

# THE AMERICAN RIFLEMAN'S MAGAZINE

## ARMS AND THE MAN



VOL. LXX, No. 3

OCTOBER 15, 1922

## Bulk Rifle Powders

THE term "bulk" powder came into being because powders of this type were intended to be measured bulk for bulk with black powder. To develop a given velocity and pressure, a certain charge of black powder was required. This charge occupied a certain volume or "bulk" in the shell. The original smokeless powders were designed to occupy the same "bulk" to develop equal velocities and pressures. In other words, the smokeless powder *measured* bulk for bulk with black although the actual weight in grains was quite different.

The term "bulk" powder is a misnomer in some cases now, if the above definition is accepted. Some bulk powders require much less space in the shell to develop a given velocity than does black powder. The characteristic which distinguishes any bulk powder is its irregular porous grains of gray, rose or light color.

The true bulk powders were designed for the old black powder cartridges with straight taper shells and heavy lead bullets. The more

modern bulk powders are very fast burning and were designed for reduced loads in modern bottle-necked shells using either alloy or metal-cased bullets. These powders burn satisfactorily at pressures which would leave many unburned grains if an attempt were made to use even the fastest dense powder.

Ease of ignition is another feature of these powders which is important when reduced loads are being used. The soft grains are readily ignited and the powder takes up more space in the shell, consequently lying closer to the primer than would the exceptionally small charge of dense powder. The same very fast burning qualities which make these powders ideal for reduced loads or for straight taper shells with lead bullets render them unfit

for high velocity loads with metalcased bullets.

Dupont No. 1 Rifle Smokeless and Schuetzen are true bulk for bulk brands. Du Pont Gallery Rifle Powder No. 75 and Du Pont Sporting Rifle Powder No. 80 are powders of the modern bulk type.



E. I. DU PONT DE NEMOURS & CO., Inc.

Sporting Powder Division

WILMINGTON, DELAWARE

*"The characteristics and adaptability of powders are subjects for constant study and experimentation by manufacturers of ammunition who are scientifically and me-*

*chanically equipped to produce cartridges of the greatest uniformity and dependability. We recommend factory loaded ammunition."*



# 64 Per Cent at Camp Perry

## 82 Per Cent at Sea Girt

### Won with Ammunition

The most important rifle competitions of the year are the National Matches held at Camp Perry and the Sea Girt Interstate Tournament—both recently concluded.

At the National Matches the US .22 N. R. A. cartridge was used by 64 per cent of the Small-Bore prize winners. At Sea Girt *all Small-Bore matches but one* and 82 per cent of all Small-Bore prizes were won with these accurate, uniform and clean-shooting cartridges.

On the International Small Bore Team shooting against England for the Dewar Trophy, 50 per cent of the American Team shot US .22 N. R. A.'s.

This impressive record of victories by US .22 N. R. A. users proves superiority in ammunition as well as in marksmanship.

The following is a list of prize winning positions won with US:

#### At the National Matches

- The Grand Aggregate  
1, 3, 4, 7, 8, 9, 10
- Small Bore Wimbledon Match  
1, 2, 3, 4, 6, 7, 8, 10
- 100 Yard Sweepstakes  
1, 5, 6, 7, 8, 9, 11, 12, 13, 14
- 50 Yard Sweepstakes  
4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 19, 20  
4th and 5th places tied high score with a possible  
17th, 19th and 20th tied for 5th place
- Off Hand Sweepstakes  
1, 2, 4, 6
- Junior Re-Entry Match  
1, 2
- Small Bore Unknown Score Match  
1, 2, 3, 4, 5
- Camp Perry Shot Gun Championship  
1, 2, 3, 4, 5, 6
- All Around Championship  
1, 2, 3, 4, 5  
US .22 N. R. A. and the Black Shells used.
- Long Range Re-Entry Match  
2, 3, 5, 6, 8, 9, 10
- Small Bore Marine Corps Match  
2, 4, 7, 8, 9
- Small Bore National Individual  
2, 3, 6, 7, 9, 10, 11
- Small Bore Swiss Match  
3rd

#### At Sea Girt

- Individual Small-Bore Dryden  
1, 2, 3, 4, 5
- Sea Girt Small Bore Championship  
1, 2, 3
- Small Bore Long Range Match  
1, 2, 3, 4, 5
- N. R. A. Small Bore Match  
1, 2, 4, 5
- Small Bore Short Range Match  
1, 2, 3, 5
- N. R. A. Team Championship  
1, 2, 3, 4  
Half of winning team used US
- Long Range Re-Entry Match  
1, 3, 5  
Winner of this match made 47 bulls in succession  
—a world's record
- Mid-Range Re-Entry Match  
1, 2, 3, 5, 6  
5th and 6th man tied for 4th place
- Short Range Re-Entry Match  
1, 2, 3
- Eisner 100 Yard Match  
2, 3, 4, 5

 **AMMUNITION**  
Metallic Cartridges—The Black Shells



# ARMS AND



# THE MAN

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## Marines Snatch Victory From Defeat Team Match Provides Dramatic Finish To Camp Perry Meeting

By KENDRICK SCOFIELD

WINNING a brilliant and signal triumph by tactics strangely reminiscent of those employed by the humble tortoise of fabled fame in his race with the speedy hare, the United States Marine Corps has again taken the National Team Match.

Through the first three, and the better part of the fourth, stages of the big competition, the Leathernecks were hopelessly outclassed. Only their unswerving persistence and their unshakable morale, while a strong opponent forged far ahead of them, kept the Sea-Soldiers' advance from Off-hand shooting to the Long Range from being drab, uninteresting and colorless. But their plodding progress, became splendidly dramatic with the smash of victory in the final, tide-turning moment.

Yet neither luck nor fluke played any part in transforming an almost commonplace performance into a spectacular achievement. Those who watched the Marines from their initial 1922 appearance in competition at Wakefield, and followed their shooting at Sea Girt and through the N. R. A. matches at Camp Perry, know that the team captain, Maj. R. S. Keyser, the team coach, Capt. A. B. Hale, and all members of the squad were of one purpose and dominated by a single idea—to win the National Team Match. To that end, every effort was directed; no other consideration was tenable. And in adopting a training policy which they believed would insure victory, so far as victory could be insured, the captain and coach laid down as a cardinal principle of their program that team members should use only ammunition of Frankford Arsenal manufacture—a precaution which was to prove most valuable, and was probably decisive in winning the team event for the Leathernecks. Accordingly when other teams were later experiencing difficulty in changing from gilt-edge commercial products to the accurate ball cartridges of the government arsenal, the Marines, knowing intimately the ammunition they were shooting obtained splendid results. The Marine Corps policy this year of "all for the team match, and let all other competitions be won or lost as chance may decide," and the fact that every man gave his undivided effort to the problem of putting across a winning team, is undoubtedly responsible for the outcome of the competition.

But the dramatic aspect of the Marine victory should not be permitted to overshadow the in-many-ways-remarkable work done by the Coast Artillery. Maj. Fulton's team was one of the most formidable and well-trained organizations that has come to the front in many years, and considering the fact that this branch of the service is relatively new to the National Match game, the

### HOW THEY FINISHED

#### Class A

U. S. Marine Corps.....	2,848
<i>The National Trophy</i>	
U. S. Infantry.....	2,838
Coast Artillery.....	2,824
U. S. Navy.....	2,814
Cavalry.....	2,813
Massachusetts National Guard.....	2,800
<i>The Hilton Trophy</i>	
Illinois Civilian.....	2,762
<i>The Soldier of Marathon</i>	
New York National Guard.....	2,745
Pennsylvania National Guard.....	2,738
Ninth Corps Area, C. M. T. C.....	2,730

#### Class B

Eighth Corps Area, C. M. T. C.....	2,728
Washington National Guard.....	2,728
District of Columbia National Guard.....	2,725
California National Guard.....	2,719
Iowa National Guard.....	2,718
Indiana National Guard.....	2,718
Oregon National Guard.....	2,711
New Mexico National Guard.....	2,700
Texas National Guard.....	2,700
Eleventh Infantry.....	2,699

#### Class C

Florida National Guard.....	2,683
Seventh Corps Area, C. M. T. C.....	2,680
Kentucky National Guard.....	2,671
Minnesota National Guard.....	2,671
Second Corps Area, C. M. T. C.....	2,669
Fifth Corps Area, C. M. T. C.....	2,665
Ohio National Guard.....	2,662
Fourth Corps Area, C. M. T. C.....	2,662
Vermont National Guard.....	2,654
Oklahoma National Guard.....	2,637

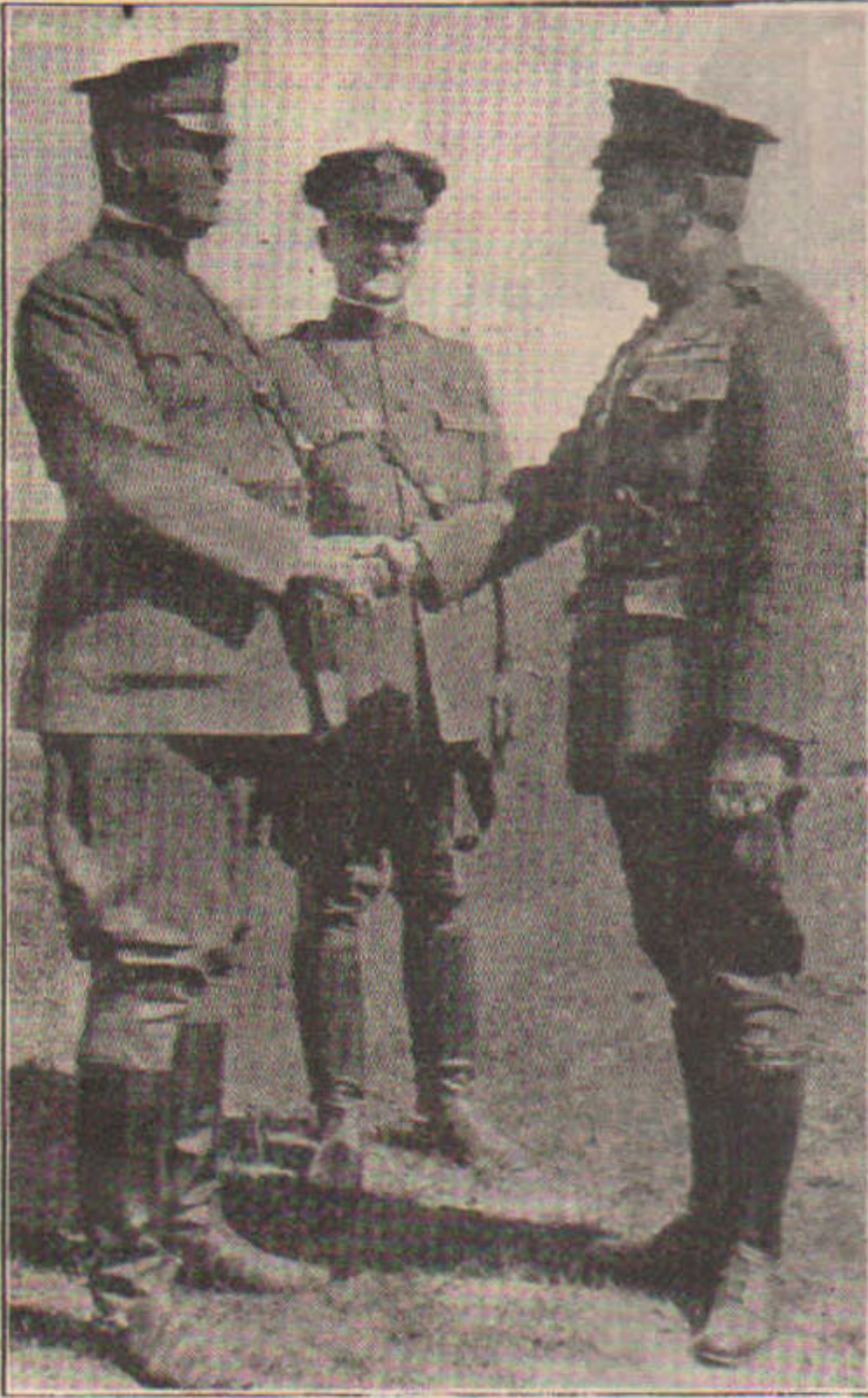
fight that the Coast Artillery Team made for the team match, constituted no mean achievement.

The National Matches of 1922 may in many ways be regarded as the most successful of their long line. For the first time since 1916, the competitions were accompanied by wonderful weather, rainless, cloudiness, clear yet presenting correction problems which placed a proper premium upon high scores.

The result of many months of prepara-



tion the rifles supplied for this year's matches proved if anything superior to any that have been previously produced at Springfield, and the ammunition may undoubtedly be regarded as an unprecedented success to the credit of Frankford Arsenal. Never before has government ammunition



Colonel Mumma (left) and Major General Farnsworth (center) Greet Major General Lejeune (right)

given so little chance for alibis, or produced so few—in fact practically no—hangfires and misfires. Rifles were easily cleaned, at Camp Perry this year, and metal fouling conspicuous by its absence. It is to be expected—in fact it is practically certain, that the ammunition tests in the spring of 1923 will see Frankford Arsenal on hand with some "new and improved" type of service rifle match cartridge, but the product of 1922 has left very little room for improvement unless some new propellant better than existing pyro and nitro-glycerin powders is developed before that time.

**A**FTER the chill unfriendly days of fish-tail and veering wind which concluded the N. R. A. Match period, Wednesday September 27 dawned bright and balmy with just a hint of Indian Summer haze in the air and the National Team Match impending.

With all other matches gone along into rifle history, the interest of half a hundred teams was focused on the big event and the half-thousand marksman who were to participate squared away in earnest for what was to prove a momentous and absorbing struggle for supremacy, among the service teams.

Before the teams went into action, there

was little upon which a dopester, seeking to predict the outcome, could base a prophecy. There were at least three uncommonly strong contenders in the field—the Infantry, Coast Artillery and the Marine Corps—none of which had demonstrated its full potential strength in the matches which had gone before, and there was always the possibility of a dark horse upsetting the ambitions of the probable leaders.

When the teams went to the firing line, and through practically all of the first day, there was little or no wind; not enough to prove much of a handicap except for points lost on windage during the offhand shooting and only sufficient to call for half a point at 600 yards.

If there was any choice among the dopessters, the Coast Artillery Team was perhaps the favorite, and this was justified at the start when they took the lead in off-shoulder shooting, scoring 452 points and topping the service teams with the Cavalry following on 449 points, the Navy on 447, the Infantry on 445 and the Marines off to a comparatively bad start with 444.

At 200-yard Rapid-Fire, the Coast Artillery lost only 1 point, advancing its lead to 951 points. The Infantry lost more points than was good for it, with a consequent fall into fifth place with 933 points, permitting the Marines to move up into fourth place on 940 points and the Navy to third place on 941 points, the Cavalry retaining second place with 944 points.

Although three of the service teams put on more points at 300 yard rapid fire than did the Artillerymen, they were unable to displace the leader, the aggregates being Coast Artillery 1441, Marines 1437, Navy 1435, Cavalry 1433 and Infantry 1430.

At 600 yards the team began shaking down into form for the long range, but again the Artillerymen ran away with the field, restoring again the lead which they held over the other service entrants by a stage score of 483 points, five higher than the Marines were able to roll up, and comfortably in advance of the others who scored: Infantry 480, Cavalry 476 and Navy 472.

While the big teams were hammering away in competition, a race which was quite close at the start got under way between the Massachusetts and the New York Guardsmen, and between the Illinois Civilians and the citizen teams from the Ninth Corps Area and the Eighth Corps Area Training Camps.

Among the guardsmen, the New Yorkers took the lead in the offhand stage, with 438 points against the Massachusetts total of 432 with the Washington National Guard third on 426 points. New York maintained and increased its lead at 200 yard rapid fire, to a total of 925 points against 916 for Massachusetts, with the Washington National Guard third on 912 points.

At 300 yards, the New Yorkers met their Waterloo, falling off for a stage total of

only 461 points, while Massachusetts took advantage of the opportunity to add 489 points to its score and the Washington National Guard added 477 points so that the Guard teams went to the 600 yard line with Massachusetts leading on 1405, Washington second on 1389 and New York third on 1386. At 600 yards there was no change in the standing of the three teams leading in this class except that Massachusetts bettered its position, to an aggregate of 1878, Washington totalling 1855 and New York 1852, and Indiana came up momentarily into the race with 1870 points.

Among the civilian teams, through the offhand and 200 yard rapid fire stages, the Eighth Corps Area headed its rivals, going to the 300 yard rapid fire range with 921 points against 905 points for the Ninth Corps Area and 903 points for the Illinois Civilians. At 300 yards, the Illinois boys, however got into their stride, and nailed up a score of 491 for the rest to follow, but the going was too swift, and this stage finished with the Illinois team leading on 1394 points, with the Eighth Corps Area second on 1392 and the Ninth Corps Area third on 1378.

Hanging up a better score than either of the other two contenders at 600 yards, put the Illinois team comfortably in the clear, while the Ninth Corps Area displaced the



Private Coulter who fired over the Team Match Course with a loss of only 4 points.

Eighth, the aggregates at this point being: Illinois 1861, Ninth Corps Area 1843 and Eighth Corps Area 1837.

And so the teams fired through the long bright day, taking at the shorter ranges what points they could against the morrow, and that night the big blackboard opposite camp headquarters showed these teams in the first thirty places comprising the A, B and C classes in the competition:

Class A. Coast Artillery, 1924; Marine





Bottom Row, left to right: Pvt. Wm. F. Pulver, Capt. Wm. W. Ashurst, Capt. A. B. Hale (coach), Major Ralph S. Keyser (team captain), 1st Sgt. Nolan Tillman, Pvt. James V. Alexander. Top row: Pvt. Raymond O. Coulter, Cpl. Geo. R. Lee, Cpl. Spencer L. Stephenson, Pvt. Grady L. Sharp, Pvt. E. L. Blade. Side (left) Sgt. Edgar J. Doyle, (right) Sgt. Albert F. Frederick.

Corps, 1915; Infantry, 1910; Cavalry Engineers, 1909; Navy, 1907; Massachusetts N. G., 1878; Indiana National Guard, 1870; Illinois Civilian, 1861; Washington N. G., 1855; New York National Guard, 1852.

Class B. Texas N. G., 1851; Pennsylvania N. G., 1846; Ninth Corps Area, 1843; New Mexico N. G., 1839; Kentucky N. G., 1837; Eighth Corps Area, 1837; Iowa N. G., 1837; Fifth Corps Area, 1834; Oregon N. G., 1833; District of Columbia N. G., 1833.

Class C. Florida N. G., 1833; Minnesota N. G., 1824; 11th Infantry, 1821; California N. G., 1826; Vermont N. G., 1820; Seventh Corps Area, 1816; New Jersey N. G., 1812; Fourth Corps Area, 1812; Idaho N. G., 1806; Michigan N. G., 1805.

**A** WINDLESS, hazy morning, chill until the climbing sun drove away the light mist, and replaced it with shimmering mirage. On the fifth peg from the extreme right, the Infantry; in the center of the line the Marines and on a few targets to the left of them, the Coast Artillery. A bugle blast which marked the beginning of the end. The desultory rattle of sighting shots, while team coaches peered through their powerful scopes to mark the point of impact. The big day was on.

The service teams, firing more slowly generally fell behind the rest of the field, and the winners in the National Guard and Civilian classes were known long before the outcome of the struggle between the headliners was in any way certain.

The Massachusetts Guardsmen, putting up the excellent score of 922 at the long range clinched their claim on honors in their own class with a grand aggregate of 2800 while the New Yorkers moved up into second place with the addition of 893 points to a total of 2745, and the Pennsylvanians made a good try with 892 points which gave

them third place on 2738, putting Washington into fourth place with a total of 2728 and the District of Columbia into fifth place with a total of 2725, Indiana having dropped out of the running.

The winner in the Civilian class was settled when the Illinois team scored 901 points, to an aggregate of 2762, leaving the Ninth Corps Area in second place on an aggregate of 2730 and the Eighth Corps Area in third place on 2728.

When the 1000-yard stage of the big team match began, it was difficult to find very many shooters on the ground who were not of the opinion that the contest had in all likelihood been won by the Coast Artillery in the early stages and the performance of the first two pairs did a great deal to strengthen this belief.

When the first pairs lay down at least two of the service teams—the Coast Artillery and the Infantry experienced difficulty in getting their elevations. It is significant that these teams, during the N. R. A. matches had used a very accurate commercial ammunition and switched to Frankfords gilt-edge product only on the practice days preceding the start of the National Matches. On these days, it was found that in the chill of the morning the first few shots from cold barrels were very different in elevations from those fired later when the barrel, warmed by a few shots, steadied down.

If there is anything in this peculiarity, the Marines who fired nothing but Frankford ammunition through their rifles since Wakefield, keeping their eyes on the ball and their ambitions centered on winning the team match to the absolute exclusion of all other considerations, took full advantage of it, keeping their rifles day and night in a tent where an oil stove maintained a high temperature and no matter how cold

the morning was or how chill the night had been, they invariably went on the line with warm barrels,

Shortly after the firing bugle sounded the sun climbing higher and higher, produced a peculiar, and in this instance a difficult, condition. To the uninitiated the conditions seemed ideal, except for a rather hard light. There was indication of very little wind at the butts, but a mirage, clearly discernible through the two-score spotting scopes trained upon it, boiled up furiously and the old dopers soon discovered that it was not easy to read. Later, when shots which should have connected so far as elevation was concerned, were found slipping out through the top of the bull, it was discovered that the mirage with each boil-up was optically "wiping out" instead of merely distorting the lower contour of the black, causing shooters to hold so far into the black as to go out at the top.

Even when this peculiarity was discovered and the high shots accounted for, so unexpectedly did the mirage boil and subside that shots continued to be lost through its agency.

The first pairs among the service teams, feeling out the conditions, did fairly well in connecting with the target. Blade and Sharp of the Marines, found their elevations standing up well, the former scoring 97 and his partner 93, a total of 190, which was high among the first pairs.

Doane scoring 90 and Stephens 85 for the Infantry, and Wurtzberger, scoring 90 and Campbell 94 for the Coast Artillery felt the effect of cold barrels in their total of 184, while the Cavalry pair got 167 points and the Navy 181 points.

These 20 shots per team did not destroy the lead of the Coast Artillery although it reduced it from 9 to 3 points and also shift-

(Continued on page 16)



# Small-bore Matches Attract Many Shooters

By KENDRICK SCOFIELD

**H**IS heart set upon winning one of the classic cups of the N. R. A. service rifle program, a civilian shooter with years of experience in handling the Springfield behind him, but with little or no recent training, came to the 1922 National Matches. His time in camp was limited, the big match pending, and he could see little opportunity to get in on the service rifle ranges, the practice which would put him back in form.

But there was plenty of time and opportunity for him to practice on the small-bore range, up under the apple trees at Perry, and there he made his headquarters, firing ticket after ticket in the re-entry competitions, and becoming a contender in all of the small-bore long range events, forcing his muscles to adapt themselves to his old shooting form.

With practically no training but this, that man—Loren M. Felt of the Illinois Civilians—went to the service range and won the Leech Cup by the remarkable score of 105 with 10 V's, outranking on his 1,000 yard score one of the veteran riflemen of the Marine Corps.

It would be hard to find a more cogent and apparent manifestation of the value which small-bore rifle shooting can be to the service shot, or of the great shooting ability that may be developed through the medium of the .22 calibre match rifle.

That practice on the small-bore range at Camp Perry this year should have preceded, and been largely responsible for, the outcome of one of the classics of service rifle shooting need not be regarded as a mere coincidence, for the program put on this year met with unqualified success.

As a result of the experience in these matches, coupled with precedent established in the N. R. A. Small Bore National Matches of the three years preceding, important steps have been taken by the National Rifle Association for the betterment of the small-bore game.

The changes which have been tentatively made in the small-bore program to become effective during the matches of 1923 were accomplished after mature deliberation by the small-bore committee of the N. R. A. Matches which have become obsolete through lack of attractiveness have been dropped. The designation of many of the old re-entry events have been changed and several new events have been added to meet the trend of popular opinion among small-bore shooters.

Aside from revising the small-bore program, several highly important decisions were reached, including the abandonment of the tyro designation as formerly applied in the .22 calibre matches; also to place no restrictions on the winning of merchandise prizes.

Next year's small-bore matches, according to present plans, will include these re-entry competitions, limited to 10 targets, 5 to count: Fifty-yard sweepstakes to be known as The Peters' Cartridge Co. Match; One hundred-yard sweepstakes to be known as the United States Cartridge Co. Match; Two hundred-yard re-entry to be known as the Remington Arms Co. Match; and The Winchester Arms Co. Match, a miss-and-out event at 200 yards. In addition there will be these squaddled competitions many of which, it is planned, will be fired on the military range: The Du Pont Powder Co. Match at 150 yards; the Western Cartridge Co. Match at 175 yards; The Winder Long Range Match at 150, 175 and 200 yards; The N. R. A. Small Bore Championship at 50, 100 and 200 yards; The Small Bore Marine Corps Match, the Small Bore Wimbledon and the Grand Aggregate Match, taking the total of scores in the Marine Corps, the Wimbledon and the Small Bore Championship.

These team matches have been added to the program:

The Hercules Powder Co. Match, teams of 2 men over the Dewar course.

East and West Championship, 2 teams of 8 men each, representing the sections of the country as divided by the Mississippi River, firing the Winder Match course.

Getting back to the small-bore matches of 1922, when the fact is taken into consideration that it was no easier for small-bore shooters to attend at government expense than it was for service shots, and that most of those who came did so at personal expense, the competitions were well attended, there being approximately 100 shooters present and competing either in the regular matches or the Dewar tryout.

From the first it was evident that Rapid-fire, Timed-fire and Off-hand competitions were not attracting the shooters, the bulk of the entries being recorded in the slow fire, prone events. This may be attributed to the fact that the small-bore shot apparently desires the position which will give him the full value of his ability to hold hard. This also has been the experience of the British in drawing up their small-bore programs, a fact which gives the American small-bore game no grounds for paralleling the English system, but simply adds weight to facts which seem to be obvious from actual experience here. It was largely for this reason that certain competitions of this character were dropped by the Small Bore Committee.

One of the most apparent circumstances in connection with this year's small-bore matches was that the shooters who participated were in almost every instance better informed as to the rules of the game, and better equipped to play it, than ever

before. The essentials of the small-bore shooting bag have by this time become pretty well established, and practically every shooter has provided himself with them.

The new .22 calibre Springfield was present at the matches in sufficient numbers and was used in enough competitions side by side with special match rifles to permit, for the first time, a comparison between them and other small-bore weapons. The new small-bore Springfield was received with the greatest of enthusiasm and in many of the competitions shot at the top of the list. Perhaps the most important competition in which the Springfield figured was the tryout for the Dewar Match and later in the match proper. Approximately 15 men of the 75 who tried out for the team, or 20 per cent, used Springfields, and 6 of these 15 made the team either as principals or alternates.

During the shooting it was observed that more men used the blade sight more extensively than the aperture, this in spite of the fact that when the shooter is in good form the aperture produces remarkable results. In connection with the sighting question, which has always been and will probably continue to be an open one, the shooters this year seemed to favor "any sight" competitions.

This year's small-bore matches tend to the conclusion that the system of range operation as exemplified at Camp Perry can not, in its essentials, be improved. Through four successive years the system inaugurated at Caldwell has been subjected to minor modifications until today it is practically "fool proof." It is likely, however, that some further modifications will be necessitated by the growing popularity of small-bore long-range shooting. This form of sport apparently appeals far more to the American shooter than to his British cousin, and if this continues to prove the case, a more elaborate and extensive equipment for the 150, 175 and 200 yard ranges will be necessitated. This circumstance has resulted in the suggestion that next year at least one day, to be known as Small Bore Day, will be set aside on the big range for the .22 calibre clan. On this day it is hoped that the range officials will be able to release at least the 200 yard range for such squaddled competitions as can not readily be held on the present small-bore range, and which may be staged on the main firing line without conflicting with the service rifle program.

The successful staging of small-bore programs at Sea Girt on the main range has demonstrated that this is entirely practicable. As to the absence of a covered firing point, it is the opinion of many of the prime movers in the small-bore game, and their opinion has the weight of experience, that the covered firing point is of no especial value in American small-bore shooting. The use of such shooting sheds by the British is directly traceable to the



climate of the British Isles where rain is more frequently falling than not during the shooting season, and where the sheds are designed to be and actually are shelters from the weather.

Discussion of the small bore from the viewpoint of military value was frequently heard at Camp Perry this year, with the advent of the new Springfield. Many of the officers and men attending the matches purchased these rifles and used them in the small-bore matches. In fact, the advent of the small-bore military shot, and the interest which the army is taking in the new rifle as a medium for training men, may sooner or later result in recognizing the desires of the army man and the strictly match shot, and in classifying them, according to their equipment in the principal matches in much the same manner as the shooters in the Wimbledon are now classified.

There are even now among the shooters men who believe that the small-bore game should closely parallel the lines laid down in rifle marksmanship, and who regard those who follow the "any rifle, any sight" game as concerning themselves with more or less artificial equipment and conditions.

Admittedly, the small-bore shooter fits himself to achieve his sole object—the placing of as many bullets as possible in the bull's-eye, and thereby plays a game which demands the hardest holding of any form of shooting, but this fact does not detract from the value of other forms of small-bore shooting as an important adjunct to the training of military rifle shots.

The fact that army men are being attracted to the .22 calibre game is good and sufficient evidence that the sport is growing healthfully, and there will be found in the programs of the future plenty of matches to hold the interest of the military and the civilian shot as well.

The general scores in the small-bore matches at Camp Perry were creditable. Small-bore scores, as every experienced shooter knows, are particularly and peculiarly susceptible to weather conditions, and those prevailing this year on the National Match Small Bore Range were even more difficult than those of previous years. The grand-daddy Fishtail, which harried the shooters on the service rifle range, turned loose several of his grandchildren on the small-bore, and some peculiar combinations of wind, light and mirage were evident through the .22 calibre events. At times, even with the best equipment, it was very difficult—in fact, almost impossible—to spot shot holes in the black even with the best optical equipment. This condition also exercised a bad effect upon the vision of the shooters with resultant eye strain.

NOTE: Complete scores in the Small-Bore events will be found on page 22.

## Winning the 1922 Dewar

By FRANK J. KAHRS, Team Coach



They Hold the Dewar Cup for Another Year

THE 1922 International Small-Bore Competition for the Sir Thomas Dewar Challenge Trophy verified predictions made early in the year, to the effect that the competition would be a real test of marksmanship between the contenders, Great Britain and the United States. After the match had passed into history, the American riflemen found that Australia had competed, scoring 7,500, and that Canada had also entered but retired from the competition.

Smarting under the sting of last year's defeat to the tune of 133 points, when the American team, under Captain Crossman and Team Coach Captain Wotkyns, put over the high-water mark of 7,735 points for the match, the British made early preparations to insure the return of the trophy to its original home, and they might have succeeded, too, had not equally strenuous measures been taken to keep the trophy on permanent exhibition in Washington.

Each year this match is staged during the N. R. A. and National Rifle competitions, for in this manner is brought together a representative gathering of American marksmen, coming, as they do, from all sections of the country. In the past there has been no great difficulty recruiting a strong team because there always was the civilian contingent to draw from, but this year Congress willed it that there should be no civilians, so the team material had to be drawn from the Services and the National Guard and such civilians who came to the Camp Perry matches of their own accord. Furthermore, it was necessary to depart from the rules for the selection of the team as laid down in the N. R. A. program for the very good and sufficient reason that had the rules been followed there would have been no team. Heretofore the patronage at the small-bore range during the an-

nual matches has been mostly, if not wholly, from the civilian representation.

With the appointment of Colonel Charles E. Stodter, Cavalry, U. S. A., as team captain, just two weeks before the actual shooting of the match took place, active preparations for the selection of the team were gotten under way. An open try-out, scheduled for Sunday, September 17, was bulletined and a sort of tent-to-tent canvass made to insure that none of our good but modest shots would try to hide their light under a bushel measure. In this manner some very good material was brought out and developed. In fact, the records show that a total of seventy-four big-bore and small-bore men started the morning of the try-out.

It was a strenuous try-out, too, for each candidate had to shoot over the course twice, which meant forty shots at 50 yards and forty shots at 100 yards, for a total possible score of 800. Some of them fell by the wayside, but retired in good order, while the best of them put up a sturdy resistance to the young gale that blew most of the day. A few of the last to shoot finished at dusk with the four-inch black at a hundred yards barely discernible. Yet, withal, the high man for the day was a mere strpling from the National Capital named J. W. Crockett, who dropped but twenty-two points over the course for a total of 778, or two good scores of 389 for the day. Close behind him came that hardy nutmegger and sterling small-borer, Henry Gussman, from New Haven, two points removed, and closely bunched were several who shot on last year's team.

Attached below is a complete record of the day's firing and will prove interesting from an analytical standpoint, for it shows that some of the old-timers were pushed back and unceremoniously trampled upon in the mad scramble for a place of honor among



the high twenty-five. It is rather interesting to observe here that Captain George R. Gawehn, of the Indiana National Guard, barely got a "toe-holt" in twenty-fifth place. Remember this, because later on in the story you will see the blonde Captain sittin' pretty.

Anyone interested in statistics may cull some good dope from the figures, but chiefly the fact that by totaling the score of the twenty high men a grand total of 15,358 will be obtained, which, divided by two, gives two team totals of 7,679. Taking into consideration the fact that it was a day for anything but good scores and the further fact that no coaching was allowed, the quality of the shooting may be better imagined than described. Moreover, it indicated that a representative Small-Bore Team was in the making.

During the week following the twenty-five high men named above fired three times at least over the course, their scores not being for record, but more for the practice that would harden them for the grueling test to come the following Sunday.

On Saturday, however, the day before the match, the entire team fired once over the course for record under match conditions for the purpose of determining the twenty men who would constitute the team to actually fire in the match, no coaching, however, being permitted.

It was a beautiful day for such a trial, and exactly right for the determination of those with holding ability for that is what counts heavily in a team match where the heavy work devolves on the coaches. There was no wind, the light was good and these beautiful conditions continued throughout the entire shooting. How those small-borers did bore that elusive bull! It was a pretty competition and presaged much for the morrow, for was not the total score for the high twenty men within three points of last year's winning total of 7,735?

It was a neat bit of shooting that was

done by T. G. Lively, of Chicago, who topped the list with a total of 395, which included a possible at 100 yards, though McGarity, of Washington, D. C., the runner-up, duplicated the feat and laid down a pretty 99 to back it up. The only other possible of the day was made by W. J. Dehner, of the University of Iowa, a promising youngster who should be heard from next year. Strange, but true, there were none who recorded the possible at 50 yards. Herewith are the details of the final try-out, and it should be noted that Captain Gawehn is still trailing near last place.

Sunday morning when the team assembled at the range at 7:30 there was consternation. What a day it was! How the wind swept in from turbulent and treacherous Erie! To call it a gale would be putting it mildly indeed, and to make matters worse, it was of the puffy variety, cat-tailing from 11 to 1 o'clock. A hurried conference was called by Colonel Stodter among the coaches and team members to decide whether to take a chance and go on with the match or postpone the shooting until another day. It was then agreed to test out the effect of the variable wind on the tiny 40-grain bullet by having two of the heavy hitters fire two ten shot targets at 100 yards. Sergeant Ioerger, of the Infantry, and L. J. Corsa, of New York, were selected for this purpose. The result of their effort was not encouraging, but indicated that fair shooting might be done, providing the coaching was of a high order.

After due deliberation it was finally decided to go on with the match and the following named assistant coaches were selected to guide the destinies of the team: Capt. Thomas Chisholm, Capt. W. H. Richard, Capt. James F. Keough, Maj. W. F. Leushner, Capt. C. J. Van Amburgh, Maj. Fred Hird, Capt. G. H. Emerson—also a shooting member—Capt. Dale Rothrock, Sergt. Ollie Schriver, U. S. M. C., Mr. L.

M. Felt, of Illinois, and Sergt. Ioerger, also a member of the team.

The coaches worked just as hard as the men shooting and perhaps the strain on them was just a bit greater than on the shooter, for at all times their judgment of wind and getting the shooter's center of impact on the target placed correctly lent an element of uncertainty to the situation, relieved only after the firing of each shot and the spotting scope showed a welcome ten or at least no worse than a nine. Yet now and then an eight crept in and even an occasional seven to utterly ruin the disposition of an otherwise perfect coach.

The first relay of ten men got away to a splendid start at the 50-yard range despite the terrific wind which swirled and howled in merry glee. The coaches kept to their task with a gritty determination to save every point possible, for if there was any place to save the match it was at the short range. Some mighty pretty shooting was done by two of the first relay men—Bussman and Emshwiller, each turning in a possible. This performance was repeated by two of the second relay—Woodworth and Williams—both new men at the small-bore game, at least so far as their Camp Perry experience goes, each getting the possible on their second target.

With the completion of the fifty-yard stage the targets were carefully scored and the totals computed, while the first relay for the 100-yard and final stage was getting under way for the real test of small-bore marksmanship. And what a surprise these same figures produced. They showed that the team, as a whole, had shot almost as good a score as the day before when the conditions were ideal. So much for careful and intelligent coaching and an indomitable team spirit.

The surprise of surprises came, however, when it was discovered that the 50-yard total score was three points better than the score made by the 1921 team,

#### RESULTS OF THE TRY-OUT FOR THE INTERNATIONAL SMALL-BORE DEWAR TEAM, SUNDAY, SEPTEMBER 17, 1922

40 Shots Each at 50 and 100 Yards

	Total
1. Crockett, J. W., Washington, D. C., N. G.	778
2. Gussman, H. J., Civilian, Connecticut	776
3. Becker, J. P., Civilian, Minnesota	775
4. Richard, V., Civilian, New Haven, Connecticut	775
5. Lively, T. G., Civilian, Illinois	773
6. Emshwiller, O. B., Civilian, Minnesota	771
7. Emerson, G. H., Civilian, Ohio	768
8. Stodter, C. E., Col., U. S. Cav., Washington, D. C.	768
9. Conover, W. C., Lieut., U. S. I., Ft. Andrews, Mass.	768
10. Dehner, W. J., Univ. of Iowa, Iowa City, Iowa	767
11. Wiles, R., Civilian, Chicago, Ill.	766
12. Loughlin, J. T., Massachusetts N. G.	766
13. Moser, J. R., Civilian, Ohio	765
14. Kahrs, F. J., Civilian, New Jersey	764
15. Snyder, M. D., Lieut. Col., Indiana N. G.	764
16. Ioerger, F., Sergt., Ft. Benning, Ga.	764
17. Williams, J. M., CMTC., Iowa	763
18. Wotkyns, G. L., Capt., Inf., Ft. Benning, Ga.	763
19. Brill, H. E.	763
20. Schmitt, C. V., Lieut., Minn. N. G.	762
21. McGarity, R. H., Civilian, Washington, D. C.	762
22. Woodworth, K. B., Civilian, Springfield, Mass.	762
23. Corsa, L. J., Civilian, New York City	762
24. Barnes, H. C., Captain, CAC., Ft. Monroe, Va.	761
25. Gawehn, Capt., Indiana N. G.	760
26. Vereer, T. E., USA	759
27. Williams, A. R.	759
28. Moore, M. J.	758
29. Stice, K. S.	758
30. Price, W. D., Civilian, Iowa	756
31. Jensen, J. C., South Carolina N. G.	755

32. Schriver, O. M., Sergt., Washington, D. C.	755
33. Frincke, M. C.	755
34. Houck, J. F., Capt., Indiana N. G.	754
35. Bronwell, Ed., Civilian, Illinois	753
36. Felt, L. M., Civilian, Illinois	753
37. Shoemaker, E. S.	753
38. Richards, J. W., Civilian, Ohio	753
39. Hemmerling, W. C.	752
40. Hessian, J. W., Civilian, New York	750
41. Wilson, L. D.	750
42. Bowlin, R. L., Capt.	748
43. Sargent, C. R., Lieut., Inf., USA	746
44. Johnson, C. H., Civilian, New York	744
45. Black, A., Capt., Indiana N. G.	744
46. Fenton, Ed., Sergt., Inf., USA	744
47. Weir, J. R., Sergt., USMC	744
48. Weaver, H. H.	742
49. Groeschel, Ed.	742
50. Adkins, J. W., Sergt., USMC	741
51. Dickerson, Sergt., USMC	740
52. Pierson, Capt., Inf.	740
53. Barrons, W. T.	738
54. Hall, A. M.	736
55. Wuchter, C. H.	736
56. Allen, Clyde	736
57. Pace, J. J.	735
58. Lewis, T. R.	734
59. Stanfield, C. C., Sergt., USMC	734
60. Gladden, A. A., Lieut., USMC	729
61. Bowers, K. W.	723
62. Henley, M. G., Major, Indiana N. G.	713

The following competitors did not complete the course:  
C. R. Shaw, J. G. Brown, R. E. Lukens, G. W. Trickel, J. Murry, Captain C. D. Berg, H. E. Simon, C. Spraker, E. P. Turner, C. J. Jefferson, W. D. Frazer.



INTERNATIONAL DEWAR TEAM  
Final Try-Out—September 23, 1922

	50 yards		100 yards		Total
1. Lively	97	100	99	99	395
2. McGarity	100	99	96	96	391
3. Richards	99	99	96	96	390
4. Loughlin	98	95	97	99	389
5. Becker	97	99	96	97	389
6. Emshwiller	97	97	96	97	387
7. Crockett	97	99	95	96	387
8. Gussman	98	98	95	96	387
9. Dehner	97	100	94	96	387
10. Woodworth	96	97	95	98	386
11. Snyder	96	99	95	96	386
12. Conover	96	99	95	96	386
13. Wotkyns	97	98	94	95	384
14. Williams	97	97	93	99	386
15. Barnes	96	97	94	98	385
16. Wiles	95	99	94	97	385
17. Emerson	96	98	95	95	384
18. Stodter	97	97	95	95	384
19. Gawehn	95	96	95	96	382
20. Moser	96	98	94	94	382
Totals	1,937	1,961	1,903	1,931	7,732
Copson	97	99	92	93	381
Brill	93	96	93	96	380
Joerger	93	98	91	97	379
Schmitt	93	94	91	93	371
Kahrs	94	19	91	95 (withdrawn)	371
Aggregate score of twenty high men					7,732
Average score per man					386.6

INTERNATIONAL SMALL-BORE TEAM MATCH FOR DEWAR TROPHY

	—50 yards—		—100 yards—		Total
1. Gawehn, Geo. R., Capt., Ind. N. G.	97	97—194	98	98—196	390
2. Becker, John P., Civ., Conn.	99	99—198	97	95—192	390
3. Richard, Virgil, Civ., Conn.	98	98—196	98	95—193	389
4. Woodworth, K. N., Civ., Mass.	100	95—195	96	97—193	388
5. Gussman, H. J., Civ., Conn.	96	100—196	98	94—192	388
6. Conover, W. C., Lt., Inf.	98	98—196	95	97—192	388
7. Loughlin, J. F., Capt., Mass. N. G.	97	98—195	93	99—192	387
8. Lively, T. G., Civ., Ill.	99	97—196	97	93—190	386
9. Emshwiller, O. B., Civ. Minn.	99	100—199	94	93—187	386
10. Dehner, W. J., Civ., Iowa	96	98—194	94	97—191	385
11. Crockett, J. W., D. C. N. G.	97	98—195	96	94—190	385
12. Williams, R. J. M., CMTC, 7th C. A.	99	100—199	91	95—186	385
13. Snyder, M. D., Lt. Col., Ind. N. G.	95	97—192	96	96—192	384
14. Emerson, G. H., Civ., Ohio	98	95—193	94	96—190	383
15. Moser, J. R., Civ., Ohio	98	97—195	92	96—188	383
16. Barnes, H. C., Jr., Capt., CAC.	98	94—192	96	94—190	382
17. Stodter, C. E., Col., Cav.	97	96—193	92	93—185	378
18. Wiles, R., Civ., Ill.	99	95—194	92	92—184	378
19. Wotkyns, G. L., Capt., Inf.	97	97—194	87	95—182	376
20. McGarity, R. H., Civ., D. C.	97	94—191	92	91—183	374
Totals	1,954	1,943—3,897	1,888	1,900—3,788	7,685

which was 3,894. A consideration of what effect the wind has on the .22 long rifle bullet at 50 yards, based on the conditions under which this shooting was done, leads to the conclusion that the wind is hardly a factor at the short range. No less than four possibles and six 99's were recorded during the 50-yard shooting.

As the 100-yard stage of the match progressed, the wind got no better fast and in the absence of an anemometer no accurate figures of velocity can be given. Several of the more experienced wind jammers voiced an opinion that at times it ran up to 35 miles velocity, but a sense of conservatism compels a more modest guess of not more than thirty miles at any time. Be that as it may, the coaches had their work cut out for them and responded nobly.

No prettier bit of coaching and coaxing was seen than that staged when the last pair got under way. Barnes and Woodworth were the last pair up and Woodworth, making his maiden effort on an International team, was as nervous as a debutante, only more so. Papa Woodworth, with parental solicitude for the welfare of his heir, had coached in the first stage with excellent results, getting a possible out of the youngster for his effort. Capt. Charley Van Amburgh, who had just finished a hard session at 100 yards with Capt. "Jimmie" Loughlin, and getting the only 99 made by anybody at the longer range, volunteered to bring the youngster through. Now "Van" hadn't spent several years in the army during the war for the fun of the thing and so he brought into play all the little tricks of the trade that take the nervousness out of the shooter and put the shots where they do the most good. And so the gallery watched this splendid coach tack his dummy target, fastened to the cardboard in front of him, as he spotted the shots through a powerful glass. After the first few shots all signs of nervousness vanished and young Woodworth came through with the splendid total of 388 and fourth place on the team.

The coaching of Van Amburgh was only an example of what the other coaches were doing to pile up a high team total. The high man on the team, Capt. George R. Gawehn, of Indiana, was coached by Major Leushner. He, by the way, was the same man who was low all through the try-outs. Becker, of Connecticut, in second place, with 390, was coached by Captain Rothrock. The third high man on the team, young Richard, was piloted by Major Hird.

And so at 1:50 in the afternoon, less than five hours after the shooting began, with Lake Erie still howling its fierce song, the shooting of the 1922 Dewar passed into history with the announcement that the aggregate score of the team was 7,685, or 50 points less than the total made by the team of 1921.

It was a great shooting match, a tri-

umph for the coaches who helped to keep the shots in the center of the bull and the twenty-five men who composed the team as shooting members or assisted by coaching.

Owing to the fact that the British representative, Colonel John Caswell, was not named until about a week before the match, the cabling of the British score was delayed until the Tuesday following the match, but it brought welcome news that the American team had won the 1922 Dewar by a score of 7,685 to 7,645.

And so the trophy will stay with us for another year at least, but in the meantime American small-bore marksmen congratulate their worthy competitors for the game and splendid fight which they made to win back their trophy. That they are game even in defeat and sportsmen to the manor born is the unanimous verdict and general opinion of American small-bore marksmen.

## The Scatter Gun at Perry

By COL. JOHN CASWELL

Executive Officer in Charge of Trap Events

**S**HOT-GUN shooting at the National Matches received a fresh impetus this year with the holding of the A. T. A. registered tournament and the Camp Perry Shotgun Championship which attracted many of the best scattergun shots in the country.

The attractive trapshooting program, in connection with the opportunity for practice shooting at a very low cost, proved unusually successful, although the number of entries was not so great as heretofore when there have been greater numbers of teams in attendance at the rifle matches. The meeting, however, was characterized by shooting of an unusually high standard, and the popularity which the scattergun enjoyed is evidenced by the fact that on Sunday, September 17, more than 10,000 shells were fired.

The trapshooting field this year was equipped with three traps, manned by details from the Eleventh Infantry, for whom there is nothing but praise. Assisting in the operation of the range was Lieut. R. Eaton of the Air Service, Richard Arvin and H. L. Maitland, two professional shots of recognized ability, who did much to contribute to the success of the meeting.

The requirements for the skidoo medals this year—23 birds out of 25—meant that to all intents and purposes a man had to be fairly expert to rate the decoration, yet the proportion of medals won was almost that of last year when the requirement was only 22 out of 25.

The smashing of blue rocks this year at Camp Perry was a sporting event from start to finish, whether the competitor was

(Continued on page 16)





# Messing Around In The Jungle

By  
VAN ALLEN LYMAN

## PART 2

tire of one of our guides, Jose, was simply a shirt made from a cement sack, nothing more, while Ramon preferred to wear his in the form of a kilt. This attire is picturesque and durable, and is heartily recommended to those affected by the high cost of clothing.

On and on up the river, it became narrow and narrower and finally we had to cut away two trees which had fallen across and utterly blocked it. We could not go much farther—that was evident—so the little .22 rifle was gotten out and a few sizeable birds picked off of trees on the bank as we went along—fresh meat when we should reach camp. Our destination was a little thatched hut or more properly simply a shelter roof, erected by former timber hunters and known as a "rancho," which was supposed to be there. The condition it might be in when found was apt to be questionable. A mile before we reached it, the natives were keeping a lookout for a dead tree suitable for firewood, and one of the kind that will burn when damp, for firewood near a campsite would naturally be either exhausted or else scarce. After a time we stopped and burdened the canoe further with a load of wood which lasted us some time.

The "rancho" was found to be in rather bad condition, but repairing was quickly done with palm and banana leaves, and the sleeping platform, raised some six inches above the ground, gotten into shape before dark. For his personal use Johnson carried a Compac tent and got it up in a few minutes. With one man these tents are O. K.; with two men, in the tropics, they are commonly designated as "fireless cookers." Apropos of shelters, it might be pertinent to suggest here that for tropical work a waterproof sheet twelve by fifteen feet with eyelets along the edges is all the tent one needs for a small camp. Such a sheet can be stretched as a flat, slanting roof with no sides, for protection from overhead rain is all that is necessary. It also serves as a waterproof cover for duffel in a canoe. However, we had no waterproof cover and had to get along without.

We were all tired, darkness came on before camp was really finished, and we supped by firelight on boiled green bananas, some of the birds we had shot, hardtack and coffee. Then all hands to bed as the rain started. We were dirty and tired, but one can not do much washing in a dark, unfamiliar jungle, and, as later events showed, it was just as well that we didn't try to.

The river, at the point where camp had been made, had dwindled to a mere little rocky stream not more than twenty-five feet across, but just below the camp it widened into a small pool, then narrowed again. While cooking breakfast next morning Jose said something about hearing a crocodile snapping his jaws during the night, but I was inclined to laugh at him, for none of the reptiles had been seen in the last several miles of the trip and the small rocky part of the stream where we

were seemed ill adapted to supporting any. However, when going down to the stream to wash I took a careful look around and there was a crocodile's head not twenty yards away, and a fair-sized one, too. He sunk almost at once. There were dirty clothes to wash and I was grimy, too, so I moved to the upper, shallow end of the pool and went ahead with sanitary operations, keeping however a watch on the deeper water. The cake of soap that floats slipped from my hand and I made a frantic rush and scramble to recover that soap before the current should carry it into deep water where that crocodile lay. While that was the only soap in that section of the country, I was also the only "me," and I didn't intend tempting fate unnecessarily. N. B.—I got the soap.

Then out into the bush to get some meat, for breakfast had consisted only of hardtack and cold boiled bananas and coffee, and it was imperative to get some meat on hand. While we were eating Ramon dug a hole in the ground and lined it with a banana leaf. What his object might be I was at a loss to understand until presently he poured into the dish thus formed the water in which the birds had been boiled the night before and his dog gladly lapped it up, together with the balance of the cooked green bananas.

Jose told of getting lost in this section years before and finding nothing to eat but crawfish in the streams, which he ate raw, for it happened to be in a season of the year when no wild fruits were bearing in that locality. Before starting out on our day's hunt we noticed the track, about as large as a man's fist, of some cat animal, made the night before, and only a few yards from where we had been sleeping. The creature had evidently been attracted by curiosity, and the dog had given no alarm.

Johnson took Jose for guide and flunkey, and I, Ramon, and we started off in different directions. Three in the afternoon found us back. Johnson had three nice turkeys, killed with three shots from his .30 Remington, and showing the effects of the soft-point bullet rather badly. My contribution was a pheasant-like bird called a *perdisse*, a *gallena de monte*, or mountain hen, quite like the ruffed grouse in shape and habits, and a "nickky." This last, properly known as the agouti, is a member of the guinea-pig tribe, quite like them in appearance but blackish brown in color and about the size of a very large domestic cat. These animals live in holes in the hill-sides and are comparatively easy to shoot, for if the hunter is skilled in imitating the call of one in distress there is a good likelihood that one or more real ones will come running to see what it is all about. The calling is usually done with a soft, tender leaf folded once lengthwise, the bottom of the leaf folded inside and the forefinger of each hand projecting into the fold. The edges of the folded leaf are put between the lips above the tongue and the breath sucked in. After much practice a man can squeak and yelp in a most realistic manner with this simple appliance, which can also be used for calling turkeys.

Jose and Johnson had, in their hunt, passed through what had once been a clearing and where in years past there had probably been an Indian village. No traces of it remained, of course, and to the untrained eye the spot would have seemed like any other part of the jungle. But in one place grew a few cocoa trees, small trees a dozen feet or more high, bearing melon-shaped fruit, yellowish brown to purple in color, nearly a foot long, and attached directly to the trunk. These are the pods which carry the seeds or beans from which choco-

OUR dugout was old and decayed, but it was all there was to be had, and in it we paddled northward along the coast, then over a series of submerged reefs and breakers which soaked the whole outfit and threatened to submerge the cranky craft, until we were finally in the quiet waters in the mouth of the river Maluz. Crocodiles abounded here. As we paddled along they would slip off the banks in front of us and into the water to swim about, the backs of the big ones, when viewed sideways, showing a scale effect, like an enormous saw upside down. We paid little attention to them, for our destination was the headwaters of a branch of the river and our object the big cats; crocodiles could be gotten at almost any time and anywhere.

Years of acquaintance with the jungle have never lessened its interest to the writer, and the trip up the river was absorbing and enjoyable, though hard work, for everyone paddled.

On the way up we passed a canoe containing three Indians coming down. All three wore hats made of palm fiber and two wore, in addition, "chacaras," little bags in which to carry odds and ends, but aside from this they were as innocent of clothing as the children who ran the streets of the village we had left. Nor was there any reason why they should wear any. It was the season of the year when stinging insects were not particularly annoying and without clothes one had no clothes to get wet. The writer learned from practical experience that it paid to do likewise during the heavy but brief downpours during the rainy season—i. e., strip one's clothes off and put them in a dry place, take the rain as it comes and after it ceases put on the dry clothes again. The woods at-



late and cocoa are made. Jose brought in several of these and we broke them open and sucked the slimy white pulp off the seeds, which are about the size of a small olive. The pulp has a pleasant sour taste. As the seeds were sucked they were all carefully saved, being thrown together on a big leaf, to be later dried in the sun and then ground into chocolate.

In order to retain peace of mind anyone with any hard and fast germ theories or who is finicky about his food had better leave Latin America alone, at least the backwoods part of it. For example, when in Gracias, the woman who did our cooking dropped on the dirt floor a piece of the yucca she was cutting up. In a most matter of fact way she stepped forward, grasped the yucca between her big and second toe, transferred it to her hand, and dropped it in the cooking pot, without washing, of course. A second exhibition of

lages if possible, and if compelled to drink their water, boil it first.

The crocodile in the pool at the camp had been on my mind all day and, being very dirty and tired, I went down to the pool for a wash, but took along the rifle to remove that crocodile should it be seen. It was not in sight, so I again washed in the shallow water with an eye on the deep part of the pool. Half an hour later, while I was cleaning the guns, Johnson reported that the crocodile was out again, and I strolled over and killed it instantly with one shot, using a standard U. S. Army cartridge, and the way that bullet split up that tough skull was conclusive evidence that soft-point ammunition is entirely unnecessary for head shots on crocodiles.

This one measured just eleven feet in length, which was no trifle, and it was entirely too large an animal to have in a restricted swimming pool where we wished

hand. Johnson found a scorpion among his things, the third scorpion found in three days without looking for them, and I noticed about six inches of a snake's tail hanging down out of the thatch of the roof, the rest of the body being hidden. Protecting my hand with a shirt, I grasped the part available and tried to pull the snake out. It was rather ticklish business, for I had no way of knowing just how big he was, which way he went, where his head might suddenly appear, or even what kind he was. However, the snake had more of a purchase on the thatch than I had on him and eventually pulled away and was never seen again. A lot of turkey and agouti meat was smoked over the fire, a covering of banana leaves keeping the rain from putting the fire out. We found cockroaches in camp, a pretty good indication that roaches live in the woods. These were big ones. Several were saved for souvenirs and, with pushing and the legs folded closely to the sides, the roaches would just fit in 12-gauge fired paper shells, one roach to a shell. Salt was packed around them and they were tied up in a leaf, to be better preserved on our return.

It was during this rainy spell that we learned the reason for the existence of the banana patch nearby, for bananas do not grow wild of their own accord in the jungle. Some years before Jose and others had been engaged in cutting valuable tropical hardwoods. Their return to Gracias had been delayed twenty-one days by bad weather, which made the sea so rough that it was not safe to venture on it in their canoes. During this time they returned up the river, cleared the patch of jungle and planted the bananas, although where the seed plants came from was not clear.

Firewood in the tropics is always a problem during the rainy season, and a good bushman must know the trees which have enough natural oil to burn well, though they may have been soaked by days of drenching rain. Shavings from a candle are always a help in starting a fire when the wood is wet, as is also the flame of the candle itself, for it saves matches, and it is



"We could go no farther up the river."

pedal dexterity occurred when a small and mangy dog persisted in keeping underfoot in a desire to lick up from the dirt floor some food that had been spilled. After pushing the *perrito* out of the way a few times the Senora got impatient and, seizing the dog's tail between her toes, threw the canine out of the doorway. People who go barefoot habitually and, in addition, appear to have some close alliance to the Simian race, learn to use their toes to advantage.

The native Panamanian's idea of sanitation, by the way, is nil. He has been accustomed to deposit garbage and human filth anywhere outside the door of his house, depending on pigs, dogs, chickens, buzzards and goats to clean it up. The little stream which ran through the town of Gracias was a common sewer and in addition a wallowing place for a herd of razorback pigs. Theoretically, drinking water was taken from the stream above the town, clothes were washed below the drinking water hole, and the rest of the stream served for general utility purposes. Practically, when Mrs. Panamanian wants some water she calls the nearest of her several children, gives him an empty calabash or coal-oil can, and tells him to bring her some water. The child brings the water from the nearest place convenient, as a matter of course, which is exactly what Mrs. Panamanian would do herself if she had to fetch it. If there is any moral to this it is: Get a typhoid inoculation before messing around in the jungle; keep away from native vil-



"The quiet waters at the mouth of the river Maluz."

to bathe. I was glad it was disposed of.

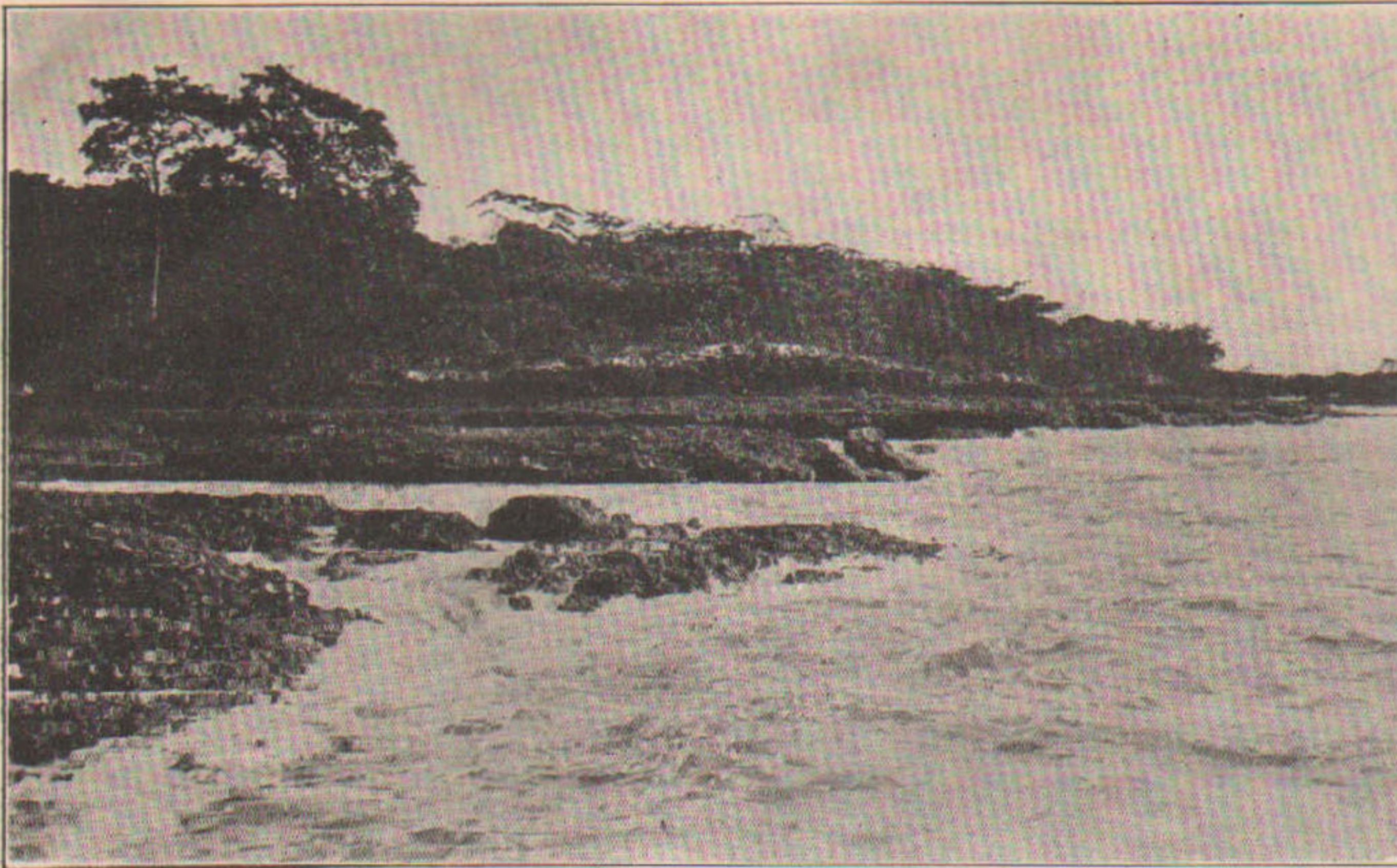
It rained at intervals all the next day, and we stayed close in camp for, as Ramon put it, "The animals do not walk much in the rain." I made a softer bed of jungle trash, covering it with large banana leaves. Such a mattress is comfortable, but furnishes an abiding place for snakes, and it pays to watch it carefully.

Idling around the camp gave an opportunity to investigate the fauna close at

well to take an ample supply of candles along.

The equipment of our natives was very simple. Aside from a machete, each had a straw sleeping mat, a cotton sheet, and a little red pillow with a fancy lace cover, the latter proving that it's human nature the world over for a man to lug some kind of effete junk around with him. Johnson's "medicine" is a gold-mounted fountain pen that never writes, and the writer himself





"We paddled northward along the coast."

must confess his weakness for toting about a suit of pajamas, and using them. Ramon insisted on bringing along a favorite chunk of stone weighing seven or eight pounds to sharpen the machetes on, though why a file would not have answered as well is not clear.

Apropos of sleeping equipment, a fly net is a mental and physical comfort; not the trifling things sold in the States, but a regular tropical fly net, seriously intended as an armor against insects, which carry discomfort certainly, and often sickness and death. Such a protection will not be made of mosquito netting but of cheesecloth, or, better still, of fine muslin, to keep out certain flies, so small as to be almost invisible but having a most aggressive bite. The top will be rectangular and of waterproofed heavy muslin, and if the sleeper is wise at the game he will hang it so there will be a slight pitch to shed water. Then, when the roof leaks one still sleeps in comfort. The sides of such a net will be five or six feet in length, giving plenty of material to tuck in under the blankets one sleeps on. Then, when one has gone over his bedding carefully for possible scorpions or centipedes, made his bed up carefully and tucked the bottom of the net in well all around under his blankets, "wrapped the draperies of his couch about him" as Bryant puts it, he then can lie down surrounded by white walls on all sides and listen complacently to the hum of the insects outside his little castle and the cries of the night life of the jungle. The feeling of security and contentment those little walls of cloth give is considerable. I chased a good-sized tarantula away from my bed one night, rigged up my acetelene jacklight outside for reading, and lay securely in my cozy "room" delving further into Reade's "Put Yourself In His Place," by the light which filtered through the cloth. The tarantula came back, for the next thing I knew was his shadow thrown on the book, for he had crawled up the outside of the fly net, attracted by the light. Being on opposite sides of the net, neither of us could get at the other, and neither had any desire to do so. I merely moved the book until the big spider's shadow ceased to interfere, and in time the spider went on its way about other business and never returned.



"Our destination was a little thatched hut erected by timber hunters and known as a Rancho."

One takes such incidents with indifference after a few experiences.

Following the rain came a spell of fair weather. The tracks of the big cats for which we had specially come, were in evidence, as were also those of tapir, deer and wild pig. Johnson's .30 caliber automatic rifle seemed to still possess an affinity for turkeys and on one day he brought in two more of them, both shot through the head this time, while on the same day I accounted for one turkey, an agouti and three sapajou monkeys with the shotgun. There was much meat drying in camp that night. These sapajou, white faced, or "Cara Blanca" monkeys are fairly good eating, though not as good as the larger red monkeys. While I have heard many stories relative to the cruelty of shooting monkeys, they come mainly from non-outdoors people. Any hunting is cruel, primarily, but nevertheless, kill and be killed is the law of the jungle, and shooting monkeys is no different from shooting any other sort of animal.

Just outside of the camp there was a fallen tree and from general signs it seemed worthy of investigation. The natives chop-

ped open a cavity in it exposing a honey comb, irregular in shape and much resembling one of the irregular brown fungus growths. As there was not over a quart of honey all told we ate it on the spot, disregarding the small bees which crawled or buzzed stupidly about not offering to sting. The honey itself was a thick, syrupy liquid, somewhat acid in taste and the hexagonal comb, commonly associated with honey was entirely missing. Eating it amounted to breaking off pieces of the irregular comb which was hollow inside like a bottle, and then sucking it dry. This was in the rainy season; in the dry season later on the honey would probably have been thick and sweeter.

One day, while hunting along the side of a ridge, I noted a rather peculiar arrangement of rocks. It seemed unlikely that stones would have been washed into such a position by themselves, and yet, as it was in an uninhabited region, there seemed no reason whatever why any human should have placed them there. I was led to speak of the matter in camp that night. "It's an old Indian grave," said Jose. Of course, it was, and I should have thought of it be-

fore, but I didn't. Some Indian had been sleeping there for centuries, possibly from before the time of Columbus. Peace to his ashes. He is resting in a burial place such as the writer would choose, for the jungle and its wild life is a far, far better resting place than any bemonumented, man-made cemetery.

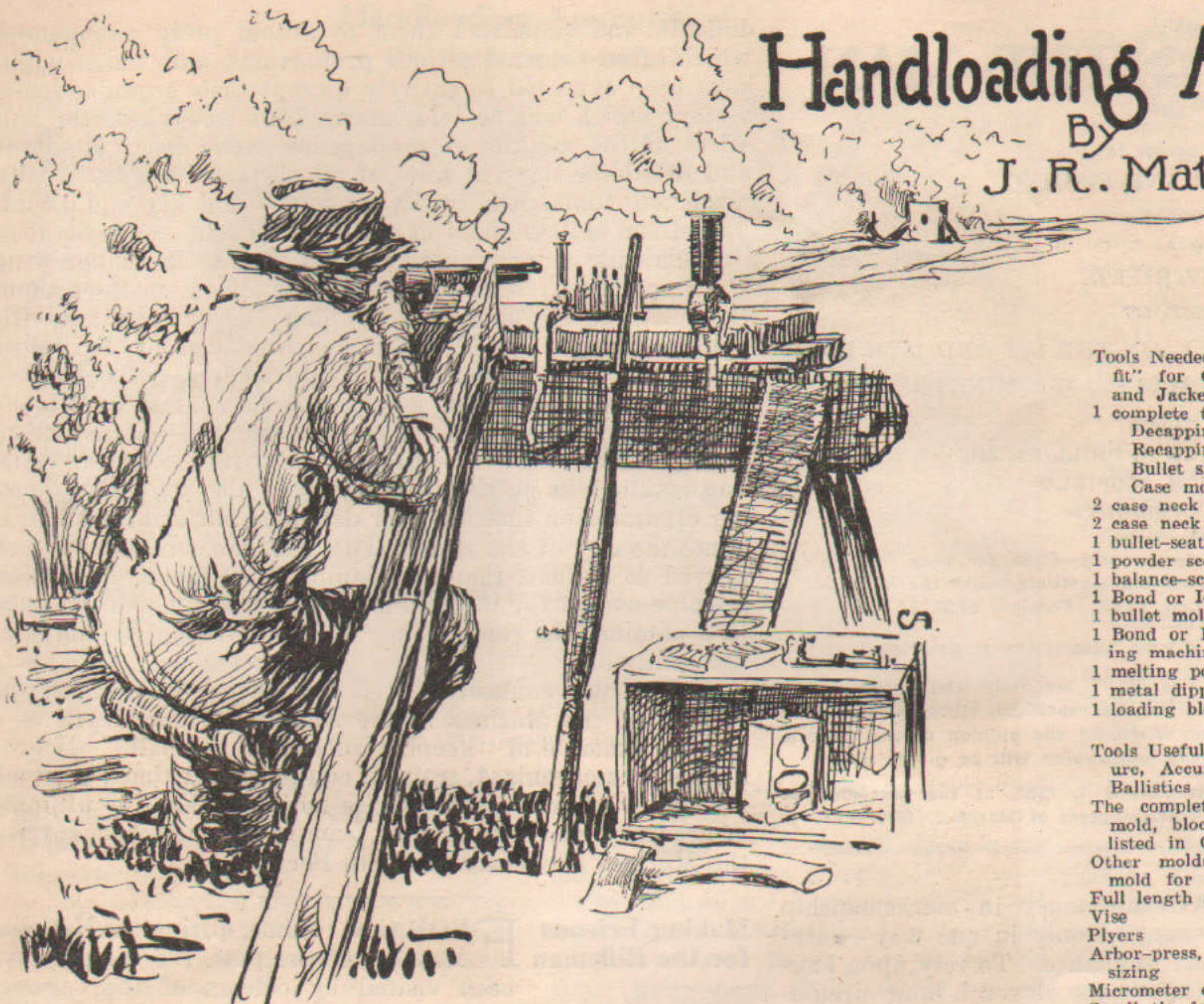
The jungle was too thick at this camp to permit of jacklighting over any of the trails or rather, where trails should have been, along the ridge tops. So I took the canoe on two different nights and floated downstream in the hope of seeing a cat. No game was seen with the exception of a little crocodile which was shot with the .22 rifle for its skin and a larger crocodile, possible as large as the one killed at camp. We did, however, get some fish with the aid of the jacklight by simply shining its light into the canoe. Schools of mullet were working their way upstream and many of them would jump at the light. The majority jumped clear over the canoe but some eight or ten were obtained, if a net had been stretched lengthwise of the canoe vertically to form a barrier probably many more could have been gotten.

(Part 3 will appear in the issue of Nov. 1)



# Handloading Ammunition

By  
J. R. Matern



## CHAPTER 2 HAND LOADING TOOLS

SOMEONE has said that: "There are four essentials for successful reloading of rifle and short-gun cartridges, yea, five of them. They are well-fitting, clean cartridge cases, proper powder, true bullets, complete tools, and finally that certain sense of the mechanical so marked in some men and so lacking in others."

The latter necessity is almost assured if a man is a rifle shooter at all, else he will not be interested in a subject requiring such precise control of all factors, his own muscles and nerves included. That this mechanical bent should be mentioned serves to emphasize the need for tools that will handle cartridge cases, powder and bullets exactly enough. Very poor cartridges usually are produced by everyone who tries to reload without sufficient tools.

Some of my most enjoyable shooting has been with reloaded ammunition, short range, prepared with only a bullet mold, a non-adjustable bullet seater and recapper combined, and a home-made decapping punch. Some of the most accurate shooting I have ever done was with cartridges prepared with these tools plus a case neck resizing die. The ammunition thus prepared, however, had defects that made it unsatisfactory for general use. A world of added convenience and speed loading, and a greatly superior product, results from the use of the additional tools hereafter to be described.

In black powder days nearly every gun manufacturer turned out hand loading tools—he had to, for every shooter demanded them. As smokeless powder replaced black, altering the problems of loading wholly, factory after factory stopped making tools. Smith & Wesson ceased to furnish their good little straight die and plunger tools years ago. Winchester, too, has ceased to furnish its two or three models. I have an old Savage catalog that lists Savage tools, but that Company today gives you a cold reply when you mention them. Many other firms and individuals used to furnish tools, good tools, but all long since become unavailable.

The Ideal reloading tools are the only ones helping to make black powder history that still are to be secured. The foregoing background is mentioned in order that beginners may better understand how their problems differ from those of thirty years ago.

In naming the tools required for home loading, of one cartridge, I will make three classes. This is done to bring out proper comparisons—each class is explained by its heading.

### 1

Tools Needed When Bullets are Bought, and Only Low-power or Reduced Loads Assembled.

- 1 decapping punch
- 1 powder scoop
- 1 bullet seating tool, with recapping hole
- 1 case neck resizing die
- 1 case neck expanding die

This is the outfit minimum with which cartridges may be reloaded satisfactorily.

### 2

Tools Needed for a "Complete Loading Outfit" for One Cartridge, to Handle Cast and Jacketed Bullets

- 1 complete tool with these attachments:
  - Decapping punch
  - Recapping hole
  - Bullet sizing hole
  - Case mouth reamer
- 2 case neck resizing dies
- 2 case neck expanding dies
- 1 bullet-seating chamber, double-adjustable
- 1 powder scoop
- 1 balance-scale, weighing to 1/10 grain error
- 1 Bond or Ideal powder measuring machine
- 1 bullet mold
- 1 Bond or Ideal bullet lubricating and sizing machine
- 1 melting pot
- 1 metal dipper, with nozzle
- 1 loading block

### 3

Tools Useful for Obtaining Additional Pleasure, Accuracy, Speed, and Knowledge of Ballistics

- The complete list of tools, punches, dies, mold, block, sizer-lubricator and scales listed in Class 2, plus:
- Other molds for different bullets—armory mold for the most-used bullet
- Full length resizing die
- Vise
- Pliers
- Arbor-press, if desired, for full-length resizing
- Micrometer calipers
- Small tin funnels
- Wire cage for holding cases while cleaning them chemically
- Separate muzzle reamers
- Speedy de- and re-capping tool
- An extra loading tool, to save changing dies, etc.
- Case neck indenter—Ideal
- Gas check cup making tool—Yankee
- Cloth-covered board for oiling cases
- Bullet swaging dies and punches
- Bullet jacket dies and cutters

The reason for including two case neck resizing dies and expanding plugs is that solid bullets, lead or alloy, must be two or three thousandths of an inch larger than jacketed bullets for any cartridge, and cases must be resized accordingly.

Clubs and individuals doing much reloading will find large bench and table machines desirable. The Government makes one for the army, for instance, which will load ten thousand cartridges a day when fully manned. The Ideal Company, Frazier Company, and others make heavy tools.

Of the tools in the lists above, complete units designed to seat bullets, to decap and recap, to resize and expand case necks, are made regularly by the following firms:

- Modern-Bond Company, Wilmington, Del.
- Yankee Specialty Company, Erie, Pa.
- Ideal Manufacturing Co., New Haven, Conn.
- Neidner Rifle Corp., Dowagiac, Mich.
- Charles Newton Rifle Corp., Buffalo, N. Y.

In addition, many gunsmiths and machine shops make tools on special order.

The pictures show what the tools look like, better than any description.

Ideal tools No. 1, 4, 6 and 8 have bullet molds combined, located beyond the joint. Ideal tools No. 3 Special and No. 10 Special,

(Continued on page 13)



# ARMS AND THE MAN

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

**The Winning of Matches** NATIONAL supremacy in marksmanship can be assured only in one way—nothing can be left to chance. To rely upon hazardous fortune, to assume that at the eleventh hour circumstances will be propitious for victory, to depend upon something "turning up," will spell disaster.

That our international teams this year were composed of marksmen of the highest skill is evidenced by the victories which were theirs, but the fact that they could bring their skill to bear with full effect against the best that the world at large could pit against them was due solely and alone to far-sighted preparation conceived, in some instances, many months in advance, and every care taken to leave nothing to chance. Had this policy not been rigidly adhered to, it is more than likely that the Swiss would have vanquished our marksmen at Milan, and that today the Dewar cup would be on its way across seas.

Reviewing for what it may be worth—and it may be worth much as an excellent precedent to be followed in other years—the equipping and organizing of the International Team, the rifles and ammunition were the product of the practical application of the best gun-making and cartridge-making skill, directed by actual experience in previous international contests plus long months of experimenting until the best that could be obtained was available, while the selection of the team was accomplished in a manner calculated to provide the best personnel possible from the shooters of a country so large that much good team material could not attend the tryout.

In other years "pick up" teams shooting hastily improvised match rifles have returned home victorious, but this circumstance does not alter the conclusion that the United States would have won at Milan if the time, trouble, and expense attached to the production of rifles and ammunition, and the care exercised in selecting and training the team had been omitted.

From the moment that the team touched European soil our riflemen were beset by untoward circumstances which deprived them of most of the practice upon which they had counted, rendered their progress to the Italian range

difficult, and submitted them to untold petty annoyances which often assumed serious proportions, and which might have been expected to entirely disrupt their organization—a story which will be told later. That was where the full effect of the months of preparation made itself apparent and saved the day; in spite of all obstacles the team, with unshaken confidence in its members and its equipment, bested the skilled shots of the Old World.

Meanwhile a very similar situation was in the brewing at Camp Perry. With but few civilian shots on the ground the prospect for putting a winning Dewar team into the field was very dark. Yet the men in charge of the Dewar match were not discouraged. "Start early, get out every available man, give them plenty of practice, and we'll make a good try," they said. This program necessitated abandoning the established method of selecting the Dewar team, but resulted in putting into the field the strongest shooting organization that has ever defended our small-bore title. Came the day of the match, with weather conditions which proved so difficult that no winning score would have been possible except for the preliminary practice which the team had obtained in consequence of the far-sighted methods inaugurated.

And in this connection it is but proper to mention the victory of the Marines in the National Team Match as a shining example of "keeping an eye on the ball." If ever a team was organized, trained, equipped and timed to reach the zenith of skill at the precise moment when the ultimate of accuracy was needed, that team is the one which carried the Marines to victory at Camp Perry.

**Making Friends for the Rifleman** FROM time to time, during the National Matches of the past, the ranges have been visited by officers of the services and by high government officials who came, observed the matches and departed, knowing but little more of the varied aspects of the big problem which was worked out before their eyes than when they arrived at the range.

For the past two years—and this year in particular—high ranking officers of the Army, Marine Corps, and National Guard have made a point of visiting the National Matches range, and while there have showed a very marked and personal interest not only in the progress of the matches but in the highly important collateral activities of which the National Matches are the capstone and climax.

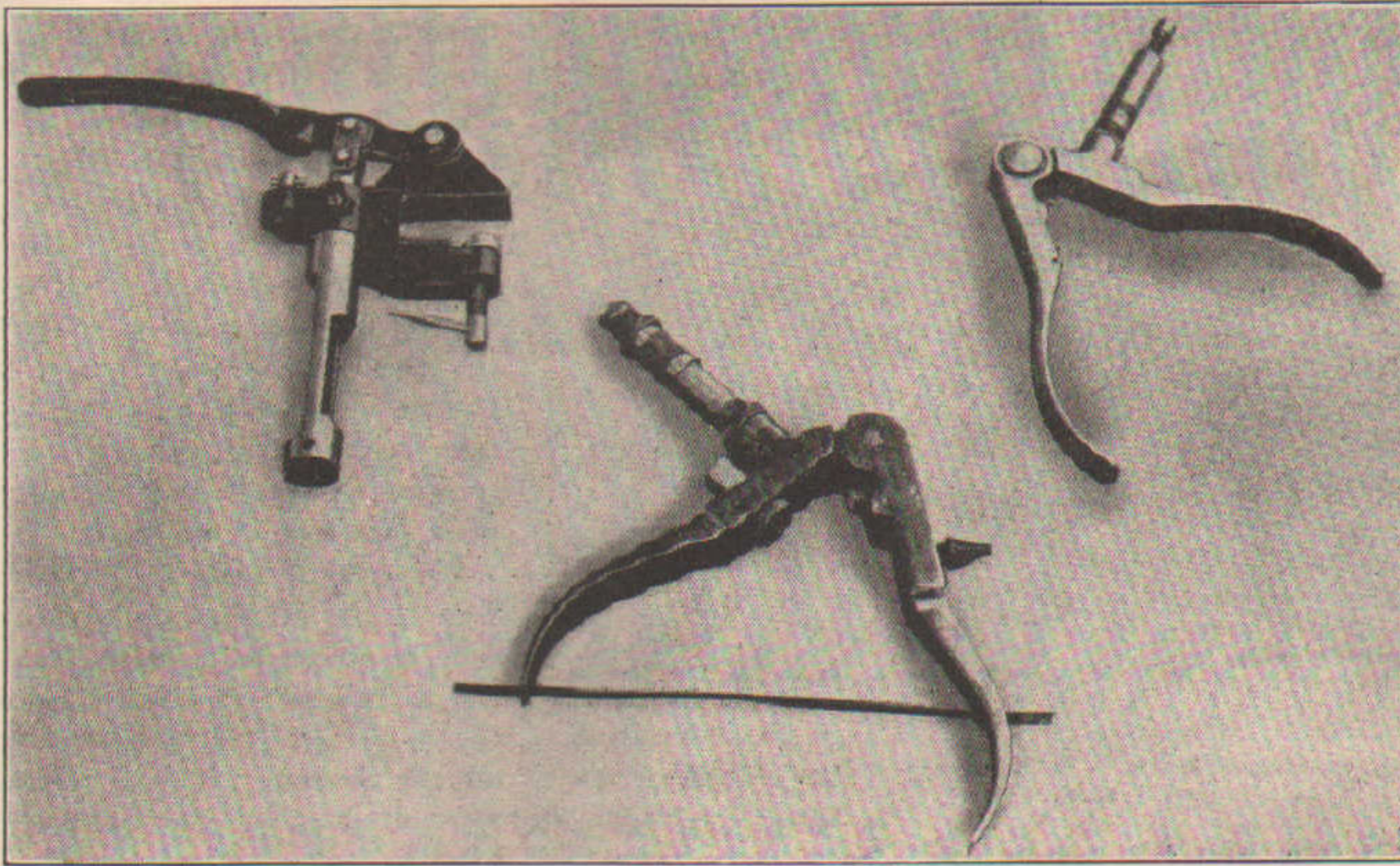
The presence at Camp Perry this year of the Assistant Secretary of War, J. Mayhew Wainwright; the Chief of Infantry, Major General Charles S. Farnsworth; Major General Lejeune, Commandant of the Marine Corps; Brigadier General Smedley Butles, Commandant of the Quantico Cantonment; Major R. E. Beebe, of the Training Section of the General Staff in charge of Civilian Military Training Camp matters, and many other officials, including several adjutants general who accompanied their State teams in order to acquaint themselves at first hand with the training features of the matches, is important and significant. These gentlemen did not attend merely as onlookers. They evinced a strong personal interest in the matches as a national institution, and each of them took home with him a clearer understanding of the potentialities which the National Matches hold as a national asset.

It is gratifying to those who have worked through nearly a generation to keep the National Matches alive to find those officials who can exert strong influence either for or against rifle practice, taking so deep and personal an interest in the sport of marksmanship. It is to be regretted that Members of Congress who are the final arbiters of the amount of encouragement which the government gives to rifle practice should practically never be seen on a National Match range.



## Handloading Ammunition

(Continued from page 11)



Yankee, Bond and Ideal Loading Tools Without Dies

do not have attached molds. Of these and other Ideal tools, many shooters will be interested to know, the Ideal Manufacturing Company recently said:

"We are now, and always have been, trying to supply our full line. We make molds for about 700 bullets and tools for 156 calibers, so at times it is difficult to make prompt deliveries."

About 1919, on insistent demand from shooters, the Bond tools were designed, manufactured and their sale began. These Bond tools naturally embody the improvements that twenty to thirty years have taught shooters are needed. They have the advantage that they were designed essentially for smokeless powder and metal jacketed bullets. It is a matter particularly of inside dimensions of chambers and dies.

The Bond Company says: "All parts of our tools are interchangeable, one set of handles answering for all calibers." Each Bond tool comes equipt complete for one caliber, including two resizing dies and two expanding plugs for such cartridges as need two. The outfit will perform all operations of reloading, except to cast and lubricate bullets and to put powder into the cases. Bond tools, like Ideal tools, work on the principle of plyers. I have found their dies, bullet sizing arrangement and other details exceptionally convenient, and deliveries prompt.

Charles Newton and Yankee tools, while much different from one another in appearance, both work on the "straight-line" principle. That is, instead of handles closing together on the arc of a circle, like those of plyers, their plungers, dies and chambers are actuated along straight lines, and held in line by guide frames. This idea is excellent, and any tools so designed are good provided the dies and chambers are of precise and convenient construction.

The Yankee tool of the "straight-line" type is worked by a lever which extends across the top. It is operated either in the hands or clamped to a table.

The catalogs and handbooks of the tool makers give full instructions for their use, at much greater length than is possible here. Every home loader should get all the printed matter that is offered by the four or five firms. He should be particular to obtain the model of tool he needs, with all the adjustments required by his loading.

Certain tools and accessories possess advantages which make them very desirable, or for other reasons should be pointed out.

Bond powder scales are practically the only reasonably-priced balances available now since Fairbank's miner's assay type scales are understood to be no longer made. One can, however, sometimes obtain privately balances or high-priced weighing instruments that are used in precious metal trades. Many of these will weigh powder charge accurately to within a fifth or a tenth of a grain.

Only two good powder measuring machines are available—Ideal and Bond. The latter perhaps is the better designed, although the former is lower in price and is very satisfactory indeed.

Bond bullet molds each have two cavities, located side by side. The Bond mold is larger than usual, and holds heat better. Many Yankee molds are made of bronze and require no breaking in. They have one bullet cavity in the bottom and one in the top of each mold. Those indispensable items, melting pots, may be obtained from Ideal, Bond, Yankee or from any plumbing supply house or hardware store. Dippers should be obtained from the maker of your molds, in order to make sure of getting one with a correct nozzle.

The Ideal Company makes a "straight-

line" de- and recapper which is practical, speedy and durable. Every home loader should have one. It decaps and recaps without need for removing the case between the operations. The Government makes a set of tools which includes a decapper which is very fast and convenient, and a recapper equally desirable.

Bond and Ideal bullet lubricating machines are much alike. The Bond machine is a little heavier and more substantial. One of these machines is indispensable when you prepare cast bullets.

Ideal makes cartridge case mouth reamers that are more speedy and convenient than anything else sold for the purpose.

Full length resizing dies are furnished by Ideal, Bond, Yankee and others, and are found in the Government outfits. They are all made about an inch in diameter. It is in fittings for speedier, easier and more accurate applying of the force needed to seat and to extract cases that any one excels others. In the small sizes particularly, Bond dies are oversize, with chambers and punches so made that your driving force is held to a true line.

Yankee makes die outfits for cutting and shaping your own copper gas-check cups, such as the Ideal Company furnishes ready made. These outfits are cheap and entirely practical, and are very well made. They shear out a disc of copper sheet, then form the cup, in two operations. So long as we can buy the Ideal cups, probably few of us will want to make them, but over periods during the past few years no factory cups were available, and then these little dies would have been very valuable to owners of the gas-check type of mold.

Items that can be made at home with satisfaction are tin funnels for pouring powder, case neck reamers from old machinists reamers or a knife blade, bullet lubricating cutters made from old cartridge cases, and loading blocks. A loading block is made by boring holes the size of the case almost through an inch board big enough to contain 25 or 50 of them without crowding. Another way is to bore the holes clean through, then tack a thin board on the back.

Swages for increasing the diameters of bullets, reducing diameters, or pointing their business ends can be obtained from Yankee or from a number of shops whose advertisements appear now and then.

Parts for old tools of most makes also can be obtained from Yankee and others. This includes new chambers, resizing dies and the like.

Home loaders should know that a tool or accessory made for one particular cartridge often may be used successfully in loading another, with or without additional dies and chambers. Bond makes a feature of this point, furnishing handles and bullet molds that fit all the different mold "heads" they make, and furnishing the large basic brass frame handles of their main implement, that takes attachments for every cartridge.

All 25 caliber cartridges use bullets and

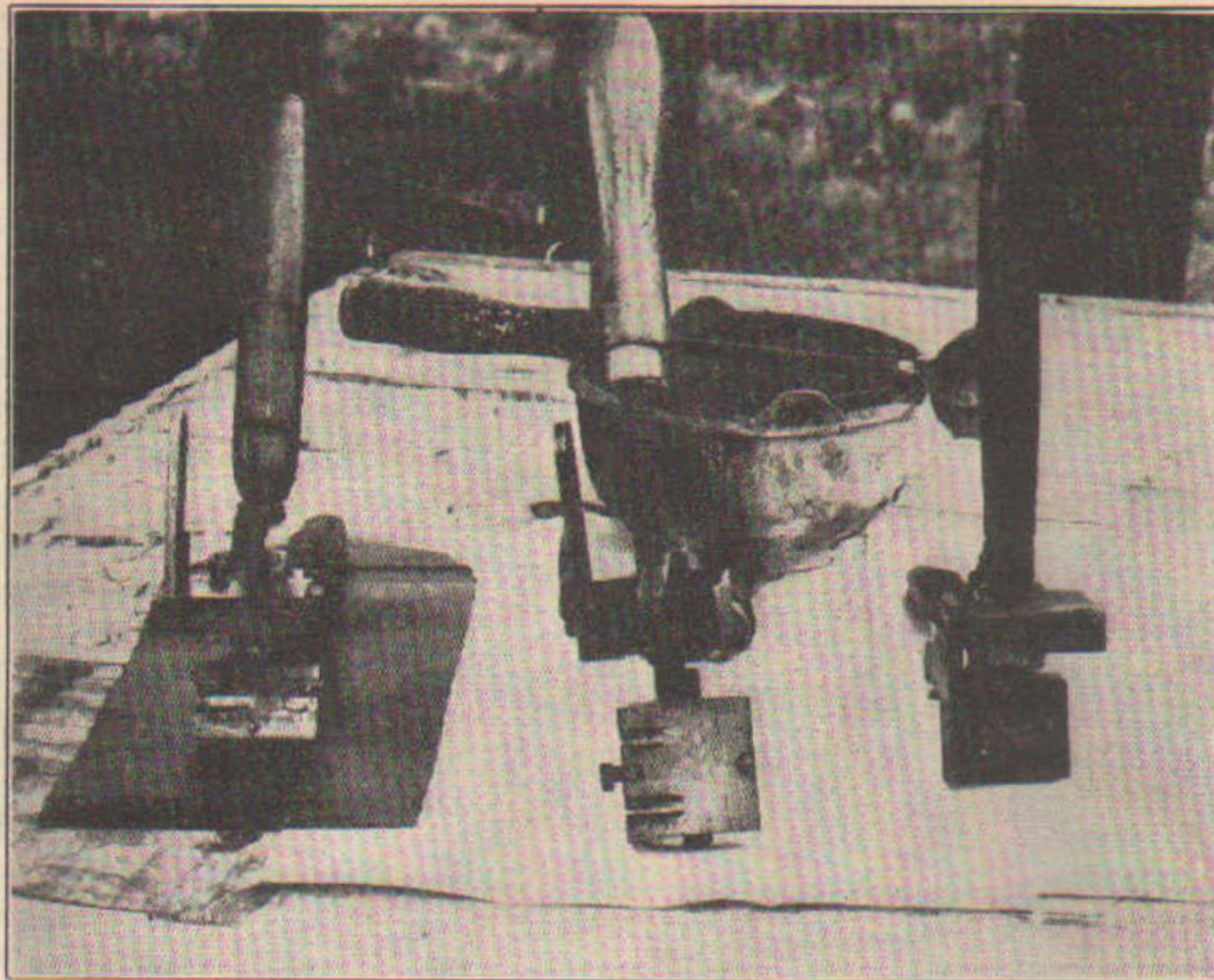


have case necks of the same diameter. The 303 Savage bullet and case neck is of the same diameter as the 30-30 and 30-06, but the 30-30 appears to be two thousandths of an inch smaller. The various 36 caliber cartridges (except S. & W. pistol) usually have about the same bullet diameter as 38 revolver cartridges.

Keep tools properly stored, to prevent rust and to prevent confusion. Each die, chamber and other piece should be kept hanging on a nail or laid in a separate box or shelf marked to show what it is. Few tools or parts I have seen are stamped plainly by the manufacturer to show their size and cartridge or cartridges for which you see the die or chamber, its true diameter if possible, and any peculiarities, such as "large", "tight", "new", "worn", etc. Such markings will save you many a hunt for the thing needed. Don't depend on your memory to hold details of fine measurement.

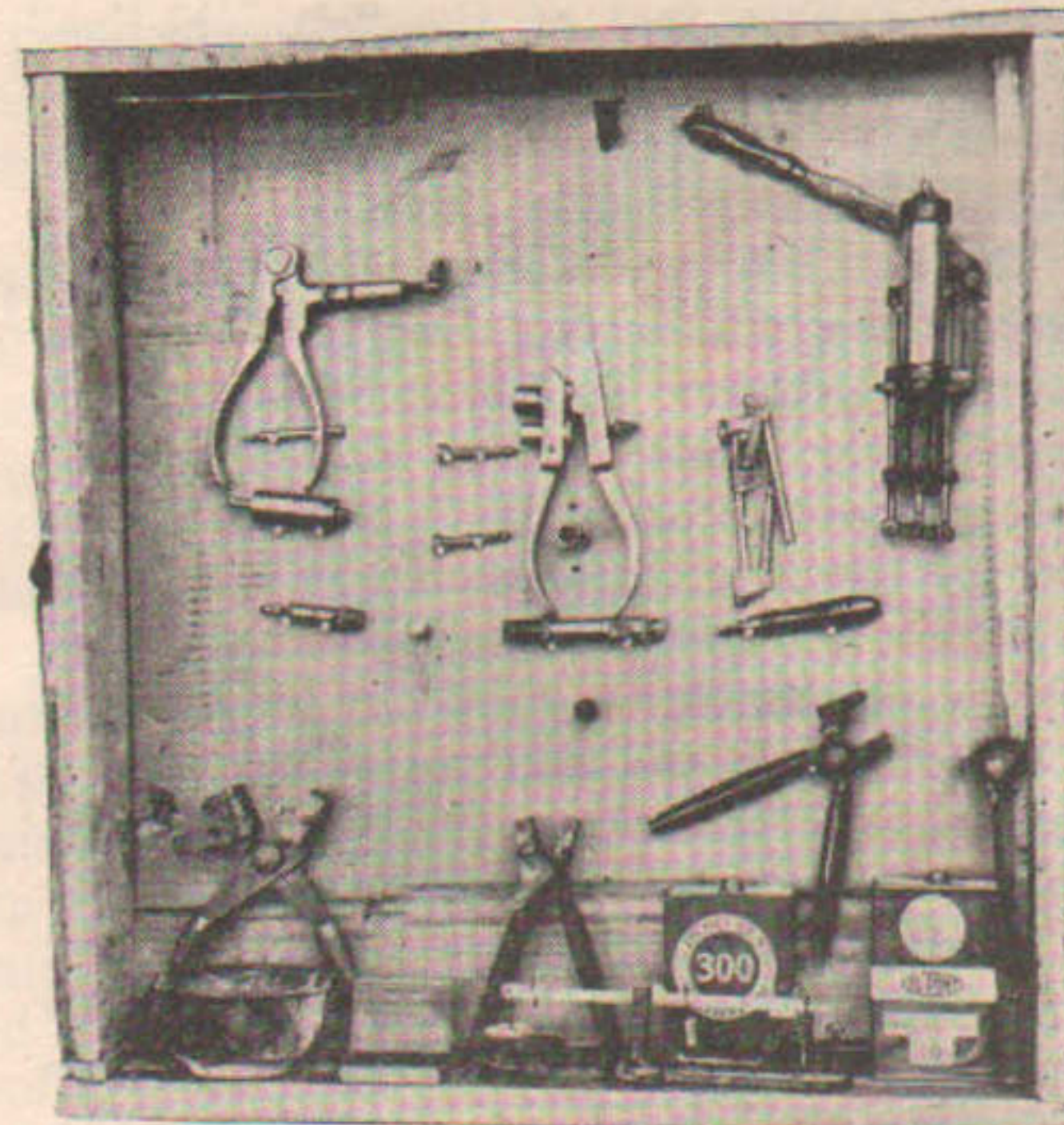
A loading bench of two-inch plank solidly secured, is desirable for holding and operating tools upon. Perhaps you can set one up in some well-lighted corner where the larger tools can be left undisturbed. The lubricating and sizing machine, particularly, should be well anchored. Mount the powder measure so you can see the powder falling from the tube into the funnel you hold in the case, on account of lagging grains. Some loaders have a bench with holes bored, which they bolt to a sill or piece of heavy furniture, and remove to the attic when they are through work.

The full set of tools as listed is important. You can not load perfect cartridges without every one of them, nor load speedily. Failures in reloading are nearly always due



Yankee, Bond and Ideal Molds. Note bullet cavities in comparison with size of head.

to a lack of some one or more necessary tools. Case muzzle dies and expanders are



as necessary as bullet seaters to insure good ammunition. Powder measures and bullet sizing and lubricating machines may not

appear indispensable, but if you want to get the joy out of home loading, and do good work quickly, they are. A pot and a dipper are vital in casting bullets. Do not try to save a few dollars by pruning the list.

Reloading tools enable you to shoot whenever inclined without too much expense. The beginner, however, may wonder if the cost of the tools listed is justified. He may think of buying a thousand factory cartridges instead, and making them last five or ten years.

The cost of tools is justified. Twenty to thirty dollars or even more can be saved in loading a thousand 30-06 cartridges if you buy new empty cases and all components. If you reload your fired cases, you can save

more than fifty dollars on a thousand of these cartridges. Loading tools properly used certainly cut down the cost of fine target ammunition for the 30 Springfield. When you reload reduced charges or your big rifle, seven or eight cents a cartridge are saved on the regular price of full power factory cartridges.

Some makes of tools are more convenient than others for your use—more convenient or complete, cheaper, or more accurate, smoother or speedier. Which tools they are depends on your conditions. The least desirable tools on the market, however, are capable of making excellent ammunition in the hands of a man who studies how.

The man who makes perfect cartridges is the one who resolves at the beginning to do everything right, and who gets a grasp of the nature and requirements of his cartridge and rifle. He tackles the job of loading determined to get good work out of each tool, even at the expense of a little inconvenience to himself.

TABLE 1—MODERN LOADS FOR VARIOUS CARTRIDGES

Including Vital Information on Diameters, Pressures and Velocities of the Different Charges, and Their Purposes

One of these tables is printed with each article of this series on hand-loading ammunition. The objects are to provide the facts and figures which every careful hand-loader requires. All important cartridges will be included in these tables from time to time, and every table will give one or more loads for each of the half-dozen most popular cartridges. The "Remarks" column will serve as your index, as it classifies the loads on the basis of their purposes or uses. Keep such data permanently. It is necessary in loading as good tools are.

Cartridge	Groove diameter	Maximum lbs. safe pressure	Bullet weight, grains and kind	Powder Name and brand	Charge grains weight	Velocity of load ft. seconds	Pressure of load pounds	Remarks—Purposes and special facts
30-40	.308"	43,000	180, jacketed	Du Pont No. 16	42.5	2550	42,000	More powerful than the 30-06-150.
30-40	.308"	43,000	180, jacketed	Hercules HiVel	36.8	2371	37,000	Extremely accurate with lubaloy bullets.
30-40	.308"	43,000	150, jacketed	Hercules 300	47	2300	40,000	Speedier than the Service 30-06 load.
30-40	.308"	43,000	150, jacketed	Du Pont No. 16	45.5	2830	42,300	Speedier than the Service 30-06 load.
30-40	.308"	43,000	220, jacketed	Du Pont No. 16	40	2225	42,000	Perhaps most killing load on heavy game.
30-40	.308"	43,000	110 (30-30), jacketed	Du Pont No. 80	13	1350	.....	For very short range in woods.
30-40	.308"	43,000	170, jacketed	Du Pont No. 75	16	1450	25,000	For woods and target up to 200 yards.
30-1906	.308"	55,000	180, jacketed, B. T.	Hercules HiVel	45	2625	48,000	Winner at Quantico trials, 1922.
30-1906	.308"	55,000	170, jacketed	Hercules HiVel	43	2585	47,000	The Frankford 1922 National Match load.
30-1906	.308"	55,000	150, jacketed	Du Pont No. 16	52.5	3039	55,000	How about having a 30-06-3000? 51.5 grs. is better.
30-1906	.308"	55,000	180, jacketed, B. T.	Du P. No. 15, Lot 2	53	2725	52,000	Most powerful 30-06 load. Strikes 2,550 lbs. at 100 yards.
30-1906	.308"	55,000	180, jacketed, B. T.	Du Pont No. 20	46.6	2520	51,800	A good load with Gov't pyro powder and 180-gr. bullet.
30-1906	.308"	55,000	150, jacketed	Du Pont No. 20	48	2700	48,000	The old standard Service load in 30-06.
30-1906	.308"	55,000	150, jacketed	Du Pont No. 16	46	2700	42,000	Standard velocity with progressive powder.



# H I V E L

## IN THE NATIONAL MATCHES

In the National Team Match of 1922, Private Raymond O. Coulter, of the Marine Corps Team, turned in the highest score, so far as is known, ever made over the National Match Course, in either practice or match shooting.

**Private Coulter's Score**

200 Yards Offhand .....	47 x 50
200 Yards Rapid Fire .....	50 x 50
300 Yards Rapid Fire .....	50 x 50
600 Yards Slow Fire .....	50 x 50
1,000 Yards Slow Fire .....	99 x 100
Total Score .....	296 x 300

In spite of the fact that no sighting shots were allowed at any ranges, Private Coulter, who shot HiVel, only dropped one point after the 200 yard offhand stage.

In the National Team Match you must be able to depend absolutely upon the elevation, and also upon the accuracy, of the first shot fired at each range.

The uniform burning of HiVel results in very much smaller mean and extreme verticals at long range than are obtained with any other powder. The absence of high or low shots and very uniform daily elevations are the qualities that enable a good holder to place his first shot at each range in the bullseye.

These are the reasons that make HiVel the best powder to use in the National Matches.

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## .25 Rim Fire Developments

By MALCOLM D. MILLER, D. D.

RECENTLY I received a mold cut from my drawing in January 1, 1922, issue. The mold was made by Mr. Rohrbacher, of the Yankee Specialty Co., Erie, Pa., and was so accurately designed to allow for shrinkage of a 1 to 50 mixture that the heel fitted perfectly in U. S. primed shells (which are chambered at the muzzle) and in Peters primed shells after chambering. Johnson and I cast a few bullets last Sunday and found that 8-grain FFFG Semi-smokeless was required to prevent the 80-grain bullet from tipping slightly at 100 yards. This load did not split the shells or foul them on the outside. Johnson fired three consecutive shots at 100 yards with muzzle rest on a black bull with ivory bead sight and they all struck within a 1-in. group, two of them being practically in the same hole. The next two shots struck practically in the same hole, but about 2½ inches from the others, owing to a sudden change of light.

Considerable difficulty was experienced in seating this ammunition into the un-throated barrel. The thumb alone could not apply enough pressure, and we had to whittle a stick with which to force the cartridge home. A sample bullet rammed into the throat showed that the rifling grips all the bands, hence I conclude that I shall either have to throat out the barrel for this bullet or have a new mold cut to cast a bullet not larger than 0.248 in. on the portion intended to lie in the throat. I have sketched such a bullet and submitted it to Western as a substitute for the present 65 to 67-gr. inside lubricated bullet, they having found that the tapered style of bullet is not adaptable to factory methods of manufacture. I am also sketching another un-tapered bullet 2½ diameters long, as the 17-in. twist seems capable of handling a heavy bullet (up to 80 grains) with the larger amounts of Semi. However, I want as long and as heavy a missile as possible, in order to secure long-range accuracy; and if I can't get enough velocity from Semi., it may be possible to use No. 93 du Pont, which, I am informed, is adaptable to rim-fire ammunition and has the advantage of developing a more favorable relation between velocity and pressure and gives less strain upon the metal of the case. I believe my new design will make the bullet sufficiently over size to develop the necessary pressure for good burning.

### SCATTERGUN AT PERRY

(Concluded from page 7.)

merely shooting for a practice medal or contesting in the big events. At all times the shooting hours were accompanied by very strong but uncertain winds, making the targets unusually hard.

On September 25 the Camp Perry Registered Tournament under A. T. A. Rules, drew 69 entrants. An evidence of the sporting quality of the birds thrown, is to be found in the score made by C. A. Bogert of Toledo, who the week before won the preliminary event in the Grand American Handicap at Atlantic City with a score of 198 out of 200. In the Camp Perry Tournament he broke only 130 out of 150.

While there were no teams entered in the team match, the Camp Perry Individual Championship attracted some 30 individual entries. It was shot September 26 and 27. This event was won by Schwartz of California with a score of 89 out of 100. Fast targets and very cold weather conditions accounted for the low scores in this event.

With the close of the practice traps, it was found that the expenditure of ammunition approximated 5,000 shells per day. Also most of the shooters had taken the course for practice or instruction.

The presence of such well known shots as Squires of Du Pont, Jay Graham of Hercules, John Taylor of Winchester, Richard Arvin and H. L. Maitland of Western made this year's shot-gun meeting an unqualified success.

NOTE: Scores in shotgun events appear on page 23.

### MARINES WIN MATCH

(Continued from page 3.)

ed the Navy into third place; the standing being: Coast Artillery 2108; Marine Corps 2105; Navy 2088; Infantry 2085 and Cavalry 2076.

The second pair up for the Marines, Ashurst and Pulver, were nipped by the mirage, each scoring a miss on his first record shot and each finishing with 90, while the Coast Artillerymen, Trichel and Hahn took the opportunity to reinforce their team's lead over the Leathernecks with strings of 95 and 97 respectively. The Infantry pair, Velenage and Wessels, each adding 93 to their team total, failed to move up the line and the second pairs finished leaving the standing the same as before, but with the Coast Artillery apparently stronger contenders than ever, with these aggregates: Coast Artillery, 2300; Marines, 2285; Navy 2272; Infantry, 2271; Cavalry, 2225.

Standings resulting from the scores of the third pairs were for a time in doubt for the Coast Artillerymen, as the match progressed began firing very slowly, but as the strings were chalked up, it was found that for the Marines, Tillman had scored 96 and Frederick 82, a total of 178 and an aggregate of 2463; for the Infantry Rothrock had scored 96 and Ross 95, a total of 191, an aggregate of 2462; while the efforts of the Navy produced an aggregate of 2457 and of the Cavalry 2435. These figures showed that the Infantry had become a dangerous competitor and the gallery crowded about the score board anxiously waiting the runners who would bring the scores of the Artillery pair, while the fourth pairs of the other teams went on the line.

Parsons of the Coast Artillery pulled a two, a three and a miss before he located the black, but Otto Bentz his shooting partner had better fortune.

A break in the crowd as a statistical office runner pushed through and called up

to the score board chalker: "Coast Artillery 85 and 92." Parsons and Bentz had put on 177 points to an aggregate of 2477, holding the lead with 14 points.

As the mid-morning hours came, the mirage intensified and its effect upon the distant targets called upon the shooters for the best that was in them. Stephenson and Doyle of the Marines outguessed the vapor-boil at the targets for strings of 99 and 92, bringing the team total to 2654 points; Hinds and Fenton of the Infantry brought their team aggregate up to 2649 and the Navy and the Cavalry at this point went well out of the running on aggregates of 2630 and 2622.

Over on the Coast Artillery target, shooting with the deliberate slowness that characterized that of the third pair, Lowe and Ping were having their troubles. Shot by shot it became apparent that the third pair of Marines had set a killing pace and that the Coast Artillery could do little more than hold its lead. And the last shot from each told the story. The pair total of 175 failed to hold the lead and the Coast Artillerymen for the first time since the match began slipped into second place 2 points behind the Leathernecks.

Blazing noon, the light hard and the mirage dancing merrily along the butts; wind flags drooping sluggishly around their poles; the crowd tense back of the benches anticipating a horse-race finish, and the "anchor pairs" on the line.

Lee and Coulter of the Marines, with 95 and 99 finished early, bringing the grand aggregate to 2848; and Kneubel and Kotlarzyck for the Infantry scored 189, which in no way threatened the supremacy of the Leathernecks. It was impossible, at this stage for either the Navy or the Cavalry to come through winners.

The silhouette of a black, cut out of card board perched upon the scoreboard in front of which Frazer and Ryan, the anchor pair of the Coast Artillery was shooting, but the team mascot did not bring good fortune; in fact a black cat henceforth is likely to be just about as popular as a measles microbe in a foundling asylum where the Coast gunners are concerned. To win the match it was up to the anchor pair to score a total of 197, which had not been approached by any pair at the long range; and skilled and experienced shots though they were, the mirage proved too much for them, Ryan scoring a miss on his second shot, and Frazer scoring more threes than were good in a total which would loose out on 4 points down.

With the firing line almost empty of shooters, most of the teams having finished thirty minutes before Frazer and Ryan concluded their strings with 172 points; the Coast Artillery dropped into third place, while the Leathernecks celebrated.

It was some jubilation and the spectacle of a young Marine Major roosting in



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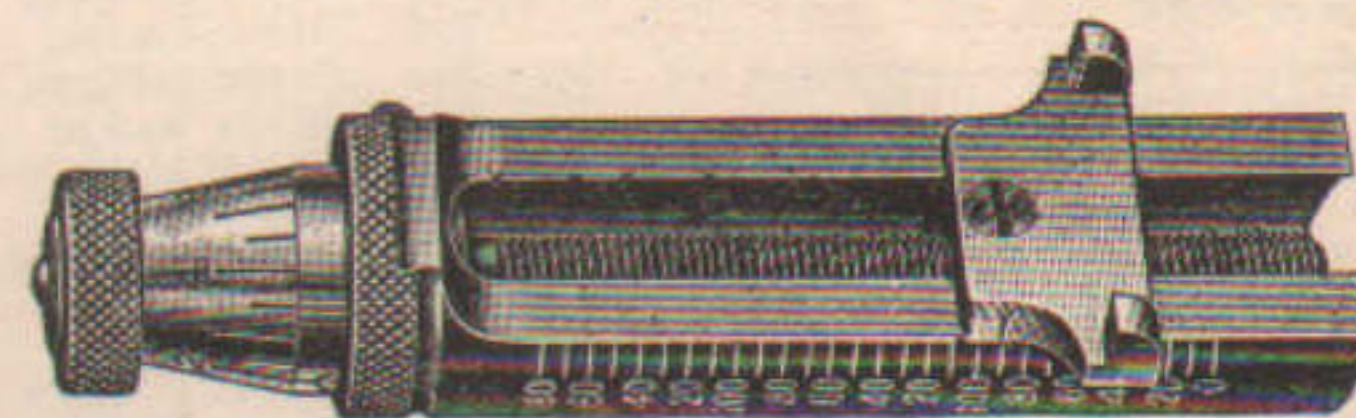


triumph on the shoulders of a Marine Brigadier was, to say the least, diverting.

In connection with the team match, mention of one remarkable individual performance is warranted—the score made by Pvt. Raymond O. Coulter over the course. From offhand to thousand-yards, Coulter dropped only 4 points finishing with a total of 296 out of 300 under conditions which taxed the skill of experienced old timers.

The National Individual Match, which immediately preceded the practice days for the team event, drew a sizeable entry list. Out of the 780 riflemen firing, Sgt. Otto Bentz, of the Coast Artillery, who it will be recalled, was a "South paw" shooter until this season and who trained himself to shoot from the right shoulder, outranked two strong contenders—Sgt. Anton Kotlarzyck of the Infantry and Capt. M. H. Parsons of the Coast Artillery—and won the event, scoring 337 out of 350.

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#### NATIONAL INDIVIDUAL RIFLE MATCH

780 Entries

Weather conditions: Thursday—Cool; light wind from west; cloudy. Friday—Cool; light wind from west; bright light.

No.	Name and Organization	Score	Badge
1.	Bentz, Otto Sergt., CAC	337	Gold badge
2.	Kotlarzyck, Anton, Sergt., 23rd Inf.	337	Gold badge
3.	Parsons, Marvel H., Capt., CAC	337	Gold badge
4.	Macon, Francis A., Capt., Inf.	336	Gold badge
5.	Cotton, Richard E., Lieut. Col., Minnesota N. G.	335	Gold badge
6.	Tucker, James R., Cpl., USMC	335	Gold badge
7.	Lively, Truman G., Civilian, Ill.	335	Gold badge
8.	Becker, John P., Civilian, Minn.	335	Gold badge
9.	Velenage, John, Sergt., 13th Inf.	335	Gold badge
10.	Vereer, Thomas E., Civilian, Mich.	334	Gold badge
11.	Lay, Walter F., 1st Sergt., 19th Inf.	334	Gold badge
12.	Tillman, Nolan, 1st Sergt., USMC	334	Gold badge

13.	Allen, Roderick R., Capt., 4th Cav.	334	Silver badge
14.	Coulter, Raymond O., Pvt., USMC	334	Silver badge
15.	Campbell, James T., Capt., CAC	334	Silver badge
16.	Price, George W., Major, Inf.	334	Silver badge
17.	Gladden, Alton A., 1st Lieut., USMC	334	Silver badge
18.	Maddux, Henry B., 2nd Lieut., Texas N. G.	334	Silver badge
19.	Ioerger, Frank, Sergt., ISD	334	Silver badge
20.	Trichel, Gervais W., 1st Lieut., CAC	333	Silver badge
21.	Friend, George E., Sergt., 8th Eng., MTD	333	Silver badge
22.	Frazer, William D., Major, CAC	333	Silver badge
23.	Frederick, Albert F., Sergt., USMC	333	Silver badge
24.	Kubovy, Jerry, Sergt., 1st Cav.	333	Silver badge
25.	Shields, Clarence S., 1st Lieut., D. of C. N. G.	333	Silver badge
26.	Smith, John D. C., 1st Sergt., 144th Inf., Texas N. G.	333	Silver badge
27.	Doyle, Edgar H., Sergt., USMC	333	Silver badge
28.	Barrans, William T., Civilian, Ill.	333	Silver badge
29.	Schoonmaker, John V. V., 2nd Lieut., New Jersey N. G.	333	Silver badge
30.	Hasbrouck, Thaddeous H., Sergt., USMC	333	Silver badge



31. Fleming, Earl D., Ch. Gn. Mate, USN.....	333	Silver badge
32. Gussman, Fred L., Capt., 112th Cav., Texas N. G.....	332	Silver badge
33. Wessels, Theo. F., Capt., Inf.....	332	Silver badge
34. Hall, Hugh J., 1st Lieut., N. M. N. G.....	332	Silver badge
35. Conradt, Pierson E., 2nd Lieut., USMC.....	332	Silver badge
36. Alexander, James V., Sergt., USMC.....	332	Silver badge
37. Kitchen, Eldon L., CMTC, 6th C. A.....	332	Bronze badge
38. Jones, Thomas, Sergt., USMC.....	332	Bronze badge
39. Weir, John R., Sergt., USMC.....	332	Bronze badge
40. Barnes, Harry C., Jr., Capt., CAC.....	332	Bronze badge
41. Stake, Ernest S., Sergt., USMC.....	331	Bronze badge
42. Powell, Ralph E., 1st Lieut., Inf.....	331	Bronze badge
43. Coldissar, George, Ensign, USN.....	331	Bronze badge
44. Loughlin, James F., Capt., Ord. Dept., Mass. N. G.....	331	Bronze badge
45. Wilson, Lester D., Cpl., USMC.....	331	Bronze badge
46. Felt, Loren M., Civilian, Ill.....	331	Bronze badge
47. Brannon, Robert V., Pvt., 118th Inf., S. C. N. G.....	331	Bronze badge
48. Bagby, Carroll A., Major, 20th Inf.....	331	Bronze badge
49. Carlson, August W., Cpl., USMC.....	331	Bronze badge
50. Stanley, Stewart W., Major, CAC.....	331	Bronze badge
51. Mollerstrom, Peter F., 1st Sergt., 17th Inf.....	331	Bronze badge
52. Leo, George R., Cpl., USMC.....	331	Bronze badge
53. Brynie, Osmund A., 1st Sergt., 2nd Eng.....	330	Bronze badge
54. Hamilton, A. C., 1st Lieut., 2nd Inf.....	330	Bronze badge
55. Stephenson, Spencer L., Cpl., USMC.....	330	Bronze badge
56. Hieks, George R., Major, Inf.....	330	Bronze badge
57. Wiggs, Otto, Mar. Gun., USMC.....	330	Bronze badge
58. Mapes, Paul W., Capt., 9th Inf.....	330	Bronze badge
59. Nelson, Ernest J., Pvt. 1st Cl., USMC.....	330	Bronze badge
60. Spooner, Lloyd S., Capt., Inf.....	330	Bronze badge
61. O'Mohundro, Wiley H., Capt., 25th Inf.....	330	Bronze badge
62. Knuebel, John H., Capt., Inf.....	330	Bronze badge
63. Leuehner, William F., Major, CAC.....	329	Bronze badge
64. Ramee, Per, Major, Inf.....	329	Bronze badge
65. Moraski, Sigmund A., Cpl., USMC.....	329	Bronze badge
66. Meighen, Carl H., Sergt., Ohio N. G.....	329	Bronze badge
67. Walsh, James F., Sergt., 11th Inf.....	329	Bronze badge
68. Ping, George B., Sergt., CAC.....	329	Bronze badge
69. Stephens, Sam, Capt., Inf.....	329	Bronze badge
70. Balough, Julius, Pvt., 1st Cl., USMC.....	329	Bronze badge
71. Meeks, Corbett, Sergt., 11th Inf.....	329	Bronze badge
72. Rhein, Wade W., Capt., CAC.....	329	Bronze badge

NATIONAL INDIVIDUAL PISTOL MATCH

119 Entries

Course: Two scores of 5 shot each, timed fired, 20 second per score; range, 25 yards. Two scores of 5 shots each, rapid fire, 10 seconds per score; range, 25 yards. Two scores of 5 shots each, slow fire, 30 seconds per shot; range, 50 yards.

No.	Name and Organization	Score	
1. Andino, Eduardo G., 1st Lieut., 18th Inf.....	265	Gold badge	
2. Hinds, Sidney R., 1st Lieut., 53rd Inf.....	265	Gold badge	
3. Hedden, Willis A., Capt., Inf., DOL.....	262	Gold badge	
4. Whaling, Wm. J., 1st Lieut., USMC.....	260	Gold badge	
5. Pruessner, Don A., Capt., Ord., Iowa N. G.....	256	Gold badge	
6. Pogorzelski, Adam F., Sergt., USMC.....	256	Gold badge	
7. Fracker, Dudley G., Pvt., USMC.....	254	Gold badge	
8. Thomas, John M., Gunnery Sergt., USMC.....	253	Gold badge	
9. Newgarden, Paul, Major, 27th Inf.....	263	Gold badge	
10. Krause, Fred, Pvt., USMC.....	252	Gold badge	
11. Snyder, Milo D., Lieut. Col., Indiana N. G.....	250	Gold badge	
12. Hoge, William D., Cpl., USMC.....	250	Gold badge	
13. Christian, James, Tech. Sergt., CAC.....	247	Silver badge	
14. Frazer, William D., Major, CAC.....	246	Silver badge	
15. Stanley, Stewart W., Major, CAC.....	244	Silver badge	
16. Smith, Stanley, Sergt., 54th Inf.....	243	Silver badge	
17. Harant, Louis J., 1st Lieut., 23rd Inf.....	243	Silver badge	
18. Jensen, Jens D., Sergt., 4th Cav.....	243	Silver badge	
19. Velenage, John, Sergt., 13th Inf.....	242	Silver badge	
20. Hohn, Lewis A., 2d Lieut., USMC.....	242	Silver badge	
21. Gawehn, George R., Capt., Indiana N. G.....	242	Silver badge	
22. Tomey, William R., 1st Lieut., 29th Inf.....	242	Silver badge	
23. Stanford, Richard A., Cpl., USMC.....	242	Silver badge	
24. Coffin, Frank P., Capt., 5th Inf.....	242	Silver badge	
25. Rumsey, Lewis M., Major, Inf.....	241	Silver badge	
26. Johnston, Oscar R., 1st Lieut., 27th Inf.....	240	Silver badge	
27. Ramee, Per, Major, Inf.....	240	Silver badge	
28. Stephens, Sam W., Capt., Inf.....	240	Silver badge	
29. Simmons, F. L., Major, ORC.....	239	Silver badge	
30. Franzen, Charles O., Cpl., USMC.....	239	Silver badge	
31. Rothrock, Arthur D., 1st Lieut., Inf.....	239	Silver badge	
32. Carlson, August W., Cpl., USMC.....	239	Silver badge	
33. Gregory, Allen L., Capt., 168th Inf., Iowa N. G.....	238	Silver badge	
34. Martin, Justus, Cpl., USMC.....	238	Silver badge	
35. Bailey, Henry M., Gunnery Sergt., USMC.....	238	Silver badge	
36. Hogue, Chas. S., 2nd Lieut., 11th Inf., Pa. N. G.....	237	Silver badge	
37. Spooner, Lloyd S., Capt., Inf., DOL.....	237	Bronze badge	
38. Porter, Earl B., Sergt., CAC.....	237	Bronze badge	
39. Steele, Thomas, Capt., 18th Inf.....	236	Bronze badge	
40. Adams, Jim, Sergt., 6th Cav.....	236	Bronze badge	
41. Schmitt, Constantine V., 1st Lieut., Ord.....	236	Bronze badge	
42. Dickerson, Stephen J., Sergt., USMC.....	236	Bronze badge	
43. Darling, Wallace L., 2nd Lieut., CAC.....	235	Bronze badge	
44. Garland, Jerry B., Capt., 113th Engineers.....	235	Bronze badge	
45. Hendricks, August O., 1st Sergt., 12th Cav.....	235	Bronze badge	
46. Yuditsky, Joseph, Capt., 14th Cav.....	235	Bronze badge	
47. Lowry, J. D., Civilian.....	235	Bronze badge	
48. Watson, William R., Capt., 5th Inf.....	235	Bronze badge	
49. Witt, Wilmer L., Seaman 2nd Cl., USN.....	234	Bronze badge	
50. Hession, John W., Civilian, New York.....	233	Bronze badge	
51. Hopkins, Dema B., Sergt., USMC.....	233	Bronze badge	
52. Hall, Hugh J., 1st Lieut., 11th Cav., N. M. N. G.....	232	Bronze badge	
53. Lively, Truman G., Civilian, Illinois.....	232	Bronze badge	
54. Sheets, Henry B., 1st Lieut., 54th Inf.....	232	Bronze badge	
55. Dyba, Joseph J., Pvt., CAC.....	231	Bronze badge	
56. Engle, Harvey C., Sergt., 125th Inf., Mich. N. G.....	231	Bronze badge	
57. Davidson, Alexander H., Lieut. Col., 8th Cav.....	230	Bronze badge	
58. Loughlin, James F., Capt., Ord., Mass. N. G.....	230	Bronze badge	
59. Rehm, George A., 1st Lieut., 14th Cav.....	229	Bronze badge	
60. Walker, Samuel P., 1st Lieut., 7th Cav.....	229	Bronze badge	
61. Schledorn, C. W., Civilian, Illinois.....	228	Bronze badge	
62. Andrews, James D., Capt., 1st Eng.....	228	Bronze badge	
63. Beckwith, Frank S., Pvt., 9th Corps Area, CMTC.....	227	Bronze badge	

64. Black, Albert, 1st Lieut., Indiana N. G.....	226	Bronze badge
65. Bagby, Carroll A., Major, 20th Infantry.....	226	Bronze badge
66. Macon, Francis A., Capt., Inf.....	226	Bronze badge
67. Castaldini, W. P., Civilian, Mass.....	226	Bronze badge
68. Eastwood, Thad., Tech. Sergt., Ord.....	225	Bronze badge
69. Mumma, Morton C., Lieut. Col., Cavalry.....	225	Bronze badge
70. McRae, Phillip M., 1st Lieut., Inf.....	224	Bronze badge
71. Sargent, Charles R., 1st Lieut., 65th Inf.....	223	Bronze badge
72. Schriver, Ollie M., Sergt., USMC.....	223	Bronze badge

THE NATIONAL RIFLE TEAM MATCH

Arm: The Service Rifle. Sights: Service. Ammunition: Service.  
 Course of fire: First stage—Slow fire, 200 yards, Target "A," ten shots, standing, time limit one minute per shot, no sighting shots. Second stage—Rapid fire, 200 yards, Target "D," ten shots kneeling or sitting from standing, time limit one minute; battle sight or leaf sight may be used. Third stage—Rapid fire, 300 yards, Target "D," ten shots prone from standing, time limit one minute and ten seconds; battle sight or leaf sight may be used. Fourth stage—Slow fire, 600 yards, Target "B," ten shots prone, no sighting shots, no artificial rest. Fifth stage—Slow fire, 1,000 yards, Target "C," twenty shots prone, no sighting shots, no artificial rest.  
 Weather conditions: Cool; bright light; slight wind from easterly direction.

No.	Team	Class A		Total
		Slow fire	Rapid fire	
		200yds.	300yds.	
<b>1. United States Marine Corps—</b>				
	Tillman, Nolan, 1st Sergt.....	42	48	96
	Frederick, Albert F., Sergt.....	44	47	82
	Doyle, Edgar, Sergt.....	45	47	92
	Stephenson, Spencer L., Cpl.....	42	47	99
	Ashurst, William W., Capt.....	45	47	90
	Fulver, William E., Pvt.....	45	50	90
	Blade, Emil J., Pvt. 1st Cl.....	44	47	97
	Sharp, Grady L., Pvt.....	47	48	93
	Lee, George R., Cpl.....	43	47	95
	Coulter, Raymond O., Pvt.....	47	50	99
	<b>Totals.....</b>	<b>444</b>	<b>478</b>	<b>938</b>
<b>2. U. S. Infantry—</b>				
	Hinds, Sidney R., 1st Lieut.....	44	48	94
	Wessels, Theo. E., Capt.....	45	47	93
	Velenage, John, 1st Sergt.....	46	50	93
	Fenton, Dennis, Cpl.....	48	48	93
	Doane, Irvin E., Capt.....	47	47	90
	Stephens, Samuel W., Capt.....	40	49	85
	Rothrock, Arthur D., 1st Lieut.....	46	46	96
	Ross, Frank S., 1st Lieut.....	43	49	95
	Knuebel, John H., Capt.....	44	48	94
	Kotlareyk, Anton, Sergt.....	42	48	95
	<b>Totals.....</b>	<b>445</b>	<b>480</b>	<b>928</b>
<b>3. Coast Artillery Corps—</b>				
	Frazer, W. D.....	45	49	83
	Ryan, J. A.....	45	49	89
	Campbell, J. T.....	44	48	94
	Wertzberger, James.....	47	47	90
	Trichel, G. W.....	46	49	95
	Hahn, Otto S.....	45	48	97
	Lowe, P. S.....	46	50	86
	Ping, G. B.....	45	48	89
	Parsons, M. H.....	45	46	85
	Bent, Otto.....	44	49	92
	<b>Totals.....</b>	<b>452</b>	<b>483</b>	<b>900</b>
<b>4. U. S. Navy—</b>				
	Amy, Enos P.....	45	50	88
	Clay, J. P.....	45	50	96
	Voegeli, C. E.....	47	48	91
	Mission, C. A.....	47	43	90
	Fleming, E. D.....	44	47	80
	Witt, W. L.....	43	46	93
	Davis, G. E.....	42	47	91
	Fray, C. J.....	44	48	94
	Sampson, J. G.....	46	47	89
	William, J. E.....	44	46	95
	<b>Totals.....</b>	<b>447</b>	<b>472</b>	<b>907</b>
<b>5. Cavalry and Engineers—</b>				
	Roderick, Allen R., Capt.....	45	43	82
	Jensen, Jens B., Sergt.....	44	48	85
	Walkers, Samuel P., 1st Lieut.....	41	48	86
	Smyth, Chas. E., 1st Sergt.....	47	48	91
	Pray, Frank, Sergt.....	44	49	96
	Longacre, Ben. F., 1st Sergt.....	45	48	87
	Marvin, Otto R., Sergt.....	44	47	93
	Kubovy, Jerry, Sergt.....	45	48	93
	Wood, Walter A., Capt.....	46	50	97
	Friend, George E., Sergt.....	48	47	94
	<b>Totals.....</b>	<b>449</b>	<b>476</b>	<b>904</b>
<b>6. Massachusetts N. G.—</b>				
	Loughlin, J. F.....	41	48	92
	Coller, A. B.....	43	43	89
	Berg, C. D.....	45	48	96
	Wilson, R. W.....	45	49	89
	Fitzgerald, Ed.....	45	44	93
	Luken, R. E.....	44	46	84
	Spraker, J. C.....	41	50	97
	Castle, R. W.....	43	48	95
	Lawless, J. T.....	42	49	91
	Campbell, M. P.....	43	48	95
	<b>Totals.....</b>	<b>432</b>	<b>473</b>	<b>922</b>
<b>7. Illinois Civilian—</b>				
	Lively, T. G.....	46	49	91
	Dunn, D. E.....	38	44	91
	Allen, Clyde.....	42	49	96
	Moore, M. G.....	39	45	93
	Barrans, W. T.....	43	49	84
	Nordhus, C. E.....	46	48	91
	Bowers, R. W.....	42	47	85





These marksmen of the American Rifle Team, using Western Ammunition, won the Championship of the World at the International Matches held at Milan, Italy. W. R. Stokes, shown at the left, retained the World's Individual Championship and also won the Kneeling Championship.

The U. S. Infantry Team (illustrated above) broke six world records in one match at Camp Perry with Western Ammunition. The 800-yard target at the right is a world's record. The entire 136 consecutive shots fired by the eight men of the team were all bull's-eyes.

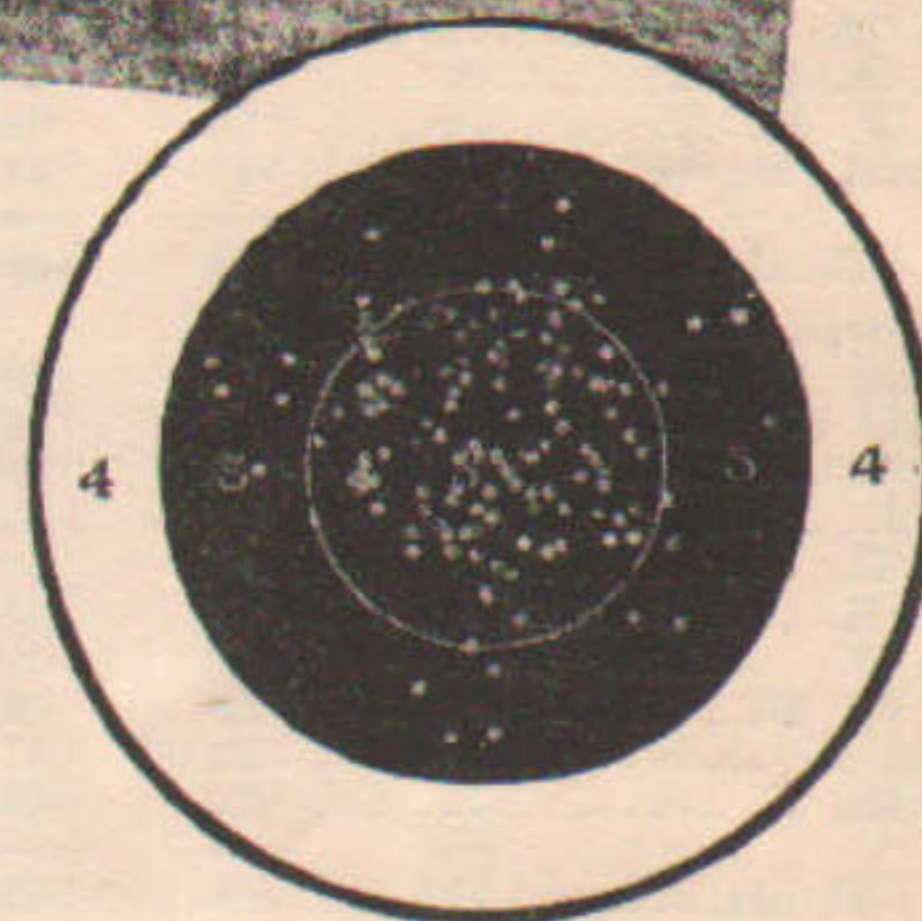


Photo by Underwood & Underwood.

## The World's Highest Honors

**W**HETHER you hunt for pleasure or shoot to prove your skill, always use Western—the ammunition accorded the world's highest honors in tests at home and abroad!

Famous marksmen who have shot Western Ammunition and closely observed the records made, state that never before in the history of ammunition manufacture has such reliable accuracy been produced. This unusual accuracy is the result of several exclusive Western features—primarily the Lubaloy Non-Fouling Bullet Jacket and the modified Boat-Tail Bullet design.

**At Milan, Italy,** in the International Matches, the American Team won the World's Championship for the second time in 18 years. W. R. Stokes retained the World's Individual Championship, making a score of 1,072, and also won the Kneeling Championship, which had previously been held for nearly 15 years by members of the Swiss Rifle Team.

**At Camp Perry,** in the National Matches, the U. S. Infantry eight-man Team broke six world's records with a total score at the 800-, 900- and 1,000-yd. ranges of

1,787 points out of a possible 1,800. At the 800-yd. range the score of all eight men was perfect—136 consecutive shots in the bull's-eye. Sergeant Stanley Smith, Lieutenant Griswold and Sergeant Lay established three new world's records by making perfect scores at all ranges. Major W. D. Fraser, of the Coast Artillery, used Western Ammunition exclusively in winning the All-around Championship, using rifle, revolver and shotgun.

**At Sea Girt,** the Marine Corps Team established a world's record with iron sights in the Saddler Match at 800, 900 and 1,000 yards. Private Alexander broke the world's record with iron sights with a score of 224 points out of a possible 225.

This is the record, briefly told, of the new world honors won with Western Ammunition—it points out clearly the wisdom of using Western Ammunition for every form of shooting.

Write for full particulars on Western Ammunition and the new book on Super-X, the famous shotgun load which will actually extend your shotgun range as much as 20 yards. Address Western Cartridge Company, Dept. F-11, East Alton, Ill.



Western Lubaloy Bullets Insure Super-accuracy

# Western Ammunition







No.	Team	—Slow fire—			—Rapid fire—		Total	No.	Team	—Slow fire—			—Rapid fire—		Total
		200 yds.	600 yds.	1000 yds.	200 yds.	300 yds.				200 yds.	600 yds.	1000 yds.	200 yds.	300 yds.	
	Fountain, Percival F., 1st Lt.	42	48	85	50	48	273		Koener, Ralph, Sergt.	43	42	80	50	46	261
	Bradfield, Clarence S., 2nd Lt.	44	38	58	45	48	233		Moisan, Paul J., Capt.	43	43	85	50	50	271
	Nordeen, Eric P., Sergt.	45	47	87	50	48	277		Lundberg, Oscar W., 1st Lieut.	41	45	84	43	44	257
	Hohjelle, E., Sergt.	40	44	84	48	47	263		Totals	414	437	827	477	475	2,830
	Fender, William J., Sergt.	39	47	90	40	50	266	33.	Idaho N. G.—						
	Gofford, Robt. B., Sergt.	43	45	78	43	46	255		McConnell, M. G.	42	44	81	44	43	254
	Waterson, E. B., Pvt.	42	44	94	49	50	279		Roche, W. L.	39	43	80	48	38	248
	Totals	424	449	847	472	479	2,671		Orris, E. B.	46	42	86	45	48	267
25.	Second Corps Area, CMTC.—								Hemphill, C. H.	42	47	84	49	45	267
	Adie, George C.	41	46	88	39	49	263		Wright, G. W.	26	47	89	48	46	256
	Truslow, Frederick K.	35	48	87	50	45	265		Long, R. F.	42	49	84	48	47	270
	Johnson, William A.	37	48	90	47	49	271		Gray, L. S.	44	48	75	49	48	264
	Jackson, Moses S.	34	44	79	46	48	251		Bennett, C. A.	40	49	80	48	49	266
	Foster, E. C.	42	41	81	49	49	262		Jarvis, H. S.	44	48	83	45	49	269
	Kafes, William G.	42	44	92	47	48	273		Dunham, I. L.	42	47	82	49	49	269
	Geraghty, Lawrence	41	46	91	48	49	275		Totals	407	464	824	473	462	2,630
	Peterson, John	40	47	82	47	49	265	34.	Michigan N. G.—						
	May, Henry S.	40	46	91	49	45	271		Wiesenhofer, M. A., Major	41	46	89	48	50	274
	Beames, Clark F., Jr.	41	46	98	48	50	273		Dessert, Earl J., 1st Lieut.	40	42	80	48	47	257
	Totals	393	456	869	470	481	2,669		Shomin, Nicholas J., St. Sergt.	39	44	80	50	49	262
26.	Fifth Corps Area, CMTC.—								Rivard, Ralph B., Sergt.	41	41	75	50	49	256
	Axup, R. W.	44	49	95	49	49	266		Sack, Ernest S., 1st Sergt.	43	46	83	50	49	271
	Bayne, Rose	39	49	88	49	46	271		Engle, Harry O., Sergt.	44	46	85	48	46	269
	Richards, R. C.	35	49	85	46	48	263		McCall, C. A., 1st Sergt.	43	44	74	44	47	252
	Turner, M. H.	40	44	79	49	47	259		Kowalski, Chas. J., 1st Lieut.	40	45	85	43	39	252
	Kropp, C. L.	38	42	79	50	50	259		Bradley, K. C., Capt.	44	48	82	48	48	270
	Hanson, L. K.	42	45	78	49	50	264		Engwall, Chas. M., 1st Sergt.	43	44	86	44	44	261
	Dunn, C. G.	44	48	73	46	46	257		Totals	418	446	819	473	468	2,624
	Wilson, P. D.	47	42	81	46	50	266	35.	Connecticut N. G.—						
	Pickett, L. W.	42	46	88	50	48	274		Denison, W. R.	41	49	87	45	45	267
	Miller, E. J.	43	47	86	45	45	266		Taylor, H. O.	45	48	80	48	50	271
	Totals	414	461	832	479	479	2,665		Bitgood, W. E.	37	45	68	49	44	243
27.	Ohio N. G.—								Berns, E. A.	43	42	72	47	45	249
	Kilper, Ban. L., Capt.	41	45	81	50	43	260		Griffin, A. J.	42	47	76	50	50	265
	Miller, Robert E., Capt.	39	46	89	47	48	269		May, C. R.	37	46	91	46	46	266
	Fleckner, Wm. E., Capt.	39	40	84	46	46	255		Kumnick, E. H.	35	43	94	49	45	266
	Rice, Clark C., 1st Lieut.	40	43	81	41	49	254		Maltby, L. F.	41	47	87	48	50	273
	Clark, John H., 2nd Lieut.	37	46	88	43	50	264		Green, F. W.	39	43	85	48	49	264
	Maxwell, D. R., Tech. Sergt.	41	47	89	49	49	275		Sunderland, P. B.	37	43	82	47	49	258
	Anspach, Russell J., Sergt.	41	45	95	48	50	279		Totals	397	453	822	477	473	2,622
	Anderson, Victor L., Sergt.	41	45	78	47	47	258	36.	Indiana Civilian—						
	Meighen, Carl, Sergt.	43	49	84	50	50	276		Bradley, Arthur C.	40	43	85	47	48	263
	Scott, Fielding W., Pvt.	41	49	91	43	48	272		Mitchell, William R.	42	41	95	49	50	277
	Totals	403	455	860	464	480	2,662		Ruschaupt, Chas.	36	42	78	47	40	243
28.	Fourth Corps Area CMTC.—								Millholand, Ray	41	47	89	48	47	272
	Alexander, A. B.	34	43	85	47	49	253		Noble Thos. B., Jr.	42	44	88	40	41	255
	Ashmore, R. W.	37	45	80	46	49	257		Wilford, D.	40	31	89	46	44	250
	Catron, R. T.	40	44	73	48	48	253		Gorsuch, John G.	46	48	95	47	44	280
	Drewnan, J. W.	46	48	89	50	49	282		Hinkle, Wm. C.	39	46	85	46	49	265
	Gaines, J. E.	42	44	80	46	49	261		Watson, Frank E.	43	39	78	44	45	249
	Greene, W. F.	41	46	94	50	50	281		Wagner Edward A.	42	46	85	47	45	265
	Osborne, A. L.	38	48	89	50	39	264		Totals	411	427	867	461	453	2,619
	Robinson, W. M.	42	44	84	47	50	267	37.	Arkansas N. G.—						
	Shaw, C. R.	41	45	86	50	46	268		Cone, Jas. C.	43	45	88	49	50	275
	Turner, E. P.	39	46	90	49	47	271		Kayer, O. W.	40	46	85	46	47	264
	Totals	400	453	850	483	476	2,662		Harris, P. A.	37	40	87	48	45	257
29.	Vermont N. G.—								Dils, H.	43	41	88	49	50	271
	Miner, Roy B., Capt.	45	45	73	50	49	262		Haslett, F. W.	41	41	81	49	49	261
	Ackley, George C., Capt.	37	44	86	47	50	264		Stevens, E. R.	41	48	81	49	47	266
	Deimer, Carl D., 2nd Lieut.	43	47	78	49	47	264		Biggers, S. E.	40	38	72	48	42	240
	Griswold, Carlton P., 2nd Lt.	46	48	90	46	47	277		Corpier, H. L.	40	44	84	42	49	259
	Beauregard, Leo C., 1st Sergt.	42	46	88	48	49	273		Crump, A. C.	34	50	84	49	41	258
	Steel, Owen B., Col. Sergt.	36	46	90	46	45	263		Warren, R. H.	36	47	85	49	49	266
	Gallaher, Marshal A., Sergt.	41	47	89	50	47	274		Totals	395	440	835	478	469	2,617
	Provost, Jos. F., Sergt.	40	41	79	45	47	252	38.	Mississippi N. G.—						
	Berry, Ed. W., Sergt.	42	47	86	47	48	270		Burril, C. F., Capt.	37	47	86	49	50	269
	Clapp, Pearl T., Sergt.	36	46	77	49	47	255		Adams, W. W., 1st Lieut.	42	45	88	48	50	273
	Totals	408	457	836	477	476	2,654		McCleur, Allen, 1st Lieut.	42	45	80	50	50	267
30.	Oklahoma N. G.—								McCaleb, L. C., 1st Lieut.	40	38	69	49	47	243
	Sammons, W. R.	42	49	93	50	50	284		McRae, H. H., 2nd Lieut.	31	43	81	45	40	240
	Fowls, D. R.	43	44	80	44	46	257		Radding, G. C., Sergt. Major	34	42	86	46	46	254
	McLean, F. O.	41	46	92	48	50	277		Willoughby, H. E., 1st Sergt.	42	46	88	49	49	274
	Hurley, H. C.	40	43	91	50	50	274		Hanna, J. Z., Cpl.	40	44	80	50	47	261
	Lee, C. O.	32	46	84	47	48	257		Herin, I. A., Cpl.	45	44	89	50	46	274
	Brazil, H. B.	44	50	93	46	49	282		Gilbert, O. M., Pvt.	40	43	79	48	50	260
	Crook, J. M.	42	39	69	48	46	244		Totals	393	437	826	484	475	2,615
	Jones, R. F.	37	40	78	47	45	247	39.	West Virginia N. G.—						
	Taylor, E. A.	40	42	90	45	41	258		Burdette, C. L., Sergt.	41	46	86	50	47	270
	Armstrong, A. M.	43	43	84	48	39	257		Herdrick, Dewey, Sergt.	46	45	88	43	44	266
	Totals	404	442	854	473	464	2,637		Harner, V. B., Sergt.	39	44	73	49	49	254
31.	New Jersey N. G.—								Hurt, Dallas K., Sergt.	40	38	77	46	48	249
	Powell, H. P.	40	47	72	48	49	256		Ellison, Carl D., Sergt.	36	45	77	48	49	255
	Cosbrook, W. E.	42	47	78	46	46	259		Miller, John R., Sergt.	44	39	64	44	49	240
	Curtis, C. L.	45	42	83	50	50	270		Thornhill, Wm. D., Sergt.	42	46	84	42	44	258
	Haslett, W. D.	41	35	80	49	47	252		Stanley, Henry M., Sergt.	38	46	96	39	45	264
	Marts, W. P.	42	43	83	49	48	265		Miller, James R., 1st Lieut.	44	47	92	48	50	281
	Colby, F. H.	38	43	90	50										



No.	Team	—Slow fire—			—Rapid fire—		Total
		200 yds.	600 yds.	1000 yds.	200 yds.	300 yds.	
41.	Tennessee N. G.—						
	Burmit, P. I.	42	41	87	43	45	258
	Myers, W. A.	40	47	84	48	48	267
	Manord, H. I.	40	42	94	46	42	264
	Howington, J. G.	38	42	81	46	43	250
	Frederick, H. R.	42	44	87	50	49	272
	Hart, S. F.	44	40	56	48	40	227
	White, E.	42	47	84	48	46	267
	Holmes, R. M.	39	38	70	47	40	234
	Rice, R. G.	45	46	87	48	45	271
	Hoover, G. H.	42	45	88	49	47	271
	Totals	414	432	817	473	445	2,581
42.	Third Corps Area, CMTTC.—						
	Riekol, Harold B., Pvt.	34	45	80	37	41	246
	Bowden, Ben. L., Cpl.	35	44	84	41	49	253
	Brown, Winfred M., Sergt.	44	45	88	47	49	273
	Craff, Chas., 1st Sergt.	37	46	77	46	41	247
	Tuttle, John W., Cpl.	39	45	81	47	46	253
	Mitchell, Ralph C., Pvt.	42	45	84	45	48	264
	Gressang, J. V., 1st Sergt.	40	47	93	47	50	277
	Prepp, George W., Pvt.	36	41	68	46	42	234
	Pueropis, Joseph, Pvt.	40	49	67	50	49	249
	Madara, Russell, Pvt.	46	45	86	48	47	272
	Totals	393	441	817	454	463	2,568
43.	North Dakota N. G.—						
	Baird, Leroy, Capt.	46	46	88	49	47	276
	St. John, Lyal P., Pvt, 1st Cl	38	45	56	48	46	233
	Aughnau, John A., Det. 1st Cl.	36	43	86	49	46	260
	Hulbert, James J., Cpl.	39	36	86	49	46	256
	Gray, James D., Capt.	39	45	73	47	47	251
	Broopp, Herman A., Capt.	39	37	81	46	28	231
	Barker, Harold E., Sergt.	36	44	90	50	50	270
	Bell, Oscar, W., Cpl.	39	43	86	48	48	264
	Ottinger, Jesse O., Cpl.	40	41	87	49	43	260
	Cristoph, Calvin H., Cpl.	41	46	82	48	50	267
	Totals	393	426	815	483	451	2,568
44.	Delaware N. G.—						
	Salter, Eldwood S., Sergt.	39	48	89	50	50	276
	Walson, Edward A., 2nd Lieut.	40	45	78	48	44	255
	Salter, David M., Major	42	44	83	49	49	267
	McDonald, J. A., Sergt.	43	47	90	50	40	270
	Bounds, Harvey C., Capt.	42	49	66	50	49	256
	Baldwin, Warren R., 1st Lieut.	41	47	79	47	49	253
	Davis, Hubert D.	37	40	74	44	41	236
	Walls, Lesley L., 1st Sergt.	37	45	66	47	42	237
	Butler, Francis T., Pvt.	37	43	89	50	47	266
	Taswell, Eldwood A., Sergt.	36	45	81	32	44	238
	Totals	394	453	795	467	455	2,564
45.	Alabama National Guard—						
	Fleming, C. R.	36	44	64	47	44	235
	Connoly, A. J.	40	39	87	45	43	254
	Cooper, G. S.	37	41	68	49	46	241
	Belscher, W. A.	40	42	80	46	44	252
	Allison, J. A.	36	46	79	48	48	257
	Butler, W. T.	41	43	81	43	49	257
	Day, L. A.	39	46	77	48	45	255
	Lacy, E. P.	38	48	77	47	49	259
	Hower, S.	41	44	84	43	47	259
	Cooper, J. O., Jr.	39	45	63	48	47	242
	Totals	387	438	760	464	462	2,511
46.	South Carolina N. G.—						
	Vaughn, Lindsey C., Cpl.	36	39	77	41	44	237
	DeLoach, J. K. B., 1st Lieut.	22	37	71	44	47	221
	Byrd, Gary E., 2nd Lieut.	35	40	78	47	45	245
	Padgett, Joe J., 2nd Lieut.	30	43	79	36	46	234
	Hovis, Jesse H., Sergt.	40	41	84	48	45	258
	Martin, George A., Sergt.	38	43	89	47	43	260
	Garrison, Carlton C., Sergt.	47	42	79	48	50	266
	Johnson, Furman, Sergt.	37	44	70	46	46	243
	Padgett, Hubert E., Sergt.	31	44	85	41	43	244
	Brannon, Robert V., Pvt.	49	41	91	49	48	278
	Totals	365	414	803	447	457	2,486
47.	Louisiana N. G.—						
	Phillips, C. Y.	43	37	83	46	43	252
	Conger, J. T.	37	44	77	47	48	253
	Robichaux, Rene J.	40	40	82	49	50	261
	Broland, E. R.	35	44	75	43	45	242
	Simon, J. D.	38	45	83	47	45	258
	Lewis, C. A.	36	45	73	44	47	245
	Richardson, W. L.	37	33	48	44	43	205
	Stanford, A. S.	39	45	73	45	44	246
	Willis, H. P.	42	44	78	36	42	242
	Brown, E.	31	42	88	39	45	245
	Totals	378	419	760	440	452	2,449
48.	First Corps Area, CMTTC.—						
	McFarland, Donald J.	41	38	74	47	40	240
	Sullivan, Martin	38	45	77	44	39	243
	Slattery, John G.	40	38	73	39	49	239
	Lereke, Holger A.	38	37	53	50	41	219
	Ierardi, Joseph A.	40	44	77	44	41	246
	Coiner, Vincent P.	41	43	75	49	47	255
	Chamberlain, Albert E.	43	41	65	42	41	232
	Gay, Spencer A.	40	42	51	46	37	216
	Caffee, Curtis W.	32	45	78	44	44	243
	Wish, M. D.	43	45	90	47	46	271
	Totals	396	418	713	452	425	2,404
49.	Montana N. G.—						
	Orr, W. H.	35	40	81	43	45	244
	Adams, W. P.	41	42	84	47	47	261
	Miesembach, Frank	41	39	66	34	40	220
	Davis, Sam	37	37	16	41	42	173
	Phillips, A. B.	39	38	86	48	48	259

No.	Team	—Slow fire—			—Rapid fire—		Total
		200 yds.	600 yds.	1000 yds.	200 yds.	300 yds.	
	Johnson, Melvin	41	35	73	46	42	237
	Moen, L.	36	41	76	49	39	241
	Gruntz, G.	37	46	46	41	46	216
	Davison, M.	33	41	80	34	42	230
	Baker, Chas.	42	38	53	41	46	220
	Totals	382	397	661	424	437	2,301

THE SMALL-BORE MATCHES

THE GRAND AGGREGATE

Small Bore

No.	Name and Organization	Score	Prize
1.	Ioerger, Frank, Sergt., ISD.	682	Gold medal \$6.25
2.	Gussman, H. J., Civilian, Conn.	682	Bronze medal 5.00
3.	Miller, J. E., Civilian, Ohio	680	Bronze medal 3.75
4.	*Woodworth, Kingsley B., Civilian, Mass.	679	Bronze medal 2.50
5.	Riehard, V., Civilian, Conn.	678	Bronze medal 2.00
6.	Hauck, J. F.	678	Bronze medal 1.50
7.	*Dehner, Walter J., Civilian, Iowa	676	Bronze medal 1.50
8.	Vereer, Thomas, Civilian, Mich.	677	Bronze medal
9.	Garland, J. B., Capt., Indiana N. G.	676	Bronze medal
10.	Price, D. W., Civilian, Iowa	675	Bronze medal

SMALL-BORE WIMBLEDON CUP

No.	Name and Organization	Score	Prize
1.	*Price, D. W., Civilian, Iowa	100	Bronze medal \$6.25
2.	Loughlin, J. F., Capt., Massachusetts N. G.	99	Bronze medal 3.37
3.	Ioerger, Frank, Sergt., ISD	99	Bronze medal 3.37
4.	Baulin, R. L.	99	Bronze medal 3.37
5.	Hart, A. E.	99	Bronze medal 3.37
6.	Vereer, Thomas, Civilian, Mich.	98	Bronze medal 1.25
7.	Stodter, C. E., Col., Cav.	98	Bronze medal 1.25
8.	Miller, J. E., Civilian, Ohio	98	Bronze medal 1.25
9.	Emmerson, Guy H., Civilian, Ohio	98	Bronze medal 1.25
10.	*Dehner, W. J., Civilian, Iowa	97	Bronze medal 1.50

SMALL-BORE MARINE CORPS

No.	Name and Organization	Score	Prize
1.	Hauck, J. F.	199	Bronze medal \$6.25
2.	Richards, V., Civilian, Conn.	198	Bronze medal 5.00
3.	Ioerger, Frank, Sergt., ISD	197	Bronze medal 3.12
4.	*Woodworth, Kingsley B., Civilian, Mass.	197	Bronze medal 3.12
5.	Gawhn, C. R., Capt., Indiana N. G.	196	Bronze medal 2.12
6.	Gussman, H. J., Civilian, Conn.	196	Bronze medal 2.12
7.	*Williams, A. P.	195	1.50
8.	*Williams, J. M. R., CMTTC., 7th C. A.	194	1.50
9.	*Dehner, W. J., Civilian, Iowa	194	1.50

SMALL-BORE NATIONAL INDIVIDUAL

No.	Name and Organization	Score	Prize
1.	Hauck, J. F.	395	Gold medal \$6.25
2.	Garland, Jerry B., Capt., Indiana N. G.	391	Bronze medal 4.37
3.	Loughlin, J. F., Capt., Mass. N. G.	391	Bronze medal 4.37
4.	Snyder, Milo D., Lieut. Col., Indiana N. G.	389	Bronze medal 2.37
5.	Gussman, H. J., Civilian, Conn.	389	Bronze medal 2.37
6.	Corsa, L. J., Civilian, N. Y.	389	Bronze medal 2.37
7.	Williams, J. M. R., CMTTC., 7th C. A.	388	Bronze medal 1.75
8.	Emshiller, O. B., Civilian, Minn.	387	Bronze medal
9.	Miller, J. E., Civilian, Ohio	387	Bronze medal
10.	Paulin, R. L.	386	Bronze medal 1.50
11.	Woodworth, Kingsley B., Civilian, Mass.	386	1.50

THE SMALL-BORE SWISS MATCH

No.	Name and Organization	Score	Prize
1.	Gussman, H. J., Civilian, Conn.	22	\$3.50
2.	Richards, V., Civilian, Conn.	18	2.50
3.	Woodworth, K. B., Civilian, Mass.	10	1.50

LONG RANGE RE-ENTRY

No.	Name and Organization	Score	Prize
1.	Richards, Virgil, Civilian, Conn.	50-10	\$6.25
2.	*Groeschel, Ed., Civilian, Ky.	50-7	5.00
3.	Deedle, John	50-6	3.75
4.	McGarity, Ralph H., Civ., D. C.	50-5	2.37
5.	Loughlin, J. F., Capt., Mass. N. G.	50-5	2.37
6.	Ioerger, Frank, Sergt., ISD	50-4	2.00
7.	Gussman, H. J., Civilian, Conn.	50-3	1.50
8.	Williams, J. M. R.	50-3	1.50
9.	Kelley, T. E., Civilian, N. Y.	49	.75
10.	Baulin, R. L.	49	.75

100-YARD SWEEPSTAKES

No.	Name and Organization	Score	Prize
1.	Dehner, W. J., Civilian, Iowa	99	\$4.81
2.	Hauck, J. F.	99	4.81
3.	Richards, V., Civilian, Conn.	99	4.81
4.	Gussman, H. J., Civilian, Conn.	99	4.81
5.	*Woodworth, Kingsley B., Civilian, Mass.	98	1.45
6.	*Herman, Paul	98	1.45



50-YARD SWEEPSTAKES

No.	Name and Organization	Score	Prize
1.	Richards, Virgil, Civilian, Conn.	100	\$4.87
2.	Gussman, H. J., Civilian, Conn.	100	4.87
3.	Wiles, R., Private, Calif. N. G.	100	4.87
4.	Corsa, L. J.	100	4.87
5.	Miller, J. E., Civilian, Ohio	100	4.87
6.	McGarity, Ralph H., Civilian, D. C.	100	4.87
7.	*Luft, C. G.	99	1.39
8.	Brownwell, A. F.	99	1.39
9.	Ioerger, Frank, Sergt., ISD	99	1.39
10.	*Williams, W. P.	99	1.39
11.	Schnerring, J. G., Civilian, Pa.	99	1.39
12.	Vercer, Thomas E., Civilian, Mich.	99	1.39
13.	Conover, W. C.	99	1.39
14.	Beedle, John	99	1.39
15.	Sargent, W. C., 1st Lieut., 65th Inf.	99	1.39
16.	Hauck, J. F.	99	1.39
17.	*Dehner, W. J., Civilian, Iowa	99	1.39
18.	*Brill, H. E.	99	1.39
19.	*Peairs, W. T., CMTG., 7th C. A.	99	1.39
20.	Hogue, C. S.	99	1.39

JUNIOR RE-ENTRY

No.	Name and Organization	Score	Prize
1.	Woodworth, K. B., Civilian, Mass.	92	\$7.75
2.	Crockett, J. W.	92	.45

SMALL-BORE UNKNOWN SCORE

No.	Name and Organization	Score	Prize
1.	Woodworth, Kingsley B., Civilian, Mass.	98	\$4.37
2.	*Williams, J. M. R., CMTG., 7th C. A.	98	4.37
3.	*Sletzer, W. H.	97	1.66
4.	Corsa, L. J., Civilian, N. Y.	97	1.66
5.	Shriver, O. W.	97	1.66
6.	Emshwiller, O. M., Civilian, Minn.	97	1.66
7.	Suleer, Ed.	97	1.66
8.	Block, Ed.	97	1.66

NOTE—An asterisk (\*) before a name indicates a tyro.

N. R. A. SHOTGUN SCORES

CAMP PERRY SHOTGUN CHAMPIONSHIP

17 Entries

No.	Name and Organization	Score
1.	Schwarz, Adolphus A., 1st Lieut., 162d Inf., Oregon N. G.	89
2.	Houck, John F., 1st Lieut., 152d Inf., Indiana N. G.	85
3.	Eaton, Samuel C., Jr., 1st Lieut., Air Service	85
4.	Brown, Clifton M., Captain, Infantry	83
5.	Frazer, William D., Major, CAC	81
6.	Caswell, John, Colonel	79
7.	Pray, Charles E., 1st Sergt., 161st Inf., Washington N. G.	79
8.	Cooper, Frank H., Pvt., 11th Infantry	78
9.	Moore, Milton J., Civilian, Illinois	75
10.	Garland, Jerry B., Capt., 113th Eng., Indiana N. G.	72
11.	Price, Don W., Civilian, Iowa	72
12.	Mitchell, Jasper N., Capt., 130th Inf., Illinois N. G.	72
13.	Wheeler, H. J., Pvt., 11th Inf.	70
14.	Snyder, Milo D., Lieut. Col., Indiana N. G.	62
15.	Mumma, Parlan L., Capt., Inf.	62
16.	Johnson, Julius A., Capt., Medical Corps	61
17.	McGee, Leonard L., 1st Lieut., Oregon N. G.	55

CAMP PERRY REGISTERED TOURNAMENT

70 Entries

No.	Name and Organization	Score
1.	Price, D. W.	138
2.	Brink, F. E.	135
3.	Volk, George	133
4.	Bogert, C. A.	130
5.	Koch, F. C.	129
6.	Jump, C. W.	128
7.	Caswell, Colonel	128
8.	Frazer, W. D.	125
9.	Morgan, R. H.	125
10.	Schwarz, A. A.	123
11.	Neill, N. P.	122
12.	Mitchell, J. N.	121
13.	Pray, C. E.	121
14.	Saylor, R. C.	120
15.	Lammers, W.	119
16.	Rarick, L. O.	118
17.	Gentzell, P. P.	118
18.	Steiert, George, Jr.	117
19.	Hoffinger, Ted	117
20.	Kay, H. S.	116
21.	Deck, George	115
22.	McVicker, James	114
23.	Britton, J. L., Dr.	114
24.	Mack, W. G.	113
25.	Feuerstein, J. F.	112
26.	Yuncker, F. A.	112
27.	Cooley, T. C.	111
28.	Deck, H. C.	111
29.	Sickinger, C. P.	111
30.	Moore, M. J.	111
31.	Morrison, Clyde	111
32.	Ledgett, A.	110
33.	Griffin, A. C.	109
34.	Scott, Stuart	109
35.	Reitz, R. D.	109
36.	Hogue, C. S.	108
37.	Garland, J. B.	108
38.	Manahan, C. D.	108
39.	Padgett, J. J., Jr.	107
40.	Thomas, J. M.	107
41.	Griffin, E. C.	107
42.	Brown, C. M.	103
43.	Crall, R. E.	103

44.	Eaton, Lieut.	102
45.	Bergen, H. S.	99
46.	Bascom, W. J.	99
47.	Houck, J. F.	99
48.	Craig, B. T.	99
49.	Felt, Loren M.	97
50.	Lively, T. G.	97
51.	Snyder, M.	97
52.	Baird, C. W., Major	94
53.	Schafer, I.	93
54.	Lentz, W. C.	92
55.	Getz, J. W.	92
56.	Henley, M. G.	91
57.	Gladden, A. A.	90
58.	Ramsey, W. G.	89
59.	Volk, F. J.	86
60.	Byers, W. M.	85
61.	Larimer, F.	83
62.	Nath, C. M.	80
63.	Sayles, David	80
64.	Cole, F. B.	78
65.	Moser, J. R.	76
66.	Riedmaier, R. R.	75
67.	Whitcomb, A. S.	75
68.	Dennison, L. E.	74
69.	Giek, H. F.	62
	*Seivert, H. S.	114

\*NOTE.—H. S. Seivert ranks between McViker, James and Britton, J. L., Dr.

N. R. A. MATCH RESULTS

These scores in the final events of the N. R. A. program were omitted from the issue of October 1 for lack of space:

INFANTRY TEAM MATCH

11 Entries

No.	Team	Arrival credit	Time credit	Unexpended ammunition credit	Pit record	Total
1.	Infantry Team	1,800	3,600	6,945	2,313	14,658
2.	U. S. Marines	1,200	2,640	5,325	3,561	12,726
3.	Cav.-Eng.	1,200	2,880	4,980	3,531	12,591
4.	USMC., 4th Brig.	1,200	2,760	5,250	3,252	12,462
5.	Texas N. G.	1,200	2,520	5,880	2,648	12,248
6.	C. A. C.	1,200	3,000	3,600	4,236	12,036
7.	Ohio N. G.	1,200	3,000	3,930	3,436	11,566
8.	Illinois N. G.	1,200	3,000	3,810	3,107	11,117
9.	11th Infantry	1,200	2,160	5,160	2,436	10,956
10.	Michigan, N. G.	1,200	2,280	1,485	4,444	9,409
11.	Connecticut N. G.	1,200	1,320	2,280	4,213	9,013

N. R. A. TWO-MAN TEAM MATCH

Course, 10 shots slow fire at each range. Ranges: 200 yards, 600 yards and 1,000 yards.

No.	Team	200 yds.	600 yds.	1,000 yds.	Total	Prize
1.	Rothrock, A. D., 1st Lt., Inf.	94	99	99	292	Gold medals
2.	Kotlareczyk, Anton, Sergt., 23rd Inf.	95	98	97	290	Bronze medals
3.	Stanfield, C. C., Sgt., USMC.	93	99	97	289	Bronze medals
4.	Weir, John R., Sgt., USMC.	93	98	96	287	Bronze medals
5.	O'Mohundro, W. H., Capt., 25th Inf.	93	98	95	286	Bronze medals
6.	Shank, Geo. T., Capt., 18th Inf.	93	98	95	286	Bronze medals
7.	White, Geo. D., Pvt., USMC.	93	95	97	285	Bronze medals
8.	Moraski, Sigmund A., Cpl., USMC.	93	95	97	285	Bronze medals
9.	Smith, Stanley, Sgt., 54th Inf.	91	99	94	284	Bronze medals
10.	Smith, C. M., Sgt., 1st Inf.	91	99	94	284	Bronze medals
11.	Tillman, Nolan, 1st Sgt., USMC.	96	94	94	284	Bronze medals
12.	Frederick Albert F., Sgt., USMC.	96	94	94	284	Bronze medals
13.	Pearson, Frank J., Capt., Inf.	88	95	99	282	Bronze medals
14.	Griswold, H. C., 1st Lt., Inf.	88	95	99	282	Bronze medals
15.	Carlson, August W., Cpl., USMC.	88	96	98	282	Bronze medals
16.	Cahall, A. G., Pvt., USMC.	88	96	98	282	Bronze medals

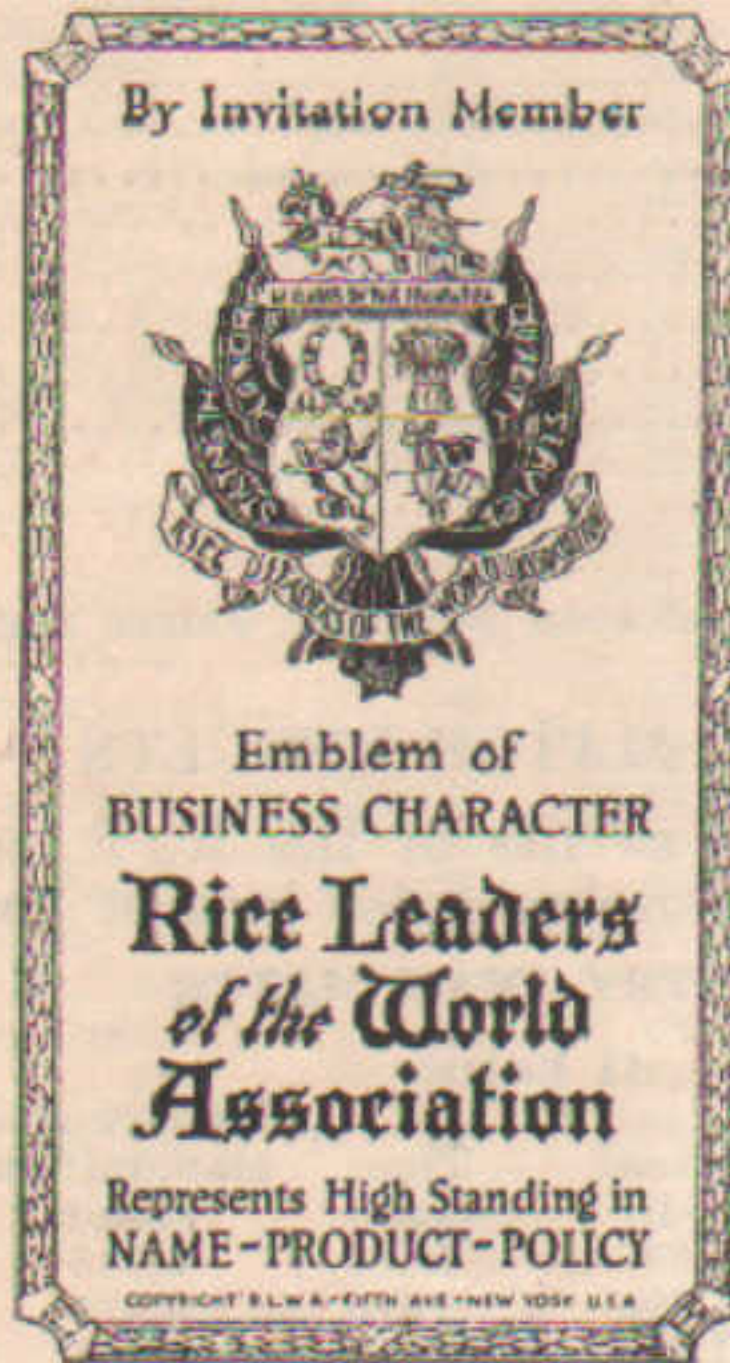
200-YARD TWO-MAN TEAM MATCH

54 Entries

No.	Team	Range, 200 yards.	Position, standing.	Prize
1.	Kotlareczyk, Anton, Sergt., 23rd Inf.	189	Gold medals	\$29.25
2.	Knobel, John, Capt., Inf.	188	Bronze medals	19.25
3.	Rothrock, Arthur D., 1st Lieut., Inf.	187	Bronze medals	15.25
4.	Mollerstrom, P. F., Sergt., 17th Inf.	186	Bronze medals	13.25
5.	Fenton, D., Cpl., Inf.	186	Bronze medals	11.25
6.	Velenage, J., 1st Sergt., Inf.	186	Bronze medals	11.25
7.	Shank, George T., Capt., 18th Inf.	183	Bronze medals	11.25
8.	O'Mohundro, Wiley H., Capt., 25th Inf.	183	Bronze medals	9.25
9.	Tillman, Nolan, USMC.	182	Bronze medals	9.25
10.	Frederick, Albert F., USMC.	182	Bronze medals	9.25
11.	Ioerger, Frank, Sergt., ISD.	182	Bronze medals	9.25
12.	Taczanowski, Adolph, 1st Sergt., 28th Inf.	182	Bronze medals	8.25
13.	Lee, George R., Cpl., USMC.	182	Bronze medals	8.25
14.	Coulter, Raymond O., Pvt., USMC.	182	Bronze medals	8.25
15.	Alexander, V. J., USMC.	182	Bronze medals	8.25
16.	Nelson, A. J., USMC.	182	Bronze medals	8.25
17.	Yuditsky, Joseph, Capt., Cav.	181	Bronze medals	7.25
18.	Rehm, George A., 1st Lieut., 14th Cav.	181	Bronze medals	7.25
19.	Doane, J. E., Capt., Inf.	181	Bronze medals	7.25
20.	Dyer, O. L., Sergt., 6th Inf.	181	Bronze medals	7.25
21.	Lay, Walter F., 1st Sergt., 19th Inf.	181	Bronze medals	7.25
22.	Driscoll, Louis H., Tech. Sergt., 8th Eng.	180	Bronze medals	5.25
23.	Smyth, Charles E., 1st Sergt., 14th Cav.	180	Bronze medals	5.25
24.	Hasbrouck, T. H., Sergt., USMC.	180	Bronze medals	5.25
25.	Lonkey, C. A., USMC.	180	Bronze medals	5.25
26.	Stodter, C. E., Col., Cav.	180	Bronze medals	5.25
27.	McGarity, R. G., Civilian D. C.	180	Bronze medals	5.25



# Winners on the Range Winners on the Hunt



Whether on the range at Sea Girt, N. J., or at Camp Perry, Ohio, or on the game hunt, Peters cartridges, due to their superior construction and uniform load can always be depended upon to do their full part. They are produced by men who understand the needs of the shooters, and who, therefore, make Peters cartridges conform to standards set, not by others, but by ourselves, and it is for this reason that shooters expect and do get superior results.

### At Sea Girt Matches, August 28 to September 6

#### Kisner 100 Yard Match

Won by L. J. Miller, using Peters .22 Tack-Hole Ammunition. Score 99 x 100

### At Camp Perry National Matches

#### Timed Fire Pistol Match

Won by Dr. J. H. Snook, using Peters 38 S. & W. Sp'l Cartridges with the World's record score of 198 x 200

#### Slow Fire Pistol Match

Won by Dr. J. H. Snook, 184 x 200

#### N. R. A. Pistol Championship

Won by Dr. J. H. Snook, 272 x 300.

#### Police Pistol Team Match

Won by Toledo Police Dept. using Peters 38 S. & W. Sp'l Cartridges

On the hunt shooters have come to appreciate the high velocities, the flat trajectories, and the greater all-around killing power of all of the different calibers found in the Peters line from the .22 up to the high-powered sporting cartridges.

Ask for Peters next time—they will really make you a better hunter.

# PETERS AMMUNITION

**THE PETERS CARTRIDGE CO., Cincinnati, Ohio**  
**NEW YORK SAN FRANCISCO**

### 600-YARD TWO-MAN TEAM MATCH

53 Entries

No.	Team	Course, 10 shots slow fire. Range, 600 yards.	Position, prone. Total	Prize
1.	Dyer, Orville L., Staff Sergt., 6th U. S. Inf.	196	Gold medals	\$25.75
2.	Lay, Walter F., 1st Sergt., 19th U. S. Inf.	194	Bronze medals	17.50
3.	O'Mohundro, Wiley H., Capt., 25th U. S. Inf.	194	Bronze medals	14.00
4.	Shank, George T., Capt., 18th U. S. Inf.	193	Bronze medals	12.25
5.	Ioerger, Frank, Sergt., ISD	193	Bronze medals	10.50
6.	Taczanowski, Adolph, 1st Sergt., 28th U. S. Inf.	193	Bronze medals	10.50
7.	Kotlarczyk, Anton, Sergt., 23rd Inf.	191	Bronze medals	8.25
8.	Knobel, John H., Capt., Inf.	191	Bronze medals	8.25
9.	Rothrock, Arthur D., 1st Sergt., Inf.	191	Bronze medals	7.00
10.	Mollerstrom, Peter F., Sergt., 17th U. S. Inf.	191	Bronze medals	5.25
11.	Smith, Stanley, Sergt., 54th U. S. Inf.	190	Bronze medals	5.25
12.	Smith, Charles M., Sergt., 1st Inf.	190	Bronze medals	5.25
13.	Scott, James M., 1st Sergt., 174th Inf., N. Y. N. G.	190	Bronze medals	5.25
	Horan, Albert L., Sergt., 174th Inf., N. Y. N. G.	190	Bronze medals	5.25
	Yuditsky, Joseph, Capt., 14th U. S. Cav.	190	Bronze medals	5.25
	Rehm, Geo. A., 1st Lieut., 14th U. S. Cav.	190	Bronze medals	5.25
	Cone, John C., Major, Arkansas N. G.	190	Bronze medals	5.25
	Dils, Homer A., Sergt., Arkansas N. G.	190	Bronze medals	5.25
	Stanfield, Charles C., Sergt., USMC	190	Bronze medals	5.25
	Weir, John R., Sergt., USMC	190	Bronze medals	5.25
	Sharp, Grady L., Pvt., USMC	190	Bronze medals	5.25
	Tucker, James R., Cpl., USMC	190	Bronze medals	5.25
	Pearson, Frank J., Capt., Inf.	190	Bronze medals	5.25
	Griswold, Harland C., 1st Lieut., Inf.	190	Bronze medals	5.25
	Carlson, August W., Cpl., USMC	190	Bronze medals	5.25
	Cahall, Alfred G., Pvt., USMC	190	Bronze medals	5.25

### 1,000-YARD TWO-MAN TEAM MATCH

48 Entries

No.	Team	Course, 10 shots, slow fire. Range, 1,000 yards.	Position, prone. Total	Prize
1.	Carlson, A. W., Cpl., USMC	195	Gold medals	\$23.50
2.	Cahall, A. C., Pvt., USMC	194	Bronze medals	16.00
3.	Pearson, F. J., Capt., Inf.	194	Bronze medals	13.00
4.	Griswold, Harland, 1st Lieut., Inf.	194	Bronze medals	13.00
5.	Rothrock, Arthur D., 1st Lieut., Inf.	194	Bronze medals	13.00
6.	Mollerstrom, P. F., Sergt., 17th Inf.	193	Bronze medals	11.50
7.	White, G. D., Pvt., USMC	193	Bronze medals	11.50
8.	Moraski, S. A., Cpl., USMC	193	Bronze medals	11.50
9.	Shank, George T., Capt., 18th Inf.	192	Bronze medals	10.00
10.	O'Mohundro, Wiley H., Capt., 25th Inf.	192	Bronze medals	10.00
11.	Kotlarczyk, Anton, Sergt., 23rd Inf.	192	Bronze medals	10.00
12.	Knobel, John, Capt., Inf.	192	Bronze medals	10.00
13.	Dyer, O. L., Sergt., 6th Inf.	190	Bronze medals	8.50
14.	Lay, Walter F., 1st Sergt., 19th Inf.	190	Bronze medals	8.50
15.	Franklin, Fred M., Tech. Sergt., 6th Eng.	189	Bronze medals	8.50
16.	Klinger, L., Pvt., 8th Cav.	189	Bronze medals	8.50
17.	Lee, G. R., Cpl., USMC	189	Bronze medals	7.00
18.	Coulter, Raymond O., Pvt., USMC	189	Bronze medals	7.00
19.	Tucker, James R., Cpl., USMC	189	Bronze medals	7.00
20.	Sharp, Grady L., Pvt., USMC	187	Bronze medals	5.50

11.	Stanfield, Charles C., Sergt., USMC	187	5.50
	Weir, John R., Sergt., USMC	187	5.50
12.	Doyle, Edgar J., Sergt., USMC	186	5.50
	Stephenson, S. L., Cpl., USMC	186	5.50

### UNITED SERVICE MATCH

3 Entries

Course: Ten shots slow fire; range, 200 yards; position, standing. Ten shots rapid fire; time, 1 minute; range, 200 yards; position, sitting from standing. Ten shots rapid fire; time, 1 minute and 10 seconds; range, 300 yards; position, prone from standing. Ten shots slow fire; range, 600 yards; position, prone. 20 shots slow fire; range, 1,000 yards; position, prone.

Weather conditions: Cool; light wind from west; bright light.

No.	Team	200 yds. S. F.	200 yds. R. F.	300 yds. R. F.	600 yds. S. F.	1,000 yds. S. F.	Total
1.	U. S. Marine Corps—						
	Ashurst, Wm. W., Capt., USMC	45	50	50	47	94	286
	Pulver, Wm. F., Pvt. 1st Cl., USMC	44	50	50	48	91	283
	Lee, Geo. R., Cpl., USMC	40	50	50	49	94	283
	Coulter, Raymond R., Pvt., USMC	45	50	50	48	96	289
	Tillman, Nolan, 1st Sergt., USMC	46	50	50	48	94	288
	Frederick, Albert F., Sergt., USMC	45	50	50	47	89	281
	Sharp, Grady L., Pvt., USMC	41	50	47	45	91	274
	Tucker, James R., Cpl., USMC	41	50	50	50	93	284
	Coppage, Alton O., Sergt.	40	50	49	46	89	274
	Blade, Emil J., Pvt., 1st Cl., USMC	46	49	50	47	95	287
	Jones, Thomas J., Sergt., USMC	41	45	49	45	92	272
	Johnson, Jack W., Cpl., USMC	40	46	49	47	96	278
	Nelson, Ernest J., Sergt., USMC	46	50	50	44	85	275
	Alexander, Jas. V., Sergt., USMC	41	50	50	47	85	273
	Stephenson, Spencer L., Cpl., USMC	45	50	50	44	93	282
	Doyle, Edgar J., Sergt., USMC	44	50	50	46	90	280
	Totals	690	790	794	748	1,467	4,489
	United Service Trophy and Medals						
2.	Army Rifle Team	672	796	788	745	1,422	4,423
3.	National Guard Team	685	779	771	743	1,436	4,414

### ALL-AROUND CHAMPIONSHIP

41 Entries

No.	Name and Organization	Score
1.	Frazer, William D., Major, CAC	880 Gold medal
2.	Garland, Jerry B., Capt., 113th Eng., Indiana N. G.	850 Bronze medal
3.	Price, D. W., Civilian, Iowa	830 Bronze medal
4.	Snyder, Milo D., Lieut. Col., Indiana N. G.	849 Bronze medal
5.	Lively, T. G., Civilian, Illinois	848 Bronze medal
6.	Houck, John F., 1st Lieut., 152nd Inf., Indiana N. G.	827 Bronze medal
7.	Felt, Loren M., Civilian, Illinois	823 Bronze medal
8.	Gladden, Alton A., 1st Lieut., USMC	818 Bronze medal
9.	Henley, Manford G., Major, 151st Inf., Indiana N. G.	803 Bronze medal





# "The Dope Bag"

*A free service to target, big game and field shots, all questions being answered directly by mail.*

*Rifles and big game hunting: Maj. Townsend Whelen.*

*Pistols and Revolvers: Maj. J. S. Hatcher.*

*Shotguns and Field Shooting: Capt. Charles Askins.*

*Every care is used in collecting data for questions submitted, but no responsibility is assumed for any accidents which may occur.*

## MAJOR WHELEN'S SERVICES TEMPORARILY DISCONTINUED

**A** **NNOUNCEMENT** is made that the services of Major Townsend Whelen in connection with the Dope Bag are temporarily discontinued. Major Whelen left September first on a hunting and exploring trip to a little known portion of the Canadian Rockies just south of Peace River, and he expects to be gone about two months and a half. The region is an extremely interesting one as it is one of the few stretches of the Rockies that has never been explored. All species of big game are very plentiful. This is practically the first holiday that Major Whelen has had since 1916, during which time he has done an enormous amount of work. He well deserves this little rest and recreation, and our best wishes for a successful trip and lots of sport go with him.

### SHOOTING THROUGH WOOD AND STEEL

**I** SHOULD be very much obliged to you if you could give me the following information:

Which do you consider the best for target work, the new Springfield .22 calibre rifle or the Winchester Model 52?

I own a Springfield Model 1903 and a Krag Model 1896 and use regular Government ammunition in both. A short time ago I decided to test the penetration of both rifles. My first test was on a sycamore tree, the Krag going clear through, but the Springfield did not, the distance was fifty yards. My second test was on a steel rail at the same distance, the Krag went clear through, but when I fired the Springfield I saw a flash of light; running down I saw that the bullet had melted instead of going through. I then took the Springfield back to about three hundred yards and the bullet went through the rail, I then tried it on the tree at that distance and it went through. This has puzzled me very much, and I shall be greatly obliged if you can tell me the reason why.

F. T. MacG., Fresno, Calif.

Answer (by Major Whelen): There is practically no difference between the accuracy of the Springfield .22 calibre and Winchester Model 52 .22 calibre rifles. Such being the case, it comes down to personal preference as to the sights and fit of the stock. This you will have to decide for yourself.

The peculiarities in penetration of the Model 1903 and the Krag rifles which you have noted, are well known. In wood the pointed bullet at high velocity acts like a wedge, and wedges itself fast, and does not have as great penetration as the heavier blunt nose bullet which plows right through. All bullets with lead core, when fired at very high velocity, fuzer on steel plates, whereas at a lower velocity, there being less energy released, they tend to penetrate.

### LIGHTENING TRIGGER PULL

**I** AM a reader of "Arms and The Man" and think it is the finest magazine in the world. I especially enjoy your articles in it, also your part of the "Dope Bag." Will you be so kind as to answer a few questions for me? This will be my first offense, but I am afraid not the last.

1. What is the least pull one can have in the double action of a revolver without weakening the spring? My Police Positive Target has 9½ pounds since I hand-finished the action.

2. Please describe the S. & W. single action revolver.

3. Please also describe the Fiala target pistol.

4. Are there any better holsters made than the Heiser, if so, by whom?

5. I was glad to hear that the cheap imported revolvers of Colt and S. & W. imitation are now to be sold no longer, but in the latest issues of some of the cheaper magazines these are still advertised. I have seen one of these "guns" (I hate to use the term on such junk) and while the outside finish is rather good the action is "bum" and the hammer was probably shaped on the maker's head, it certainly was lopsided. I certainly hope the sale of such trash is, or will be, stopped.

Hoping to hear from you soon and thanking you in advance for your trouble.

A. W. R., Punta Gorda, Fla.

Answer (by Major Hatcher): 1. It is not possible to lighten the double action pull of a revolver except by weakening the main spring. This is because in operating the gun by the double action, the main spring is fully compressed as the hammer raises. Therefore, the pull depends on the strength of the spring and the leverage of the trigger mechanism.

## N. R. A. Gallery Program Ready

**T**HE N. R. A. Gallery Matches for the season 1922-1923 will begin on November 15. Live-wire clubs are already getting their team material into shape. A revised schedule of competitions which include events designed especially for beginners, in which either match or sporting model rifles—each separately classified—may be used, has been completed and will be ready for distribution by October 20.

Interest this year in both rifle and pistol gallery competitions is running high and the competition promises to be exceptionally keen.

The 1922-1923 program is in general based upon last year's highly successful schedule, with such improvements and modifications as have been dictated by the results of the shooting done in 1921-1922. One of the most important changes is the cutting down of the time required to shoot the multi-stage matches and a reduction in the number of shots in the individual matches.

The program is expected to prove exceptionally popular as there are matches provided for every kind of shooter.

which is not capable of change. The S. & W. revolvers have a small screw in the front of the frame near the bottom of the grip, called the strain screw, which puts tension on the spring after assembly. Some people try to reduce the double action pull by loosening this screw, but this it not

to be recommended, because unless this screw is fully screwed home, the spring will not lie in the right curve, and cramping may occur when using the single action. In the Colt, which has the double leaf spring, some people reduce the pull by grinding the main spring and so weakening it. This usually leads to misfires, also to broken springs.

2. The S. & W. single action, which is no longer made, was a jointed frame break-down weapon, which was made in a variety of calibres, the most famous being the .44 Russian. The action was unexcelled for a quick clean let-off, and the old guns of this pattern are often purchased today to be used for target work.

3. The Fiala target pistol is a ten-shot repeating weapon, built on the lines of the Colt .22 automatic, which it closely resembles in appearance. The barrel is 7½ inches long, giving a ten-inch sight radius, and, if desired, a 20-inch barrel can be obtained which will interchange with the pistol barrel. There is a detachable stock which, when used with the 20-inch barrel, makes a rifle. The weapon is not automatic, as the breech must be worked by hand after each shot. The Fiala gun was fully described by me in an article in the January 1, 1922, issue of "Arms and The Man."

4. I believe that the Heiser holsters are equal to any. Another good holster is made by Captain A. H. Hardy, also of Denver.

5. They have had to remove the more grossly deceptive marks from these cheap imitation arms, such as the inscription "for Smith & Wesson cartridge," but the trash is still being sold, at an enormous profit to the dealer, as it is brought into this country dirt cheap, and by the time it reaches the consumer the fat profits have brought the price almost up to what a real gun should cost. The purchaser is stung, and our reliable American arms factories, who cannot put out a quality gun at prices to compete with cheap junk turned out by foreign labor, are in danger of being forced off the market. Our American workmen are being laid off for lack of work and our money is going to foreigners for poorly made imitations we ought to be ashamed to own. You are certainly right in hoping that this trade will not prosper.

### THE .22-45

**I** AM very much interested in the .22 calibre slide for the service automatic pistol as described and mentioned several times in "Arms and The Man." Would it be possible for you to forecast the date when they will be available to the N. R. A.?

Please permit me to congratulate you on the splendid work you have done in perfecting the .22 Springfield. We shooters are indeed fortunate to have you at Springfield and Whelen at Frankford.

C. W., Philadelphia, Pa.

Answer (by Major Hatcher): When I had the .22 slide for the .45 auto at Camp Perry last year I was not entirely satisfied that it was as good as it could be made, as once in a while we would have a little trouble with the feeding, and the magazines were somewhat hard to load. Also in endurance tests we developed the fact that one part had a tendency to break after about 5,000 rounds. Accordingly, I carried on experiments, with the help of Mr. Woodworth and Mr. Coon, of Springfield Armory, from time to time during all of the fall and winter, and about the first of the year we had the pleasure of seeing one of these devices that answered every requirement. Just at this time I was ordered away from Springfield, and when I left they were modifying the twenty-five old ones to incorporate the improvements.

I have been rather out of touch with things at Springfield since then, but I imagine that the modified devices have been sent out to the Service Schools for test, and if satisfactory they may be manufactured.

Your praise of the new Springfield .22 rifle is greatly appreciated, I assure you. Much of the credit for its success is due to Mr. Woodworth and Mr. Coon, mentioned above. I more than regret that I am no longer at Springfield, but I hope to serve there again soon.

### POWDER FOR THE .44 SPECIAL

**I** N answer to a recent inquiry in the "Dope Bag," I noticed that you stated that the pistol powder now sold by the Ordnance Department was Bull's-eye, and I wish to ask if this has always been so, also for a little information as to proper charge of some that was purchased some time ago.

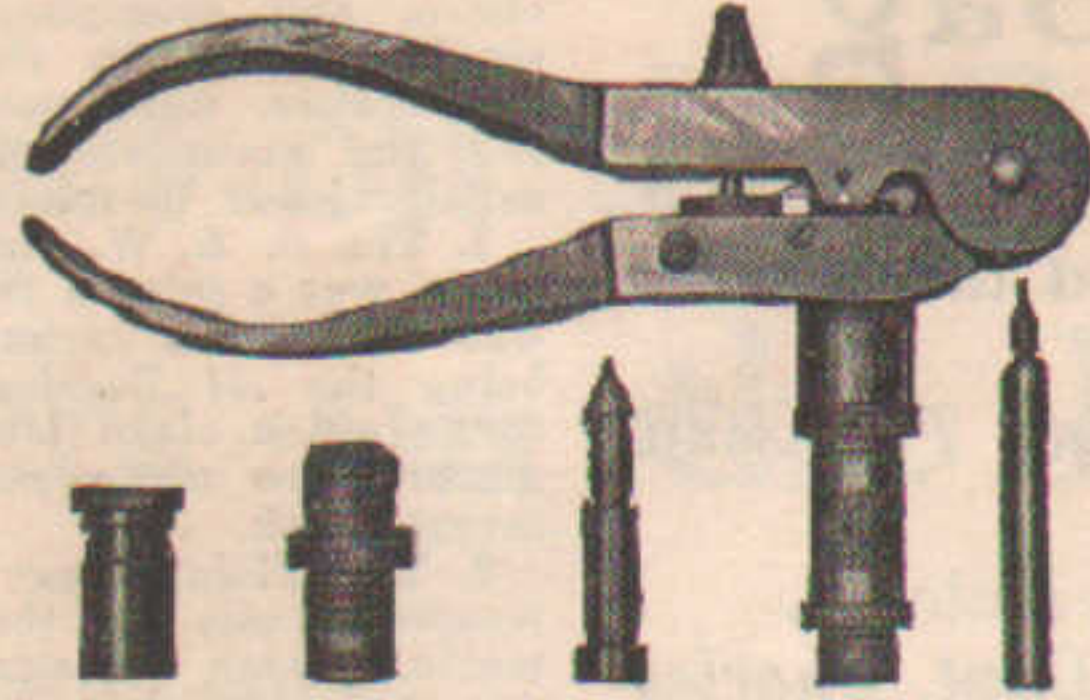
This powder was marked Du Pont's Lot 1007-7-45 and was purchased from Frankford Arsenal in December, 1921, the proper charge for the automatic pistol being given as 6.5 grains.

I have never used any of this powder as it was purchased with the intention of using same in a .44 calibre special S. & W. revolver, but not knowing definitely what the powder was, have let it alone for this purpose.

The bullet which I wish to use in this gun with this powder is a special solid base bullet of 200 grs. weight and I would like your advice as to the best load of this powder to use for fifty-yard shooting.

The gun as described above is one of the first





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issue of this model having a 7½-inch barrel and is  
very finely fitted and adjusted, a wonderful shoot-  
ing gun and naturally some pet.

Could you suggest any other combination of pow-  
der and bullet, either with this powder or some  
other, that would give better results in this arm,  
as what I am after is the best in both a long and  
short range load.

W. H. R., Berkeley, Calif.

Answer (by Major Hatcher): I regret that the  
answer to your letter was somewhat delayed while  
I was finding out exactly what powder it was that  
was sold by Frankford Arsenal under the designa-  
tion you mention. I find that it was Du Pont Pis-  
tol Powder No. 3. This is similar in general to  
Du Pont Pistol Powder No. 5, except that No. 5, a  
later powder, is easier of ignition and burns with  
less residue.

A suitable charge for the .44 S. & W. Special,  
246-grain bullet, is 6.0 (six) grains of this Du Pont  
No. 3.

With the 200-grain bullet, you might try 4.5 (four  
and one-half) grains of Du Pont No. 3, or the same  
amount of Du Pont Pistol Powder No. 5, or 4.0  
(four) grains Hercules Bull's-eye, which should give  
you a good, strong shooting load.

### LUGERS AND MAUSERS

I AM taking the pleasure of writing to you for  
the reason that I have learned that you are one  
of the very best authorities on pistols and re-  
volvers, and I am here asking your valued opinion  
regarding the selection of two automatic pistols.

The genuine German Officers' Military Luger, cali-  
bre 7.65 mm., with 8-inch barrel, pre-war, made  
in 1914, at the Erfurt Arsenal. I have a chance  
to purchase this automatic exactly as above men-  
tioned. There are only one of each calibre (7.65 and  
9 mm.), they are both two real highly finished guns,  
made when the Lugers were made right. Which  
calibre would you choose this gun in, the 9 mm. or  
the 7.65 mm., and why?

The other is a real pre-war Mauser Automatic,  
calibre 7.63 mm., German Military Officers' Model,  
with 5½-inch barrel. The Luger looks the nicer  
of the two guns, but that is not what I am after,  
your decision makes my choice. From past history

on merits, I choose and prefer the Mauser 7.63  
calibre.

Now, what is very important to me, which gun,  
in your opinion, is the superior of the two and why?  
I will greatly appreciate whatever valuable informa-  
tion that you may offer me, regarding the true  
worth of these two guns. What would be your  
opinion or advice on purchasing one of each—Luger  
7.65 mm., as mentioned, with 8-inch barrel, and the  
big Mauser, calibre 7.63 mm.? But, best of all, I  
want you to tell me which is the superior auto-  
matic of the two, as for the real qualities and which  
is the superior cartridge, Luger 7.65 mm., or the  
Mauser 7.63 mm., and why? I promise you that  
whatever you may enlighten me on, regarding this  
matter, is for my own personal benefit only, and  
I am very anxiously awaiting your really valuable  
reply. Hoping that I may hear from you as soon  
as possible regarding this matter in full.

W. L. T., Trenton, N. J.

Answer (by Major Hatcher): The ballistics of the  
three cartridges concerned are as follows:

Mauser 7.63 mm.—Weight bullet, 86 grains; muz-  
zle velocity, 1323 f. s.; energy, 329 ft. lbs; penetra-  
tion, 11-inch boards.

Luger 7.65 mm.—Weight bullet, 93 grains; muz-  
zle velocity, 1207 f. s.; energy, 300 ft. lbs; penetra-  
tion, 10-inch boards.

Luger 9 mm.—Weight bullet, 124 grains; muz-  
zle velocity, 1014 f. s.; energy, 284 ft. lbs; penetra-  
tion, 10-inch boards.

You will see from the above that the Mauser  
has the best cartridge. However, I must say that  
I decidedly prefer the Luger, which I consider to  
be the best foreign automatic pistol, and believe  
to be second only to the Colt in general excellence  
in the class of military automatic pistols. It has  
the best balance of any automatic pistol, bar none;  
is accurate, and while it is difficult to make, it is  
extremely simple to assemble, disassemble, load, oper-  
ate and clean.

The Mauser is superior in power, of course, but  
not in accuracy. It has a wooden holster stock,  
and if you want a combination pistol and carbine,  
it is all right, but it is too clumsy to be very satis-  
factory as a pistol.

I prefer the 9 mm. Luger, but I really do not  
believe it makes much difference whether you get  
this or the 7.65; I should say follow your inclina-  
tion in this matter, as they are both good cartridges.  
I seem to have gotten better accuracy with my 9  
mm. Lugers than with the smaller calibres, but  
this may have been just luck.

My Lugers have the 4½-inch barrel, and are ex-  
tremely accurate. I prefer the shorter barrel, as it  
makes a better balanced and handier gun.

### THE DRIFT SLIDE

THE questions I want to ask in this letter per-  
tain to the little vertical white mark on the  
drift slide of the United States rifle, model 1903,  
which I have inclosed in this letter.

The first question is: Why is the white mark  
put there, or what help is it to a rifleman?

The second question is: Why is it that all the  
rifles (United States rifle, model 1903) do not have  
them on?

J. C., San Antonio, Texas.

Answer (by Major Whelen): The little vertical  
marks on the drift slide were placed on those drift  
slides first manufactured with the mistaken idea that  
they would help one to find the sight. These vertical  
lines filled with platinum are of use only on a  
sight which inclines forward, such as the English  
Express sight. The lines then catch the light from  
the sky and can be seen, but when the slide stands  
vertically, the slide is in shadow, except when there  
is a strong light from the rear, and the marks  
cannot be seen. As a matter of fact everyone black-  
ened their sights before firing, so that these marks  
were of no use, and I believe that they have been  
omitted from all drift slides of later manufacture.

### .30-30 BULLETS IN .30 '06

I FIND that I can buy bullets of the .30-30 calibre  
very much cheaper than the regulation bullets  
for my Krag and Springfield guns. A friend has  
been using these .30-30 bullets and claims good re-  
sults, but I am wondering if there is any chance  
of injuring the chamber or barrel of either gun.

What load of Du Pont No. 16 or 18 powder would  
you recommend?

As I am pretty green at reloading, any informa-  
tion you may give me concerning this I assure  
you will be a great benefit and will be appreciated.

M. J. C., Delevan, N. Y.

Answer (by Major Whelen): There is no reason  
why you should not use .30-30 bullets in your Spring-  
field. In fact, just yesterday I fired some of these  
bullets measuring .306" in my own Springfield, and  
got very excellent results at the rather short range  
of one hundred (100) yards. The absolutely maxi-  
mum charge that you should use with this bullet is  
forty-eight (48) grains of Du Pont No. 16 powder,  
which will give a muzzle velocity of about two thou-  
sand six hundred and eighty (2,680) foot seconds,  
with a pressure of about fifty-one thousand (51,000)  
pounds.

Relative to information on reloading, the chapter  
on reloading in my book, "The American Rifle,"  
gives full information. In addition, the National  
Rifle Association will publish in about a month a  
pamphlet entitled "Cartridges and Loads for Amer-



ican Rifles," which will give you a lot of other additional and new information. Please address them at that time relative to it.

**THE SHOTGUN FOR WOMEN**

**A** FEW years ago, when my wife took up field shooting, I bought her a Winchester 16 gauge, 1912 model, 26-inch barrel shotgun with modified choke, which she has tried out for 3 years with poor success for the reason that she is short and light in weight and, of course, has short arms, and the fore end or action is too far to reach for the length of her arms. It is all right, of course, for the first shot, but to get off the second shot she has to drop the gun almost to the hip to pump in a new shell. Now, you know this takes time, especially for a slow shot in underbrush and scrub when after rabbits, with a chance shot at quail, woodcock or ringneck. I am thinking about a double-barrel gun for her and would like your advice on the matter.

What should be the length of barrels, weight of gun, choke or bore of each barrel, and gauge, since the new Super X shells have been tried out? Would you advise a 20 gauge in place of a 16, and do you think the recoil of the Super X load would be too much for a woman about 96 to 100 pounds? All shooting would be at rabbits and squirrels with an occasional shot at birds. We begin shooting for practice about September 1 at clay birds from a Du Pont hand trap and wooden rabbits, as I call them, which are round discs of wood from 6 inches diameter to 11 inches rolled at different angles from and to the shooter in grass and stubble, also down hill, and we have lots of fun and some training as well. The discs are saved from time to time and painted or a piece of paper pasted over each side to be as near the color of a rabbit as we can make it. If you could find time to set me straight on the gun question, I would appreciate it very much.

N. T., East Downington, Pa.

P. S.—The mail man just brought a booklet from Western Cartridge Co. on their Super X shells, and, of course, had to read the article by you, and it sounds fine, so I can guess the gauge question is settled.

Answer (by Captain Askins): I think you are right about the double gun suiting your wife better than a repeater.

Get the gun with 26-inch barrels, weight six pounds, bored improved cylinder right and modified left, twenty gauge, length of stock 13 1/4 inches, Siver's recoil pad, drop 1% at comb by 2% at heel.

I do not notice an appreciable difference in the recoil between Super X and other cartridges containing similar loads. However, you need not confine yourself to this one make, but can choose the kind of cartridge that you wife likes best.

**A "SUPER" DUCK GUN**

**A** FEW years ago you gave me some valuable information in regard to specifications for a field gun. I am writing to ask if you will be kind enough to make some suggestions now for a duck gun. Before delving into the subject I would like to know what you think of the new gun (Special H) which the A. H. Fox people are bringing out as a "super" duck gun? I believe you have tested out this gun and Western cartridges pretty thoroughly. They claim that it will target 82 to 90 per cent. Is it due to the special boring and chamber, or to the shells, or both? Will it do this consistently and regularly? Can you indorse this gun as an ideal duck gun? Would this boring shoot too close for an ordinary "dub" shooter? How would you advise the right barrel to be bored, also the left, i. e., percentage of shot change?

For the ordinary duck gun what would you advise as to the following: (1) Gauge; (2) length of barrels; (3) boring of barrels, right and left, i. e., percentage of shot change; (4) length of chamber; (5) load; (6) weight?

J. C. M., Montclair, N. J.

Answer (by Captain Askins): The Fox gun you mention is one of the best duck guns made.

I am inclined to hold with Sweeley that three-fourths of good patterns lie in the load and but one-fourth in the gun. Also, it is a mistake to be too specific or didactic about just what kind of performance a gun and load will put up. L. P. Smith, of the Ithaca Gun Company, says that a difference of 10 per cent in patterns will be found between zero weather and 100 in the shade. I have lately been trying out guns here during a protracted drought, in excessive heat, and Mr. Smith seems to have stated the matter fairly. The gun that patterned 80 per cent in cold weather falls off to not much over 70 in extremely hot weather. If the powder or the cartridges could be taken out of cold storage this might not be the case, but when ammunition has been stored in the place where it became very hot, and when shot under like conditions patterns are sure to suffer. I shouldn't be willing to state that any gun will pattern 90 per cent under unfavorable weather conditions—a very good gun, with freshly loaded ammunition ought to reach 80 per cent or a trifle better.

The overbored Fox with its slight cone contraction ought to develop a little less pressure and a little better patterns than standard bored arms.

Specification for a duck gun: Weight, 8 1/2 pounds; barrels, 32 inches, 12 bore, right barrel 70 per

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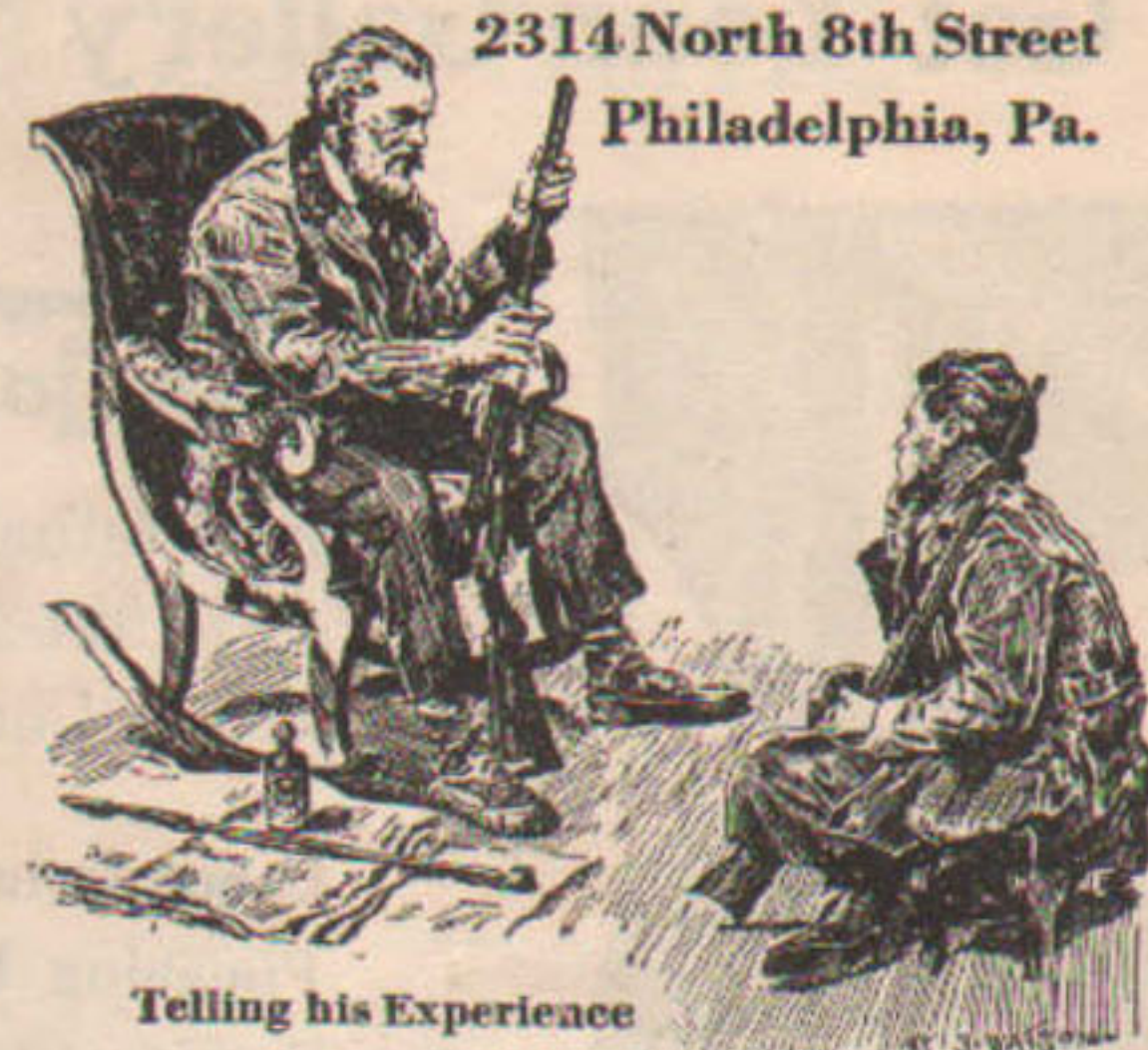
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15 acres army goods. Illustrated catalog for 1922—372 pages—including full and highly interesting information (specially secured) of all World War small arms, mailed 50 cents. Circular 16 pages 10 cents. Established 1865.

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cent, left 80 per cent, chambered for three-inch cases, load 3 1/2 to 3 3/4 drams of equivalent, 1 1/4 ounces of shot, fours or fives.

**THE .455**

**I** TAKE great interest in the "Dope Bag" and would like to ask you about my .455 Smith & Wesson revolver.

What is the muzzle velocity and energy of this cartridge in a 6 1/2-inch barrel?

Also where can I obtain ammunition for this revolver, and is the arm very accurate?

J. P. S., Washington, Ind.

Answer (by Major Hatcher): Your revolver is chambered for the British Service cartridge, otherwise called the .455 Webley, Mark II. Its ballistics are as follows: Weight of bullet, 265 grains; muzzle velocity, 700 f. s.; energy, 288 ft. lb.; penetration, 4 1/2-inch boards. This is a very pleasant cartridge to shoot, and is quite accurate, but is not as powerful as American military cartridges of corresponding calibre.

Arms of this calibre are not often seen in the United States, as they are not manufactured for the local trade. You will not find this calibre listed in the S. & W. catalog. During the war, S. & W. made these guns for the British and Canadians, and they are now the official gun of the Canadian Government. This should be a sufficient testimonial to the value of the weapon.

The .455 Webley, Mark II, is regularly made by both the Remington-U. M. C. and the Winchester companies. You can get these cartridges from any of the large sporting goods houses, or your local dealer should be able to get them for you on special order.



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This wonderful oil removes the residue of all powders and easily loosens metal fouling and leading. Prevents rusting and pitting. Free from harmful chemicals and moisture.

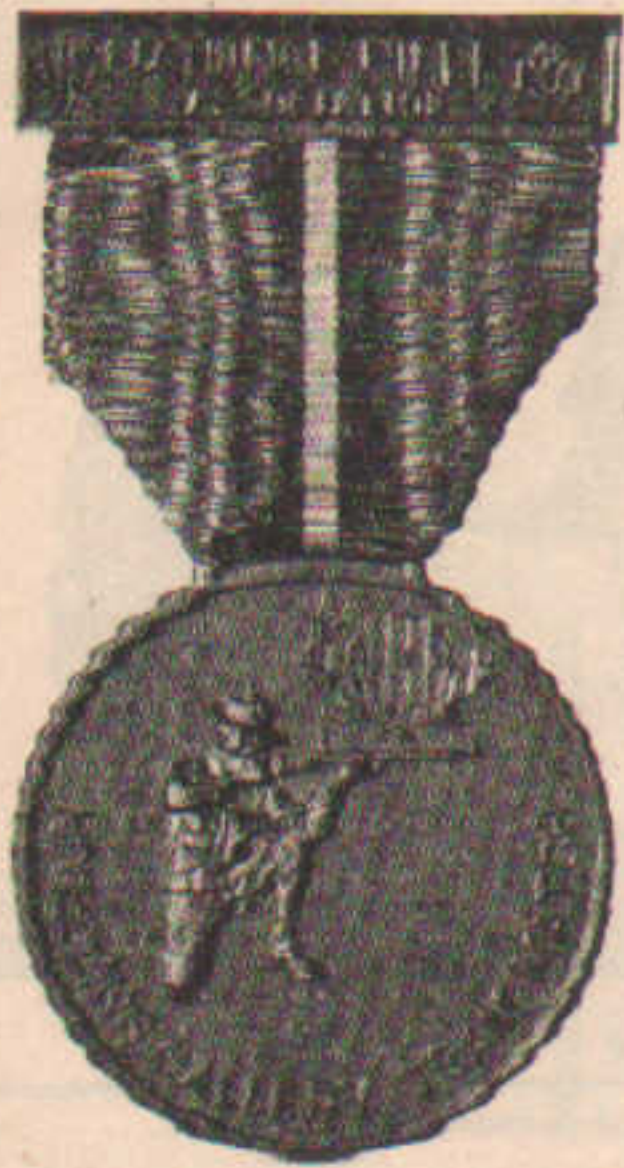
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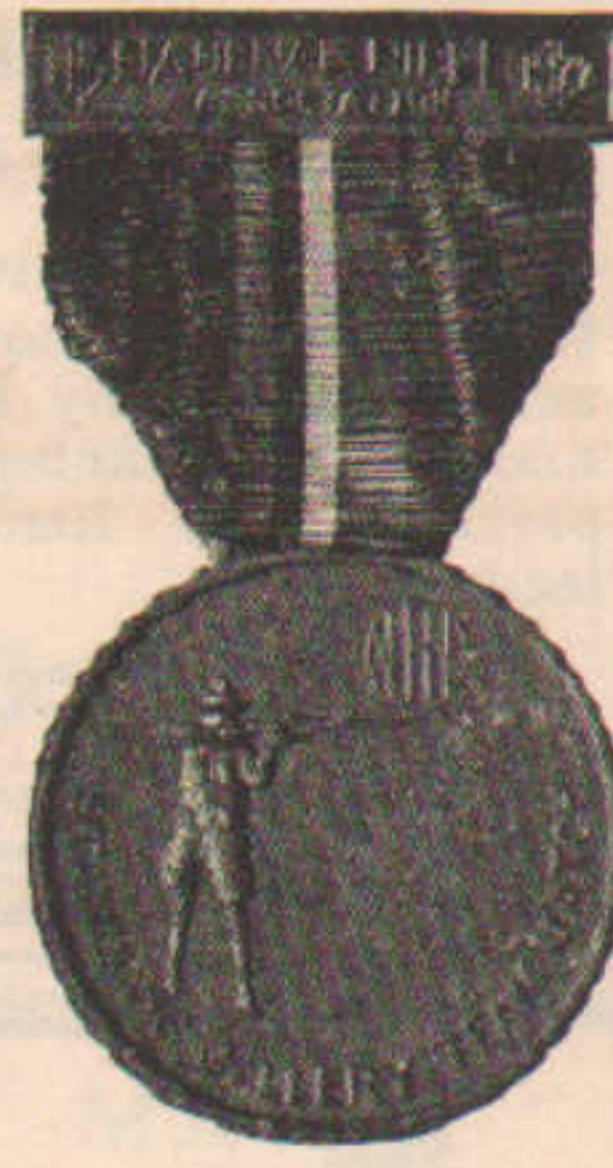
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**National Rifle Association Gallery Competitions**  
1108 Woodward Bldg. Washington, D. C.



## WANTS AND FOR SALE

The uniformly excellent returns from advertisements appearing in the classified columns of Arms and The Man make it a most satisfactory and productive medium for the disposal of surplus shooting equipment, or the acquisition of special types of firearms.

**Free Insertions.** Each subscriber is entitled to one free insertion of one-half inch, when his subscription is paid up for one year. It is necessary only to write or print the text plainly, noting thereon the date subscription was paid. These advertisements will appear in the first available issue and should be in the publication office two weeks prior to the following publication date.

**Paid Insertions.** Non-subscribers or those who have already made use of the subscriber's privilege may take advantage of these columns at a cost of \$1.00 per inch or part thereof. No advertisement for less than \$1.00 accepted. Advertisements will be set in 6 point solid. They should be in the publication office two weeks prior to the time appearance is desired.

**OLD-TIME** and modern firearms bought, sold and exchanged. Kentucky flintlock rifles, old-time pistols, revolvers, guns, swords, powder horns, etc. Lists free, Stephen Van Rensselaer, 873 Madison Avenue, New York City.

**FOR SALE**—Antique pistols, rifles, carbines, muskets, daggers, swords, powder horns, flasks, moulds, belt plates, curios. Lists free. Nagy, 33 South 18th St., Philadelphia, Pa.

**RESTOCKING**—Springfield, Mausers, Krags, .22 Savage, N. R. A. and Newton rifles. Prices quoted upon request. Clarence H. Lyon, 610 East Main Street, Lansing, Michigan.

**FOR SALE**—New 1899 Savage, .30-30, T. D., peep sights, \$40.00; new 1919 Savage, N. R. A., \$19.00; Krag, cut to sporter, good, \$20.00; Remington 12, 30", double hammerless, fine, \$30.00. Exchange—2 Colt automatic .45 U. S. Government clips for 2 same Savage N. R. A. Want—No. 24 Remington. 22 automatic and No. 28 Marlin. R. C. Scott, 52 Water St., Aurora, Ill.

**FOR SALE**—One .22 cal. Winchester musket, N. R. A. model, for .22 long rifle cartridge. Factory perfect inside, very nearly so outside. Price, \$20.00. E. A. Angevine, Hydeville, Vt.

**FOR SALE**—German captured machine gun, calibre 8 mm., like new, \$150.00. Want \$50 cash, rest trade on small arms. Also have for sale .30-06 Enfield, Springfield, Spanish and German Mauser, Ross and Short Krag rifles, with slings and best of condition. Capt. White, 718 North Ave., Youngstown, Ohio.

**FOR SALE**—Riverside Arms Co. 12 gauge double hammerless, full 32-inch barrels. First money order for \$15.00 take same. Gun in fair shape. Floyd Otto, Box 26, Florence Station, Ill.

**FOR SALE**—Star-gauged Springfield '06 rifle, p. g. sporting stock, fully checked; Lyman 48 rear, aperture front sights. Tiptop order; very accurate; has made 28 consecutive bulls twice at 200 yards. New Bond reloading tool, rod, brushes, and all the new shells (empty) you want, for \$50.00 money order. Perry Frazer, Ridgewood, N. J.

**FOR SALE**—One specially selected and exceedingly accurate Vickers Martini .22 calibre match rifle. This is the latest .22 calibre match rifle and has special features that make for consistent accuracy. This weapon has produced very remarkable results in British competitions and is manufactured by one of the best equipped and most famous small arms concern in the world. The rifle has been personally tested and is guaranteed an exceptional weapon, far and away above the average match rifle. First check or cash for \$30 takes it. Address 23, "Arms and The Man."

**FOR SALE**—30-40 take-down Winchester, beautiful curly checkered stock with Whelen cheek piece. Barrel like new inside and out. Lyman receiver peep and ivory bead front sights. Finish slightly worn off receiver. First money order for \$25.00 accepted. Refer Dilworth Bank, Gonzales, Texas. J. B. Kennard, Gonzales, Texas.

**WANTED**—Two receivers with bolts Springfield 1903, blued—not parkerized. Must be A-1 shape, with or without old barrels. State price in first letter. Wm. Soukup, 92 Main Street, Fair Oaks, Pa.

**FOR SALE**—Savage .250-3000 bolt action rifle, with Lyman No. 54 receiver sight. This rifle is new, fired only 50 times. Price, \$40.00. Also Winchester, single shot target rifle, with globe adjustable front sight and wind gauge rear tang peep sight. Calibre .32-40, 26-inch round No. 3 barrel. This gun is in perfect condition. Price, \$20.00. Walter B. Wilson, Port Alleghany, Pa.

**FOR SALE**—Fancy Winchester .30-30, model '94, extra light weight, take-down rifle, selected walnut checked pistol grip stock, 24-inch barrel. Cost \$90.00. In fine condition. \$45.00. .22 H. P. Savage, with Maxim silencer, in fine condition, \$28.00. .22 N. R. A. Savage leather sling, fine, \$15.00. 9 mm. Luger, 8-inch barrel, \$25.00. French Prism Binoculars, \$15.00. O. C. Adams, North Canton, Conn.

**FOR SALE**—Krag rifle, .303 Ross rifle, .22 calibre 12-A Remington rifle. Address Jos. Deisinger, Finleyville, Pa.

**WANTED**—Obsolete guns, cartridges, reloading tools, old gun catalogues, gun books, Remington rifle, rolling block action, Bullard rifle, single shot and repeater. For sale—Reloading tools; .32-40, .38-40, .32 Winchester Specials. Ideal mould .308-334, .40 and .45 calibre moulds, \$1.50 each; 5 round ball armory moulds, .30 bronze perlent, \$2.00. Colt and Remington cap and ball revolvers, Fine; \$9.00 each. Remington pistol, .32-20 calibre, barrel 6 inches, heavy, octagon. Good order, not perfect, \$8.00. Fred Wainwright, Grayling, Mich.

**FOR SALE**—Ballard single shot rifle, 38 long, inside fair, action perfect, firing pin for center or rim fire, \$10.00. .45-70 and .38-55 Winchester reloading tools, with moulds. Brand new, \$3.00 each. Francis W. Greac, Claremont, N. H.

**FOR SALE**—B. S. A. rifle, Winchester 5-A scope mounted. Outfit only \$35.00. S. & W. .22 target pistol, \$12.50. All in fine condition and accurate. H. S. Jones, Jr., 1913 Third Ave., Birmingham, Ala.

**FOR SALE**—Stevens 368, scope and mounts, new, \$16.00. Winchester S. S., .32 ideal calibre, 26" No. 3 bbl., checkered pistol grip and fore end double set triggers, reloading tools and about 115 cartridges; Marble peep and ivory bead. Also G. O. Neidner bbl, 30" round No. 3, rifle for 38-55 cartridges, but not chambered nor extractor slot cut; perfect 33" bbl., pitted at breech, \$25.00. .32-20 reloading tools, \$1.75. 450 .25-20 S. P. lubaloy bullets, \$3.50. 100 bu-grain and 200 91-grain pointed, lubricated, cast bullets, .25 calibre, \$1.75. 80 new and 60 used .25-30 cases, 10 loads, \$3.00. 340 Krag cartridges, M. P. Remington make, \$5.00. 100 .30 calibre, 220-grain M. P., 75c. Fred Snively, P. H. Station, Box 193, R. F. D. 4, Cincinnati, Ohio.

**WANTED**—A .450 Cordite rifle or any rifle for large game. E. H. Proudman, 151 West 61st St., New York.

**TRADE**—A new 1921 specially selected match Springfield; Lyman 48 rear, King folding middle, gold bead front. Stock cut down to carbine form, oil finish; aluminum but plate and special sling. Want a fine 1897 model Winchester 12 gauge. Trap grade preferred. Must be perfect and new. Give description in letter. Thos. J. Pearson, Roswell, N. Mex.

**FOR SALE**—From the collection of the late Chas. A. Smith: Adolph three-barrel gun, 12 gauge .25-35, top lever, Krupp barrels 27 inches, 7½ lbs., cross-bolt, side clips, dolls head, de luxe game engraving, pistol grip stock 13½ inches, peep sight, used only three times, \$200. Adolph three-barrel gun, under lever, 20 gauge .30-30, de luxe game engraving, pistol grip, never used, \$175; weight, 6½ lbs. Adolph "O. & U." gun, top barrel, 28 gauge .25-35, underneath, under lever, line engraving, 5½ lbs, never used, \$110. Gean Smith, Genoa, N. Y.

**FOR SALE**—Model 1903 Springfield, star gauged. New barrel and sighted at Springfield Army ord during 1921. Factory condition. \$30.00 post office money order. Martin B. Donker, 609 Leonard St., N. W., Grand Rapids, Mich.

**FOR SALE**—30-40 Winchester, Lyman sights, sling \$27.00; 1914 Enfield, .303 calibre, \$18.00; 8 mm. French Carbine, \$15.00; Colt's D. A., .45, \$20.00; sterling grade Baker trap gun for equal value in pump or double; all in excellent condition. Fred Johnson, Seneca, Ill.

**FOR SALE**—Model '95 Winchester, .30-06, Solid frame, perfect inside, fired thirty times, \$40.00. Newton reloading tools, \$6.00. Want—Bond tool for both Krag and Springfield. R. B. Miller, Temperance, Mich.

**FOR SALE**—800 rounds .25 Stevens long rim fire, \$7.00; 200 rounds .25 Remington, 101-grain bullets, \$8.00; 300 rounds .44 S. & W. Russian, 246-grain bullet, \$9.00. All factory loads, in excellent condition. 400 Ideal gas-check bullets, No. 308284, factory made, \$4.00; 100 .30-40 Winchester primed shells, never fired, \$2.50; Ideal .30-40 single adj. chamber loading tool, \$3.00; Ideal .30-40 full length shell, resizing die, \$2.50. All above in guaranteed condition. Box 7, "Arms and The Man."

**FOR SALE**—.45 Colt Automatic and holster, Army model with extra new barrel. Gun in excellent condition. \$25.00, Box 9, "Arms and The Man."

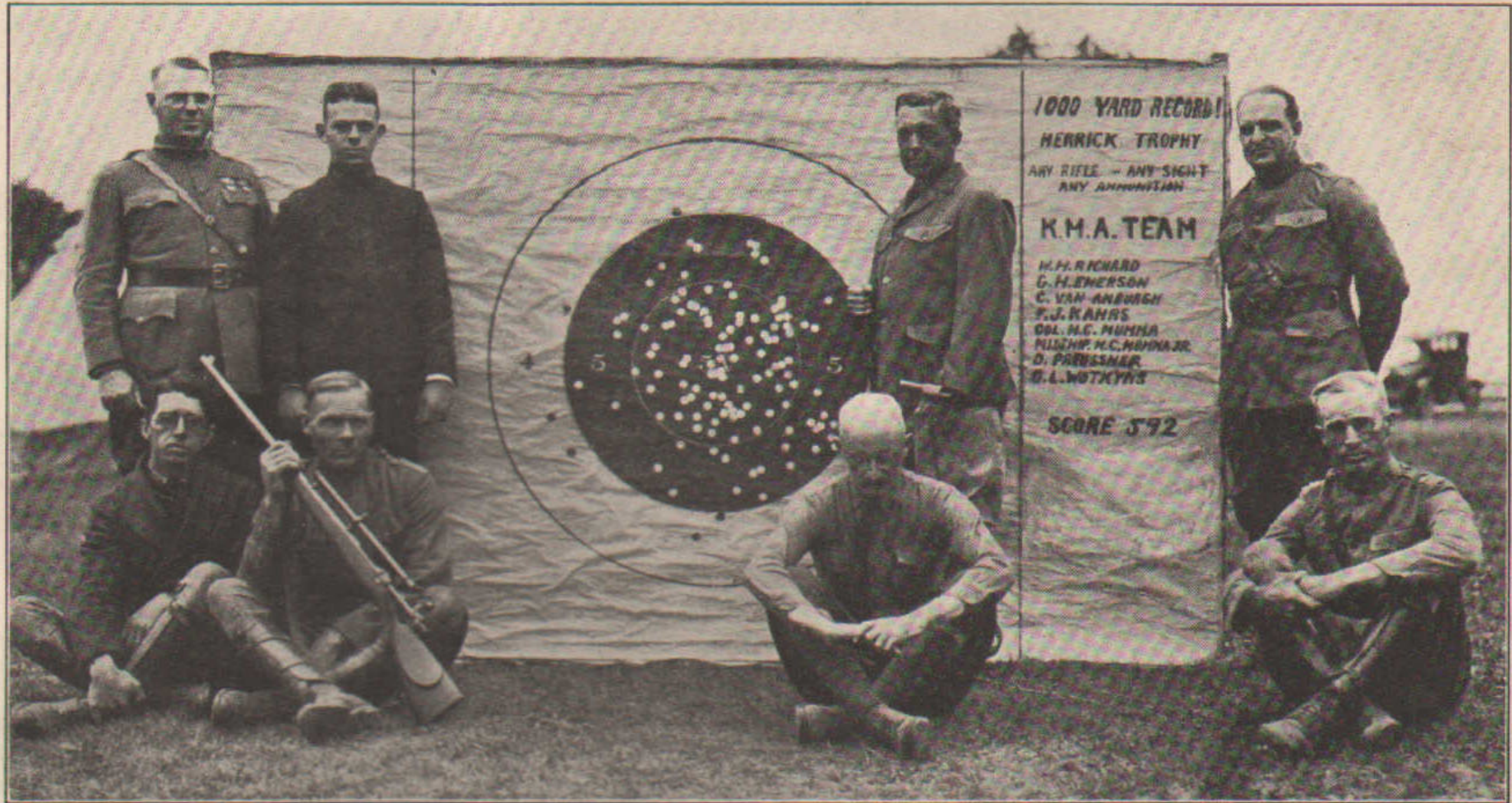
**FOR SALE**—.280 Ross, like new, barrel excellent, fitted with Lyman No. 48, rear and bead front, folding rear sight, \$45.00. Box K. B., "Arms and The Man."

**FOR SALE**—7 mm., model 1912, military Mauser rifle, star gauged barrel, never fired. An excellent buy for experimenting with the 7 mm. cartridge. Not post war junk. \$30.00. Box 11, "Arm and The Man."

**FOR SALE**—20 gauge Ithaca double barrel, hammerless, with 26-inch barrels. Very good condition. Fine brush gun. \$25.00. Box A. M. L., "Arms and The Man."



# World's Record Long Range Shooting with *Remington*



Shooting in the Herrick Trophy Match at Camp Perry last month the K. M. A. Team established a new World's Record at 1,000 yards for an eight-man team over the Herrick Trophy Course, using telescope sights, with the remarkable score of 592x600, shooting Remington Palma-Olympic 180-grain Match Ammunition. The individual scores were:

## K. M. A. TEAM

	800 yds.	900 yds.	1,000 yds.	Total
Capt. W. H. Richard.....	75	74	75	224
Capt. G. H. Emerson.....	75	75	74	224
Capt. C. J. Van Amburgh.....	75	75	74	224
Mr. Frank J. Kahrs.....	74	75	74	223
Midshipman Morton C. Mumma, Jr.....	75	75	75	*225
Col. Morton C. Mumma, Sr.....	75	74	72	221
Capt. Grove L. Wotkyns.....	73	75	74	222
Capt. Don. Preussner.....	74	73	74	221
Totals.....	596	596	592*	1,784

\* World's Record.

A new Individual World's Record for this course was made in this match by Midshipman Morton C. Mumma, Jr., who scored the possible 225. This score represents 2 sighters and 15 shots for record at 800, 900 and 1,000 yards, and was made with Remington Palma-Olympic 180-grain Match Ammunition.

The Herrick Trophy was won by the Massachusetts State Team of eight men with a new record team score for this match of 1,772x1,800 at 800, 900 and 1,000 yards, the entire team using Remington Palma-Olympic 180-grain Match Ammunition.





*Captain Guy H. Emerson and his winning rifle*

## The Wimbledon Cup

The Thousand Yard Classic of the Year

### The Problem

Twenty Shots 1,000 yards. Any rifle. Any sight.  
Any ammunition

### The Answer

Twenty shots in the black, fifteen of which were in the 20-inch inner ring, or central V.

Captain Guy H. Emerson, of Ohio, shooting the New Sniper No. 2, Winchester barrel, Springfield action, Winchester A-5 telescope and Winchester cartridges furnished the above answer.

Captain Emerson has three times captured this cup against all comers, and three times his winning combination has been Winchester barrel, Winchester scope and Winchester cartridges.

# WINCHESTER REPEATING ARMS COMPANY NEW HAVEN, CONN.

Address all inquiries to Shooting Promotion Division.

Photographs through the courtesies of Henry N. Marsh, Hercules Powder Co.

## "Kernal Mumma's Amatures" at Camp Perry

The "K. M. A." Team, a pick-up team shooting in the Herrick Trophy Match, broke existing records at 1,000 yards for eight men, using the *two Winchester Sniper Rifles*. There is no such a thing as a "Uster Waser" with such equipment.

Winchester rifles and telescopes bring you right up-to-the-minute.

Midshipman Morton C. Mumma, Jr., son of Col. Mumma, shot a perfect score at all three ranges, 800-900-1,000 yards, fifteen shots at each range for the possible score of 225 x 225 points. Mumma, Jr., used Sniper No. 1, equipped with A-5 telescope, even his two sighters at each range were bulls. Not many shooters have turned this trick.

*The "K. M. A." Herrick Team*

