

trained to use them, and happily no occasion arose for the mounted batteries when revolvers could have been made use of at close quarters.

"The weapon of the gunner."

"The driver has enough to do with his horses in action."

"Artillery ought never to be left exposed to attacks at close quarters."

These are common arguments to be heard when this subject of arming our men is discussed. But the gun is a poor weapon to defend ten men against fanatics or savages (and most of our wars nowadays are against them) who have contrived to come to close quarters, especially when a tube misses fire or a shrapnel plug sticks, which may happen in the best regulated battery. Surely, too, it is only when no skill in driving would avail him that a driver would have the opportunity of using a pistol, for if the enemy were within pistol range it would be a very smart battery that could limber up and get away in time. It is seriously contended that the driver, from an irresistible desire to take part in the fray, would, from his position in action, commence shooting over the gunners' heads. "Ahmed Khel" has been frequently quoted in this discussion, but on that occasion the drivers (who had pistols) did nothing of the sort, though they had every temptation to fire. At the same action, in limbering up to retire, a horse got his legs over the trace and caused a momentary delay; a few Ghazis were close at hand—happily not quite close enough, and the gun got away—but a few seconds later and the unarmed detachment would have been cut down, and possibly the gun lost. Would not pistols in the gunners' hands have been useful?

Episodes such as this, and that of Tamai, ought not to occur, no doubt, but they do with alarming frequency, and it is with what happens in practice, and not with theories, that we have to do. In a *mele*, such as an attack on artillery at close quarters must be, there is certainly some danger of our men hitting their own comrades if armed with firearms; but this must surely be the case in hand-to-hand fighting between any kind of troops, and is an unavoidable risk. We ought, at any rate, to weigh against it the possibility of our men being killed like sheep without the chance of defending themselves. In the case of gunners, the fact of their having a personal weapon at their sides, as a last resource, ought to give them additional confidence in serving their guns to the last moment, especially when attacked by cavalry. It would be a task of some difficulty for the latter to effectually disable a battery with the gunners lying under the guns and defending themselves with pistols. Nothing demoralizes infantry so much as the retreat of their own guns, and any expedient which enables the latter to hold their own is an advantage in that way.

In the heat of action men do sometimes lose their heads and do foolish things, but careful training in peace time will do much to prevent this, and it is at least as reasonable to suppose that the supports of infantry, for instance, would fire into the skirmishers in front of them, as that the wheel-driver of a gun would shoot his centre-driver in a moment of excitement, or a gunner prefer a pistol bullet to case shot as a means of stopping an enemy at 100 yards range.

It would be very interesting to learn the opinion and experiences on this point of the officers who served with the camel and mule batteries in the recent battles on the Nile.—*Proc. R. A. Inst.*

The Creedmoor Shooting.

THE annual fad matches of the United States National rifle association were held during the week beginning the 13th inst. The weather generally was anything but favorable, beginning with a 20 mile wind across the range the first day, a fish-tail on Tuesday and Saturday, and rain on Tuesday, left only Wednesday and Friday with fair shooting weather. A few of the matches deserve special mention. In the Wimbledon cup match, J. W. Todd won the cup for the third time consecutively; there were but few competitors. In the Shorkley, another long range match, there were 14 entries; the winner, F. J. Rabbeth, shot on his back, crossing his legs through the sling of his rifle. In the President's match, which included the military championship of the United States, there were 59 entries, C. W. Hinman was first in the first stage with 66 out of a possible 70, but M. W. Bull with 44 out of 50 at 600, landed the big prize in the second stage. In the short range team match only five teams competed, and the Zettler rifle club of New York had it all their own way, winning the two first places. In No. 9 there were five teams entered; in No. 11 four teams, in No. 12, none, and it consequently fell through; in No. 13, five; No. 14, two, and No. 15, three teams.

In Gen. Sheridan's skirmishers' match the visitors were particularly interested. It embodied all the features of regular warfare, and the execution done was very fine. The teams were six each, and the engineer corps from Willet's Point, L.I., the 13th regiment and the 4th and 5th artilleries, U.S.A., were represented. The teams formed in skirmish line at the 600 yards range and at the bugle call fell into the double quick march to the 500 yards range, where at the bugle signal they fell

and fired rapid volleys and repeated the manœuvre at each 100 yards till the 200 yards range was reached. The trophy was won by the engineers corps.

Lieut. Zalinski, the indefatigable executive officer of the association during the matches had something to say on the importance of rifle practice. He remarked: "The general public in these times of peace do not fully appreciate the value of the work which is going on here and in other places for the perfection of rifle practice. Its effect is only realized in times of danger. This, I presume, is natural, for when men are busy in peaceful pursuits they do not stop to think of the possibility of war, and it is only when war comes that we can demonstrate the usefulness of our work in that direction. Meanwhile it seems like boys' play. Skillful marksmanship is always an important adjunct in battle, and this can only be acquired by long practice. There are many young men whose tastes incline them to familiarity with firearms, and these are usually men who are among the first to enter the service of their country. Those who represent this class would, in the aggregate, equal in value an entire army corps. Their own knowledge of the skillful use of arms would incite them to the work of developing perfection in the ranks which they might command, and hence their value and power would be speedily felt in a hastily recruited army. We read in history of the great interest which always attached to exercises with the long bow in England prior to the introduction of firearms. In the present day rifle practice is of equal importance to the people.

"One reason, perhaps, why Creedmoor has not received more support and recognition is because of our comparatively remote location from the city and the absence of direct railroad facilities. It has been suggested that some more accessible site for our range should be selected, and the advantages of Staten Island have been presented. What this will result in I cannot now say. The advisability of making an appeal to the public for encouragement and substantial assistance has also been discussed. With all the wealth of New York around us it seems to me we should not appeal in vain for support, especially when it is remembered that there is no point more directly interested in the successful development of the science which we represent."

The following are the highest scores and in a few cases all the scores, in the several matches:

No. 1. Directors' match.—200 yards, open only to directors, any military rifle:

Jas. Duane, Sharp.....	55544	23
J. S. Shephard, Rem. spec.....	44455	22

No. 2. Judd match.—All comers, any military rifle, including specials. Remington State model will be allowed one point on each score, 200 yards. The aggregate of two scores to count for the first five prizes:

W. M. Farrow, Farrow.....	4555455	33	5554455	33	66
E. DeForest, Rem. State.....	+2-4554555	33	5454455	31	66
B. D. Spelman, jr., Rem. State.....	+2-4545545	32	4455545	31	65
J. F. Klein, Rem. State.....	+2-5445554	32	5444545	31	65

No. 3. Wimbledon cup match.—Open to all citizens and residents of the United States, 1,000 yards, any rifle:

J. W. Todd, Sharp.....	5450354543	4435454444	4034555424	115
F. H. Holton, Sharp.....	4352524433	4352533345	5444554342	112

No. 4. President's match.—First stage, 200 and 500 yards, open to army, navy and marine corps of the U.S. or national guard of any State; Remington State model and Springfield '45-cal., three-grooved and chambered for 2 1-10in. shell only. Second stage, open to all prize winners in the first stage, 600 yards; rifle, same as in first stage, but .50-cal. Remington State model will receive one point allowance:

First Stage.

C. W. Hinman, Spg.....	4455454	31	5555555	35	66
M. W. Bull, Spg.....	4455554	32	4544555	32	64
M. W. Daulton, Spg.....	5444345	29	5554555	34	63
J. Corrie, Spg.....	4545445	31	4554554	32	63

Second Stage.

M. W. Bull, Spg.....	3554551554	44
E. F. Young, Rem.....	2554455454	43
L. J. Elliott, Rem.....	+1-4555553434	44

No. 5. The Shorkley match.—Any military rifle, 800, 900 and 1,000 yards, all comers:

F. J. Rabbeth, Sharp..	5545545554	47	4534554455	44	5034544535	38-129
C. W. Hinman, Sharp.	5545554454	46	4455544455	45	5554503334	37-128
J. F. Klein, Hep.....	4455445554	45	5445550543	39	4534542355	40-124
T. J. Dolan, Hep.....	4545544555	46	5454555253	43	0450350253	27-116

No. 6. All comers' continuous match.—200 yards, American standard target, any rifle. Military rifles as in match No. 4 will be allowed four points, and other military or special military rifles three points on each score. The aggregate of three scores for first five prizes, aggregate of two scores for the others:

G. F. Ellsworth, Bal..	989891010-63	81089998-61	791010898-61	185
W. M. Farrow, S. Mil..	599989-59	107767109-56	+99985896-55	179
E. Munson, Bal.....	979910106-60	7871010710-59	610910897-59	178
M. Dorrier, Bal.....	1079810710-61	981010878-60	771010788-57	178

No. 7. Governors' match.—500 yards, any military rifle including specials, the aggregate of three scores to count for first five prizes, aggregate of two scores to count for the others, two points allowed on the aggregate of the three scores in first five prizes to State model rifles of .50-cal., one point on aggregate of the two scores:

J. F. Klein, Rem. spec.....	35	35	35-105
F. J. Rabbeth, Sharp spec.....	35	35	35-105
J. Cavanagh, Spg.....	35	34	34-103
E. F. Young, Rem. spec.....	34	33	33-102
John S. Shepherd, Rem.....	+234	33	33-101