

ARMS AND THE MAN

Vol. LIV, No. 16

JULY 17, 1913



**THE NATIONAL
MILITARY AND SHOOTING WEEKLY**

CONTENTS.

The British Rifle Meeting.

The Military Cartridge of the Future.

Service Shooting at Sea Girt.

Small Bore Target Rifles.

The Short Range Rifle League.

**Latest News of Pistol, Rifle, Shotgun, and the
Army, Navy, and National Guard.**

\$3 A YEAR

10 CENTS A COPY

MEETING ALL REQUIREMENTS OF THE N. R. A.
STEVENS "ARMORY" MODEL No. 414

TRADE MARK
— STEVENS —

Reg. U. S. Pat. Off. & Fgn.



"SPECIAL PRICE TO RIFLE CLUBS"

.22 short caliber. Made to order in .22 L. R. caliber
Bead Front—Stevens Peep Rear Sight

Weight about 8 lbs. Take Down Automatic Ejector

**Watch the Splendid Scores this Rifle is making in
SHORT RANGE RIFLE LEAGUE**

Small wonder that Riflemen specify "**STEVENS No. 414**" in preference to all other makes

Our Rifle Catalog No. 11 illustrates and describes the largest and most popular line of Rifles in the world

J. STEVENS ARMS AND TOOL COMPANY

P. O. BOX 3320

CHICOPEE FALLS, MASSACHUSETTS

THERE SHOULD BE

at least five 30 caliber Maxim Silencers in every National Guard Company and on every rifle range.

REMEMBER

there are a great many rookie privates who never saw a Springfield until they joined the National Guard, and the report for the first time sounds to them like the discharge of a sixteen-inch coast defense gun, the recoil like

THE KICK FROM A MULE

No wonder Company Commanders can't get their men out. Naturally the figure of merit will suffer. Placing a silencer on the Springfield does away with all these petty annoyances.

COMPANY COMMANDERS

should ask their Adjutant General to supply them with at least five silencers of the model 15. These can be obtained on requisition under 1661. Address,

**THE MAXIM SILENT FIREARMS COMPANY
HARTFORD, CONN.**

**Dupont
1909 Military**

**THE BEST RIFLE
POWDER IN THE WORLD**

THE PROOF

Pan-American International Team Match, at Buenos Aires, Argentine Republic, May 23, 1912, between *United States*, Argentine, Chile, Peru, Brazil and Uruguay.

International Legation Guards Match, at Peking, China, June 5, 1912, between *United States*, Great Britain, Germany, Holland, Russia and Italy.

The International (Team Match) at the Olympic Games, Stockholm, Sweden, June 29, 1912, between *United States*, England, Sweden, South Africa, France, Norway, Greece, Denmark, Russia and Hungary.

The Palma Trophy Match, at Ottawa, Canada, September 14, 1912, between *United States* and Canada.

RIFLE SMOKELESS DIVISION

**E. I. du Pont de Nemours Powder Co.
WILMINGTON, DEL.**

ARMS AND THE MAN

FORMERLY
SHOOTING AND FISHING.

VOLUME LIV. No. 16.

WASHINGTON, D. C., JULY 17, 1913.

\$3 a year. 10 cents a copy.

The British Rifle Meeting.

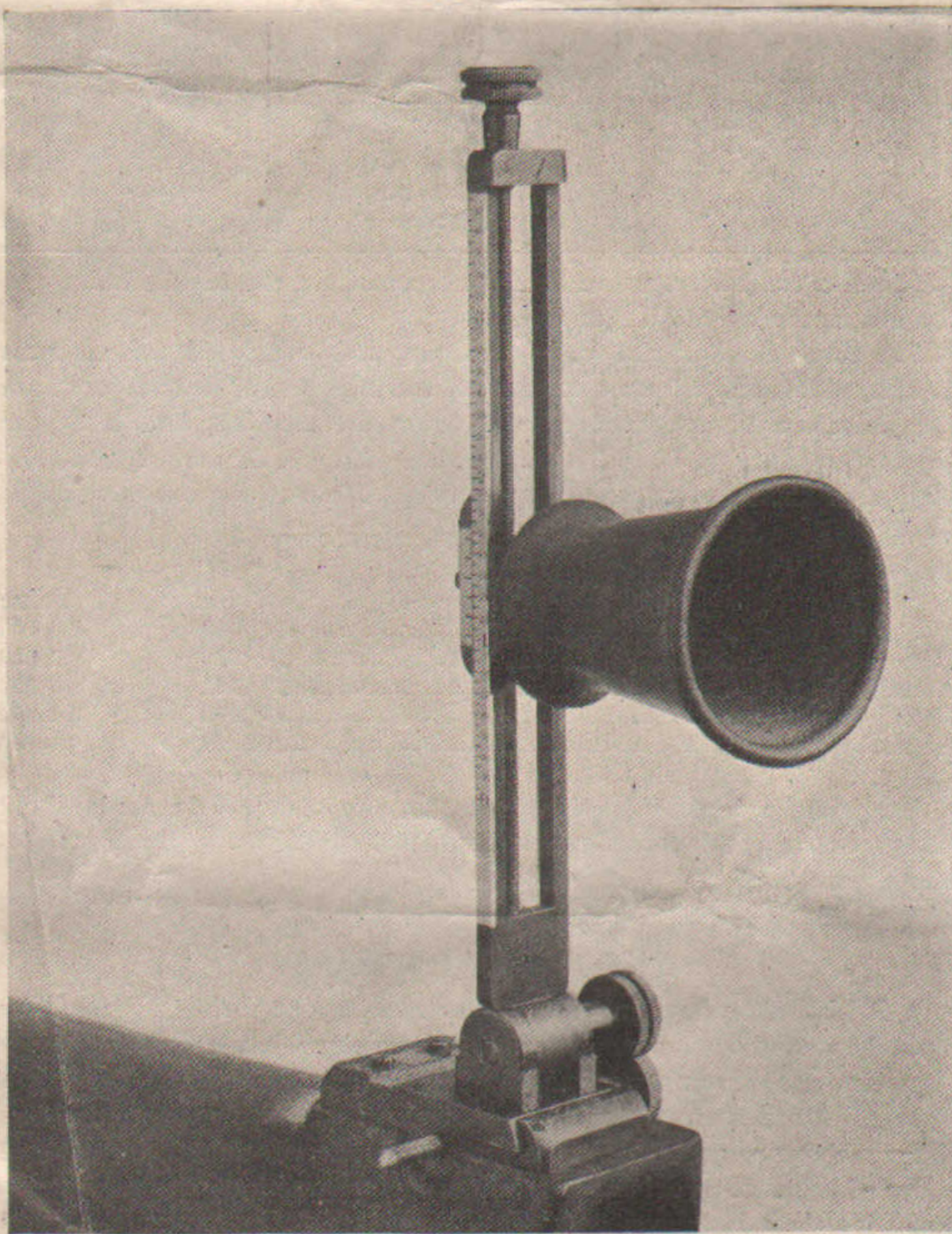
The First of a Series of Articles on the Great Annual Bisley Rifle Meeting.

BY OUR SPECIAL CORRESPONDENT.

FROM July 1st to the 26th, inclusive, the British National Rifle Association held its 54th consecutive annual rifle meeting at Bisley.

Much of the interest of this event to Americans lies in the opportunities our special, exclusive and freely illustrated report will afford of comparing British and American methods, for which reason considerable space will be devoted to more details of rifles, ammunition, targets and competition conditions than would ordinarily find place in the report of a rifle meeting.

In pursuance of a broad policy of encouraging everything that may directly or indirectly improve shooting in war or hunting, the British program includes contests for match rifles, service rifles, sporting rifles, small bore or miniature rifles, revolvers and pistols. The match rifle as defined by the N. R. A. is any breech-loading rifle with any sights, maximum caliber .310; maximum weight of barrel, three and one-fourth pounds; minimum trigger pull, four pounds. Most match rifles are equipped with magnifying sights on the principle of the Galilean telescope and are the last word in precision at long ranges.



REAR SIGHT OF LONG RANGE MATCH RIFLE.

Elevating and wind gauge scale divided to minutes of angle. The aperture is sometimes fitted with a lens for use in communication with the magnifying foresight, though the latter can be used equally well without.

All the contests for this rifle are at distances from 900 to 1,200 yards. From 10 to 20 shots are fired at each range without cleaning and the *raison d'être* of this class of rifle and shooting is the development of

great accuracy in ammunition of a size and caliber which may ultimately prove useful for military purposes. This game is very expensive and is therefore indulged in by a limited number of more or less opulent enthusiasts to whom the expense of their hobby is not the first consideration.

The chief event for this class of rifles is the Elcho Challenge Shield, a team shoot for teams of eight representing England, Scotland, and Ireland, in which each man fires 15 shots at 900, 1,000, and 1,100 yards—without sighting shots.

The Humphrey Challenge Cup, shot under similar conditions, is open to teams of four from the Officers' Training Corps of Oxford and Cambridge Universities. In addition to the above there are 14 separate match rifle contests open to individuals.

The British service rifle, with which the majority of the shooting at these meetings is done, is of .303 caliber and has a somewhat weak bolt action which precludes the use of modern high-pressure cartridges. The Mark VI ammunition supplied by the Government for use at Bisley has a 215 grain bullet having about 2,060 foot seconds muzzle velocity and is fairly accurate up to 1,000 yards, though not comparable in this feature with the U. S. Springfield; moreover, its slower bullet is more susceptible to wind.

For war purposes a Mark VII cartridge giving a velocity of 2,450 foot seconds to a 175 grain pointed bullet has been evolved for this rifle. This is more accurate at all distances than the Mark VI cartridge, but for reasons which have not yet been divulged it has not been available for use at N. R. A. meetings.

The service rifle events are divided into team and individual contests. There are some thirty team events, international, inter-county, inter-regimental, inter-public schools, inter-university, inter-hospital, inter-services, inter-colonial, and not forgetting the Lords and Commons match between the British, equivalent of the U. S. Congress and Senate.

Several of these team shoots are under service conditions and include rapid fire at figure targets.

Some sixty-three service rifle events for individuals are also provided. Of these some are open to all comers, while others are limited to Territorials (same as your National Guard). Competitors are divided according to their winnings in previous years into classes A, B, and C, with special events and prizes devoted to each class. This method of endeavoring to induce novices to compete at these meetings has now been under trial at two or three meetings, but it is questionable whether it is achieving its purpose to the satisfaction of its designers, though entries for the present year are greater in number than last year.

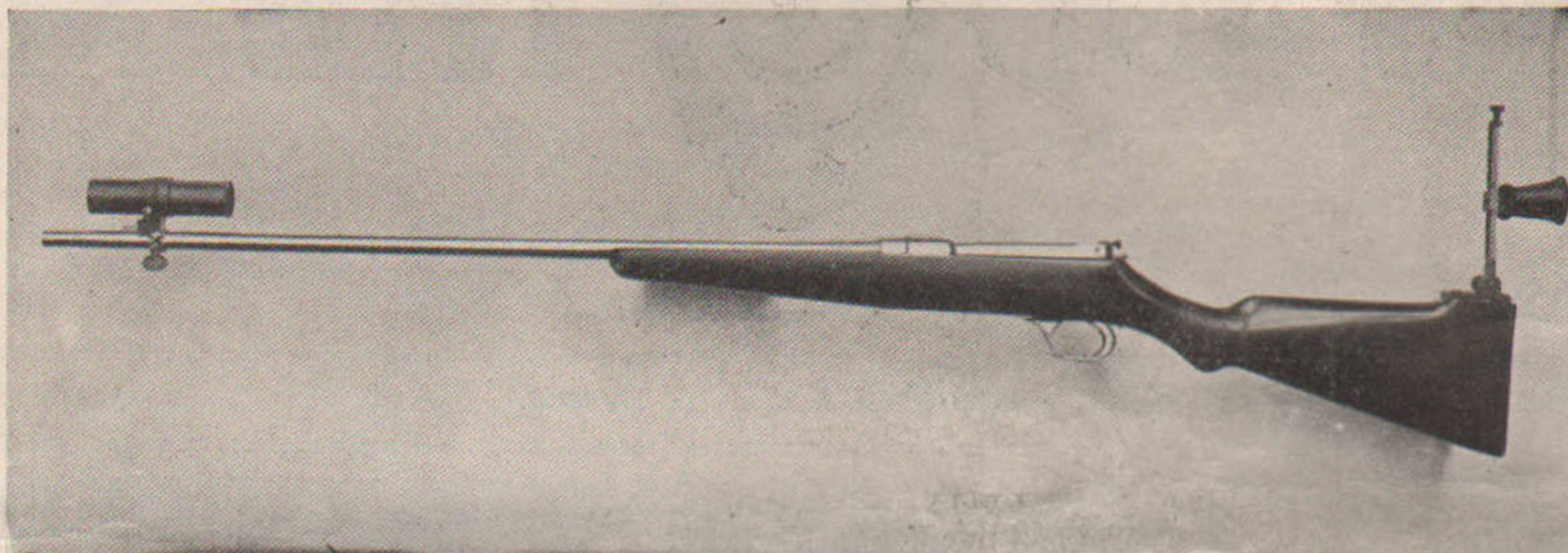
About fifteen team and individual contests are open to revolvers, at 20 to 50 yards, and most of these are shot for at figure targets with a time limit and service pattern revolver.

Sporting or hunting rifles are used in several contests at the running deer target, while shooting at moving objects with service rifles is also encouraged by competition at the running deer, running man and walking man.

A very sporting event is the egg pool, in which the objective is a two and one-half inch white circular card pinned to the center of the bull's-eye at 500 and 600 yards. The N. R. A. lays 40 and 50 to 1 in six-pences against hits, and usually makes a good profit.

The N. R. A. definition of small bore rifles is any .220 bore breech-loading rifle, barrel not exceeding 30 inches, minimum pull of trigger four pounds, with any sights not containing glass. Three team and 19 individual events at distances from 25 to 200 yards are provided for this type of rifle.

The firing point and target accommodation at Bisley is on a generous



MATCH RIFLE USED FOR LONG RANGE SHOOTING IN ENGLAND

scale and more than ample for the number of competitors. Two hundred and twenty-four targets are available simultaneously on butts Nos. 1 to 23, inclusive, in addition to which there are some 100 revolver and miniature rifle targets, two running deer and running men, and two walking men targets. From left to right of the firing line is about a mile and a steam tramway runs just in the rear for most of the distance.

Bisley is charmingly situated in the Surrey hills about 30 miles from London, from whence trains, at the reduced return fare of .36 cents, run right into the camp. Several rifle clubs and private individuals have established permanent bungalows and pavilions near the range and these with the N. R. A. and press offices, the great refreshment pavilion, umbrella tent and exhibition building make a charming and business-like picture.

Most of the competitors are housed in permanent huts, but the markers and range staff, which number nearly 1,000, are accommodated in tents.

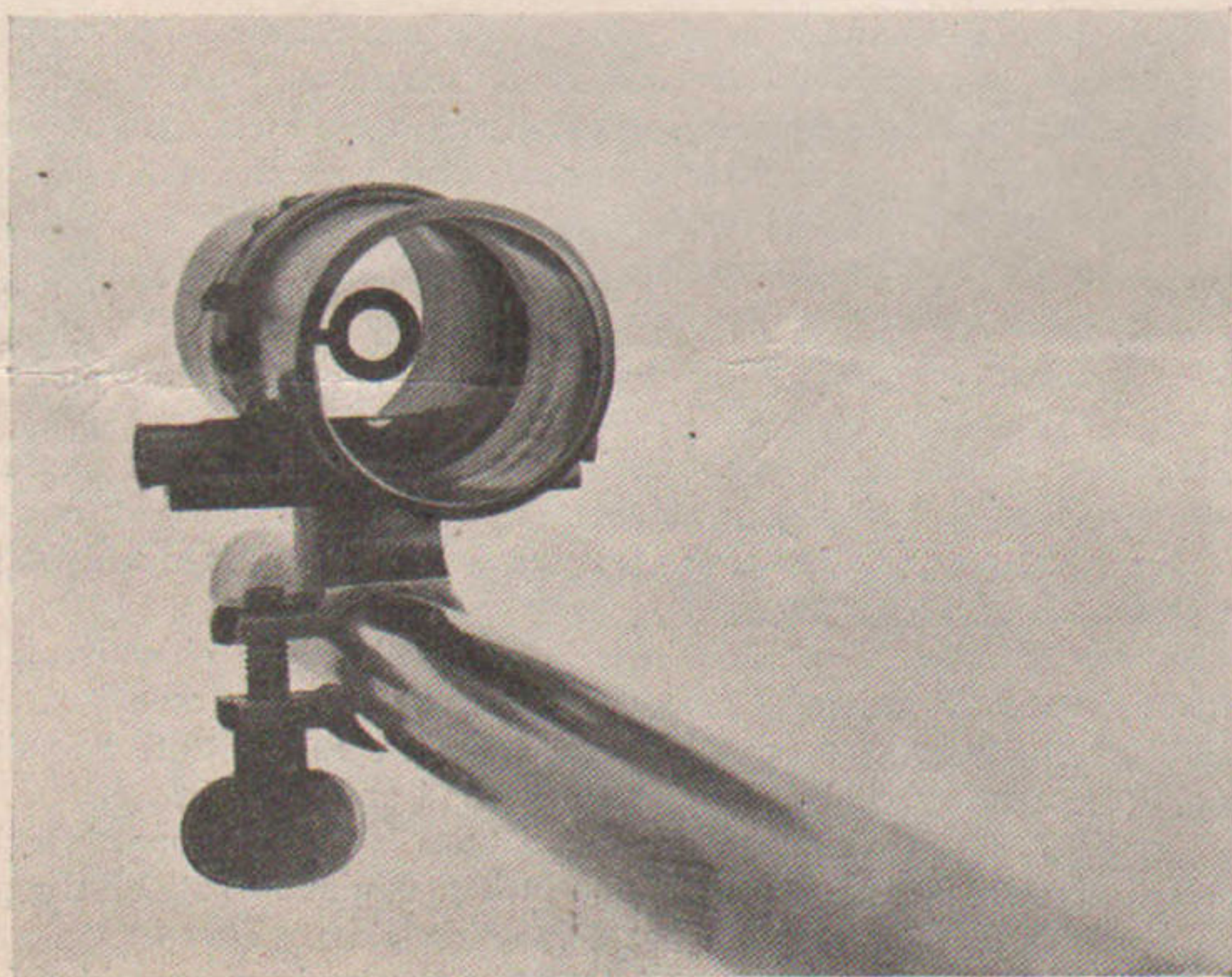
The targets used beyond 800 yards are 10 x 6 feet with a 3-foot bull's-eye counting 5, a 4-foot 6-inch inner counting 4, both circular, a 6-foot square magpie counting 3, and the outer counting 2, is the remainder of the target.

At 200 and 500 yards a square target having a drab-colored head and shoulder figure in the middle is used. The groundwork of this target is green for the bottom half and pale-blue for the upper half, and it is very difficult to sight on in bad lights.

The dimensions of the scoring rings are as follows:

	bull's-eye	inner	magpie	outer	
200 yards	5	12	21	48	inches
300 yards	8	17	26	48	inches
500 yards	18	30	46	72	inches

The figure which forms the objective for aim at 200 yards has a maximum width and height of 12 inches, and at 500 yards of 18 x 21 inches. In the 200 yards target the bull's-eye ring, invisible to the firer, is in about the center of the figure, in the 500 yards target the bottom line of the figure intersects the bull's-eye just below the center.



Magnifying Front Sight of Long Range Match Rifle

Revolver targets have five rings counting from 7 to 2 of the following dimensions, counting 7, 6, 5, 4, 3, 2:

20 yards	2	3	4½	6½	9	12 inches
50 yards	4	6	9	13	18	24 inches

The running deer target is a life-sized figure of a deer having invisible rings 6 inches, 12 inches, and 18 inches in diameter about the middle counting 5, 4, and 3, respectively; the rest of the deer, excepting the haunch, counting 2. The deer travels about 75 feet in three seconds. The running man target is the upper portion of a man with similar invisible rings to those on the running deer target, and it travels the same distance at the same speed. The range for running deer and running man competitions is 110 yards.

DECIMAL TARGETS OF THE FOLLOWING DIMENSIONS ARE USED FOR THE SMALL BORE EVENTS.

Distance	200	100	50	25	Scoring
Diameter of rings in inches	4	2	1	½	10
	8	4	2	1	9
	12	6	3	1½	8
	16	8	4	2	7
	20	10	5	2½	6
				3	5
			Hits outside these rings do not score.	3½	4
				4	3
				4½	2
				5	1

The two central rings are black and constitute the middle bull's-eye, the remainder of the target is white.

The total number and value of the prizes competed for at these meetings depends to some extent on the number of entries and can not therefore be ascertained until after the meeting, but, last year there were 5,878 prizes of a total value of approximately \$56,750, inclusive of challenge cups. These were allocated to the encouragement of shooting with the various weapons as follows:

	Prizes	Value
Sporting rifles	49	\$ 405
Revolver and pistol	252	1,620
Match rifle	141	2,530
Small bore	492	1,845
Service rifle	4,944	50,350

The other side of this picture is that the competitors made about 45,700 entries and contributed about \$60,000 in entry fees, practice shots, etc.

THE SOLANO TARGET.

AFTER experimenting for some months, the British War Office has adopted a new pattern of the Solano battle practice target for use on miniature ranges of the Regular Army and Territorial forces. More than 100 of these ranges will be equipped in the near future, about 80 of which will belong to the Territorials.

In addition to providing for all ordinary practices, the new target provides what is known as a "field firing area" for miniature ranges. This is the reproduction of a tract of natural country, the features of which may be varied at will, over which troops of all arms in battle formations, reduced to scale for various ranges, can be made to maneuver. In other words, the target is a form of panorama with artificial figures moving thereon.

The Military Cartridge of The Future.

BY EDWARD C. CROSSMAN.

(Continued from last week.)

INASMUCH as fear is admitted to be the strongest weapon in checking an advance or compelling the evacuation of a position, then bullets that inflict but slight wounds, often not even disabling the man hit, will cease to inspire the fear that comes from the sight of more efficient missiles inflicting terrible and disabling wounds. It is the tenth man hit that stops the other nine, provided the tenth man is hit in a way that brings a sinking feeling to the pit of the stomach, and the impression that the most undesirable thing in the world is to be hit in the same fashion.

It would appear, therefore, that the reduction of caliber can not proceed much below thirty without a change in the bullet structure to compel it to act as soft-point missiles do on game. It is not at all improbable in the future that ballistic engineers will deliberately seek to produce bullets of such a balance that they will turn and dive on impact as does the Springfield, merely to inflict wounds beyond the power of a differently balanced missile. It has apparently been done before—a deliberate design of bullet or rifle to inflict more severe wounds than the rules of civilized warfare contemplate.

Tippins, the English expert, charges in his book that the very deep rifling of foreign military rifles is for the deliberate purpose of so weakening the jacket that it will burst on impact and allow the bullet to break up.

Ballistically, the boat-shaped or taper-tailed bullet seems to offer the greatest chance for improvement in military cartridge. With such a bullet—made to shoot straight, not yet done—the present muzzle velocities would suffice to give battle range sighting up to 1,000 yards or so. Eliminating the backward drag on the tail of the bullet would enable it to hold its velocity much longer, would give it in short a still higher ballistic coefficient for the same weight. Turning the proposition around, the bullet could be made lighter, enabling therefore higher velocities without change in the cartridge case or chamber pressure, giving very flat trajectories over the actual fighting ranges but lessened energy at the longer ranges.

Before me lies a Swiss bullet, tapered at the base to about one-half the full caliber of the missile when it is cut off square like the ordinary bullet. It weighs 170 grains.

My informant says that although it is driven at just under 2,400 feet seconds against 2,950 for the German bullet of 154 grains, it requires less angle of elevation for all ranges beyond 300 yards than does the German affair. The calibers are the same.

The Swiss bullet has a trifle the better of it in sectional density, 2,125 against 1,900 grains per square inch, but this difference would hardly compensate alone for the 23-per cent difference in velocity in favor of the German bullet. Apparently the boat-tail is playing a very important part in enabling the Swiss bullet to retain its velocity.

Thus far experimenters have had trouble in making the taper-tails shoot straight. Sir Charles Ross sent me a handful of various shaped boat-tailed .280 bullets, made from pure copper à la the French Balle D. These bullets, he said, would strangely enough shoot straight in a covered range, the sort of long cloth tunnel used by Dr. Mann in his work, but in the open they would not perform at all well. Reports from the Swiss bullet are regretably scarce.

The bullet of the future will have a mixed core—either of lead and aluminum like the present British Mark VII, a spitzer weighing 170 grains and shot in the present Lee—or of some other material than lead, or else with the core but partly filling the bullet, leaving the point hollow.

It has not been generally known that the Ross .280 match bullet that performed so extraordinarily at Bisley in 1912, was a steel-coated bullet, filled from the front and with a hollow point. The sharp point was afterwards swaged closed by a set of tiny hammers, revolving and striking hundreds of blows per minute. The reason for filling the bullet from the forward end was primarily to obtain this hollow point which Ross found greatly to increase the accuracy of a bullet. A hollow point bullet, filled from the rear, would be a difficult proposition for the reason that the blow on the base of the bullet would promptly drive the entire core forward, filling up the sharp point pronto.

A bullet with hollow point or with point filled with some very light material, such as the British Mark VII, can be made, of course, longer over all for the allowed weight, giving a very steady flight. The weight being well to the rear, causes the bullet to spin far longer in time than a bullet differently balanced and this in turn aids the bullet to retain its steadiness of flight to ranges beyond the scope of the ordinary missile. The greater spin of such missiles imports a greater shock to tissue than a bullet turning more slowly.

The objection to such missiles is that they call for a long action to handle them. Naturally, were the Springfield bullet kept in the same position in the neck of the case, and made one-fourth inch longer by extending its jacket over one-fourth inch of nothing at the point, it would not work through the present magazine. The long Ross match bullet will not work through even the long Ross action but has to be fed by hand into the chamber. Complete, the bullet is $1\frac{1}{2}$ inches long against 1.01 for the larger caliber Springfield.

The point should be a trifle sharper than that of the present bullet for the Springfield, and the parallel longer to ensure perfect centering of the bullet in the rifling without the necessity for a short, pressure-raising lead, such as we use on the service rifle. The value of n , coefficient of shape, in the Springfield, is .563 and but .48 in the .280 match bullet. This means in turn that were the two bullets alike in density, the .280 would still badly outrange the Springfield with velocities equal. A blunt, five or six diameter point against one of nine or ten, wastes the powder energy in the same old air-bucking stunt that our old type of bullet used to perform, even though the five diameter and the ten diameter point are both to be classed as "spitzers."

If metal fouling continues to trouble as it probably will with velocities around 3,000, then recourse may be had to either a mild steel jacket with some form of lubricant, or else the present cupro-nickel with a lubricant. A bullet now used is coated with wax in which is incorporated Acheson graphite, before loading into the case. The wax is, of course, not sticky or greasy like our favorite mobile lubricant, but the question remains whether it is practicable for service use.

What is needed is something on the order of wax that will resist ordinary heat and handling, but which will burn up clean in a barrel, releasing its graphite content. Nitrocellulose itself has been suggested for the graphite container as it is waterproof, not easily scraped off, and burns up clean in a barrel in such small quantities as would be used on a bullet.

Considerations of weight and strength will compel a change in the material of the case itself. Brass was selected for the first drawn cartridge cases because it was tough and easily worked, besides being cheap. There are far tougher substances, giving more strength of case for the same weight. It is only in the last few years that brass has been questioned as a suitable material for high pressure rifle cases—but at present the case is the weak link.

It is not hard to make a barrel strong enough to give a generous margin of strength over working pressures, nor very difficult to design a bolt that will effectually support the cartridge head during explosion.

The weakness of the combination is that your 50,000 or 60,000 pounds pressure is coming in part on a soft brass case that in the natural course of things can not be more than partly supported by the best designed bolt-head. There must be a primer-pocket, and there must be an extractor-slot in the receiver.

I have seen two rifles that were blown up. Neither one had the barrel ripped open, neither one had a sheered lug. In each case the gas had apparently ruptured the case at the extractor slot, then ripped off the top of the receiver.

This released the top locking lug, and the bolt tripped out of the receiver. In one case the magazine was bulged outward until it bellied like a ship's sail, ripping off the stock over the receiver for a distance of eight inches. It afforded a good example of the power behind that tiny bullet when said power gets on a rampage.

At the present time the State of California is using ammunition of private make, which leaks gas around its primers as a regular thing, and occasionally sheds a primer into the receiver. This comes merely from the head stretching under pressure, and enlarging the primer socket. The present case is walking the tight rope, safe so long as balance is retained, unsafe when pressures rise.

If some method of manufacture can be perfected, steel cases will come into vogue. Also some method will beyond doubt be worked out, just as a means was found of drawing brass cases from discs of brass.

At the present moment, no rifle using pressures of Springfield sort and using brass cases is within the limit of safety that barrel material affords, nor within the limit of the bolt, which is far weaker than the barrel.

The shell actually protrudes from the chamber the distance of its cannellure, it is not always firmly supported by the bolt because of variations in the head space or distance from cannellure to the shoulder of the shell.

Sufficient proof is given, by the fact that whenever a rifle lets go from overload, not from defects in the bolt material, the case is the first thing to open up and the rest of the wreck follows in due course as the receiver is separated from its roof by the gas, and the bolt is released.

Probably the best form of case construction is that of the Holland .275. In the normal rimless case, the shell is stopped from further progress into the chamber by the shoulder striking the corresponding slope in the chamber. The distance from shell head to shoulder is termed the head-space and upon the even run of this distance depends the even seating of the shell, and freedom from misfires.

A more easily manufactured shell so far as head-space is concerned, is the rimless case, with a very slight raised ridge just ahead of the cannellure. It is not enough to interfere with smooth feeding in the magazine, but is sufficient to constitute a positive stop to the case's further progress up the chamber.

Naturally it is easier to make an even run of cases from head of shell to a slight rim three-sixteenths inch forward, than an even run with uniform distance from head to shoulder or more than two inches.

It is unfortunate that the Balkan War, with its use of both spitzer and blunt-nose bullets can not tell us how modern bullets and cases work out in active service.

The ammunition used by the Turks, as reported by various observers, was so irregular and unreliable that any unsatisfactory results might be charged either to faulty design of cartridge or faulty materials in the construction.

SERVICE SHOOTING AT SEA GIRT.

THE School of Musketry of New Jersey, plans for which were worked out under the direction of Gen. Bird W. Spencer, Inspector-General of Rifle Practice of that State, has closed a most successful season. Previous reference has been made to the scope of this school and a considerable number of the States are known to have asked for the course of instruction prepared by New Jersey. The practical results of the school seem to justify more work and further experiments along similar lines. It is a new feature in National Guard instruction.

About 600 officers and men attended the school in the armories out of which 172 qualified for the outdoor school. Of these 24 officers and 29 enlisted men finally reached the prescribed 70 per cent figure of merit, and will be announced in orders by the Adjutant General, and receive certificate of proficiency.

General Spencer and his capable assistants are naturally proud of the success of the school and they have received many high compliments from officers of the Army and others competent to judge of the merit of the work performed.

A firing problem which was worked out successfully came at the end of the sessions of the outdoor school. The problem started at 1,200 yards with two companies, each divided into two platoons. One of these companies was commanded by Maj. Wm. B. Martin and the other by Maj. W. S. Price. There was a platoon leader, of course, for each platoon and an umpire for each one. These latter reported direct to the Chief Umpire.

Announcement was made to the companies that the silhouettes in front of them represented the company with which they were competing. Ninety rounds of ammunition per man were allowed to be expended by the time the companies reached the 500 yard firing line. The quantity was correct.

Both Major Price and Major Martin being experienced officers used excellent judgment in the advance of their companies; Major Price having somewhat the better of it as will be shown by the figures about to be given. A new feature injected into the problem was that of holding the platoon fire, when it became inefficient, for a space of 45 seconds. The period of inaction under such circumstances was 30 seconds, when firing was resumed. It was also permitted that the captain of each company might concentrate his fire on a single group of silhouettes, while his other platoon was advancing.

Problems of this character do more to establish fire discipline, fire control and fire effect than anything which has yet been undertaken. Nothing, of course, can render unnecessary or useless the individual instruction of the men with the rifle—that is, pre-eminently, the basis for all rifle efficiency. At the same time it must be remembered team work is essential and there is no way to obtain it except by practice given in such ways as that afforded by the New Jersey system.

General Spencer, his officers and his men are to be congratulated upon their enterprise in initiating in the National Guard a training which must grow more and more extensive as time goes on. The results of the firing as tabulated by the Chief Umpire, Capt. Russell

Langdon, 3rd Infantry, exclusive of the hits on the various divisions and on the silhouettes:

MAJOR MARTIN'S COMPANY.

Right Platoon (on No. 3 group).

Percentage of hits.....	25.76
Percentage of distribution.....	100.
Figure of merit.....	50.51
Possible	100.

Left Platoon (on No. 4 group).

Percentage of hits.....	26.51
Percentage of distribution.....	100.
Figure of merit.....	51.01
Possible	100.
Figure of merit of company.....	50.76

MAJOR PRICE'S COMPANY.

Right Platoon (on No. 1 group).

Percentage of hits.....	34.51
Percentage of distribution.....	91.67
Figure of merit.....	53.56
Possible	100.

Left Platoon (on No. 2 group).

Percentage of hits.....	31.1
Percentage of distribution.....	100.
Figure of merit.....	54.07
Possible	100.
Figure of merit of company.....	53.82

The two provisional companies of two platoons each were made up of the students in the school, officers and men.

RECEIVING FOREIGN RIFLEMEN.

THE Reception Committee of the National Rifle Association of America announces that which follows as a tentative program of reception and entertainment for visiting riflemen during the International competitions of this year. It is understood that this program is tentative and subject to change without notice.

It seems to be excellently conceived to give the visitors a good general idea of this country and to afford them the most possible pleasure within the limits of their stay.

It is especially pleasing that they should be taken to Sea Girt before leaving the country, as that most historic and beautiful range will be sure to appeal to them all.

RECEPTION COMMITTEE.

Col. J. G. Ewing, Chairman.

Col. H. G. Catrow.

Lt. Col. Wm. Libbey.

INTERNATIONAL RIFLE SHOOTING TOURNAMENT, CAMP PERRY, OHIO, U. S. A.

Memorandum.

Tentative program for receiving and entertaining visiting foreign rifle teams:

1. Reception of each by the chairman and a sub-committee—one of which will be a representative designated by the ambassador or minister of the country from which the team comes. (N. B. Freedom of the port has been granted to the visitors by special act of Congress.)
2. Transshipment of teams to Camp Perry as soon as practicable after arrival, accompanied by a committeeman to look after each en route.
3. August 16th, 23d, and 30th, possible transportation and receptions from Saturday till Monday by Detroit, Cleveland, and Toledo, in the order as specified.
4. September 9th, banquet at or near Camp Perry.
5. September 10th, special train to Buffalo.
6. September 11th, visit to Niagara Falls. Special train Buffalo to New York.
7. September 12th, to Sea Girt.
8. September 12th to 20th, inclusive, at Sea Girt.
9. September 21st, to Washington.

10. September 22d, inspection U. S. Naval Academy, with review.
11. September 23d, Washington.
12. September 24th, possible review by U. S. Marine Corps at League Island, Philadelphia, Pa. Special train to New York.
13. September 25th, to West Point and return by yachts. Review at West Point.
14. September 26th, seeing New York. Complimentary evening performance at the Hippodrome, with visit to stage to see water tank and diving bells.
15. September 27th, possible banquet and review by a New York regiment.

SMALL BORE TARGET RIFLES.

By D. C. McCOWN.

YEARS have been consumed and experiments without number have been made to bring our military rifle and ammunition to its present standard of perfection, and only since ARMS AND THE MAN instituted the twenty-five-yard indoor game and the more recent fifty-yard outdoor league have we awakened to the fact that there is not made in America a rifle fully suitable and designed for this class of work.

You can not buy a better barrel anywhere than is bored in the United States, but the action and manner of loading both of the make-shifts we are now using is execrable.

Small bore rifle shooting is only in its veriest infancy and there is no question that there will be many times the number of clubs competing next year. It is an ideal sport, this coaxing the little forty-grain long rifle missile into the center, and its devotees will increase enormously.

But we must have a rifle and many of us for as many more reasons don't care to adopt the little beauty from across the pond. It is a wonder, and Mr. Crossman is credited with the two following extracts on its Royal Highness, the B. S. A. Number Twelve:

"It is unquestionably a mile ahead of anything I have ever seen;" and again: "The cartridge has nowhere to go except into the chamber, and the tiresome, nerve-racking fumbling is entirely obviated."

Do you remember the lovely time you had last winter at the indoor range loading our antiquated relics?

Here are some ideas covering a rifle which we of the Middle West would welcome. The ideas are those of the writer and his good friend and Olympic Rifle and Revolver Club team-mate, Capt. Fred S. Hird, winner of the individual small bore championship at the Olympic games.

It must, of course, be of the .22 caliber persuasion and chambered for the long rifle cartridge. Barrel to be twenty-eight or thirty inches in length, round, and tapering from one inch in diameter at the breech to three-quarters of an inch at the muzzle.

The action must be so designed that bolt or breech block can be readily removed, without tools, to admit of cleaning action and to clean the barrel from the breech. Loading slot so fixed that by placing cartridge in position, the breech can be closed, or bolt slid forward, seating the cartridge. So designed, that user will not have to pull his arm out of the sling, roll over and yell for help or a light to reload.

Use the semi-shot gun butt as on the Stevens No. 414, except with butt-plate of steel, curved, and milled or roughened to prevent slipping on shoulder. Fore-end approximately the same as on above-mentioned model except with swell extending back to frame.

The trigger to be the same as on the new Springfield, and milled or roughened in the same manner.

Weight from eight to nine pounds. And above all, let's have a man's rifle in every dimension.

Adapt it to the new No. 47 Lyman or Harry Pope's No. 110 rear sights, and a front sight that will allow for many different ideas in discs.

The next few years will see mighty strides in the organization of civilian rifle clubs. We of the United States, are behind the times in this respect and to maintain our vaunted supremacy we must make up for lost time.

Our English friends have over four thousand civilian rifle clubs, with a membership of over four hundred thousand, and the figures are growing. Switzerland has twenty-eight hundred rifle clubs with a membership totalling one-third of the male population. Australia has passed a bill compelling every boy between the ages of fourteen and seventeen to join the cadets and practice rifle shooting. South Africa has passed a similar bill.

With the above in mind, let's all pull together and help ARMS AND THE MAN in every way to put our United States in line. If there are only ten men, old, young, or indifferent, in your town, herd them together and demand that they lend their assistance in establishing a National Rifle Association club.

And let's all pull for a suitable, well-balanced, nifty, man's-size target rifle, and we will get it.

INTERNATIONAL RIFLE SHOOTING.

IT is noticed in the news notes sent out by the National Rifle Association that the International Union Match is referred to as the premier event to occur at Camp Perry. This, of course, is wrong. The International Union Match is not the most important match which will occur during the tournament of this year.

Further, on this subject, the bulletin says:

"In this match Switzerland has won fifteen times out of the sixteen contests and the scores made by the Swiss team are phenomenal. It is this proposition that the United States riflemen are up against and the National Rifle Association of America is scouring the country for men to compose the team to represent the United States in this match. Both the military shooters and the followers of the Schuetzen game have been appealed to and orders have been given to a prominent arms manufacturer to make the special rifles to come within the rules for the American team."

The tryout will take place at Camp Perry August 14. The range will be open for practice two days previous to that date. All who report for the tryout will shoot with the twenty-five special rifles. From this tryout 10 men will be selected who will pledge themselves to shoot with nothing but these "Free" rifles from August 23 until September 6; the last date named is when the match will be shot. The ten high men of the tryout will be designated as the team to begin training immediately and enter the "Free" rifle events of the International program from September 1 to 5, inclusive. The showing by the ten men in these contests will be the means of selection on the night of the fifth of the five men who will compose the International team to shoot the following day.

Special invitations have been sent out by the team captain to about fifty of the leading riflemen, both Schuetzen and military, urging that they enter the tryouts.

The special rifles to be used are now in process of manufacture by the Winchester Repeating Arms Co., and will be ready for delivery in about three weeks. The rifle will weigh about twelve pounds, is equipped with open sights, set trigger, cork finger rest and grip specially designed to aid holding, particularly in the prone position, and will have an interchangeable stock of Schuetzen design for the standing and kneeling positions with a straight stock for the prone shooting. No sling will be used. Outside of a desire to get together a winning team there is encouragement lent all of our marksmen by the news that the winning team will divide the prize of \$1,000 among the five men who compose the team.

The captain of the team will be the well-known military shot, Lieut. Col. Glendie B. Young, of the District of Columbia National Guard. Colonel Young's career as a rifleman dates back many years and his selection is an assurance of efficient training and proper management.

COLLEGE STUDENT CAMPS.

REPORTS from the college student camps at Gettysburg, Pa., and Monterey, Cal., where the War Department is giving instruction in military matters, are that both camps are highly successful. Last Sunday Maj. Gen. Leonard Wood, Chief of Staff, accompanied by Captain McCoy, his aide, visited the Gettysburg camp and lectured to the several hundred students encamped there.

The course in each camp is made up of lectures alternating with practical work, which latter includes rifle practice. Those who proposed the plan are much encouraged by results already achieved.

CONFERENCE ON BIRD PROTECTION.

AT the instance of Senator McLean, of Connecticut, the Senate last Monday resolved "That the President be requested to propose to the Governments of other countries the negotiation of a convention for the protection and preservation of birds."

Action by the House is not necessary to make this resolution effective.

Senator McLean long has been the spokesman on the floor of the Senate for those interested in the protection of bird life. Proposed legislation in the tariff bill regarding the importation of plumage of birds, taken in connection with the new Federal law regarding the protection of migratory birds in this country, has raised the question of the efficacy of protective efforts on the part of the United States without the co-operation of other nations. Hence the proposal for international action.

MACHINE GUNS IN GRECIAN ARMY.

CAPT. A. TRAPMANN, Twenty-fifth (County of London) Cyclist Battalion, The London Regiment, has published in the Royal United Service Institution, a lecture which he recently delivered recording his observations of the recent "Greek Operations in Epirus," which is reprinted in the Journal of the Military Service Institution for July-August.

Regarding the machine gun in use by the Greek Army, Capt. Trappmann says:

"They have got a gun which is, to my mind, the best, and I know a little about machine guns, as I have tried, I think, every kind. The Schwartzlose is, to my mind, infinitely the best gun in every conceivable way, except for its rather limited range, but personally I do not think the fact that it is sighted up to only 1,800 yards is a very great disadvantage. I saw ten of these guns in continuous action for seventeen minutes at the battle of Manallyassa; I was sitting among them myself, and there was not a jam during the whole time. It is an Austrian weapon—not an Austrian Army weapon, but made by a firm in Austria, and I understand it has been adopted by the German Government. The Greeks chose it from a general competition of the various machine guns used by the different armies of the world, and they were advised to choose it by French experts. The curious thing is that the gunners are supplied with what we can not get in England, or have not been able to get so far, although the question has cropped up in every Army estimate. Every machine gun section of two guns in the Greek Army is furnished with a Marindin's range finder."

OFFICERS FOR CAMP PERRY.

IN addition to the list printed last week, the following Army officers have been detailed for duty at the Camp Perry matches:

Range officers: Maj. George D. Moore, 18th Inf.; Capt. Walter C. Sweeney, 21st Inf.

Assistant executive officers: Lieut. Col. Thomas W. Griffith, Inf., and Maj. William H. Hay, 10th Cav.; Ordnance officer, Maj. William A. Phillips, O. D.; assistant adjutant, Capt. Robert D. Carter, 17th Inf.; financial officer, Capt. S. J. Bayard Schindel, General Staff; Chaplain, Chaplain Thomas J. Dickson, 6th Field Artillery.

The foregoing are instructed to report to the executive officer at Camp Perry on August 10.

Capt. William L. Luhn, 10th Cav., adjutant of the matches, has been ordered to Washington for temporary duty, and to report at Camp Perry on August 10.

AUSTRIA'S FIELD GUN EQUIPMENT.

AUSTRIA has brought out a modification of its field gun equipment to enable it to be used on narrow mountain paths. In event of Austria engaging in the Balkan war, this, it is thought, will be particularly useful.

The gun and upper carriage are transported on a miniature three-wheeled cart; the trail is fitted with a special short axle and small wheels, and the shield and gun-wheels are converted into a third carriage. Small three-wheeled carts are used for ammunition transport. The battery can be prepared for mountain work in twenty minutes, and can open fire in five minutes by remounting the guns on the carriages with small wheels, or in twenty minutes with full equipment. It is reported that one battery in each division has now been supplied with the new gear.

GOVERNOR BLEASE'S SECOND THOUGHT.

ON second thought, Governor Blease, of South Carolina, has decided that he does want Federal aid for the National Guard of his State, after all.

A few days ago he telegraphed to the Secretary of War announcing that he would hereafter see that the National Guard of his State complied with the provisions of the National Militia law. His previous communication to the department, setting forth that he wanted no Federal aid or interference with National Guard in his State and that he would not require compliance with the Militia law, had caused a withdrawal of Federal aid.

The Governor's assurances that the requirements of the Militia law will be met has operated to restore to his State the granting of national funds.

Press dispatches several days ago announced the withdrawal of Federal aid from the National Guard of Arkansas, as if this was a new thing. In fact Federal aid was withdrawn some time ago because it was demonstrated that the National Guard of Arkansas had no means

of protecting and caring for adequately the Federal military property loaned to the State. Some \$115,000 of war material, secured from the War Department, is yet unaccounted for, and there are no armories or State funds to provide for renting proper shelter. The Arkansas legislature, which met last spring, made no provision for the service.

However, it is not improbable that Federal aid will be restored to Arkansas. Popular subscriptions, it is reported from there, are being raised to house and care for military property. When this is done, Federal aid will be restored.

CAMERA RECORD OF SIGHTING.

DO you want a photographic record showing precisely how you were holding at the instant of firing? Such a record is now practicable, if the pretensions of a British inventor be correct. The new invention is described as follows:

"A photographic recording gun-sight comprising a sighting telescope provided with cross wires and a recording camera provided with adjustable cross wires or their equivalent, and with a shutter electrically released by the firing circuit of the gun, so that when such circuit is closed a photograph of the field of the sighting telescope is obtained with the position of the cross wires recorded on it, the beam of light which normally enters the sighting eyepiece being permitted to enter the camera at the moment of pulling the trigger. A portion of the light which enters the telescope is used for sighting and the remainder for recording."

DISCONTINUE GARRISON SCHOOLS FOR NATIONAL GUARD.

ON June 5 the Secretary of War directed that the policy of authorizing attendance of officers of the Organized Militia at garrison schools be discontinued.

With the passage of the Militia Act of 1902, a limited number of officers of the Organized Militia were authorized to attend garrison schools and receive a course of theoretical instruction. At that time this was the only available method of affording militia officers an opportunity to receive such instruction from Regular Army sources, but since then better facilities have been provided for imparting instruction. These facilities extend such instruction to include not only theoretical, but practical training and to include not only a few, but all officers of the Organized Militia.

These better facilities are supplied through the Inspector-Instructors detailed with the Organized Militia of the several States. In addition to the instruction imparted through the medium of the Inspector-Instructors, the Federal Government lends its assistance at the camps of practical instruction, both joint and State camps.

The discontinuance of the authority for attendance at garrison schools is in nowise a curtailment of opportunities for militia officers to perfect themselves in the more advanced courses since they still have the privilege of attending the service schools.

HIGH PRAISE FOR MOBILIZATION CAMPS.

MAJ. GEN. WILLIAM H. CARTER has been recently quoted, from headquarters at Texas City, Texas, as saying that:

"The division here and at Galveston comprises one-third of the infantry strength of the United States Army and with artillery, cavalry and signal corps, makes nearly 12,000 men. Bringing the division together has taught the officers and men the intimate needs of a big organization as to its equipment and has weeded out unnecessary paraphernalia and under-standard animals. When the commands comprising the various divisions go back to their various posts and are ordered to reassemble for any service whatever, the commanding general can issue a single order which will cover the entire equipment of every man.

"The second division is now in excellent shape. The soldiers are equal to any in the world. The whole division, with baggage, could be ready to go aboard trains or transports before the cars could be sidetracked or the transports ready to cast off.

"Probably the one most important accomplishment here for the American people has been the demonstration of sanitary standards. It has verified methods tested at San Antonio in 1911, when 14,000 men assembled as a maneuver division. We have now been here four months, and not one case of typhoid has developed. When we came we were told this site was a swamp.

"Maj. Gen. Carter said double the number of soldiers could have been trained at Texas City without an increase of officers."

ARMS AND THE MAN

1502 H STREET NORTHWEST, WASHINGTON, D. C.

EVERY THURSDAY

Editor

JAMES A. DRAIN

Associate Editors

FRANK J. KAHR **ASHMUN BROWN**

Communications.—The Editor will be pleased to receive communications on timely topics from any authentic source. The correspondent's name and address must in all cases be given as an evidence of good faith, but will not be published if specially requested. Address all communications to ARMS AND THE MAN. Manuscript must be fully prepaid, and will not be returned unless accompanied by sufficient postage.

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

That a 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.

AN EVIL AND AN ANTIDOTE.

There is food for thought in an excellent article by Capt. James J. Mayers, U. S. Inf., on "The Right to Condemn" in the July-August Journal of the Military Service Institution.

His is a general discussion of the causes of desertion in the services, and goes back to the psychology of the American youth for much of his material. "The present theories of school government," he finds, "are particularly perverse of good citizenship. It is passing strange that, while the need of training for every other human activity is being emphasized, the belief that a boy needs practice in being good is regarded as obsolete."

Further, he holds that modern boys "are not taught to obey law; they are taught to subvert law to their own ends or to evade it. * * * Such training is criminal. * * * A stiffening up in early training would reduce to a minimum the present large percentage of 'merely misguided' who find their way into penitentiaries."

Other observant men in like manner have deplored present tendencies in our educational system and have condemned the great license given to youth in this country.

Nevertheless, ARMS AND THE MAN is not yet ready to believe that any considerable number of our boys are being ruined in character by the almost fanatical desire on the part of present-day educators to let them do as they please. For all ills in the body politic, an antidote manages to be found, and just such an antidote is working in this country.

We refer to the Boy Scout movement. If our schools and colleges are lax in enforcing and teaching discipline, self-control, unselfishness, obedience and respect for proper authority, the Scout movement has superseded them in instilling these valuable precepts in the youthful mind. And there is no certainty that it is not doing the work better than the schools ever did.

The youth of a country where the Scout movement is as popular and as wide-spread as it is in the United States today, is in no imminent danger of serious degeneration.

DANGEROUS POLITICS.

Bold and dangerous politics is being played in Mexico. No man needs extraordinary perspicacity to realize that the anti-American demonstrations that recently have been witnessed in the City of Mexico, as well as the pro-Japanese demonstrations that have accompanied them, are not spontaneous outbursts. Some political force is behind them.

Naturally it is assumed that the Huerta Government is that force. Color is given to the assumption by the fact that the Mexican press

friendly to Huerta discusses the possibility of war with the United States, and pleads that all Mexicans stand together against the Northern enemy.

From the Mexican viewpoint it may be good politics to make a bogey man of Uncle Sam, with a view to checking rebellion and solidifying the nation, but from an international viewpoint it is too much like smoking a cigarette in a powder factory.

A disquieting feature of the situation is that the insulting and defiant attitude of Mexicans toward the United States follows so fast on the peace pronouncements of the present administration of this nation. It is evident that those now in control of the Mexican Government feel confident that they can go to any lengths in making Uncle Sam a scape-goat for their political purposes.

The thought is not a pleasant one to Americans. The situation calls for the exercise of statecraft on the part of this Government, even if Chautauqua lecture courses are made to suffer thereby. Or perhaps Chautauqua's gain is also the State Department's gain.

THE INTERNATIONAL RIFLE MATCHES.

In another column reference is made to the International Matches of this year and portions of a late bulletin sent out by the N. R. A. are published.

We are glad to note that the National Rifle Association has begun the activity suggested in our recent editorial as the only way of avoiding defeat in the International Union 300-meter Match. We observe the bulletin to refer to this as the premier event at Camp Perry. The premier international event at Camp Perry will be the Palma Match; next to that the Pan-American Union Team Match; after that the International Union Team Match.

There can be no question about this. The Palma is the most important because it is shot with military rifle and at the longest ranges; the Pan-American second, because it is shot exclusively with military rifles; the International third, because it is shot with rifles which are of no use from the military standpoint and which have been especially evolved for this particular kind of contest.

We are glad the National Rifle Association is taking an active interest in preparing to make a reasonable showing in the International Union events. The selection of Lieut. Col. Glendie B. Young for team captain of the International Union organization is an excellent one. If the association gives Colonel Young sufficient authority and backs him up he will get the maximum results from the material at hand.

The Swiss claim superior merit in rifle shooting from having won the International Union contests for fifteen out of sixteen times. They will have considerable difficulty to convince us and probably the rest of the world that they are entitled to this superiority even should they win the International Union Match this year, unless they put a team in the Palma Match and finish first in that contest.

The highest test of a rifleman's skill so far as the International program of this year is concerned is afforded by the Palma Match. When Switzerland has shot in and won that the time will have come to commence talking about International Championships for 1913.

UNIFORMS AS TARGETS.

White is a delightful color for uniforms in the tropics—in time of peace. When there is any shooting going on, however, it makes an elegant target. A sailor man who is beginning to run to embonpoint looms up on the firing line like the Woolworth Building, when thus attired.

Assistant Secretary Roosevelt, of the Navy, has ordered an investigation with a view to selecting a new uniform for sailors who are sent on landing expeditions. It may create some additional expense and bother, but the expenditure of each should be well worth while.

A firing line that looks like a wash-line can hardly be justified under any consideration of military efficiency. For fighting purposes the whites should go.

THE SHORT RANGE RIFLE LEAGUE.

THE Park Club still stands at the head of the list of clubs shooting the Short Range Rifle League series. Eight contests have been shot and there are two more to wind up the competition.

Adrian has made rapid gains through putting on scores of 2,400 or better. While it looks as if the Park Club will finish the season at the head of the list, still the spurt of Adrian might carry them through to the top.

Fremont leads in Class B through being just one-eighth of a point shy of 80 per cent. Milwaukee is a close second for the honors and should Fremont in the two remaining matches make better than an 80 per cent average, Milwaukee will probably lead Class B, through Fremont shooting itself into Class A.

Kiowa leads in Class C, also one-eighth of a point shy of 70 per cent, with Mitchell runner-up.

The Old Dominion Club, composed of simon-pure novices, seems to have the honors of that class all to itself:

OFFICIAL STANDING OF CLUBS.

(Up to and including Eighth Match.)

CLASS A, 90 PER CENT OR BETTER.

	Average.
Park Rifle Club.....	2,360
Adrian Rifle Club.....	2,346 ³ / ₄
Bangor Rifle Association.....	2,339 ⁷ / ₈
Engineers Rifle Club.....	2,339 ⁵ / ₈
District of Columbia Rifle Association.....	2,317 ³ / ₈
Dickinson Rifle Club.....	2,304
1st Wisconsin Old Guard Rifle Association.....	2,297 ¹ / ₈
Bucyrus Rifle Association.....	2,284 ¹ / ₈
Olympic Rifle & Revolver Club.....	2,278 ³ / ₈

CLASS B, 80 PER CENT OR BETTER.

Fremont Rifle Club.....	2,249 ⁷ / ₈
Milwaukee Rifle & Revolver Club.....	2,248 ⁵ / ₈
Providence Revolver Club.....	2,237 ⁷ / ₈
St. Louis-Colonial Revolver Club.....	2,233 ⁵ / ₈
Auburn Rifle Club.....	2,223 ³ / ₈
Priest River Rifle Club.....	2,219 ¹ / ₈
Los Angeles Rifle & Revolver Club.....	2,199 ⁵ / ₈
The Hague Gun Club.....	2,196 ¹ / ₈
Cypress Hills Rifle Association.....	2,194 ¹ / ₂
Eagle Globe & Anchor.....	2,178 ⁷ / ₈
Presque Isle Rifle Club.....	2,176 ¹ / ₂
Shell Mound Rifle & Revolver Club.....	2,162 ¹ / ₂
Massachusetts Rifle Association.....	2,132 ⁷ / ₈
Marion Rifle Club.....	2,115 ³ / ₈
St. John's Rifle Club.....	2,067 ³ / ₄
Philadelphia Rifle Association.....	2,034 ¹ / ₂
Diamond Spring Rifle Club.....	2,001 ⁷ / ₈

CLASS C, 70 PER CENT OR BETTER.

Kiowa Rifle & Revolver Club.....	1,999 ⁷ / ₈
Mitchell Rifle & Revolver Club.....	1,989 ⁷ / ₈
Watertown Rifle Club.....	1,901 ⁷ / ₈

CLASS D, NOVICE.

Old Dominion Rifle Club.....	1,717
------------------------------	-------

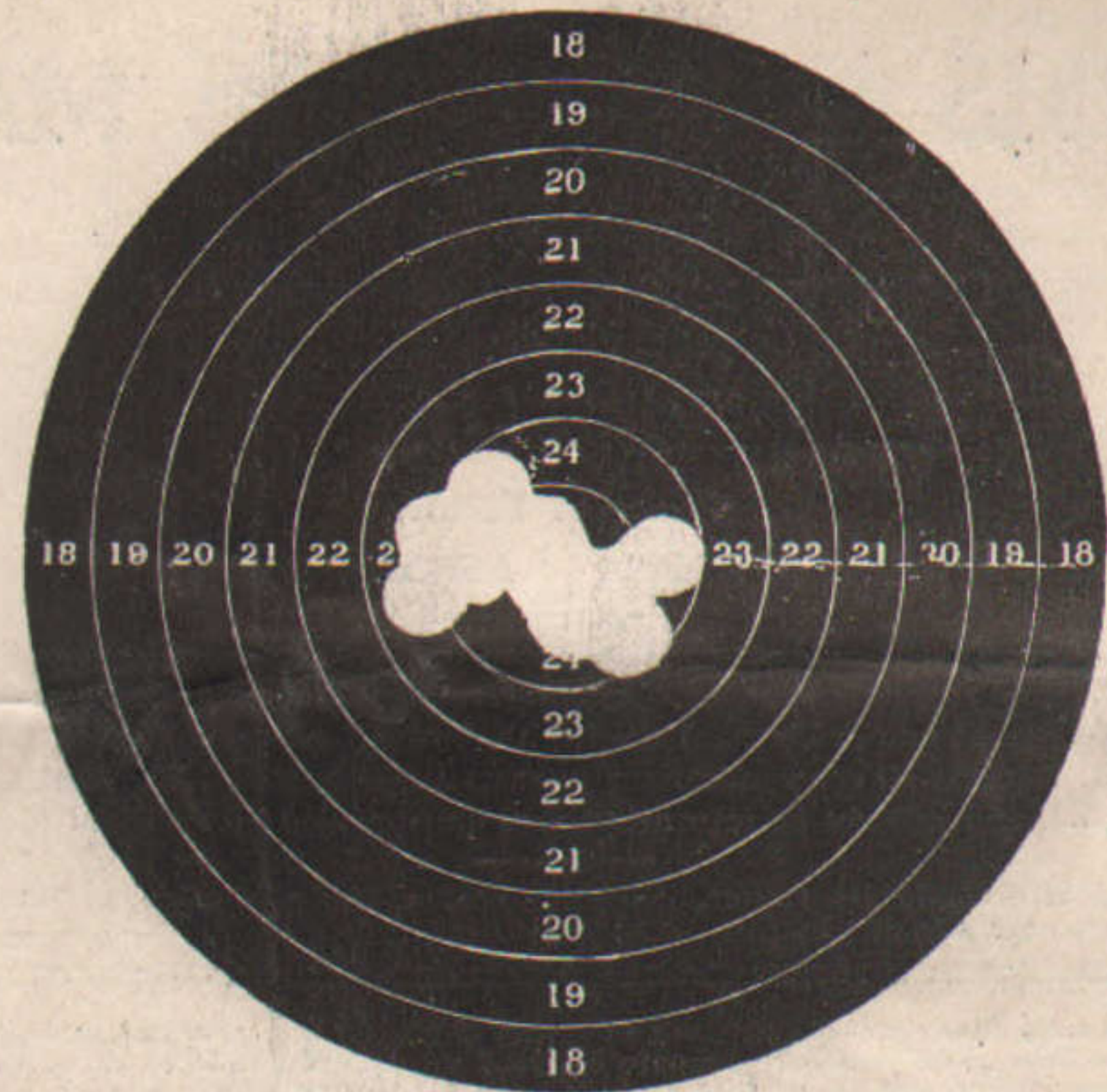
The individual standing up to and including the eighth match finds D. I. Gould still leading with practically a 484 average, though W. H. Matterson, of Adrian, has pulled up to within three and one-half points of the leader's average. It is quite certain that these two men will finish first and second. The third place, however, is in doubt, as any one of seven men closely bunched have a good chance, though it looks as if J. S. Bonner, of Adrian, will land it for he is shooting over 480 these days, and that will make it difficult to catch him.

The real excitement of the week, however, was the tumble of that good, consistent shot, J. W. Hessian, who slipped a bit and pulled up in eighth place, a drop of five positions.

OFFICIAL INDIVIDUAL STANDING.

(Up to and including Eighth Match.)

	Total	Average
1. D. I. Gould, Bangor.....	3,871	483 ⁷ / ₈
2. W. H. Matterson, Adrian.....	3,836	479 ¹ / ₂
3. Jarvis Williams, Bridgeport.....	3,782	472 ³ / ₄
4. A. E. Gaartz, Milwaukee.....	3,781	472 ⁵ / ₈
5. J. S. Bonner, Adrian.....	3,777	472 ¹ / ₈
6. W. C. Andrews, Cleveland.....	3,771	471 ³ / ₈
7. C. E. Groome, D. C.....	3,765	470 ⁵ / ₈



Score of 497 out of possible 500, by W. H. Matterson, Adrian (Mich.) Rifle Club, shooting Lyman wind gauge peep sight on Winchester musket and Winchester long rifle Lesmok cartridges.

8. J. W. Hessian, Bridgeport.....	3,762	470 ¹ / ₄
9. A. B. Gully, Bridgeport.....	3,761	470 ¹ / ₈
10. H. D. Meyer, Adrian.....	3,756	469 ¹ / ₂
11. Frank J. Kahrs, D. C.....	3,742	467 ³ / ₄
12. Ralph Alderman, D. C.....	3,739	467 ³ / ₈
13. J. E. Sexton, Hague-on-Lake George.....	3,735	466 ⁷ / ₈
14. H. Mansfield, Milwaukee.....	3,731	466 ³ / ₈
15. E. M. Sylvester, Bangor.....	3,730	466 ¹ / ₄
16. C. B. Chisholm, Cleveland.....	3,725	465 ⁵ / ₈
17. H. J. Dietrich, Bridgeport.....	3,724	465 ¹ / ₂
18. John Humphrey, Cleveland.....	3,720	465
19. A. E. Shiells, Milwaukee.....	3,718	464 ³ / ₄
20. Andrew Erdahl, Dickinson.....	3,706	463 ¹ / ₄
21. Dr. L. S. Chilcott, Bangor.....	3,703	462 ⁷ / ₈
22. Capt. G. H. Emerson, Fremont.....	3,695	461 ⁷ / ₈
23. L. R. Baird, Dickinson.....	3,690	461 ¹ / ₄
24. Jas. R. Steward, Priest River.....	3,687	460 ⁷ / ₈
25. H. E. Graffin, Bridgeport.....	3,686	460 ³ / ₄

Adrian has somehow or other hit upon the correct combination for this game. The last two totals for this club have been 2,425 and 2,419, with one of its members shooting 490 or better. Adrian led for the eighth match with 2,425, while the Park Club shot its same old consistent gait and pulled up in second place with 2,371. The Engineers nosed out the Bangor Club by one point for third position honors on 2,362. Nine teams shot into the 2,300 class for the eighth contest.

OFFICIAL RESULTS, EIGHTH MATCH.

	Total
Adrian Rifle Club.....	2,425
Park Club.....	2,371
Engineers' Rifle & Revolver Club.....	2,362
Bangor Rifle Association.....	2,361
Dickinson Rifle Club.....	2,346
Hague Gun Club.....	2,313
Olympic Rifle & Revolver Club.....	2,312
Eagle, Globe & Anchor Rifle Club.....	2,310
Bucyrus Rifle Association.....	2,302
1st Wisconsin Old Guard Rifle Association.....	2,293
District of Columbia Rifle Association.....	2,293
Providence Revolver Club.....	2,282
Shell Mound Pistol and Rifle Club.....	2,275
Milwaukee Rifle & Pistol Club.....	2,266
Auburn, N. Y. Rifle Club.....	2,265
Fremont Rifle Club.....	2,262
Presque Isle Rifle Club.....	2,245
St. Louis-Colonial Revolver Club.....	2,243
Priest River Rifle Club.....	2,238
Cypress Hills Rifle & Revolver Association.....	2,199
Los Angeles Rifle & Revolver Club.....	2,199
Marion Rifle Club.....	2,179
Massachusetts Rifle Association.....	2,084
St. John's Rifle Club.....	2,067
Philadelphia Rifle Association.....	2,034
Mitchell Rifle Club.....	2,020
Watertown Rifle Club.....	2,008
Diamond Spring Rifle Club.....	1,979
Kiowa Rifle Club.....	1,910
Old Dominion Rifle Club.....	1,900

The highest score made by any individual short range shooter is that credited to W. H. Matterson, of Adrian, Mich., for the eighth match,

497, just three points below the possible. D. I. Gould, with 491, gets second place, and J. S. Bonner, third with 487. There were just ten shooting 480 or better, which would seem to indicate that the contestants are getting the hang of the game.

OFFICIAL FIFTEEN HIGH INDIVIDUALS.
(Eighth Match.)

1. W. H. Matterson, Adrian.....	497
2. D. I. Gould, Bangor.....	491
3. J. S. Bonner, Adrian.....	487
4. H. D. Meyer, Adrian.....	486
5. J. E. Sexton, Hague.....	485
6. E. E. Tindall, Cleveland.....	484
7. H. E. Lundberg, Olympic.....	483
8. George Emery, Bangor.....	482
9. H. D. Nessel, Adrian.....	481
10. G. W. Farnham, D. C.....	480
11. H. Mansfield, Milwaukee.....	477
12. Frank J. Kahrs, D. C.....	477
13. C. B. Naramore, Bridgeport.....	477
14. M. J. Lyons, Bridgeport.....	477
15. Jas. R. Stewart, Priest River.....	475

Unofficially, Adrian leads all clubs for the ninth contest with the good score of 2,419. Nine clubs made 2,300 or better. Only one more match remains to be shot, when the final standing and the winners will be determined.

UNOFFICIAL RESULTS, NINTH MATCH.

1. Adrian, Mich.....	2,419
2. Bangor, Maine.....	2,407
3. Park Club.....	2,396
4. Hague.....	2,384
5. Engineers' Rifle & Revolver Club.....	2,369
6. District of Columbia.....	2,349
7. 1st Wisconsin Old Guard.....	2,343
8. Dickinson.....	2,341
9. Olympic.....	2,316
10. Providence.....	2,298
11. Fremont.....	2,250
12. Shell Mound.....	2,238
13. Priest River.....	2,233
14. Auburn, N. Y.....	2,232
15. Presque Isle.....	2,229
16. Cypress Hills.....	2,225
17. Marion Rifle Club.....	2,174
18. Philadelphia Rifle Association.....	2,165
19. Salt Lake Club.....	2,142
20. Massachusetts Rifle Association.....	2,137
21. Old Dominion.....	2,118
22. Mitchell, S. Dak.....	2,073
23. Diamond Spring.....	2,004
24. Kiowa.....	1,999
25. St. John's.....	1,715

LATE RETURNS.

Bucyrus Rifle Ass'n.....	2,330
Milwaukee R'fle Club.....	2,289
St. Louis-Colonials.....	2,220

MAY ATTEND SERVICE SCHOOLS.

SOME confusion has arisen over the recent announcement from the War Department that National Guard officers hereafter would not be permitted to attend garrison schools at Regular Army posts. This order does not affect the right of National Guard officers, when properly accredited, to attend the service schools, such as that maintained at Fort Leavenworth. It merely takes them out of local garrison schools.

The reason for the change is that the instructor-inspector system provides what the department considers a better means of furnishing instruction to National Guard officers, than attendance at garrison schools. The Regular Army instructor-inspector in each State arranges a course of instruction for officers, which they, under their State control, are free to take. Excellent results have followed in some instances, for example in New Jersey, where a model instruction course was devised by Maj. Evan M. Johnson when he was on duty there as inspector-instructor.

The need for opening the garrison schools to National Guard officers having passed, the new order has been issued.

The Military Look.

When Sir John French was in command of the cavalry at Canterbury he chanced one day to meet a rather slouching young recruit.

"Tell me, lad," said the new chief of the General Staff, "does this city belong to you?"

The military fledgling saluted and blushing replied:

"No, sir."

"Never mind," said French, genially. "Straighten yourself up, pull yourself together and look as though it did."—Chicago American.

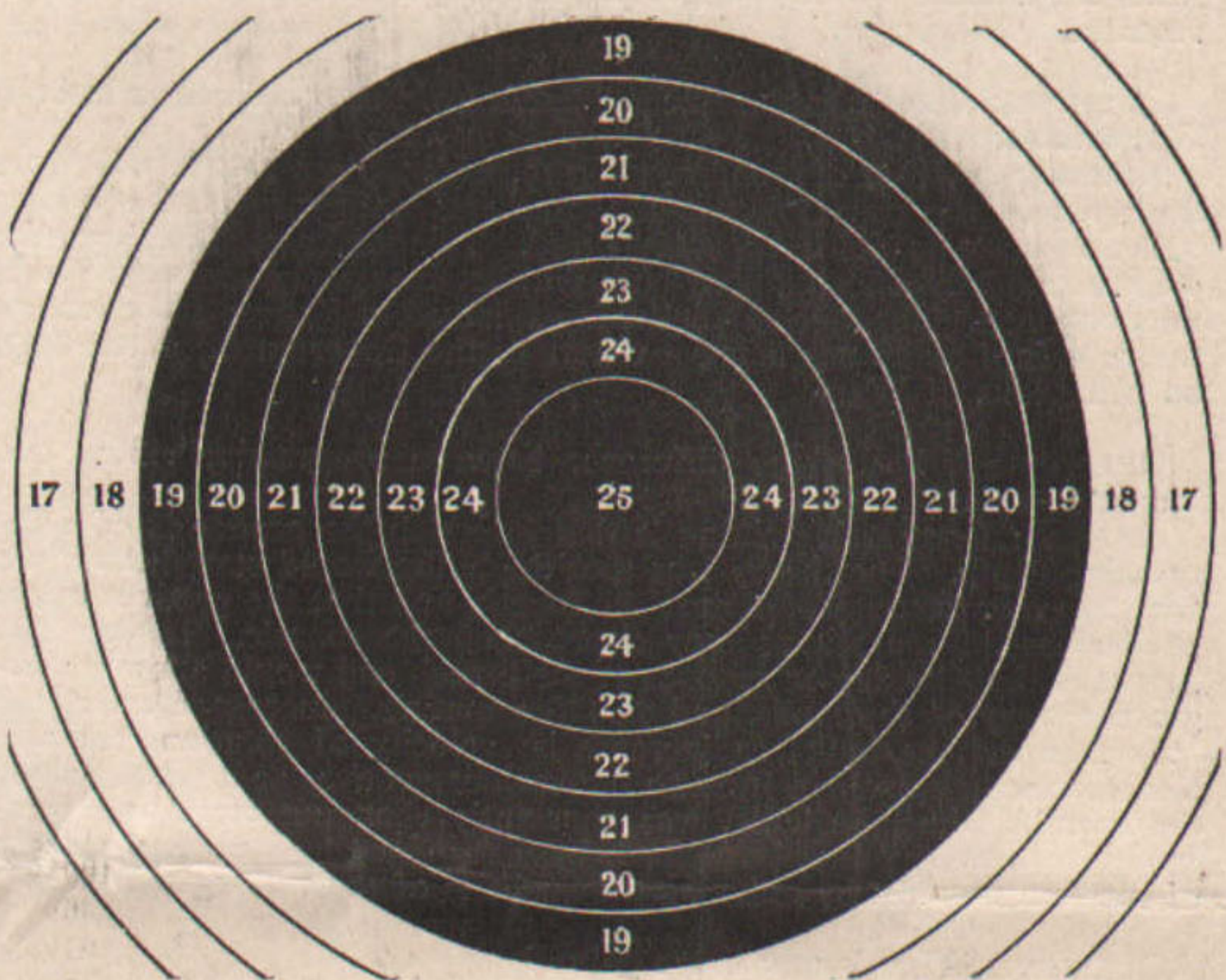
SUGGESTED TARGET FOR SHORT RANGE WORK

By C. R. DISBROW, SECRETARY, PARK CLUB.

IN adopting the reduced 200-yard German ring target in the Short Range League, I believe it was, in a measure, a mistake. While a more ring bull was desired, we did not comprehend it would mean a 3/8 ring for the possible.

When you stop to consider that only about 90 per cent of .22 caliber ammunition will group in an inch circle at fifty yards, you can then realize that a shooter does not get the value of his hold, and the element of luck plays a good part in the scores. Why ask the impossible of a shooter? Of course, we know that it is as fair for one as another; but will this condition create and hold the interest it should to make this league as successful as that of Great Britain?

Is it not discouraging, when a couple of shots have cut and the hold of the next was just as good—and maybe better—to draw a "23," one of these hard luck ones; one that if the paper was worth a d—mn would make?



If the ammunition companies will test their product with the best testing apparatus available under ideal conditions, and guarantee that 95 per cent will cut a circle of three-fourths to one inch in diameter, or whatever diameter agreed upon at fifty yards by the companies, presuming it to be three-fourths inch, let us construct a target with a bull three inches in diameter, with the smallest ring three-fourths inch in diameter and diverging from this the additional rings at a distance of three-sixteenths of an inch apart. This, I believe, would prove more feasible than the present target inasmuch as it eliminates the element of luck and will give the shooter the value of his hold with the capabilities of the ammunition; also, by maintaining the present German ring distance between circles, the shooter receives full value of his error in holding. It is then simply up to the shooter to guess his wind and light conditions.

Come on, you Short Range Leaguers—comments are in order!

Going Some!

Horace L. Moore was lieutenant-colonel of the noted Nineteenth Kansas Cavalry, says the *Kansas City Journal*. He could lead men for a longer period without rest, on a single ration of cheerful good humor, than any other officer. Though not given to jokes, he was the reputed author of as many astonishers as the great Lincoln.

Late one night he was heard in the darkness of the tent calling his orderly. The man, who slept on the floor, was finally awakened, when the colonel in a voice of mingled curiosity and solicitude, said: "Now, orderly, be honest and tell the truth; did you ever actually hear it thunder?"

In surprise, the soldier stammered: "Yes-yes, sir."

"What a — of a clap it must have been!" exclaimed Moore, seemingly lost in wonder and admiration at the bare thought.

Another time, on the march, he sent an orderly with a message to an officer at some distance. Before the man was out of hearing Moore shouted, "Hey orderly! Come back here!"

He came galloping back, sitting limply in the saddle.

Moore dropped his voice, and assuming a half-confidential manner, inquired: "Orderly, in the course of your life have you ever seen a snail?"

"Yes, sir," was the astonished reply.

"You met him, then," replied Moore, "for you'd never overtake one!"

QUESTIONS AND ANSWERS

Under this heading ARMS AND THE MAN will print weekly such questions of general interest as may be submitted by its readers, with the answers thereto.

QUESTION: What are the advantages of a flat trajectory?

ANSWER: Primarily, greater accuracy. The direction of the bullet is less oblique to the target with the flatter trajectory, thus minimizing the effect of slight errors in aiming or estimating distance. Harder hitting also is obtained, the velocity being higher and the distance to travel being shorter.

QUESTION: In what manner is the correct amount of twist given a rifle barrel ascertained?

ANSWER: The amount of twist differs according to the diameter, sectional density, and muzzle velocity of the projectile. No formula exists for determining the ratio of each to the other. By calculation from ascertained data one may estimate the amount of spiral, but actual experiment is the surer way. When the bullet is of small diameter and when the muzzle velocity is greater, a sharper twist or more turn is required.

QUESTION: What was the "picket" bullet, so often referred to in Civil War annals?

ANSWER: A picket of wood running through the center half way from the apex of the cone towards the base was a feature of the Snider bullet as made in the Civil War period. This seems to have been the original model. The required bulk without increasing the weight was thus obtained. The "picket" bullet is explained in Murray's Dictionary, the reference to its use being a report to the Government, dated 1868, on Munitions of War.

QUESTION: What is the difference between progressive rifling and increased twist?

ANSWER: Progressive rifling is that in which the groove is of a decreasing depth. The theory was that the bullet would start better in a barrel having deep grooves near the breech, and that the grooves might be decreased in depth as they approached the muzzle. It was also supposed that the deeper grooves at the breech end would allow a margin for wear of the lands, and also for fouling. Increased spiral not only required the bullet to increase its velocity of rotation, but also to accommodate itself in form to the various grooves as it passed along the barrel. Thus the bullet was constantly changing form as it progressed toward the muzzle. Whatever was gained by increased rapidly of rotation was lost by reducing the qualities of the moving bullet.

QUESTION: What is an asinine editor?

ANSWER: ?

An Army officer in his expense list on Government service, put down: "Porter, 10 cents."

The officer was requested to report to the war office where he was told:

"While executing public duty refreshments are not chargeable to the nation."

"The item does not represent refreshments," he replied, "but a fee to a carrier."

"You should have said 'portage,'" was then explained to him.

When the officer had occasion to take a hansom, remembering instructions, he wrote in his accounts:

"Cabbage, 50 cents."

Pure Luck.

'14—How did you get your stolen watch back so quickly?

'13—The poor idiot of a thief took it to a pawnshop, where they at once recognized it as mine.—*Pennsylvania Punch Bowl.*

POSSIBLE GROUPING OF SHOTS.

Editor ARMS AND THE MAN:

I notice in the July 3d issue of your magazine a few questions asked by "F. W. K." and your reply thereto. This gentleman asks what size groups can be obtained with selected service rifles at 300 yards from machine rest, by a marksman shooting prone with a muzzle rest and with mid-range ammunition in which the powder and bullets have not been weighed. Your paper answers him as follows:

"The best targets made at that range (300 meters) from a machine rest under the conditions named had a mean radius of 1.14 inches. That is the total of ten shots closely grouped within a diameter of a little less than three inches.

"2. Groups fired by a good shot from the prone position from a muzzle rest should print practically as well as those fired from the machine rest.

"3. It is impossible to give information on this point. No data is available."

Now it happens that experiments which I have made in the past two years can, perhaps, throw quite a little light on this subject. In offering the following, if I appear to have criticized the reply of the paper to the questions of "F. W. K.," I trust that no offense will be taken, as I simply mean it as a help in getting at the facts in the case.

Almost every group fired by a rifle will be found to contain one or more, usually two, off shots. That is, shots which strike the target some little distance from the center of impact. The mean radius of a

group is the average distance of all the shots from the center of impact, and not the actual radius of the group. The actual radius—that is, the circle which will completely enclose all the bullet holes, is almost always considerably larger than the mean radius. For example, let us take a group which contains one flyer four inches above the point of impact and one drop-shot three inches below, the radius of the other shots from the center being as follows: .121, .26, .74, .82, .17, .42, and .38 inches. This group will have a mean radius of 1.14 inches but the size of the circle which will enclose all the ten shots will be 7.30 inches, and not slightly under three inches. Thus it will be seen that the mean radius of a target gives no idea of the size of the group although it does give the best method of comparing the accuracy of ammunition and rifle with which we are familiar.

When we are seeking knowledge of what size groups a rifle will give, we should take the average of a number of groups, not a single selected group. From a long experience with the rifle and ammunition which "F. W. K." mentions, I should say that at 300 yards with the best ammunition from machine rest the groups will run from four to five inches in diameter.

I have never seen any man who could compete with a machine rest. A couple of years ago a competition was held at Camp Perry for places on an International team. Many of our very best shots were competing. Some of the shooting had to be done prone at 200 yards. Few, indeed, were the men who kept their 20 shots in the 8-inch bull's-eye. A certain error of aim is always present with metallic sights. It is much less with peep and globe sights than with military sights. A first-class marksman with a good service rifle and the best ammunition would perhaps be able to keep his shots from muzzle rest in an eight-inch circle at 300 yards, but he could hardly average better than this. Of course, he would get a number of groups much smaller than eight inches, also quite as many considerably larger.

With regard to "what size groups can be expected from very carefully reloaded mid-range ammunition put up without weighing each bullet and powder charge, prone position and muzzle rest at 300 yards," like the editor of this magazine, I have no data available for this range, but I have for 100 yards which may throw some light on the subject. Last winter, in the course of some experiments I fire 10 groups of 10 shots each from muzzle rest at 100 yards with a service rifle equipped with Winchester telescope sight. The ammunition was loaded by myself with care, except that the bullets were not selected, nor the bullets or powder weighed. The load consisted of Ideal Bullet No. 308334 cast by the Ideal Mfg. Co., and 25 grains of Lightning powder. The average mean radius was .855 inches and the average size of groups, measuring from center to center of shots farthest apart, was 2.75 inches. At 300 yards this ammunition would, therefore, give about double the size group that can be obtained with the best service ammunition.

TOWNSEND WHELEN.

EDITOR'S NOTE: It may be said that the 300-meter group referred to was without an off-shot, quite symmetrical and was cited for that reason.

At Camp Perry the shooting in question was done without artificial rest of any kind. Lieut. Whelen's opinion is always of value, but he has seen more groups made without the machine rest than with it. Unaccountables are not unknown when the machine takes the place of the man. In a very long run of continuous shots the machine rest would give better targets. But with a good fore-end rest an expert shot, or expert shots up to the limit of their physical capacity would produce targets practically as good as those printed by the machine.

Rapid Reconnaissance Sketching.

In view of the recommendation of the War College Division that parts of authorized publications, when published separately, can be placed on the list and furnished the Organized Militia, the publication "Rapid Reconnaissance Sketching" (Part III, "Military Topography," Sherrill), may also be furnished the Organized Militia and will be placed on the list contained in paragraph 2, Bulletin No. 3, War Department, March 4, 1912, when that bulletin is revised.

A Good Shooting Company.

Company I, 3rd Infantry, Capt. Chas. E. Koch, commanding, with a figure of merit of 78.18, has been awarded the McGurkin Shield for excellence in indoor rifle practice during the season of 1912-1913. As the members of this company won the shield the preceding year it will remain in their possession.

A subscriber says:

"Kindly accept my sincere thanks for the manner in which you handled my inquiries regarding the first international match and groups of the service rifle. The two accounts of the match were exceedingly interesting to me, I assure you, and they could hardly be otherwise to a majority of the readers, as you stated. I read and re-read them several times. Also the account of the groups concerned me deeply as I have done a little testing with reloaded mid-range ammunition with the service rifle. But your answer to the one question stating that the groups fired by a good shot prone position and muzzle rest should print practically the same as from machine rest surprised me just a little, as I would have expected them to be one inch greater diameter or more on the average for each hundred yards. I may be wrong in this.

"Again thanking you for your interest in the above matters, I am,

"Yours respectfully,

"F. W. K."

"The above is not necessarily intended for publication. ARMS AND THE MAN for me. Not so full of hot air as some other publications devoted to shooting.

"F. W. K."

Rifle, Revolver and Pistol.

Headquarters of the N. R. A.
Washington, D. C.
Secretary, Lieut. A. S. Jones.

Headquarters U. S. R. A.
Springfield, Mass.
Secretary, J. B. Crabtree, 525 Main St.

FORTHCOMING EVENTS.

July 21-26, inc.—Annual tournament of the New England Military Rifle Association. John M. Portal, Secretary, Woburn, Mass.
August 15-23, inc.—Matches of the National Rifle Association of America, Camp Perry, Ohio.
August 25-29, inc.—National Matches, Camp Perry, Ohio.
September 1-9.—International Rifle and Revolver Matches, Camp Perry, Ohio, including Palma Trophy Match.
September 12-20.—Matches of the New Jersey State Rifle Association.
September 19-20.—North American Match at Sea Girt, N. J.

Short Range Rifle League.

(Ninth Match.)

D. C.	M. R. A.
Groome ----- 479	Gerrish ----- 450
Atkinson ----- 473	Hosmer ----- 418
Alderman ----- 469	Marshall ----- 439
Knight ----- 465	Niedner ----- 404
Martin ----- 463	Nash ----- 426
Total ----- 2,349	Total ----- 2,137

SALT LAKE

Albertson ----- 456
Leichfield ----- 444
Bodmer ----- 425
Aird ----- 420
McCurdy ----- 397
Timbry ----- 373
Total ----- 2,142

BANGOR.

Gould ----- 493
McDonald ----- 484
Emery ----- 479
Sylvester ----- 476
Doane ----- 475
Total ----- 2,407

SHELL MOUND.

Armstrong ----- 462
Newell ----- 449
Povey ----- 448
Poulter ----- 440
Seely ----- 439
Total ----- 2,238

PRIEST RIVER.

Stewart ----- 478
Wright ----- 445
Gregory ----- 445
Runc ----- 438
Hydom ----- 427
Total ----- 2,233

CYPRESS HILLS.

Otto ----- 453
Vanderputten ----- 451
Corsa ----- 450
Hoffman ----- 445
Whalen ----- 426
Total ----- 2,225

PRESQUE ISLE.

Bacon ----- 458
Letterman ----- 446
Gifford ----- 443
Veit ----- 441
Mount ----- 441
Total ----- 2,229

DIAMOND SPRING.

Clarke ----- 426
Hern ----- 420
Tefft ----- 387
Arnold ----- 387
Hoyle ----- 384
Total ----- 2,004

ADRIAN.

Matterson ----- 493
Bonner ----- 486
Meyer ----- 487
Nessel ----- 477
Snedeker ----- 476
Total ----- 2,419

PHILA. RIFLE ASSN.

Livingstone ----- 451
Patrick ----- 433
Dill ----- 431
Dubbs ----- 426
Schnerring ----- 424
Total ----- 2,165

OLD DOMINION.

Jewett ----- 451
Livingstone ----- 429
Buckman, L. ----- 421
Buckman, G. ----- 409
Allston ----- 403
Total ----- 2,118

1ST WISCONSIN.

Gaartz ----- 494
Shiells ----- 479
Hoey ----- 475
Dewey ----- 454
Buenson ----- 441
Total ----- 2,343

KIOWA.

Lovejoy ----- 431
Kessler, Lt. ----- 428
Day ----- 412
Wallace ----- 366
Kessler, C. H. ----- 362
Total ----- 1,999

PROVIDENCE.

Spooner ----- 472
Brooks ----- 462
Biesel ----- 459

HAGUE.

Sexton ----- 493
Wilson ----- 484
Barnett, P. ----- 478

Chase, Jr. ----- 453	Barnett, Joe. ----- 465
Albro ----- 452	Burt, Chas. ----- 464
Total ----- 2,298	Total ----- 2,384

PARK CLUB.

Dietrich ----- 481
Lyons ----- 481
Hessian ----- 480
Gully ----- 480
Williams ----- 474
Total ----- 2,396

ST. JOHN'S.

Richard ----- 453
Rudolph ----- 433
Jacob ----- 370
Pond ----- 318
Laverly ----- 141
Total ----- 1,715

AUBURN.

Shapley ----- 466
Annin ----- 454
Cole ----- 445
Deming ----- 436
Stebbins ----- 431
Total ----- 2,232

E. G. & A.

Kahrs ----- 480
Van Moss ----- 472
Farnham ----- 456
Sands ----- 439
Shurtleff ----- 437
Total ----- 2,284

FREMONT.

Day ----- 410
Emerson ----- 455
Bartlett ----- 451
Bork, A. ----- 447
Bork, F. ----- 437
Total ----- 2,250

ENGINEERS'.

Tindall ----- 478
Andrews ----- 477
Chisholm ----- 474
Hale ----- 472
Humphrey ----- 468
Total ----- 2,369

MARION.

Seffner ----- 442	Smith ----- 428
Sammons ----- 438	
Messenger ----- 437	Total ----- 2,174
Pinyerd ----- 429	

PRIEST RIVER PRATTLINGS.

Maybe some of 'em can't "come back," but the Priest River Piutes have shown that they can. You see we feel so good about it we have to spout. Matter of fact much of the credit is due to the famous U.M.C. "Spechuls." They are sure the correct dope. We all reckon we'd uh been right near the top if we had had them to shoot all the matches with. Also another thing, think how the clubs who have been shooting in this outdoor stunt will have it on the other N. R. A. clubs in the indoor matches next winter in the matter of practice? Huh?

J. S.

IOWA INKLINGS.

Our shooting has all been done with the Springfield target rifle. This has necessitated our using the .22 shorts instead of the long rifle cartridges, and still we will hardly end up in last place. The experience of our high school club has led us to use Peters ammunition exclusively. We use over 75,000 rounds of it annually and so feel qualified to speak of its excellence.

Our team this summer has been composed of high school boys, but only two of the regular team have been competitors in the present series of matches. The other boys are not in town or would have participated, as all are super-enthusiastic regarding rifle shooting. Our range is satisfactory—level ground, close-cut sod, and the C. R. I. & P. railroad embankment as a back-stop for wild shots. We shoot in the afternoon and have the sun to our backs. Our crack shot is Donald Price, age 16. He has just one and one-half arms, but for several matches has averaged about 460 with the usual Springfield. Not bad, is it?

NEWPORT NIPS.

Got the ninth match of the short range out of our system and we "shure" did hope to land that 2,300 bunch, but no such luck. Missed

again, by gosh. One more chance to get the mark, and if we don't land it next week, it will be because we couldn't, that's all. We made a mistake in laying out our range for this match as we get too many changing lights as we are now located and it is almost impossible to tell from one string to another how to hold. Have doped it out that our best scores are put up between five and six in the afternoon, as at that time we get our best light. Next week all of us will be wanting to shoot at that time, hoping they can get a few points extra. How are they going to do it with only two guns sighted in for the match? Weather conditions for match were poor, light changing suddenly and bad wind blowing. Here's for 2,300 in Match 10—do we get it? No—Yes.

F. J. B.

SHELL MOUND SHELLINGS.

AL BLANCO:

We closed our ninth match with the total of 2,238 for our five high men. We have been making a better score each match, falling below only twice in nine matches and going above in seven. This is remarkable work when one will take into consideration the many difficulties to contend with.

The seventh annual Westy Hogan tournament will take place as usual this year at Atlantic City, September 16 to 20, inclusive. This annual event is a shoot for amateurs and is well attended. Bernard Elsesser, of York, Pa., is the secretary.

A catalogue and price list of riflemen's supplies has just been issued by C. J. O'Hare, of 33 Bruce street, Newark, N. J., which is well illustrated and appears to contain everything necessary to complete a rifleman's outfit. This well-known rifleman will as usual make his headquarters at Camp Perry, where, he says, he will have a line of imported and domestic supplies which will be second to none. He can be found on Commercial Row during the big shoot.

The following letter was recently received from the Secretary of the Society of Miniature Rifle Clubs, of England, in reference to the small bore match:

"TO THE SECRETARY,
"National Rifle Association of America,
"Washington, D. C., U. S. A.

"DEAR SIR: I have much pleasure in acknowledging receipt of the international targets this day. We have thoroughly checked these and according to our scoring, we make them eight points less than you. This leaves

Hints on Revolver Shooting

With 20 Illustrations specially prepared for the book

Crown 8vo, cloth (By mail, \$1.15)

Suggestions to Military Riflemen

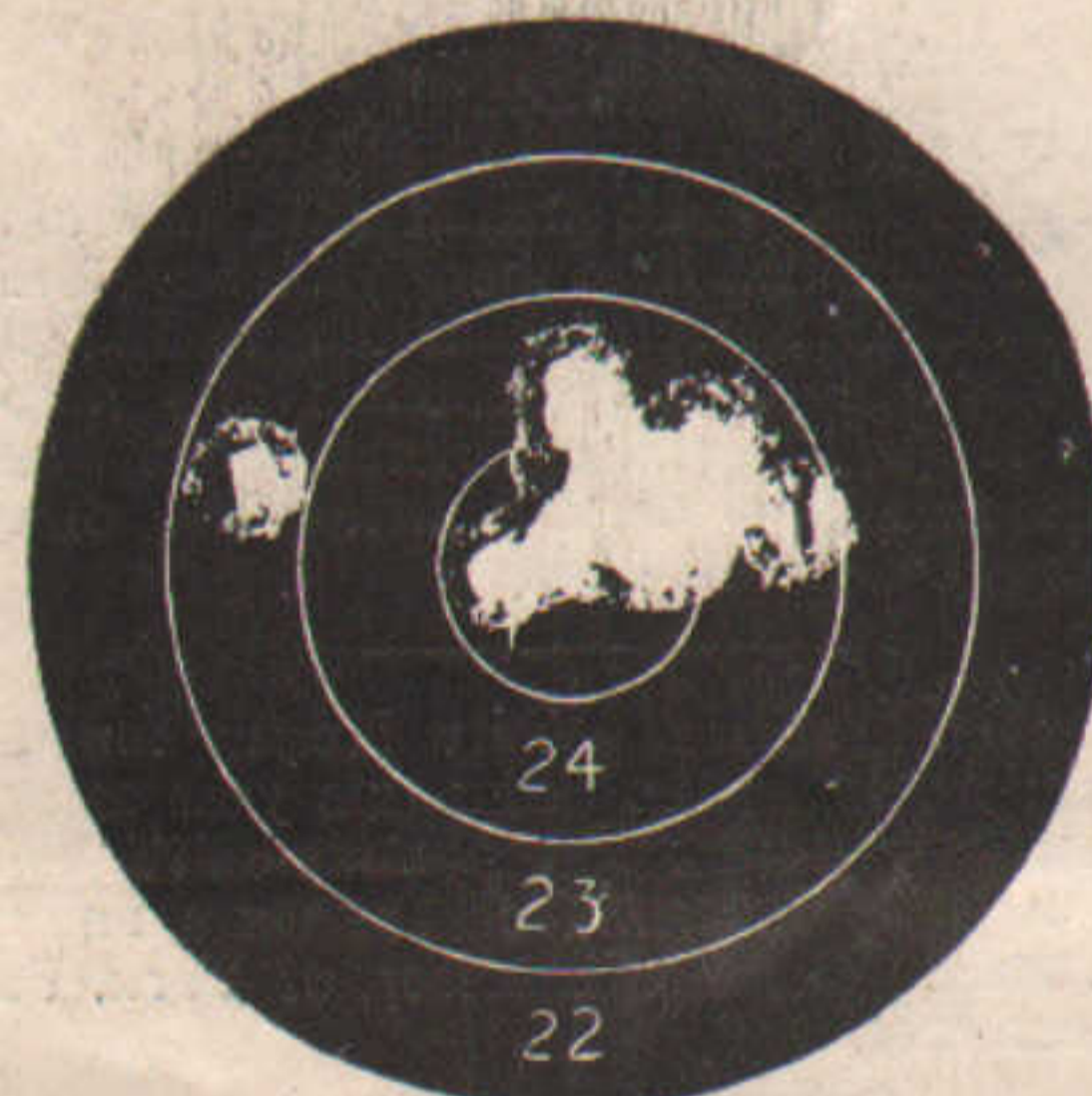
(Revised Edition, 2d Edition)
By Lieut. TOWNSEND WHELEN,
29th U. S. Infantry

PRICE, \$1.10

the American team 33 points ahead of the British team. Under these circumstances, I presume you will not require us to send out the British targets. Of course, we have not yet received the targets of the other countries, but as soon as we do, I will let you know the result.

"I congratulate you on the excellent shooting of the American team.

"Yours faithfully,
(Signed) "S. H. WINTER,
"Colonel,
"Secretary."



EXCELLENT SHOOTING

The three targets shown above were shot by Miss A. E. McCarthy of Mittineague, Mass., a member of the Stevens Ladies' Rifle Club, shooting at 25 yards with her Stevens Ideal Ladies' Model Rifle No. 56.

The organization and signal success of the Overland Rifle Association, of Toledo, Ohio, has led to the formation of a second N. R. A. Club, the Toledo Cavalry Rifle Club. All the members of the new club are members of Troop D, 1st Squadron Ohio Cavalry, and the organization is the direct result of the efforts of Lieut. Harry J. Vortriede of the Troop, who also is a charter member of the O. R. A. Club and was the latter's first president. The officers of the Toledo Cavalry Club are: G. E. Dixon, president; G. D. Sheets, vice-president; E. L. Walbridge, treasurer; N. W. Larke, secretary; H. J. Vortriede, executive officer.

There are so far twenty-six members.

It is interesting in this connection to note that the organization of a third N. R. A. club in Toledo is a matter of only a short time. The third organization will be strictly

civilian. While the Overland Club consists of employees of the big Willys-Overland Company's automobile factory, and the Toledo Cavalry Club comprises mounted militiamen, the third organization will include men who are neither Overland employees nor members of State troops.

The following is very interesting as showing what may be expected from .22 barrels of present-day manufacture:

Copy of letter received from Remington Arms-Union Metallic Cartridge Co., Bridgeport, Conn., U. S. A., May 1, 1913:

"THE BIRMINGHAM SMALL ARMS CO. LTD.,
"Birmingham.

"DEAR SIRS: With regard to the .22 caliber rifle you supplied to the Ballistic Depot here for the purpose of testing the .22 long rifle Lesmok manufactured for the English market, we have kept careful observation on the barrel and chamber with the object of determining when erosion and wear could first be detected.

"This rifle is fired from 1,000 to 1,500 times per day in our usual daily tests, our records showing that upwards of 7000 rounds have been fired from it to date and up to the present no signs of wear are apparent and it still continued to group regularly into two inches at 100 yards, this being the standard of accuracy we have laid down for this cartridge.

"Yours truly,
"REMINGTON ARMS-U. M. C. Co.,
(Signed) "W. M. THOMAS,
"Ballistic Engineer."

Dickinson vs. Los Angeles.

On June 9 E. C. Crossman, of the Los Angeles Rifle and Revolver Club, informed us that they had a bunch of rifle sharks out there who were packing around chips of various sizes on their shoulders waiting for some club to knock them off.

We have only a few members here that we can depend on to get out to shoot, but we never took a dare, so challenged them to a match at surprise fire and skirmish—five high men—shoot as many as desired, on July 4.

We managed to get five men out on that day to shoot. Our president, George W. Kilmer, one of the worst rifle fiends in the State and over forty years old, who never misses a day on the range—ran the target, and our Episcopal minister (a Spanish-American war veteran) sat on the firing line to see that all the firing conditions were complied with.

The team consisted of Baird, Engbrecht, Lee, Barker and Erdahl.

Baird, a four times Camp Perry man, led us with a ninety-one skirmish.

Of course, we did not know anything about the results until all the scores were shot.

Engbrecht, a three times Camp Perry man, came second with eighty-eight. Lee, a Camp Perry man, next with eighty-nine. Erdahl, a comer, with eighty-one. Barker, a Camp Perry man, with seventy-three.

Next the surprise fire in which the following scores were made: Baird, 43; Erdahl, 42; Engbrecht, 41; Barker, 40; Lee, 38.

	Sk.	Sup.	Tl.
Baird	91	43	134
Engbrecht	88	41	129
Lee	89	38	127
Erdahl	81	42	123
Barker	73	40	113
			626

We hated to beat you, Mr. Crossman, but will give you a chance to get back at us later at the 600 and 1,000 yard ranges.

C. N. B.

St. Louis-Central Sharpshooters' Association.

Weather conditions were perfect for good shooting but with the single exception of D. Schneidwind, the shooters made a very poor showing. Schneidwind came over from Belleville and gave another exhibition of expert shooting that made the boys confident that at least one man could be depended upon to make a good score at the coming tournament of the Central Schuetzen Bundes.

The programs for the coming tournament are out and the following totals of cash prizes

Marlin

12 gauge Hammerless Repeating Shotgun

THE handsomest and best designed pump gun in the world!

Hammerless—Solid Steel Breech (inside as well as out). **Solid Top**—a thick steel wall of protection between your head and the cartridge; keeps out rain, snow, dirt, leaves, twigs and sand. **Side Ejection** (away from your face and eyes.) **Matted Barrel**—A great convenience in quick sighting. **Press-Button Cartridge Release**—to remove loaded cartridges quickly from magazine without working through action.

Grade "A"
\$22.60



Double Extractors—they pull any shell. **Take-Down Feature**—for convenient carrying and cleaning. **Trigger and Hammer Safety**—a double guard against accidental firing. The **Solid Steel Breech** (not a shell of wood) shows the superior design. The receiver is absolutely solid steel at the rear as well as on top.

The Marlin is the safest breech-loading shotgun ever built.

Ask your dealer—or send us three stamps postage for new big catalog of all Marlin repeating rifles and shotguns.

The Marlin Firearms Co.
41 Willow Street
New Haven, Conn.

on each prize target are listed:

*Honor Target (guaranteed)	\$355
King Target, \$25 gold medal and	327
Stick Target	281
Jubilee Target, \$75 medal and	550
People's Target	460
Man Target	460
St. Louis Target	305
Point Target, gold medals and	186

*Every club—of which there are 25—will donate from \$25 up to go on the Honor Target.

Shooting Sunday afternoon was done on the German ring target in ten-shot scores, off-hand, possible 250 per score. Here they are:

D. Schneidwind	222	226	212	215	217	1,092
Tobe Watkins	203	195	215	223	219	1,055
Wm. Bauer	197	202	205	214	209	1,027
Geo. Cole	211	203	214	202	191	1,021
E. D. Ekstedt	186	191	192	206	220	995
I. A. Sertl	206	208	191	192	197	994
W. A. Alexander	182	190	198	205	193	968
I. Weldon	176	165	179	170	197	887
Ed. Von Eitzen	190	200				
G. Kull	211					

TOBE.

Peters

CARTRIDGES

WIN

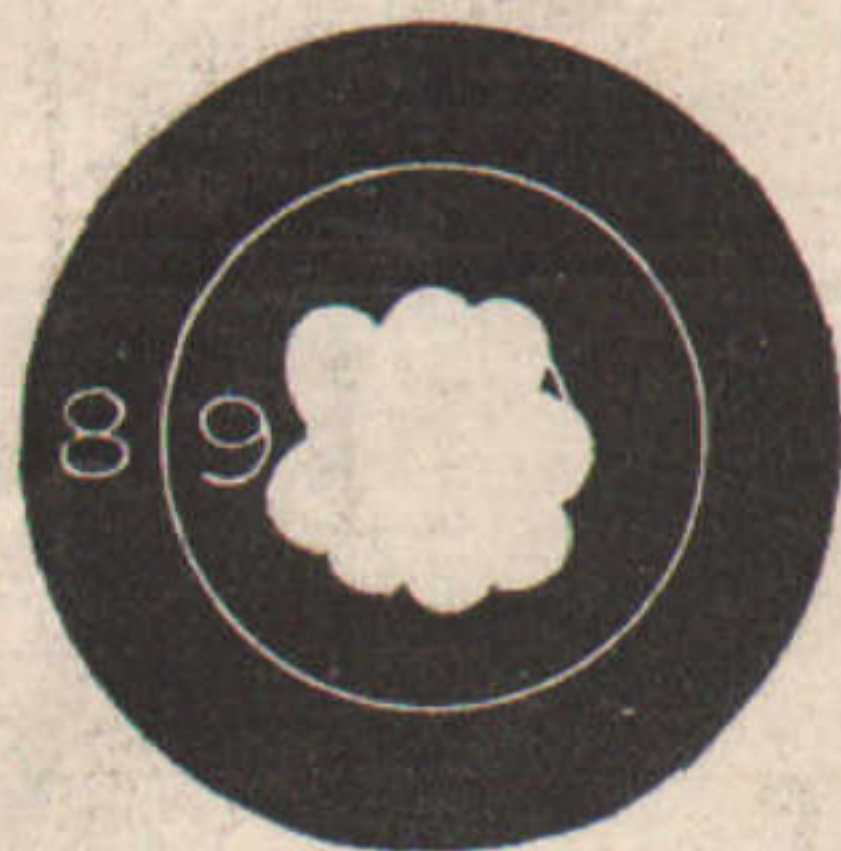
INTERNATIONAL HONORS

The 1913 International Small Bore Match between teams of 50 men each, representing the United States, Great Britain and Canada, resulted in a victory for the United States Team; score, 24,551 out of a possible 25,000, leading the second team by 41 points.

5 out of the first 10 men on the U. S. Team used **Peters** .22 Semi-Smokeless Ammunition

Messrs. Jos. Lorenz and F. A. Anderson, of Butte, Montana, each scored

500 out of a possible 500 with **(P)** brand and were the Only Perfect Scores Made in the Match



JOS. LORENZ, 500
Butte

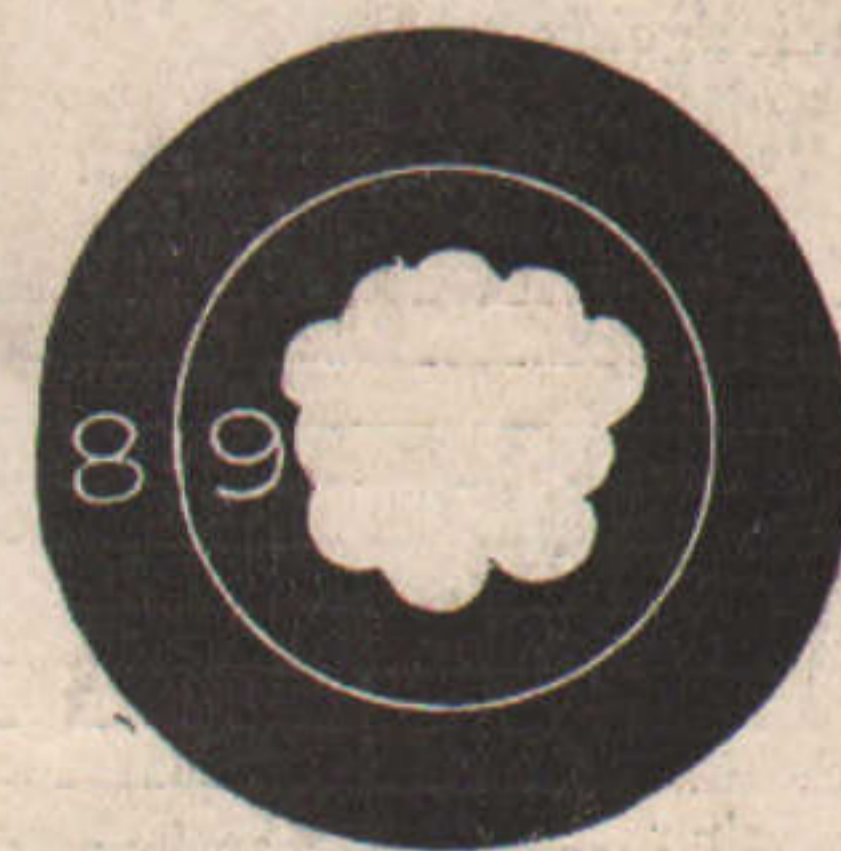
W. C. ANDREWS, 498
Cleveland

J. C. SEMON, 497
Cleveland

G. W. EASON, 496
Cleveland

The average of these 5 scores is 498, and the average of the entire team 491.1

The scores made with PETERS Semi-Smokeless Ammunition in this match are simply a continuation of the victories of P users in the Indoor .22 Cal. U. S. Championship, the N. R. A. Inter-Scholastic events, the U. S. R. A. Outdoor and Indoor Championships, etc., etc.



F. A. ANDERSON, 500
Butte

USE Peters SEMI-SMOKELESS CARTRIDGES

They Shoot Straighter, Stronger and Surer Than Any Others

THE PETERS CARTRIDGE COMPANY, Cincinnati, Ohio [NEW YORK: 60-62 Warren St., T. H. Keller, Mgr. SAN FRANCISCO: 583-585 Howard St., J. S. French, Mgr. NEW ORLEANS: 321 Magazine St., Lee Omohundro, Mgr.

Los Angeles Rifle and Revolver Club.

We may not be the best little shooting club in the world but we're certainly the poorest little choosers. We picked on to a Badger club one time and got trimmed in the very middle of a good shooting streak. Now we go picking on the Dickinson crowd July 4th and didn't get away with any fewer black eyes than we did in the other trouble.

We scored 594, Dickinson Rifle Club, 626. Course 10 shots surprise fire, and one skirmish run per man, high five to constitute the team. Our high man beat the Dickinson high man by two points so it was evidently the pig-tails that lost the match for us.

Things were some warm on our range, and the mirage ran like spring water, but there was little wind, and no license for anything below 80 skirmish for a man who knew his elevations. There were but two 80's—ergo.

We also shot for the A. C. White trophy, for surprise fire, conditions 15 shots, military rifle and conditions as laid down for Perry even to the split-second watch. The surprise lay in the way one Hall, a new man at this game, came to the front with 72 out of the 75, but one point behind the winner, while the rest of them were dabbling around in the sixties.

There was also some blue rock shooting, the seven attendants making more fuss and ruining more blue rocks than any twenty men in their right minds. When a fellow gets the small bore bug and goes to lugging both the 12 and 20 bore out to a gun club, you can put him down as hopeless. He'll rob a church box to get money to buy shells. Hedderly, Groat, Fitzgerald, Rollinson and Packard all fuss about with 20 and 28 bore guns when they really want to get some fun out of the blue rock game, sicking the popguns on to overhead blue rocks and usually hanging it on the slower moving 12's at this stage. As usual, Ned Hedderly with his 32-inch Parker 20 bore, A No. 1 grade, costing \$397.77½ re-

tail, wall paper engraving all, was the star, breaking them startlingly well for a man armed with but a 20-gauge gun.

The regimental tryouts approach and except for the Camp Perry course, many of our crowd are like the old mammy's race horse what didn't have his mind on no race. Both shotgun and short hold league fail to entice.

LOS ANGELES RIFLE AND REVOLVER CLUB VS. DICKINSON RIFLE CLUB, JULY 4TH.

	200	S. F.	Sk.	Tl.
E. C. Crossman.....	49	89		138
G. T. Kellogg.....	41	84		125
C. B. Hubbs.....	39	73		112
E. L. Stevenson.....	41	69		110
W. R. Jackson.....	38	71		109
				594
Alternates:				
Dr. Felsenthal.....	42	64		106
Hall.....	47	49		96
A. F. Goldsborough.....	46	48		94
Woodward.....	25	55		80

A. C. WHITE TROPHY MATCH.

15 shots surprise fire, possible 75 points.

E. C. Crossman.....	73
Hall.....	72
Dr. Felsenthal.....	64
W. R. Jackson.....	61
E. L. Stevenson.....	61
C. B. Hubbs.....	59
A. F. Goldsborough.....	46 unfinished
C. T. Kellogg.....	41 unfinished
Woodward.....	25 unfinished

OTHER SCORES.

	500	200
Hall.....	43	
E. Burns.....	42	
Duschkin.....	41	

Mrs. Crossman.....	39	40
Mrs. Kellogg.....	37	40

SHOTGUN.

Scores shot at overheads and 16-yard rise by Rollinson, Hedderly, Mr. and Mrs. Groat, Fitzgerald, Packard, and Harry Miles.

We've just received the scores of the Dickinson layout and lest their secretary forget, we're sending them in to show how we got licked.

It was a case of too much class spread over too much surface. We had one high man and one fair to middlin' but the rest of the bunch were just about good enough for a second team, while the Dickinson bunch held up a good average. Dr. Barker let his combination leg-remover and appendix-carver slip and sawed off his own score a bit, but aside from this the blizzard club ran very even. They write asking for more trouble on the return of their team from the State encampment and we'll probably accommodate them unless too many of our bunch are away at our own State tryouts at Sacramento. The regimental having not yet taken place no one knoweth who goeth North for the final eliminations. Probably the fellows that don't make the regimental will be too blamed disgusted to want to shoot, anyhow.

SCORES OF THE DICKINSON RIFLE CLUB.

	Sk.	S. F.	Tl.
L. R. Baird.....	91	43	134
J. J. Engbrecht.....	88	41	129
Rufus Lee.....	89	38	127
Andrew Erdahl.....	81	42	123
Dr. C. N. Barker.....	73	40	113
			626
Los Angeles.....			594
Los Angeles high man.....			138
Low man.....			110

Fort Pitt Rifle Club, Pittsburg, Pa.

Saturday afternoon, July 12, found the guard in camp, so we had the range all to ourselves. After a heavy rain early in the afternoon the weather cleared but left a rather heavy, tricky wind.

We had scheduled our annual skirmish match, and the Olson Trophy match on the 600-yard range.

As we only have the use of the skirmish target when the guard is absent and the boys only get in one run a year, we do not look for much in the scoring line. One of the boys, for instance, whose score was in the 40's had nine shots about 7 inches over the back of the figure that could be covered with the hand. This match resulted in a triple tie with the fair score of 73, Snyder's score ranking.

Dad Hazlett's whiskers again proved a valuable wind meter, enabling him to make the proper shifts and land a leg on the Olson trophy with the good score of 48. Dr. Atkinson, after working the buck out of his system during his match score, crawled up on the firing point and rung up 11 straight white ones; nice going for 600.

SKIRMISH MATCH.

G. A. Snyder.....	73
P. Paulson.....	73
M. C. Hazlett.....	73
C. C. Borchers.....	64
Granville Teter.....	63
Dr. R. V. Swanton.....	61
T. C. Beal.....	54
J. M. Glashan.....	49
Dr. E. A. Waugaman.....	44
F. B. Fisher.....	42
R. O. Hodges.....	37
G. S. Bassett.....	36
Dr. D. A. Atkinson.....	36
R. S. Everett.....	28

OLSON TROPHY MATCH.

M. C. Hazlett.....	48
Granville Teter.....	46
C. C. Borchers.....	46
Dr. E. A. Waugaman.....	45
Dr. R. V. Swanton.....	45
F. B. Fisher.....	45
T. C. Beal.....	44
P. Paulson.....	43
Dr. D. A. Atkinson.....	43
J. M. Glashan.....	42
G. A. Snyder.....	41
R. O. Hodges.....	41
G. S. Bassett.....	40
R. S. Everett.....	39

Practice is the Secret of Expert Marksmanship

TRAIN WITH THE HOLLIFIELD DOTTER

Every feature of shooting, except recoil, is simulated, and the pleasure in the game affords the needed incentive to keep on practicing. *One does not have to leave the room to practice.*

HOLLIFIELD TARGET PRACTICE ROD CO.

85 Hanford Street

Middletown, N. Y.



The cut shows the needle rod (dotter) as it records on the tally target at instant of discharge.

Description, price list, etc., on request.

THE CALL OF THE CLAY.

Trap Shooting at Youghiogheny Country Club, McKeesport, Pa.

The afternoon of the Fourth proved an ideal one for trap shooting, and both traps were in fine condition. J. F. Calhoun was again high gun, but he had an equal partner in J. W. Napier, who tied him, breaking 47 birds out of a possible 50. Napier is new at the trap-shooting game but has already shown that he is a crack shot. Calhoun also won in the doubles, getting 39 out of a possible 50, and was followed closely by Dr. Heisey with 36. Napier tying Calhoun, qualifies with him in Class "A" for the shoot-off at the end of the season. H. N. Pendleton qualifies in Class "B," and Chas. Napier and B. E. Parke in Class "C."

Du Pont Gun Club, Wilmington, Del.

The shooting at the DuPont Gun Club traps on July 6 was frequently interrupted by rain. Nevertheless, about 50 shooters managed to shoot between showers. The club had as visitors George W. Maxwell, the one-arm wonder from Hastings, Nebraska, and one of the greatest shots in the country. He distinguished himself by breaking 100 straight (all he shot at).

This was Mr. Maxwell's first visit East and next week he will be here to shoot in the Eastern Handicap.

H. L. Worthington, of Rising Sun, Md., well known to all shooters in the East, was only one target behind Maxwell, his score being 99 out of 100.

Of the home shooters, J. H. Minnick made 97 out of 100. He is now shooting in excellent form and within two weeks has made scores of 99, 98 and 97.

The first contest for the new Eugene DuPont Challenge cups took place, and brought out a large entry list. A. H. Lobb and J. H. Minnick both tied in Class A with 25 straight. R. P. Willis with 25 straight won the Class B cup. Class C found W. A. Casey and J. B. Green tied on 19. W. H. Neeley won Class D with 17, and E. E. Handv won Class E with 19.

Harry T. Reed won the Stevens Trophy with a score of 22 and 5 added, defeating J. H. Minnick and T. W. Mathewson, who scored 23 and 20.

Analostan Gun Club, Washington, D. C.

The Analostan Gun Club held a very successful shoot on the afternoon of July 4th. The afternoon was pleasant—a breeze cooled the air, and it interfered with the scores to some extent the comfort it brought counterbalance the discomfort hat accompanies low scores. Visitors were here from adjoining towns and the White Flyer Club was well represented. It was a merchandise affair for splendid prizes and every participant received one. The shooters were divided into three classes and the prizes were duplicated in each class. By doing this the poor shot received just as good trophies as the first class man. Following are the scores:

	Sat	Bk.		Sat	Bk.
Taylor.....	100	93	Fawcett.....	100	68
Hunter.....	100	92	Ford, E. F.....	100	66
Ford, E. W.....	100	92	Wenner.....	100	67
Stubener.....	100	90	McQuillan, Dr.	100	64
Peck, Jr.....	100	86	Thalaker.....	100	63
Cole.....	100	86	Stearn.....	100	63
Bray.....	100	85	Bradford, Dr.	100	62
Hogan.....	100	84	Green.....	100	61
Purdum.....	100	83	Kengla.....	100	53
Ott.....	100	83	Smith, W. L.	100	47
Wilson.....	100	81	Wise.....	65	45
Graves.....	100	79	Orrison.....	50	46
Stine.....	100	78	Brown.....	50	39

Fisher.....	100	74	Lohr.....	50	39
Wynkoop.....	100	73	Smith, Jas.....	50	38
Gray.....	100	72	Everett.....	25	21
Duvall.....	100	72	Dumain.....	25	16
Shaeffer.....	100	71	Wheeler.....	15	9
Emmons.....	100	69			

NEWS OF THE TRADE.

High professional average at Springfield, Ohio, July 4, was won by Mr. C. A. Young, the professional champion of the United States, who scored 96 out of 100 with Peters shells.

The International Amateur Championship contested for at the Pre-Olympic Tournament in Chicago, July 3, 4, and 5, was won by Mr. Barton Lewis, with a score of 98 out of 100. Mr. Lewis also won high average for the



It will Prevent Shock from Gun Fire or Loud Noise. Excludes Wind, Dust or Water, and Prevents Disease and Deafness from the Above Causes

\$1.00 Pair with Neat Aluminum Pocket Case, Postpaid

J. A. R. ELLIOTT

P. O. Box 201

New York, U. S. A.

The 1913 Navy and Marine Corps Rifle Teams

Will Be Fitted With



EDMONDS
Shooting
Glasses

The 1913 Model of the Edmonds Shooting Glass is the result of years of experiment and years of co-operation with the ARMY, NAVY, and MARINE Corps Rifle Teams—and that result is Shooting Glass efficiency in the highest form:

The men who make these teams know that with the Edmonds Shooting Glass they won't "blow up." They know they will make consistent scores.

You would not use an inferior grade of ammunition in a big shoot—the odds would all be against you. Then don't fool with a poor glass that is a positive menace to a good score.

Shoot with the Glass of Efficiency: The 1913 Model of the Edmonds Shooting Glass.

Address Shooting Glass Department.

F. H. EDMONDS

Washington, D. C.

An Officer Has Much to Learn and Life is Short

Study at Home, in the Armory, and Field Service Instruction All Help, but nothing can teach you More than

Tactical Principles and Problems

By CAPT. M. E. HANNA,
General Staff, U. S. A.

Can be drawn on requisition, or purchased for \$2.50 per volume of

ARMS AND THE MAN

AGAIN! WE CALL YOUR ATTENTION TO HONORS WON BY THOSE WHO USED "WESTERN" STEEL LOCKED SHELLS

Championship of New Jersey - - 50 Straight
Wildwood Championship - - - 199 x 200

By E. B. SPRINGER

3rd in National Am. Championship - 192 x 200

By H. H. HICKS

2nd in Pre-Olympic Handicap - 92 x 100, 20 Yds.

2nd High Gun On Pre-Olympic Winning Team - 94 x 100

By C. KENNICOTT

3rd in Pre-Olympic Double Championship - - 37 x 50

By LOUIS KUMPFER

2nd General Average, Sedalia, Mo. - - 192 x 200

By HOMER CLARK 102 STRAIGHT

2nd Amateur Average, Crookston, Minn. - 318 x 360

2nd Amateur Average, Ada, Minn. - - 185 x 200

By J. E. HARKER

2nd General Average, Bunker Hill, Illinois - 148 x 150
 By HOMER CLARK 108 STRAIGHT

High Amateur Average, Bunker Hill, Ills. - 146 x 150
 By C. E. ORR

Pacific Indians Challenge Trophy - - 96 x 100
and 25 Straight in Shoot-off

479 x 500 - Second on All Shot at - 479 x 500

By F. C. RIEHL

The Hoolihan Medal - - - 50 Straight

By J. N. McLAUGHLIN

The Gooding Medal - - - 20 Straight

And 58 x 60 in Shoot-offs By AL. ADDELMANN

424 x 450 - 2nd Amateur Average - 424 x 450

J. N. McLAUGHLIN L. A. LEHRBUS

All of Above Honors Won at Idaho State Shoot

Does It Not Occur to You That, by Adopting This Honor-Winning Ammunition, You, Too, May Become a Winner?
THE WESTERN CARTRIDGE COMPANY :: :: ALTON, ILLINOIS

three days' program, breaking 196 out of 200 from 16 yards and 94 out of 100 from 22 yards. He shot Peters "steel where steel belongs" shells.

High amateur average at Hattiesburg, Miss., July 4, was won by Dr. C. L. Gun, of Gadsden, Ala., with the fine score of 195 out of 200. In the Mississippi championship event Mr. J. S. Day scored 98 out of 100, being second professional, and Messrs. J. A. Blunt and John Sirmon tied for high amateur, score 96 out of 100, but both were ineligible, not being residents of the State. All the above scores were made with Peters factory-loaded shells. High runs at this tournament made with Peters shells were as follows: C. L. Gun, 146; J. S. Day, 110 and 94; L. P. Chaudet, 107.

At the July 4th shoot of the San Marcos Gun Club, San Marcos, Texas, Mr. Guy Ward, shooting The Black Shells, won high profes-

sional score, breaking 157 out of 170.

Mr. H. C. Withers, of San Marcos, Texas, shooting The Black Shells, won high amateur score, breaking 155 out of 170.

Mr. R. H. Connerly, of Austin, Texas, and R. C. Chew, of Lockhart, Texas, both shooting The Black Shells, tied for second high amateur honors, breaking 153 out of 170.

The Black Shells were used by at least one-half of the shooters, and about thirty shooters attended this one-day tournament.

At the registered shoot of the Greenwich Gun Club, at Greenwich, Conn., on July 4, C. Van Stone, of Bridgeport, Conn., shooting The Black Shells, won the double bird championship, breaking 19 out of 10 pairs.

J. S. Hendrickson, of Jamaica, Long Island, shooting The Black Shells, was second, breaking 18 out of 10 pairs.

F. F. Rodgers, of Stamford, Conn., shooting The Black Shells, made a long run of 57 straight.

Carl von Lengerke, shooting The Black Shells, won the high professional score, breaking 153 out of 175.

At the second day Pre-Olympic trap shooting tournament, at Grand Park, Chicago, H. C. Kirkwood, of La Grange, Ill., shooting The Black Shells, was high professional, breaking 100 out of 100. During the three days' shoot H. C. Kirkwood, shooting The Black Shells, broke 287 out of 300. Mr. Kirkwood also had the highest run during the tournament, breaking 130 straight.

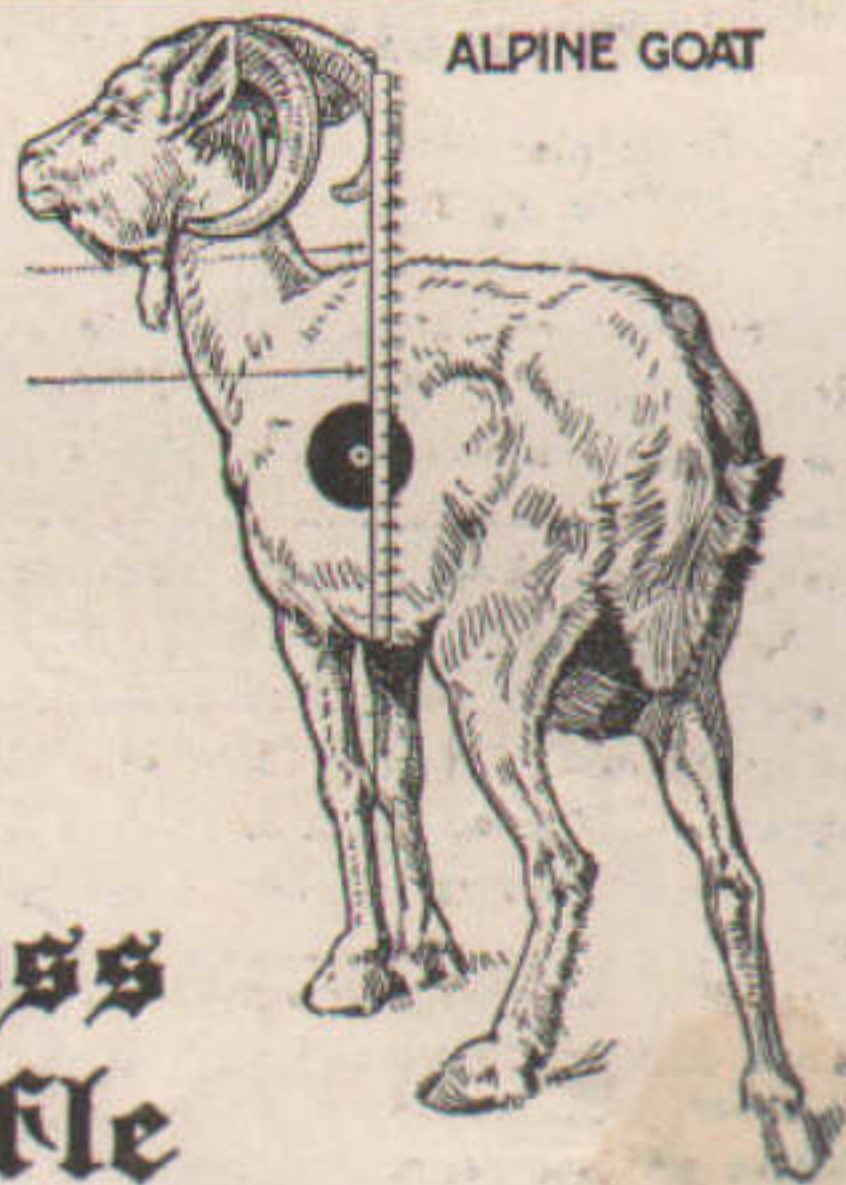
In the recent International Small Bore Matches, which created such great interest among riflemen all over the world, twenty-two out of the fifty rifles used were Stevens. It may be that there were even more than twenty-two Stevens rifles used in this International competition, but twenty-two we are positively sure of.

Two scores of 499 out of 500 and two absolutely perfect scores, 500 out of 500, were made in this International tournament by Stevens rifles.

U. S. Revolver Champion Has Wide Military Service.

Two young Americans, one just past his teens and the other in his early thirties, stand at the head of the revolver shots of all the world. A. P. Lane, of New York, the younger of the twain, won his spurs at the Olympic games last year, where he outshot the picked contestants of many countries and became champion of the world. The other, Peter J. Dolfen, of Springfield, Mass., a team mate of Lane in the Olympic contest, recently captured the championship of the United States by

An error of 200 yards



Ross Rifle

In hilly country or over water, an error of 200 yards in judging distance is frequent

The difference between the use of the 30-30 or 30-40 cartridge and the Ross .280 High velocity using the special Ross Cartridge with copper tube bullet patented is well illustrated in this sketch of a shot aimed at 500 yards, when the correct distance was 300. The 14-inch rise of the 30-30 or 30-40 misses the goat where the Ross .280 not only hits, but anchors the game. The Ross .280 Sporting cartridge with copper tube bullet (patented) thanks to its wonderful explosive properties, will stop any large game it hits fairly. The price of the Ross .280 is now \$55.00 in the U. S. f. o. b. New York.

If your dealer cannot show one, write direct for catalogue and full information to

Ross Rifle Co., Dept. S-18, Quebec, Canada
 or Post & Floto, 14 Reade St., New York

MARBLE'S
NITRO-SOLVENT OIL

"Corrosion's Enemy"

The only solvent that is also a lubricant. All other solvents must be removed entirely and the barrel thoroughly oiled. This combination saves time and trouble. Has remarkable penetrating qualities. Soaks into the steel and eats out the acid of the residue of any powder made. Cannot injure the barrel for it contains no acid.

STOPS CORROSION INSTANTLY

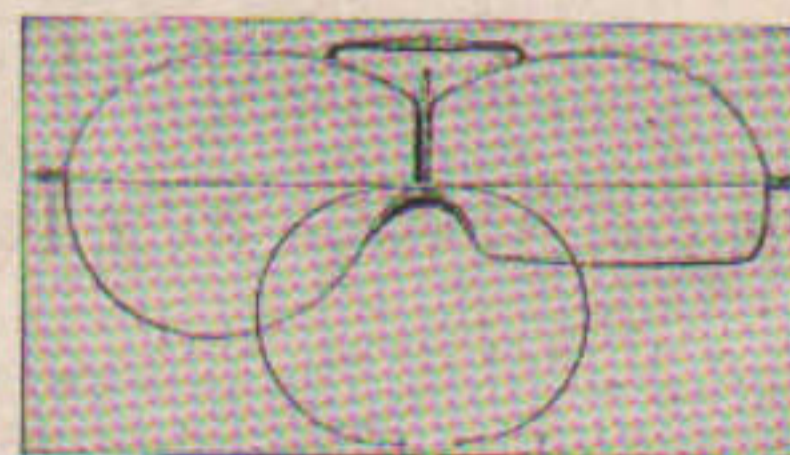
Send for generous sample. Test it on YOUR gun. Apply it to bore directly after shooting. Lay aside several days. No harm done—bore in perfect condition.

Lubricates, removes, prevents rust; cuts dirt and gum; cleans, polishes; no acids; frost-proof. 2-ozs., 25c. 6-ozs., 50c at dealers. 60-Page Catalogue free.

Marble Arms & Mfg. Co., 502 Delta Ave., Gladstone, Mich.



Get Your Free Sample Yet?



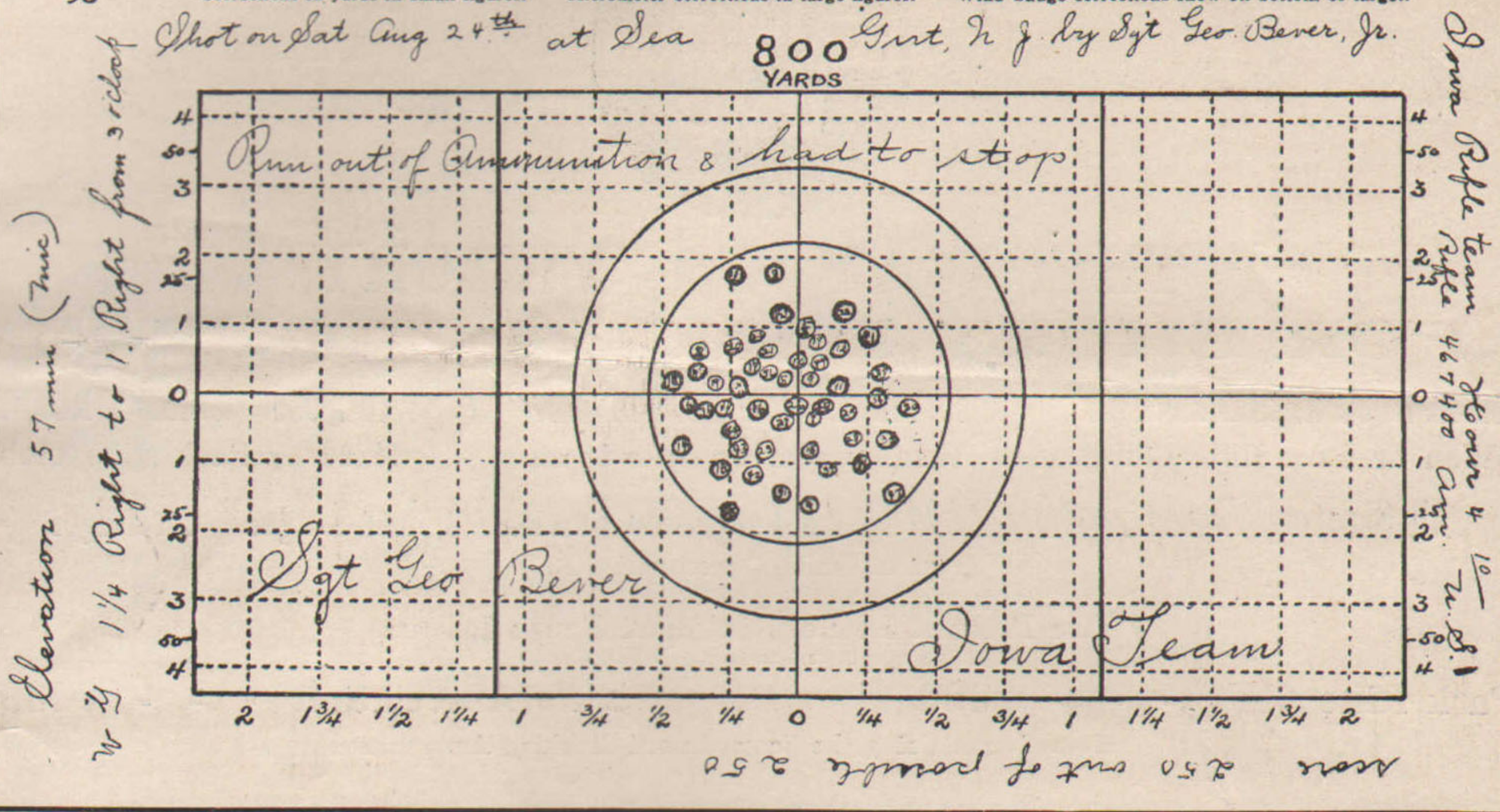
Only One Place to Buy REAL Shooting Glasses

If you want one lens cut off—first see that you have a decent shaped frame like the above.

LIEUT. TOWNSEND WHELEN,
 Inspector Instructor
 Acting Coach, Connecticut State Team, writes us,
 June 30th, 1913.

"I have had the pleasure of examining and trying out the Akopos glasses made by The F. W. King Optical Co., of Cleveland, Ohio. The peculiar color of the lenses of these glasses is such as to make them extremely efficient for target shooting. They greatly increase the definition of sights and target, and, while cutting out the glare, seem actually to illuminate the vision in a way that is hard to understand unless one has seen them. They are far superior to any other color with which I am familiar, including all shades of Amber. Their excellence is such that I have arranged to have the entire Connecticut State Team which is to compete at Camp Perry this year, equipped with them."

Send for Our Complete Catalogue D
THE F. W. KING OPTICAL CO. Cleveland, Ohio



US AMMUNITION

Hits Where You Aim!

Above, we show a reproduction of a page torn from Sergt. Bever's score book showing the plotting of 50 shots fired at 800 yards range, scoring 250 out of a possible 250, at Sea Girt, on August 24, 1912.

Sergt. Bever used **US** AMMUNITION, and the attention of all military rifle shots is directed to the remarkably uniform elevation.

This sort of visible proof of the reliability and uniform accuracy of **US** AMMUNITION should be of interest to every shooter of military rifles who is anxious to improve his score at the longer and more difficult ranges.

When purchasing ammunition, insist upon **US** brand.

UNITED STATES CARTRIDGE COMPANY
LOWELL, MASS.



THE WAY TO VICTORY FOR SHORT RANGE LEAGUERS

1911-12 N. R. A. CHAMPIONSHIP
Won by Park Rifle Club

1912-13 N. R. A. CHAMPIONSHIP
Won by Warren Rifle Team

"THE 998" WORLD'S RECORD
Made by Park Rifle Club

All Shooting *Remington-UMC* .22 Long Rifle Lesmok "Indoor Target" Cartridges
(Formerly called "Specification 73")

Two Present Leaders in Short Range League
(Averages to and Including Eighth Match)

Park Rifle Club - - - 2360

Bangor Rifle Association - - - 2339 ⁷/₈

Both Teams Using the Same Record-Breaking Ammunition

Why discount your natural skill, your long conscientious practice, your enjoyment of "the game" and your good, honest, American hope of victory, by using inferior ammunition when you can

SHOOT THE CARTRIDGES THAT MAKE CHAMPIONS

REMINGTON ARMS-UNION METALLIC CARTRIDGE CO.

299 BROADWAY

NEW YORK

Hang the Rifle Gallery!

The 3d Infantry, N. G. P., had
no room for a Gallery

**They Suspended It
FROM THE ROOF!**

Write for information to

RIFLE SMOKELESS DIVISION
E. I. Du Pont De Nemours Powder Company
WILMINGTON, DEL.

BADGES and INSIGNIA
for the
ARMY and NAVY

Designed and Made by
BAILEY, BANKS & BIDDLE CO.

"TROPHIES & PRIZES"
An Illustrated Booklet-describing many handsome articles
suitable for Presentation Pieces-forwarded upon request.

The Hand Book
contains Engravings of Jewelry,
Silverware, Glassware, China and
Mahogany for Wedding and other
Gifts-forwarded by post.

BAILEY, BANKS & BIDDLE CO.
Chestnut Street Philadelphia

**THE WARNER
& SWASEY**

**Prism Terrestrial
Telescope**



Is the ideal instrument for porch and tourists' use in making terrestrial observations, and is so perfect in its construction that it will show clearly such astronomical objects, as the Moon; Saturn and its rings; Jupiter and his moons and many others equally interesting. A booklet will be sent upon application

THE WARNER & SWASEY COMPANY
CLEVELAND

WONDERFUL SHOOTING WITH



SMOKELESS POWDERS

Mr. W. H. Heer, Guthrie, Okla., on July 3-5, shooting a 3-dram load of DUPONT made these astonishing scores:

299 x 300	99.66%	AND	398 x 400	99.50%
IN THE REGULAR PROGRAM			INCLUDING PRACTICE EVENTS	

Sold Gold Long Run Trophy Winners Demonstrate Their Shooting Ability and the Uniform Quality of DUPONT SMOKELESS POWDERS

W. H. Heer, Guthrie, Okla., shooting DUPONT, 219, 179, STRAIGHT
J. M. Hawkins, Baltimore, Md., shooting DUPONT, 148, STRAIGHT
E. H. Adams, Reading, Pa., shooting SCHULTZE, 139, STRAIGHT

Remember 80% of Amateurs in the G. A. H. at Dayton, O., shot DUPONT, BAL-LISTITE or SCHULTZE—an emphatic endorsement of these world-famous Smokeless Powders. *Made and Guaranteed by the Pioneer Powder Makers of America.*

E. I. DU PONT DE NEMOURS POWDER CO.
Established 1802 WILMINGTON, DELAWARE