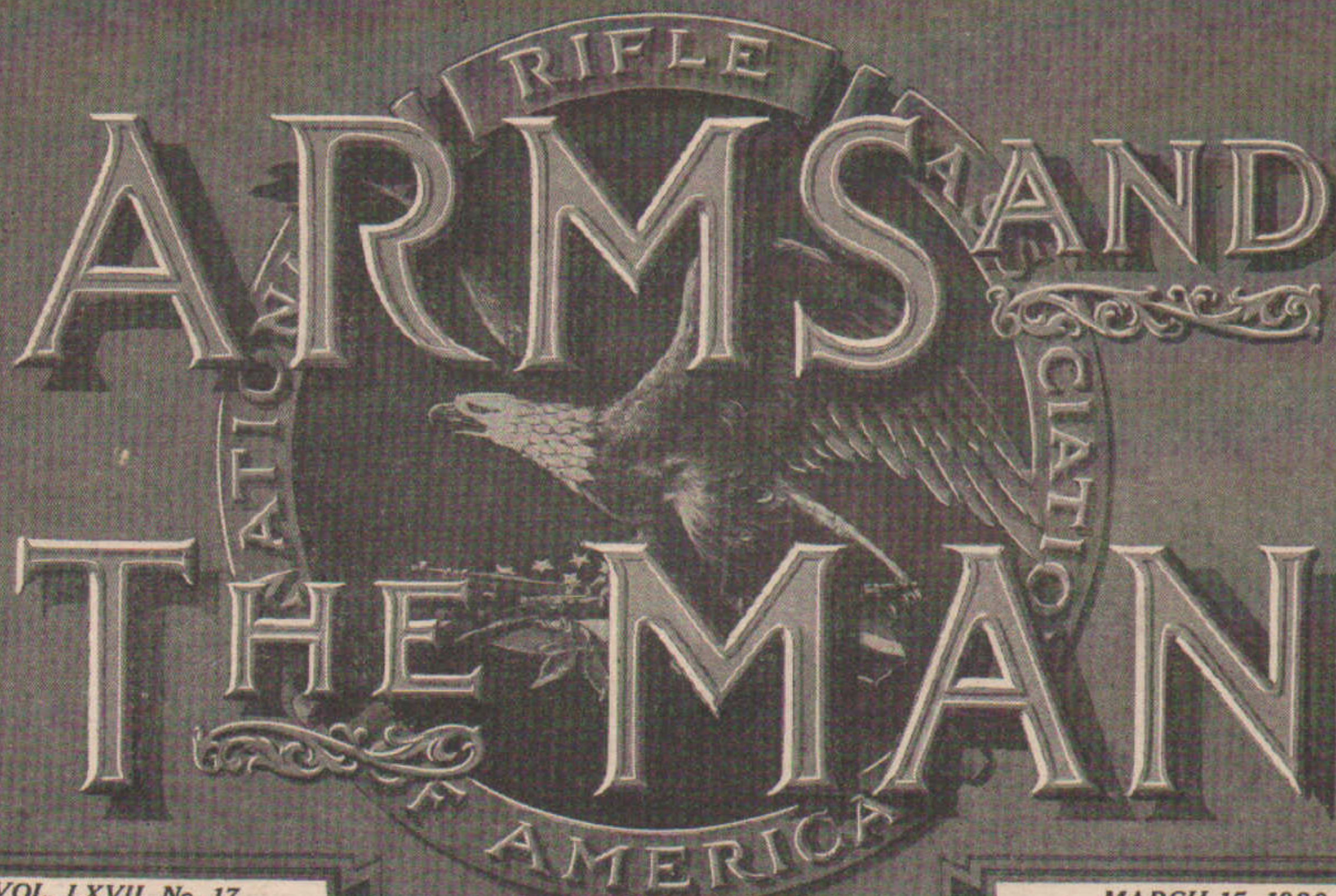
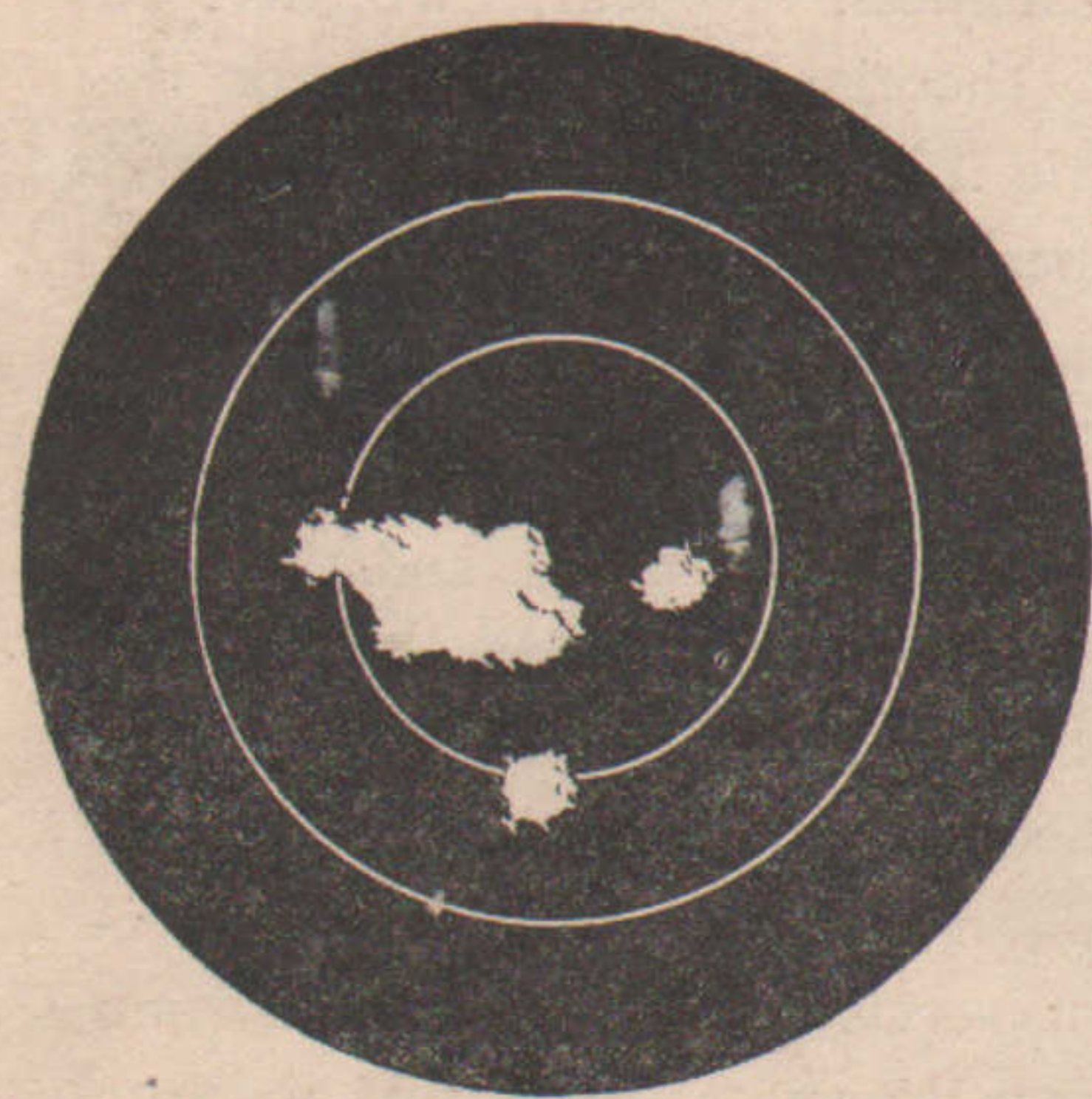


THE AMERICAN RIFLEMAN'S MAGAZINE



VOL. LXVII, No. 17

MARCH 15, 1920



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On January 3, 1920, Dr. John L. Bastey, of the Boston Rifle & Revolver Club, made the finest ten shot possible which has ever been recorded with a pistol at 20 yards.

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Largest Manufacturers of Firearms and Ammunition in the World

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One of the most prized war trophies is the Luger Pistol. Peters 9 mm Luger Cartridges especially adapted to this pistol operate with perfect satisfaction. The name Peters insures the shooter the perfection of quality that characterizes the **P** brand.



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They are now being used by many teams competing in U. S. R. A. and N. R. A. competitions, and the final results will show, as they have always shown, that the skilled shooter who places his confidence in the **P** brand will find that they will give him perfect service when the competition grows keen, and when absolute uniformity and accuracy are most essential.

THE PETERS CARTRIDGE COMPANY

New York

Cincinnati, Ohio

San Francisco



The Official Organ of the National Rifle Association of America

Volume LXVII, No. 17

WASHINGTON, D. C., March 15, 1920

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New Reloading Tools at Last

SINCE the beginning of the War it has been practically impossible to obtain reloading tools. This, combined with the constantly increasing cost of rifle ammunition, has worked a great hardship on our riflemen, and has greatly retarded rifle practice. Today the expense involved in practice or sport with factory ammunition is practically prohibitive to most men. A few months ago there was apparently no relief in sight.

Realizing the importance of this matter, the National Board for the Promotion of Rifle Practice, and the National Rifle Association have been actively engaged in an effort to induce a reputable concern to place a full line of efficient reloading tools on the market. It was realized that reloading of rifle ammunition by individual, clubs, and organizations was practically the only solution for reducing the expense of ammunition. While primers have gone up a little in price, and lead and tin considerably, powder has not increased in price at all, thanks to the patriotic policy of the powder companies.

By

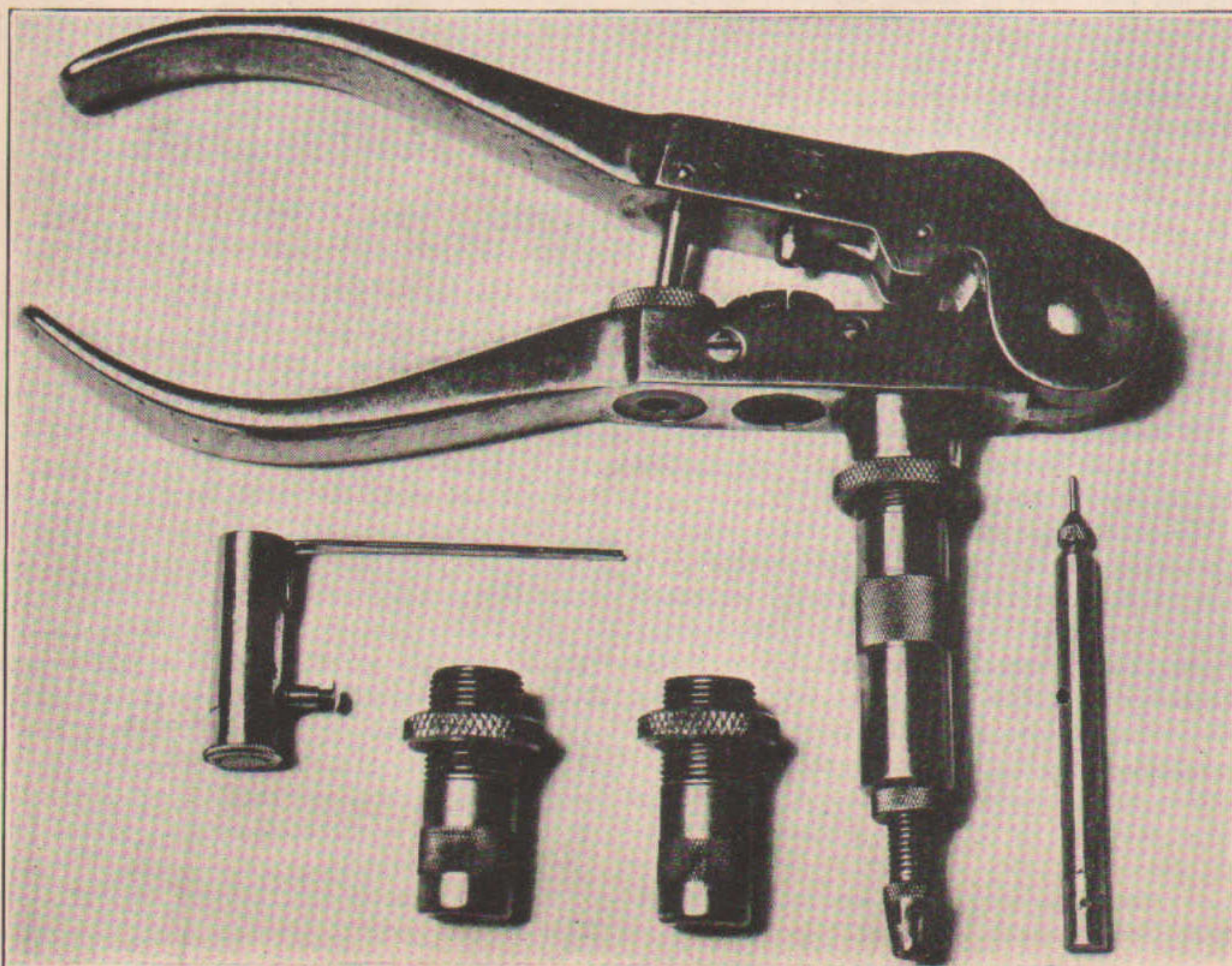
Lieut. Col. Townsend Whelen

One big item of increase in the expense of factory ammunition, the cost of labor, may be eliminated, and thus fired shells may be saved and reloaded at a cost well within the purse of all riflemen—if only reloading tools can be obtained at a reasonable cost. The big problem has been the reloading tool production, entailing as it does the establishment of a new business.

Success has at last crowned our efforts. About a year ago it was decided to discard the unreliable .22 calibre Springfield gallery rifle in the Regular Army, and to adopt in its stead an accurate .30 calibre reduced load with lead alloy bullet for gallery practice. It was desired to have an annual allowance



The Bond Bullet Mould: Below, the full set of Bond Reloading tools.



of at least 500 rounds of this ammunition for each man armed with the rifle, and in order to keep down the expense the reloading of fired shells by soldier labor was imperative. Accordingly a set of heavy bench reloading tools was designed, capable of a daily output of at least 10,000 rounds, and these sets are now being issued to each regiment of Infantry and Cavalry in the regular Army, and to certain other organizations. These tools were manufactured in a most efficient manner by the Bond Machine Company of Wilmington, Delaware. This company, having been already introduced, as it were, to the manufacture of reloading tools, it was not difficult to induce them to take up the manufacture of a full line of small hand tools. The necessary preliminary work, design, and development, has been going on for some months. The National Board for the Promotion of Rifle Practice, and the National Rifle Association, besides initiating the enterprise,

have lent every assistance in their power to this work, including the procurement of the services of our most expert riflemen. As a consequence the Bond Machine Company is now prepared to offer to riflemen and sportsmen a most complete and perfect line of reloading tools for all rifle and pistol cartridges, and for all kinds of ammunition from reduced loads to high power cartridges with hand made jacketed bullets.

Of this series the first tool which engages our attention is of course the one known as the "Reloading Tool." This is somewhat similar to the one which in the past has been offered to riflemen, but more modern, accurate, and efficient. The tool extracts the old primer, resizes the neck of the fired shell, inserts the new primer, sizes the cast bullet to the standard size, chamfers out the mouth of the shell if necessary, and seats the bullet in the shell. The loading chamber is of the double adjustable type so that the bullet may be seated to any desired depth, and may be crimped or not as the rifleman desires. The outward end of the screw plunger which seats the bullet is cut as a shell champhering reamer thus making it unnecessary to purchase this additional instrument. This loading chamber can be unscrewed, and in its place is inserted the muzzle resizing die. Two of these are furnished with each tool, one resizing the muzzle of the fired shell the required size to hold the metal jacketed bullet friction tight, and the other being correct for lead alloy bullets which, as is well known, are about .003 inch larger than the jacketed bullets and thus require a different size of the neck of the shell to hold them friction tight. Many other unique and efficient ideas have been incorporated in this tool. One of the most important of these is that all the various attachments, no matter for what calibre, fit in the standard handle, so that if the rifleman desires tools for more than one cartridge it is not necessary to buy a complete new tool, but only the new loading chamber, muzzle dies, decapping pin, and bushings for the recapping chamber and bullet sizing chamber. Thus the handle does for all cartridges, and one saves half the cost of the tool when he comes to purchase implements for loading another cartridge. The tool which I have at present, and which is illustrated herewith, is for the .30 calibre Model 1906 cartridge, but by simply obtaining a couple of extra collars for the top of the chamber screw in the handle, and at the cost of only a few cents, this tool and its various chambers will load any of the .30 calibre cartridges, .30-40, .30-30 W.C.F., .30 Rem., .303 Savage, and .303 British. Sometimes it is necessary to get an extra screw plug shaped for the point of bullets with special points for use in the loading chamber. Often, however, if this plug is shaped for the spitzer point bullet it will load all the other types of point without deforming the bullet. A blunt pointed plug will not load spitzer point bullets.

A unique attachment is furnished for holding the rimless shell for repriming, making it unnecessary to have a separate piece for this, and to have to operate it with the fingers for every shell recapped. The shell is simply pressed into the recapping hole until it clicks, is then reprimed, and a simple push of the mouth of the shell against the loading bench or table releases it. The sizing die for alloy bullets is also a great

improvement. There is a cylindrical portion of the die in which the unsized bullet is placed, and in which it fits perfectly. The handle is then closed, and the plunger forces the bullet in perfect alignment through the die so that it is impossible for the bullet to be resized crooked, or deformed in any way. The powder scoop which accompanies the tool without charge is adjustable with very fine graduations for any charge of powder, and it will run charges to within about a grain variation. Most riflemen will prefer to obtain the regular bench powder measure, but this little scoop works perfectly for throwing charges upon the pan of the powder scales.

The bench powder measure is much more efficient than the old model, and more accurate as well. The recess in which the powder is measured is smaller in diameter and deeper, fills more accurately, delivers its charge more freely without grains remaining undelivered, and cuts fewer of the large tubular grains of modern smokeless powder.

Bullet moulds for lead alloy bullets, and for the lead cores of metal jacketed bullets, are made of the best materials, carefully cut with the best cherries so that the bullets mould perfectly and leave the mould freely, and they have extra long handles which make them easy and cool to handle.

The reloading tool, powder measure, and bullet mould are all that the rifleman requires for ordinary reloading, although if he works much with super loads giving high velocity and high pressure a pair of powder scales are a necessity, and arrangements have been made to handle the most efficient powder scales on the market at a very reasonable figure. These tools, which are the most necessary ones, are now ready in all popular calibres, and any other calibres will be made to order at no additional cost. As soon as the manufacturers have made one of any special calibre of tool they will of course be prepared to thereafter turn that tool out on the regular list. The remaining series of tools are

being developed as rapidly as possible, and the majority of them will be on the market in the very near future. This series includes:

A bullet lubricating and sizing machine.

A speed re-and decapper.

An arbor press for operating a full length shell resizing die.

A bench reloading tool for clubs and organizations.

Copper bullet bases for metal base.

Copper jackets for all calibres, soft point metal jacketed bullets.

Sweges for inserting cores in jackets and swedging metal cased bullets to form.

It will be noticed that we have worked out a perfectly practical method by which the individual rifleman can make his own soft point metal cased bullets. This is a big and important development because of the very high price of these bullets when purchased from the manufacturers. Now in the manufacture of these bullets it will be necessary for the rifleman to purchase only the formed jackets, and the lead and tin or antimony for moulding the cores. The tools will do all the rest, turning out bullets that can be fired at the highest velocities and which will do good work at either target or big game.

With the Director of Civilian Marksmanship ready to supply rifles, target material, and a limited amount of ammunition to clubs, schools, and individual members of the National Rifle Association, with all Government owned rifle ranges about to be opened for the use of all citizens of the United States; with the various manufacturers turning out small bore rifles, sights, etc., perfectly adapted for the first time to really expert use; and now with reloading tools easily available by which the H.C.L., can be cut down; it certainly does look as though the American Rifleman was coming into his own, and that soon again we will deserve the title of a Nation of Riflemen, a nation able to hold its own and thus in no danger of another wanton attack.

The Manufacture of Rifle Barrels

By T. T. PIERCE

Giving in brief a general list of the machine operations and machines required to produce a rifle barrel from the forging to rifling.

STOCK for rifle barrels that are to be forged to shapes comes in the form of round rods, ten to twelve feet long and one to two inches in diameter.

The selection of steel for any barrel is a matter that should be based on a complete knowledge of the interior ballistics of the cartridge for which it is to be made, as with the use of increasingly more powerful smokeless powders it is necessary to obtain steel with suitable physical properties to durably withstand the high temperatures and pressures of the burning powder charge.

The tensile strength of this class of steel in finished barrels for the modern hi-power cartridge of the .30 '06 army class which develops pressure around 50,000 lbs. per square inch, is 100,000 to 140,000 lbs. per square inch.

The barrel stock is cut into lengths somewhat

shorter than the length of the finished barrel, the bars being cut, one at a time, on a stock shear at a rate of about 250 bars per hour.

From the stock shears the bars go to an oil furnace where they are heated to over 1,000 degrees fahrenheit, two or more men perform this operation at a rate of about 40 per hour.

From the furnace these barrel blanks are passed through a rolling machine with special rollers which rolls them out to shape and length. In some cases they are passed through the rolling a second time. The rolling operation follows the heating closely and the production time in this operation is the same as and governed by the furnace operation.

When the barrel blanks come from the rolls they are put under a 400 pound drop hammer in

(Continued on page 8)

Rules for National Matches Drawn

REGULATIONS governing the National Matches of 1920 will be in the hands of American riflemen within the next few weeks. Details of the meeting have been completed by the committee of the National Board for the Promotion of Rifle Practice charged with this duty and have been approved by the Assistant Secretary of War.

The dates for the National Matches have been definitely fixed so that the big shoot will start on the Camp Perry Range July 30th and will conclude on August 28th. During this period a school of instruction will be in operation on the Camp Perry Range; the matches of the National Rifle Association and a few of the best of the Ohio State matches will be staged, as well as a series of our door small bore competitions. All of these events will be disposed of prior to the final week, when the National Matches will take place.

The National Match program this year includes more events than it has in any previous year, a pistol team match having been instituted. Several important changes will also be noted in the course of fire, such as a return to Target D for rapid fire in the first stage, instead of Target B, as at Caldwell in 1919; and a return of 600 yards for the second stage in the prone position instead of 500 yards changing position fire, as at the last National Matches.

The regulations in part provide:

For the year 1920 the National Matches will be held under the direction of the Secretary of War at the Ohio State Rifle Range, Camp Perry, Ohio, commencing Monday, August 23, 1920. The matches will begin in the following order:

1. National Individual rifle match.
2. National Individual pistol match.
3. National Pistol Team match.
4. National Rifle Team match.

On Friday, August 20 and Saturday, August 21, the range will be open for final preliminary practice.

The matches of the National Rifle Association of America will precede the national matches.

TEAM MATCHES

National Rifle Team Match.

Open to teams of 12 firers from the following:

1. The Army of the United States, one or more.
2. The United States Navy, one or more.
3. The United States Marine Corps, one or more.
4. The United States Military Academy, one.
5. The United States Naval Academy, one.
6. The National Guard (including the Naval Militia) and the State troops of the several States and Territories, including the District of Columbia, one or more from each.
7. School teams composed of students of universities, colleges, and schools, one or more from each State, Territory, and the District of Columbia.

8. Reserve Officers' Training Corps Camps, one or more from each.

9. Civilian teams composed of members of the National Rifle Association or its affiliated clubs, one or more from each State, Territory, and the District of Columbia.

There will be established and maintained at the Ohio State Rifle Range, Camp Perry, Ohio, a small-arms firing school for the instruction of citizens of the United States in marksmanship.

The governors of the States and Territories, the Board of Commissioners of the District of Columbia, and the commanding officers of Reserve Officers' Training Corps training camps, are each authorized to designate a civilian or school team of 18 members to attend the small-arms firing school at the Ohio State Rifle Range, Camp Perry, Ohio, from July 30 to August 28, 1920, inclusive, to receive instruction, engage in practice and participate in the National Matches.

Such designated team and no other civilian team shall receive transportation, sleeping car fare, and subsistence, or reimbursement therefor, at the expense of the United States within the limits of available appropriations.

Course of Fire:

First Stage.—Rapid fire, 200 yards, target "D". Twenty shots. One string of 10 shots, kneeling from standing, to be followed by one string of 10 shots, kneeling, sitting, or squatting, from standing. Time limit, 1 minute for each string of 10 shots. Battle sight or leaf sight may be used.

Second Stage.—Slow fire, 600 yards, target "B". Twenty shots, prone. No sighting shots. No artificial rests.

Third Stage.—Slow fire, 1,000 yards, target "C". Twenty shots. No sighting shots. No artificial rest.

The executive officer, at his discretion, at any time after the first stage may eliminate from further participation in the match any number of teams of lowest standing, in excess of a remaining number of 100 teams.

Rules.—As laid down in the Small Arms Firing Manual, 1913, except as herein modified.

The Squatting Position.—Both feet must be flat on the ground and the buttocks must be clear of the ground, the knees are bent, and the body lowered. Both elbows may rest on the knees.

Arm.—United States rifle, calibre .30, model 1903.

The Ordnance Department is authorized to select star-gauged and targeted rifles of as high grade as can be produced for the use of teams and individuals participating in the matches for issue or sale on the grounds by the ordnance officer of the matches.

Ammunition.—Ammunition issued by the Ordnance Department. Ammunition will be issued to the competitors at the firing points. No other ammunition will be used in the national matches. Ammunition will be issued to all competitors for practice prior to the national matches, including practice in the

matches held prior to the national matches.

Civilians desiring to procure rifles and ammunition for practice in advance of their arrival at Camp Perry will make application therefor to the Director of Civilian Marksmanship, War Department, Washington, D.C. Under the law Annual and Life members of the National Rifle Association of America are entitled to purchase rifles and ammunition from the War Department. Each rifle club affiliated with the National Rifle Association of America is entitled to a free issue of two U. S. Rifles, Model 1903, and to an allowance of ammunition therefor.

National Pistol Team Match.

Open to teams consisting of a team captain and 5 firers from the following:

1. The Army of the United States, one or more.
2. The United States Navy, one or more.
3. The United States Marine Corps, one or more.
4. The United States Military Academy, one or more.
5. The United States Naval Academy, one or more.
6. The National Guard (including the Naval Militia) and the State troops of the several States and Territories, including the District of Columbia, one or more from each.
7. School teams composed of students of universities, colleges, and schools, one or more from each State, Territory, and the District of Columbia.
8. Reserve Officers' Training Corps Camps, one or more from each.
9. Civilian teams composed of members of the National Rifle Association or its affiliated clubs, one or more from each State, Territory, and the District of Columbia.

The allowances for transportation and subsistence or reimbursement therefor herein provided for members of the several national rifle teams shall be paid only to such members of the several national pistol teams as have also been properly designated as members of a national rifle team. All other members of the several national pistol teams must provide for their own expenses except that the executive officer is authorized to furnish all such members with tentage and such other equipment as may be available.

Course of fire:

First Stage.—Slow fire, 50 yards, target "L", 2 scores (5 shots each)—30 seconds per shot.

Second Stage.—Rapid fire, 25 yards, target "L", 2 scores (5 shots each) 20 seconds per score.

Third Stage.—Quick fire, 25 yards, target "L", 2 scores (five shots each) 10 seconds per score.

Positions.—Without body or artificial rest; one hand only to be used.

Arm.—Colt's automatic pistol, calibre .45, model 1911, having not less than 4 pounds trigger pull, sights as issued.

Ammunition.—Ammunition issued by Ordnance Department. Ammunition will be issued to all competitors at the firing points for practice and for use in the pistol matches.

No other ammunition will be used in the National Pistol Team Match.

Rules.—As laid down in the Small Arms Firing Manual, 1913, except as herein modified.

Prizes.—A Trophy shall be awarded to the winning team, and to each shooting member of the ten highest teams shall be awarded a badge.

INDIVIDUAL MATCHES

The National Individual Rifle Match and the National Individual Pistol Match are open to any citizen of the United States. Entries for these events should be made as early as possible, and must be made 72 hours before the beginning of each match.

Each team captain in the National Rifle Team Match will see that proper entries for all members of his team desiring to enter the National Individual Rifle Match and the

National Individual Pistol Match are properly made out and delivered to the statistical officer in one lot.

Individual competitors not members of regularly accredited teams may make entry in person or by mail addressed to the Statistical Officer, National Matches, Camp Perry, Ohio.

The executive officer, at his discretion, at any time after the first stage of each match may eliminate from further participation in that match any number of competitors of lowest standing in excess of remaining number of 500 competitors.

National Individual Rifle Match.

The course of fire and rules in regard to arms and ammunition are the same as for the National Rifle Team Match.

Prizes:

1. To each of the 12 competitors making the highest aggregate scores, a gold badge.

2. To each of the 24 competitors making the next highest aggregate scores, a silver badge.

3. To each of the 36 competitors making the next highest aggregate scores, a bronze badge.

National Individual Pistol Match.

The course of fire and rules in regard to arms and ammunition are the same as for the National Pistol Team Match.

Prizes:

1. To each of the competitors making the highest aggregate scores, a gold badge.

2. To each of the 24 competitors making the next highest aggregate scores, a silver badge.

3. To each of the 36 competitors making the next highest scores, a bronze badge.

Comfy Camping for Two

Being the third of a series of talks for the out-of-doors man.

By CAPT. FRANK WINCH

WEEK-END camping at any distance up to eighty-five miles from home is a delightful diversion for the city swelterer and simple in the extreme of accomplishment. It matters not a whit where you live, or what your occupation may be, nor your income, a comfy camping outfit for two can be bought cheaply—that is the essentials and the odds and ends that make the "comfy" part can be home made and for that very reason all the more enjoyed and appreciated.

For several years "Peter Pan" and myself have enjoyed this method of recreation—and right here let me state that all those several years were needed in constant scheming to get our equipment in perfection shape, mainly through the elimination of the non-essentials. Where to camp has never bothered us—always wherever we have been, East, West, North or South, there is a place, one away from the city smoke, where good water comes gurgling along, or the broad expanse of a lake here or there, or when nothing better came to hand, the edge of a woods, or along the main traveled highways. The main thing was to get away from the hurry and shout of the city noise, to stretch oneself with lungs full of pure air, to watch the glowing sunset and feel the damp glittering wet of the morning dew. If nothing more than that, then a week-end trip is worth while.

Like the average beginner our duffle for the first trip when piled on the lawn looked like household moving day. Now a steamer trunk and a box by train or trolley, or the Ford roadster, supply the means of transportation. Whether it be for a week end, a month or a full season our outfit will stand without addition except for rations.

First I had the tin turtle back on the car removed and in its place built a box a little larger all around with edges in the rear extending eight inches. The material is bass wood, one inch

thick, with a hinged top, using the same holes for fastening to the deck of car already bored.

In this box are packed rain coats, extra clothing, boots, pots and pans, and small duffle bags of toilet articles, etc. On the top is the tent, fishing tackle box, folding cots, all lashed securely by means of quarter inch rope fastened through the solid ends of hammock hooks. The tent poles are wrapped in an extra tarpaulin that we used for a dining room fly and tied one end to the windshield upright, the other to the top holder in the rear.

Leave the cushioned auto seat at home—in its place put two camp pillows side by side, over this lay the blankets and auto ropes, and on top put the other two pillows. The car will ride even more comfortably than with the steel sprung leather cushion. On one of the wind shield supports is lashed a lantern well filled with kerosene. Under the seat with my extra gallon cans of oil and gasoline I have a third can holding a quart of kerosene, this for the starting of cook fires doing away with fussing or bother with kindling dew damp paper or rain slushed wood. En route to the camping grounds we purchase the food from a list already prepared and at the last town before turning off into the woods we buy the meat for our evening meal.

First off the car are tent and poles, then the stove and kitchen outfit. By the time that the tent is up fire is going and water boiling. The tent is seven by nine, waterproofed. I have found that one of the folding grates are the most convenient cooking apparatus to be had, this banked with rocks to keep the heat in the proper place will answer every purpose for the camper.

The cots set and blankets spread then comes the cutting of half a dozen or so small branches trimming them down to only the fork; then a strip of ordinary bicycle tape will lash these to the tent pole uprights for clothes hangers.

A little contrivance that I made out of a produce basket with four ropes one attached to each

corner, serves as a place to keep our food. Hang this from the projecting branch of a tree, the air circulating through the open work will keep things cool and fresh.

If there is in your party of two a lady, as in mine, who by the way is the "Peter Pan" mentioned, some provision must be made for the lavation. It is not always handy or best to depend on the creek or river, for the necessary lavation. A piece of canvas, not necessarily waterproofed, provided to be of heavy texture will answer as the wash basin. Fold over corner edges and attach to small tree limbs and you will be well repaid for the little exertion in the making.

Supper ready and is served on a home made folding table, the meal over, dishes washed, a troll on the lake for bass, and as darkness falls, falls, toss on a couple of green logs, light the candles and lounge about the camp fire until to roll away to slumberland.

After all it matters not much what the game, camping out is the main pleasure, and in getting together the outfit either for yourself and pal, or better yet, that sweetheart wife of yours, its not so much the things you take along, but mostly the stuff that should have been left behind, that will determine whether its been a torture or Comfy Camping for two.

Marksmanship Regulations Made

REGULATIONS making it possible for officers of the United States Army Reserve Corps of either active or inactive status to participate in target practice, have been approved. The officers need only to make application to their department commanders for assignment to regular units for target practice periods.

The Secretary of War has granted authority to all department commanders to assign reserve officers to organizations of the Regular Army for the target practice, allowing the regular expenditure for small arms ammunition. Special regulations are being revised so as to provide that reserve officers on active duty or assigned to organizations for target practice shall be entitled to the same allowance of small arms ammunition as are officers of the Regular Army of the same arm of the service. Reserve officers on inactive duty may be assigned by department commanders to an organization of the Regular Army for target practice at their own request, but without pay.

A Day After "Chinks" in Idaho

By R. E. HERRICK

OFFICE hours are long and dreary, along when that crisp feeling gets into the air, especially when one can look just outside his window and see the coloring leaves; the corn, now golden with maturity, shocked neatly in rows, and the long leaves curving in the soft autumn light seem as beckoning fingers. It was Saturday and the week seemed long, for had we not been waiting for a whole year for that day when the calendar date and the inscription on our hunting licenses told us that for each of ten short days we might "hunt, pursue and kill" our two "chinks" or Chinese Pheasants?

Now the Chief Clerk and writer are as widely variant so far as physique is concerned as one will find in day's ride, the Chief being quite symmetrical, in that his girth and his height as almost the same, while the writer is built more on the order of the festive wasp, but without that insect's ability to command respect from those considerably mightier, but with all these differences we each, separately, and individually and collectively delight in a day in the field, and so this Saturday saw a scheme hatched up whereby we were to arise in the wee, sma' hours of the morning, gird our loins with sundry articles of offense, take a short ride on the trolley and see what we could do toward filling our licenses. The scheme worked very well, at least so far as said "seeing" was concerned, but we came nearly not fulfilling our desires otherwise, and thereby hangs our tale.

The trolley ride to our hunting fields was through a very fertile valley, and the view from the car window presented pleasant vistas of orchards, meadows, timber and all things that make autumn seem ideal. The air was at that snappy stage that makes particularly aromatic the smoke from the old "Jimmy Pipe" as the curling fumes float upward in the stillness.

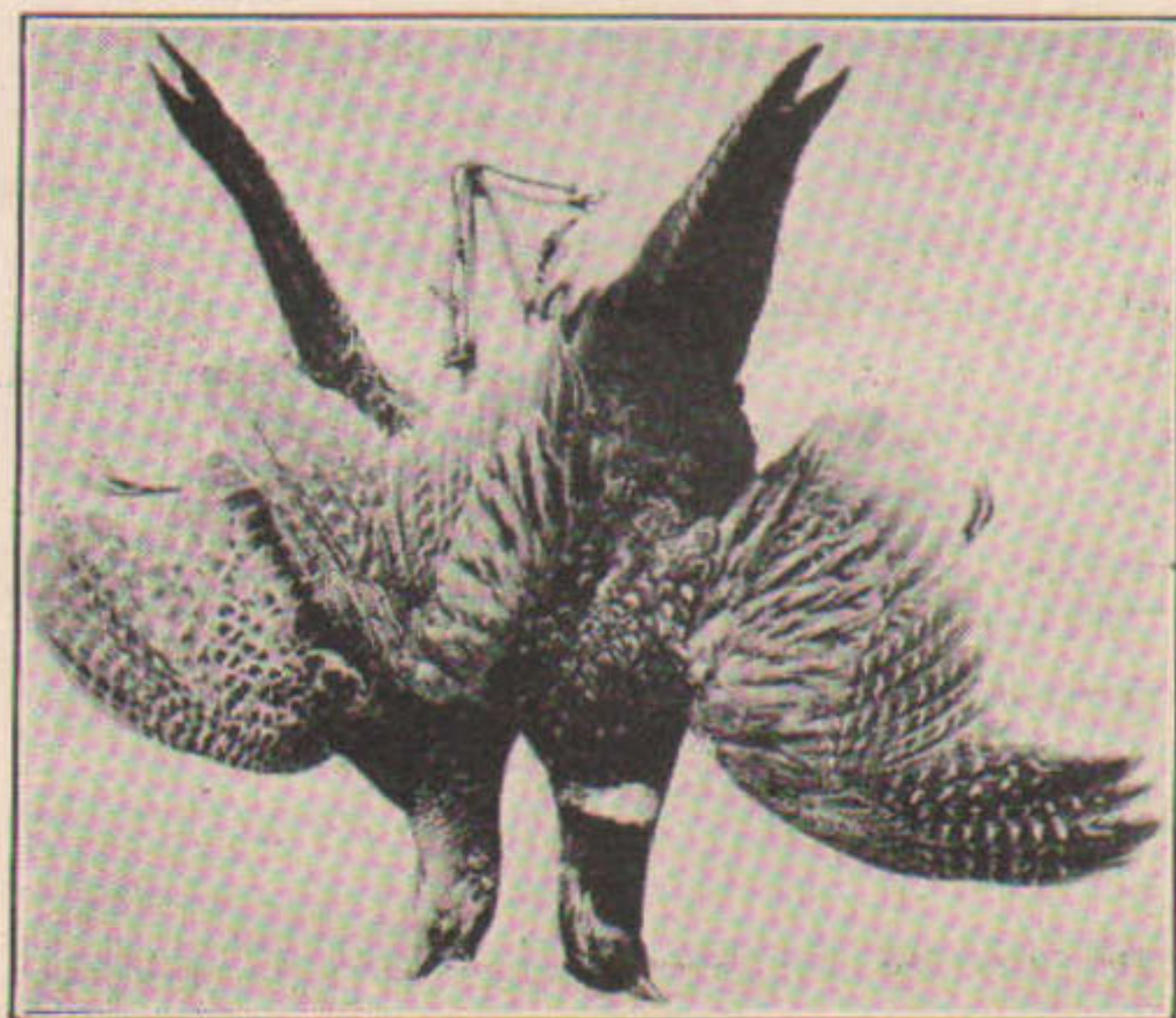
Dropping off our car at the appointed place we hurriedly shoved the "teeth" in our fuses and pulled up our boot tops preparatory to our first "dip" in the sloughs. First off we made for the river, as the ducks were beginning to fly. We had gone hardly two hundred yards when we flushed our first "Chinks" in a corner of old waste land. The Chief took a shot at them as they dove for cover, but the range was too great, and, not having a dog it was practically useless to try and locate them again, so we linked along toward the river. By the time we reached it the ducks were flying high so decided to wade the river and try the weed patches for pheasants.

On reaching the opposite side of the river we gave a look up and down the fence for the typical "No Hunting" placards, and, none being in sight concluded we might hunt undisturbed. Crossing a little creek and climbing a high bank put us right into a fine patch of cover nearly shoulder high. We noticed a man crawl through a fence with a gun over his shoulder and followed by a dog, but paid little heed to him thinking he was another

hunter, until he got to within forty or fifty yards of us. He then dropped his gun, a Winchester, to a "ready" and the next thing our startled ears recorded were the words "Drop your guns, you———, or I'll put a bullet into you", and as the speaker advanced we observed that he was a very irate Irish farmer. He repeated his orders several times as fast as he could sputter out the words, and as the writer was the closer to him he apparently was making a bid for his talk first. We had our gun over our shoulder, trigger guard up and safety off and instantly concluded that if it came to a show-down we could get into action on pretty quick notice ourselves, so informed the old fellow that we would NOT drop our gun and what was more we were in the habit of being addressed by the we were not in the habit of being addressed by the epithet he had applied to us, and that furthermore we were a special deputy sheriff and in our opinion we were justified in arresting him for disturbing the peace, and making threats to do bodily injury. This line of talk in addition to the sight of the official star sort of changed his attitude somewhat, but nevertheless he was a crazy mad farmer. It seemed he had some cattle around there that he had been trying to fatten up and the shooting up and down the river had kept them moving to such an extent that they were not putting on flesh fast enough to suit him, so he had decided to do a little patrol duty, with the results stated. At any rate our bluff worked. It was true that we were special deputy sheriffs, but not for the county we were then in, but the farmer didn't know that.

Just about this time we each of us, decided that discretion was the better part of valor, and as we had the old fellow somewhat pacified we took the occasion to take a few steps necessary to put us outside the pale of his possessions, and continued our hunt for pheasants.

Before going on to the actual subject of the slaughter, perhaps we had best say a few words for the benefit of some of our readers who have not had the pleasure of hunting this



The "Chinks" of the Idaho Tules

most gamey bird. They haunt the stubble fields in this valley so much as to have earned the nick-name "stubbleducks" by some. On riding out through the country in closed season one can see them nearly any time of the day feeding in the fields, and in fact I have seen them stand and eye the car from the fence row, apparently as unsophisticated as anything in the world. But after about the second day's shooting they are wilder than crows. After feeding in the fields in early light they seek cover in swamps, cat-tails or tules (pronounced "tuleez") as they are known here, and any bit of cover they can locate close to a grain stubble.

Once they are in cover it is almost impossible to kick them up without the use of a good dog. Time and again I have walked almost over a bird in such cover only to have him fly out after I had passed him by several yards.

Their flight is very peculiar. Probably the nearest bird we have in this country to compare them by is the grouse or prairie chicken, with the exception that the pheasant has about twice the speed and seems to be continually rising all the time he is within range, so they are really a very difficult shot.

You all know the thrill that comes on flushing a quail. Well, Mr. Pheasant has the quail's thrill beat a mile. He may jump right up from under your feet, and the flutter of his wings is so loud and startling as to simply paralyze the new shooter, and sometime the old ones too. I have seen more than one man simply stand open mouthed in astonishment and let a bird get clear out of range before coming out of his trance, and then his usual remark is "well, I'll be damned", in tones which only convey a compliment to a bird so large that can get out of range so quickly. The nearest thing I know of describing the whirr the pheasant makes on flushing is the noise made by a horse in clearing his nostrils. If you have ever stood with your back to a horse and had him suddenly "blow his nose" in this fashion you can appreciate just how a hunter feels when a pheasant jumps right up after he has stepped over him.

After our episode with the farmer we crossed the river and hunted through some dry timber without seeing any sign, and then through a piece of light cover from which the Chief had the pleasure of flushing a bird, but was a little too slow in getting into action, and as the bird turned and flew behind him, scored a clean miss. One old cock flushed a hundred yards ahead of us and dropped in some sweet clover, which was about as high as one's head and thick as it could grow. The writer flushed him and took a snapshot through the brush, but got only a couple of feathers for his pains. "Smatter, R. E., dust in your eye?" inquires the Chief.

Our next sight of birds was a whole flock in the distance doing what appeared to be a sort of marathon away from us. This is a trait the birds here have, and when a flock gets on the run it is dollars to doughnuts they outrun the hunter. Here is where a good trailing dog is worth his weight in silver.

However, we could see pretty much where they would go, and followed at a leisurely

(Continued on page 9)

ARMS AND THE MAN

1111 WOODWARD BUILDING, WASHINGTON, D. C.
SEMI-MONTHLY—ON THE 1st AND 15th DAY

Editor

BRIG.-GEN. FRED H. PHILLIPS, JR., Secretary N. R. A.

Associate Editor

KENDRICK SCOFIELD

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

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

MAKE MARKSMANSHIP "FASHIONABLE"

THE sport that succeeds is the sport which appeals as a recreation to the tired business man and to his family.

Until the past few years, marksmanship as a sport has, unfortunately, been confined to the relatively few citizens who have been willing to face all manner of handicaps, endure all manner of discomforts, and go to considerable expense in order to indulge their love for the shooting game. Before rifle shooting can enjoy the widespread popularity of other outdoor recreations, it must become "fashionable".

The rifleman of ingrained shooting instinct, usually found in the majority memberships of our rifle clubs today, cares very little whether the members of the country clubs of his town regard shooting as a pastime with favor or condemnation. He has gone—and will continue to go—about his shooting occasions totally unmoved as to whether or not his neighbors look upon his excursions to the rifle range as a mild form of lunacy.

He finds in rifle practice his chosen sport, and no ordinary considerations can divorce him from it. Wherefore there always has been and always will be some tens of thousands of civilian riflemen to keep alive the shooting game in the United States.

But the time has come then the rifleman can no longer maintain an attitude of indifference to non-shooters, and at the same time perform his full duty as a citizen. To convince his neighbors that rifle shooting is a clean, healthful, sport, and to interest them in rifle practice with a view to upbuilding our national standards of straight shooting should be regarded as quite as binding an obligation as voting according to the dictates of clean, progressive politics.

In the past, missionaries of marksmanship have found that many times they have taken on thankless work. They have been unable, frequently, to overcome the obstacles interposed by the conditions which must be met in the establishment of a range on which the military rifle can be fired. But the standardization of small-bore shooting which is now practically an accomplished fact, has entirely changed the conditions which have prevailed in past years, and now more than ever rifle practice can be and should be made "fashionable".

The rifle clubs in every locality, and individual N.R.A. members as well, should watch for all opportunities to bring the sport of shooting the .22 calibre rifle to the attention of the public. Rifle matches should, if possible, be made part of the program at every country club field day and local fair; the country club members should be encouraged to take part, and arrangements should be made to give instruction to those who desire to participate but who are ignorant of the principles underlying rifle shooting, while at local fairs and similar gatherings every effort should be made to interest the general public. With the possibilities for special matches on field targets, and breakable discs, the men who undertake to establish small-bore shooting as a sport for country clubs and similar organizations would soon find that they have undertaken anything but a thankless task. If such a policy could be carried out throughout the United States, it will not be long before rifle shooting will not only be popular but "fashionable", with a following as great as that of golf or trapshooting.

The Manufacture of Rifle Barrels

(Continued from page 4)

their heated state and are straightened by about six blows of the hammer. From the drop hammer they go to a special machine where both ends are sawed off squarely.

After cutting off the ends the blanks are packed in boxes of dry lime and allowed to finish cooling. This is the annealing process and the lime boxes or annealing boxes, mounted on truck wheels, are moved to the machining department where the blanks are unpacked.

In the next operation the barrels are milled—two at a time—on each end, cutting ends exactly square and to the desired working length. This is done at a rate of about 45 barrels per hour per machine; after this operation the barrels are placed on end in racks mounted on wheels. These racks are used to carry the barrels during their many machining and inspection operations.

Following the above operation the barrels are

laid upon a bench and are stamped with a hand hammer and stamp, with their lot number as a means of identification of the lot of steel from which they come and as a record of their forging.

In the next machine operation the barrel ends are centered at a rate of 45 per hour on a double spindle centering machine, a drill and counter-sink being used for this centering.

After centering, the barrels are revolved by hand on a bench center, the high spots are marked and the barrel is again straightened, this time by hand, with a copper hammer over a special straightening block or anvil of babbitt metal.

In the next operation a barrel turning lathe is used and the muzzle end of barrel is turned down to working diameter for a short distance back to allow for holding in drilling and further turning operations. The time consumed in this operation is about one hour for 4 barrels.

In the next turning operation the barrels are held in the lathe and the remainder of their length turned down to working size the pro-

duction time on this operation being also 4 barrels per hour per machine. After this turning operation the barrels are re-stamped with the lot number which has been cut away in turning.

In the next operation the barrels are drilled or bored through their entire length on a special barrel drilling machine of the double spindle type. They are drilled through at the rate of $\frac{3}{4}$ inch per minute or 30 to 40 minutes per barrel.

This drilling leaves the bore about .007" smaller than the caliber or finished diameter of the bore. The barrel is then put through another machine operation which consists of reaming the bore at the rate of about 20 barrels per hour. In this operation the diameter of the bore is increased about .002".

Following this first reaming of the bore the barrel is chambered to working diameter, this is done with a number of drills, reamers, and counterbores on a turret spindle at a rate of about 20 per hour.

When this chambering operation is completed the barrels are again straightened, the straight-

ner, doing about 30 barrels per hour, works in a darkened room by what is called the ring process. The copper hammer method of straightening is used and under proper conditions of light an experienced barrel straightener can detect the slightest kink or crook in the bore.

Next the barrels are turned on a lathe cutting two "spots" or wide grooves around the barrel. The spots are for the purpose of holding the barrel in further turning operations and they must be turned true with the bore. The production in spot turning operation is about 20 barrels per hour. It is followed by an 8 barrel per hour operation on a milling machine in which both ends of the barrel are milled to shape.

The next operation is a turning lathe operation in which the barrel is held by "spots" previously turned and the rest of their length is turned to diameter.

The remaining operations vary somewhat according to the final shape of the barrel; generally and briefly they are something as follows.

Operation 22. Production 53 barrels per hour. machine used; Speed lathe. Filing to gauge, removing contours between turning cuts.

Operation 23. 200 barrels per hour, hammer and stamp. Re-stamping lot numbers on butt of barrel.

Operation 24. 100 per hour, lathe operation. Milling muzzle down to finished length of barrel.

Operation 25. 28 per hour, speed lathe operation. Filing shank at butt of barrel.

Operation 26. 50 per hour. Screw machine operation. Finishing rear end of chamber for

threading and finishing neck of chamber and shoulder on butt.

Operation 27. 35 per hour. Thread milling machine operation. Cutting thread for receiver.

Operation 28. 35 per hour, bench operation. Marking draw line on barrel by screwing barrel in fixture and striking blade plunger with hammer.

Operation 29. 50 per hour, Milling machine operation. Cutting spline or slot for front sight.

Operation 30. 150 per hour. Rolling machine operation. Rolling maker's name, etc., on barrel.

Operation 31. 18 per hour. Barrel reaming operation. Reaming bore to within .002" of finished diameter.

Operation 32. 18 per hour. Barrel reaming machine operation. Reaming bore to caliber or finished diameter.

Operation 33. Final and careful straightening of the bore.

Operation 34. 3 barrels per hour per spindle. (double spindle machine 6 barrels per hour) Rifling machine. Rifling.

Operation 35. 100 per hour. Hand tool operation. Removing burrs from threads and shoulders of barrel.

Operation 36. 50 per hour. Lathe operation. Cutting chamber ramp, or runway.

Operation 37. Hand tool operation. Removing burrs from inside and rear of chamber.

Operation 38. 20 per hour. Screw machine operation. Cutting chamber to final dimensions.

Operation 39. 75 per hour. Milling machine operation. Milling clearance cut for extractor.

Operation 40. 125 per hour. Hand filing operation. Removing burrs from extractor cut.

Operation 41. 100 per hour. Lathe operation. Finishing off end of muzzle and rounding to shape.

In the modern arms plant there are employed as many inspectors as there are machine operators. Practically every machining operation is followed by gauging or otherwise inspecting the machine work between operations. Sometimes as many as five different gauges are used to measure dimensions of one cut. There are also gauge inspectors who are responsible for the correctness of gauges used and whose duty is to condemn gauges as soon as they will have become worn beyond certain limits.

Perhaps the most interesting inspection is the inspection of the barrel after rifling but a great amount of skill is also required in the inspections by eye, of the drilled bore in which all barrels are rejected in which rings and spots are visible to a certain degree.

In the above we have followed the barrel generally through a part of its making. Having in mind more particularly .30 calibre barrels of the military type though as to actual machining operations of different models there is but little variation from these standard operations or the machines used. We have not taken into account any of the polishing, blueing, final inspection, machining for rear sights or the various cleanings and experiments that go as a part of the production of every barrel.

A Day After "Chinks"

(Continued from page 7)

pace, always at a ready. On crossing a stubble field having a ditch crossing it on which a rank growth of sweet clover was standing we saw some of the birds crossing some clear ground at least a hundred yards ahead. One young cock however, flushed from the sweet clover and decided he wanted to go back the way he came and carftily flew directly between the Chief and the writer, but the little 20 of the latter was just a little too quick for him and he crumpled up in full flight and hit the ground like an empty sack. After taking up the trail of the running flock we separated and each hunted up a place to cross the tule swamp. The writer had just reached a nice deep hole in the mud that threatened to swamp him any instant, when a lone mallard hen towered out from the tules in an attempt to escape, but the little 20 gave its harp little bark and she joined the pheasant in the seclusion of the old "Dux-back."

We next observed our flock of birds enter a patch of standing clover, and managed to flush one lone bird from the bunch, at which both blazed waay without cutting a single feather. Gosh! That was an easy one! Right out in the open. We looked at each other, and said nary a word. Words wern't adequate. We then beat all through the likely cover thereabouts, but the balance of the flock had just simply vanished, and we had stopped to look around for more cover, talking about it as we stood. The writer

turned partly around and said to the Chief, "Well, I guess we have missed them, so let's eat lunch and decide 'Where next to go,' when WIR-R-R-R!!—right from under my feet burst a hen and away she sailed at ninety miles an hour to say the least. "Crack", said the 20, and she dropped right in the open, turning end over end as she fell, in the manner that delights a duck dunter's heart. I had hunted these birds enough to know that as soon as one falls the wisest thing to do is to get to the landing place as soon as possible, and that is just what we did. I saw her hit the ground and never took my eyes off the spot while runnign up, on doing which we found—Absolutely nothing. Not a trace of a bird in shape of feather or blood. She had simply vanished in thin air, and what's more we never saw her again. This in one feature that puts spcie into pheasant shooting. You never count your bird until he is in your pocket. I have seen it happen time and again that a bird apparently dead in the aid has escaped after reaching the ground, and that is the reason the boys say the way to kill a pheasant is to break both legs and both wings and his neck in addition to a good body pattern in order to anchor him to the spot where you drop him.

After this fizzle we hunted along a creek affording some good cover and only flushed one bird, and out of range at that, so decided to sit down and eat our lunch, which we were doing when a farmer walked along and sat down with us just to "chew the rag" for a spell.

"How many birds have you got?" he asked.

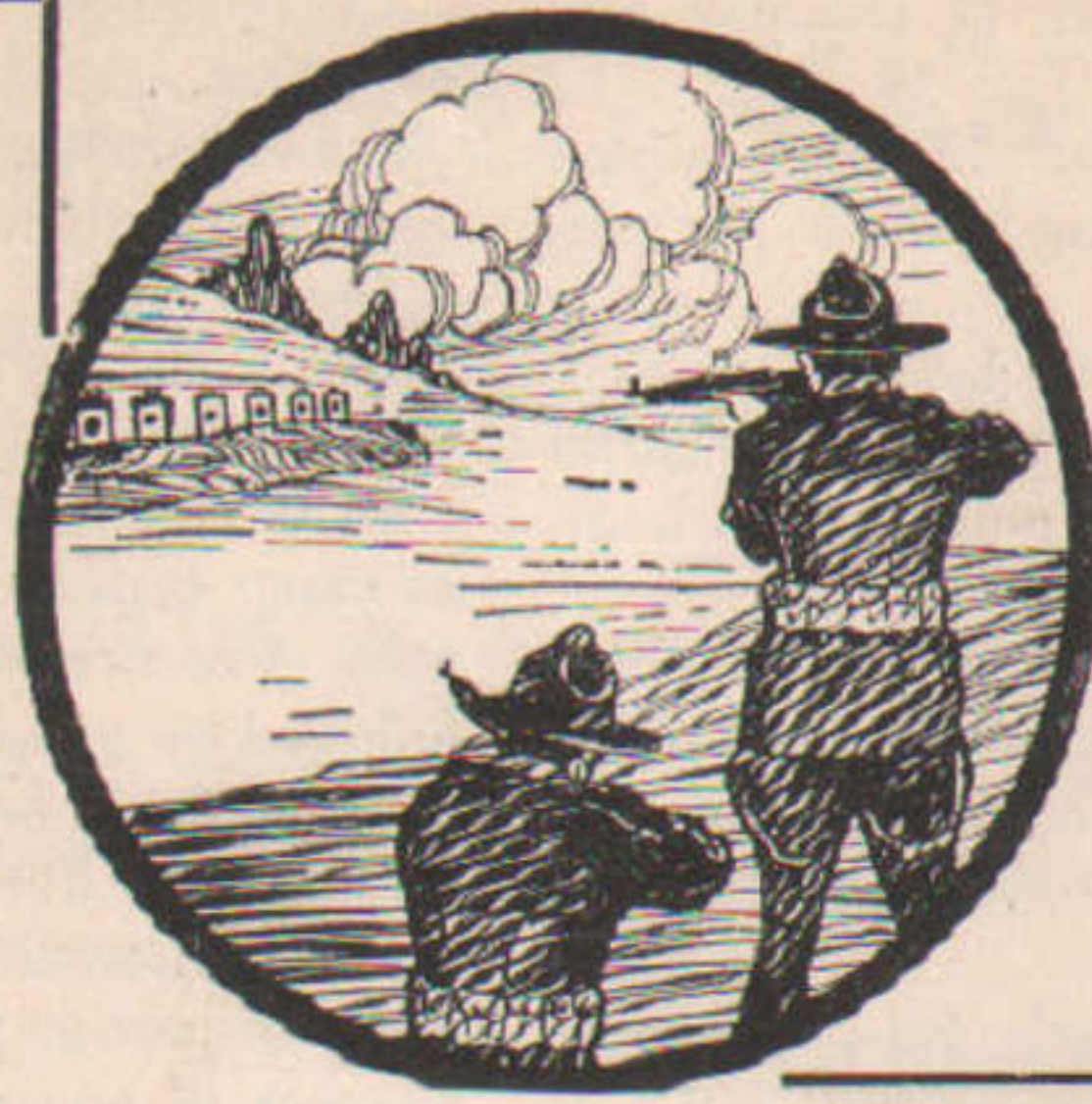
"Two," was the answer.

He had with him an ordinary looking black dog, just a regular "cross dog under the wagon," and after we had finished lunch said, "Well, I haven't anything in particular to do for an hour or two, so if you fellows want to fill your licenses I'll take the dog along down past that slough and help you out."

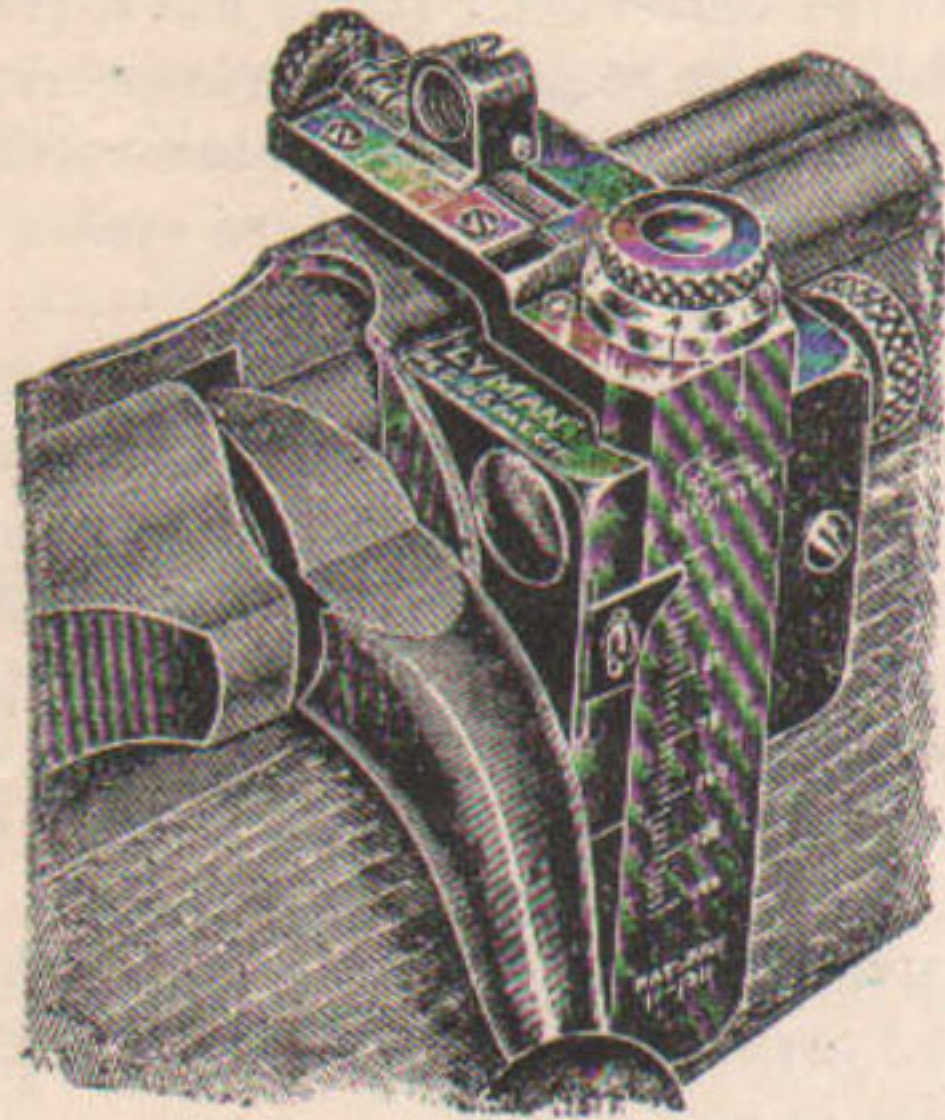
We had been through some of this cover ourselves, but thought maybe the dog could tout out some of the hidens, so accepted his kind offer, and he put that black cur to work, and work he did. The farmer swore he had no bird dog blood in him, but I have seen \$50 and \$100 pointers that would have to take a back seat when "Buster" was around. He hunted out one nice bird from some sage brush, which is hard work on a dog on account of the strong odor of the sage, and the chief did the honors nicely, centering his bird at the first shot, so that there was no trouble in locating him. He flushed another one from ground we had already hunted over and the writer took two snap shots at her only to see her sail away apparently uninjured, but no—she's down! It was true. She had sailed at least a hundred yards and suddenly crumpled up and fell stone dead. That filled the writer's license for one day, but left the Chief one short, so we went back along the creek again. Nothing doing, so took a walk through a little open stubble ground and had not walked fifty yards before that blamed black cur froze into as pretty a

The Call of the Outdoor Range

BRIGHT sunshine, spring winds, and the crack of rifles in the clear air! Get ready for the call of the outdoor range. Competition will be keen, and your sight equipment should be of the best—



LYMAN SIGHTS



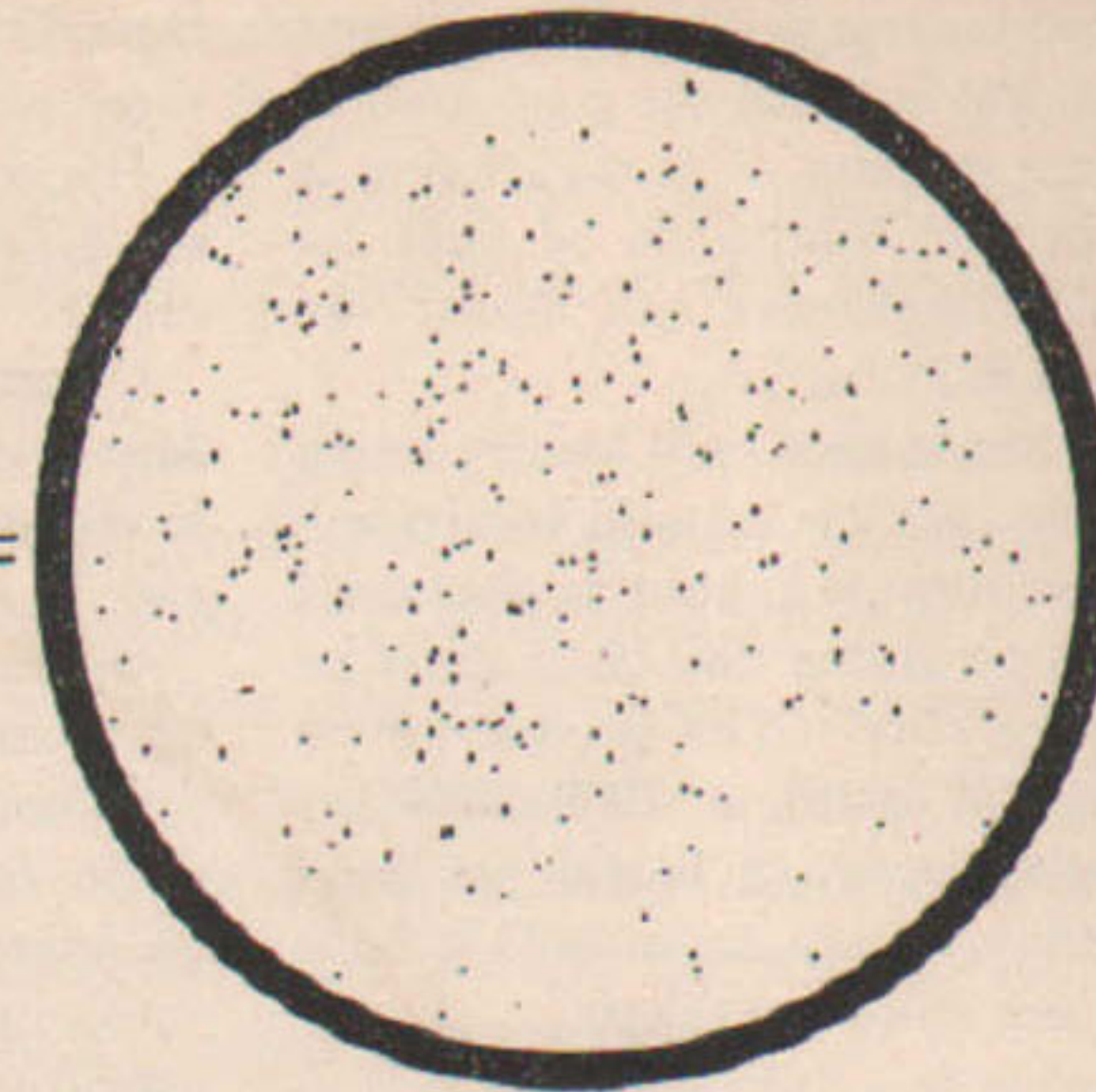
No. 48, \$11.00. With Disc, \$11.50. Tap and drill for mounting, \$0.75.

No. 48. Micrometer Receiver Sight (for Springfield, Newton & Ross .280) is adjustable to half minutes of angle for elevation and to quarter points for windage. Free windage and elevation tables, carefully tested for certain ammunition, enable you to adjust it instantly and accurately for varying ranges, and save time and ammunition in zeroing for any given range.

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Shows complete Lyman line, and gives expert hints on sight adjustment, care of guns, etc. Send for it.

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TWENTY YEARS UNDER WATER INFALLIBLE

Makes This Wonderful Pattern

This is an exact reproduction of a 77% pattern made on a 30 inch circle at 40 yards by a standard grade pump gun when loaded with 28 grains of Infallible powder that had been kept in a jar of water in our Ballistic Laboratory since June 1899.

This powder was not protected from the water in any way, the powder grains lying on the bottom of the jar just as pebbles lie on the bottom of a stream.

This is a record that will stand for many a day for it is one of the most remarkable performances ever recorded in testing smokeless powder.

HERCULES POWDER COMPANY

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Wilmington

Delaware

point as you ever saw. Head turned to one side and body stiff as a ramrod. "Steady, Buster!" "There's birds here!" Slowly following up the point we looked every instant for at least one pheasant to flush from the stubble. Not yet. We were almost even with the dog now, and he was doing his prettiest, when—whir-r-r-r! and whir-r-r-r! and whie-r-r-r! he went—not pheasants, but as pretty a covey of quail as ever flew. Too bad, Buster, but we can't shoot quail today, and so with a dissatisfied look Buster turned his attentions to the business at hand, viz, locating another pheasant for the Chief, so we tried another tule swamp, from which was flushed another hen, which went into the Chief's pocket, thus giving each of us his limit. The dog wanted to keep up the game, and was apparently on a hot scent from the way he was working, so we followed him for perhaps 50 yards, only to see him lose the scent and begin circling. He worked probably two or three minutes before he picked it up again, and off he went through a stubble field. As we were "full up" the dog's owner tried to call him in, but with his nose to the ground he refused to call, so we watched him trailing right toward a big straw stack. When almost up to the stack up flushed a magnificent cock, which sailed off into the brush, while we all stood in admiration. That old cur had trailed him at least 150 yards, and should have afforded us a fine shot if we had been shooting.

That is one bad feature about these birds when working a bird dog. They won't sit under a point consistently, but if possible will run ahead of the dog and if he is not a good trailer the bird will outrun him. This is particularly true of the cocks, which are more wary than hens.

Thanking the farmer for his kindly assistance and for the use of his dog we turned our footsteps back toward the car line and home. There is little doubt that we should have been nearly skunked had it not been for the kindness of this farmer, who is one out of a thousand. There are mighty few farmers who will pick up a couple of stray hunters and loan them the use of his dog to hunt over his own farm. Quite a contrast to the actions of the first farmer we referred to in the early part of this screed. We were just in time for the car, and hauling our tired bodies aboard, settled down to a good rest and a smoke, and how good that old pipe did taste.

Marine Corps to Stage Matches

PRELIMINARY to the selection of a team to represent the Marine Corps at the National Matches this year, Divisional Rifle Competitions will be held, according to an announcement made from Marine Corps Headquarters. The schedule of competitions includes:

West Indian, at Guantanamo Bay, Cuba, week beginning April 12, for marines from posts in the West Indies; Western, at Mare Island, Calif., week beginning April 12, for

marines at posts on the west coast, in Hawaii and in the mountain and western recruiting divisions; Southeastern, at Parris Island, S. C., week commencing April 19, for marines at that post, Charleston, S. C., Pensacola, Miami and Key West, Fla., New Orleans, and in the southern recruiting division; and eastern, at Quantico, Va., week commencing April 19, for marines at posts in the eastern section of the country north of Charleston and in the central and eastern recruiting divisions. The competitions will be conducted in accordance with the Army small-arms firing manual of 1913. The model 5903 Springfield rifle will be used, with no alterations permitted, except that the new model front sight (No. 10) made especially for the Marine Corps, may be used. The competitions will be divided into four stages, as follows: 1 and 2, complete firing of the Army qualification course, and 3 and 4, two sighting shots and ten shots for record at 1,000 yards. "The Marine Corps Competition" will be shot at Quantico during the first week in May, and the competitors for it will be selected to a large degree from among those making the best scores in the division competitions. An inter-post competition for the Elliott trophy will be held at Quantico during the same week.



MARBLE'S Jointed Rifle Rod

Made of brass, with steel joints. Can't wobble, bend or break. Swivel in end section prevents joints from unscrewing when in barrel. Gives whirling movement that cleans thoroly. Wood handle. All lengths. All calibres from .22 to .50. Price, including cloth bag, \$1.10.

MARBLE ARMS & MFG CO. 502 Delta Ave. GLADSTONE, MICH.



When You Buy N. R. A. Cartridges Look for the Make as Well as the Name

During the war, we developed a Long Rifle Lesmok cartridge of unprecedented accuracy at ranges of from 50 to 250 yards.

This cartridge seemed particularly well adapted to the needs of expert riflemen. These are the men who form the backbone of the National Rifle Association. So we named this cartridge the U. S. 22 N.R.A. It seemed an especially suitable name.

Apparently other people agreed with us in that; for after spending some eighteen months of time and some thousands of dollars popularizing the name and telling the riflemen about the cartridge we notice that others have appropriated the same designation—"N.R.A."—for a cartridge of the long rifle style.

The U. S. .22 N.R.A. is the original 22 Long Rifle cartridge developed for long range work. We are convinced it has not been equalled. We do not think it is likely to be equalled. If it can be improved upon, you may be sure we will do the improving.

Under the circumstances, we feel that we owe it to our friends—to those thousands who have come to associate the name "N.R.A." with a certain highly developed cartridge of our make—to warn them of the possibility of confusion and the need for making sure that the U. S. name and trademark appears on the box when they ask for N.R.A. cartridges.

UNITED STATES CARTRIDGE COMPANY

111 BROADWAY

NEW YORK, N. Y.

B. S. A.

Match Rifle



For the N. R. A. 1920 Indoor Matches

THE RIFLE THAT BEAT EVERY
OTHER SMALLBORE AT
CALDWELL

The
Production
Equipment
Company

5 Union Square
NEW YORK

CONVENIENCE

NOWHERE TO GO
BUT IN THE
CHAMBER

Success is made up of small details. One of them is lack of annoyance over the little things.

When you load your B. S. A. whether at the darkened firing point of the indoor range or in broad daylight, you merely put the cartridge in the groove on top of the block and give it a push, then move the lever up 2 inches and the rifle is ready to fire.



SHOOTING NEWS AND COMMENT



WITH a series of team and individual matches, outdoor small bore shooting will be introduced to civilian rifle clubs.

The small-bore committee of the National Rifle Association, of which Lt. Col. Townsend Whelen is chairman, has prepared Bulletin No. 2, outlining these competitions. This bulletin will be distributed broadcast to rifle clubs and individual shots within the near future. The matches as scheduled will be shot between May 2, and June 12.

In addition to the matches, the N.R.A. has in preparation a qualification course for the small-bore rifle. This course will permit the award of Marksman, Sharpshooter and Expert Rifleman decorations, over courses easily fired on ranges of the sort usually available to the average civilian club. The bulletin giving the details of the competitions reads:

The conditions of the Small Bore Rifle Competition to be held during the months of May and June, 1920, under the auspices of the National Rifle Association are published for the information of all concerned.

The dates of holding the matches are May 3 to June 12, 1920. This period is known as the Small Bore Season.

Team Matches are open to rifle clubs,

schools and military organizations affiliated with the National Rifle Association.

Individual Matches are open to life and annual members of the National Rifle Association. (Life membership cost \$25. Annual membership cost \$2.00. Address the Secretary of the Association for membership blanks.)

Small Bore Team Match, 50 and 100 yards:

A club may enter one or more teams. Ten men or less may shoot on each team. The scores of the highest five men to count for record. The course will be fired six times, once each week during the first six weeks of the season. A team may shoot on any day of the week, but all the scores must be fired on the same day. Each member of the team to shoot scores as follows:

50 yards, 10 shots, slow fire, time limit five minutes for ten shots, any position without artificial rest.

100 yards, 10 shots, slow fire, time limit five minutes for ten shots, any position without artificial rest.

Rifle: Any .22 calibre rim fire rifle; any sight not containing glass.

Entrance fee \$10.00, which includes all six matches.

Prizes: 10 bronze medals to winning team, 10 bronze medals to high team in each state where 5 teams from any one state are entered, and bronze medals to all individual contestants making 90% scores.

Small Bore Individual Match, 50 and 100 yards, slow fire:

One entry only. May be fired any time during the season.

50 yards, 20 shots, (10 shots on a target), slow fire, time limit five minutes for each ten shots, any position without artificial rest.

100 yards, 20 shots, (10 shots on a target), slow fire, time limit five minutes for each ten shots, any position without artificial rest.

Rifle: Any .22 calibre rim fire rifle; any sights not containing glass.

Entrance fee \$1.00.

Prizes: 10 bronze medals to ten high contestants, a bronze medal to the high entrant from each state where 5 entrants from any one state compete and bronze medals to all individuals making 90% scores.

Small Bore Individual Match, 50 yards, rapid Fire:

One entry only. 20 shots (10 shots on a target); position, any without artificial rest. Time limit 2 minutes for each ten shots, contestants to start with rifle and magazine empty, magazine in rifle, magazine must be filled within the time limit, loading tubes not permitted.

Rifle: Any .22 calibre rim fire rifle; any sights not containing glass.

Entrance fee \$1.00.

Prizes: 10 bronze medals to ten high contestants, a bronze medal to the high entrant from each state where 5 entrants from any one state compete and bronze medals to all individuals making 90% scores.

Regulations, etc:

Small Bore Individual Match, Long Range:

Wimbledon Cup conditions. One entry only. 20 shots, 200 yards, target c-5, time limit 20 minutes, any position without artificial rest.

Rifle: Any .22 calibre rim fire rifle.

Entrance fee \$1.00.

Prizes: 10 bronze medals to ten high contestants, a bronze medal to the high entrant from each state where 5 entrants from any one state compete and bronze medals to all individuals making 90% scores.

Other Conditions of Matches:

Sighting shots: Sighting shots are not permitted in any match or qualification, but there is no objection to prior practice on non-official targets.

Preservation of targets: All targets used in matches will be preserved by the club secretary (or the individual in individual matches) for a period of six months for use in deciding ties, disputes, etc.

Other regulations, ties, etc.: Small Arms Firing Manual 1913, U.S.A., will govern in regard to all regulations, ties, etc., not mentioned herein.

The following are the dimensions of the regulation small bore bull's eye-targets referred to in preceding paragraphs:

Rings.	50 yard target.	100 yard target.
	inches	inches
Ten Ring, Sighting.....	1	2
Ten-ring, sighting.....	1	2
Nine-ring, bull's-eye.....	2	4
Eight-ring.....	3	6
Seven-ring.....	4	8
Six-ring.....	5	10
Five-ring.....	6	12

Target C-5 for use at 150, 175, and 200 yards is a rectangle 14.4 inches high and 24 inches long.

The black bull's-eye is 7.2 inches in diameter and counts 5 points.

The four-ring is 9.6 inches in diameter.

The three-space is 14.4 inches square.

The two-space is the remainder of the target being an exact reproduction of the 1,000 yard target, reduced to one fifth size.

FRED H. PHILLIPS, Jr.
Executive Officer and Recorder.

THE Director of Civilian Marksmanship has been informed that some of the rifle clubs to which issues of gunlings have been made for the caliber .22 rifles have received a sling of a different model from that intended for these rifles. Slings which do not fit should be reported to the Director of Civilian Marksmanship by letter direct, stating the number and from what issuing officer received.

The Kerr adjustable web gunslings is being issued to clubs and schools using Caliber .22 single shot Winchester rifles. Through mistake the Storage Division has issued to several clubs a web sling broader than the Kerr sling and made in one piece. This sling can be easily distinguished because it is so broad that it cannot be adjusted to the rifle.

It is desired that all clubs that have received this type of sling notify the Director of Civilian Marksmanship, giving the number of slings of this type that have been furnished.

NOTICE

Difficulty in obtaining labor and the slowness of the mails have operated to delay the delivery of the past few issues of ARMS AND THE MAN.

The editorial staff is doing all it can to insure the prompt appearance of the paper, in such time as will permit its delivery upon publication dates.

Subscribers are requested to permit a reasonable time to elapse before writing to this office, but in every case of failure of the paper to reach a subscriber this office will gladly forward missing numbers wherever possible.

—The Editors.

THE Ordnance Salvage Board has for sale certain ammunition in manufacturers' original packages, samples of which have been fired with satisfactory results. The Ordnance Department does not guarantee this ammunition, but will sell it "as is", f. o. b. San Antonio Arsenal, Texas. Applications for it should be addressed to the Director of Civilian Marksmanship and accompanied by money orders or bank drafts made payable to that officer. Under the law, members of the National Rifle Association are entitled to make purchases. The ammunition and prices follow.

350,000 cartridges, ball, caliber .30-.30, metal cased or full patch, packed in boxes of 1720 cartridges and 1000 cartridges each, in pasteboard boxes containing 20 cartridges each...\$25 per M.

127,000 cartridges, ball, calibre .30-.30, soft point packed 1,000 cartridges per box in cartons containing 20 cartridges each.....\$25 per M.

2,000 cartridges, call, caliber .22, automatic rifle, U. M. C., can be fired in Remington or Winchester automatic rifle caliber .22 ..\$5 per M.

10,000 cartridges, ball, caliber .22, long rifle, U. M. C.,.....\$3 per M.

20,000 cartridges, ball, caliber .22, short, U. M. C.....\$2 per M.

This ammunition will be sold in lots of not less than 1,000 only.

"AS the Indoor N. R. A. matches are under way, I thought it would not be amiss to let other clubs know what we are using for elbows rest on our indoor range," says Fred L. Johnson of the Concord, N. H. Rifle Club.

"We have tried sand bags, wheat bags and elbow pads, trying to secure a comfortable position while shooting.

"We are now using elbow rests made from the same composition as printers rollers, i.e. glue and molasses.

"I do not know the correct formula, but my scheme seems to work and we have secured the required results.

"I used 4 pounds of common hard glue and four ounces liquid measure of common molasses. (this will make 8 rests.)

"Add just enough water to dissolve the glue and add the molasses using a dish containing

water and set the glue pot inside and let the mixture boil for a few minutes and stir thoroughly.

"For a mould I used a small tin pan about five inches in diameter with a good sized dent hammered into the bottom to make the depression for the elbow, this depression is about two inches across and 3/4 inches deep nicely rounded to fit the elbow.

"Grease the inside of the dish with common gas engine oil and pour mixture and allow to cool about 1/2 hour with the dish in snow or ice water.

"After the mixture is cold it can be very easily removed by running a common thin knife around the edge and lay the results aside flat side down to harden. Wash with gasoline and smear over talcum powder or common flour to remove the sticky effect.

"The patten when complete will measure about 5 inches in diameter and 1 1/2 inches thick with a dent 3/4-inch deep for the elbow.

"This scheme will prevent rolling and slipping and the shooter assumes the same position for each shot as the position is disturbed when loading for the next shot.

"Every man has his ideas as to the best way to get results. Personally I am using a 10 power scope fitted with cross hairs, with an eye-piece similar to a jewelers eye-glass with a Lyman disc inserted. This reduces the field and confines the eye more closely to the bull.

"On the hold, I establish the right and left on coming up with the perpendicular hair, cutting the bull in halves and the moment the horizontal hair cuts the 6 o'clock of the half inch circle, I let go.

"This is almost snap shooting, but I get rid of the jiggle and waste no time fishing for the center of the target, after reaching the required elevation. I find it much easier on the eye and can shoot 200 shots without fatigue.

"We have tried many kinds of lights but find the 75 Watt nitrogen is the best.

"We use 5 lights for four targets with the lights arranged two feet in front of the target and one foot either side.

"For a back-ground we use grass green for color as it seems most pleasing to the eye and we have no shadows.

"Perhaps the above may be of some use to the lovers of the sport who have not done so much experimenting but are looking for results.

AMONG users of firearms the question continually comes up as to just what is meant by the calibre of rifle or pistol barrel. The subject is somewhat confusing, it is true, mainly because of the lack of uniformity in designating similar weapons.

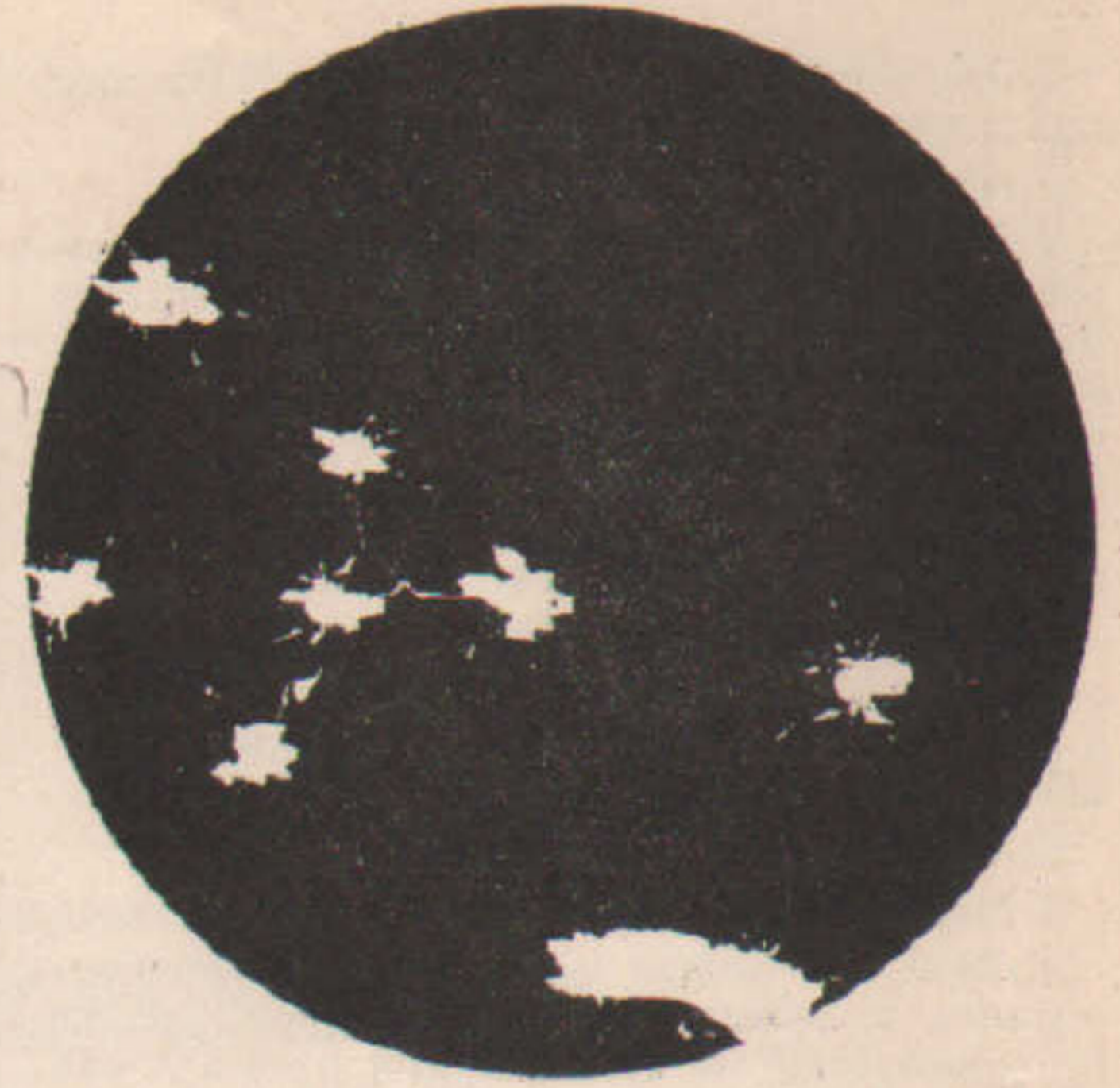
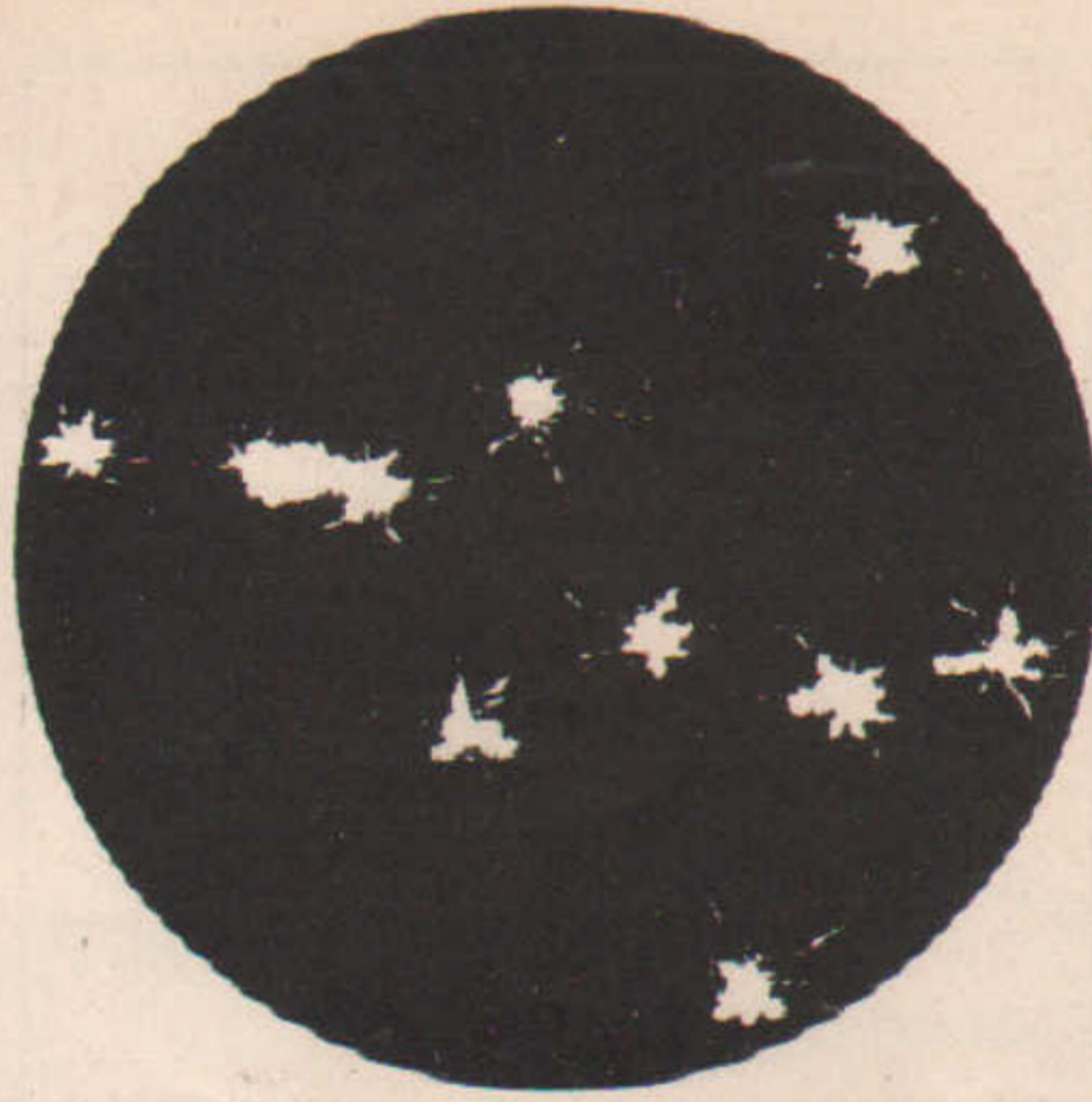
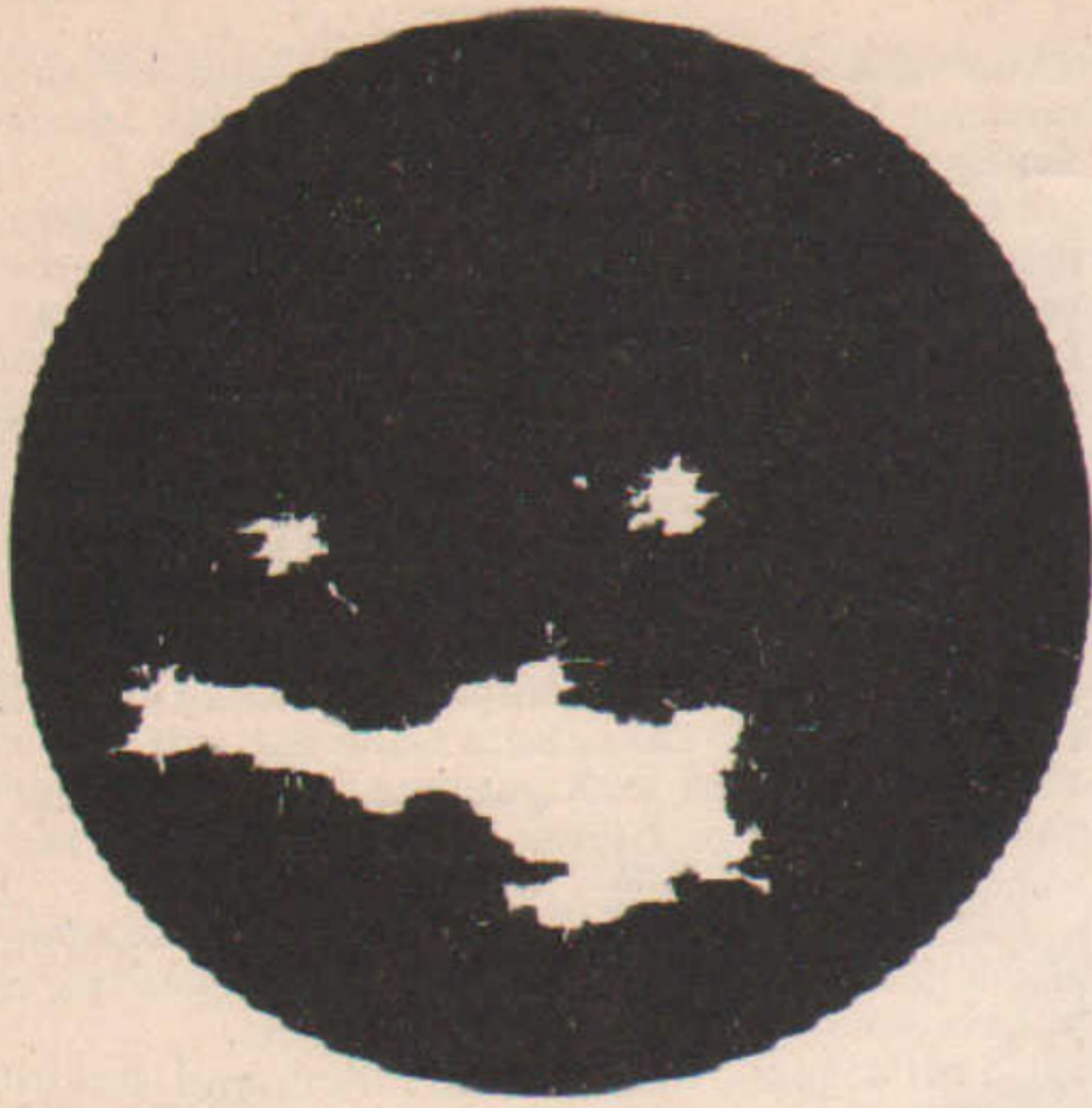
This is the way A. P. Lane explains the question of calibres:

Back in the muzzle loading days before barrels were rifled, all weapons were known by the number to the pound of round lead balls which would just fit the bore. The 12-gauge gun was one that would just fit a round lead ball weighing 1-12 of a pound and the 20-gauge was one that would just fit a round ball weighing 1-20 of a pound.

When the rifle barrels were brought into common use, it was customary to designate them by the diameter in decimal parts of an inch. One reason for doing this was to distinguish them from the smooth bore shot gun barrels.

A rifle barrel which is just 1/4" in diameter is commonly known as .25 calibre. In other words, it would have a diameter of .25 hundredths of an inch. Some makers in bringing out new styles of rifles of the same calibre would go to the trouble of calling their barrels. 250 caliber instead of .25 calibre for the same diameter barrel. The disadvantage of doing this is that there is a chance of confusion owing to using two different numbers to designate the same actual diameter. There is a n automatic pistol of .38 calibre which is a powerful military weapon, and there is also .380 calibre which is suited to pocket use. These two have exactly the same diameter of barrels. One is called .38 and the other .380 simply to tell them apart.

There are also cases where the calibre, by which a revolver is known, is not the diameter of



The three Fitzgerald targets. Left to right, No. 1, two 5-shot strings, 20 seconds per shot; No. 2, two 5-shot strings, 20 seconds per string; No. 3, two 5-shot strings, ten seconds per string.

the barrel. An example of this is the 38 special revolver, the calibre of which is actually .36. This revolver was originally .38 calibre in the days outside lubricated bullets. When they made the bullets smaller so as to tuck them into the mouth of the shells and thus cover up the lubricating grooves, they also had to reduce the diameter of the barrel. A good many revolver calibres are off for this reason.

The calibre of a barrel is curiously enough not the proper diameter for bullets to be used in it. This is due to the fact that the calibre is the diameter of the barrel before being rifled and the diameter of the proper size bullet should be large enough so that it will fit to the bottom of the grooves. The government rifle is .30 calibre, but to the bottom of the grooves it measures .308", consequently the right size of bullet for the government rifle is .308" in diameter.



Expert Riflemen

who know the absolute necessity for removing every vestige of smokeless powder residue from firearms gave Pyramid Solvent exacting tests for over a year.

Pyramid Solvent

more than made good. All agree that it dissolves residues and loosens metal fouling easily, quickly.

After Pyramid Solvent use 3-in-One Oil to prevent rust and to lubricate.

Pyramid Solvent is for sale by most firearm dealers, 3 ounces in a convenient flat can that fits pocket or shooting kit, 30c per can. If your dealer can't supply you, send 30c and we will send you a can postpaid.



Three-in-One Oil Co.
165 AKG Bdw., New York City.

THE perfect score indoors, in the National Match Pistol Course has at last been made. Although the score was made during practice it was witnessed and has been formally authenticated. The shooting was done with a Colt army automatic.

Most hand-gun enthusiasts who have visited the Colt plant have met J. H. Fitzgerald, the shooting master, and have seen examples of his proficiency with pistol and revolver. On January 20th Fitzgerald started to fire the National Match Pistol Course on the company's regular test range, indoors, with artificial light. The range was 25 yards and the 5-inch bulls-eye target was used. The first target was the regular two 5-shot strings, 20 seconds for each shot; number 2 target called for two 5-shot strings, 20 seconds to each string; and number 3 target called for two strings of 5 shots each in ten seconds, rapid fire. All of Fitzgerald's bullets were well within the black and his targets do not show a doubtful shot.

AUSTRALIA, as well as England, will probably contest the right of America to retain the Dewar International Trophy in 1920.

Information received from officials of the Society of Miniature Rifle Clubs of Great Britain indicates that the victory won by the American riflemen at Caldwell has served to arouse widespread enthusiasm among English small-bore shots, and that the British are already prepared to enter as strong a team as they can possibly get together.

Full details of the match are yet to be completed, but an informal suggestion was made that the Dewar Trophy be shot for at Antwerp during the Olympic Games. This suggestion has not met with very much favor either here or in England, the British taking the stand that such an arrangement would mean that only a small team of six instead of a team of twenty could be sent abroad to compete. The British tryouts for the team of twenty are already under way. It is likely, although not certain, that the British will shoot their targets at the Lancashire meeting on either the 30th or the 31st of July. There will be a team of Australians competing at this meeting, and it is considered likely that from the ranks of the territorial riflemen will be selected a small-bore team to enter for the Dewar Trophy. The Secretary of the British Society of Miniature Rifle Clubs in a recent letter said: "I have been wondering whether any American miniature riflemen will be passing through England on their way to Belgium about the time the Lancashire meeting is held, namely, July 26-31. If so, we will be glad to know whether any of them would like to take part in the events of the meeting. Should they so desire it may be possible to have the council alter the conditions so that competitors can participate."

WASHINGTON, D. C. is to have a National Championship Rifle Shoot early in the Fall when the Veterans of Foreign Wars hold their annual encampment during the week of September 13-18.

Matches will be held under the auspices of the League of Associated Rifle Clubs, Veterans of Foreign Wars, every member of which is affiliated with the National Rifle Association.

About 200,000 members of the Veterans of Foreign Wars will attend the National Encampment, and it is expected that representatives from at least two hundred rifle clubs of the Veterans of Foreign Wars will have its marksmen on the firing line at Congress Heights Range.

The series of competitions are being arranged now and while there will be several events at various ranges with the military rifle, the feature of the meet will be the contests with the small bore .22 caliber rifle. Prizes and trophies valued at about \$5,000 will be the reward of successful entrants, many of whom will participate in the National Matches of the N. R. A. held during August at Camp Perry.

The League of Associated Rifle Clubs, Veterans of Foreign Wars, is composed solely of members who have at one time or another seen service on foreign soil; it is a powerful organization dedicated to the promotion of marksmanship as a pastime and means of national defense.

The competitions at Washington will prove an attractive feature of the encampment at which will be at least 200,000 members.

Captain Frank Winch, Inspector-General Small Arms Practice, Veterans of Foreign Wars, is completing the details of the meet, which promises to attract widespread attention.

THE AMERICAN RIFLE

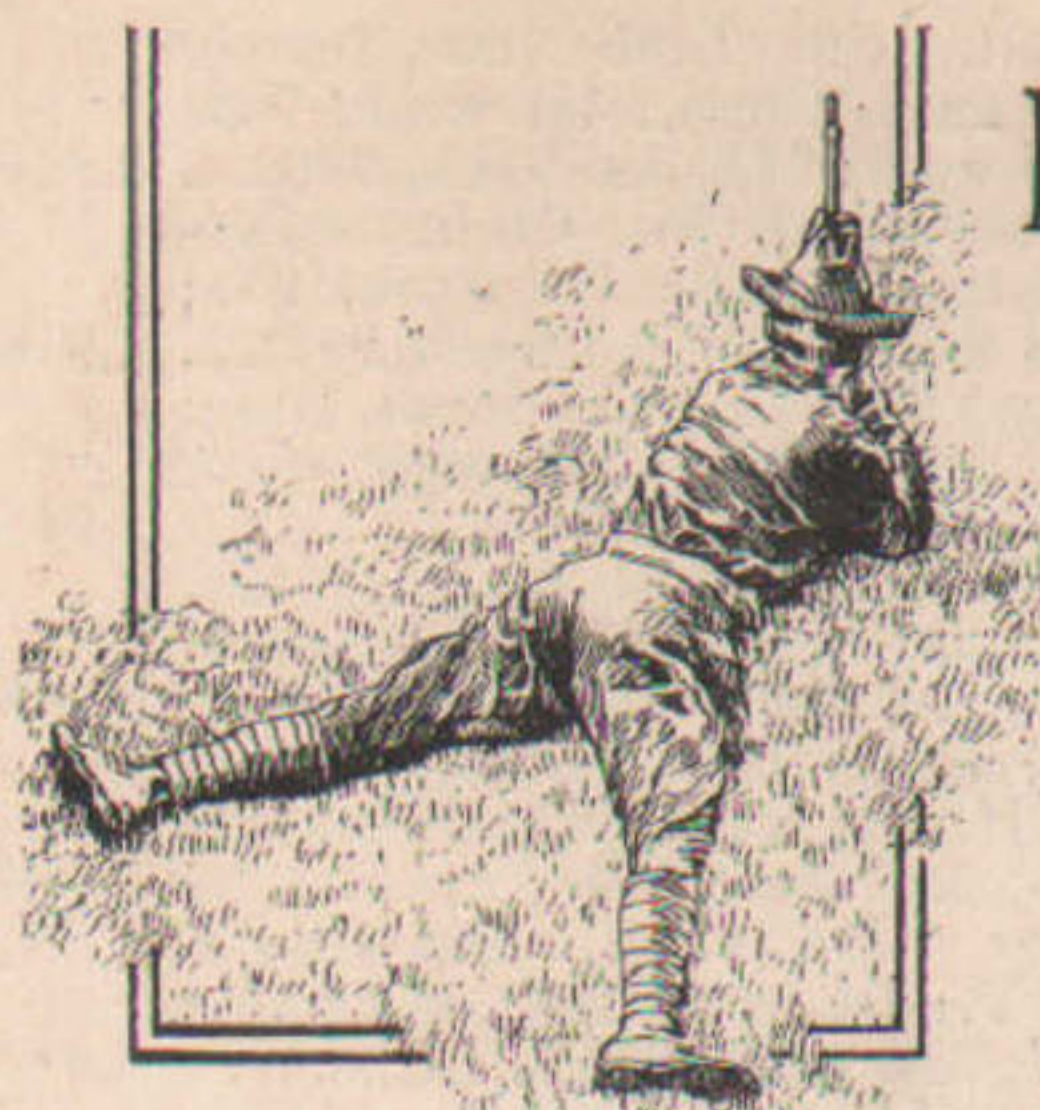
By Lt.-Col. Townsend Whelen



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Arms and The Man

Woodward Building Washington, D. C.



Loads And Re-loads

In this column, conducted by Lt. Col. Townsend Whelen, will be answered inquiries pertaining to target and hunting small arms, hunting licenses, game guides, and kindred subjects. An effort will be made to reply to inquiries direct by mail before the appearance in this column of the answer. This service is free to all, whether the inquirer is a subscriber to Arms and the Man or not. All questions are answered at length by mail. Those portions of general interest are published here.

I HAVE a Remington 38-50 Hepburn, patent 1879, target rifle, No. 3 barrel, which I wish to get a bullet mould for. Some years ago the sights were stolen off it and I have since replaced them with a Lyman No. 7 front sight and a Lyman rear tang peep sight with wind gauge and disc. Since going to this expense I am anxious to see what the rifle is capable of doing. Now, I desire to use a small charge of smokeless powder, such as Du Pont No. 75 or 80. Just enough to make an accurate 200-yard target load. I understand when using smokeless powder bullet must be the full groove diameter and not the land diameter to get the best results. No allowance being made for upsetting. A lead plug which I upset in barrel measured .394 inch. This being the full groove diameter. Can you suggest any bullet of .38 or .40 caliber (lead) I could use? If a .40 caliber, possibly I could resize it to .394 inch. Perhaps you know where I could get such a bullet mould, or have one made to order?

R. H. D., Alberta, Can.

Answer: Are you sure that the groove diameter of this barrel is .394 inch? These barrels were usually bored about .005 inch smaller than the regular .38-55, and if so the groove diameter should be about .375 inch. Please verify these figures again before you go any further.

In using smokeless powder in such a rifle I would advise that the bullet be sized to .001 inch larger than full groove diameter. I think that the bullet for your rifle should weigh between 250 and 275 grains, probably you will get better results from No. 80 powder with the lighter weight. I would advise that you make it in shape somewhat like the old .45-70-500 bullet, the smooth portion outside the shell being just large enough to rest on top of the lands and thus straightened the bullet up in the chamber before it is fired. Bullets should be cast about 1 to 16 tin and lead, or you might go to as hard an alloy as 1 to 10 if 1 to 16 does not give good results.

I think that you can get reloading tools and bullet moulds made by the Bond Machine Company, Wilmington, Del. They are just placing on the market a full line of most excellent reloading tools. Of course, you understand that these tools will probably have to be made to order, and that therefore they will probably cost quite a little more than the regular tools for popular calibers.

USING regular military powder bought from the Government for reloading model 1906 ammunition, what load should we use for the Newton 172 grain bullet, for the model 1903 rifle, to get best results in hunting (general with deer and possibly mule deer as the largest game)?

What would be the largest load safely possible with above combination? Largest powder load I mean. And what would be the velocity, breech pressure, and trajectory? Same for the load recommended in answer to first part of question as the best one to be made up. Taking regular issue Krag and Springfield ammunition, is it safe to cut the

top off the bullet, so as to expose a part of the core? I have had an idea that the core might blow out and leave the jacket in the gun. Some of our members have been doing this. What sort of a bullet would this leave for hunting purposes? Would it mushroom sufficiently? Also same as to cutting with saw or boring hole in point of bullet. The idea being to adapt the regular load to hunting purposes.

H. S. G., Red Bluff, Calif.

Answer: The U. S. Government Pyro D. G. powder and the Du Pont military rifle powder No. 20 are the same powder. These two powders, as put out differ somewhat, however, in the following manner. Different lots of this powder often differ considerably in strength, so that powder charges have to be varied sometimes as much as four or five grains. The Du Pont company only place on the market for sale to individuals those lots which have normal properties. Thus, I can tell you that with Du Pont No. 20 powder in canisters obtained from the Du Pont agencies you are safe to use 48 grains of this powder with the 172 grain bullet, and will obtain from this load a velocity of about 2,625 feet per second at the muzzle. With the Government powder, however, I would not advise your going above 48 grains which will give a velocity of about 2,575 feet per second. Either of these loads have plenty of power for black tail deer; in fact, the power is almost excessive.

I would strongly advise against the filing of the points of full jacketed bullets in any manner to make them expand on game. It is only a question of time when a jacket will lodge in the bore, and the next shot will ruin the rifle.

I VERY much desire to know if the Ideal gas check bullet for the .280 Ross is as accurate as similar bullets in the Krag, .303 B., etc. What would be the best powder to use? Is there any hunting bullet weighing about 180 grains procurable for this gun? Should not a velocity of about 3,000 ft. secs. be obtainable with such a bullet, using one of the progressive powders?

H. L. L., Ottawa, Can.

Answer: Relative to the use of the Ideal gas check bullet in the .280 Ross rifle, I have tried out this bullet thoroughly at all velocities. I was able to get only fair results at very low velocity, but very poor results all around. The bullet is poorly designed. There is not enough bearing surface. Generally the accuracy was very poor.

In this connection I would advise your corresponding with the Bond Machine Company, Wilmington, Del. They are about to place on the market a full line of reloading tools in all calibers. They understand the problem of a lead alloy bullet for the Ross perfectly, and will undoubtedly place on the market a suitable bullet for this rifle in the near future. In fact, one of their men is about to start work on this very thing. But may I suggest that I think that you will always get better results from a metal jacketed

bullet. The Bond Machine Company have worked out a perfectly practical method by which riflemen can make their own soft point, metal jacketed bullets. They are working on the production of the tools now, but it will be two or three months before they are actually able to place the tools for making these bullets on the market. You can use a light metal jacketed bullet with a light charge of powder, and get all the results which would be hoped for from a metal check bullet, you will get much better accuracy, and you will not have the trouble with cleaning and corrosion which always attends the use of lead alloy bullets in these small caliber high velocity, quick twist rifles.

Relative to the 180 grain bullet. The only bullets of this caliber that I know of for the .280 Ross are all full jacketed target bullets. Formerly about 2,800 feet per second was the highest velocity that could be obtained in the Ross with a bullet of this weight, and still keep under permissible breech pressures. I believe, however, that with Modern Du Pont powders this velocity can now be run up a little, probably to about 2,900 feet per second. Write the Rifle Smokeless Division, E. I. Du Pont de Nemours & Company, Wilmington, Del., relative to this.

Olympic Tryouts Announced

THE Olympic Games Committee of the National Rifle Association met in Washington February 28 and considered matters relative to the participation of American marksmen in the Antwerp shooting program.

Competitions

Aspirants for membership on the Olympic shooting teams will be afforded opportunity to demonstrate their qualifications in tryouts to be held at the Marine Corps station at Quantico, Va., for one week between May 15 and June 1. The contestants winning places in the tryouts will be placed in training and taken to Belgium as a part of the United States team. The tryouts will be shot at 200, 300, and 600 yards at targets the same as those used in the international competitions at Stockholm in 1912. The rifle firing will be at 20 yards, standing, slow fire, 10 shots; 300 yards, kneeling, slow fire, 10 shots; 300 yards, prone, slow fire, 10 shots; 600 yards, prone, slow fire, 10 shots; all strings of 10 shots to be preceded by two sighting shots; and rapid fire, 300 yards, 5 shots kneeling and 5 shots prone, in 2½ minutes, starting with the gun unloaded. In the pistol tryouts target "L" will be used, and the course will be slow fire consisting of 1 shots at 25 yards, 10 shots at 50 yards, and 10 shots at 100 yards.

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With the Small-bore League

DELAYS on the part of clubs in reporting the results of the small bore matches, operated during the first three weeks of the test to retard the compilation of scores in the N. R. A. office. Returns from most of the clubs for the third week's shooting, which ended February 28th, are, however, in the hands of the match officials at this time and show some remarkably good shooting on the part of many of the clubs. At the close of the third week the Quinnipiac Club of New Haven was in the lead among the civilian teams with a total of 2,993 points out of a possible 3,000. The Denver City boys, who made such a remarkable record last year, now stand in second place, three points behind the Quinnipiac shots, with the first team of the Lakewood, Ohio, Rifle Club in third place on a total of 2,987.

Considerable interest is being shown in the special prize which has been offered by the B. S. A. Guns, Ltd., of Birmingham, England. For the best individual score during the matches made with the B. S. A. rifle, a 25 power spotting telescope will be awarded. The team scores for the first, second and third week and the club totals at the end of the third week follow:

CIVILIAN CLUBS.

	<i>Club Total Third Week</i>
1. Quinnipiac Rifle & Revolver Club New Haven, Conn.: 1st week, 999; 2nd week, 997; 3rd week, 997	2,993
2. Denver City Rifle Club, Denver, Colo.: 1st week, 997; 2nd week, 995; 3rd week, 998	2,990
3. Lakewood Rifle Club (1st Team), Lakewood, Ohio: 1st week, 994; 2nd week, 996; 3rd week, 997	2,987
4. Bridgeport Rifle Club, Bridgeport, Conn.: 1st week, 996; 2nd week, 996; 3rd week, 994	2,986
5. Marion Rifle Club, Marion, Ohio: 1st week, 996; 2nd week, 995; 3rd week, 994	2,985
6. Bangor, Maine, Rifle Association, Bangor, Me.: 1st week, 993; 2nd week, 992; 3rd week, 995	2,980
7. Lynn Rifle & Revolver Club, Lynn, Mass.: 1st week, 994; 2nd week, 995; 3rd week, 989	2,978
8. Ordnance Rifle Club, Washington, D. C.: 1st week, 988; 2nd week, 993; 3rd week, 996	2,977
9. Birmingham A. C. Rifle Club, Bir- mingham, Ala.: 1st week, 989; 2nd week, 996; 3rd week, 988	2,973
10. Butte Indoor Rifle Club, Butte, Mont.: 1st week, 987; 2nd week, 992; 3rd week, 991	2,970
11. Haverhill Rifle & Gun Club, Haver- hill, Mass.: 1st week, 990; 2nd week, 987; 3rd week, 991	2,968
12. Brattleboro Rifle Club, Brattleboro, Vt.: 1st week, 992; 2nd week, 989; 3rd week, 986	2,967
13. Remington U. M. C. Rifle & Gun Club, Bridgeport, Conn.: 1st week, 988; 2nd week, 989; 3rd week, 987	2,964
14. Boston Rifle & Revolver Club, Bos- ton, Mass.: 1st week, 989; 2nd week, 991; 3rd week, 982	2,962
15. Warren Rifle Club, Warren, Pa.: 1st week, 983; 2nd week, 987; 3rd week, 990	2,960
16. St. Paul Rifle & Pistol Association, St. Paul, Minn.: 1st week, 979; 2nd week, 985; 3rd week, 990	2,954
17. Arlington Rifle & Pistol Club (1st Team), Arlington, N. J.: 1st week, 984; 2nd week, 987; 3rd week, 982	2,953
18. Corvallis Rifle Club, Hamilton, Mont.: 1st week, 978; 2nd week, 982; 3rd week, 993	2,953
19. Santa Fe Rifle Club, Santa Fe, N. Mex.: 1st week, 989; 2nd week, 979; 3rd week, 985	2,953
20. Hillsboro Rifle Club, Hillsboro, Ohio: 1st week, 983; 2nd week, 985; 3rd week, 984	2,952
21. Auburn Rifle Club, Auburn, N. Y.: 1st week, 985; 2nd week, 980; 3rd week, 987	2,952
22. Brooklyn Rifle Club, Woodhaven, L. I.: 1st week, 985; 2nd week, 980; 3rd week, 986	2,951
23. Olympic Pistol & Rifle Club, San Francisco, Calif.: 1st week, 979; 2nd week, 986; 3rd week, 986	2,951
24. Centennial Rifle Club, Chicago, Ill.: 1st week, 979; 2nd week, 988; 3rd week, 982	2,949
25. Irving Park Rifle Club, Chicago, Ill.: 1st week, 979; 2nd week, 985; 3rd week, 983	2,947
26. Chicago Rifle Club, Chicago, Ill.: 1st week, 974; 2nd week, 980; 3d week, 988	2,942
27. Jacksonville Rifle Club (1st Team), Jacksonville, Fla.: 1st week, 965; 2nd week, 989; 3rd week, 986	2,940
28. Los Angeles Rifle & Revolver Club, Los Angeles, Calif.: 1st week, 974; 2nd week, 978; 3rd week, 985	2,937
29. Commonwealth-Edison Rifle Club, Chicago, Ill.: 1st week, 973; 2nd week, 983; 3rd week, 980	2,936
30. Minneapolis Rifle Club, Minneapo- lis, Minn.: 1st week, 974; 2nd week, 984; 3rd week, 976	2,934
31. Wisner Rifle Club, Wisner, Nebr.: 1st week, 982; 2nd week, 969; 3rd week, 983	2,934
32. Pentwater Rifle Club, Pentwater, Mich.: 1st week, 983; 2nd week, 975; 3rd week, 975	2,933
33. Salt Lake Rifle & Revolver Club, Salt Lake City, Utah: 1st week, 981; 2nd week, 972; 3rd week, 980	2,933
34. Dayton Y. M. C. A. Rifle Club, Dayton, Ohio: 1st week, 983; 2nd week, 979; 3rd week, 970	2,932
35. Rogers Park Rifle Club, Chicago, Ill.: 1st week, 979; 2nd week, 974; 3rd week, 979	2,932
36. Middletown Rifle Club, Middle- town, N. Y.: 1st week, 979; 2nd week, 976; 3rd week, 975	2,930
37. San Diego Rifle Club, San Diego, Calif.: 1st week, 977; 2nd week, 969; 3rd week, 981	2,927
38. East Orange Rifle Club, East Orange, N. J.: 1st week, 974; 2nd week, 972; 3rd week, 979	2,925
39. Reed Indoor Rifle Club, Spring- field, Ohio: 1st week, 973; 2nd week, 976; 3rd week, 975	2,924
40. Concord Rifle Club, Concord, N. H.: 1st week, 966; 2nd week, 983; 3rd week, 974	2,923
41. Jacksonville Rifle Club (2nd Team), Jacksonville, Fla.: 1st week, 957; 2nd week, 986; 3rd week, 980	2,923
42. Hawthorne Rifle Club, Chicago, Ill.: 1st week, 974; 2nd week, 968; 3rd week, 980	2,922
43. Robbins & Myers Rifle Club, Springfield, Ohio: 1st week, 971; 2nd week, 970; 3rd week, 979	2,920
44. Norwalk Rifle Club (1st Team), Norwalk, Conn.: 1st week, 965; 2nd week, 973; 3rd week, 980	2,918
45. Manchester Rifle Club, Man- chester, N. H.: 1st week, 958; 2nd week, 979; 3rd week, 981	2,918
46. Fremont Rifle Club, Fremont, Ohio: 1st week, 964; 2nd week, 976; 3rd week, 975	2,915
47. Joliet Rifle Club (1st Team), Joliet, Ill.: 1st week, 970; 2nd week, 970; 3rd week, 975	2,915
48. Maynesboro Rifle Club, Berlin, N. H.: 1st week, 972; 2nd week, 968; 3rd week, 974	2,914
49. Victory Rifle Club, Amsterdam, N. Y.: 1st week, 961; 2nd week, 977; 3rd week, 974	2,912
50. Business & Professional Men's Rifle Club, Boston, Mass.: 1st week, 965; 2nd week, 970; 3rd week, 967	2,911
51. Roberts Island Rifle Club, Stock- ton, Calif.: 1st week, 958; 2nd week, 975; 3rd week, 976	2,909
52. Beaver Rifle Club, Beaver, Pa.: 1st week, 972; 2nd week, 966; 3rd week, 970	2,908
53. Worcester Pistol & Revolver Club, Worcester, Mass.: 1st week, 965; 2nd week, 970; 3rd week, 973	2,908
54. Towanda Rifle Club, Towanda, Pa.: 1st week, 964; 2nd week, 966; 3rd week, 974	2,904
55. Arlington Rifle & Pistol Club (2nd Team), Arlington, N. J.: 1st week, 971; 2nd week, 957; 3rd week, 974	2,902
56. Ft. Wayne Rifle & Revolver Club, Ft. Wayne, Ind.: 1st week, 959; 2nd week, 973; 3rd week, 970	2,902
57. Bucyrus Rifle Club, Bucyrus, Ohio: 1st week, 961; 2nd week, 981; 3rd week, 959	2,901
58. Franklin Rifle Club, Franklin, Pa.: 1st week, 954; 2nd week, 971; 3rd week, 973	2,898
59. Grand Forks Rifle Club, Grand Forks, N. Dak.: 1st week, 954; 2nd week, 981; 3rd week, 962	2,897
60. Rochester Rifle Club, Rochester, N. Y.: 1st week, 946; 2nd week, 974; 3rd week, 977	2,897
61. Rumford Rifle Club, Mexico, Me.: 1st week, 955; 2nd week, 968; 3rd week, 972	2,895
62. Ridgeville Rifle Club, Evanston, Ill.: 1st week, 959; 2nd week, 963; 3rd week, 971	2,893
63. Riverside Rifle Club, Riverside, Calif.: 1st week, 951; 2nd week, 968; 3rd week, 971	2,890
64. Peekskill Rifle Club, Peekskill, N. Y.: 1st week, 970; 2nd week, 956; 3rd week, 963	2,889
65. Claremont Rifle Club, Claremont, N. H.: 1st week, 958; 2nd week, 967; 3rd week, 963	2,888
66. Citizens' Rifle & Revolver Club, Rochester, N. Y.: 1st week, 966; 2nd week, 955; 3rd week, 964	2,885
67. Lakewood Rifle Club (2nd Team), Lakewood, Ohio: 1st week, 948; 2nd week, 963; 3rd week, 974	2,885
68. University of Chicago Civilian Rifle Club (1st Team), Chicago, Ill.: 1st week, 964; 2nd week, 961; 3rd week, 959	2,884
69. Scott Rifle Club, Scott, Ark.: 1st week, 951; 2nd week, 960; 3rd week, 970	2,881
70. Huntington Rifle & Revolver Club, Huntington, W. Va.: 1st week, 968; 2nd week, 951; 3rd week, 960	2,879
71. Des Moines Rifle & Revolver Club, Des Moines, Iowa: 1st week, 960; 2nd week, 952; 3rd week, 967	2,879

72. Elmira Rifle & Revolver Club, Elmira, N. Y.: 1st week, 955; 2nd week, 962; 3rd week, 961.....	2,878
73. Marine Corps Civilian Rifle Club, Springfield, Mass.: 1st week, 956; 2nd week, 950; 3rd week, 972.....	2,878
74. Mound City Rifle Club, St. Louis, Mo.: 1st week, 947; 2nd week, 971; 3rd week, 957.....	2,875
75. Covington Rifle Club, Covington, Va.: 1st week, 962; 2nd week, 952; 3rd week, 960.....	2,974
76. Saginaw Rifle Club, Saginaw, Mich.: 1st week, 959; 2nd week, 956; 3rd week, 953.....	2,868
77. Detroit Rifle & Revolver Club, Detroit, Mich.: 1st week, 952; 2nd week, 958; 3rd week, 957.....	2,867
78. Moraine National Rifle Club, Dayton, Ohio: 1st week, 953; 2nd week, 946; 3rd week, 968.....	2,867
79. Altoona Rifle Club (1st Team), Altoona, Pa.: 1st week, 953; 2nd week, 954; 3rd week, 955.....	2,862
80. Roundup Rifle & Revolver Club, Roundup, Mont.: 1st week, 953; 2nd week, 938; 3rd week, 966.....	2,857
81. Joliet Rifle Club (2nd Team), Joliet, Ill.: 1st week, 936; 2nd week, 949; 3rd week, 960.....	2,845
82. Miami Rifle Club, Cincinnati, Ohio: 1st week, 943; 2nd week, 947; 3rd week, 954.....	2,844
83. Chibridge Rifle Club, Greenville, Pa.: 1st week, 939; 2nd week, 939; 3rd week, 950.....	2,828
84. Chicago Engineers Rifle Club, Chicago, Ill.: 1st week, 929; 2nd week, 947; 3rd week, 952.....	2,828
85. Atlanta Rifle Club, Atlanta, Ga.: 1st week, 923; 2nd week, 942; 3rd week, 951.....	2,816
86. Norwalk Rifle Club (2nd Team), Norwalk, Conn.: 1st week, 900; 2nd week, 946; 3rd week, 966.....	2,812
87. East Saginaw Rifle Club, Saginaw, Mich.: 1st week, 939; 2nd week, 926; 3rd week, 946.....	2,811
88. University of Chicago Civilian Rifle Club (2nd Team), Chicago, Ill.: 1st week, 944; 2nd week, 919; 3rd week, 941.....	2,804
89. Hoosier Rifle Club, Indianapolis, Ind.: 1st week, 916; 2nd week, 940; 3rd week, 943.....	2,799
90. Onondaga Rifle Club, Syracuse, N. Y.: 1st week, 915; 2nd week, 940; 3rd week, 937.....	2,792
91. Needles Rifle & Revolver Club, Needles, Calif.: 1st week, 913; 2nd week, 927; 3rd week, 950.....	2,790
92. Altoona Rifle Club (2nd Team), Altoona, Pa.: 1st week, 929; 2nd week, 927; 3rd week, 934.....	2,790
93. Joliet Rifle Club (3rd Team), Joliet, Ill.: 1st week, 919; 2nd week, 932; 3rd week, 933.....	2,784
94. Du Pont Rifle Club, Flint, Mich.: 1st week, 945; 2nd week, 932; 3rd week, 905.....	2,782
95. Paterson Rifle Club, Paterson, N. J.: 1st week, 917; 2nd week, 909; 3rd week, 954.....	2,780
96. Niagara Falls Rifle Club, Niagara Falls, N. Y.: 1st week, 919; 2nd week, 911; 3rd week, 946.....	2,776
97. Lamar Rifle Club (3rd Team), Lamar, Colo.: 1st week, 931; 2nd week, 904; 3rd week, 938.....	2,773
98. Shawnee Rifle & Revolver Club, Lima, Ohio: 1st week, 898; 2nd week, 934; 3rd week, 930.....	2,762
99. Albion Rifle Club, Albion, Ind.: 1st week, 938; 2nd week, 939; 3rd week, 884.....	2,761
100. Interwoven Rifle Club, New Brunswick, N. J.: 1st week, 921; 2nd week, 907; 3rd week, 933.....	2,761

101. Cromwell Rifle Club, Cromwell, Ind.: 1st week, 908; 2nd week, 923; 3rd week, 927.....	2,758
102. Lamar Rifle Club (4th Team), Lamar, Colo.: 1st week, 928; 2nd week, 911; 3rd week, 918.....	2,757
103. Liberty Rifle Club, Dubuque, Iowa: 1st week, 915; 2nd week, 911; 3rd week, 925.....	2,751
104. Superior Rifle Club, Superior, Wis.: 1st week, 909; 2nd week, 931; 3rd week, 911.....	2,751
105. Commencement-Bay Rifle Club, Tacoma, Wash.: 1st week, 907; 2nd week, 919; 3rd week, 920.....	2,746
106. Yellowstone Rifle Club (2nd Team), Billings, Mont.: 1st week, 907; 2nd week, 909; 3rd week, 930.....	2,746
107. Lamar Rifle Club (1st Team), Lamar, Colo.: 1st week, 911; 2nd week, 894; 3rd week, 939.....	2,744
108. Cazenovia Rifle Club, Cazenovia, N. Y.: 1st week, 918; 2nd week, 907; 3rd week, 919.....	2,744
109. Berkeley Defense Corps Rifle Club, Berkeley, Calif.: 1st week, 869; 2nd week, 929; 3rd week, 941.....	2,739
110. Yellowstone Rifle Club (1st Team), Billings, Mont.: 1st week, 910; 2nd week, 930; 3rd week, 896.....	2,736
111. John Forrester Rifle Club, Pittsburgh, Pa.: 1st week, 901; 2nd week, 917; 3rd week, 910.....	2,728
112. Varnum Continentals Rifle Club, E. Greenwich, R. I.: 1st week, 914; 2nd week, 879; 3rd week, 933.....	2,726
113. Lamar Rifle Club (2nd Team), Lamar, Colo.: 1st week, 892; 2nd week, 886; 3rd week, 935.....	2,713
114. Military Service Rifle Club, Elizabeth, N. J.: 1st week, 909; 2nd week, 913; 3rd week, 890.....	2,712
115. Grass Valley Rifle Club, Grass Valley, Calif.: 1st week, 917; 2nd week, 906; 3rd week, 870.....	2,693
116. Eclipse A. A. Rifle Club, Franklin, Pa.: 1st week, 877; 2nd week, 897; 3rd week, 909.....	2,683
117. Nevada City Rifle Club, Nevada City, Calif.: 1st week, 882; 2nd week, 885; 3rd week, 906.....	2,673
118. Camden Rifle Club, Camden, N. J.: 1st week, 874; 2nd week, 879; 3rd week, 871.....	2,624
119. Groton Rifle Club, Groton, Mass.: 1st week, 837; 2nd week, 867; 3rd week, 859.....	2,563
120. Watertown Rifle Club, Watertown, Mass.: 1st week, 822; 2nd week, 826; 3rd week, 851.....	2,499
121. Company G Rifle Club, Springfield, Mass.: 1st week, 774; 2nd week, 762; 3rd week, 781.....	2,317
122. Mt. Washington Lyceum Rifle Club, Pittsburgh, Pa.: 1st week, 568; 2nd week, 624; 3rd week, 678.....	1,870

CIVILIAN CLUBS.

(Third Match Missing.)

	<i>Club Total</i>
	<i>Second Week</i>
Philadelphia Rifle Association, Philadelphia, Pa.: 1st week, 986; 2nd week, 987.....	1,973
San Francisco Telephone Rifle Club, San Francisco, Calif.: 1st week, 979; 2nd week, 971.....	1,950
Forest Service Dist. 1 Rifle Club, Missoula, Mont.: 1st week, 957; 2nd week, 989.....	1,946
Madison Rifle Club, Madison, Wis.: 1st week, 974; 2nd week, 968.....	1,942
Providence Revolver Club, Providence, R. I.: 1st week, 962; 2nd week, 964.....	1,926

(Second and Third Matches Missing.)

	<i>First Week</i>
McKean County Rifle Club, Bradford, Pa.....	966
National Capitol Rifle Club, Washington, D. C.....	957
Rupert Rifle Club, Rupert, Idaho.....	613
9 clubs not reported.	

COLLEGE CLUBS.

	<i>Club Total</i>
	<i>Third Week</i>
1. Norwich University, Northfield, Vt.: 1st week, 979; 2nd week, 983; 3rd week, 991.....	2,953
2. University of Pennsylvania (1st Team), Philadelphia, Pa.: 1st week, 981; 2nd week, 984; 3rd week, 983.....	2,948
3. Columbia University, New York City, N. Y.: 1st week, 964; 2nd week, 969; 3rd week, 973.....	2,906
4. Worcester Polytech., Worcester, Mass.: 1st week, 954; 2nd week, 970; 3rd week, 974.....	2,898
5. Massachusetts Institute of Technology, Cambridge, Mass.: 1st week, 955; 2nd week, 968; 3rd week, 965.....	2,888
6. Massachusetts Agricultural College, Amherst, Mass.: 1st week, 945; 2nd week, 966; 3rd week, 973.....	2,884
7. Dartmouth College, Hanover, N. H.: 1st week, 955; 2nd week, 969; 3rd week, 951.....	2,875
8. University of Pennsylvania (Freshman), Philadelphia, Pa.: 1st week, 954; 2nd week, 960; 3rd week, 958.....	2,872
9. Princeton University, Princeton, N. J.: 1st week, 934; 2nd week, 962; 3rd week, 965.....	2,861
10. Bowdoin College, Brunswick, Me.: 1st week, 886; 2nd week, 961; 3rd week, 968.....	2,815
11. Massachusetts Institute of Technology (Freshman), Cambridge, Mass.: 1st week, 930; 2nd week, 914; 3rd week, 949.....	2,793
12. University of California, Berkeley, Calif.: 1st week, 890; 2nd week, 945; 3rd week, 941.....	2,776
13. Iowa State College, Ames, Iowa: 1st week, 905; 2nd week, 932; 3rd week, 933.....	2,770
14. University of Washington, Seattle, Wash.: 1st week, 913; 2nd week, 919; 3rd week, 918.....	2,750
15. University of Maine, Orono, Me.: 1st week, 894; 2nd week, 879; 3rd week, 904.....	2,677
16. Cornell University, Ithaca, N. Y.: 1st week, 853; 2nd week, 873; 3rd week, 852.....	2,578

(Third Match Missing.)

Syracuse University, Syracuse, N. Y.: 1st week, 976; 2nd week, 977.....	1,953
(Second and Third Match Missing.)	
	<i>First Week</i>
Ferris Institute, R. O. T. C., Big Rapids, Mich.....	610
2 clubs not reported.	

MILITARY SCHOOL CLUBS.

	<i>Club Total</i>
	<i>Third Week</i>
1. St. John's Military Academy, Delafield, Wis.: 1st week, 995; 2nd week, 994; 3rd week, 993.....	2,982
2. Culver Military Academy, Culver, Ind.: 1st week, 984; 2nd week, 989; 3rd week, 990.....	2,963
3. Tennessee Military Institute, Sweetwater, Tenn.: 1st week, 930; 2nd week, 942; 3rd week, 912.....	2,784
4. Bordentown Military Academy, Bordentown, N. J.: 1st week, 897; 2nd week, 916; 3rd week, 926.....	2,739

5. Western Military Academy, Alton, Ill.: 1st week, 835; 2nd week, 948; 3rd week, 948.....	2,731
6. Northwestern Military and Naval Academy (1st Team), Walworth, Wis.: 1st week, 880; 2nd week, 894; 3rd week, 914.....	2,688
7. Castle Heights Military Academy, Lebanon, Tenn.: 1st week, 863; 2nd week, 918; 3rd week, 878.....	2,659
8. Northwestern Military and Naval Academy (2nd Team), Walworth, Wis.: 1st week, 858; 2nd week, 866; 3rd week, 851.....	2,575
9. Morgan Park Military Academy, Morgan Park, Ill.: 1st week, 556; 2nd week, 591; 3rd week, 674.....	1,821
10. Nazareth Hall Military Academy, Nazareth, Pa.: 1st week, 487; 2nd week, 600; 3rd week, 496.....	1,583
(Third Match Missing.)	
Tabor Academy, Marion, Mass.: 1st week, 856; 2nd week, 819.....	1,675
(Second and Third Match Missing.)	
New York Military Academy, Cornwall-on-Hudson, N. Y.....	964
St. John's School (2nd Team), Manlius, N. Y.....	832
St. John's School (1st Team), Manlius, N. Y.....	803
5 clubs not reported.	

HIGH SCHOOL CLUBS.

	<i>Club Total Third Week</i>
1. Central High School, Washington, D. C.: 1st week, 987; 2nd week, 995; 3rd week, 994.....	2,976
2. Business High School, Washington, D. C.: 1st week, 978; 2nd week, 987; 3rd week, 986.....	2,951
3. McKinley Manual Training High School, Washington, D. C.: 1st week, 973; 2nd week, 982; 3rd week, 976.....	2,931
4. Jamaica High School, Jamaica, New York City: 1st week, 957; 2nd week, 967; 3rd week, 970.....	2,894
5. Davenport High School, Davenport, Iowa: 1st week, 960; 2nd week, 963; 3rd week, 934.....	2,857
6. Evanston Township High School, Evanston, Ill.: 1st week, 937; 2nd week, 957; 3rd week, 951.....	2,845
7. Western High School, Washington, D. C.: 1st week, 949; 2nd week, 955; 3rd week, 935.....	2,839
8. Lawrenceville School, Lawrenceville, N. J.: 1st week, 921; 2nd week, 945; 3rd week, 945.....	2,811
9. Springfield Tech High School, Springfield, Mass.: 1st week, 907; 2nd week, 935; 3rd week, 948.....	2,790
10. Crosby High School, Waterbury, Conn.: 1st week, 908; 2nd week, 914; 3rd week, 921.....	2,743
11. Commercial High School, Brooklyn, N. Y.: 1st week, 889; 2nd week, 908; 3rd week, 934.....	2,731
12. Watsonville Union High School, Watsonville, Calif.: 1st week, 893; 2nd week, 910; 3rd week, 919.....	2,722
13. Tempe Normal School, Tempe, Ariz.: 1st week, 901; 2nd week, 910; 3rd week, 910.....	2,721
14. Iowa City High School, Iowa City, Iowa: 1st week, 896; 2nd week, 858; 3rd week, 905.....	2,659
15. Lewis & Clark High School, Spokane, Wash.: 1st week, 838; 2nd week, 879; 3rd week, 890.....	2,607
16. Bonita Union High School, La Verne, Calif.: 1st week, 835; 2nd week, 846; 3rd week, 863.....	2,544
17. San Jose High School, San Jose, Calif.: 1st week, 795; 2nd week, 847; 3rd week, 832.....	2,474

18. Erasmus Hall High School, Brooklyn, N. Y.: 1st week, 808; 2nd week, 835; 3rd week, 827.....	2,470
19. Red Bluff Union High School, Red Bluff, Calif.: 1st week, 792; 2nd week, 742; 3rd week, 776.....	2,310
20. Pomfret School Rifle Club, Pomfret, Conn.: 1st week, 785; 2nd week, 737; 3rd week, 783.....	2,305

Third Match Missing.

	<i>Club Total Third Week</i>
Ridgewood High School Rifle Club, Ridgewood, N. J.: 1st week, 948; 2nd week, 926.....	1,874
San Bernardino High School Rifle Club, San Bernardino, Calif.: 1st week, 657; 2nd week, 714.....	1,371
Boys High School, Brooklyn, N. Y.: 1st week, 297; 2nd week, 252.....	549

Second and Third Match Missing.

	<i>First Week</i>
Eastern High School, Washington, D. C.....	921
Fillmore Union High School, Fillmore, Calif.....	741
Huntington Park Union High School, Los Angeles, Calif.....	683
Inglewood High School, Inglewood, Calif.....	382
15 clubs not reported.	

MILITARY UNITS.

(Third Match Missing.)

	<i>Club Total Third Week</i>
1. Officers Rifle Club, Camp Humphreys, Accotink, Va.: 1st week, 942; 2nd week, 951.....	1,893
2. Service Rifle Club (2nd Team), Camp Humphreys, Accotink, Va.: 1st week, 914; 2nd week, 883.....	1,797
3. Service Rifle Club (1st Team), Camp Humphreys, Accotink, Va.: 1st week, 786; 2nd week, 342.....	1,128

WANTS AND FOR SALE

Each subscriber to 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.

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OLD-TIME and modern firearms bought, sold and exchanged. Kentucky flint-lock rifles, old-time pistols, revolvers, guns, swords, powder horns, etc. Lists free. Stephen Van Rensselaer, 805 Madison Avenue, New York City.

WANTED:—A Krag rifle or carbine in good condition. State condition and price. F. A. Sternberg, 972 Lafayette Ave., Buffalo, N. Y.

WANTED:—Set of reloading tools for .38 S. and W. Special. State condition. J. F. Askew, Cincinnati Pike, Georgetown, Ky.

WANTED:—One Stevens telescope number 540.W. W. Naramore, Bridgeport Coach Lace Co., Bridgeport, Conn.

WANTED:—44 S. & W. 1908 model, blued 4 inch barrel, good condition. R. J. Mullikin, 1401 W. Lanvale Street, Baltimore, Md.

WANTED:—Telescope sight, 2½ to 3 power, post or crosshair, to fit standard Stevens or Winchester blocks. Wire or write T. K. Lee, Birmingham, Alabama.

WANTED:—Ballard Schuetzen or single shot rifle, .22 short or long rifle preferred. C. B. Adkins, 34 Hendrix St., Brooklyn, N. Y.

WANTED:—Colt .45 Automatic Pistol or Colt .38-40 New Service Revolver in first class condition. E. A. Roberts, Ryan, Cal.

WANTED:—High grade .12 gauge hammerless, 3 barreled gun. Will pay good price for right gun or will trade Daly 16 gauge .25 .35. Give detailed description. T. D. Sloan, Col. F. A., 2632 Woodley Place, Washington, D. C.

WANTED:—25-35 cal. re-loading set, and empty 25-35 cal. shells. Also Stevens 25-25 cal. empty shells in condition for re-loading. F. C. Sherman, 442 Meigs St., Rochester, N. Y.

WANTED:—Ideal reloading outfit for 30-40 Krag to king 150 grain 1906 bullets. M. M. Nussele, 422 Mission St., San Antonio, Texas.

FOR SALE:—Krag rifle and .38 single action Colt revolver. WANTED:—Springfield 22 or .30 cal. and Colt Army Special or Positive Special. Condition of barre immaterial. Elmer R. Boyer, 1704 6th Ave., Altoona, Pa.

FOR SALE:—Two Sharps Hammerless actions, Bochard Pat. complete actions, only \$15.00 each. Wm. Kirk Gunsmith, Box 771, Rawlins, Wyo.

FOR SALE:—1200 rounds ammunition, Remington, .30 calibre, model 1906, \$40.00. C. E. Murphy, 717 Tenth St., Washington, D. C.

FOR SALE:—Pair of ten inch A. A. Cutter moccasin boots, size 7½, width D; in perfect condition, never been worn. Cost \$21.15, will sell for \$19. Leonard De Claire Route 2, Royal Oak, Mich.

FOR SALE:—Two .32-40 Ballard rifles, one \$20. and one \$30. One .38-55 cal. Ballard rifle, \$25. One .40-70 cal. Ballard rifle, \$25. All have good actions, with double set triggers. One .28-30 cal. Stevens-Pope, muzzle loading, target rifle with 3 power Stevens scope, and loading outfit. New Condition, \$60. H. C. Morse, Prairie du Sac, Wis., P. O. Box 29.

FOR SALE:—Set of German silver drafting tools, nine pieces, Cost \$20.00 new several years ago, will sell for \$15.00. Also International Correspondence School's Reference Library of Electrical Engineer Course, five volumes, \$20.00. H. S. Halvorsen, Wesby, Wis.

FOR SALE:—Ballard rifle, finely engraved, small trigger, beautiful walnut burl stock, special .22 cal. barrel, new, made by the Marlin Co. and chambered for short cartridge by A.O. Neidner. This gun has never been used except to target it. It is equipped with Vernier rear and aperture front sight. \$35.00. Jerome Clark, Major, Q.M.C., U.S.A., Ft. Leavenworth, Kans.

FOR SALE:—Ballard .38 cal. barrel slightly pitted, Scheutzen stock with cheekpiece, no sights, action in perfect condition, aside from the blueing being worn off, \$15. Sharps Borchardt .45 cal., hammerless, perfect condition. A rare rifle. Best cash offer or exchange for Springfield. 1903, 06' Government cartridge. J. Leroy Baker, 208 North Fourth St., Mechanicsville, N. Y.

EXCHANGE:—32 Savage Automatic Pistol, condition new, with 100 cartridges, to exchange for pair high-grade field glasses with case. Advise regarding power and make. S. T. B., care Arms and the Man, 1108 Woodward Bldg., Washington, D. C.

EXCHANGE:—Will trade .32 Winchester Automatic fine condition, peep sights, globe front, for .22 Colt's Auto. 28 ga. Double Hammerless .45 Colt's Auto., .22 Savage N.R.A. Must be fine condition. Gene Drouhard, Danville, Kans.

WANTED:—Two new Krag rifles as issued. Write best price. Rifles wanted immediately. H. D. Dodge, care of Gray Tractor Co., Inc., Minneapolis, Minn.

FOR SALE:—One Sharps hammerless action without barrel, \$15.00. Also fine Circasian walnut stock, with cheek rest, to fit action, \$5.00. Leonard J. Miller, 102 S. Oxford Street, Brooklyn, N. Y.

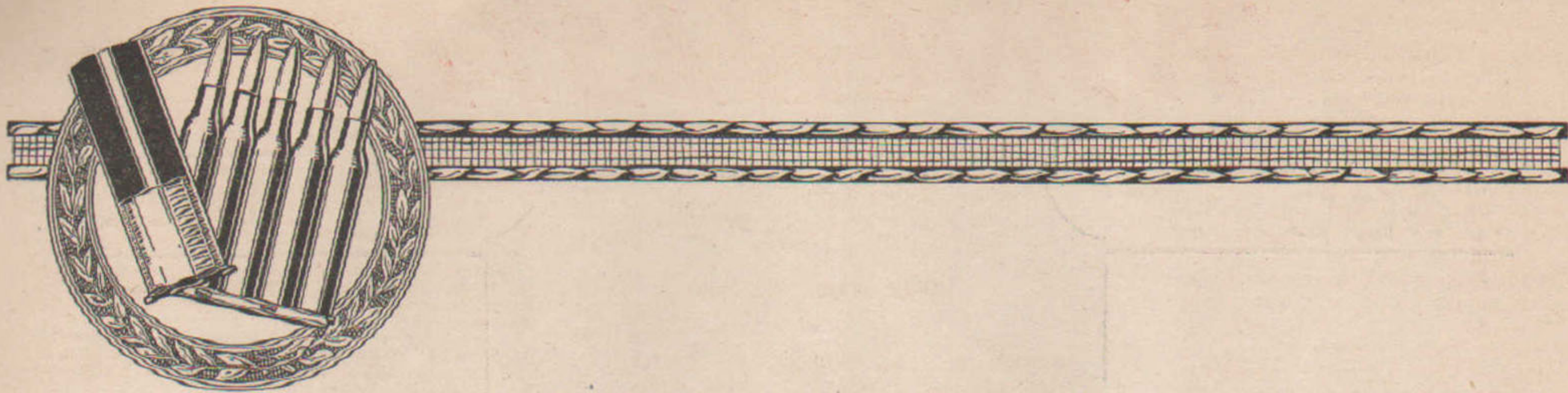
FOR SALE:—One Winchester musket, calibre .22 in first class condition, \$30.00. H. C. Espey, 51 Adams Street, N. W., Washington, D. C.

FOR SALE:—One Winchester .22 L.R. musket peep rear, aperture front sights, also fitted with A-5 Winchester cross hair scope, with No. 2 mounts all in good condition, \$50.00 takes it. J. A. Wade, Newcastle, Wyoming.

WANTED:—22 Cal. rifle suitable for prone shooting. Prefer a remodeled Springfield, but would consider any high class make. R. L. Sterling, 123 Franklin Street, Buffalo, N. Y.

GUNSTOCKS and restocking; military rifles fitted with sporting stocks a specialty. C. T. Harner, 117 N. Isabella St., Springfield, Ohio.

FOR SALE:—22 calibre long rifle, N.R.A. Model; Remington; .22 Winchester Automatic with No. 2-A Lyman rear sight; Stevens .22 long rifle Armory model, aperture front and windgauge rear sights, Nos. 210 and 104. Each new condition inside and out. Price \$20.00. C. B. Adkins, 34 Hendrix Street, Brooklyn, N. Y.



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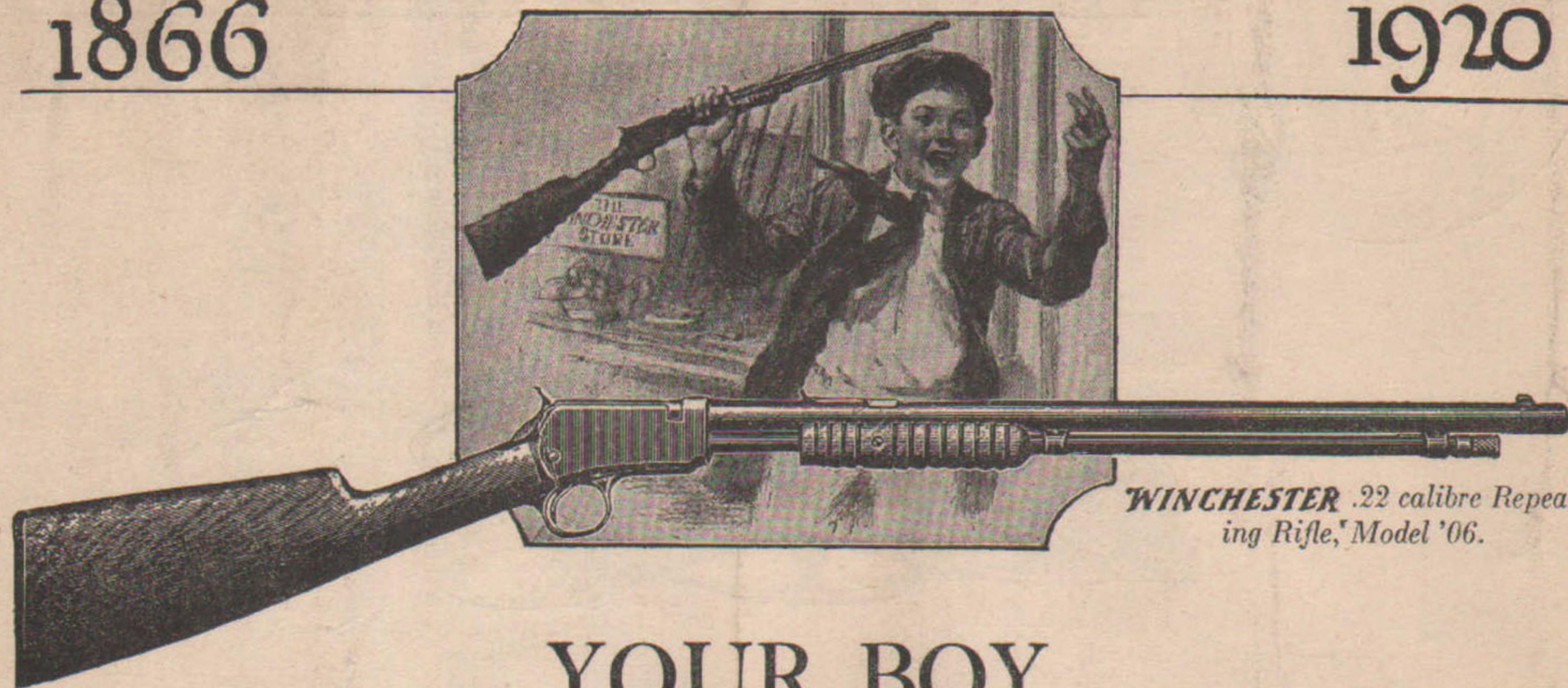
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WINCHESTER .22 calibre Repeating Rifle, Model '06.

YOUR BOY SHOULD BE TAUGHT TO SHOOT

HAS your boy's voice begun to change? Has he commenced wearing suspenders? Are his first pair of long trousers just around the corner, so to speak? Then his yearning for a gun *demands your attention.*

He will get hold of one sooner or later—it is his natural instinct. He needs your help now. Earn his lifelong gratitude and add to your own pleasure and self-esteem by giving him *the proper start.*

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He must be *taught.*

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Go to your local hardware or sporting goods store today and ask to be shown the Winchester .22 calibre Rifles for boys. The Model 06 repeater, one of which appears in the above illustration, is the most popular boy's rifle. But if you prefer one of the single-shot models, you can depend upon its being equally accurate. The steel in all Winchester barrels is of uniform quality and all are bored alike.

Buy the boy a .22 calibre Winchester Rifle—or an official W.J.R.C. Range Kit, containing everything needed, including ammunition. Get out on the range with him, improve your acquaintance, and brush up your own shooting.

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