

THE AMERICAN RIFLEMAN'S MAGAZINE



VOL. LXX, No. 4

NOVEMBER 1, 1922

Indoor

PETERS TACK-HOLE AMMUNITION

Outdoor

Peters .22 Indoor Tack-Hole and Outdoor Tack-Hole cartridges have proven their superior shooting qualities in keen match competition and well have they earned the title of "The World's Finest Ammunition."

Expert riflemen will accept only that brand of ammunition which measures up to the highest standards and their choice is with Tack-Hole, not only for its wonderful accuracy and uniformity, but also for its freedom from fouling and prevention of pitting in the riflebarrel, due to the non-corrosive priming mixture and the use of set-off smokeless powder.

Harry Palmer of Sheridan, Wyo., using the Indoor Tack-Hole cartridges, made what is believed to be a world's record for consecutive shooting,—540 consecutive bull's-eyes at 50 feet, the result of over seven hours of continuous shooting. T. K. Lee of Birmingham, using the Indoor Tack-Hole and shooting over a range of 75 feet, put 266 consecutive shots in the black.

The Outdoor Tack-Hole cartridge firmly established its superiority in long range shooting at the Eastern Small Bore Matches, held at Sea Girt, New Jersey. John W. Hession, using this cartridge made 47 consecutive bull's-eyes at 200 yards in Match E,—was also high man on the winning team in the Palma Small Bore Team Match, making the marvelous score of 224 x 225 over an average range of 175 yards. R. V. Reynolds, using Outdoor Tack-Hole ammunition, made a score of 222 x 225 in winning the Palma Individual Match over an average range of 175 yards.

The .22 Indoor Tack-Hole cartridge is designed to meet the demand of riflemen for a super-accurate small-bore cartridge for target shooting up to 75 feet.

The .22 Outdoor Tack-Hole cartridge is designed to give extreme accurate results on ranges up to 250 yards. To obtain the best results in pistols and revolvers, the Outdoor Tack-Hole cartridge should be used.

Small Bore Shooters: if you want your scores to represent your true ability, use Tack-Hole ammunition, "The World's Finest."

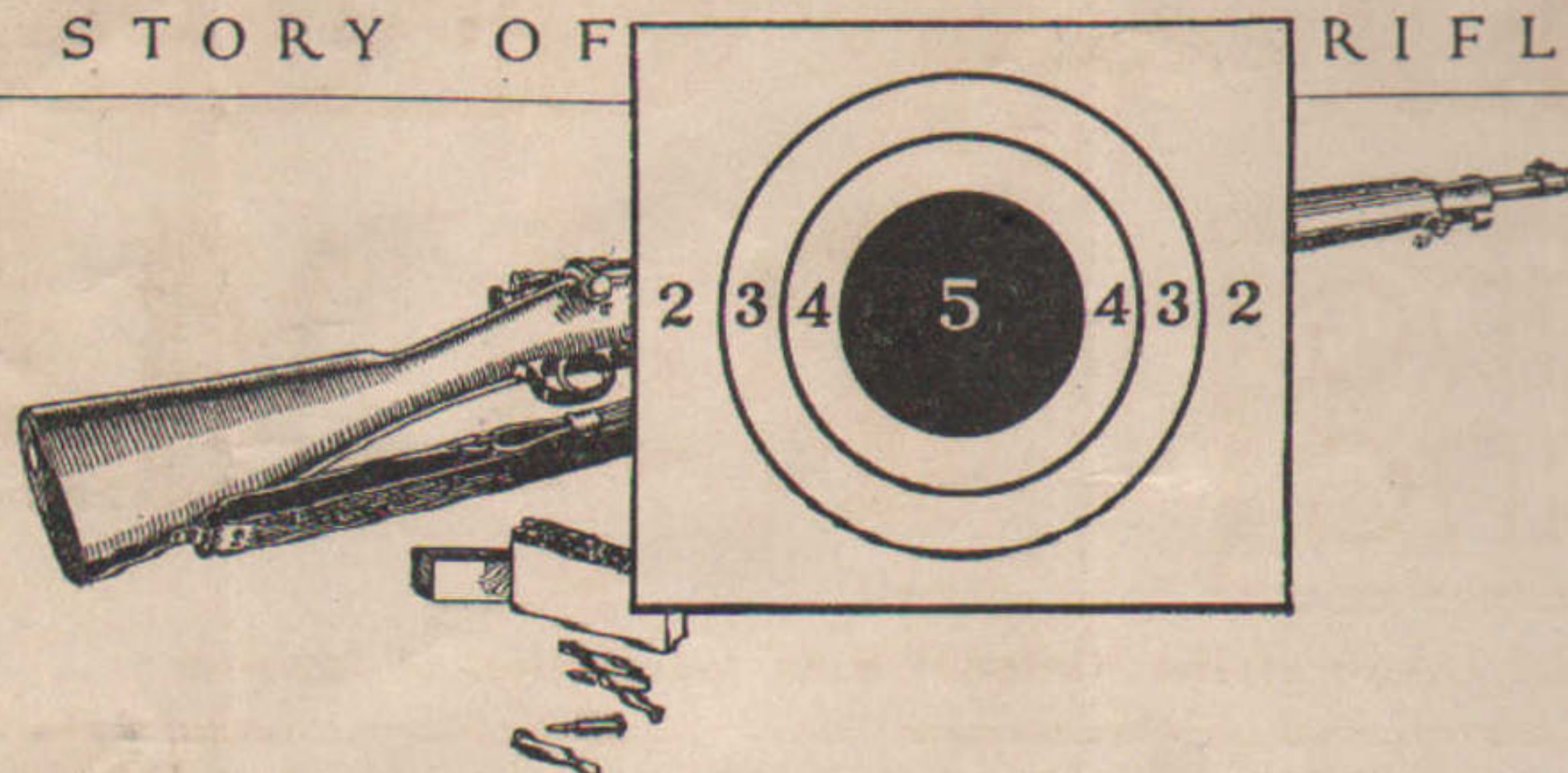


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ARMS AND



SHOOTING AND FISHING.

THE MAN

The Official Organ of the National Rifle Association of America

Vol. LXX, No. 4

WASHINGTON, D. C., NOVEMBER 1, 1922

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HOW seven American Riflemen were chosen in gruelling contest to meet the crack marksmen of Europe at Milan has been told in the pages of ARMS AND THE MAN; likewise the swift flash of cables announced to the world on September 20 that the United States Rifle Team had accomplished what American shooters expected of it—a vindication of American supremacy with the rifle.

But between the try-out and the cable-flash of the winning score there lie two tales yet to be told: how, beset by an extraordinary chapter of misfortunes and annoyances, our American riflemen confronted by almost insurmountable difficulties, adventured through half the by-ways of Europe; and how, shot by shot, they fought and won a grim contest with what was heralded as the greatest rifle team the redoubtable Swiss marksmen had ever mustered.

On the morning of August 23 the members of the United States International Rifle Team boarded the *S. S. President Adams* at her Hoboken wharf, to the accompaniment of the strains of an Army band and the purring click of a battery of movie cameras.

Before the big liner bearing America's representative marksmen got under way on her long voyage to Cherbourg, the riflemen aboard her were given a send-off such as has never been accorded any other American rifle team departing for foreign conquest. A fine personal touch was lent to the occasion by the presence of General Phillips, Major Dooley, Frank Kahrs, Mr. Rice and other rifleman friends of the team, and, as seems natural, the circumstances of this departure had a marked effect in strengthening the morale of the team. When the *President Adams* finally swung out into the channel and headed for sea, every shooter aboard her was imbued with a keen realization that he was going forth as a representative of the American fraternity of riflemen, who stood interestedly and firmly behind him.

Once out of sight of land and comfortably quartered, the team settled down for the long days of voyaging which must come before the ultimate journey across Europe could begin. With the exception of Larry Neusslein, who at the last moment found himself unable to get away, all the shooters selected at the try-out were there: Major L. W. T. Waller, Jr., U. S. M. C., the team captain; Lieut. Comdr. C. T. Osburn, the team coach; Lieut. Comdr.

E. E. Wilson, the team adjutant, and the shooting members, Sergt. Morris Fisher, U. S. M. C.; Mr. W. R. Stokes, of Washington, D. C.; Major J. K. Boles, U. S. A.; Captain Jcs. Jackson, U. S. M. C.; Marine Gunner C. A. Lloyd, U. S. M. C., and Lieut. Comdr. A. D. Denny, U. S. N. Now, perhaps for the twentieth time since the team was selected, the shooters took time—as shooters always will—to “mill over” the equipment which had been provided for them and to discuss at length and in detail the “dope” which the closing days of practice at Quantico had provided.

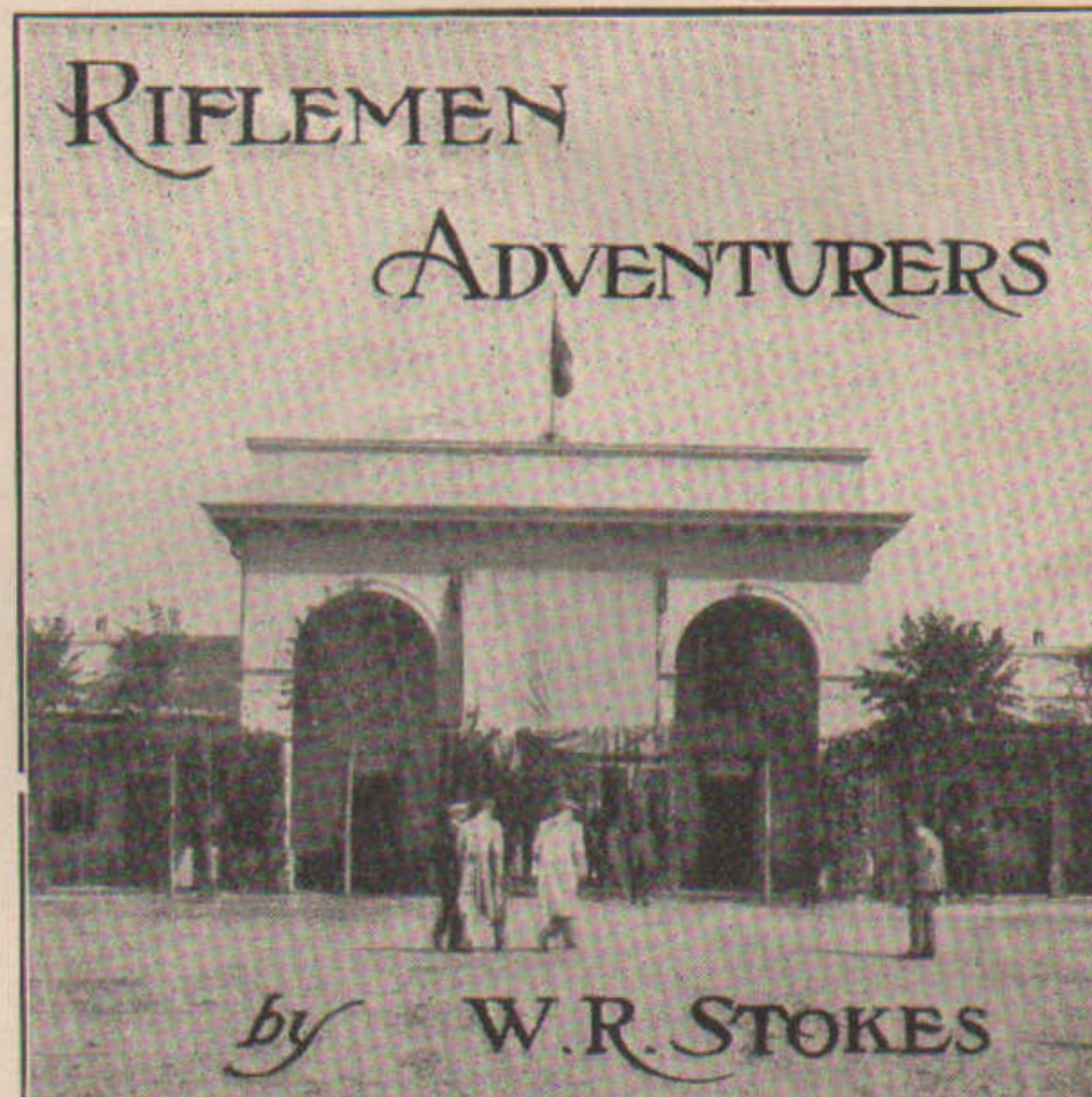
The rifles—heavy Springfields—had already been fitted to the individual members of the team by those skilled Marine Corps gunsmiths, Emil Blade and Frank Rimkonas, and they gave the shooters every advantage to be found in double set triggers, pistol grip stocks, adjustable sling swivels, special hooded interchangeable front sights, lightened firing pin rods, adjustable butt prongs, and adjustable palm rests; which were nearly all that a rifleman's heart could desire. All that was left for the “between whiles” of the voyage was such familiarizing practice as might be possible.

The results of the preliminary firing at Quantico after the try-out had convinced the members of the team that they were undoubtedly better equipped than was last year's team, and they were capable of making a score better than that which won last year.

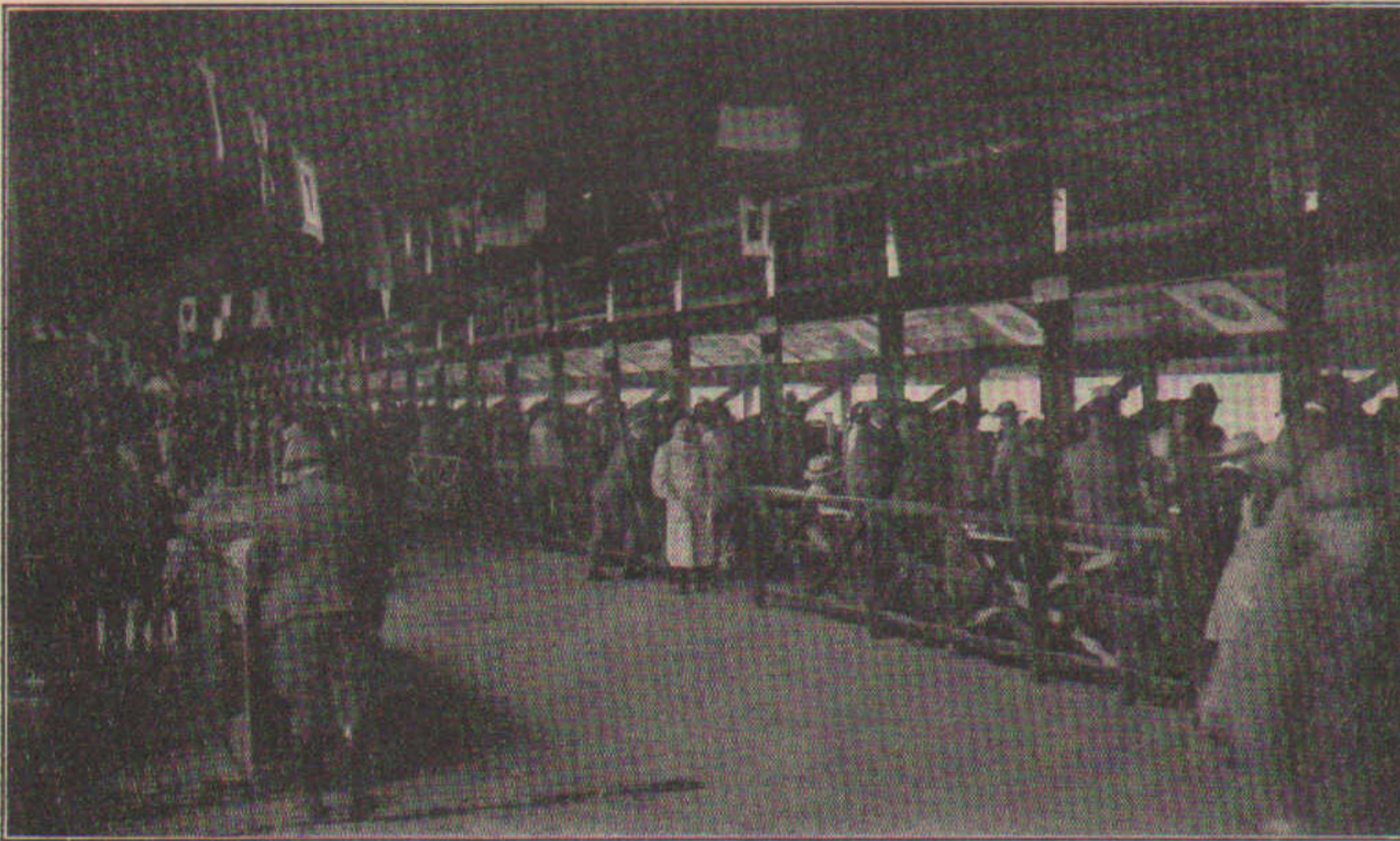
The team was equipped for .22 calibre gallery practice on the ship,

but such practice was decided against on the ground that the necessarily unsteady holding produced by the ship's motion would tend to develop undesirable snap-shooting. The only training done consisted in prolonged periods of aiming drills in each position. In this practice the trigger was left severely alone because of the anticipated danger of developing a snap get-away: No; this snap get-away reference has no connection with seasickness; indeed no one in the team party was sick at any time during the voyage, despite the fact that some rough weather was experienced off the Irish coast.

After the ship had touched at Queenstown and Plymouth, she reached Cherbourg on the morning of September 2. The team at once disembarked, and that morning took a train for Paris. But before Cherbourg had been left behind there developed the first link in a chain of baggage troubles which were later to as-



THE ODYSSEY OF THE DEFENDERS OF
THE ARGENTINE CUP



The "Doller House," where the Battle of Milan was fought, with the shooting booths on the right and the bar on the left.

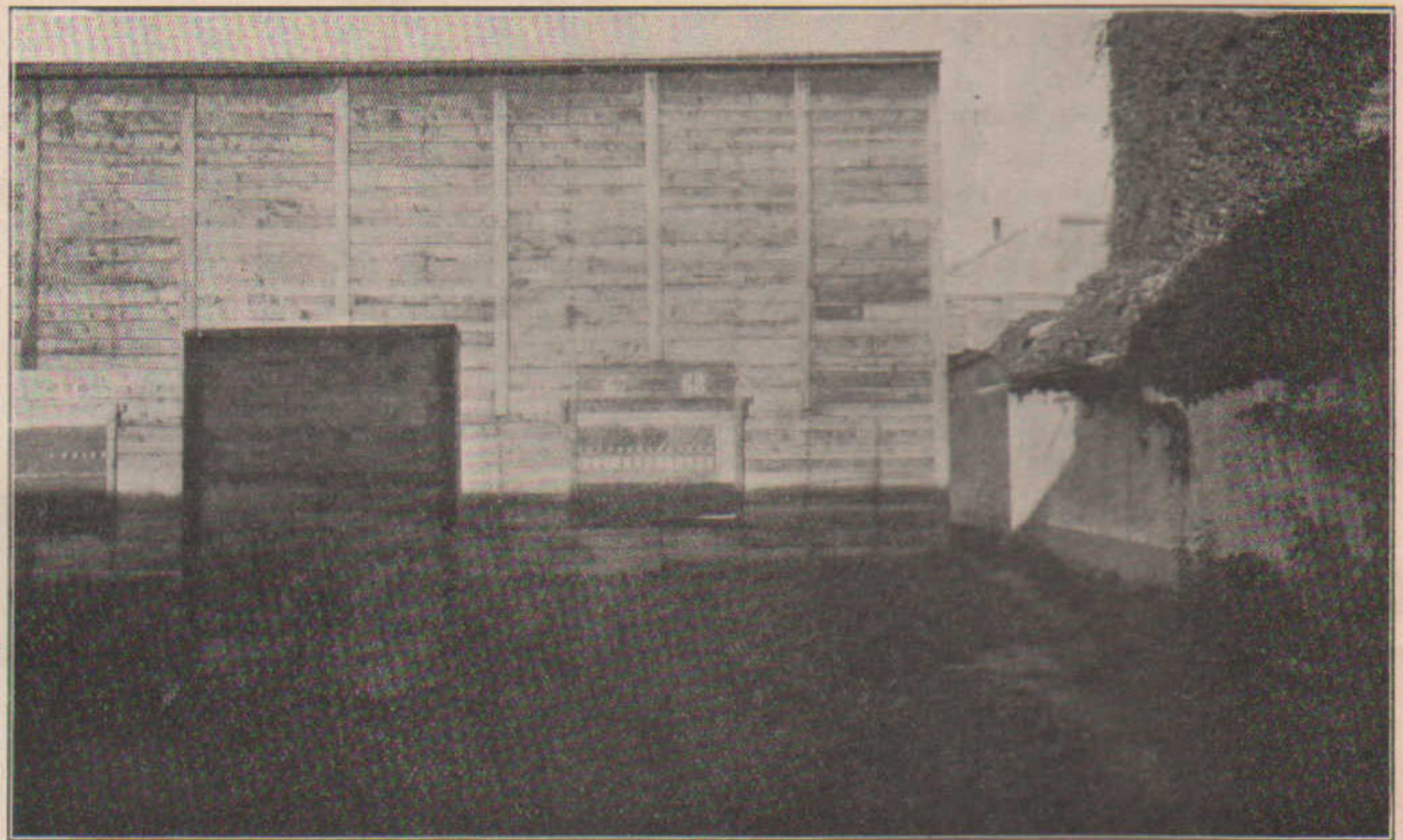
sume a leading rôle among the experiences of the team.

Major Waler had wisely decided to let each man carry his own rifle with him. But this the railway officials at Cherbourg would not permit; neither would they allow the team's ammunition to be transported as personal baggage. The best that could be made of the situation was to put all team baggage into a freight car, which was permitted to be attached to the train on which the team was traveling.

The train arrived in Paris about 6 o'clock Saturday afternoon. By this time the Customs in the Gare St. Lazare had closed, not to open again until Monday. When finally the car was opened and ammunition was discovered, the consternation of the railway officials was unbounded. The boxes might as well have contained the plague for all they would have to do with them. This, perhaps, because it had been learned that the Cherbourg railway official responsible for attaching a car containing ammunition to a passenger train—a violation of French law—had been very suddenly separated from his job. Persuasion and argument fell on deaf ears. So, after a day in Paris, the team started on ahead for Coblenz, a few porters having finally been cajoled into pushing the baggage car into position where a train would pick it up.

The team reached Coblenz on the afternoon of September 4, and upon their arrival found everything in readiness for them to go on to Neuweid, a few miles from Coblenz, to begin practice firing on the American Rifle Range located at that place. But the baggage had not arrived, and on the morning of the 5th it was still missing. Later developments disclosed the probable reason: the agent at one of the French division points had exhausted the space in his car book and when this happened, he simply stopped keeping his records. The natural result was that the car went adrift.

It was decided to delay going to Neu-



A view down the range, showing the barricades, walls of the enclosure and butts in the distance.

weid until the next day. But when the next day arrived and the baggage had not yet been delivered, another day on the range was lost. The history of these two days proved to be the history of all the remaining days spent at Coblenz. Telegrams by dozens were sent out in an effort to locate the missing baggage car, and the cooperation of the French and American Armies of Occupation was secured in the search.

Major Herwig, U. S. A., who had been detailed at Coblenz as team quartermaster, was sent to Paris to work in person upon the trail of the lost car. Through a combination of those efforts, the car at last drifted into Coblenz during the night of September 9, the day before the team was scheduled to leave for Milan. It had been located finally at a coal mine in the Saar Valley. Thus not a shot of practice was fired at Coblenz, and the conditioning of the team was set back accordingly. The dispiriting tendency of this situation was

added to by day after day of chill, rainy weather.

While the team was stooping at Coblenz it was learned that Switzerland, as well as France, was possessed of law most unfavorable to the transportation of rifles and ammunition. Hence it was determined that the best way for the team to reach Milan with its equipment intact was for it to make the trip by way of unoccupied Germany and Austria, avoiding France and Switzerland. Accordingly, on the 10th a start was made for Milan by way of Frankfurt-on-Rhine, Munich, Kufstein, Innsbruck, Bozen, and Verona. Even making the trip by this route it was far from assured that the team would arrive at Milan with any ammunition. As a special precaution, all the boxed ammunition carried along was stripped of identifying labels, and six thousand rounds were distributed among the team's personal baggage. Also

an additional lot was shipped to Milan by way of Switzerland.

To the casual reader it will seem strange that there should have been this trouble about the transportation of the team's ammunition. The fact is that the laws of all the countries involved strictly forbid the carrying of ammunition on passenger trains, and that after the one bitter experience the team had had with freight shipment, they were ready to attempt anything to get some of their ammunition to Milan in time for the Big Match.

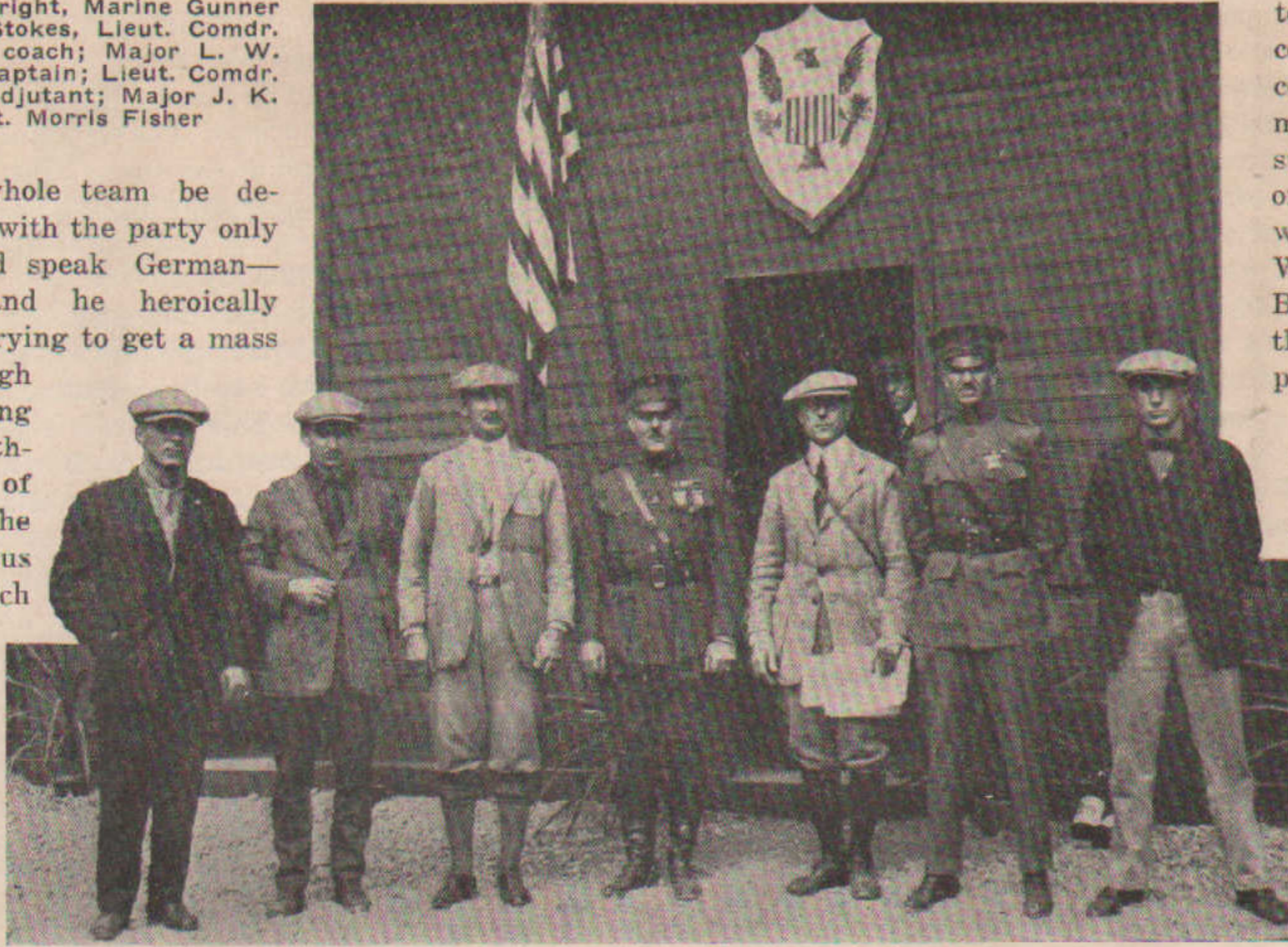
Late on the night of the 11th the team, in a special car, two compartments of which contained their baggage, arrived at Kufstein, on the Austro-German border. There their baggage was unceremoniously removed from the car and lined up for inspection by German and Austrian customs officials. This turn of affairs promised calamity, because it seemed certain that the forbidden ammunition would be discovered and confiscated,

The Victors: Left to right, Marine Gunner C. A. Lloyd, W. R. Stokes, Lieut. Comdr. C. T. Osburn, team coach; Major L. W. T. Waller, Jr., team captain; Lieut. Comdr. E. E. Wilson, team adjutant; Major J. K. Boles, and Sergt. Morris Fisher

and perhaps the whole team be detained. There was with the party only one man who could speak German—Major Herwig—and he heroically tackled the job of trying to get a mass of baggage through two sets of unobliging customs officials without the formality of having it opened. The long and strenuous arguments into which he launched were anxiously watched by the members of the team, who could only stand around in silence, understanding nothing of what was being said.

Finally, in the early hours of the morning the customs people throw up the sponge—more from weariness than from any other cause, it appeared. All the baggage was at last loaded into a special car on a waiting train and the team sleepily but joyously departed from Kufstein.

Only a fortunate "hunch" prevented seri-



On the next morning, after leaving Kufstein, a few pleasant hours were spent by the team members in enjoying from the car windows the magnificent scenery of the Austrian Tyrol, but the journey, as a whole, was a heart-breaking one for the team; forced to sit up in dirty coaches all night, and to battle every inch of the way,

experience concluded. The party at once went to a good hotel, in the center of the city, where reservations had previously been made by Commander Wilson, who had come to Milan a few days ahead of the others. In the meantime, the matches had opened and the team was one day late.

On the morning of the 13th the team

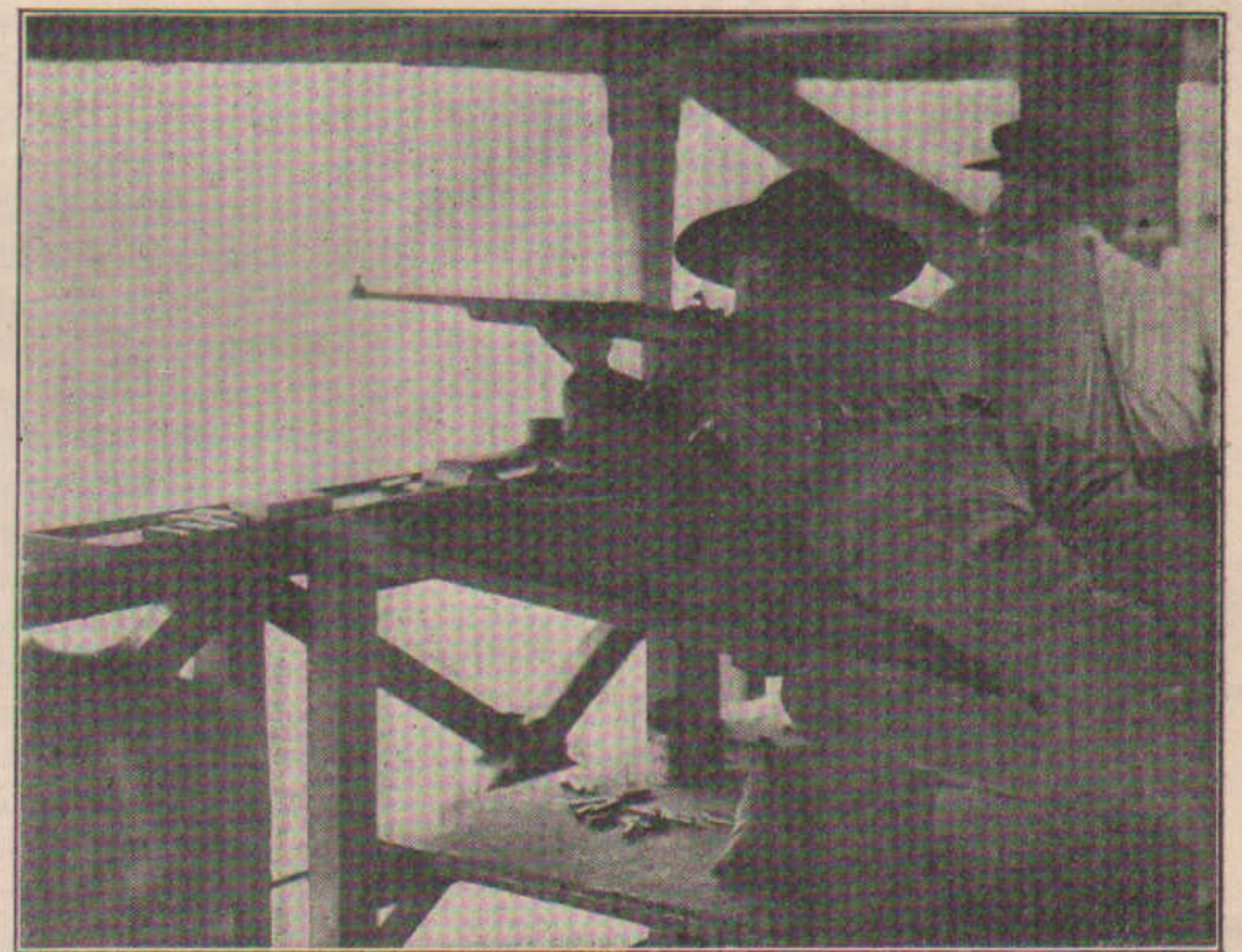
to permit it to pass in a coach in spite of all the "safe conducts" and special permissions exhibited. The result was that the party went on without their baggage, with the exception of Major Waller, who remained at Bolzano to see personally that the baggage should follow promptly.

The team arrived at Verona in the afternoon, and there had to wait four or five hours to get a train for Milan. This delay allowed Major Waller to rejoin the party with the baggage, minus the crated ammunition, which was detained for freight shipment.

In the evening, about forty-eight hours after having left Coblenz, the team arrived at Milan, a harrowing



President Dalai, executive officer of the meeting, with the Italian-American team who also attended the matches



Major Boles on the bench provided for prone shooting

ous trouble at Kufstein even as events transpired. Just before the train bearing the team arrived at the customs town it was decided to be too risky to try to pass the customs people with ammunition in handbags, so all the ammunition carried in that manner was thrown out of the car windows just before Kufstein was reached. Had this been retained it would probably have been discovered during such inspection as was made at the border town.

they were completely worn out. As the frontiers were passed, however, they had begun to breathe more easily when, at the town of Bolzano, near the Austro-Italian border, the lid blew clear off. Up to this point the ammunition had been carried in a special car with the members of the squad. It now became necessary, because of a different kind of car brake used in Italy, to change to another car, and the station master on discovering the ammunition, refused

was on the Milan Range ready to begin firing (with the ammunition brought through in trunks). The range was found to be a spacious one (67 targets) and well appointed. Firing was done from a long shed which protected the shooter from head and side winds. The firing points were of typical European style: a very limited space opposite each target, with removable individual wooden platforms to be used in the prone and kneeling positions. At each



The Argentine Cup

firing point was found one of the little bags of sawdust and sand that European shooters habitually place under the bent ankle when shooting kneeling, a device which, as opposed to the simple expedient of sitting on the side of the foot, has not appealed to American riflemen.

Close back of the 200-yard long firing line was an equally long row of scorers' benches and tables, each place manned by an Italian soldier. In rear of the scorers, and still under the shooting shed, was a spectators' promenade, some thirty or forty feet wide, run-

ning the entire length of the firing line. From the early hours of morning until dusk in the evening this promenade was the scene of thronging activity. At each end of the rifle range firing point a pistol range was located. In rear of the shooting shed was a large open courtyard, surrounded by the range administration buildings and the mess hall. In the courtyard, close to the shooting shed, was situated a temporary team quarters building, in which the Americans were assigned a dressing-room—a real convenience.

During their first day at Milan, little firing was done by the Americans, since it takes at least one day for an American to learn the scheme of management on a European range. In this matter of learning how things were done at the range the Americans received most valuable assistance from the members of an Italian-American rifle team, which came to Milan from New York city. The shooters on this team, Messrs. Minervini, Riali, DeFelice, and Alfari made it their particular business to assist the American team in all sorts of helpful ways, and when they learned of the team's ammunition transportation troubles they even went so far as to offer to give up to the American team three thousand rounds of special Springfield ammunition which they had brought with them for their own use.

It was speedily discovered by the Americans that their practice would have to be largely through the medium of re-entry and qualification matches. As there were about 1,200 actual individual competitors present,

it became evident that the number of shots fired by one man in a day must be decidedly limited. This factor proved a handicap in the training of all of the teams present.

The American riflemen found themselves privileged to see such a collection of fancy firearms and ammunition as was certainly never before assembled on a single rifle range. American gun cranks are supposed to be a rabid species and to develop some fantastic ideas, but members of the 1922 U. S. International Team can never be convinced that there is one real gun bug in the United States after what was seen at Milan of the handiwork of the European cranks. There seemed to be scarcely two of precisely the same type among the hundreds of "free rifles" to be observed. And variations in ammunition were almost as numerous as variations in the rifles themselves. The rifles were in most instances single shot arms with Martini actions, and of calibres close around .30. Double set triggers, hand-made stocks and cheek rests, and Schutzen butt plates were characteristic features of practically all of the rifles to be seen. Among the many types of ammunition in use it was notable that the full metal jacketed bullet held undisputed sway.

From September 13 until September 18 the American team was on the range when the sun came up, and was still there when the "cease firing" cannon was fired each evening. Uncontemplated difficulties in abundance were unearthed during this period, but they were promptly overcome by determined effort. Principal among these difficulties was the fact that the light on the targets was so poor after 11 o'clock in the morning that the favorite heavy-rimmed aperture front sights of the Americans simply could not be used at all. After much experimenting it was at last agreed by everyone that a very large aperture with a hair-line rim was the sight needed, and sights of this type were finally used in the match. Among other troubles encountered were three or four days of very unpleasantly cold weather, which aided in making one member of the team, Commander Denny, seriously ill. And on the range, late in the afternoon on the warm days, a species of small-winged insects in countless swarms clouded the air between firing point and target. Another very annoying thing was the constant necessity that each shooter be unceasingly alert for a chance to get in on a target in order to do any firing at all.

During these preliminary practice days the Swiss were showing a very decided edge on the Americans; in fact, they were doing phenomenal shooting—often above the world record. The American shooters could see plainly that they faced a tremendous assignment in attempting to keep the Argentine Cup in America. Yet, though they were having a variety of troubles and were popularly picked to receive a trimming,

they maintained a most alert and determined attitude.

On September 17 the Swiss took the International Pistol Match on a remarkable brand of shooting. This tended to strengthen their growing confidence in their ability to regain their sacrilegiously departed Argentine Cup.

On the final morning before the match, the Americans received their ammunition which had been detained at the Italian border. This assured a plentiful supply for any contingency. During the last practice held on the morning of the 18th, the Americans were elated to find themselves at last free from all their ammunition troubles, and this elation, together with the painstaking practice and experimenting of the past week showed itself in the last practice scores. So, on the night before the big event, America's riflemen went to sleep with an abiding conviction that on the morrow they would "cross the dope" and spring a real surprise.

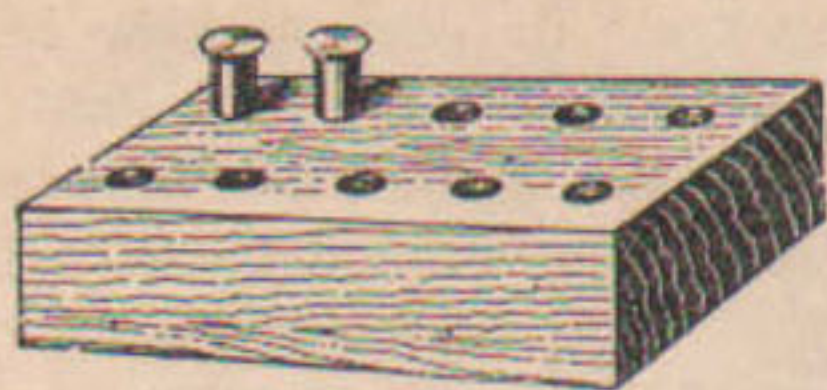
When the first long rays of the rising sun fell upon the Milan range on the morning of the 19th—Match Day—they illuminated a scene to quicken the pulse of the most veteran rifleman. Here were lined up, shoulder to shoulder, to compete for the highest honors of the shooting game, the expert representatives of eight nations: the United States, Switzerland, France, Sweden, Italy, Holland, Denmark and Monaco.

With their troubles in the background, the Americans lined up for the Big Match. Every precaution was taken to gain all possible points, the strategy of the match being based upon the superiority of the Americans in the prone position; consequently, in order to take full advantage of this, the kneeling and standing strings were to be shot last, which resulted in scores from the steadier position being made while the light was good. This move gave the Swiss, who fired many standing strings in the morning, an uphill battle through the whole gruelling day, and by the time the Americans reached the vital standing position most of the match nervousness among them had worn off.

The American team, like all others, drew three targets and was allowed from 7 a. m. to 6:30 p. m., with two hours out for lunch, to complete its scores. The five shooters chosen to represent the United States were Osburn, Boles, Lloyd, Fisher, and Stokes.

Behind each of the three American targets Major Waller mounted a high power 'scope, taking the center one himself and detailing Denny and Jackson to watch the ends. No spotters were used in the pit, the point of impact being indicated only by a small point on the tip of the scoring disc; but whatever disadvantage this may have been was neutralized to a large degree by the close team work between the shooting members and the coaches.

(Continued on page 16)



A Critique on Twenty-Two Calibre Rifles

By Malcolm Dean Miller, M. D.

THE appearance, in the June 1 issue of ARMS AND THE MAN, of the description of the new Springfield .22, is the exciting cause of this screed. At last the small-bore devotee seems to have a practically perfect understudy of the service rifle at his disposal. Time alone will tell whether serious modifications will have to be made to change "practically" to "absolutely."

Others will doubtless inform us through the columns of our favorite shooting journal as to the practical results obtained with this new Springfield. In the meantime, it may help some of the men who have yet to purchase a small-bore rifle if some frank comments are published on the rifles available.

Thirty years' experience with various .22's gives one a number of pretty definite likes and dislikes. Like most boys of my time, my brother (Beric) and I began with a Flobert, a sure-enough spitfire, but effective in reducing the English sparrow population. The Remington No. 4 succeeded. Next came a long succession of Winchester Single Shots, Marlins' 97's, and other repeaters. The No. 4, for a boy, is, in my opinion, still one of the best rifles ever designed. But for target shooting, in those bygone days, the best bet was a Winchester S. S. with 28-inch No. 3 round barrel, No. 7 Lyman in front, and a Lyman tang sight with cup disc in the rear. It was about the time of the introduction of King's Semi-smokeless that I owned that particular weapon, and it was good for scores of 89 and 90 (and very occasionally, on still days) even higher at 200 yards on the Standard American target at the old Walnut Hill range. In fact, we could both shoot the .22 for better scores than we got out of the .38-55 barrel on the same frame (an interesting job involving interchangeable firing pins done by Frank Nowicki, of New York) with lubricated bullets seated ahead of the shellful of black powder. That weapon ended up with a brass forearm to increase the weight and a single set trigger. I have always regretted parting with it. By the way, it will perhaps interest some of the present patrons of gunsmiths to know that that Nowicki job, including cost of the new barrel from the factory, was only \$17.00.

For years, however, most of my interest was in the .25 calibre, as much of it still is. The next period of .22 development came with the close of the war and the bringing out of the present series of small-bore rifles. Not that the Stevens Armory Model and the Winchester musket are to be despised even now. They have their faults,

possibly the worst being the tendency of the fired cases to get into and jam the action; but if properly sighted with either the B. S. A. tang sight or the new Lyman No. 103—provided that the latter demonstrates its freedom from the defects which the old model developed, they are still extremely satisfactory for range use. Stevens single shots always used to be taken to Kirkwood, by the old-time Walnut Hillers, to have the action parts refinished and hardened and the pulls fixed. The Winchesters never needed anything but adjusting the pull. However, the W. R. A. Co. altered for the worse an action which was formerly most excellent by introducing the takedown model with coil springs and the fly intended to leave the hammer at half cock. It might have some excuse for being if it worked; but one can never tell whether the hammer will be at half or at full cock. This is the case with both of our issue rifles at the club, as well as with my .25 R. F., though fortunately the latter is solid frame, and some day it is going back to the factory to have the fly changed.

A. C. Gould once wrote—I think it was in "Modern American Rifles"—an account of his favorite stunt of challenging the user of a repeater to shoot against his Sharps Borchardt for speed combined with accuracy. As I recall, he used to hold cartridges in his mouth and drop them on top of the breechblock, letting them run in by gravity. In this manner he speeded up on reloading and gained in steadiness of aim, generally making more hits than the repeater, the user of which always tended to fire too fast and without due regard to steady down for a good aim for each shot. Well, one could use the old Winchester, which *always* came to full cock on closing, in much the same manner. With cartridges in a pouch on the belt, slamming the lever down very hard would throw the shell clear and it took but a moment to insert the new cartridge and close the action while bringing up the rifle, with the eyes still on the game. Getting squirrels on the run, through an 8-power Mogg glass, was thus an occasional possibility.

Actions aside for the moment, the most critical point about the smallbore .22 is the rear sight. A sight which is not absolutely free from backlash and lost motion and adjustable by clicks for half-minutes is an almost fatal handicap. The great popularity of the Winchester scope is due more its mountings than to its optical qualities or to the help which it gives the man with defective vision. The Lyman No. 103, in its new form, may solve the problem nicely.

I am at present trying one out on the Savage 1919 rifle. The small of the stock is the best location for a peep sight. No aperture on the receiver can compare with it for ease and comfort in sighting. This new Lyman comes just right for prone shooting and is equally good in the other positions—our regular Club Match is 10 shots in each of the four positions—without one's having to crawl way up the comb in the effort to get the eye close enough to the peep to see through it properly. If I owned a Winchester 52, I should certainly desire to try out this sight on it in place of the factory rear sight. However, no other criticism of this rifle has ever been developed in our club, where they are now about two to one of all other makes, except as to stock dimensions. Unless the 1922 Springfield proves superior, no other smallbore .22 can be compared to the Winchester 52 for smoothness and certainty of functioning, good pull, etc. If one cared to restock it and use the newer model of the Lyman No. 48 or the new No. 103, it would be ideal.

My own rifle, the 1919 Savage, is not so satisfactory as the Winchester in functioning, though very much better stocked. The criticisms I am about to write have already been submitted to the manufacturers. That they are valid is proved by the gradual replacement of Savages by Winchesters in our club, where formerly the Savage predominated. The Savage magazine is defective and a nuisance. Even after several trips back to the factory for adjustment, in a short time they get out of order and either suddenly and unexpectedly spew forth their cartridges, or else fail to feed them smoothly and in line with the chamber, resulting in jams or in losing the cartridge at the dark firing point and having to call for an extra cartridge. As a singleloader, the rifle is very hard to manage. The trigger pull is difficult to adjust without getting it creepy or too light for the rules. The ejector, sticking out in the way of the cleaning rod, shaves bits of steel off and makes a mess of the action. A cleaning tube of brass, designed to hold this ejector back out of the way, helped for a time, but it put the safety out of action somehow, and after the rifle had been back to the factory to be cut down to a sporter, etc., I could not make the cleaning tube work. None of these troubles afflicts the 52, which by contrast never seems to buck or balk in any way. It is too bad that these defects exist, for the barrel is superbly accurate and the stock has the best dimensions of any yet produced by the factories. In discussing the Savage the decidedly low cost at which this weapon may be procured must be taken into consideration by the prospective purchaser. In spite of the defects I have mentioned, I cling to this arm because it is just about right in hang and feel (after taking off the superfluous forearm)

(Continued on page 19)

ETHICS OF THE HUNTER

By F. E. Brimmer



It does not take a lengthy process of mental calculation to see that the hunter who goes into the field after his favorite game must play the game fairly with the farmer on whose land he must walk. If he is shooting on land that belongs to a club, his code of ethics will need be just as square as if he is the average, ordinary shooter working on land that belongs to another. In any case the hunter owes those people whose guest he by nature is, and often an uninvited one at that, at least a fair degree of ordinary care. Too much stress is often placed upon getting of game rather than on the more important feature of being a good sportsman.

The good sportsman plays the Golden Rule to perfection, and he must do this in order to insure his hunting ground. If he allows some member of the party to destroy property, to create a nuisance, or to offend the owner of the land, then the inevitable result is that he is prohibited from going on to that land in a few weeks by big posters, properly and legally put up, to keep him out. Of course the wild game that roams about the country and less settled districts does belong to him, and to him only, who can reduce the same to his possession. The wild birds that a farmer may have on his land do not belong to him unless he can fence them in or make them so tame that they are domestic fowls. By their wild nature they are the property of the state, of society, of everybody, and particularly of that lucky hunter who can reduce them to his possession. Nevertheless the fact that wild game is the property of the state does not mean that this in itself gives the shooter a right to go after that game anywhere he finds it.

Possibly no one would object to the hunters going anywhere after wild game that would not create a nuisance. I do not think that the farmer is a game hog, and so wants everything on his land for himself. He knows that game wanders about and may be on his farm one day and on that of a neighbor on another. Yet he does have the right to expect that the hunter will exercise due care when he goes after that game, and that he will not destroy anything. If a hunter should trespass on posted land but never cause any damage whatever, it is pretty likely that the owner could only collect a nominal damage that

would not amount to the time and trouble taken to collect it.

Yet no hunter who has the intention of living up to the fair rules and ethics of the sportsman cares anything about the hold that the land owner may have over him legally. In other words, it is not the fear of the law and the punishment and fine that it could impose that should make a hunter play fairly with the rights of those he is using. The thing that should make the shooter live up to the ten commandments of the outdoorsman is his own conscience. He should be his own moral dictator and decide so firmly for himself that he was going into the woods to hunt properly that he would need no other outside stimulation. There are crooks and criminals among hunters, there are Huns and vandals, too, but I am thinking only of those in the great majority who mean to do the right thing.

One of the first things I do when hunting in strange territory is to get acquainted with the farmer in whose woods I want to hunt. As soon as he sees that I am not trying to sneak around and get into his backlots, that one thing alone does a great deal toward making him feel that I am trying to do the thing right. Often I can find my winter's supply of honey, or it may be spuds, or apples, on a farm that I happen to be hunting. There is always something that you can talk over with the owner of the woods which makes a hiding place for the grouse, the woodcock, the pheasant, or the bunny, and you will be surprised at the friendly and profitable acquaintances that you can make, all in a day's hunting.

Even when the land is posted a hunter that goes at the thing in a clean-breasted manner may be able to obtain the owner's permission to hunt. Posted land is generally the result of some former depredations that have caused the destruction of property or some other kind of annoyance so that the farmer has a good excuse to prohibit trespassing. However, he is reasonable and does not have the notion that all hunters are of the bad sort. Very often the farmer is a hunter himself and maybe he would like a day's sport with your dogs. If you don't run your car over some soft place in his meadow and tear up the ground getting out, and if you act like you real-

ized he had the first rights to his own land, it will go a long way in getting you in with the good will of the owner. Show him you are a real sportsman and not a game hog that is out after heads at all costs.

Probably more trouble that has resulted in posted land has been the result of broken fences and gates than any other. The farmer no doubt has some stock that he has got fenced in the pasture and a broken wire, a gate left open, or the boards broken, will give him no end of trouble. He got nothing from your hunting, and he does not expect to have to go around and clean up after you, so don't leave the trail of debris and carelessness behind you. The natural order of events will be that he gets up some big tin signs of regulation size and proportion to keep you out the next time you come that way. A posted farm here and there is a mighty good thing, for it gives the game a place to breed and multiply, and don't think because there is one posted in the locality that you hunt that the owner is a crank. He has some good reasons. Suppose you talked it over with him and got his side of the story. It sounds just about like what you would say in his shoes you will find every time.

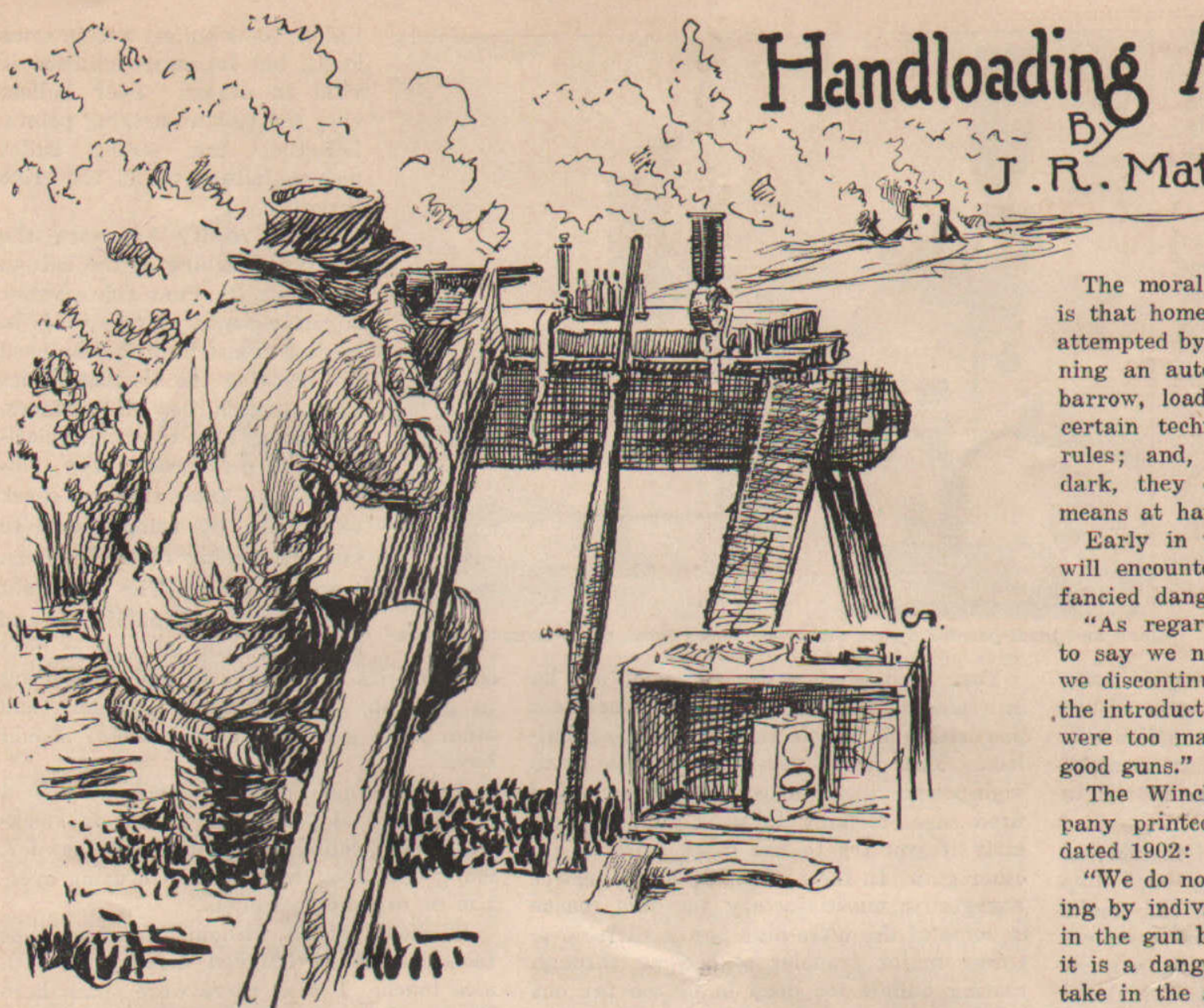
Thou shalt not leave a gate open or break down a fence! ought to be on the hunter's ten tables of stone. I know a farmer who found that his meshed wire fences were getting all pulled out of shape and the staples drawn from the posts because hunters climbed on the wire when getting from one field to another. Eventually the nuisance became so great that the wire no longer acted as a barrier to his stock, because it sagged down between posts until the cattle could walk over it at many places. So the land was posted and measures taken to enforce the prohibition against trespassing. And you couldn't blame the owner of the land!

Thou shalt not shoot at a hidden target! is another of the ten don'ts that a shooter should observe. Enough argument might be brought forward to prove this if I took only the instances of the present hunting season when a father shot at the white handkerchief that his son was using to blow his nose, claiming it resembled a deer's white flag. Or the case of the hunter who shot near Cranberry Lake in the Adirondacks at a moving object after dark that looked like a big buck—but turned out to be a student in the New York Forestry Station. Be sure you see clearly what you are shooting at—not guess at it. Another hunter lost a big buck because he came down a trail along which he expected a companion and, although he plainly heard him coming, did not raise his rifle to position until he could see the deer. Then the big fellow saw the motion as the rifle was raised and sprang into the brush. Better be safe than sorry!

(Continued on page 19)

Handloading Ammunition

By
J. R. Matern



CHAPTER 3

TROUBLES ENCOUNTERED

RECENTLY a locomotive engineer who was planning a hunt in the big woods asked a friend of his: "Where can I get hunting ammunition at a fair price for my 30-1906 Winchester?"

And the friend, nobly coming to his aid, answered: "I have all the tools, empty cases ready resized, lots of powder and Newton bullets. But I have no time to load your cartridges. Why not load them yourself?"

"Could I do it?" parried the engineer, shaking his head in uncertainty.

"You are a mechanic," argued the other man. "You have shot a rifle for years. If anyone could load, you should be able to. I will adjust my Ideal powder measure and Fairbank's scales for the right charge of No. 20 powder, and I will adjust the reloading tool. You will need merely to try the empty cases in your rifle to see if they fit too tightly, and then put the primers, cases, powder and bullets together."

The engineer in due time came around, and his friend set out all "the makings" on a work table—and after lengthy instruction, departed.

"Ah!" mused the engineer. "A veritable dub couldn't go wrong in the little left to do—much less a skilled man."

Thanks to full length resizing in a new die, few of the cases proved to be too tight in his Model '95. These few he threw out,

and then proceeded with enjoyment and speed to reprime the others. Some of the primers seemed to go into the case pockets pretty hard, and he hadn't the heart, or nerve, to press these entirely home.

He worried a little about getting some powder on the floor. The stuff dribbled down over his fingers now and then when he filled a case, and sometimes part of a charge failed to drop out of the powder measure. Instead it reserved itself as a reinforcement to the correct full charge in the next case, and ran it over, but he dumped a little of that out to obtain space for the bullet.

Some of the bullets fitted case necks tightly, too. With them, however, he had no fear of an explosion, so he closed down on the tool handles with both of his big hands as he would yank on the reverse lever of a mogul. The cartridges were of uniform length, although some had sharp swellings at the base of the necks, and a few were telescoped.

The friend returned about that time, and together they sadly took stock. Two of the cases had been loaded without primers, and another, with enlarged pocket, lost its primer. Half the total number they eliminated because of buckled cases. The dangerously heavy powder charges were eliminated by shaking each cartridge to an ear, to catch powder rattle—no rattle, no shoot that load! Probable misfires were sorted out on the basis of protruding primers.

The moral of this absolutely true story is that home loading *can* go wrong when attempted by a careless person. Like running an automobile or wheeling a wheelbarrow, loading and reloading require a certain technique and knowledge of the rules; and, like taking medicine in the dark, they demand familiarity with the means at hand and the ends in view.

Early in your study of reloading, you will encounter warnings against real and fancied dangers. Says Smith & Wesson:

"As regards reloading tools, we regret to say we no longer make them—in fact, we discontinued making them shortly after the introduction of smokeless powder. There were too many novices wrecking a lot of good guns."

The Winchester Repeating Arms Company printed the following in a catalog dated 1902:

"We do not advise the loading or reloading by individuals, as our long experience in the gun business has convinced us that it is a dangerous practice. A slight mistake in the selection of powder, or in the quantity used, often leads to disastrous results to guns and individuals. If, in view of these facts, loading or reloading of rifle or pistol cartridges is attempted, we will say that the shells of all our center fire * * *" and so on.

The Winchester catalog No. 81, a recent edition, contains this statement: "Smokeless powders vary greatly in bulk, density, rapidity of combustion, chamber pressure and charge required, and for this reason it is very unsafe to load smokeless powders unless the means of determining chamber pressures are at hand. * * *. For this reason the Winchester Repeating Arms Company cautions its patrons against loading or reloading smokeless powder rifle ammunition and wishes to do its utmost to discourage the practice."

The Savage Arms Company is no less definite if not so specific as to reasons. They say, "We recommend the exclusive use of factory-loaded ammunition in order to obtain the best results with our arms."

Now all this is pretty formidable testimony against reloading. Fortunately there is a grain or salt, or two or three of them, to accompany it.

Careless and uninformed people do have trouble, it is true, but we can not prevent *everyone* from reloading in order to protect the few who refuse to be guided wisely—no more than we could keep everyone from deep water because a few drown.

I do not believe that the ammunition companies who warn us do so to make us buy

more of their ammunition—not wholly—but the fact remains that we drop a coin of profit into their outstretched hands every time we buy a cartridge of theirs. Hence their suggestions are open to question.

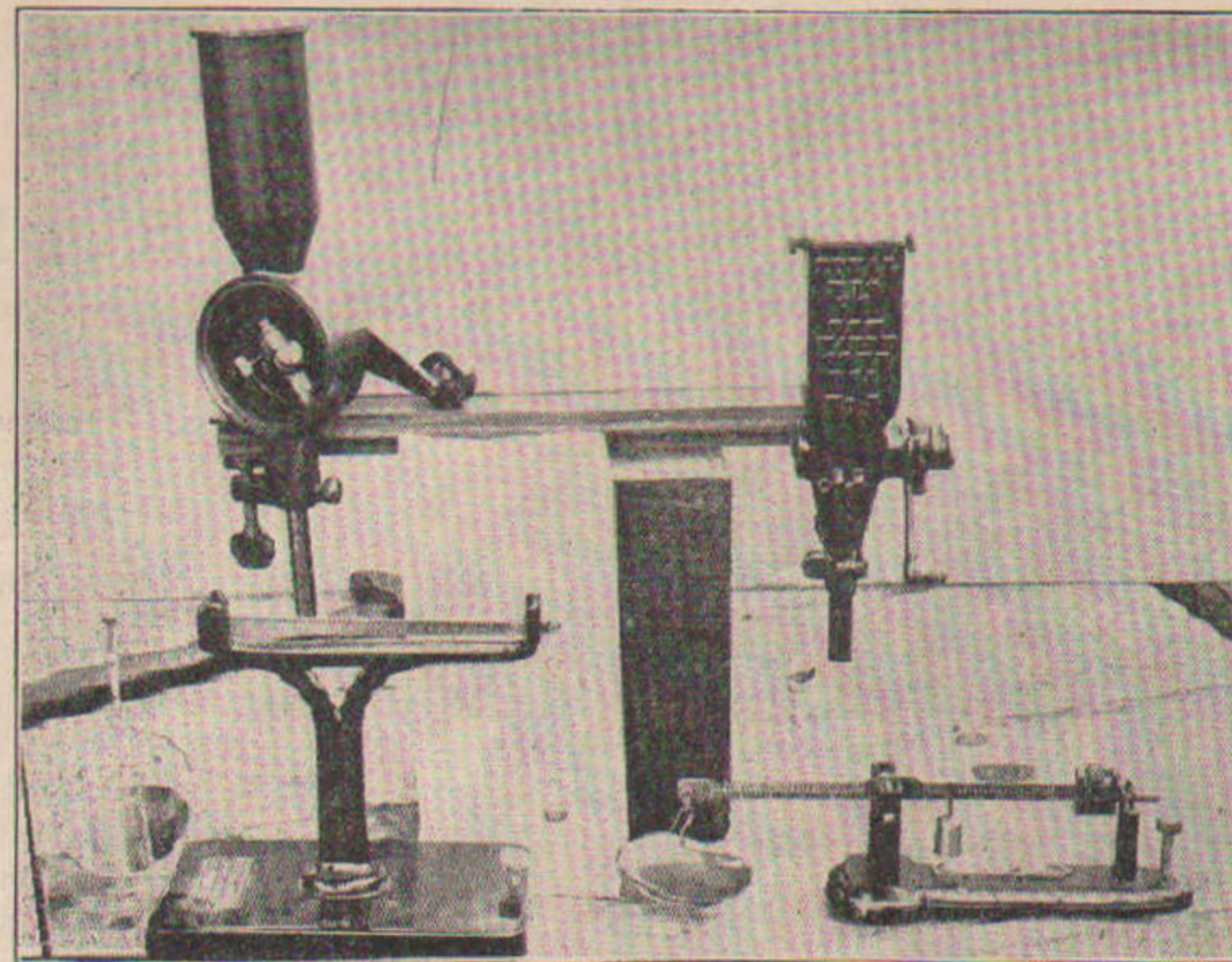
Finally, the wholesale, sweeping warnings are overdrawn, and in particular are out of date. Our present smokeless powders are vastly different from those of 1902. We also know more about the subject. Such complete instruction and data from responsible people are available, that anyone willing and careful to follow directions is as safe in using smokeless powder as black.

My chief quarrel with the current talk against home loading, and indeed against shooting in some quarters, is that it is given a general application to everyone. It really applies only to the individual devoid of that common sense and mechanical sense mentioned in the introductory article.

A due regard for the need of instruction and information before taking each step is vital. If you have it, you can make superb ammunition at home in complete safety. You then are not paying a number of workmen for doing what perhaps you can better afford or prefer to do yourself. If rifle shooting is to play its historical American part in your life, and in forming the characters of your boys, you will not permit the obstacles to prevent you from loading some ammunition at home.

* * * * *

Our engineer, mentioned at the beginning, located for us a few home-loading troubles. It may be well to cite a few others, in order to give you an idea of what must be avoided or overcome.



Bond and Ideal powder measurers and (lower) Bond and Fairbanks scales

Your main chances to go wrong will be in selecting and measuring smokeless powders, and in selecting and seating bullets. Your most persistent trouble with high-power rifles will come from expanded fired cases sticking in your gun, particularly if you try to use cases fired in another gun. In fact, reloading of full-power charges is unsatisfactory for this reason in some of the ultra-high-power cartridges. Other major troubles will come through seating bullets too deep in or too far out of the cases, and through accumulating a mixed lot of unmarked cartridges. The last-mentioned may cause you to find yourself some day attempting to shoot a bear with a chipmunk charge.

Primers will cause trouble if you attempt to use corroded cases, or the wrong kind or size of primer for your cartridges, gun and powder, or use war-time primers or those stored in damp places.

Many cartridge cases are made of brass too soft or too brittle. Lubricant is essen-

tial on some bullets and in some loads, but its entire absence is vital in others. Poor bullets vary ten feet in striking points. Selecting the wrong bullet means failure to fit the rifle throat.

Every reader has seen the fine-type warning at the bottom of recent Du Pont rifle powder advertisements. Everything in loading comes back to "the need for knowing the characteristics and adaptabilities of powders, and being able to check velocities and pressures." The individual can know and can check effectually, by using the data and instructions freely, his from many sources. The Du Pont Company itself publishes and gives promptly all sorts of data

on velocities and pressures and on loading in general. The Hercules Company and other firms give data every shooter should have.

Actual danger points in loading lie in a double load of powder in a case, in smoking while loading, in using wrong powder, using excessive charges, and in using over-size or over-heavy bullets.

It should stand without argument that tools should be handled deftly and with nice touch. I wish there were space here for warnings on a hundred details of actual loading. Go slowly; get full information; and use your head.

Home loading is simple and easy when you approach it with the right points of view. There are only a few things to do, in proper order, without complication. But you do need enough tools and good tools, and you must comprehend what things are right to attempt and what are foolish or dangerous. Get a comprehension of the essentials and a grasp of the impossibilities, and the troubles will evaporate.

TABLE 2—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. 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.

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 acts
30-1906	.308"	55,000	150, jacketed	Hercules 300	49.4	2700	46,000	Standard velocity with progressive powder.
30-1906	.308"	55,000	180, jacketed, B. T.	Hercules HiVel	46.5	2665	49,000	For extreme long range target shooting.
30-1906	.308"	55,000	170, jacketed	Hercules Unique	8.4	1025	.....	For 25-50 yards at target and game.
30-1906	.308"	55,000	140, solid	Du Pont No. 80	10.5	1125	7,000	The army reload for training soldiers.
30-1906	.308"	55,000	125-210, solid	Du Pont 75 or 80	10-12	....	.....	Best small game and cheap practice loads.
30-1906	.308"	55,000	150-180, jacketed	Du Pont 75 or 80	16-22	1350 up	18,000 up	Superbly accurate up to 200 yards.
30-1906	.308"	55,000	210, solid, gas ck.	Hercules Lightning	23	1825	.....	A duplicate of the 30-30 in power.
30-1906	.308"	55,000	210, solid, gas ck.	Du Pont No. 80	11.5	1090	.....	This 30-06 load is silent in Maxim silencer—good 500 yards.
30-1906	.308"	55,000	210, solid, gas ck.	Du Pont No. 18	27	1750	23,000	Another of the useful midrange charges—has light recoil.
30-1906	.308"	55,000	87, solid	Du Pont No. 75	6	800	.....	For indoor shooting, killing trapped game or birds on trees.
30-1906	.308"	55,000	100 or 115, solid	Hercules Unique	7	1100	.....	A 25 or 50-yard charge, for target or field.
30-1906	.308"	55,000	220, jacketed	Du P. No. 15, Lot 2	50	2385	53,000	"Best moose load."—Whelen, 1920. Delivers 2676 lbs. at 100 yds.
30-1906	.308"	55,000	220, jacketed	Du Pont No. 16	45	2300	51,500	The bone-smasher driven by another powder almost as fast.
30-1906	.308"	55,000	220, jacketed	Du Pont No. 20	43	2200	50,000	Factory standard for 220-grain bullet in this cartridge.
30-30	.306"	39,000	170, jacketed	Du Pont No. 16	32.5	2250	38,000	Increases the killing capacity of this gun.
30-30	.306"	39,000	150, jacketed	Du Pont No. 18	34.5	2500	39,000	High speed in the 30-30.
25-35	.257"	39,000	100, jacketed	Du Pont No. 16	26.3	2400	38,000	Much faster, flatter and deadier than standard.
25-35	.257"	39,000	117, jacketed	Du Pont No. 16	25.5	2300	39,000	Increases killing power, over standard.



IN the *American Rifle*, Major Whelen makes a statement that runs something like this—in fact, I will just copy it: “We even see many men waxing eloquent in print on this subject who have never killed or seen killed a single head of big game in their lives.”

The Major is speaking of “the killing qualities of various cartridges.” “Killing power” is the heading of his chapter XV. Likewise we also see in print articles by men who, having had a little experience, make statements that were their views on the subject broadened, they themselves might doubt. So it is in the shooting of wolves and coyotes—in fact, in shooting game of any kind.

Just recently I read a story of an elk hunt made by a man who used a rifle that Major Whelen does not recommend for shooting over 150 yards, yet the writer states that he killed elk with it at around 300 yards and knocked the lice off a bear, or about as fine shooting, at 400 yards. Now don't for an instant think that I doubt this man's story, for accidents will happen, and when a fellow is in a hurry he can take some awful short paces; but—well, let's get to the subject of coyotes. I personally know more about them than bear anyway.

Now I myself have had some experience shooting coyotes and missing a lot of them. As compared to the experience of some others I have had a lot, but when compared to that of still others, why honest, I feel like I had never even seen one. The other day I met one of these “still others” fellows and sat and listened to his story until he got tired. I was anxious for him to go on, but he wasn't used to overwork, so called it off. His name is John W. Crook. He is a Biological Survey Hunter and has headquarters at Monte Vista, Colo. Now I am going to try and tell you some of the stuff he told me. I'll have to tell it my own way, for no one could do it his way. Crook has to his credit close to seven hundred coyotes. Naturally he knows what he is talking about, and has his Survey record to back him up.

In the first place I will ease your mind and tell you what kind a rifle he uses. You may bet your boots that it is just the rifle you thought I would think of first—

a Savage 1899 Model .250-3000. He has had three or four of them along with rifles of other calibers and is just as dead stuck on the little Savage as I am. I have often said that I have done more really good shooting with my Savage .250 than with all the rest put together. Crook says the same thing. He says that he does shooting on coyotes that would be impossible with any 2000-foot velocity rifle. In shooting at them running he again substantiates my belief by saying that he holds just at the breast line, and if his hold is true he gets his hit where he wants it.

Along this same line I might mention that the other day I missed five or six shots at a running jack rabbit, shooting the Stevens .25-20 single shot. I am confident that had I been shooting the Savage I would have landed it the first or second shot. Confidence in the rifle, of course; that's a big thing, but it's the rifle itself that counts in such shooting.

There was one other thing that he and I also agreed on. The Savage people have done well to put out the .250 in a solid frame; there is no good reason why this should not have been done, and a whole lot stiffer arm is the result. Give us the solid frame or the takedown—some will want one and some the other. My rifle is as tight as ever, but I have heard of other rifles like it to get loose in the takedown, especially where they were packed around on a saddle horse a lot. Well, this isn't hunting coyotes, but it is a very important part of the game at that.

One day Crook, while riding along leading a pack horse, on his way to a new locality, came on to the tracks of a pack of coyotes. He figured that it was a bitch with six or seven half-grown pups. He followed the trail until dark. He camped where he was and at the first streak of

light was in the saddle and on the trail. At last he came to an opening in the brush, an alkali flat for you fellows who know what one is; and out in the middle of it was a sort of island of brush and weeds. He felt confident that his quarry was laying hidden in this cover. Accordingly he turned loose his dog, which he had along for just such occasions. The dog ran right up to the brush, and ran right out again, with the old bitch coyote nipping at him at every jump. Crook in the meantime, laying flat on his horse, had moved out closer to the hiding place.

At this juncture he slipped from his horse and with shot number one knocked over the old bitch. Immediately a half-grown pup burst from the cover and made for the main brush, running for all his life was worth. Shot number two busted him as pup number two came tearing out, only to get shot number three. Pup number three followed number two, only to be laid low, and so it went until pup number five was knocked flat with shot number six.

“As I had jest milked the old gun dry, I retched into my pocket and grabbed out a couple o' shells en jest worked her single shot for the other two.”

There on the flat lay eight coyotes and by Crook's side lay eight empty .250 Savage shells. He stood about 75 yards from them all, they having made somewhat of a circle around him heading for the brush. The first five pups lay just twelve and a half paces apart, and when he began shooting single shot the distance between number six and seven lengthened out to twenty paces.

Of course he uses Lyman sights with an ivory bead for a front. His one expression in telling of this and other fast shooting was, “I jest milked her dry.” Now can you think of any other set of words that would express the act of laying low eight coyotes, seven of which were running as scared coyotes only can run. Just stop and think how his lever hand had to move. Every shot was pulled just right and even when the magazine was empty his skill was equal to the occasion. From his pocket he grabbed a couple of cartridges and finished off the two remaining pups, both running and getting nearer the brush all the time, one shot each. Shooting like this takes skill with the rifle of the highest kind. Think what shooting like this would mean in a tight place on the battle front. Some of those hard-boiled Leathernecks would even have to set up and take notice; those heroes of Belleau Wood I have in mind.

But just to show you that this was not an accident, I'll tell you one more of Crook's adventures, all in the day's work, too, for him remember. At another time he located a female coyote and five pups near the side of an alfalfa field. He managed to get up to about 100 yards of them, where he hid

(Continued on page 20)



Messing Around In The Jungle

By
VAN ALLEN LYMAN

PART 3

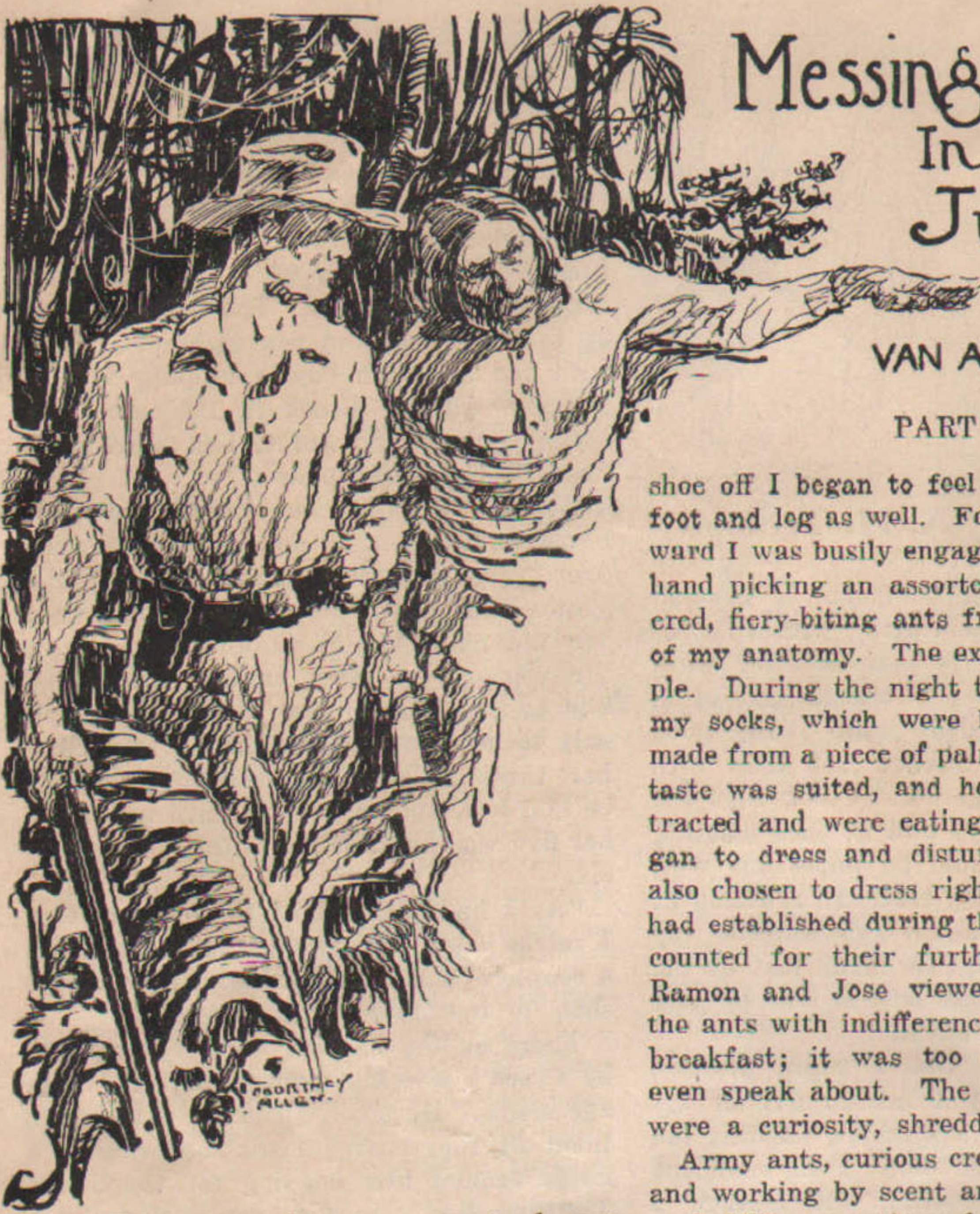
shoe off I began to feel bites on the other foot and leg as well. For some time afterward I was busily engaged in brushing and hand picking an assorted lot of bad-tempered, fiery-biting ants from different parts of my anatomy. The explanation was simple. During the night the ants had found my socks, which were hung up on a rod made from a piece of palm-leaf stem. Their taste was suited, and hordes had been attracted and were eating at the time I began to dress and disturbed them. I had also chosen to dress right in the path they had established during the night, which accounted for their further attack on me. Ramon and Jose viewed the incident of the ants with indifference as they prepared breakfast; it was too casual a thing to even speak about. The socks, by the way, were a curiosity, shredded with holes.

Army ants, curious creatures, stone blind and working by scent and odor only in all probability, sometimes form an actual menace to life in the tropics. More than one hunter has left a dog tied alone in a jungle camp for a few hours, to find on his return that the ants had passed that way, and the poor brute, unable to get away, had been actually eaten alive by the voracious insects, only the bones remaining. On occasions men have been caught. The writer knows of one man in Costa Rica, who, while looking for valuable tropical woods, and clearing a trail to them, was caught and

pinned to the ground by a falling tree. When his party found him some hours later they found that the ants had gotten there first. The softer parts of the man's body had been eaten away; he was conscious at the time, but died a few hours later.

On the way out at the mouth of the river I got another crocodile, an 11½ footer this time by measurement. The ammunition was 1917 war-product stuff, and the first two shots were misfires. However, the crocodile obligingly waited for a third, which went off properly and did the business. While misfire wartime ammunition may serve after a fashion for crocodiles, it was no satisfaction for one to know that he might at any time be called on to use it for snaphooting at dangerous game. After chopping off the crock's head for its teeth and its tail for its oil, we started on. Half an hour later we were hard aground on a mud flat a mile from shore and the water receding all about us, for in this part of the world the tides run twenty feet or thereabouts on the Pacific side and are something to be reckoned with, and our guides hadn't done so. After our frantic effort to push the heavily laden canoe along to deeper water, Ramon and Jose promptly gave it up, and settled themselves to rest until the rising tide should float us off.

There was a broiling hot equatorial sun overhead, and the little dugout offered no shade, so Johnson took Jose with him to seek the shade of the shore a mile away across the mud. I saw a couple of crocodiles quite a ways off through the glass, and went over to pass the time of day with them, while Ramon, to be useful he said, but more probably because he was getting thirsty, started off to another point along the shore after some water cocoanuts. By the time I had returned to the boat from the crocodiles, Ramon was already there with his cocoanuts. He had one ready trimmed for me when I arrived, and the cool water from its interior was certainly



ANTS are a thing one must always contend with in the jungle. In one day, twice, Ramon had exclaimed "*Muchos ormezas, cuidado*" (many ants, be careful), and started on a quick run for a little distance down the trail. It simply meant that we had come to a small army of ants and must go through them quickly or be severely bitten. It seems probable that the ants must find, and eat alive, many young birds helpless in their nests, and this should be true of tree-nesting birds as well as of those on the ground; for ants are often found high in trees, as those who have climbed for cocoanuts can testify. Now came the first real experience with the creatures, for while I had run through small armies of them in times past, I literally "put my foot in it" this time.

As hunting had been indifferent, we decided one day to break camp early the next morning, paddle downstream in time to catch the tide on the turn, and then go to a different kind of country to try our luck. arising at about 4 a. m., I called the others, and then started to dress by the dim light of a candle. Standing on a banana leaf to keep my feet out of the mud, I shook out my trousers and flannel shirt for possible insects, put them on, lifted one shoe from the stick on which it perched to keep it off the ground, shook it out, and, standing on one foot, drew on a sock, put the shoe on, and started to lace it. Then something happened! That foot suddenly seemed to be afire, and while I was hastily tearing the



On the way out we got another crocodile

refreshing. Eventually we got away when the tide rose, and then back to Gracias to arrange for the next part of the trip.

If one is going among primitive, ignorant people he will do well to learn a few tricks of parlor magic, such as can be done with material that may fall to hand. A few little tricks done at the right time and in the right way will do much toward quickly establishing a feeling of friendship and good-will and getting people out of a reserved, non-committal attitude. For example, an idly curious crowd collected about the house where we stopped. In order to get them in a good frame of mind a few little tricks were done.

For example, take the one that is done with two pieces of string or shoe laces, a spool and a couple of finger rings. To all appearances the strings are laid side by side and the three articles threaded on and the four ends given to four different people to hold. Then the articles are covered with a hat and removed one by one while the people still hold the ends of the cords in their hands. Cries of "Bravo," "Carajo" and "Carramba," general examining of the vines, for pieces of vine were used this time, and requests to do it again. This is an old-timer, and explained in most of the books on Magic, as are many others.

We went to another location next morning, comparatively nearby this time, and the rising tide helped us up the river somewhat. As on the way to Camp One, we



One way of obtaining cocoanuts is to shoot them down



Then back to Gracias to arrange for the next part of the trip

were able to pick up a few birds with the .22 on the way in, plover and curlew, and they were very tame. The evening found us in camp, a shack in rather worse condition than the first, and the supporting posts so badly eaten by termites or wood ants that the whole structure might be expected to fall at any time. However, for our comparatively short stay, it might serve if carefully treated, so we used it rather than to build a new one. During two rather severe storms, when the wind made it creak ominously, I rather wished we had taken the time from hunting to build a new *ranchito*, for the thought of that rotten roof with its certain cargo of centipedes and scorpions and other insect life, together with a possible snake or two being precipitated on us while we were asleep was not particularly pleasant. Johnson, on the other hand, who slept in a Compac tent, was more concerned about a couple of big trees, the roots of which were half washed away by a little stream which flowed over them before emptying into the main stream. "If one of those trees lets go it will be all up with this camp," was his comment, and then he optimistically added, "But maybe we can jump away quick enough."

This part of the jungle was cocobolo country, a different class of country from that of our first camp, for the woods were comparatively free of undergrowth, and one could go almost anywhere without chopping a trail. Cocobolo, familiar to those of the temperate zones in the form of knife handles, etc., grew here, and the jungle was full of trails made at different times by native woodcutters. At short distances along these trails would be "log-rests," simply four-forked sticks supporting two parallel horizontal sticks at the height of

a man's shoulder. A native would carry a log of wood on his shoulder a ways, then put it in a log-rest that he might rest, but he saved the trouble of picking up his burden from the ground. Carried to the nearest stream, the short logs of cocobolo are thrown in. Being heavier than water they promptly sink, but the rainy season freshets wash them down a ways, and they eventually find their way to the bar at the mouth of the "big river," there to be dredged for and gathered. Cocobolo logs may be in the water as long as five years in their progress downstream, but this is in their progress downstream. This cocobolo country, being open woods, gave good opportunity to use the jacklight.

The program at Camp Two was very similar to that of the other. The birds we got on the way up were eaten the first evening. The first night was "some" night, the worst of the entire trip. Nothing but torrential rains—the bottom fell out of the clouds. Fortunately the rotten old shack held up; the roof we had patched with leaves shed water, and the leaning trees did not fall. With morning the rain stopped and the sun came. There was no meat and little grub in camp, and all hands started to rustle something. I, with the shotgun, soon picked up a mountain hen. Forgetting there might be others, I went forward to pick it up, right barrel empty and left loaded with buckshot. Two more got up and sailed off. Johnson came in with another turkey—he seemed to find turkeys wherever he went—and Jose and Ramon presently came in, Jose with two bunches of bananas and Ramon with a fair-sized yam, a descendant of yams that cocobolo hunters must have planted in the vicinity in times now long past.

ARMS AND THE MAN

Successor to
SHOOTING AND FISHING
1888-1906

Founded by A. C. Gould as
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1895-1897

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The Gun-Toting Criminal

LIKE all other regulatory legislation, most of the laws which several States are seeking to enact for the avowed purpose of eradicating the armed thug, although based upon a sound premise which all good citizens endorse, develop a superstructure which bids fair to defeat the very purpose for which the laws are drafted.

AS ARMS AND THE MAN has stated times without number, the stereotyped answer which our legislators and police departments invariably give to the problem—prohibiting the sale or ownership, or both, of firearms—can result, and will inevitably result, only in disarming the law abiding citizen and in placing him more thoroughly and hopelessly than ever at the scant mercy of the armed intruder or the lurking footpad.

The main trouble with the Sullivan type of law which our legislators appear to regard as the criterion and pattern for all such laws, would appear to lie in the fact that fails utterly to recognize that firearms become a menace only in the hands of criminals or those criminally inclined when there is present in the mind of the possessor the intent to commit a crime or to do harmful bodily injury to another. The firearm kept in the home for protection is not a menace; and the target weapon around which centers a clean and essentially American sport should no more be legislated out of existence than baseball bats with which murders have been, and will again be, committed. A plumber is obviously at liberty to carry a piece of lead pipe—concealed if he so desires—to or from the place he is using it and no legislator would dream of interdicting this practice, or of banning the sale of lead pipe. Yet if that plumber, on his way to work, quarrels with, and strikes another with that piece of pipe, he will be promptly indicted, charged with murder or with assault with a deadly weapon, according to the outcome of the victim's injuries, and the lead pipe will be offered in evidence and admitted to be a deadly and dangerous weapon.

Ostensibly and actually anti-firearm laws are directed at the criminal. That they so far have resulted only in reacting upon the responsible citizen is due chiefly to the fact that in many instances those who have framed our Sullivan laws have failed to apply to the problem of regulating firearms the cardinal common sense vision which under one set of circumstances sees in a piece of lead pipe an innocent and necessary

adjunct to a peaceful and proper occupation and under another set of circumstances a deadly and dangerous weapon.

Consider now the case of the rifleman and the pistol shot. The man who loves firearms and who uses them for sport will never be found in the ranks of habitual gun toters. When he has occasion to carry his weapon between his home and the range, he carries it in his shooting bag. He is on a peaceful and proper errand and he should be protected in his right to indulge in the sport which most appeals to him. He is in no way, either actually or potentially, a criminal. Nor does the possession of a target weapon in the least change his status, a fact which should be recognized in the eyes of the law.

ARMS AND THE MAN recognizes the need for regulating the sale of firearms and favors such laws as require dealers to keep a record of, and report their sales to the constituted authorities. Above all, ARMS AND THE MAN and every rifleman and pistol shooter will heartily support legislation tending to decrease crimes against the persons and property of citizens. Yet, while laws compelling the dealer to report his sales and providing a record of such transactions form an excellent basis on which to build, they can no more be regarded as adequate than can the Sullivan law, which admittedly has failed miserably to curb crime in New York. Given a law which compels a record of sales, and which prohibits the carrying concealed of deadly and dangerous weapons, any community can give teeth to such legislation by providing penalties which will apply according to "intent," a factor which can as easily be proven in a gun-toting case as in one of assault or murder, and which will discourage the criminal while protecting the citizen.

If every criminal knew that a penitentiary sentence of not less than ten years faced him if he were found possessing a weapon under circumstances which indicated criminal intent, and where a previous conviction record would be taken as indicative, pistol toting would not be so popular.

A very sane, and what should prove a very effective, law is now pending in the Senate for enactment as part of the District of Columbia Code. This bill, by Senator Capper, of Kansas, may readily be remodeled to apply to any State or community, and it not only may be expected to discourage the possession of weapons by criminals—so far as this can be accomplished by legislation—but it takes due cognizance of the rights of the reputable citizen to be secure in his home or to enjoy target practice, as well as emphasizing by heavy penalties the unwisdom of gun toting. The chief provisions of the Capper bill are:

None but citizens, personally known, or properly identified to a licensed dealer in firearms, are permitted to purchase pistols or revolvers. Each purchaser must sign a record of sale, a copy of which must be filed with the police.

No pistol or revolver may be delivered to the purchaser until the day after the sale.

Owners of such firearms are not permitted to carry them on their persons or in a vehicle without a license from the police.

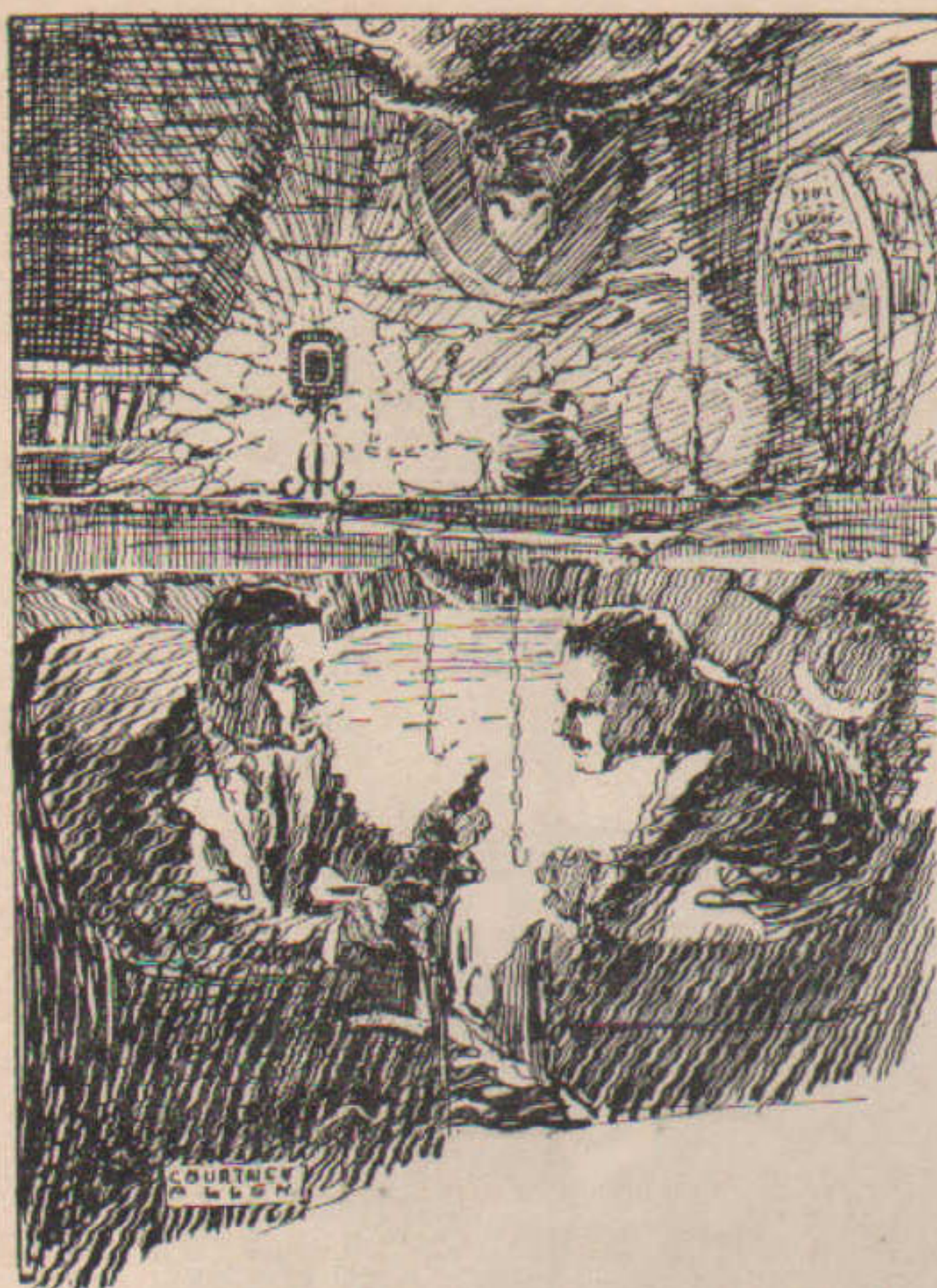
Dealers are not permitted to display pistols or revolvers, or imitations thereof, where they can be seen from the outside of the store.

Possession of a pocket firearm by a person committing or attempting to commit a felony, is regarded as *prima facie* evidence of criminal intent, and is punishable by five years extra imprisonment.

Heavy penalties are prescribed for second and third offenders. Fourth offenders may be sentenced to life imprisonment.

Manufacturers' serial numbers or other identifying marks on pistols or revolvers must not be altered or erased.

Aliens and persons who have been convicted of a felony are not permitted to possess a pistol or revolver.



DEN TALKS

By
Ernest Coler

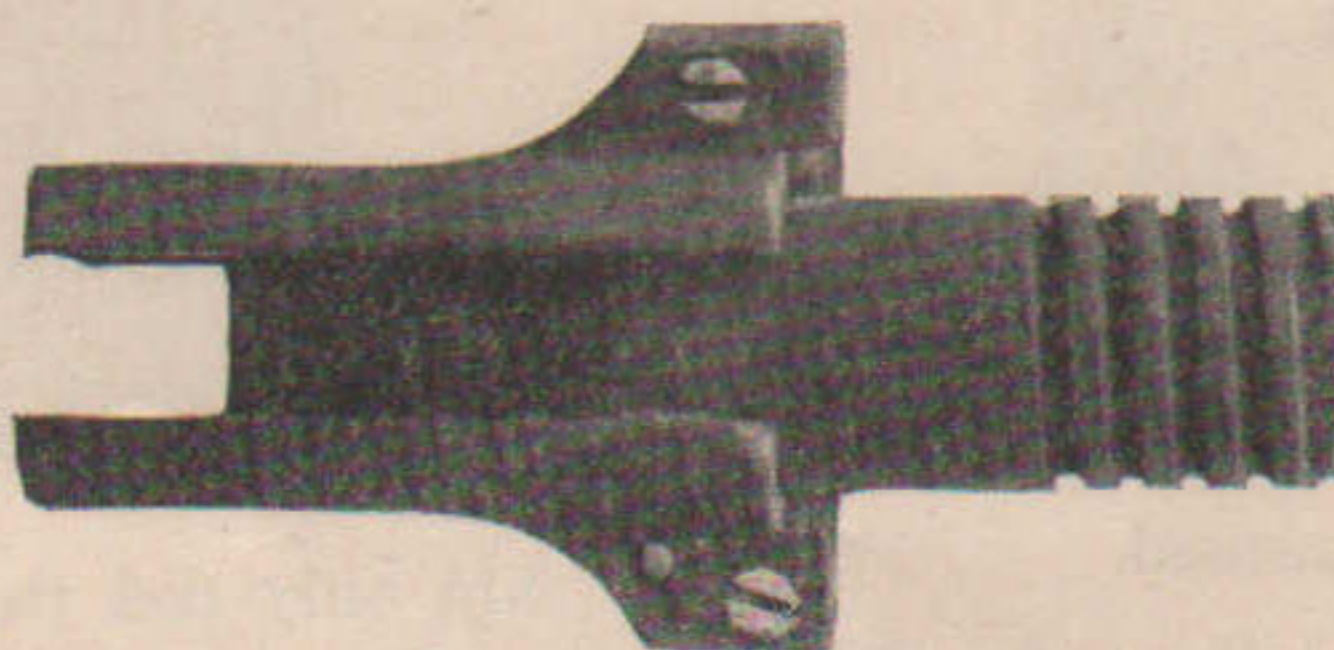
our trigger pull well fixed, soft, nice and light—if possible a little under the official 3-pound minimum, men like Guy Emerson, Hession, Vanderputten and others like theirs at four pounds and over, their argument being that the heavier pull has a tendency to steady their hold.

To my mind, much of the rifleman's idiosyncracies as to his pull have to do with his physical heft. If you have the frame and build, and consequently the strength, of a coal heaver the heavy pull is what you want, whereas, if you are an office worker or of slight stature you may be flirting with a light trigger. It all depends.

But there is one kind of trigger pull that does not endear itself with anybody, and that is the variable pull, the kind that is sometimes light and sometimes heavy and very generally plays tag with the score.

This feminine inclination of the trigger pull to do the unexpected is largely due to the fact that the firing pin sleeve, even in the best of Springfield actions, has a certain amount of rotary play which accommodates itself to the movements of the bolt.

If you have a rifle that is given to somewhat uncertain behavior, try this some day:



Note the two screws, which, when ground down to the proper depth, steady the firing pin sleeve and the firing pin itself

Insert a new or resized shell in the chamber and close the action. Pull the trigger and note the pull. The pull may be very light. Now take a rather tight-fitting shell and try it the same way. The chances are that the pull will be noticeably heavier. It may even be the other way around.

Then take a shell, insert it in the chamber and close the bolt very gently and gradually. The pull may now be fairly resistant. Operate the bolt again, this time slamming the bolt home quickly, as you might do it in firing a string in rapid-fire; now you may find that the pull is very light.

In all these instances the ultimate trouble maker is the firing-pin sleeve which sometimes partially rotates with the bolt and against the firing pin and at other times—

as in slamming the bolt—rotates with it but recoils to its original position.

It is obvious that if the sleeve could be made to ride evenly on the receiver when the action is closed no movement would be possible and the trigger would be compelled to behave the same way regardless of whether you slam the bolt shut or close it gently, or whether the shell enters the chamber freely or only with a certain amount of urging.

The steadying of the firing-pin sleeve in such a way that it will function without any inclination to turn in sympathy with the bolt is not a very cumbersome matter for a mechanic who, moreover, need do only the initial work while the finishing of the job is done by the rifleman himself. The nature of the expedient becomes clear upon reference to the accompanying illustration in which the firing-pin sleeve is shown with two small screws seated in its two flat-bottom surfaces. It is of course necessary to spot-anneal the places where the screws enter.

After the screws are seated—and it is well to give them a rather deep slot as well as a fairly tight fit—the heads are ground down until when the firing pin, striker, sleeve and main spring are assembled and the bolt is operated the screws ride on the receiver without any side motion whatever.

All of which sounds rather more formidable than it really is. The results are very gratifying, however, because this steadying of the bolt endows even the wobbliest and most uncertain trigger pull with the desired degree of uniformity.

Picking on the Icepick

WELL—it's happened! In New York, that den of iniquity where everything is likely to take place, a crazed Japanese butler has stabbed the wife of his employer with an icepick!

So, since the theory of modern American legislation seems to be promptly to forbid that with which an evil deed was, is or may be committed, while ignoring its obvious utility, I humbly rise to set a new bee buzzing in the legislative bonnets of the wise men who control our national and lesser destinies:

That the manufacture of icepicks be, and hereby is interdicted, prohibited and forbidden to all private enterprise, being limited to the government arsenals for that purpose ordained, appointed and designated; that the sale of icepicks be, and hereby is, placed under the direction of a Commissioner of Civilian Icepickmanship; that every icepick shall bear a serial number; that no person except officers and enlisted men of the Army, Navy and Marine Corps of the United States, Senators, Congressmen or members of duly organized and constituted police forces shall have in his or her possession an icepick, except with the written permission of the chief of police of his city, town, village, hamlet or settlement. Violations of this act are punishable by imprisonment for terms of from one month to one year in accordance with the judgment, temper, patriotism and intelligence of the court.

Next!

By the way, I wonder why it hasn't occurred to somebody to forbid the cork-screw!

Steadying the Wobbly Trigger Pull

IT'S a gift, I suppose—this indifference with which some fellows regard so sacred a shooting factor as the trigger pull.

Take John Vanderputten. John is a contractor and quite a respected citizen of Brooklyn, N. Y. Yet in his earlier and less sophisticated days he must have been somewhat of a hobo. He just loves to travel light, a trait that is unmistakable proof of reminiscent hoboism, as any former Knight of the Road will tell you.

Thus it happens that while chaps like John Hession arrive at the range with a trunkful of Springfields strapped to the running boards of their Cadillacs or Fords, John Vanderputten only brings his appetite, his shooting eye, and his trigger squeeze. That's all. The ammunition he draws. The rifle he borrows. While admitting that some rifles are better than others he knows that all of them are pretty good. Having shot a great variety of them during fourteen years of borrowing such trifling matters as sights or peculiarities of trigger pull do not worry him at all.

Now if anybody in the rifle world is cast in a heroic mold it's these birds that don't give a rap about the trigger pull. With an abandon that causes astonishment in the "crank" about such matters they deprive themselves of a first-class alibi by which bum scores have been explained since the days of Daniel Boone. They just lie down and shoot.

The truth of the matter is that there are men in whose shooting life trigger pull means very little. I envy them. If there is a pull to which they object at all, it is that much-coveted light one, which goes off before the shooter is quite ready for the final let-off. So, while many of us take



Photo by Underwood & Underwood

General view of the American Firing Point at the International Matches in Milan, Italy, on September 19. The American team is in action—every one of its members used Western Ammunition exclusively and defeated the picked representatives of seven different nations.

Supreme Test of Accuracy

In the International Matches, recently concluded at Milan, Italy, Western Ammunition came through with the highest possible honors in one of the most severe tests of superior accuracy ever witnessed.

The absolute reliability of Western Ammunition was never more forcibly demonstrated than at Milan—the U. S. Free Rifle Team, using Western Ammunition exclusively, won the World's Championship by beating the field of over 1,200 active competitors who represented the picked shots of seven competing nations! This was the second time in 18 years that the American Team was victorious in International Match competition.

The members of the American Team were unani-

mous in attributing a large measure of their success to the remarkable uniformity of this super-accurate ammunition.

Not only did the American Team win the World's Championship, but one of its members, Mr. W. R. Stokes, used Western Ammunition in retaining the World's Individual Championship with a score of 1,067. Mr. Stokes also won the Individual Kneeling Championship with a score of 356 and the principal individual unsquadded match, known as the International Re-Entry with an aggregate score of 196 fired from the prone position. These were two acid tests of individual skill in which uniformity of ammunition was vital.



Western Am



Commander Cy Osburn, U. S. N.
Coach of 1922 International Rifle Team

Mr. W. R. Stokes
International Champion, who successfully defended his title this year with Western Ammunition. In addition to twice winning the World's Individual Championship, he also won the Kneeling Championship with a score of 356. The target is a composite of the targets shot by Mr. Stokes.



Major L. W. T. Waller, Jr., U. S. M. C.
Captain of 1922 International Rifle Team

The Victorious American Team

Photographed in front of Team Headquarters immediately after winning the World's Championship. Top row—Jackson, Wilson, Denny. Middle row—Waller, Osburn, Stokes, Boles. Front row—Lloyd, Fisher.



The Americans Joining in the Prone Stage of the Matches at Milan



Photo by Underwood & Underwood

Exclusive Western Features Responsible for Super-Accurate Shooting

The features that made the wonderfully accurate results possible are distinct and exclusive Western development. They are, principally, the Lubaloy Bullet Jacket and the modified Boat-tail Bullet design.

The Lubaloy Bullet Jacket is a patented alloy that possesses marked lubricating properties. It positively prevents barrel fouling and has a tendency to clean barrels that are already fouled. Lubaloy is an exclusive Western product and may be obtained in the various types and sizes of cartridges in widest demand.

The Modified Boat-tail design is another feature. It materially increases the velocity that may be attained by rifle cartridges and thus helps to maintain the remarkable accuracy of Western Ammunition.

If you hunt or shoot, use Western Ammunition! It has been proved supreme, at home and abroad, and is in the highest favor with all classes of hunters and marksmen.

Write for information on these exclusive Western features—Lubaloy Bullet Jacket and the Modified Boat-tail Design, and Super X, the long range shot shell.

WESTERN CARTRIDGE COMPANY

EAST ALTON, ILL.

ammunition



RIFLEMEN ADVENTURERS

(Continued from page 4)

For the Americans Osburn, Lloyd, and Stokes were first up. They all got going without difficulty and began rolling up the first scores of an excellent team total for the prone position. By 11 o'clock all of the American prone scores were in. A comparison of totals showed that the Swiss were not quite equal to the American pace, although Lienhard, of their team, had shot a record-breaking prone score, unofficially recorded as 376. The unofficial figures showed Stokes, of the American team, to have a similar total.

When the morning's firing was over the Americans had shot half of their kneeling scores, in addition to having finished prone. The Swiss had fired some scores in all of the positions, so that no accurate estimate of the relative standing was possible.

Completing his kneeling total in the first afternoon relay, Stokes turned in a score of 92, and a total of 356, which proved to be the winning individual score in that position.

Toward the end of the afternoon, with only a few standing scores remaining to be fired, it became evident that the race between Swiss and Americans would be exceedingly close, and that Lienhard and Stokes would stage a driving finish for the individual title. These last standing scores were phenomenally high: Osburn finished with 89 and 90, Stokes with 88 and 87, Zimmerman (Swiss) with 88 and 92, and Lienhard with 88 and 90. As the totals of the teams neared completion the excitement which had prevailed all day became intensified to the last degree. The flash of the marking discs on the Swiss and American targets was eagerly followed by the eyes of a throng of well over a thousand spectators, who crowded everywhere within sight of the firing line. The first break in the tension of excitement occurred at about half-past five, when Stokes, after an effort consuming twenty minutes, put in a ten on his last shot and thereby completed an unofficial total of 1,072, which assured the Americans of the individual championship and indicated that the turn of the day's fortune was favoring the United States. The Americans finished at 6 o'clock, a few minutes before the last Swiss shooter completed his score. When the last Swiss shot had been marked it was found from the unofficial figures of the score sheets that the United States was winner by 28 points over the Swiss. Stokes appeared to retain the individual championship by five points over Lienhard, and Osburn was tied with Zimmerman and Madsen (Dane) for the standing championship, on the remarkably good total of 341.

By 8 o'clock in the evening the match targets had been officially checked by representatives of the teams and the official scores were announced. While there were

numerous changes in scores on the official count, the relative standing of the teams remained the same. Zimmerman was found to have the ranking standing score and Lienhard outranked Stokes on a new official record prone score of 375. The lead of the American team was cut to twelve points and the lead of Stokes over Lienhard finally appeared as two points. Never in the history of the International Rifle Union have these matches been so closely con-

tested, nor so many high scores made. In view of the large totals involved it will be noted that the margins of the winners were very slight indeed.

It will readily be seen from a glance at the official scores that the Swiss and Americans had the battle for first place entirely to themselves. The Swedes and Danes in turn outstripped the others in the competition for third place.

The performance of the American team

THE OFFICIAL SCORES

		United States				Total	Agg.
Shooter	Position	1	2	3	4		
Osburn, C. T.	Standing	76	86	89	90	341	1,041
	Kneeling	84	85	81	85	335	
	Prone	91	94	88	92	365	
Stokes, W. R.	Standing	82	79	88	87	336	1,067
	Kneeling	87	89	88	92	356	
	Prone	95	94	92	94	375	
Boles, J. K.	Standing	84	76	76	78	314	1,026
	Kneeling	92	89	81	82	344	
	Prone	94	92	89	93	368	
Lloyd, C. A.	Standing	66	74	75	67	282	987
	Kneeling	80	81	87	86	334	
	Prone	91	91	97	92	371	
Fisher, M.	Standing	76	83	68	77	304	1,011
	Kneeling	80	85	83	87	344	
	Prone	89	92	89	93	363	
Total.....						5,132	

U. S. Team totals and averages:
 Standing—Total 1,577; average, 78.85.
 Kneeling—Total, 1,713; average, 85.65.
 Prone—Total, 1,842; average, 92.10.
 Aggregate average, 1,026.40.

		Switzerland				Total	Agg.
Shooter	Position	1	2	3	4		
Lienhard	Standing	75	84	88	90	337	1,065
	Kneeling	83	89	93	88	353	
	Prone	96	95	93	91	375	
Zimmerman	Standing	84	77	88	92	341	1,054
	Kneeling	84	84	92	86	346	
	Prone	91	90	93	93	367	
Hartmann	Standing	73	77	78	75	303	1,009
	Kneeling	86	89	93	92	350	
	Prone	91	91	87	87	356	
Pfleiderer	Standing	74	83	82	78	317	1,007
	Kneeling	90	84	88	81	343	
	Prone	89	82	84	92	347	
Rosli	Standing	72	74	85	82	313	985
	Kneeling	86	84	82	80	332	
	Prone	87	85	83	85	340	
Total.....						5,120	

Swiss Team totals and averages:
 Standing—Total, 1,611; average, 80.55.
 Kneeling—Total, 1,724; average, 86.20.
 Prone—Total, 1,785; average, 89.25.
 Aggregate average, 1,024.

Denmark		Total
Madsen	1,026*	4,965
Larsen, A.	1,027	
Larsen, S.	984	
Laursen	980	
Hansen	948	

* Included a standing score of 93.

Sweden		Total
Ericksen	907*	4,916
Hellman	1,013	
Johnson	1,000	
Cretisson	1,019	
Lagerlof	977	

* Ericksen had not fired last score when time expired.

Holland		Total
Boumans, A.	995	4,868
Boumans, H.	947	
Durang	965	
Egglers	984	
Van Den Bergh	977	

France		Total
Johnson	942	4,780
Parmentica	979	
Rols	954	
Henry	987	
Macaigne	918	

Italy		Total
Isnardi	946	4,688
Ticchi	962	
Laseni	921	
Oscani	947	
De Raneesi	912	

Monaco		Total
Capesano	883	4,094
Allari	842	
Lunig	847	
Abel	752	
Fiori	743	

was thoroughly gratifying. The score which the Americans made in the match was, as it should have been, the best total they had ever recorded. The Swiss, on the other hand, fell considerably below even their average shooting. Evidently the psychological situation affected the shooters of the two nations differently, and the American advantage in this difference was the proximate cause behind the retention of the Argentine Cup by our shooters. The American equipment held up splendidly under the acid test of the match. There are, of course, some improvements suggested for next year's equipment, but the heavy Springfield Rifles used, and the Western Cartridge Company ammunition (HiVel powder behind a 180-grain lubaloy modified boat-tail bullet) demonstrated themselves to be a combination which has no superior in the world for the production of accurate shooting. And in the minds of the American riflemen who fired in the match will always remain a kindly and appreciative memory of the way in which the team captain and his associates aided them by a display of coaching which embodied every attribute of skilled technique and perfect personal sympathy.

After the shooting was over no remarks in disparagement of the American victory were to be heard, as was the case last year. The Swiss weakened under the match strain—aided in their downfall—and that before a gallery of over 200 of their countrymen, who also had a chance to see for themselves that the Americans really possessed some genuine shooting ability. So after the match there was nothing to be said in excuse of the Swiss defeat.

The night following the match the Italians held a splendid banquet to which all delegations of foreign shooters were invited. On this occasion Major Waller, in behalf of the National Rifle Association of America, tendered to the shooters present an invitation to attend next year's International Match, which will be held in the United States.

On the day following the match the members of the American team did a little firing to strengthen positions in individual re-entry matches and then packed up their equipment in readiness to leave Milan. While American riflemen have not in the past been very successful in competing against the Europeans at their favorite re-entry game, this year Stokes, of the American team, sprang a surprise by winning the principal re-entry event at Milan. This event, the International Re-entry, consisted in an unlimited number of four shot strings, any regulation position permitted, the best five strings to count for record. Stokes' score was 196.

On September 21st some of the American shooters accompanied a large group of riflemen on an excursion to Lake Como. On the

next day following, the team split up, the members leaving Milan for tourist trips of individual appeal.

Thus were concluded the activities of a rifle team respecting which American riflemen may never regret the splendid support they gave it. And it may truly be said that

perhaps never in American shooting history has a nationally representative rifle team disbanded with such strong mutual friendships, and such whole-hearted admiration for team officials as existed when the 1922 U. S. International Rifle Team passed into history at Milan.

Through Neutral Eyes

By CAPTAIN ERNEST H. ROBINSON

Being an account of the International Matches at Milan, as the 1922 contest impressed one of Britain's foremost authorities and as published in the British N. R. A. Journal for October, 1922.

FOR the second year in succession the team from the United States has won the International Match, effectively breaking the Swiss long run of wins. The World's Champion is also a United States man, a youngster—W. R. Stokes—age 23. The match is a long, gruelling affair, calling for 120 shots from each man of the team at one range—300 metres—and one type of target only. The only variety is provided by change of position; 40 shots are fired standing, 40 kneeling and 40 prone. The United States won, not so much because they were the better men but because of the excellence of their team organization and because they shot as a team and not as individuals. There was generalship also behind Stokes' Championship success. He was nursed cunningly by Major Waller, his team captain, when it was seen that he was running for the high score of the match. As an instance, it is usual to fire but one string of ten shots at a time in the standing position, but Stokes was made to shoot his last three strings, thirty shots, right off, so that he should not get back in the crowd and hear that the Swiss, who everybody expected to be the Champion, had had a small breakdown and could be beaten. In the result Linehert, the Swiss, was beaten by the narrow margin of two points, after having been left with an almost impossible task which he nearly succeeded in performing.

The targets and conditions of the International Matches have some features which make for interest; but to one used to open-air ranges and varied distances, the whole business appears artificial in the extreme. This is, of course, but a question of degree. All target shooting must be artificial, to a certain extent, when judged by the standard of "the real thing"; but the extent of artificiality could easily stop short of a shooting house covering the firing-point and provision of mattress-covered tables for the shooters to lie on in the prone position.

At the Milan Shooting Ground there are 67 rifle-firing points and 18 pistol-firing points. The firing points are all under cover of a brick and wood building open at the back and front except for one of the two pistol houses, which is closed in like a conservatory and provided with growing pot-plants. Pens, like cattle pens, are provided for each shooter, and the tables are placed in pairs in a straight line with the target. On the table is a mattress and a small pillow, both covered with some rather shiny sacking material. The

pillow is used either for the elbow in the prone position or for the knee when kneeling. The tables are just wide enough for a big man to lie on and spread his elbows. To the man who uses the spread out, 45 degree, prone position, these tables are nothing more nor less than fiendish instruments of torture, for it is almost impossible to get comfortable. Owing to the construction of the range, which is of the "safety" variety, it is impossible to shoot prone from the ground because the targets are not visible in that position. The best method of meeting these strange conditions was to stitch sandpaper to the elbows to overcome the slipperiness of the mattress and reduce the angle of the prone position to the minimum required for reasonable steadiness. For the kneeling position the table is folded back, disclosing a second table. For standing shooting this second table is also folded back and the thankful *Signor Tiratore* finds himself on the solid earth at last.

To each table there is a desk at which sits the register keeper. He is provided with a set of rubber stamps from one to ten and an electric bell push, which communicates with the target. When the shot has been fired the register keeper, a private soldier pushes the bell. The target is then lowered for examination and the value of the hit indicated. He then stamps the value on the register. The register keepers at Milan were very good at their job, and their patience with the polyglot crowd that swarmed behind the firing point was beyond praise. There was one or two of them who spoke a little French; but none spoke English. With others than their own countrymen they conversed in signs according to a simple code that was quickly worked out to meet the needs of the situation by the competitors and register keepers themselves. To each group of four or five firing points there was a range officer, either civilian or an officer of the Italian Army. They all spoke French and some had a little English or German.

They were evidently all experienced men, and nothing could be better than the way they did their work.

From the British viewpoint there was far too much talking close to the firing points. In this the Swiss were the worst offenders, and as there were more of them than of any nationality save Italian, they were occasionally rather a nuisance. In any case the noise of 57 rifles and over a thousand competitors all in a long covered shed and all speaking at the same time is so

terrific that a little extra was of small consequence.

It must here be recorded that the Italians are a nation of sportsmen. They are keen shots and "play the game." Their generous and mercurial temperament leads them to open coaching; but as everybody does it and it proceeds from pure good-heartedness, it is not of much consequence. The Italian is pleased with a good score, whether he makes it himself or whether it is made by someone else. The men of the United States and the solitary British competitor usually shot before an appreciative gallery, and there was always much generous congratulation for a good score. It did one's heart good to shoot with such a crowd. The French also, commended themselves to the English-speaking competitors, who reckon themselves a judge of sportsmanship, as a first-rate lot of fellows. It was interesting to note that many of them had procured Springfield rifles for use in the Any Rifle Class.

To return to the way things were run at Milan: The arrangements as to tickets, squadding, etc., were bewildering to the foreigner; but they are well thought out, and work smoothly and well. The only complaint we visitors had to make was that there were not nearly enough targets. One hundred would not have been too many. When the *Signor Tiratore* arrived at the shooting ground he has to procure, if he has not already done so, a ticket of entry. This costs Lira 5. He is then given a thick book of tickets for every competition, single entry and unlimited, throughout the meeting. The tickets are of different colored paper, in duplicate. One-half is a counterfoil and is the shooter's record. Ticket and counterfoil have printed on them the shooter's number. In single entry competition and those which have to be completed within a stated time, both ticket and counterfoil is signed by the Range Officer for the target group. In unlimited entry competitions the stamped figures of the register keeper are sufficient. This book does not give right of entry to any competition. The shooter proceeds to a ticket office and buys himself a collection of tiny stamps valued at anything from Lira 1 to Lira 10. These stamps are affixed to the ticket in the book—not the counterfoil—and represent the fee of entry paid for the competition. The stamp is defaced with a rubber stamp by the register keeper directly after the shooter has fired his first shot. A ticket book, with some stamps affixed, is now in the Museum of the British National Rifle Association for the information of the curious.

But the possession of a book of tickets with stamps attached does not give the competitor the right to shoot. He must buy himself a collection of small sticks on which is pasted paper of colors differing for each competition. On these he writes his name and number. These sticks cost a few cents each and are squadding tickets. The competitor squads himself for both unlimited entry and single entry competitions by the simple process of slipping a stick into a box, something like an automatic sweetmeat machine, from which it can only be taken when it arrives at the bottom. The bottom stick is the next turn. Golfers will be familiar with this means of gaining a place, save that they use a ball in a trough instead of a stick in a frame. This system should work well, but it is open to abuse. The Swiss got themselves very much disliked by sending one or more of their number with a sack full of sticks to fill all the places directly the range was open. By this means they occupied many targets for practically the whole day.

When the competitor's turn comes he

gives his ticket book to the register keeper and clambers on to his table. He may shoot two strings of ten shots or not more than twenty shots in competitions calling for strings of less than ten. Some of the unlimiteds are of three shots each. Directly he has fired, the register keeper presses the bell and the target goes down for examination, another target coming up at the same time. On the new target the marker puts a panel which is fixed to the end of a pole, in a position indicating the value of the shot. These positions are similar to those used in England except that they have to be adapted to count from one to ten. One is in the top lefthand corner, two in the middle of the top, and three in the righthand corner. Four, five and six are along the bottom and seven and eight left and right of the centre. Nine is placed on top of the bull and ten is indicated by agitating the panel vertically up and down the bull. On top of the red marking panel is a small spotting disc, black on one side and red on the other. Directly the value has been signalled this spotting disc is placed in the position of the shot-hole and held there for a few seconds. You must be on the watch keenly to catch it. It should be noted that as the disc is placed on a new target and not on the actual shot-hole the position shown is often only very approximate to the real position. The shot-holes are covered very neatly with a round patch. For the International match only one target was used for each shooter, and in this case the actual shot-hole could be seen with a telescope by means of the repairing patch. On the whole, marking was very good, but one heard the same old complaint one hears at Bisley, that the marking was not in accordance with the facts. The markers were soldiers lent by the war office.

When the competitor had finished his string the register keeper tore out the perforated ticket and put it in a locked tin box, handing back to the competitor his book which contained a duplicate stamped score on the counterfoil.

Two hits on one target do not entitle the shooter to the higher value. The shot is washed out and he has another.

Sighting shots are purchased in tickets, entitling the competitor to six, to be used when he likes, except in the middle of a string. In no circumstances are they convertible.

The statistics department at Milan was run on lines very similar to those used at Bisley. The locked tin boxes were taken by a soldier to the room, where they were opened and the tickets rapidly sorted into competitions according to color. These were then sorted into pigeonholes according to scores. Everything was done very rapidly, and the results of a few single entry competitions over in one day were out very rapidly. All scores are checked and counter-checked as at Bisley, but as there are only two ranges and fifteen competitions for the rifle, the amount of work to be done was considerably less, though the number of competitors during the fortnight was somewhat larger than we had at Bisley this year.

The International Match was shot on September 19, the official times being from 7.30 in the morning to noon, and from 2 till 6 in the evening. From the first a keen struggle was anticipated between the United States team and the Swiss. The Americans won last year, but previously the Swiss had won every match for at least seven of the eight years in which it was last contested.

At the meeting of International delegates on Sunday the Swiss raised an objection to the use of the sling by the Americans. As

the match is shot with any rifle, the only restriction being to the use of telescopic sights, the meeting could not see the force of the objection, and the sling was allowed by five votes to two, one delegate withholding his vote. As it turned out the sling was the undoing of the Swiss, not because the United States men use it, but because one of the Swiss, their best man, essayed experiments with it during the competition. These experiments undoubtedly cost that man the world's championship if it didn't lose the match for his side.

Eight teams entered, and on the scoring board, on which scores were entered as the match proceeded it was rather pathetic to see the name of Great Britain heavily crossed out. What we are going to do about this International Match it is difficult to know, but we should do something. The other nations expect it from us. They can not see why the United States can send a team and Great Britain can not. The argument that we do not use the standing position does not appeal to them. "But you are sportsmen," said a Frenchman. "You do not shoot always to win. You would soon learn to shoot as we shoot. Are there not five men in Great Britain who can shoot standing? I tell you, my friend it is not to your honor that you do not enter." The Spaniards and Italians said much the same. We certainly should do something in this matter.

The splendid team feeling and organization of the United States men has already been referred to, as also has the generalship of Major Waller. His team fired their prone shots first when the light was good, the argument being that they would not be able to hold so well standing and so light would not affect them so much. They used rifles specially made for them by the United States Board of Ordnance. These were really proof barrels in Springfield actions with a set (hair) trigger provided. They had hand rests for standing shooting and the butts were faked a bit for the chin. They were all made with extended butt-plates for standing and kneeling shooting. They used the Lubaloy boat-tail 180-grain bullet made by the Western Cartridge Company. This was undoubtedly much too powerful for the job in hand. The team would probably have put up an even better score than it did had the individuals been less tired by the high recoil. The Swiss shot with the well-known and very elaborate "Schutzen" rifles, for which they are famous. The actions were Martini, and looked to be very beautifully made. Their set-triggers were like a rifleman's dream of perfection. The stocks were very elaborately shaped to fit shoulder and cheek, and no possible refinement or aid, within the regulations, had been omitted. On paper the Swiss should have won, for it was a team of champions thoroughly used to the conditions. Several of the United States men knew very little of the set-trigger and continental offhand methods. That Switzerland did not win can be put down to the fact that they had in the Americans a very tough nut to crack, that they shot as individuals and not as a team, and that their best man made experiments with a sling during the match. This man, Linehert, of Lucerne, is a very fine individual shot. In the *Maestro Tiratori* series, which calls for 60 shots at 300 meters in any position, and with any rifle, he put on 60 "cartons," which is equivalent to making 60 bulls in succession at 300 yards. The carton is the 8, 9 and 10 rings of the target, and in minutes of angle is just a little bigger than the 300 yards bullseye. All the shots must be completed within twenty-four hour. When Linehert had completed

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A CRITIQUE ON .22 CALIBRE RIFLES

(Continued from page 5)

to use for a combination target and hunting arm. In fact, I think so much of it that I have spent considerable time and money in trying to get it right, not only as regards functioning and developing a satisfactory front aperture sight, as described in my recent article on the "Weedless Wonder," but also in experimenting with rear sights.

The Savage factory rear sight went through some remarkable evolutions in the hands of every owner of this gun in our club. Cup discs were fitted, new screws made, etc.; but sooner or later every one was canned and the owner either got a scope fitted or tried a sight screwed to the wood where the tang ought to be. My own efforts included a Marble S5S, which brought the sight stem back to the comb. This was impossible for prone shooting, though very satisfactory for the other positions. Furthermore, this sight cannot be adjusted accurately and reliably, so it joined the junk. I had just come to the conclusion that I should have to get a scope mounted when the new model of the No. 103 came out. So far, this is proving satisfactory; but only long-continued use will demonstrate whether it will remain rigid and accurate indefinitely. Should it do so, it will permanently solve, for me, the sight problem for this arm. The B. S. A. sight might prove as good, if brought out with proper base and length of stem for the weapon. However, the rifle itself ought to be made with a metal tang let into the wood, as screwing a sight to wood is mechanically a poor proposition. It may be that the new Stevens scope designed for this arm would be satisfactory—perhaps I shall try it next.

The B. S. A. rifle is represented by only two specimens in our club, and neither member is very active. However, there is very little to criticize adversely. The stock looks very clumsy but seems to fit fairly well. The action is good, the pull smooth, and the lock time very quick indeed. The sights, as furnished, can hardly be improved upon. American makers could profitably investigate the heavy-rimmed aperture of the front sight, which suits most eyes far better than the fragile, thin ring as supplied in this country. The rear sight seems to me the most solid and satisfactory type of vernier sight I have ever seen—and I go back to those mounted on the heel for long-range shooting in the back position, as used at Walnut Hill up to the early 90's. Those who like a single-shot rifle won't go far wrong in choosing a B. S. A. if it fits them.

Another favorite rifle of the old days, it is rumored, may again come on the market, now that the Marlin line is reestablished. I refer to the Ballard, still a great favorite for fitting with special barrels. This action, with the Borchardt, had the reputation of having the smoothest pull and the quickest lock action, due to the light

hammer and its short travel. It seems, in a way, a waste of good material to construct a fine bolt-action rifle and restrict it to single-loading in the matches. The single-shot rifle, therefore, is no handicap to the target shot, and a New Ballard should certainly meet with a big sale.

Other things being equal, the first choice would depend largely on whether one wished to keep in trim for the '30-'06. If this is the main desideratum, one should, I think, pick the .22 Springfield—though it might spoil one for the regulation stock and induce the fitting of the Model 1922 stock to the Model 1903 arm. Those who like the regulation stock might be better suited with the Winchester 52, since that arm follows the faults of the old army weapon. The choice, as regards repeaters, surely lies between them. Savage could easily correct the faults in the 1919 and get back into the running. Among the single-shots,

ETHICS OF THE HUNTER

(Continued from page 6)

Thou shalt not carry thy weapon carelessly! is another bed-rock rule for the outdoorsman. If the gun is not loaded it should never be pointed in the direction of a comrade habitually because when the load is put in the breech there are ten bets to one that the same careless position will be taken. The right way to hold the rifle or shotgun is with its muzzle either pointed at an angle upward or downward. In this case it does not cover the person of another who is nearby, while a barrel held in the horizontal position must come in the direction of someone as the party walks along through the woods. It seems strange that many accidents occur when the hunters are still some distance from the hunting ground. This is because a loaded gun is carried carelessly pointed in the direction of a companion and so a slip or jar may set off the charge. Don't be afraid to ask a hunter who lets you look into the muzzle of his gun as you walk near him to shift it elsewhere.

Thou shalt not leave a loaded gun about the house! is an axiom that should be a part of the ethics of every shooter. Probably ninety-nine out of the shooting accidents occur because "He didn't know the gun was loaded!" And in a good many cases the injured are children. This fall there have been in central New York three such accidents where young lads "played" with a weapon of an older person and shot a companion. One lad of eight had got down his dad's shotgun many times and played shooting Indians with other boys. The father went hunting one Saturday and the next week during a repetition of the shooting wild Indian game another lad of similar age was killed. If no loaded automatics, pistols, revolvers, shotguns, and rifles, or any kind of shooting arm, were left loaded about the house there would be ninety-nine per cent less numbers of this

the matter of personal appeal would have to be the deciding factor, the rear-sight question being easily solved for any of them.

Glass sights, of course, can be fitted equally well to any of the rifles mentioned, if the rules allow. They are an undoubted advantage. So far, only the Winchester mounts have proved adequate; but the Winchester glass itself is not all that might be desired. That man Fecker has a wonderful series of 'scopes. I believe it is the first time in recent telescope history that 'scopes have been designed by a scientific optician who is also a practical rifleman. His optical systems are of the most advanced design, with deep curves and splendid correction. His methods of mounting and securing his lens-systems are simple, strong, and durable. No one who is thinking of a "glass eye" should neglect to investigate the Fecker telescopes.

type of accident. If a loaded gun is absolutely necessary for protection in the home, then it should be placed where children can not get to it. Poison kills, so does a loaded gun! Keep them unloaded around the house.

Thou shalt not shoot too hastily! should be a cardinal rule firmly fixed in the mind of every hunter. I know a shooter who hunts birds by preference to all other game. He never gets his feathered target on the first shot. His first cartridge is wasted because of too great haste, and after the one miss he steadies down and really takes good aim. A friend of mine went after deer last fall with the idea in his head that he had got to shoot like lightning to get his buck. One day he walked face to face with a big boy and shot so very rapidly that it was evident to anyone who heard the shots that he did not take time to aim. Result was three perfectly good charges of powder wasted and no venison to show for it. Too great haste is one of the best things possible from the standpoint of the game shot at. It means safety first for the quarry! But not for hunters who may be with the hasty shooter. When I hunt once with a man who shoots before he gets a good look in his haste to get a shot fired, I try to avoid other hunting trips with that hunter.

Thou shalt love thy dog! Yet many a hunter takes his canine into the woods without having given him proper ante-season exercise and expects him to at once show mid-season form. The shooter who loves his dog will see that on the trip he is not delegated to the hands of a hotel servant and placed maybe in a cold room with improper bedding for the night. He will see that he is given the best kind of food and that he is treated right. After the horse, the dog is probably the most intelligent and sensitive of all the animals that man has reduced to his obedience. Over-exertion and exposure may lead to

the germs of canine flu, or some other disease, getting a foothold in his system that may take from you the best dog you have. All that is needed to obey this commandment in the code of the outdoorsman is a little thoughtful common sense.

Thou shalt not shoot wantonly! Why do some hunters always have to slam at everything that comes along? In a duck blind a heron is not safe when he ventures over, and a robin that flies past is too big a temptation for the hunter of woodcock. Not always is this the case, but it is true with a "certain type" of hunter that you and I know. There is one thing we can do, and that is to set a clean example for this sort of fellow. There ought to be no bigger breech of the ten tables than for a shooter to cut down a woodpecker. This bird is Nature's surgeon, and if he were out of existence the woods would only survive the inroads of the beetles, the bugs, the larvae, the grubs, the worms, and insects but a very few years at most. Out of season shooting should be a big disgrace, and it is with the majority of shooters. The killing of mating birds, the shooting of the female species where protected, the bagging of more than the limit—all these are, to say the least, unethical and result in depletion of game and a decrease in the sport for all parties concerned.

Probably the few rules of ethics I have mentioned would find additions in every locality to fit some particular nuisance that is making trouble for the great majority of hunters. Certain it is that the shooter's decalogue could easily be made complete for each individual hunter and by every hunting club. How about spending the time of one meeting in drawing up a set of ten or more resolutions that ought to be enforced and maintained in the woods and anywhere a gun is carried or shot? It is time that a big educational crusade is pulled across that will teach gun wielders that the getting of game is not the big idea in hunting. Rather the policy of good sportsmanship should be made the backbone and a hunter who can get keen enjoyment, mental relaxation, can get lifted on his toes by the tonic of the out-of-doors, should be held up as the ideal Nimrod.

MILKIN' HER DRY

(Continued from page 9)

behind some brush. At the first shot one fell, and as fast as he could work the lever down went a coyote. He fired his six shots, and when he walked over the battlefield he counted five coyotes; shot number six had missed.

He "jest milked her dry" again, and five more coyotes were recorded in his diary, and five more scalps went in to headquarters for Uncle Sam to play with.

That's what I call shooting, and I guess it is what most anyone might call good shooting. But then his bullets were not magic, for with a smile he told me about

a time when he jumped a coyote pup and "I drew down on him and jest milked her dry and never teched him." You bet, every man who shoots a rifle misses now and then, some more often than others.

I am reminded of days gone by on the ranch. Any fellow that came bragging around how he "wasn't never throwed" was immediately put down by the outfit as a "nut" and as one who had perhaps never been on a horse. So it is with rifle shooting—he who never misses has probably never shot. Well, the fire is most out and the oil in the lamp is getting low, and she smells like she is about dry, so I am going to turn in and let this here writing machine cool off. *Adios.*

More Game-load Dope

By VAL A. FYNN

THE behavior on game of the 180-gr. Lubaloy hollow point .30 Govt. '06 ammunition is a question on which considerable information is gradually being collected.

I used this ammunition in the Peace River district in October and November of last year and found it eminently satisfactory on caribou, goat, moose and grizzly. I was unfortunate to have to hunt without a guide except for 3 out of 42 days and for this reason had to cut my equipment down to the minimum. I intended to photograph the kills and bullet wounds, extract the bullets and weigh them, but had to leave my camera in camp and never had the time to spend on bullet hunting. Days were very short, skinning took a long time and all my kills happening to be far from camp I had to hurry with the load as soon as possible so as not to travel in the dark over the more difficult parts of the ground. For these reasons the information I have to offer is not of much value.

This load kills goat with the greatest ease if hit anywhere near the right spot and a rear shot stops them or slows them down so quickly that a chance for a finishing shot is sure to be had. My shots were all between 200 and 250 yards.

Caribou was killed with the greatest ease at 150 yards. One badly centered head on shot glanced along the neck ripping the skin for a distance of nearly two feet and spoiling the scalp.

A shoulder shot stopped a very large moose dead at about 300 yards. The animal stood 78 inches at the withers. A rear shot slowed another down sufficiently to give a chance for a second and finishing side shot.

An 8-foot grizzly was bowled over at the first shot, shoulder at about 220 yards, and this would probably have been sufficient but being alone I did not care to take any chances, so hit him in the thigh as he was rolling down and added a second shoulder shot at 15 yards before touching the animal.

The entry is always a small hole about the diameter of the bullet. None of the bullets went through except in the case of one caribou, where a quartering upward shot entering near the last ribs came out through or just under one eye.

All shoulder shots mutilated shoulder and chest cavity considerably. The hip shot on the grizzly broke his hind leg to smithereens.

Such bullets as I saw seemed to have lost about 30 per cent of their original weight and were well mushroomed. The

front part of the copper sheath seems to break up entirely.

The load is a very satisfactory killer and does not seem to mutilate the meat unduly.

Will be glad to hear all about your new boat tail bullet. Has it any advantages as a game bullet and does it not show up best at target ranges of more than 600 yards?

THROUGH NEUTRAL EYES

(Continued from page 18)

his prone series in the match, it was found that he had tied with W. R. Stokes of the U. S. A. team, with 375 points out of 400—very tall shooting. In the kneeling series he had to give Stokes best, for the American totalled 356 and took the title of champion of the kneeling position. Stokes started his first standing string rather badly, and Linehart apparently thought that desperate measures were necessary if he was to obtain the world championship that had been looked on as a gift for him after his previous marvelous performance. He fixed a sling to his rifle, and then tied it across his back and round his chest. The inevitable result followed: Every heartbeat was transferred to the rifle. In the first string he dropped 25 points out of 100, and in the second string 16 points. Then he threw away the sling, and, in the position to which he was used put up a really remarkable shoot, as nearly as possible pulling himself out of an impossible position in the rear to the very top. Stokes, who had been shooting steadily, standing, but not brilliantly, won the world's championship by two points. In the standing series Zimmermann, of Switzerland, and Osborne, of the U. S. A., each scored 341, but Zimmermann won on the greatest number of 10's.

The scores of the International Match, Linehart being the last to complete for the Swiss, and the last man to fire in the match, were as follows: United States, 5,132; Switzerland, 5,126; Denmark, 4,965; Sweden, 4,916; Holland, 4,868; France, 4,780; Italy, 4,688; Monaco, 4,094. A score of over 5,000 is seldom made in this match.

From first to last the meeting went without a hitch. The only regret is that there was not a British team there to compete.

Arms Available to Riflemen

The supply of Krag carbines of all models, formerly sold by the Bureau of Civilian marksmanship has been exhausted. A new supply is being made at Rock Island Arsenal from Krag rifles by cutting the barrels off to 22 inches and fitting with carbine stocks. On account of the extra work involved the price of these carbines is \$10.00 each. They are in good condition.

A supply of the model 1922 pistol grip stocks of two types has been made by Springfield Armory. The first type is the same as the stock furnished on the .22 calibre Springfield rifle; the other is the same from trigger to butt plate but with the fore end made like the regular Springfield .30 calibre stock as issued. This stock will fit the Springfield .30 calibre rifle as issued, using the same hand guard and upper and lower bands.

It is estimated that \$5.00 will cover the cost of either stock with butt plate. The special band with sling swivel for the .22 calibre stock will cost 76 cents.

THE SCORE BOARD



NRA Gallery Program Made Attractive to Beginners

BEGINNERS in the shooting game, sportsmen who wish to keep in practice during the winter season, members of military units, including the Army, Navy, Marine Corps and National Guard, as well as the old-line team and individual shots from civilian clubs and educational institutions, will each find in the N. R. A. gallery competitions of 1922-1923 a splendid field for keen and absorbing sport.

The complete program, embracing many new special events, as well as the time approved rifle and pistol matches, has been distributed by the secretary of the National Rifle Association.

The entrance of military units in the field of gallery small-bore work has been accomplished through a series of three matches in which teams from, or individuals in the service of, the Army, Navy, Marine Corps and National Guard may compete against one another without the formality of affiliation with the N. R. A. If, however, teams or individuals from the services desire to compete in the regular N. R. A. matches, affiliation is required. The new military matches, all at 50 feet, include:

The Military Company Team Match, an event in four stages, running from December 31 to January 27, calling for five-man teams, all scores to count. Each competitor fires two strings of two sighters and 10 record shots: First, one string prone, one sitting; second, one prone, one kneeling; third, one prone, one standing; fourth, one prone and one kneeling, sitting or standing. In this match, Company Team Regimental Championships will be decided.

The Military Regimental Team Match, an event in four stages, running from February 4 to March 3, calling for 10-man teams, all scores to count, the course of fire paralleling that in the Company Team Match.

The Individual Military Championship, an event in three stages, each to consist of two sighting shots and 10 for record. First one string prone; one sitting; second, one string prone, one kneeling; third week, one string prone, one standing. In connection with this event various Individual Regimental Championships will be decided.

The "Beginners' Matches," another important innovation provided for the purpose of affording an interesting avenue by which the newcomer may enter and be-

come acquainted with the gallery game, are restricted to individual members of the N. R. A. (life, annual, or junior), who have never before competed in any N. R. A. gallery competition. There will be two of these matches—one shot at 50 feet and the other at 75 feet. Winners will be decided in two classes—in each match—those using any small-bore rifle, which includes match and special patterns, and those using any .22-calibre rifle designed for general sporting or hunting purposes. These matches will be fired in three stages, each to consist of two sighting shots and 10 record shots: First, one string prone, one sitting; second, one string prone, one kneeling; third, one string prone, one standing.

These matches will run from December 4 to December 23. It is believed that these events will hold a special appeal for sportsmen who hitherto have been able to in-

dulge only in "dry shooting" between seasons.

The usual series of preliminary matches for N. R. A. clubs and individual members will be fired this year between November 12 and December 2. These include a standing-team match, a kneeling-team match, a sitting-team match, and a prone-team match, shot at two distances—50 and 75 feet. These teams will consist of seven shooting members, five high scores to count, two of which scores must have been made by riflemen who have not previously shot in N. R. A. competitions. Each stage of these matches consists of two sighting shots and 10 record shots per man in the position specified.

Individual matches in the several positions and distances will hold the interest of the shooters at different periods from December 31 to January 21. In this series are: Individual standing position matches at 50 and 75 feet; individual sitting position match at 50 and 75 feet; individual kneeling position match at 50 and 75 feet; and individual prone position match at 50 and 75 feet. Each of these eight events will consist of 40 record shots fired in the specified position in strings of two sighting shots and 20 shots for record.

During February and March the Civilian Club, Intercollegiate, High School and Military School Championships will be fired, as well as the Astor Cup Match.

In the Championship Matches, shot at 50 feet, teams of five shooters, all scores counting, will compete. These matches consist of four stages, fired weekly, each stage calling for two strings each of two sighting shots and 10 record shots: First, one string prone, one sitting; second, one prone, one kneeling; third week, one prone, one standing; and fourth, one prone and one string kneeling, sitting or standing.

Two Individual Gallery Championships—one at 75 feet and the other at 50 feet—will be decided between March 4 and March 24 in three stages, each stage to consist of two strings of two sighters and 10 record shots: First, one string prone, one sitting; second, one prone, one kneeling; and third, one prone, one standing.

Individual Gallery Qualification Matches

SCHEDULE OF N. R. A. GALLERY MATCHES

Match No.	Name of Match	Distance Feet	Week Fired	Entrance Fee	Entries Close
RIFLE MATCHES					
1	Standing Team	75	Nov. 12-Dec. 2	\$5.00	Nov. 5
2	Kneeling Team	75	Nov. 12-Dec. 2	\$5.00	Nov. 5
3	Sitting Team	75	Nov. 12-Dec. 2	\$5.00	Nov. 5
4	Prone Team	75	Nov. 12-Dec. 2	\$5.00	Nov. 5
5	Standing Team	50	Nov. 12-Dec. 2	\$5.00	Nov. 5
6	Kneeling Team	50	Nov. 12-Dec. 2	\$5.00	Nov. 5
7	Sitting Team	50	Nov. 12-Dec. 2	\$5.00	Nov. 5
8	Prone Team	50	Nov. 12-Dec. 2	\$5.00	Nov. 5
9	Beginners' Individual Match.....	75	Dec. 4-Dec. 23	\$1.00	Nov. 27
10	Beginners' Individual Match.....	50	Dec. 4-Dec. 23	\$1.00	Nov. 27
11	Individual Gallery Championship.....	75	Mar. 4-Mar. 24	\$1.00	Feb. 26
12	Civilian Interclub Championship.....	75	Feb. 4-Mar. 3	\$5.00	Jan. 29
13	Individual Gallery Championship.....	50	Mar. 4-Mar. 24	\$1.00	Feb. 26
14	Civilian Interclub Championship.....	50	Feb. 4-Mar. 3	\$5.00	Jan. 29
15	Intercollegiate Championship.....	50	Feb. 4-Mar. 3	\$5.00	Jan. 29
16	High School Championship.....	50	Feb. 4-Mar. 3	\$5.00	Jan. 29
17	Military School Championship.....	50	Feb. 4-Mar. 3	\$5.00	Jan. 29
18	Individual Standing.....	50	Dec. 31	\$1.00	Dec. 25
19	Individual Standing.....	75	Dec. 31	\$1.00	Dec. 25
20	Individual Sitting.....	50	Jan. 7	\$1.00	Jan. 1
21	Individual Sitting.....	75	Jan. 7	\$1.00	Jan. 1
22	Individual Kneeling.....	50	Jan. 14	\$1.00	Jan. 8
23	Individual Kneeling.....	75	Jan. 14	\$1.00	Jan. 8
24	Individual Prone.....	50	Jan. 21	\$1.00	Jan. 15
25	Individual Prone.....	75	Jan. 21	\$1.00	Jan. 15
26	N. R. A. Gallery Aggregate.....	50	Dec. 31-Jan. 27	None	
27	N. R. A. Gallery Aggregate.....	75	Dec. 31-Jan. 27	None	
28	Individual Gallery Qualification.....	50	Apr. 1-Apr. 21	\$1.00	Mar. 26
29	Individual Gallery Qualification.....	75	Apr. 1-Apr. 21	\$1.00	Mar. 26
30	Astor Cup Match.....	50	Mar. 25	\$5.00	Mar. 19
31	Military Company Team.....	50	Dec. 31-Jan. 27	\$5.00	Dec. 26
32	Military Regimental Team.....	50	Feb. 4-Mar. 3	\$5.00	Jan. 29
33	Individual Military Championship.....	50	Mar. 4-Mar. 24	\$1.00	Feb. 26
PISTOL MATCHES					
1	Slow Fire.....	60	Jan. 7-Jan. 27	\$1.00	Jan. 1
2	Rapid Fire.....	60	Feb. 4-Feb. 24	\$1.00	Jan. 29
3	Gallery Pistol Championship.....	60	Mar. 4-Mar. 24	\$1.00	Feb. 26

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N. R. A. Outdoor Small-Bore Rifle Competition

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at 50 and 75 feet will be fired from April 1 to April 21, and will introduce a rapid-fire feature.

The course of fire in these events calls for three stages fired weekly, each stage consisting of two strings of slow fire, each of two sighting shots and 10 record shots, and two strings of rapid-fire each of five shots. Stages will be fired: First, one string prone, one sitting, and two strings of rapid-fire sitting; second, one string prone, one kneeling and two strings of rapid-fire kneeling; third, one string prone, one standing, and two strings of rapid-fire standing. Ratings of gallery marksmen, gallery sharpshooters and gallery experts will be awarded in these events, as well as medals to the winners.

Percentage medals will be awarded to all competitors in the N. R. A. Gallery Matches who make the required average of 90 per cent or better, and who have not previously won one of these medals.

Individuals competing in the Individual Standing, Sitting, Kneeling and Prone Matches at 50 or 75 feet are automatically entered in the gallery grand aggregates, which will be determined by the scores in these events.

A Curious Fluke on the Range

By PERRY FRAZER

HERE is a shooting yarn that is too good to be kept from the brotherhood. I have made many curious shots, at odd times, but this is the first time that I ever made a possible by accident.

I was shooting a 22 Springfield rifle and

'scope at 200 yards, and later on decided to try a group at fifty yards, without altering the 200-yard elevation. Two small targets were tacked up on the 50-yard target frame, one above the other, and I shot from the prone position, centering the crosswires on the 10-ring of the lower target. There being no mark of the first shot on my target, I examined the upper one through the glass, and saw a clean 10.

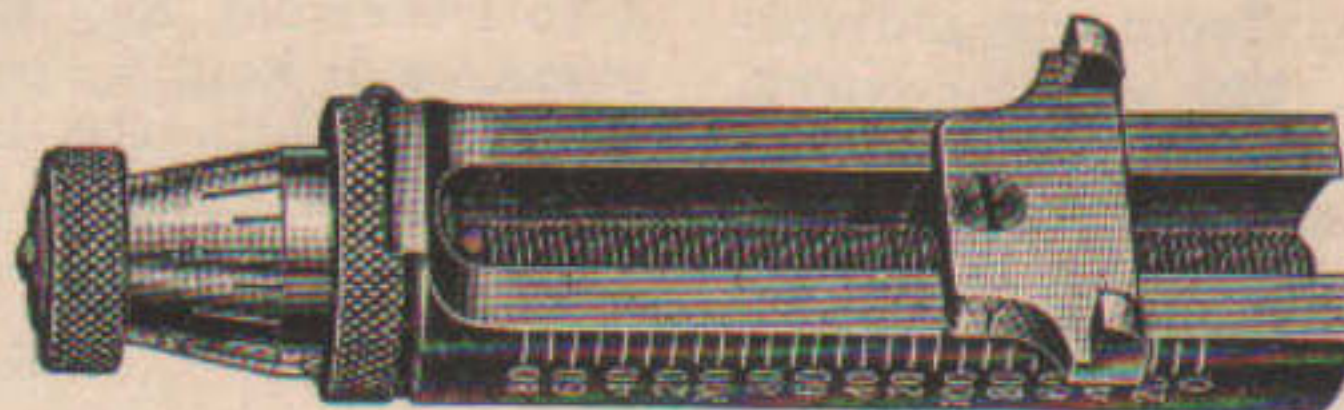
"Did you fire at my target?" I asked Frank Brinckerhoff, who was on my right. "No, I am shooting on the left-hand target," he replied.

The second shot showed no mark on my

lower target, but was promptly found in the 10-ring of the upper one. Then I fired three more shots, centering the crosswires on the 10-ring of the lower bulls eye each time, and scored three nice 10s on the upper target. That gave me a possible on a target at which I did not aim at all, but which was tacked up, haphazard and without any thought, just the precise distance above, and in vertical line with, the target aimed it; so that the sights were absolutely right for the upper target.

Couldn't do that again, without some close figuring, and measuring, in a thousand years.

O'Hare Micrometer for Springfield Rifle 1903



To improve your shooting you require an O'Hare Micrometer, a good telescope, and shooting case to hold your telescope stand, rifle rest, sight black, elbow pads, shoulder pads and 100 other articles I handle that interest riflemen.

Send 6 cents for New No. 5 Illustrated Catalog and Price List

P. J. O'HARE

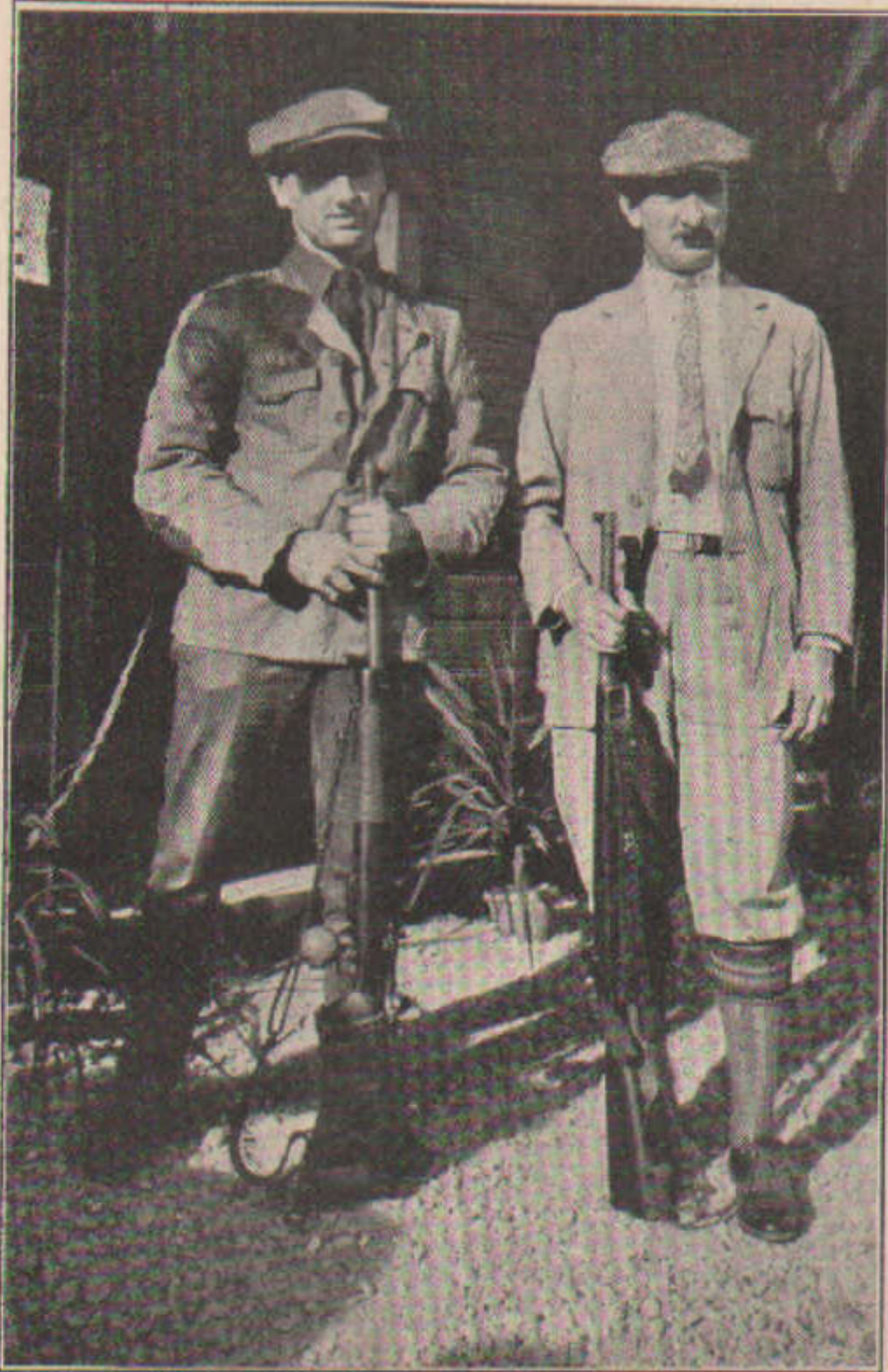
178 Littleton Avenue

Newark, N. J.

INTERNATIONAL CHAMPIONSHIPS

WON WITH

HI V E L



Left to Right: W. R. Stokes and Commander Osburn, of the American Team.

In the International Rifle Matches at Milan, Italy, the American Rifle Team used ammunition loaded with Hercules HiVel in winning both the Team and Individual World's Championships. The scores in the team championship were as follows:

United States of America

(Highest possible total per man, 1200.)

Mr. W. R. Stokes.....	1067
Lt. Com. Cy Osburn, U. S. N.....	1041
Maj. J. K. Boles, U. S. A.....	1026
Sgt. Morris Fisher, U. S. M. C.....	1011
Mar. Gunner C. A. Lloyd.....	987
Team Total.....	5132

Switzerland

Mr. Lienhard	1065
Mr. Zimmerman	1054
Mr. Hartman	1009
Mr. Pfeiderer	1007
Mr. Rosli	985
Team Total.....	5120

Mr. Stokes won the Individual World's Championship with his score of 1067 x 1200, and the Kneeling Championship with 356 x 400. He also tied with Mr. Lienhard of Switzerland, for first place in the Prone Championship with a New World's Record of 375 x 400.

Commander Osburn tied with Mr. Zimmerman, of Switzerland, for first place in the Standing Championship with a score of 341 x 400.

HiVel was used in winning every military or free rifle match at both Sea Girt and Camp Perry, and in winning or tying in every championship match at Milan.

These competitions included every long range match of real national or international importance in which an American Rifleman competed during the year 1922. It is doubtful, if in the whole history of rifle shooting, one brand of powder ever before made such a record.

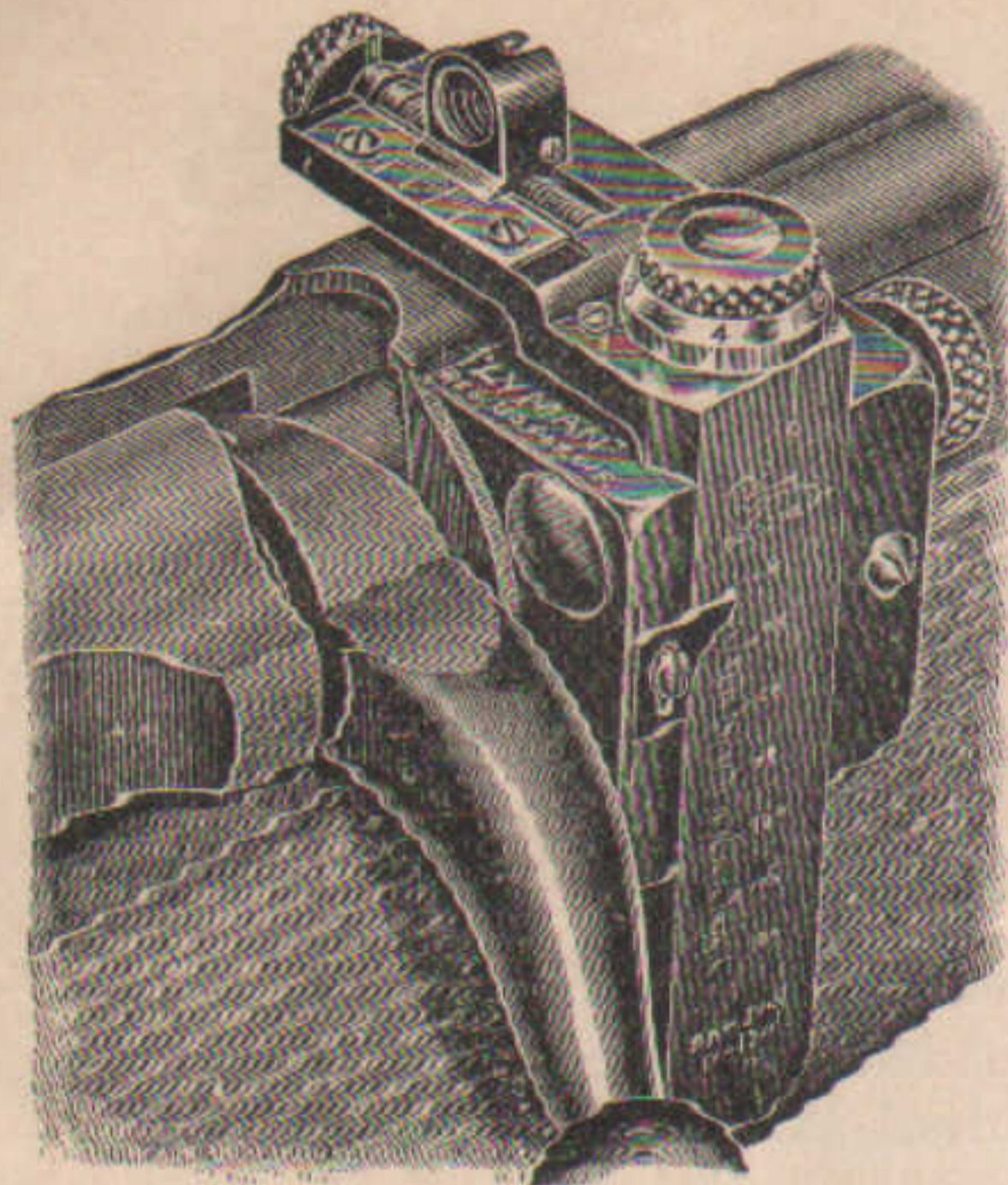
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No. 16 Micrometer Receiver Sight

The type of rear sight used by the victorious U. S. Teams of this year and last. Fits Krag, Remington 90, Ross 10 .280 and Lee-Enfield as well as Springfield 1903-06. Price, \$11.00; with Disc, \$11.50. Tap and Drill for mounting, 50c.



No. 26 for Springfield

An excellent sight for both hunting and target. Ivory or Gold Head. Gold head can be blackened by smoke of match for shooting against light background. Price, \$1.00



No. 17 Target Front

Reversible peep and pinhead protected from damage and shaded from distracting light rays by large hood. Price, \$2.50. (Special for Springfield, \$4.00.)

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Again Justify Faith of U. S. Riflemen

BACK of the U. S. Rifle Team's sweeping victory at Milan is the un-failing accuracy of Lyman Sights.

Though the rifles and ammunition were the most accurate obtainable, and the men the most skillful shots that training could produce; yet if their sights had been the least untrue or failed of accurate adjustment, it might have cost them the victory.

The wisdom of choosing Lyman Sight equipment was proved by the winning of every event.

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Scores in Small Bore Grand Aggregate

WHATEVER may be said about the debilitating effects of the tropics on white men, the effects seem to be nullified for any one who is a dyed-in-the-wool rifle or revolver crank. Witness the performance of H. W. Gerrans, Canal Zone booster who has taken the Small Bore Grand Aggregate representing 50 shots at 50 yards, a like number at 100 yards and 20 shots at 280 yards with the remarkable total of 1,092. Eight points dropped in 120 shots at three ranges is something of a performance. It was not outstanding however because of the close race given the winner by E. F. Burkins and T. K. Lee with 1,091 and 1,090, respectively. L. J. Corsa, in fourth place, with 1,085, completes the quartette who have been swapping position with one another since the gallery season. The scores:

Name	Address	50	100	200	Aggregate
Gerrans, H. W., Balboa Hts., C. Z.		500	492	100	1092
Burkins, E. C., Wilmington, Del.		497	495	99	1091
Lee, T. K., Birmingham, Ala.		497	495	98	1090
Corsa, L. J., Woodhaven, N. Y.		495	492	98	1085
Rich, H. A., Pasadena, Calif.		489	493	98	1080
Goldsbrough, A. F., Pasadena, Calif.		495	487	97	1079
Johnson, C. H., Upper Darby, Pa.		491	488	95	1074
Wood, C., Pasadena, Calif.		484	490	98	1072
Hull, E. R., Milton Junct., Wis.		491	485	96	1072
Gussman, H. J., New Haven, Conn.		492	484	96	1072
Reynolds, R. B., Washington, D. C.		475	495	98	1068
Shaw, R., Boise, Idaho		484	484	99	1067
Sippelle, N. P., Boston, Mass.		480	492	93	1065
Ross, H. W. T., Santa Barbara, Calif.		486	492	86	1064
Schwegler, E., Janesville, Wis.		484	479	100	1063
Shepherd, P. A., Burlingame, Kans.		482	480	100	1062
Wolfe, C. D., Wewoka, Okla.		477	486	99	1062
Thomson, A. L., Pasadena, Calif.		479	484	98	1061
Stokes, W. R., Washington, D. C.		476	488	95	1059
Payne, F. C., Los Angeles, Calif.		477	481	100	1058
Dezert, Mr. Leon, Pasadena, Calif.		473	487	97	1057
Hart, R. J., Janesville, Wis.		478	490	87	1055
Hack, H. D., Hillsboro, O.		480	478	95	1053
Smith, A. R., Toledo, O.		470	490	93	1053
Cariffe, J. V., Cristobal, C. Z.		481	482	90	1053
Cutting, G. L., Worcester, Mass.		486	479	88	1053
McDill, A. S., Washington, D. C.		475	481	96	1052
Cocroft, W. L., Evanston, Ill.		484	476	92	1052
Gibbons, W. S., Boston, Mass.		491	469	92	1052
Friedrich, A. K., Ames, Iowa		484	472	95	1051
Ladd, J. H., Sheridan, Wyo.		471	485	95	1051

Sharpe, G. H., Trenton, N. J.	472	483	95	1050
Brown, Capt. C. M., Ft. Benning, Ga.	481	469	99	1049
Betts, R. H., Glenside, Pa.	481	474	94	1049
Palmer, H. R., Sheridan, Wyo.	462	491	93	1046
Woodruff, C. W., Birmingham, Ala.	482	473	91	1046
McMahon, E. A., Balboa Hts., C. Z.	473	478	94	1045
Schenck, G. L., New York, N. Y.	466	490	89	1045
Taylor, J. W., Toledo, O.	472	484	88	1044
Snabely, C. C., Hopkins, Minn.	474	477	93	1044
McGarity, R. H., Washington, D. C.	477	481	86	1044
Williard, Dr. H. S., Ridgewood, N. J.	466	483	94	1043
Logsdon, J. C., Sheridan, Wyo.	487	467	89	1043
Dezert, Mrs. L., Pasadena, Calif.	487	460	95	1042
Kerns, C. M., Altoona, Pa.	477	467	95	1039
Terry, J. E., Philadelphia, Pa.	478	472	89	1039
Balch, A. A., Haverhill, Mass.	486	469	84	1039
Borler, F. E., Westend, Ia.	489	472	78	1039
Tam, W., Greenville, Pa.	467	484	87	1038
Witker, H., Toledo, O.	473	474	90	1037
Sletter, W. H., Cleveland, O.	468	472	95	1035
Richardson, R. B., Ellwood City, Pa.	458	484	92	1034
Neff, E. D., Atadena, Calif.	467	479	88	1034
Davis, E. E., Toledo, O.	473	466	93	1032
Smith, J. T., Birmingham, Ala.	480	462	90	1032
O'Connor, M., Racine, Wis.	472	475	85	1032
Smith, W. D., Jr., Birmingham, Ala.	477	461	93	1031
Davidson, A. J., Chicago, Ill.	476	475	80	1031
Chamberlain, C. J., Chicago, Ill.	486	473	71	1030
Binney, H. M., Woburn, Mass.	479	465	84	1028
Van Winkle, H. F., Santa Barbara, Calif.	461	477	89	1027
Hadin, V. J., Schenectady, N. Y.	474	458	94	1026
Vosburg, J. L., Davenport, Ia.	466	474	86	1026
Touhcton, S. L., Chicago, Ill.	470	464	89	1023
Flanders, Dr. R. A., Dodge City, Kans.	467	460	95	1022
Winger, F., Scranton, Pa.	459	470	90	1019
Roziene, T. B., Chicago, Ill.	451	481	87	1019
Stodter, Lt. Col. C. E., Washington, D. C.	467	473	79	1019
Dorweiler, J., West Bend, Ia.	491	460	65	1016
Bullard, C. E., Connorsville, Ind.	469	453	87	1009
Kimmel, F. C., St. Louis, Mo.	480	460	68	1008
Pfieger, C. L., Collingswood, N. J.	449	460	95	1004
Buschman, F. W., Connorsville, Ind.	451	456	96	1003
Noble, T. B., Jr., Indianapolis, Ind.	455	463	84	1002
Meyers, P. S., Passaic, N. J.	465	454	80	999
Woodruff, W. P., Birmingham, Ala.	453	464	77	994
Backus, C., Connorsville, Ind.	444	449	97	990
Kidder, E. M., Ayer, Mass.	459	444	87	990
Overacre, H. S., Passaic, N. J.	444	463	82	989
Montague, E., West Bend, Ia.	438	472	78	988
Boggs, M. R., Cristobal, C. Z.	470	431	85	986
Kipp, N., Rosebud, Mont.	456	447	83	986
Bivins, P. A., Passaic, N. J.	451	440	89	980



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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

ANNOUNCEMENT 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.

THE KRAG FOR "CHUCKS"

I WISH to reload .30-40 shells for my Krag, principally for woodchuck shooting. The inside of my rifle is in perfect condition. Would you advise me to load with lead or the 170-grain gilding metal bullets? If lead, what weight bullet would you advise with a reduced load, and can I load such a bullet far enough forward to touch rifling; also will the recoil flatten the lead bullets in the magazine as it does the soft points with a full load? With the 170-grain gilding would the results be enough better to justify loading them forward and using gun as a single loader? With either bullet give kind of powder and charge of same to use.

I have cut my rifle (Krag) barrel down to 25 inches and fitted same with a dovetailed sight but do not like it as it is so high it is easily moved; can I fit my barrel with a Springfield front sight? If so, what should I order to receive the full front sight? Also in fitting the Lyman 48 rear, do you lose the use of the cartridge stop, or do you fit same just forward of this? Thanking you, I am,
E. F. Gowanda, N. Y.

Answer (by Major Whelen): Fair accuracy can be obtained from the Frankford Arsenal 170-grain pointed gilding metal jacketed bullet when loaded deeply enough to work through the magazine—that is to say, ten shots at two hundred yards would group in about an eight-inch (8") circle. By loading the same bullet considerably out of the case so that when it is inserted in the chamber the lands just barely leave a slight impression on the bullet, the same cartridge should shoot in about a four and one-half (4½") inch circle at two hundred yards. But this bullet is hardly satisfactory for woodchuck shooting, because it penetrates too cleanly, and does not kill well, and also because it is liable to ricochet badly and be dangerous in settled communities.

I would suggest that you try one of the 170-grain bullets with soft point for the .30-30 cartridge instead. These are all made with gilding metal jackets; the jackets being slightly tin plated. Or you can obtain them from the Western Cartridge Company without the tin plating. Practically all of them now measure .306" to .308" and this is large enough for good work in the Krag.

The charge for this 170-grain .30-30 bullet should be thirty-seven point five (37.5) grains of DuPont No. 20, or Government Pyro D. G. powder, giving a muzzle velocity of two thousand two hundred and ninety-three (2,293) foot seconds, with a pressure of thirty-six thousand nine hundred (36,900) pounds—or, forty-three point five (43.5) grains of DuPont No. 16 powder, giving a muzzle velocity of two thousand six hundred and thirty-six (2,636) foot seconds, with a pressure of forty-one thousand four hundred and eighty (41,480) pounds.

It is easily possible to fit a Springfield front sight to your Krag barrel which has been cut off to twenty-five inches (25"), by slightly turning the barrel down so that the band on the fixed stud will fit. You should order from the Director of Civilian Marksmanship one (1) fixed stud and band, 37c, one (1) stud pin, 1c, one (1) movable stud, 30c, one (1) front sight, 9c, and one (1) front sight pin, 1c.

If the Lyman No. 48 rear sight is mounted on the Krag, it is usually necessary to take out and eliminate the magazine cut-off. However, a skilled machinist should be able to make a new magazine cut-off which can be operated with the Lyman No. 48 sight in place. Such work, however, would be rather expensive.

TANK RIFLES

KINDLY give the ballistics of the U. S. Tank Rifle, used during the World War, stating the weight of bullet and construction of same; also the weight of powder charge. The information I received from you June 10, 1922, regarding the Gibbs .505 Magnum Mauser was very interesting. If you have any data on hand giving the penetration of this cartridge in wood in comparison with the .30-06 in its various forms of bullets, I should be glad to have it. Hoping I am not too inquisitive, and thanking you in advance.

G. L., Buffalo, N. Y.

Answer (by Major Whelen): So far as I know, the United States Government did not develop any weapon for use in tanks during the World War. Such tanks as were used were equipped with machine guns, or with the 37 mm. cannon obtained from the French. We have never developed a tank rifle, but have lately developed a .50 caliber machine gun; the experimental bullets of which weigh from eight hundred (800) to eight hundred and sixty-eight (868) grains, and the muzzle velocity runs about two thousand five hundred (2,500) foot seconds. The recoil of this weapon is entirely too severe to ever consider the adoption of it for shoulder use.

I regret to say that I have no data whatever on the penetration of the .505 Gibbs Magnum Mauser.

AMMUNITION FOR ROSS AND ENFIELD

I WISH to know if the Ross .303 caliber ammunition will fit in the Lee Enfield or if I can purchase it from the N. R. A.

F. P. S., Erwin, Tenn.

Answer (by Major Whelen): The .303 caliber short model Lee Enfield, and the 303 Ross rifle both use exactly the same ammunition. This ammunition is known here as the .303 British ammunition. It is made in two types. The older type, which can be obtained from our cartridge companies either with full jacketed or soft point bullets, has a 215-grain bullet with a muzzle velocity of two thousand (2,000) foot seconds. The newer type, which is known as the Mark VII, has a 174-grain pointed bullet with a muzzle velocity of about two thousand four hundred and sixty (2,460) foot seconds. This ammunition can also be obtained from any of our ammunition companies, but only in the full jacketed type of bullet.

BARREL LENGTH AND VELOCITY

AS the barrel of a rifle is decreased in length, the velocity of the projectile decreases while the pressure at the breech remains practically constant. Can you give me the relation between the change in velocity and the change in barrel length? Is this relation the same for different calibre rifles?

Can you also give me the relation between the change in velocity and the change in barrel length for a smooth bored barrel such as a shotgun barrel?

E. G., Wilmington, Del.

Answer (by Major Whelen): Experiments made with the .30 caliber model of 1903 rifle show that as the 24" barrel of this rifle is increased in length, the velocity increases, and as it decreases in length, the velocity decreases. Between 18" and 30" this increase and decrease is almost exactly at the rate of twenty-five (25) foot seconds per inch. Under 18" it falls off very much faster in velocity, and over 30", it increases slower. Probably at some point beyond about 36", there will be no increase, but rather a decrease due to length of barrel, but this has not been definitely determined.

The same principle will pertain to practically all rifles, but not to the same degree. A great deal depends upon the particular cartridge used, and also upon the powder, as some powder is designed to burn in long barrels, and other powder to burn completely in very short barrels.

I regret that I have no similar information relative to shotgun barrels, but you probably can obtain the same by writing to Captain Charles Askins, care "The Dope Bag Department of Arms and The Man," Woodward Building, Washington, D. C.

CONCERNING SCOPES

I HAVE a .52 Winchester, a Springfield and a Krag. I also have a Malcolm telescope, but I can not seem to find a set of mounts to fit this instrument. I have also used a Winchester 5-B scope but somehow I can not seem to get this focused so but when I look through it the cross hairs seem to dance and the longer I look the worse it gets, and I have tried to adjust it every way but it does not seem to make any difference at all. The lens seems to look to me as though it was very hazy when I look through it, and when I try the Malcolm every thing seems to be so much clearer. What do you think the trouble might be, or is it my eyes? What or who do you think, in your own opinion, builds the best scope and mounts for hunting and target work?

L. H. M., Greenwich, Conn.

Answer (by Major Whelen): The Malcolm telescope sight used to be considered a very excellent glass. I have not seen one for many years, and have forgotten most of its characteristics. However, I feel sure that hardly any of these old style telescopes will stand the recoil of a modern high velocity rifle like the Springfield, or Krag. Also it would be necessary in order to get really efficient mountings for it, to have the mountings made to order, and this would cost no less than \$50.00. Unless you have good mountings on the telescope, there is no use in getting a telescope, as you can never set the glass so that it will shoot as close to the point of impact as you can aim. The telescope mountings simply must have double micrometer adjustment, reading to at least half minutes of angle.

I do not like the Winchester 5-B telescope at all. The field and the exit pupil are entirely too small. The Winchester Type-A, 5-power telescope, on the other hand, is a very excellent instrument for target shooting when the marksman understands its adjustment and keeps it in adjustment. Many of these glasses are condemned solely because the marksman does not know how to adjust them, and gets them out of focus, or has parallax in them. This Winchester glass should always have the No. 2 rear mounting, and if you get one you should order it with the flat top post reticule with a thin horizontal wire, and not with the regular heavy cross hairs.

MIXED CLIPS

I NOTICE that you say that the 170-grain bullet would give excellent results in the Krag if it were loaded well out of the shell but that it would have to be loaded so far out that the cartridge would not work through the magazine. Would it be advisable to use such a shell for the first shot and follow up with 220-grain cartridge in magazine?

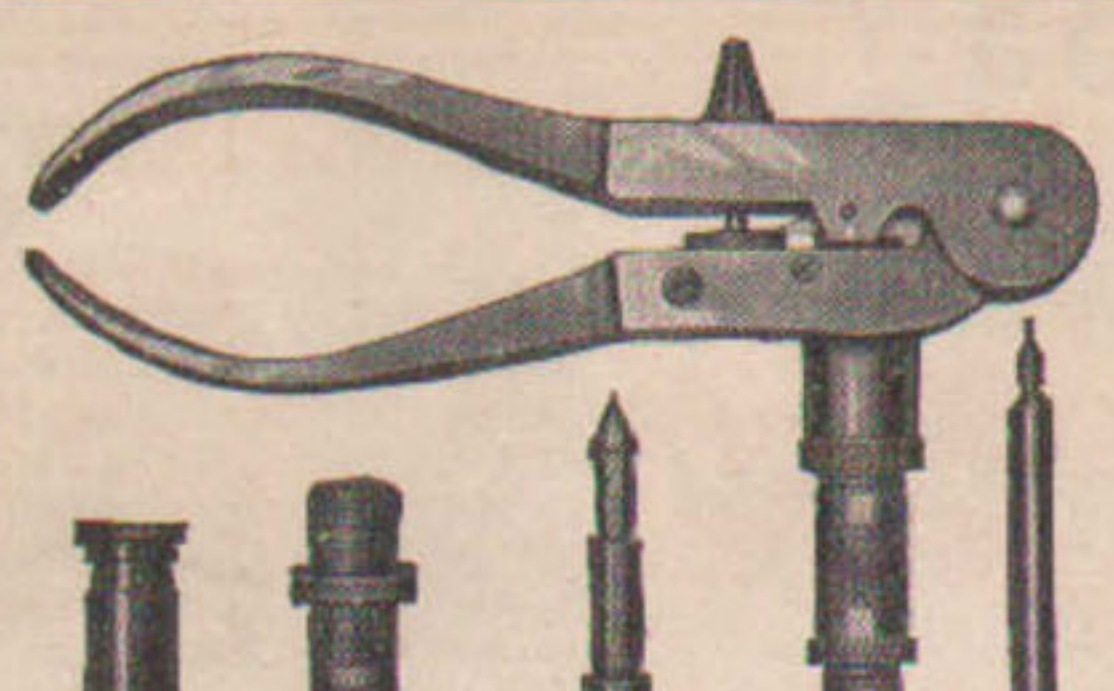
What is your opinion of the .30-30 as improved by the U. S. Cartridge Company and by the Remington Company? What game is each of these cartridges suited to?

Do you think that any of the American firms will put out a three-barrelled gun within the next few years?

L. S. S. Independence, W. Va.

Answer (by Major Whelen): The objection to using the 170-grain bullet loaded far out of the case for the first shot in the Krag rifle, having the magazine filled with 220-grain cartridges, is that in all probability the rifle will require quite a different sight adjustment for the first mentioned cartridge than it does for the second, and after you had fired the first cartridge your gun would not be correctly sighted for the second cartridge, except for very short range.

My own personal opinion about the new .30-30 cartridges with very light bullets and extremely high velocity, is that these bullets are no more efficient than the old cartridge. Of course, the demand nowadays is entirely for extremely high velocity, and as the cartridge companies are in the business to make money, they have to cater to the demand, but really



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I think that you can get better efficiency out of the .30-30 rifle by using the regular 170-grain bullet and speeding it up a little bit by loading with a progressive burning power such as DuPont No. 16, or Hercules No. 300. Thirty-two point five (32.5) grains of DuPont No. 16 powder will give a muzzle velocity of two thousand two hundred and fifty (2,250) foot seconds, with a pressure of thirty-eight thousand (38,000) pounds. Thirty-two (32) grains of Hercules No. 300 powder will give a muzzle velocity of two thousand one hundred and forty (2,140) foot seconds, with a pressure of thirty-six thousand (36,000) pounds.



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I do not know of any American firms who are contemplating putting three-barreled guns on the market. I think that there might be quite a demand for such a gun but the manufacturing cost at the present time would probably be very high.

CLEANING THE .303
ABOUT a year ago I purchased one of the .303 Ross rifles offered for sale by the D. C. M. I drew a very accurate rifle so far as shooting qualities go; in fact, I consider it the equal of most issue Springfields, using the British Government ammo at that, but I find that all ordinary methods of claiming fail to produce very good results. Hot water, Hoppe No. 9, and ammonia solution, all seem to leave or produce a lot of very gummy material in the barrel which does not want to be removed. After the barrel has been wiped and brushed (bristles, not brass) until it looks quite smooth another ap-

"Amateur Gunsmithing"
 By
 Major Townsend Whelen

The serial which closed recently in
ARMS AND THE MAN
 was the first work of its kind published in fifty years and is the only modern treatise covering the subject from the practical shooter's standpoint. It will prove of decided benefit to every owner of firearms.

It commenced in our March 15th issue and we have reserved a generous supply of extra numbers in anticipation of a demand from late or new subscribers for the complete manuscript.

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plication of liquid will produce more gumminess, it generally takes about a week and a half to get the thing clean, getting at a little more every day or so. What I would like to know is what produces said condition of things and is there any reasonably rapid way of getting the rifle thoroughly cleaned? I have never noticed the same difficulty with either the Krag carbine of 1903 and have wondered whether or not it might be the combination of Cordite, high velocity (2,400), and long barrel, but whatever the cause, it does not clean the rifle, and I am wondering now what will!

You might be interested to hear the results obtained from the Vetterli-Vitali .41 center fire about which I asked for information last spring. The gun itself is in as good condition as the day it was made—sometime in 1884—and using the original ammunition, of Italian made dated '89, it produced a good close group of fours and fives on the eight-inch bull at 200 yards. The shots grouped at ten o'clock with a normal hold. The front sight is peaked, flat on top with a fillet on either side, and somewhat off the center of the barrel apparently to help counteract drift. The rear sight is a very crude modification of the '02 Krag, a side spring clicks into slots for every hundred meters to 1,800 and the opening itself is a notch with the metal cut away quite near to each side, so that the two sides blur considerably. The powder proved to be absolutely smokeless, but did not burn completely, which might have been due to its thirty-odds years of confinement in the cases, the recoil was quite comparable to that of a Krag. Considering its antiquity I call it quite some gun.

J. W. G., Hanover, N. H.

Answer (by Major Whelen): I have frequently encountered the same trouble in cleaning .303 rifles which you have. I think it is due to Cordite powder and high velocity. Probably the best way out of your difficulty will be hot water, followed by a good scrubbing with a brass wire bristle brush while the barrel is still wet. Then wipe out dry and use the ammonia solution. After the ammonia solution, wash out again with water, dry thoroughly, and grease the bore. I cannot suggest anything more efficient than this. If this does not do the business, please blame the powder and the bullet, and not the method of cleaning.

Why not approach the Western Cartridge Company relative to lubaloy bullets and a first-class nitrocellulose powder for this cartridge?

I note with a great deal of interest what you say relative to your test of the Vetterli rifle. This is extremely good work, considering the rifle and the ammunition.

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1. Brilliant, clearly defined image, distinct to the extreme edge of the field.
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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.

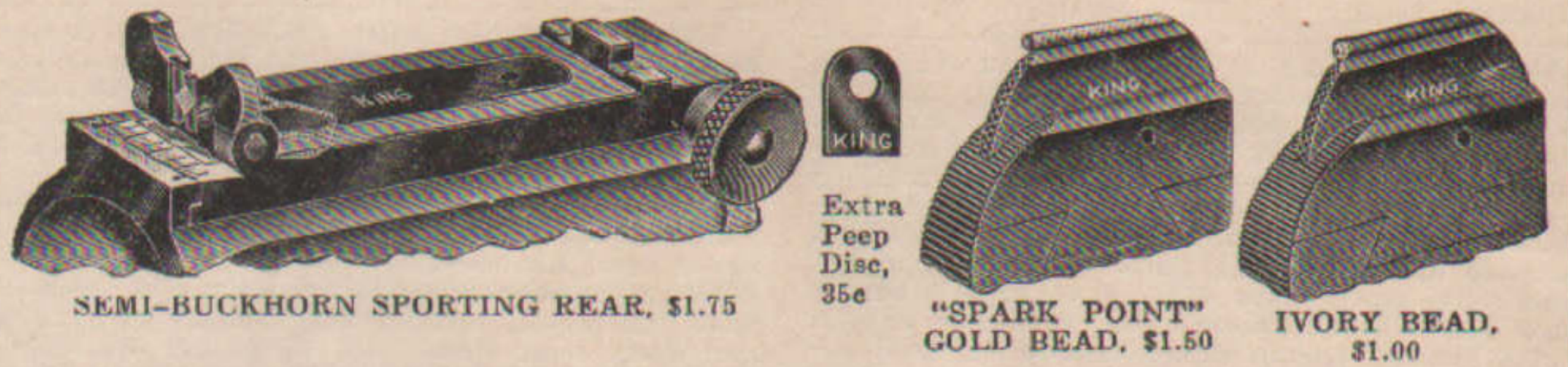
Paid Insertions. Non-subscribers or those who have already made use of the subscriber's privilege may take advantage of these columns at a cost of \$1.00 per inch or part thereof. No advertisement for less than \$1.00 accepted. Advertisement will be set in 6 point solid. They should be in the publication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

SAVAGE N. R. A. sporter stock, checked grip, tapped for scope, oil polished, new gun, \$15.00. Mann taper blocks, Mann mounts, personal outfit of Dr. Mann, 6 x scope, very fine outfit, cost \$60.00, sell for \$35.00. Mann Niedner .22 H. P. nickel barrel, palm rest, beautiful curly polished stock, peep and globe sights, taper blocks on barrel, \$50.00; recapper and decapper Niedner loading tools, swage for Savage bullets, \$10.00. About 70 everlasting reamed shells and 150 bullets, \$5.00. Mann Marine mounts for above blocks, worth \$50, and Sidel telescope 4 x, both for \$35.00. All articles equal or better than new; guaranteed to shoot small groups. Hervey Lovell, 2809 Bellefontaine St., Indianapolis, Ind.

WANTED—Heavy, American-made, ten-gauge hammer gun; ideal armory loading press; No. 5 or No. 6 powder measure; moulds for .38 S. & W. and .45 Colt revolver. Must be cheap for cash. E. R. Page, Norman, Okla.

FOR SALE—414 Stevens long rifle, \$12 Lyman sights, sling, excellent condition outside, fair inside, \$20.00. Krag carbine, excellent condition, sling, 300 rounds ammunition, \$25.00. Springfield slings 75c. P. F. Taylor, 3409 W. 11th St., Chester, Pa.

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SALE OR EXCHANGE—Like new, .44 S. & W. Special, 6 1/2 inches; gold bead; No. 3 Ideal tools, two chambers, two moulds. Want .38 Colt Army Special 6-inch O. M. New 19 jewel Riverside Waltham, 17 size, open face, 20 year gold case. Want Savage 300 or 30 featherweight or Ithaca 12-28 fluid or damascus, full and Model Krag carbine, perfect for .45 S. & W. 17. Guns must be fine condition. H. Z. Holliwel, Schroon Lake, N. Y.

FOR SALE—Remington Model 24, .22 cal. automatic rifle, Lyman sights, perfect condition, cost complete \$34.00, sell \$25.00. Savage 1919 N. R. A. .22 cal. pistol grip re-modeled, Lyman 103 rear and folding leaf sights, perfect condition, cost complete \$32.00, sell \$24.00. Want—double gun, 12 gauge; .45 Colt Automatic or New Service revolver. N. A. Ormsby, Chillicothe, Mo.

FOR SALE—Reloading tools, etc., for cal. .30-'06 cartridges; 1 Ideal No. 10 special reloading tool with double adjustable chamber; 1 muzzle sizer; 1 shell expanding chamber; 1 Ideal shell resizing tool; 1 Ideal No. 5 universal powder measure; 1 Ideal No. 2 recapper and decapper; 1 home-made arbor press; 1 loading block; 400 150-grain metal patched bullets; 5 pounds powder, smokeless, for 1906 ammunition; 300 empty shells for .30 cal. 1906 ammunition. First check for \$15.00 takes the lot. Frank D. Elwell, 219 Audubon Park, Dayton, Ohio.

RESTOCKING—Springfields, Mausers, Krags, .22 Savage, N. R. A. and Newton rifles. Prices quoted upon request. Clarence H. Lyon, 610 E. Main St., Lansing, Mich.

FOR SALE—Pure bred Airedale puppies, three months old. Males \$12.00, females \$7.50. Herman H. Piggott, Hamilton, Va.

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FOR SALE—Krag sporter, new, 24-inch barrel, gold bead front sight, Lyman No. 34 with disc in rear, \$20.00. Winchester musket, cal. .22, 28-inch barrel, barrel perfect inside, fine condition outside, \$10.00. Colt single action army, frontier model, cal. .38 special, new 7 1/2-inch barrel, mechanically perfect, \$15.00. Will take \$40.00 for all. W. Rohrbacher, 851 E. 6th St., Erie, Pa.

FOR SALE—Brand new Krag rifle, two bandoliers, \$40.00. R. M. Thompson, 2229 E. 70th St., Chicago, Illinois.

WANTED—.22 center fire S. S. Winchester, with old style flat mainspring, with No. 2, 3 or 4 barrel, octagon or half octagon preferred; condition of bore not important. Burrough Mong, 122 N. Martin St., Muncie, Ind.

WANTED—Powder scales weighing accurate to 1/10 grain. Price must be reasonable. Walter Van Curen, R. 4, Boring, Oreg.

FOR SALE—Savage .22 N. R. A., new, \$17.00. Krag carbine, good condition, and 500 cartridges, \$18.00. Weiss 7x-Alpine Binoculars, new, in sole leather case, \$19.00. H. A. Sparks, 650 S. Detroit St., Xenia, Ohio.

FOR SALE—Model 52 Winchester .22 long rifle, perfect condition, beautiful stock, \$40.00; .250-3000 bolt action Savage, Model 1920, perfect condition, \$40.00. Both gun crank guns. Frank Ingersoll Farrell, 48 Halsted St., Newton, Sussex Co., N. J.

FOR SALE—Ithaca No. 1½ 10 gauge hammerless, automatic ejector, 32-inch barrels, both barrels full choke, very nearly new, \$55. Fox C. E. Grade 20 gauge double barrel, hammerless, automatic ejector, 28-inch barrels. Lyman sights, a beautiful gun, absolutely new, \$90. Full description given for stamp. V. S. Thayer, Readsboro, Vt.

FOR SALE—1917 S. & W. .45 revolver, with holster, like new, \$20. .22 Savage N. R. A. rifle, like new, \$18; with case, \$22. .20 Winchester reloading tool and mould, brand new, \$4. Want very good .22 L. R. Winchester Musket. N. C. Pierce, 64 Oak St., Norwich, Conn.

WANT Colt's officer's model, 7¼ inches, offer around \$20. For sale—Marble Game Getter, 12 inches, fine condition, extras, \$20. No trades. E. Richard Page, Norman, Okla.

FOR SALE—Brand new Savage N. R. A., model 1919, \$17.50; brand new Winchester .22 automatic, 1903 model, \$25.00; brand new Winchester .22 cal., 1906 model, \$16.00; brand new .22 Colt automatic pistol, \$23.00; .45 Colt, model 1909, fired about 40 shots, like new and perfect, with holster and cartridge belt, \$22.50; .22 Savage, model 1903 rifle, like new, with 3 magazines, \$14.00; Winchester 40-60, repeater, model 1976, in good working and shooting order, \$8.00. D. O. Arstutz, Ranson, Kans.

FOR SALE—Model 52 Winchester, perfect. Lyman 5-B front sight, 5 extra 10 capacity clips, \$40.00; model 94 Winchester .25-35, perfect, round barrel, half magazine, \$27.50; Marlin model 38, .22 caliber, octagon barrel, new, \$21.00; Remington 12-C "N. R. A. Target" grade, fine, Lyman 5-B front sight, Lyman peep with disc, \$25.00; Colt's .38 Automatic, military model, perfect, blue slightly worn, Partridge sights, 225 cartridges, \$34.00; Colt's .45 New Service, D. A., 5½-inch barrel, good, fine inside, \$16.00. Want new .22 Springfield, 1922 model. W. M. Gantt, Box 54, Elmore, Ala.

TRADE—Colt .32 automatic, good condition, for S. & W. .22 Regulation Police revolver, 3¼-inch barrel; also Krag carbine, good condition, for 20 gauge pump gun. J. L. Polk, 443 So. Madison Avenue, La Grange, Ill.

FOR SALE—Parker Bros. G. H. grade, double, 12 gauge, with sole leather case, 1½x2¼x14¼, 7¾ lbs. Full choke. Fine trap and duck gun, shot less than 500 times. Spotless inside and out. Very handsome stock, \$75.00. Sickness reason for selling. Also two good well-lined Buffalo robes very cheap. Ira W. Enos, 732 Lafayette Ave. S. E., Grand Rapids, Mich.

FOR SALE—Mauser 1918 anti-tank gun, perfect condition, Colt .45, 1917 model, fine, \$18.00. Belgian bolt action, pistol target model 22, \$5.00. Also a few World War relics and souvenirs. L. R. Wilson, 1113 4th St., Brookings, S. Dak.

SELL OR TRADE—9 mm. pre-war Luger outfit; 25 auto Mauser; several "inside" rifle barrels for shotguns; 6-x Zeiss prism binocular; .32 auto rifle, fancy, for Colt cartridges, all new. Have also (used) 8-x French binoculars, several old model rifles and revolvers, etc. Want—.30-'06 Springfield, as issued, perfect inside; 6-x monocular; books on arms, ammunition and gunnery. C. H. Goddard, Johns Hopkins Hospital, Baltimore, Md.

FOR SALE—One .35 Remington side action, in new condition, with bull leather case, \$27.50. Paul Gasser, Payson City, Utah.

FOR SALE—One Vion scope, 40-power, double achromatic, new, \$20.00. To Trade—One 1894 Winchester .30-30, new, for Winchester pump, 12 or 16 bore, 12 preferred. James A. Browne, 627 West Avenue 50, Los Angeles, Calif.

FOR SALE—Brand new, Star-Gauged Springfield, specially selected for the National Matches, with 35 rounds ammunition and sectional cleaning rod. \$35.00 Money Order will prepay the above to you. Star-Gauging Record will accompany the rifle. Address J. T. Stanford, Fitzgerald, Ga.

WANTED—Gun locks stamped "Fayetteville C. S. A." and Harpers Ferry 1806-8. Also Springfield rifle 1903-6, as issued. E. B. Bowie, 811 N. Eutaw St., Baltimore, Md.

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."

TRADE—Colt's Army Special, .38, 6-inch barrel. Want—Lyman receiver sight No. 48, disc. Sell—Krag rifle loading tools, nearly new, \$12.00. J. S. Rogers, Albany, Wyoming.

TRADE—Beautiful match rifle, like new, 2 stocks, double set of sights, worth \$50.00; for rifle scope, field glasses, motorcycle or high power rifle, .25 or .30 cal. Reference 1st National and Citizens National Banks. E. A. Hilkert, 303 West Main St., Knightstown, Ind.

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. J. A. White, 718 North Ave., Youngstown, Ohio.

FOR SALE OR TRADE—One brand new Stevens 414 Armory model .22 L. R. with Kerr sling and Stevens 8½ power No. 368 scope mounted, \$35.00. One used Ross Cadet Target model 1912 .22 L. R. bolt action, Kerr sling, Stevens 3¼ power No. 499 scope mounted; gun-crank condition, \$30.00. Two Winchester A-5 scopes; almost new; one cross hair, one Post No. 2 mounts and bases, each \$28.00. Various other firearms. Want shotguns. F. H. Deyette, 2 Frederick St., Worcester, Mass.

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

FOR SALE—Model No. 52 Winchester, mounted with a Lyman No. 48 sight, Winchester scope blocks, leather sling, and extra ten-shot magazine. In gun crank condition, absolutely perfect inside and out. First money order for \$39.00. Frank M. Owens, care Electric Light Co., 207 N. 19th St., Noblesville, Indiana.

WANTED—Sharps single shot pistol, must be in good shape; also could use a Remington single shot pistol. Address Chas. Pepin, 1218 East Maple St., Enid, Okla.

FOR SALE—Winchester Winder model musket, .22 caliber long rifle, Lyman micrometer wind gauge sight on tang, first class condition. Price, \$22.00. Has blocks for scope put on by Pope. A. J. Dionnie, 28 South Parkway, East Orange, N. J.

FOR SALE—.303 Winchester box magazine rifle, nickel steel barrel, new, never fired, cost about \$40 wholesale, will take \$35, or will exchange for '06 Springfield. One 45-70 Winchester, '06 in good service and accurate condition. Price, \$12.50. One heavy, old-fashioned English make duck gun, 10 gauge, D. B. hammer, serviceable condition. Fine for extra heavy loads. Price, \$10.00. Want to purchase some extra fine walnut at right price. V. F. Shafer, Needles, Calif.

SELL OR TRADE—Krag sporter, fine condition, shot less than hundred times. Throw in semi-sporter military stock, Winchester sub-chamber, 48 rounds service, 18 rounds 220-grain S. P. and 26 rounds .32 S. & W. Sell for \$30 cash or trade for .45 Colt S. A. 5½-inch barrel in good condition plus \$10. E. W. Robinson, P. O. Box 58, San Antonio, Texas.

WINCHESTER 12 gauge ventilated rib tournament grade trap gun, new, \$100. Winchester riot gun, 1897, \$30.00. Parker, 12 gauge, extra full 30-inch barrels, also extra barrels 60 and 70 per cent pattern, \$100. W. L. Rohbock, 807 Huron-Sixth Bldg., Cleveland, Ohio.

WANTED—Receiver for Colt .45 automatic model 1911. State price and condition. W. J. Winter, 323 So. 6th St., Goshen, Ind.

FOR SALE—Winchester .22 caliber model 52 rifle in new condition, \$55.00, or trade for Fox or Parker 12 gauge shotgun, double 28-inch barrels, bored full and modified. Must be in good condition inside and out. H. Priess, 3631-A McRee Ave., St. Louis, Mo.

FOR SALE—Special Winchester 55 rifle, originally made for N. R. A., chambered for '06 cartridges, re-chambered by Winchester for .30-40 cartridges; 26-inch No. 3 barrel, handguard, Winchester scope bases, Shotgun butt stock checked, steel butt plate. An excellent arm in perfect condition, \$30. One Krag rifle, brand new, \$15.00. One new Colt .22 automatic pistol, \$22.00. All guns fully guaranteed. H. D. Dodge, 1300 Powdertown Park Terrace, Minneapolis, Minn.

FOR SALE OR TRADE—Ross 280 sporting rifle. Like new, 26-inch barrel, Lyman micrometer rear sight, gold bead front; 80 cartridges, \$60.00. Want .300 Savage or good binoculars, Zeiss or Bausch & Lomb, 8-X40. Blair Davis, 813 Aiken Ave., Pittsburgh, Pa.

FOR SALE—.280 Boss, 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."

SELL—Krag carbine, standard carbine barrel with full length military stock. Leather sling and 100 rounds, \$8.00 worth of ammunition. Gun crank condition inside and out; money-back guarantee. A wonderful bargain at \$15.00 cash. Luger .30 with leather holster, detachable wood stock and 10 rounds soft nosed cartridges; fine handles. Barrel and action guaranteed perfect; \$14.50 cash. Savage N. R. A., with leather sling, guaranteed good condition or money back, \$13.50 cash. Draft or money-order must accompany all orders. L. N. Van Atta, care Citizens National Bank, Covington, Ohio.

FOR SALE—Aluminum butt-plate for Springfield, increasing length of stock one-half inch, \$1.50, or fitted with your trap, \$3. Checked steel shotgun butt-plates, man size, \$3. Bronze grip caps, \$1. Also all these articles and eight bases, barrel bands, and sling swivels made just as you wish, and engraved as you wish at special prices. Let us make the fittings for your pet sporter to express your own individuality. Whelen telescope holders, best on market, \$1.50. Jas. V. Howe, 3203 Benner St., Frankford, Philadelphia, Pa.

FOR SALE—One B. S. A. rifle, perfect condition, practically new, \$35.00. Capt. George R. Gawehn, 1440 St. Joe Blvd., Ft. Wayne, Ind.

FOR SALE—No trade—52 Winchester, 48 Lyman sight, perfect, \$45.00. .25-20 Winchester, 1892, Lyman sight, perfect, \$25.00. .38 S. & W. special target, new, \$25.00. W. M. Hira, Castalia, Ohio.

WANTED—Ideal reloading tool and moulds for .32-20 Winchester. State lowest cash price. A. B. Gleason, 604 Park Road, N. W., Washington, D. C.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912.

Of "Arms and The Man" published semi-monthly at Washington, D. C., for October 1, 1922. City of Washington, District of Columbia, } ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Fred H. Phillips, Jr., who, having been duly sworn according to law, deposes and says that he is the Editor of the Arms and The Man and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Name of Publisher, National Rifle Association of America, Washington, D. C. Editor, Brig. Gen. Fred H. Phillips, Jr., 1108 Woodward Bldg., Washington, D. C. Managing Editor, none. Business Managers, Executive Committee, National Rifle Association of America.

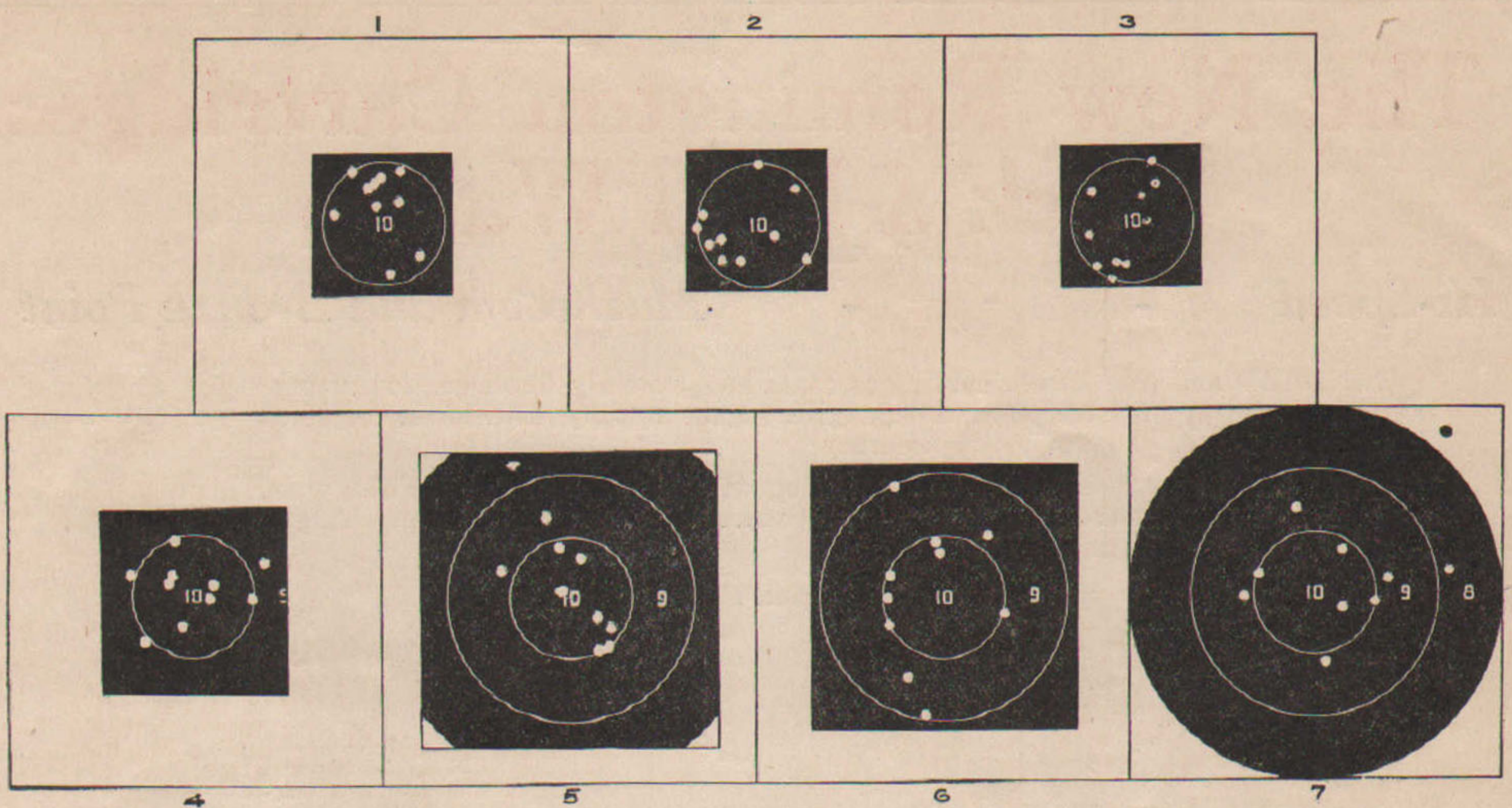
2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.) No stock issue. Lieut. Col. Smith W. Brookhart, Washington, Iowa, President; Major Frank Maloney, Knoxville, Tennessee, First Vice-President; Col. Fred M. Waterbury, New York City, Second Vice-President; Major A. B. Critchfield, Shreve, Ohio, Third Vice-President.

3. That the known bondholders, mortgages, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is..... (This information is required from daily publications only.)

F. H. PHILLIPS, JR.
Sworn to and subscribed before me this 6th day of October, 1922.
[Seal] CLARE DILLON,
(My commission expires May 10, 1923.)



Nos. 1, 2 and 3=Targets with U. S. .22 N. R. A. Cartridges
Nos. 4, 5, 6 and 7=Targets with Competitive Ammunition

These seven targets were shot by Mr. George W. Schneering, the well-known expert of Frankfort Arsenal in testing the leading brands of Long Rifle cartridges.

The targets (reduced about two-thirds) represent seven different groups

- Shot at 100 yards
- Under identical conditions
- In a machine rest
- With five different makes of ammunition
- In the new .22 Government Springfield rifle

The targets have been trimmed as shown merely to emphasize the difference in the sizes of the seven groups.

Groups Nos. 1, 2 and 3 were shot with U. S. .22 N. R. A. cartridges (all possibles). Groups Nos. 4, 5, 6 and 7 were shot with corresponding cartridges of four other makes.

What is there left for us to say?

UNITED STATES CARTRIDGE CO.
 111 BROADWAY NEW YORK, N. Y.

The New Remington Cartridges Pack a Real Wallop

Hi-Speed - - - **Mushroom and Bronze Point**

STANDARD and well known cartridges containing recently developed loads consisting of new bullets and progressive powders that give higher velocity with lower trajectory—a greater killing power—and equal or better accuracy.

There are thousands of owners of Remington and other makes of rifles who will welcome this chance to convert them into modern high velocity rifles without even changing the barrel, simply by using these new Hi-Speed loads.

The New Remington Hi-Speed Cartridges



.25 Remington
Hi-Speed Mushroom

Adapted to Remington Model 8 Autoloading and Model 14 High Power Slide Action Repeating Rifles



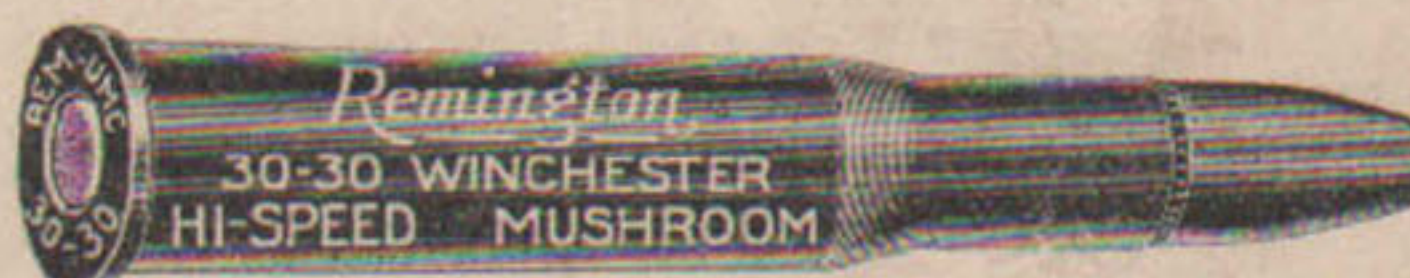
.25-35
Hi-Speed Mushroom

Adapted to Winchester Model 1894 and Savage Repeating Rifles



.30 Remington
Hi-Speed Mushroom

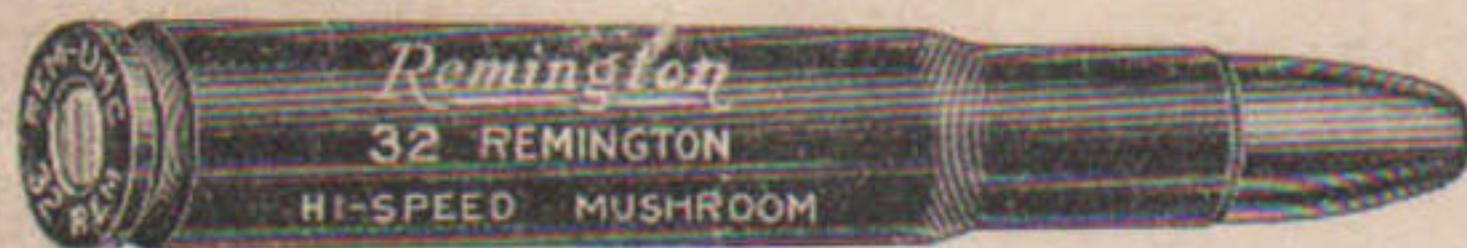
Adapted to Remington Model 8 Autoloading, Model 14 High Power Slide Action Repeating, Stevens and Standard Rifles



.30-30

Hi-Speed Mushroom

Adapted to Winchester Model 1894, Marlin and Savage Rifles



.32 Remington
Hi-Speed Mushroom

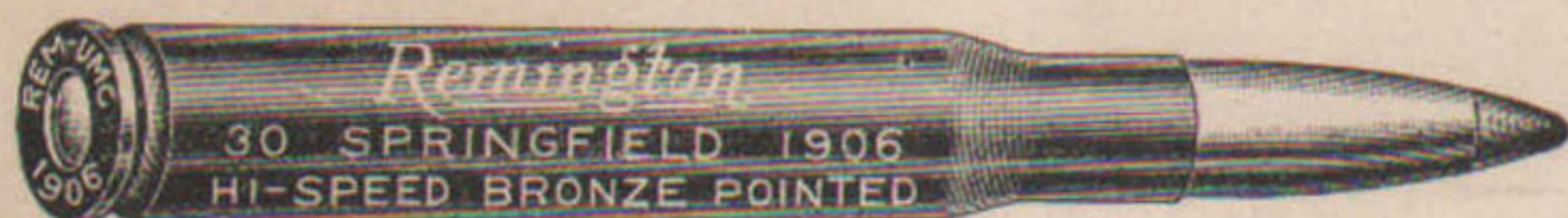
Adapted to Remington Model 8 Autoloading, Model 14 High Power Slide Action Repeating, Stevens and Standard Rifles



.32 Special

Hi-Speed Mushroom

Adapted to Winchester Model 1894 and Marlin Rifles



.30 Springfield 150 and 180 grain
Hi-Speed Bronze Point

Adapted to Remington Model 30 High Power Bolt Action, U. S. Springfield and Winchester Model 1895 Rifles



.30 Krag

Hi-Speed Bronze Point

Adapted to U. S. Krag and Winchester Model 1895 Rifles



Sectional View
Copper jacketed bullet
used in Hi-Speed Mush-
room cartridges



Sectional View
Bronze point bullet used
in Hi-Speed Bronze
Point cartridges (Mush-
room)

Write for Hi-Speed Cartridge Folder giving ballistic table and complete information

Remington Arms Company, Inc.

25 Broadway

New York City

Remington