

the distinctive capabilities of machine guns have to be shown. However, His Excellency fired a few rounds with good effect and then about 50 cartridges were expended, the result of which was subsequently reported by the marker, when he returned from the butts, to be 40 hits, eight of which were bulls. Lord Alexander Russell then suggested that the gun should be pointed at a mark in the snow somewhat to the left of, but equidistant with, the target. This was done, and about 240 rounds were fired quickly. The effect was surprising, and to all appearances most deadly, and we consider it was the best proof that has been given of the capabilities of the Nordenfelt. Captain Douglas, who fired the gun, informed us that he purposely left it unclamped, in other words the traversing gear was free, and we observed the tendency of the gun in rapid firing to work to the left by the action of the lever, was compensated in bringing it back sharply to the cocking position, thus slightly moving the breech action to the left, or the muzzles of the barrels to the right, at the same time there was a slight oscillatory movement in the gun which threw a continuous stream of bullets in an area of about 30 feet across the front by about 15 or 20 in the line of fire.

It was remarked by one of the colonels present that a cat with its nine lives could not have lived a minute under such a murderous fire. Altogether the exhibition was a most successful one, and we trust that the courteous and energetic agent of the company will not leave the Dominion without having the satisfaction of knowing that his persistent and untiring efforts have been rewarded with success. If there are yet any military officers in Ottawa who do not appreciate the good points of the Nordenfelt it is through no fault of Captain Douglas. We regret extremely to learn that Major-General Sir Fred. Middleton was prevented by indisposition from being present.

A Night Sight for Ordnance.

SIR W. ARMSTRONG & CO. have recently brought out a night sight which is illustrated in *Engineering* for March 11, which says of it: "An alignment is obtained which is easily discernable by the eye under all degrees of dusk or darkness, is capable of even more accurate adjustment than the usual day sight, and is so arranged that even on the darkest night in which fire is possible, the observer's eye is in no way fatigued or blinded by the illuminated points. The sight is made in several forms according to the purpose for which it is applied. When used with the director for discharging guns from a central position or for the sighting positions in turrets or barbettes, light is transmitted by reflection from an electric lamp through two small spherical lenses where it concentrates in two minute and easily adjusted points of light. For the torpedo director used for discharging torpedoes and for direct use with larger guns, two lamps are employed, while for smaller guns such as Hotchkiss and other 3-pounders and 6-pounders, two separate sights, each with its lamp, take the place of the ordinary day sight. As most warships are now fitted with the electric light the application of these sights is arranged in connection with the light circuit. A short length of wire with a terminal in a convenient position close to the gun or director enables the sights to be illuminated as desired. The purposes for which these sights are applicable are for directing instruments for discharging guns and torpedoes either on board ship or in forts and coast batteries; for ordnance generally afloat and ashore, and for position finders and observation mines.

Correspondence.

The Editor desires it distinctly understood that he does not hold himself responsible for the opinions expressed by correspondents.

FAIR PLAY.

To the Editor of the Canadian Militia Gazette.

I see the Imperial government intend giving a clasp to each volunteer actually under fire during the North-west rebellion. Is this quite fair to those who underwent the same hardships, and who performed all duties, and were in reality doing just as much in quelling the rebellion as those more fortunate ones a few miles farther to the front. Take B and D companies of the Midland, which were left at Clark's Crossing, heard every gun fired, and were ordered up to assist General Middleton, marched 45 miles in one day and a-half, arrived just after the battle was over, helped to take the wounded down to the boat, buried the dead in the zareba and were with the general from that time, also spent 12 days and 13 nights on board the *Northcote*, not knowing what minute they might have been fired on. These two companies were without doubt supports to the general's column, and are these to be passed by with the clasps. Take the London or 7th battalion; these men worked like slaves day and night to get to the front; is there no decoration for them? Again take the 35th and the balance of this battalion, I forget its number, making after friend Pia-Pot, they too will be passed by. I am afraid if this unfair clasp is only given to those few who were more fortunate and who did not have any more duties to perform than those in the rear, our volunteer force will not be so anxious to come forward again.

K. K.

[While granting all that K. K. claims for those who were not fortunate enough to get into action, we would once more explain that what he asks for is simply impossible. The Queen's Regulations, framed long before this campaign, point out very unmistakably the limits of an award of clasps.—ED.]

SMALLBORES.

To the Editor of the Canadian Militia Gazette.

DEAR SIR,—Your editorial of the 17th March on this subject revives some old ideas, but would you explain to us how a Snider teaches "accuracy" as well as a small-bore? accuracy in record, holding and observation. When did Snider shots keep records of their shooting, use verniers, observe wind and light and other changes; was it not after smallbore men had taught their use? What teaches a man to hold steady and plumb like shooting at 1,000 yards?

Look at the history of the last twenty-five years and see if it is not the "small-bore" men who have made shooting what it is to-day in England and Canada. Practice may have fallen off to-day in Canada, but I suspect it is because of the persistent "hammering down" on the part of a certain set.

On the contrary, I believe smallbore shooting should be encouraged, the original objection, which was its price, is now removed; the cost of smallbore rifles is nearly the same as that of the military weapon.

However, I confess myself to be

A SMALLBORE SHOT.

THE RESISTANCE OF SNOW TO BULLETS.

To the Editor of the Canadian Militia Gazette:

DEAR SIR,—As an old rifleman I very naturally felt a good deal of interest in Major Anderson's proposal to try by actual experiment the amount of resistance well-packed snow would offer to the passage of a bullet. Taking advantage, therefore, of the trial of the Nordenfelt gun on the 25th inst. at the Rideau rifle range, when several hundred rounds of Martini ammunition were fired in the presence of His Excellency the Governor-General and General Lord Alexander Russell, commanding the forces in British North America, I proceeded, immediately the firing ceased, to carefully examine the surface of the snow in order to trace the course of the bullets and determine as far as possible the degree of penetration; this, however, I found more difficult than I anticipated, the surface of the snow being frozen, and forming where the shots struck a crust so strong that I was unable without a shovel to remove it. One thing was pretty clear, and that was that the degree of penetration was less than usually supposed as I picked up seven Martini bullets lying upon the surface of the snow which had cut just under the surface and, coming out after traversing a distance of not more than four feet from the point of impact, were completely spent.

Lord Alexander Russell, who had watched the firing of the Nordenfelt with great interest, subsequently suggested that trial should be made how far a bullet would penetrate a bank of packed snow and ice. In order to ascertain what could be done in this direction, Major W. P. Anderson and myself, provided with a Snider rifle and ammunition and a snow shovel, went to the Rideau range this afternoon, and after firing into snow banks in various places and of different consistency, found that in hard packed snow, mixed with ice, but not hard enough to prevent digging into it with a sheet-iron shovel, a bullet did not penetrate more than about 4 feet; in perfectly dry snow, packed by natural drift, but capable of being easily crushed in the hand, a bullet penetrated about four feet, and in loose drifted dry snow less than seven feet, though fired from points only twenty or thirty yards distant.

Immediately behind the target (of canvas), which had been used for the Nordenfelt gun practice, was a bank of snow mixed with ice, this was carefully removed, and embedded therein we found several of the Martini bullets fired on the 25th inst., these had penetrated a little over 4 feet, very little, if any, farther than Snider bullets fired at a distance of 200 yards during our experiments this afternoon. The bullets in every case were taken out perfectly uninjured, with the marks of the rifle grooving very conspicuous. The Martini bullets were encased in ice, thus showing that they must have been very hot when stopped by the snowbank.

Trusting that the experiments detailed above may be interesting to your readers.

I am, &c.,

WM. WHITE.

Ottawa, 29th March, 1887.

Queries and Replies.

DISQUALIFIED TEAMS D.R.A.

Q. I was recently told, that some teams were disqualified in the "Gzowski" or "British Challenge" matches of last year; on reference to the report, it is found that the subject is not mentioned at all. Were any teams disqualified in those matches, and if so, why?

AN INQUIRER.

A. The Sixth Fusiliers team was disqualified because one of the men was proved to have fired more than the number of shots allowed by the regulations. This disqualification, however, made no change in the prize winning teams.—ED.

THE ASSUMPTION OF BREVET TITLES.

Q. An officer holds the rank of Brevet Major in the militia, with the substantive rank of Captain in his regiment. How should he sign his name to documents, which, while not regimental, are still military?

RANK.

A. Q.R. Sec. 21 par. 11 says: "The rank and corps of officers are in all cases to be added after their signatures." This would seem to imply that the signature should be (e.g.) A.B., Captain and Brevet Major, 105th Batt. But this probably only refers to official documents. There are certainly precedents in favor of his signing A.B., Major, and as he holds militia rank as major he would always be entitled to be styled Major B.—ED.

Regimental Notes.

We wish to publish information respecting all the doings of all corps. Will the officers interested, particularly at a distance, assist us by having news relating to their corps promptly forwarded?

Montreal.—Lieuts. Labelle, Ostell, Hebert, Laframboise, Desnoyers and McKay of the 65th Batt., have gone to St. John's Infantry School to pass their examinations during this present special course. These officers, we understand, have been studying very hard during the last three months under Staff-Sergt. Gauthier (ex-instructor from St. John's), and we have no doubt they will return delighted with the result of their experience in St. John's.—RAM ROD.

Winnipeg.—The 90th club, which was organized sometime ago in the interests of the 90th battalion, has made a most creditable move towards encouraging rifle shooting this year. Sometime ago it was decided to offer for team competition, a handsome rifle trophy to be shot for annually by the several companies of the battalion. Lieut. Broughall, the secretary, wrote to Capt. Clark, of the 90th, who is representing Mani-