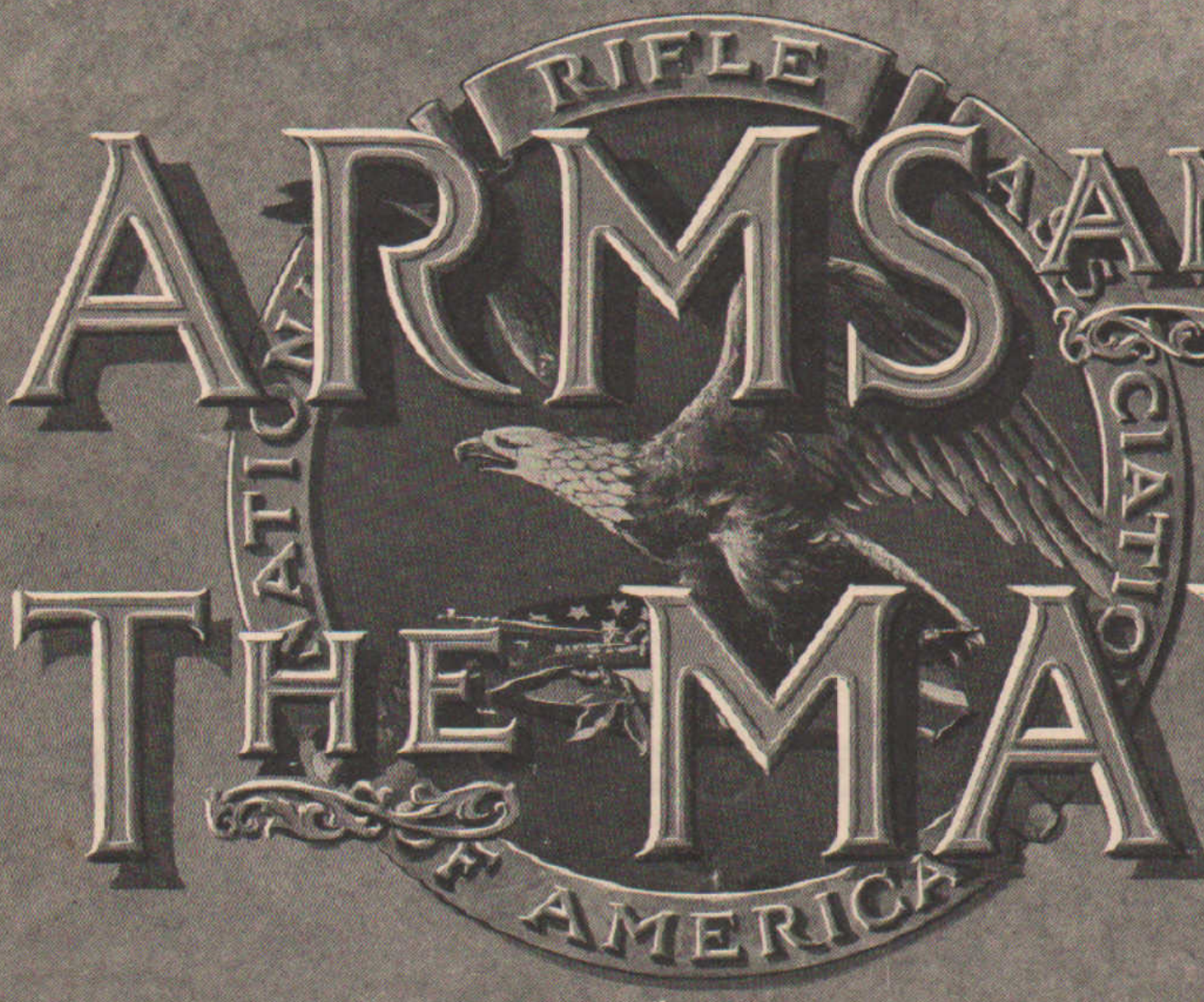
RIFLE AND ARMS



THE MAN

"THERE IS NOTHING NEW UNDER THE SUN"

ENFIELD RIFLE IS OFFICIALLY ADOPTED

THIRTY YEARS AGO ON THE FIRING LINE

No. 9

THE RELATION OF THE EYES TO RIFLE SHOOTING

FLINCHING

TWO LETTERS THAT SPEAK FOR THEMSELVES

EDITORIALS

and

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

VOL. LXII, NO. 9

NRA

MAY 26, 1917

1917 N. R. A. CHAMPIONSHIP

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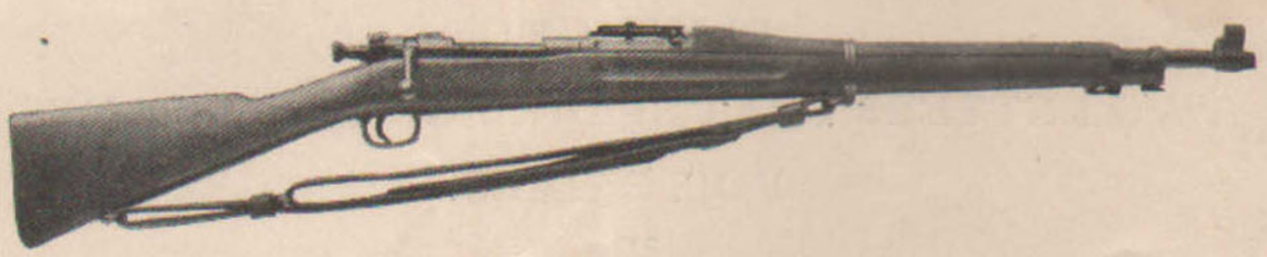

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ARMS AND THE MAN

WASHINGTON, D. C.

ARMS AND THE MAN

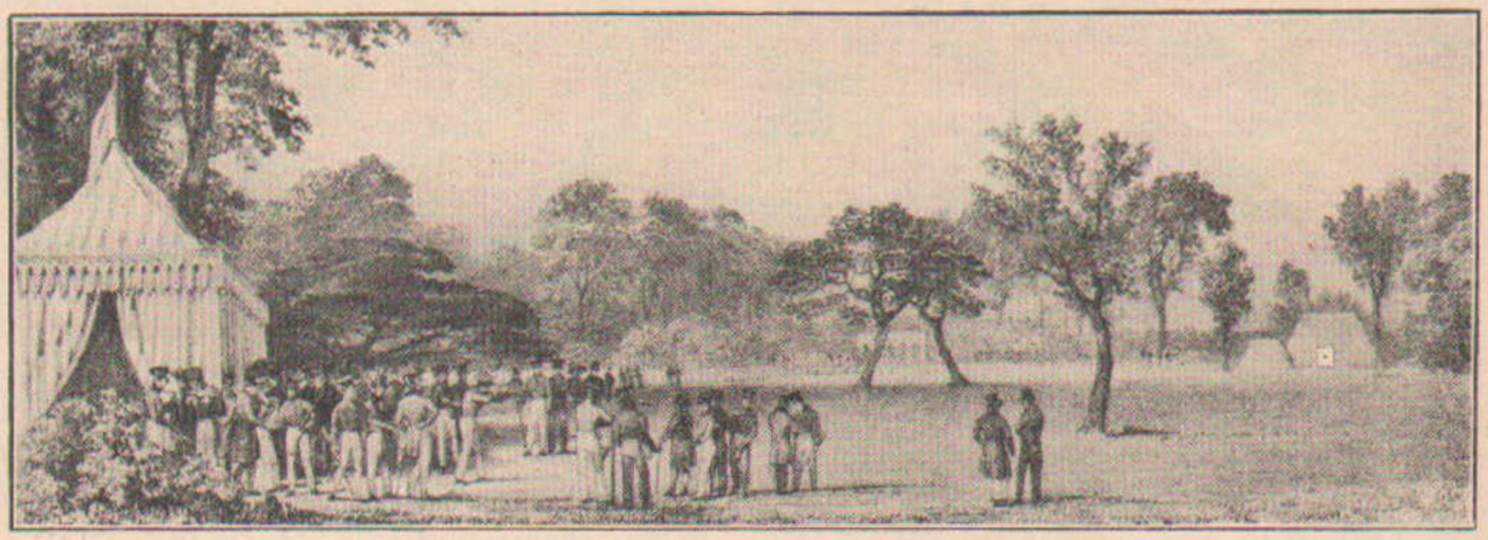
The Official Organ of the National Rifle Association of America

Volume LXII, No. 9 | WASHINGTON, D. C., MAY 26, 1917 | $3 a year. 10 cents a copy

"There is Nothing New Under the Sun"

WITHIN three miles of the heart of London Town, typified by teeming Piccadilly, young men and boys—members of a civilian rifle club—were shooting what is parallel to the present "qualification" courses on ranges varying from 100 to 300 yards nearly a century ago.

Where, upon the ranges of the present, the spiteful high-power crashes and rattles in rapid fire, heavy flintlocks and a few of the early percussion rifles coughed out huge lead bullets from that firing line of the Long Ago.

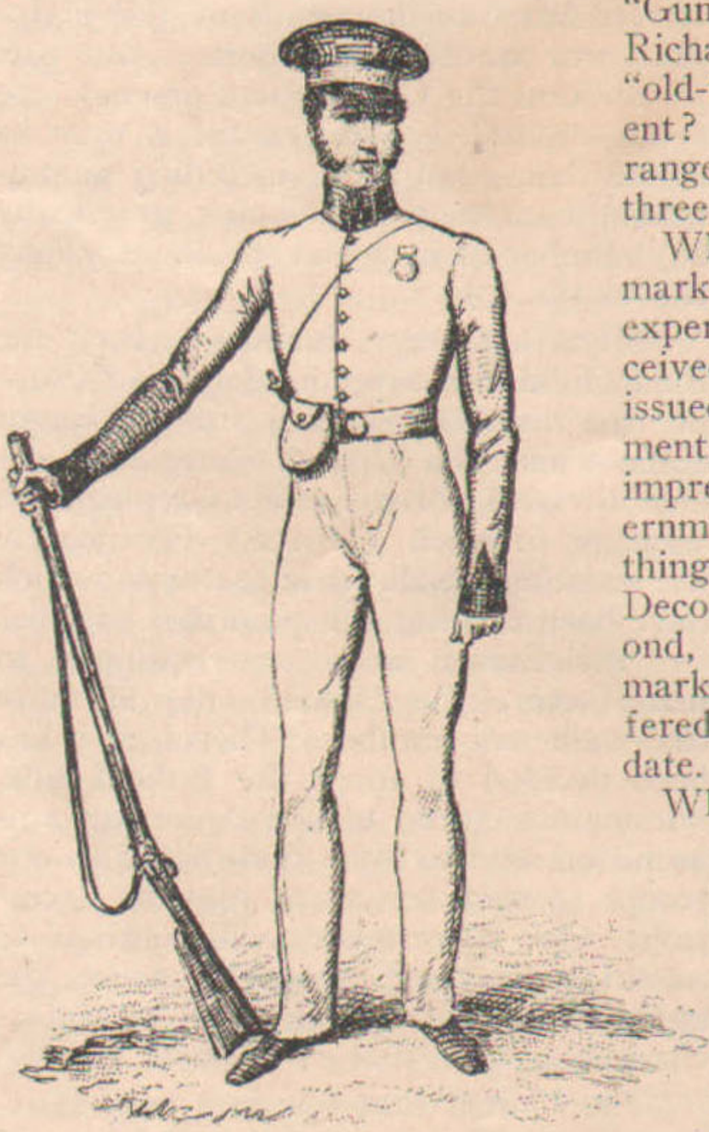


Range of the Stadium Rifle Club, Cremorne House, Chelsea, 1830

Yet the history of the National Stadium Rifle Club, of Cremorne House, on King's Road, Chelsea, holds many interesting parallels to the customs of rifle clubs of the Twentieth Century.

Did you dream that your telephone system between firing line and butts was new? The Stadium Rifle Club ranges were equipped "with telegraph for recording the shooting upon two iron targets, the largest being unrivaled for curious mechanism." And this upon the word of Lt. Col. Baron de Berenger, who chronicled the establishment of the club.

Have you thought that the use of the gun-sling to steady your weapon originated with the versatile and skillful Casey, "Gun-Sling Dave," Hessian, Richards, or any of the "old-timers" of the present? On the Stadium range the sling was in use three generations past.



Uniform Stadium Rifle Club
Drawn by Cruickshank

When you made your marksman, sharpshooter or expert qualification and received the badge of merit issued by the War Department, were you under the impression that the Government had done something new? Not at all. Decorations for first, second, third and fourth class marksmen were being confered at the same early date.

When some veteran of the game, squatting behind you on your first visit to the range, advised you to half fill your lungs, and hold your breath for a moment while aiming; when he taught you the trigger squeeze; when he warned you to keep your eye on the sights even after the trigger had been pulled, so that you could call your shots and incidentally reduce "flinching" to its proper minimum, did you believe that your coach was wise only in his own generation? De Berenger told all this and more to his son when the United States was yet in the process of emerging from its primeval wilderness.

The Stadium Rifle Club was formed early in 1830, as part of the British National Arena, which was housed upon the broad acres of what had until shortly before been the home of Lord Cremorne, which was visited frequently by members of the royal family. The manor included 24 acres, with 200 yards of frontage on the Thames River and a considerable stretch along King's Road.

The idea of the Stadium, as part of the British National Arena, was conceived by the proprietor of Cremorne House, when the ownership of Lord Cremorne ceased. At that time it was nothing more nor less than an exclusive rural tavern. By proposing that it be used to house the National Arena, and arranging for all sports, including lawn billiards, golf, football, athletics, the miniature racing of blooded ponies, and for aquatic sports, he transformed his rural tavern into something closely akin to the country club of the present.

Special attention, however, was paid to fencing with the small and broad sword, tilt practice, quarter-staff defence and attack, archery, pistol, rifle and cross-bow practice.

In his account of the Stadium and the rifle club formed among its members, de Berenger said:

"The careful and scientific initiation at the Stadium in a peculiar mode of using firearms will not only promote successful skill and insure perfect safety, but will thus remove the alloy of uneasiness connected with their injudicious use, and tend to tranquilize the apprehensions which relatives and friends so often and so anxiously urge against such pursuits on grounds of dangerous exposure to the (hitherto so lamentably frequent) loss of life or limb."

Civilians who patronized the National Arena, as well as members of the Stadium Rifle Club, were also given military training, in spite of the generally accepted idea that the "Wyoming Plan" and its forerunners marked the inception of such activities, for de Berenger continues: "A military drill has been instituted for youths in order to improve attitude by

marching, and by being taught to poise themselves with promptness and grace."

The National Arena, in addition to those activities provided for its male members, also made provision for women, in whose behalf "a safe (because mechanical) chariot course" was provided.

Each club which held membership in the Arena had its distinctive uniform and a separate day on which to enjoy ranges and fields of the Stadium. Among them all, the rifle club was perhaps the most popular organization. In addition to the ranges provided for long-distance rifle practice, there were also two plain and one mechanical pistol targets. Of the activities on the rifle range, de Berenger says: "The safe and unerring use as well as the scientific treatment and choice of firearms at targets, with or without mechanical displays, at movable objects, and at whimsical contrivances but *against amply protecting banks and under safety insuring regulations, strictly enforced,* are taught."

In undertaking to acquaint his son, in a series of letters, with the proper use of small arms, principally as practiced at the Stadium, de Berenger paid a high compliment to the early riflemen of America, when in referring to the then not so distant War of the Revolution he wrote: "These planters and citizens, laboring under an appalling ignorance of tactics, still found means of effecting a powerful resistance *in the skillful use of that arm* (the rifle). They were men, too, who, although high-spirited and brave, were nothing more than an undisciplined rabble. *The rifle, then, it was that made up the difference between discipline and the want of discipline.*

"To England's unrivaled state of cultivation we may look for a reason why the rifle is not used in the sports of the field; whilst, on the other hand, that peculiar cultivation makes it so much more the fittest country in Europe for the organization of a rifle *landwehr* or a superior militia, to defend it against what in the last war in reality was dreaded, and may be so again—an invasion."

At the time de Berenger wrote, the riflemen of England were engaged in one of those long and seemingly endless controversies which have always marked the history of the game. At that time the current moot question concerned whether the rifle barrels with a three-quarter turn, or those with the one-quarter turn, were superior. The three-quarter turn barrel was one in which the rifling made 3 parts of a circle descending from muzzle to breech, and the one-quarter turn was that which made a fourth of a circle from muzzle to breech. De Berenger himself preferred the three-quarter turn weapon, claiming that the other type could never be made to shoot accurately at more than 150 yards.

Small calibres were the fashion at that time in the Stadium Club, as throughout England, but de Berenger refused to believe in them, declaring: "They are less likely to lead to success than a larger bore. Even every boy knows that a heavy piece of metal can be thrown farther than a sponge; wherefore you will admit that a bullet of two ounces will make its way with more facility and truth than a quarter-ounce ball."

After directing his son as to the proper methods of loading the old percussion guns, de Berenger outlines the position to take at the firing point, and in this he mentions the use of the sling strap. He says:

"Present at the target with perfect coolness and without hurry; many place the left elbow in the sling of the rifle."

Upon the point of holding one's breath at the moment of fire, and continuing the aim, even after the trigger has been pulled, he wrote, in describing the proper alignment of sights:

"All this time you should hold your breath, your finger having stolen toward the trigger. *The moment you have secured a good aim, you should pull the lock off.* Never pull your trigger by a movement of the arm, nor with a sort of *snatch,* but instead do it coolly by *firmly increasing the pressure.*

"Never move a hair's breadth if you can possibly help it, much less flinch from the discharge nor move your rifle in any way for a few seconds after it has been fired off, but *keep on aiming* as if a second fire were to follow, looking all the while through the sights to see if they still remain on the object fired at: this will make you steady. Although I do not advise you to fire in a hurry, I do recommend your pulling the trigger the moment you have obtained a good aim.

"Target practice cannot be conducted too steadily nor too particularly, wherefore the marker ought to show every miss to instruct the person shooting how to avoid a continuance of the error.

"The great error which aspirants to celebrity for rifle-shooting expertness fall into is that much too impatiently they try at all distances before they have acquired steadiness at any."

In his communications to his son, Col. de Berenger outlined a "qualification course" which was then in vogue.

"Unclassed men" were not allowed to fire at a greater distance than 50 yards until they could hit a target 30 inches in diameter, with 10-inch sighting bull and 2½-inch center or "dollar" five times out of six shots, from the shoulder on two days out of three. Their doing this entitled them to wear black silk cockades, and placed them in the fourth class.

"If, therefore," says de Berenger, "and at a distance of 100 yards any fourth-class man put five shots out of six from the shoulder into the target two days out of three, it entitled him to wear a black silk cockade with a green center and put him in the

"Third Class, where he had to perform the same task, with this difference only: that the distance was 150 yards and he had to fire three shots from the shoulder and three shots from a rest. If successful, it gave him a cockade all of green silk and authorized his joining

"Second Class, where he had the same task to perform at 200 yards, all from a rest, before he obtained the privilege of adding to his green cockade a bronze Death's Head and Bones, as the honorable badge of belonging to the

"First Class, whose members practiced rest and shoulder shooting at 200 yards and chiefly rest shooting at from 200 to 300 yards and upward.

"All shots were unclassed once a year."

ENFIELD IS OFFICIALLY ADOPTED

AMERICA is ready for the war, so far as rifles and ammunition are concerned. Frank A. Scott, chairman of the general munitions board of the Council of National Defense, has issued the following statement:

"We are in a position now to assure the country that rifles and ammunition will be ready for American troops as fast as they can be raised and otherwise prepared for foreign service. There are on hand more than enough rifles for the rifle-carrying men of an army of approximately a million, and arrangements have now been made to provide for the arming of a larger force and for the reserve which the wastage under modern war conditions makes necessary. Plans have been completed to take advantage of the small-arms factories developed in our country as the result of the European war, and convert them to our use. In addition the Government arsenals are being expanded. In general it may be stated that small arms, including ammunition, can be provided for practically any number of men that the country may call to the colors.

"Manufacturing facilities for the Springfield rifle are not adequate to supply the number required for the larger force which the United States may decide to send abroad and to replace the wastage of such a force. Fortunately the existing small-arms factories which have been turning out quantities of rifles for the British army are equipped to manufacture the Enfield rifle in more than sufficient number. Therefore it has been decided to adopt the Enfield rifle, but manufactured to use American ammunition, and to issue these rifles to our troops to such extent as may be necessary. Our Government will continue to manufacture the Springfield model, the ammunition for which will be interchangeable with that of the new Enfield.

"The United States is in a very satisfactory position so far as all types of

(*Concluded on page* 170)

Thirty Years Ago on the Firing Line

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

No.9—J. H. BROWN AND SALEM WILDER

EVEN a generation ago the rifle-shooting game had its "old-timers." Just as the tyro of today listens eagerly to the men who began their shooting careers with the 45-70 Springfield, so in the early Eighties the newcomers at the game sat at the feet of veterans who had graduated as exceptionally skilful shots with percussion-cap weapons long before the advent of the breech-loader.

Such veterans were J. H. Brown and Salem Wilder, both of whom were well known on the Massachusetts ranges as well as in the Creedmoor competitions.

J. H. Brown, a native of Liberty, Maine, was not only an exceptionally expert shot, but an inventor as well, having produced the Brown Military Rifle. He began his shooting career in 1847, and his fondness for the rifle influenced him when only twenty years old to apprentice himself to a gunsmith. He did not complete his time, however, but still continued in the shooting game.

His knowledge first became of practical value when he took an active part in organizing and training the Andrews Sharpshooters, whose work as snipers is famous in the annals of the Civil War.

From that time until 1878 he did but little shooting. In that year, however, he again took up marksmanship, devoting himself almost entirely to off-hand shooting with gallery rifle, military arms, and the Schuetzen rifles.

The old Knickerbocker Rifle Gallery, which was a noted rendezvous of riflemen at that time, was the scene of many of his triumphs with the heavy Schuetzen weapons, and later with equal facility he hung up high scores at Creedmoor.

When the first International Military Rifle Match was arranged, the American Team was without a suitable weapon. By the time the second match was proposed, in 1882, Mr. Brown had perfected his military rifle, which in the opinion of contemporary experts possessed many points of superiority over any similar weapon of the time. This rifle Brown offered to the American Team.

While the majority of the younger of the riflemen of this period were shooting with specially designed sights, Brown made his scores with any sight which happened to come handy, and when questioned concerning his apparent lack of any favorite form of sight, said:

"I have no great preference for sights on a military rifle. I can do equally well with open, bar, notch, or aperture wind-gauge, or fixed sight. The only thing that would handicap me much would be too fine a front sight. For any range back of 200 yards, I prefer nothing but the bayonet stud, with the front sight cut off entirely, and would not care whether there was a wind-gauge or not. There is too much humbug about military sights. A good rifleman can shoot with almost any kind of sight."

Mr. Brown made many remarkable scores. Among them his record with a long-range match rifle at 800, 900 and 1,000 yards is worthy of mention. Shooting these distances in regular matches, he made 215 and 218 out of a possible 225. Among the matches to his credit is the "All Distance Champion Match," which he won on a full score at 600 yards at Creedmoor in September, 1882.

Much of his fine shooting was done with the Brown rifle, and in one of his early trials with that weapon over the six ranges at Creedmoor, he made 207 out of a possible 210. On October 31, 1883, he fired 60 consecutive shots at the Creedmoor target at 1,000 yards, using the Brown military rifle with open bar sights and without cleaning. The shooting was duly witnessed. The sixty shots aggregated 264 out of a possible 300.

About the time that Brown was organizing the Andrews Sharpshooters, Salem Wilder, a native of Sterling, Massachusetts, where he was born in 1823, was engaged in obtaining fine telescopic rifles with which to equip the same command.

As early as 1841 Wilder was making his reputation as a rifle shot, having in that year gone on a squirrel hunt with some friends who laughed at him for carrying a rifle instead of a shotgun. The laugh, however, was on his companions, when he shot ten times and each shot brought down a squirrel. All of his early shooting was done with a muzzle-loading rifle, and much of it was of an experimental nature.

He practiced quite steadily from 1857 to 1861, however, and on February 28, 1861, he shot ten successive shots into a 3¾-inch circle at 220 yards, or forty rods, the target measuring 9 7/16 inches. The rifle with which he made this record was a muzzle-loader made by Andrew Whitmore. It had telescopic sights and weighed twenty pounds. The shooting was done from a small portable rest, and in a kneeling instead of a sitting position. The calibre of the rifle was about .40, the powder charge 85 grains, and the bullets weighed about 300 grains.

This rifle, with other fine ones owned by Mr. Wilder, was turned over to the Andrews Sharpshooters.

With the introduction of the breech-loader Wilder abandoned the muzzle-loader, and with this arm he showed remarkable proficiency, having made 14 successive bull's-eyes at 600 in 1885, using a weapon with a Borchardt stock and action and a .40-calibre Remington barrel 36 inches long. The charge was 85 grains of powder and the bullet weighed 426 grains. He was credited with knowing more about the fine points of the effects of light, temperature and wind on rifle shooting than any of his contemporaries.

Among his many victories he scored 40 out of a possible 42 in seven shots at 600 yards during a Carton match on the Wallnut Hill range. In the 900-yard Carton match at the fall meeting of the Massachusetts Rifle Association, 1885, seven shots, possible 42, two scores to count, he scored 80 out of a possible 84.

NEW SERVICE COAT NOT APPROVED

The Secretary of War has withheld his approval from changes proposed for the service coat of commissioned officers and enlisted men of the Army, it being contemplated to abandon the closely fitting collar in favor of the open rolling collar, similar to the coat worn by British officers.

General Scott, who was expected to pass on the question as chief of staff, left the city with the commission for Russia without approving it, but he wore one of the service coast of the contemplated design, as did Col. R. E. Michie, who accompanied the commission. In addition, the officers wore on the coat lapel facings of different colors to indicate the arm with which they were connected. These insignia are of purely experimental character, and it was not proposed that they should be retained except on certain occasions. The matter of a change in the uniform, therefore, is still pending.

EIGHT HOUR DAY NEXT

Officer (to private)—"What are you doing down that shell-hole? Didn't you hear me say we were out against four to one?"

Geordie (a trade-unionist)—"Ay. Aa heard you; but Aa've killed ma fower."—*Punch.*

The Relation of the Eyes to Rifle Shooting

By RODERIC O'CONNOR
FORMERLY MAJOR, MEDICAL CORPS, U. S. A.
(*From Ophthalmology, July,* 1915)

ROOSEVELT said: "The shots that hit are the shots that count. The most valuable fighting man, and the most difficult to perfect, is the rifleman."

It is thought that the truth of the above quotations will be conceded by everyone. Other things being equal it follows that the ability of troops which are armed with the rifle to inflict damage will vary directly with their average shooting ability. The advantage of expert marksmanship was conclusively shown in the English-Boer War. It is therefore exceedingly important to take advantage of all possible aids to an increase of the shooting ability and to avoid all hindrances to that end.

The object of this article is to consider in detail the various ocular conditions which, in my oipnion, interfere with the securing of the best results in shooting.

Owing to the present visual standard there are many men in the service (30 per cent in one command I examined) with varying degrees of reduced vision, many of whom require glasses to relieve them of the effects of refractive errors.

The consideration of the subject naturally falls under two headings, as follows:

I. The ocular functions involved.

II. Their relation to shooting as regards (a) sighting; (b) estimation of distance.

PART I.

A. Visual Acuity. The measure of visual acuity is the smallest angle under which two points can be seen as separate. This for the normal eye has been determined to be about one minute, although some eyes can do better. The letters of our test cards are constructed on this principle—each line of the letter and each interspace between lines subtending angles of one minute, the whole letter an angle of five minutes at the distance for which each size is calculated. In the fraction used to represent the degree of visual acuity the numerator is the distance from the card, while the distance at which the lowest line made out should be read as the denominator. Thus, if a case under test at twenty feet can be read no better than the line marked sixty feet the vision is 20/60 or one-third normal.

As visual acuity becomes less and less the blurring of an object becomes greater and greater, due to a proportionate increase in the size of the diffusion circles, until finally it fades away and becomes indistinguishable from its background. This being so, it follows that the less contrast between an object and its background the sooner, as regards reduction in visual acuity, will such disappearance take place. This is of great importance as the tendency is to so color military clothing and equipment as to closely approach that of the ordinary natural background and thus become more or less invisible. *The closer the color of an object approaches that of its background the greater the visual acuity necessary to distinguish it therefrom.*

Another important factor to be considered is the amount of light reflected from an object. Everyone knows that as dusk comes on, and consequently the amount of light is lessened, that his visual acuity likewise is greatly decreased. This is exactly the case in reduced vision. When vision is normal the focusing is accurate and all the light rays are concentrated at one point, thus giving a greater effect; when vision is defective the focusing is also and the light instead of being concentrated is spread over the area of a circle of diffusion, and therefore each point on the retina receives less light. The difference in the action of a "burning glass" when focused from that when not focused is the best illustration of the above described fact.

The degree of visual acuity therefore depends on:

1. The focus=refractive errors=diffusion circles.
2. Spherical aberration.
3. Intensity of light stimulus.
4. Acuity of color vision.
5. The accommodative power which serves to overcome certain refractive errors.

B. Circles of Diffusion. These are blurred images on the retina of points and are due to defective focusing. As objects are made up of numerous points the image will be made up of numerous overlapping circles of diffusion, except at the border, which will appear blurred, and the whole image be enlarged the diameter of one diffusion circle.

The diameter of a circle of diffusion may be calculated from the following formula (Tscherning):

$$X = p\left(\frac{d}{d+a}\right)$$

where p=diameter of pupil.

a=distance from pupil to retina.

d=distance of distinct image from retina which increases with increases of refractive error.

This shows that the size of the diffusion circles (decrease in visual acuity) increase with size of pupil and increase in degree of refractive error; also that a decrease in size of pupil tends to overcome the effect of improper focusing. This is the reason why defective vision may be overcome by looking through a pinhole aperture and this test is commonly used to determine whether such vision is due to refractive error or to actual disease of visual nerve circuit. It must not be forgotten, however, that as we vary the diameter of the aperture we vary amount of light entering directly as the squares of such diameters, and that we soon reach a size where the amount of light is insufficient. However, in a brilliant light, practically a fixed focus for all distances may be secured by a small aperture. These statements are easily verified by means of any camera fitted with a ground glass for focusing. This subject will be brought up in the consideration of sighting and especially in presbyopia.

C. Spherical Aberration. This is a blurring due to the fact that the refractive power of a lens increases with each increase in distance from its axis—the axial ray itself due to its perpendicular course not being refracted—consequently these peripheral rays come to a focus sooner than the central.

The amount of aberration varies as the square of the aperture and the cube of the refracting power of the lens. It is seen, therefore, that the pinhole aperture described under circles of diffusion will correct this condition also. Certain experiments have shown that the central four milimeters of our crystalline lens is free from aberration and consequently that our pupils need not, on that account, be smaller than four millimeters.

The fact that the refractive power of lenses changes with the distance from their axes is *the* reason for accurate adjustment and centering of glasses used to correct refractive errors.

D. Refractive Conditions:

1. Emmetropia. In this, the normal type of eye, parallel rays of light (those from distant objects) are

focused on the retina without aid of the accommodative power. The eye is at rest except when focusing objects closer than twenty feet, and consequently is better able to perform continued near work than the hyperopic eye.

2. Hyperopia or Farsightedness. This term simply means that the eye is able to see distant objects clearly in contradistinction to the near-sighted eye, which can only see clearly objects at or within its far point. The hyperopic eye is one in which, when at rest, parallel rays of light are focused behind the retina, and therefore in order to see distant objects clearly it becomes necessary to shorten the focus of the refractive apparatus. This is known as accommodation and will be described fully. It follows, therefore, that the eye is never at rest except when closed or when the accommodation is relaxed, thus allowing distant objects to blur. Such eyes are unable to stand as prolonged a strain as the emmetropic eye.

In hyperopia the eye is adjusted for converging rays, which do not exist in nature, and consequently as soon as accommodation fails the eye is unable to see clearly either for far or near.

3. Myopia or near-sightedness is a condition in which the eye is adjusted for diverging rays (those from near points), consequently parallel rays are focused in front of the retina. The eye has no power of decreasing its refractive strength, therefore such an eye can never see distant objects clearly except by the aid of concave lenses. The inability of a myope to recognize friends, except when close, is a matter of common knowledge.

4. Astigmatism is a condition where the refractive power of the eye is not spherical; that is, it varies in different meridians. According to the character of this variation we have the following kinds:

(a) Simple (myopic or hyperopic), where one meridian is emmetropic; the other (at right angles), myopic or hyperopic.

(b) Compound (myopic or hyperopic), where both medidians have the same error but one to a greater degree.

(c) Mixed, where one medidian is myopic, the other hyperopic.

(d) With the rule where the meridian of greatest curvature is at or near the vertical.

(e) Against the rule when the meridian of greatest curvature is at or near the horizontal.

The presence of astigmatism is due in the vast majority of cases to the shape of the cornea while the kind is due to the plane of the retina in relation to the beam of refracted rays. For example, if the retinal plane lies between the foci of the two meridians

(*Continued on page* 170)

Canadians Shooting a "Match" With the Dotter

DOTTER PRACTICE AND MARKSMANSHIP

AS early as 1875 dotter practice was in use in the State of New York for converting into marksmen National Guardsmen who had never fired a service rifle.

General George W. Wingate, then general inspector of rifle practice, N. G. N. Y., originator of the dotter, made practice with this instrument an important part of the preparatory course of rifle instruction. For a number of years this practice was continued and was finally abandoned through no fault of the method, but because of inherent defects in the dotter as then made. The Winchester Repeating Arms Company sold it, and several thousand were in use.

In 1903 the dotter-practice idea was again revived and a complicated machine was put on the market. This apparatus met with considerable favor for a time, but was expensive and difficult to keep in satisfactory working order, and was therefore easily displaced in the service when a new, infinitely cheaper and more efficient dotter appeared.

The new dotter was made upon the lines of the Wingate indicator, but was much improved, with the defects of the old apparatus eliminated and dummy cartridges added. So pronounced were the results obtained by the systematic use of the new dotter, as shown by the substantial improvement of the marksmanship of those trained with it, that in many regular service organizations dotter practice has been made to supplement other preparatory methods.

The improved dotter provides a complete course of instruction in all the mechanical details of shooting with service small arms. The shooter loads the gun, cocks it, and aims at a target reduced to a proper size corresponding to the distance, and, when his aim is satisfactory, pulls the trigger. When this is done a needle rod licks out of the muzzle and punctures a hole in a miniature target, also reduced to proper size. The hole is substantially in the same relative place on the tally target as would have been made in the target at which the shooter was aiming, if same had been at the full distance and a bullet had been fired. It consequently gives the same experience in holding and pull-off as is had in actual shooting.

The apparatus has been adopted by the military and naval authorities of the United States and Canada, and 50,000 are in use. It is procurable on requisition through proper channels.

E. C. Crossman, of Los Angeles, California, in a magazine article, states:

"For the instruction of the recruit the device is most valuable, as not only does he learn to aim and pull the trigger correctly, but he learns the proper handling of cartridges at the same time. Rapid fire works perfectly with the dummies, which is not true when the cut-off is turned down, and at the same time the shots are being spotted on the tell-tale target. No use trying to deceive yourself as to your shooting and to tell yourself that such and such a shot would have been a bull. You've got to show this little Missouri device.

"I can see no escape from the conclusion that if a man practices at all faithfully with the rod he will make a good shot of himself."

ARMS AND THE MAN

1110 Woodward Building, Washington, D. C.

EVERY SATURDAY

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

Associate Editor
KENDRICK SCOFIELD

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

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

THE SUSPENSION OF FREE ISSUE AND PURCHASE

WHEN the Secretary of War, by official order, directed that the issue to rifle clubs of arms, equipment and other Government property be suspended, and that the purchase privilege so long enjoyed by citizen marksmen be curtailed, his action was taken avowedly because the War Department needs all of its resources for the proper training of the national army.

So far as has been indicated, these orders will be effective, at the longest, only for the period of the war, and the rifles which have already been issued will not be recalled.

That this action will bring disappointment to thousands of rifle-club members who are looking forward to a season of target practice, made possible largely by the free issue of ammunition, cannot be denied; and that such a step should have been regarded as necessary by the War Department officials is deeply regretable.

It is the duty, however, of every rifle-club member not only to make the best of the situation by continuing his activities by every means at hand, but also to look upon the temporary suspension as a necessary emergency measure.

Rifle practice flourished long before the free issue of ammunition and arms was instituted by the Government. There is no good reason why it should not continue to do so.

In the days before the free issue, dyed-in-the-wool riflemen crowded the ranges because they loved the game and because they were willing to make personal sacrifices for it. If the free issue of arms and ammunition has not brought the newer generation of riflemen into touch with this spirit and inculcated in them a love of marksmanship which will not brook obstacles, the free issue has failed of its most important object.

There are many phases of rifle shooting which can be indulged in while the free issue is being held in war-time abeyance. The .22-calibre rifle is just as good as it ever was as a weapon whereby valuable practice might be obtained, and the present situation will no doubt result in the development of a real military small-bore.

There is also the possibility of developing the reloading game, in connection with military rifles, to a point where home-loaded ammunition will be quite as satisfactory as arsenal-prepared shells.

There are few live rifle-club members who confine their shooting to the 120 rounds of free ammunition, even in times when this issue is operative. There is in almost every club some member who has more or less knowledge of reloading. Now is the time for such members to get out and "start something." If there is no such man in your club, write to the manufacturers of rifle powder; they are always willing to spread the right re-loading dope. And in addition to this, it is always possible to obtain factory-loaded ammunition from cartridge manufacturers.

If the shooting game has been a good game to you, it is worthy of perpetuation, even through personal sacrifice and trouble.

HOW THE PLAN WORKED

SOME weeks ago, Arms and the Man commented favorably in an editorial upon a plan adopted by the Lamar, Colorado, Rifle Club, to stir up patriotism in its home town.

In brief, the rifle-club members constituted themselves a committee to undertake a military census and to arrange a series of patriotic revivals, with a view to "boost" recruiting.

Just how well the Lamar plan worked can best be indicated by the statement that during the first eight days of its activities, in a community of about 3,000, fifty-seven of the many recruits mustered as the result of the agitation were accepted and sworn into the service of the United States. In addition, many members of the club have volunteered for active duty.

It is such accomplishments as this that justify the existence of rifle clubs, aside from the promotion of rifle practice. If every rifle club set itself a similar task, it would not be long before a lot of folk who have asked upon occasion: "What good is a rifle club to the Government?" would have their answer.

Further details of the plan followed by the Lamar club may not come amiss as a guide to other clubs wishing to perform similar services.

The club started its campaign for recruits with a parade and patriotic addresses, after having lined up all the newspapers and publicity mediums. The club then got in touch with the Army and Navy recruiting officers of the district, with the result that each of them co-operated to the greatest extent, using the club rooms as a recruiting station. Meanwhile, the club pushed its publicity campaign, advertising in all the papers of three counties, the proprietors gladly giving the space. The rifle-club members played no favorite, so far as the branches of the service are concerned, with the result that half went to the Navy and the rest were divided between the Coast Artillery, the Cavalry, Infantry and the Aviation Corps.

Having seen the results which the rifle club produced in its efforts to round up recruits for the regular establishment, the Captain of Company D, First Colorado Infantry, called upon the club for 50 recruits, to bring that organization to war strength.

Flinching

By R. E. HERRICK

N. R. A. State Secretary for Idaho

FLINCHING! Absolutely the unpardonable sin in the sport of rifle shooting.

In the usually accepted understanding of sin we always have the privilege of confession and atonement, but in rifle shooting there is absolutely no power that can wipe out a "goose egg" on the scorer's sheet and substitute a "5," representing our good intention. No matter how deep is our remorse, that circle will stand forever, taunting us for our lack of nerve control.

Remember the old epigram of "The road to Hell is paved with good intentions," for verily the rifleman's Hell is the result of a fine string of seven or eight or more fives, and then the "old red flannel shirt" comes dancing and cavorting, flirting like a lamb's tail past that diminutive bull's-eye as the result of a flinching pull. We can appreciate, after pulling that sort of a stunt, just what feelings must pervade the otherwise even-tempered farmyard bull at the sight of a red parasol.

But there is no advantage in dwelling on the horrors of such a situation (referring to the target scene, not the farmyard), for it merely brings back unpleasant recollections to probably 90 per cent of us; for it is a very conservative estimate that nine out of ten men flinch occasionally when firing a high-powered rifle at target, meaning deliberate fire, as few flinch when doing snap shooting.

Let's analyze the act of flinching. Webster says it is "to shrink back or hesitate on account of pain or danger; waiver in courage." This definition would cover the ordinary application of the word, but scarcely fills the bill as regards rifle shooting. Let's call it a lack of cooperation between muscles and nerves. It is similar to a back-firing motor that slaps one on the wrist when cranking it; that is, the electrical system, corresponding to the shooter's nervous system, completes its cycle before the reciprocating mechanism, corresponding to the muscular system, has completed its cycle.

It might also be termed a lack of perfect concentration, for if the shooter's mind were absolutely and unwaveringly and unswervingly concentrated on sights and bull's-eye until after the discharge of the rifle, there would be no flinching. Enough for the diagnosis. Let's see what we can do in the way of a prescription.

We probably have all seen the recruit who, after the coach has closed the rifle bolt on an empty chamber, flinches and pulls, only to hear the "click" of the firing pin and no explosion. Some men can be shamed out of it in this manner, but how about the experienced shooter who may be suffering from a bad case of nerves. You can't fool him like that.

A few years ago the writer did a little experimenting along this line, and the results obtained lead to the belief that with the majority of men the cause of flinching is not wholly from fear of the recoil, but in fact only about 50 per cent from that cause. The balance is, in our opinion, due to the nervous system anticipating the ear-splitting report.

The matter of recoil is not a consistent factor in all men. For instance: One man whom we had opportunity for observing during one shooting season weighed around 230 pounds. In other words, he was generously upholstered with good resilient adipose tissue. Consequence: When shooting from the prone position, with body muscles in the unflexed condition, the recoil merely started a series of vibrations, not unlike waves, which extended from his shoulder nearly to his waist. It looked as though his body might have been made from jelly. Quite naturally, this man never flinched from fear of the recoil.

As the other extreme, the writer is one of those long, cadaverous individuals whose curves of figure are all angles, and with not enough fat to grease a frying pan. Obviously a person constructed along such a style of architecture is likely to find the jar from a rifle having 14.98 foot pounds free recoil a very pertinent factor when firing without blouse or coat. In fact we have taken several impressions on our shoulder from our checked butt plate that reminded one of hamburg steak.

However, this is easily avoided by means of a recoil pad; or, if in service conditions, a shoulder pad. We now use a quilted pad made from drill and curled horse hair, after trying pads made from leather, sponge rubber, cotton batting, and what not.

This is our theory on the use of recoil pads: A man may fire every day for a week and not get kicked at all, but in some unguarded moment the "recoil jinx" is going to hand him a beautiful wallop, and his scores for the balance of the day are likely to suffer in consequence. So, then, "a pad" and "Safety First" are our mottoes, and if some big husky scoffs at us for wearing the pad we just bide our time. For some time we will be sure to have a chance to laugh on our own hook.

Our next line of experiment lay in endeavoring to reduce the concussion resulting from the explosion. It is a well-known fact that the Maxim Silencer has proven itself a good thing in reducing flinching. It takes off part of the recoil and likewise part of the report. So then we plugged our ears. Tried various substances, but settled on a pair of ear protectors, several of which are advertised extensively. We never appreciated before what a quiet, calm world a deaf man moves in. It is refreshing. (Tip No. 1. Try your ear protectors the next time your young hopeful has a bad spell of colic along about 2:00 P. X. We know.)

Here is a statement some one may question, but it has been our experience that three out of four confirmed trapshooters will be found to flinch when shooting a high-powered rifle in deliberate fire. They not only flinch, but are very hard to break from it. Occasionally we run across a man who can use rifle, shotgun or pistol and make good scores with all three, but those men are not plentiful. It is not unusual to find a good rifleman and a good pistol shot in the same person, and the good pistol shot can always be made into a good rifle

Two Letters That Speak for Themselves

WAR DEPARTMENT
The Adjutant General's Office
Washington

May 9, 1917.

From: The Adjutant General of the Army.
To: The Chief of Ordnance.
Subject: Suspension of issue to Educational Institutions and Rifle Clubs.

The Secretary of War directs that you be informed that the issue of arms, equipment and other Government property to educational institutions and rifle clubs is suspended during the war.

(Signed) W. T. Johnston,
Adjutant General.

WAR DEPARTMENT
Office of the Chief of Ordnance
Washington

May 15, 1917.

From: The Ordnance Office.
To: All arsenals, etc.
Subject: Suspension of sale of rifles and carbines.

1. I am directed by the Chief of Ordnance to inform you that by order of the Secretary of War, the sale of rifles and carbines of all types, by the Ordnance Department, is hereby suspended until further notice to other than:

American designers (authorized by Act of April 23, 1904).

States, Territories and the District of Columbia for use of the National Guard (authorized by Act of June 3, 1916).

Officers of the Army and contract surgeons (authorized by par. 1520, A. R.).
Officers of the Navy and Marine Corps (authorized by Act of March 3, 1909).

The Government of Cuba, subject to approval of the President of the United States or the Secretary of War acting for him (authorized by Act of August 29, 1916).

2. This action is taken on account of the need for all rifles on hand for campaign or training purposes (O. O. 474.1/108 Miscellaneous), and will apply to all sales now pending where shipment has not actually been made, as well as to future applications. Please be governed accordingly.

(Signed) T. L. Ames,
Major, Ord. Depart.

To the Secretary,
National Rifle Association of America,
Room 1108, Woodward Building,
Washington, D. C.

shot, but the shotgun seems to be the dividing line.

A very good plan for a rifleman to follow is to steel his nerves to the point where he is certain of the location of the front sight as regards the bull's-eye at the time of discharge, and to audibly call the shot before the marker shows its location. Any man who can call his shots accurately can keep himself from flinching. This simply means that the marksman has concentrated all his faculties on holding his front sight at the proper point and in holding his rifle in a good tight grip during the time required for the bullet to pass through the barrel, and also until the rifle stops bucking; and all this without batting an eye. For it is a physical impossibility to call the shot if the eyes are closed at the time of discharge. We have all seen the man who got a good hold, closed both eyes and gave the trigger a yank, scored a miss, and swore the front sight was on the bull.

A very practical, and to a coach an indispensible affair, is used in the army and is called an "Aiming Device." This is nothing but a clip which passes around the rifle and stock just back of the rear sight, having a vertical standard carrying a little cage and a piece of smoked glass for a reflector. By means of the use of this device the coach lying alongside the recruit may secure a reflection of the sights and bull's-eye, and in that way is enabled to correct the recruit's holding and to make sure he is not flinching. .

We have also found one other point that has a very important bearing on good shooting, and that is the matter of the condition of the shooter's stomach and bowels. The stomach and nervous system are very closely related and any disorder of the former is quite likely to have its detrimental effect on the eyes. So a few days before a big match is coming off, try taking a good cathartic, then plug your ears, pad your shoulder, hang a few bandoleers of ammunition on any projecting portions of your anatomy, hike to the range, *call your shots and win.*

ENFIELD OFFICIALLY ADOPTED

(*Concluded from page* 146)

ammunition are concerned. This country has developed during the past three years great plants for the manufacture of high explosives, small-arms ammunition, and field-artillery ammunition of various types. This development has been so great that several of the belligerent nations have received the greater part of their supplies from us.

"Steps are being taken to provide for the additional quantities of field artillery necessary for modern battle conditions through the extension of plants already in operation for the Allies, and through the introduction and adaption of new plants that have not hitherto manufactured war material. The process will be slower than that of providing rifles, but this country has been noted for its machine tools, an industry which has been developed beyond that of any other nation, and this is proving a decided asset in these days of preparation of a great war and will help us to make good a shortage which is greater than it should be. The General Munitions Board is endeavoring to develop these various resources to the fullest capacity, in order that the country may be prepared for any developments of the military situation, no matter how serious they may prove.

"In order to secure the great quantities of artillery immediately necessary for the large armies that are to be raised, a certain number of guns of tried foreign types, but manufactured in the United States, will be introduced into our service. Satisfactory arrangements have been made to accomplish this. In the meantime the munitions plants are pushing forward their preparations for the manufacture in large quantities of the various types of mobile artillery that have been adopted for our own service. Among these types is the 3-inch light artillery gun, of which the latest model is said to be even superior to the famous French 75."

In its issue of April 28, ARMS AND THE MAN forecasted the likelihood of the United States manufacturing the Enfield. A week later Representative Tilson, of Vermont, went into the question when he spoke of the matter of small arms and ammunition. He declared that the United States had 800,000 of the 1903 model Springfield rifles on hand, making them at the rate of 200,000 a year on one eight-hour shift. If we should run our arsenals twenty-four hours a day with three shifts we could make 500,000 a year, he said.

The purpose back of Mr. Tilson's speech was to show the Government had been slow to provide the proper number of gauges, jigs and other tools, to enable it to turn out the Springfield rifle as quickly and in such numbers as would be needed in the event of war. This has made it necessary now for the Government to adopt the Enfield rifle.

RELATION OF THE EYES TO SHOOTING

(*Continued from page* 167)

the condition is mixed astigmatism. Is is, therefore, easily understood how, by stretching of the eyeball, a case of compound hyperopic astigmatism may change first to simple hyperopic, then to mixed and finally to compound myopic.

5. Anisometropia is a condition in which the refractive condition of the two eyes differ to a marked extent. The disadvantages will be mentioned under accommodation and binocular vision; the main one, however, is that binocular vision is prevented.

E. Accommodation. This is the power of changing the focus of the eye, by a change in curvature of the crystalline lens, in order that near objects may be seen clearly. For practical purposes we consider all points twenty feet or farther as in focus, and that accommodation is required, in the normal eye, only for objects closer than that. In order to accurately measure the accommodative power it is necessary first to *fully correct,* by proper lenses, any refractive error. A fine black line on a white background is then brought slowly toward the eye till it becomes blurred. This distance from the eye is measured and the relation it bears to one meter determines the amount of accommodation expressed in diopters. The strength of a lens in diopters is expressed inversely as the ratio of its focal distance to one meter—for instance, a focal distance of 1/10 meter equals ten diopters. So, if the line blurred at ten centimeters, the amount of accommodation would be expressed as ten diopters.

The following table shows the progressive diminution in range of accommodation at different ages:

Age in years..	15	20	25	30	35	40	45	50	55	60	64
Diopters	12	10	8.5	7	5.5	4.5	3.5	2.5	1.5	.5	0

It has been definitely established that only two-thirds of the accommodative power can be used continuously, which explains the fact that even a normal eye begins to have difficulty in reading between the fortieth and forty-fifth years. A far-sighted eye has trouble earlier in proportion to the degree of error; a near-sighted eye later, and when of the proper degree for reading will never have trouble, although distant vision, of course, is blurred.

As the range of accommodation decreases the ability to make a rapid change of focus also decreases, owing to the diminution of the elasticity of the crystalline lens. In aligning the sights on the bull's-eye such a shift of focus is necessary. In slow fire there is plenty of time to do this, but in rapid fire the change must be made rapidly. One has trouble with this class of shooting even before he reaches a stage where he becomes unable to focus the rear sight notch. This condition is called presbyopia (old-age sight), although in high degrees of hyperopia it would be reached at a comparatively early age, as can be seen from the above table. These points are of much importance in connection with enlistments. Suppose a man with five diopters of hyperopia enlisting at twenty-eight years of age. His distant and near vision will be normal, but at the age of thirty-one he would be unable to focus his rear sight notch, because it would require eight diopters accommodation and he has less than seven, and consequently he would be unable to

(*Continued on page* 172)

RELATION OF THE EYES TO SHOOTING

(*Continued from page* 170)

shoot. The only remedy for presbyopia is the use of a perforated disc through which to sight, preferably in the form of a rear sight close to the eye and therefore on the grip of the rifle. This obviates the necessity of aligning three points (target, front and rear sights), and in addition tends to increase the accuracy of aim by increasing the distance between sights.

The rapid shift of focus mentioned above frequently produces a condition called "spasm of accommodation." It is a cramp of the muscle by whose action the focal power is increased, and while it lasts the eye is highly myopic. This condition is shown by blurring and disappearance of the bull's-eye while sighting—"the target comes and goes," as the victim says. This rapid change of focus is more tiring than a more prolonged change as in reading, which explains the readiness with which hyperopes, even of low degree, accept correcting lenses for use while shooting, as they are thereby relieved of the strain of focusing the bull's-eye.

Accommodation in the various defractive errors:

1. Hyperopia. In this condition the accommodation is required, even to see distant objects; consequently the eye is never at rest except when closed, or when the accommodation is purposely relaxed.

2. Myopia. The accommodation is not required except within the far point, which is the farthest point at which a line can be seen clearly. Beyond this any action would only increase the myopia.

3. Astigmatism. It being impossible to focus unequally for different meridians, it becomes necessary to accommodate for the most useful ones. These are the ones that will increase the clearness of *vertical* lines, so that the letters, in reading, may be rendered more legible and so that the power of convergence of the two eyes necessary to binocular vision may be properly guided. At one time it was thought that astigmatics accommodated for a mean focus giving the smallest diffusion circles.

4. Anisometropia. Accommodation is a bilateral function and practically equal in both eyes, consequently it cannot correct images which are unequal in size and shape. Therefore, it acts where the best results will be secured with the least effort. If both eyes are hyperopic, the one with the lesser error will be used; if both are myopic, the better eye, for the particular distance, will be used, always remembering that it can act only inside the far point; if one eye is hyperopic (or emmetropic), the other myopic, there may be but little call on the accommodation, one being used for distance, the other near.

F. Size and Shape of Retinal Images.

1. In emmetropia the size may be taken as the standard and the shape is that of the object focused.

2. In hyperopia (a) when uncorrected the image is enlarged and blurred, as explained under diffusion circles, but there is no distortion of shape; (b) when corrected by accommodation the image is smaller, therefore the object appears farther away; (c) when corrected by glasses, which as a rule are in front of the anterior focus of the eye, the image is clear and enlarged, therefore the object appears nearer.

3. In myopia (a) when uncorrected the image is as in uncorrected hyperopia; (b) when corrected by glasses the image is smaller, therefore the object appears farther away.

4. In astigmatism the size of the image depends on the refractive error and the shape is always distorted. The image of a point is oval, the diameter of the long axis increasing with the amount of astigmatism until in high degrees a point is actually seen as a line. As explained under accommodation, as long as vertical lines can be seen clearly the vision remains fairly good. This is the case in astigmatism with the rule, while in that against the rule the blurring of the vertical lines causes a running together of the different letters forming a word. Oblique astigmatism even in low degree reduces vision by its twisting effect on lines.

Irradiation is another factor which appears to alter the size of the bull's-eye. A black bull's-eye on a white background appears smaller than a white bull's-eye of same size on a black background.

The size of retinal images and the estimation of distance are closely connected and the above facts show how the ability to estimate distance may be affected by refractive errors and their correcting lenses.

G. The Light Sense. A few remarks on this subject were made under "visual acuity," and the following are intended as explanatory:

The most practical method of determining the acuteness is by testing the visual acuity for pale letters on a white background. Bjerrum uses letters the brightness of which is one-twelfth weaker than that of the background and found the visual acuity for such letters to be one-third of that for dead black letters. Aubert found that the weakest light we can distinguish is that reflected from a piece of white paper illuminated by a candle, the observer being at a distance of from 200 to 250 meters.

The fovea centralis, which is the point on the retina of best visual acuity, is less acute than the surrounding retina to slight variations in light intensity, especially when the illumination is weak.

These facts explain the marked diminution in visual acuity when the illumination is weak and the effect is more noticeable when the vision is defective.

As the amount of light lessens the pupil enlarges and, as we have seen, this carries with it an increase in the blurring from spherical aberration and an increase in size of diffusion circles, thus forming a "vicious circle."

H. Color Sense. This account is condensed from the chapter on Color Perception in Tscherning's *Physiologic Optics.*

White and Black. It has been generally supposed that seeing black is equivalent to seeing nothing, but this is not so, it being a true sensation "corresponding to the state of repose of the visual organ. There exists in nature no completely blank object." The blackest paper reflects nearly 5 per cent of the incident light, while the whitest paper returns only 37 per cent. This has a practical application to our bull's-eye targets, as the bull's-eye is far from being the blackest paper, while the rest of the target is yellowish, consequently the percentages of reflected light approach each other closer than shown by the above figures. It follows that the bull's-eye and target merge with the weaker illumination, or, what is the same thing, a lower degree of reduced vision than if the contrast were more marked.

It has been determined that "if we lessen the intensity of the luminous source (or, what is the same thing, reduce the visual acuity, R. P. O'C.), the colors of the spectrum change hue. We first see the yellow and blue colors disappear; there remain only the red, green and violet, which take the place of the colors that have disappeared. On still further diminishing the brightness the blue changes into blue-gray, the green into green-gray, the red becomes brownish, and finally all the colors disappear and we see only gray. The red alone forms an exception; it does not seem to change into gray before disappearing. With a very feeble illumination red appears black." This paragraph is of great importance, as it explains the statements in regard to color vision made under heading of Visual Acuity. Experimenting with my own eyes, I found that a reduction of my vision to 20/80 was sufficient to cause a black bull's-eye (made with India ink) of the same visual angle as that of the 300-yard target to totally disappear by merging with a background much whiter than that of the target.

The visual acuity, therefore, has a great deal to do with color perception and consequently the ability to distinguish slight contrasts.

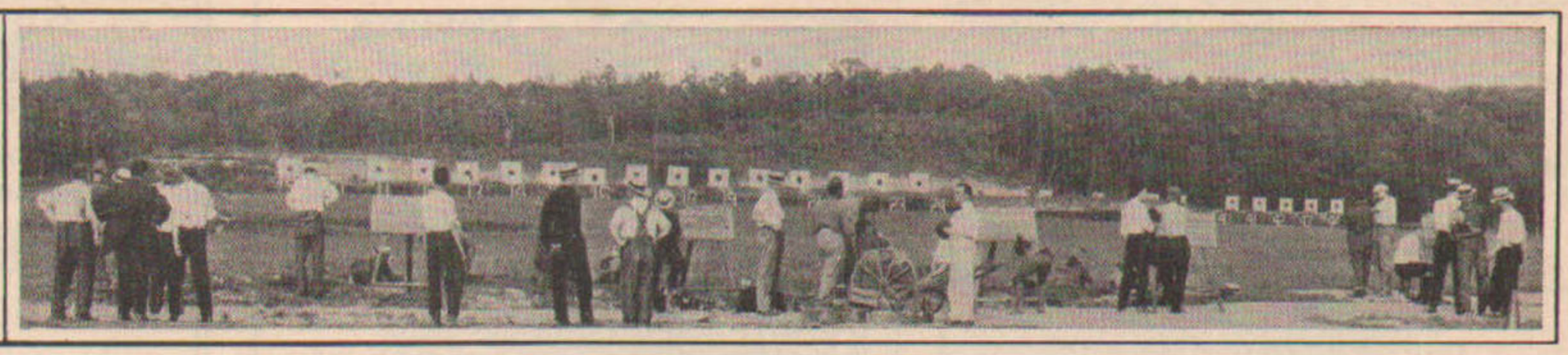
(*To be continued*)

A FINE SIGHT

Corporal (instructing awkward squad in rifle practice)—"I told you to take a fine sight, you dub; don't you know what a fine sight is?"

Rookie—"Sure, a boat full of corporals sinking."—*Judge.*

AT THE TARGETS!



Atlanta Club Wins Class F Prizes

THROUGH a strict interpretation of the rules governing the class winners in the recent Civilian Interclub Gallery competition, the Atlanta, Georgia, Rifle Club has been declared victor in Class F of that competition. This action displaces the Gunnison, Colorado, Rifle Club.

When the conditions of the gallery matches were published, it was announced that every club entering the competition, no matter in what class originally listed, had a chance of winning the competition, and a chance to win the prize in any class above the one in which it began shooting.

Following this ruling, the officials of the match made an error in awarding the Class F prize to Gunnison, Colorado, whose score of 9,530 placed that club 44th in the general list, but behind the Georgia outfit, whose total was 9,551, and whose place was 38th in the general list. The Georgia club started shooting in Class G.

The excess of the Atlanta club's score over that of the Main Line Rifle Club, of Berwyn, Pa., leaves the latter club winner in Class G.

D. of A. Clubs Stage Match

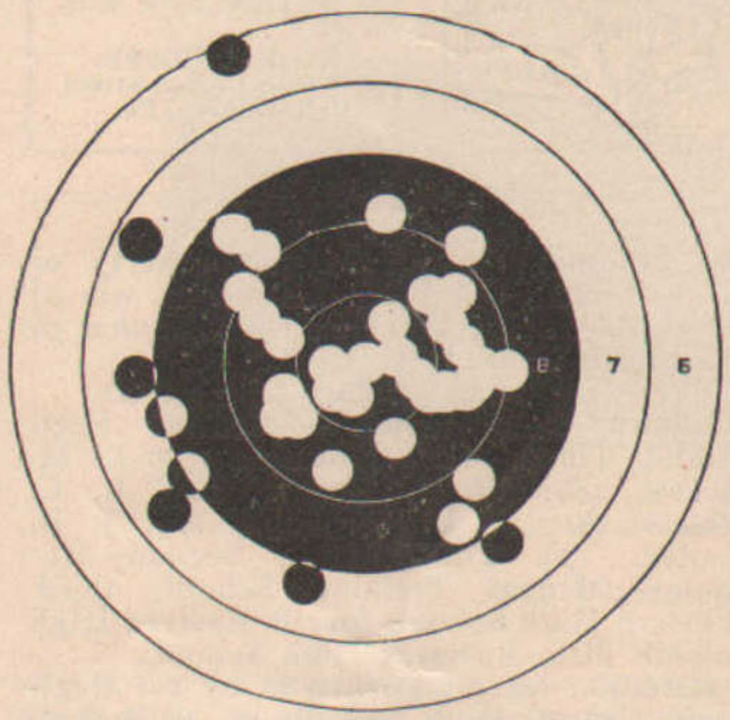
During the month of April the U. S. Department of Agriculture Rifle Club, of Washington, D. C., staged a very interesting slow-fire match on the 50-yard indoor range of the N. R. A. under the Eastern Market. Service rifles and service-charge ammunition were used, ten of the twelve bureau clubs composing the Department club being represented in the match by teams of five men each.

The course consisted of 10 shots per man, slow fire, in each of the four position—prone, kneeling, squatting and sitting. To test the mettle of the contestants, the customary 5-inch bull was discarded in favor of a decimal target consisting of a 1-inch bull counting 10 and half-inch rings running down from 9 to zero, the eight and nine rings as well as the bull being blackened for convenience in sighting. It should be noted that on this target it is entirely possible, in firing a string of ten shots, to get all of them "in the black" and still score only 80 out of a possible 100.

The prize, a star-gauged Springfield and appendages, was won by the Forest Service team, which turned in a total score of 1,618 points out of a possible 2,000, thereby defeating the Big Four team by a scant margin of only 3 points, the latter team coming through with a total of 1,615. Other team scores were:

Division of Publications	1,522
Office of Farm Management	1,500
Bureau of Soils	1,421
Secretary's Office	1,418
Bureau of Animal Industry	1,298
Bureau of Chemistry	1,239
Crop Estimates	1,154
Bureau of Plant Industry	1,094

The detailed scores of Forest Service and Big Four were:



Composite of Kiefer's Target

Forest Service

Name	Prone	Kneeling	Squating	Sitting	Individual and Team Totals
Kiefer, F.	91	89	95	86	361
Smith, C. L.	88	79	76	86	329
Reynolds, I. V.	86	78	83	81	328
Merrill, O. C.	88	70	66	85	309
Wheeler, B. L.	83	55	72	81	291
Position totals	436	371	392	419	1,618

Big Four

Knight, O. D.	96	82	87	87	352
Hood, J. D.	85	71	81	91	328
McDonnell, C. C.	90	74	81	83	328
Borden, N. H.	89	81	69	83	322
Roberts, J. N.	79	58	76	72	285
Position totals	439	366	394	416	1,615

Exceptionally creditable was the performance of Mr. Kiefer, of the Forest Service team, who was "high gun" among the 50 individual contestants, despite the fact that his experience with the service rifle covers a period of only two months. A "composite" of the 40 shots fired by Mr. Kiefer in the match is interesting.

Under normal shooting conditions, and among A-1 riflemen, this score might not attract unusual attention. In view of the special conditions, however, I feel that it is almost phenomenal. Hence it seems worthy of publication, but the special conditions should be clearly explained:

It was shot with full charges, and with military peep sight, from a Springfield 1906, and in four positions.

It was shot indoors, by artificial light, and there was a light burning behind the shooter.

Previous to February, 1917, Mr. Kiefer had never fired a military rifle. He qualified as a marksman on March 17, 1917. This was his first score fired in competition.

Individual scores in excess of 300 out of a possible 400, other than those already shown for Forest Service and Big Four, were:

E. D. Strait, Office of Farm Management	338
W. L. Goss, Bureau of Plant Industry	329
Chas. Fryer, Division of Publications	327
A. A. Ruark, Office of Farm Management	325
M. R. Cooper, Office of Farm Management	319
A. Ludwig, Division of Publications	318
J. R. Williams, Office of Secretary	318
H. D. Ruddiman, Bureau of Crop Estimates	314
J. H. Stevenson, Division of Publications	314
J. A. McLaughlin, Bureau of Chemistry	306
A. McC. Ashley, Secretary's Office	303
E. G. Speakman, Bureau of Crop Estimates	302

It is the intention of the club to arrange another match in the near future.—R. V. R.

Poor Conditions Mar Shoot.

Despite the poor light and the inclement weather prevailing, which greatly handicapped the riflemen, excellent scores were recorded in the University Rifle Club's open shoot over the club's Black Bear range near Philadelphia a few days ago. Horace W. Barr, of Springmont, carried off the honors, winning the "Old Glory" trophy, with Robert M. Tyack, of Reading, tied with E. L. White, of Bethlehem, for the runner-up honors. The scores follow:

Ten shots, 500 yards, slow fire, and 10 shots, 300 yards, rapid fire. Possible 100.

	500 Yds. S. F.	300 Yds. R. F.	T'l
Horace W. Barr	44	44	88
E. L. White	44	41	85
Robert M. Tyack	41	44	85
Dr. Charles R. Essick	42	41	83
William O'Gorman	40	43	83
Fred A. Muhlenberg	40	42	82
Lewis J. Heizmann	41	41	82
J. E. Dalton	41	41	82
J. L. Conway	39	43	82
Oliver J. Lentz	41	41	82
H. Scott Rapp	41	41	82
E. L. West	40	41	81
E. Carroll Schaeffer	39	49	79
Dr. C. L. Kaucher	38	40	78
E. L. Anthony	34	41	75
Walter S. Essick	41	32	73
Mayor Edward H. Filbert	38	26	64
Clyde Van Reed	27	36	63
Charles H. Muhlenberg	28	33	61
Edward A. Quier	31	28	59
Arthur E. Turner	24	18	42
Allen J. Turner	25	14	39

Schuetzen Corps on Range

The New York Central Schuetzen Corps held its first practice shoot of the season at Union Hill, April 15th. The following results were obtained:

On the ring target, out of a possible 75 in 3 shots: H. D. Muller, 73; J. E. Huels, 73; C. A. Schrag, 71; L. Ihrig, 69; D. Blanke, 68; D. Schaminghausen, 66; A. Waltenberg, 66; H. Bucholz, 66; J. v. d. Lieth, 65; P. Pretzell, 63; W. Thealkin, 63; F. Sullan, 59; G. Dettloff, 59; C. Bensen, 58; G. Bartels, 53; P. Thiele, 50; H. Backmann, 44.

On the man target, 3 shots; possible, 60: P. Pretzell, 60; L. Ihrig, 59; H. D. Muller, 58; C. A. Schrag, 56; D. Schaminghausen, 56; J. E. Huels, 55; G. D. Dettloff, 54; A. Waltenberg, 53; G. Bartels, 53; J. v. d. Leith, 52; H. Buchholz, 51; D. Blanke, 51; W. Thealking, 43; H. Backmann, 43; F. Sullan, 36; P. Thiele, 20; C. Bensen, 19. Point target: H. D. Muller, 36; C. A. Schrag, 30; L. Ihrig, 29; D. Blanke, 28; A. Waltenberg, 25; D. Scham-

inghausen, 23; H. Buchholz, 22; J. Huels, 21; F. Sullan, 20; P. Pretzell, 15; J. v. d. Leith, 15; C. Bensen, 18; W. Thealking, 13; P. Thiele, 12. Best bull's-eyes: C. A. Schrag, 27; H. D. Muller, 14; L. Ihrig, 8; D. Blanke, 7; J. E. Huels, 4; A. Waltenberg, 4; H. Buchholz, 4; C. Bensen, 2; D. Schaminghausen, 2; F. Sullan, 2.

RICOCHETS

The Crane Technical High School Rifle Club, of Chicago, formally opened the outdoor season at Fort Sheridan, Ill., about 10 days ago. Only a few of the members were present, but those that were there made some very high scores. Vance Williams, connected with the Canadian Government, was a guest. At the 200-yard target B, slow fire, he scored 90 out of a possible 100. He made a "possible" in sitting position (rapid fire). A member of the club, Walter Gordon, has qualified on the sharpshooters' course with 82 slow fire and 78 on the skirmish fire. Albert Gloss also qualified as a sharpshooter with a score of 80 slow fire and 71 skirmish fire. Bernard B. Bulawa shot the expert course as prescribed in the navy regulations of 1917, with a total score of 179. He also did some freak shooting, shooting the skirmish fire, starting with the 500-yard line and finishing at the 200-yard line with the rifle on target B. Then with an officer's model, 6-inch barrel pistol, every 50 yards, from 200 down to 50 yards, 6 shots at each stop, using target A, 24 shots, he got 6 bull's-eyes, 16 fours and 2 threes. The Crane Technical High School Rifle Club wishes to compete with any of the rifle clubs on the indoor range. For details write to Bernard B. Bulawa, 1143 North Winchester Avenue, Chicago.

The Washington High School annual matches were recently shot on the Poli Range, Washington, D. C., and the Winthrop, Md., Rifle Range. The indoor match was shot May 5, and the outdoor events May 12. Riflemen from the Central High School were winners in both events.

The results of the outdoor match are: School team match (Du Pont cup)—Won by Central (W. R. Stokes, 134; R. C. Stokes, 132; W. C. Harrison, 127; J. E. Stansfield, 126; R. M. Morris, 122; P. T. Williams, 119; F. J. Harbaugh, 113; S. Houston, 113. Aggregate, 990); second, McKinley, 961; third, Eastern; fourth, Business.

Club team match (N. R. A. cup)—Won by Central (W. R. Stokes, 135; W. C. Harrison, 133; R. M. Norris, 126; R. C. Stokes, 119. Aggregate, 513.); second, McKinley, 506, third, Eastern; fourth, Business.

Company team match (Hibbs cup)—Won by Company B, First regiment, Central (W. C. Harrison, 125; R. C. Stokes, 125; W. R. Stokes, 124; R. M. Norris, 121. Aggregate, 495.); second, Company F, First regiment, Eastern, 489; third, Company B, Second regiment, McKinley, 459. (The Hibbs cup becomes the permanent property of Company B, First regiment, this being its third win of the trophy.)

High school cadet company rifle championship final—Won by Company B, First regiment, Central (W. R. Stokes, 185; R. C. Stokes, 179; S. Houston, 156; W. C. Harrison, 153; R. M. Norris, 127. Aggregate, 800.); second, Company B, Second regiment, McKinley, 737.

Individual championship (Gibson cup)—Won by W. R. Stokes (Central), 269; second, W. C. Harrison (Central), 260; third, C. F. Chisholm (Eastern), 255; fourth, J. G. Buyler (McKinley), 254. (The Gibson cup becomes the permanent property of W. R. Stokes, this being his second win of the trophy. Harrison gets the Chamber of Commerce medal.)

The scores in the gallery match were:

School team match — Central High School, winner—Sam Houston, 190; R. M. Morris, 186; W. R. Stokes, 185; R. C. Stokes, 181; F. J. Harbaugh, 179; J. B. Cooley, 170. Total, 1,091. Second—McKinley Manual Training School; third, Western High School; fourth, Eastern High School; fifth, Business High School.

Battalion team match, won by 1st Regiment, Central High School; W. R. Stokes, 187; F. J. Harbaugh, 182; R. M. Morris, 181; Sam Houston, 179, and R. C. Stokes, 171. Total, 900. Second—1st Battalion, Second regiment, McKinley Manual Training School; third, Second Battalion, First regiment, Eastern High School; fourth, Second battalion, Second regiment, McKinley Manual Training School; fifth, Third battalion, Second regiment, Business High School.

Company team match, won by Company B, First regiment, Central High School; W. R. Stokes, 187; R. S. Stokes, 182; R. M. Morris, 170, and Sam Houston, 166. Total, 705. Second—Company B, Second regiment, McKinley Manual Training School; third, second team, Company B, First regiment, Central High School; fourth, fifth and sixth, Companies G. I. and E, Second regiment, Business High School.

Col. M. A. Winter medal for high individual score won by Sam Houston, Central High School. Officials — Col. Thomas King, D. C. N. G., executive officer; S. E. Cramer, Henry Burroughs, Charles E. Schwartz, Arthur D. Fulton and J. M. Finkel, range officers. Judge, O. M. Schriver, gunnery sergeant, U. S. M. C.

The San Juan, Porto Rico, Rifle Club has reported the folloging qualifications under the old course:

Experts: H. V. Latham, 224; A. B. Crosas, 217; W. J. Russell, 211.

Sharpshooters: P. L. Hagen, 195; J. C. Spear, 193; A. L. Pratchett, 190.

Marksmen: J. A. Rose, 188; Dr. L. C. Babcock, 184; A. Moscioni, 170; E. A. Seefeldt, 166.

Two expert qualifications have been reported by the Porto Rico Rifle Club under the old course. They are C. Mercado, 214 and R. Alers, 213.

The Kanawha, Iowa, Rifle Club has reported eight marksmen qualifications under the new course as follows:

Geo. Brummund, 153; Andy Foster, 165; Han Nielson, 150; Gene Wright, 154; A. Gracson, 154; H. B. Stotts, 150; B. Diebler, 151; Roy Aldrich, 151.

GOODNESS, YES, OSWALD. WE'RE PREPARED

When we think of the terror which some folks express
That the Germans could capture Spokane,
It moves us to laughter—the city has means
Which would block the Germanic plan—
Why, sure!
And, to reassure those who are nervous o' nights—
Though our comfort is mingled with pity—
We draw your attention to this simple fact:
No shooting's allowed in the city.

And they say that a bomb may be planted one night
And the waterworks scattered to glory;
But the folks who think thus make a premature fuss,
For they're reading just half of the story—
Gee whiz!
Don't they know there's a law in the city's new code
Just expressly designed to prohibit
The unwarranted noise which a bombshell would make?
There's an ordinance passed to forbid it.

And we weep for the folks who imagine the Zeps
Would drop bombs on our buildings to wreck 'em;
How foolish these fears when we realize that
The city has measures to check 'em—
My, yes!
Don't they know we've some laws which would checkmate the Teuts,
If they ever got ready to test 'em?
If they muss up the streets with their dirty ol' bombs—
Why, the health office sleuths would arrest 'em!

—*Spokane Chronicle.*

Off Hand From the Clubs

First Aid For the "Jaw Pounder" Rifle

I AM sending to your compendium of scores and other misinformation a photograph of a valuable aid to health and comfort in connection with that countenance-alterer, the New Springfield. The fact that said valuable aid is shown crouched on the bally British rifle does not alter the fact.

The comb or portion of the Springfield stock against which the face is supposed to rest is not more than an inch or so too low, unless one is shooting 1,000 yards, when it is an inch and a half. The net result of this close approximation to a correct shape of stock is that many gents, particularly those of lantern-jaw style of facial beauty, and those who are more than usually handsome—in one of the two classes mentioned I belong—get pounded in the jaw by the low comb, and even if not pounded, never get the comfy cuddly sense that attends pressing the face against a comb that is high enough and built by somebody with more knowledge of rifles than a Government ordnance expert.

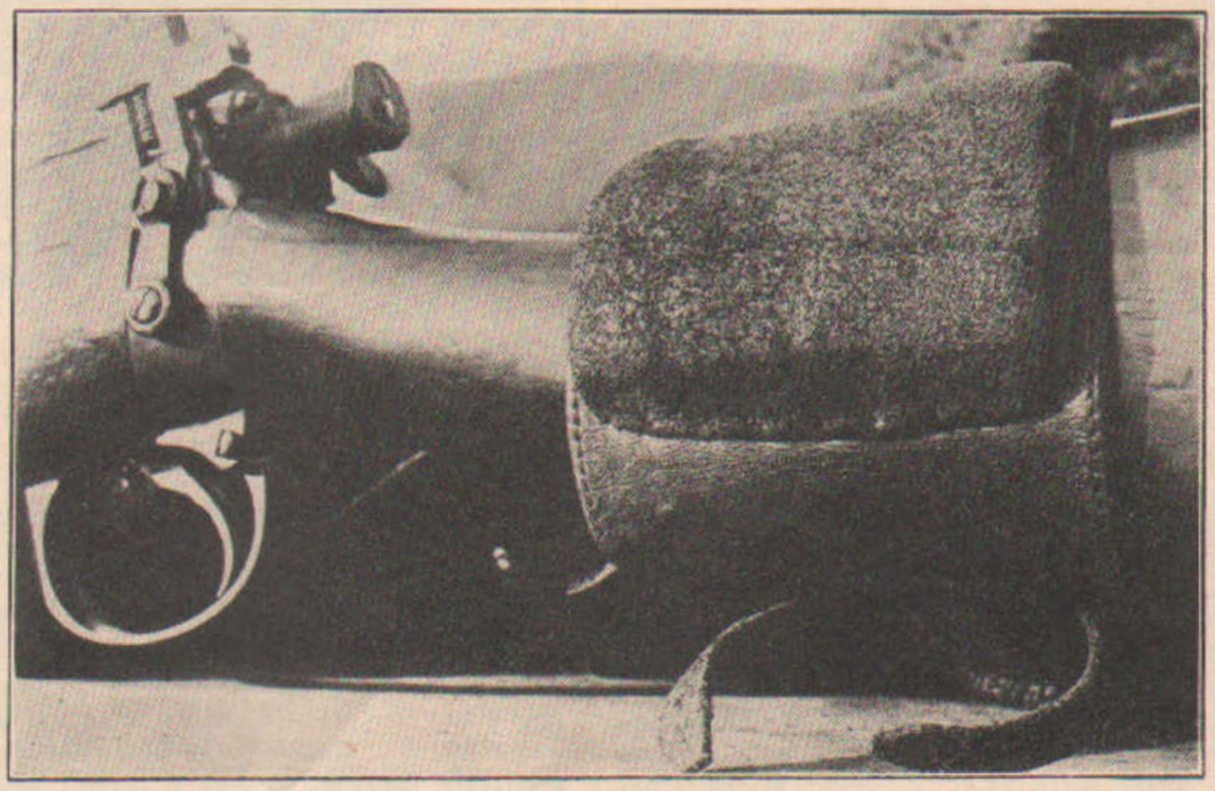
For several years I have been using on the service rifle a pad to raise the comb, and to prevent pounding a jaw already out of proportion from the thickened tissue that comes from constant pounding. If other shooting gents are so troubled, let them go to a person who works in leathers and get a pad made, the foundation being a piece of good solid leather, not so heavy as sole leather, of course, 7 inches long and 3½ inches wide. On this is built a pad made of chamois skin over about three thicknesses of white felt that looks to be about ¼ inch wide when not compressed, the finished pad being a half to three quarters of an inch thick. It is around 3 inches square.

My own is 3½ inches long—which length runs across the strip of foundation leather—by 3 inches wide.

At one end of the 7-inch strip of leather are sewed a pair of little straps, one at each corner; at the other end is a pair of buckles, set back from the edge an inch or so, to allow the ends of the leather strip to overlap.

The little device is well worth its cost in comfort and prevention of the pounding so many men get. Of course, in the officially blessed and sealed matches of the War Department, which permit only the God-given and inspired rifle "as zissued," one cannot use his pad, but the absence is easily compensated by a temporary rigging of white felt strip and surgeon's tape, if one's jaw is tender, and the victim comes to the scratch with his countenance fresh and unbanged for the ordeal, by the use of the pad in his practice and previous matches. As any logical person knows, the use of this pad in a War Department match would not do at all, at all, but inasmuch as the facial department is yet out of their control, one can place the pad on the "mug," and not be guilty of a violtion of the rules, or *lese majeste,* or any other particular crime.

EDWARD C. CROSSMAN.



The Crossman "Jaw Protector."

Wants New Members' Medal

Concerning the ruling which forbids the winning of a member's match medal more than once by any individual, Steve A. Glassel, of the Beverly Hills, California, Rifle Club, writes:

"Would it not be a good idea to sustain the interest and fire the ambition of these former medal winners to give a simple bar of bronze to any who is skilful enough to make the highest score at one of these matches, and permit the medal to go to the winner as determined under present conditions—something which could be attached to the medal previously won? The bar might be made black for a score below 140 and bright for one above that, with the year stamped on it.

"This would not in any way interfere with the tyro winning his decoration, as the highest score of the non-medal holders would be taken just the same.

"A man might win his medal during the first year by a miserable score and forever afterward be ashamed to show it, for fear some inspired individual would question him as to the number of points which won it; but if that bronze morning star were suspended from a bright bar or two, the owner needs no alibi."

Sighting Shots

Members of the Littleton, Massachusetts. Rifle Club are contemplating the formation of an auxiliary to be at the call of the town police in case of emergency.

As soon as President Wilson's war message was published, the student body of the Hampden-Sidney College, in Virginia, almost to a man voluntarily bound itself to take consistent military training, actuated by a desire to prepare for active service. A cadet officer from the Virginia Polytechnic Institute has been placed in charge of the training.

The Home Guard of Pass Christian, Miss., has taken the obvious way to effect a permanent organization—they are organizing a rifle club.

The Medford National Rifle Association of Portland, Oregon, is arranging to give its members military instruction.

Lieutenant T. G. Samworth, who is well known in rifle-shooting circles, has been named N. R. A. State Secretary for Delaware.

The resignation of Captain R. H. Fleet as N. R. A. State Secretary of Washington has been accepted. The Adjutant General of the State nominated Captain Fred V. Berger, of Seattle, to succeed Captain Fleet.

A rifle club has been organized among the residents of Ewa, Hawaii. The entire membership voted for an armament of Springfield rifles and the club has a range which is nearing completion.

With the arrival of a dozen Krag rifles from the Springfield Armory, the Holyoke, Massachusetts, Rifle Club is now prepared to push plans for an active outdoor season as soon as weather conditions permit. A supply of ammunition is expected within a short time. Those promoting the club are also planning to organize a revolver club auxiliary to the rifle club, and have already received a number of applications for membership.

The club may be able to secure space for an indoor rifle and revolver range in the Y. M. C. A. Building and several sites are under consideration for the establishment of outdoor ranges. The club members have already had a practice session in Westfield as the guests of the Westfield Rifle Club and the form displayed at that time indicates that the local club is certain to take rank with the best as soon as the members have a chance to practise regularly.

Members of the Polish Sharpshooters' Club of Milwaukee has resumed outdoor practice, so that, if later deemed advisable, the organization as a whole will be in shooting trim to tender its services to the Government.

The club has been in existence ten years and has taken part in a large number of rifle contests. The object of the organization is to perfect young men in military drill and in the use of the rifle, although for the past few years the military drill has given place wholly to range work. The members use the Krag rifle, the arm of the Regular Army for several years, and the new Springfield, the present Army rifle.

"The Polish Sharpshooters' Club is one of the best organizations of its kind in Wisconsin," said Frank Grutza, secretary. "It has a membership of 120 men who are desirous of perfecting themselves in military work, particularly in rifle shooting. Of the members, about eighty are between 19 and 25. Some are members of the Polish companies in the National Guard, and find the range of the club an excellent place to keep up their standing in shooting. When trouble broke out on the

Mexican border, about twenty enlisted in the National Guard, and they found that the training they had received as members of the club helped them materially in the organized troops. I have no doubt in event of war and call for volunteers the entire membership of the Polish Sharpshooters' Club will offer its services to the nation.

"There are about fifty additional Polish sharpshooters in Milwaukee who have picked up their qualifications in various ways, but who are not members of the Polish Sharpshooters' Club," says Mr. Grutza.

"My company has some of the best shots in the city," said Capt. Stanley Piasecki, of Company K. "We spent two weeks on the range at Leon Springs, Tex., a rifle range for the Regular Army. Every man in the company can hit an object within 600 yards. I have 118 men in the company and out of that number have twenty-five sharpshooters and ten expert riflemen."

Range work is in charge of K. Borucki, former member of Company K, Wisconsin National Guard, who took part in many competitions on the state range at Camp Douglas and elsewhere, and has several medals for his marksmanship. The president of the club is Leo Chroscicki; vice-president, Albert Smukowski; secretary, F. Grutza, and treasurer, M. Skibinski.

A committee will make a report at the next meeting relative to rifle work for the coming season.

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

CIVILIAN CLUBS

Maryland

Eleventh Ward Rifle Club of Baltimore—Willis R. Jones, secretary; S. D. Thomas, president; William Milnes, vice-president; Frank Ramey, treasurer; Joseph D. Noonan, executive officer. Membership, 23.

St. Mary's Industrial Senior Rifle Club, Baltimore — Brother Aiden, secretary; Brother Paul, president; Brother Raymond, treasurer; Brother Matthias, executive officer. Membership, 134.

Massachusetts

Aberthaw Rifle Club, Boston—S. A. Phelan, secretary; E. B. Germain, president; M. C. Tuttle, vice-president; F. E. Bovers, treasurer, C. E. Patch, executive officer. Membership, 46.

Boston Plate & Window Glass Co. Rifle Club—Alexander Allen, secretary; Chester A. Collins, president; Walter McKinley, vice-president; Matthew V. Callahan, treasurer; William Robinson, executive officer. Membership, 16.

Campello Rifle Club—Donald M. Keith, secretary; William L. Merrill, president; Frank S. Farnum, vice-president; Frank E. Cobb, treasurer; Eldon B. Keith, executive officer. Membership, 40.

The Hopedale Rifle Club—Theodore H. Sheldon, secretary; Cranston S. Thayer, president; Asa A. Westcott, vice-president; Edward A. Darling, treasurer; Walter F. Roper, executive officer. Membership, 53.

Mattapoisett Rifle Club—Harry W. Griffin, secretary; Rev. C. Julian Tuthill, president; Asa Hoxie, vice-president; M. R. Tuttle, treasurer; Edwin A. Walsh, executive officer. Membership, 26.

Minnesota

Windom Rifle Club—S. A. Brown, secretary; H. B. Levering, president; Charles Vold, vice-president; C. M. Hanson, treasurer; Tom Jenness, executive officer. Membership, 80.

Nevada

The Verdi Rifle Club—C. E. Shand, secretary; C. R. Sprague, president; C. P. Stoffal, vice-president; E. T. Bruhus, treasurer; J. H. Bruhus, executive officer. Membership, 40.

New Jersey

Chatham Rifle Club—W. Rolland Kelley, secretary; Harry DeB. Page, president; Herbert M. Dawley, vice-president; Rufus Keisler, Jr., treasurer; Lawrence S. Page, executive officer. Membership, 11.

Cresskill Rifle Club—L. W. Robinson, secretary; L. E. Clark, president; W. F. Crook, vice-president; C. K. Godfrey, treasurer; F. W. Schaaf, executive officer. Membership, 23.

Netherwood Rifle Club, Plainfield—W. B. Gresham; secretary; H. B. Wier, president; A. W. Drake, vice-president; W. R. Townsend, treasurer; A. F. Nathan, executive officer. Membership, 30.

Alabama

Dothan Rifle Club—J. D. Campbell, secretary; R. E. Cannady, president; A. J. May, vice-president; R. L. Cox, treasurer; J. W. Sanders, executive officer. Membership, 125.

Robertsdale Rifle Club—C. M. Seever, secretary; George A. Strong, president; George A. Nimmo, vice-president J. W. Randall, treasurer; W. J. Etherridge, executive officer. Membership, 63.

Arizona

Central Rifle Club—Luther Ferguson, secretary; M. P. Ferguson, president; Noah Ferguson, vice-president; Millard Fyffe, treasurer; R. P. Jones, executive officer. Membership, 23.

Christmas Rifle Club—D. S. Roome, secretary; H. Douglas, president; F. J. Hart, vice-president; S. H. Sherman, treasurer; George Bardwell, executive officer. Membership, 36.

Holbrook Rifle Club—D. L. Bundy, secretary; Chas. Osbourne, president; Charles P. Coolly, vice-president; J. M. Patterson, treasurer; Leo H. Mickey, executive officer. Membership, 53.

Winkelman Rifle Club—L. L. Johnson, secretary; S. H. Snider, president; G. L. Young, vice-president; John C. Preston, treasurer; Ed. M. Hamilton, executive officer. Membership, 60.

Arkansas

Brown Home Rifle Club, Camden—M. E. Fahy, secretary; W. W. Brown, president; D. V. Snow, vice-president; Louis Bauerlein, treasurer; A. B. Moore, executive officer. Membership, 162.

El Dorado Rifle Club—Clarence A. Bull, secretary; Kenneth H. Hanger, president; I. Fred Vautouse, vice-president; Wilson W. Russell, treasurer; William S. Sloane, executive officer. Membership, 61.

Magnolia Rifle Club—W. O. Williamson, secretary; W. R. Cross, president; A. S. Killyore, vice-president; W. H. Warrnock, treasurer; A. A. Reid, executive officer. Membership, 184.

Nashville Rifle Club—J. N. Power, secretary; M. A. Beaver, president; W. P. Williams, vice-president; Mike Pope, treasurer; E. A. Williams, executive officer. Membership, 138.

California

Hollywood Rifle Club—Ralph Long, secretary; Geo. L. Eastman, president; James B. Irsfeld, vice-president; John P. Roberts, treasurer; C. E. Toberman, executive officer. Membership, 18.

New Mexico

The Roy Rifle Club—Wolcott L. Russell, secretary; Claude L. Wensell, president; Fred S. Brown, vice-president; C. L. Justice, treasurer; E. P. Brown, executive officer. Membership, 21.

Ohio

Twenty-Sixth Maccabee Rifle Club, Columbus—E. O. Ranck, secretary; George W. Bryan, president; W. Leslie Henthorne, vice-president; Carl Moline, treasurer; Otis W. Wolf, executive officer. Membership, 34.

Oregon

Sumpter National Rifle Club—H. E. Hendryx, secretary; I. E. Jones, president; R. W. Derby, vice-president; C. C. Basche, treasurer; J. W. L. Kaufman, executive officer. Membership, 66.

South Dakota

Naples Rifle Club—Robert W. Johnston, secretary; C. H. Smith, president; M. Doan, vice-president; W. P. Peterson, treasurer; John Beath, executive officer. Membership, 16.

Texas

The Buffalo Rifle Club—V. E. Jawens, secretary; R. W. Stevens, president; W. F. Cunningham, vice-president; R. E. Burroughs, treasurer; T. A. Cochran, executive officer. Membership, 65.

The Dime Box Rifle Club—J. T. Carlisle, secretary; A. E. Karcher, president; V. Baker, Sr., vice-president; G. G. Kaiser, treasurer; Joe H. Nelle, executive officer. Membership, 84.

Grandfalls Rifle Club—A. J. Adcock, secretary; Dr. W. E. Baker, president; John T. Sweatt, vice-president; A. D. Cummins, treasurer; Jack Sweatt, executive officer. Membership, 45.

San Marcos Rifle Club—Merton Swift, secretary; Ashley F. Wilson, president; Frank Bradley, vice-president; T. G. Oliver, treasurer; R. E. McKie, executive officer. Membership, 110.

Utah

The Elwood Rifle Club, Tremonton—J. H. Reese, secretary; David Peterson, president; J. M. Mortensen, vice-president; M. O. Christeman, treasurer; William Bowman, executive officer. Membership, 31.

Washington

Tacoma Home Guard Rifle Club—Dudley Eskelman, secretary; Eugene T. Wilson, president; Major C. O. Bates, vice-president; W. P. Bonny, treasurer; S. R. Fraser, executive officer. Membership, 279.

SCHOOL CLUBS

Maryland

St. Mary's Industrial School Rifle Club, Baltimore — Brother Aiden, secretary, Brother Paul, president; Brother Raymond, treasurer; Brother Matthias, captain. Membership, 126.

Nevada

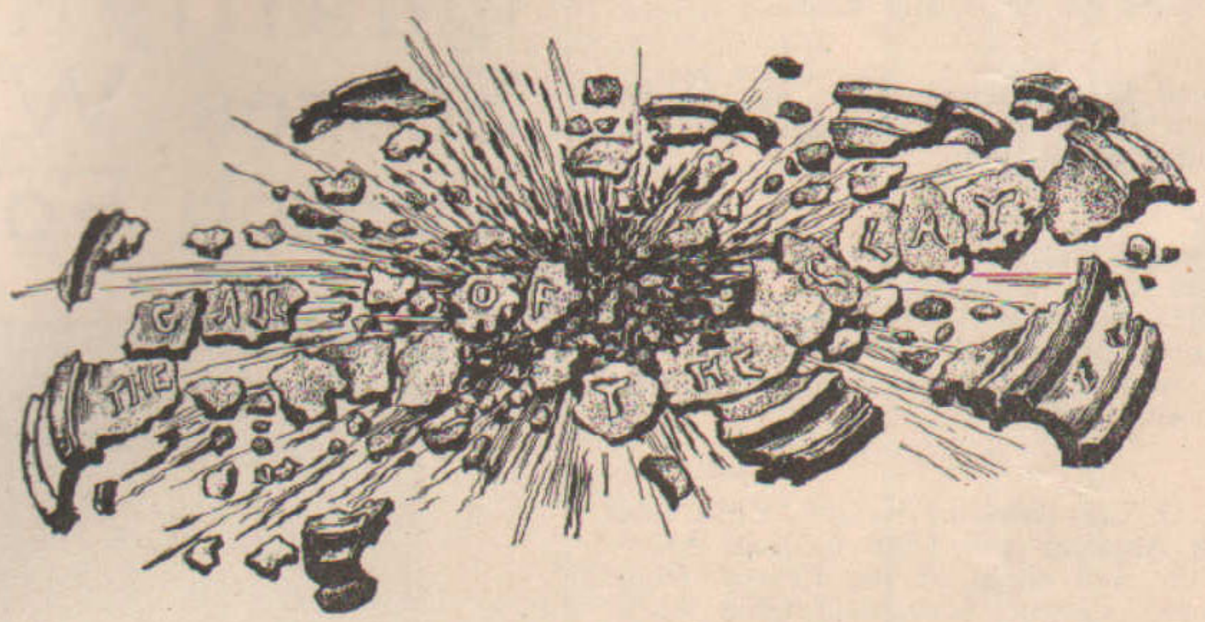
Winnemucca High School Rifle Club—Dave Espey, secretary; Cecil Callahan, president; Harold Haviland, treasurer; Cledith Townsend, captain. Membership, 31.

STATE ASSOCIATION

Connecticut State Rifle Association—Fred S. Allgrunn, secretary; Edgar J. Taylor, president; J. Francis Calef, vice-president; Fred H. Ganug, treasurer.

LIFE MEMBER

W. N. G. Clark, West Medway, Mass.



Long Runs are Proof that Trapshooters are Improving

Nearly 7000 Scores of 50 or Better Made in Past Two Years, 480 of Which Number Were 100 or Better

WITH the overwhelming increase in the number of trapshooters each year individual averages also improve.

This statement is borne out by the statistics of long run records kept by the duPont Company beginning in 1915 when that company inaugurated its long run trophy proposition for tournaments registered with the Interstate Association. This plan is being continued this year with a few minor changes.

For long runs in 1915 and 1916, the duPont Company gave out 116 watches, 1686 watch fobs and 4947 bars. Eighty of the watches were won by amateurs and 36 by professionals. 77 shooters each received one watch; 7 others received two; seven more got three, and one shooter—Art Killam, of St. Louis—won four watches.

During these two years, 1682 scores of between 50 and 74 were made; 4468 scores between 75 and 99 and 479 scores of 100 or better, some of them running more than 200. In 1915, 929 runs between 50 and 74 were made and in 1916, 759. In 1915 1667 runs between 75 and 99 were made and 2801 in 1916. During this year 195 runs of 100 or better were tallied and 285 in 1916—which gives us the grand total of 2791 runs of 50 or better in 1915 and 3845 of 50 or better in 1916, or 6635 runs of 50 or better in two years.

The best previous records obtainable show that 107 runs of 100 or better were made in 1911; 115 in 1912; 135 in 1913, and 128 in 1914. Previous to 1914 no record was kept on the runs below 100. In 1914, 429 shooters compiled 1142 scores of 50 or better and 905 shooters compiled the marks of 50 or better in 1915.

During the operation of long run trophy plan in 1917, a watch fob will be awarded to amateur and professional trapshooters for their first straight run of 50 targets or over. For each additional run of 50 or over the shooter will receive a bar for attachment to his fob. When an amateur has made 15 runs of 50 straight or better, he is awarded a 17-jeweled watch. A professional is required to make 25 long runs in order to win one of these trophies.

As soon as a shooter has made a sufficient number of runs to win a watch, he may start competing for another. It should be understood, however, that the long run trophy winner has the privilege of taking merchandise to the value of $30 instead of the second or third watch which he may win.

During 1917 instead of awarding the shooter a second long run trophy fob for his sixteenth run, he will be given a pair of cuff links. Should he make a sufficient number of long runs to entitle him to a third fob, he will be sent a scarf pin instead of another fob. A bar will also be sent to the shooter in addition to the cuff links or scarf pin for attachment to his first fob. If a shooter won one or more fobs during 1915 and 1916, he will not be awarded another one in 1917. Cuff links will be sent him instead of the first fob he wins and a scarf pin in lieu of the second. This ruling applies to amateurs and professionals alike.

Here are the names of trapshooters who won "long run" watches in 1915 and 1916:

One watch—A. H. Ammann, Peotone, Ill.; W. A. Anderson, Sleepy Eye, Minn.; Neaf Apgar, Plainfield, N. J.; Peter Baggerman, St. Louis, Mo.; E. L. Bartlett, Baltimore, Md.; W. Behm, Easterly, Pa.; J. W. Bell, St. Louis, Mo.; F. G. Bills, Chicago, Ill.; J. S. Boa, Montreal, Can.; H. R. Bonser, Cincinnati, O.; R. H. Bruns, Brookville, Ind.; A. C. Buckles, Lake Fork, Ill.; Paul Burger, Catawissa, Pa.; J. E. Cain, Dayton, O.; J. I. Chipley, Greenwood, S. C.; C. D. Coburn, Mechanicsburg, O.; A. V. Cocke, Welling, Tex.; W. E. Corfield, Utica, N. Y.; J. E. Dickey, Minneapolis, Minn.; J. H. Donnelly, Guthrie, Okla.; C. B. Eaton, Fayette, Mo.; G. N. Fish, Lyndonville, N. Y.; A. G. Flickinger, Vallejo, Cal.; G. H. Ford, Indianapolis, Ind.; O. N. Ford, San Jose, Cal.; S. S. Foster, Mason City, Ia.; O. C. Funderburk, Detroit, Mich.; Ira Gailbraith, West Frankfort, Ill.; Sim Glover, Rochester, N. Y.; W. E. Graham, Coles, Ill.; D. D. Gross, Kansas City, Mo.; R. A. Hall, Fisherville, Va.; Fred Harlow, Newark, O.; J. W. Hart, Dresdon, Ont.; Allen Heil, Allentown, Pa.; Ed. Hellyer, Alexandria, Pa.; H. C. Hirschy, Minneapolis, Minn.; D. J. Holland, Springfield, Mo.; W. S. Hoon, Jewell, Ia.; M. S. Hootman, Hicksville, O.; Walter Huff, Macon, Ga.; S. A. Huntley, Chicago, Ill.; K. Y. Johnson, Kenton, O.; J. Kautzky, Fort Dodge, Ia.; A. V. King, Toms River, N. J.; R. A. King, Delta, Colo.; Max Kneusel, Ottawa, Ill.; F. C. Koch, Phillipsburg, O.; Al. Koyen, Freemont, Neb.; C. O. Le Compte, Asheville, N. C.; Barton Lewis, Auburn, Ill.; F. B. Lofland, Plymouth, O.; F. W. McNair, Houston, Tex.; T. A. Marshall, Evanston, Ill.; George Maxwell, Hastings, Nebr.; F. H. Mellus, Los Angeles, Cal.; J. H. Noel, Nashville, Tenn.; C. H. Peck, Remington, Ind.; H. Pfirrmann, Jr., Los Angeles, Cal.; R. E. Probert, Claypool, Ind.; F. C. Reihl, Tacoma, Wash.; W. D. Runnells, Staunton, Va.; H. B. Shoop, Harrisburg, Pa.; G. R. Shuck, Kempton, Ind.; F. S. Sidebotham, Philadelphia, Pa.; H. E. Smith, Columbus, O.; R. L. Spotts, New York City, N. Y.; W. D. Stannard, Chicago, Ill.; J. R. Tansil, Blythesville, Ark.; Brian Teats, Northcumberland, Pa.; W. H. Tolen, Fort Dodge, Ia.; F. S. Tomlin, Glassboro, N. J.; S. W. Vance, Tillsonburg, Ont.; J. P. White, Watertown, S. D.; C. A. Young, Springfield, O.

Two watches—J. S. Fink, Worthington, Minn.; Lester German, Aberdeen, Md.; Charles Hummell, La Porte City, Ia.; J. G. Martin, Harrisburg, Pa.; Fred Plum, Atlantic City, N. J.; C. G. Spencer, St. Louis, Mo.; J. R. Taylor, Newark, O.

Three watches—Fred Gilbert, Spirit Lake, Ia.; J. M. Hawkins, Baltimore, Md.; Woolfolk Henderson, Lexington, Ky.; Charles H. Newcomb, Philadelphia, Pa.; A. B. Richardson, Dover, Del; Frank Troeh, Vancouver, Wash.; F. S. Wright, Buffalo, N. Y.

Four watches—Arthur Killam, St. Louis, Mo.

—P. P. C.

Trap Trophies Are Best

No other sport offers so many and so valuable rewards for skill as does trapshooting. And in no other sport can the novice so quickly rise to fame.

Trophies, medals, prizes, etc., donated by those interested in the sport, are within easy reach of the shooter who applies himself to the mastering of the principles of trapshooting.

Ample opportunities are given by local, county and State shoots for the contestant to become known. As he acquires proficiency and gains in confidence, the amateur trapshooter may look forward to the time

when he may bring himself and his club the honor of winning the State championship, or sweeping the field in the Eastern, the Western, the Southern, the Pacific Coast, or the Grand American Handicap. In all of these shoots the privilege of contesting for trophies and prizes is restricted to amateur shooters.

The handicap regulations of the Interstate Association enable the less experienced shooter to compete on equal terms with the best, as the whole intent and purpose of these rules is to equalize conditions.

Remington Notes

Dr. E. H. Buie carried off high honors at a recent shoot of the Gilliard Sporting Club, Natchez, Miss., with a score of 96x100. Dr. G. S. Handy won second honors and J. N. Stone third honors, breaking 94x100 and 91x100 respectively. All three of these men shot Remington pump guns and Nitro Club Speed shells.

At a recent shoot of the Sea Cliff Gun Club, Leamington, Ont., James Hartwick and W. Hart took first and second honors, respectively. Both men shot Remington pump guns and Nitro Club Speed shells.

The Glen Willow Gun Club, of Roxborough, Philadelphia, Pa., held an interesting shoot recently at which 72 followers of the clay saucers faced the traps. Harry Sloan, of Philadelphia, won high honors, breaking 47 out of his quota of 50 targets. H. Bartolet was second, with a score of 45x50, and W. Williams took third honors, breaking 45x50. All three of these men shot Remington pump guns.

The S. S. White Gun Club, of Holmesburg Junction, Pa., had a good turnout at one of their recent shoots, at which 95 shooters faced the traps. High honors were taken by W. B. Severn, of Philadelphia, who broke 48 out of 50 targets. H. Hoffman and E. W. Budd tied for second honors, each breaking 46 out of 50 targets. All three men shot Remington UMC Shotshells.

Chas. Hummel, of the Des Moines, Iowa, Gun Club, won high honors at their recent registered shoot. Shooting the perfect combination of a Remington pump gun and Nitro Club shells, he scored 142x150, defeating a field of 70 shooters.

W. E. Butler won high honors at a recent shoot of the Riverside Gun Club, of Rochester, N. Y. Shooting a Remington pump gun and Nitro Club Speed shells, he broke 95 out of 100 targets.

Peters Paragraphs

High Amateur and High General Averages at Bruning, Neb., April 18, were won by Mr. E. W. Varner, 136x150, using Peters factory-loaded shells.

At Riverside, Conn., April 19, Mr. Fred Plum, of Atlantic City, shooting Peters shells, tied for High Amateur and High General Averages, 146x150, and tied first place in the Maplewood Hundred, 98x100, winning with 20 straight in the shootoff.

At Butte, Mont., April 15, Mr. C. L. Flannigan, using Peters shells, was High Professional, 129x150, including double targets and handicap events.

High General Average at Oklahoma City, April 21-22, was won by Mr. K. L. Eagan, using Peters factory-loaded shells. Mr. Eagan scored 97x100 each day.

High Professional Average at Garden City, Kan., April 17, was won by Mr. H. N. Kirby, 138x150, using the "P" brand shells.

On April 18, at Belpre, Kan., Mr. D. D. Gross won High General Average, 110x125, using Peters ammunition.

At a special tournament given at the Interurban Gun Club, Houston, Texas, in honor of shooters attending the Hardware Jobbers' Convention, April 19, Mr. H. A. Murrelle, of Houston, won High General Average, 93x100, using Peters shells.

Mr. C. O. Carothers, of Kenton, Ohio, tied for High Amateur and High General Averages at the first shoot of the Central Ohio Trapshooters' League, Springfield, Ohio, April 24. Mr. R. O. Heikes was High Professional. Both of these gentlemen broke 97x100 and both used the "P" brand factory-loaded shells.

WANTS AND FOR SALE

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

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

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

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

FIREARMS AND ANTIQUES—I buy, sell and exchange all sort of old-time and modern firearms.
STEPHEN VAN RENSSELAER, ANTIQUES,
805 Madison Ave., New York City.

WANTED—Reloading and resizing tools for the Krag and Springfield; and 38 cal. revolver to load S. & W. Special and regulation army load. Ridgeville Rifle Club, P. O. Box 23, Evanston, Ill.

FOR SALE—.22 Colt automatic, new shot only fifty times, $16.50. One pair $3.00 shooting glasses, $1.50. Arthur L. Clapp, Elliott, Conn.

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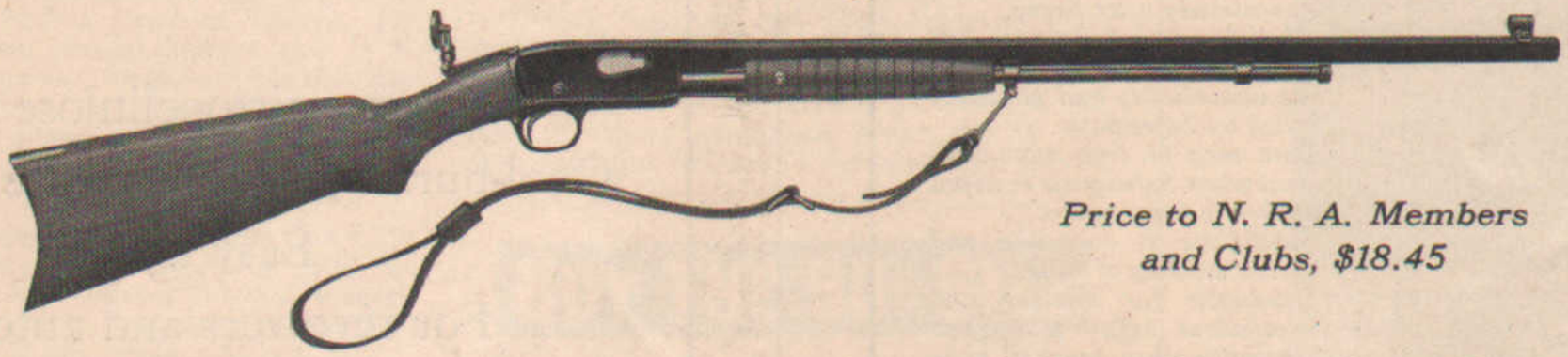

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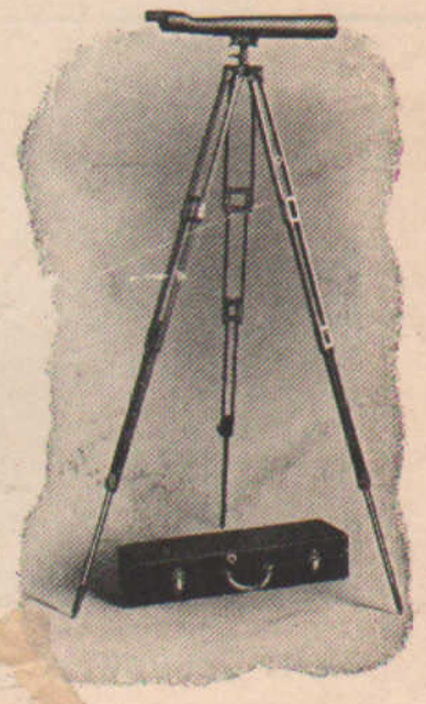

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