

ARMS AND
THE MAN

REMARKS ON WING SHOOTING
U. S. N. TO BE BEST FED AND CLAD NAVY
AN EVOLUTION OF THE SHOTGUN
WHY HORIZON BLUE IS PREFERABLE TO KHAKI
IN UNIFORMS
FRENCH FACTORIES TO SUPPLY U. S. HEAVY
ARTILLERY
WITH THE SMALL-BORE LEAGUE
EDITORIALS and
LATEST NEWS OF RIFLE, REVOLVER AND
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THE MAN

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Remarks on Wing Shooting

By L. E. EUBANKS

DELIBERATE aiming is for stationary targets; it has no place in wing shooting.

In shotgun work, the fundamental principle is that a moving mark requires a moving gun. Instantaneous arrival of the shot charge is only apparent; really an appreciable time elapses between pressure of the trigger and contact of the load with its target. Judging this time correctly, according to range, and timing your movements to those of the bird is the essence of successful wing shooting.

That the art is not as easy as the novice fondly believes is evidenced by the acknowledged fact that it requires good shooting to get 50 per cent of the quails shot at. Eighty per cent at the traps is nothing phenomenal, but in the field it would be very remarkable. Conditions are different.

Judgment of distance develops very rapidly with practice, because it is the first matter to decide in every shot; consciously or instinctively, the shooter determines instantly whether there is any use to shoot—whether or not the bird is in range.

Speed is at a premium in wing shooting; one must strive for all the quickness compatible with accuracy. Of course, this is a reward of training; correct form must always be the first goal. So different is this sport from stationary rifle shooting that proficiency in the latter is of very little help in learning the former. I would not say "no help," as some have said; because I think familiarity with one gun is bound to give us confidence and facility in taking up another.

In wing shooting, the sights of the gun are not used, except in the usual preliminary examination of the alignment. This disregard of the sights always strikes the beginner as odd; but it is easily explained. To begin with, it would be impossible to kill speedy birds, except by the merest chance, if the sights had to be used—the game would be far out of range before a bead could be drawn. The necessity for a more rapid system led to our modern gun pointing, in which the eyes follow the game and leave the manipulation of the piece entirely to the hands. The act of throwing well illustrates the principle; even the greenest baseball player doesn't watch his hand, but concentrates eye and thought on the place where he wishes to send the ball. Further, the pattern of a shotgun, that is the charge of shot, covers about thirty inches when it has traveled forty yards, so the system of gun pointing is not so impracticable as it seems to those unfamiliar with the smooth-bore. Obviously, the gun in its swing after the bird must pass the quarry before the trigger is pulled, so that the charge will have time to intersect the angle of the bird's flight. This technically is termed "lead," and is one of the deepest studies in the realm of sport. Nothing but practice can make a good leader, though beginners may reasonably work on the presumption, based on the general experience of shooters, that they will be inclined to give too little lead.

Swinging the gun on the bird's course of flight is not the only system of leading. Some men use what is called the pitch-forward method. A certain point ahead of the bird is chosen and the gun aimed at that place, without swinging. The pitch-forward system naturally requires a bigger lead, because we have to add the time taken to direct the gun, after the decision is made. Often the pitch-forward shot requires such a great lead as to be nothing but the roughest kind of a guess.

In the swinging shot, the mental work is done as the weapon swings, and the shooter's judgment of the probable angle of flight is bound to be better. I think that no one denies that the swing-on system is far more favorable to effective use of the second barrel. The piece being in motion is more easily managed to meet the requirements. Every shooter should make it a rule to finish the swing every time, and never drop the gun precipitantly. Act each time as though you intended to follow with the second barrel; then when you do want to you can do it effectively.

Get used to an easy trigger from the first, and cultivate a sensitive trigger finger so that you will always know just when you are pulling. It is vitally important to learn to pull without checking the swing.

It is seldom necessary to tell a beginner at wing shooting to keep both eyes open; if he starts right he immediately discovers that he needs all the eyes he can summon. But if he has been used to stationary marks and formed the old school habit of closing one eye, he must drop the practice. Nearly everyone has a difference in the respective vision of his two eyes, but nothing is gained by closing the weaker one.

Flinching always annoys the beginner, more or less. A few shocks from the recoil sometimes makes a fellow gun shy and he dreads to pull the trigger. Much of this can be avoided by the use of light loads, or by using a barrel of extra length. There is a clever way of "blocking" the recoil, if I may be permitted a boxing expression. This is done by pressing the hands, as they hold the gun in position, toward each other. The knack is easily mastered with a little practice. There is another kind of flinching, of psychological nature; but we will not take that up in this article.

Of course, in shooting as in other arts, example is better than precept; any good field shooter can teach you more than you can learn from reading—perhaps not more, but more effectively. Watch the experts, and never be backward about asking questions.

But following all these instructions is not enough; to be a good wing shot one has to study the bird. As I have said in another article, he has a will of his own, and boundless space in which to exercise it. Since we have no way of controlling his movements—and real sportsmen do not wish to—we must rely on study of his nature and habits, take him as he is.

Other things equal, the shooter with most intimate

knowledge of birds, their respective habits, mode and rate of flight, etc., will always do the best shooting. Clay pigeons afford good practice, but they do not act exactly like live birds. The clay bird springs from the trap at his greatest speed and slows down rapidly after the first 25 or 30 feet. Birds and all animals, gather speed, requiring an appreciable period to get under headway.

Next to the real sport of live bird shooting, the best practice for a wing shot comes from the use of a hand trap, carried by a companion who has been instructed to make the angles of flight as varied as possible. Two marksmen can take turns trapping for each other, and by intelligent management can get some good training. In any case, this is infinitely preferable to the contemptible practice of shooting the gentle non-game birds.

Birds are as different as people. A good shot gets nearly all his snipes, when conditions are favorable, and can bring down the leisurely curlews with a regularity that becomes monotonous; but he will find a bluewing teal sailing at 125 miles an hour a different proposition. Wonderful indeed is the action of birds in the air, and as varied as wonderful! A hawk can stand absolutely still in the air, then suddenly cut through space at 200 miles an hour—twice as fast as an airplane.

I am quoting the following table from "Guncraft." It is based on the table of velocities of shot and shows the space traversed by a bird moving at the rate of sixty feet a second in the brief interval that elapses from the fall of the hammer to the arrival of the shot at the various distances mentioned. It is, of course, understood that with slower birds approximately smaller distances must be adopted, and when faster birds are encountered the figures must be correspondingly adjusted. These allowances are only absolutely correct for crossing birds.

For a bird distant 20 yds., lead 3 ft. 8 in.
 " " " " 25 " " 4 " 9 "
 " " " " 30 " " 5 " 11 "
 " " " " 35 " " 7 " 2 "
 " " " " 40 " " 8 " 6 "

Some birds duck if they meet an obstruction; a quail jumps it, a snipe dodges, a mallard swerves. A bluewing teal jumps with the wind, and a canvasback whizzes at an incredible speed. Some birds are nervous, capricious, you can hardly tell what they will do; others are phlegmatic and comparatively steady. Most ducks aim to meet emergencies, they fly according to the needs of the moment. Some of our feathered friends rise perpendicularly, others quarter almost invariably, some fly low and make for timber, some like to face the wind, some go with it. A good deal of

this knowledge comes to the hunter incidentally, is forced upon him. He would acquire it much sooner and far more satisfactorily if he would observe bird life carefully. Knowledge of the game is a big feature in successful hunting of any kind, and it is particularly essential in wing shooting. The following little table on bird flight I quote from Charles Askins' book on shooting. It will be found reliable and useful:

Kind of bird—	Feet per second average flight
Quail	75
Prairie Chicken	75
Ruffed Grouse	75
Dove	85
Jack Snipe	65
Curlew	55
Flowers (according to variety) ..	50 to 80
Crow	45
Mallard	75
Black Duck	75
Spoonbill	70
Pintail	80
Wood Duck	80
Widgeon	90
Gadwall	90
Red Head	120
Bluewing Teal	130
Greenwing Teal	115
Canvasback	145
Canada Geese	110
Some Hawks	200

U. S. N. to be Best Fed and Clad Navy

FEEDING and clothing the Navy is one of the big tasks of the war, particularly in this day of high prices the United States is determined to keep up its reputation of having "the best fed, best clad Navy in the world."

With its reserves and auxiliaries, the Navy will soon have a force of 200,000. To provide three square meals a day for this large number of men requires mountains of food. The principal items for a single month are: Meat (refrigerated), 5,509,600 pounds; flour, 4,854,000 pounds; vegetables (mostly potatoes), 8,769,200 pounds; butter, 620,400 pounds; coffee, 462,000 pounds; sugar, 1,678,000 pounds; beans (white navy), 100,200 pounds; tomatoes, 612,200 pounds; corn, 251,000 pounds; and milk (evaporated), 624,600 pounds.

To furnish this food requires a steady stream of supplies to every navy yard, training station, port, and ship. Most of the articles must be arranged for long in advance, and there must be no hitch or delay in transportation or delivery. The Navy draws its supplies from many sections of the Union—flour, from the grain

centers; meat, from the packing houses; canned vegetables and fruits from the places where the canning industry flourishes; coffee and sugar, from the principal producing and distributing points. All this must be brought together at the ports where it is needed to provision ships or provide for the men in training ashore.

Clothing the greater Navy has been no small undertaking. More than 100,000 men have been enlisted in the Regular Navy and Naval Reserves since war was declared, and to outfit these men the following was required: Overshirts, 200,000; dress jumpers, 100,000; blue trousers, 200,000; overcoats, 100,000; blue caps, 100,000; white hats, 200,000; white undress jumpers, 300,000; white trousers, 400,000; drawers, nainsook, 200,000; drawers, heavy, 200,000; undershirts, heavy, 200,000; undershirts, light, 200,000; jerseys, 100,000; watch caps, 100,000; leggings, 100,000 pairs; neckerchiefs, 100,000; gloves, 100,000 pairs; socks, 400,000 pairs; shoes, 200,000 pairs mattresses, 100,000; mattress covers, 100,000; blankets, 200,000; towels, 200,000.

All this is in addition to providing for the requirements of the men who were in the Navy before the war was declared, and clothing which is subjected to much greater wear under war service conditions than in time of peace has had to be constantly replaced.

There probably will be a quarter of a million men in the naval service before many months, and to keep them in clothing vast quantities are required and must be arranged for long in advance. Here are some of the big contracts for future needs that have been awarded by the Navy Department: Cotton socks, 3,500,000 pairs; woolen socks, 600,000 pairs; shoes, 700,000 pairs; jerseys, 750,000; cotton undershirts, 3,000,000; nainsook drawers, 1,400,000; handkerchiefs, 4,000,000; bath towels, 950,000; blankets, 600,000; heavy undershirts, 500,000; heavy drawers, 500,000; watch caps, 450,000; silk neckerchiefs, 340,000; woolen gloves, 300,000 pairs; leggings, 300,000 pairs; bleached twills for white uniforms, 6,000,000 yards; blue denim for

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Air Guns and Air Rifles

By HENRY SHARP

INQUIRIES have come along respecting the air-gun and its utility from the sportsman's view-point. My questioner appears to have a very hazy notion of the pump form of air-gun, and admits total ignorance as to the nature and qualifications of the more recently evolved spring-compressor type. He says that "the blackbirds and thrushes are getting far more than a fair share of my strawberries and currants, and I am told that an air-gun throwing a thimbleful of small shot would help me to get rid of these pests. My shot-gun is too noisy and powerful for this work, and stray pellets cut the trees overmuch. It seems to me that I might easily fire away 1,000 cartridges per week without getting out of my trouble, for the birds are so numerous in this district that half a dozen or more appear to be ready to take the place of each bird shot." And then follow various questions relative to the charge of shot to be employed, the kind of gun to get, its cost, and so forth.

Yes; right well do I know the nature of the situation in which my correspondent is environed. Both blackbird and thrush charm our ears with their sweet spring carols; but for this pleasing mistrelsy they and their numerous progeny exact full payment in the form of luscious ripe fruit. Of course, these two members of the thrush tribe are not alone in the fruit foray; the missel-thrush also joins in, and in moorland districts the ring-ouzel can take his share. In some quarters "blackbird drives" have been instituted, and when good shots having guns loaded with No. 9 or No. 10 shot are placed in the fields contiguous to the garden some remarkable bags of this sort of game have resulted. It is fine practice, but, of course, considerable care must be exercised in placing the guns, as also in shooting the birds, for in a general way only very low shots are obtainable.

Returning to the air-gun question, there is no doubt that in many situations a suitable form of air-gun provides a ready means for clearing away a number of these winged marauders. It might be thought that the noisy report of the shot-gun might have a deterrent effect, but after some little firing of cartridges the robbers will not trouble themselves to fly away when the gun goes off, but will lurk beneath the thick screen afforded by gooseberry and currant bushes. In such case to walk quietly around with air-rifle at the "ready" will result in many shots being obtained, and whether the

resultant kills bear due proportion to the trigger-pulling must depend upon the aiming skill of the shooter and his capacity for taking quick shots. It will be a good test of shooting adaptability, for the birds not often remain quiescent through many fractions of a second, and, indeed, it will be all to the good if one can acquire the trick of potting them on the run, or hop.

Several years ago I penned some remarks respecting air-guns in response to queries very similar to those now received. It may, perhaps, be well to redress and utilize certain of those remarks to be of service at this moment. Many years ago air-guns were produced that would throw a bullet with a fair-amount of accuracy up to 40 yards or so, and with sufficient force to kill animals like rooks, rabbits, and lesser fry.

The earliest forms that I remember to have seen were curiously and wondrously designed, for, following somewhat closely the lines of the single-barrelled firearm, their contour was flagrantly distorted by a remarkable pendant reservoir for the compressed air which was screwed on at the breech end of the barrel. This deformity, which took the shape of a huge cannon-ball, was dispensed with in later models, and at this stage of evolution a hollowed gun-stock formed the air-chamber.

I think perhaps the so-called "air-cane" came next; but if in error it will afford me pleasure to be corrected. The air-cane derived its name from a fancied resemblance to a walking cane—a fancy, by the way, that exerted a considerable strain upon the imaginative faculties, for, although it might be painted or lacquered into some sort of semblance, it still proved a very heavy and clumsy representative of the real commodity. However, appearance is not all that one looks for, and, certainly, so far as my own practical experience extends in the use of these arms, the air-cane proved a much more practical proposition than either of the previous forms.

These air-guns I have termed pump-compressors, for with them the necessary air-compression is effected by means of a force-pump actuated by the hands and feet, plus the shoulder weight, of the operator. It is fairly hard work, say what one will, and the only redeeming feature about it is that one good pumping will last for some fifteen or twenty shots.

The modern air-rifle is totally different in principle from that form just mentioned. In the newer form of

air-rifle the requisite air-compression is secured by mechanical means, a powerful spring ensuring air-pressure sufficient for the projection of a light bullet. It is quite true that throughout many years juvenile shooters have been in possession of air-rifles of the spring-compression type, which have provided some sort of means for shooting practice, but these pioneer weapons were not without their faults, chief amongst which were (1) want of accuracy and (2) lack of power. These two are closely inter-related, and, whilst the first proved a bad enough fault in any arm planned to be of service towards the acquirement of skill in marksmanship, the second was found to be even more grievously misleading. Indeed, I think the average toy-shop air-gun may be regarded as sailing under false colors, inasmuch as it inspires confidence by reason of the weakness of its shooting, judged from ordinary standards, the fact being too often disregarded that at close range such force may still be sufficient to inadvertently maim or blind man, dog, or other creature. Thus these Hun-guns are much too dangerous for indiscriminate use as toys, although, unfortunately and very misguidedly, often regarded in that light.

A service of inestimable value to the youth of the country—and, indeed, to all who aspire to become skilled in the use of rifled arms—was rendered by the Birmingham Small Arms Co. when their attention was directed to the production of air-rifles of indisputable accuracy and power. The attention thus focussed upon this class of gun gave it a totally different status, for here at length was presented an arm of such admirable solidity, nice adjustment, and duly regularised shooting power that the whole sport and practice of air-rifle shooting assumed higher rank. The air-rifle first brought out by the firm named was of diminutive calibre, being no more than .177 inch bore. This is the rifle that my correspondent should acquire for thinning down his fruit-stealing blackbirds and thrushes. At least it is advisable to say that he should attempt to procure one, for it is somewhat doubtful if he will be able to obtain one under present conditions. At all events, the expenditure of a penny stamp will doubtless soon bring the necessary information from the B. S. A. Co.; then, failing headquarters, probably an advertisement might be the means of bringing to light a secondhand .177-bore air-rifle that would serve his present purpose. I have mentioned the .177 as quite suf-

ficient for the work indicated, but may say that, should my correspondent have other work at hand for an air-rifle, such as rat, rabbit, rook, or wood-pigeon shooting, then the .22-bore air-rifle more recently brought out by the B.S.A. Co. will insure better work, as it projects a heavier bullet and has considerably greater power than the lesser bore. The remarkable bullet accuracy and power attained with these rifles renders their use a constant source of pleasure, which in these times is certainly not lessened by knowledge of the fact that as regards cost of ammunition this is far and away the most economical form of gun sport that can possibly be found.—*Shooting Times and British Sportsman.*

THE "O. D." SHIRT

How the olive drab shirt, which has not only been the stand-by of the American soldier for many years, but which has found favor as a "firing line" garment among many rifle clubs, is being turned out literally by the thousands, was interestingly told by Dan Walsh in the *Louisville Times*. He says:

"Every American soldier who fights upon the fields of France will wear a shirt from the Quartermaster's Department at Jeffersonville. The shirtmaking for the entire American army that is and the regiments and brigades and divisions that will come until Uncle Sam has 2,000,000 men beneath the colors—all is intrusted to one little giant of a man. The man is Col. Winthrop S. Wood, U. S. A., the quartermaster at Jeffersonville. Last November his 'boss,' your Uncle Sam, sent him to Jeffersonville to 'speed up' the work of making shirts and harness and the many other things needed for the troops. Colonel Wood 'speeded up,' but the gait he secured in November and the one by which things move at the depot now bear about the same relation to each other as a tortoise does to an airplane.

"In the olden days widows and other close relatives of soldiers were 'awarded Government sewing.' To-day thousands of women in a constant stream file out of the depot with their bundles of materials, and other thousands cross them, filing in with shirts all ready. Fifteen thousand shirts a day, 90,000 a week, are coming in, but that is all too slow, says Colonel Wood, for he must deliver to the army 2,500,000 shirts before November 1st. If the women of the surrounding country will come to his aid and do the sewing, those who have witnessed what Colonel Wood has done have not the slightest doubt that he will fill this mighty bill.

"What has happened at Jeffersonville since Colonel Wood came there can be told in one sentence—to-day the place looks like a manufacturing establishment instead of a quartermaster's depot. The lawns have all but disappeared, for they are packed and jammed and stacked, al-

most as high as any of the buildings, with boxes and crates. 'Red tape' Colonel Wood swept out and burned. In its place has come 'system,' methods that get results in the shortest possible time with the fewest possible movements.

"The women are paid \$4.50 for a bundle of ten shirts. They can make just as many as they are able a week and some women, with motors on their machines, turn out a shirt an hour. The average earned is about seven dollars a week, although many are drawing eighteen dollars and even more a week. The average payroll to these sewing women is \$150,000 a week. The sub-station at New Albany is increasing its force at the rate of about 150 women a day. It is hoped to open one or more sub-stations in Louisville. The matter at present is in the hands of a special committee of the Board of Trade. Gen. W. B. Haldeman has offered to furnish free of cost for rental a building suitable for this depot, but Colonel Wood is waiting for a report from the committee. Indianapolis last week opened a large sub-station. Madison has done likewise. In order to handle this enormous increase in business, Colonel Wood has fifty expert cutters at work. To-day 170 thicknesses are laid down at once on four great tables and the shirts are cut out by electric motors. Ten thousand shirts are cut out at one time. The cutters work in two shifts of eight hours each. There are, in all, about 1,200 employees at the depot. Colonel Wood has not forgotten the comforts of the thousands of women who are helping him. Outside the walls are rest and lunch rooms. Two first-aid stations, in charge of Red Cross nurses, are nearby.

"Although the Jeffersonville depot has the whole task of supplying the army with shirts, this is not its only call. Five thousand sets of harness a week are being made there, besides hundreds of water bags, bed sacks and scores of other things. Hundreds of army wagons of every description are being assembled and painted, and great supplies of stoves, both for camps and the field; of nails, of overalls and so on, are brought through the depot, stored there and then sent out wherever needed. When Colonel Wood came to the depot not a single truck was available. To-day he has twenty-one of the largest and most powerful motor trucks on the market. That is an example of what must be done in just one station to supply an army and how Colonel Wood goes about doing it."

A very tall, thin lieutenant reported in Flanders to a Canadian battalion commanded by a bald, elderly colonel. After a few days he approached his commander and asked permission to air a grievance.

"I wish you would use your influence, sir, to restrain my platoon from referring to me as 'Legs,'" he said.

"Sure, my lad, sure," replied the colonel solemnly, "if you'll use yours to stop my whole battalion calling me 'Old Baldy.'"—*Youth's Companion.*

CHANGES CONTEMPLATED IN U. S. UNIFORMS

In all probability the soldier of the United States, if encountered a year from now in the trenches of France, will present a vastly different appearance, so far as uniform is concerned, from what he does today.

In both the army and the navy uniform changes of a radical nature are presaged by those who keep track of such developments, and it is known that General Pershing, with an eye to providing the Sammies with the most suitable garments for trench warfare has already made several recommendations touching upon changes in service garments.

One of the first changes to be made, it is thought will be the shortening of the overcoat issued to enlisted men, to knee length. This change will also be made in the slicker. The overcoats prescribed for the officers, however, will, at least for the present, remain unchanged. A leather jerkin will be added to the enlisted man's equipment, for trench service, as well as hip-high boots to be worn with moccasins. It is also planned to issue a skull-cap to be worn with the shrapnel-proof helmets.

Further than this, General Pershing, it is said, favors the adoption of the spiral woolen puttee in place of canvas and leather leggins, which do not seem to keep out the mud and water as well as the woolen wrappings. The only objection noted in connection with the woolen puttee so far is that many enlisted men seem unable to master the proper method of wrapping, and draw the spirals so tight that circulation is interfered with, causing serious trouble.

Deck crews on the vessels of the United States Navy will also be equipped with a new outfit, including an outer rain- and wind-proof suit. The coat of this suit is equipped with a hood which fits tightly about the head, and closely at the neck. The sleeves are designed to button tightly around the wrist, and the trousers button snugly around the ankles. According to descriptions of the new outfit under the outer garment is worn a heavy woolen blanket overshirt that comes almost to the knees. It also has a hood that comes over the head and fits tightly around the throat. A heavy woolen jersey is also furnished. Two kinds of woolen underwear will be supplied—one the usual winter weight, the other a very heavy garment of double thickness at the chest and over the back to give added protection. In addition to regular woolen socks, extra-heavy "woodsmen's socks" will be provided. Over his shoes the seaman will wear fleece-lined rubber Arctics, 15 inches high, reaching to a point just below

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An Evolution of the Shot Gun

By E. NEWITT

A FEW years ago there arose a demand for a twenty bore pump gun; it may be questioned, however, if the makers who responded have ever received a commensurate return for their enterprise, or indeed, rightly interpreted the public demand. The 12 bore pump gun despite its virtues is admittedly a tolerable load to tote around, whilst in point of handiness it is not overstating the case to call it a "bit clumsy." What the public really asked for, and still wants, is a lighter, handier gun than the 12 bore, and the only guns the public know as such are the smaller bores that have been made for all time, but it is equally certain that when the comparative inefficiency and other shortcomings of the smaller bores come to be appreciated the demand for them will be neither large nor permanent.

Yet, in view of the circumstances the public demand was quite legitimate and if correctly interpreted and intelligently met, could be catered to profitably. Success is to be found in an evolution which, in truth, should have been made twenty-five years ago. The chamber dimensions of the present day shot gun were designed for black gunpowder. Upon the introduction of smokeless powders, some thirty years ago, as it was hopeless at that time to expect gunmakers to adapt gun dimensions to a newcomer without a reputation, the powder maker perforce adapted the powder to the gun, in other words he "bulked" it so as to fill a chamber designed for an entirely different powder, and the gun and cartridge remains unchanged in this particular to this day. Though smokeless powders have long since demonstrated their superiority and established a reputation justifying any evolution in the gun essential to realizing all their advantages, at the moment the only advantages we realize from their use is less recoil, absence of smoke, a nice clean gun and a trifle in the matter of velocity; what we might realize in addition, just so soon as we are prepared to assimilate the necessary changes, is a much lighter shorter cartridge and its concomitant, a lighter and handier gun.

It is not perhaps sufficiently appreciated that the requisite energy for propelling the shot can be generated by a powder occupying less than half the space allotted to the powder in the present cartridge shell. Indeed concentrated or dense shot gun powders, of which Ballistite is an example, have been used to some extent for many years in special shells in which the superfluous space has been padded up

by coned base wads and thicker wads between the powder and shot. Thus the user of dense shot gun powders today is not only not reaping the advantage which their concentrated form offers, but actually pays in hard cash and increased recoil for wads and things which only serve the purpose of filling up space which, if deducted from the cartridge shell by diminishing its external as well as internal dimensions in the first instance, would enable him to realize the much more important advantage of a smaller and lighter gun.

Indeed the time is ripe for this much delayed evolution, the adaptation of gun chamber dimensions to condensed smokeless powders; moreover other reductions are possible. From times immemorial we have associated certain charges with certain bores and continued to use them as if, like the laws of the Medes and Persians, they were unchangeable. To the modern ballistician the charge is governed by considerations of which the bore is only one, and that by no means of the first importance. The fact is we have established the gun first and adapted the charge to it, whereas the truly logical and appropriate order of proceeding would be to establish a charge appropriate to our purpose and then to build the gun to the charge. Let us discuss the matter from this ballistician's standpoint. It has already been shown that we can diminish without loss the space at present allotted to the powder, can we pare something off the shot charge with advantage? We now fill the remainder of the shell with wads and shot not, be it understood, because the killing of the game demands it, but because the space is there and must be filled.

A simple mathematical computation will show that one ounce of shot pellets properly distributed by appropriate choking of the barrel will cover an area sufficiently large to embrace the average errors of the average marksman, sufficiently densely to kill any game for which a gun is employed. In other words one ounce of shot handled properly is an efficient hunting charge, $1\frac{1}{8}$ ounces may be better, $1\frac{1}{4}$ ounces still better, but 1 ounce is sufficient, and as our purpose is to make a lighter, handier gun, the smaller the charge, consistent with sufficiency, the easier will it be to accomplish our purpose. The space this will occupy is a question of calibre. What calibre will distribute an ounce of shot most advantageously? Experience has shown it to be an overload for a 20 or 16 bore and an under-load for a 12 bore. Experiments with which the writer

was associated showed that a calibre of .69 (a 12 bore is .726, a 16 bore .671) gave the best patterns, and that with a suitable charge of condensed powder the overall dimensions of the cartridge were 1.9 inches long by 0.7 inches in diameter, hence it is possible to effect an enormous saving in length and calibre, the importance of which will be more apparent when we come to construct a gun to shoot it.

The weight of a gun is also governed to some extent by ballistic considerations, if made as light as the strength of available material permits it may be so light that recoil becomes excessive. In the presence of the most favorable velocity for pellet distribution and penetration a gun weighing a hundred times its shot charge does not recoil unpleasantly, and the strength of suitable material admits of its construction well within this proportion. Thus $6\frac{1}{4}$ pounds is an appropriate weight for a gun shooting an ounce of shot, and is not an uncomfortable weight for the average man to carry around. A short and relatively small calibre cartridge such as that described lends itself to the use of a box in place of a tubular magazine and thus to the extinction of the chief element of clumsiness possessed by the pump gun, and one which moreover, is not easy to lead nor functions too well. To construct a repeating shot gun on the foregoing principles does not present any mechanical difficulties, many existing rifle actions lending themselves with little modification to such a purpose.

In days gone by when gun and ammunition were separate industries the commercial prospects of such an enterprise as that of constructing a gun for a non-existent cartridge, or vice versa, were not inviting, but today things are different. With these industries combined such obstructions to progress no longer exists, on the contrary the production of a novel and useful combination for which a demand is already apparent promises an attraction to sportsmen which should result in business thoroughly justifying the enterprise.

Here is a story our wounded boys have brought back from the front about Sir Douglas Haig.

Sir Douglas was some few weeks ago in a great hurry to get to a certain place. He found his car, but the chauffeur was missing. So Sir Douglas got in the car and drove off by himself. Then the driver appeared and saw the car disappearing in the distance.

"Great Scot!" cried the driver, "there's 'Aig a-driving my car!"

"Well, get even with him," said a Tommy standing by, "and go and fight one of 'is battles for him."—*Tid-Bits.*

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.

"SHOTS OR SHOEMAKERS"?

OFFICERS of the United States Army brought face to face almost overnight with the necessity of equipping in the shortest space of time an army of more than a million men for service abroad, have very properly drawn freely from the experience of the Allies.

Before the war was a month old, the Ordnance officers had accepted the word of the English that windage was not a matter for very serious consideration in trench fighting at distances rarely exceeding 200 yards and usually ranging from 80 to 100 yards, and had set about adapting the machinery in this country which had been producing the British rifle model of 1914 to turning out the United States Rifle, model 1917. About the same time, tacitly admitting that bayonet practice as prescribed for the United States Army was obsolete and would serve no practical purpose "Over There," they bodily adopted the British bayonet manual which had been founded upon the needs of trench fighting and which looks to the "butt" rather than to the steel as a weapon of offence and defence. Hard on the heels of these developments, came the announcement that the Sammies in the Field Artillery would be equipped with the famous French "Seventy-fives." The shrapnel-proof helmets which the men of the United States Army will wear have also been modeled upon European types of protective headgear.

It is to be hoped that before many months have passed, and before very many thousands of our men have dodged the U-boats on their way to the front, that the United States Army will adopt another, and in some ways, by far the most important war-time military philosophy of the British and Canadian forces. So far, while perhaps perfunctorily proceeding along that line, the War Department has not formulated, or at least has not announced that it has formulated, any plan for training individual snipers.

The general impression seems to be that if a soldier knows enough to cram a clip of cartridges into his rifle, and scatter his bullets along the enemy intrenchments every time a Hun shows his head that there is no need of highly specialized shots in the ranks. So far as announcements as to the army's plan for training the big draft in rifle shooting is concerned,

what little has been made public, would seem to indicate that the training which the American soldier is to receive before going into the trenches will be largely rudimentary; which policy, if it be the one ultimately followed out by the Army, is in tragic contrast to the shooting gospel of at least Canadian and Britisher.

"URGE the War Department to let everything else slide if necessary and train the men to shoot," is the advice given by a commissioned officer of the Canadian troops, an old Palma Match man, and an officer who has had considerable to do with the schools of instruction in the Dominion, when he recently dropped into the office of ARMS AND THE MAN.

"Is he a shot or a Shoemaker?" is the first question we ask after a man has been put through his first instructional course; for you know there is a vast difference between the man who merely knows how to shoot—"shoemakers", we call them—and the man who can place his shots. There's no room for 'Shoemakers' Over There. There's all the room in the world for shots, and God knows what would have happened to England and the Dominion if it hadn't been for the rifle clubs with their members many thousands of whom needed but very little coaching to turn them into first-class instructors.

"Why every regiment of British and Canadian troops 'Over There' prides itself upon its snipers. Nobody will gainsay that the machine gun is playing a mighty big part in this war. But there are at least two things that can put a machine gun crew out of business. One is artillery fire. The other is—snipers. And to be a sniper, a man must be able to place his shots.

"There was one mighty interesting character with our outfit. He was an Indian, and I suppose that he was all of 65 years old; but he was a splendid specimen, and passed for a whole lot younger, principally because he was a wizard with the rifle.

"He's somewhere in London now; but they wheel him around in a chair for the Huns got him at last. Both legs gone.

"But out in the trenches, after a particularly disastrous session with the Hun snipers, they would call the old Indian.

"'Pretty bad,' an officer would say to him. 'Two lieutenants and four sergeants gone today!'

"'Too bad' the old fellow would agree, dive into his dugout, reappear with his rifle and go off down the trench. When he found a favorable opportunity he would put the butt of his rifle between his feet, clasp the barrel to his breast with his hands, and roll Over the Top, out into No Man's Land. Hours later he would come back, stalk to his dugout and squat there making a notch in the butt of his weapon.

"Two of his rifles are in a London Museum now. One has 76 notches on it and the other, 126.

"The strange part of the old fellow's philosophy and sportsmanship was that he would take only one shot at a Hun. If he didn't get the enemy sniper on the first shot, he never tried a second! But there are authentic records of his having gotten nearly 200 Huns on the first shot.

"And it's shots like the old Indian we need 'Over There.' With the members of rifle clubs to draw from—if they're shots and not shoemakers—there shouldn't be any trouble in sending over the finest riflemen in the world. Canada will help, if the government wants us."

WHETHER the War Department will devise a system for the proper training of the draft in the handling of arms, remains to be seen.

In the meantime some very encouraging reports are coming from "Over There" where the first overseas contingent is being trained for its debut in trench warfare.

According to reliable press dispatches, the first expeditionary force, whose officers are convinced that marksmanship is not altogether a dead issue in this war, even though it has been somewhat neglected, are giving the men thorough, intensive courses of instruction.

This practice apparently has its roots in tradition. European armies have from time out of mind regarded American soldiers as the premier riflemen of the world, and not even second to the splendidly trained regular British Army which was practically wiped out during the first six months of the war. Knowing that American soldiers have been regarded in this light, the first expeditionary force, at least, has been unwilling that so old and so worthy a tradition be lost. They have therefore taken up intensive training with a snap and vigor which bids fair to uphold the reputation of the United States soldier.

That these men, eager to perfect themselves as marksmen, have in fact only anticipated a system which will probably be in force in the near future is the belief of men who follow the trend of warfare along the European fronts.

It is pointed out that whatever decline in individual marksmanship has come about dates from the battle of the Somme, about a year ago.

Following that great offensive, there appeared a tendency to regard the rifle merely as the staff for a bayonet, the

reliance in advances no longer being placed upon the ability of a regiment to fight its way to the enemy trenches behind its own enfillading rifle fire, but rather being based upon the protection to advancing troops given by artillery *barrages* which moved 50 yards ahead of the charge, interposing a curtain of explosive shells which were calculated to keep the Huns in their dugouts until the attack could be poured over the trenches.

Once inside the enemy lines, hand grenades and the bayonets were regarded as being the proper weapons.

But the constantly changing theories of attack are swinging back in favor of the rifle, and to meet the need of trained riflemen the United States government should see that the big draft goes to France well versed in handling the service arm.

Few of the draft, it is estimated, already have the training in marksmanship which every one will need. The National Rifle Association has, of course, been training men for many years with the sole idea of equipping every citizen for active service by instructing him in the use of the rifle. Very few of the National Rifle Association shots, however, are to be found in the ranks of the Draft, since most expert riflemen had already identified themselves with some branch of the service before the draft came.

These men, naturally can be searched out and used as instructors to a great advantage, but their presence in the ranks of the army can only emphasize the necessity of making use of their peculiar attainments in not only sustaining the rifle shooting traditions of the nation, but in equipping every man selected in the draft, to do his best for the cause of democracy.

Why Horizon Blue is Preferable to Khaki in Uniforms

By WALTER WINANS

AS a big game shooter and also as an artist from infancy, the subject of protective coloration has always interested me, and I have studied it deeply.

My conclusions are that the color of a uniform must not only be as near as possible the color of the local surroundings, but it must blend with *all* surroundings.

If you put a man dressed in green on a green field and he is standing with the sun behind him, he shows very plainly dark against the background. It is a matter of light and shade.

A white plaster statue stood in the snow can, with suitable alterations of lighting, be made to appear black against the snow, or be white, and invisible, against the snow.

There is no color which can make a man invisible if the sun is behind him when he is standing. But with the sun facing him, he is nearest invisible when dressed in the French "Horizon Blue." The reason is that this is the color

which artists have found "gives distance."

When Khaki is worn, it is very invisible against certain backgrounds, but very visible against others. But "Horizon Blue" is invisible against *all* backgrounds at a certain distance, because it is of the same color as the distance.

The sky is blue because it is air of a thickness of several miles and the farther away an object is, the bluer it looks.

Now when one paints a landscape—in the immediate foreground, in daylight, I paint objects their natural colors. In the middle distance after painting them in their natural colors, (speaking of oil painting), I "scramble" over the paint when dry, a mixture of white and blue—the "Horizon Color" of the French Army.

This puts the object "Back" as we painters call it, by making them look as if there were air between them and our eyes, and appear indistinct. The farther "back" the object, the more "horizon color" is scrambled over it, until pos-

ibly the far distance is all blue haze, "Horizon Color" and no detail.

This, then, is the reason the French use it for their uniforms. It is nature's way of blending distant objects into their surroundings.

The result of wearing "Horizon Blue" is that the wearer artificially makes his distance appear greater than it really is, and proportionately indistinct. It is like looking at him through field glasses reversed.

There is another point. One recognizes a man by his *shape*; not his *color*. So then, the great thing is to break up his shape by having cap, tunic and breeches different colors.

A Mouflon, the wild sheep of Corsica, has a black neck, brown body, grey legs, and a white patch in the middle of his body, and he is much more difficult to see when still hunting, although larger than a roe-buck which is all one color. The reason is that one does not see the shape of the Mouflon. He looks like a rock, dry grass and a patch of snow.

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is largely used by British soldiers at the front. It abolishes labor because the bore has merely to be coated with it immediately after firing. Abolishes anxiety because steel destroying powder gas deposits are immediately and positively killed by Safetipaste. Bore may be even more brilliant when Safetipaste is wiped out before firing again. Safetipaste is soap-like and assists washing of hands. Invaluable for hunting and knockabout rifles and guns especially when benches, vises and refined cleaning apparatus are not available.

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Makers of Rifles and Machine Guns for British and Foreign Governments



U. S. N. TO BE BEST NAVY

(Concluded from page 444)

dungarees (overalls), 3,000,000 yards; heavy canvas for sails, awnings, covers, hammocks, cots, etc., 4,000,000 yards; mattress covers, 400,000; heavy overcoats, 250,000; 11-ounce cloth for shirts and jumpers, 1,500,000 yards; trousers cloth, 1,250,000 yards.

This was only one of the many tasks of the Bureau of Supplies and Accounts resultant from the war. Speaking of how it has been performed, Rear Admiral McGowan, chief of that bureau and Paymaster General of the Navy, said:

"When war was declared recruits poured into the Navy at the rate of more than a thousand a day. From every naval station came the call for uniforms, blankets, and all the various things needed by the thousands.

"At the Brooklyn and Charleston clothing factories it was not a case merely of working overtime, but all the time, the output being limited, not alone by the number of operatives available, but very much by the short supply of materials obtainable.

"The Navy manufactures most of its uniforms in its own factories. The naval clothing factory at Charleston is now turning out daily 2,500 pairs of white trousers, 1,500 white jumpers, and 1,500 suits of dungarees (overalls). When the large addition which was completed some time ago is working with the full number of operatives, this factory will be able to turn out 100,000 suits of white clothing a month. The clothing factory at the New York Navy Yard, which has charge of our production of blue uniforms, has greatly increased its output. In May, 20,000 blue suits were produced. Now they are being turned out at the rate of 70,000 suits a month, a large part of the work being done by private contractors.

"The great difficulty we experienced in getting blue cloth, of which there was very little in the market, has been overcome. To provide for future needs, we have awarded contracts for the manufacture of 2,500,000 yards of blue uniform cloth. The manufacturers may either secure the wool from other sources or from the Navy, as they desire.

"Contracts have been given for 3,750,000 pairs of socks, for hundreds of thousands of pairs of shoes, and for many other articles of clothing which will be required. We are anticipating our needs and providing not only for the present emergency, but for the creation of a reserve.

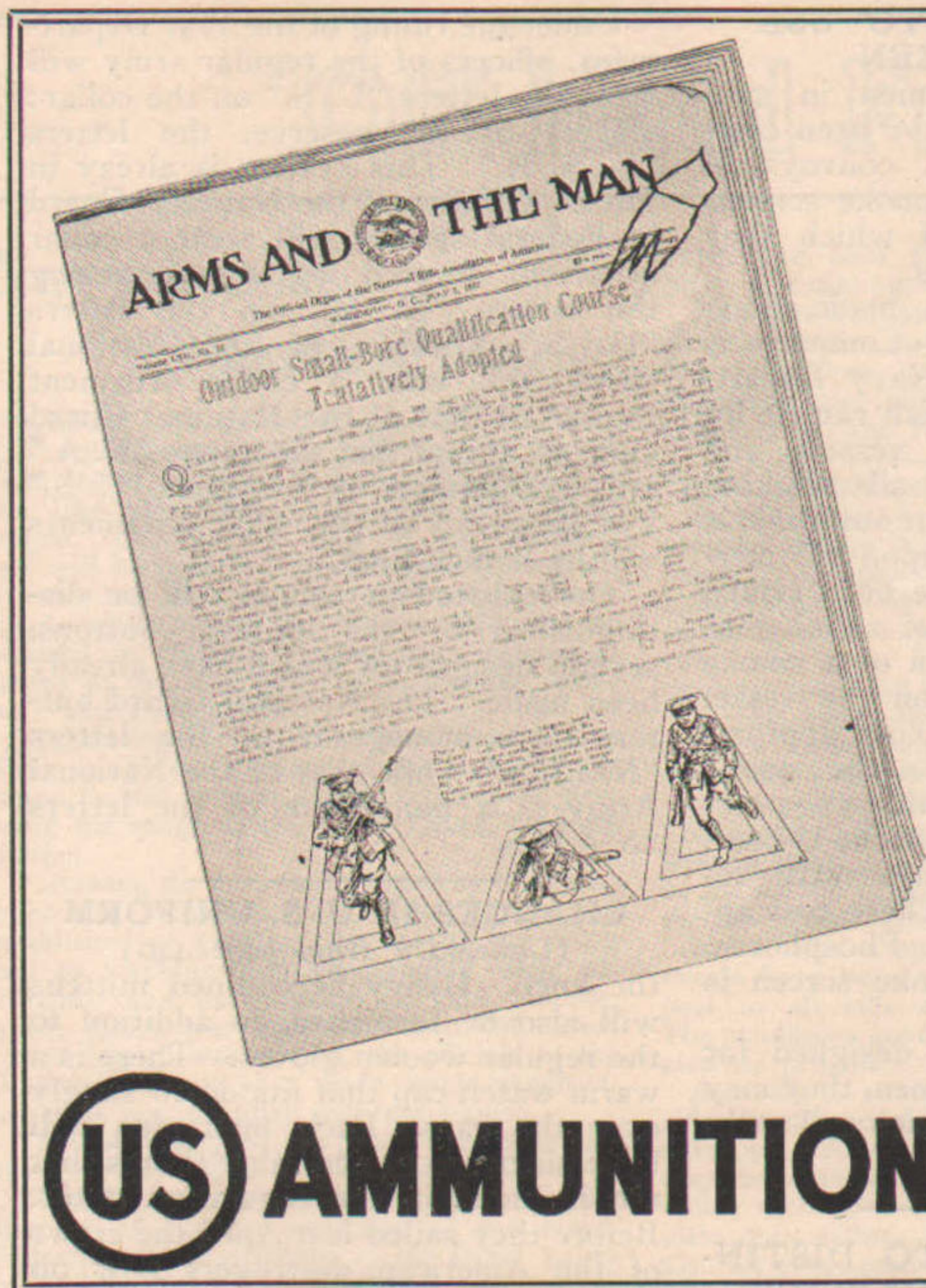
"It is our business to furnish the men who are fighting our battles on the seas with every thing required for their comfort, and we are determined to do it. America is giving them the best in the shop."

Easy Finding of Real Killing Power

By L. RAMIREZ CASABLANCA

This pamphlet contains tables of Pistol, Revolver and Rifle Cartridges from which the stopping power at point of impact can be determined. Postpaid 20c.

ARMS AND THE MAN
Washington, D. C.



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WE have perfected a .22 calibre Long Rifle Lesmok cartridge that is accurate up to 250 yards.

This cartridge has been developed as a result of agitation in this country for outdoor small-bore qualification courses of from 50 yards to 250 yards, and to meet the demands of the British Army Training Camps. We are able to produce this cartridge at the same price as an ordinary .22 calibre Long Rifle Lesmok and our special N. R. A. discounts will apply.

For purposes of identification, this cartridge is being referred to as the "N. R. A. Outdoor .22 Long Rifle Lesmok." Prompt shipments can be secured thru any of the following general selling agents:

National Lead Co., Boston, Buffalo, Cleveland, Chicago, St. Louis, Cincinnati; National Lead & Oil Co., Pittsburgh; John T. Lewis & Bros. Co., Philadelphia, Baltimore; United Lead Co., New York; Selby Smelting & Lead Co., San Francisco.

US AMMUNITION

United States Cartridge Company
2201 Trinity Building
New York

French Factories to Supply U. S. Heavy Artillery

FURTHER details of the plan to draw upon the gun factories of France for heavy field artillery with which to equip the American fighting forces abroad are given in an official statement prepared by the War Department.

The entry of this country into the war made necessary the completion, in the shortest possible time, of what had previously been a four-year program of equipment of the Army of something like a million men, all told, contemplated by the national-defense act of June 3, 1916. There was on hand a certain supply of small arms and small-arms ammunition, and there were, fortunately, in existence plants of large capacity for the manufacture of this class of war supplies brought into being by the demands of the European nations, which are our present allies, and there were also plants of large capacity for the manufacture of all kinds of field artillery ammunition which can be rapidly made available for our own needs.

It has long been known to those who have paid any attention to the efforts of our military authorities at preparation for war that the supply of field artillery has been wholly inadequate and has not been growing at a rate which seemed to be sufficient to accord with ordinary prudence.

The shortage has been the subject of urgent presentation by the Chief of Ordnance for the past 15 years, but it has been only since the passage of the national defense act that measures have been authorized looking to anything like an immediate correction of the situation. Field guns can not be produced in a short time, and the plants for making the forgings and for afterwards machining and assembling the parts into finished guns require time for their erection and equipment.

In addition to the unsatisfactory stage of advancement of the pre-war program, the war itself has brought about an almost revolutionary increase in the use of artillery, both in the number of guns and in the amount of ammunition expended, so that on both accounts the officers of the War Department found themselves in greater straits for supplying the needs of the existing and prospective armies in field artillery than in regard to any other class of war material. The most obvious step, of course, was to give orders for manufacture such as to occupy the entire capacity of the coun-

try, particularly for the production of gun forgings, for which the capacity was the most limited and the requirements the most special, and in addition to provide for the greatest expansion of existing plants which the limits of justifiable dilution of their organizations rendered prudent. This had to be done in such manner as to interfere in the least possible degree with the orders of our allied nations for gun forgings, upon which they were and are still relying for the maintenance in artillery equipment of their armies in the field. After providing for the enlargement of existing plants, it was necessary to take measures for the construction of new plants, making use of the personnel of mechanical industries somewhat similar to that of gunmaking, under the organizations of officials and employees which were conducting them.

Under these circumstances a solution has been found which, fortunately, will go far toward meeting the situation. The gun factories of France have been highly developed, and in the matter of machining and assembling guns and carriages, as distinct from the manufacture of the steel out of which they are made, some

surplus capacity has been attained which is now available for other than her own necessities. The ordnance department has taken advantage of this opening and has placed with the French Government orders for the manufacture of an initial supply of field pieces of the most necessary types, and of the most thoroughly demonstrated efficiency, namely, the 75 mm. gun and the 155 mm. howitzer (about 3 inches and 6 inches, respectively, in caliber).

As this artillery can be promptly furnished to the American troops in Europe, and as it is desirable and practicable to have uniformity of ammunition supply, the guns now on hand will be kept in this country for the training of our troops, and the ammunition for them will be expended in the necessary target practice. As the wear of the rifling brings the guns to the point where relining is necessary there will be made during this process the slight change in the caliber which will be necessary to fit them for firing French ammunition, and thereafter ammunition of uniform dimensions for fitting the French calibers will be manufactured both in this country and abroad. All future manufactures of these particular fieldpieces in this country will also be of the French calibers, which, as above stated, are practically the same as our own, although the guns will in other respects probably conform to our own designs, which are modern and satisfactory.

An American soldier, one of the contingent that paraded in London on August 15th, went into a saloon to get a glass of beer, says a dispatch to the *New York Sun*. It was served warm, as is the custom there, and addressing the barmaid he said:

"Isn't that beer a little stale?"

To which the barmaid replied:

"Why shouldn't it be? It's been waiting for you for two years."

MERCHANTMEN TO USE SMOKE SCREEN

Until now, merchantmen in submarine infested zones have been compelled to depend upon convoys of friendly destroyers for smoke screens under the protection of which they might escape the U-boats.

Announcement is now made, however, that the Du Pont Company is manufacturing for the Navy Department "smoke boxes" which can be installed upon merchant vessels and which will produce the all-screening pall. These smoke-screen outfits, it is said, will be installed upon all merchant vessels which have been armed and which carry crews of naval gunners. The outfit consists of a smoke funnel, to be operated on the vessel proper, and which will cost approximately \$125. In addition the smoke boxes, which will be thrown overboard upon the approach of the U-boat, and which cannot be afterward recovered, will be used. These cost approximately \$25 each. Phosphorus, used in making the smoke screen is quoted at \$1.25 a pound.

While the outfits are designed for issue to armed merchantmen, they may be purchased by ships which sail without gun crews.

COLLAR DEVICES TO DISTINGUISH SERVICE BRANCHES

Officers of the Regular Army, the Officers' Reserve Corps, the National Guard in Federal Service and the National Army will be distinguished by collar ornaments, according to a ruling announced by the War Department. This has been made necessary because of the absorption of the different classes of officers in the National Army. To a certain extent some system will also be adopted for distinguishing members of the many special units which have sprung up in the service by reason of the war.

Under the ruling of the War Department, officers of the regular army will wear the letters "U. S." on the collar; officers of the reserve, the letters "U. S. R." This system is already in force. Officers of the National Guard in Federal service will wear a collar ornament formed by superimposing the letters "N. G." on the letters "U. S." Officers of the National Army will wear a collar ornament similar to that of the National Guard Officers, except that the letters "N. A." are superimposed on the letters "U. S." The letters in all the collar ornaments will be 5/8 inch high.

The enlisted personnel will be distinguished by the uniform buttons, several designs for which have already been made. The National Guard button is a monogram of the letters "N.G.U.S." while that of the National Army is a monogram of the letters "N.A.U.S."

CHANGES IN U. S. UNIFORM

(Concluded from page 446)

the knee. Heavy fleece-lined mittens will also be furnished, in addition to the regular woolen gloves. There is a warm watch cap that fits down snugly over the ears. Each man also will have his overcoat and other things that are included in the regulation outfit. Before they sailed last April the crews of the American destroyers now on service in the anti-submarine warfare in European waters were not only given full winter outfits, but were provided with one of the warmest garments, a fleece-lined rubberette coat, the lining being of heavy lamb's wool, the sleeves lined with corduroy velvet. They had regulation overcoats, a heavy oilskin suit, consisting of coat and trousers, thoroughly water-proof; woolen jerseys, woolen mitts and socks, woolen watch caps, heavy woolen underwear, and rubber boots, in addition to their regulation blue uniforms and full outfits of clothing.

The Marine Corps Score Book

A Rifleman's Instructor

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Supply it to your Company, Club or Team. It will save you labor. Your men will then instruct themselves. Your subordinates can teach it. It will produce results for you with the minimum of work.

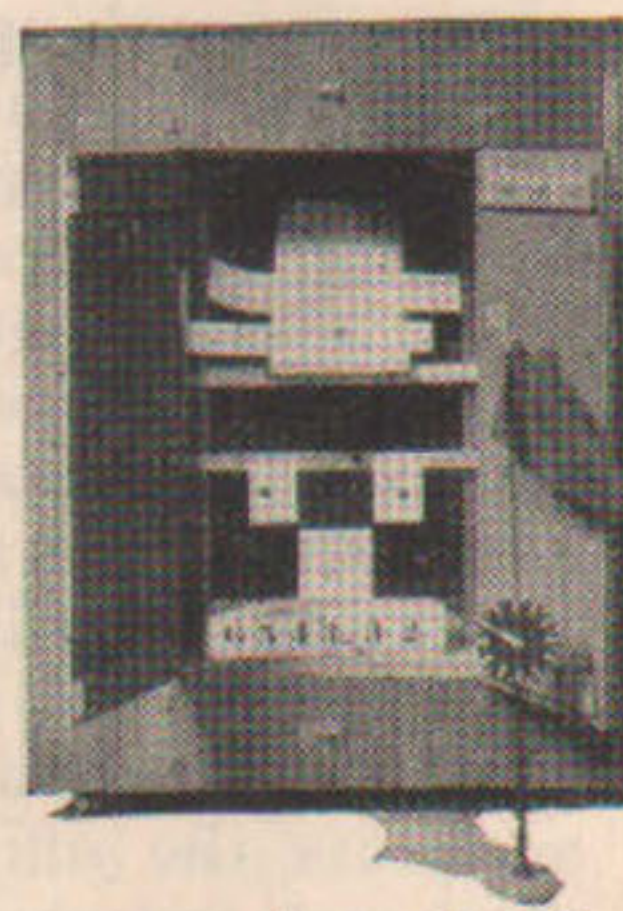
Adopted by the War Department and issued by the Ordnance Department to organizations of the Army, and to the Organized Militia (under Sec. 1661 R. S.), and for sale to educational institutions (Bulletin No. 12, 1916, and G. O. No. 1, 1916.)

Remittance should accompany order. Stamps accepted for orders less than \$1.00.

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ARMS AND THE MAN

WASHINGTON, D. C.



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The Winder Locker Butt is constructed on the "safety first" principle, and the targets permit of shooting which takes into consideration problems of windage and elevation. Order through

ARMS AND THE MAN

1110 Woodward Bldg.

Washington, D. C.

Off Hand From the Clubs

Navy Leases Wakefield Range

DURING the period of the War, the Navy will operate the big rifle range at Wakefield, Mass., on which so many competitions of the Bay State Rifle Association have been staged. The range is now in full operation and will be used for the intensive instruction of men on the ships at the Boston Navy Yard and the sailors and Marines who may be ordered to training stations and instruction camps in the neighborhood of Boston, Newport, and Portsmouth.

The leasing of the Wakefield Range by the Navy marks the opening of the second giant range by this branch of the service, the first being the range at the Great Lakes Training Station.

Following the custom instituted by the Navy when the Winthrop, Md., Rifle Range was established of granting the use of the firing line to civilians, and encouraging their attendance and participation in rifle practice, which policy was followed when the Great Lakes Station was opened, the officials of the Wakefield Range have made ample provision for shots not identified with the service.

The opening up of the range was under the direction of Major William C. Harllee, U. S. M. C., attached to the office of the director of gunnery exercises of the Navy. Following the completion of the Great Lakes range, he took to Wakefield a company of 125 men who had been at the training station in the middle west. This company is composed entirely of students from the University of Michigan, and is officered by Lt. E. A. Harrington, Lt. J. R. Hayden and Ensign A. H. Jenkins. The officers are former professors and instructors at the University.

Lieut. Harrington will be in command of the range. He is a Massachusetts man, his home being in Worcester. This Naval Company of University men has been the coaches and instructors at the Naval Training Station at Great Lakes, Illinois, where they were trained under the direction of Major Harllee, who has the task of opening up rifle ranges for the use of the Navy and Marine Corps in all the Naval Districts on the Eastern Coast. He is temporarily at Wakefield with Lieut. Harrington. Major Harllee, who has been in charge of the matches of the New England Rifle Association held at Wakefield for several years past, is well known to the riflemen of New England.

The Navy style of operating the range is to have a coach or instructor for every man shooting, and on Saturday afternoons rifle club members will find expert instructors who will give them individual instruction and furnish them a rifle and all the paraphanelia for shooting, except ammunition, without charge. The Bay State Rifle Association will furnish ammunition on the grounds at government cost. Members of rifle clubs who desire to shoot on Saturday have nothing to do but to come to the range and report to the range officer on the firing line.

General Walter C. Lombard, President of the Navy New England Rifle Association is now making plans to hold the regular annual New England matches. On account of the mobilization it was not possible to hold these matches until the Navy Department had offered its services to the Association.

Wakefield will become one of the principal Navy Ranges in the country. Instructing and Operating Detachments will be trained

there and sent to the ranges which the Navy is building or has secured.

One hundred young men from the New England States and who are enrolled in the Naval Reserves have been called to duty at Wakefield and will be trained as range instructors for the Wakefield and other ranges.

"Wild Life" Matches Scheduled

Rifle matches, as usual will be part of the program of the Wild Life League meeting to begin at Conneaut Lake, Pennsylvania, on Labor Day. The Elmwood City, Pennsylvania, Rifle Club has issued a challenge to all rifle clubs in the State to compete with it in the team match on that date.

In this event, the Pittsburg Post has contributed a handsome trophy which will become the property of the club winning the match, together with the title "Team Rifle Champions of Pennsylvania." Members of the winning team will receive gold medals, those of the second team silver medals and those of the third team bronze medals.

In addition, a number of rifle and revolver events have been arranged which should appeal to all rifle and hand-gun enthusiasts. The conditions governing the rifle and revolver matches provide:

Any rifle or ammunition may be used in the rifle shooting contests and any sights, except telescopic. Any revolver or automatic pistol may be used in the revolver contests, providing such revolver or pistol is equipped with plain open sights. Each contestant must furnish his own ammunition and it would be wise for him to bring it with him, but the more popular calibers can probably be secured at Meadville, a short distance from the range by trolley car. Ammunition for Krag rifles will be for sale at the range. All general practice shooting must be finished before 9:00 a. m., when competition begins. A charge of 10 cents per card will be made for practice shooting. Only League members are eligible for trophies in individual matches, but membership books will be open at the range, and any citizen may join by paying the yearly dues, \$1.50.

All contests will end at 4 p. m. on the day scheduled and ties will be shot off under regular conditions.

MONDAY, SEPTEMBER 3. SHOOTING BEGINS AT 9 A. M.

Team Match.—Open to teams of three men from civilian rifle clubs in Pennsylvania affiliated with the National Association. Clubs may enter as many teams as desired.

Distance.—200 yards, slow fire, off hand position, target "A" and 100 yards at Running Deer Target.

Number of Shots.—Two sighting shots and ten shots for record at 200 yards and five shots for record on Running Deer.

Entrance Fee.—\$1.50 per team. Entries close with the beginning of the match.

"The Pittsburg Post" Trophy, to winning team and gold medals to individual members of such team. Silver medal to individual members of second team, bronze to third.

Revolver Trophy Match.—50 yards. Entry fee 50 cents, re-entry 25 cents. Ten shots for record at Standard American Target, off hand shooting, one hand only.

Fine Target Pistol to winner, silver medal to second, bronze to third.

Small Bore Rifle Match.—25 yards, 10 shots, regulation target; entry fee 50 cents; re-entry 25 cents; Small-bore Trophy to winner; silver medal to second, bronze to third.

TUESDAY, SEPTEMBER 4. SHOOTING BEGINS AT 9 A. M.

Rifle Trophy Match.—200 yards. Entry fee 50 cents, re-entry 25 cents. Two sighting shots and ten shots for record at regulation target, "A" off hand position. Re-entries will be shot only after original entries for match are finished and then in the order handed in. League Gold Watch Fob to winner, silver to second, bronze to third.

The Rising Bear Trophy Rifle Match.—Entry fee 50 cents, re-entry 25 cents.

At 100 yards, contestants to shoot standing off-hand or from kneeling position at the outline of a bear which rises into position and remains there five seconds, dropping out of sight to reappear again after five seconds. Five shots for record. One shot at each rise of bear. Ten points for a hit within 12-inch circle on bear's shoulder, balance of body being graduated in circles, counting 9, 8 and 7 points.

Cup offered by E. W. Kelly to winner, silver and bronze medals to second and third.

Novelty Trophy Match.—For small-bore rifles at 25 yards, 10 shots; entry fee 50 cents; re-entry 25 cents; Novelty Trophy to winner, silver medal to second, bronze to third. This watch will continue through Wednesday also.

WEDNESDAY, SEPTEMBER 5. SHOOTING BEGINS AT 9 A. M.

The Running Deer Trophy Rifle Match.—Entry fee 50 cents, re-entry, 25 cents. Distance 100 yards. The deer will run across a space 20 yards in width. Shooter to have his rifle at ready, firing off hand at any time while deer is in sight, calling for the deer's first run when ready. The deer will make five trips across the open space, and five shots will be fired for record, one on each trip. A hit within a 12-inch circle on deer's shoulder will count 10 points, balance of body being graduated in circles, counting 9, 8 and 7 points.

Silver Cup, offered by T. C. Beal, to the winner, silver medal to second, bronze to third.

The Running Deer Revolver Trophy Match.—Entry 50 cents, re-entry 25 cents. Conditions the same as the Running Deer Match for rifles, except that this event will be shot at 50 yards. Five shots for record. Silver cup to the winner, silver medal to second, bronze medal to third.

Novelty Trophy Match, for small-bore guns, continues through this day; all entries close at 1 p. m., and ties being shot off at 2 p. m.

Rifle Championship Trophy.—The contestant entering all individual rifle matches having the highest total best score in each event to be used in computing will receive the League's Rifle Championship medal.

Revolver Championship Trophy.—The contestants entering all revolver matches and having the highest total best score in each event to be used in computing will receive the League Revolver Championship medal.

Sweepstakes.—Optional sweepstakes, entry 50 cents. Sweepstakes purse to be divided 50, 30 and 20 per cent at close of rifle and revolver program, Wednesday, September 6th, among contestants so entered, shooting through all individual rifle and revolver matches.

Ties in the various rifle and revolver matches will be shot off, under original conditions, at conclusion of day that such matches are held.

THURSDAY, SEPTEMBER 6, 10 A. M. LADIES' RIFLE MATCH

Special Prize for best score at Running Deer Rifle, made by a woman.

Special Prize for best score at Rising Bear Rifle made by a woman.

Sighting Shots

Editor ARMS AND THE MAN:

The recent issue of ARMS AND THE MAN, setting forth a reduced qualification course for the twenty-two, caused quite a "mouth shooting match" in the club room of The Canton Rifle Club. You see, it was like this: Two years ago, or just before the Canton club succeeded in obtaining a Hi Power range, the officers of the club were sorely tried to keep up interest in the shooting game. We were shooting in-doors but when the warm weather came something else had to be done.

One evening as we were sitting around shooting off our mouths, about one thing and another, pertaining to the shooting game, Old Bull's Eye Hart took out his pencil and started to figure on the back of a target. The rest of us didn't pay much attention to him until suddenly he jumped up, and created quite a commotion, by declaring he had it. "Had what," asked someone. "Why, a reduced course for the twenty-two."

Then we all wanted to know all about it, and how he had figured it out.

When we settled down to listen this is what he told us.

"While you fellows were talking," he said, "I just wondered why we couldn't figure out, some way, to shoot the twenty-two, that would be good, out-door practice. First I divided two hundred yards by four which gave me fifty. Then three hundred by four, which is seventy-five. Next I divided the eight-inch bull, of the 'A' target, by four which is two. The twenty-inch bull, of the 'B' target divided by four gave me five inches. In fact," he continued, "I just divided the whole 'shootin' match' by four which gave me a dandy twenty-two course."

Well, that was the starter, and the first chance that Hart and I got, after that, we made a set of targets and went out to try it. We spent considerable time that afternoon sighting in our guns, at the different ranges, to get our elevations, then started in to fire the course.

The result of that afternoon's shooting was recorded in ARMS AND THE MAN over two years ago and a half page article went with it. Hart's score was 228 and my own was a few points less. I don't remember it exact, but we both made expert.

So you see, when the article that appeared in the issue of July 7th, advocating a reduced course for the twenty-two, some of our members said: "Why, that's our old twenty-two course." "Sure," said Hart, "I originated that myself." And that started the "mouthing" that evening.

W. K. PERDUE,

Secretary Canton, Ohio, Rifle & Pistol Club.

Members of the Niagara Falls, New York, Rifle Club are establishing a fund for the purchase of a strip of land 50 yards wide and 500 feet long on which to operate an outdoor range. During 1916 the club was permitted to use the government range at Ft. Niagara, 12 miles from the city. This range at present is no longer available.

Editor, Arms and The Man.

Tho far from being expert with the one hand gun I am pleased to note that the N. R. A. is considering qualification courses with this arm. I would not minimize the importance of rifle practice nor discourage the interest in this manliest of all sports but the use of the rifle as a weapon is usually restricted to times of war which, happily, are seldom present. On the contrary, danger from the highwayman, burglar and their kind is ever present and ninety-nine times out of a hundred, if a man is called upon to defend himself or his home, he must pin his faith to the hand gun, and his chances against an armed aggressor depend upon his ability to draw quickly and fire with reasonable accuracy at short range.

By way of comment on the proposed course I would say that I consider it too difficult for "average civilian proficiency." Indeed, having witnessed some military matches, I fancy there would not be a super-abundance of experts even among military men. The .22-calibre course seems to me to be all right. Expert qualification will require much practice but .22 ammunition is so much lower in price than the larger calibres as to almost seem cheap. I see no reason for having separate courses for the .45 automatic and the .38 revolver. The user of either arm is perfectly willing to compete with the other on even terms. Of course in a rapid fire string of more than five shots the user of the automatic should be allowed but one magazine.

For these arms I would suggest that "L" target be used at all ranges; that the range for expert qualification be fifty yards; sharpshooter, twenty-five yards; marksman, fifteen yards; score required in timed fire 90 or better, and rapid fire 80 or better; time in rapid fire to begin with arm in holster, uncocked; either factory or full charge re-loaded ammunition to be allowed.

T. H. WINFREY, Secy.
Central Rifle and Revolver Club,
Des Moines, Iowa.

Arms and The Man,

Washington, D. C.

In reply to your editorial in your August 18th issue on The subject of the Secretary and His Club, he sure does have to do the knowing for all the rest. But I am glad to do it.

As to continuing target practice, if we could buy shells for our Krag's at all reasonable we would do so. But \$67.50 a thousand is too expensive for most of us.

Our club members are not wealthy, we can't afford it.

It looks funny to us that the government can sell for \$15.00 per M., while manufacturers charge \$67.50.

We also think that as this country needs marksmen why couldn't there be an appropriation by Congress to cover the ammunition cost at least?

The boys could buy the guns they need. Don't you think Congress would do it if the N. R. A. petitioned?

Three of our club members have applied for admission to officers training camps. Two have been successful in entering.

Another one of our club members expects to be called to the aviation section soon. Two others have enlisted in the U. S. Public Service Reserve.

We are most all anxious to do something.

L. G. COONROD, Sec.
Savoy, Ill., Rifle Club.

The Santa Barbara, California, Rifle Club has for some time maintained a drill unit of 80 members. These men form one of the six companies of Home Guards in the county.

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. What should be done if the Ordnance Department should recall the Krag rifles, or order them held for the disposition of the Governor of the state? What action should be taken in regard to rifles not arising from the free issue, but which either were purchased outright by the club subsequent to the 1st of July, 1916, or purchased by individual members prior to that date, or transferred to members upon qualification?

A. Such an order would apply only to the free issue of Krag's, for the return of which, upon demand, the club executed a bond, and possibly to all free issue ammunition remaining unexpended. It would in no way effect rifles purchased by the club or owned by individuals through qualification or through purchase prior to July, 1916. Over these rifles the government no longer has jurisdiction.

Q. In shooting from the standing position, is the use of the bandolier as an elbow rest allowed? If so would it not be as legal to use a strap slung from the shoulders?

A. The use of a strap could be no more objectionable than the use of the bandolier as an elbow rest in shooting from the standing position. The fact of the matter is that neither device could be permitted.

Q. Is there any way for a man to have his case passed on before he is called for examination in connection with the draft?

A. The latest ruling of the War Department forbids expressly the calling of drafted men out of their turns for examination or certification.

Q. "A" claims that an automatic pistol will keep on shooting as long as you hold the trigger. "B" says that you have to pull the trigger for every shot. Which is right and why?

A. "B" is absolutely right. There seems to be a very prevalent idea, however, that an automatic pistol acts as "A" claims, probably due to the name. Automatic pistols are not automatic in the true sense of the word; they are really self-loading. In all automatic and self-loading pistols there is a device which either locks or disconnects the trigger during the reloading operation and permits another shot only when the shooter fully releases the trigger. By changing certain parts in the action it would be possible to have the weapon fire the full magazine if the trigger were held back. The result of such a change would be very disastrous, as can be easily understood if one stops to remember that the recoil throws the weapon up and back, and a continuous series of shots would either tear the weapon from the shooter's hand or twist his wrist back to such an extent that he might actually shoot himself or someone back of or to one side of him.

Q. Are there any rules governing the throwing of clay pigeons from the trap in a trap shooting contest? A gun club which I know of has its traps set so that they throw targets in almost every direction except back at the shooter.

A. The Interstate Association, which governs trap shooting in this country, prescribes rules for throwing clay targets with regard to height, distance and angle. It is well for any gun club to throw its targets within the prescribed limits in order that its members become accustomed to standard conditions.

With the Small-Bore Outdoor League

SIX of the ten outdoor small-bore matches in the N. R. A. series have passed into history, but jockeying all along the line in the aggregate standing of the teams, as well as the fact that none of the teams near the top have an unbeatable lead over the others, seems to indicate that the final matches will be hard fought contests.

For two successive weeks the Washington, D. C., Rifle Club has lead in the aggregate standing. The grand total of this organization is now 5586 points, 14 points over the Massachusetts State Rifle Association and 18 points more than the Kiowa Shooting Club of Des Moines, Iowa, with Brooklyn, New York, in fourth place on a score of 5548 and Milwaukee in fifth with a similar total.

The team total for the sixth match hung up by the Washingtonians is 942, which while not as good as this team has done in previous matches, is well ahead of the weekly total of the Massachusetts State Rifle Association, 936 and the Kiowa outfit, 932. The results of the next two matches can be made to count heavily by any of the clubs near the top of the list.

There were some pretty good individual scores hung up during the sixth match. Those making totals of 190 points or more included: T. K. Lee, Birmingham Athletic Club Rifle Association, 198; W. E. Kessler, Kiowa Shooting Club, Des Moines, Ia., 197; John Roche, General Phil Kearney Rifle Club, 194; J. W. Siefert, Los Angeles Rifle Club, and C. L. Butler, Denver City, Colorado, Rifle Club, 193; J. Patterson Hydraulic Rifle Club, Cleveland, O., 192; and O. M. Schriver, W. R. Stokes, and J. H. Robertson of the Washington, D. C., Rifle Club, C. H. Kessler, Kiowa Shooting Club, Des Moines, Ia., Alfred H. Seeley, Manhattan Rifle and Revolver Club, and J. R. Briggs, Ashburnham, Mass., Rifle Club, 190.

The results of the sixth match are:

1. *Washington, D. C., Rifle Club:* O. M. Schriver, 190; W. R. Stokes, 190; J. H. Robertson, 190; Robert M. Morris, 188; W. C. Robertson, 184. Club total, 942.
2. *Massachusetts Rifle Association, Boston:* N. C. Nash, 189; J. Kelly, 188; L. H. McAleer, 187; A. Niedner, 186; H. Marshall, 186. Club total, 936.
3. *Kiowa Shooting Club, Des Moines, Iowa:* W. E. Kessler, 197; C. H. Kessler, 190; Berry, 186; Fines, 182; Paul, 177. Club total, 932.
4. *Brooklyn, N. Y., Rifle Club:* Paul F. Lahm, 189; H. Otto, 188; L. J. Miller, 187; L. J. Corsa, 186; W. Coffin, 182. Club total, 932.
5. *Los Angeles, Cal., R. & R. Club:* J. W. Siefert, 193; G. L. Wotkyns, 187; E. D. Neff, 186; E. C. Crossman, 185; Dr. L. Felsenthal, 180. Club total, 931.
6. *Gen. Phil Kearny Rifle Club, Kearny, N. J.:* John Roche, 194; John Crook, 189; J. Lang, 185; L. Marshall, 180; P. Blanvelt, 177. Club total, 925.
7. *Milwaukee, Wisc., Rifle & P. Club:* Emil Teich, 187; H. W. Mansfield, 187; G. E. Meisenheimer, 187; N. E. Dahm, 185; Lawrence Teich, 174. Club total, 920.
8. *Manhattan R. & R. Club, N. Y. City:* Alfred H. Seeley, 190; David J. Gould, Jr.,

187; H. M. Pope, 182; C. B. Walker, 172; K. H. Fichtner, 172. Club total, 903.

9. *Birmingham, Ala., Athletic Club R. & R. Ass'n.:* T. K. Lee, 198; A. F. DeFuniak, 183; Malven Jones, 178; Frank Flinn, 170; Percy Reid, 166. Club total, 895.

10. *Scott, Ark., Rifle Club:* Henry Thilbault, 188; Walter Alexander, 180; J. K. Thilbault, Jr., 173; H. Fletcher, 173; W. O. Scott, 172. Club total, 886.

11. *Jacksonville, Fla., Rifle Club:* J. H. Whitney, 183; A. R. Reynolds, 179; N. M. McNamee, 177; C. S. Graham, 174; G. W. May, 173. Club total, 886.

12. *Toledo, Ohio, R. & P. Club:* H. G. Affleck, 185; Bruce C. Wilson, 180; J. W. Taylor, 177; H. S. Crawford, 175; Henry Yunker, 166. Club total, 883.

13. *Pentwater, Mich., Rifle Club:* E. Stanhope, 179; R. N. Lagesen, 179; J. B. Hendrick, 173; N. D. Girard, 173; E. B. Clark, 171. Club total, 875.

14. *Denver, Colo., City Rifle Club:* C. L. Butler, 193; W. S. Diddle, 169; T. H. Smith, 169; R. E. Ladwig, 169; E. L. Nanson, 165. Club total, 865.

15. *California R. C. R. & P. Club San Francisco:* R. M. Vaughan, 185; J. S. P. Dean, 176; J. F. Beaman, 169; L. R. Kessing, 166; Paul Thelen, 163. Club total, 859.

16. *Warren, Pa., Rifle & Revolver Club:* J. A. Clark, 185; F. W. Jefferson, 179; J. L. Smith, 175; Geo P. McAnerney, 161; F. P. Lauffer, 158. Club total, 858.

17. *Middleboro, Mass., Rifle Club:* Henry Pember, 180; Richard Bowen, 176; S. L. Brett, 174; A. C. Jinney, 173; R. W. Drake, 155. Club total, 858.

18. *Citizens Rifle & Revolver Club, Rochester, N. Y.:* G. S. Searle, 184; F. C. Sherman, 174; A. G. Johnson, 168; W. W. Lewis, 167; C. D. V. Hobbie, 162. Club total, 855.

19. *Cazenovia, N. Y., Rifle Club:* H. C. Thorne, 185; Geo. L. Woodworth, 184; F. D. Holridge, 162; R. D. Magee, 160; C. F. Huttleston, 157. Club total, 854.

20. *Greater Omaha, Nebr., R. & R. Club:* J. L. Terry, 176; W. B. Riley, 176; C. L. Mather, 169; C. G. Riley, 164; C. A. Darling, 163. Club total, 848.

21. *Ashburnham, Mass., Rifle Club:* J. R. Briggs, 190; Geo. Hollingworth, 187; Geo. Willard, 167; Wm. A. Barlow, 157; W. S. Young, 140. Club total, 841.

22. *Joliet, Ill., Rifle Club:* Arthur Gray, 182; H. D. Grose, 180; Leo D. Deiss, 180; Carl McKee, 159; F. M. Barber, 136. Club total, 837.

23. *Rochester, Minn., Rifle Club:* S. Robinson, 179; Geo. Morrison, 168; E. L. Irish, 163; Louis B. Wilson, 161; C. L. Wilson, 157. Club total, 829.

24. *Hydraulic Rifle Club, E. Cleveland, Ohio:* J. Patterson, 192; E. Gruber, 175; M. B. Mook, 164; D. G. McNeal, 154; John Singer, 135. Club total, 820.

25. *Franklin, Pa., Rifle Club:* C. S. Boswell, 185; W. W. Mackey, 167; C. A. Bronson, 167; G. B. Jobson, 150; C. M. Campbell, 145. Club total, 814.

26. *Community Rifle Club, Sherrill, N. Y.:* H. Freeman, 165; S. Freeman, 163; L. Lee, 161; G. Burlingame, 149; L. Amacher, 146. Club total, 784.

27. *Norwalk Rifle Club, So. Norwalk, Conn.:* J. A. Baker, Jr., 175; W. E. Mathews, 157; C. R. Chasmar, 150; F. M. Hoppel, 150; A. N. Clark, 149. Club total, 781.

28. *Antioch, Ill., Rifle Club:* H. E. Williams, 170; Bert Worman, 169; Norris Procter, 159; Joe Pauowski, 144; Ed Garrett, 138. Club total, 780.

29. *Olig Rifle Club, Reward, Cal.:* S. J. Burris, 167; C. M. Small, 160; W. D. McNairn, 159; A. C. Dambacher, 141; H. W. Cullen, 133. Club total, 760.

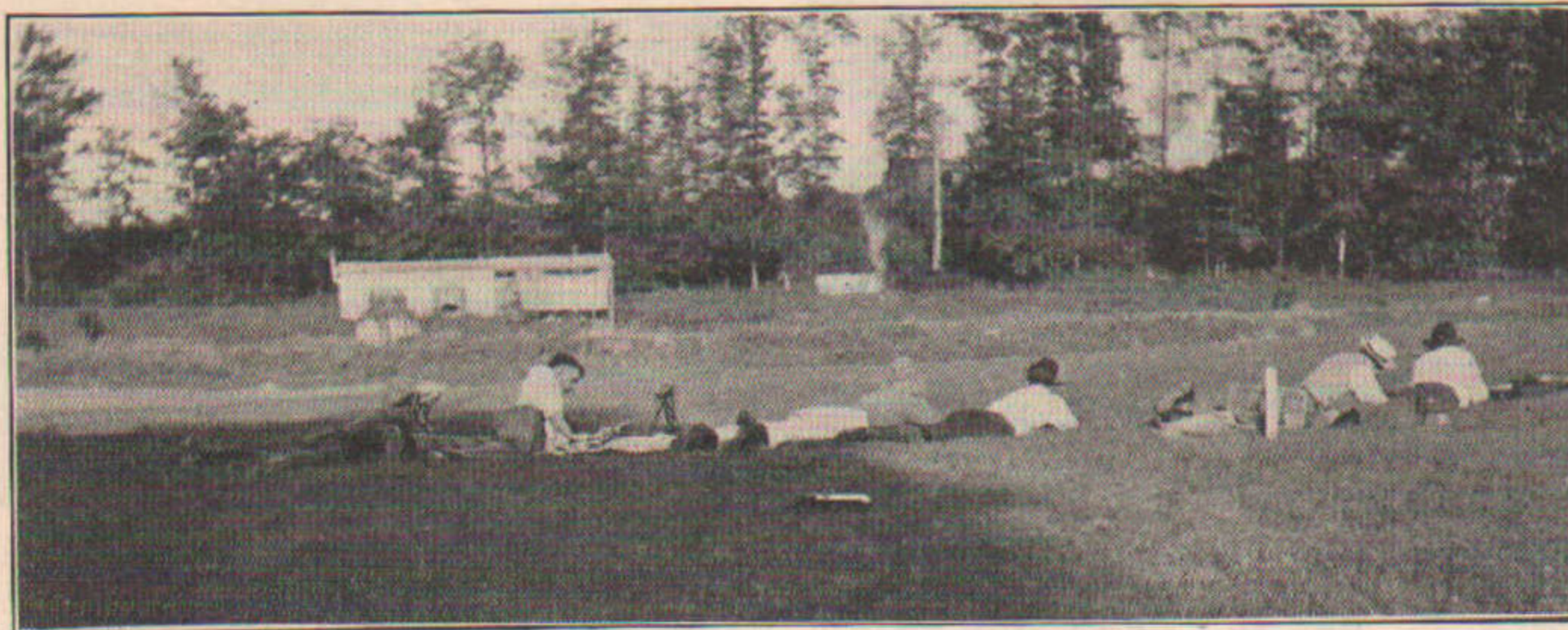
30. *Ontario, Cal., Rifle Club:* E. A. Casler, 159; C. E. Hare, 153; Scott Morrell, 150; F. H. Wallihan, 147; W. H. Tangeman, 139. Club total, 748.

31. *Chicago, Ill., Rifle Club:* E. B. Witwer, 170; Charles J. Chamberlain, 155; F. B. Roziene, 155; K. C. Robinson, 139; John S. Grimes, 127. Club total, 746.

32. *Canyon City, Ore., Rifle Club:* C. G. Guernsey, 155; J. A. Muldrick, 150; Denver Leedy, 150; W. C. Mason, 148; Harry Allen, 136. Club total, 739.

33. *Patchogue, N. Y., Rifle Club:* Chas. C. Cave, Jr., 128; Julius Chevalley, 126; Frank P. Johnson, 126; Robt. A. Van Tayl, 118; R. B. Ackerly, 105. Club total, 603.

Club.	Score.
1. Washington, D. C., Rifle Club...	5586
2. Massachusetts Rifle Ass'n., Boston, Mass.	5572
3. Kiowa Shooting Club, Des Moines, Iowa	5568
4. Brooklyn, N. Y., Rifle Club	5548
5. Milwaukee, Wisc., R. & P. Club..	5548
6. Birmingham, Ala., Ath. Club Rifle Club	5452
7. Manhattan R. & R. Club, N. Y. City	5359
8. Ashburnham, Mass., Rifle Club..	5218
9. Jacksonville, Fla., Rifle Club....	5205
10. Toledo, Ohio, R. & P. Club.....	5203
11. Los Angeles, Cal., R. & R. Club	5197
12. Scott, Ark., Rifle Club	5157
13. Pentwater, Mich., Rifle Club....	5127
14. Cazinovia, N. Y., Rifle Club.....	5085
15. Denver, Colo., City Rifle Club...	5076
16. Franklin, Pa., Rifle Club	5057
17. Cal. R. C. R. & P. Club.....	4989
18. Norwalk Rifle Club, So. Norwalk, Conn.	4964
19. Citizens R. & R. Club, Rochester, N. Y.	4955
20. Warren, Pa., R. & R. Club.....	4940
21. Community Rifle Club, Sherrill, N. Y.	4879
22. Hydraulic Rifle Club, E. Cleveland, Ohio	4732
23. The Greater Omaha, Nebr., R. & R. Club	4726
24. Middleboro, Mass., Rifle Club...	4713
25. Ontario, Cal., Rifle Club.....	4593
26. Joliet, Ill., Rifle Club.....	4588
27. Antioch, Ill., Rifle Club.....	4543
28. Gen Phil Kearny Rifle Club, Kearny, N. J.	4163
29. Chicago, Ill., Rifle Club.....	4124
30. Canyon City, Ore., Rifle Club....	3976
31. Olig Rifle Club, Reward, Cal....	3689
32. Rochester, Minn., Rifle Club....	3650
33. Patchogue, N. Y., Rifle Club....	3626



The Manhattan Club of New York City Shooting the 125-Yard Stage of the Small-Bore Outdoor Course

SIXTH MATCH MISSING

34. Canton, Ohio, R. & P. Club.....	4228
35. Niskayuna Rifle Club, Schenectady, N. Y.	3981
36. New Bedford, Mass., Rifle Club..	3972
37. St. Johnsbury, Vt., Rifle Club....	3872
38. Wilsall, Mont., Rifle Club.....	3167
39. Holbrook, Arizona, Rifle Club...	3127
40. Massena, N. Y., R. & P. Club....	3100
41. Malta, Mont., Rifle Club.....	2921
42. Kenosha, Wisc., Rifle Club.....	2777

FIFTH AND SIXTH MATCHES MISSING

Akron, Ohio, Rifle Ass'n.....	2811
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FOURTH, FIFTH AND SIXTH MATCHES MISSING

Hoosier Rifle Club, Indianapolis, Ind.	2390
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THIRD, FOURTH, FIFTH AND SIXTH MATCHES MISSING

St. Louis, Mo., Colonial Rev. Club....	1745
Highland, Cal., Rifle Club.....	1427

SECOND, THIRD, FOURTH, FIFTH AND SIXTH MATCHES MISSING

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

NO MATCHES REPORTED

- Saranac Lake, N. Y., Rifle Club.
- Mt. Olive Rifle Club, Reedley, Colo.
- National Rifle Club, Newark, N. J.
- Long Beach, Cal., Rifle Club.

RICOCHETS

AMONG the many enthusiastic supporters of the small-bore qualification idea are the members of the Manhattan Rifle and Revolver Association of New York City, since the club has been able to obtain only enough range for short-distance shooting, and those who in the past have wished to practice with the service rifle have been forced to travel the long distance to the State range.

In discussing the small-bore course, Alfred H. Seeley says:

"Our range is very well adapted for small-bore work, and, owing to the increased enthusiasm among the members, the club has added a porch to the regular shooting house for the convenience of the shooters and visitors.

"Needless to say we soon had ready a quantity of the new qualification targets, and have so far qualified ten men over the course, as Expert Riflemen.

"We feel, however, that some changes must be made, as the course under present conditions is too easy.

"The 150-yard target seems to be all right, as the slightest wind is almost sure to blow

the bullets out of the black, unless the utmost good judgment is used. The 125-yard is fairly easy, though they occasionally stray out here also.

"For some reason the 75-yard slow-fire stage is the hardest of all, and nearly all of our members dropped points there.

"The two rapid-fire stages are a joke, especially the 75-yard prone, from standing. In nearly all cases 'possibles' were recorded at this distance, and occasionally at 50 yards also. One reason is the great amount of time allowed for a single-shot rifle. An increase of 30 seconds at each range, instead of two minutes, would be more than ample, and the silhouette could be reduced slightly. The above criticisms all apply to shooting with telescopic sights, which simplifies the course greatly, especially the long ranges. If iron sights only are used, the targets are probably all right as they are, but we most strongly advocate the reduction of the additional time allowed single-shot rifles. However, if telescopes are barred, it will also mean that many older men who have difficulty seeing the sights will not shoot.

"Those who qualified as Expert Riflemen and their scores are:

NAME	75 Yds. Slow Fire	125 Yds. Slow Fire	150 Yds. Slow Fire	50 Yds. Rapid Fire	75 Yds. Rapid Fire	TOTAL
D. J. Gould, Jr....	49	49	47	47	50	242
C. L. Cammann, Jr.	47	48	46	48	50	239
Le Roy Latham...	48	48	46	48	49	239
Alfred H. Seeley..	45	48	47	47	50	237
J. E. Silliman....	46	47	48	46	50	237
K. H. Fichtner....	45	47	47	48	49	236
L. W. Wright....	44	45	45	50	49	233
Chas. W. Latham.	42	47	46	46	49	230
Clinton B. Walker	45	42	46	43	50	226
J. C. Couzens....	41	43	41	49	50	224

"Three of our members made the trip to the Peekskill State range and also qualified as Expert Riflemen with the Springfield rifle over the Militia Course with the following scores: David J. Gould, Jr., 236; Karl T. Frederick, 227; Alfred H. Seeley, 217."

A. T. Carter won the N. R. A. medal in the "Members' Match" held by the Central Rifle and Revolver Club, of Des Moines, Iowa, on the State range. First to fourth cash handicap prizes were won by R. A. Martin, W. L. Broklaw, F. M. Winfrey and T. H. Winfrey, in the order named.

	Slow Fire 300	Rapid Fire 500	Handicap	Tot'l	
A. T. Carter.....	44	45	45	00	134
T. H. Winfrey..	38	40	47	6	131
F. M. Winfrey..	38	38	46	10	132
R. A. Martin....	37	33	45	30	145
F. Gordon.....	34	38	40	10	122
W. L. Broklaw..	35	30	39	35	139
B. O. Spear....	31	37	33	15	116
J. G. Keek.....	32	25	40	4	101
A. Goldbeck	27	16	41	35	119
Neil Brink	36	13	34	32	115

The Shanghai, China, Miniature Rifle and Revolver Club's second annual revolver championship competition closed May 31st. On the whole some excellent revolver shooting was done. Great credit is due the women who entered this difficult competition. The competition was 10 shots at 10 yards, 10 shots at 15 yards, 10 shots at 20 yards and 10 shots at 25 yards: off hand. No body or artificial rest. Club's standard targets with 4-inch outer bull's-eye, which counts 9 points, and 2-inch inner bull's-eye, which counts 10 points, were used. Possible score, 400. Revolvers used were Colts, 38 calibre; Officers' model and Smith & Wesson 38 calibre special. Ammunition used, Remington. The six highest scores in 1916 were 374, 372, 368, 365, 363, 261.

The following scores above 80 per cent were made:

NAME	10 yds	15 yds	20 yds	25 yds	Tot.
P. S. Chapman.....	98	95	98	91	382
E. W. Godfrey.....	98	95	92	91	376
J. H. Farquharson..	97	96	93	89	375
R. E. Neale.....	100	95	93	86	374
St. G. R. Clark....	95	93	91	93	372
W. B. Sutherland...	99	95	88	89	371
K. D. Stewart.....	99	96	89	87	371
E. Essig	97	93	89	91	370
Mrs. K. D. Stewart.	97	90	93	84	364
E. A. Sykes.....	98	90	88	85	361
Miss L. Negus.....	97	88	92	83	360
Mrs. A. R. Fullerton	98	93	88	80	359
W. Brand	95	93	88	81	357
Mrs. G. H. Wright.	98	88	87	81	354
A. V. White.....	91	91	87	82	351
Miss H. McNeill...	97	94	85	73	349
Mrs. H. C. Gulland.	94	91	85	77	347
H. H. Read.....	96	91	84	73	344
C. H. Rutherford...	96	88	83	77	344
E. K. Howe.....	91	91	85	76	343
L. R. When.....	96	81	85	72	334
Miss D. Unwin....	90	83	78	80	331

The Crow, Montana, Rifle Club has reported ten qualifications under the new course. They are:

Sharpshooters—S. J. Shick, 163; C. D. Munro, 160; O. J. Posey, 153.

Marksmen—E. W. Estep, 152; T. E. Shipley, 159; B. Boyer, 156; E. Lieurance, 166; M. K. Wolfe, 158; H. E. Clifford, 170; E. J. Boos, 167.

Ten marksman qualifications have been reported by the Faculty Rifle Club of the University of Arizona, Tucson, under the new course. They are:

H. C. Heard, 166; J. G. Brown, 158; W. S. Cunningham, 166; G. R. Faucett, 153; C. B. Johnson, 156; R. H. Williams, 154; H. A. Hubbard, 150; A. L. Enger, magazine fire score of 76, total 148; Chas. T. Vorhies, 173; W. E. Bryan, 163.

Twenty-two qualifications have been reported by the Pecos City, Texas, Rifle Club under the new course. They are:

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Sharpshooters—J. J. King, 151; John C. Camp, 151; E. P. Gaines, 152; H. E. Collings, 155; D. M. Leckenly, 163; J. R. Harbour, 165.

Marksmen—E. L. Collins, 158; M. M. Collie, 161; J. V. Hanson, 151; B. G. Warner, 150; R. E. Williams, 154; Dewey Richburg, rapid fire score of 76, total 149; Hugh Roberson, 152; E. G. Reynolds, 151; John Ross, 159; R. F. Kelton, 155; Ben Palmer, 164; H. R. Anderson, 161; W. H. Drummond, 160; N. R. Bozeman, 152; W. C. Sparman, 167; Marion Slack, 161.

The Fort Wayne, Indiana, Rifle and Revolver Club has reported five qualifications under the old course. They are:

Expert—X. J. Divens, 219.

Sharpshooters—F. B. Hall, 200; Walter Nichter, 191.

Marksmen—C. Nichter, 185; R. D. Sowle, 162.

The Members' Match was shot by the Kiowa Shooting Club of Des Moines, Iowa, on August 12, 1917. Ten members participated and T. H. Winfrey won the match with score of 132.

W. M. Claypool of the Needles, California, Rifle and Revolver Club, has qualified as an expert under the new course with a score of 148.

The Lamar, Colorado, Rifle Club has reported five qualifications under the new course. They are:

Experts—J. E. Brownlee, 150; C. J. Laughlin, 146.

Sharpshooter—John White, 160.

Marksmen—Willard Harker, 169; V. E. Rowton, 161.

Three marksman qualifications have been reported by the Promise, Oregon, Rifle Club under the new course. They are: Charles Carper, 150; Wm. Stall, 163; Perry Carper, 173.

Six qualifications have been reported by the Evansville, Indiana, Rifle Club, four under the new course and two under the old course. Those qualifying under the new course are:

Marksmen—H. Lahr, 177; L. Manella, 154; J. Miller, 163; W. Reisinger, 160.

Those qualifying under the old course are:

Experts—R. D. Eaton, 220; J. G. Schmidt, 218.

The Rugby, North Dakota, Rifle Club has reported four qualifications under the new course. They are:

Expert—F. H. Schendel, 142.

Sharpshooters—Fred C. Severyn, 150; Sam Cornell, 150; S. E. Olson, skirmish fire score of 79, total 147.

The Corona, California, Rifle Club has reported forty-six qualifications under the new course. They are:

Expert—F. M. Baird, 145.

Sharpshooters—V. Asher, 152; L. D. Bedford, 165; W. T. Blackman, 156; E. W. Blickhahn, 156; Chas. Clark, 151; B. Crawford, 161; Jas. Davis, 159; E. R. Freeman, 158; J. R. Hardisty, 159; Cleo House, 168; H. L. Lyman, 151; Dee McConnell, 154; G. P. Ross, 158; Harry Sliff, 151; E. C. Vinnedge, 169; W. L. Vinnedge, 155; F. S. Watrous, 164; W. E. Williamson, 172.

Marksmen—F. J. Beveridge, 163; J. V. Bird, 160; W. S. Clayton, Jr., 155; Alfred Daniels, 173; W. K. English, 163; R. D. Feuerborn, 167; W. J. Fink, 170; T. A. Fraser, 168; Howard Glass, 166; V. A. Gleason, 157; W. E. Hill, 155; A. F. Hull, 155; W. H. Jameson, Jr., 158; M. J. Keegan, 175; F. W. Kuster, 168; C. B. McConnell,



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160; F. Penrod, 170; A. C. Ramsey, 177; L. D. Robbins, 158; Robt. N. Ross, 150; A. L. Russell, 158; L. W. Scaggs, 156; M. Victor Staley, 153; Matthew Ster, 164; Nile Vinnedge, 168; D. K. Wilson, 151; Elmer Wood, 161.

Twenty-five qualifications have been reported by the Marysville, California, Rifle Club under the new course. They are:

Sharpshooters—J. Frank, 159; E. E. Wernex, 155; H. Eich, 173; J. A. Easterbrooks, 170; W. Arnoldy, 169; W. M. Meek, 164; J. W. Morgan, 154; L. R. Brewer, 151; W. A. Suftin, 159; C. R. Suftin, 178; J. F. Hosford, 161.

Marksmen—G. A. Waddle, 182; A. W. Thornton, 153; P. L. Kuster, 165; C. Wood, 150; P. J. Delay, 163; J. L. Howard, 178; J. Peters, 152; A. M. Bundy, 153; A. H. Grant, 154; R. J. Flannery, 166; K. P. Wilkie, 157; J. T. Riley, 169; L. C. Plants, 154; C. Tharp, 189.

The Westerfield, Connecticut, Rifle Club has reported eighteen qualifications under the new course. They are:

Sharpshooters—E. J. Lyman, 152; J. E. Bulkley, 151.

Marksmen—I. H. Churchill, 154; C. F. Caswell, 161; F. Carlson, 165; G. O. Carlson, 153; A. Dixon, 156; G. S. Francis, 170; S. O. Greenough, 183; H. H. Hills, 150; C. W. Hale, 160; H. E. Haskell, 165; C. E. Loveland, 174; J. L. Noble, 168; F. M. Taylor, 167; L. A. Wilson, 154; E. S. Whitney, 151; W. A. Allen, 153.

THE MAKING OF A MODERN HUNTING RIFLE

IN EVERY firearms catalog you will find several paragraphs devoted to a description of the care taken in the manufacture of the rifles which the maker offers to the shooting public. The high quality of the steel used and the number of times each part is inspected during its trip through the factory is usually mentioned.

The average sportsman reads this part of the catalog with much interest but it often leaves him with a bewildered feeling as to just what it is all about. He noted that so-and-so part is inspected a couple of hundred times and he cannot help but wonder what good it does to look at the part so frequently!

As every sportsman knows a rifle is made up of many small and large parts. A session with the screwdriver and a count of the parts left over afterwards will always prove this fact. Each one of the parts has some necessary function in the operation of the rifle otherwise it certainly would not be there.

To get down to elementary principles in order to make the subject clear, it is necessary to understand just what inspection means. In some ways it is a misleading term, for inspection as applied to the parts of firearms really means measurement.

Every solid object has at least three dimensions and consequently must be measured in at least three directions. Many of the parts of a rifle are complicated in shape. This means that they must be

measured in a large number of ways to be sure that they will fit in with the other parts properly.

Modern rifles are made on the interchangeable system, that is, all the parts are made exactly alike and this is where inspection, or rather measurement, comes in. The heavy and complicated machines that cut the parts out of the solid steel or the rough forgings, can be set to cut the parts just right. The edges of the cutting tools wear away, however, and after a number of cuts have been taken, the last part made does not measure just the same as the first one. Every so often the inspectors measure the parts as they come from the machines and as soon as wear in the cutting tool begins to show in the size of the part the machine is stopped and a new tool inserted, or the machine readjusted.

You may ask how the size of the gauges themselves are determined. Originally they are made to fit the model gun and after that they are checked up periodically by means of a set of master gauges which are also made to fit the model gun.

WANTS AND FOR SALE

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

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

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

WILL BUY your field glasses or binoculars for cash—this is the time to sell them. Will pay you the full price you paid within past 3 years for any purchased of the F. W. King Optical Company of Cleveland, and a fair price for any others in good condition. Lemaire field glasses wanted especially. F. W. King, 12 Maiden Lane, New York City.

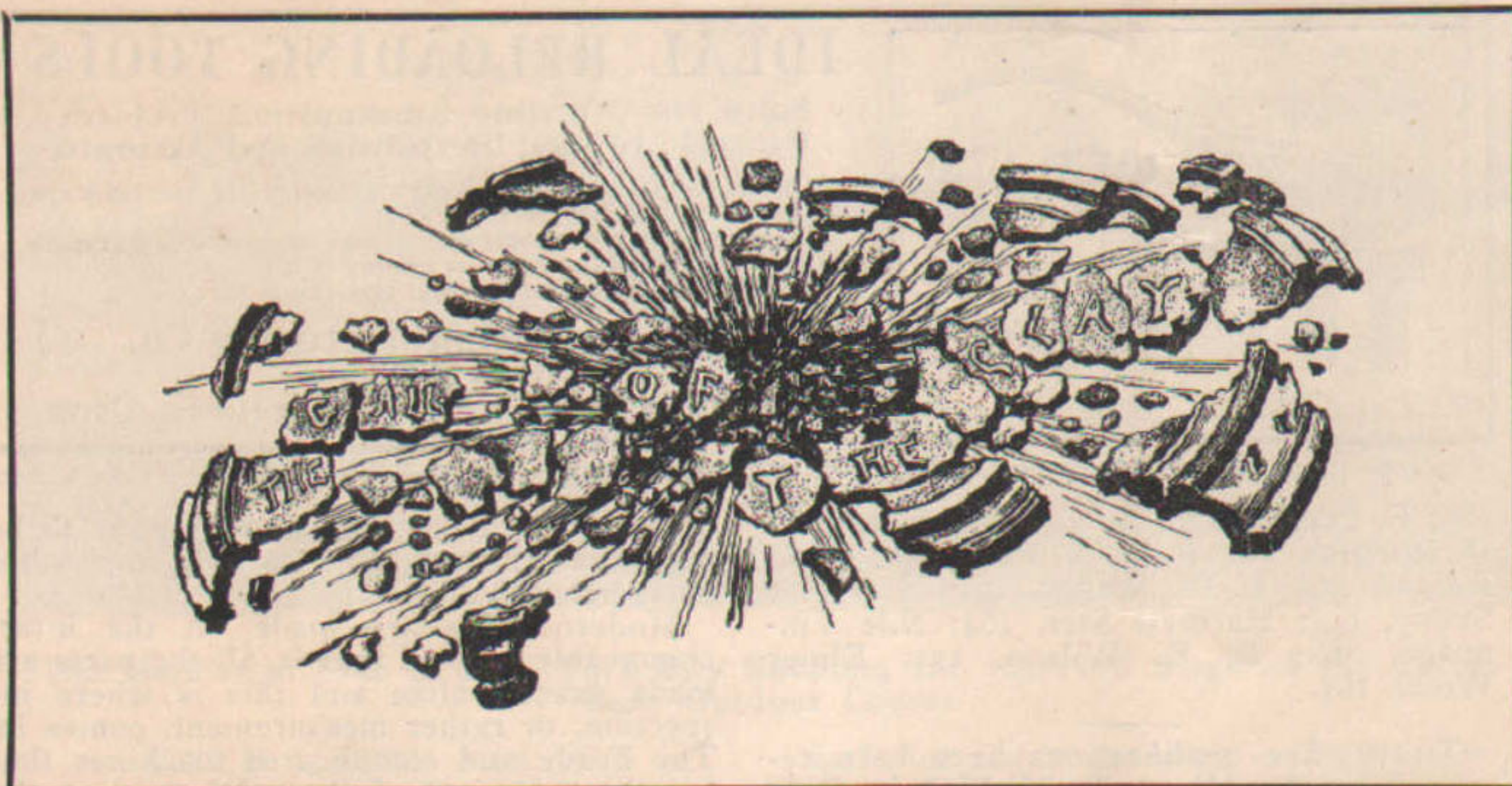
FIREARMS AND ANTIQUES—Buy, sell, exchange old time and modern firearms. Antiques wanted. Stephen Van Rensselaer, 805 Madison avenue, New York City.

FOR SALE—Shooting and Fishing and Arms and the Man, 1897 to date. Outer's Book, 1912 to date. Rod & Gun, 1875-6-7. Large Radioticon outfit. Fine 22/35 Stevens rifle with extra 30/25 Savage bbl. .28/30 Pope barrel, 4x5 Kodak. All full outfits in A-1 condition. W. Angle lens, 21 vol. Photo journals. .32 and .8 patched bullets. Send stamps for data. Thomas Martin, 8 Drummond St., G.H. Sta., Boston, Mass.

WANTED—Primers, powder, and metal cased bullets for the .30 Springfield. Give quantity and price in first letter. C. S. Landis, 2017 Penn St., Harrisburg, Pa.

HAVE YOUR empty rifle shells reloaded. Gallery, short range or long range loaded to order. Soft points for hunting, too. C. E. Stewart, 212 Alma Ave., New Castle, Pa.

FOR SALE—U. S. Springfield Rifle, model 1906, first-class condition, \$25.00. Also .38 Special Smith & Wesson Revolver, 6-inch barrel, been used for target work, \$15.00. G. A. Ringlund, 16 So. 8th St., Minneapolis, Minn.



Frank Troeh Wins G. A. H. Introductory

BY smashing 199 out of 200 targets thrown in the South Shore Introductory to the Grand American Handicap, Frank Troeh, last year's victor in the National Amateur Handicap, won the event which opened the trapshooting classic of 1917 on August 20th. Against him were pitted 235 entries, all shooting from the 18-yard mark.

Troeh dropped his target during the first 100, running the second 100 straight. J. E. Chatfield, of Texarkana, State champion of Arkansas, finished second with 198 targets, and A. C. Skutt, of New York, took third place.

The opening of the Eighteenth Grand American Handicap was accompanied by perfect shooting conditions during the morning, but in the afternoon a rainstorm not only delayed the sport, but cut down many scores which otherwise would have been greater.

The Hercules All Around Championship match, at 150 singles and 25 pairs, shot in connection with the opening of the big event, was staged at the South Shore Club grounds, Saturday, August 18th, with the A. B. Richardson Memorial Cup shoot following on Sunday, August 19th.

The Hercules championship resulted in a win for two Illinois men, amateur and professional. Mark Arie, of Thomasboro, won in the amateur division on the score of 190 out of a possible 200. He broke 49 out of the first 50 from 18 yards, 47 from 20 yards, and 46 from 22 yards, finishing with 49 out of 50 in the doubles. Bart Lewis, professional, totaled 193 in this order: 50 straight from 18 yards, 49 from 20 yards, 49 from 22 yards, and 45 of the doubles. Others of the best scores were J. R. Jahn and A. H. Winkler, amateurs, 187 each; Fred Harlow, amateur, 186; Lester German, professional, 192; George Maxwell, 191; Homer Clark, 190; John R. Taylor, 189; Fred Gilbert, 188; W. R. Crosby, 185.

The Richardson Memorial Shoot, at 100 targets, went to Fred King, of Delta, Cal., on a score of 99, and 24 to 23 out of 25 on a shoot-off with Fred Harlow, of Ohio, who also broke 99. There were 130 entries for this beautiful cup, given as a testimonial to the memory of the popular shooter, A. B. Richardson, of Dover, Del., who was killed a year ago. The shooting had to close at 1 p. m., on account of it being Sunday, or there would have been many more entries. There was no entrance fee. The weather was perfect and a number of good scores were made. Mark Arie and Chan Powers broke 98 each; G. F. Egbert, W. N. Boylston, Geo. Roll, F. M. Troeh and J. W. Coleman, 97 each. The conditions were:

16 yards on the first trap, 17 on the second, and so on, going back a yard at each of the five traps, so that all finished at 20 yards.

MAKE YOUR GUN COMFORT- ABLE

By FRED O. COPELAND

TO THE man who is a true sportsman, who loves his guns, there is a complete charm in a gun the model of which is obsolete, a gun which has outlived its day on account of its honest construction, for his loving hands have jealously shielded it from injury and nursed its joints against wear.

Traces of blue on its straps and of case-hardening on its frame may linger in protected spots on the bright steel, which, in the case of the barrels that glow like mirrors within, has these many years shown a bald spot through the browning in the neighborhood of the fore end as though to dignify its age and arouse a longing to go back through the Octobers with such a gun.

Habits early formed will systematically fight the certain wear of steel on steel. Heavy grease such as is used for gears is a most soothing lotion for the gun's most wearing point, where fore end and frame meet.

It is easy to dose the trap gun in this way, for a small round metal box containing the grease may easily accompany the gun in its case, and there will be plenty of time to procure a match or sliver of wood to apply the grease not only to the bearing of fore end on frame, but also to the lug that hooks to the bolt on this bearing, and to the lug which receives the locking bolt.

Besides being an effective lubricant when breaking and closing the gun, the grease acts as a cushion for the shock sustained by the lugs and joint at the time of discharge.

While the sportsman may be quite willing to take the time to protect his trap gun in this manner, his field gun may suffer from bearings wiped dry on the cloth interior of his gun case. This may be overcome, before the instant eagerness of entering the cover interferes, by applying a generous supply of grease to the concave bearing of the fore end iron before he leaves home. When the gun is assembled later in the day a twig may be pressed into service and all larger bearings be lubricated from the generous supply in the protected curve of the fore end iron.

It is true the field gun suffers far less than the trap gun, for it may be carried for hours at a time without its being broken open or the gun discharged; nevertheless, it is a comfortable feeling to know that the gun of your choice is being protected as far as human care can go.

Honest wear will denude the steel of the frame and barrels, but if carefully wiped and oiled it will not suffer from rust.

TRAP EVENTS DROP AS HUNTING SEASON NEARS

By PETER P. CARNEY

AS THE hunting season draws near trapshooting tournaments decline. While the hunting season is on, important trap tournaments are few and far between. This is as it should be. The Interstate Association tries to conduct all the registered tournaments before October 15, and from that time on club, league and intercity shoots hold sway.

September, therefore, isn't as strong a trapshooting month as August, for the hunting season begins in many States this month. Fifty-four registered tournaments are scheduled in 22 States, with Illinois leading with nine. This is the first month that Iowa didn't show the way. The Buckeye State boasts of six registered shoots. Pennsylvania is next with five; Indiana, Oklahoma, New York, Michigan and Kansas have three each; Maryland, Nebraska, New Jersey, Minnesota and Ohio, two each, and Virginia, Missouri, Florida, North Carolina, California, Delaware, Washington, New Hampshire and Kentucky, one each.

There are a number of important trap tournaments billed during the month. The Virginia State trapshooting championship will take place in Richmond on September 3 and 4. The Pennsylvania Wild Life League will hold its annual tournament from September 2 to 6, inclusive, at Conneaut Lake. The Miwikims, the Westy Hogans of the Middle West, will conduct their first tournament at Foc Lake, Ill., on September 5, 6 and 7. The Westy Hogans will be found as usual at Venice Park, Atlantic City, N. J., on September 12, 13 and 14.

That fair associations are becoming interested in trapshooting as a sport is evidenced by the fact that on September 3 the Monmouth Fair Association, of Red Bank, N. J., has listed a number of events for trapshooters.

FIGHTING MEN TAKE SMALL RISK

That the risk of the fighting man is not nearly so great as is popularly imagined is the belief of Marine Corps officials who have compiled statistics covering the Allied losses in the war.

A careful estimate shows that only one man in fifteen is killed, and one out of five hundred loses a limb. Recent reports from French and British hospitals show that about 95 per cent recover from wounds, while about 90 per cent are able to return to the firing line.

While the Marine Corps officials hold unbiased views in regard to the expected casualties among their own troops in France, it is pointed out that the "Soldiers of the Sea" recently engaged in warfare in Haiti, suffered less than one per cent losses. These were sustained while covering a wide terrain, fighting from house to house, and capturing and holding small redoubts, taken one by one from the enemy. This method of warfare is said to be rapidly superceding the trench system on the Western front.

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Bronze, 14 cents lots of 25
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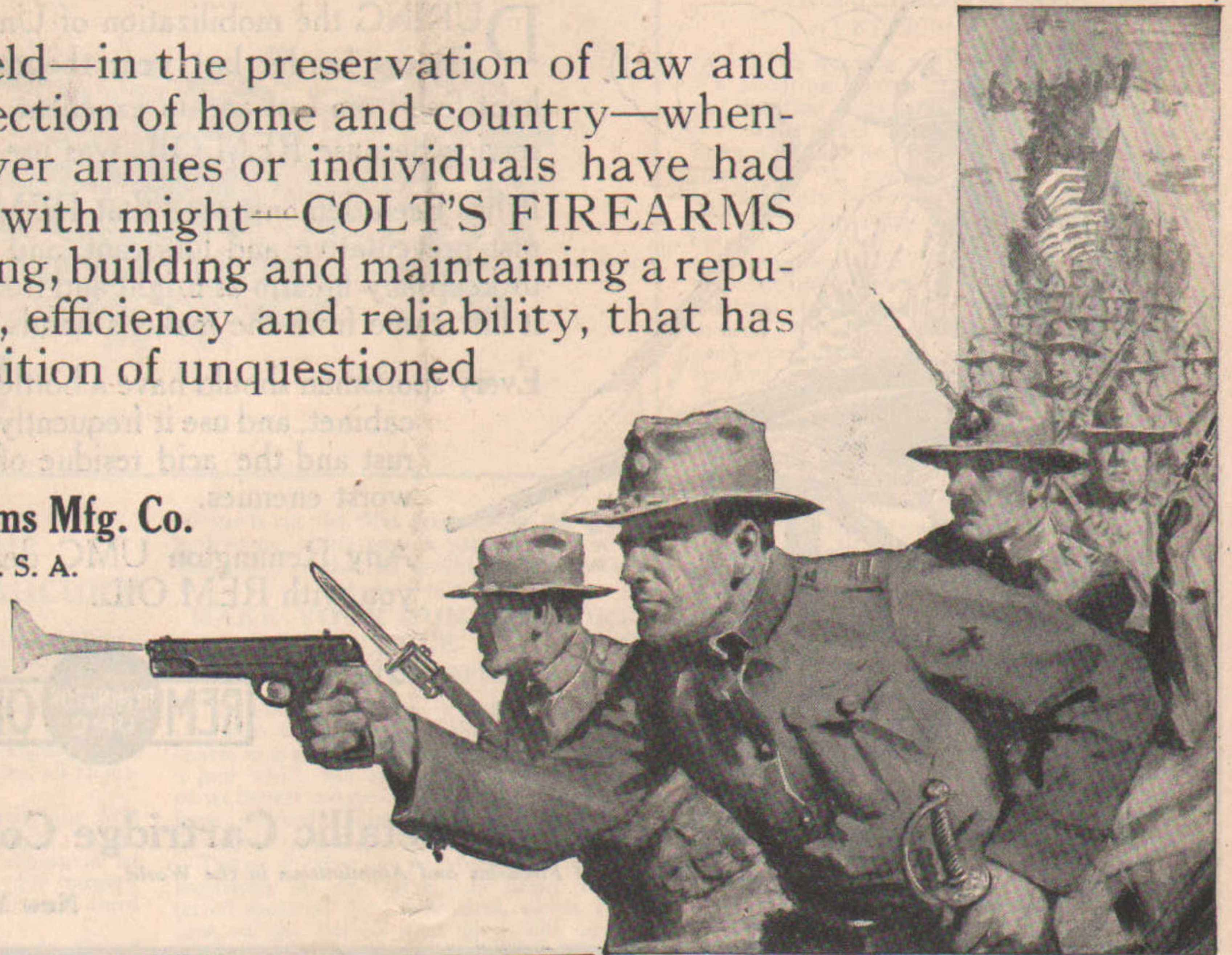
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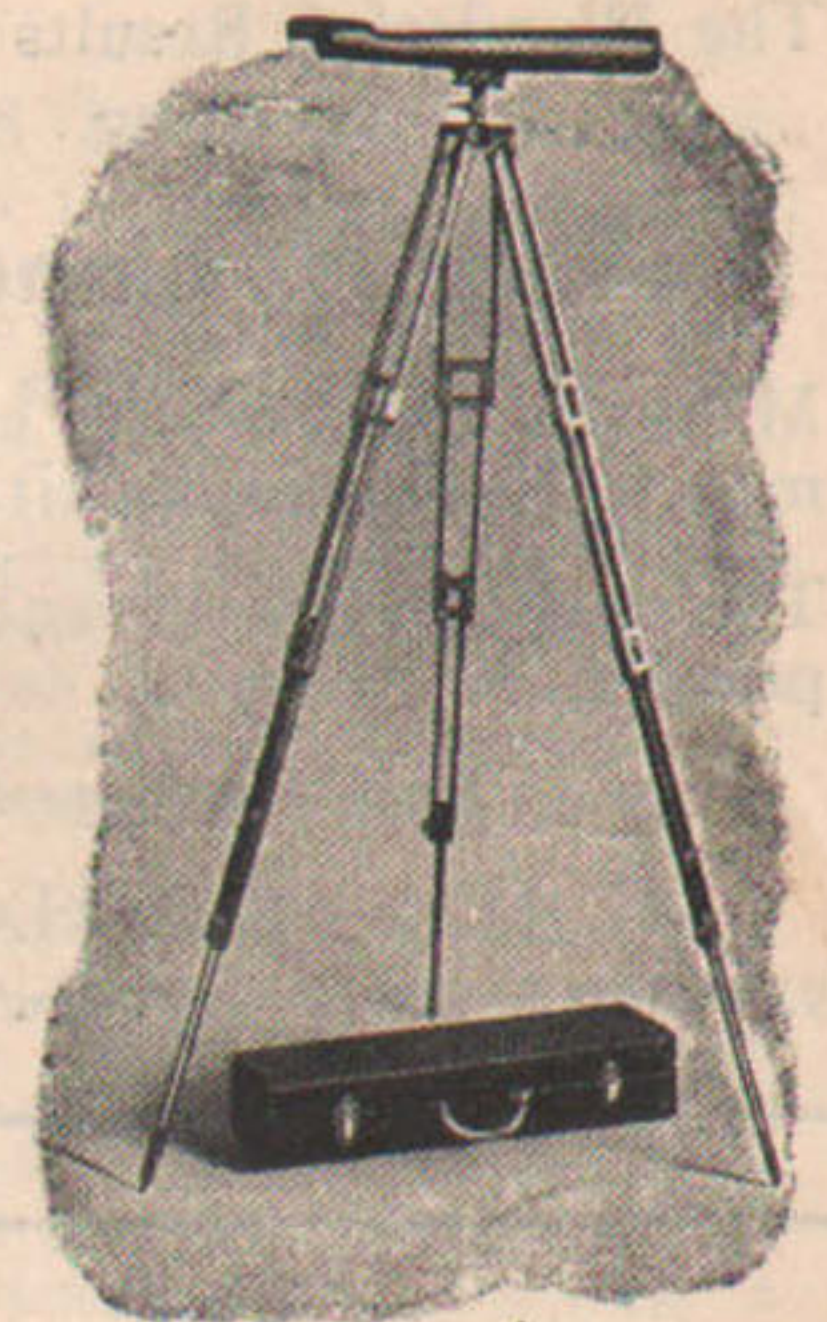
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