

ARMS AND THE MAN

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JUNE 24, 1915



THE NATIONAL
MILITARY AND SHOOTING WEEKLY

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ARMS AND THE MAN

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Letters From A Red Leg.

BY MONTFORT.

BEING THE STORY OF A NATIONAL GUARD FIELD ARTILLERYMAN.

The following interesting letter is the first of a series written especially for ARMS AND THE MAN by a real field artilleryman who knows his business, which will contain much inside information about the galloping guns and the men who use them.

Somewhere in U. S., June 15, 1915.

MY DEAR BOB:

I DID not take me long to change my cadet gray for the O. D. of the National Guard. Here I am in Battery — F. A. — National Guard and a private at that.

You will probably smile when you think of your old cadet captain in the rôle of a private again after all the fun we used to make of the "tin soldiers" of the National Guard and how we would never join it unless they came to us with a commission.

You see, it was this way. When I got home I found father very much wrought up over the defenseless condition of the country and what would happen to us if we should be forced into war. He had been reading up on the subject and I had no sooner landed in the house than he was after me to make some use of my military training to help out. The next day we went down to the office and he called up the captain of the battery here and asked what the chances were for getting me a commission right away. I don't know just what the captain told him, but the O. M. got a little red in the face and growled the way he does when he is sore; but in the end he made an appointment for that evening in the battery armory.

We motored to the battery armory right after supper and found it out in the country with a long line of sheds for the guns, caissons, wagons and a few horses. Some of the members were there getting ready for a horseback ride and we almost stampeded the horses; or at least it looked that way for a few moments; but none of them seemed to care very much and they made the worst actor in the bunch come up and smell the machine.

The O. M. and the captain had a short talk while one of the men showed me around. Then they called me into the office and the O. M. told me he thought it would be a mistake for me to have a commission right away; that there was plenty of chance for me to work up if I would attend to business and learn the duties of an artilleryman from the bottom up. Then he told me to use my own judgment in the matter and either enlist in the battery or in one of the other organizations in the city. He said I could have the rest of the summer to loaf instead of the trip to Europe he had promised me; but that I must either put it in learning to be of some use in the country's service or get out and hustle for myself. I never saw the O. M. so worked up before and it did not take me long to decide I would be a "red leg." Father signed the papers right on the spot and almost before I knew it I was stripped and being examined. I used to think they gave a fellow some pretty stiff examination before they would let us play football, but this one was twice as severe. I passed all right and the captain swore me in right then and there. While I was taking the oath father stood up at attention straighter than I had ever seen him and there was a look on his face I can see yet.

After I was sworn in they measured me for my clothes and above all or rather below all, the captain himself measured me for my shoes. I knew they were particular about an infantryman's feet, but I never thought they would be so careful about a man who would either ride a carriage or a horse. I learned differently the first time I went for the 10-mile "rookie" ride and wore my civilian shoes. They seemed to be all right at first; but after the first 5 miles they commenced

to pinch like the mischief and I was glad when I got home and got them off. Your feet seem to swell while riding and unless your shoes are just right it is just as hard as a long march.

Of course I escaped the "awkward squad" and was put in the "rookie" gun squad.

We used to be told something about the field artillery at school and of course the last year we have read a whole lot about the work of the artillery; but I never thought for a minute that there was so much to learn.

The guns we have are 3-inch field guns, "Light Artillery," they call us, but after you have wrestled with the 115 pound trail for an hour or so, or moved the blooming guns and caissons "by hand" over the drill ground for an hour you think they are anything but light. The gun and its carriage weigh 2,445 pounds without the 75 pounds of ammunition they carry for emergencies (cavalry charge or the enemy catching you up short) then you shoot these four rounds and use your pistols; artillerymen are like the Spartans of old Herodotus "with it or on it." The limber, it always is stiff enough for yours truly and devilish hard to ride on until you get used to it, is all steel and weighs 942 pounds without any ammunition. It has a swiveled hook called the pintle on the back end which catches a ring in the trail of the gun carriage, called the lunette, and six horses pull the two. They use six horses so they can get the whole load, including ammunition, of 4,137 pounds, over any ordinary ground at a gallop if necessary; but the trot is as fast as they usually go. I don't know much about the harness as yet so I will leave that for another letter when I am better acquainted, although I know you will want to know all about that part of it. I can say this much. It takes some knowledge to be able to harness and drive the way some of the older men do and I am told they have to give the drivers a whole lot of drill and training although I don't see how they do it with only a few horses, some of the batteries have none at all and never see a horse except for parades or camp when they usually get just what the contractor gives them, unless they happen to go to camp with a regular battery as we are going to do in August.

They have another carriage and limber which is called the caisson. This is used to carry ammunition, seventy rounds, in the caisson with thirty-six in the limber. It is all steel like the gun carriage, parts of it being armor plate, the wheels, though are of wood. It weighs, empty, 1,303 pounds, and with the limber and ammunition, 4,232½ pounds. It takes six horses to handle it and they say they upset once in a while.

A gun and a caisson, with the trimmings, compose a section, and there are four gun sections and four caisson sections (two caissons) in a war footing battery besides which there is the battery wagon and the store wagon each with their limbers, one limber being filled with fire control instruments called the signal limber and one with blacksmith tools called the forge limber. The wagons are filled with supplies and spare parts sufficient for six months' supply in the field. The signal limber is usually put with one of the sections, the fifth, so it is always with the firing battery.

You will want to know something about the gun and the wonderful mechanism of its carriage so I will try to explain it to you as best I

can after my short acquaintance. Of course they instructed us in all the parts, but a fellow cannot learn much in the hour and a half we are allowed for drill and I have been going out to the armory in the afternoons and learning something about it.

The gun is a breech loader, of course, and by reason of the mechanism contained in a large tube underneath it called the cradle, its recoil when it is fired is almost entirely taken up by a system of springs, a cylinder filled with oil, a piston rod and a piston, throttling bars and a counter recoil buffer. The force of the recoil compresses the springs and forces the oil through small openings from one side of the piston to the other, this brings the gun to rest after a recoil of about 45 inches and then the springs return the gun without any serious jar to its place "in battery" ready for the next shot. In this way the aim is only very slightly disturbed and the gun can be fired very rapidly, in fact faster than the commands can usually be given.

The gun is fired by a cannoneer, No. 1, who sits on a seat alongside the gun and operates a lever. The old joke about "cocking a cannon" is true; only with these guns they are always cocked and as soon as the breech is closed they can be fired. It can be fired with a lanyard, but this is only done before the carriage has settled into place and in the guns we have it is harder and more dangerous as the gun recoils 45 inches and the man has to stand directly behind to get a fair pull.

The men at the guns are protected by an armor plate shield, part of which is stationary with the gun sticking through it, one part folds down and forms the top shield and the target piece or apron swings from the axle almost to the ground. It is hooked up when traveling. Just in front of the shield are two very comfortable seats with cushions; but there is nary a spring about to soften the effect of the rough ground and a fellow gets pretty well jolted sometimes. Underneath the seats are the emergency ammunition tubes.

Running from the axle back is a hollow steel box partly open and partly closed and slightly tapering until it ends in a sort of a plow with a lid on it to keep it from sinking too deep in the ground. This is called the trail and the plow is called the spade while the lid is called the float. Folding over on the trail is the only bit of wood about the carriage, except the wheels, it looks like a pick handle but it is called the trail handspike. It is great joy to straddle it and shift the trail this way and that.

The gun is sighted, *laid* is the proper term, by the gunner (a corporal) and No. 1 seated on opposite sides of the trail. The gunner on the left and No. 1 on the right.

The gunner has two sights, the open sight and the panoramic. They can both be used for laying directly on the target as you would a rifle, this is called Direct Laying. When the target is not visible, as in firing from behind a hill or two, the panoramic sight alone is used for getting the direction while the proper elevation is given by No. 1 using the Range Quadrant.

The panoramic sight is a small telescope or rather periscope so constructed that you can see behind you or at any angle by simply turning the head. It is graduated in milles, or mil as they call it for short, and it takes 6,400 mils to make a circle. A mil is one-one-thousandth of the range. That is a space 100 yards long is 100 mils at 1,000 yards, 50 mils at 2,000 and 25 at 4,000.

The range quadrant has a range dial graduated up to 6,500 yards with 50 yard graduations, this is connected with a level bubble so when a given range is set on the dial the gun is moved up or down until the bubble shows level and the gun is at the proper elevation for the range, provided your target is on the same level as the gun. If the target is higher or lower than the gun then the No. 1 is given "Sight 305 if the target is 5 mils higher or 295 if the target is 5 mils lower than the gun, 300 being used when they are on the same level in order not to confuse anybody with plus or minus. On both the gunner's sight and the range quadrant are levels for correcting for "difference in level of the wheels."

Both gunner and No. 1 can elevate or depress the gun to the maximum of 15 degrees elevation or 8 degree depression; but only the gunner can swing the gun on the carriage, traverse, we call it, one turn of the wheel being equal to about 8 mils or a total of 140 mils from one extreme to the other. As they never like to fire the gun when it is crowded way over to one side or another the man at the end of the trail handspike is ordered to shift the trail to the right or left. To help him they have divisions in mils painted on the shield and you are taught the number of mils a shift the width of the spade or between two rivets will give. In this way the gun can be laid pretty rapidly even on targets a considerable distance apart.

Speaking of speed: They drill it into you all the time. Everything that can be done at a run is done that way; but you will "get yours" if you let your desire for speed allow you to set an instrument off a

single mil, a bubble not fairly centered, or make any noise in getting ready. The artillery has to work silently until the moment comes for it to strike and then it must strike hard and fast. It is like a snake in the grass, you don't know it is there until you hear the rattle or the hiss and feel the strike. The men sit down or kneel behind their shields and do not jump up to attention when an officer comes near them; they are taught to keep silent and always on the alert as long as there is anything doing. The minute the commands stop or cease firing is given they relax at once only to jump at the first command which is usually "Battery Attention!" It is all a whole lot different from the stiffness and precision of the cadenced movements we learned at school and yet they do a lot of things in less than no time and the older men seem to fairly fly. Every man has his job and he is drilled in it until he does it almost automatically, at least that is what they work for, but it would take ten years at the rate we go, one and a half hours a week, to get it down that fine.

When the section is put in position for action (gotten in position for firing) the caisson is stationed about one foot from the gun on its left side, although it can be used on the right it is not so convenient as the fuse setter is then farther from the gun and as the breech block swings to the right it would get in the way of loading, the door which is bullet proof is raised and the apron and bracket fuse setter are lowered. No. 3 then sits down with his back against a wheel and with the fuse setter almost in his lap is ready for business. The other two men, Nos. 4 and 5, attend to getting the ammunition from the caisson, setting the fuse and loading the gun.

The fuse setter consists of a range dial and a corrector scale on the top, a conical hole in the center to fit the shrapnel fuses and places to catch the stud and stop the turning of the fuse. When commands are given they come like this Corrector 28, No. 3 sets his corrector scale so the pointer reads 28, 3,000 (range is meant but not spoken) No. 3 turns the proper crank until 3,000 shows at the pointer. The shrapnel is put in by No. 5 and given a partial turn and then No. 4 finishes turning it until it comes against the stop when he puts it in the gun and No. 1 closes the breech and fires the piece at command of either the gunner or the chief of section (sergeant) according to the kind of fire being used.

The commands are something like this, and you have to look alive to get them as they come pretty fast after they think you have gotten to the point where you can do fairly accurate work: "Battery Attention!" "Right from the right!" (meaning the right gun of the right platoon fires first), or "Right from the left" (meaning the left gun of the right platoon fires first). They seldom if ever fire first with the left platoon unless they use all four guns of course. "Deflection 2,640! Close by 5! Site 305! Corrector 28! 3,000! Fire!" Then they add or subtract 5, 10, 20 on the deflection. Open or close by 2, 5, or 10 as the case may be. Up or down (on the corrector) and change the range first by 400 yards then by 200 and finally by 100. Sometimes the battery commander (captain) will be right in the battery and give his commands directly; again he may be a little distance away and communicate with a magaphone; again he may be a hundred or more yards away, then he uses a telephone or signal flags.

The men of the battery are divided into sections under command of a sergeant with a gunner corporal and a caisson corporal. Part of these are drivers and the rest are cannoneers. The men who actually operate the gun are called the gun squad which consists of the two corporals and not less than five privates. The caisson corporal is usually in use as a signaler or scout and he really is not much use around the gun for drill purposes. The men are told off in whole number and each man has his particular duties for each movement or command. Every man is drilled in the work for each position. Sometimes they drill with reduced numbers and the duties in each case are divided around, then you do have to "hump."

I have told you a lot more than we have had at drill thus far, but the captain gave me some books and I have been studying up and have also put in a good deal of time around the armory. The only objection to the latter seems to be that there is always a bunch of work to be done and it is overalls for yours truly every time I drop around. I don't mind the work or the dirt, but it surely opens one's eyes to what it means to keep a field battery in good order all the time. I have also had a few lessons in horseback riding under the Instructor-Sergeant and although I have ridden a little I have a lot to learn. We have not been allowed to use saddle as yet and sitting down is a trifle painful.

My ideas of the National Guard have changed a good deal and I feel ashamed of myself every time I think of how I used to scoff at it. While some men come in because they think they can have a lot of fun, the great majority are dead in earnest about all they do and seem to be anxious to learn all there is to learn and the officers

work as hard, if not harder, than the men. The captain seems to be at the armory almost all the time, although he gets no pay.

They are going to take out a platoon mounted on Saturday afternoon and march out somewhere in the country and bivouac over night and come back another way. The first sergeant told us recent recruits who had gotten "on the guns" we could go along; so I will tell you something about it in my next.

Yours,

(To be Continued.)

DICK.

GENERAL BOARDMAN SPEAKS.

GEN. CHARLES R. BOARDMAN, for some seventeen years Adjutant General of the Wisconsin National Guard, who was in charge of the reorganization of the Guard and its equipment for active service during the Spanish-American War, and whose broad outlook on military affairs and wide experience in dealing with National Guard conditions all over the country are well known, has recently given expression to his ideas on the subject of military preparedness and the use of the Militia to this end. General Boardman expresses himself as against placing a heavy burden of taxation on the people for the purpose of excessive armament, but emphatically declares himself in favor of all reasonable preparation for adequate defense and for the maintenance of the integrity of the Government.

He proceeds along the following clear and sane lines:

"I believe the Regular Army of the United States should be increased and maintained at not less than a total effective strength of 500,000; that it should be provided with an adequate Reserve.

I favor an increase in the strength of the Organized Militia, known as the National Guard, and provision for an adequate reserve for it, together with full equipment and adequate training, so that when ordered out for service its units in organization, numbers and equipment will be identical with those of the Regular Army; its training as near equal the latter as time and conditions will permit.

For this purpose I advocate increased financial support from the United States Government and with it should go greater control over the State force in time of peace by the War Department. The Organized Militia of the States should be ordered into service by the President, not asked to volunteer, and when so ordered, all control over the troops on the part of the State should cease absolutely and be lodged entirely with the United States Government.

I believe in the complete organization, not on paper, but in fact, of all the Militia into the higher units. This should be kept up and not allowed to wait until hostilities break out or appear imminent. All officers of the higher units should come from the Regulars. If I had my way, no Governor would issue any commissions for offices higher than the grade of colonel. If professional soldiers are not better than volunteers in time of war, there is no use for Regulars.

The benefits of maneuvers are very great. The training given from the highest officer down to the private is invaluable. There should be more of them. They should extend over a period of thirty instead of ten days and the mobilizations should include greater numbers of troops than has been the custom.

In my opinion the National Guard (or Organized Militia) of each State should be entirely divorced from police duty. The National Guard should be used in war, when needed in times of disaster resulting from floods, cyclones, conflagrations, earthquakes and the like, or in case of conditions equivalent to war, but not otherwise. The primary duty of the Guard should be national defense. To use it to attempt to settle economic questions produces more or less unsatisfactory results. It makes the service unpopular among the men most fit for military service, who make the best recruits, and places the members of the Militia in a position where they are subject to both persecution and prosecution. The Organized Militia should be popular with and have the support of all classes. To relegate police duty to the proper branches of State, county and city government and not unload it, with all its responsibility on the National Guard, will give that organization the universal popularity it deserves.

The National Guard, in my judgment, should not alone always be ready for instant and efficient service in national defense, but it should be the great training school for experience in military matters for the masses of our people. Its work should be supplemented by the rudiments of military drill in all the public schools.

Gallery target practice should be taught in the schools and all the great rifle ranges, which are slowly increasing throughout the country, should be thrown open for school boys and civilians for proper instructions in handling and firing the rifle and not maintained for the exclusive use of the military. These methods would help to produce recruits for the Militia, and through such plans a goodly portion of our citizens, of military age and physique, would be able to make themselves of some use as volunteers to the nation for national de-

fense besides simply offering themselves as food for powder. Lectures on military subjects in educational institutions should be more common and the extension department of the University of Wisconsin could well afford to devote some time to at least preliminary military instruction, using Army officers on duty in the State and National Guard officers as lecturers and instructors.

It should be provided by Congress that the great bulk of the specialized branches of the service be provided for and maintained in the Regular Army. The States can furnish, and keep in a fair degree of readiness, infantry and medical corps units and sanitary troops, as also a small quota, but in most States a very small quota of artillery, cavalry, engineering and signal corps units. These special branches call for special professional training and it should be the business of the United States to supply them. They not only call for officers who are highly specialized, but they are expensive to equip, expensive to train, expensive to house and expensive to maintain. To arbitrarily assign a proportionate number of these special units to any of the States unless a State is able and willing, is wrong. If a State can and will maintain some, all right; but in the main this work should be that of the United States, for the central Government can do it easier and in the long run can do it much better.

When a National Guard regiment is ordered out for war all preparation should be made in advance to gather and train recruits to fill its ranks as they become depleted. This should be the work of the State and it should be well done.

Organizing and organizing continually new regiments provides commissions for men ambitious to become officers, but it will not supply as efficient fighting troops as will the maintenance of the old regiments continually supplied as needed with good recruits. The fine records of many of the Wisconsin regiments in the Civil War are signal proof of this, for in this State during that war, efforts were made to replace losses with good recruits.

To carry out these plans more financial aid to the States from the United States will be required, but at that the expense will be less than by other plans. To maintain a soldier in the Regular Army costs about \$1,200 a year. For from \$300 to \$500 annually a volunteer with fair training can be maintained and this volunteer while holding himself ready to serve will be earning his own living at his regular civil occupation.

Increasing the National Guard to war strength with an adequate reserve would give, in addition to the Regular Army, an available force of from 250,000 to 300,000.

Finally, I would change the name National Guard to United States Volunteers. Back of the Regular Army and the United States Volunteers there should be full authority, apportionment to territory according to population of the kind and numbers of troops to be raised, reserve lists of available officers and men, a reserve of full equipment and complete plans for organizing a great national Volunteer Army.

Not to give prompt and adequate attention to national defense will be suicidal in the final analysis. To provide it there is no need of burying the nation in debt nor cause to fear the creation of a military party that will dominate the affairs of government. As in all questions in dispute the correct position is usually at neither extreme, but rather more a middle ground. The plans I have crudely written are in part in force now. Complete them, provide for a national military policy and a national council for defense and I believe, with a national pledge to work and strive for humanity, rather than for territory and the dollar, our future will be reasonably safe."

MILITARY RIFLE SIGHTS.

TRULY, if some of the sight designers would consent to go through a course of sprouts in target shooting, says Edward C. Crossman, United Service Magazine, and then would watch for a few hours a demonstration of field firing with ball cartridge, their products for the fighting man's rifle might be considerably improved.

Few riflemen have a kind word for the military sight found on most fighting rifles. Tasting the joys of the peep or orthoptic sort, they refuse to do aught but curse the open variety. Experiencing the forbidden pleasures of a peep set close to the eye, they cannot find anything virtuous in the peep set farther away, as on the United States New Springfield. Dallying with a windgauge for every vagrant breeze, they cry loudly against the sight with no lateral adjustment.

They demand vernier or micrometer adjustments on the rear sight to give them fine changes in elevation. They request, each and every one, a different form of front sight as the one which, suiting their individual tastes, is therefore the best sight for all men and all purposes.

The sight designer is thus 'twixt devil and deep sea, cursed by all men that shoot if he turns out strictly a fighting sight; his name *anathaema marantha* among military men if he lists to the voice of the

siren and puts micrometers and windgauges and things on his rear sight.

True, if he is of the nation of the Argentinos, his problem is a simple one. All he need do is to fit up the rifle with the plainest form of ramp sight, as on the German Mauser, and then allow the target shooters to add to the rifle any old sight they fancy. And, if said sights get into a contest wherein are prescribed only the sights of the army rifle as issued to troops—he can buy the fancy sights, fit them on the team rifles, and issue them, assuring the other team that said sights are the regular equipment of the sharpshooters of the army.

Such was the cheerful tale of the Argentino rifle team in the 1913 Pan-American and Palma matches—and they got by with it, also, which is more to the point. The fighting rifles appeared “dolled up” with the finest sights of English make, with vernier adjustments fore, aft, and amidships, with six-hole eye cup close to the eye, and every other little thing the heart of the target crank could desire. And they shot through the great Palma match with said sights—the regular equipment issued to the sharpshooters of the Argentino Army. Scandal hath it that all the said sharpshooters were on that rifle team—but truly, one should not listen to scandal.

Departing from the province of fiction, and getting back to our problem, the task of the modern rifle designer in thinking up proper sights is this: he must evolve a rear sight that will stand the hard knocks, the sand and the rust of a protracted campaign. It must be easily moved, must lock itself, must afford readings visible if possible to the file closers, and its manipulation must be plain to the boniest bonehead of a private that ever stepped from the south end of pick handle, to the butt of a fighting musket. Also this rear sight, to be in line with modern optical knowledge and modern sight construction, must not perpetrate and perpetuate the old error of an open notch, whether it be U or V in shape.

If the sportsman making his way through the roughest of rough country finds the peep sight worth enough to him to pay several dollars additional for it, and finds it strong enough to stand the racket; if the target shooter finds the peep sight adding enough to his scores to make it worth while bedevilling a War Department for ever and ever over its absence, then is there no use in the designer of sights for a fighting rifle ever trying to get by with the old and tiresome statement as to the impracticability of the aperture or peep sight.

It is at once the simplest of all sights to use, and the most accurate in its results. No question is there of fine or coarse sights, of a front sight standing high in a notch and putting the bullets over the top of the objective, or of another pulled nearly out of view and sending its own bullets into the dirt far short. Changes in light affect it not at all. The objective is clearly seen through a properly placed peep, it is never plainly seen through a notch. Give the beginner, provided he is not rattled into fits, a sight equipment that will permit him to hit merely by putting the front sight on the objective, and you've added 100 per cent. to the effectiveness of that man.

The peep sight, of proper size, and in proper position relative to the eye, hardly enters into the field of vision so far as its appearance goes, although in reality it may be quite heavy rimmed and quite sturdy in construction.

A case in point is a sight on the writer's sporting .280 rifle. Here the sight is a disc one-fourth inch in diameter. The aperture is less than one-sixteenth inch. When the eye is held 4.5 to 5 inches from the aperture, and focussed sharply on the front sight and the objective, the disc suddenly fades out to the appearance of a very thin rim, hardly interfering with the vision.

Front sight, and objective, and the country for miles about, all are in plain sight, only the thin rim, hardly obtruding into the line of sight, remains of the heavy disc with the small hole through it.

Here is no question of fine sight or coarse. The eye sees only the front sight and the thing to be hit, once it has looked at the rear to make sure it is looking through it. Who will say that such a sight does not add enormously to the chances of hitting an ill-defined objective; that such a sight does not come nearer to the automatic sighting necessary in the case of the excitable man, than the old crude bar with notch cut in it, far up the barrel, and requiring conscious effort to bring the front into proper position with the rear?

There are peep sights and peep sights. A sight may have a hole in it instead of a notch, and yet be most useless for fighting. The United States New Springfield offers a case in point. Here is a foolish little hole, .04 or .05, or .60 inch in diameter, bored in a plate situate from 10 to 8½ inches from the eye, according to the position of the firer. In any but good lights, a poorly defined objective is invisible through this penurious peep. It is unusable for fighting. Evidently it is a compromise with the target rifleman, and the net result is a sight not particularly satisfactory for either branch of the work for which a military rifle is used.

On my own rifle, used for target purposes, the aperture sight in prone work is between 3 and 4 inches from the eye. The aperture is .06. The difference is that through this aperture—generous in size because of the closeness to the eye, I get a sharp, excellent view of the target, and the country around it, with perfect definition of front and objective, instead of straining my eyes trying to pick up the tiny pencil of light coming from the same size holes three times as far away from the eye.

Under fighting conditions I should say that the peep sight, of generous size, gently interposing itself between eye and front sight, would possess an efficiency, as compared with the open sight, as three is to one. This, as pointed out, not only because of the greater distinctiveness with which the front sight may be laid on the objective, but because of the lack of conscious effort to get the front sight in the proper position with relation to the rear sight.

The Canadians, swayed perhaps by target shooting considerations, fitted many of their late Mark II double star and all Mark III Ross rifles with a peep tangent sight at the bridge. It is, in fact, so far back that it strikes the firer on the forehead, and on rifles fired carelessly and hastily from trenches, the soldiers would undoubtedly get a hearty banging in the forehead before the fight was over. This has been overdone. The full efficiency of the peep principle can be realized without in the least endangering the shooter's face or eyes.

Then our ideal fighting sight, with the virtues of the aperture realized and embodied, should have a quick, self-locking, and easily released elevator arrangement, with large plain figures for range marked at the stops. In this respect, the sight on the German Mauser is an excellent one, although too far forward in position for a peep arrangement.

But, excellent as this arrangement of positive settings for each 50 yards might be for fighting, the roar of horror that would go up from the target gentlemen can be easily imagined. Long-range shooting at the target with such a sight would be a physical impossibility. A 50-yard move at the 1,000-yard range, with a cartridge having around 2,800 foot-seconds velocity, would equal from 3½ to 4 feet change on the target. Ergo, did Tom Shark, the long-range champion, find himself with a pair of 6 o'clock 3's for his two sighters at 1,000, he could make his choice between trying to hold higher on the paper, or taking the rest of his score out in 3's, or of changing 50 yards and going over the whole target on the next shot. Or he might pull out the bullets and remove just enough powder to make a 50-yard sight change put him just into the bull's-eye. Note for future rifle-men's equipment—pair of pliers for removing bullets from cartridges.

Now if we can conjure up mechanically a sight with strong, positive, self-locking press button release for 50-yard divisions, and then a fine micrometer adjustment for splitting up the 50-yard divisions into minutes of angle, we've got a sight that should be well suited to both games. The rifleman's notebook would read then something like: “Elevation 950 plus 7,” meaning that his elevation was the 950-yard notch in the ramp or other form of sight elevator, plus 7 divisions on the micrometer or vernier fine adjustment device.

Of course, in active campaigning there is always the chance that such fine changes would “freeze up,” because of rust, or dust, or blows, but it would not matter. The positive 50-yard elevating movement would be left, and after the campaign the rifle would not be fit for target shooting anyhow.

The United States New Springfield sight is not suited to rough work, and yet it is not suited to fine target shooting as well as are the fine special sights like that on the Ross Mark III, or some of the fine English aperture sights.

This sight embodies mistakes that should not be perpetuated in newer rifles. The slide, carrying the notch and the aperture, and working up and down the standing or tangent portion, is locked by turning up a thumb-screw. If the thumb-screw is not turned up firmly, the slide will slip during firing. Excited men are not likely to be very careful in this respect.

The marks for elevation are not easily read, either by the firer or by the file closers who may check upon elevations during firing.

Perhaps the worst phase of this sight lies in the multiplicity of aiming notches and apertures.

There is first, when the leaf is lying down, the battle sight, a notch of “U” shape, adjusted to bring the bullet back to the line of sight at 530 yards. Then when the leaf is raised to the vertical, the green man, with bullets cracking by his ears, is confronted with a pleasing assortment of sights, thus—

A notch in the very top of the leaf, cut in the transverse bar; a notch cut in the top of the slide itself; a triangle milled out in the slide, with a notch in that, and an aperture in the leaf below that. That is, all the recruit has offered him “in confusing abundance” are one aperture and four different notches.

With green men, hastily armed, and drilled more in the rudiments of "Squads right," and forming line of skirmishers, than in rifle firing, there would be no need for the German scheme of "two sights," for a given range to secure dispersion of fire. The catholicity of taste among these four notches and one aperture would present a dispersion of fire ranging from 300 to 2,850 yards. Also I forgot to mention the invariable recruit trick, when told to use the aperture, of aiming through the small irregular-shaped hole left between the bottom of the slide and the base of the leaf. This makes another choice for our consideration.

There is little excuse for omitting the windgauge from a sight.

Here is no fine and useless quirk of the target man, even though installed on the rifle as a sop to that particular Cerberus. It does not the least harm when designed mechanically and made with some attention to design. It does not need to be used in battle; the worst it can do is to rust tight. Also it gives a chance to zero up the rifle, should chance afford time to do target shooting before the ball opens.

The United States New Springfield could be used as a pry, a baseball bat, a club, or the south end of a viciously handled sword bayonet without hurting the windgauge, or without removing it.

The windgauge sight on the Ross rifle I do not like. Through lack of proper means to move it, a paltry milled spindle which must be rolled over by the friction of a finger, but without means of allowing a good grip with thumb and forefinger, it must be left easy working, else its means of adjustment is not sufficient to budge it. This would result, in active service, in a lot of temperamental sights, adjusting themselves betimes, and perhaps ruining the shooting of rifles and men, themselves capable of inflicting heavy damage on the enemy.

The ideal windgauge should have a snicking arrangement, both for the information of the target man, and for the purpose of preventing movement of the sight in service. This snicking spring can easily be adjusted in such fashion

(Continued on page 250.)



THE MAN WITH THE GUN.

Written by Capt. Roy S. Tinney, after reading Markham's world-famous poem, and illustrated with a drawing from life by Frank Day.

Bowed with the weight of bandoleers
 He leans
 Upon his gun
 And gazes to'rd the land
 That looks to him to guard it
 From envious powers that would possess our wealth;
 He fills the emptiness of ages
 With his energy
 And on his shoulders bears
 The burden of our peace
 That needs his strength;
 Duty makes him dead
 To doubting and despair,
 A man who fears not
 And who always hopes.
 Stolid, yet swift,
 The mighty god of war
 Is raised by him
 To higher dignity.
 Who loosens and lets fly the lead
 That hews down tyranny?
 Whose hand sweeps back the tide
 Of panic and defeat?
 Whose fire shoots out
 The hearts of those who would attack us?
 The man with the gun
 And don't you forget it!

Army and Navy News

His Status Changed Anyway.

She—Isn't Jack just wonderful? He's already been promoted to Field Marshal.

He—From private to Field Marshal in two months? Impossible!

She—Did I say Field Marshal? Well, perhaps it's court-martial. I know it's one or the other.—Passing Show.

Enough for George.

"Would George enlist?"

"No, I don't think he would."

"What's the reason. He comes from fighting stock."

"That's the reason. He's soured on fighting. His grandmother is a Colonial Dame, his aunt is a D. A. R. and his mother is a militant."—Cleveland Plain Dealer.

SOMETHING IN THIS.

MUCH is being said at the present time about, first, second and third reserve lists. Also many articles are appearing in regard to the efficiency of our National Guard, and the lack of patriotism shown by our young men in not enlisting. Now, I can't attach "Maj.," "Gen.," "Capt." or even "Lieut." to my name, but am just an humble citizen with a few ideas of my own.

Why don't more young men enlist in the National Guard? My observation has been this; that if the National Guard was organized and drilled for the purpose of training young men to be soldiers only, the trouble of enlistment would be eliminated; but, when they are subject to call for strike duty and riot duty, they draw the line. Take, for instance, the man who belongs to some trade union. If his union declares a strike he is forced to go out whether he wants to or not. If he happens to be a member of the National Guard and the strikers become so radical that it is necessary to call for State aid, he is forced to turn against his working companions or violate his oath of enlistment. This man will not enlist.

Again, why is it that there is a lack of respect for the uniform? I don't believe it is because the express man, the delivery man, motorcyclist, etc., wear it, but I do believe it is because the moral standard is placed too low, whereas the physical standard is perfection. Raise the moral standard for enlistment in our National Guard and enlistments will come easier.

While we are hearing so much about a "greater Army," "a more efficient Guard," and "reserve lists," why can't we have something along the same line in the Militia, for the purpose of training the citizens to be soldiers?

Have first, second and third companies. Let the captain enlist his full company in the regular way as now provided for. Then let him enlist a company with its own officers, who are willing to drill twice a month and attend camp one week in each year. A third company could be enlisted from citizens willing to drill once each month without being subject to anything except discipline, all three companies to drill in the armories with the same guns, the regular company only to have uniform.

I believe many citizens would avail themselves of the opportunity to become proficient in military tactics in this way, and in case of war, and an urgent need of assembling a great army, many of our citizens would already be drilled to such an extent that it would greatly assist in quickly arriving at perfection.

W. K. PERDUE.

REGULAR TEAMS FOR THE NATIONAL MATCHES.

THE plans for the Army teams which are to participate in the National Matches to be held on the Florida State range near Jacksonville, in October, have been decided upon and will be announced at an early date in department orders.

Capt. Charles A. Romeyn, 2d Cavalry, will captain the Cavalry team. Captain Romeyn is now stationed at Fort Ethan Allen, Vermont. He has been for several years a member of the Cavalry team in the National Matches at Camp Perry and captained the Cavalry team in the Divisional Matches held at Sea Girt, N. J., last year. At the last National Matches, held at Camp Perry in 1913, the team match was one by the Cavalry team, captained by Capt. William H. Clepton, Jr., who will be the adjutant of this year's National Matches.

The members of the Cavalry team will assemble at Fort Sheridan, Illinois, near Chicago, about July 10. Three enlisted men from each regiment of cavalry in the United States, selected by their regimental commanders and other officers and men specially selected for the purpose, will go to Fort Sheridan for the tryout.

The Infantry team will be captained by First Lieut. John F. Clapham, 19th Infantry. Lieutenant Clapham's regiment is now on the Texas border. He has been selected by the War Department for duty at the School of Musketry at Fort Sill, Oklahoma, and will enter upon those duties at the conclusion of the National Matches. He has for several years been a member of the Infantry team which has won so many laurels at the National Matches.

The Infantry tryout will take place about July 10 on the Texas border. Three enlisted men from each regiment of the 2d Division and other specially selected officers and men will join the tryout and when the team is selected about August 1, it will go to Fort Sheridan for practice and training.

The War Department has announced that a regiment of infantry from the Texas border will be sent to Jacksonville, Fla., for duty at the National Matches, which take place on the Florida State Rifle range near Jacksonville, this regiment to be selected by the commanding

general of the Army division on the Texas border. It will reach Jacksonville not later than September 27 and will serve on the range during the matches of the Florida State Rifle Association and the Southern Rifle Association, as well as the matches of the National Rifle Association and the National Matches proper.

The Navy Department has agreed to send 500 marines from its mobile regiment at its advance base at Philadelphia. This regiment will go to Jacksonville on a naval transport and will arrive early in September to take advantage of the offer of General Foster, the Adjutant General of Florida of the free use of the range for their regular target practice before the series of matches begin.

Another new feature will be that the soldiers and marines will keep the whole range open for practice so that the shooters who arrive early can use without charge any part of the big range not being used for matches. Formerly no provision was made for this free practice and many teams preferred to remain on their home ranges for practice instead of going to the National Match range for the preliminary matches. The War Department has announced that the commanding general on the Texas border will select twelve range officers to accompany the National Match regiment in addition to the officers who belong to the regiment and the other details as range officers will be restricted to special selections made by reason of peculiar fitness of officers not above the grade of captain for duty as chief range officers.

FOR THE HORSE.

MARCUS HORTON, author of the recently published novel, "Bred of the Desert"—the story of a horse and his owner—has approached in fiction what the Russians have done in fact. He recognizes the great service of the horse to man in peace and makes one of his characters repeat an imaginary prayer of the horse to his master. The Russians have put into their war liturgy the following petition for horses: "And for those also, O Lord, the humble beasts, who, with us, bear the burden and heat of the day, and offer their guiltless lives for the well-being of their countries, we supplicate Thy great tenderness of heart. For Thou hast promised to save both man and beast and great is Thy loving-kindness. Lord have mercy!"

OUR ATTITUDE APPRECIATED AND UNDERSTOOD.

ARMS AND EXLOSIVES, England, in a late number says: "American Neutrality.—ARMS AND THE MAN contains in its leading article for the issue of May 13, a magnificent exposition of American opinion on the sinking of the *Lusitania*. Dignified throughout with judicial impartiality, the article absolutely condemns Germany for this violation of international morality. The suggestion is expressly debarred that the American nation as a whole should fail to follow whatever lead the President should decide to give, the reason being that "the situation is far too grave to justify it being complicated by internal dissension." A neutral, feeling as America feels, is a great asset on the side of a combatant which has earned the double sympathy bred out of fighting cleanly against an antagonist which knows no scruples. By the force of circumstances the services which neutral Americans can offer alike to both sides have been wholly rendered to the Allies. When sentiment raises these services higher than the commercial level America's definite abandonment of the neutral attitude is not necessarily an unmixed benefit. There is no question of cloaking real alliance behind the privileges of neutrality, for the position is entirely above board. America has been honestly desirous from the start of holding herself clear of the turmoil of European conflict. But her dignity as a cosignator of the various Hague rules has been constantly assailed by violations of these rules. To this extent she has her own quarrel with Germany, and the moderation she has exercised shows how sincere has been the desire to retain an even balance between the conflicting parties. That the balance has been on the sway is no proof that she favors Great Britain, but only that the witnessing of wrong creates a just indignation against the doer of it."

"Economy has its pains as well as its pleasures," says a Washington preacher, "if the experience of an old darky of my acquaintance in Virginia counts for anything.

"One spring, for some reason, old Mose was going round town with a face of dissatisfaction. When questioned, he poured forth a voluble tale of woe in these terms:

"'Marse Tom, he come to me last fall an' he say, 'Mose, dey's gwine to be a hard winter, so you be keerful, an' save yo' wages fast an' tight.'"

"'An' I believe Marse Tom, yassuh. I believe him, an' I save an' save, an' when de winter come it ain't got no hardships, an' dere I was wid all dat money just thrown on mah hands!'"

ARMS AND THE MAN

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EVERY THURSDAY

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Associate Editor
ASHMUN BROWN

Communications.—The Editor will be pleased to receive communications on timely topics from any authentic source. The correspondent's name and address must in all cases be given as an evidence of good faith, but will not be published if specially requested. Address all communications to ARMS AND THE MAN. Manuscript must be fully prepaid, and will not be returned unless accompanied by sufficient postage.

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

DIVERGENT VIEWS OF PEACE.

There are those in the United States who maintain that William Jennings Bryan, late Secretary of State, performs no useful service in the body politic and is a national liability rather than a national asset. With such persons ARMS AND THE MAN is not in agreement. We admit to a fondness for Mr. Bryan; he typifies so accurately the things for which we do not stand that he is a veritable boon to these editorial columns.

Since he retired from office, we are told on the reliable authority of the newspaper statisticians, that his average daily output of words anent the reasons for his resigning and in regard to his ideas of how to obtain peace in the world has exceeded 1,500. It seems more, but we are willing to accept the statement as accurate.

All of these words, taken in connection with the recent meeting at Philadelphia of the League to Enforce Peace, American Branch, have achieved the highly useful purpose of making clear the dividing line between two opposing schools of peace advocates in the United States. Mr. Bryan's school is insistent on peace at any price; the league aforementioned is for peace if we have to fight for it. "We are here to enforce peace," said A. Lawrence Lowell, president of Harvard University, in explaining the league's attitude. "When you fight a forest fire you fight it with a backfire. We have here a means to discourage war, and what that means is the threat to use force."

It is very hard to extract from Mr. Bryan's large output of eloquent words a precise definition of his program to secure peace. There are so many words that helpful ideas seem lost in the jungle of them. However, it would appear that the Bryan program embraces, first, a combined effort on the part of right-thinking people to "crystallize the sentiment in favor of peace into a coercive force, for public opinion at last controls the world;" second, that the nations of the world enter into treaties providing for an investigation by a permanent international commission of every dispute that may arise, with decision reserved for one year; and, third, liberty of action on the part of each nation at the end of the year to do as it bally well pleases, fight or quit.

With all modesty, ARMS AND THE MAN submits the suggestion that the difficulty in the way of getting the nations of the world into a compact of this sort at this time is rather larger than it has been before in recent years. If, as Mr. Bryan declares, "public opinion at last controls the world," that controlling force seems just now quite

warlike. Peaceful words, even if uttered with unanimity by the 100,000,000 of Americans, we fear, would not have an appreciable effect on the peoples at war, whose number is greatly in excess of the number of Americans.

But, granting that the nations of the world have come into the Bryan compact to "wait a year," what would be the immediate result? Would that put a stop to a race for superiority in armament and preparation for war? Viewing men and nations as they are and not as Mr. Bryan would have them, it occurs to this newspaper that it would simply encourage a redoubling of effort. With war a possibility, even a remote possibility, at the end of a twelve-month, what nation would do nothing save hope for the best?

The League to Enforce Peace proposes a different remedy. This Philadelphia meeting has consolidated the sentiment, heretofore extant in many quarters, in favor of what amounts to the creation of an international police force to preserve the peace among the nations. Its program is quite definite. First, there is a proposal that the nations unite in a combination or league; so far being in line with the Bryan proposal and meeting the same difficulties; that, when "justiciable questions" arising between the signatory powers are not settled by negotiation they shall be submitted to an international court, and that all other questions arising shall be submitted to a council of conciliation. But the crux of the proposal is in the third paragraph:

"The signatory powers shall jointly use forthwith both their economic and military forces against any one of their number that goes to war or commits acts of hostility against another of the signatories before any question arising shall be submitted as provided in the foregoing."

Very much more practical than the Bryan proposals are these suggestions. Here lies the means for ending the futile international race for military superiority. And ARMS AND THE MAN firmly believes that somewhat along these suggestive lines will be worked out finally the solution of the great problem.

CLOUDING THE ISSUE.

With a measure of justification the German press is emphasizing the fact that a British tank steamer, after misusing a neutral flag, rammed and sank the German submarine *U-29*, and is setting up that fact as an excuse for the German submarine policy of sinking suspicious craft first and making inquiry afterward. That this may be a cause of temporary embarrassment in the present diplomatic interchange goes without saying.

But a little examination of the question shows clearly that this *U-29* affair has no direct bearing whatever on the broader questions at issue between the United States and Germany. Admittedly the British tank vessel sacrificed her noncombatant character the instant that she took the offensive against the German submarine and was forfeit. Thereafter it was a matter of relative skill in action. That any merchant craft, using her prow as her only weapon, is invariably the military superior of a submarine cannot be conceded. The submarine is not the helpless craft that some would have us believe.

Aside from this, however, and aside from any consideration of British freight craft converting themselves into war craft or privateers, there stands out the question: Do such actions justify firing on and sinking without warning and without effort to safeguard noncombatants, passenger ships such as the *Lusitania*, whose character as passenger ships cannot be doubted?

To keep the real issue squarely before us, let us quote from the President's note of June 9:

"The Government of the United States is surprised to find the Imperial German Government contending that an effort on the part of a merchantman to escape capture and secure assistance alters the obligation of the officer seeking to make the capture in respect of the safety of the lives of those on board the merchantman. . . .

"It (the Government of the United States) understands it (the

Imperial German Government) to accept as established beyond question the principle that the lives of noncombatants cannot lawfully or rightfully be put in jeopardy by the capture or destruction of an unresisting merchantman."

COST OF GOVERNMENT WORK.

In times past ARMS AND THE MAN has pointed out the unfairness that characterizes the ever-recurring dispute regarding the relative cost of Government work done by contract and Government work done in Government works. Methods of ascertaining the cost of Government work in Government plants are so crude, so regardless of essential factors of various items of overhead charges of which the private plant must take account that there never is a true comparison. By eliminating charges of overhead management, interest on investment, and depreciation of plant, Government works at times have been able to make a superficial showing of production cheaper than contract price. But the actual cost to the public has been far in excess.

In naval construction, however, for reasons upon which it is not necessary to dwell, by no stretching of rules of sound accountancy could the Government yards show cheaper production than private yards. Now this is to be changed. From Congress the Navy Department has secured authority to do wonderful things to the system of cost keeping.

"Under the new system of accounting at Government Navy yards, to be inaugurated July 1," says the daily press, "Secretary Daniels expects to demonstrate that battleships can be constructed by the Government at a cost that will at least insure satisfactory competition in bidding for contracts by private builders. . . . The Secretary has concluded that the present system of charging a proportionate share of the ordinary running expenses of the yards in figuring the cost of construction was wrong."

Unfortunately for private builders, they cannot take such liberties with their cost-keeping systems. So presently we are to be told that building ships in Navy yards is ever so much cheaper than building them in private yards. Somehow, though, there will be a tremendous advance in other items of Navy administration.

"I care not," the modern public official may exclaim, "who makes the nation's laws or who writes the nation's songs, if I may but keep the nation's books."

MILITARY RIFLE SIGHTS.

(Continued from page 247.)

as to make considerable effort necessary before the actuating screw can be moved.

Fashion has long prescribed that the rear military rifle sight should be on the barrel. Logic there is none when this sight is on the modern rifle such as the Mauser, with receiver bridge and other structural work handy as a sight base. When the open sight was the only sight, the optical fact prevailed that the farther away the sight was from the eye, the more clearly the rear notch could be defined, and the better the aim could be taken. Also the truth was admitted but blinked that this same process of moving the sight from the eye to gain definition, shortened sight radius, and penalized more heavily errors in sight alignment.

But with the peep, the same coyness and shrinking between rear sight and eye that added to the beauty of the outlines of the notch, results in merely blurring and making the peep sight indistinct. As there is every reason why we should use the peep, there is every reason why our rear sight should be brought as far back as possible.

The gain is a double gain, apparent greater size of aperture, and clearness of sight definition; longer sight radius with lessened error at the objective for error in aligning the sights.

Many fighting rifles carried in the field are provided with breech covers, protecting the entire breech mechanism from dust and moisture. When the rear sight is a fixture on said breech action, it shares in the protection.

With rifles provided with a bridge, such as the Ross Mark III, the Charger Lee Enfield, the Mauser, and the United States New Springfield—a Mauser type—there is no difficulty in finding a perching place for the rear sight. The objection to the bridge position used to be that a standard sight leaf that folded down when out of use, would protrude over into the magazine well.

With the improved ballistics of the modern rifle, a bridge can easily be designed to contain the entire sight when so folded down, or a form of ramp sight can be evolved to lie on this bridge.

With a cartridge having 3,000 foot-seconds, and a bullet with the ballistic coefficient *C* of .40 or better, the total height of the aperture over the point blank or zero sighting line, for 1,500 yards, is but .64 inch, if our barrel is 24 inches long, and our sighting radius is 29 inches. Of course some sights are designed to give more range than this, but for the bulk of the infantry and cavalry rifles a 1,500-yard range is ample for all contingencies.

The American Lyman sight-makers evolved a very strong form of micrometer "receiver" sight, adapted to fine target shooting, and yet amply able to undergo the hard knock of the hunting rifle. In this sight the base is firmly fastened to the right side of the receiver bridge, and the elevating slide works in a dovetail slot, accurately cut in the base. When in the lowest position the elevating slide extends down along the stock on the right side of the receiver. Proper design of the rifle from the start could thoroughly protect this slide by letting its groove into the wood itself.

The windgauge, carrying the aperture, is on the elevating slide, which is bent over at right angles from the vertical graduated portion. A graduated head, milled to permit firmer finger grasp, raises and lowers the elevating slide, with a snicking spring to indicate minutes of angle. This sight is not fit for military use because of the absence of quick and positive setting arrangement for 50-yard fractions of the range, but this could easily be arranged. Of course, all the trouble of so arranging an aperture sight close to the eye can be set at naught by following the military man's error of a very small aperture. A thousand times a year does the hunter demonstrate that an aperture as large as one-eighth inch in diameter can give far higher accuracy in the hands of anybody than the holding of the average shot. Quick shooting is aided by the large aperture, the hours of daylight during which accurate firing is possible are increased, and it comes nearer to the chief *desideratum* of the perfect rear sight—failure to interfere in the slightest with the view of the front sight, the objective, and the country around it.

The error perpetrated in designing a front sight for the military rifle is so common as to provoke the suspicion that the designer had no idea of the problems to which those in charge of directing the fire of troops would be subjected.

The barley-corn is a good example. This would be an excellent shape, if turned upside down and used with the wide end up, and the narrow end where the sight joins its base. The American New Springfield front sight is another botch—a narrow knife-blade flat-top front sight but .05 inch thick. Let us consider what the soldier is called upon to see over the front sight, and how best he can define both the thing to be hit, and the front sight.

His objective is nearly always an ill-defined one. Nine-tenths of his errors in fire lie in elevation. Part of said errors lie in faulty estimate of range by his officers, part in the failure of his rifle to shoot accurately to the ranges marked on the sight; part are due to the inability of the soldier to define clearly the thing to be hit, over his front sight.

Let us see how field-firing problems bear on the sight shape question.

At various times I have witnessed field-firing demonstrations on a large scale—by this meaning a war strength battalion of 400 men, using ball cartridge.

Regardless of the nature of the objective, and regardless of the range, this is always a peculiarity of the firing—that the sheaf of fire, as shown by the boiling of the dust from bullet strike, is usually just the width of the objective, but is terribly long in the plane between firing party and target.

As an example, a company of 100 men, firing on a row of disappearing targets from 1,000 yards. The targets occupied a length of entrenchments perhaps 75 yards long. The zone of dust puffs extended accurately the width of that row of figures, but the depth of the zone, target to firers, was 200 yards or more.

At Camp Perry, a firing problem on a smaller scale showed another example of this, but in more exaggerated form, when the "bolomen," infantrymen not able to make the qualifying score on the target range, fired at a group target at ranges from 1,200 yards down.

Few of the shots of these poor marksmen flew wide laterally, but the ground showed bullet strike for a zone of 400 yards when the firing was at long range.

The target of the soldier in action is likely to be one of two things, a long line of extremely hard to see trenches, possibly nothing more than the side of a far-off ridge, or else tiny running or prone dots,

harmonizing closely with their background. As we've seen, the difficulty in obtaining accurate and effective fire seems to be wholly in the elevation of the shots. It is interesting to consider the various forms of front sights possible.

We must remember that in firing at a line of single trenches, or in attempting to repel the attack of troops deployed into long, thin skirmish lines, the slightest error in elevation means a wasted bullet, while a considerable margin of error is permissible laterally, because of the nature of the target, and because of the slight tendency toward lateral errors, anyhow.

Mr. Walter Winans, the Anglicized version of an American sportsman, and authority on big game shooting, advocates the use of an ivory front sight for the military rifle, evidently with the idea that the contrasting material would enable better definition. The idea is all right on the sporting rifle, but absurd on the military arm, for this reason: the objective of the soldier is very small, when it consists of the troops of the enemy actually in sight.

At 600 yards, moderately close range, a soldier standing erect is included in 10 minutes of angle.

The smallest possible ivory front sight, say one-thirty-second inch, would be included in 3.5 minutes of angle on a 24-inch barrel, and the smallest conceivable bit of ivory we could use would thus blot out one-third of a standing figure at 600, and would entirely cover up a prone figure. As a matter of fact, the advantage of the ivory could not be realized in a size less than one-sixteenth inch, which would be twice as bad as the one-thirty-second size in blotting out the objective from sight.

Inasmuch as we need to sacrifice almost anything to obtain perfect definition of sight on objective, and to eliminate so far as possible errors in elevation arising from improper laying of the front sight, there appears to be but one form of front sight possible in the military rifle. This is the flat top or bar front sight, with clearly cut sides and top, and last, but not least, of a width adequate to the task of showing sharply and clearly at the *base* of the thing to be hit.

Extensive experiments by the writer, and by others, in target shooting, develop the fact that the *wide* front sight with flat, sharply cut top has little tendency to increase errors in lateral strike, but has an astonishing tendency to increase accuracy in elevation of a series of shots.

This holds equally true—to put the case conservatively—on a poorly defined objective. The broad, sharp, black front sight can be cut across almost any mark that can be seen with the eye, unimpeded by sights, where a narrow front sight, straining the eyes to tell top from thing to be hit, often fades out, and the shot is a miss so far as elevation goes. Most military front sights—all military front sights, as a matter of fact—are too narrow, even if flat top and clearly cut.

For all of one target season the writer fired a rifle having 30-inch barrel, fitted with front sight .10 inch wide. On the target the sight therefore covered up a space included in 10 minutes of angle. The bull's-eye at 300 yards, being 8 inches in diameter, is included in an angle of 2.66 minutes, and the front sight, therefore, held below this bull's-eye, looked to be more than three times the width of the bull.

Yet the scores on this target rose with the use of the wide front sight. Without the use of a dot or other device accurately to show the center of the wide blade, there seemed to be few errors laterally, while the difficulty of defining the tiny bull over the sight was cut down to a great extent, and elevation was held splendidly. The scorebook for this season shows an average of 46 out of 50 at this range, the bull counting five, the score ten shots, the position sitting. Scores of previous seasons fail to equal this, and a narrow front was used on these seasons.

The secret of being able to define a front sight on an objective is to focus sharply on the thing to be hit, using, of course, the peep rear sight, then to bring the front sight up into the line of sight until it touches the objective. If the front sight is too narrow, the focus must be changed to see it, and make sure that it is the right spot. If the front sight is wide, it crawls up into the vision and cuts across the objective without removing the sharp gaze from the thing to be hit. The wider and the blacker the front sight, the more easily it can be defined against a dull, non-contrasting objective.

With a 24-inch barrel I should consider it an error to use a front sight less than .08 inch in width, and I should do considerable experimenting to see if one still wider could not be used to advantage. Of course, all this applies only to the peep, not to the notch sight, that a wide front would fill up.

The face of the front sight should slope a trifle toward the shooter, bottom to top, that is, the top of the sight should be a bit nearer the eye than the bottom. The face is in the shadow, and the chances for glimmer, and the evils of changing light effects are much lessened.

A MILITARY DREAM RIFLE.

BY CAPT. ROY S. TINNEY.

DURING the past ten days it has been persistently rumored among the "war brokers" and those reputed to be "in the know," that a new military rifle has been perfected here in America, and that large shipments are soon to be made to the Allies. Only this afternoon a friend of mine dropped into my office simply bubbling over with delightfully vague information concerning this new "shoot-in' iron" and—

"I'll not say its true, 'though it might easy be;
I'll tell you the tale as 'twas told to me."

The piece is so simple in construction as to be practically fool-proof and so strongly made as to be well adapted to withstand the wear and tear of campaigning. A sort of super-Springfield, sans the defects of that gun (if there be any), and much better fitted for trench work. (From which last remark I would infer that the piece is heavier than our pet.) Only a few buying agents have been permitted to see it, and it is understood that a firm in Connecticut has accepted an order for 400,000 of these new rifles, to be delivered as soon as possible this summer.

The building of the piece represents months of work for the making of the necessary machinery, although placed in the hands of one of the best known firms in this country.

Another military rifle has recently been introduced by an American arms company. Only a few of these weapons have been seen, but it is known that they are considered effective by European buyers. The few which have been inspected have been turned out largely by hand, but it is understood machinery for making them is ready and the company is about to fill several large contracts. This weapon also resembles the Springfield, and it is said to be capable of developing a velocity greater than our Army rifle.

Before the advent of these new dream rifles many efforts have been made to induce the manufacturers here to go into the manufacture of Mauser rifles on a large scale, but there has always been a disposition to dodge orders for weapons of this type. There have been rumors also that the larger firms are about to put in machinery for the manufacture of the Springfield rifle according to our Government specifications. The new American arms, however, are said to be more in line of what the European powers are seeking for the use of their troops.

These rumors, of course, may simply be the product of some versatile and unfettered imagination, but on the other hand such activities on the part of the arms companies are both possible and highly probable under the present circumstances. And like Wallace Irwin's friend, Togo, "I do ask to inquire" of my brother "gun cranks" if they may chance to know anything about these dream rifles. The thought of a master-gun being produced under our very noses without "us bugs" being given a chance to cuss and discuss the afore-said weapon—now wouldn't it make you mad?

MEMORIAL DAY SPEECH

BY HON. HENRY BRECKENRIDGE, BEFORE VETERANS OF THE G. A. R. AT GRANT'S TOMB, MAY 31, 1915.

SOLEMNNITY but not pessimism, introspection but not morbidness—contemplation and analysis are the natural accompaniments of this occasion. We stand at the tomb of him who, with the immortal Lincoln, personified the mighty forces that established and preserved the unity of this nation. The unity of America as a nation was not established by the Constitution, but was cemented by the blood of countless thousands upon the fields of the Civil War. The Constitution was the parchment whereon were set forth the terms of the compact, but the sealing and the binding interpretation was only to be found in the sacrifice of the days of '61 to '65. What you established and saved, it is for the present generation to preserve and hand on to posterity untarnished and unweakened.

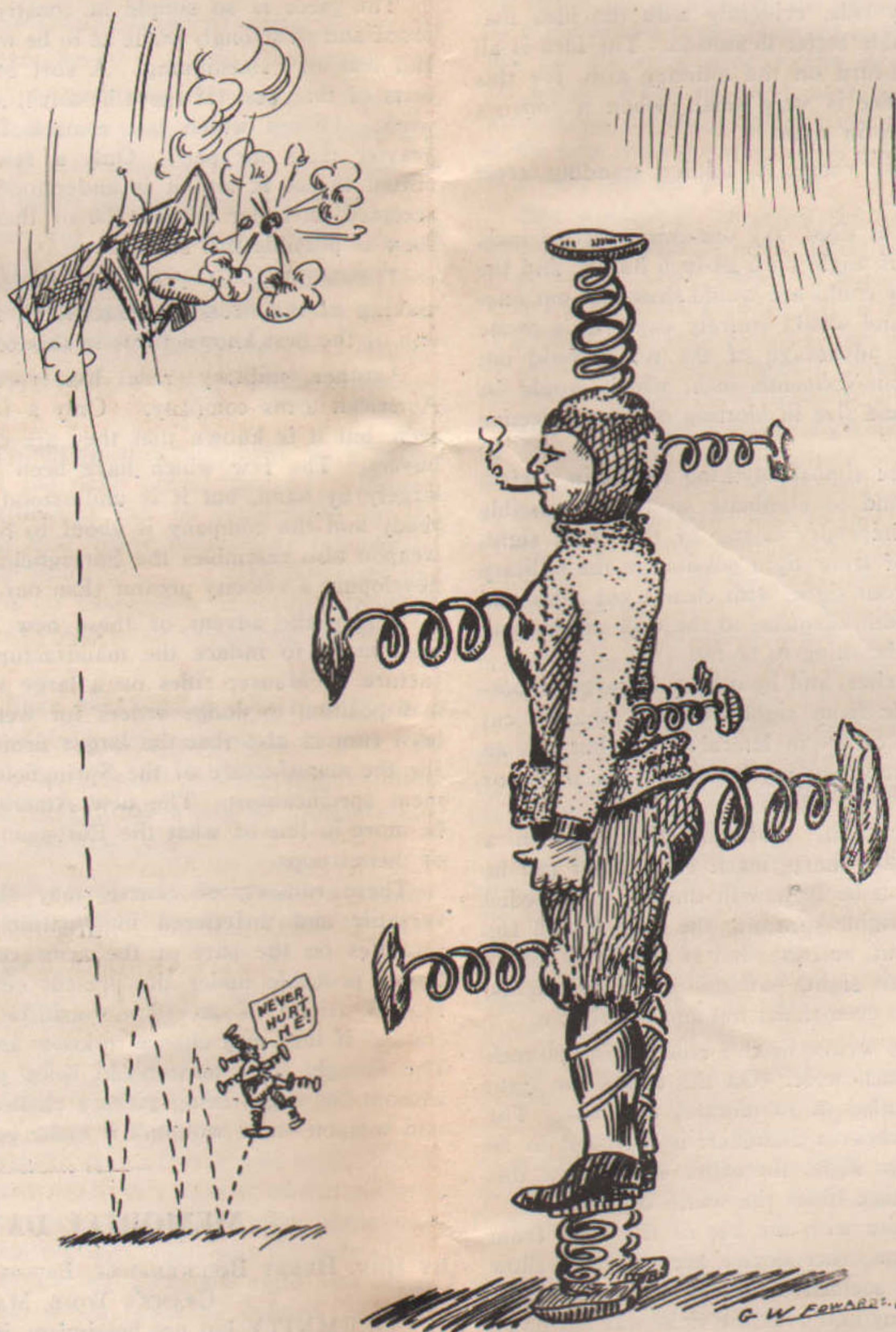
What must be the thoughts of the soldier of the Grand Army as he stands in his declining years at the tomb of his great commander, a full half century after the termination of the mighty conflict which must ever fill his memory and challenge the attention of his thought? For the most part the veteran has relinquished the control and guidance of the destiny of his country. Increasing years deplete the physical energies so that physical participation in the activity and turmoil of national life must be largely renounced. But the keenness of observation and vision and the profound interest in and ready response to every trend and movement and development in the national life are no whit abated. The very physical inactivity compelled by the gradually subsiding energies of the body with advancing years, indeed, heightens the

speculative and observing activity of the mind in contemplating current developments, current trends and current characteristics of the nation's course. Watchman, what of the night, or, rather, Watchman, what of the day? Patriot, veteran of the great internecine strife that saved the unity of the nation, what of special significance do you see in the life of your people about you? To what end is the national destiny shaping? Toward what ideal is the national mind crystallizing? What are the signs in our nation's life that call for anxiety and what are the signs that call for hopefulness?

It seems to me that I can comprehend the mind of the veteran running somewhat along this line: This is one of the critical eras in the

America as a unit in a world system and not as a place eternally disconnected from the circumstances and forces, and, aye the fate that pursues the other racial and political entities of the world.

I wonder if it is sufficiently realized how domestic affairs and domestic ideals react on the international destiny of the nation. Up to this time the history of the world demonstrates that nations are weak, grow strong, expand and then decay. It may be that by the grace of God the last step may be spared to nations in the future. But until the present, a combination of internal and external causes have combined to undermine and seal the fate of every great governmental unit that has arisen in the world. Weakness within has eventually



NEW FALL SUITS FOR AVIATORS.

No, gentle reader, this is not a picture transferred mistakenly from Uncle Henry's meanderings among the patents upon which you look every week. No patent has yet been granted upon this process, but one might very well be. The practicability of the design must appeal to you. No words of explanation are necessary. However, one detail yet remains to be perfected: How to keep the protected aviator on the ground after he has once arrived there after an unpremeditated descent, and how to keep him from bouncing himself to death. The inventor is now at work on a device that combines some of the principles of the gaff hook and the landing net to overcome this difficulty.

history of the world. It is impossible that the stirring of the world to its very depths can leave my own country untouched. It is impossible longer to consider my country as a place isolated and apart, living its own life in its own sphere, unaffected and untouched by what goes on elsewhere, safe in its isolation and assured thereby from being affected by external developments and happenings. I wonder if those who lead the thought and action of the nation comprehend sufficiently the inter-relationship of the republic with the mighty world forces now so active. I wonder if the shackles of provincialism and insularity have been stricken from the minds of the men of light and leading so that a true conception of America can be had—a conception of

spelled weakness without, and the great of yesterday have become the weak and unconsidered of today. That which is purely external we shall pass by today and that which is internal we shall for a brief moment ponder.

With individuals and with nations the test of greatness is the capacity for self-sacrifice. Whose are the memories out of the past that humanity now cherishes and keeps green? Those who spent themselves for something besides themselves. The king who wrought and fought for his people; the prophet, the priest who spent himself for the souls of his people. And with us, the President, the general, the soldier, the citizens that spared not themselves in their service

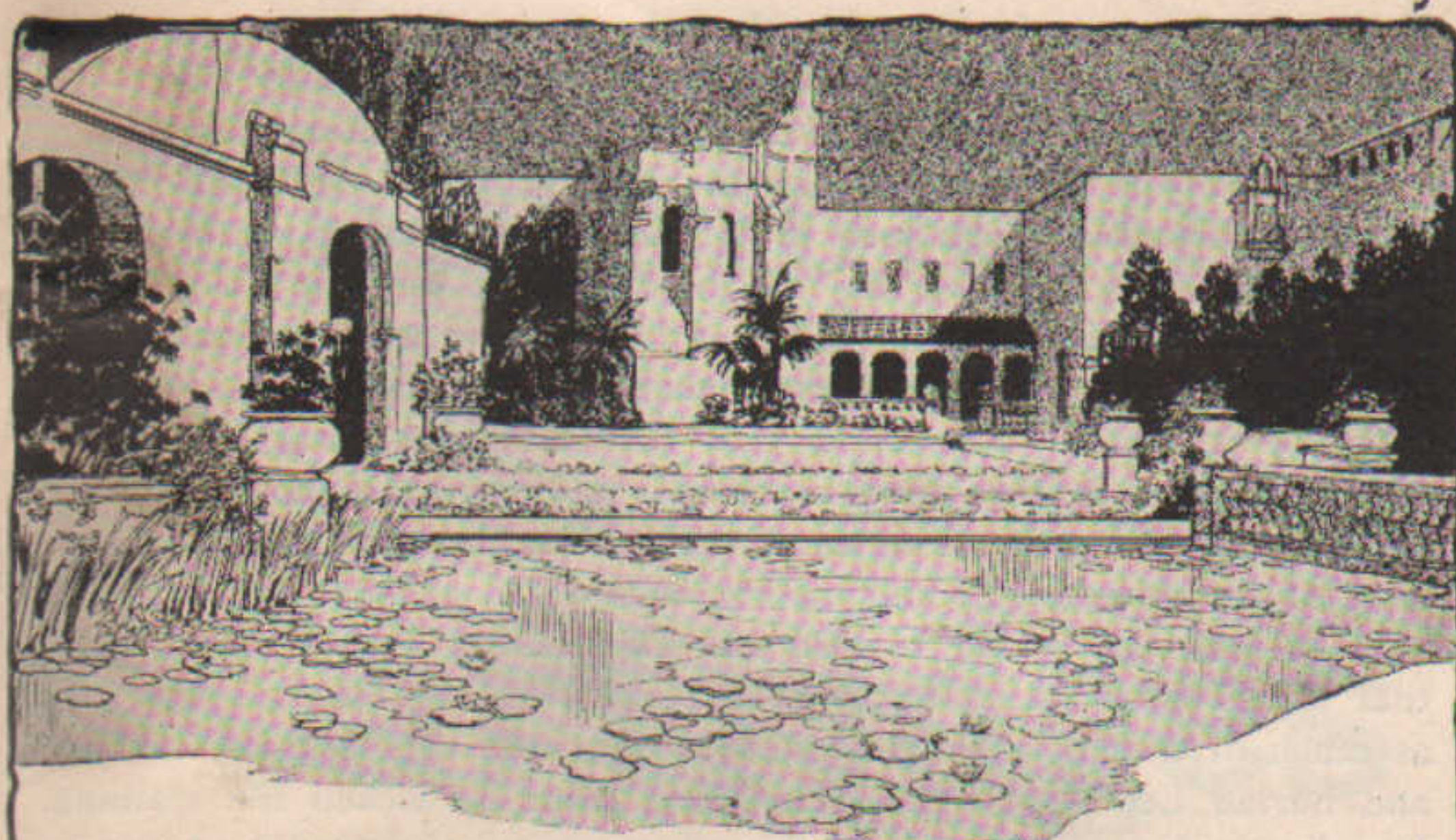
to the common weal. Ancient civilizations are remembered and revered not so much for what they did for themselves but for what they bequeathed to humanity. But unless the citizens of those civilizations at first spent themselves for their country, never would their country have been in a position to accomplish something for the sake of humanity in general. True it is, that America owes to humanity and would accomplish something for humanity, but first it is the duty of the citizen to spend himself for his country and to build and to conserve and make strong the sinews and institutions of his own civilization and, if necessary, to defend the same with his life against external assaults, that in the end his country in turn might then accomplish those things for humanity at large that God in His wisdom has destined for its accomplishment.

The measure of the greatness of the individual is his capacity for self-sacrifice. And, mark you, that self-sacrifice does not necessarily mean submission, because it may be necessary for one to struggle and contend and even die in an effort to protect that which is committed to one's charge against the assaults of men or the menace of nature; the fireman when he gives his life in the struggle against the flame for the rescue of some helpless one; the policeman, when he falls in an effort to protect life and property against predatory crime; the doctor and the nurse, when they succumb to the pestilence which they combat; the soldier when he dies on the field of glory for the life of his nation. The measure of the greatness of the individual is his capacity for self-sacrifice. This truth is called in question by one of the philosophies of life that contend for mastery in our nation. There is a struggle of ideas and ideals taking place in the land. Each side has able leaders and they marshal their battalions of logic and rhetoric with skill and with determination. Each side has a banner and on its banner carries a shibboleth. On the banner of the first it is written, "The strength of impotence and the impotence of strength." On the banner of the other it is written, "Be strong." The second army is no better supplied as to its forces of logic and rhetoric perhaps, but practical experience in the world has shown that those who have adhered to its principles have prospered and have stood, while those who have not done so have suffered humiliation. But nevertheless the issue is joined with as much intensity and sincerity today as if it had not been fought out and settled on a thousand other fields.

Of course, the forces to which I allude are on the one hand those who would strengthen the defenses of the nation and on the other hand those who would not. Those who would not tell us that preparation for war does not prevent war; that the building up of great armaments tempts to war; that the possession of the means of striking is a temptation to strike; that the influence of America in the world should be by moral force and not by brute force; that war is terrible and under no circumstances should be resorted to.

Those who stand for the strengthening of the national defenses admit that preparation for war does not prevent war, but insist that it does prevent certain very dire consequences of not being prepared. They also believe that the spirit is greater than the body and that moral force is a more desirable force than brute force. And they know that human history has shown that sometimes the desirable things of the spirit can only be maintained by the sacrifice of the body. If Abraham Lincoln, Ulysses Grant and the men of the Grand Army of the Republic had been peace-at-any-price men, the nation would now be disrupted.

If Patrick Henry, George Washington and Thomas Jefferson had been peace-at-any-price men, New York now would have been a provincial town and the United States a colony. If the hardy mountaineers of Uri, Schwyz and Unterwalden had been for peace-at-any-price, modern liberty never would have been born among the beautiful mountains of Switzerland. For it was first in her mountains that the brave foot soldiers of the people overwhelmed among their rocky heights ten times their number of the mailed and mounted ranks of nobility and oppression. I, for one, thank God that there have been men not only willing but quick to fight for liberty and for righteousness against the powers of oppression and of evil. I rejoice that thousands upon thousands of such men have been bred upon the soil of our beloved country. And I would hang my head with shame and tremble with ignoble fear if I didn't believe that the bone and sinew of this people were just as able to give and to receive hard blows in the name of liberty and of righteousness and of their honor as were their forefathers in the wars in which the nation has engaged. War! Its horrible visage only is outmatched in hideousness by one thing—and that is an individual or a nation that has not the spirit to make whatever sacrifice is necessary to protect that which is vital whenever it is threatened or assailed. There is nothing to fear for the courage and steadfastness and capacity for self-sacrifice of the American people.



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But there is cause for concern that the nation be so circumstanced as to its defenses that undue weakness could not tempt either the covetous or ill-disposed, if such there be, to aggression against us.

Our Army is deficient in personnel and matériel, neither of which can be improvised. You men of '61 know that putting a gun into a man's hand does not give him the knowledge to shoot it. You know that furnishing him a ration does not furnish him with the knowledge to cook it. You know that experience in camp sanitation does not come by intuition. You know that field telegraphs and telephones, mammoth coast defense guns, aeroplanes and motors cannot be utilized by inexperienced men. You know that all the thousand-and-one problems of the government and maintenance of an army in the field can only be mastered by the trained and experienced soldier. You know that the raw recruit that turned tail and fled at Bull Run was just as much of a man as the seasoned veteran that compassed Vicksburg and hurled Lee back from Gettysburg. But he lacked the training. You know that all the talk about effectiveness of improvised armies can only be indulged in by those without experience in that of which they speak. The military policy of the United States, if it can be dignified by that term, is utterly inadequate. Prudence dictates its reconstruction. And it is the solemn duty of patriotic citizens to see that that reconstruction is speedily made.

But the disarmers would raise the cry of militarism and fog the issue with his railings. Let us not be misled by a term. The possession of strength adequate for defense is not militarism. Militarism is the ideals and ambitions and purposes behind the strength. You might as well say that the flabby youth should not develop himself into the strong man lest he become a bully as say that the nation should not look to its defenses lest it become a bully among nations. There is no fear, on the other hand, under our institutions of domestic oppression by the military. There is no principle of our policy better established than the subordination of the military to the civil and any military policy that is to be wrought out will be under the aegis of this well-established and inviolable principle.

But the disarmers reiterates his plaint. He says that to make the citizen a soldier is to endanger democracy. Facts oppose his contention, but he is not a gentleman who deals in facts. As we mention the relationship between military preparedness and democracy, it is interesting to note that what are probably the two most democratic peoples of the world have systems of universal compulsory military service. I speak of Switzerland and Australia. Switzerland was driven to her system years ago by surrounding perils. Australia lately has deemed such steps necessary. And of all the places in the world where the principles of democratic government are in vogue, these two lands are in many ways preeminent. The initiative and referendum—every sort of social insurance—wise and democratic laws for the protection of the laboring men and women, all that class of legislation and policy that is distinctive of advanced and progressive democratic government are not only found but conceived and initiated in Switzerland and in Australia. Whatever you may conclude from the study of the institutions of these peoples, it is very hard to find any justification in them for the conclusion that sane and democratic measures of defense tend to the restricting of free government. Rather the reverse must be concluded if any conclusion is to be drawn at all.

How manifold are the blessings of this day and time. The cooling stream of time has washed away the blood and the bitterness of the Civil War. The anger, the strife, the hatred, the humiliation, the rage, we forget. The glory we cherish and remember. Love and tears for the blue; Tears and love for the gray! Oh, that the country may be worthy of the pain and the sacrifice offered up upon the altar of its unity. May this and coming generations be faithful guardians of the heritage of glory bequeathed unto them by the Grand Army of the Republic and its two immortal heroes, Ulysses Grant, who held its sword, and Abraham Lincoln, who held its spirit.

MOTOR SERVICE IN THE WAR.

A RECENT number of the Scientific American stated that military tactics today may be said to rely pre-eminently on the motor and its speed. Attacks rushing forward at the rate of 30 miles a day are no novelty in 1915. Retreats, in complete order, at a speed of 50 miles a day would have been called impossible by military men twenty years ago. The motor car has revolutionized warfare. In the case of France and Germany, the motorbuses and interurban motor-passenger coaches have proved of tremendous value. In Germany more than 3,000 of these sturdy and capacious vehicles have been transformed into military vehicles, especially for meat transport to the front. The same must be said of the French buses, long lines of which may be seen at all times several miles behind the battle front.

The military authorities foresaw the great service that power wagons in general were called upon to perform in the event of war, and, as in all the leading countries, they endeavored to have all the

power wagon trucks, including the ones built with an autobus body, built according to the general standard regulations laid down by the War Department. For emergency cases or rapid maneuvers, a considerable number of troops can be instantly sent to a certain point of the battle either in autobus or on other kinds of power wagons, and this might often change the issue of events.

One of the surprises of the British Expeditionary Force has been the excellent showing of the fleet of 110 Foden steam trucks as heavy tractors. For slow haulage of three or more trailers, of heavy artillery, and as repair wagons with complete electrical equipment, these steam trucks have given invaluable service. They are easily kept in repair and they burn small anthracite coal as well as crude oil and kerosene.

Except on the fast cars used by the officers, pneumatic tires are strictly tabooed. Even on motor ambulances the solid rubber tire is preferred, because of the immense trouble caused by bullet or shrapnel penetrating the pneumatic—usually at the most inopportune moment. On some of the British armored cars twin pneumatics are used on the rear wheels, but in the majority of cases solid tires have been mounted. Safety in this case is preferred to a certain degree of comfort. Motor truck experts now at the front calculate the destruction of vehicles at about 60 per cent. of the total. The estimate of the British is slightly higher, reaching nearly 70 per cent., while that of the Germans is less than 50 per cent. Several hundred good British and more than 1,000 French and Belgium trucks are reported to have been repaired by the Germans in the big F. N. and Minerva automobile factories in Belgium. The Minerva plant, especially, has proved of great value to the invading army, because of its location at Antwerp, so near the scenes of fighting.

Among the special types of vehicles employed in the campaign are a number of 200 horse-power motor ploughs which dig trenches three feet deep faster than a hundred men can dig them with spades. Huge steam tractors with regular roller wheels for smoothing roads are used for pulling the heaviest weights while caterpillar tractors, of the types made in the United States, pull the heaviest siege guns.

As was to be expected, reports from the various seats of war tell us of the widespread use of armored automobiles. Most of the nations involved have made exhaustive experiments to determine the most suitable of the types, which range all the way from ordinary touring cars, the sides of which are covered with steel plates, to huge moving forts. The most satisfactory cars have, naturally, proved to be those between the two extremes.

The service required dictates to a large extent the design of the car. In the early days of the war, the Germans made great use of standard N. A. G. and Opel touring cars, to the sides of which are fastened steel plates of four millimeters thickness. No guns are mounted on the cars, the occupants being armed simply with rifles. Owing to the comparatively slight increase in weight over ordinary touring trim, these cars possess mobility of a high order, and are well suited for scouting. They generally carry on each side of the dash a vertical rod having a knife-edge in front. The object of this is to sever any wires which may be stretched across the road, generally at the height of the pilot's head.

Much heavier armored vehicles have also been made use of by the Germans. These are generally trucks on which are maintained 5 or 7 centimeter Krupp or Erhardt guns. The armor plating is very heavy, being about one half inch in thickness. The rear wheels have twin solid tires, and the front disc wheels have single tires of the same type.

The Belgians possess few, if any, heavily armored automobiles. They pin their faith to lightly armored, highly mobile cars, which have proved highly successful. Their speed and ease of manipulation enable them to rush to the desired spot, make a sharp attack, and, if necessary, retire quickly.

So far little has been heard of French armored cars in the war. It is known, however, that the authorities possess a number of "travelling forts" manufactured by Charron & Schneider of La Creusot.

Another very important branch of the motor truck service comprises the care and transportation of the wounded in the field. Russia has recently experimented with automobile field hospitals, equipped with all medical and surgical apparatus, including a dynamo for illumination, operating Roentgen apparatus, etc. These experiments appear to have been successful, for the Russian government ordered a number of these vehicles from Switzerland. Another Russian innovation is an automobile ambulance capable of carrying twelve or more wounded men. This is used for the speedy removal of wounded from the firing line. In besieged fortified places, also, these ambulances would go at night, unlighted, from battery to battery, to collect the wounded and transport them to the hospital. Similar vehicles, arranged as omnibuses, and carrying thirty passengers, have been employed in Russia for the transportation of prisoners of war.

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Ammunition: Peters .22 Long Rifle Semi-Smokeless

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RIFLE; REVOLVER AND SHOTGUN

Small Bore Scores, Second Week.

With a score of 945, the Peters Rifle and Revolver Clubs, of Kings Mills, Ohio, leads in the second week's shoot of the Small Bore Short Range Outdoor League, ended June 12, and also leads the clubs in the aggregate for the first two matches. The best individual score was made by A. D. Rothrock, of the Peters Club, 195, of which 100 was at rapid fire. A. O. Neidner, of the Massachusetts Rifle Association, made the high individual score at slow fire, 97.

The scores of the second match follow:

Order.	Club	Slow Fire.	Rapid Fire.	Aggregate.
1.	Peters Rifle and Revolver Club	458	487	945
2.	Auburn Rifle Club	460	477	937
3.	Bucyrus Rifle Association	455	469	924
4.	Milwaukee Rifle and Pistol Club (first match, corrected)	455	466	921
	(second match)	486	457	943
5.	Fremont Civilian Rifle and Revolver Club	445	458	903
6.	Portsmouth-Norfolk Rifle Club	448	455	903
7.	Massachusetts Rifle Association	451	452	903
8.	St. Louis-Colonial Revolver Club	438	460	898
9.	Pittsburgh Rifle and Revolver Club	439	458	897
10.	Rifle and Revolver Club of New York, Inc., (first match, corrected)	443	454	897
	(second match)	441	456	897
11.	Meeker, Colo., Rifle Club	423	460	883
12.	Kiewa Shooting Club	433	438	871
13.	Citizens Rifle and Revolver Club	434	422	856
14.	Fort Harrison Rifle Club	406	448	854
15.	Ashburnham Rifle Club	397	454	851
16.	Dallas Rifle and Revolver Club	402	446	848
17.	Cypress Hills Rifle and Revolver Association	414	432	846
18.	Canton Rifle Club	424	417	841
19.	Hydraulic Pressed Steel Rifle Club	415	418	833
20.	South Chicago Rifle Club	394	419	813

21.	Shawnee Rifle and Revolver Club	379	430	809	8 10 10 9 8 10 6 9 10 8-89
22.	Black Hawk Rifle Club	390	418	808	8 10 10 10 10 10 9 8 9 10-94
23.	San Simon Rifle Club	362	442	804	10 9 10 8 10 8 10 10 10 8-93
24.	Toledo Yacht Club and Pistol Association	369	427	796	10 9 10 9 10 7 10 10 10 10-95
25.	Nogales Rifle Club	378	401	779	9 10 8 10 10 9 7 9 9 10-91
26.	Niskayuna Rifle Club	354	399	753	
27.	Lewiston-Clarkson Rifle Club (telegraphic report)	320	431	751	920
28.	Kansas City Rifle Club	309	440	749	
29.	Ephrata Rifle Club	316	391	707	
30.	Ithaca Rifle Club	277	324	601	
31.	Quincy Rifle Club	213	376	589	
32.	Interwoven Rifle Club	234	348	582	
33.	Fort Worth Rifle Association	204	293	497	
34.	Chicago Rifle Club, made no report.				

Annual American Record Match.

The annual American record match, 100 shots, 200 yards offhand on the Standard American target took place at Union Hill Schuetzen Park on June 20. Attendance was less than usual and, with the exception of Mr. Hubalek, who came within two points of the record, scores were lower. We were sorry that some out-of-town "good shooters" did not put in an appearance, for there is no place better than this to demonstrate a man's ability. The weather, except a little treacherous wind, was very kind to us, and it was a pleasure indeed to get away from town worries.

THE SCORES.

A. Hubalek—	9 9 9 9 10 7 9 9 10 10-91
	9 9 10 8 10 9 10 10 9 10-94
	10 9 10 10 8 10 9 7 8 8-89
	8 10 10 8 10 9 8 7 10 9-89
	10 8 10 10 10 9 9 10 9 10-95

Mr. Hubalek's first shot after an hour's stop for lunch was a 6 on a changed wind; had it not been for the stop he would undoubtedly have broken the record.

H. M. Pope has so played out from long overwork in the shop that "Bill" very kindly took pity on him and helped him load the last fifty shots in order that H. M. might get through in time. H. M. showed his gratitude by making a 96 on the last score and trimming "Bill" one point; however, in the light of the rest of the score, this might have been an accident. It took three rounds on the score card to do the trick after the shooting was over. It should be mentioned, however, that "Bill" ran short of powder in the middle of the score and had to get educated to the kick of black the rest of the way.

H. M. Pope—

8 8 8 6 10 10 8 9 9 9-85
10 9 7 10 8 7 6 9 8 8-82
10 7 9 8 7 8 10 7 8 10-84
10 6 10 8 9 10 6 10 10 9-88
10 7 9 10 7 8 10 10 10 10-91
10 8 9 8 10 8 8 9 7 8-85
8 8 8 9 10 10 8 10 8 9-88
8 9 10 8 9 9 5 8 9 9 8-85
9 10 9 9 7 9 10 9 9 8-85
9 8 10 10 10 10 10 10 9 10-96

W. A. Tewes—

7	8	8	9	7	6	10	10	9	5	—79
10	8	10	8	10	8	8	10	9	10	—91
9	9	9	10	10	8	10	7	10	9	—91
10	9	9	9	9	8	10	10	10	10	—94
8	8	10	10	8	8	9	8	9	7	—85
9	10	9	8	8	8	7	6	10	10	—85
10	9	10	10	8	9	8	7	8	10	—89
9	8	10	9	9	7	10	8	9	9	—88
6	9	10	7	9	8	7	9	7	8	—80
10	8	8	8	10	8	9	8	7	10	—85

868

J. Kaufmann—

82	83	86	81	79	92	85	85	82	82	—837
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O. Smith—

92	81	77	89	81	87	69	88	85	87	—836
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Kaufman and Smith also had a couple of rounds on the score card.

Geo. Schlicht—

77	82	73	73	81	85	82	81	81	81	—796
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J. J. Simmen—

53	74	69	69	82	63	70	76	76	77	—709
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C. A. Schrag—

73	65	63	72	66	72	63	67	69	75	—685
----	----	----	----	----	----	----	----	----	----	------

J. E. Ward—

50	51	59	49	56	54	60	62	55	64	—560
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Our small prizes went on the bull's-eye target, each man shooting till he made one 4-inch bull. Measurements were made on the Zettler machine and resulted as follows: Kaufman, 59; Smith, 100; Pope, 130; Schrag, 142; Tewes, 142; Ward, 171; Simmen, 174; Hubalek, 215; Schlicht, 219.

H. M. POPE, Secretary.

Shoshoni Shoot.

The regular monthly competition of our club took place June 13. Weather conditions were good except our usual strong mirage. Scores for the club prizes were as follows:

R.F. R.F. S.F. S.F. S.F.										
200 300 300 500 600 T										
E. L. Crabb	49	48	44	43	40	224				
R. E. Ireland	46	46	42	40	44	218				
R. S. Linn	45	44	41	41	36	207				
A. Olson	43	45	38	36	40	202				
J. W. Drouillard	41	43	42	36	40	202				
J. W. Stuchell	40	46	36	38	39	199				
J. W. Miller	42	46	36	35	32	191				
L. E. Blackwell	46	37	35	38	35	191				

We would be pleased to hear from members of other clubs as to their experiences in reloading ammunition for the Krag and the Springfield with the sharp point 150- and 180-grain bullets, what kinds of powder to be the best and the accuracy of their loads.

E. L. CRABB, Sec.

Fort Pitt Rifle Club.

The Fort Pitt Rifle Club, of Pittsburgh, staged two matches at the Highland Range today, June 19.

The regular match was a feature match to be shot with a Krag carbine. G. B. Armstrong took first place, F. B. Fisher, second and P. H. Dillman, third.

The 500-yard match was won by T. C. Beal with fourteen straight bulls.

200-YARD KRAG MATCH.

G. B. Armstrong	4	5	4	5	5	4	4	4	5	—44
F. B. Fisher	4	4	5	4	3	5	3	5	4	—41
P. H. Dillman	3	4	4	4	4	5	3	4	5	—40
R. S. Everett	4	4	4	5	4	4	4	4	3	—40
V. J. Shepherd	0	5	5	4	3	5	5	5	4	—39
T. C. Beal	4	3	4	4	3	4	3	5	4	—38
G. Feter	3	3	4	5	3	4	5	3	4	—38
F. C. Douds	3	4	3	4	4	3	4	4	4	—37
W. A. Wagner	4	0	3	4	3	4	4	0	3	—30
R. V. Swanton	0	3	0	3	3	4	3	3	2	—26

500-YARD MATCH.

T. C. Beal	5	5	5	5	5	5	5	5	5	—50
W. A. Wagner	5	5	5	4	5	5	5	4	5	—47
F. B. Fisher	4	4	5	5	5	5	5	5	4	—46
R. S. Everett	5	5	5	4	5	3	5	4	5	—45
P. H. Dillman	5	5	5	4	4	4	4	5	4	—45
R. V. Swanton	4	4	4	5	4	4	5	5	5	—44
G. A. Snyder	5	5	4	4	5	4	4	4	5	—44
W. B. Smith	4	3	0	5	0	4	5	5	5	—36
J. Bonsell	4	5	5	4	4	0	4	3	3	—36

1,000-YARD RECORD.

G. A. Snyder	46
P. H. Dillman	43
T. C. Beal	41

F. B. FISHER, Secretary.

The Grand American Handicap.

The program of the coming Grand American Trapshooting Tournament will be ready for mailing about July 15. The program is not materially different from that of its predecessor, issued for last year's tournament, which won the approval and support of the trapshooting fraternity to a marked degree. The schedule of events, in the main, follows the policy adopted by the Interstate Association in respect to its Grand American Trapshooting Tournaments, and which have proved in practice to be popular, equitable and successful.

As was the case last year, the Interstate Association will donate numerous valuable trophies to be competed for.

Ten automatic traps, an extra trap for professionals and two "joker traps" will be installed. The section system, slightly modified, will be used. By using ten traps, it is confidently believed that, barring inclement weather, it will be possible to finish each event on the day it is scheduled to be shot with a total of 700 entrants.

The Interstate Association and the Chicago Association of Trapshooters will spare no trouble or expense to make this, the sixteenth Grand American Trapshooting Tournament, come fully up to the high standard set by its predecessors.

THE INTERSTATE ASSOCIATION.

Western Handicap.

Never was a handicap pulled off under better conditions than those prevailing at St. Louis, Mo., during the week of June 14, when the tenth Western Handicap was held. The tournament was held on the grounds of the St. Louis Trap Shooting Association, under the auspices of the Missouri Athletic Association. The grounds were in perfect condition, every imaginable detail had been looked after, and when Manager Shaner arrived on the scene, he found a shooting grounds on which a Grand American could have been held. The perfecting of all the arrangements was due to the faithful work of James W. Bell, most ably assisted by Louis Ebert.

The Missouri A. A. officers are: W. B. Willis, chairman trap committee; F. P. Ford, vice-chairman, and J. O. Victor. They all took an active part in the shoot. The members of the gun club committee were: H. W. Geller, chairman, Col. J. A. Laird and Robt. Niedringhaus. The handicap committee was selected from the shooters present and consisted of: J. W. Bell, St. Louis; J. A. Campbell, Tulsa, Okla.; G. K. Mackie, Lawrence, Kans.; G. Dering, Columbus, Wis.; and T. L. Andrews, Lawrenceville, Ill.

On the morning of June 14 an open match for the Hazard trophy was shot, with twenty entries, Guy Dering, of Columbus, Wis., winning on a score of 93 out of 50 pairs. S. A. Huntley was runner up with 88.

The shooters were greeted with clear skies on Tuesday, the opening day of the tournament, and the weather was ideal, not too warm for comfort, and with no wind to disturb the flight of the targets. Under these conditions and considering the class of the contestants, good scores were expected, and were certainly made. The opening of the tournament was preceded by a short speech from Manager Elmer E. Shaner, who mentioned the superb condition of the grounds, giving deserved praise to James W. Bell and his able assistant, Louis Ebert, for their efforts which have given St. Louis one of the finest shooting grounds in the country.

At 9.15 T. H. Fox, the popular Southern professional, fired the first shot in the program of the ten 15-targets events, and at 2.10 the last squad sheet was brought to the office.

The amateur class was headed by C. C. Plummer, A. M. Burr, G. W. Ball, and E. S. Winbigler with 148 each. Art Killam, who has taken a leading place in the professional ranks this season, tied with E. O'Brien for first place on 149. J. R. Graham occupied third place alone on 147. The special event at twenty-five pairs, followed the regular events and was finished at 4.10. Forty-three shooters entered the event, D. D. Gross finishing high over all with 48. John Noel, of Nashville, Tenn., was at the head of the amateur class, and next to Gross, with 46, trying

for second place with Ed. O'Brien, the Florence, Kans., professional, on 46. John R. Taylor was third with 45.

Messrs. Bell and Ebert evidently had made some deal with the weather sharps, for a more beautiful day never greeted a crowd of anxious shooters than welcomed them on Wednesday. Preliminary Handicap day. Fresh, cool and with a light breeze in the early morning, the day was all that could be asked for. Late in the afternoon a rain storm passed over the city, but the shoot was over and no damage done.

There were 124 entries in the morning's events at 100 targets, and this number was increased to 130 in the preliminary handicap. The quality of the contestants may be judged from the fact that considerably over half of the entrants in the regular events finished with over 90. C. L. Plummer, of Swan River, Manitoba, led the amateurs with 99; C. R. Ray, D. J. Holland and P. Baggerman, all local men, were only one target behind, with 98 each. The professionals had a merry struggle among themselves, finishing in bunches, with E. Banks, R. W. Clancy and Art Killam in the first flight on 99 each. O. R. Dickey, J. R. Graham, Ed. O'Brien and J. R. Taylor, giving them a hot race, and losing out by only one target, with 98 each.

When the last returns were in it was found that J. B. Goodbar, of Memphis, Tenn., with a total of 97 from the 19 yard work, was high and he was awarded the first place trophy. F. Knittel, 16 yards, was runner-up with 96. A bunch of seven were tied for third trophy on 95. In the professional class in the preliminary, C. G. Spencer finished in the lead with 95 from the limit distance of 23 yards. W. T. Crosby, also at 23 yards and L. Ebert, at 20 yards, tied on 94 for second place.

Thursday handicap day, was another one of ideal conditions for shooting. The attendance was larger than on the previous days and the contestants were closely watched by a large gallery of spectators, among them being many ladies interested in outdoor sport. The morning events were well filled and many good scores were recorded. D. J. Holland set the work of 100 straight, and was followed by J. W. Akard, S. A. Huntley, C. Funderkirk and A. H. Campbell only one target behind, with 99 each. The professionals were just as classy as the amateur in their work. J. R. Graham accounting for the whole century and Art. Killam, W. R. Crosby, Ed. O'Brien and F. G. Bills, dropping but one target each.

The Western handicap event was closed with a record entry of 230. The contest was a close one. F. A. Snell, Carlinville, Ill., 18 yards; W. J. Raup, Portage, Wis., 20 yards, and G. L. Grubb, Wetmore, Kans., 20 yards, tying for first place on 97. In second place were A. C. Connor, Springfield, Ill.; G. T. Hall, Laoni, Ill.; J. H. Noel, Nashville, Tenn., and C. C. Plummer, Swan Lake, Manitoba, all at 20 yards with 96 each. The shoot-off for first money and trophy was a hot one. In the first round the men tied on 18. The second round settled the winner of first place, W. Rauf scoring 19, and the others tying on 18. Then followed the shoot-off for second and third trophies. The first two rounds resulted in ties on 18 and 20. The next time Snell won on a score of 19 to 16 and took second trophy, Grubb getting third. The professionals also finished well up in the list. G. H. Ford, Nashville, Tenn., 16 yards; E. Banks, Wilmington, Del., 20 yards; J. R. Graham, Ingleside, Ill., 23 yards, 95 each. A complete list of long runs would require too much space; a few of the longest follow: C. C. Plummer, 212; D. J. Holland, 73, 82, 119; D. D. Gross, 106, 79; A. C. Buckles 115; J. W. Bell, 79; Bert Waggoner, 83; C. Funderkirk, 104; H. W. Cadwalader, 115. D. J. Holland and C. C. Plummer tied for high amateur average on 344 out of 350. P. Baggerman, 342, J. S. Frink and S. A. Huntley, 341.

Nemours (Ladies) Trapshooting Club.

"Old Sol" was out in all his glory, but in spite of his efforts to make the afternoon "red hot," five of the Nemours ladies faced the traps at the Du Pont Trapshooting Club on Saturday, June 19.

This day's shoot was the third in the

series of the "five-bird events," which the ladies are trying out this month. Mrs. White won the first event yesterday and Miss Hammond the second and third. So far, Mrs. Riley has won a place on two of the trophies that are to be shot off for final ownership the first Thursday in July. Dr. Seward, a place on two, Mrs. White, who only entered the competition yesterday, a place on the first, and Miss Hammond yesterday finished with a place on all three.

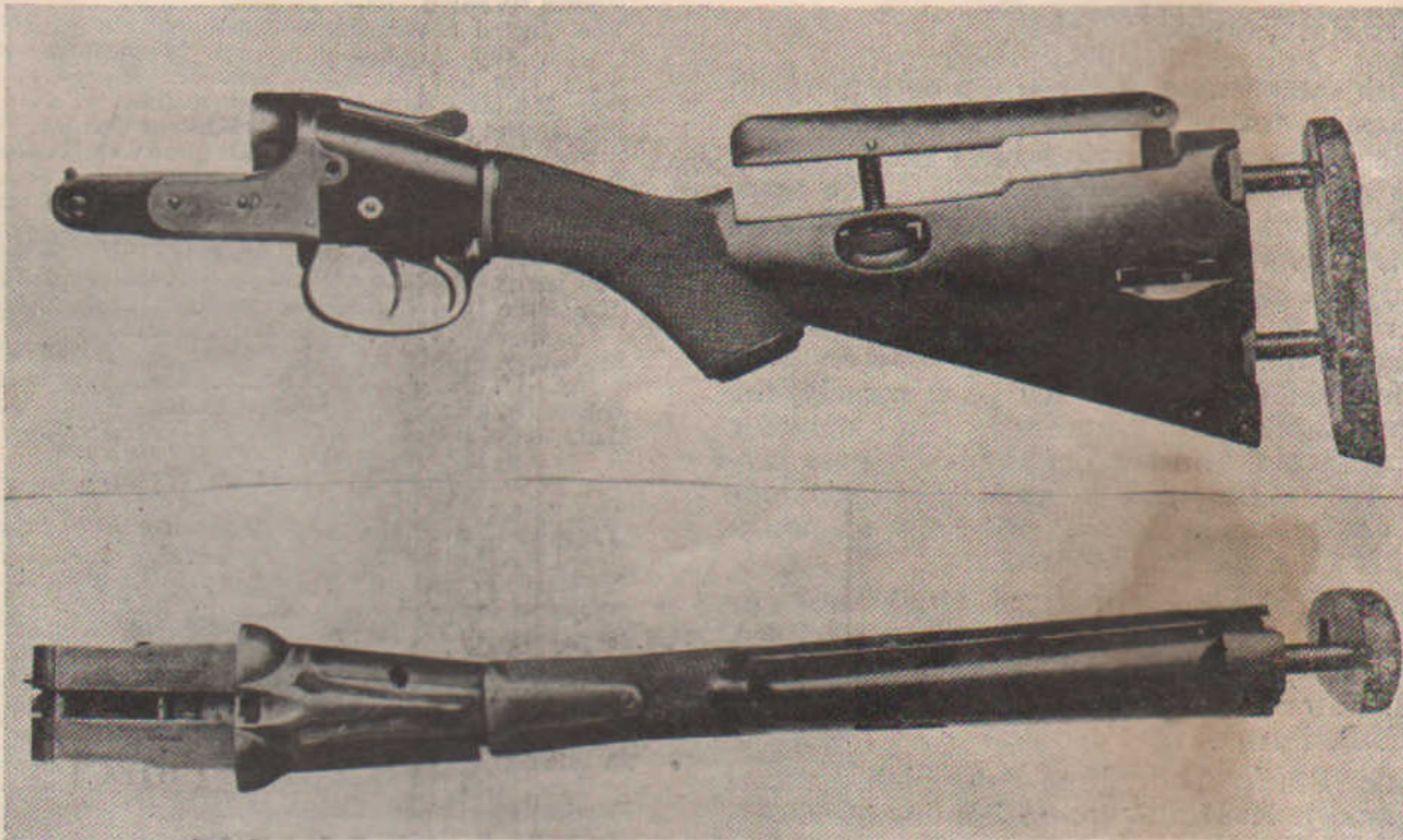
The final shoot will be a handicap event and all the members who have won a place on any of the trophies during the month will be eligible for the final shoot, which will be held the first Thursday in July.

Scores (twenty-five targets) follow:

Mrs. White	10
Miss Hammond	17
Mrs. Riley	10
Dr. Seward	10
Miss Teresa Smith	5
"BLUE BIRD."	

The Parker "Try-Gun."

The new "try-gun" just put out by Parker Brothers Co., of Meriden, Conn., possesses more than ordinary interest for the shotgun devotee. It permits of being so adjusted that most accurate measurements may be secured for a perfectly fitting gun. In order to secure these measurements the makers have designed a try-gun with a grip which moves in relation with the stock, thus giving a perfect fitting grip, no matter whether the stock may be made with very little drop or with the maximum drop. This is accomplished by means of a universal joint which is located between the tang and the trigger plate and is



THE NEW PARKER TRY GUN.

adjustable, both up and down or to right or left. This permits any variation of heel drop, from one extreme to the other, and also gives any desired cast off, either to right or left. These adjustments are secured by means of socket-headed adjusting screws, which are located in the tang and trigger plate and also on either side of the frame and are adjusted by means of the small wrench shown in the illustration.

Adjustments of the comb are made by means of knurled nuts which are let into the body of the stock, and are held from turning by spring pressure. The rear end of the comb may be raised or lowered so that a Monte Carlo effect may be secured. The length of stock is also adjustable by means of similar knurled nuts, and the angle or pitch of butt plate may also be changed at will, so that any pitch desired may be secured.

A still further refinement may be had by swinging the toe of the butt plate either to right or left in relation to the stock. This latter adjustment is made by means of a screw operated by the small wrench. After proper adjustments are secured, the gun may be used, as all parts are amply strong so to permit the use of the gun in demonstrating.

In order to secure the dimensions after the proper adjustments have been made, a special measuring device has been designed. It is firmly fastened to the top rib of the gun by

means of locating pins and a thumb screw, and a vertical slide, which may be moved from one end of the horizontal bar to the other, gives the correct drop measurements at any point of the stock. The pitch is also read by sliding the vertical slide to the end of the stock, and pushing it down across the butt plate, swinging it in its bearing so that the slide touches the butt at heel and toe.

The graduations on the vertical slide holder are in inches and will show the desired pitch of the gun. The cast-off may be also read by measuring the distance of center lines, which are on the heel and toe of the butt plate, from the end of the vertical slide, which is exactly central with the barrels. For determining the length of stock, the measuring device is removed from the barrels and is used as a pair of bean calipers, a small finger attached to the bar being held against the trigger and the vertical slide held against the center of the butt plate. The horizontal bar is graduated, and the length easily and quickly read.

Greenhill Trapshooting Club.

A meeting of the Greenhill shooters was held on Saturday, June 11, at the office of Mr. Harry S. Lynch and the Greenhill Trapshooting Club regularly organized.

The following officers were elected to serve for one year: President, Mr. C. C. Lynch; vice-president, Mr. Richard Bonsal; financial secretary and assistant treasurer, Mr. W. O. Lynch; treasurer, Mr. Frank Swartz; corresponding secretary, Miss Harriet D. Hammond; field captain, Mr. John M. Hammond; Committee on Rules, Mr. H. S. Lynch, Mr. John From, Mr. Leonard Bonsal.

Shoots will be held every other week at the club grounds, Sixth and Cleveland Avenues. A Leggett trap has been installed and the

club well equipped for trapshooting.

The first regular shoot since the organization of the Greenhill Trapshooting Club was held Saturday afternoon at the club grounds, Sixth and Greenhill Ave., Wilmington, Del. There were fifteen members and five visitors on the grounds.

The shoot was a handicap event and when scores were totaled it was found that Mr. James Moore was high for the first prize, a fine briar pipe. Mr. W. O. Lynch was a close second, capturing the second prize, a leather wallet and pocket memorandum.

Mr. H. S. Lynch and Mr. Richard Bonsal tied for third prize, a silver stick pin, but in the shoot-off Mr. Bonsal came off winner.

Mr. Leonard Bonsal, Mr. John From and Mr. C. C. Lynch, for their good work were each presented with a copy of this week's issue of the Sportsmen's Review.

The afternoon, though showery, was thoroughly enjoyed by everyone present. The next regular shoot will be held Saturday afternoon, July 3.

Scores (25 targets) follow:

	Score	Hdc.	Total
S. Hammond	19	0	19
R. Bonsal	15	3	18
John Lynch	7	8	15
G. Goodwin	16	0	16
Miss H. D. Hammond	19	0	19

5 aimed shots in 2 2-5 seconds This Ross Record is hard to beat

It is made possible by the "Ross" straight pull, its speedy and reliable action. The power of the Ross .280 Sporting Cartridge and its destructive effect are important factors in the luck which accompanies Ross Rifles. The most experienced big game hunters all over the world use and recommend the Ross .280 Rifle which sells in New York at \$55.00. Ross .280 Sporting Ammunition with Copper Tube expanding bullet Patented \$7.50 per 100.

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The Ross Rifle

H. S. Lynch	10	8	18
C. C. Lynch	12	5	17
John From	8	8	16
M. Harding	13	5	18
W. O. Lynch	14	7	21
James Moore	14	8	22
C. Bonsal	2	12	14
L. Bonsal	8	9	17
John Hammond	15	0	15
Dr. Florence Seward	11	4	15
Miss Teresa Smith	5	9	14

HARRIET D. HAMMOND.

Harker is High Amateur.

At the registered tournament of the La Crosse (Wisconsin) Gun Club, which took place on June 4, Mr. John Harker, of Minneapolis, was high amateur. Mr. Harker's score was 144 out of 150. Mr. Harker used the Black Shells.

Trapshooting Honors to Ford.

Victor over classy field wins State title at Maryland Country Club. Member of Anolstan Gun Club, of Washington, in addition to landing the Maryland championship, carried back to the Capital City the high average in the Sportsmen's Association tournament trophy for C. A. Jenkins.

Displaying the same form that characterized his shooting during the first two days of the tournament, E. W. Ford, of the Anolstan Gun Club, of Washington, captured the State individual trapshooting championship yesterday over the traps of the Maryland Country Club, of Park Heights Avenue, defeating one of the largest and classiest fields that has ever participated in an event of this

25th Annual Interstate Rifle Tournament

SEA GIRT, N. J.

Sept. 9 to Sept. 18, 1915

Sea Girt Tournament
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New York State Rifle Association

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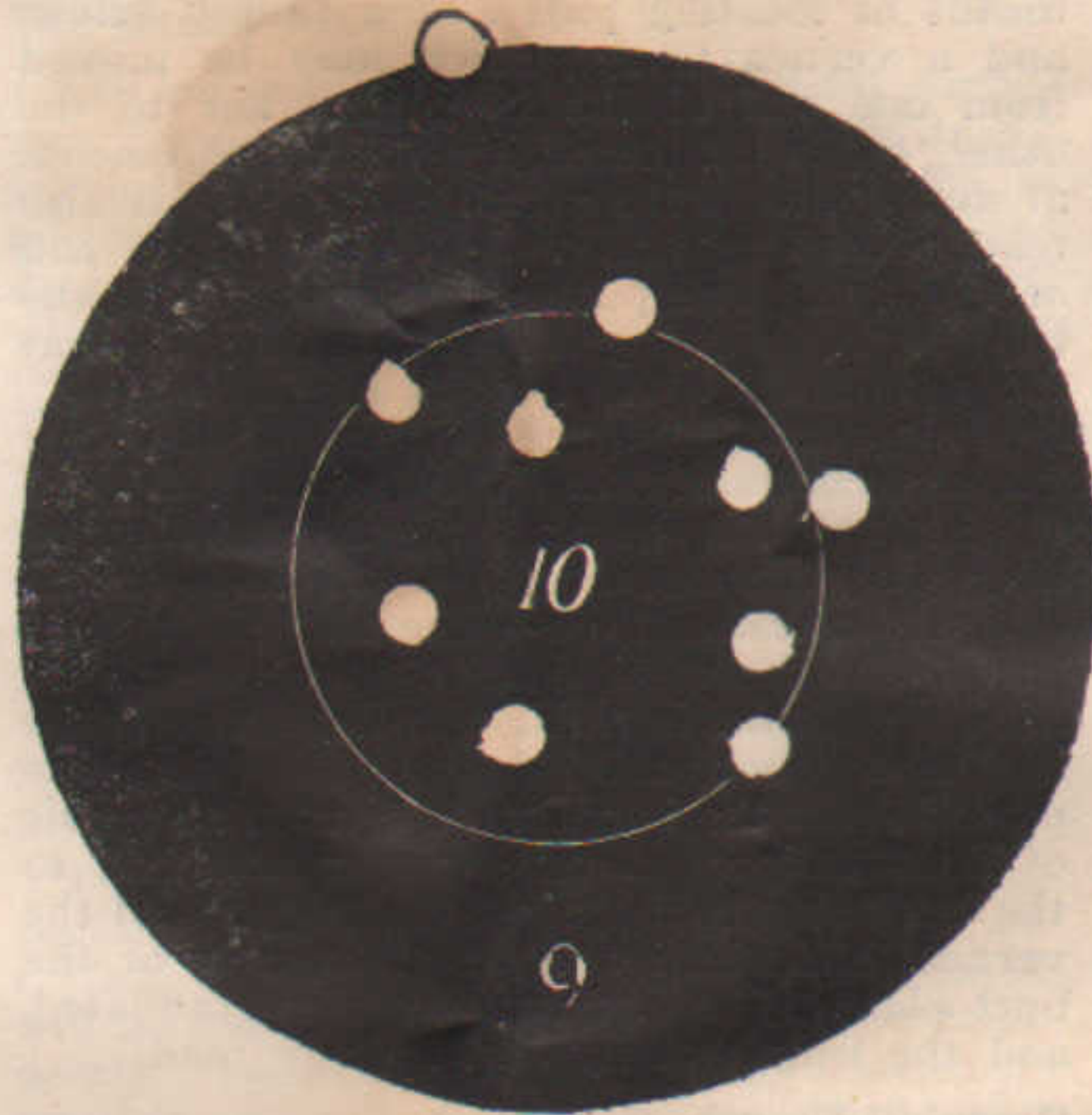
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T. H. CLARKE,
Care of Republic Rubber Co., Youngstown, Ohio.



Target No. 3. Practice score, 99 out of 100, by Dr. H. A. Baker, of the Massachusetts Rifle Association shooting a B. S. A. bolt action rifle with telescope sight, United States .22 long rifle-lesmok cartridge.

broke everyone without a miss. He dropped two in the third event, while in the fourth and final block of twenty-five he let one of the little blue rocks get away from him, thus giving him a total of 97 out of a possible 100, one of the best scores registered in a championship event for years.

The Black Shells were used by Mr. Ford in capturing these honors.

Peters Paragraphs.

With the opening of the trapshooting season in earnest during the past two weeks innumerable prizes and averages have been won by users of the "P" brand of shells. The trapshooters of the country are very evidently taking advantage of the superior shooting quality of these goods, which quality was never more impressively demonstrated than in the year 1914, when Peters shooters won the five chief honors of the year, namely, the Grand American Handicap; the amateur championship of both double and single targets, the official high averages both amateur and professional. Recent winnings of peters shooters include the following:

Springfield, Mo., June 7-9, high amateur average, S. A. Huntley, score 582 out of 600. Third amateur average, 579 out of 600, by C. B. Eaton. Long amateur run, 200 straight, by C. B. Eaton.

Pine Bluff, Ark., June 8-9, high general average, J. R. Hinkle, score 385 out of 400.

Alexander, Ill., June 9-10, high general average, H. W. Cadwallader, score 290 out of 300.

Indiana State shoot, Indianapolis, June 8-10, high general average, C. A. Young, score 493 out of 500. Indiana State championship, Walter Roach, score 293 out of 300. C. A. Young, high professional in this event, score 296 out of 300. Mr. Young also made high run of 167 straight, and high score in the interstate championship event, score 99 out of 100.

Chicago Gun Club, June 12, high general average, J. R. Graham, score 145 out of 150.

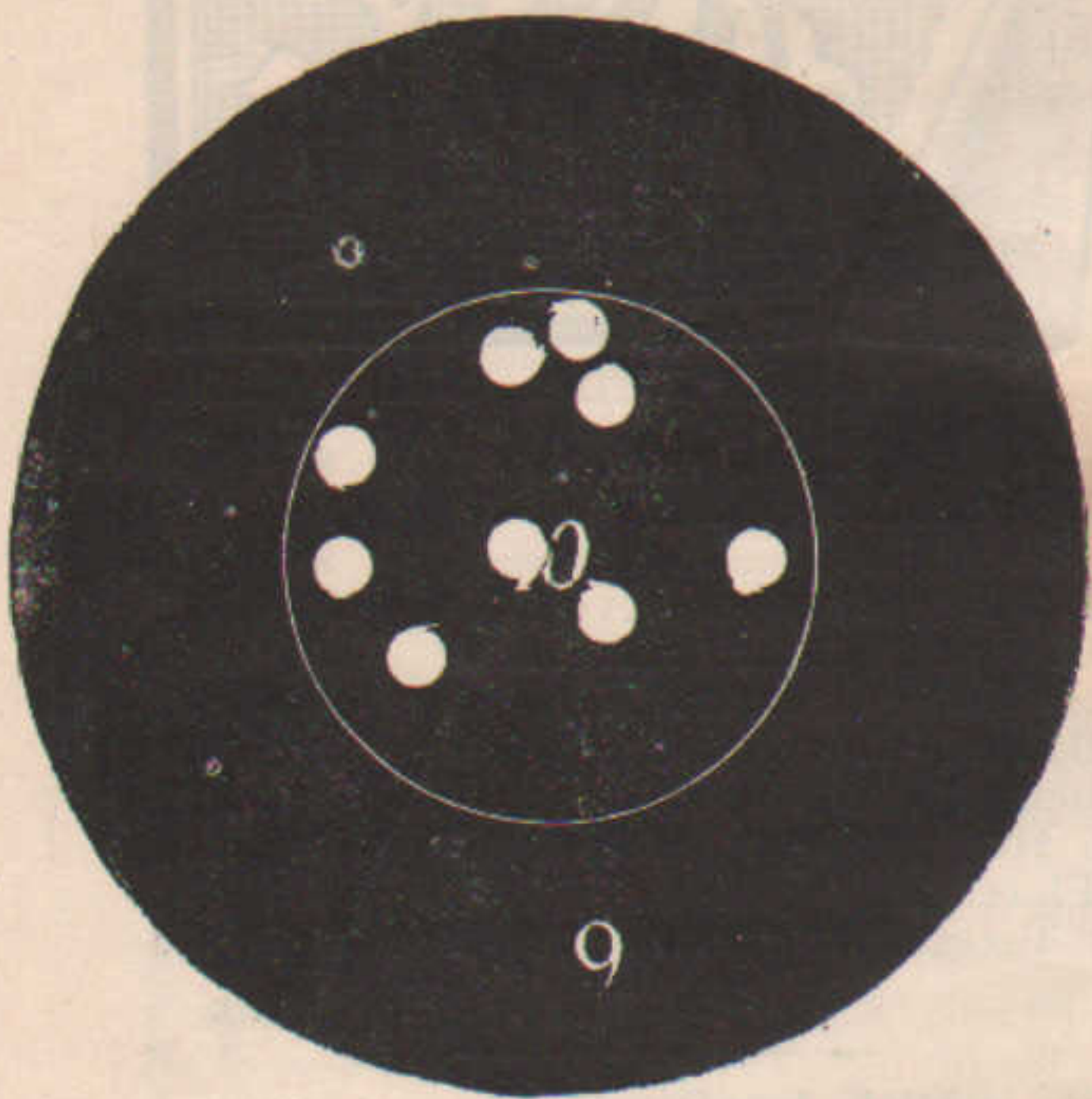
Reading, Pa., June 12, high amateur average Chas. H. Newcomb, score 146 out of 150. Second amateur average, Allen Heil, score 144 out of 150. High professional average, Neaf Apgear, score 143 out of 150.

Chicago, Ill., June 13, high professional, J. R. Graham, score 96 out of 100.

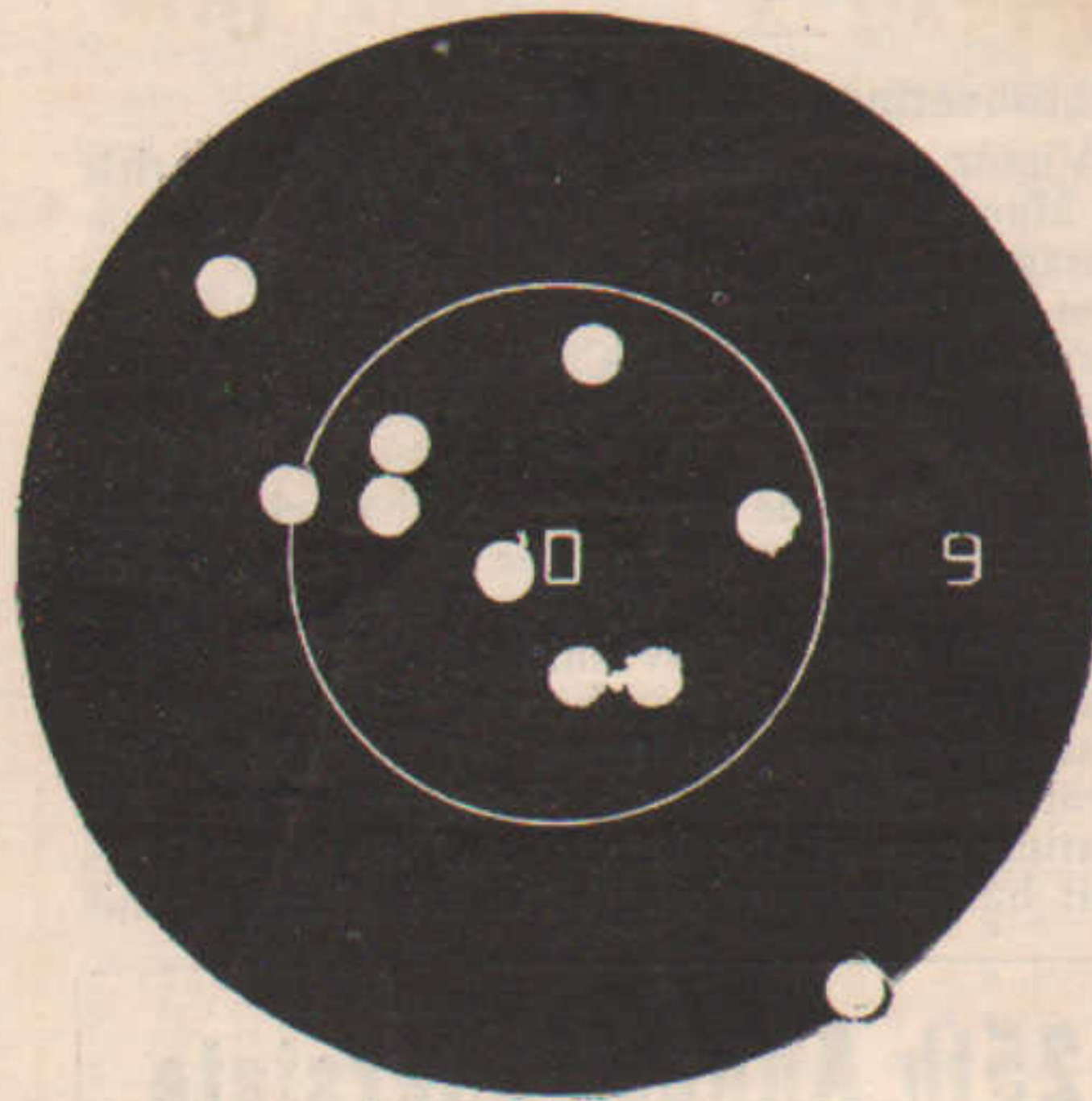
Amarillo, Tex., June 14, high professional average, L. I. Wade, score 169 out of 175. High amateur average, W. E. Gazzell, score 160 out of 175.

Kentucky State challenge cup, Lexington, Ky., June 17, won by Mr. H. T. Strother, of Winchester, Ky., score 99 out of 100.

Crookston, Mo., June 15-16, high professional average, R. R. Barbour, score 318 out of 360.



Target No. 1. Practice score, 98 out of 100 at 100 yards prone, by Dr. H. A. Baker, of the Massachusetts Rifle Association, shooting a B. S. A. Martin action match rifle with telescope sight, United States .22 long rifle lesmok cartridge.



Target No. 2. Score 98 out of 100, by Dr. H. A. Baker, Massachusetts Rifle Association in the second match of the N. R. A. Small Bore Outdoor League shooting a B. S. A. bolt action rifle with telescope sight, United States .22 long rifle lesmok cartridge.

kind. It was the closing feature of the annual tournament of the Maryland Sportsmen's Association, and besides taking the State championship back to Washington with him, Ford also carried off the high average prize for the tournament, leading both the amateurs and professionals during the two days of shooting.

The Washington gunner also stood out by himself in the championship. In the first two events of twenty-five targets each, he

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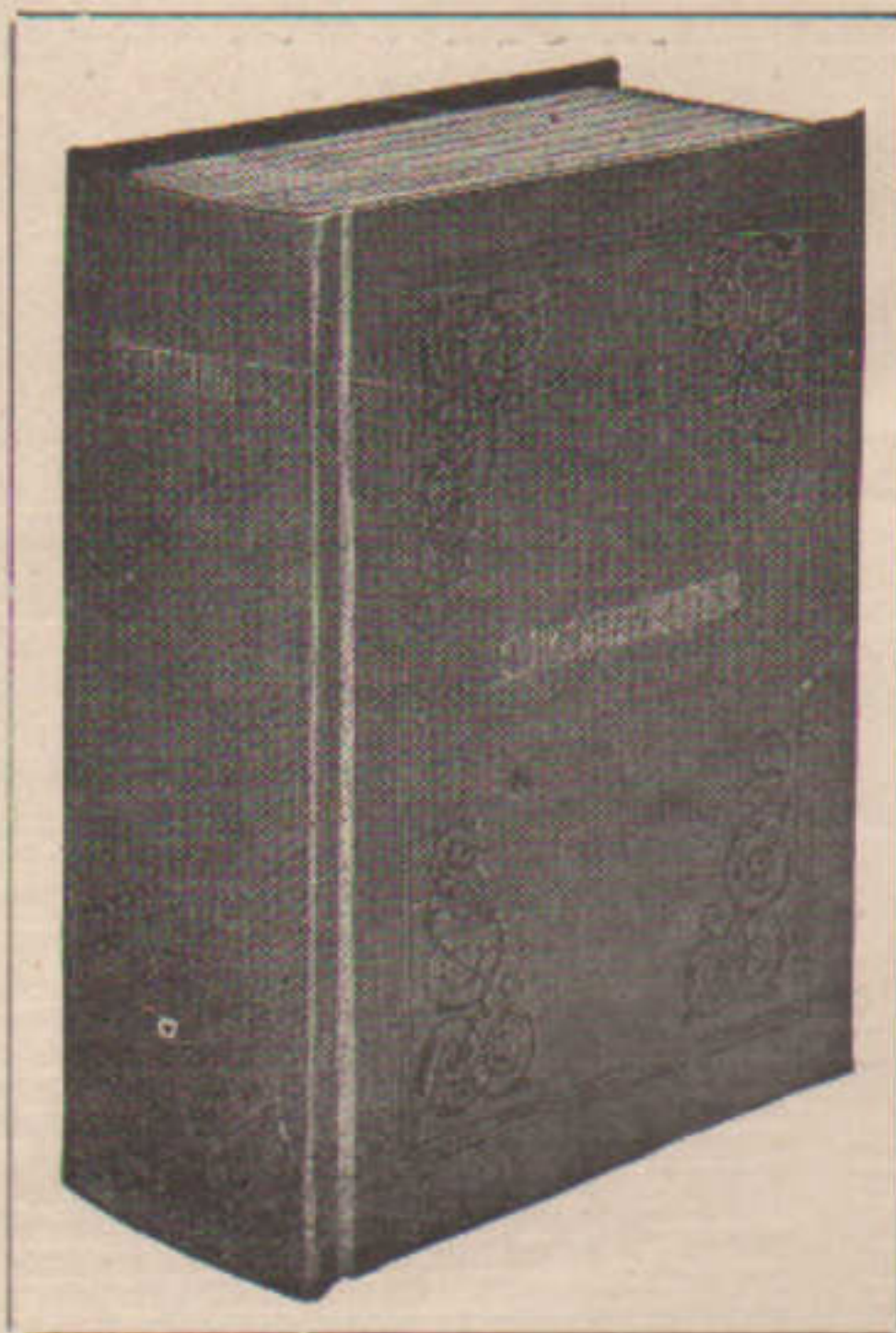
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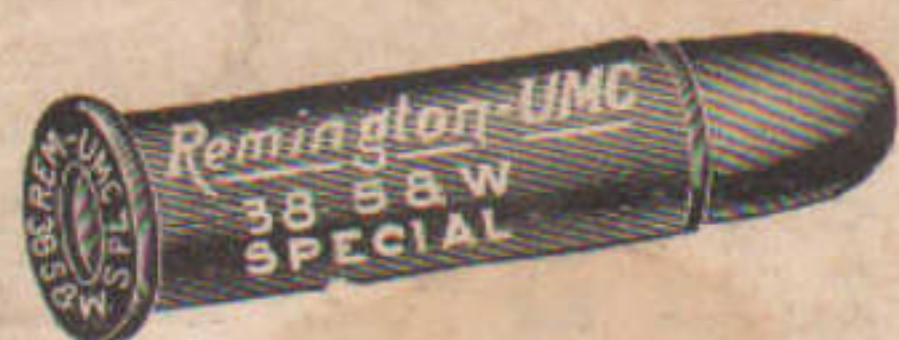
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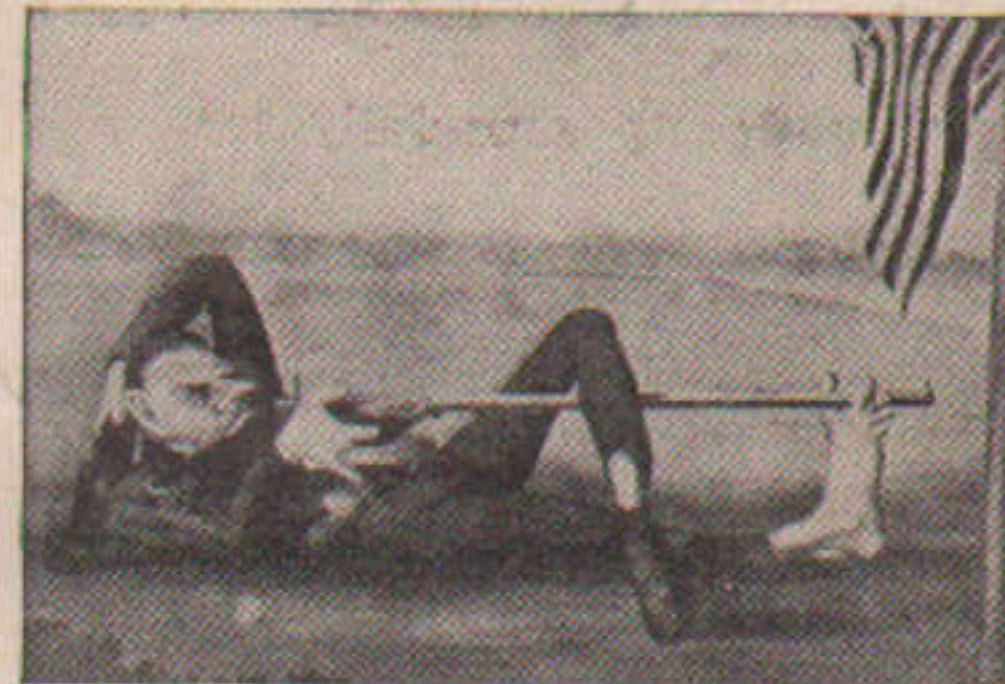
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