

# ARMS AND THE MAN



Vol. XLVI. No. 25.

SEPTEMBER 23, 1909.

**THE NATIONAL  
MILITARY AND SHOOTING WEEKLY**

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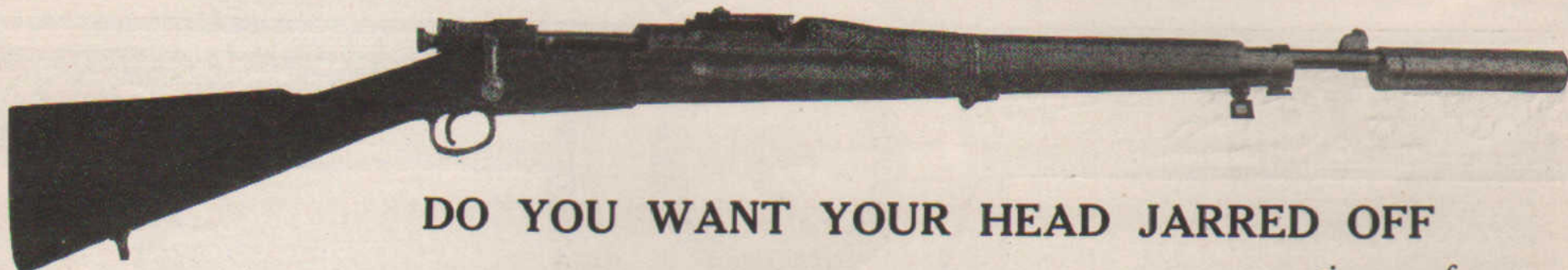
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WASHINGTON, D. C.



# ARMS AND THE MAN

FORMERLY  
SHOOTING AND FISHING.

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## THE MYSTERY OF METAL FOULING.

A SERIOUS INVESTIGATION OF ITS CAUSES AND CURE.

The most serious, careful, intelligent and comprehensive tests ever undertaken to solve the mystery of metal fouling are those described in the article which follows. These tests were carried on, and indeed are still being carried on, at Frankford Arsenal by Capt. Thos. B. Doe, Ordnance Department, United States Army.

Captain Doe is a pupil and protege of Major Phillips of the Ordnance Department. As is well known, Phillip's efforts have resulted in the manufacture of Service ammunition which at the present moment appears to be almost, if not quite, equal to the finest product turned out by the commercial manufacturers.

Captain Doe, no more than Major Phillips, is doing the work which falls to him in the Ordnance Department for the glorification of himself. A reasonable personal pride furnishes the splendid spur for many grand achievements, but the backbone of an ambition which will last through any siege of hard and disappointing labor must be the love of the thing for its own sake's sake.

This is just the interest which Major Phillips and Captain Doe have in the manufacture of Service ammunition. They have been given a free hand by their superiors, and the results speak for themselves. Doe designed the revolver cartridge which proved in the tests at Sea Girt this year to be very close in quality to the highest grade commercial cartridge. It unquestionably showed itself immensely superior to any Frankford cartridge which had ever gone before.

In the last eighteen months no other subject has more deeply engrossed the attention of riflemen than that of metal fouling. ARMS AND THE MAN has contributed much to the literature of this subject. Our columns have literally bristled with "dope or no dope" observations; a notable example of this is found in our issue of June 10, this year, but there were many others.

However, as we have said, the article which follows here is the most valuable contribution on this subject which has ever been made public. It is not to be taken as the final word but the results which are cited may, without violence, be assumed to be correct. The conclusions reached may be questioned, but in that case the burden of proof would doubtless lie upon the protestant.

This is an important question for, as Captain Doe once remarked in the hearing of the editor of ARMS AND THE MAN, "It would be a very serious thing if we had a war and our troops felt that their ammunition was inferior. Even if it were not inferior the situation would be serious, but on the other hand, if our fellows thought that our ammunition was the best on earth, and to back that up it happened to be the best, you couldn't lick them!"

To all practical intents and purposes, if the conclusions reached by Captain Doe are to be taken as the truth, metal fouling has become a thing of the past, as the small amount still produced is evenly distributed along the bore, and thus distributed it improves the accuracy of the arm. Tests which he has made seem to prove this.

It is only fair to say that the article which follows was not prepared by Captain Doe for publication, but a knowledge of what is going on in affairs military, and especially with the shooting phase of them, in the Ordnance Department and everywhere else, caused ARMS AND THE MAN to be aware of the experiments which he was conducting, and an application to the Chief of Ordnance brought us permission to present to the shooting men of the world his extremely valuable and unique report.

I HAVE worked on the theory that the glass in the H-48 primer increases the friction of the bullet along the bore and thus increases the metal fouling. All the data I have been able to collect on the subject of metal fouling seems to show without doubt that the fouling depends directly upon the pressure and velocity, other things being equal. The bullet passes through the bore so rapidly that the heat developed cannot be conducted away; the result is that a thin skin of metal is actually melted from the jacket and deposited in the bore. Bullets recovered from sawdust after being fired at Service velocity showed that from 1.3 to 1.8 grains in weight had been lost which is divided equally between the slug and jacket. The part lost from the slug is eroded from the base of the bullet by the powder gases, while the part lost from the jacket is from that part of the jacket in actual contact with the bore.

The following test was made to determine whether or not particles of cupro-nickel broken from the jacket would be melted by the powder gases and appear as fouling.

### TEST NO. 1.

Gun.	Radius.	Mean Vertical Deviation.	Metal fouling.	Remarks.
184210	.25	.12	1.29 grs.	2 grs. fine cupro nickel filing in case. Cupro nickel steel jacket 150 gr. bullet. Temp. of gun before firing 85°. Temp. of gun after firing 30 shots 256°. Slight traces of metallic fouling on gun 6" from muzzle.
	.28	.24		
	.32	.27		
	.34	.23		
	.24	.18		
	.23	.20		
	.26	.16		
	.29	.19		
	.14	.09		
	.261	.186		
274470	.38	.27	1.07 gr.	2 grs. fine copper filing in case. Cupro nickel steel jacket 150 gr. bullet. Temp. of gun before firing 86°. Temp. of gun after firing 30 shots 268°. No metallic fouling visible.
	.44	.26		
	.32	.20		
	.26	.17		
	.31	.24		
	.22	.16		
	.24	.20		
	.25	.18		
	.34	.25		
	.37	.32		
	.313	.225		

Gun.	Radius.	Mean Vertical Deviation.	Metal fouling.	Remarks.
277537	.24	.13	0.98 gr.	2 grs. fine cupro nickel filing in case. Cupro nickel steel jacket 150 gr. bullet. Temp. of gun before firing 80°. Temp. of gun after firing 30 shots 264°. No metal fouling visible.
	.22	.16		
	.26	.18		
	.15	.11		
	.18	.13		
	.26	.14		
	.26	.16		
	.22	.17		
	.16	.11		
	.19	.11		
	.214	.14		

In preparing this ammunition 2 grains of very fine copper filings or cupro-nickel filings was placed in the powder charge; bullets with cupro-nickel steel jackets were used, as this jacket gives very little fouling. The results of this test seem to indicate without doubt that small particles broken from the bullet jacket will not appear as metal fouling and that the metal fouling which is found in the bore is caused entirely by small particles being melted from the jacket by friction.

The following test was made to determine the relation between velocity and metal fouling.

### TEST NO. 2.

Firing done to determine the relation between the muzzle velocity and metal fouling produced by 30 caliber Service ammunition, all ammunition hand loaded. Fired for accuracy at 500 yards.

Charge.	Muzzle Velocity.	Radius.	Mean Vertical Deviation.	Temperature of gun.	Metal fouling.	Remarks.
40.7	2400	0.46	0.34	70°	0.51 gr.	Rifle No. new 276113. Fired 102 times. Solution left in barrel 1 hour considerable color. Gun cooled after 1st 30 rounds then after each 20 rounds.
		.77	.56			
		.50	.41	226°		
		.62	.42			
		.51	.34			
		.31	.18			
		.48	.34			
		.74	.47			
		.35	.19			
		.32	.17			
		5.06	3.42			
		0.506	0.342			



Charge.	Muzzle Velocity.	Radius.	Mean Vertical Deviation.	Temperature of gun.	Metal fouling.	Remarks.	Powder.	Metal.	Radius.	Temperature of gun.	Metal fouling.	Remarks.
42.8	2500.	0.77 .68 .47 .70 .40 .37 .60 .65 .50 .54	0.66 .51 .35 .46 .28 .31 .54 .38 .30	73° 240°	1.56 gr.	Rifle No. 276113. Previously fired 204 times.	Pyro Lot 218	River-side No. 16 alloy.	0.26 .22 .23 .27 .37 .45 .32 .34 .34	62° 250°	3.03 gr.	Rifle No. 276113. Previously fired 917 times. Metallic fouling distributed along groove 6" from muzzle. One patch 6" from muzzle. Solution applied 3 times.
		5.68	4.07						3.03			
		0.568	0.407						0.303			
44.6	2600	0.63 .66 .60 .66 .37 .32 .44 .40 .52 .28	0.42 .21 .40 .51 .20 .20 .28 .34 .30 .24	75° 250°	2.05 gr.	Rifle 276113. Previously fired 304 times.	Pyro Lot 208	Cupro-nickel.	0.39 .38 .46 .46 .38 .35 .21 .39 .47 .34	68° 245°	4.98 gr.	Rifle No. 276113. Previously fired 1019 times. Solution applied 4 times. Solution very dark. Numerous patches of metallic fouling in lands and grooves extending 8 or 10 inches from muzzle.
		4.80	3.10						3.83			
		0.480	0.310						0.383			
47.2	2700	0.36 .31 .66 .51 .40 .44 .48 .50 .67 .63	0.25 .23 .46 .20 .20 .30 .30 .36 .40 .57	68° 250°	3.12 gr.	Rifle 276113. Previously fired 404 times.	Pyro	Cupro-nickel steel.	0.25 .40 .36 .38 .27 .30 .29 .51 .26 .26	64° 252°	1.84 gr.	Rifle No. 276113. Previously fired 815 times. No metallic fouling visible. Solution applied 3 times.
		4.96	3.27						3.28			
		0.496	0.327						0.328			
48.8	2800	0.47 .78 .64 .48 .40 .63 .55 .33 .66 .56	0.29 .60 .30 .36 .36 .42 .44 .14 .42 .41	69° 240°	6.25	Rifle 276113. Previously fired 506 times.						
		5.50	3.74									
		0.550	0.374									

NOTE.—In all tests in which the amount of metal fouling is given the gun was clean when firing began. The entire amount of fouling produced was removed. Different guns give different amounts of fouling under the same conditions—for this reason in all cases where comparisons are made the same gun was used and fired under identical conditions.

It will be seen from the above that the fouling increases very rapidly with the velocity due to two causes. First, the heat developed by friction has less time in which to be conducted away, and second, the lateral pressure of the bullet in the bore is greater, due to the greater powder pressure. This increases the amount of friction and therefore the amount of heat developed by friction. A heavier bullet with thicker jacket and a lower muzzle velocity would in all probability reduce the metal fouling and give equally as good a trajectory. The following test was made to determine the relative advantages of different metals.

TEST NO. 3.

Comparison of different bullet jacket metals for 30 caliber service ammunition. Muzzle velocity 2700 f. s. all shots fired from fixed rest for accuracy at 500 yards. Temperature taken at beginning and after 30 shots. Solution for removing metal fouling applied after each series of targets with each kind of metal.

Powder.	Metal.	Radius.	Temperature of gun.	Metal fouling.	Remarks.
Pyro Lot 208.	Cupro-nickel.	0.35 .42 .38 .29 .42 .29 .45 .34 .26 .26	64° 245°	3.92 gr.	Rifle 276113. Previously fired 713 times. Several patches of metallic fouling near muzzle. Solution applied 3 times resulting solution very dark.
		3.46			
		0.346			
Pyro Lot 218	River-side No. 16 alloy.	0.37 .26 .34 .31 .33 .23 .40 .46 .48 .48	62° 252°	2.71 gr.	Rifle 276113. Previously fired 611 times, 107 fired—Solution applied 3 times. No metal patches visible after firing 105 rounds.
		3.66			
		0.366			
Pyro Lot 208	Cupro-nickel steel jacket.	0.22 .35 .32 .38 .34 .23 .34 .33 .29 .29 .22	65° 252°	2.09 gr.	Rifle No. 276113. Previously fired 1121 times. No metallic fouling visible in gun. Solution applied 3 times. Solution medium dark.
		3.02			
		0.302			

TEST NO. 4.

Gun and Times Fired.	Radius.	Mean Vertical Deviation.	Primer.	Metallic Fouling.	Remarks.
No. 184210. Fired 102 times.	.33 .33 .32 .43 .22 .29 .24 .40 .40 .24 .25	.24 .21 .25 .40 .16 .20 .17 .36 .36 .14 .18	Winchester Repeating Arms Co.	1.54 gr.	Winchester Repeating Arms Co. ammunition. Temp. of gun before firing 78°. After firing 30 shots 238°. Gun showed slight traces of metal fouling 8" from muzzle.
	0.305	0.237			
No. 277537. Fired 102 times.	.37 .18 .25 .18 .23 .20 .19 .16 .26 .22	.24 .10 .14 .16 .19 .16 .10 .10 .15 .15	United States Cartridge Company.	0.66 gr.	United States Cartridge Company ammunition. Temp. of gun before firing 79°. After firing 30 shots 242°. No metallic fouling visible.
	0.224	0.49			
No. 276675. Fired 102 times.	.31 .36 .34 .34 .25 .18 .32 .23 .46 .17	.33 .22 .21 .27 .18 .10 .26 .18 .31 .12	H-48.	2.34 gr.	Frankford Arsenal ammunition. Temp. of gun before firing 81°. After firing 30 shots 240°. 10 patches of metallic fouling on lands and grooves.
	0.296	0.208			
No. 274470. Fired 102 times.	.28 .40 .32 .55 .39 .40 .62 .75 .31 .30	.20 .32 .16 .30 .27 .29 .40 .56 .24 .17	Union Metallic Cartridge Company.	2.19 gr.	Union Metallic Cartridge Company ammunition. Temp. of gun before firing 83°. After firing 30 shots 238. Slight metal fouling.
	0.430	0.291			
No. 184210. Fired 204 times.	.36 .19 .43 .24 .22 .25 .36 .40 .46 .46	.24 .13 .18 .22 .22 .20 .22 .24 .30 .24	United States Cartridge Company.	1.27 gr.	United States Cartridge Company ammunition. Temp. of gun before firing 81°. After firing 30 shots 242°. No metallic fouling visible.
	0.347	0.229			



Gun and times fired.	Radius.	Mean Vertical Deviation.	Primer.	Metallic fouling.	Remarks.
No. 277537. Fired 204 times.	.26 .29 .26 .29 .24 .32 .26 .32 .43 .40	.20 .21 .15 .21 .19 .21 .21 .29 .29 .31	Winchester Repeating Arms Co.	1.77 gr.	Winchester Repeating Arms Co. ammunition. Temp. of gun before firing 82°. After firing 30 shots 245°. Slight traces of metal fouling.
0.307		0.227			
No. 276675. Fired 204 times.	.37 .32 .28 .38 .31 .35 .30 .23 .28 .29	.21 .17 .20 .21 .23 .30 .21 .18 .15 .19	Winchester Repeating Arms Co.	2.35 gr.	Winchester Repeating Arms Company ammunition. Temp. of gun before firing 84°. After firing 30 shots 247°. Slight metallic fouling near muzzle.
0.312		0.205			
No. 274470. Fired 204 times.	.38 .33 .30 .30 .37 .30 .25 .29 .43 .35	.35 .24 .19 .25 .30 .20 .20 .25 .28 .22	H-48	1.73 gr.	Frankford Arsenal ammunition. Temp. of gun before firing 88°. After firing 30 shots 252°. 12 patches of metallic fouling from muzzle extending back for 10 inches.
0.330		0.240			
No. 184210. Fired 306 times.	.50 .35 .54 .49 .35 .47 .31 .29 .40 .32	.40 .20 .28 .39 .24 .35 .26 .20 .30 .23	Union Metallic Cartridge Company.	1.92 gr.	Union Metallic Cartridge Company ammunition. Temp. of gun before firing 82°. After firing 30 shots 250°. Several patches of metallic fouling near muzzle.
0.402		0.285			
No. 277537. Fired 306 times.	.31 .36 .31 .25 .35 .28 .40 .50 .27 .44	.18 .20 .20 .21 .16 .24 .34 .43 .17 .24	H-48	1.42 gr.	Frankford Arsenal ammunition. Temp. of gun before firing 82°. After firing 30 shots 248°. 8 patches of metallic fouling near muzzle.
0.347		0.237			
No. 276675. Fired 306 times.	.37 .43 .23 .43 .30 .52 .40 .23 .44 .50	.20 .34 .18 .30 .16 .43 .32 .16 .23 .25	Union Metallic Cartridge Company.	1.95 gr.	Union Metallic Cartridge Company ammunition. Temp. of gun before firing 82°. After firing 30 shots 246°. Slight metal fouling near muzzle.
0.385		0.257			
No. 274470. Fired 306 times.	.21 .22 .26 .35 .30 .21 .23 .23 .22 .26	.16 .10 .22 .19 .27 .12 .14 .17 .12 .17	United States Cartridge Company.	1.59 gr.	United States Cartridge Company ammunition. Temp. of gun before firing 82°. After firing 30 shots 250°. No metallic fouling visible.
0.249		0.166			
No. 184210. Fired 408 times.	.20 .34 .41 .48 .42 .38 .38 .27 .36 .32	.13 .18 .23 .30 .16 .17 .24 .19 .23 .21	H-48	2.62 gr.	Frankford Arsenal ammunition. Temp. before firing 78°. After firing 30 shots 248°. Numerous patches of metallic fouling on lands and grooves from muzzle extending back for 6 inches.
0.352		0.204			
No. 277537. Fired 408 times.	.30 .40 .39 .38 .29 .40 .47 .36 .47 .37	.22 .27 .19 .28 .21 .28 .40 .22 .15 .32	Union Metallic Cartridge Company.	2.00 gr.	Union Metallic Cartridge Company ammunition. Temp. of gun before firing 80°. After firing 30 shots 252°. Slight metal fouling on grooves.
0.383		0.254			
No. 276675. 408 times.	.28 .22 .26 .18 .21 .14 .28 .23 .29 .28	.14 .14 .14 .10 .15 .12 .19 .16 .20 .15	United States Cartridge Company.	1.85 grs.	United States Cartridge Co. ammunition. Temp. of gun before firing 81°. After firing 30 shots, 260°. No metallic fouling visible.
0.237		0.149			

Gun and times fired.	Radius.	Mean Vertical Deviation.	Primer.	Metallic fouling.	Remarks.
No. 274470. Fired 408 times.	.22 .21 .27 .22 .27 .34 .30 .33 .43	.11 .09 .22 .14 .23 .28 .18 .24 .22	Winchester Repeating Arms Co.	3.14 grs.	Winchester Repeating Arms Co. ammunition. Temp. of gun before firing, 82°. After firing 30 shots, 258°. 6 metallic patches on grooves near muzzle.
0.294		0.196			

Resumé.

Ammunition.	Radius.	Fouling produced by 100 shots.
United States Cartridge Co. ....	.267'	1.34 grains.
Winchester Repeating Arms Co. ...	.306'	2.20 grains.
Frankford Arsenal. ....	.332'	2.03 grains.
Union Metallic Cartridge Co. ....	.400'	2.01 grains.

Attention is invited to the fact that the ammunition furnished by the United Cartridge Company gives the best results both for accuracy and metal fouling.

The best results so far obtained with any ammunition was obtained with the cupro-nickel steel jacketed bullet; the mean radius of 10 targets being .214. The mean radius of all firing with the cupro-nickel steel, however, is not quite as good as the mean radius of the firing with the United States Cartridge Company's ammunition.

United States Cartridge Co.	Radius.	Fouling per 100 shots.
Cupro nickel. ....	.267'	1.34 gr.
Steel. ....	.285'	1.65 gr.

Previous to the above firing, primers were made without glass and it was found that they gave better results than the H-48 (Service primer) both in uniformity of pressures and velocities and in reducing the metal fouling.

There seems to be no doubt but that the glass increases the friction in the bore and consequently the metal fouling.

The best results were obtained with sulphur and potassium chlorate in the proportion  $\frac{570}{1335}$ ; this alone, however, gives a primer much too strong. This mixture was diluted with graphite, antimony sulphide and with a mixture of the two. The primers with graphite in them gave very good flames, but were not sensitive enough.

Primers were made in which antimony sulphide alone was used to dilute the composition and these gave very good results. Fifty-one different compositions were made in which the ingredients were varied from sulphur 570 grains, antimony sulphide 0, and potassium chlorate 1,225; to sulphur 570, antimony sulphide 2,000, and potassium chlorate 1,225.

It was found that the primer containing no antimony sulphide was too strong and the one made from the mixture containing 2,000 grains of antimony sulphide would not ignite the powder or would give a hang-fire.

The best results were obtained with compositions containing from 600 to 1,200 grains of antimony sulphide.

Following is a record of firing done with Primer No. 42 for comparison with the United States Cartridge Company's primer.

TEST NO. 5.

RECORD OF VELOCITY FIRING.

Fired in rifle No. 353438. Velocities taken with two instruments.

Primer.	No. of shot.	Velocity.	No. of shot.	Velocity.	Remarks.
United States Cartridge Co.'s	1	2658.5	11	2651	Max. var. in velocity 55 ft.
	2	33	12	46	
	3	54	13	21	Mean var. in velocity 13.02 ft.
	4	36.5	14	39.5	
	5	31	15	63.5	C. P. Pyro D. G. Lot 207 of 1909.
	6	52.5	16	76	
	7	47	17	56.5	Charge 50 gr.
	8	38	18	32	
	9	68	19	62.5	
	10	30	20	70.5	
Mean of 20 shots. ....					2646.6

Primer.	No. of shot.	Velocity.	Pressure.	Remarks.
United States Cartridge Co.'s	1	2637.0	47200	Max. var. in velocity, 44 ft.
	2	61.5	48833	Mean var. in velocity, 11.28 ft.
	3	25.5	46840	Max. var. in pressure, 1993 lbs.
	4	47.5	47480	C. P. Pyro D. G., 30 cal. Lot 207 of 1909.
	5	60.5	47333	
	6	60.5	47120	Charge, 50 grs.
	7	43.0	46960	
	8	69.5	47160	
	9	65.5	47366	
	10	53.0	47200	
		2652.35	47349.2	

Primer.	No. of shot.	Velocity.	No. of shot.	Velocity.	Remarks.
Experimental No. 42, Frankford.	1	2653.5	11	2649.5	Max. var. in velocity 29.5 ft.
	2	51	12	48.5	
	3	53.5	13	54.5	Mean var. in velocity, 5.20 ft.
	4	40.5	14	51	
	5	53	15	49	C. P. Pyro D. G. .30 cal. Lot 209 of 1909.
	6	41.5	16	32	
	7	60	17	49.5	
	8	46.5	18	61.5	Charge 47.0 grs.
	9	60.5	19	59	
	10	46.5	20	50	
Mean of 20 shots. ....					2650.5



Primer.	No. of shot.	Velocity.	Pressure.	Remarks.
Experimental No. 42, Frankford.	1	2651	48040	Max. var. in velocity, 22.5 ft.
	2	69.5	47700	Mean var. in velocity, 7.42 ft.
	3	65	47560	Max. var. in pressure, 1040 lbs.
	4	57.5	47000	C. P. Pyro D. G., 30 cal. Lot
	5	56	47280	209 of 1909.
	6	49	47440	Charge 47.0 grs.
	7	54	47400	
	8	67.5	47080	
	9	68.5	48040	
	10	46	47200	

Rifle.	Primer.	Radius.	Mean Vertical Deviation.	Metal fouling.	Remarks.		
274470	No. 42	.53'	.37	3.19	No metal fouling visible after firing.		
		.51	.36				
		.48	.32				
		.46	.21				
		.57	.24				
		.37	.15				
		Mean....	.486'	.275'			

Primer.	No. of shot.	Velocity.	No. of shot.	Velocity.	Remarks.
Experimental No. 42, Frankford.	1	2630	11	2636	Max. var. in velocity, 23 ft.
	2	43.5	12	49.5	Mean var. in velocity, 5.37 ft.
	3	35.5	13	39.5	C. P. Pyro D. G. Lot
	4	29	14	38	207, 30 cal.
	5	26.5	15	42.5	Charge 50 gr.
	6	36	16	36.5	
	7	29	17	39.5	
	8	30	18	41.5	
	9	39	19	29	
	10	31	20	45	

274470	H-48	.547	.43	3.94	Several patches of metal fouling near muzzle after firing.		
		.59	.43				
		.56	.46				
		.69	.47				
		.58	.48				
		.39	.37				
		Mean....	.558	.44			

Primer.	No. of shot.	Velocity.	Pressure.	Remarks.
Experimental No. 42, Frankford.	1	2636	48520	Max. var. in velocity, 24.5 ft.
	2	30	48266	Mean var. in velocity, 4.30 ft.
	3	20	47366	Max. var. in pressure, 1360 lbs.
	4	18	47880	C. P. Pyro D. G., 30 cal. Lot
	5	22	47700	207 of 1909.
	6	08	47200	Charge 50 gr.
	7	22	48240	
	8	32	47560	
	9	31	47320	
	10	23	48560	

277337	No. 42.	.54	.408	2.96	One patch of fouling visible after firing.		
		.30	.42				
		.41	.20				
		.55	.30				
		.34	.17				
		.46	.22				
		Mean....	.46	.28			

Primer.	No. of shot.	Velocity.	No. of shot.	Velocity.	Remarks.
Experimental No. 42, Frankford.	1	2653.5	11	2657.5	Max. var. in velocity, 34.5 ft.
	2	28	12	46.5	Mean var. in velocity, 7.02 ft.
	3	34.5	13	30	C. P. Pyro D. G., 30 cal. Lot
	4	38	14	35.5	219 of 1909.
	5	37	15	42.5	Charge 46.5 gr.
	6	41.5	16	38	
	7	32.5	17	37.5	
	8	22	18	42.5	
	9	28	19	23	
	10	39	20	47.5	

277337	H-48.	.52	.42	3.41	Several patches of fouling near muzzle after firing.		
		.62	.48				
		.44	.28				
		.34	.30				
		.46	.35				
		.45	.33				
		Mean....	.505	.36			

Primer.	No. of shot.	Velocity.	Pressure.	Remarks.
Experimental No. 42, Frankford.	1	2654.5	47120	Max. var. in velocity, 30 ft.
	2	45.5	46800	Mean var. in velocity, 7.04 ft.
	3	33.5	47160	Max. var. in pressure, 933 lbs.
	4	43	47120	C. P. Pyro D. G., 30 cal. Lot
	5	63.5	46733	219 of 1909.
	6	55.5	47300	Charge 46.5 gr.
	7	40	47633	
	8	46	46700	
	9	52.5	46800	
	10	43	47120	

This test was very severe and while not a very great difference in actual amount of fouling was found yet the fact that that produced by No. 42 primer was smooth, while that produced by H-48 was in patches probably accounted for the difference in accuracy which is decidedly in favor of the No. 42 primer.

### IN THE STILL WATCHES OF THE NIGHT.

NO one has ever been able to explain for us the phenomena of dreams. Is it the soul within the man that never sleeps? May it be his brain which is ever wakeful? Could a second self exist, too weak to assert itself in wakeful hours? Who knows? We are entitled to a guess, and that is about all.

Dreams may be influenced by external causes, or they may not be. The phantasies of the night may be concerned with our doings of the day, or of things we never thought of.

The land of dreams is the home of mystery. The most common-sense man is affected by the murmurings of the one who talks in his sleep, and the sleep-walker is a terror to all.

Many, many years ago—to be more specific, during the Civil War—an incident occurred which had to do with dreams; an incident which has always impressed me as worth remembering, not as a matter of importance but simply because it was curious. Just curious. I will tell it to you, and then I shall see whether you agree with me.

It is remarkable how the threadbare, old conical tent offered any impediment whatsoever to the steadily down-pouring rain, but it did. There were really patches within the guard-tent that night which were almost dry. In these patches wet, tired and bedraggled soldiers slept, as if they had already achieved the soldiers' destiny—death, with torments added.

Within an old tin lantern, hung high on the center pole, a lonesome candle, emaciated and misshapen, sputtered its way to an impending extinction. Midnight had just gone—that gloomy hour "when churchyards yawn and graves give up their dead." It was the enemy's country; the guard-tent stood within the habitat of the foe. Every day was a fighting day and every night a battle to decide how much sleep each tired man might steal from guard duty or forced march.

Well within the center of the dark circle which the bottom of the lantern cast lay the "Professor," styled so because in pre-soldier days he had taught a country school.

Yes, he had left the school-room for the camp. Be-whiskered and begrimed, wrapped in a wretchedly ragged overcoat, his burnt-out eyes defended by a battered forage cap, he slept with uneasy tossings. Sometimes he spoke, and occasionally a clear word escaped him.

On either side and around him other soldiers lay, all sleeping heavily, with moanings that tired men know.

Then the school-master soldier said quite clearly, "Now give me your attention! X times Y equals XY. Do you follow me?" and with the query he thrust out an index finger in the pedagogical way so familiar. That member encountered the body of the next sleeper just under the arm.

On an instant, impelled by God knows what strange chain of singular thought suggestion, the second cried out in a determined voice, obviously that of the vigilant sentry on post, in the old challenging vernacular of Civil War days, "HALT! WHO GOES THERE?" The forefinger withdrawn was poised in air. The sleep which possessed all was so deep that none had been disturbed.

It will be noted that the velocities and pressures given by primer No. 42 are very uniform and much better than given by the United States Cartridge Company's primer. It was found in the test of the United States Cartridge Company's primer a year ago that it did not give uniform velocities and pressures. At that time, however, the subject of metal fouling was not investigated.

In all firings for velocity the rifles were thoroughly cleaned after each twenty shots and without exception the metal fouling seemed to be less than with the H-48 primer, that is, the solution taken from the rifle was not so dark. It is certain, however, that the fouling produced by the United States Cartridge Company's primer and by No. 42 is not bunched as it is with the Service primer; this has been noted throughout both in accuracy firing and firing for velocity.

The following table shows that in every instance where the fouling has been actually measured it has been less for the experimental primers than for the United States Cartridge Company's or H-48 primer:

Primer.	Rifle.	Fouling.	Remarks.
U. S. Cartridge Co., No. 35.	276675	4.48	One hundred shots in five minutes.
H-48, No. 35.	184210	3.57	One hundred shots in five minutes.
U. S. Cartridge Co., No. 35.	277537	20.30	One hundred shots in five minutes.
U. S. Cartridge Co., No. 35.	276675	4.37	One hundred shots in five minutes.
H-48.	274470	1.62	100 shots, 10 in 30 min. and 3 min. intervals.
U. S. Cartridge Co., No. 42.		1.06	100 shots, 10 in 30 min. and 3 min. intervals.
H-48.	277537	2.13	100 shots, 10 in 30 min. and 3 min. intervals.
U. S. Cartridge Co., No. 42.		1.10	100 shots, 10 in 30 min. and 3 min. intervals.
H-48.	274470	3.94	50 shots in 2 min. and 50 fired 10 in 30 sec. with 2 minute intervals.
U. S. Cartridge Co., No. 42.		3.23	50 shots in 2 min. and 50 fired 10 in 30 sec. with 2 minute intervals.
H-48.	277537	3.19	50 shots in 2 min. and 50 fired 10 in 30 sec. with 2 minute intervals.
U. S. Cartridge Co., No. 42.		3.41	50 shots in 2 min. and 50 fired 10 in 30 sec. with 2 minute intervals.
H-48.	277537	3.25	50 shots in 2 min. and 50 fired 10 in 30 sec. with 2 minute intervals.
U. S. Cartridge Co., No. 42.		2.96	50 shots in 2 min. and 50 fired 10 in 30 sec. with 2 minute intervals.

The following record shows pretty well the relative advantages of the Service primer and No. 42.

Two guns were used; 50 shots were fired in two minutes and then 5 targets of 10 shots each were fired. The 10 shots for the target were fired in thirty seconds and there was a two-minute interval between targets.

The bullets used were selected in identically the same manner and 400 rounds of ammunition were hand-loaded under identical conditions, 200 with the H-48 primer, and 200 with No. 42. In the firing the ammunition containing the Service primer was fired first in one rifle; that containing No. 42 primer fired first in the other rifle.

Every care was taken to insure the differences in results being caused by the primer alone.



Again the finger went forward, and once more its tip touched the other as the first sleeper said, in a winning and persuasive voice, "Do you follow me?"

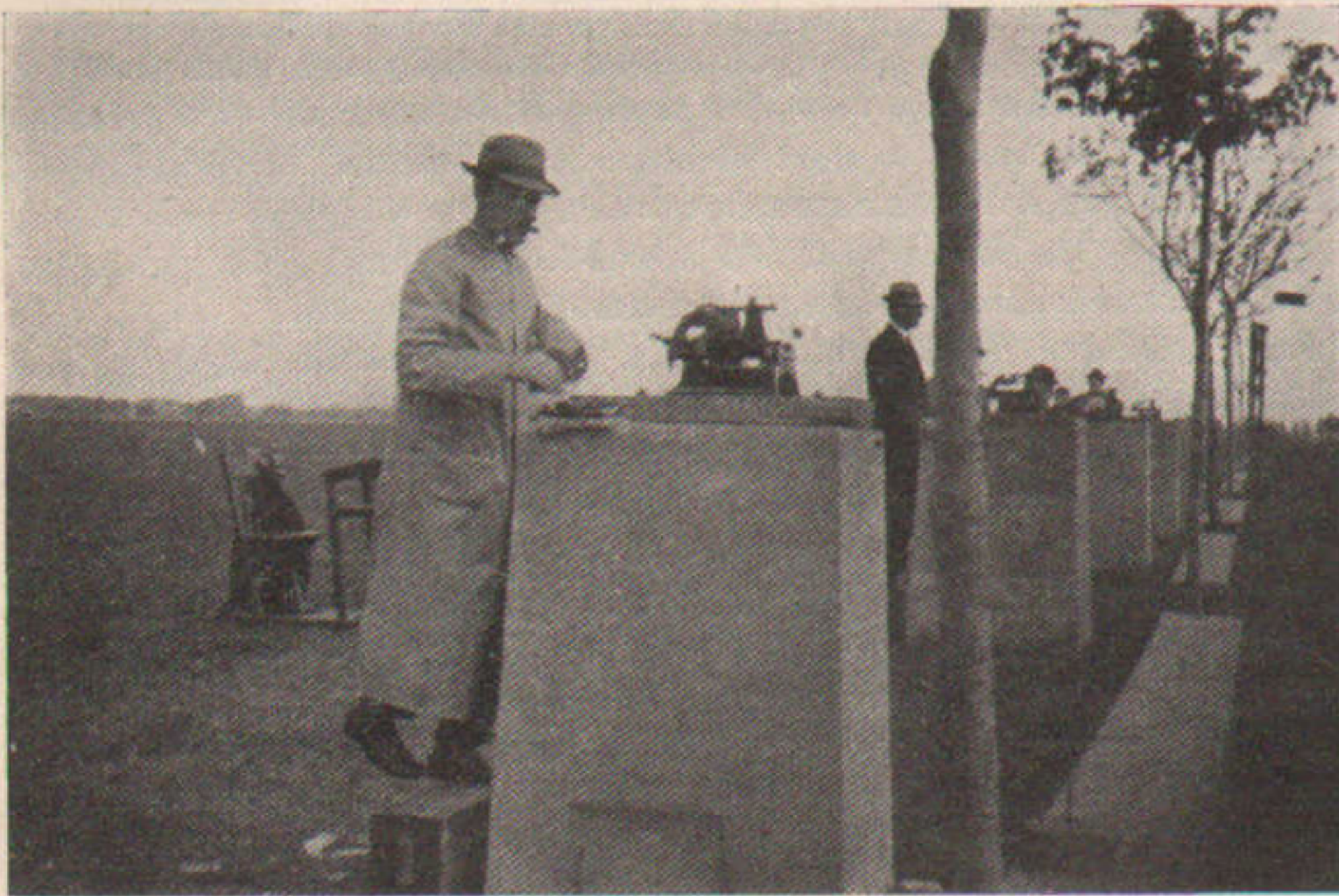
Then once again the formula of the soldier who saw his dream-self on sentry go,

"HALT! WHO GOES THERE?"

### THE PISTOL REST.

**T**HE machine rest which was used by the Board appointed by the Secretary of War to test ammunition at Sea Girt for the purpose of determining which kind was best for use in the National Matches of this year, is a new one designed and manufactured by the Ordnance Department. It seemed to accomplish its purpose very well and gave no trouble during the trials.

Most shooting men are more familiar with the machine rest for the rifle than with the one for the smaller arm. Having this in mind and



THE PISTOL REST USED AT SEA GIRT.

recalling the number of inquiries which have been made of us about the rest we are reproducing a photograph of it herewith. The picture was taken by Mr. E. L. Uhl, of the Winchester Repeating Arms Co., and it shows Mr. J. E. Burns of the United States Cartridge Company standing ready to fire.

The rest, as will be seen, is very simple, a base which carries in its slots a small carriage which in turn holds the pistol firmly. The recoil is only in one direction, along the line of the axis of the bore.

### IS THIS TRUE?

**F**ROM over seas comes drifting to us on many tides tales of the physical, mental and moral degeneration of the island Englishman.

Some of these accounts are surely overdrawn; some are the offspring of malice; some the progeny of hate, and yet no one would expect the Broad Arrow, an English Service paper of established repute, to quote and approve the utterances of a German newspaper upon the subject.

The Broad Arrow has been a strong advocate of compulsory military service in England. It may be that the desire for any argument to advance its cause gives it enough pleasure to overbalance the pain which must follow the taking home of such an accusation. Island Englishmen may be growing smaller and weaker but we are not disposed to agree so wholly with the German critic, as does this English Service paper.

"We commend to the British workman, and more especially to his leaders, the following extract from Der Tag, a German newspaper. It is headed 'English Sport,' and after casting doubts on the alleged fine physical development of the British aristocracy owing to its delight in fox-hunting, it proceeds thus: 'But incomparably more beneficial than the English sport is our compulsory service, and also the official care for the bodily constitution of the lower classes. The pure animal strength of the workman is without doubt far greater in Germany than in any other land. It is always a great joy to the German traveling home from abroad to see the way the porter heaves his mighty box on his shoulders and carries it with long strides to the cab. A visitor in England only finds such well-developed, powerful men—as one meets on every station and in every manufacturing town in Germany—on the quays of the harbors, whither all the strong men are attracted by high wages for the loading and unloading work. It is not here that a stranger can form a good opinion of the physical constitution of the English masses. He must go into the streets of

London on the occasion of a Lord Mayor's Show. Here the red-cheeked 'beef-eaters' are well represented, but for every one of these one sees, not twenty, but fifty, ill-set, pale, narrow-chested, half-crippled men. Such physical degeneration, such tragic deformity, such unhealed, ever-present illness, such laziness, and such depravity on living bodies. Bad air, bad food and bad lodging, and the absolute lack of any regular training or strengthening enforced by a superior power, have mutilated a whole nation.'

There can be no possible doubt as to the truth of the last paragraph. If the working classes really desire the amelioration of the physique of their children, they should insist on the adoption of universal, bodily, military service in Great Britain and Ireland. With it would come better lodging, better food, better air and regular training. It is sad to hear one's fellow-countrymen so described by Germans, and sadder to think we have the remedy in our own hands yet decline to apply it!"

### A BULLY STORY.

BY EDWARD C. CROSSMAN.

**I**T was one of those heaven-sent nights that made Atascadero a positive fairyland—a dream of color in silver and ebony. The Sibleys had lost their ugly tan color and had been transformed by the moonlight into row after row of silvery cones. Under the live-oaks were deep black shadows, mysterious and to the eye impenetrable, but the open spaces were splotches of soft, velvety white.

Down at the headquarters of the 20th Regulars the fine band quit and the tired tooters and drummers and the boss sought their metamorphosed tents. The call to quarters languidly floated over the mile-long camp, tattoo had gone, "Taps" crept from one regiment to another, and the camp sunk into the silence that belonged to the peaceful beauty of the night.

Before the tent of Major Blank of the 'Steenth California Infantry there lay half a bale of hay, wheedled out of the quartermaster for the use of the Major's pet horse. About an hour after taps there arrived at the bale a large and mean-looking bull from the neighboring Henry Ranch. His bullship not being able to sleep, had arisen from his couch, found a handy gate open and decided to make a quiet inspection of the camp. The hay was of the brand he liked best and he therefore, with many a grunt and "whoosh" of satisfaction, proceeded to do his best to make the Major's poor horse breakfastless.

Inside the tent the Major and his tentmate were awakened by the many puffs and grunts of the visitor and lay wondering drowsily what in time was transpiring on the outside of that tent.

"Say, Blank," called the Lieutenant, "Wotinell do you s'pose that is by our tent; sounds like an S. P. engine'd strayed over this way."

"Hanged if I know, responded the Major, "better get up an' see."

"Don't want to know that bad," and the Lieutenant snuggled closer into his warm blankets.

The Major arose with many a growl and strode to the tent entrance. He untied the flaps, threw them back and—looked into the eyes of the visitor, not four feet away.

"Whoosh—ro-o-o-m," said the bull, irritably.

"Sufferin' turnips, y'ought to see what's out there!" yelled the Major, covering half the width of the tent in one jump. "It's a bull bigger'n elephant and he's eatin' my horse's hay, confound his hide."

They arose and reconnoitered.

"Go out an' drive him away, Fred," gurgled the Major in an oily voice.

"Tisn't my hay," said Fred, decisively, "and, besides, the poor creature is hungry; let him alone."

Just then a life saver hove in sight and the twain hailed him as one man.

"Officer of the Guard, come over here and chase this bull away from our tent."

The officer, a young Lieutenant of the 'Steenth, strode over in the direction of the bull, but Mr. Bull paid him not the slightest attention. Only men on horses and with ropes were deserving of respect according to his long experience.

"Get out of here," ordered the Officer of the Guard, halting at correct (and safe) saluting distance.

The bull looked at him wonderingly and then considered the situation. Perhaps there was something in the bluff, any way he had enough hay. At any rate to the amazement of the three officers the monster turned tail and calmly walked off.

At this juncture the Officer of the Guard, elated by his excellent start in driving off the bull, strode after him, howled "Git out of here now, in a hurry," and planted a hearty kick in the section of the bull's anatomy nearest him—the bull was going away at the time.

His bullship turned as though on a pivot, his head dropped, and the next instant the horrified Major and his mate saw as pretty a hundred dash as could be desired, the Officer of the Guard winning by a limb—one belonging to a handy live-oak. Here he perched with many puffs while the bull



walked around the bottom of the tree, seeking some way of climbing it to take vengeance for that kick.

The Major and the Lieutenant held on to each other and laughed, laughed until they could be heard down at the camp of the Fifth; laughed until the bull noticed them and started over to investigate. Then they quit hastily and, diving inside the tent, tied the flaps with many strong knots.

Atascadero nights were cold, cold even under many blankets and very cold to a man perched in a cramped position in the limbs of a live-oak.

"Corporal of the Guard, No. 10," howled the Officer of the Guard after ten minutes of futile waiting for the Nemesis below to tire of his job.

The relief was just making its rounds and a minute later they made their appearance from the shadows.

"Drive this bull away, corporal," called the Officer of the Guard to the nearest corporal. The corporal and the relief got a fair look at the bull for the first time.

"Relief, *Halt!*" said the corporal with alacrity and the relief did it promptly. They stared at the bull and the bull stared back.

"Go on, get out of here, you," yelled the corporal from a fifteen-pace distance.

"More ro-o-o-o-o-om!" remarked the bull in a voice that seemed to come from the depths of a mighty big and deep barrel.

"Drive him away, I tell you," said the officer, impatiently.

"He won't go, sir," replied the corporal.

"Well, then, throw something at him if you're afraid to go any closer."

Forthwith the corporal gathered sundry good-sized rocks and hove one at the bull-sentry. It struck him in the ribs with a hollow "plunk."

A minute later the men of the relief gathered themselves in from the darkness and compared notes at the guard-tent, while the bull, losing the last man in the gloom, returned faithfully to his post with what would pass for a bull grin on his mug at the memory of the relief and its retreat.

An hour later a cold, stiff, disgusted officer slid painfully out of a live-oak tree, as hot under the collar as he was cold elsewhere, and watched sleepy Cavalrymen herd the bull away from the tree and out of camp.

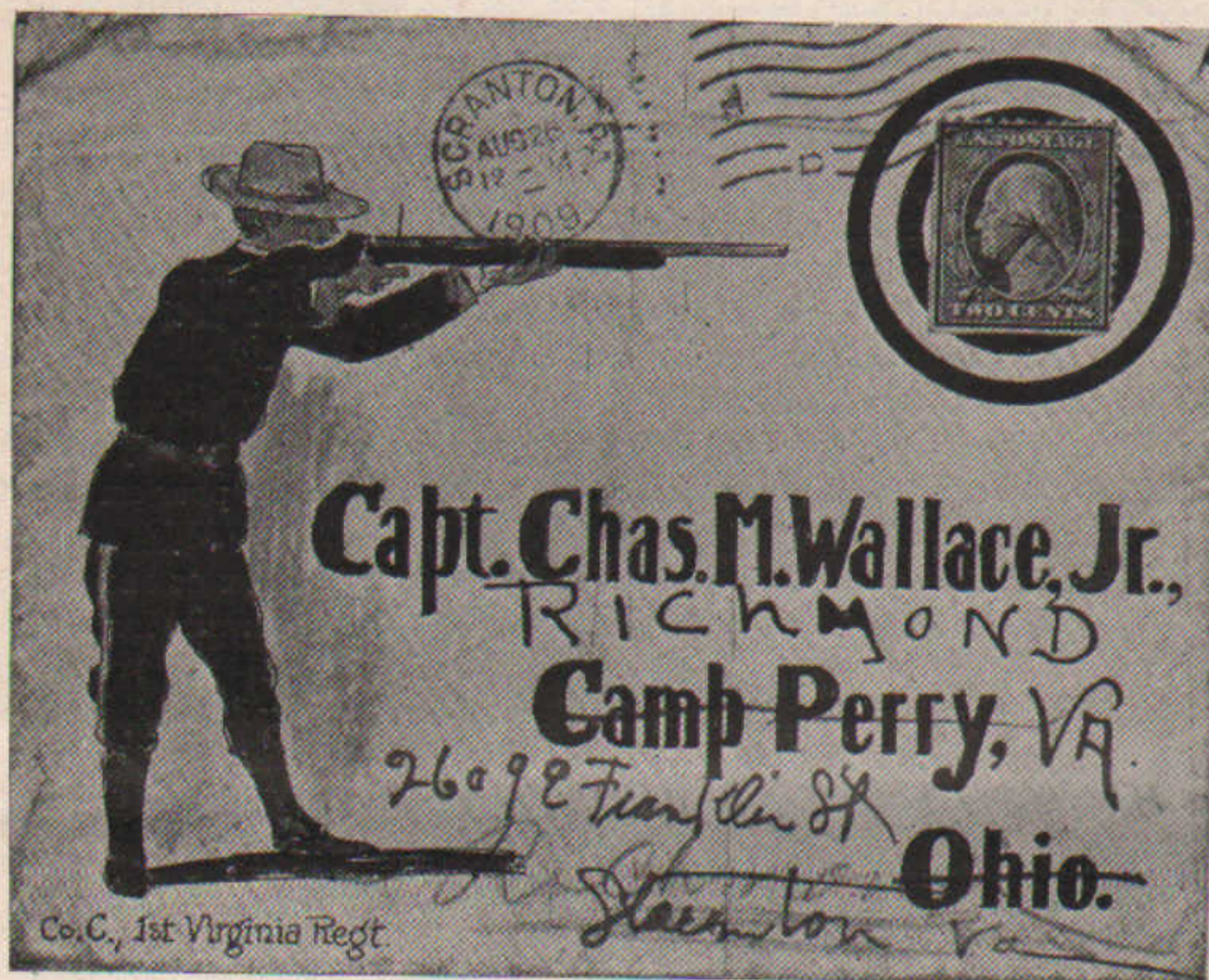
That morning, after guard-mount and his relief had come, the tent-mate of the young ex-officer of the guard noticed him slip a revolver in his pocket and tuck a roll of bills into his shirt.

"What in thunder are you going to do with a gun and all that money?" he inquired, wonderingly.

"Going to buy a bull," replied the young Lieutenant, feelingly.

#### AT INTERESTING ENVELOPE.

CAPT. CHAS. M. WALLACE, Jr., of the 1st Virginia Infantry, a member of the Virginia National Match Team since 1906, has sent to us an envelope which enclosed a letter forwarded to him at Camp Perry this year. The work was done by Jefferson Wallace, a brother of Captain Wallace.



Writing of it Captain Wallace says: "The uniform is some eleven years obsolete, showing the work of a civilian, and the attitude, or rather position, reminds one strongly of that frequently assumed by the rookie when he is first being instructed in bird shooting and insists on poking the gun at the bird. However, this may be excused as the evident sincerity of the artist makes some amends."

*Wanted a Guarantee.*

"Will it hurt?" asked the precise person, as he sat down in the big chair.

"Don't you know that I advertise myself as the painless dentist?"

"Yes. But what I want to know is whether you can guarantee me as a painless patient."—Washington Star.

#### MAINLY ABOUT PANTHERS.

BY CERTUS IN INDIAN FIELD.

(Continued from last week.)

IN the hills which surrounded me on all sides but one, the peacocks were calling loudly from their perches, sometimes singly, more often in discordant chorus which echoed far in the silence of the night. From the more open jungle along the margin of the cultivated fields came ever and anon the loud challenge of a cheetal stag.

Suddenly the bark of a sambhur rang out loud and clear, and continued in a manner that has only one meaning to the sportsman's ear. The panther was on the prowl, but its approach was marked by great caution, and it was not till another half hour had passed that a low rumbling growl proclaimed its arrival. I lay perfectly still, waiting to hear the brute start feeding before I ventured to raise myself in the *machan*. After waiting for another half hour, my patience became exhausted, and I cautiously peered from the loophole. Some twenty paces away an object at once caught my eye. My field glasses were quickly focussed on it, and so greatly did they magnify it at that short distance, that at first I took it to be a tiger. The panther, as it actually was, had probably been lying there for some time, but having had a meal the two previous nights, was in no hurry to start feeding. As I watched, the brute raised its head, and gazed for some seconds at the moon, now high in the heavens, as if admiring the silvery orb. At last it crept forward a few paces, lay down again, and then approached and stood beside the kill.

I had so placed the dead buffalo, that when the panther began to feed at the usual place, the belly between the hind legs, it would offer me a broadside shot. The panther's first move, however, upset this scheme; it seized the kill and dragged it round, so that when it started to feed it was facing me, and half concealed behind the buffalo's body. Even with a full moon the shot thus offered was by no means an easy one, and as I was greatly interested in watching the panther through the glasses I waited for a more favorable opportunity. It was most interesting to watch its method of eating. The buffalo was lying on its side, and the panther put its head between the hind legs, and started gnawing at the belly, with the upper leg of the buffalo pressing on its head. After gnawing away the skin between the legs the panther was able to force back the leg which was pressing its head, and, holding it down with one paw, continued its meal in greater comfort.

After watching for about half an hour without seeing a more favorable opportunity for a shot, I determined to take the panther as it lay, and raised myself gently in the *machan*. Unfortunately a branch creaked, and in an instant the panther had ceased feeding, and was gazing intently at my tree. I remained perfectly quiet, but the brute's suspicions were aroused, and it suddenly turned and sneaked off.

This was bad. I knew, however, that the panther could not have seen me through the screen of the *machan*, and came to the conclusion that it was worth staying on in hopes of its return.

About ten o'clock I was awakened from a light slumber by the sounds of some animal at the kill, and looking out, saw a hyena feeding where the panther had left off. I watched for a bit, and then dozed off again. The hyena continued steadily feeding, and at eleven o'clock there was still no sign of the panther's return. Had the *machan* been less comfortable or the night less perfect for watching, I should have been tempted to give the hyena a charge of slugs, and have something to show for my night watch. However, I determined to see it out.

Another half hour passed, when I was suddenly awakened to full consciousness by hearing the hyena making a most extraordinary noise, a sort of prolonged "Hoo, hoo, hoo," rising and falling, and so astonishingly human, that on first hearing the sound in my sleepy condition I thought it was the voice of a man. The hyena was running round and uttering its weird cry, while the cause of alarm, the panther, was standing quietly surveying the scene from a distance of some fifteen paces. I expected to see the panther drive away the intruder, and was amazed to see the hyena suddenly return to the kill, and proceed with its interrupted meal. The panther watched it for a few seconds, and then turned and walked off.

After some twenty minutes more, the hyena had apparently satisfied its hunger, and trotted off. A few minutes later I saw a form approaching, which the glasses showed to be the panther. It lay for a few moments under the shadow of a tree, and then came up to the kill and began to feed.

The shot was still rather an awkward one, the panther being partially concealed behind the buffalo, but it was obviously useless to wait for a better opportunity. A few drops of oil of phosphorous poured on the foresight made it show up distinctly, and it was not difficult to feel fairly certain of hitting the panther somewhere. At the shot, the brute rolled over, growling fiercely, but recovered and dashed off before a second shot could be fired.

(Continued on page 554.)



# ARMS AND THE MAN

1502 H Street N. W., Washington, D. C.

Every Thursday

James A. Drain, Editor

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.

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

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

## THERE ARE TWO SIDES.

An officer of the National Guard of a State, one who has had an honorable military career in his own and other services, who was the coach of his State Team in the last National Rifle Matches, in his report to his Adjutant General recommends that, unless conditions change, a team from his State (Nebraska), be not sent to any other National competitions.

His reasons are "that the benefit derived does not compensate for the cost." He complains of the lack of progress in rifle practice in his State, and remarks that the men who have been brought down as members of the teams of Nebraska have not been useful as instructors upon their return.

Without intending to reflect in any way upon the judgment, skill, or intelligence of this gentleman, we are constrained to point out to him that the low position which the team of that State has occupied in every National Match and the fact, if it be a fact, that the men who have been members of teams have not been good instructors later on, is not a thing for which the rules covering the National Matches should be blamed, but wholly the fault of those responsible for rifle practice in his State.

This officer alleges that it is impossible for Nebraska to hold her own with States which have teams made up of professional shots, men employed by ammunition companies, etc. If his experience had extended further and if he had looked more closely into the facts he would have discovered many other States, smaller and poorer than his own, which have finished far above his own team year after year.

He would also find that those States which maintain good State teams have a high figure of merit; that they qualify a great number of men in marksmanship every year; that they carry on regular, consistent and effective rifle instruction; that they use membership on a National Team as the strongest incentive to induce their men to practice; and that those men who are members of teams as a general rule furnish the best class of instructors for the rest of the organization.

Further, we would say that the semi-professional shots, of whom there are now very few, the men who are paid by ammunition or arms companies, are also very valuable as instructors.

It is remarked that this officer recommends Service firing instead of the bullseye target. He should be told that an organization which does not know more about shooting than his own is not in the best position to use the Service target, nor is any organization which cannot do good work on the plain and easily discovered bullseye.

What sort of practice under difficult Service conditions could you expect from men who cannot hit where they aim a major part of the time on a perfectly plain and easy bullseye target? Service firing is necessary. Service firing is or will soon be a part of our regular course of instruction. Service firing, or conditions which approximate it, will in the immediate future be an important feature of the National Matches, but we must creep before we can walk. Bullseye instruction is necessary in every case to teach a man the rudiments of rifle shooting.

The conditions of great competitions like the National Matches must be more or less artificial so that a reasonable equality between contestants may exist. There must, for instance, be available one target for the representatives of each team at the same moment. The targets must be equally clear. They must be fired upon under the same general atmospheric conditions. In short, all of the surrounding conditions must be made as near the same as you can make them.

In other words, if conditions are not equal luck has too great an opportunity to influence the results. It was for this reason that the B target was substituted for the regular skirmish target in the National Matches of this year. Students of the subject of the promotion of rifle practice will pretty generally agree that the change was a beneficial one. Bent only upon preparing men for that sort of firing which they would be called upon to do in war any critic judging from insufficient data might, like the gentleman from Nebraska, be inclined to say very much what he has said.

But there are two sides to the question.

Whether a State sends the team to the National Match is not so important as it is to be sure that a State is carrying on instruction in rifle practice in such a way as will produce the largest number of riflemen of reasonable excellence in its organization.

## THE SOUNDS RESOUND FROM POLE TO POLE.

The battle between the adherents of Peary and the friends of Cook, as foreseen by our prophetic soul, has been raging fiercely.

It all makes us very, very weary. There will be time enough to decide who, if anybody, discovered the North Pole when the two alleged discoverers get back and have an opportunity to display their proofs. As the situation now discloses itself to us, Cook seems to have rather the better of it. His narrative if anything seems more reasonable than that of Peary, and his conduct unmistakably stamps him as a man of superior character.

Assuming merely for the sake of argument that both of these gentlemen reached the North Pole, as they say they did, and admitting without arguments, as we must, that the discovery of the North Pole is an inconsequential matter—except from the standpoint of a trial of endurance and skill and bravery on the part of the explorer—which of the two is entitled to the more praise?

To a man up a tree it looks like Peary went under circumstances as favorable as could be. An expedition in a specially built ship, with money supplied by a generous public, which it had been begged to subscribe, to buy all the Arctic requisites which seven men could think of.

Peary had made a business of going into the North Pole country for about twenty years and his experiences should have made things easier for him.

Cook, on the other hand, undertook with much less equipment, almost single-handed and alone, to make the journey to the Pole. He had been in the Arctic and knew something of the conditions there, but he was not supposed to rank with Peary as a North Pole expedition expert.

If then, as we say, both men reached the Pole, Cook is entitled to more praise than Peary, but neither to any praise except for the skill and courage displayed.

Possibly a more or less clear comprehension of this fact is what makes Peary's laconic telegrams come out of the north as full of fervor as if they had been written from the Torrid Zone with a pen dipped in vitriol.

## GROWTH.

After the passage of the Act to Increase the Efficiency of the Organized Militia in May, 1908, immediately after that law which for the first time made the National Guard a tangible national asset was written upon the Statute books, ARMS AND THE MAN, discussing the question editorially, said:

"Now that the nation has accepted the generous, loyal, patriotic offer of the National Guardsmen, we may look for a rapid increase in the efficiency of the National Guard.

In the ultimate results to be attained, Regulars and National Guardsmen have approached the work of passing this bill with the same purpose—that of the best good of the country. Without doubt it will not only materially



assist the National Guard but it will also very greatly benefit the Regular Army.

The community of interest established should be continued and increased by joint maneuvers and the detail of officers of the Army to the National Guard, until at last we shall have accomplished a proper condition of preparedness for war's responsibilities, and evolved for the first time in our history a genuine military policy."

When we said that a rapid increase in the efficiency of the National Guard could be expected we *felt* sure that we were right. Now, a little over a year later, we *know* that we were. But while we felt that there would be a rapid increase in efficiency we thought that we could not reasonably expect an increase in numerical strength until the real purpose of the new legislation could be comprehended by a great many Americans inside and outside of the National Guard.

We even thought that a reduction in numerical strength might follow the adoption of the new law. It is with real satisfaction and pleasure that we note the increase in numbers in the National Guard during the past year. There has been a great and steady gain in efficiency, but that we should have added 8,000 to the number of men who are willing to subject themselves to the embarrassments and added responsibilities of National Guard Service comes as a most pleasant surprise.

That there has been such an addition is made evident by the figures recently given out by the Chief of the Division of Militia Affairs. These figures were published in full in *ARMS AND THE MAN* last week. They show that the National Guard in numbers is 8,000 men stronger than it was at this time last year.

What they cannot show, what no figures will ever disclose, what no amount of telling will ever prove until war once more appears, is the inestimable increase in efficiency through elevated and strengthened morale.

#### MAINLY ABOUT PANTHERS.

(Continued from page 552.)

My men were but half a mile away, and in a quarter of an hour I was seated on my elephant, prepared for the novel experience of following up a wounded panther at one a. m., by the light of a full moon. The jungle was open and devoid of undergrowth, and a search of a few hundred yards along the line taken by the panther could do no harm, and might save a return to the spot at a later hour.

The elephant which I was riding, a fine tusker, was reported to be staunch, but of this I had my doubts, and the uncertainty as to how he would behave lent an additional excitement. I had fired at the panther with a .500 high velocity rifle; but I now took in hand my 12-bore with slugs, as being a more suitable weapon for the task in hand. This weapon I could, if necessary, wield with one hand, leaving the other free to hold on to the pad ropes if the elephant misbehaved. A small, dry water-course, less than five yards in width, ran in the direction taken by the panther. Along this the elephant was driven, while I examined the ground carefully with my glasses. After proceeding thus for about 100 yards, the panther was described lying on the opposite bank of the nullah. The elephant approached and halted directly opposite, but the panther took no notice of us, though the heaving flanks showed that life was not yet extinct. A charge of slugs fired into its head extinguished the last sparks of life. The elephant had behaved splendidly, and he now raised no objection to having the panther padded on his back. Thus ended a most interesting night watch, and even the most inveterate opponent of this form of sport cannot but admit that more is learnt of the inner life of the jungles in a single night such as I have described, than in a hundred beats.

Another panther experience is of interest as a typical instance of the boldness of which these brutes are sometimes capable, and also because an electric flash light was successfully used.

A panther had killed and partially devoured a foal close to the police lines in the village of K. The country for some distance round was almost entirely devoid of cover, but there was one patch of dense *Lantana* like bushes in which panthers used not infrequently to lie up.

The kill was about twenty paces from the nearest house at the corner of the lines, and lay on bare, open ground, the panther having made no attempt to drag it away to cover.

Parallel with the lines was a row of young silver oaks, each protected by the usual wattle fence, some four feet in diameter and three and a half feet in height. One of these was taken up and planted some ten yards nearer the kill, loopholes were cut in the wattle, some straw was strewn on the ground inside, and an ideal hiding place was the result.

A little after sunset I took up my position. In front of me, on an office stool, was a small but powerful electric lamp, on a level with one of the loopholes: by my side was a 12-bore loaded with slugs, a more suitable

weapon than a rifle for this kind of work. Some ten paces away was the half-eaten carcass, while the same distance behind me was the first house in the lines, throughout the whole length of which an incessant chattering was kept up by the constables and their families.

I was quite prepared for a lengthy watch, and hardly expected that the panther would turn up before ten o'clock: nevertheless it was but little after seven-thirty when I heard a crunch, which announced that the panther had already returned and commenced his meal. It was quite dark, and though I could dimly make out the carcass of the foal, the panther was quite invisible.

This was an occasion on which a third hand would have been invaluable. As it was I had to manipulate the gun and the lamp simultaneously, the former with my right hand, the latter with my left. Aiming in the direction in which I judged the panther to be, I touched the screw on the lamp which completed the circuit. As the light flashed out, it disclosed the form of the panther, standing broadside on, gazing at what it probably took for an unusually drawn-out flash of lightning. Before he had made up his mind as to the true nature of the light, the trigger was pressed, and with a loud "Wough, Wough," the stricken brute dashed off into the darkness.

The panther was left for the night, and next morning was discovered lying dead about 100 yards from where he had been shot. Unfortunately the jackals had discovered the body, and by some strange perversity had preferred to gnaw the skin rather than gorge themselves on the half-eaten foal which lay so near.

#### THE ARMY, THE NATIONAL GUARD, AND THE NATION.

**T**HE Journal of the United States Infantry has an article in its September number under the above title. This article was written by Maj. Robert H. Noble, 1st Infantry. Major Noble says many sensible and pertinent things. The only quarrel we have with him is that his article is too long to allow us to reproduce all of it.

We do present certain extracts from it, which we recommend to the serious consideration of our readers.

"Taking leave of generalities, what are some of the more specific questions that interest us? We of the Regular Army have long realized the necessity for closer relations with the National Guard. It is a fortunate thing for our country that more is being done each year to foster these relations, to aid the National Guard and to encourage rifle shooting among our citizens, and military training in many schools and colleges.

We need a Regular Army of sufficient size, capable of further expansion, which when joined with the Organized Militia will provide an adequate first line of defense. After reorganizing the Regular Army on modern lines, and increasing the size of the Organized Militia come the preparations for raising, training and officering the volunteer forces of the future. We need a sane and sustained policy in these matters. This is not militarism, but the patriotic duty of Congress, the War Department and the nation at large. Anyone who has studied the question will agree that the present numbers of the Regular Army and the Organized Militia combined are not large enough for a first line in war; but it is not now in the power of the War Department to make either sufficiently large, even under the Army bill of 1901 and the Dick bill amended.

\* \* \* \* \*

The readiest means, for the present, for increasing the efficiency of the Regular Army is to secure more regiments of Infantry and Field Artillery and an increase in the number of officers, for the many important detached duties at home and abroad, the importance of which has been ably urged by each Secretary of War for a number of years past. This latter measure is of especial interest to the National Guard; it is of importance for promoting military education in military schools, national and State, and in the country at large, and to the proper efficiency of the Regular Army, not only in peace, but especially in war.

The Grand Army of the Republic, in the natural order of events, has diminished as an important political factor in military affairs. The Organized Militia has fallen heir to its mantle. It has the votes, its organization is thoroughly alive, it reaches every nook and corner of our vast continental domain, its members are non-partisan in Militia matters; they are united and enthusiastic, and animated primarily for the good of our country. If only all this organized political strength is exerted wisely, the fruition of the effort will be seen in the change of popular sentiment, and in the further enactment of necessary laws, which will not then be a dead letter, as was the militia law of 1792, for 106 years.

\* \* \* \* \*

When it is remembered that the most dangerous part of the fighting and the real shock in battle comes with the advance of the Infantry, any fair-minded man will admit that such work requires the steadiness



that can only come from discipline and training, both of which require time. Those who teach the contrary, or attempt to minimize the value of trained Infantry and the time absolutely necessary to train them, are not safe teachers. Except for the few naturally good shots, much care, time and training are also necessary to teach the proper use of a rifle, along with discipline, knowledge of marching, camping, etc. It is effective fire, the hits, that count in battle and win success in wars. If any war the world has ever witnessed established any military truth, the Spanish and Boer wars certainly established this. But besides learning the use of his weapon, one of the chief parts of any soldier's training is, as noted above, the military training of his human nature. This takes time, as we all know, in any country, in the Infantry as much as in any other arm; and, as we have shown, there are many other reasons why the average American needs this and much other training to make a good soldier of any arm. There is a too common error prevalent and still being propagated that while we may be short, for example, in trained coast artillerists, or may be short some time in the future in Cavalrymen, we have an unlimited amount of Infantry already on hand, in sight, or, at any rate, easily obtained. This is not true, and if we continue to pursue this false idea we are certainly reckoning without our host. Moreover, as a simple matter of justice to the Infantry branch at this time, which has to bear the brunt of foreign service, spending only about two years at home, we need more regiments of Infantry right now; and as every man knows, who knows anything about the matter at all, for war we need many more, and more Field Artillery. The fact is the Regular Army today is most lacking in Infantry and Field Artillery, for peace needs even. Of course everybody knows we need the necessary mobile troops for defense of the sea-coast batteries from attack by land, and more mobile troops for possible over-sea expeditions.

It cannot be too often repeated that, in the provision for our national defense, the fostering the National Guard and the reorganization of the Army, the thing of most importance now is to have more officers, more trained Infantry and more Field Artillery; more rifles and field guns and ammunition and other equipment for them. The newspapers talk glibly of 2,000,000 volunteers that can be raised as easily as 50,000; but even granting that we will get the volunteers, they fail to tell us where the officers to command them and guns to be placed in their hands are coming from. All this must be provided for in advance. The other parts of the whole problem of defense have not received undue attention; but the simple truth is, we have made more progress in late years in providing for the necessities in some other directions—as, for example, in numbers of Cavalry and in mounting and manning guns on the sea-coast—than in the matter of Infantry and light Artillery. Let the progress be symmetrical.

This matter is of vital interest to the National Guard. We of the mobile portion of the Regular Army expect, of course, if war comes, to be pushed in and used up to the last man, if necessary; but the Organized Militia, the bulk of which is always bound to be Infantry, will be either right along with us, or else not very far behind. Don't deceive yourselves on this point!

\* \* \* \* \*

We Americans have our national virtues and defects as have every other people, and in time of great financial and political stress we have always followed our due share of fallacies. But let us take a hopeful view. Our people, I hope and believe, are not going to be fooled much longer as to some of the fallacies of the past: the danger of militarism and of a standing Army; that there is no probability or possibility of war; that no one will dare to attack us; that we are prepared for war; and anyhow, somehow, by hook or by crook, even if we are attacked, we will win out 'as we always have done;' 'we've got the men and the money too;' we have 'unlimited military resources' readily available—they will learn, and I believe are anxious to learn, *the truth* in all these matters. We can at least undertake to tell the facts regarding the small amount of Regular Army and Organized Militia that we actually have, and the larger numbers we need right now. Let us of the National Guard and the Regular Army not forget in this connection, since we will have to bear the brunt *both in peace and in war*, the remark of Benjamin Franklin, when endeavoring to secure concerted action among his friends, in the early, trying days of the Revolution: 'We must all hang together, or we shall all hang separately.'

The National Guard has not in times past received adequate support from the general Government or the States. But the indications for the future, so far as Congress and the State legislatures are concerned, seem much more favorable. The amount of time and of money the members of the National Guard have devoted and now devote to the military part of their civic duties are not yet appreciated by the people at large. Let us hope these conditions may change for the better; they will change under persistent and united effort by military men to mold public opinion; and especially so if the question can be separated from politics in the narrow sense, and treated as the economic and patriotic question it really is."

## THE TENNESSEE RIFLE TROPHY.

SECRETARY of War Dickinson, a citizen of Tennessee, visited his own State during the period of duty on the range of a portion of the Tennessee National Guard.

Secretary Dickinson is interested in target practice, both from the official and personal standpoints. To give practical effect to his interest in target practice in Tennessee he offered a trophy for the member of the Tennessee National Guard who should make the highest skirmish run. The trophy was won for the first time by Maj. Fred. H. Phillips.

A reproduction of this handsome and unique trophy appears with this article.



Upon an oak shield, the seven shields for the winners' names are fastened by secret bolts, the small shields, the border of the large shield, part of the lettering and the figure of the skirmisher are in silver. The eagle at the top is in bronze, the flag of silver enamelled in colors (the flag is that of the Secretary of War,) and the ground work of the large shield is copper bronze.

The shield was manufactured by the Bailey, Banks and Biddle Company of Philadelphia. It will be a perpetual trophy, and to the winner of each year a replica of the shield in the form of a medal will be given.

## SOME OBSERVATIONS FROM ENGLAND.

D R. J. N. REEVE, whose excellent article on the optics of rifle shooting entitled "Concerning the Importance of the Examination of the Eyes for Marksmen," published in ARMS AND THE MAN of June 10, which attracted much attention here and abroad, has turned over to us a letter to him from a well known English expert, E. J. D. Newett.

The letter, which makes interesting reading, is as follows:

"The fault of the American peep sight is that it is attached to the rifle in the wrong place; if placed near the eye as are the aperture sights now allowed here in connection with our Service rifle competitions, it could be used theoretically properly, that is, looked through instead of looked at; moreover, the sight radius would be increased thirty-three per cent and errors diminished to a similar extent.

The new Springfield is a good gun with a good cartridge and, with a scientific sight attached in the proper place, would be the best shooting tool extant. As it is now, in the hands of such jugglers as your Olympic team, it is hard to beat.

I made the interesting experiment of attaching rifle sights of various kinds to the outside of a long telescope having equatorial mountings, and cross hairs in the focal plane. Aim was taken by means of the sights, checked by looking through the 'scope, and errors measured by reading the ascension scale. I found that with the open V notch military sight, fourteen inches from the eye, very few men could aim within four minutes of angle vertically or laterally, and none could do so seven times consecutively. With an aperture from ten to twelve inches from the eye errors were reduced to two minutes, and with an aperture .04 in diameter three inches from the eye, aim was taken by every one within one minute of angle every time, and that quite rapidly. This aperture at this distance gave a circular field of view four feet in diameter at 100 yards. The Springfield aperture in its present position gives only a 12-inch field at 100 yards, and







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**Ribbon Event of the Sea Girt Tourna-  
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First and Second Places  
ake of Ammunition.**

## *Revolver Matches Won with UMC Cartridges*

### REVOLVER TEAM MATCH, N. J.

1st, Squadron A, N. Y.  
2nd, Manhattan Rifle and Revolver Association,  
4 used U. M. C. cartridges and 1 another make.

### ALL-COMERS MILITARY REVOLVER MATCH.

1st, Sergt. H. E. Williams, N. J.  
2nd, Lieut. R. H. Sayre, N. Y.  
3rd, Sergeant Herrick, N. Y.

### BOBBER MATCH.

1st, Lieut. R. H. Sayre, N. Y.

### NOVICE MILITARY REVOLVER MATCH.

1st, Sergeant Muller.  
2nd, A. M. Poindexter.  
3rd, Captain Nissen, Cavalry.  
4th, Captain Coppeck, Cavalry.  
5th, O. Smith.

### REVOLVER TEAM MATCH, N. Y.

1st, Squadron A, N. Y.  
2nd, Manhattan Rifle and Revolver Association,  
4 used U. M. C. cartridges out of 5.

### DISAPPEARING TARGET REVOLVER MATCH.

2nd, Captain Nissen, Cavalry.  
3rd, Lieut. R. H. Sayre.

### ALL-COMERS MILITARY REVOLVER MATCH.

3rd, Lieut. R. H. Sayre.  
4th, Sergt. H. E. Williams, N. J.  
5th, John Dietz, N. Y.

### ALL-COMERS SQUADED REVOLVER MATCH.

2nd, Thos. Le Boutillier.

### ANY REVOLVER MATCH.

3rd, Lieut. R. H. Sayre.  
4th, Thos. Le Boutillier.

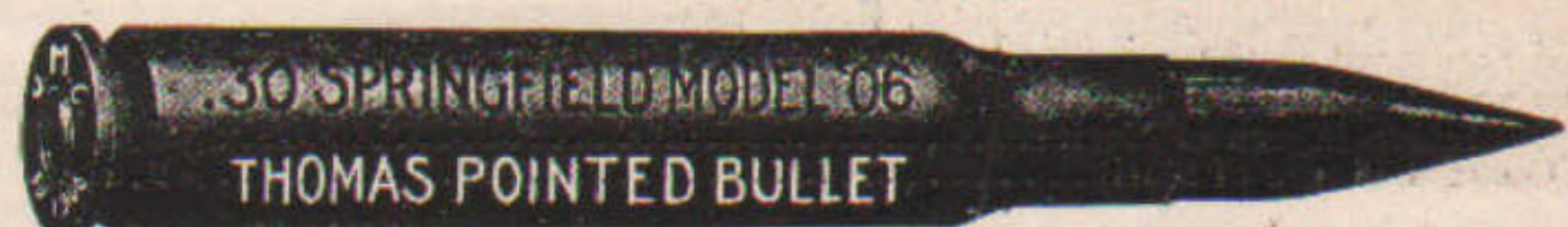
**the Marine Corps Cup, the Adjutant-General's Cup, and the Majority of  
Sea Girt—All Won with UMC .30 Cal. Cartridges Fitted  
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**Note the Point—It's Different**



is not therefore well adapted either to field work or rapid fire, though it is wonderful nevertheless.

The popular .22 rifle in England is our old Martini Henry Service rifle fitted with a new barrel. We do an enormous amount of .22 shooting here, principally because it is very cheap and there is no room for long military ranges in a little island already overcrowded. Curiously enough we find it the best possible kind of training even for shooting with military rifles at long ranges. We shoot them up to 100 and 200 yards and the average enthusiast will fire 5,000 or more cartridges a year, hence he acquires a perfect hold and let off and his eye adapts itself to aiming in a way that is seldom acquired by those who use rifles in which the expense of ammunition, and time and cost of traveling to distant ranges, necessarily limits practice.

.25 and .28 caliber rifles are not made here; in fact, with the exception of the .22 rifle I have mentioned, scarcely any rifles are made in England except a few high class, hand-made, double barrel sporting rifles. Our converted Martini-Henry, is a capital gun, and has the merit of costing only 25 shillings. It shoots well and its strong military action stands well the wear and tear of being fired thousand of times, for you will bear in mind that, though the charge is small, no rifle is fired so often as a .22.

At first we used a good deal of American made .22 ammunition, but the German makers, and latterly the English, have completely beaten the Americans for accuracy and reliability. As we use about 200 millions a year I am surprised at the American makers allowing themselves to be beaten."

THE SCOUTS CAN SHOOT.

IN the far-off Philippines we have a small army of native Filipinos reputed by Americans known as the "Philippine Scouts." The reputation of this organization for discipline and all-round efficiency is high. We are very glad to be able to publish a record of target practice of one of the companies of Scouts for the past three years. This record shows a steady and consistent rise in the size of the figure of merit, an indication not alone of intelligent direction and instruction on the part of the officers of the company but also of hard and faithful work by the men. Capt. C. E. Pitney, commanding the 29th Company, is himself



OFFICERS OF THE 3RD BATTALION, PHILIPPINE SCOUTS.

an expert rifleman and to him the lion's share of the credit for the progress of the company should be given. The 1909 record of this company, showing every man above the third class, should be a good object lesson to some companies more favorably situated.

RECORD OF TARGET PRACTICE OF 29TH COMPANY PHILIPPINE SCOUTS, FOR 1907.

<i>Officers.</i>			
Expert riflemen	.....		2
<i>Enlisted Men.</i>			
Expert riflemen	.....		1
Sharpshooters	.....		4
Marksmen	.....		6
First Class	.....		20
Second Class	.....		31
Third Class	.....		35
Total	.....		97
Total firing	.....		97
Individual Figure of Merit	.....		51.03%
<i>Collective Figure of Merit.</i>			
Yds.	Volley.	Yds.	Fire at will.
600	55.27%	600	62.86%
800	42.61%	800	54.85%
1000	28.69%	1000	45.15%
Collective Figure of Merit	.....		48.24%
General Figure of Merit	.....		49.64%

RECORD OF TARGET PRACTICE FOR 1908.

<i>Officers.</i>			
Expert riflemen	.....		2
<i>Enlisted Men.</i>			
Expert riflemen	.....		3
Sharpshooters	.....		17
Marksmen	.....		12
First Class	.....		35
Second Class	.....		28
Third Class	.....		7
Total	.....		102
Total firing	.....		102
Individual Figure of Merit	.....		85.74%
<i>Collective Figure of Merit.</i>			
Yds.	Volley.	Yds.	Fire at will.
600	47.33%	600	75.00%
800	53.41%	800	65.53%
1000	32.58%	1000	44.70%
Collective Figure of Merit	.....		53.15%
General Figure of Merit	.....		69.45%

RECORD OF TARGET PRACTICE FOR 1909.

<i>Officers.</i>			
Expert riflemen, Capt. C. L. Pitney	.....		1
Sharpshooters, 1st. Lieut. G. H. Wright; 2nd, Lieut. B. E. Bowen	.....		2
<i>Enlisted Men.</i>			
Expert riflemen	.....		12
Sharpshooters	.....		30
Marksmen	.....		32
First Class	.....		24
Second Class	.....		9
Third Class	.....		0
Total	.....		107
Total firing	.....		107
Individual Figure of Merit	.....		122.89%
<i>Collective Figure of Merit.</i>			
Yds.	Volley.	Yds.	Fire at will.
600	77.90%	600	116.10%
800	66.66%	800	110.11%
1000	44.56%	1000	79.40%
Collective Figure of Merit	.....		82.45%
General Figure of Merit	.....		102.67%

Presence of Mind.

Presence of Mind is the quality which, above all others, the military man should cultivate.

"Captain, we are entirely out of ammunition!" said an orderly sergeant to his commander on a field day.

"What! entirely out of ammunition?" exclaimed the captain.

"Yes, sir," was the laconic reply.

"Then cease firing," said the captain.—The Regiment.

A Burning Question.

"Why do they want to preserve the great American forests, pa?"

"So they can have forest fires, my son."—Puck.

HERE AND THERE.

To Aid the Submarine.

Messrs. Aldis Brothers, of Birmingham, have invented an improvement to the periscope by which the occupants of a submarine operating under water may see objects in every direction at the same time. The periscope heretofore employed would allow an observation only in one direction without a change of position.

Trying a Torpedo.

The Italians have recently conducted an experiment to ascertain the effect of the explosion of a torpedo against the skin of a battleship. Care was taken to duplicate the conditions which would ordinarily surround the use of a torpedo by giving it the same air pressure and by placing it against the side of the vessel about three meters under water. The explosion made a hole about fifty square meters in size and of course caused the immediate sinking of the vessel. As a result the Italian government proposes to have more swift vessels equipped with torpedo tubes.

English Maneuvers.

About 50,000 men, 20,000 horses and 300 guns are now participating in maneuvers over a considerable area extending from near Cheltenham to the Thames. In these maneuvers, as in those in Germany and France of this year, the airship is being employed.

All the troops will bivouac each night. No tents or other camp equipment will be carried. An extraordinary effort to duplicate Service conditions is being made. The operations will cover a space of about 70 miles by 50. Beyond information as to the size of the opposing forces neither side has any knowledge concerning the plans of the other.

A Powerful English Cruiser.

There will be laid down in an English dockyard in November a new cruiser of a very powerful type. She will be an extremely large vessel with a speed of about thirty knots. She will be about 600 feet long. The main armament will consist of 12-inch guns and an increased torpedo equipment. The torpedoes which she will carry will have an effective range of 7,000 yards. Such a cruiser will be more powerful than battleships but lately built.

The Fleet in the Hudson-Fulton Celebration.

Twenty-one battleships and cruisers of the Atlantic Fleet, with a number of auxiliaries, have gone to New York to take part in the Hudson-Fulton Celebration.

During the stay in New York a crew from the battleship Minnesota will



contest with a crew from the British cruiser Argyle for the possession of the Prince of Battenburg Trophy.

This is a rowing trophy, which is held by the Americans until challenged by the British, when it must be again contested for.

It has been successfully defended by the Louisiana twice in Australia and once at Gibraltar. The crew from the Argyle defeated the Americans in 1907 and hope to repeat the feat this time.

In choosing the trophy defenders the men from the Minnesota led with the Idaho and Georgia next in order.

## ARMY AND NAVY.

### *A Large Class for the Army Medical School.*

About thirty-five first lieutenants of the Medical Reserve Corps just recently appointed have been ordered on active duty and directed to report to Col. Valery Havard, President of the Army Medical School, in Washington, for a course of instruction.

### *Funston Says Some Good Things Well.*

Gen. Frederick Funston, Commandant of the Army Service School, made a characteristic address at the opening exercises of the institution the first of this month. Funston is a clear thinker and he has the faculty of expressing himself plainly and intelligibly. The influence of the Army Service School upon the Army is beyond the estimate of any man.

All the more reason then that we should congratulate ourselves upon having a head for the school who seems to appreciate the importance of the work to be done there and who expresses himself in a way which must not only make him understood by every one who hears him but bring out the best in every student officer under him.

### *The Dirigible to Des Moines.*

Lieut. Frank P. Lahm, Signal Corps, has been ordered to Des Moines, to operate dirigible balloon No. 1 of the Signal Corps during the military tournament which commences there Monday of this week.

### *The Pistol for Gallery Work.*

The Ordnance Department has decided to purchase for experimental purposes six .22 caliber revolvers. These will be used for indoor pistol practice, experimentally, with a view to finding out whether it is advisable to issue .22 caliber pistols or revolvers for gallery work.

### *Rifles Will Be Improved.*

Authority has been granted to the Chief of Ordnance by the Secretary of War to smooth down the sears and engaging parts of the bolt and trigger mechanism of the Service rifle so that the bolts may work more easily and the trigger pull be more uniformly smooth.

Now, if this authority is supplemented by additional permission which will allow careful selection of the barrels and their better finish inside and out, particularly in, and the segregation of such special arms for the use of expert riflemen and the members of the rifle teams, we shall indeed have made much progress.

## THE NATIONAL GUARD.

### *Range Work Closing in Pennsylvania.*

The wind-up of outdoor rifle practice in Pennsylvania, being the Bower Long Range Match, the Brigade Trophy Match, the Bailey Match and the Officers' Revolver Match, has taken place.

All of the organizations are looking forward to an active winter of armory work, more seriously undertaken and to be more consistently carried out than ever before.

### *New Jersey Chooses a Brigadier.*

Gen. Henry W. Freeman, formerly commanding the 1st Infantry, New Jersey National Guard, has been chosen as Brigadier-General of the First Brigade, vice Gen. Joseph Brensinger, retired. General Brensinger had a long and distinguished career in the Volunteer Service during the Civil War in the 7th New York and the New Jersey National Guard.

### *Regulations for Indoor Field Artillery Practice.*

General Orders No. 183, War Department, September 8, embrace a method of instruction in indoor firing practice for Field Artillery officers, according to the principles laid down in Chapter 5, Part 3, of the Drill regulations for Field Artillery. The order describes the apparatus required, the method of use, gives the principles which should govern the instructor in his work, and offers a series of problems demonstrating the principles involved.

### MILITIA DIVISION INFORMATION.

#### *A Cook Book.*

"A Subsistence Guide for the National Guard," prepared by Capt. Frank A. Cook, Subsistence Department, U. S. A., for the guidance of officers of the Subsistence Departments of the Organized Militia, has been given a careful examination in the Division of Militia Affairs, and the publication found to contain matter that it is considered will be of great instructive value to the Militia in questions pertaining to the subsistence of troops in field service, especially the concrete case shown in Part II of the book, wherein is set forth the method of subsisting a brigade in camp according to methods of the Regular Army.

#### *Organizations Must Conform.*

Attention has been called to the fact that in one of the States, wherein has been organized several companies of Coast Artillery, the companies each included one electrician sergeant, first-class, and a sergeant of the Hospital Corps. The Adjutant General was informed that electrician sergeants are properly non-commissioned staff officers of Coast Artillery

Corps, not members of companies, and they should be warranted and carried accordingly, reference being made to paragraph 31, Militia Regulations; that the sergeant of the Hospital Corps is, properly, a member of the Hospital Corps of the Medical Department and should not be enrolled as a member of any company (paragraph 22, Militia Regulations).

Attention was also called to the fact that two bands of Infantry organizations each had three members in excess of the authorized strength, as given in paragraph 28, Militia Regulations, and in connection therewith it was stated that, while the Department did not desire to make any ruling that would interfere with the State authorities as to the character of music provided for regiments, it was considered necessary to point out that if bands be provided for regiments, the Department could recognize no departure from the organization prescribed by law for the Regular Army in matters of issue of supplies, or in the pay, transportation, or subsistence which may be provided from Federal funds under Section 1661, Revised Statutes, as amended, or under Sections 14 and 15 of the Militia Law; but that it should be understood that after the 21st of January next the organization of the bands should be made to conform to that given for the Regular Army, unless the departure from the organization of bands in the Regular Service be specially authorized in time of peace by the Secretary of War, as contemplated in Section 13 of the Militia Law.

Attention was also called to the fact that several companies of Infantry had seven corporals, and information was given that a company of Infantry of the Regular Army as now constituted is allowed six corporals, and no more than this number should be allowed for similar organizations of the Militia.

#### *Titles Passed upon by Attorney-General.*

In connection with the request of an Adjutant General to have abstracts of title to land, which it is intended to acquire for a target range, passed upon by the Department, previous to the obtaining of the deeds, he was informed that Section 355, the Revised Statutes, requires titles to such property to be conveyed to the United States to be approved by the Attorney-General, and that it is usual to submit deeds, abstracts of title, and other necessary documents to the Attorney-General for his opinion as to the validity of the title, and that in his opinion would be pointed out any defects in the title, and instructions given as to the perfection of the same. It was suggested that all necessary papers relating to the acquisition of the land should be procured before the case could be presented to the Attorney-General for examination.

#### *Property Accountability.*

It is not proper to enter on pay rolls for military services performed (Form 3, D. M. A.), any charges against officers or enlisted men of the Organized Militia, on account of the loss or destruction of articles of public property during field service, when payment for such services is to be made from funds advanced to a State under the provisions of Section 14 of the Militia Law.

The procedure to be followed in accounting to the United States for articles of public property so lost or destroyed by members of the Organized Militia is set forth in Section 4 of the Act of June 22, 1906, amending Section 1661 of the Revised Statutes, and this procedure should be adhered to strictly (paragraph 6 [4], and 49, 50, and 51, Militia Regulations). The question of subsequent reimbursement to the State for the value of the articles lost or destroyed and charged against the allotment of the State is one for determination by the State authorities.

#### *Maxim Silencers Not Yet Issued.*

The Maxim Silencer has not been adopted for use in the Regular Army, only a limited number of the device having been issued for experimental purposes; consequently, it cannot be supplied to the Organized Militia as an issue under the provisions of Section 1661, Revised Statutes, as amended, or the Act of May 27, 1908. In view of this fact, and that cutting threads on the rifles issued for the use of the Organized Militia would be for the purpose of adapting them to an article which is not authorized for use in connection with the arm, the Secretary of War decided that the cutting of threads for the purpose stated could not be authorized, but it was suggested that rifles to be used for cutting threads thereon for the purpose of adapting the Maxim Silencer could be purchased under the provisions of Section 17 of the Militia Law.

#### *Coast Artillery Drill Regulations Ready.*

The 1909 edition of the Coast Artillery Drill Regulations is now being supplied by the public printer to the War Department, and copies thereof may be obtained on requisition of the Governor, as an issue under Section 1661 of the Revised Statutes, as amended, or as a purchase for cash under Section 17 of the Militia Law. The cost of the regulations is 51 cents a copy.

#### *National Guard Schools.*

The following letter to an Adjutant General is of great interest:

In answer to your letter of the seventh instant, in which you ask whether plans have been matured in this office in regard to the preparation of a correspondence course, it may be stated that it is not the intention to have prepared in the office of the Division of Militia Affairs a general correspondence course, since this would be impossible and impracticable owing to the various conditions that prevail in the different States.

The question of how much money is available for this purpose, what previous instruction has been given, what subjects have been covered, what officers are available for conducting the school and reviewing the papers, what system of examination can be inaugurated and many other questions of a similar nature all are factors which make the subject one to be considered separately for each State.

As a general outline, it is suggested that for Tennessee the Adjutant General issue an order prescribing a school course for the officers during the season November 1, 1909, to April 30, 1910 (or otherwise); that for company officers the course consist of certain parts of the Infantry Drill Regulations; certain parts of the Small Arms Firing Regulations (latest edition just out); Map Reading and Patrolling; that for field officers it consist of



certain parts of the Infantry Drill Regulations, Map Reading, Patrolling, and Orders; that for staff officers it consist of the manuals of their departments; that the text-books required be prescribed and furnished; that a series of questions be furnished each officer on the subjects covered with references as to where the answers may be found; that all the officers of the Guard be assembled at some convenient time and place, either all together, or by regiment, for from two to five days, when some specially selected officer of the Regular Service should be present to review these subjects with them in a practical way and then conduct examinations therein.

Wherever this latter has been tried, it has met with the very greatest success. Officers of the Militia are to be paid at least their actual expenses regardless of rank.

Before the end of October, it is believed that the two books "Studies in Minor Tactics" and "Military Map Reading" will be distributed to all combatant officers of the National Guard. It is hoped also to have ready for issue by that time a Manual for Privates of Infantry which will contain practically all that it is necessary for a private to know.

It is believed that the subject of officers' schools is one that merits the most careful consideration and that it would be well to assemble a board of officers carefully selected for their peculiar fitness for the work, to recommend a system most suitable to the conditions prevailing in the State.

It is suggested that this office be informed as fully as possible of such a scheme of correspondence school as the Adjutant General of Tennessee deems feasible and advisable for the National Guard of that State, when every effort will be made to place at his disposal such information and data on the subject as it is possible to furnish.

## ARMS AND AMMUNITION.

THE NEW SPRINGFIELD AS A SPORTING RIFLE.

By EDWARD C. CROSSMAN.

Since writing the last article, several more instances of military rifles being converted to the ways of the hunter have come to my notice.

The first of these is the rifle of Paul Jenkins, illustrated in a monthly sporting magazine. This was a Krag carbine which had the stock worked down to the dimensions of a Parker straight grip shotgun stock. The improvement in the appearance of the rifle from this one change alone is wonderful. An ivory bead front sight was added and a Lyman rear, while the parts were put through a course of sprouts in the way of refinishing and smoothing. Checking was another valuable addition to this made-over rifle while a silver recoil pad lengthened the stock to suit the owner. This would be an especially valuable feature with the New Springfield stock which is altogether too short for any human being, measuring but 12 $\frac{3}{4}$  inches from trigger to butt-plate, when 14 inches would be nearer right.

Particularly is this longer stock desirable when using the rifle for rapid-fire work and working it from the shoulder—as practically every expert does. The bolt being longer than the Krag and the stock shorter, the unhappy shooter is compelled either to drop back his head or to duck to the left out of the way of the bolt. An inch or an inch and a quarter more would allow the rifleman to keep his head in position, even though handicapped with the writer's hawk's-beak style of countenance.

The writer has recently had a Sauer-Mausier made to order according to his own peculiar cranks and this 14-inch stock is one of the specifications which he expects will aid in getting in a second shot "muy pronto."

Another advantage which this Mauser has is the absence of any cocking-piece on the bolt, making the bolt half an inch shorter and giving this much less to threaten one's countenance. The cocking-piece is one alleged strong point which the writer has been able to find no use for, except in the possible case of a misfire, enabling the rifle to be snapped again without opening the bolt. A disadvantage is that it tempts those who know as much about a bolt action rifle as a cow knows of trigonometry to let down the firing pin on a loaded cartridge.

A friend of the writer carries his New Springfield in this position on his hunting trips, in blissful ignorance of the fact that a slight blow on the end of the cocking piece would fire the rifle; that the firing pin or striker is pressing against the primer with all the force of the main spring and that the rifle is far safer cocked and with the safety on than with the striker down against the primer. Removal of this cocking piece would go far toward making the rifle "fool-proof."

The second military rifle which deserves particular notice as exemplifying how easily a sporting rifle can be obtained from one of military type, is that owned by my friend, W. B. Knoble, of Tacoma.

In this case Mr. Knoble did not take the New Springfield or Krag and then try to persuade it to the ways of righteousness. Sending to the arsenal he purchased all the parts of the New Springfield, with the exception of the stock, hand guard and rear sight, including the fixed base in the things left out. With their customary courtesy, the people at the arsenal at Mr. K's request left off the fixed base for the rear sight and did not cut the barrel to receive the pins by which this fixed base is fastened. This left the barrel clean at this point, enabling the hand guard to be left off and still not spoiling its appearance by a defaced barrel. Not satisfied with this, the arsenal people sent Mr. Knoble a perfect barrel in size and evenness of boring. Then with the most important parts of a fine rifle in his possession he had a stock made to suit himself.

In the cut the rifle is shown as at present made, but the Tacoma man states that he is going to have another stock made that will be better than the one on the rifle at present. The stock shown in the cut is hardly made on the average lines, being too high at the comb and with too much drop from the comb back to the heel.

The pitch of the butt-plate is also rather peculiar. The idea, however, is an excellent one and the cost of the entire rifle would be under that of the Winchester Model 1895, a typical big game rifle, with the advantage

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of the made-to-order stock and the fine materials of the Government rifle. In the opinion of the writer, a full pistol grip, capped, is a great help to a fine rifle, while a stock with a trifle more drop at the comb and not so much from the comb to the heel is more satisfactory to the ordinary run of men.

It will be noted that Mr. Knoble uses the front sight at its full height. It would seem that one might send the front sight stud and front sight blade to a sight maker—Sheard or the Lyman people—and have a sight fixed on the stud, cutting down the sore-thumb-like front sight. The 200 yard point on the Service rear sight is some distance above the barrel, necessitating a high front sight. With a sight fitting close to the rear end of the receiver, much of this front sight could be dispensed with—to the advantage of the rifle from the standpoint of looks and strength



of sight. Another improvement evolved for this rifle is the sight. This consists of a base, sweated on the rear part of the receiver just above the safety shoulder. On this is dovetailed an upright leaf with a slide working on this with a peep in it. It is fastened by an ordinary thumb screw similar to that on the slide of the Service rear sight and is adjustable up to 600 yards.

The Lyman people have at last evolved a satisfactory sight for the New Springfield which is similar to the sight they turn out for the Mauser. The New Springfield sight, however, is fastened to the receiver by a screw entering a hole that has to be drilled and tapped in the steel. It is made both with and without wind-gauge adjustment and differs from the ordinary Lyman receiver sight in that the locking lever of the elevating slide is on the right hand side of the rifle instead of the left.

The advantage of this form of sight for hunting or any other purpose over the ordinary open sight, is hard to estimate. The sighting radius is much longer—8 inches or more—the peep is so close to the eye that it is caught quickly and it is not considered in the operations which the much bedeviled eye has to go through in the process of sighting and the full optical benefit of the peep sight—the self-centering propensity of the eye through the stronger light in the center—is taken advantage of to its fullest extent.



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## 6 WORLD'S RECORDS

40 Firsts

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30 Thirds

THE three most important Rifle Shooting Tournaments of the year are now over, and Winchester cartridges emerge from the classic contests overwhelmingly triumphant over all other makes of ammunition. Again the Red W Brand has proven its superiority, as it did at slow fire—the supreme test—in the Government Trials, again it has established new World's Records—six to be specific—and again at Short, Mid, Long and Extreme Ranges it has demonstrated its uniformity and accuracy so conclusively as to leave no question of its superiority. The results at Wakefield and Camp Perry, which have been given, were indicative of the way Red W Cartridges were to sweep the field at Sea Girt. Their shooting there has never been equalled, and fully justify the early season's claim that Winchester rifle cartridges were not only better than ever, but better than all other makes. Read the long list of winnings with Winchester rifle cartridges and decide for yourself.

### New World's Records

45 OUT OF 50 AT 1200 YARDS, made by Musician G. W. Chesley, Conn., in Nevada Match at Sea Girt.  
68 OUT OF 75 AT 1200 YARDS, made by Lieut.-Col. C. B. Winder, Ohio, in Spencer Match at Sea Girt.  
837 POINTS IN INDIVIDUAL RAPID FIRE MATCH, 300 YARDS, made by John Sabo, Ohio, at Sea Girt.  
27 CONSECUTIVE BULL'S-EYES AT 1000 YARDS, made by Lieut. H. E. Simon, Ohio, at Camp Perry.  
224 OUT OF 225 AT 800, 900 AND 1000 YARDS, made by Capt. G. H. Emerson, Ohio, at Camp Perry.  
60 CONSECUTIVE BULL'S-EYES AT 500 YARDS, made by Capt. S. W. Wise, Mass., at Wakefield.

### At Sea Girt

#### NEVADA MATCH.

10 shots at 600, 900 and 1,200 yards.

Won by Mus. G. W. Chesley, Conn., score, 50 48 45—143.

#### SPENCER MATCH.

15 shots at 1,200 yards.

Won by Lieut.-Col. C. B. Winder, Ohio, score, 68. Colonel Winder used a Winchester barrel as well as Winchester cartridges.

#### THURSTON MATCH.

15 shots at 800 and 900 yards.

Won by Lieut. H. E. Simon, Ohio, score, 147. Lieutenant Simon used a Winchester barrel as well as Winchester cartridges.

#### NEW YORK STATE RIFLE ASSOCIATION MATCH.

7 shots at 800, 900 and 1,000 yards.

Won by Mus. G. W. Chesley, Conn., score, 196.

#### OFFICERS AND INSPECTORS MATCH.

10 shots at 600 and 1,000 yards.

Won by Captain McDougal, U. S. M. C., score, 45 50—95.

Third, Major W. B. Martin, N. J., score, 45 48—93.

#### DRYDEN TROPHY MATCH.

10 shots at 200, 600 and 1,000 yards.

Won by Ohio Team, score, 1024, using Winchester cartridges, and part another make of ammunition. Highest scores of the winning team were made with Winchester cartridges.

Second, U. S. M. C. Team, score, 1013, using Winchester cartridges.

#### CRUIKSHANK TROPHY MATCH.

7 shots per man at 200, 500 and 600 yards.

Won by Second Regiment, New Jersey Team, score, 566.

Second, First Regiment, District of Columbia Team, score, 562.

#### ROE LONG RANGE MATCH.

10 shots at 1,000 yards, 3 best scores.

Won by Lieut.-Col. C. B. Winder, Ohio, score, 145.

Second, Mus. G. W. Chesley, Conn., score, 140.

Third, Lieut. H. E. Simon, Ohio, score, 139.

#### McALPIN TROPHY MATCH.

10 shots per man at 200, 600 and 1,000 yards.

Won by U. S. M. C. Team, score, 1083.

Second, New Jersey Team, score, 1076.

Third, U. S. Infantry Team, score, 1075.

The winning team all used Winchester cartridges, the 2nd and 3rd teams part Winchester cartridges.

#### HALE MATCH.

10 shots at 600 yards.

Won by Corporal Peterson, U. S. M. C., with a possible score and five extra bulls.

Second, Corporal Hagan, U. S. M. C., with a possible score and four extra bulls.

#### LIBBEY TROPHY MATCH.

1,000 yards.

Won by Maj. W. B. Martin, N. J., 24 hits.

#### 71ST REGIMENT MATCH.

Won by District of Columbia First Team, score, 804.

Second, District of Columbia Second Team, score, 774, both using Winchester cartridges.

#### KEYSTONE LONG RANGE MATCH.

Won by Lieut. H. E. Simon, Ohio, score, 49. Lieutenant Simon used a Winchester barrel as well as Winchester cartridges.

#### COMPANY TEAM MATCH. TYRO.

Won by Second Troop of Philadelphia, score, 137.

#### INDIVIDUAL RAPID FIRE MATCH.

Won by John Sabo, Ohio, score, 837.

Second, Capt. A. F. Laudensack, Conn., score, 745, both using Winchester Automatic rifles as well as Winchester cartridges.

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READ THE RIFLEMAN'S FATE IN HIS FACE.

A rifleman on a record bent  
But lately to his home range went  
To try his skill at a thousand yards  
And bring home a handful of all-bull cards.

His first for record made him feel blue—  
He misjudged his wind and got a two!



A TWO

His second was better, though we see  
The marker scored him only three.



A THREE

Then on his third to better his score  
He landed a close twelve o'clock four.



A FOUR

And see! as sure as you're alive  
His fourth shot is a "bully" five.



A BULLSEYE

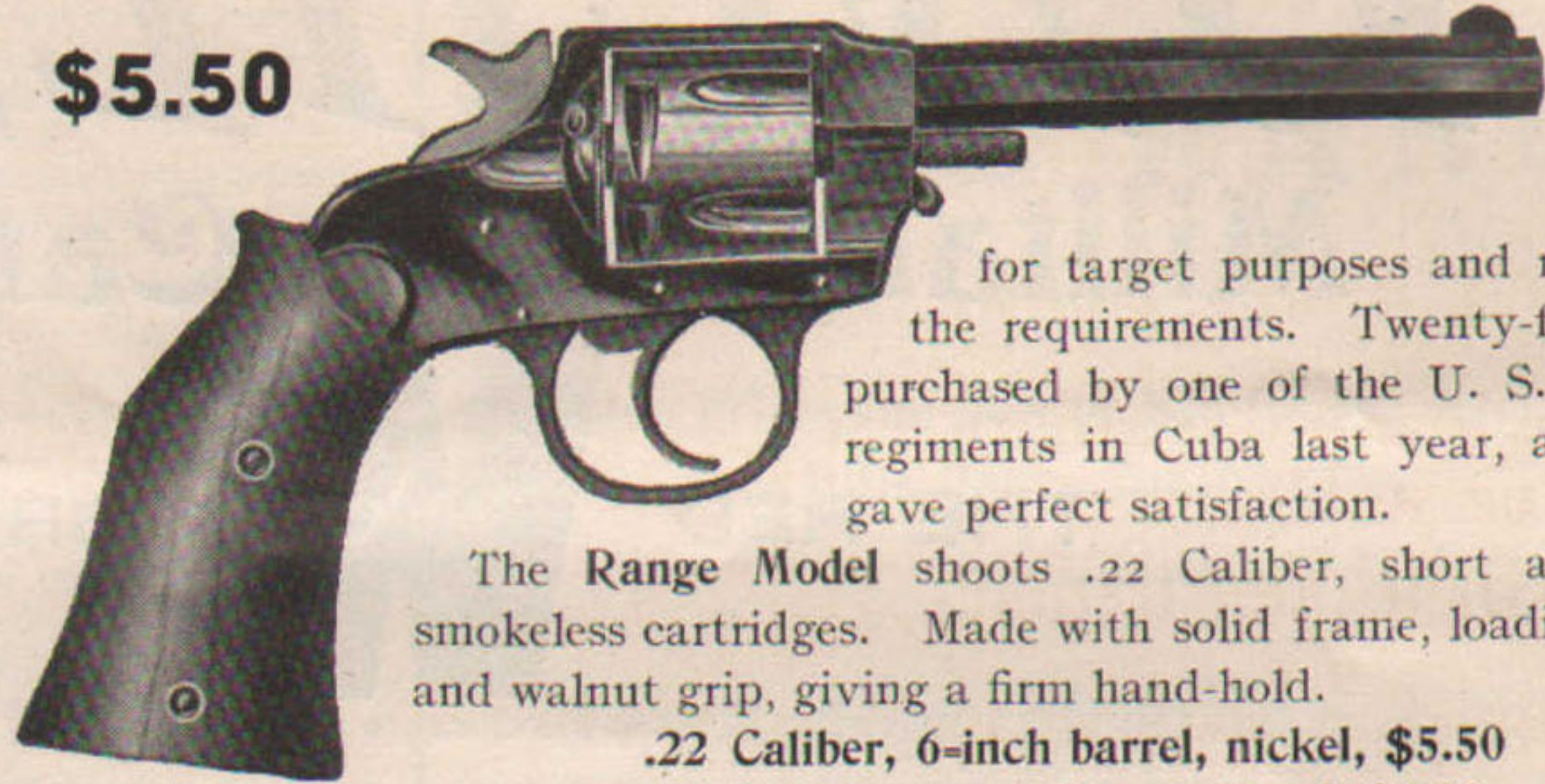
Nothing can stop him now he thinks  
He'll make bulls here as easy as winks  
What joy! What pleasure! Oh, what bliss!  
Damnation! . . . Someone moved the target, and he  
Looks like this.



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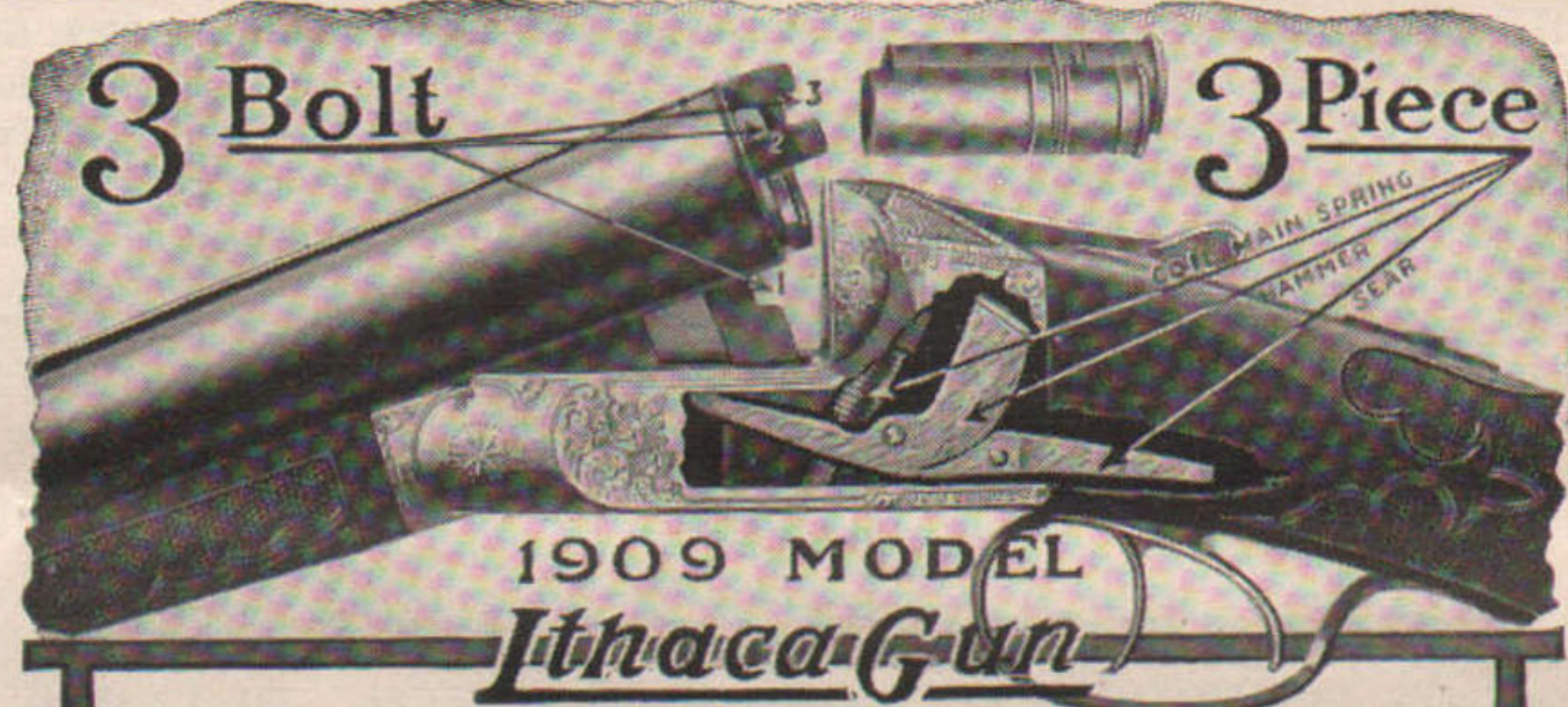
.22 Caliber, 6-inch barrel, nickel, \$5.50

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PROVIDENCE, R. I., REVOLVER CLUB.

Scores made at the Arlington Range for week of September 4.

50 Yards Revolver.					
Parkhurst	84	83	88	82	88—425
Donaghy, .38 Colt.	80	84	84	78	83—409
.38 Colt.	86	87	91	84	84—433
Luger	85	87			

50 Yards Pistol.					
Donaghy	88	87	90	89	87—441
Joslyn	90	93	87	87	86—443
Miller	86	84	83		

The annual Labor Day shoot was held at Redwood Farm Range, Portsmouth. Conditions, ten shots at 200, 300 and 500 yards, no sighting shots. Prize, telescope donated by one of the members. The scores:

Yards	200	300	500	TL
Parkhurst	38	42	38	118
Peckham	38	42	36	116
Bowler	32	35	39	106
Almy	35	40	30	105
Coulter	43	36	23	102
Bresel	39	35	23	97
Albro	34	35	20	89
Henderson	27	31	24	82

Fifty yards practice scores week September 11.

Joslyn, 22 S. & W.	93	86	90	86	92—447
.38 Colt.	94	86	87	89	91—447
Donaghy, .22 S. & W.	88	86	80	87	81—422
.38 Colt.	90	87	87	86	87—437
.38 Colt.	86	87	80	88	79—420
Parkhurst, .38 Colt.	78	81	86	87	93—425
Miller, .38 Colt Military	89	81	88	83	87—428
Miller, .38 Colt Military	86	83			

Fifty yards English miniature rifle with reduced target.

Coulter	41	44	39	45	44	40	42
Parkhurst	45						
Lewis	36	40	41	37	38		

GOLDEN GATE RIFLE AND PISTOL CLUB.

The monthly competition of the Golden Gate Rifle and Pistol Club was held recently with the following results:

Rifle.  
J. Williams, 225, 201; H. Wobber, 211, 213, 209, 210; J. M. Klassen, 226; B. Jonas, 208, 209, 220, 215, 209; J. G. Day, 177; Frank E. Mason, 214, 216, 219; R. J. Fraser, 213; W. Blasse, 204; Otto A. Bremer, 222.

Pistol and Revolver.  
J. G. Day, 79, 69, 65; C. W. Linder, 93, 91, 89, 82; C. W. Whaley, 87, 87, 82; E. Schierbaum, 84, 80, 75; F. Spencer, 86, 84, 77; R. W. Jones, 90, 87, 82, 77; N. G. Williamson, 80, 70, 69, 60, 58; C. J. Doehring, 87, 83, 83; R. J. Fraser, 91, 90, 87.

MANHATTAN RIFLE AND REVOLVER ASSOCIATION.

At 2628 Broadway on Sept. 16.

20 Yard Revolver.						
G. P. Sanborn	93	90	89	88	87	87
J. L. R. Morgan	93	92	86	86	85	
J. A. Dietz	92	90				84
E. Schnitzler	86					84
B. F. Wilder	84					77
Dr. C. Phillips						84
M. Hays						84
C. Drechsel						77

LOS ANGELES, CAL., REVOLVER CLUB.

The regular monthly medal matches for the pistol and revolver handicap medals took place September 5. A. M. Smith with a handicap of 36 points to his credit was awarded the revolver medal for the month of September. I. C. Douglas won the pistol trophy with a score of 260. Conditions were 30 shots per man at 50 yards on Standard American target. Following are the scores:

Revolver Handicap Medal Match.

Score	Hcp.	TL				
A. M. Smith	79	84	90	253	36	289
Dr. L. M. Packard	86	86	86	258	18	276
H. D. Thaxter	94	83	87	264	9	273
I. C. Douglas	75	88	93	256	9	265
Will A. Wright	72	89	87	248	9	257
W. E. Smith	77	72	82	231	24	255

Pistol Medal Match.

I. C. Douglas	85	87	88—260
J. E. Holcomb	82	84	91—257
Dr. L. M. Packard	79	89	88—256
H. D. Thaxter	82	80	92—254

Practice Scores; 50 Yard Pistol.

J. E. Holcomb	89	85	84	85	84
Dr. L. M. Packard	94	89			

MASSACHUSETTS RIFLE ASSOCIATION.

A fishtail wind interfered with the shooters at the range on September 18 and no high scores were made except by R. L. Dale at 200 yards, shooting a .22 caliber high power hunting rifle weighing 6½ pounds and with a 5-pound trigger pull, making a total of 89. The scores: 200 yard medal and badge match, offhand—F. C. Fitz, 83, 82; L. Lewis, 82, 82, 82. 200-yard offhand practice match—\*R. L. Dale, 7, 9, 7, 10, 10, 9, 10, 10, 7, 10—89; J. E. Lynch, 78; M. Weeks, 77; Busfield, 87, 86; M. Darling, 81, 80; F. W. Pierce, 75, 65.

Military medal match, 200 yards—George H. Mackay, Jr., 42, 40, 39. Pistol and revolver practice match, 50 yards—H. A. Hill, 90, 90, 90; M. Weeks, 88, 87; M. Darling, 87, 86; I. Smith, 86.

Pocket revolver, 50 yards—H. A. Hill, 79. A large number of marksmen were busy on September 18, at the Bay State range practicing for the State shoot September 24 and 25. Surgeon Golder of the 5th Regiment team, who belongs to Company F, made 15 consecutive bullseyes at 800 yards.

\*Hunting rifle.

COLONIAL REVOLVER CLUB, ST. LOUIS, MO.

The results of the United States Rifle Association Outdoor Championship Matches held at St. Louis are as follows:

Match A—Target Revolver, 50 Shots, Slow Fire, Possible 500.

Chas. Dominic, .38 S. & W.	92	90	84	84	93—443
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S. E. Sears, .38 Spaedy Handmade	87	90	90	88	80—435
C. C. Crossman, .38 Colt.	86	87	88	90	84—435
Dr. M. R. Moore, .38 Colt.	87	79	88	91	88—433
Mrs. C. C. Crossman, .38 S. & W.	85	75	83	91	87—421
Wm. C. Ayer, .38 Colt.	85	77	85	65	83—395
M. Summerfield, .38 Colt.	74	78	73	87	77—389
Wm. H. Spencer, .38 Colt.	65	76	76	71	68—356
Louis F. Alt, .38 Colt.	67	70	73	71	64—345

Match B.—Target Pistol, 50 Shots, Slow Fire, Possible, 500.

Chas. Dominic, .38 Remington	92	94	87	87	90—450
Geo. C. Olcott, .22 S. & W.	88	91	83	87	87—435
W. C. Ayer, .22 S. & W.	86	87	85	84	88—430
C. C. Crossman, .32 Spaedy	86	79	89	84	90—428
Dr. M. R. Moore, .22 Remington	80	85	84	86	91—426
Paul Frese, .32 Remington	90	78	86	75	78—407
Louis Ebert, 22 S. & W.	76	63	40	56	60—295

Match C.—Military Revolver, 75 Shots in 5 Shot Strings, 15 Seconds each string. Possible 750.

Chas. Dominic	37	40	38	37	32—184
(.38 S. & W.)	31	34	32	35	37—169
	36	45	38	38	39—196—549
W. C. Ayer	32	32	35	40	32—171
(.38 Colt)	30	32	30	36	39—167
	43	34	38	29	25—169—507
Geo. C. Olcott	29	18	31	34	36—148
(.38 Colt)	46	40	35	30	31—182
	35	36	40	28	37—176—506
Wm. H. Spencer	33	31	36	28	32—160
(.38 Colt)	16	28	28	26	25—123
	23	32	20	30	30—135—418
J. W. Heirs	0	21	18	—	39
(.38 Colt)					

Match D.—Military Revolver, 25 Shots in strings of 5, 15 seconds to each string. Possible 250.

Chas. Dominic	37	44	39	31	34—185
Wm. H. Spencer	42	37	31	30	36—176
	29	39	28	35	30—161
C. C. Crossman	30	35	33	32	29—159
	13	19	25	25	31—113
	32	20	27	36	27—142
W. C. Ayer	37	35	38	28	20—158
	26	33	33	29	35—156
	27	30	36	24	32—149
Geo. C. Olcott	33	26	29	31	31—150
	23	31	38	24	32—148
M. Summerfield	20	19	14	5	15—73
J. W. Heirs	0	0	3	12	4—19

Match E.—Team, Military Revolver, 25 Shots per man, 15 seconds to each 5-shot string. Possible 250.

1. Chas. Dominic	39	35	35	34	41—184
2. Wm. H. Spencer	37	31	39	39	33—179
3. Wm. C. Ayer	26	28	33	37	25—149
4. Geo. C. Olcott	18	27	36	14	23—118

Team total 630

Match F.—Pocket Revolver, 25 shots in strings of 5 shots, 30 Seconds to each string. Possible 250.

Wm. H. Spencer	39	36	38	36	40—189
Chas. Dominic	40	33	34	41	37—183
C. C. Crossman	36	36	38	32	43—185
S. E. Sears	31	33	41	37	41—183
W. C. Ayer	33	28	31	40	34—166
Dr. M. R. Moore	27	26	33	39	38—163
J. W. Heirs	7	0	4	8	0—19



# PETERS

## RIFLE AND REVOLVER AMMUNITION SUCCESSFUL AT SEA GIRT

The following honors won at the New York, New Jersey, and Pennsylvania Competitions, Sept. 3-10, attest the efficiency of PETERS CARTRIDGES:

No. 1—DRYDEN TROPHY MATCH. Won by Ohio Team, 5 out of 8 men using PETERS.		No. 30—ANY REVOLVER MATCH. 1st, Sergt. Thos. Anderton..... 146 2nd, C. E. Tayntor..... 144
No. 3—COMPANY TEAM MATCH. Won by Company C, 4th N. G. N. J., part of team using PETERS.		No. 31—PISTOL MATCH. 1st, J. H. Snook..... 146 2nd, Sergt. Thos. Anderton..... 144 3rd, Lieut. R. H. Sayre..... 143
No. 7—VETERAN TEAM MATCH. 1st, Veteran Club of the Second Troop of Philadelphia.....	Score. 234	No. 32—ALL-COMERS SQUADED REVOLVER MATCH. 1st, Sergt. Thos. Anderton..... 135
No. 9—SEA GIRT CHAMPIONSHIP. 3rd, Lieut.-Col. W. A. Tewes..... 5th, Priv. H. Minervini.....	183 181	No. 33—DISAPPEARING TARGET REVOLVER MATCH. 1st, J. H. Snook (Tie)..... 66 4th, Colonel Young..... 59
No. 10—NEVADA TROPHY MATCH. 5th, Capt. J. C. Semon..... 7th, Capt. C. F. Silvester.....	136 132	No. 35—COMPANY TEAM MATCH. 6th, Company E, 7th Regiment, N. G. N. Y..... 353
No. 11—SPENCER MATCH. 4th, Lieut.-Col. W. A. Tewes..... 6th, Lieut. W. B. Short.....	60 58	No. 39—OLD GUARD TROPHY MATCH. 1st, Italian Rifle Association of New York..... 255 2nd, 7th Regiment Rifle Club of New York, Team No. 1..... 251 5th, 7th Regiment Rifle Club of New York, Team No. 2..... 238
No. 12—OFF-HAND MATCH. 1st, Priv. H. Minervini (Tie).....	47	No. 40—THURSTON MATCH. 1st, Priv. H. Minervini (Tie)..... 147
No. 13—SWISS TROPHY MATCH. 3rd, Lieut.-Col. W. A. Tewes..... 5th, F. M. Dardingkiller.....	39 24	No. 41—NEW YORK STATE RIFLE ASSOCIATION MATCH. 1st, Lieut.-Col. W. A. Tewes (Tie)..... 196
No. 14—HALE MATCH. 6th, Lieut. W. B. Short.....	49	No. 42—THE WINGATE ALL-COMERS SHORT RANGE MATCH. 3rd, Lieut. A. D. Rothrock..... 139 5th, Capt. E. W. Eddy..... 138
No. 15—LIBBEY TROPHY MATCH. 3rd, Capt. C. F. Silvester.....	8	No. 43—THE ROGERS ALL-COMERS MIDRANGE MATCH. 3rd, Capt. Ben. South..... 148 4th, Lieut. A. D. Rothrock..... 148
No. 16—PRESS MATCH. 4th, Lieut. T. C. Walker.....	32	No. 48—MAXIM LONG RANGE MATCH. 5th, Lieut.-Col. W. A. Tewes..... 48
No. 17—OFFICERS AND INSPECTORS MATCH. 6th, Lieut.-Col. Arthur Rowland.....	90	No. 49—KEYSTONE LONG RANGE MATCH. 3rd, Lieut.-Col. Arthur Rowland..... 49 6th, Lieut.-Col. W. A. Tewes..... 48
No. 18—INDIVIDUAL RAPID FIRE MATCH. 3rd, Maj. C. S. Benedict..... 5th, Capt. Ben South.....	678 505	No. 50—MIDRANGE MATCH. 1st, Lieut.-Col. W. A. Tewes (Tie)..... 50
No. 26—REVOLVER TEAM MATCH. 2nd, Manhattan Revolver Association, part using PETERS... 4th, Battery A, N. G. N. Y.....	995 673	No. 51—MEMBERS MATCH. 1st, Lieut.-Col. D. M. Flynn.
No. 28—ALL-COMERS MILITARY REVOLVER MATCH. 1st, J. H. Snook..... 2nd, Sergt. Thos. Anderton.....	145 143	

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Mr. Henderson won the Hunter Arms Trophy.

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C. H. NEWCOMB, 193 and 126.	NEAF APGAR, 116 and 103.
L. S. GERMAN, 131.	H. HERMAN, 114 and 105.
J. R. TAYLOR, 128 and 128.	G. E. PAINTER, 114.
W. HENDERSON, 116 and 115.	

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UNION HILL, N. J., SCHUETZEN PARK.

A feature of one of the Saturday afternoon shoots at the park recently was an impromptu match between Arthur Hubalek and Louis C. Buss, two very fine shots with the schuetzen rifle. Hubalek's average for ten-shot strings was a trifle over 223. "Buff" Rosenbaum was referee and scorer for the match.

Arthur Hubalek:  
220 224 221 222 221 235 220 220 217 234—2234  
Louis C. Buss:  
225 215 228 209 219 224 214 224 209 228—2195

FORT PITT RIFLE CLUB, PITTSBURG, PA.

Ideal conditions and the edge that results from a long season's shooting were responsible for exceedingly good scores in the 800 yards handicap match, held by the club at the Highland Range on September 18.

Man after man made a strong start and most of them held the pace to the end. Out of twelve entrants, nine men shot 46 or better, three of them coming within one point of the possible. Of these 90 shots only two missed the bullseye by more than nine inches, thus scoring 3's.

A deduction of handicaps resulted in 3 scores of 48, Douds, Parsons and Beal finishing in the order named under the N. R. A. rules governing ties.

A number of scores were shot on the 200 yard range, Fisher being high man with three 44's.

800 Yards Match.			
F. C. Douds.....	48	E. A. Waugaman.....	45
W. C. Parsons.....	48	J. McGlashan.....	43
T. C. Beal.....	48	Chas. Leacy.....	42
G. H. Stewart.....	47	A. M. Fuller.....	40
O. W. Hammer.....	46	F. B. Fisher.....	40
F. S. Nisbet.....	45	R. W. Newton.....	37
200 Yards Record.			
F. B. Fisher.....	44	J. McGlashan.....	41
T. C. Beal.....	43	Chas. Leacy.....	40
E. A. Waugaman.....	42	W. C. Parsons.....	39
O. W. Hammer.....	42		

LOS ANGELES, CAL., REVOLVER CLUB.

Five of the members entered the outdoor U. S. R. A. contests September 11 and 12, for the first time, and did not make quite as good a showing as they expected.

Dr. Packard's match A scores would have been higher if he had started earlier in the day as it was almost dark when he finished his last string. Following are the scores:

Match A.					
A. B. Douglas.....	81	95	85	89	88—438
H. D. Thaxter.....	81	81	82	88	79—411
I. C. Douglas.....	86	82	83	77	83—411
Dr. L. M. Packard.....	74	78	83	82	73—390
Match B.					
Dr. L. M. Packard.....	80	86	89	86	87—428
J. E. Holcomb.....	82	90	77	88	84—421
I. C. Douglas.....	85	83	84	86	80—418

SHOOT FOR THE FIRST BRIGADE TROPHY.

By making a score of 373 the 1st Infantry won final possession of the trophy on September 18. The match was shot at 200, 500 and 600 yards, four men to a team, and was under the direction of Maj. E. Claude Goddard.

First Infantry.				
Yards.....	200	300	500	Tl.
Captain Mehard.....	31	34	29	94
Musician Chapin.....	30	33	32	95
Private Gamble.....	29	33	29	91
Private Dunn.....	27	33	33	93
Totals.....	117	133	123	373
3rd Infantry.....	118	120	118	356
2nd Troop, P. C. C.....	109	120	116	345
1st Troop, P. C. C.....	113	112	117	342
Troop A.....	109	120	112	341
*6th Infantry.....	285	2nd Infantry.....		276

\*Three men on team.

74TH INFANTRY WINS FOURTH BRIGADE SHOOT.

Consistent work by the 74th Infantry rifle team won the annual Fourth Brigade match at Geneva on Sept. 18 by 36 points. The 3rd Infantry was the only contender, the 65th Infantry having no team in the contest. Those comprising the 74th's team were Captains Barmon and Kemp, Lieutenants Dominick, Kendall, Cadotte, Horton, Clark and Ahearn; Sergeants Leushner, Alvord, Dominick and Stebbins; Corporals Thomas and Fischer and

Private Knubnel.

There were three events. In the first of these, slow fire at 600 yards, the Buffalo boys scored 365 points as against 342. In the second event, slow firing at 200 yards, the Buffalo boys got 346 and the 3rd Regiment 339. Rapid firing at 200 yards ended by the 74th getting 421 and the 3rd, 414. The total score was 1132 for the 74th and 1,096 for the 3rd. Lieutenant Clark scored 105, the highest score. Captain Kemp, Lieutenant Cadotte and Sergeant Leushner came next. A State trophy valued at \$100 was the prize captured by the 74th team.

1ST INFANTRY, N. G. P.

First Regiment officers' field day and three very important matches were conducted by 1st Lieut. Edward J. Adams, Company B, at the First Regiment rifle range, Essington, on Sept. 20. The Bailey medal match, the officers' revolver and expert revolver matches, made up a long and varied program.

The match for the Bailey medal is unique from the fact that teams of three officers were in competition. Only six teams were entered in this contest and the combination of the three majors won the trophy with a score of 145; Company C's officers second, with 144; Company B, 142; Company E, 121; and Company L, 121.

The conditions were, each officer to fire with the Service rifle, seven shots each at 200 and 500 yards, the high man of winning team to wear the medal for a period of one year and medals to go to each member of the winning team. The individual scores were:

Yards.....	200	500	Tl.
Major Scattergood.....	27	25	52
Major Hunt.....	27	24	51
Major Zane.....	26	16	42
Total.....	80	65	145

Scores in the expert revolver match were:

Major Hunt, 203; Lieut. Clarence J. Kensil, 176; Maj. George A. Scattergood, 175; Capt. Frank A. Hall, 169; and Lieut. Isaac N. Drew, 147.

This match was also open to only the commissioned officers. Each contestant was obliged to fire in strings of 5 shots rapid fire, with an allowance of three seconds for each shot of ten shots at 15 and 25 yards. In timed fire of twenty seconds, to each score of five shots, ten shots at 25 and 50 yards, and "slow fire" of twenty seconds for each shot of the ten fired at a distance of 75 yards.

Yards.....	25	50	75	Tl.
Captain Bonnin.....	21	21	21	63
Major Scattergood.....	20	20	15	55
Major Zane.....	20	16	18	54
Lieutenant Silver.....	21	15	17	53
Lieutenant Adams.....	19	19	11	49
Captain Kiser.....	19	13	10	42
Lieutenant Van Zandt.....	17	9	10	36
Captain Hollenbach.....	17	10	6	33
Lieutenant Ward.....	21	7	..	28

This match was open to the commissioned officers of the regiment, and the conditions were 5 shots each at 25, 50 and 75 yards. The first prize was the Veteran Corps Trophy with gold medal and second prize a silver medal.

**AT THE TRAPS.**

CHICAGO, ILL., GUN CLUB.

At the regular weekly shoot of the club on September 11 the following scores were recorded:

Shot at Bk.		Shot at Bk.	
Quade.....	175 149	Knights.....	125 103
*Graham.....	150 147	Hunt.....	125 101
Roll.....	150 143	Matthews.....	150 94
Barto.....	150 136	Amberg.....	100 88
*Stannard.....	150 136	Dr. Bosler.....	100 79
Gilman.....	150 120	Hall.....	100 65
*Burton.....	125 115	Katz.....	50 25
Davis.....	125 111	Teepie, Jr.....	25 20
Parker.....	125 104	Mrs. Davis.....	25 19

\*Professionals.

September 12.			
Shot at Bk.		Shot at Bk.	
Cutler.....	200 163	Young.....	100 91
Flewelling.....	150 136	Miller.....	125 91
Crocker.....	175 136	Dr. Little.....	100 90
Gilman.....	150 128	Geo. Eck.....	100 88
Cady.....	150 123	F. Taggart.....	125 78
Thwaite.....	150 121	J. Taggart.....	125 77



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Goldsmith.....	125	98	Frana.....	50	33
Thomas.....	125	97	J. Eck.....	50	32
Seelig, Jr.....	125	94	Teepie, Jr.....	25	16
De Wolf.....	125	92	Page.....	25	10

\*Professional.

#### MEADOW SPRINGS GUN CLUB, PHILADELPHIA, PA.

In the twenty-five target handicap prize shoot of the club held on September 18, on the Fifty-sixth and Lancaster avenue grounds, Soley and Murdock tied with straight scores for the club prize, but after two ten target shootoff Soley finally won with one to the good. Henry was the crack of the day, but he could not reach a win. The scores:

	Hdep.	Bk.	Tl.
Murdock.....	5	20	25
Soley.....	5	20	25
Clegg.....	4	19	23
Pierce.....	5	18	23
Henry.....	0	22	22
Jackson.....	4	18	22
Sloan.....	1	18	19
Moore.....	4	15	19
Henry, Jr.....	0	15	16

Shootoff, ten targets.

Soley.....	2	8	10
Murdock.....	2	8	10

Second shootoff.

Soley.....	2	8	10
Murdock.....	2	7	9

The open sweepstakes were scored as follows:  
 First event, ten targets—Sloan, 9; Soley, 8; Murdock, 8; Moore, 8; Clegg, 7; Jackson, 6; Arndt, 6.  
 Second event, fifteen targets—Sloan, 11; Soley, 11; Clegg, 11; Murdock, 10; Jackson, 10; Arndt, 9; Moore 9.

#### CLEARVIEW GUN CLUB, PHILADELPHIA, PA.

The regular club class shoot was shot on September 18, over the range at Sixty-seventh and Brewster avenue, and Perry won the Class A prize without hardly trying, while Paul came near to having an easy thing in winning the Class B. Bonsall actually had a cinch on the Class C.

The scores:

Ferry, A.....	23	Renner, B.....	22
Fisher, A.....	21	Redford, B.....	21
Bilhartz, A.....	20	Redman, B.....	16
Holznaple, A.....	17	McCullough, B.....	15
Paul, B.....	23	Eyans, B.....	15
Elwell, B.....	22	Bonsall, C.....	20

#### INDIANAPOLIS GUN CLUB.

The Labor Day shoot brought out a good attendance but the state fair opened on the same day, keeping down the attendance somewhat, but they all had a fine time as the day was ideal and the trap worked fine. Mr. Kanouse, of St. Paul, shot at a 95 per cent clip at 110 targets. Our Doctor Britten shot 87 per cent.

Shot at. Bk.	Shot at. Bk.
Parry..... 200 184	Brooks..... 130 113
Moller..... 200 181	Kanouse..... 110 104
Voris..... 200 181	Stewart..... 90 81
Barr..... 200 177	Wilson..... 115 80
Tripp..... 200 175	Cantwell..... 90 62
Britton..... 200 174	Wands..... 80 61
Van Nest..... 200 172	Dyer..... 95 57
Hymen..... 200 171	Beil..... 70 55
Dixon..... 200 166	Greenleaf..... 55 40
Brennan..... 200 166	Borders..... 30 18
Gephart..... 160 135	

Practice Events.

Shot at. Bk.	Shot at. Bk.
Moller..... 100 94	Dixon..... 80 66
Parry..... 100 92	Bell..... 80 62
Roland..... 100 79	Barr..... 60 50
Anderson..... 100 78	Neighbors..... 60 41
Moore..... 100 71	Wise..... 40 36
Britton..... 80 66	B. H. Moore..... 40 28
Lewis..... 80 66	

Ballistite and Empire trophy 50-target race.—Parry, Moller and Britton tied for high, Parry at 22 yards and the other two at 20 yards. In the shootoff Parry won out by one-third, being close pressed by Moller, who lost one more than Parry. Dr. Britton fell down some in this event. Lewis and Wise were close up, Wise at 20 yards getting 44, and Lewis at 16 yards, tying him.

Yds. Tl.	Yds. Tl.
Parry..... 22 45	Barr..... 16 41
Moller..... 20 45	Anderson..... 16 39
Britton..... 20 45	Bell..... 16 39
Lewis..... 16 44	Roland..... 20 38
Wise..... 20 44	Dixon..... 20 37
Moore..... 16 42	Neighbors..... 16 26

#### CINCINNATI GUN CLUB.

The main event of the day at a recent shoot of the club was a team race, the fat men and the lean men. This was a return match of August 29, at 50 targets per man, which resulted in the fat men winning by five targets.

Two-man team race, 25 targets per man.

Randall..... 25	Pfeifer..... 16
Gambell..... 22—47	Pohlar..... 12—28

Practice Events.

Shot at. Bk.	Shot at. Bk.
Connelly..... 125 86	O. E. Pope..... 75 39
C. Klein..... 100 74	Riley..... 50 34
Anderson..... 75 68	Lambert..... 50 32
Dr. Malloy..... 80 52	Pohlar..... 40 26
R. L. Trimble..... 50 49	Pfeifer..... 25 22
Dr. Bird..... 75 45	A. Gambell..... 25 17
Kerry..... 50 41	Randall..... 25 11
Schreck..... 50 39	Fredrick..... 25 10

Fat Men's Team. Lean Men's Team.

Targets... 15 15 20 Tl.	Targets... 15 15 20 Tl.
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Schreck.... 14 13 18 45	Randall.... 14 13 17 44
Anderson... 13 13 19 45	Pohlar.... 13 14 16 43
Pfeifer.... 13 12 18 43	A. Gambell. 12 14 14 40
Dr. Bird... 11 14 16 41	L. Gambell. 12 12 16 40
F. A. Pope.. 9 11 16 36	Lambert... 11 11 14 36
Connelly.... 12 9 13 34	Riley..... 11 13 12 36

Total.....244 Total.....239

#### ANNUAL SHOOT OF THE WESTY HOGANS.

The annual shoot of the West Hogans at Young's Pier, Atlantic City, N. J., was, as usual, a most successful and enjoyable occasion. The shooting started promptly as scheduled on the morning of September 16 with nearly 150 prominent trap shots entered. Charles Newcomb of Philadelphia and Billy Foord of Wilmington, Del., were high amateurs for the day, each breaking 198 targets out of 200. Newcomb had a straight run of 159 and Foord missed two in the first event and then went straight. Henderson of Kentucky was third high.

Neaf Apgar was high professional for the day with 196 breaks to his credit. Sked was second with 195. Some of the scores were: Culver, 192; Farnum, 170; Henlin, 187; Wagner, 186; Korner, 185; Humer, 180; E. Bates, 189; Day, Jr., 186; Brown, 190; Cooper, 174; Young, 181; Cook, 184; Westcoat, 166; Sheppard, 176; Anderson, 171; Hamlin, 188; Scholl, 143; Jamison, 149; Watson, 176; Mrs. Park, 178; Hillsman, 179; Heckler, 174; Anderson, 133; Bloxtun, 180; Colquett, 188; Butler, 186; M. Taylor, 187; Clark, 175; Todd, 168; German, 193; Foord, 198; Newcomb, 198; Squires, 193; Foltz, 190; Hawkins, 190; Sked, 195; Storr, 191; Henderson, 196; Curtis, 184; Miss Reiker, 171; Apgar, 196; Keller, 187; Stevens, 191.

The important winnings were as follows: Frank E. Foltz of Ohio and Woolfolk Henderson of Kentucky, tied for The Westy Hogan Championship at doubles with 84 out of 100. On the shootoff Mr. Henderson won the Young's Hotel Trophy on the shootoff and Mr. Henderson won the Hunter Arms Company Trophy. The Du Pont Cup for longest run was won by Mr. W. M. Foord, with 198 straight. J. R. Taylor was the winner of first professional average, 544 out of 560. Second professional was L. S. German, 543 out of 560. The amateur averages were: W. M. Foord, 541 out of 560; W. Henderson, 539 out of 560; C. H. Newcomb, 538 out of 560.

### NEWS OF THE TRADE.

#### THE RED W COMBINATION AT WORK.

Again clearly demonstrating their superiority over all other makes of guns and ammunition the unbeatable combination of Winchester Red W goods showed the bright light to those who recently participated in many of the important shoots all over the country. By careful perusal of the winnings of amateurs and professionals, you will readily determine that there is no other make of guns and ammunition better adapted to meet

all conditions of shooting as is the Winchester Red W brand.

At Quaker Valley, Pa., September 6, L. B. Fleming scored 144 out of 150, thus obtaining high amateur average, using the old reliable Winchester Red W brand of shells and Winchester gun.

At Bradford, Pa., on September 8 and 9, G. E. Painter, using Winchester shells, scored 388 out of 400, getting high amateur average for the match.

At Hammond, Ind., September 6, J. S. Young, using Winchester shells, scored 146 out of 150 and earned high amateur average for the meet.

Again at Hoopston, Ill., J. S. Young, using Winchester shells and Winchester gun, followed up his win at Hammond, Ind., by scoring 193 out of 200, gaining high amateur average for this meet.

On September 8, at Covington, Tenn., L. W. Williams, using Winchester shells and Winchester gun, scored 88 out of 100, and obtained high amateur average.

At Covington, Tenn., on September 9, E. Caldwell, using the strong combination of Winchester shells and Winchester gun, scored 193 out of 200 and carried off the high amateur average for the shoot.

At Portsmouth, Va., on September 9, Winchester shells and guns were doubly victorious, E. C. Gunther scoring 89 out of 100, winning high amateur average, and J. R. Taylor scoring 96 out of 100, winning high professional average.

At Charlotte, N. C., September 10, Chas. Nuchels, using Winchester Repeater shells and Winchester gun, scored 72 out of 75, and won high amateur average for the meet.

At Point Clear, Ala., September 7-10, W. T. Laster, using Winchester Leader shells, scored 483 out of 500, winning high amateur average for the shoot.

At Shamokin, Pa., Fred Coleman, on September 10, won the high amateur average, scoring 96 out of 100, and J. M. Hawkins, using the reliable combination of Winchester shells and Winchester guns, scored 97 out of 100, winning the high professional average.

At Newton, Ill., September 10, L. A. Cummings won the high professional average with his trusty Winchester and Winchester Leader shells, scoring 90 out of 100.

At Belvidere, Ill., September 13, R. W. Clancy, using Winchester Leader shells and Winchester gun, won the high professional average, scoring 186 out of 200.

At Cokeburg, Pa., September 13, W. H. Schuyler scored 143 out of 150, using Winchester shells, winning the high amateur average, and L. J. Squires, using Winchester shells and Winchester gun, won the high professional average, scoring 146 out of 150.

At Haddonfield, N. J., September 14, W. S. Colfax scored 165 out of 180, winning high amateur average, using Winchester shells and Winchester gun, and L. S. German, using Winchester shells, scored 175 out of 180, winning high professional average.

#### WITH U. M. C. STEEL LINED.

At the Colorado Handicap, Denver, many remarkable scores were made with U. M. C. steel lined shells. "Pat" Adams broke 194 straight and won the high professional average the first day, while George Maxwell made a run of 151 straight. He also broke 48 out of 50 double targets, which is wonderful shooting for a man with one arm. Mr. Cobb, of Albuquerque, N. M., broke 184 straight and was second in the Colorado Handicap, one bird behind the winner. O. N. Ford won the Preliminary Handicap with a score of 98 out of 100 with U. M. C. steel lined shells. At the tournament, 19 men broke 100 straight or more. Nine of them used U. M. C. steel lined shells. On every one of the three days, more shooters were using U. M. C. steel lined shells than any other make.

Chas. J. Brittain, president of the Berwick Rod and Gun Club, Berwick, Pa., on Labor Day won the Hunter Arms and Dupont trophies with scores of 47 and 49 out of 50 respectively, at the Berwick Gun Club shoot. In the last two shoots Mr. Brittain has attended, he has broken 234 out of 242 targets which is wonderful shooting. It is all the more credit to Mr. Brittain because he has shot very little during the last year. He used U. M. C. steel lined shells and a Remington pump gun.

At the Richmond State Shoot, September 6 and 7, U. M. C. steel lined shells won the lion's share. W. L. Boyd won the high amateur average the first day with 190 out of 200, including two long runs of 54 and 65. W. A. Hammond won the Stevens pump gun, scoring 24 out of 25. W. A. Hall won the State Championship with 94 out of 100, breaking the last 25 straight. He also won the second amateur average for the two days. All the above were won with U. M. C. steel lined shells.

#### SOME GOOD SCORES WITH PETERS.

High professional average and high general average at Covington, Tenn., were won by H. J. Borden, who scored 385 out of 400, using Peters shells. On the first day of the shoot Mr. Borden broke 198 out of 200, with a run of 104 straight.

C. A. Young won second professional average at Columbus, Ohio, September 9 and 10, with Peters shells, score 377 out of 400, with a run of 101 straight.

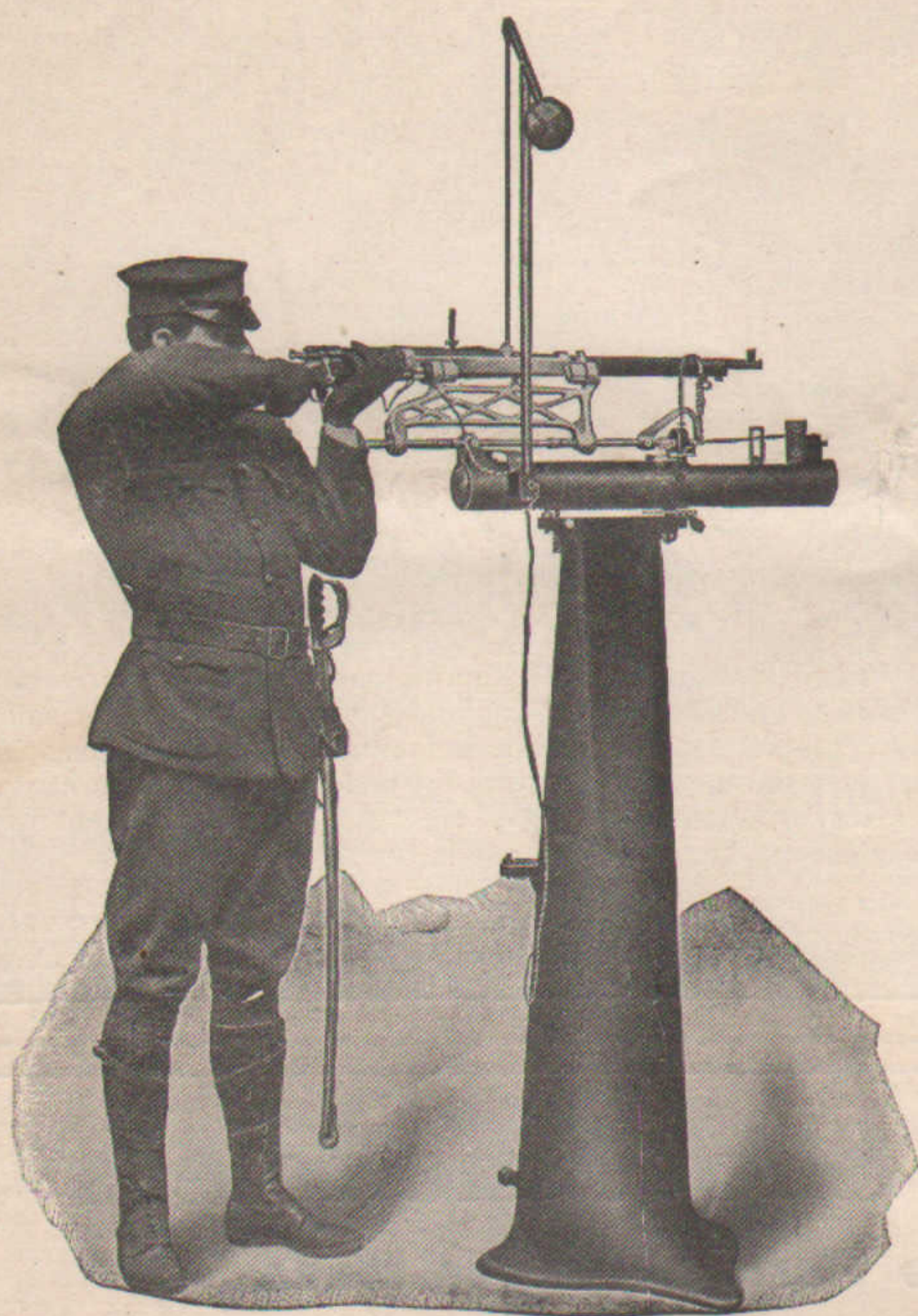
High professional average at Point Clear, Mobile, Ala., September 7-10, was won by Walter Huff, using Peters factory loaded Ideal shells; score 481 out of 500.

Jno. R. Livingston was third amateur, 472 out of 500, also using Peters shells.









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