

the English 9-pounder, of which the charge is 1 lb. 12 oz. But, as the object of the trial is to obtain data as to the relative merits of the two systems of field artillery as they stand, it is, of course, fair and proper to fire the representative gun of each system with its regular service charge, neither more or less. The trial is a comparative, not a competitive one—that is to say, the object is simply to compare two existing systems. In this respect it is unlike the experiments which were carried out a few years ago at Tegel, when the object was professedly the selection of one particular class of gun for the armament of the Prussian fleet. Then each gun ought to have been permitted to fire any charge which its backers might think it capable of, and to which they would submit it in endurance trials. Now, it is quite otherwise. Each gun is the representative of a system, the elements of which have been presumably determined with reference to the best obtainable results. If the Germans do not fire larger charges than 1 lb. 2 oz. in their 9-pounders, we may fairly presume that they have good reason for their moderation—reasons relating to recoil, endurance, &c. If we in England treat our 9-pounders 1 lb. 12 oz. of powder, it is fair to presume that this charge has been assigned in view of all the circumstances of the case. It is important to point this out, because we shall no doubt hear complaints that the German gun was unfairly treated. The advocates of breech loaders will most likely argue that the breech-loading guns has been tested at a disadvantage. It is as well therefore to make it clear beforehand that the trial is not a trial of breech loading guns in the abstract as against muzzle loaders in the abstract, but of concrete and definite system of artillery in which muzzle loading is one of the elements.

With regard to the results of the trial, says the *Pall Mall Gazette*, from whose columns those remarks are quoted, we venture to predict that in initial velocity, in flatness of trajectory, and in ballistic power, the English gun will prove superior to the German. With regard to accuracy—one of the advantages which the advocates of the breech-loaders invariably and strenuously claim—it would perhaps be unwise to venture upon any decided prophecy, but we may go as far as to predict confidentially that the breech-loading gun will not exhibit that "incompatible superiority" in precision which its supporters claim for it. When we recollect our accumulated experience on this point—that the experience has decidedly on the whole been in favor of muzzle-loaders—that only so recently as last summer the muzzle-loader in a very full trial had slightly the advantage of the Armstrong breech-loader in accuracy—and when we recall the performances of the 9 pounder, muzzle-loader, as given in the report of the Indian Field gun Committee, viz a mean difference of range 2566 yards (a mile and a half) of only 18.9 yards, and what a mean reduced deflection at the same range of only 0.8 yard—with the facts and figures before us, it is impossible to resist the conclusion that even on that point on which the breech loader is supposed to be the strongest it will find it hard to beat its muzzle-loading rival. With regard to rapidity of firing—a point, be it observed, to which the Prussians attach very little importance in practice, whatever they may say of it in theory—it is probable that the muzzle loader will have the advantage. Indeed, if the figures of Capt. Nicaise, of the Belgian artillery, an ardent supporter of breech loaders, has to be relied upon, the superiority of the muzzle loader will be very marked indeed. In his "L

Artillerie de Campagne Belge," Nicaise gives twenty five rounds in eleven minutes as the best performance of the breech loader—or 26.4 seconds per round. The 9-pounder muzzle-loader has been fired for rapidity combined with accuracy fifty rounds in thirteen minutes—or 15.6 seconds per round. This would give seventeen rounds from the muzzle-loader to ten of the breech-loader. We do not expect to find the disparity quite as great as this, but that the muzzle-loader will prove as it invariably has done, the quicker gun, we do not doubt. As to the relative simplicity of the two guns there can be no two opinions; and we shall be disappointed if we do not find that the effects obtained with the English shrapnel are vastly superior to any which will be obtained with the Prussian common shell. In short, we look forward to the trials of this week with confidence, as likely to establish in a marked degree the all round superiority of the English 9 pounder muzzle loading field gun to the Prussian 9-pounder breech-loader. And although artillerists will probably not learn much from this trial which they do not know already, it will be something that the world at large should have ocular demonstration of the excellence of a muzzle-loading field gun. In this way the phantom of a breech-loading field-gun with which our dream of artillery supremacy are so frequently disturbed may, perhaps, be finally laid to rest.—*Broad Arrow.*

CORRESPONDENCE.

[The Editor does not hold himself responsible for individual expressions of opinion in communications addressed to the VOLUNTEER REVIEW.]

THE VOLUNTEER MILITIA.

To the Editor of the VOLUNTEER REVIEW.

Sir,—One of the gravest difficulties which a reformer, military or otherwise, can encounter, is the endless misconception and misconstruction to which he is exposed on the part of those who are friendly to his propositions. Such is my case. I neither seek the *Globe* as the exponent of my views because it is opposition, nor your columns because you are an avowed supporter of the Administration; yet because I do not wholly give in my allegiance to your views, you at once charge me with a political bias. To disprove your assertion, and without any idea of discussing a matter so foreign to that which I have at heart, I am led to address you, in the hope that a thorough ventilation of the subject which now engages so large a share of public attention, may be useful to the force to which I am proud to belong.

You charge me with mistatement in regard to the character of the force assembled at Brigade Camps this summer. I am in a position to prove the truth of my assertion, not only from the muster roll of my own regiment; but from the fact that militia authorities themselves calculated only on an average of 40 men per company, from actual returns made by commanding officers, and that the majority of those in camp were recruited men, whose time had expired at various dates, from October, 1869, and who at any moment could claim their discharge. That the Brigade Camps by their novelty, the

increased advantages offered of acquiring a knowledge of military life, and favorable scale of pay and rations, lent an impetus to the movement which brought out many old members of companies, who had not attended the annual drill for years past, and who although good and efficient volunteers, could scarcely be considered on the strength of the Active Militia. For these reasons I say that the numbers attending at these Brigade Camps, and which still fall short of the 40,000 men Canada is supposed to furnish, cannot be taken as a criterion of the actual state of the Volunteer Force.

The position I assume is therefore as follows: The people of Canada contribute annually a large sum of money for the maintenance of the National Defence. This sum is supposed to train every three years 40,000 men, so that in case of need they may be efficient soldiers. Now I contend that the country has a right to expect that 10,000 men shall at the expiration of every three years be added to the militia reserve of the country—that these 40,000 men shall be qualified for military service if required—and that sufficient organization shall be retained amongst them, to enable their assemblage at short notice, if necessity arose for their services. Under these conditions the country might be considered to have received a fair equivalent for the large annual expenditure. What is the present condition of affairs? A nominal force of 40,000 men is provided for—the real strength lies between 28,000 and 30,000—some men have served 6, some 5 and 4 years—many officers from 9 to 12 years, but the large proportion of the force is renewed from year to year. This is the ruin of the force. Just as you get a company fairly drilled by the most unremitting labor—by rifle matches and "camaraderie" establish an *esprit du corps*—and by expenditure of your own money secure proper outfit for each man—than owing to caprice of employer, parent or soldier himself—to the fancied or real requirements of store or farm at the period appointed for drill—to the want of discipline, and impatience of reproof caused by some untidiness, tardiness or irregularity at drill—your half drilled men leave you, and you must commence *de novo*. Surely a good officer, anxious for the credit of his company, may well tire of his task, to which the labors of Sisyphus or the waters of Tantalus bear no unfitting comparison.

Then the cure is so simple. First to provide for the men, by adopting ballot or draft where volunteering fails. Next to abolish the privilege of leaving a corps at six months notice. True, you must then abandon the word "Volunteer" as the index to the character of our national defenders, but this is a sentimental drawback that should not be allowed to interfere with the practical advantages that an "Active Militia" force would possess.

These changes do not call for any amendment to the present Act farther than doing away with the word "Volunteer," and the inequality of service which exists between the "Volunteer" and "Regular" Militia, and the clauses relating to the pay of offi