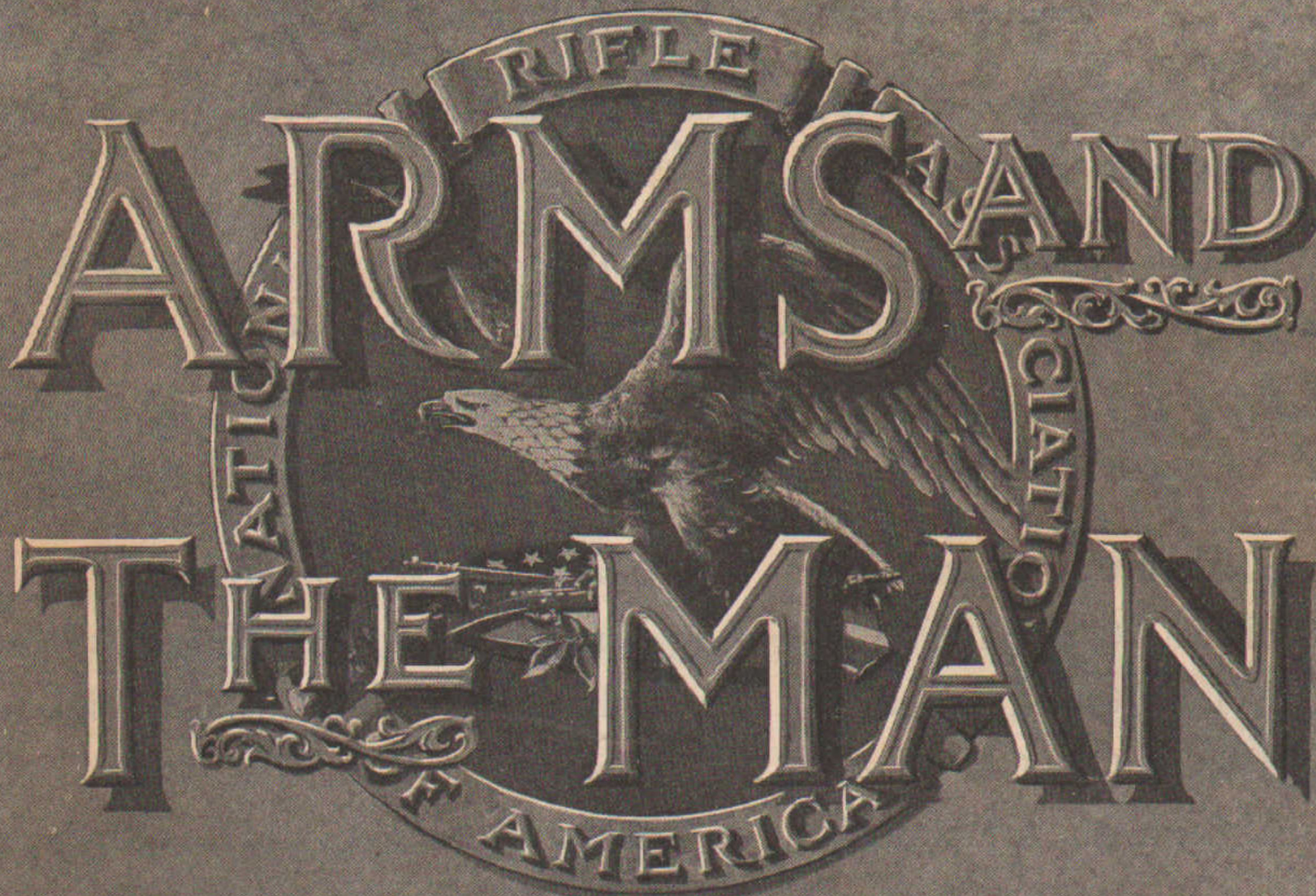


RIFLE
ARMS AND
THE MAN
OF AMERICA
NATIONAL ASSOCIATION



THE COOKSON GUN AND THE MORTIMER PISTOLS

MARKET HUNTING

ARMOR-PIERCERS, TRACERS AND INCENDIARIES
IN AIR FIGHTING

AMMUNITION PROBE DEVELOPS NEW FACTS

RECASTING OF ANCIENT CANNON SUGGESTED

BOOK NEWS AND REVIEWS

WITH THE SMALL-BORE LEAGUE

EDITORIALS and
LATEST NEWS OF RIFLE, REVOLVER AND
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VOL. LXIII, NO. 1



SEPTEMBER 29, 1917

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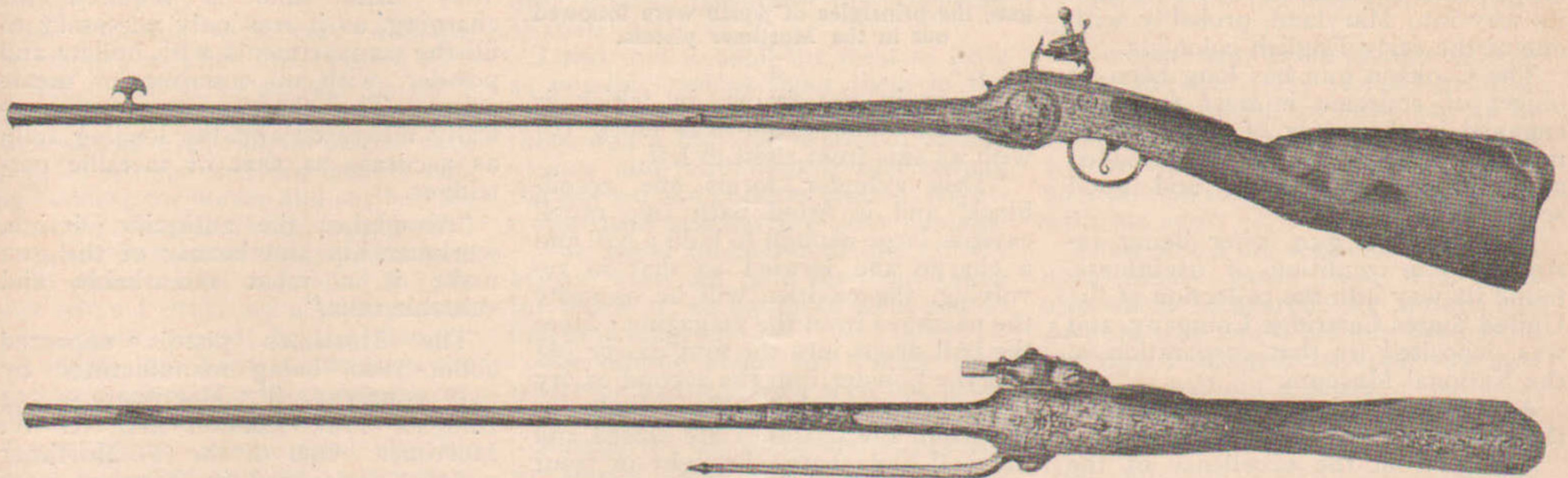
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WASHINGTON, D. C., SEPTEMBER 29, 1917

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The Cookson Gun and the Mortimer Pistols

By "SNIPER"



Upper—Side and top view of the Cookson gun showing lever by which the magazine was operated on the left side. Lower—The T. Mortimer pistol, with the magazine lever raised.

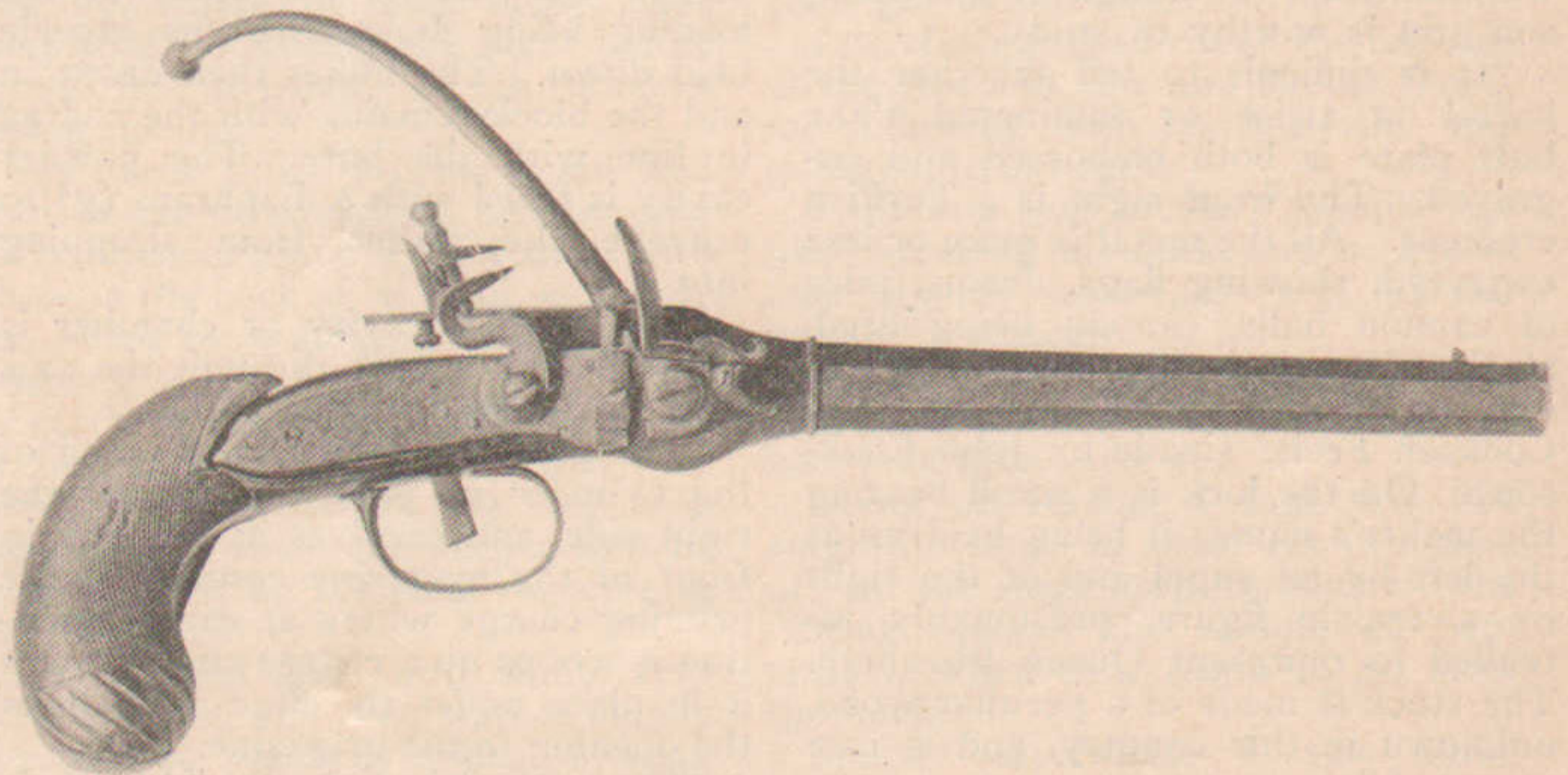
IN the study of firearm antiquities the Cookson flint-lock magazine gun and the Mortimer flint-lock magazine pistols occupy a unique position.

Those who, unsatisfied with confining their researches to the mechanism of modern firearms, have studied the work of the pioneer gunsmiths are well aware that in flint-lock and even snap-haunce days the breech-loader was not unknown, that that windage played an important part in the calculations of riflemen of the long-gone past.

But in the Cookson magazine gun—the one of its kind—and in the Mortimer pistols, it is very apparent that the rudiments of magazine loading had been firmly established as early as 1586 if not before, and that the system was used more extensively about 1800.

The mechanism of these relics is strangely reminiscent of the lever principle which in a different form was adapted to weapons extensively after the War Between the States. It appears to be even more than a rudimentary principle, for the Cookson gun has been declared by experts to have been a thoroughly practical weapon admirably adapted to the rapid loading of a powder-and-ball piece which, of necessity, used a flint lock, percussion priming then being practically unknown.

The only example of the Cookson gun is the one which perhaps forms the capstone of the collection of arms in the National Museum at Washington, D. C. In the same collection is one of the Mortimer pistols, there being several



examples of this arm, but all locked securely away in famous collections.

When the United States provost marshal of Baltimore conducted a search for arms in that city in 1863, a rusty flint-lock weapon was discovered during the course of the search and confiscated. The old flint-lock remained in the custody of the United States until 1867, when, unclaimed, it was thrown into the scrap heap. From the junk pile, the gun was rescued by a scavenger and sold for a nominal sum. For several years the gun remained in an obscurity caused by the failure of any of its owners to realize its value.

It reappeared in 1888 when it was taken to Richard Heinze, a Baltimore gunsmith by a man who sought to have it repaired and altered to a percussion lock.

Heinze looked at the gun, found it caked with rust, and knew that the desired alteration of the lock was out of the question. As a result, he purchased the gun for a trifling

amount, and set it aside with other unusual and obsolete weapons.

A few months later, upon examining the piece more closely, Heinze became very much interested in the old weapon, and set about removing the accumulation of rust and dirt. For eleven days he worked, and the rust gave way, there developed to reward his efforts, a flint-lock magazine rifle of unique design. The engraving uncovered by cleaning indicated that it had been made in 1586 by John Cookson, evidently an Englishman, apparently after a similar Spanish design, the decorations strongly suggesting the Moorish art which flourished at the close of the sixteenth century. The old weapon is believed to have found its way into Maryland, probably with one of the early English colonists.

The Cookson gun has long been an object of supreme interest to those engaged in the study of the development of firearms. It has been loaded and fired several times, and good scores have resulted.

The Cookson gun, after being restored to a condition of usefulness, found its way into the collection of the United States Cartridge Company, and was deposited by that corporation in the National Museum.

A description of the gun prepared by the cartridge company experts says:

"Aside from the excellence of the workmanship, the design of the Cookson gun is worthy of study.

"It is difficult to tell whether the barrel is twist or laminated. The butt plate is both embossed and engraved. The front sight is a Turkish crescent. All the metal is more or less engraved, showing flags, drums, piles of cannon balls, cannon being fired, stacks of muskets, boarding pikes, etc. On top of the barrel appears 'John Cookson Fecit,' (made by John Cookson). On the lock is a scroll bearing the maker's name; it being held up at the left by an angel and at the right by a female figure, presumably intended to represent Queen Elizabeth. The stock is made of a peculiar wood, unknown in this country, and is iron mounted."

Incidentally, the wood in the stock is still unidentified. Scores of cabinet makers and carpenters, both domestic and foreign have examined the stock of this unique weapon, but none so far has been able to classify the wood. The official description continues:

"The letters in the following description refer to the side sectional view. The arm is a magazine smooth bore flint-lock gun, firing spherical bullets weighing 260 grains and a charge of about 125 grains of powder. It has a capacity of ten rounds and a magazine is also fitted to the lock for a similar number of priming charges.

"The gun is charged on the left side through an opening with a hinged

flap, the bullets being poured into one compartment (a) and the powder into an adjacent one (b).

"These compartments connect by cylindrical passages, with the central

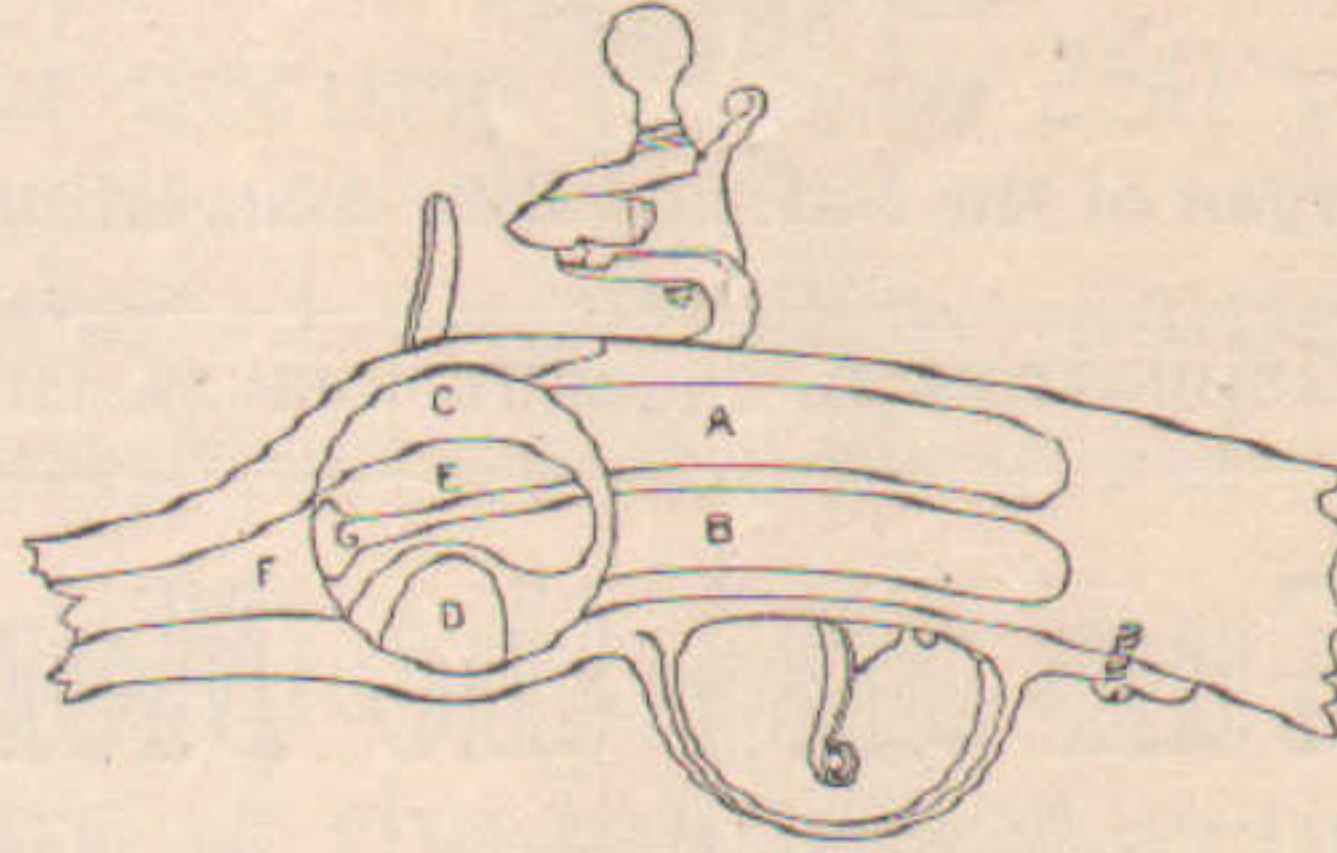


Diagram of the mechanism of the Cookson gun, the principles of which were followed out in the Mortimer pistols.

chamber in the frame, in which is located a solid cylindrical block (c) with its axis from right to left.

"This cylinder forms the recoil-block, and is fitted with two radial cavities large enough to hold a ball and a charge and located so that in revolving, the cavities will be opposite the passages from the magazine. Here the ball drops into the first cavity (d) and the powder into the second cavity (e), and by revolving the cylinder to the front, the passages are closed and the ball and charge brought in front of the rear end of the bore (f) the loading being done with the muzzle held down. The bullet then drops in and the block remains with the charge in line with the bore. The powder cavity is fitted with a diaphragm (g) to prevent the bullet from dropping into it.

"The powder cavity or chamber is connected by a vent through the axis of the cylinder with the pan.

"The pan is a cavity in one end of the cylinder or breech block on the right side, and revolves in the lock in front of the magazine containing the priming charge where at each revolution it scoops up a charge and revolves it in place under the flint, and closes the opening to the magazine.

"The cylindrical breech block is revolved by a lever on the left side which also cocks the hammer and closes the pan.

"This automatic action is accomplished by a stop on the cylinder acting on a hooked lever-arm attached to and pivoted on the hammer. The stop pushes the hammer back by the lever and the hook on the latter pulls the steel faced cover of the pan, known as the 'battery,' into place. The lock and trigger are the ordinary design; but it is worthy of note that the design as regards sear, sear spring, main-spring, etc., is the same as that used on the late types of flint-lock guns.

"The barrel, front sight and under side of the guard are all in one piece

and the carving and other works show evidence of the highest mechanical skill.

"The only omissions in the provisions for all the necessary points in the design, from a mechanical point of view, are those for inserting a wad and preventing the escape of gas through the vent. The former is partly compensated for by making the bullet slightly larger than the bore and the latter exists in all flint-locks. From a military point of view, the design of the arm gives evidence of being far in advance of its time. With the magazine charged, the ten shots could be fired in a time which compares very favorably with modern magazine guns. Very little time is required for charging, as it was only necessary to fill the compartments with bullets and powder, with no counting or measuring. The charges were automatically measured and the loading fully as accurate as that of metallic cartridges.

"Altogether the antiquity, design, workmanship and beauty of the gun make it a most remarkable and valuable relic."

The Mortimer pistols appeared about 1800, being manufactured by two concerns, T. Mortimer of 44 Ludgate Hill, London and H. W. Mortimer. One of the T. Mortimer pistols, discovered in Virginia now occupies a case near that of the Cookson gun in the National Museum. An excellent example of H. W. Mortimer's work was made for Lord Nelson, in 1805.

Generally, the Mortimer pistols closely followed the mechanism later discovered to have been used more than two centuries before in the Cookson gun, and there is reason to believe that Cookson adapted his mechanism from an earlier Spanish model.

The H. W. Mortimer pistols operated in practically the same manner as the Cookson gun, including the mechanism for automatically closing the pan and cocking the hammer. In the T. Mortimer pistol, however, this automatic mechanism seems to have been absent. These pistols fired about 7 times, the magazines being smaller than those in the Cookson gun.

Sergeant (drilling awkward squad)—"Company! Attention company! Lift up your left leg and hold it straight out in front of you!"

One of the squad held up his right leg by mistake. This brought his right-hand companion's left leg and his own right leg close together. The officer, seeing this, exclaimed angrily:

"And who is that blooming galoot over there holding up both legs?"—*Chicago News*.

"Pa, what are seasoned troops?"
"Those that have 'pep' and 'ginger' in 'em, I suppose, my son."—*Boston Transcript*.

Market Hunting

By WALTER WINANS

I HAVE just finished deer shooting "somewhere on the East Coast" and today started in further west upon a very celebrated forest stocked with very fine deer.

Where I have just completed a stay, the game is what is known as "fallow deer." They have palmated horns, like miniature moose, and weigh from 80 to 120 pounds. They are about the height of the Virginia deer, and vary in color from white through light bay with white spots, up to black. I shot fifty-five.

The shooting was very difficult. The country was flat, and covered with bracken,—high ferns as high as one's shoulders. To complicate matters, the bracken was over-run in places with gangs of women and boy scouts cutting bedding for horses and cattle. As one could not see these people until quite close to them, it was very dangerous to shoot a rifle, and I had to only shoot when I could see a back-ground where there would be no danger. The people, too, kept the deer on the move, and aeroplanes often came over, still further disturbing the deer.

I am greatly handicapped also by having to use up any old ammunition I happen to have by me, as it is difficult to buy ammunition and the manufacture of soft-nosed bullets is not permitted.

In my recent shooting, I used 2 rifles—one a .255 low velocity double-barreled rifle fitted with telescope by Rigby and the other a double-barreled rifle by Purdy of .455 calibre shooting the regulation English revolver ammunition. This is the rifle with which I shot my 77 fallow deer sometime ago.

The object in shooting revolver ammunition is that the bullet goes only a short distance, making it safe to shoot in a thickly inhabited country. The bullets I used are what are forbidden in war—the Webley manstopping bullet.

These bullets are cylinders with a cup-shaped depression in front and open out very much on striking.

I began by shooting the .255 low velocity. It had solid bullets and though extremely accurate I found it only dropped deer if the hit was exactly in a vital spot, otherwise one could put several shots into the deer without stopping it. I lost a very good big buck through this.

I hit him with both barrels just a little back of the heart, the first shot made him rear and go on three legs. The second shot, as often happens, seemed to put new life into him and he was able to use all of his legs.

He got into some bracken and I

could not find him again, probably he lay down in a hole and died.

I used the .455 rifle after that and did not lose any more deer.

Where I now am the ground is more undulating but very full of big areas of bracken, and many trees.

I am also here hampered by the women and boys cutting bracken on a government contract.

I found that in this forest there are a number of stags to be shot (stags are, in England, the males of the red-deer, a small edition of the American Wapati).

I was told to spoil the meat as little as possible and to shoot them in the neck or head. I was also warned that there was a big stag who had turned vicious and waited at a road where the women and children passed, frightening them and barring their passage.

The wood forester and one elderly keeper were the only men not taken for the War, so we three went out to find this stag.

We hunted about for a long time where he had last been seen but could find no trace of him or any other deer.

Finally the wood forester suggested we should go to a pond he knew of near by, where the stag might have come to drink during the night before laying up invisible in the bracken during the day.

We went down to the pond and heard a rabbit squealing and hunting in the bracken found it lying dead with a hole in the back of its head, evidently just killed by a stoat, a small sort of weasel.

Searching the mud round the pond, (it had rained during the night) we found tracks of a very big stag with square toes, which the keeper said he thought must be the stag we were in search of.

We tracked him into some very thick bracken, and then walked slowly through the bracken in line, I being the only one armed. Suddenly the stag jumped up close in front of the keeper and galloped off, showing only his horns.

From these the keeper knew (they had twelve points, three on top of each horn, what is called a "Royal Head") that it was the stag we needed.

We worked up wind and looking through my Zeiss glasses I found him in an opening in the forest.

He was close to one side, but it was impossible to go there as, not only the wind would betray us, but, even if the wind had been right, I could not shoot from there as it would be the direct line of fire to where we knew people were cutting bracken half a mile off.

After a consultation we decided on the following tactics:

The stag, not being followed and never having been shot at, after standing a few minutes, began to feed.

He was used, we knew, to having women pass the opening in the forest on their way to work.

We therefore made up the wood forester as like a woman as we could with our gum-coats, then he and the forester walked along slowly side by side, I sheltering myself from the view of the stag on the side furthest from him.

We came sauntering along not looking at the deer. He stopped grazing, turned and raised his head, but as he only saw what looked like a man and woman walking to their work he paid no attention to us, merely following us with his eyes.

There was a big stemmed tree in the open ninety yards from him, as I afterwards measured; we walked on. As this tree trunk hid his head from our view I stopped, the other two men going on without a pause.

I now crept to the tree taking care always to have the stag's head hidden from me, and I therefore from him till I got to the tree.

I carefully peeped round the left side of the tree and saw him almost facing me following with his head the men going off to our right.

I hit him just in the "Adam's Apple," breaking his neck, and he heeled over slightly backwards and lay flat without a struggle.

He is a very good stag, weighing some 300 pounds, which is about as heavy as these deer run.

Going on further I first saw five stags too small to shoot (at this time of year the stags keep together till the rutting season, the middle of September, when they begin to go after the hinds).

Shortly afterwards I saw three more stags, one with nine points. He was standing amongst some bracken at 200 yards I hit him just back of the heart.

He stood spraddled-legged unable to move, and I walked up to him and shot him through the neck.

As two stags so late in the day were all we could skin and send to the railroad before dark, we took them to the keeper's cottage and stopped shooting for the day.

The rifle I used in this day's shooting was my bear-shooting rifle, a double .400 nitro powder express rifle by Purdey.

It shoots a hollow-pointed bullet and can literally "stop an elephant" (I

shot one at a circus with it which had to be destroyed five years ago).

I have, unfortunately very few cartridges left for it and none can be made during the War.

I was sorry I had to shoot again at the second stag, after I had hit him with the first barrel, as I am so short of ammunition for it; I intend to take another rifle, I think my .22 H.P. Savage to use as a "cripple stopper" if a stag needs a second shot.

Not being able to use a horse here is a great handicap and one can only see a very short distance in any direction, so it is a matter of chance coming onto deer; one can only walk up wind and trust to finding them.

BOOK NEWS AND REVIEWS

WHILE handbooks on almost every conceivable military subject have appeared with almost unbelievable frequency ever since the border mobilization last fall—an output which was doubled and redoubled during the first few weeks of the war with Germany—very few practical treatises on machine guns and their uses are to be found among these printed aids to the soldier.

This was undoubtedly because the possibilities of the machine gun, as a weapon both of offense and defense, were not widely recognized. Accordingly, the ideas of the military world had, of necessity, to be revised before any comprehensive volumes could be written.

With three years of the greatest war in history behind the Allies, it is time to expect the appearance of a number of valuable works upon rapid firers and their practical uses in the field.

Quite some time ago, Longstaff and Atteridge, the British machine-gun experts, brought their volume from the press. The reception accorded it demonstrated that it filled a long-felt want. Now comes Lieut. K. B. McKellar, of the Canadian Machine Gun Service, and devoting practically no space to the history of machine-gun development—a subject so ably covered by Longstaff and Atteridge—confines his book to "Machine Gun Practice and Tactics for Officers, N. C. O.'s and Men," which title it bears.

The book is published by the Macmillan Company and sells for 90 cents. It is of a size to permit its convenient packing in field lockers, or of its being carried in the pocket of a regulation blouse.

The author of the book has seen long service at the front, where since practically the beginning of hostilities he has been instructing men in handling the rapid firers. The methods of organization of machine-gun units, and the se-

A stag must be dropped or stopped at once as a wounded one would be lost in the miles of high bracken, with no dog to track and no horse to gallop after the stag.

For this reason I do not dare to try using the .22 H.P. except as a cripple stopper, when there is no fear of the stag being able to get away.

It is difficult to use the knife as long as a stag is on his legs as he keeps one off with his horns, so one has to give him a finishing shot. A .45 Colt Automatic pistol would be just the thing but my chauffeur, W. Francis, has mine in Russia (he has been awarded the St. George's Cross for bravery) and none are to be bought now.

quence of training, set forth in the book are the results of actual experience.

The book is in outline form, and is well indexed, two features which make the use of it easy.

Among many other phases of machine-gun work, the little book treats of machine-gun fire from the technical standpoint, including the theory of angles, of elevation and of windage, ranging fire, rapid fire and traversing fire; the judging of distances; the selection of gunners; methods of signaling; range cards; the occupation of various positions in open warfare; reconnaissance, and co-operation from the standpoints of concealment and protection; village fighting and trench fighting.

A text book to cover in a simple and thorough manner the subjects which are essential in the education and training of the various members of the battery, battalion and regimental details in field artillery units is to be found in "Notes on Training Field Artillery Details," by Captain Robert M. Danford, F. A. U. S., and Captain Onorio Moretti, F. A. R. The book has just appeared from the Yale University Press, of New Haven. Its price is \$2.00. The book is now in its third printing.

Both of the authors of the book obtained the material for the volume while on duty as instructors in the course for field artillery non-commissioned officers at Ft. Sill.

The volume deals with map-reading; military sketches; elementary field artillery gunnery, including definitions, formulas, principles of fire, use of instruments; firing data, both theoretical and with instruments; the estimation of ranges, communication, and range tables in addition to discussions of several other subjects regarded as being necessary to the proper training of men in this branch of the service.

Col. Cornelius DeWitt Wilcox, U. S. A., professor of modern languages in the United States Military Academy, and George Nestler Tricoche, late artillery officer of the French army, have each written small pocket-edition books which are calculated to give the American soldier in France a groundwork upon which he can build a vocabulary sufficiently wide to permit him to make known his wants and understand simple conversation.

Colonel Wilcox's book is published by the Macmillan Company under the title of "War French." The volume of the usual handy dimensions is divided into three parts. The first part treats of the French language, and provides the working knowledge necessary for a comprehensive understanding of Part 2, "The French Army," and Part 3, "Passages for Translation into English."

George Nestler Tricoche's book is designed to be a military guide to the French language, army, and nation. It is published by the Edward T. Miller Company, of Columbus. The book contains special and technical vocabularies, relating to different branches of the service.

The vocabularies of military slang in each of these books are of unusual interest. From them one learns that the so-frequently used term *poilu*, which is applied to any French soldier in field service, means, literally, "the hairy one"; that a machine gun is referred to as "*moulin à café*," or, literally, the coffee mill; that a soldier of the Quartermaster Department is called "*ris-pain-sel*," or rice-bread-salt; that the French for chestnut—*marron*—means a bullet; that the bayonet is termed a *Rosalie*, a crochet needle, and a roasting spit; that a *Josephine* is a pipe, and a *brule gueule*, or jaw-burner, is a short clay pipe; that a Quartermaster Sergeant is called *garde-punaise*, or bed-bug keeper; and that *la marmite*, which literally means a great kettle, is used to designate the big shells.

One of the clearest and most informative presentations of present-day military operations as conducted along the western front is to be found in "The War of Position." The book is from the pen of Lt. Col. Paul Azan, of the French army and chief of the military mission at Harvard. The volume is published by the Harvard University Press, Cambridge.

Colonel Azan has succeeded well in his endeavor to give a general picture of contemporary tactics as worked out by the various arms of the service, and allots to each one its individual responsibilities, giving full credit to each arm for its work in the field as well as outlining what that work is. After a general introduction his text is divided up into three parts: "Positions," "Attack on a

(Concluded on page 10)

Armor-piercers, Incendiaries and Tracers in Air Fighting

By STEPHEN TRASK

BATTLE flying and sky fighting such as has led to the development of the famous "Aces" of the French *escadrilles* as the aviators who have downed five opponents are known, has brought into play many hitherto generally unused and little known special bullets.

On the battle fronts of France and Flanders today the airmen are equipped with at least three unique forms of ammunition—the incendiary, the tracer and the armor piercing bullets, while the inventors of the world are constantly at work endeavoring to perfect either new specials or combinations of already existing forms.

Up to the present time, most of this developmental work, so far as the small arms projectiles used in Europe are concerned, has been done abroad. What part the United States will play in perfecting other forms of special projectiles, remains to be seen.

Observers who have an opportunity of studying the sky-battle conditions to be met with not only along the battle fronts but in communities exposed to aerial attacks, declare that there are four ways in which an enemy aircraft may be brought down.

The first and most obvious way is to kill the pilot.

The second way is to set fire to the machine, either by igniting the wings of the craft, or by igniting the petrol tank.

The third is to wreck the engine or the steering apparatus or riddle the tank with armor piercing bullets.

The fourth way is to cut the struts and supports so badly as to disable the machine and bring it out of control.

In developing special bullets to meet these needs, the pilot of course could be put out of the fighting by ordinary steel-jacketed bullets. When it came to setting fire to the wings or the tank, or disabling the engine, incendiary and armor-piercing bullets were required. It also soon became apparent that for fighting between aeroplanes, there was needed the "tracer" bullet by which the line of fire could be indicated without reference to sights, since the machine guns mounted on heavier than air machines are worked by pointing the machine rather than the muzzle of the weapon.

Even in the early days of the great war, when the Hun apparently pinned a great deal of his faith to the rudders of his giant Zeppelins, the fore-runner of the small-arms incendiary bullet had appeared in the equipment of British anti-aircraft batteries.

These bullets were much larger, of course, than those now used in machine

guns. But when once the British anti-aircraft gunners found the range of the big Zeppelins and sent against them a hail of incendiary bullets which, bursting into flame upon contact, set fire to the huge gas bags, Zeppelin raiding became an unpopular outdoor sport with the Kaiser's flyers.

It is said upon good authority that the anti-aircraft incendiary bullet of the British was the direct cause of Germany's abandonment of her Zeppelin raids, and of the report that the big Zepp factories had been converted into plants for the manufacture of aeroplanes.

But Germany, according to all accounts, was not slow in learning the lesson taught by the British incendiary shells, if indeed she were totally ignorant of the principles involved in bringing about conflagration upon contact—the secret of which, including the formula for so doing is guarded with the the greatest secrecy by every nation which now possesses it.

And so Germany it is said, while having no British raiding Zepps to contend with, retaliated for the loss of the Hun raiders by shooting down a host of British observation balloons, using the incendiary bullet in the operation.

When Germany, through the bitter lesson taught her when her Zepps were shot down, turned to the air-plane as a vehicle for raids of frightfulness, the age old battle between inventors of armament and projectiles was on again.

Because of the rapid flight of the aeroplanes, the small target they presented, and possibly the lack of an adequate rangefinder, the British incendiary bullets for anti-air craft guns did not seem to meet the emergency as well as they had done in the case of the Zeppelins. The German flyers had also by that time learned the art of protective coloration which was recently described, in this way, by a writer in the *London Daily Express*:

"It is like going out to fight birds of paradise," he was told by one of the R.F.C. pilots, who complained facetiously that the dazzling tints of the Albatross and Aviatik machines nearly blinded him. "Never has there been such an orgy of kaleidoscopic effects on the earth or above it. The Hun has taken to daubing his machines fantastically, after the manner of a savage who hopes to frighten his foe to death. A child let loose with a box of paints could not achieve more lurid results. One British aviator who went out one morning to search for trouble found it with a red body and wings that were

green on top and blue underneath. One German squadron encountered recently was composed of machines painted white, red and green and one of khaki color, with greenish grey wings. Individual fliers have included a green aeroplane with a yellow nose; another with a red body, green wings, and yellow stripes; another with green body and yellow wings; another with scarlet body, brown tail, and reddish brown wings, with white crosses on a bright green background; another with yellow body and red wings, with light white markings; a machine with one green and one white wing, and others with silver disks, yellow noses, and blue tails." "It seems just possible that the boche pilots are experimenting with colored aeroplanes," remarks the editor of *The Aeroplane*, in commenting on Mr. Phillips's dispatch, "to see whether varying colors have any effect upon the range-judging powers of enemy pilots, or whether the use of brilliantly variegated stripes cramps their vision in some peculiar way. Startling primary colors in close proximity are distinctly trying to the eyes."

This form of *camouflage* of course rendered more difficult the task of potting a speeding enemy plane with an anti-aircraft gun, but the start had been made, and when the Allies had carried the war into the air, the principles established in the British incendiary anti-aircraft bullet, proved a valuable one when applied to machine gun ammunition.

The synchronizing device invented by the French "Aces" to permit of firing the machine gun through the rotating propeller together with a later device which is said to embody the principle of firing through a tube set in the propeller shaft, and the German invention which provides tunnels in the tails of the Gotha battle-planes through which a rear attack can be beaten off, called attention to a greater extent than ever before to the necessity of aiming the gun by pointing the entire aeroplane, instead of simply pointing the gun.

So that now, according to reports from "over there," the machine gunner equipped with a unique sequence of special cartridges in the belts or the drums of his weapon, uses his rapid firer in much the same manner as one would "play a hose" to throw the water upon some desired spot.

The coming of the armor piercer, the tracer, and the incendiary bullet has made possible a system of fire which can be counted upon to accom-

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ARMS AND THE MAN

1110 WOODWARD BUILDING, WASHINGTON, D. C.

EVERY SATURDAY

Editor

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

Associate Editor

KENDRICK SCOFIELD

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

AN ANTI-AIRCRAFT RANGE-FINDER

MISTAKES made by the Allies can be just as useful to the United States as their achievements. Just now there is considerable criticism emanating from English service papers, directed at the Munitions Inventions Ministry for its failure either to approve or develop a satisfactory range-finder for anti-aircraft guns. To these criticisms, the Munitions Ministry answer that the anti-aircraft defenses have adequate range-finders. At the present stage of the controversy, the service paper critics are offering in rebuttal the air raid of July 7, when 22 enemy airplanes flew over London and were able to get away without the loss of a single machine; also the raid over Felixtowe July 22 when 20 enemy planes escaped without damage.

Commenting upon these raids, the *United Service Gazette* is authority for the statement that some of the British anti-aircraft gunners during the London raid were firing at an altitude of 7,000 feet when the bomb droppers were only 5,000 feet up, while others were wasting ammunition at 3,000 yards only.

As against this record, the *Gazette* says: "It is possible for our gunners to hit a target at from 5 to 10 miles, if they know the distance. The *Blucher* and the *Derflinger* were hit and sunk at 8½ and 9 miles respectively, by naval gunners with proper range-finders."

It is difficult to credit the likelihood of a fleet of Hun aeroplanes ever sailing on a bomb-dropping expedition over the big cities of the United States. It is not impossible, however, and it is a contingency, which, however remote, should be given serious consideration.

Perhaps the United States has developed a range-finder by which a gunner can lay his gun to such a position that the shell will reach the planned position at the same moment as an enemy airship will reach it, but this is not very likely since the only real aeroplane activity of the government is as yet in its infancy.

It might be well for the inventors of the United States, so many of whom are grappling with the anti-submarine problem, to remember that dangerous attacks may not all come

from beneath the sea, and that the army which can cripple enemy aeroplane offensive can win the war in short order.

In discussing the necessity for developing a suitable range-finder *The United Service Gazette* drops a hint which might be of service to this country. Speaking of why patentees are cautious in approaching the inventions board and the army with new ideas, it says:

"Newspapers constitute a national tribunal to which everybody with a grievance appeals. In this way an editor learns more about the tricks of public officials than the officials themselves have any conception of. They work in watertight compartments blissfully ignorant of what is going on outside. Although it is regrettable to have to say so in a Service journal, it is nevertheless a fact that the germs of many ideas submitted to naval and military authorities in the past have been deliberately annexed by officials and the inventing genius coolly informed that his idea is useless. These little tricks soon become public property, with the result that inventors are careful now not to divulge the most important parts of their ideas when preparing specifications for registration purposes.

"And this is where the nation scores, especially in the case of inventions of military importance. Our Patent Office is so kindly disposed towards our enemies that it freely permits anybody to purchase for a few pence the complete specification of any patent, illustrations included. In case our enemies may overlook one, it generously despatches copies to neutral countries whence they are reposted to the enemy headquarters. In this way inventions, which are intended to benefit our own country solely, are utilised against us by a cool, calculating enemy, who misses nothing. Even the crudest idea is worked out in Berlin until the intention of the inventor is fathomed. Then our wide-awake (?) authorities copy the invention of which they might have had the monopoly if proper secrecy had been observed."

PRACTICAL PATRIOTISM

A GOOD many forms of practical patriotism are coming to the front as the result of the war with Germany. Of course there still exists all too much "lip patriotism" and an attitude which, among some few Americans, borders upon sickly sentimentality.

But here and there groups of men and individuals, who perhaps say very little about their love of country, are setting to work along lines which make up in practical value what they may lack in glamor.

One of the latest instances of this kind is the work which is being done by the members of some patriotic societies in New York with the aid of a corps of Spanish War Veterans.

As any one knows who has followed the progress of the campaign for volunteers and the progress of the draft, thousands upon thousands of men who are willing to serve in the fighting forces of the United States have been rejected because of some defect which is easily eradicable yet which is regarded as an absolute bar to acceptance.

Becoming acquainted with this state of affairs, these New Yorkers, assisted by Spanish War Veterans and former officers of the National Guard, have established

classes and arranged a schedule of drills for men who wish to serve but who have been deemed unfit. The purpose of these physical training classes is to eradicate in every instance possible the defect which is standing in the way of each individual's entering the service.

If the men who accept the aid which these classes offer are sincere in their desire to serve, the work of rehabilitating them can be counted upon to place at the disposal of the United States many able-bodied men who otherwise might never be available.

Such a work as this is comparable only to the patriotic efforts of the many civilian rifle clubs who have not only turned their ranges over to members of the draft but who have taken a personal interest in, and expended money toward teaching the untried "selected conscript" to shoot.

MEDALS FROM WAR DEPARTMENT'S ANCIENT CANNON

OFFICIALS of the Army and Navy and members of Congress should turn deaf ears to those who are importuning them to recast into valor medals the historic cannon which guard the entrances of the War and Navy Department.

It has long been the custom to cast distinguished service decorations from captured or obsolete ordnance. The cannon in question, however, are no mere relics. They are unique and well-preserved examples of long gone ordnance and the acquisition by the United States of practically every one of them was linked with some event of historic and patriotic interest.

So, while it is proper and desirable that suitable decorations be awarded by the United States government for deeds

of valor, some line of distinction should be drawn between captured ordnance which might well be turned to such a use, and captured ordnance which not only occupies a peculiar place in the history of firearms, but which could never be replaced.

Almost every cannon at the War, State and Navy Building is in its own way, a work of art. Several of them are the rarely encountered and very limited survivors of ancient periods in ordnance making.

Two of the cannon are especially rare and interesting. They are twin four-pounders and are called "San Mateo" and "San Marcos." They were named after the Disciples Matthew and Mark.

These cannon are what is known as "Twelve Apostle Guns." They were brought to America, it is thought, at the time of the Spanish occupation of Louisiana, as part of a dozen such pieces. They were later included in a battery of 12 guns in Mexico, which was captured during the Mexican War by Scott's troops. Four of these guns were brought back to the United States. In addition the two at the War, State and Navy Building, a third is known to still exist. This is said to be on Governor's Island. The guns formed part of the Ordnance exhibit at the Philadelphia Centennial Exposition.

History frequently mentions the "Twelve Apostle Guns," although examples of them are rarely encountered. The "Twelve Apostle" type is believed to have originated in 1521 when as the result of experiments, many such guns were cast at Malaga for use in the siege of Tunis.

The destruction of such guns as these, and the others which form the decorations at the War, State and Navy Building should not be countenanced.

Ammunition Probe Develops New Facts

THAT the pressure in the Ordnance Department behind its own priming formula was too great to permit Frankford Arsenal to substitute therefor the formula of commercial companies which were admittedly superior, was indicated by Col. George Montgomery, commandant of the arsenal, before the House committee investigating the causes for defective small-arms ammunition.

Colonel Montgomery said that the Frankford Arsenal and one commercial manufacturer were the only concerns using free sulphur in their primers, and that he felt "that the technical opinion of the world was against" the use of this ingredient.

The investigation conducted by the House of Representatives opened September 17th, with the appearance of Colonel Montgomery and other high ordnance officials.

The arsenal commandant said that in August, 1916, the head chemist of one of the largest manufacturers of explosives in the world convinced him that the

sulphur primer was not as good as others in use.

"But all our people believed in it," explained the Colonel, "and I was anxious to be able to prove my contention beyond cavil before taking such drastic action as the changing of the formula."

It was brought out that when the defects were discovered to be general the Ordnance Department not only purchased or arranged for the purchase from the Winchester Arms Company of 55,000,000 primers made with a different formula, but also adopted the formula used by this company.

Representative Shallenberger engaged the witness in a lengthy discussion of the operating conditions at Frankford Arsenal.

Until August, 1916, according to Colonel Montgomery, Frankford Arsenal was forced to operate at about four-ninths of a normal eight-hour-day capacity. When increased appropriations were made an attempt was made to go into a two-shift basis.

This developed the lack of available skilled labor, great confusion over operating the two shifts and much lost motion through lack of an elastic organization.

"If Frankford Arsenal had been maintained at a full eight-hour capacity we would have discovered lots of weak signs and remedied them before actual war took place," said Colonel Montgomery.

The judgment of Colonel Montgomery clashed sharply with that of big private manufacturers of arms and ammunition, quoted by Mr. Shallenberger as to the wisdom and efficiency of operating big plants at full twenty- or twenty-four-hour capacity.

At the hearing on September 18th, it was brought out that a former chief chemist, Walter Arthus, believed the defect arose from improperly granulated antimony, but other witnesses attacked Arthus' qualifications as an expert.

Members of the committee interrogated Major A. S. Cushman sharply over a conflict of his opinion with Arthus, indicating at one point that possibly the

sulphur theory was adopted to hide the passing by inspectors of imperfect ammunition.

Col. J. T. Thompson, chief of the Small Arms Division of the Ordnance Department, read into the record the telegraphic correspondence in connection with the final decision to change the primer formula.

He declared the first reports of trouble came from the Marine Training Camp at Fort Royal, South Carolina, on May 6th. An investigation at Frankford Arsenal was ordered on May 9th, and on May 25th Colonel Montgomery sent the following telegram to the department:

"Serious trouble in calibre 30 primer. Suspension of manufacture pending the location of the trouble imminent. Winchester company requested to quote prices on 25,000,000 primers."

To which the Small Arms Division replied:

"Suggest communication with the United States Cartridge Company and the Remington company and approval of primer to be used or type to be manufactured at Frankford Arsenal only after such tests as will satisfy you as to the complete serviceability of the primer."

Colonel Thompson told the committee that he considered this as giving Colonel Montgomery plenary powers to take whatever action and adopt whatever type of primer he deemed wise.

Witnesses Wednesday included several chemists, Major Munroe, chief inspector of the Frankford Arsenal, and Colonel Thompson, chief of the small-ammunition division.

All witnesses agreed that the presence of free sulphur in the small-arms primers

was the primary cause of the miss-fires and hang-fires complained of, and that this formula had been abandoned as soon as defects appeared in the ammunition. Major Munroe testified that 8,000,000 primers have been condemned since the trouble was discovered.

Upon the report made by the investigating committee depends whether a further investigation is deemed advisable.

In the House, on Tuesday, Representative Fitzgerald was questioned as to defective cartridges. Among other things, he said:

"That is the investigation being conducted by the Committee on Military Affairs relative to the alleged defective ammunition. The Committee on Military Affairs of the Senate has made an inquiry regarding it and the Committee on Appropriations of the House has made an inquiry regarding it. I do not wish to anticipate the report that will be made by the Committee on Military Affairs. But these facts are in our possession:

"For some time there was difficulty with the primer in the cartridge. The first complaint was received, my recollection is, in May, and subsequently some additional complaints. The Ordnance Bureau immediately upon receipt of these complaints began investigation to ascertain the cause of the defect in the primer. The complaint was that the cartridges hung fire. And subsequent investigations developed to such a point that it was determined to recall all of the cartridges that had been manufactured between certain dates, a very large quantity of which were in possession of the troops. Word was sent to General Pershing of what had been discovered

regarding this ammunition, and instructions given to him as to what to do regarding it. It did not interfere in any way with the supply of ammunition, as, excluding the amount of this particular ammunition, he had more than he really needed.

"There was considerable difference of opinion as to whether the ammunition should be recalled or whether it was necessary to do what it is proposed shall be done. The Ordnance Department has determined to 'break' the ammunition up, as it is called, and take out the primer and put in a primer made under a different formula. One matter was submitted to the Committee on Appropriations from a colonel of a regiment that was using this ammunition. His regiment had already expended 30,000 rounds. They had no complaint of any kind to make about it. They still had 170,000 rounds of the same ammunition, and he requested that he be permitted to retain it, as their experience with it had proved thoroughly satisfactory. The Bureau of Ordnance, however, determined that, in view of the suspicious character of the ammunition—that is, these complaints of the cartridges hanging fire, and having ascertained the reason for it—it was more desirable to withdraw it, break it up, and rebuild it. The Committee on Military Affairs is now engaged in a more exhaustive investigation to ascertain not only the causes but whether the particular fault could have been ascertained earlier than it was ascertained and just what precautions were taken, and whether other precautions should have been taken. But I have given the facts as they have been ascertained so far."

BOOK REVIEWS

(Concluded from page 6)

Position," and "Defense of a Position," going into each subject with definiteness that makes for a complete understanding of the situation and with a commendable absence of cumbering detail. Colonel Azan lays great stress on "communications"; and wherever he gives a definition there can be no misunderstanding what he means. It is to be noted that he prefers the French word *boyau* to the English phrase "communication trench," declaring that the latter leads to confusion. We know of no single book that will give both the young officer and the lay reader so clear and informative a presentation of how the so-called "trench warfare" is conducted as this work by Colonel Azan. Major Gen. Joseph H. Kuhn, U. S. A., has written an introduction to the book, in which he says that the book "will enlighten the layman as to why it is so difficult to attain a military decision between antagonists fairly equal as to numbers, resourcefulness, and industrial development."

SPECIALIZATION STRIPS HUN ARMY

Discussing the question of specializing in military art and the lengths to which it is carried to-day, the *Army and Navy Gazette*, of London, says: "The Germans have gone to extremes in the cult of specialization, particularly in the evolution of what they call their *Stosstruppen*. These are bodies gathered from all units, which have been stripped of their best fighters, men picked for their youth, daring and vigor, men who have given no hostages to fortune and who are not prone to take counsel of their fears. These are the men who make the counter-attacks; they are occasionally successful, but lost heavily and cost the Germans the flower of their armies, and when withdrawn from positions these are seldom held by the inferior troops then brought forward, they having been in a measure emasculated to provide for the *Stosstruppen*. Specialization may be a good thing, but carried too far it promotes the decline of general quality." Some of the military correspondents on the western front have expressed the opinion that

Germany has been forced to form these "shock troops" owing to the badly lowered morale of their men as a whole.

ASKS LARGER PROVING GROUND

In order to "attack" armor at long range during tests, the Navy Department has asked an appropriation to enable the purchase of nearly 5,000 acres of land adjoining the proving grounds at Indian Head, Md.

In seeking the appropriation, the department explains that at present, the butts against which the armor rests during the tests, are but 500 feet from the muzzle of the big naval rifles used in the trials. This of course prohibits long range "attacks."


The department also wishes to obtain data on the effect of angle fire and similar problems; and desires to fire shells at the maximum range this property will give,—21,000 yards—and then recover the shells, studying the fuse action and the action of flight.

5 GREAT RIFLE VICTORIES

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

Peters .22 Cal. Semi-Smokeless Cartridges

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

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

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Recasting of Ancient Cannon Suggested

EFFORTS are being made to gain the consent of the War and the Navy Departments to a plan which contemplates recasting into medals of honor the historic cannon which guard the main entrances of the War, State and Navy Department Building in Washington, D. C.

Just who sponsored the idea of making the valor medals for the war with Germany from these pieces of ancient ordnance is not quite clear, although the matter has lately been frequently discussed, and has been made the subject of voluminous correspondence by individual proponents of the idea.

The question which the War and Navy Department officials will be called upon to decide first is whether such a course, if adopted, would not irreparably lose to the country relics of great historic interest, and whether medals cast from these cannon, each of which forms a remarkably interesting exhibit, would mean any more to the men decorated therewith than medals cast from other captured and obsolete ordnance whose

historic and sentimental value is not so great.

The five major entrances of the Navy and War Departments' portion of the big executive are guarded by approximately a score of cannon, mostly bronze, which were captured in the Revolutionary, Mexican and Civil wars.

A rather startling fact came to light during an inspection of these cannon. If they were ever melted up to make war medals, America will witness the conversion of cannon made in France and some made in England, which were later turned against the Stars and Stripes in battle, melted down into medals for Americans who are fighting side by side with Englishmen and Frenchmen on French soil.

The major portion of these guns were owned by Spain at one time, but a number of them were made at Douay, France, and later came into possession of the Spanish, either by purchase or capture. It is interesting, also, to remember that Douay, the place where these guns were cast over 100 years ago, is today historic

in the annals of the war for democracy.

A study of these guns reveals a number of interesting facts. It will show the common practice of the French and Spanish gunmakers to give their big weapons belligerent titles. A big Spanish cannon mounted under the window of Secretary of the Navy Daniels was named "Le Belicoso" (The Belicose), and another in front of the War Department end of the building is named "Le Passepartout" (The Passport).

A very brief examination of the Spanish-made guns will also reveal the fact that the Spanish ordnance department of the late eighteenth century was particularly efficient.

The gun might be named any defiant, sentimental name that occurred to those who named them, but the ordnance department put its "numero" or number into the gun in bas-relief characters that stayed there as long as there was a gun.

"Le Farouche," another of the old weapons, must have been the sort of a gun that would make glad the heart of an eighteenth-century gun-builder. It was a great 8-inch piece, moulded of solid bronze, and about twelve feet long.

Its weight is enormous. Up near the muzzle is a grimly significant motto, that appears on others of the French-made guns: "Ultima Ratio Regum"—"the last argument of kings."

Then, in bold relief, reads this inscription further down the barrel:

"Louis Charles de Bourbon. Comte Deu. Duc D'Aumale."

Next comes a wonderfully and fearfully fashioned device—the arms of France, with the three fleur-de-lis in the center—which shows clearly to what heights the art of gun decorating reached in those artistic, brass-cannon days.

Then a strange, perfect device of a blazing sun-face, surrounded by the

Latin motto: "Pluribus nec Impar." Then come more and more intricate representations of the French coat-of-arms in the days of the monarchy, and around the butt of the gun one finds this inscription:

"Rendu en Douay Le 27 Juillet, 1748, par Jean Maritz." The translation is plain: "Made at Douay (France) July 27, 1748, by Jean Maritz."

Much the same is "Le Passepartout," which stands at the north entrance of the State, War, and Navy Building. Virtually the same device appears on the two guns, except that "The Passport" bears the arms of "Le Mareschal Duc de Humieres," and the ducal crest, though

the gun was made by Kelleritigure, a Helvetian, at Douay, in 1693. Both "The Passport" and "La Farouche" were captured at the fall of Santiago by the American forces in 1898.

A glimpse at the names of these guns is fascinating to the lover of relics. There is "Le Fanatico" (The Fanatic), a big Spanish sea-coast cannon made in Seville, in 1779; the "Cerbero" (Cerberus, the three-headed dog who guarded the gates of Hell), a short three-inch piece that must have barked at the rovers of the Spanish main; "Le Garduna" (The Guardian), a great twelve-foot six-inch calibre piece that bears the Spanish crest and is "Numero" 4.

Armor-piercers, Incendiaries and Tracers in Air Fighting

(Concluded from page 7)

plish any one or all of the four possibilities presented in the problem of downing an enemy aeroplane.

Into the magazines of machine guns designed for aerial use are loaded in sequence the old form of steel jacketed ammunition and the newer forms of cartridges containing tracer bullets, incendiary bullets and armor-piercing bullets.

This form of fighting made it possible to direct a stream of these special bullets at an enemy air-craft. Where before the aviator in using the old-style steel-jacketed bullet exclusively, had to depend upon bringing down the pilot, or upon the thousandth chance that his fire would in some way disable the machine, he now counts either upon winging or killing the pilot, setting fire to the enemy plane with his incendiary bullets, piercing the tank, wrecking the engine, or literally cutting the plane down with his armor-piercers. Meanwhile the tracers clearly define his line of fire.

None of the allies will permit the publication of the actual principles involved in their new machine-gun ammunition. As to incendiaries, however, it is generally understood that the bullets are prepared with a substance which causes an explosion at point of contact, and the ignition of any inflammable material which the bullet may strike.

The tracer bullets have hollow bases, into which a composition is packed. Upon the bullet leaving the barrel, this composition ignites, and burns in a white blot back of the bullet. This white blot is easily discernable, and when hundreds of these bullets are being sent from the muzzle of a machine gun every minute, the course of fire is as accurately marked, as when, to again use the same comparison, a gardner plays a hose upon a distant plant. The tracer bullet is

quite as dangerous as the ordinary bullet, having as much penetration as the old-style steel-jacketed projectile.

The armor-piercing bullet, as developed in Europe, will penetrate about $\frac{7}{8}$ of an inch of tool steel. The general design of this bullet presents a cupro-nickle jacket inside of which is the customary core of softer metal. Within this softer core is a steel-piercing projectile.

The general theory upon which this bullet is constructed is that the cupro-nickle jacket strikes, the soft core holds the bullet for an almost inappreciable fraction of a second to permit the armor-piercing heart to deliver its full impact, and then acts as a lubricant when the armor-piercer begins to go through.

Germany is said to use a soft-nose bullet—usually of copper—in her armor piercers. England and France use a slightly different design from that of the German armor piercer.

The armor-piercing bullets used by Germany and Russia are said to be considerably heavier than those used by England and France. In these two armies the armor piercers are made to conform as nearly as possible with the weight and dimension specifications of ordinary ammunition.

Repeated reports have come to this country that Germany is using a bullet made of glass, for some purpose which has never been explained. This report, however, is regarded as having been based upon a misapprehension. Nobody so far apparently has been found who has actually seen the glass bullet. The report that such projectiles were being used, has been based principally upon the fact that certain German bullets shatter into minute fragments. This is generally regarded as being due to the fact that some bullets of unusual hardness are being used.

MARINE INVENTS "PORTABLE TRENCH"

Trenches that may be picked up bodily and moved about from place to place is the invention of United States Marines stationed at Winthrop, Md., who use this novel apparatus for practice in hand-grenade throwing.

Sections about 10 feet long, with a parapet that stands 3 feet above the head of the grenadier, form a skeleton framework of pine, shaped similar to the regular trench. From inside these portable trenches, or "stalls" as the Marines call them, the sea soldiers hurl the grenades over the top and into other stalls, placed about 50 feet away, to represent the enemy trenches.

The practice grenades are non-explosive, but are of the same weight and size as those used by the Allies. Long, rangy fellows prove to be the best throwers, as their greater reach helps them to develop the sweeping overhead throw that experienced grenadiers use.

CALL FIELD KITCHENS "GOULASH CANNON"

To the already long list of service slang has been added a picturesque and descriptive term, since the soldiers now have dubbed the new field kitchens supplied to the army "goulash cannon."

Each of the new kitchens is capable of supplying 250 men with hot meals whether in camp or on the march. The improvement in this equipment has also brought about a greater mobility of the commissary.

N. R. A. Membership Button



Bronze, 15 cents each
Bronze, 14 cents lots of 25
Bronze, 13 cents lots of 50
Bronze, 12 cents lots of 100
Gold, \$2.50 each

These buttons, together with membership cards, make attractive credentials for Rifle Club Members. FOR SALE BY

ARMS AND THE MAN

With the Small-Bore Outdoor League

PENDING an official rechecking of the targets of the clubs leading in the series, the results of the tenth match in the N. R. A. outdoor small-bore league indicate that the Kiowa Shooting Club, of Des Moines, Ia., has won the contest on an aggregate of 9438 points out of a possible 10,000.

Second in line, as the scores now stand, is the Washington, D. C., Rifle Club, with a total of 9372.

Third in the list is the Massachusetts Rifle Association, of Boston, with 9319 points.

The shooting of the Kiowa Club during the last few matches has been of unusual excellence. Starting off in seventh place at the close of the first match, on a score of 901, or an individual average of only 180.2, the team showed steady improvement until in the fifth match it stood in first place on a score of 949, or an average of 185.8. A slump came in the sixth match on a score of 932, but during the remainder of the series the total has not fallen below 971. The score of the Kiowa team for the entire series shows an average of 943.8 for each match, or an individual average for each shooter of 188.7.

From the looks of the scores, there will be a good many 90 per cent medals awarded to men who have shot in each of the matches and have made this rating, regardless of whether they have been selected in the "five high" men every week.

There has never been an actual trophy for the small-bore outdoor match. Steps, however, have been taken to remedy this and the trophy is expected to be shortly forthcoming.

At the time the match was authorized by the National Board for the Promotion of Rifle Practice, through the then Assistant Secretary of War, the acquisition of a trophy for the competition was authorized. A change in the War Department administration shortly after that time, and before the trophy was obtained, interfered with the plans for this and one or two other matches; hence the trophy has never been selected. The N. R. A. planned to make the medals for this match miniatures of the trophy. Therefore the medals have not been struck.

At a recent meeting of the Executive Committee of the N. R. A., however, the matter was taken up and gotten into such shape that War Department action may be expected within a reasonable time.

Before the match is officially awarded to the Kiowa Club, the targets of the leading teams will be rechecked, to guard against any clerical errors.

The results in the tenth match are:

1. *Kiowa Shooting Club, Des Moines, Iowa:* Wharff, 198; W. Kessler, 195; Fines, 195; Berry, 194; C. H. Kessler, 194. Club total, 976.

2. *Los Angeles, Cal., R. & R. Club:* G. L. Wotkins, 194; L. Felsenthal, 191; J. W. Siefert, 191; E. C. Crossman, 190; E. D. Neff, 185. Club total, 951.

3. *Brooklyn, N. Y., Rifle Club:* L. J. Miller, 192; P. F. Lahm, 190; H. Otto, 189; J. W. Dearborn, 186; L. J. Corsa, 186. Club total, 943.

4. *Washington, D. C., Rifle Club:* J. C. Wheat, Sr., 190; R. H. McGarity, 189; J. H. Robertson, 189; F. Chisholm, 187; W. C. Robertson, 186. Club total, 941.

5. *Massachusetts Rifle Ass'n, Boston:* S. H. McAleer, 193; A. Niedner, 188; N. C. Nash, 188; J. Kelly, 184; H. Marshall, 183. Club total, 936.

6. *California R. C. R. & P. Club, San Francisco:* Paul Thelen, 185; R. M. Vaughan, 184; L. R. Kessing, 178; H. Schmidt, 178; J. F. Beamen, 177. Club total, 902.

7. *Franklin, Pa., Rifle Club:* C. H. Bronson, 190; F. E. Cathers, 185; W. W. Mackey, 179; W. H. Shaffer, 179; C. M. Campbell, 169. Club total, 902.

8. *Denver, Colo., City Rifle Club:* C. L. Butler, 194; A. H. Hardy, 181; R. E. Ladwig, 180; W. S. Diddle, 174; T. B. Watters, 172. Club total, 901.

9. *Manhattan R. & R. Club, N. Y. C.:* H. M. Pope, 194; Alfred H. Seeley, 188; David J. Gould, Jr., 188; K. H. Fichtner, 170; C. B. Walker, 159. Club total, 899.

10. *Warren, Pa., R. & R. Club:* J. A. Clark, 186; F. P. Lauff, 181; F. W. Jefferson, 177; J. L. Smith, 175; T. M. Carlson, 170. Club total, 889.

11. *Birmingham, Ala., A. C. R. & R. Club:* T. K. Lee, 198; Malven Jones, 183; A. F. DeFuniak, 175; Percy Reid, 170; D. Reid, 156. Club total, 882.

12. *Pentwater, Mich., Rifle Club:* P. N. Lagesen, 179; J. B. Hendrick, 179; E. B. Clark, 177; A. J. Jeffries, 171; F. W. Cramer, 168. Club total, 874.

13. *Cazenovia, N. Y., Rifle Club:* H. C. Thorne, 183; F. D. Holdridge, 179; C. F. Huttleston, 173; G. L. Woodworth, 170; R. D. Magee, 168. Club total, 873.

14. *Ashburnham, Mass., Rifle Club:* J. R. Briggs, 191; G. S. Hollingsworth, 183; Wm. A. Barlow, 173; G. Willard, 163; W. S. Young, 158. Club total, 868.

15. *Hydraulic Rifle Club, Cleveland, Ohio:* E. Gruber, 187; Fred Gruber, 178; J. Pettersen, 175; M. B. Nook, 163; J. Singer, 154. Club total, 857.

16. *Greater Omaha, Nebr., R. & R. Club:* Mather, 190; C. G. Riley, 169; W. B. Riley, 168; Allen, 166; Nicholson, 150. Club total, 843.

17. *Chicago, Ill., Rifle Club:* E. B. Witwer, 173; J. Howard, 172; H. F. Walbaum, 170; F. B. Roziene, 165; K. C. Robinson, 160. Club total, 840.

18. *Canton, Ohio, R. & P. Club:* A. E. Hart, 181; C. J. Foetz, 169; W. K. Perdue, 163; A. N. Scott, 160; W. A. Short, 157. Club total, 830.

19. *Middleboro, Mass., Rifle Club:* A. C. Jinney, 180; S. L. Brett, 168; H. L. Pember, 164; R. G. Bower, 160; R. W. Drake, 157. Club total, 829.

20. *Joliet, Ill., Rifle Club:* Arthur Gray, 181; H. D. Grose, 170; Leo. J. Deiss, 165; Paul B. Streich, 159; C. McKee, 154. Club total, 829.

21. *Citizens R. & R. Club, Rochester, N. Y.:* G. S. Searle, 181; W. W. Lewis, 174; A. G. Johnson, 172; C. D. V. Hobbie, 153; F. C. Sherman, 148. Club total, 828.

22. *Norwalk, Conn., Rifle Club:* J. A. Baker, Jr., 175; E. N. Dart, 173; F. Hoppel, 168; B. Reynolds, 157; W. E. Mathews, 155. Club total, 828.

23. *Community Rifle Club, Sherrill, N. Y.:* Burlingame, 179; S. Freeman, 174; L. Lee, 173; H. Freeman, 165; L. Amacher, 135. Club total, 826.

24. *Olig Rifle Club, Reward, Cal.:* C. M. Small, 172; A. C. Dambacher, 167; H. W. Cullen, 164; S. J. Burris, 158; B. F. Mattison, 157. Club total, 818.

25. *Antioch, Ill., Rifle Club:* E. S. Garrett, 178; F. R. King, 171; H. E. Williams, 169; N. E. Proctor, 158; J. Panowski, 142. Club total, 818.

26. *Ontario, Cal., Rifle Club:* F. H. Wallihan, 178; C. E. Hare, 160; C. H. Card, 158; E. Casler, 156; U. Tangeman, 156. Club total, 808.

27. *Toledo, Ohio, R. & P. Club:* H. G. Affleck, 187; B. C. Wilson, 185; H. G. Crawford, 184; H. Yunker, 174. Club total, 730.

28. *Canyon City, Ore., Rifle Club:* W. C. Mason, 155; J. M. Blank, 149; C. G. Gurnsey, 147; D. Leedy, 143; H. Allen, 135. Club total, 729.

29. *Patchogue Rifle Club, New York:* Robert A. Van Tuyl, 150; F. P. Johnson, 149; Chas. C. Cave, 132; Julius Chevally, 122; F. C. Brophy, 117. Club total, 670.

30. *Holbrook, Arizona, Rifle Club:* L. H. Mickey, 135; C. Osborne, 119; D. Ayon, 92; C. P. Cooley, 69; W. Lee, Jr., 66. Club total, 481.

The unofficial aggregate standing at the close of the tenth match is:

Club	Score
1. Kiowa Shooting Club, Des Moines, Iowa.....	9438
2. Washington, D. C., Rifle Club.....	9372



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3. Massachusetts Rifle Ass'n, Boston...	9319
4. Brooklyn, N. Y., Rifle Club.....	9317
5. Birmingham, Ala., A. C. Rifle Club..	9024
6. Los Angeles, Cal., R. & R. Club.....	8974
7. Manhattan, N. Y. City, R. & R. Club.	8950
8. Cal. R. C. R. & P. Club, San Francisco	8609
9. Denver, Colo., City Rifle Club.....	8596
10. Franklin, Pa., Rifle Club.....	8574
11. Toledo, Ohio, R. & P. Club.....	8572
12. Cazenovia, N. Y., Rifle Club.....	8511
13. Canton, Ohio, R. & P. Club.....	8488
14. Pentwater, Mich., Rifle Club.....	8478
15. Ashburnham, Mass., Rifle Club.....	8404
16. Warren, Pa., R. & R. Club.....	8375
17. Norwalk, Conn., Rifle Club.....	8317
18. Citizens R. & R. Club, N. Y. City....	8251
19. Greater Omaha, Nebr., R. & R. Club..	8168
20. Hydraulic Rifle Club, Cleveland, Ohio	8134
21. Community Rifle Club, Sherrill, N. Y.	8117
22. Middleboro, Mass., Rifle Club.....	8036
23. Joliet, Ill., Rifle Club.....	7938
24. Ontario, Cal., Rifle Club.....	7775
25. Olig Rifle Club, Reward, Cal.....	7670
26. Antioch, Ill., Rifle Club.....	7583
27. Chicago, Ill., Rifle Club.....	7381
28. Canyon City, Ore., Rifle Club.....	6783
29. Patchogue, N. Y., Rifle Club.....	6287
30. Holbrook, Arizona, Rifle Club.....	6115

Tenth Match Missing

Milwaukee R. & P. Club.....	8390
Jacksonville Rifle Club, Fla.....	8023
Scott Rifle Club, Ark.....	7715
Malta Rifle Club, Mont.....	5363

Ninth and Tenth Matches Missing

New Bedford Rifle Club, Mass.....	6444
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Eighth, Ninth and Tenth Matches Missing

Gen. Phil Kearney Rifle Club, N. J.....	5017
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Rochester Rifle Club, Minn.....	4963
Niskayuma Rifle Club, Mass.....	4868

Seventh, Eighth, Ninth and Tenth Matches Missing

St. Johnsbury Rifle Club, Vt.....	4715
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Sixth, Seventh, Eighth, Ninth and Tenth Matches Missing

Wilsall Rifle Club, Mont.....	3167
Massena R. & P. Club, N. Y.....	3100
Kenosha Rifle Club, Wis.....	2777

Fifth, Sixth, Seventh, Eighth, Ninth and Tenth Matches Missing

Akron Rifle Association, Ohio.....	2811
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Fourth, Fifth, Sixth, Seventh, Eighth, Ninth and Tenth Matches Missing

Hoosier Rifle Club, Ind.....	2390
St. Louis Colonial Rev. Club, Mo.....	1745

Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth and Tenth Matches Missing

Highland Rifle Club, Calif.....	1427
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Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth and Tenth Matches Missing

Hopkins Rifle Club, Minn.....	865
Litchfield Rifle Club, Conn.....	491

No Matches Reported

Saranac Lake, N. Y., Rifle Club.	
Mt. Olive Rifle Club, Reedly, Colo.	
National Rifle Club, Newark, N. J.	
Long Beach Rifle Club, Calif.	

matches. The usual features included Bill Almy being dragged away from home and fireside and brought to the match by one Bradford Norman who holds that business should not interfere with shooting.

The score sheet looks about as follows:

Name	300	500	600	200	300	Tot'l
	SF	SF	SF	RF	RF	
Spooner	44	44	42	36	47	213
Rhodes	41	46	48	43	44	222
Powel	41	33	23	27	35	159
Howe	39	30	39	40	42	190
Chase	43	45	35	32	44	199
Alderson	34	38	34	35	34	175
Peckham	39	39	40	40	32	190
Hay	33	35	20	35	44	167
Stoddard	44	41	43	43	31	202
Fletcher, H. P.....	41	47	46	42	46	222
Thurston	44	41	35	41	34	195
Fludder	35	40	24	26	22	147
Easton	28	31	21
Fletcher, Ted	35	41	38	30	44	188

RALPH F. RHODES.

Roy Shumway of the Zephyrhills, Florida, Rifle Club, has qualified as a marksman with a rapid fire score of 75, total 127.

The Members' match recently held by the Manhattan Rifle and Revolver Association, over the small bore course resulted in a tie for first place between Clinton B. Walker and C. L. Cammann, Jr., their scores being 242. Mr. Walker was declared the winner, because while both men's scores were similar in the rapid fire and also the slow fire, Mr. Walker made the higher scores in the long range.

The Newton Center, Massachusetts, Rifle Club, in a Labor Day shoot, defeated the Upton, Massachusetts, Rifle Club by a score of 232 to 216. The match was shot on the West Upton range, and the course of fire called for 10 shots prone at the B target, 300 yards. Five-men teams participated in the match.

A REAL SPORTSMAN'S CALENDAR

To the average sportsman, the year begins in September. Then, Nature starts to paint the forest leaves a brighter tint, the nuts are nipped with the first frost, the Autumn haze clothes the hills, and—the game seasons open.

A sportsman whose heart responds to the September call of the hunt suggested to the Remington UMC people that a calendar for the tribe of Nimrod should be issued with this month of charm leading all the rest. So the Remington calendar comes to us this year bearing leaves for all the months from September, 1917, to December, 1918, inclusive.

In another respect this calendar is a precedent-breaker. The full-color sketch which adorns it is in Lynn Bogue Hunt's best style—in fact, good judges say that Mr. Hunt never did a better thing. Have you had a covey of quail whir-r-r up right under your feet? If you have had this experience, you will get a much better view of the birds and in just as true color when you see this splendid calendar. Should you be looking forward to coming upon your first quail, Mr. Hunt here saves you the trouble of going to the fields. Just below the sketch is another new note—an extremely artistic view of the mammoth Remington UMC factories.

Sportsmen the world over will treasure this calendar—those who are fortunate enough to get one—and when its sixteen leaves have gone, will frame it "for keeps."

First Army Mule—What's the matter? You look dejected.

Second—I've been driven all day by a militiaman who never says anything stronger than "Pshaw," and it gets on my nerves.—Puck.

HANGFIRES AND RICOCHETS

The Newport Rifle Club held its regular Labor Day shoot, September 3, at its range at Redwood Farm, Porthmouth, R. I. During the preceding week or two the prospects for a shoot looked decidedly gloomy on account of the ammunition question. Some had ammunition and some had not, but as the date for the shoot drew near one after another announced that he would shoot. Ammunition was secured in one way or another so that when the crowd showed up Monday on the range fourteen men wanted their names on the score sheet.

There was not a cloud in the sky when the targets were run up from "half mast" and the red flag disappeared within the pit. Furthermore, it was hot and as for wind, one had to suck his finger before holding it up in order to feel any air stirring. The course shot over was the regular old qualification course beginning with slow fire on the fly speck at 300 yards. Isn't this the profanity course though, with near fives to keep the talk steadily flowing? No one got a decent score, 44 being high. Every one is always glad when this state is done and he can spread out his poncho back at the 500-yard peg.

At 500, Fletcher (Pewee) got a 47 for the high score, Rhodes and Harry Chase accumulating 46 and 45 respectively. About this time Powel was slamming things into his bag one minute and squinting into the bore of his gun the next. He wasn't happy worth a darn, for about six inches from the muzzle of his gun (inside) there was a teensy weensy spot that would not wipe out. A little thing like this would not worry a regular fellow like Fludder or Ted Fletcher but it certainly did peeve Powel, and when a fellow arrives at this state of

mind you had better give him plenty of room.

At 600 yards Rhodes got a 48 which swelled him up considerably. Of course the two fours that he got couldn't be explained. They were either errors on the part of the markers or were due to defective ammunition. Fletcher got a 46 making his total to date 134 to Rhodes 135. After this, these two broke off diplomatic relations. The overt act had been committed.

When the 600-yard stuff is over with, most every one packs up his traps keeping out only 20 rounds of ammunition and some chewing tobacco. The tension relaxes and all that have brought lunch can be seen with nourishment in each hand and a distorted countenance. At 200 and 300 yards rapid fire, Fletcher got an 88 and Rhodes an 87, making their grand totals the same, 222. It is rather disagreeable for a well mannered crowd to be around these two at times like this but as it could not be helped very well it was endured.

The Labor Day match for this club is the most enjoyable one of the season perhaps, and this one was no exception to the rule. The day was an unusual one though in one respect—the score sheet did not have on it the name of one P. E. Brooks. This regrettable fact was due to a very severe attack of automobilitis from which Brooks is now a chronic sufferer. He was on the range during the match and was the recipient of much sympathetic attention. The unusual features included H. P. Fletcher finishing the match with an upper lip of normal color and size and several fives made by Fludder which were not punctuated by cartwheels and wrestling

Off Hand From the Clubs

N. R. A. Adopts Small-Bore Course

RADICAL changes in the targets tentatively prescribed for small-bore outdoor qualification marks the official adoption of .22-calibre work on the open range as part of its rifle-shooting program by the National Rifle Association of America.

The seal of approval was set upon the proposed course, after modifications had been effected, by the members of the executive committee of the N. R. A. meeting in Washington, September 21st.

The course of fire was officially sanctioned as the result of a tryout among the clubs which has been going on for the past three months.

The small-bore outdoor qualification course for N. R. A. clubs, in its approved form, calls for shooting at 50, 75, 125 and 150 yards, instead of at 200, 300, 500 and 600 yards, and where reduced targets following closely the army regulation targets were proposed at first, the course in its final form calls for slightly different targets, giving scoring bulls of the proper ratio, but in the instance of the short-range target a sighting bull slightly larger.

The reduced D target prescribed for rapid fire at 50 and 75 yards in the tentative course has been abandoned. Any sights may still be used, but in order to compensate for the advantage in telescopic equipment, a larger qualifying score is required when the telescope is used. Here is the course in full:

Targets

A-4: The short-range target used for 50 and 75 yards slow fire is a rectangle 18 inches high and 12 inches wide. Black circular aiming bull's-eye 3 inches in diameter, with scoring bull 2 inches in diameter, value of hit, 5; center ring, 6½ inches in diameter, value of hit, 4; inner ring, 11½ inches in diameter, value of hit, 3; outer (remainder of target), value of hit, 2.

B-4: The mid-range target used for 125 and 150 yards slow fire, and for 50 and 75 yards rapid fire, is a square 18 inches on a side, black circular counting bull 4 inches in diameter, with black circular sighting bull 5 inches in diameter; center ring, 9¼ inches in diameter; inner ring, 13¼ inches in diameter; outer, remainder of target. The value of hits is the same as on target A-4.

Target C-4: The long-range target used for 200 and 250 yards, a rectangle 18 inches high and 30 inches wide. Black circular bull's-eye, 9 inches in diameter, with inner scoring bull 7½ inches in diameter; center ring, 13½ inches in diameter; inner space outside of center ring bounded by vertical lines 6 inches from each end of target; outer, remainder of target. Value of hits, same as on Target A-4.

In the course of fire, slight changes have been made, principally affecting the time limit in rapid fire, an effort being made to so regulate this practice that while allowing plenty of time for the shooter to operate a single-shot weapon, the spirit of rapid fire will be observed. The new course of fire is:

OUTDOOR SMALL-BORE QUALIFICATION COURSE

Range	Time	Shots	Targets	Position
75	No limit	10	A-4	prone
125	No limit	10	B-4	prone
150	No limit	10	B-4	prone

Two sighting shots permitted at 150 yards. In firing with sandbag rest, either rifle or back of hand must rest on sandbag.

Rapid Fire

Range	Time	Shots	Targets	Position
50	1 min.*	10	B-4	kneeling from standing
75	1 min.*	10	B-4	prone from standing

*If single-shot rifle, time may be increased 1 minute.

This course may be fired as many times as desired in any target season, the individual's classification being determined by the best of his trials; but this provision should not be construed to permit the formation of a record based on scores selected from two or more trials; the basis of classification must be the result of one complete score in each case.

Coaching is allowed and desired in record practice.

Points required for qualification, possible 250: When sights not containing glass are used, for Expert 210, for Sharpshooter 190, and for Marksman 160; when telescopic sights are used, for Expert 225, for Sharpshooter 205, and for Marksman 175.

Long-distance Practice

After the qualification course has been completed, those men who have qualified as experts and sharpshooters may be given long-distance practice.

Record practice will consist of any selective score of 10 shots each:

Range	Time	Shots	Targets	Position
200 yds.	15 min.	10	C-4	prone
250 yds.	15 min.	10	C-4	prone

No one should be advanced to practice at 250 yards until he has attained a minimum total of 40 points at 200 yards in any score of 10 consecutive shots.

When an individual has attained a total of 75 points at 200 and 250 yards, including a minimum of 40 points at 200 yards by selective scores of 10 consecutive shots, he shall be considered as qualified in long-range practice.

The approved form of the outdoor small-bore qualification course is largely the outcome of criticism sent in by N. R. A. riflemen who have been trying out the program as first submitted for experiment.

In its larger aspects, the course seems to have met the instant approval of the shots of the country. There were several points upon which most of the critics, however, seemed to agree. One of the most frequent criticisms was directed against the D-4 target, the reduced silhouette for rapid fire. This target, it was generally conceded, was very easy. Another recurrent criticism was directed against the allotment of time in rapid fire.

These two points were largely responsible for some of the most radical changes made in the course. The larger sighting bull, with inner scoring bull, however, came about not only by reason of the fact that many riflemen declared in favor of such an innovation, but because the theory of practical war-time shooting now seems unquestionably to center about the group instead of the scattered hits.

As every rifleman knows, it is far easier to scatter ten shots around the circumference of the 5-circle, which would bring a perfect score, than it is to group those ten shots within the coveted ring. It is therefore with an idea of emphasizing the necessity of learning to hold that the smaller counting bulls have been provided.

Lee Declared Winner

On a shoot-off score of 496 out of a possible 500, T. K. Lee, of Birmingham, Ala., has been declared winner of the N. R. A. Individual 50-shot Championship Match.

At the conclusion of the match, during the early part of last June, three contestants were found tied with possible scores. They were Lee, Capt. Francis R. Whelan, of the Lowell, Mass., Military Rifle Club, and C. E. Swanson, of the Gisholt Rifle Club, of Madison, Wis. A shoot-off was arranged for. Lee shot his score under the supervision of a representative of the N. R. A., making a total of 496 points.

The question of awarding the match was considered by the executive committee of the N. R. A. at a recent meeting, and the decision was rendered in favor of Lee.

Interclub Match Arranged

Invitations to an interclub shoot to be held at Reading, Pa., October 14th, have been issued to the Allentown, Harrisburg, Lancaster, Lebanon, Lehigh, P. R. R. Keystone, Ft. Pitt of Pittsburgh, and Pottsville rifle clubs of Pennsylvania by the University Rifle Club.

The proposed match will probably be over a course of 15 shots per man at 200, 300 and 500 yards on the A and B targets, using any rifle and any sights.

The Reading Club reports, in connection with the plans, that its four-target range is in excellent condition and that 30 or 40 men can be accommodated by beginning to shoot at 10 o'clock in the morning and winding up about 1:30, after which luncheon will be served on the firing line.

Sighting Shots

Editor ARMS AND THE MAN:

On my return September 16th from the beautiful little army and navy base of San Diego, the city of bay and climate, I was charmed to note from the columns of your 'steemed publication the glad tidings that the San Diego Rifle Club was all cocked and primed for a match with us, and that furthermore their particular bright and shining star, Mr. Schroder, is all ready for a match with the best that we have with us. I would be even more pleased with this information—being a great admirer of rifle matches and being desirous of boosting the game—could I manage to reconcile two apparently irreconcilable facts.

The first one is that ARMS AND THE MAN of September 8th contains the before-mentioned statement from the San Diego Rifle Club that they and their leader were ready for a shootin' match of sorts. The second one is that just about the time this issue arrived in Los Angeles I was in San Diego, and at that time did myself the honor of calling on Mr. Schroder in person—Mr. Schroder being a former Angeleno and one of the best offhand shots and best barrel borers on the coast.

During this interview Mr. Schroder assured me that the club was "done busted," so far as shooting ability was concerned; that it had lost most of its members, and that it had apparently no material to work with in making up a new assortment of 222 stars. I was conclusively assured that no match was possible,

and that San Diego could not shoot in the So. Cal. Rifle League I had in mind for the sake of the game. Also, Mr. Schroder made no mention of an individual and friendly match between his good self and some member of this club.

Wherefore I am sadly put to it to reconcile the letter in *ARMS AND THE MAN* from Bro. Bellon, appropriately headed "San Diego accepts Los Angeles del," and the personal interview with Bro. Schroder. Is it possible that Mr. Schroder is, as he told me, not entirely in touch with what the San Diego Rifle Club says in print, however cognizant he is of its doings on the range?

Because of the discouraging result of the talk with Mr. Schroder, who is enough of a lover of the game to want to shoot if San Diego conditions permit, I am moved to inquire once more through the columns of your estimable paper whether Mr. Schroder or Mr. Bellon got the signals crossed—whose fault it was that Bro. Schroder pitched a high incurve when Bro. Bellon signalled for a low outdrop.

It is, of course, but fair to San Diego to say that their conditions are those of the Los Angeles Club and of every other outfit in the country. We have also lost about half of our members, and a grievous number of those remaining have become afflicted with one-way pocket-books, or else accumulated a lot of fish-hooks in the trouser pockets where the small change is kept.

We are grieved to note that the match, if shot, must be shot over the old and archaic and abandoned course used by the milish and some of the clubs last year. We are so grieved, not because we haven't shot this course day in and day out in practice for the interclub matches of 1915 and 1916 and not because we cannot handily beat our San Diego friends over it, but because the course is as said before, abandoned, and the battle sight a thing of the past as formerly used.

While I, of course, appreciate that the news has not yet filtered down the Santa Fe San Diego branch, yet it is true that the army has dropped the battle sight as we formerly used it, has put on higher front sights, and has remarked the zeros of the drift slides to compensate for the change in the front-sight height. Inasmuch as the army has dropped the idea of holding one place to hit another, as the Marines never did use it when they could avoid it, and as said Marines are after even a new rear sight as per a letter from my friend Captain MacDougal, I see little use in perpetuating a past and forgotten mistake of the Ordnance Department, that said O. D. now sees after these many years. As I have argued against this battle-sight idea in various periodicals, from *The United Service* of England and *The Scientific American* down to the *Infantry Journal* of this country, I should hardly be consistent in doing my part in framing a match which utilized a style of sight and sighting dropped cold by even the hide-bound army. I feel confident that even San Diego will drop this sight and this style of holding two feet away from the thing to be hit when the glorious tidings are conveyed to them by this letter of mine, for which there is no charge—seein' it's San Diego.

I appreciate that tearing themselves away from this sight will be painful to San Diego and the cohorts of Mr. Bellon, in view of the fact that in the mentioned score of 222, which was first held up to show the capabilities of Mr. S. and which score is now cruelly abandoned as being made in a fog, Mr. S. made 38 rapid fire at 200 yards!

The said 38 is explained in Mr. Bellon's letter to *ARMS AND THE MAN* as being due to adverse atmospheric conditions and a dense fog. This is, of course, easily understood—particularly in view of the fact that at 600 yards, which is three times as far as 200 and which is on a bull not so wide as the silhouette used at 200, Mr. S. made, as I remember, 46 or 47. It was this same fog which was respon-

sible for the poorest score of the 222 being made at the shortest range on the largest figure. Having made this plain to the readers of this note, we'll pass on.

It is rather unfortunate that in hanging up with so many fireworks and so much implied gratification Mr. Schroder's score of 222 x 250, Mr. Bellon did not at that time state as he now states: that said score was made in a fog—or at midnight—or with one hand tied behind him or entire offhand, or with some other form of handicap imposed. The failure of Bro. Bellon to fully state the details was responsible for my taking up the matter, lest others also be deceived and feel that in Southern California the wondrous total of 222 was considered as being but two jumps behind a 98 x 100 at Jacksonville, with the mirage running and the distance just 1,000 yards. The total of 222 is, of course, a good total for a shoot held in a fog, even though the poorest score was over the easiest seen range; 202 might also be a good score under the same adverse conditions. Only, when such scores are made under wraps, so to speak, it is well to specify the conditions.

I am touched to note the confidence shown by Mr. B. in the ability of Mr. Schroder. He states that he believes Mr. S. is in the 240 class and ranks among the first. I really feel that Mr. Bellon deprived us of a rare treat in not digging down into the old score-book and printing some 240 scores of Mr. Schroder's. Or, say a few over 230. Careful reading of *ARMS AND THE MAN* has failed to develop any 240's on record for Mr. Schroder, or any 230's. All it has managed to bring to light is just one score, and that one with many verbal pyrotechnics calling attention to it, the same being as before said, to-wit, 222 x 250—made in a fog. Apparently Mr. Bellon is holding back something on us; either he's cruelly failing to give Mr. Schroder credit for what he's done, or else he's printing only the foggy scores for bait to other clubs and shooters.

Looking over the San Diego records as set forth in the public prints fully satisfied us that Mr. Schroder is much better than the rest of the San Diego Rifle Club—so much better as to provoke them to rush into print with even the foggy morning scores and challenge the world. But the fact of Mr. S.'s superiority to the rest of San Diego's rifle shooters doesn't necessarily prove his superiority to some of the veteran military rifle shots on the Pacific Coast, and it was to call this to the attention of the enthusiastic San Diego secretary that I penned the note to *ARMS AND THE MAN*. Were it not verging on possible rudeness, I would call to Mr. Bellon's attention the old fable of the large frog in the small puddle.

I am delighted to note that the San Diego club will permit us to use some of the equipment possessed by all up-to-date riflemen, including the national teams at the national matches. Only, why the mention of the details? Are they unfamiliar to the San Diego club men?

Inasmuch as my note was merely to accept the challenge of the San Diego boys for an individual match between Mr. Schroder and any comer inhabiting the Pacific Coast, and inasmuch as Mr. B. still fails to specify date, range and details, and farther inasmuch as Mr. Schroder didn't suggest any details in my talk with him, I am compelled to make farther inquiries from Bro. Bellon. I am sure that when Bro. Bellon learns the grand news as to the abandonment of the battle sight he'll not insist on perpetuating this old relic, more particularly when he considers that the San Diego Samson made 38 rapid fire at 200 yards using this sight, and his poorest score therewith. Lest he misconstrue our attitude toward it, I take the liberty of printing the scores made in the interclub match of 1916, the last time we shot the battle sight in competition, which was before an outside officer.

Wotkyns, 200: 48, 300 50; Crossman, 50, 49; March, 49, 50; Felsenthal, 47, 47; Gardiner, 46, 48; Thomson, 46, 47; Neff, 45, 46; Hansen, 49, 50; Hansen, 46, 45; Kemper, 44, 46.

Wherefore I feel that we have no reason for disliking the battle sight if past experience is any guide, but feel that using this misfit longer, even to satisfy our San Diego friends, is hardly worth while. Were they not in a town made up these days largely of service gentlemen, with possibly opportunity now and then to be the recipients of some little from them in the shape of a stray bando or two, I should be inclined to suspect the San Diego boys as being a bunch of disguised millionaires, considering the fact that ammunition is now \$39, and unpurchaseable at that.

More detailed information from San Diego as to the sad failure of what Bro. Bellon says and what Bro. Schroder says, to agree in any way, will be gratefully received by this club, because we like the San Diego boys for their disposition to keep things moving. We know they don't object to being "joshed," any more than we do, and we feel that we might have an enjoyable little match with a good club.

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

Commenting upon a recent editorial, W. H. Rhodes, secretary of the Oakland, California, Rifle Club, says:

"I read with considerable amusement your article in the issue of August 18th, entitled 'The Secretary and His Club,' and while I do not wish to give the impression that the average club secretary feels himself to be an abused person, still I believe that the majority of same will offer you their hearty 'Amen' for that article. Also, I notice that you ask for suggestions to help retain the interest of club members during these trying times and for any ideas that may assist in carrying on club work. Below are a couple of suggestions I would like to offer.

"That during these times, when some clubs are doing very little actual range work, that the meetings of the club be made educational in nature, and that all time not otherwise occupied be devoted to the study and reading of some of the great mass of valuable data and information easily available to any club.

"For instance: *ARMS AND THE MAN*, a copy of which is sent to every club and which I believe is seldom seen by the great majority of club members, contains in every issue articles of interest to the average club member, such as the description of the new U. S. rifle, Model 1917, about which there has been so much noise; also the articles on machine guns and 'Little Talks About Team Work,' besides scores of others too numerous to mention.

"Why not let the Executive Board of each club divide up this work, each man, we will say, reading one of these articles and seeing that it is understood by all the assembled club members. This would really arrange the matter as a sort of lecture course of a very easy sort, as the material for which is already printed and need only to be read.

"Besides these articles, there is much valuable information to be obtained from outside sources on such subjects as ballistics, a thorough study of which would hurt no club; also a study of the best information on reloading and reloaded ammunition in general would do a world of good and might go a long ways toward helping the burst-barrel and broken-bolt evil at this time.

"This last leads directly up to my second suggestion: that clubs adopt some good load as their standard for practice shooting and in fact all work except where service loads are required, and reload their empties with this load.

"For example, Ideal bullet No. 308,334 loaded with 25.5 grains Du Pont No. 21 works

well, as do many similar loads made up with cast bullets and a light charge of powder.

"These loads may not and I know do not give the same results as the regular service load, but in times like these, when we do not know when we will get any more service ammunition or ammunition components, we can not afford to be too particular, and I believe it behooves us all to conserve our supply of the above very jealously, keeping the same to be used only where service loads are specified, as in the Members Match and such competitions as require it, or for long-range work.

"The thing is now to keep the boys from drifting apart and losing their interest in the game, a result that will certainly overtake us unless some plan is devised to hold things together.

"The new .22-calibre courses will go a long way toward bringing the desired result, but there are many club members who do not possess .22-calibre rifles and others who do not care for the small rifles, and for such some other plan is necessary.

"While the above ideas seem reasonable to me, I realize that others may differ with my suggestions; but if they will help in the least toward solving the problem that now confronts civilian rifle shooting, I will feel well repaid for having offered them."

INQUIRIES OF GENERAL INTEREST

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

Q. With what rifles are the American forces in England and France equipped? From a double-page picture in the *Sphere*, of London, showing the American forces parading before the King, I gather that at least part of the troops are armed with the old long-barreled Krag.

A. The greater part of the American forces abroad are armed with the 1903 Springfield. The general plan is to arm all of the National Army—the selected conscripts—with the Model 1917 U. S. rifle, as the weapon adapted from the British rifle of 1914 is known. The photograph in the *Sphere* was undoubtedly a contingent of the United States Engineers. It is understood that some of these troops were sent abroad with Krags, in order to conserve the supply of Springfields, since they would figure to a small extent in the trench fighting.

Q. In taking up pistol shooting, is it advisable to begin with the single-shot .22-calibre pistol?

A. In order to become a good shot with a revolver or pistol, it is quite necessary to begin with the single-shot pistol of .22 calibre. In the past there have been three or four models on the market, but owing to the abnormal conditions of the past two or three years, it is almost impossible to say whether or not these models may be purchased in the open market. The standard single-shot pistol used by the shooting fraternity is the .22 S. & W. with 10-inch barrel chambered for the .22 long rifle cartridge.

Q. Which is the best sight for target shooting with the .22 rifle? Also, is the single-shot rifle better for accuracy?

A. You will find that the best results will come from using peep sights, both front and rear. The rear peep sight should be as close to the eye as it is possible to get it—that is, on the tang of the rifle. An aperture front sight gives the best results in target shooting. If it is the correct size, the bull's-eye may be seen exactly in the center with plenty of clear

white space around. Taking everything into consideration, the single-shot target rifle gives better and more accurate results than the repeater, principally because it is heavier, which allows it to be held more steadily.

Q. When a member qualifies and is entitled to a Springfield, we understand a property transfer is issued by the N. R. A. In case the rifle is owned by the club, do they get credit for same? Also, in case there are no Springfields on hand, just how should the matter be handled at present?

In reference to ammunition: Do we understand limited quantities can now be purchased from the Ordnance Department? What are the prospects for the resumption of the free issue? Is there any probability that this will be started again during the war?

A. When a member qualifies as a sharpshooter or expert, he is entitled to own a Springfield or a Krag. This does not mean that the weapon is given to him. It simply means that he can purchase and acquire outright title. If the rifle to be transferred is owned by the club, the member qualifying simply pays the club for the rifle, and the transfer papers are made out by the N. R. A. If the club has no Springfields, there can none be purchased at present. In such a case the member will either have to be satisfied with a Krag or wait until the suspension of the purchase privilege is lifted. The ban on purchase from the Government included ammunition. None can be bought at present. Until

the armies of the nation are fully equipped, there is no chance, apparently, of a resumption of the free issue.

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

CIVILIAN

Missouri

Lewistown Government Rifle Club—E. L. Newlon, secretary; Dr. T. F. McGlasson, president; C. W. Stinson, vice-president; W. E. Bragg, treasurer; Roy Roberts, executive officer. Membership, 21.

Montana

South Boulder Rifle Club, Jefferson Island—C. G. Shenk, secretary; Highland Shaw, president; Wm. T. Raney, vice-president; Earle Hildebrand, treasurer; Wm. Lubke, executive officer. Membership, 20.

New Jersey

Sterling Hill Rifle Club, Ogdensburg—Wm. G. Bailey, secretary; Warren Hastings, president; James C. Hyde, vice-president; Fred Chambers, treasurer; L. J. Weintz, executive officer. Membership, 34.

Washington

Northport Rifle Club—Rowland Pike, secretary; William Lillie, president; A. A. Morgan, vice-president; C. E. Allison, treasurer; Earl Greenlee, executive officer. Membership, 43.

WITH THE SCATTERGUN

Rabbits Good To Hunt Are Better To Eat

RABBITS as a source of sport and good "eats" have been derided time and again by the more pretentious and wealthy sportsmen, but this game of the every-day man now has a wide following, says a writer in a magazine devoted to hunting.

And those of us who indulge our liking for the plebeian pastime of rabbit hunting, in fear of incurring the scorn of the leisured hunter, can take heart from the following writings of an ancient and venerable gunner who has pursued game of all kinds over these United States and is not too nice to admit his liking for the humbler sport and the good it produces.

"Rabbit en casserole for mine once a week all winter. That means for this choice morsel, as well as birdlets, cooking in a crockery dish with a cover, among vegetables done in small globe shapes and swimming in gravy.

"Some dishes are found more exclusively on the tables of the wealthy; but why? A casserole cooking dish costs little. Get a book if you don't know the ropes, and learn how. It costs no more to cook a bird or beast this way than in the old spider on top of the stove.

"I dislike to see you tramping all day and using up good ammunition, only to bring home game for poor cookery. All game will stand for en casserole, and many now never cook a guinea hen except in that manner.

"The rabbit has his nice little ways of hiding while you are looking for him with a gun, particularly if you have no dog

along. He simply burrows in leaves or soft wood soil, leaving only his eyes visible, same as a flounder hides in the salt water bottom, under a thin coating of sand. Then he beats it for a brush heap, where you can dance up and down something livelier than a tango or a hesitation until he comes forth.

"With the ground heavily carpeted with dried leaves and abundance of old weed-covered logs and stumps, a rabbit can lead gunners and dogs as merry a chase as ever exasperated a hunter. Everywhere are his lairs about logs, where he enters one end and emerges out of the other, while the dogs are tearing up the ground at the point of disappearance. Sometimes you get a good bag easily, and then again, with the animals plentiful, you don't. Really, it takes half a dozen boys in a bunch to get rabbits galore, and my memory of such hunting is that said gang of kids beat all the hunters to a frazzle.

"My greatest sport rabbit hunting happened years ago in Mississippi. The party was mounted on horseback, trained for field and forest hunting. The field of the chase was an immense lot of uncut weeds, dry and rearing their heads at the horses' knees.

"The hunters started even in a row, rode swiftly, but evenly, in straight lines, firing between the horses' ears as each put up a rabbit. Employees followed behind, gathering up the deceased. At the end of the field the cavalry swung around and coursed back in straight line, making new rows, like plows. In this way the sport kept up until the whole area had been thoroughly covered, when adjournment was had to a new field.

"Such hunting couldn't last long, it was too strenuous. At lunch times a lot of tired riders, who were exhausted by the maximum of the greatest fun ever, paused long enough to eat, then plunged slowly into

the depths of the forest after deer and bear.

"Nothing arouses Westerners more than rabbit hunting in the East. In the West the rabbit hunt is a quarterly affair, in which all of the men that can be got together engage as a matter of business to kill and destroy the accumulated rabbits, forming one of the greatest pests, which eat more valuable products than birds or cattle."

Many Cities Want G. A. H.

Indications at this particular time are that there will be spirited bidding for the four sectional trapshooting handicaps and the 1918 Grand American Trapshooting Tournament at the annual meeting of the Directors of the Interstate Association for the Encouragement of Trapshooting which takes place in New York on Thursday, the eighth of November.

For many years there was little genuine enthusiasm in the conducting of the sectional tournaments. This isn't the case now. There were a dozen or more applicants for each subsidiary handicap last winter and there will be quite a number of cities in line for the events when the bell is tolled on November 8. All applications for the Eastern, Western, Southern and Pacific Coast Handicaps and the Grand American Trapshooting Tournament must be in the hands of the Interstate Association by October 15.

Spokane, Wash., and Los Angeles, Cal., have already put in bids for the Pacific Coast Handicap; Omaha, Neb., and Peoria, Ill., for the Western Handicap; Louisville, Ky., and Birmingham, Ala., for the Southern Handicap; Wilmington, Del., Baltimore, Md., and New York City for the Eastern Handicap, and Toledo, O., for the Grand American Trapshooting Tournament.

Trapshooters rather hope that the South Shore Country Club, of Chicago, Ill., will put in a bid for the Grand American Tournament and that Toledo will wage a fight for the Western Handicap. Toledo has a fine place on the bay for the shoot, not more than 20 minutes from the heart of the city, and Toledo will give a royal welcome to the trapshots, but the trapshooters would pick Chicago over all other places, and the South Shore Club first of all. It is next to impossible to stage a Grand American any better than Chicago staged the last one—and if the South Shore Club bids again the Interstate Association could aught but award them the tournament.

Toledo was a contender for the Western and Grand American tournaments last year, losing out both ways.

Baltimore was a contender for the Eastern Handicap last year, losing to Hartford. This time the Oriole City will have strenuous opposition also in Wilmington and the new Forest Hills Gun Club, of New York. Wilmington staged the Eastern Handicap in 1911 and 1913 and had 201 entries in 1911 and 264 in 1913. Wilmington has a new gun club now, a new trapshooting park, and more "pep" than ever.

Omaha staged the Western Handicap in 1911, 1913 and 1916, and in these years had 188, 150 and 159 entries. Omaha always stages a good shoot. Peoria has a hustling gun club and its members got in a lot of good licks during the Grand American. Spokane and Los Angeles were both bidders against St. Jose last winter for the Pacific Coast Handicap. Spokane staged the shoot in 1907 and Los Angeles in 1906 and both want to show how much they have come to the front since then. Birmingham held the Southern Handicap in 1908 and attracted 116 entries. Louisville has never bid for the tournament, but is coming to the meeting with a full delegation intent on getting this one.

By October 15 the Interstate Association should have a good crop of cities eager to stage the trapshooting classics of the year.

Some Dope For Beginners

People are prone to idolize and imitate a winner, but before the trapshooting novice attempts to do things as he sees a good shot do them he should mentally compare his build, temperament and other characteristics with those of his model.

Some men, and good shots, too, handle a gun in a peculiar manner because they have to. Their way may be a bad way for a man of an entirely different build.

For instance, a man may be an excellent shot and yet clutch the trigger-guard with his forward hand. Owing perhaps to an abnormal shortness of arm, or to some old injury to, or peculiarity of the muscles of an arm, this may, for that man, be the easiest and best way.

But this does not prove that it is the best way for any or every man.

As a rule it is well to avoid extremes. About the middle of the fore-end is where the designer of the gun intended the forward hand should be, and this most learners will find the best place.

The term "forward hand" is used because there are many left-handed shooters and quite a number who can shoot from either shoulder. There are a number of fine right-hand shots who habitually shoot with the left arm almost straight, so that the left hand grasps the barrels in front of the fore-end.

Very long-armed men are apt to do this because the most natural point for the left hand falls beyond where the gunmaker figured it to be. This method of holding, so long as the left arm finds it easy, is not necessarily a fault, but one should not adopt it unless his build compels him to.

Wherever the forward hand finds the quickest and easiest control of the gun is the best place.

Platt Equals World's Record

Trapshooters assert that the real test of ability in the breaking of inanimate targets is in doubles competition. If this be true there is no question as to the ability of Clarence B. Platt, of Bridgeton, N. J.

Platt won the doubles target championship of the United States in the recent Grand American Trapshooting Tournament in Chicago. Furthermore Platt equalled the world's record for breaking the doubles, pulverizing 96 in 50 pairs. 96 out of 100 targets thrown at a time is not a bad score, so you must confess that 96 breaks in 100 when the targets are trapped two at a time is quite some shooting.

Only once before did a shooter reach the 96 mark. That was when William Ridley, of What Cheer, Ia., turned the trick in a doubles competition in the Western Handicap some years back in Denver, Colo. The best previous score in a championship competition was 94 by the late George Lyon in 1913—and Lyon broke 13 targets more than the shooter who was second.

Any trapshot breaking 90 out of 50 pairs has been looked upon as an exceptional shot—but in this year's championship no less than ten shooters broke 90 or more. That's the class that Platt was traveling in. Mark Arie broke 95 targets—999 times out of 1000 this score would have won.

Platt's score was all the more remarkable in that he shot at 45 pairs one day and at 5 pairs the next. He broke 87 of the first 90 and nine in the last ten. Conditions are apt to change overnight and no shooter cares to stop when he is going good. Platt is not only the doubles champion of the United States but is the trapshooting champion of New Jersey and at Chicago was second high gun on all targets with 568

out of 600. In 1916 Platt won the Eastern Handicap. He is a good consistent trapshot.

PETER P. CARNEY.

EXPLORER BAGS BIG GAME

Some sportsmen find an outlet for their energies in hunting mountain sheep, moose, bear and the large game in our northern latitudes while others prefer the less familiar game of the Arctic. Only a small proportion of hunters can enjoy shooting polar bear, musk-oxen, walrus and the various animals indigenous to the lands of perpetual ice. Those who are able to satisfy their taste for Arctic game—and most of these men are members of exploration expeditions—have many interesting stories to tell of their experiences beyond the "circle."

W. Elmer Eckblaw, A.B., A.M., geologist and botanist, and a member of the faculty of the University of Illinois, has just returned from the far north. Dr. Eckblaw was attached to the Crocker Land Expedition. He arrived on the relief steamship Neptune from Greenland by way of Sydney, N. S., and had been picked up by Mr. Donald E. MacMillan, leader of the expedition, at Godhaven, where he was expecting to do some scientific work in the Danish Government Station for another year, not supposing that the relief party would know of his whereabouts.

Dr. Eckblaw is an enthusiastic hunter. Among the animals that fell before his Remington .32 caliber high-power slide action rifle were two polar bears, five musk-oxen, half a dozen walrus, a dozen caribou and innumerable small game. Dr. Eckblaw also used a Remington auto-loading shotgun that he said "worked like a charm" in 30 degrees (F) below zero weather.

The Crocker Land Expedition (George Borup Memorial) was sent out under the auspices of the American Museum of Natural History and the American Geographical Society with the co-operation of the University of Illinois. Its members have brought back voluminous data that are of exceptional value to the scientific world.

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.

WANTED—By N. R. A. Expert Rifleman. Either a new Springfield or barrel for one. Must be in A-No. 1 condition. Give complete description, etc., in first letter. O. L. Wheeler, Monroe, Wash.

FOR SALE—B. S. A. air rifle, case, spare parts and 4,000 pellets, \$15.00. Colt's P. P. Target, Cal. .22 Wood grips, \$10.00. Colt's D. A. Cal. .41, 6-inch. New. \$10.00. H. L. Rowe, 4 Normal St., Worcester, Mass.

WANTED—Springfield, Star-gauged, in perfect condition. State price. Lawrence Lepinske, Care of Cereal Mills Co., Wausau, Wis.

WANTED—'03 Springfield or Krag rifle. Must be in first-class condition. N. L. Anderson, Moorhead, Mont.

WANTED—Springfield rifle, 1903 Model, in A-No. 1 condition. Give best cash price for shipment by express, subject to inspection. Clayton H. Waite, Bellows Falls, Vt.

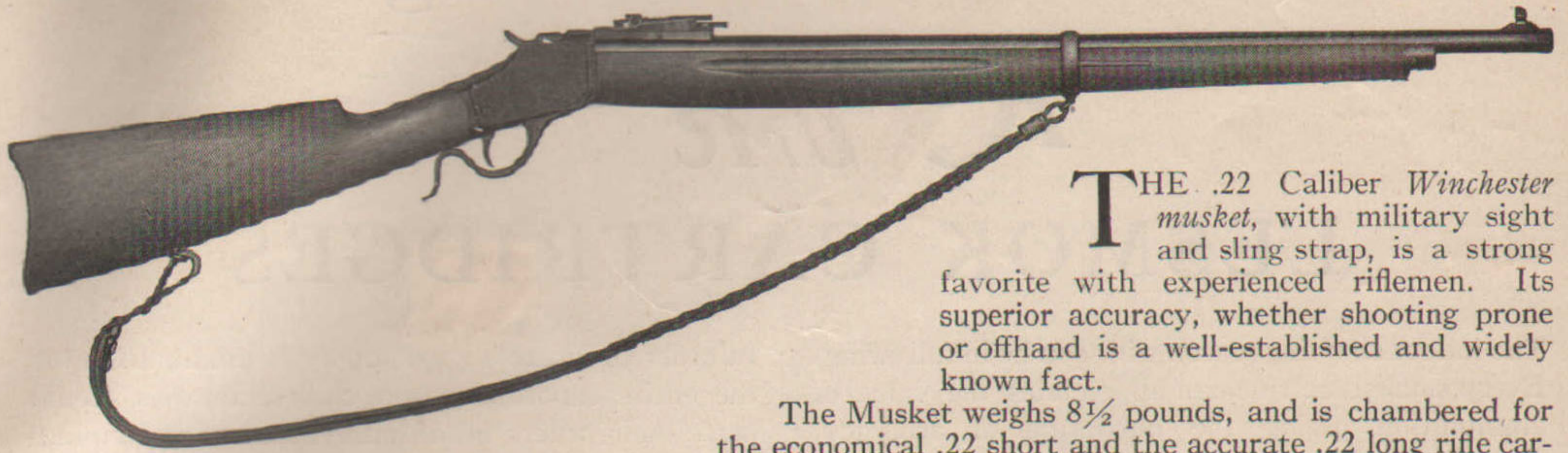
WANTED—Bayonet for 1903 Model Springfield rifle. Must be in first-class condition. Ludvig L. Larson, Box 42, R. F. D. No. 1, Burbank, S. D.

WANTED—New Service Target Grade Revolver, .45 or .44 Special. .38 Army Special 6-inch. Springfield 1903 Military or Sporting. Am a member of N. R. A. Quote price and advise condition in first letter. Box 52, Statesville, N. C.

FOR SALE—Smith & Wesson Special 32-20, 6-in. target barrel. New and in perfect condition, \$15.00. J. R. Zeigler, Secy., Webster City Rifle Club, Webster City, Iowa.

WANTED—Colt Automatic Target Pistol, .22 Caliber. J. S. Beckwith, Albion, New York.

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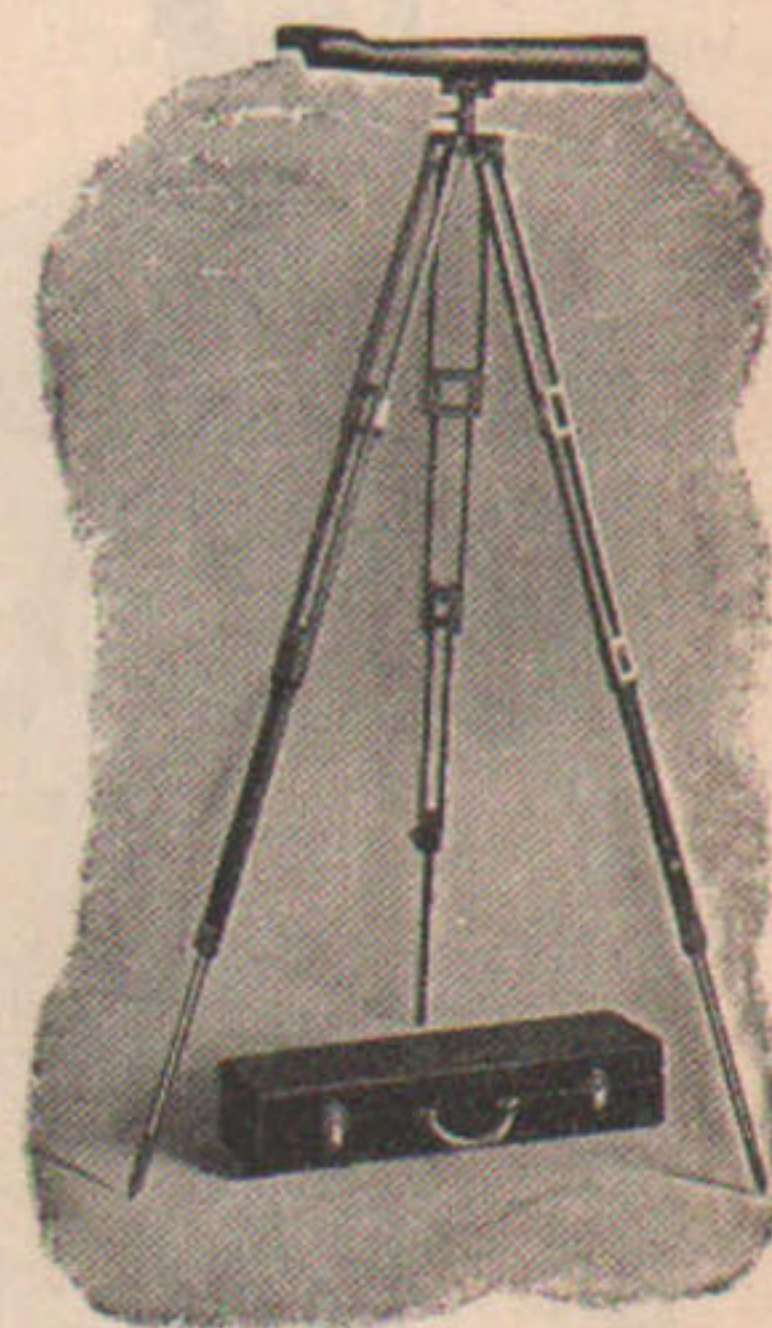
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