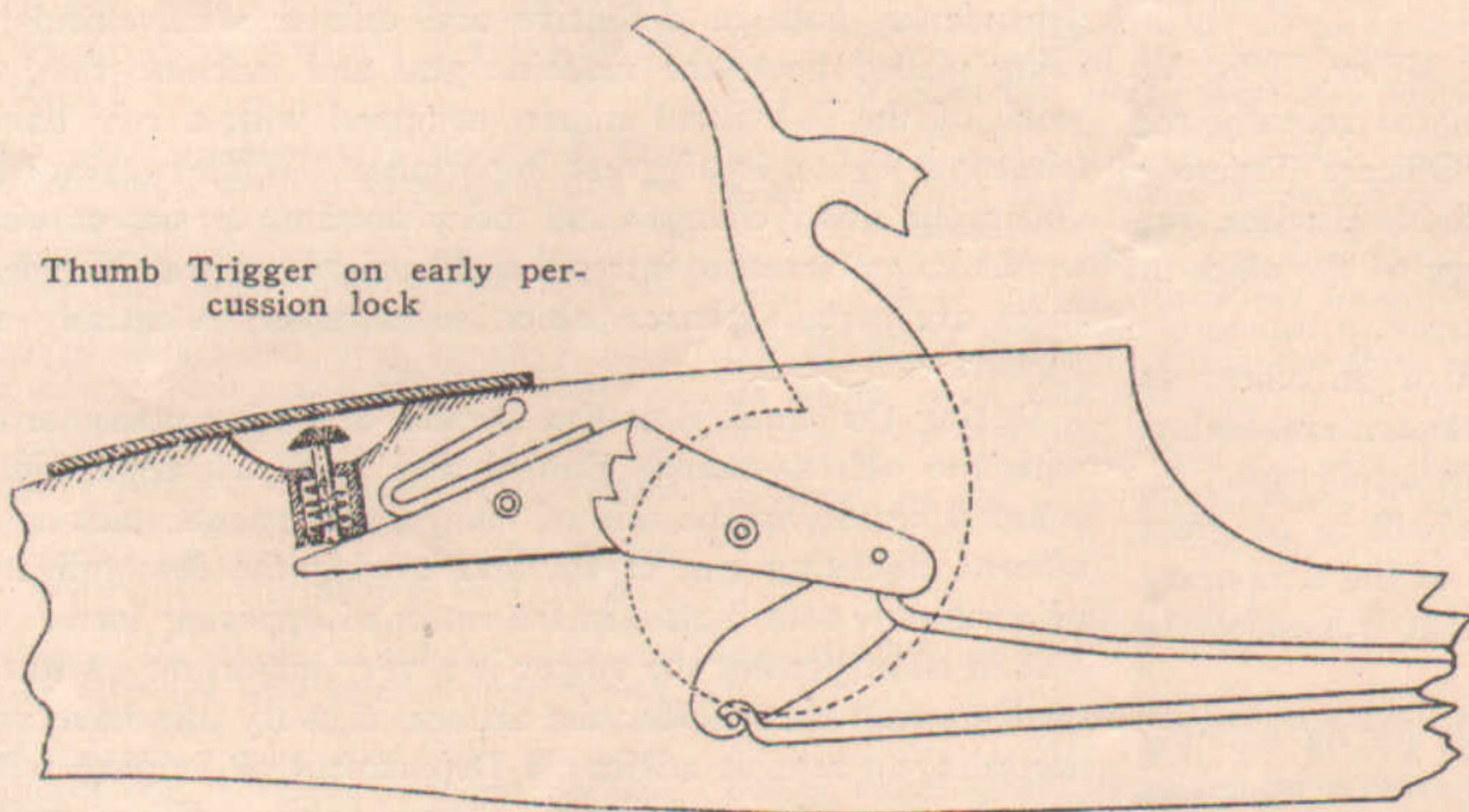
"Again, many users of rifles carry them 'cocked and locked,' so that they may be ready for instant use. Various devices for locking the cocked guns have been devised, and one or another of these is found on most guns now made; but they are all subject to the fatal objection that they take almost as long to unlock as to cock the gun without them.

"Finally, in cold weather, when the hand needs protection, the rifleman is in a sad dilemma. The gloved finger is too stiff to manipulate with safety the trigger now in use, while a mitten, though even warmer than a glove, must be removed altogether.

"A Brooklyn inventor has eliminated these various defects, so he claims, in a new gun recently patented. In the first place, he has substituted, for the old, projecting finger trigger under the stock, a thumb trigger above the stock. In operation it is only necessary to tighten the grip of the hand slightly in order to work this trigger; and at rest it is possible to guard it by a five-sided guard.

(Concluded on page 151)

Thumb Trigger on early percussion lock



counteract this possibility before good hits could be assured.

The thumb triggers of the early days, as well as those whose have made later appearance, generally took the form of push buttons or of levers. These, it would appear from rifle history, have been regarded more or less as freaks and never came into very general use, so far as practical marksmanship was concerned.

From the photographs of the latest model in thumb triggers, it would seem that the invention of the Brooklyn man had considerably more to recommend it than the thumb triggers of earlier vintage.

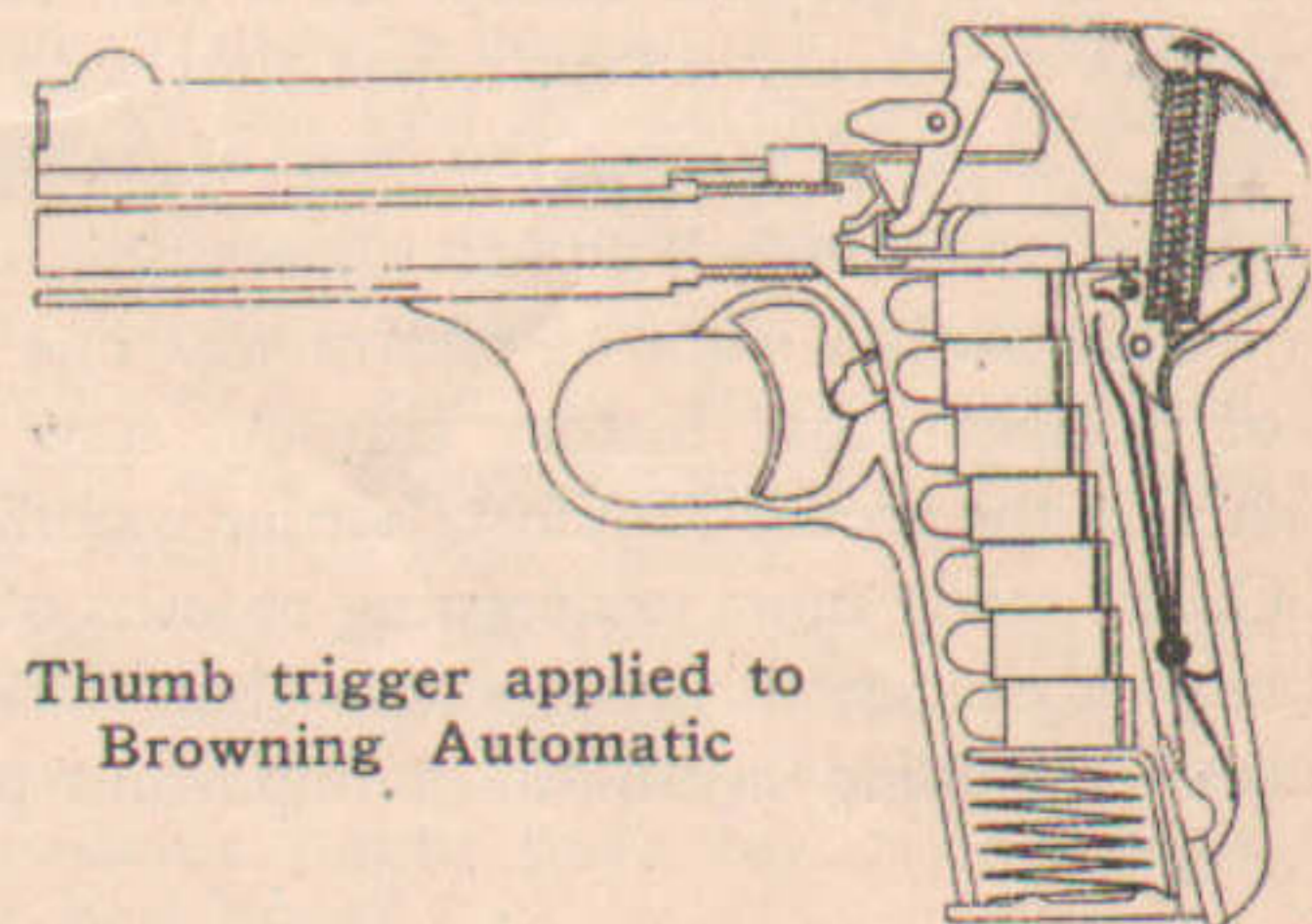
Whether the inventor took the Springfield as his model in working out his thumb-trigger idea, altering the conformation of the receiver, can not be stated.

closer to the shooter's eye, not only makes aiming easier, but materially increases the sighting radius.

A. B. Bowers, describing the new thumb-trigger rifle in *The Scientific American*, after setting forth the usual list of drawbacks which so many riflemen impute to the present service rifle, says, in part:

"The regular army rifle, while in most respects an admirable weapon, is, in the opinion of many competent observers, open to grave objections on more than one ground. In the first place, the trigger by which the rifle is discharged is located below the stock, between narrow, open-sided guards, which are far from a sufficient protection.

"Moreover, the manner of discharge, by pressure of the forefinger on the trigger, produces, in many cases, a sidewise



Thumb trigger applied to Browning Automatic

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

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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 DIRECTOR OF CIVILIAN MARKSMANSHIP

THE Chief of Staff of the Army has under consideration the names of several retired Army officers from which he will probably select one for detail as Director of Civilian Marksmanship.

This was made necessary when Col. S. W. Miller, U. S. A., appointed to the office several months ago, was recently relieved and assigned to command the Reserve Officers' Training Camp at Fort Niagara, N. Y. Captain Wm. N. Hughes, Jr., of the Militia Bureau, is temporarily in charge of the office in addition to his other duties.

It is important that the permanent detail of an officer as Director of Civilian Marksmanship be made without delay. Giving the citizens of the United States an opportunity to learn to shoot the military rifle at this time will be of great value from a military standpoint. Members of the temporary army will need every bit of such training that is possible to give them.

The War Department is morally responsible for the training at target practice of every man to whom a rifle is issued as part of his fighting equipment and upon the ability to use which his life may depend. Men sent abroad should be expert marksmen. Before this can be accomplished each man must be coached as an individual in the handling of the rifle. Unfortunately, the opportunity for this kind of training, which is so vitally necessary, is often lacking at large mobilization camps. During the Spanish-American War thousands of men were never given a chance on a rifle range before going into action, and many a man's first shot with the old Army Springfield was fired during the heat of battle, without any knowledge of elevation, windage or holding.

That such a state of affairs was one of the many mistakes of ancient army history can not now be pleaded, for even during the recent Mexican border mobilization of the National Guard many units undergoing months of active service did not have a chance to fire a single shot, and so returned from the border lacking in this most important part of the training of a soldier.

The Director of Civilian Marksmanship could do much to increase the value of potential recruits before they ever reach mobilization camps by giving the training necessary to make of each male citizen a man with the ability to hit what he shoots at previous to the time he reports for camp and field training.

Expert riflemen will be needed during the present emergency.

The office of Director of Civilian Marksmanship was created by act of Congress and money has been appropriated to carry out the intent of Congress. It is hoped that the Secretary of War will soon name the right man to start something.

THE AMERICAN EXPEDITIONARY FORCE

WHEN the flag of the United States is unfurled beside the colors of the Allies on the European battle front, a regiment of picked American sharpshooters should be among the troops who fight beneath it.

There are in the United States thousands of men whose proficiency with the service rifle would make them invaluable as instructors or as snipers. Such an organization could be formed without the slightest difficulty under the authorization given the President to provide technical or special units for the new army.

That there is room for such a unit cannot be doubted after the statements of officers returning from the war zone, all of which point to the conclusion that no matter how great a dependence, both in defensive and offensive movements, is being placed upon the machine gun and machine rifle, the work of the individual sniper, equipped with a rifle having telescopic sights, is of great importance. While warfare has undergone many changes and today presents an aspect which would stagger even so intrepid a campaigner as was Napoleon, there are certain phases which seem never to entirely disappear.

During the Civil War the snipers of both armies, armed with the old .55-calibre Enfield and huge telescopic sights, counted heavily in the tide of many engagements, picking off officers, depleting gun crews, and sowing the demoralization of accurately sent bullets in the ranks of opposing forces.

And so at present the sniper is a very important institution on European battlefields; the armies of every ally have now, according to reliable advices, a Department of Sniping, which has charge of the training of sharpshooters. When trained the snipers are regarded as "detached units" and assigned to a certain theatre of operations, where they remain, regardless of the movement of other troops.

AN ORDER TO BE EMULATED

THE Adjutant General of California has recently published an order directing the commanding officers of National Guard organizations within the state not only to put forth an especial effort toward instructing every man in each command in the handling of the service rifle, but to do everything possible to encourage the presence of civilian riflemen on National Guard ranges.

In promulgating this order, Brig. Gen. J. J. Borree is to be congratulated upon a spirit which will no doubt be justified by results. His order might well be made a model for other similar orders throughout the United States. It reads:

"All men of the National Guard believe in preparedness

for the defense of the Nation, and the fact that a great danger lies in the present lack of knowledge of firearms by the men of the Nation is a matter which should be of particular interest to the National Guardsman.

"It is, therefore, urged that special effort be made to instruct the men of your command in rifle work, both on the gallery and outdoor ranges. Organizations having no outdoor range should endeavor to locate a site, and when a suitable one has been found, to advise this office, so that an officer may be detailed to inspect the range and approve or disapprove it.

"In order that we may further assist in educating the men of this state in the use of the rifle, it is the desire of this office that every range board, and the commanding officers of organizations having rifle ranges, place such ranges, or the portion

of them that may be available, at the disposal of the high school cadet companies, regularly organized under the state law, and such civilian rifle clubs as are affiliated with the National Rifle Association of America, and who may desire to use the ranges at particular times.

"It will be understood, however, that the instruction of the National Guard troops must take precedence over any other organizations which may desire to use the ranges.

"It is essential that all organizations, military and civilian, using the ranges, work in harmony and that every effort be made to perfect as many men as possible in the use of the United States rifle, to the end that California may have the maximum number of expert riflemen—a condition much to be desired in the preparedness plan."

Benjamin Robins

By F. H. KELLY

(Conclusion)

On the 2d of July, 1747, Robins read before the Royal Society his famous dissertation, entitled "On the Nature and Advantage of Rifled Barrel Pieces." In this dissertation, having described the nature of a rifle barrel, he proceeds to sum up the advantages, which had been claimed for such barrels by previous writers, in the following words:—

"But what occurs most wonderful in this affair, is, that a method so singular and so successful, and which hath been so long and generally practiced in many parts of *Germany* and *Switzerland*, should have its theory so little understood, as it appears to me to have been. For by all, I have been able to recollect, I am fully satisfied, that neither the inventor of this method, nor the practicers of it, nor any of the numerous authors, who have written about it, have been at all apprised of the true and genuine advantages hence arising; but have constantly represented the intention of it to be very different, from what I have here described; and have supposed it to be attended with conveniences, which, by a long series of experiments, I know to be altogether imaginary. For the truth of what I here advance, it might perhaps be sufficient to appeal to those gentlemen, who have at any time examined artificers, or those skilled in the practice of these pieces, about the use and intention of the rifles. For I doubt not, but they have found, as I have done, that one or all of the three following reasons have been constantly alleged. Either that the inflammation of the powder was greater by the resistance, which the bullet thus forced into the barrel gave thereto, and that hereby the bullet received a much greater impulsion, than it would have done from the same quantity of powder in a common piece; or that the bullet by the compounding of its circular and revolving motion did, as it were, bore the air, and thereby flew to a much greater distance, than it would otherwise have done; or that by the same boring motion it made its way much easier through all solid substances, and penetrated much deeper into them, than if discharged in the common manner."

He then describes experiments disproving these theories, and shows clearly that the real advantage of rifling

is that it causes the bullet to rotate around an axis parallel to the line of spiral motion as in the former kind of the bore and thus obviate the enormous error which was otherwise inevitable.

"And first I considered, that in consequence of the reasoning about the manner, in which it produces this effect; it should follow, that the same hemisphere of the bullet, which lies foremost in the piece, must continue foremost during the whole course of its flight.

"To examine this particular, I took a rifled barrel carrying a bullet of six to the pound; but instead of its leaden bullet, I used a wooden one of the same size, made of a soft springy wood, which bent itself easily into the rifles without breaking. And firing the piece thus loaded against a wall at such a distance, as the bullet might not be shivered by the blow; I always found, that the same surface, which lay foremost in the piece, continued foremost without any sensible deflection, during the time of its flight. And this was easy to be observed, by examining the bullet; as both the marks of the rifles, and the part that impinged on the wall, were sufficiently apparent."

His remarks on loading are especially interesting:—

"The most usual is, doubtless, what I have already recited, that of forcing a leaden bullet down the piece by a strong rammer driven by a mallet. But in some parts of *Germany* and *Switzerland*, an improvement is added to this practice; especially in the larger pieces, which are used for shooting at great distances.

"This is done by cutting a piece of very thin leather, or of thin fustian, in a circular shape, somewhat larger than the bore of the barrel. This circle being greased on one side, is laid upon the muzzle with its greasy part downwards, and the bullet, being placed upon it, is then forced down the barrel with it; by which means the leather or fustian incloses the lower half of the bullet, and by its interposition between the bullet and the rifles, prevents the lead from being cut by them. But it must be remembered, that in those barrels, where this is practiced, the rifles are generally shallow, and the bullet ought not to be too large.

"As both these methods of charging at the mouth take up a good deal of time; the rifled barrels, which have been made in *England* (for I remember not to have seen it in any foreign piece) are contrived to be charged at the breech, where the piece is for this purpose made larger than in any

other part. And the powder and bullet are put in through the side of the barrel by an opening, which, when the piece is loaded, is filled up with a screw. By this means, when the piece is fixed, the bullet is forced through the rifles, and acquires the same pieces. And perhaps somewhat of this kind, though not in the manner now practiced, would be of all others the most perfect method for the construction of these sorts of barrels."

He ends his paper with the following words:—

"I shall, therefore, close this paper with predicting that whatever state shall thoroughly comprehend the nature and advantages of rifled barrel pieces, and, having facilitated and completed their construction, shall introduce into their armies their general use with a dexterity in the management of them; they will by this means acquire a superiority, which will almost equal any thing that has been done at any time by the particular excellence of any one kind of arms; and will perhaps fall but little short of the wonderful effects, which histories relate to have been formerly produced by the first inventors of fire-arms."

These later dissertations were only included in the second edition of Robins' book, which was published after his death, and it is interesting to note that the famous paper on the rifle only came into the possession of the editor of the book at the very last moment, when all the rest of the book was actually in print. This famous article was, therefore, included almost by an accident at the end of the book, and probably but for that accident would never have descended to us.

In 1750 Robins went to India, chiefly to construct fortifications. He was unable to support the climate, however, and eventually became ill. He refused to give up, and gradually got weaker, and died on July 29, 1751, with his pen in his hand. He is believed to have revised his book, "New Principles of Gunnery," and to have performed many new experiments, but no trace of them was ever found.

So died, at the early age of 44, this most original genius. Who can say how the history of the development of fire-arms might have been changed if he had lived!

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 Benjamin Robins, 1707-1751, by Captain Hardcastle. (Arms and Explosives, July, 1907)

THIRTY YEARS AGO ON THE FIRING LINE

(Concluded from page 145)

- 700 yards, 36-inch bull's-eye, all shots in 29-inch circle; all bull's-eyes.
 800 yards, 36-inch bull's-eye, all in 29-inch circle; all bull's-eyes.
 900 yards, 36-inch bull's-eye, all in 28-inch circle; all bull's-eyes.
 1,000 yards, 36-inch bull's-eye, all in 46-inch circle; all but two in bull's-eye.
 1,100 yards, 48-inch bull's-eye, all in 52-inch circle; five shots in bull's-eye.
 1,200 yards, 48-inch bull's-eye, all in 5-foot circle; half the shots in bull's-eye.
 1,300 yards, 6-foot bull's-eye, all the shots covered with 5¾-foot circle; all but one in 6-foot bull's-eye.
 1,400 yards, 6-foot bull's-eye, all in a 7-foot circle; all but three bull's-eyes.
 1,500 yards, 6-foot bull's-eye, all in 8½-foot circle; four bull's-eyes.
 1,600 yards, 6-foot bull's-eye, all in 15-foot circle; two bull's-eyes.
 1,700 yards, 6-foot bull's-eye, all in 18½-foot circle.
 1,800 yards, 6-foot bull's-eye, all in 18½-foot circle; four bull's-eyes.
 1,900 yards, 6-foot bull's-eye, all in 20-foot circle; vertical deviation, 13½ feet.
 2,000 yards, 6-foot bull's-eye; lateral deviation, 21 feet; vertical deviation, 12 feet.

SMALL ARAB FOR CAVALRY MOUNT

AN effort is being made by the Commandant of the Mounted Service School, Fort Riley, Kansas, to obtain expressions of opinion as to the strain from which can be developed the best cavalry mount.

Major Frank Tompkins, of the Cavalry, was recently quoted in the New York *Herald* upon this question. The *Herald* said:

"After his experience in Mexico, Major Tompkins is an enthusiastic partisan of the small Arab horse for the cavalry, notwithstanding the fact that thoroughbred race horses are favored by many Army officers. As Major Tompkins's column covered the distance from

Columbus to Parral in two days less time than any other column of General Pershing's expedition, he speaks with some authority.

"Of all the horses that did the hardest and most continuous marching to Parral,' he said the other day, 'there was not a single thoroughbred that was ridden all the time. In my own particular command the horses under 15½ hands stood up better under the hardships than did the taller horses. The thoroughbred horse of today has no place in a cavalry command. He is bred for work which is diametrically opposite to the work of a cavalry horse. For generations he has been bred to run his sprint races. I have never seen a blue-ribbon winner in any charger class that would have stood the gaff in Mexico.'

"The cavalry does not want a galloping horse. The cavalry needs an animal that can carry rider and pack, about two hundred and fifty pounds, at the rate of five or six miles an hour for ten hours at a stretch, and do it day after day; an animal low to the ground, of full form, one that when in low flesh does not show it, a horse whose bone and muscular development, energy, and reserve power are denoted by a certain balance not often seen in horses over 15½ hands high."

Subsequently, Major Tompkins in a letter to the *Herald* said: "I feel that I must say a word or two in explanation, as I seem to have offended many lovers of the thoroughbred horse. My remarks applied to the thoroughbred horse bred and raised in the United States. Some thirty years ago our thoroughbred horses were bred to win races consisting of four miles, and each horse had to win three heats out of five before the race was won. This meant a horse must run at least twelve miles to win a race, and if the contest was close he sometimes ran twenty miles. Horses of thirty years ago must have been animals of bone and substance in order to qualify.

"Racing in heats soon became irksome and the races were reduced to one heat of one mile, and even less. Furthermore, it was expensive to keep a horse until he was mature. Hence, colts at the age of two years old were raced. Generations of horse breeding under these conditions have changed the noble thoroughbred of thirty years ago into an animal that is now weak in his hoofs, weak in his leg tendons, and weak in his lungs as a result of forced racing.

"A cavalry horse must be quick on his feet, must be capable of carrying an average load of 250 pounds, must be able to travel at the rate of five and six miles an hour for ten hours at a stretch, and be able to move at a fast speed; also must be able to do his work on very scanty food, often on nothing but grazing. The thoroughbred of the present day, due to the avarice of the gamblers that breed and raise him, is thoroughly unfitted for the cavalry service."

MAY USE BRITISH AMMUNITION

It is now likely that if the War Department definitely decides to undertake the manufacture of the British Enfield of 1914, as an emergency weapon for the United States Army, no attempt will be made to rechamber the rifle to take Springfield ammunition.

It is also considered more than probable that any fighting force sent to the French battle front will be armed with Enfields.

These two possibilities seem likely in view of the fact that everything points toward a disposition on the part of army officials to keep the equipment of the United States forces as nearly interchangeable as possible with the equipment of the Allied troops.

THE FORTY-FIVE SEVENTY AGAIN

There is considerable talk of issuing to training camps the remainder of the old Forty-five Seventy Springfield rifles which the government has on hand. The weapons are excellent up to 500 yards, and good scores were frequently made with them in the old days.

To meet this situation an edition of the Infantry Drill Regulations containing the Manual of Arms for the old Springfield has been printed.

TO CHANGE SERVICE COAT

Revolutionary changes in the style of the service uniform coat worn by the Army officer is under discussion by officers of the Quartermaster Corps, and the General Staff. The modifications include the substitution of the soft roll collar for the stiff collar now prescribed, "bellows" pockets and loose flaring folds about the hips. This is practically the style of coat now in use in the British army. It is denied that the appearance of the British officers—the evident comfort and utility of the coat, especially—had anything to do with the projected change, but the appearance in Washington of those officers was coincident with the manufacture of the sample garment by Army tailors. This coat was cut to the generous lines demanded by the figure of the Chief of Staff, who was outspoken in his approval. The Secretary of War also endorsed the change but no decision will be reached until it has been considered formally by the General Staff. The only objection to the new coat that has been heard is that it does not give the wearer the military effect secured from the tightly-buttoned, high-collared garment now in use.—*Army and Navy Journal*.

DuPont Rifle Powders

DuPont Military Rifle Powder No. 10

For .280 Ross, .30 Adolph, and similar cartridges

DuPont Improved Military Rifle Powder No. 15

(Progressive)

For .30 Springfield, .280 Ross, and similar cartridges

DuPont Improved Military Rifle Powder No. 16

(Progressive)

For .250/3000, .30/40 Government, and similar cartridges

DuPont Improved Military Rifle Powder No. 18

(Progressive)

For .30/30, .32 Special, .32/40, etc.

DuPont Military Rifle Powder No. 20

For .30 Springfield, .22 Savage H. P., .25 Remington, and similar cartridges

DuPont Military Rifle Powder No. 21

For Remington Auto Loader, .30/30 and .303 Savage, and similar cartridges

DuPont Gallery Rifle Powder No. 75

(Marksman)

For reduced and gallery charges in high power rifles

DuPont Sporting Rifle Powder No. 80

For .25/20, .32/20, and similar cartridges

DuPont No. 1 Rifle

For black powder rifles

Schuetzen

For 200 yard target rifles

R S Q

For revolvers and automatic pistols

DuPont Pistol Powder No. 3

For revolvers and automatic pistols

RIFLE SMOKELESS DIVISION

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THE THUMB TRIGGER

(Concluded from page 147)

"A long sighting radius has been obtained, without any of the disadvantages enumerated above, by attaching an ortho-optic or peep-sight to the firing pin. In this way is obtained a broad base, sliding in closely fitting guides that preserve the alignment.

"The conflict between cocking and locking is automatically eliminated; for the base of the peep-sight so completely covers the thumb trigger, when the gun is at cock, that the necessity for locking is wholly removed. Finally, the motion by which discharge is accomplished is such a simple one that it can be made without the slightest difficulty, regardless of whether the hand be bare, gloved or mittened."

While the Brooklyn inventor seems to have hit upon a new method of utilizing the thumb-trigger principle and of applying it in what appears to be a satisfactory way to military bolt-action rifles, the history of similar inventions shows that scores of gunsmiths have at one time and another for more than half a century worked along the same line.

The thumb-trigger principle has perhaps been applied to air guns and air pistols more extensively than to any other type of weapon, and most of them have been the product of French gunsmiths.

One of the simplest forms, typifying the French conception of the thumb-trigger principle, is to be found in a patent granted to one M. de Moerio in 1912. It consisted of a thumb trigger in the form of a push button, set in a depression immediately behind the "break" of the breech and designed in this instance for use upon an Anson and Deely shotgun. The principle was also regarded as being applicable to the Browning automatic pistol. In applying for his patent, M. de Moerio claimed that the use of the push button provided a gentler disengagement of the cam catch which held the hammer cocked.

Another patent on a thumb trigger, similar to that of de Moerio and applicable to the Lee-Remington among other weapons, was granted in Great Britain in 1897 to Louis Estevan Green and Samuel Smallwood, British gunsmiths.

The push button was also used in this instance, and was mounted upon the end

of a "plunger" or rod pressure upon the button acting upon the rod and disengaging a catch so that the hammer was released.

This system was applicable to double-barreled guns, and was designed so that each barrel might be fired separately. This was accomplished by fitting the lever, which released the trigger, with "steps" which operated upon "extensions of sears" on the hammer. Pressing the button lightly discharged one barrel, and pressing it home discharged the other.

WAR DOGS AND THEIR WORK

The method adopted by the war dogs to bring aid to badly wounded men is to take the soldier's cap and carry it back to the stretcher-bearers. Then the latter follow up the dog, which takes them to the owner of the cap. The soldiers are instructed to whistle and hand their caps to any ambulance dog at work, but the dog, if left to itself, will find the wounded man and immediately set to work to secure his hat.—*Shooting Times and British Sportsman*.

WINCHESTER

Shotguns and Shells

played an important part in the winnings of the Southern Handicap, at Roanoke, Va.

Preliminary Handicap: Won by E. C. Gunther, using Winchester "Leader" loaded shells. Score 93x100.

On the first day, Fred Harlow was second high on 150 sixteen yard targets, with score of 144, using Winchester shotgun and shells.

Southern Overture was won by Fred Harlow with Winchester shotgun and shells. Score 98x100.

High Professional average on 16 yard registered targets: L. S. German first, score 338x350. Ed Banks second, score 335x350. C. T. Stevens third, score 335x350. All used Winchester shells and Mr. Banks and Mr. Stevens, Winchester guns.

Winchester Shotguns and Shells—the Red W brand—always shoots to win

More Shooting For Less Money

(Concluded from page 144)

velocity desired. Powder requirements are exact. One kind, or type, can not be substituted for another. For instance, it is impossible to use the same powder for reduced loads as for full-power loads, except in isolated instances, and impossible to substitute them the other way about.

For very light loads with any bullets du Pont No. 75 and No. 80 are excellent. The former, under extremely close test, perhaps might give a shade more accuracy, but is subject to slight change or deterioration from dampness, or when exposed for some length of time to the dirt of uncleaned shells. Of late a comparatively new powder, du Pont No. 18, made originally for full charges in the 30-30 class of rifles, has been tried with excellent results in charges of 14 to 16 grains, which practically corresponds to the ordinary load of No. 75. It is likely most successful in this low charge behind the regular metal-cased bullet or behind heavy gas-check bullets.

For heavier, or mid-range loads—that is, those giving a bullet velocity of 1,600 to 2,000 feet—No. 18 perhaps is the best powder on the market today. Hercules

Lightning, however, gives exceedingly accurate results, though it is said to be a little hard on the barrels. Sharpshooter powder is accurate, but never should be used in barrels intended for fine shooting afterward, as it will erode them. No. 80 is very good also for mid-range purposes behind heavy gas-check or regular metal-cased bullets.

The exact amount of the charge for each rifle and each bullet had better be studied in the handbook referred to, as it is particular in each case and requires more space to discuss intelligently than is available here. The main thing is to decide on the power of load required for your purposes and range, then to select one load and stick to it, learning and memorizing the adjustments of sight required for it and all other details about it. If this is done the practical man will find his reduced loads an enormous help toward qualifying with high scores, and, if he hunts, that the great amount of practice will be just what he needs to prepare him for the woods.

THE "UNLUCKY GINK"

"For a long time," said the fat plumber, "I have been trying to locate the most unlucky gink in the whole world."

"And now——"

"I have found him at last."

The thin carpenter showed curiosity. "He is a soldier down on the border," the fat plumber continued.

"Do you mean that you think all of the boys down there are to be pitied?"

"I should say not!"

"Then you have to furnish a diagram with your joke."

"This particular soldier is wealthy and has everything he wants, back home."

"And still he is unlucky."

"Yes. He wrote to his wife, one day, and told her she ought to do something for the boys at the front."

"Yes——"

"And the wife immediately bought 500 fresh fish and had them shipped to the border."

"That was fine of her."

"Now comes the unlucky part."

"I have been waiting for that."

"On the very day that the consignment reached the company the woman's husband happened to be assigned to duty in the mess tent——"

"Yes——"

"And blamed if he didn't have to clean every one of those 500 fish."—*Youngstown Telegram.*

AT THE TARGETS!



Dillman First At Fort Pitt

THE opening shoot of the Fort Pitt matches was held recently.

The club expects a very successful year, as the membership is larger than last year, which was the banner year, and have splendid target and range facilities, there being no better equipped range in the state.

The 200-yard rapid-fire match, shot on the opening day, called for ten shots in one and one-half minutes, and the 500-yard match two shots for sighters and ten shots for record.

P. H. Dillman won first prize in the 200-yard rapid-fire match, with a perfect score; G. A. Snyder second, with 49, and T. C. Beal third, with 49, Snyder winning over Beal in the shoot-off.

The 500-yard match was won by P. H. Dillman with a score of 48; R. S. Everett second, with 48, and G. H. Keil third, with 46.

200-Yard Rapid-Fire Scores

| | |
|---------------------|----|
| P. H. Dillman..... | 50 |
| G. A. Snyder..... | 49 |
| T. C. Beal..... | 49 |
| R. S. Everett..... | 48 |
| V. J. Shepard..... | 48 |
| F. B. Fisher..... | 47 |
| I. C. Laughery..... | 45 |
| T. M. Millis..... | 45 |
| S. F. Hand..... | 44 |
| G. Teter..... | 44 |

500-Yard Match Scores

| | |
|---------------------|----|
| P. H. Dillman..... | 48 |
| R. S. Everett..... | 48 |
| G. H. Keil..... | 46 |
| T. C. Beal..... | 46 |
| I. C. Laughery..... | 46 |
| F. B. Fisher..... | 44 |
| G. A. Snyder..... | 44 |
| G. Teter..... | 42 |
| O. G. Harris..... | 38 |
| V. J. Shepard..... | 36 |

Shoot Trophies Missing

It becomes my painful duty to announce to a waiting and anxious sporting public the total disappearance of the I. O. Gardiner and the T. F. Cooke trophies from competition with the rifle, after lasting through just five shoots. Through the inadvertence of those present on the range of the Los Angeles Rifle and Revolver Club Sunday, and the added reason of the first Sunday of a large and juicy fishing season, with its drag on some of the club members, both of the trophies, up for any man able to win either three times, disappeared in the grasp of one and the same person, who is now just about popular enough to be unanimously elected to lead the first forlorn hope of the first expeditionary force we send to France. And if such election should take place there is no doubt that private word would be sent to the Germans where to aim.

The E. C. Price trophy is still in circulation, contrary to the dope sheets and the hopes of Mr. Wotkyns, who had accumulated two legs out of three necessary to win it. The said

Mr. Wotkyns proceeded to come out Sunday morning and train for the final score at 600 yards for the above-mentioned trophy by finishing the installation of the telephone system to 600 yards—probably because of the well-known steadying effect on one's shooting of digging post holes, shinning up poles and lugging 6x6 timbers various fractions of a mile uphill.

So it came about that one Mr. A. L. Thomson, who cleaned up fourth pew in the great national individual shoot in Florida last fall, proceeded to rub a few blisters off his paddies from the day before, to harness his big shoulders into the creaking and stretching rifle sling, and to then bang out 49 x 50 at 600 yards for the ten shots, using the plain, unadorned new Springfield, devoid of anything the arsenal didn't put on it, outside of sight black and blessings.

Following him—but, alas! following him—came the estimable Mr. Wotkyns, holder of two legs on the trophy, with but 47, and toddling in his own wake there came a procession of gents shooting like Mr. Wotkyns, telescope sights, and special barrels, and special stocks, and special sights, and special prayers for victory—like the Germans. The scores:

I. O. Gardiner trophy, twenty shots, change position fire, 200 yards, A target—E. C. Crossman, 91 (final winner); G. L. Wotkyns, 89; E. D. Neff, 86; A. L. Thomson, 86; A. Pachmayer, 84; D. R. Dickey, 81; E. D. Kemper, 78; A. J. Keating, 74.

E. C. Price trophy, ten shots, 600 yards—A. L. Thomson, 49; G. L. Wotkyns, 47; Tom Jordan, 45; E. C. Crossman, 45; A. J. W. Keating, 45; R. J. Fraser, 45; J. W. Siefert, 44; E. D. Neff, 40; Eddie Kemper, 38; A. Pachmayer, 38; Dr. Felsenthal, 38; Mrs. Crossman, 37.

T. F. Cooke trophy, ten shots, 1,000 yards—E. C. Crossman, 45 (final winner); A. L. Thomson, 42; G. L. Wotkyns, 38; E. D. Neff, 32; Tom Jordan, 22; A. Pachmayer, 15; E. D. Kemper, 15; Dr. Felsenthal, 12; D. R. Dickey, J. W. Siefert and A. J. W. Keating didn't find target.—E. C. C. in the *Los Angeles Times*.

Camden Defeats Morris Guards.

The Camden, New Jersey, P. R. R. rifle team defeated the Morris Guards, Atlantic City, team in a rifle-shooting contest recently by the score of 606 to 577. Barnard was high man for the visitors, with 94, while Henry was the best of the Morris Guards, with a score of 93.

The scores:

| Camden | Morris Guards |
|----------------------|---------------|
| E. C. Barnard.... | 94 |
| E. B. Young..... | 88 |
| A. C. Shreve..... | 86 |
| B. H. Atkinson... 78 | |
| N. S. Atkinson... 76 | |
| W. B. Atkinson... 74 | |
| H. H. Peacock... 69 | |
| W. J. Atkinson... 41 | |
| Total.....606 | |
| A. J. Henry..... | 93 |
| A. T. Crean..... | 89 |
| W. Leonard..... | 77 |
| E. F. Calkins.... | 71 |
| E. Ehlner..... | 67 |
| W. L. Welhofer.. | 64 |
| E. B. Haring..... | 59 |
| A. C. Walker..... | 57 |
| Total.....577 | |

RICOCHETS

A ten-mile six-o'clock wind and a cloudy day failed to prevent most of the members of the Davy Crockett Rifle Club of San Antonio, Texas, from making qualifying scores on March 11. As a result of the day's shoot, six qualified as marksmen and two as sharpshooters. The resulting scores show good work. Only one of the members failed to qualify and he made 84 in slow fire.

Those who qualified were: Sharpshooters—Kit Carson, 147; H. L. Pancost, 145. Marksman—Kit Carson, 171; A. L. Cotten, 160; August Erpurth, 154; H. L. Pancost, 151; H. C. West, 151; Jos. W. Schofield, 159.

On account of insufficient time only three members shot the sharpshooter course, the others intending to qualify at an early date.

"Our spring weather is here to stay now," says M. M. Nuessle, the secretary, "and we expect to hold out-of-doors shoots every few weeks. Our greatest trouble is in getting to the target range, at Leon Springs, Texas, which is twenty-two miles from town. It is impossible to hold a qualification shoot at the Municipal Range, as they only allow shooting from the prone position."

Of fourteen qualifications reported by the Neopit, Wisconsin, Rifle Club, four were expert and five were sharpshooter. They were: Expert—George D. Pecore, 218; A. S. Nicholson, 233; Chas. A. Tourtillott, 212; A. H. Mierswa, 214. Sharpshooter—Chas. Baures, 197; Mitchell Waukaw, 196; Louis Prickett, 201; Edward Weisenborn, 208; Wm. F. Ragan, 203. Marksman—Reginald Oshkosh, 183; Emil Gehrke, 181; Matt Dillenberg, 179; Irwing Conners, 171; Charles Conners, 173.

The Seligman, Arizona, Rifle Club held a shoot March 25. The scores made were: J. W. Rothwell, 122; G. E. Rowen, 107; F. L. Campbell, 60; F. H. Cartmell, 67; A. F. Ervin, 92; V. Curry, 134; C. Hardin, 48; O. L. Baily, 85, and J. R. Ashleman, 37.

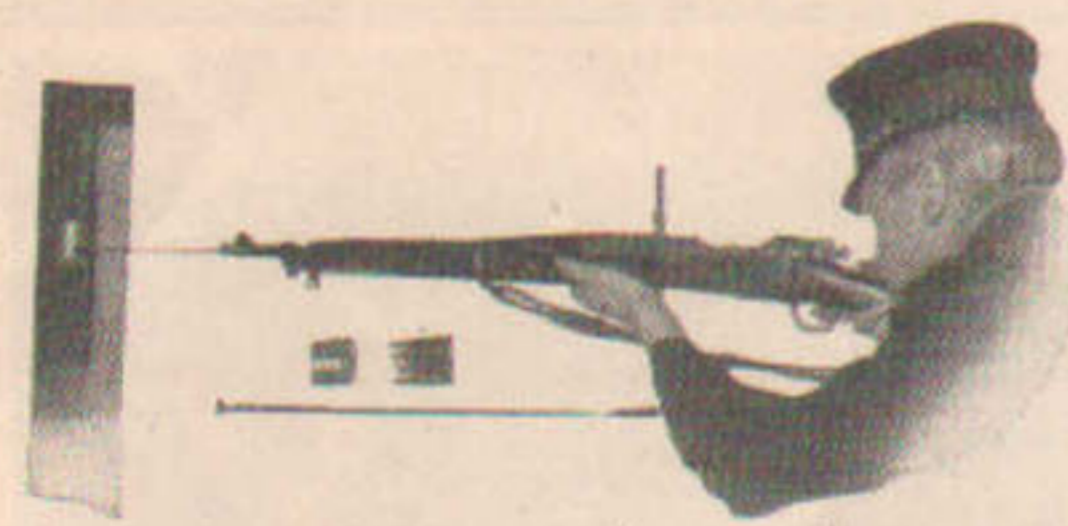
F. C. Sargent, of the Engineers' Rifle Club, Boston, has qualified as a sharpshooter on a score of 197.

During the quarter ending April 1, 1917, the Kennewick, Washington, Rifle Club qualified six marksmen and one sharpshooter. The marksmen are Edward Shepard, Vic Klebucher, George Tweedt, McKinley Desgranger, Robert Perkins, and R. E. Reed. The sharpshooter is H. W. Nelson.

The Oceanside, California, Rifle Club during the first quarter of 1917 qualified two expert riflemen. They are Alfonso McCallum and Jerry Renner.

Two marksmen have been qualified by the Empire City Rifle and Revolver Club. They are William Dannenberg and William Klemm.

The Porto Rico Rifle Club, of San Juan, P. R., reports the qualification of two experts—C. Mercado and R. Alers.



The Hits Count The Hollifield Dotter Makes Aiming Interesting.

Adopted by the Army, Navy, Naval Militia and Canada. Gives the same practice as at the range, makes no noise and costs nothing to use.

W. H. Whigham, Lt.-Col., 1st Cav., Ill. N. G., who won the military revolver championship in 1910 with a score of 591, says:

"I have given your inner tube target-firing device a thorough try-out and am satisfied it is one of the finest things we have to assist in the production of good rifle shots. There has been nothing presented in the way of educational assistance that can at all compare with this device in giving the recruit a complete and adequate knowledge of rifle shooting, to say nothing of the economical aspect."

THE HOLLIFIELD TARGET PRACTICE ROD COMPANY - - Middletown, N. Y.



THIS is a new, one-piece, rifle cleaner with a brass cloth-carrying head on a coppered Bessemer rod, mounted free for rotation. It is especially adapted to the use of absorbent cotton. Will clean Krag from the breech.

A special price is made to rifle clubs affiliated with the N. R. A. when rods are ordered in quantities of 10 or more.

The rod is made in three sizes. Be sure to state caliber of gun when ordering. By mail, 50 cents.

C. H. YOST, Distributor
53 Sherwood Place, Greenwich, Conn.

PATRIOTISM WITH PROFIT THE FARROW ARMS CO., Washington, D. C.

Wants a thousand patriotic people to subscribe for one or more shares of stock, at \$10 a share par value to assist in enlarging the plant to make munitions on a larger scale. THE FARROW ARMS COMPANY have been located in Washington for seventeen years and have now a remunerative business paying good profits; but the demand for war munitions must be met, and every available plant must do its part to help our President in every way to do his best, that the United States may be equal to this emergency now thrust upon us.

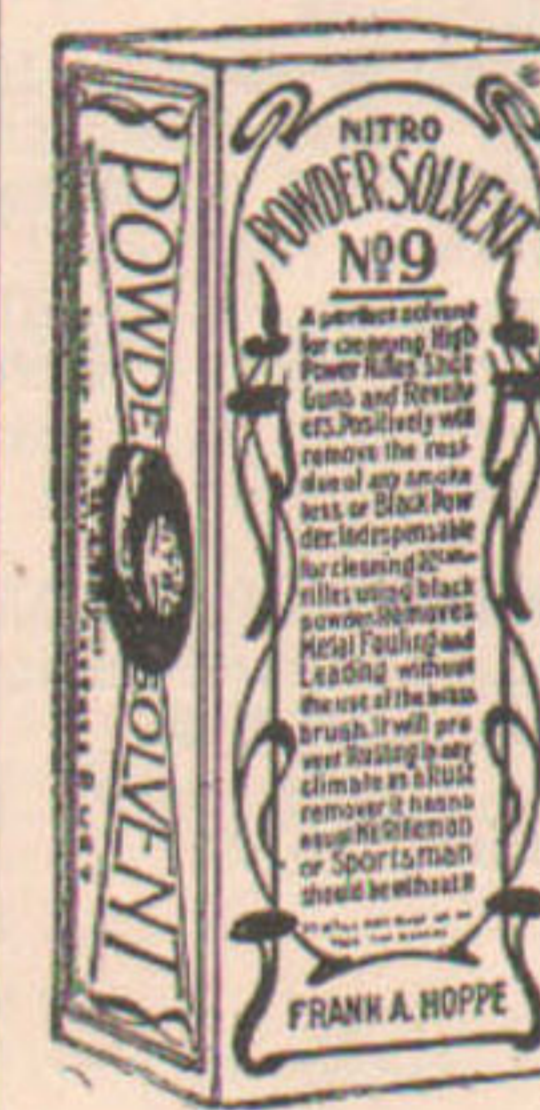
WE NEED YOUR ASSISTANCE. Come in with us. Making munitions is profitable work. Make check or P. O. money orders to Farrow Arms Co., Washington, D. C., and certificate will be sent by return mail.

Those not knowing the persons behind this enterprise are referred to the article in ARMS AND THE MAN, page 65, issue of April 21st.



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
ZEWTON ARMS CO., Inc. 506 Mutual Life Bldg. BUFFALO, N. Y.



HOPPE'S NITRO POWDER SOLVENT No. 9

For cleaning rifles, shotguns and revolvers where high power powders are used. Indispensable for cleaning .22 caliber Schuetzen rifles using black powder.

Sold by all dealers, and at post exchanges. No rifleman or military organization can afford to be without it.

FRANK A. HOPPE
1741 North Darien Street
Philadelphia, Pa.

One marksman, four sharpshooters and four experts have been qualified from the membership of the Redlands, California, Rifle Club. The experts are: B. Cousins, F. W. Moore, G. E. Wittwer, and H. H. Ford, Jr. The sharpshooters are C. W. Hobbs, Jr., J. A. Patterson, P. S. Molten and F. A. Kitching. The marksman is N. B. Green.

Revolver News

This bulletin has been published by the U. S. R. A. concerning the annual Indoor championship contest:

"Seven matches were scheduled for March 31 to April 8 inclusive, and supplies were sent to Ancon, C. Z.; Baltimore, Big Rapids, Cincinnati, Columbus, Denver, Dallas, Durango, Havana, Milton, Wis.; Montpelier, Montreal, New Haven, New York, Philadelphia, Pittsburg, Portland, Ore., St. Louis, San Francisco, Seattle, Springfield, Toledo, Toronto, Van Alstyne, Tex., Washington, D. C., Youngstown and Zolfo, Fla.

"The exigencies of war made sudden demands upon many of our Association officials and delayed the targets in transit.

"Targets from the Canal Zone have not yet been received and part of those from Cuba have yet to arrive. It seems pretty safe, however, to assume that the following are the winners of the National Prizes for the individual championships and the Novice Match:

| | |
|---|-----|
| MATCH A.—Target Revolver Championship | |
| Dr. B. J. Ochsner, Durango, Colt army revolver, hand load..... | 451 |
| Dr. W. E. Quicksall, Philadelphia, S. & W. .38, U. M. C..... | 450 |
| Capt. A. H. Hardy, Denver, Peters.... | 446 |
| D. J. Gould, Jr., New York, Colt .38, hand load | 443 |
| Dr. J. H. Snook, Columbus, Peters.... | 441 |
| MATCH B.—Target Pistol Championship | |
| P. J. Dolfen, Springfield, S. & W., Western | 471 |
| A. P. Lane, New York, U. M. C..... | 468 |
| George Armstrong, Oakland, S. & W., Pope, U. M. C..... | 466 |
| Dr. J. H. Snook, Columbus, S. & W., Peters | 462 |
| Dr. W. E. Quicksall, Philadelphia, U. M. C..... | 459 |
| Dr. J. W. Millikin, San Francisco U. M. C..... | 459 |
| Drs. Quicksall and Millikin have for low shots, one 7 and three 7's respectively. | |
| MATCH F.—Pocket Revolver Championship | |
| Hans Roedder, New York, Colt .38, Peters | 204 |
| Dr. J. H. Snook, Columbus, Colt .38.... | 202 |
| Dr. J. L. Bastey, Boston, Colt, U. M. C. | 199 |
| A. P. Lane, New York, U. M. C..... | 196 |
| J. A. L. Moller, New York, Colt..... | 195 |
| MATCH G.—Novice Match, Either Pistol or Revolver | |
| P. C. Bracken, Columbus, S. & W., Peters | 227 |
| A. A. Yungblut, Cincinnati..... | 225 |
| Norman de F. Douglas, New York, S. & W.-Pope, Winchester..... | 224 |
| E. L. Parris, Jr., New York, Peters.... | 221 |
| Horace F. Barret, New York, U. M. C. | 220 |

"The Police Team Championship Match for uniformed members of a police force has for the highest three teams:

Philadelphia, S. & W. .32, U. M. C..... 753
San Francisco, S. & W. 3, Colt 2, Peters 743
Portland, Oregon. Arm and ammunition not reported..... 722

"The record score for this match is 776 of Portland in 1915 and the record score for individuals was formerly 162 by Craddock of Portland who equalled that score again this year but a new record is established by Lieut. Herman Thomas of Philadelphia, of 168.

"Returns for the pistol and revolver handicap matches are not complete enough to decide National winners.

"The late annual contest was the best patronized in the history of the Association.

J. B. CRABTREE,
Sec'y-Treas., U. S. R. A.

WAS ANXIOUS TO ENLIST

Trying to boost his 5 feet 3 inches up to the standard for military service, a patriotic youth from Glenwood, near Albany, N. Y., tried a form of elevation that almost got by the United States Marine Corps recruiting officers in that city a few days ago.

The recruit went through without a flaw until he stripped to be examined for scars, when the doctor discovered several layers of adhesive plaster and a small cotton pad under each heel that gave a "French-heel effect" to the would-be warrior. When it was removed, he lacked one inch of meeting the required height.

"I don't want to be a slacker, so I tried my best to enlist," said the man when he was rejected. "The scheme would be all right, too," he added, "if I could only make it stick."

Off Hand From the Clubs

Conditions Announced For College Match

THE 1917 Intercollegiate Outdoor Rifle Championship Match, which in the N. R. A. program follows closely the Astor Cup and Individual Championship competitions, will be shot between May 15 and June 15, according to an official announcement from the National Rifle Association.

The match is open to teams of six students from any university or college rifle club affiliated with the N. R. A. This is the first match of the 1917 season calling for the service rifle with full-charge ammunition. The winning team will receive the championship trophy, to be held for one year, in addition to a bronze medal for each member of the victorious outfit. To the shooting members of the second team will also be given bronze medals.

The conditions of the match call for ten shots at each of three distances—200 yards rapid fire, kneeling from standing, and 300 and 500 yards slow fire, prone, using U. S. Army targets A, B and D.

Entries for the match will close May 25th and the competition will be shot on any range available, under the supervision of a judge and witness approved by the National Rifle Association. The conditions of the match as announced by the National Rifle Association read:

Distances—200 yards rapid fire and 300 and 500 yards slow fire.

Number of Shots—Two sighting shots allowed at slow fire and ten shots for record at each distance.

Positions—200 yards rapid fire, kneeling from standing (time limit, 1½ minutes); 300 yards, kneeling or sitting; 500 yards, prone.

Rifle—U. S. Army .30-calibre rifle as issued, or one that has been viewed and stamped by the National Rifle Association.

Ammunition—Any.

Targets—U. S. Army Targets A, B and D.

Entrance Fee—\$3.00 per team. No entry will be accepted unless accompanied by the entrance fee.

Entry and When Shot—Entries will close May 25th and the match shot on any range available, and under the supervision of a judge and witness approved by the N. R. A., during the period between May 15 and June 15. Official score cards furnished by the N. R. A.

Prize—The Championship Trophy to be held by the institution represented by the winning team for one year, or until the next competition, and bronze medals to the members of the winning team; bronze medals to the members of the second team. The trophy will become the property of the institution winning it the most number of times in 16 years.

Eligibility of Team Members—Members of teams to be in good standing in the undergraduate year and who are maintaining the necessary hours of work and standing of scholarship required by the institution and who have not taken a degree from any college. Certificate to be furnished by some one duly authorized.

The Match was won in 1905 by Princeton University; 1906 by George Washington University; 1907, no contest; 1908 and 1909 by George Washington University; 1910 and 1911 by Massachusetts Agricultural College; 1912 by Harvard College; 1913 by Massachusetts Agricultural College; 1914 by Massachusetts Agricultural College; 1915 by Massachusetts Institute of Technology, and in 1916 by Norwich University.



Intercollegiate Rifle Match Trophy

Sighting Shots

A movement is on foot in the Interwoven Rifle Club, of New Brunswick, N. J., to interest five or six other clubs within a comparatively short distance in some sort of competition, to be held at the ranges of the various clubs each Saturday afternoon during the summer. The Interwoven Rifle Club has just completed the rebuilding of a new backstop and now has a safe range for 200, 300 and 500 yards.

After having worked for years toward securing a permanent range, the Akron Rifle Association has at last achieved its goal, according to the secretary, Edwin W. Brouse, who says:

"We have at last been able to realize what we have worked for years for this association—a permanent location for a rifle range. Behind the project we have been able to enlist the Akron Chamber of Commerce and the city authorities, and by keeping their co-operation we will be able to secure a range here which will be a credit to Akron, and accessible to

any member of the club or to any of the members of the military unit located at Akron.

"The range will be only about half a mile's walk from the street-car line and can easily be reached by automobile, and we expect it to be equipped with the best sort of equipment. The ground is the property of the Akron City Water Works. Targets will be installed at all ranges from 200 to 1,000 yards.

"We have increased our membership, largely recruited from an organization known as the 'Home Guards,' composed to a large extent of men who are above the usual age for military service, but who can do guard duty to relieve the younger and more active men for active military service. We have our original membership practically intact, but with the addition of a number of enthusiastic members from this new organization, we will undoubtedly show greater work than has heretofore been possible."

The members of the Shawnee Rifle Club, of Kansas, about fifty in number, have acquired an excellent rifle range. In conjunction with the members of the Boys' Industrial School of Kansas, this range was built at an approximate cost of \$400, the major expense having been defrayed by the school. The club, having spent all their available funds in doing their part toward the establishment of the range, are now facing the problem of securing the necessary target frame.

An increase in membership within three weeks from 33 members in good standing to 394, all of whom are substantial citizens, is the record of the Phoenix, Arizona, Rifle Club. The secretary, L. Chapman, writes:

"Most of the new members are ordering rifles. We have not done any rifle practice to speak of, except the club match each month, and with a membership such as we had there was very little shooting. We have a goodly amount of ammunition requisitioned, and as soon as that gets here we are going to get extremely busy.

"We have a good range, six targets available from 200 to 1,200 yards, with telephone service to all firing points, and have hired a man to live on the range, so that it may be available at all times to the members. It is within less than seven miles of the city.

"We have been fooling around so long that it is stimulating to some of us older members to see things humming as they are now doing."

Preparedness has struck the bank clerks of Worcester, Massachusetts, and they have taken steps to perfect themselves in the correct and efficient use of revolvers.

While every bank is thoroughly equipped with revolvers, it is acknowledged that the majority of the clerks are unfamiliar with the proper use of the revolver, and sadly lacking in efficiency in shooting. This is due to lack of practice, a condition which the possibility of war and internal trouble have caused the bank clerks to move to remedy.

Some of the bank men had a range in mind and talked the matter over with the chief of police, but the proposed location was out of doors, and not acceptable. The location was outside the city limits, and had a natural background to receive the bullets, but the possibilities of danger to either the contestants or others, caused the chief to frown on the location.

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: Would a civilian who attended the National Matches, 1916, as a team member be qualified to attend the matches of 1917 as a team member from a different state?

A: There would seem to be no reason why such a rifleman should not attend as a member of a different team if he meets the requirements in the state where he now resides. The whole matter would hinge upon the specific conditions in force to govern the choice of team members.

Q: Are rifle clubs permitted to use their rifles for the protection of property, public and private, in an emergency?

A: Rifles issued to rifle clubs are furnished for the specific purpose of target practice. The National Rifle Association cannot authorize their use for any other purpose. If they are so used, it is done at the risk of the club which is held responsible for the property.

Q: I have an army special revolver and from the way it shoots I think that maybe the cylinder does not line up with the barrel. Is there any way in which I can test to find out if the chambers all line up properly?

A: The best way I know of to see if the chambers line up properly is to cock the hammer and then while holding the barrel up to the light, look through the firing pin hole and you will be able to see if the edges of the chamber coincide with the barrel. Try this with each of the six chambers.

Q: A member of a civilian rifle club qualified as sharpshooter last fall; can he commence his shooting this spring by trying for expert, or must he go back and shoot through the marksman and sharpshooter courses a second time before he can undertake the expert course?

A: In such a situation, the club member can take up the expert course without going over the work already done.

Q: Is it permissible to use the Krag rifle with reduced load in the watch-fob qualification course?

A: The conditions for the re-entry match calls for a .22-calibre rifle. No other rifle can be substituted therefor.

Q: Is the 5-A Winchester telescope sight satisfactory?

A: The 5-A Winchester seems to be the sight preferred by most riflemen. Using this sight on a Winchester No. 2 mount will give an equipment suitable for either indoor or outdoor shooting.

Clubs Admitted to N. R. A. Membership During the Past Week Include:

CIVILIAN

Arizona.

Boykin Rifle Club (Shultz) W. F. Kelly, secretary; D. Daily, president; F. E. Beyea, vice-president; E. D. Morton, treasurer; W. S. Haskins, executive officer. Membership, 21.

The Faculty of the University of Arizona Rifle Club (Tucson) C. W. Adkinson, secretary; C. T. Vorhies, president; H. C. Heard, vice-president; W. S. Cunningham, treasurer; J. G. Brown, executive officer. Membership, 41.

Peoria Rifle Club—L. A. Hays, secretary; W. H. Brown, president; L. B. Street, vice-president; J. B. Gray, treasurer; R. F. Schaefer, executive officer. Membership, 40.

St. Johns Rifle Club—Albert F. Anderson, secretary; T. J. Bouldin, president; G. E. Greer, vice-president; Albert F. Anderson, treasurer; F. W. Nelson, executive officer. Membership, 62.

Silverbell Rifle Club—E. A. Fennell, secretary; Edward Thornton, president; W. H. Buchman, vice-president; G. W. Dietz, treasurer; Lee H. Burch, executive officer. Membership, 32.

Snowflake Rifle Club—A. G. McCloskey, secretary; Paul H. Roberts, president; Kenner C. Kartchner, vice-president; J. O. Freeman, treasurer; J. T. Hunt, executive officer. Membership, 45.

Thatcher Rifle Club—C. M. Clawson, secretary; James A. Duke, president; Frank Tyler, vice-president; E. C. Dodge, treasurer; D. B. Jones, executive officer. Membership, 105.

Arkansas.

Conway Woodmen of the World Rifle Club—J. A. King, secretary; A. L. Jones, president; R. E. Haskins, vice-president; J. S. Johnson, treasurer; W. S. Hanner, executive officer. Membership, 150.

McNeil Rifle Club—Lewis T. Sanders, secretary; John J. Luck, president; Ross B. McAlister, vice-president; John E. Blair, treasurer; Brown Pennington, executive officer. Membership, 24.

Parkdale Rifle Club—George W. Slocum, secretary; M. L. Milner, president; H. W. Morris, vice-president; N. P. Atkin, treasurer; R. H. Nichols, executive officer. Membership, 50.

Stuttgart Rifle Club—M. McCuing, secretary; C. A. Brown, president; James A. Henderson, vice-president; H. H. Hoist, treasurer; J. C. Wert, executive officer. Membership, 175.

California.

Ramona Rifle Club—Percy E. Johnson, secretary; Frank A. Creelman, president; John C. Bargar, vice-president; Henry Brown, treasurer; George Comings, executive officer. Membership, 50.

Connecticut.

Brass City Rifle and Pistol Association (Waterbury)—W. J. Conaty, secretary; W. D. Northrop, president; F. Morrisseau, vice-president; M. W. Atwood, treasurer; C. R. Patzold, executive officer. Membership, 139.

Choate Rifle Club (Wallingford)—C. C. Buckland, secretary and treasurer; E. Underhill, president; E. Hatch, vice-president; W. Bruce Pirnie, executive officer. Membership, 147.

Cromwell Rifle Club—Claude Adams, secretary; A. E. Garde, president; W. H. Frazer, vice-president; J. A. Palmquist, treasurer; Dewey Pierson, executive officer. Membership, 70.

Norfolk Guard Rifle Club—Ellis Silvernale, secretary; Harry H. Cook, president; Thomas Morris, vice-president; Neil Silvernale, treasurer; Henry H. Saunders, executive officer. Membership, 49.

Illinois.

Libertyville Rifle Club—Jacob R. Alleman, secretary; Lyell H. Morris, president; William E. Decker, vice-president; Harry C. Meyer, treasurer; Paul G. Ray, executive officer. Membership, 63.

Iowa.

The Adel Rifle Club—Russell H. Luther, secretary; Charles F. Clarke, president; F. S. Naiden, vice-president; C. E. Russell, treasurer; E. W. Dingwell, executive officer. Membership, 36.

Capital City Rifle Club (Des Moines)—C. H. Kessler, secretary; J. E. Fines, president; W. J. Kizer, vice-president; Herman Paul, treasurer; W. E. Kessler, executive officer. Membership, 21.

Kansas.

Wichita Y. M. C. A. Rifle Club—E. L. R. Mark, secretary; J. R. Chandler, president; Robert Moore, vice-president; E. L. R. Mark, treasurer; G. G. Van Patten, executive officer. Membership, 35.

Maryland.

Swindell Rifle Club (Baltimore)—W. A. Richardson, secretary; J. R. Swindell, president; P. J. Lavelle, vice-president; Claude Griner, treasurer; Robert Smith and William Whelan, executive officers. Membership, 21.

Massachusetts.

Gilchrist Rifle Club (Boston)—Frank J. McCann, secretary; Frank S. Leavitt, president; C. C. J. Carlisle, vice-president; Frank A. Smith, treasurer; C. A. Staples, executive officer. Membership, 187.

Michigan.

Milford Rifle Club—Fred W. Wells, secretary; W. Scott Lovejoy, president; Samuel L. Weisbrod, vice-president; Mark B. Liddell, treasurer; I. L. Forsbee, executive officer. Membership, 35.

Minnesota.

Big Falls Rifle Club—George Rowe, secretary; A. M. Jensen, president; A. A. Miller, vice-president; M. R. Adams, treasurer; L. M. Patnode, executive officer. Membership, 37.

Deerwood Rifle Club—C. C. Adams, secretary; B. Magoffin, Jr., president; Paul M. Hale, vice-president; J. C. Hage, treasurer; F. L. Freeman, executive officer. Membership, 65.

Patterson Post No. 7, Veterans of Foreign Wars of U. S. Rifle Club (Minneapolis)—Jack J. Scheuer, secretary; John R. Edick, president; James J. Coats, vice-president; W. A. Reynolds, treasurer; L. P. Burlingham, executive officer. Membership, 33.

Mississippi.

Pass Christian Rifle Club—W. D. Robinson, secretary; R. A. Strong, president; Frank Farrell, vice-president; H. B. Spence, treasurer; S. L. McGlathery, executive officer. Membership, 25.

Nevada.

Reno Rifle Club—J. R. Parry, secretary; H. W. Huskey, president; A. C. Frohlich, vice-president; A. T. Donnels, treasurer; L. A. McClure, executive officer. Membership, 105.

New Jersey.

Congregational Forum Rifle Club (Bound Brook)—Ralph B. Prugh, secretary; L. W. Guernsey, Jr., president; George Brokaw, vice-president; Adelbert C. Barras, treasurer; J. Vosseller, executive officer. Membership, 35.

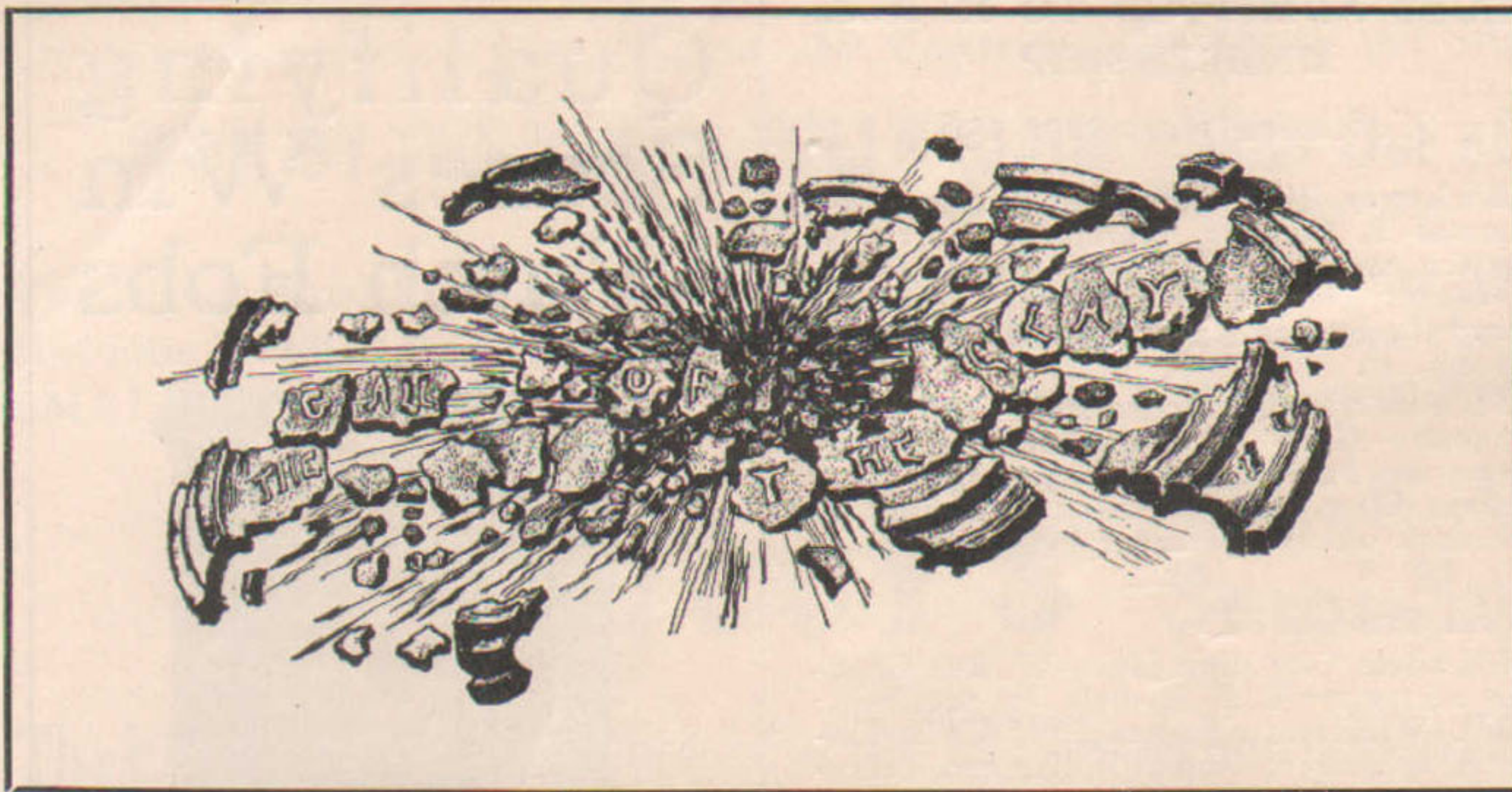
Verona Rifle Club—F. N. Everett, secretary; C. Frank Cowley, president; F. F. Moore, vice-president; C. W. S. Curley, treasurer; W. J. Garrabrant, executive officer. Membership, 17.

New York.

Country Life Press Rifle Club (Garden City)—Lael Von Elm, secretary; Russell Doubleday, president; Thomas G. Sweet, vice-president; Edward Becker, treasurer; R. H. Wilcox, executive officer. Membership, 63.

Pleasantville Rifle Club—W. Ward Johnson, secretary; J. W. Harshbarger, president; Chas. H. Chapman, vice-president; James J. Maraney, treasurer; Alfred E. Carnthwaite, executive officer. Membership, 68.

(Concluded on page 158)



Why I Took Up The Scattergun

By CHARLES H. NEWCOMB
Amateur Champion, 1915

Mr. Newcomb is in business in Philadelphia, Pa. He won the Pennsylvania State trapshooting championship and the national amateur championship in 1915. He is also a member of the world's record squad that broke 497 out of 500 targets at Maplewood in 1916. He is a student of the game and one of the best trapshots in the United States.

This is the first of a series, every national champion having been asked to give his reasons for having become a devotee of the Blue Clay Game.

WHY did I take up trapshooting? Primarily because it seemed to fit into my business, at the time I took it up, better than other forms of recreation that I considered.

After dropping athletic work I wanted some form of outdoor recreation, and as club shoots were always held on Saturday afternoons and holidays, I adopted trapshooting. Furthermore, the fascination of trying to reduce the little clay "blue rocks" to dust increased every time I tried it.

It probably is difficult for one who is not a trapshooter to realize this, but all trapshooters know that this idea of reducing the elusive clay targets to dust develops to such a degree that it would seem as if we were simply breaking them for spite. It is this fascination that holds me in the game.

The one element around which the whole success of the sport of trapshooting is centered, and the one thing that holds us all after once thoroughly initiated, is the sportsmanship of the game, and those connected with it. There is no question but that there is more true sportsmanship exhibited daily in this sport than in any other in the world, and it is this feeling that is now responsible for the wonderful increase in this, the sport of all sports, for a red-blooded man, during the past year or two.

The rules governing trapshooting are few, but decisive, and to the point. We do not see every few weeks where some trapshooter is before the governing association for transgressing the amateur ruling as in other lines. The rule is so clear that there can be no misunderstanding as to what constitutes a professional or an amateur.

He is either one or the other, and shoots as such. This is another reason why trapshooters are so enthusiastic about the sport. They have a fascinating game, where they meet good clean sportsmen and good fellows, and it makes a combination hard to beat.

In trapshooting, like in all other games that are worth while, a high degree of efficiency cannot be reached except through diligent practice, and application which makes the winning of a big event or tournament worth the effort. Take for instance the National Amateur Championship. To be eligible to compete in this event it is first necessary for the shooter to win the championship of his State. This is a great feat in itself.

Beginners are always welcome at trapshooting clubs. The regulars are only too glad to give all the assistance they can to every new convert. While the veterans can give the beginners some of the basic principles of trapshooting, it is a case of continual application combined with bull dog tenacity that brings results, for, this as well as other games is very discouraging at times.

Keeping everlastingly at it, however, will bring success, and with victory past trials are forgotten. It is a sport worthy of the effort.

Newcomb Again Champion

Prevented from participating in his favorite pastime for five months through illness, Charles H. Newcomb, of Philadelphia, Pa., celebrated his return to the traps in the New York Athletic Club trapshooting tournament at Travers Island on May 5 by winning the Amateur Trapshooting championship of America at 200 targets. He broke 191 under conditions that were anything but favorable to such a performance. Newcomb's long illness did not rob him of any of his steadiness.

In 1913 Newcomb also won the amateur championship at 200 targets, and in 1915 he won the amateur championship at 100 targets. The 200 target championship is always conducted by the New York Athletic Club. The 100 target event is held in connection with the Grand American Handicap each summer, and only State champions can compete in the classic. That year Newcomb was the champion of Pennsylvania. Of the 12 times the 200 target championship has been held it has been won five times by Philadelphians.

Here is a list of the champions and their scores:

| Year | Shooter | From | Score |
|------|-------------------|------------------|-------|
| 1905 | J. H. Hendrickson | New York | 94 |
| 1906 | W. M. Foord | Wilmington, Del. | 94 |

| | | | |
|------|-----------------|-------------------|-----|
| 1907 | E. F. Gleason | Boston, Mass. | 95 |
| 1908 | G. S. McCarty | Philadelphia, Pa. | 96 |
| 1909 | G. S. McCarty | Philadelphia, Pa. | 98 |
| 1910 | No competition. | | |
| 1911 | Harry Kahler | Philadelphia, Pa. | 173 |
| 1912 | B. M. Higginson | Newburg, N. Y. | 185 |
| 1913 | C. H. Newcomb | Philadelphia, Pa. | 179 |
| 1914 | R. L. Spotts | New York | 188 |
| 1915 | G. L. Lyon | Durham, N. C. | 192 |
| 1916 | R. L. Spotts | New York | 196 |
| 1917 | C. H. Newcomb | Philadelphia, Pa. | 191 |

(The first five championships were at 100 targets, the remainder at 200 targets.)
P. P. C.

More Clubs Enter Teams.

Trapshooting team competition as advocated by the Interstate Association for the Encouragement of Trapshooting has taken a firm hold.

Following the announcement of the association that trophies would be given for "team competition" 32 clubs made known their intention to engage in such contests, and since May 1st 26 other clubs have filed application for trophies. Thus there are 58 clubs engaged in team competition for Interstate Association trophies.

The stipulations are that the clubs shall engage in competition once a month, alternating on the grounds, until one club has won the trophy three times. Each shooter fires at 50 targets. Teams are made up of 5, 10 or 15 shooters, depending entirely on the number the visiting club has before the traps. When the trophy is won by a club three times it is then put up for competition among the members who shot on the teams that were victorious in the three matches and remains in competition until one shooter has won it three times.

Here is a list of the latest clubs to receive trophies and the competition as arranged:

- Janesville (N. Y.) Gun Club and Syracuse Rendering Company Gun Club, Eastwood, N. Y.
- Madison (Wis.) Gun Club and Stoughton (Wis.) Rod and Gun Club.
- Ansley (Neb.) Gun Club and Broken Bow (Neb.) Gun Club.
- Thornburg (Pa.) Gun Club and Youghiogheny Country Club, McKeesport, Pa.
- Bay City (Mich.) Gun Club and West Side Gun Club, Saginaw, Mich.
- Gofftown (N. H.) Gun Club and Amoskeag Gun Club, Manchester, N. H.
- Hampton Roads Gun Club, Newport News, Va., and Norfolk-Portsmouth (Va.) Gun Club.
- Ottumwa (Ia.) Gun Club and Chariton (Ia.) Gun Club.
- Gouverneur (N. Y.) Rod and Gun Club and High Falls Gun Club, Pyrites, N. Y.
- Peru (Ind.) Gun Club and Logansport (Ind.) Gun Club.
- Kent Gun Club, Harrington, Del., and Dover (Del.) Gun Club.
- Lake Hallie Gun Club, Eau Claire, Wis., and Durand (Wis.) Rod and Gun Club.
- Waynesboro (Va.) Gun Club and Front Royal (Va.) Gun Club.

Scattering Shot

Trapshooting has progressed so well as a sport that the American Amateur Trapshooters' Association, formed a little more than a year ago, has more than 60,000 members.

Fred Plum, of Atlantic City, N. J., has developed into one of the best amateur trapshooters in the country. His run of 281 at Maplewood last summer was the best of the

year, and recently he was high average man—379 out of 400—in the New York Athletic Club shoot.

When the Chicago Cubs were in Cincinnati recently several accepted the invitation of H. C. Bonser and tried the clay-target sport on the Cincinnati Gun Club traps. Pendergast broke 76 out of 100, Wilson 69 and Zeider 50.

Mrs. L. C. Vogel, of Detroit, Mich., is the best woman amateur trapshooter in America and a great deal better than many of the men. In the recent Amateur Championship of America contest she broke 185 targets. The champion broke only six more.

One hundred and twenty-three thousand and fifty clay targets were trapped in the Philadelphia Trapshooters' League series recently concluded.

Al G. Field, the minstrel man, is the latest convert to the trapshooting game. He likes it so well that he has purchased an Ideal Leggett Trap and has installed it in his private grounds in Cincinnati.

D. F. McMahon, of the New York Athletic Club, won the first of the "Maplewood 100" shoots and Fred Plum, of Atlantic City, won the second. McMahon broke 99 at Lakewood, Plum 98 in Boston.

There was a time when there was nothing in the city parks except benches. Then some one worked in tennis courts, then golf links were made, and now 12 cities have installed traps for trapshooters.

When Charley Newcomb won the Amateur Trapshooting Championship at 200 targets at Travers Island recently it was the fifth time a Philadelphian had won the title in the 12 years of competition.

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—Rifle trunks, marine and British shooting bags, imported telescopes, British cleaning rods and brushes, shooting glasses, rifle rests, British micrometers and verniers, telescope rests, Marble cleaning rods and brushes; locking front sight protector and rear sight cover, Hoppe No. 9; bull's-eye score books, Marine score book, sweat bands, elbow pads, the adjustable shoulder pad, gun covers, "Never Nickel" lubricant. Motter paste, rim oil, Winchester oil, barrel gauges, Marble field and rifle cleaner, cleaning patches, all kinds and calibers of brushes, Spitzer greaser, Mobile lubricant, Ideal micrometer, B. S. A. Rifle Saftipaste, Elliott ear protector, gun bore wicks, revolver and pistol rods, rifleman's Favorite sight, black; barrel reflectors, officers' hat cords. Send for catalog and price list. P. J. O'Hare, Importer and Manufacturer of Shooting Accessories, 33 Bruce St., Newark, N. J.

FOR SALE—Stevens .32/35 & .303/25 rifle, Favorite .22 Pope barrel, .28/30. Picture projector with lights, 4x5 Kodak Outfit. Lot of Grooved and Patch molds—.25, .30, .32, .38, .40, .46. Loading tools, lubricators, Dippers, Shells, Patches, Cartridges, files of Rod & Gun and Forest and Stream, all in finest condition. Sight discs and peep-cups made to order. Send 10c in stamps and state what you want. T. Martin, 8 Drummond St., G. H. Station, Boston, Mass.

WANTED—Rifle barrel No. 4 oct. not less than 30 inch cal. 25/21 or 28/30. Must be perfect inside. Address with all particulars to A. A. H. 1095 Broadway, Brooklyn, N. Y.

WANTED—Target Pistol .22 Cal. Must be in good order. W. J. Nolan, Morrow, Ga.

WANTED—The Rifleman to know that a Farrow Rifle will be presented for competition or ownership, for a 10-share subscription at one time, by club or individual. See Farrow Arms Company advertisement, this issue.

CLUBS ADMITTED TO N. R. A. MEMBERSHIP

(Concluded from page 156)

Rockaway Rifle Club (Far Rockaway)—Thomas I. Conerty, secretary; Harry G. Heyson, president; Stanley C. Fowler, vice-president; George H. Mullen, treasurer; Harry L. Spence, executive officer. Membership, 43.

St. Paul's Parish House Rifle Club (Kinderhook)—Giles D. Clark, secretary and treasurer; Paul A. Scholtegger, president; Marvin Gage, vice-president; Paul Judson, executive officer. Membership, 20.

North Carolina.

Elizabeth City Rifle Club—W. Ben Goodwin, secretary; E. F. Aydtlett, Jr., president; P. H. Williams, vice-president; C. B. Culbreth, treasurer; Frank J. Kramer, executive officer. Membership, 154.

North Dakota.

New England Rifle Club—C. M. Eklund, secretary; Charles Simon, president; Joe Paul, vice-president; C. L. Harrison, treasurer; F. H. Davis, executive officer. Membership, 15.

Sheyenne Rifle Club—Martin L. Vick, secretary; Alvin E. Soderholm, president; G. F. Keller, vice-president; Carl Soderholm, treasurer; Arthur B. Dingle, executive officer. Membership, 50.

Valley City Rifle Club—Fred Fredrickson, secretary; Harry N. Olsby, president; James W. Nielson, vice-president; M. J. Boyd, treasurer; C. A. Wylie, executive officer. Membership, 90.

Oregon.

Burnt River Rifle Club (Unity)—Walt L. Dutton, secretary; F. F. Zable, president; Oscar Hardman, vice-president; Sterling Clark, treasurer; R. W. Miggins, executive officer. Membership, 30.

Pennsylvania.

Dunbar Military Rifle Club—Jas. V. Connell, secretary; Charles McGee, president; H. M. Liston, vice-president; Charles Nemon, treasurer; A. M. Hampton, executive officer. Membership, 60.

Texas.

Marlin Rifle Club—Cliff A. McCoy, secretary; R. C. Fain, president; Rodney Donohoo, vice-president; G. W. Glass, treasurer; J. O. Simpson, executive officer. Membership, 28.

Staples Rifle Club—J. M. Scott, secretary; J. J. Lowmon, Sr., president; R. S. Holmes, vice-president; Bolton Carlisle, treasurer; C. F. Bost, executive officer. Membership, 71.

Washington.

Zillah Rifle Club—H. C. Green, secretary; H. K. Rowland, president; M. A. Sams, vice-president; E. P. Follansbee, treasurer; Roy C. Brown, executive officer. Membership, 35.

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Alfred H. Seeley, Weehawken, N. J.

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ARMS AND THE MAN

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The Hand Book, 1917

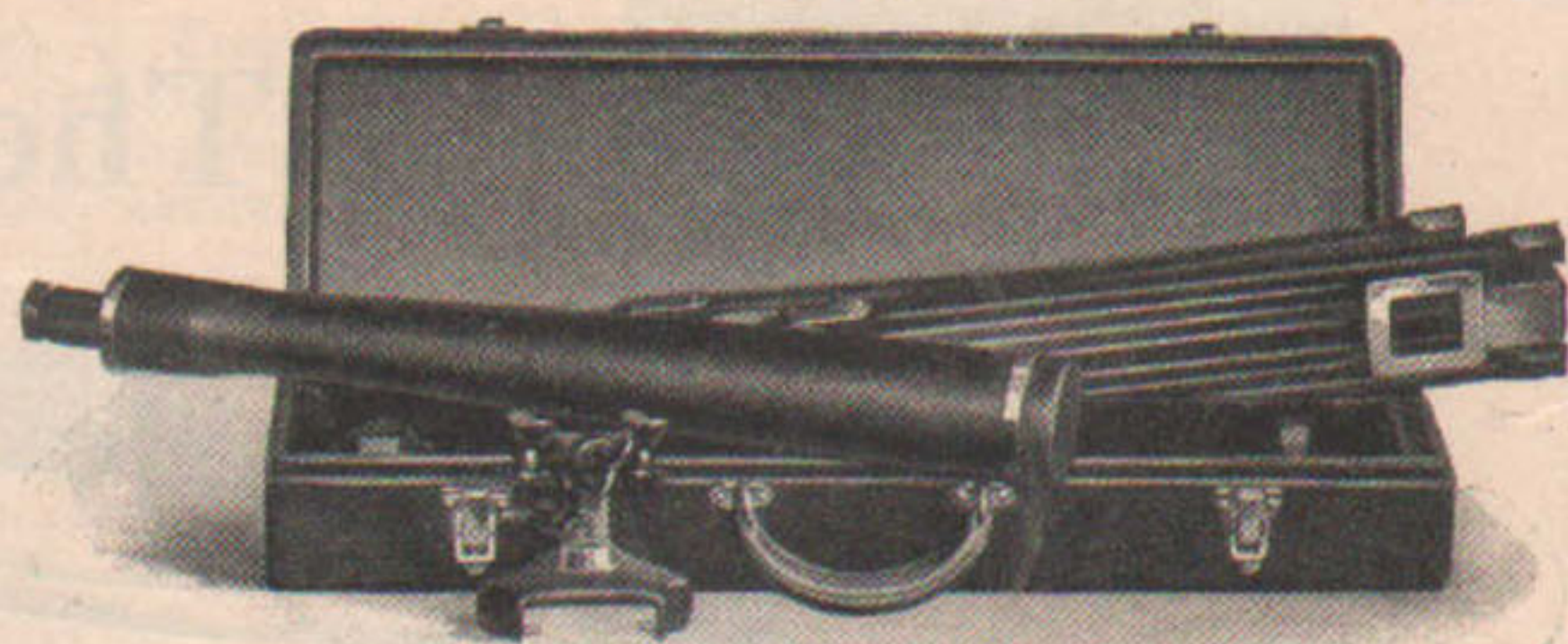
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