

posing forces came into close contact, were such, Prince Edward of Saxe-Weimar is convinced, as could be speedily corrected if the officers could be accustomed to drill with larger bodies and with regular troops. The advance in general efficiency was most marked. The Prince adds that he cannot omit mentioning "the cheerful submission of all ranks to the severe hardships which most of the corps had to endure during a long and tedious day's work"—some of the regiments having paraded as early as 2 A.M., while they could not reach home before midnight. The conduct of the volunteers was most excellent. In forwarding Prince Edward of Saxe-Weimar's report the Duke of Cambridge says he has much pleasure in bearing the most favorable testimony, from his personal observations, to the marked improvement that has taken place in the volunteer force during the last few years. His Royal Highness, The Duke of Cambridge having noted the "splendid physique and soldierlike bearing of the men" confirms the opinions of Prince Edward of Saxe-Weimar, and concludes:—"I cannot refrain from expressing my entire conviction, resulting from a careful observation of the recent military display at Brighton, that the nation possesses in the volunteer force a substantial and trustworthy reserve for the defence of the country."

—The numerical weakness of the force which paraded before the Queen at Aldershot the other day has attracted attention to the difference which exists between the paper strength of an English battalion and the number of men who actually fall in in its ranks when it is assembled for drill or for the practice of minor tactics. The total strength of the division at Aldershot is 10,644 of all ranks; and yet at the late review the number on parade was only 6,728. The sick of the division numbered 560, the men left on guard duty in the camp 217, while no fewer than 1,644 were employed on other duties. Altogether, therefore, it may be said that more than a third of the division was absent from the parade; and although all officers and mess servants, cooks, tailors, and shoe-makers, orderlies, and so forth, who are as a rule excused from ordinary regimental drills, had been ordered to fall in for the occasion. When the number of these and also of the men usually employed in every regiment on different fatigue duties is remembered some notion may be formed of the number who actually undergo military instruction day by day. The matter is in fact a very important one, and demands the serious attention of the higher authorities of the army, since experience has shown that it is their decisive interference only that can restrict within reasonable limits the baneful practice of employing a large number of men on duties which take them away from the drill instructor and from the practice of military exercises. Under the existing system of short service men remain only a comparatively short time with the colours; and if during this brief period they are continually employed on other than purely military duties, they cannot be accounted thoroughly trained soldiers when dismissed into the reserve. In France it has been found necessary to issue an order that no soldier shall be excused from drill or parade.

—An interesting history of the development of the Russian army during the last quarter of a century has been lately published in St. Petersburg. On the 1st of January, 1853, the Russian army comprised 27,716 officers and 968,382 men (including reserve, local, and auxiliary troops), besides 78,144 Cossacks. During the Crimean war the strength of the armed forces of the empire was of course largely increased and according to official returns included on the 1st of January, 1856 no fewer than 41,817 officers and 2,275,454 men. How many of these were, however, actually present with the colours, or were available for service in the field cannot be even approximately ascertained. The active army numbered, it is stated, 24,664 officers and 1,170,184 men, the reserve troops 7,876 officers and 572,158 men; the irregular forces, 3,640 officers and 168,691 men; the opoltschenie, or militia,

5,647 officers and 364,421 men, and the Cossack troops 3,441 officers and 156,726 men, but very large deductions would probably have to be made to arrive at the actual strength of each of these several bodies. In 1863, for instance, when, according to the returns of the Minister of War, the Russian army numbered 858,907 regular troops, it was calculated, after a careful examination of the strength of the several units of the army, that the probable real strength of the regular troops did not exceed 385,050 men. On the 25th of November, 1879, the Russian army comprised 908 generals, 31,414 officers, and 886,426 men, while on the same date the reserves numbered 742,144 men, and the Cossack troops 1,972 officers and 51,359 men, with 105,046 men more on furlough; but whether anything like the above-mentioned number of men are serving with the colours at the present moment is again very doubtful. It was, in fact, lately shown by a German military writer that the revenue annually devoted to military purposes in Russia would not, even if the army was administered in the most economical manner, suffice to maintain such large forces.

### Military.

The following paragraph from the *Army and Navy Gazette*, of the 5th instant, may be of interest:—"The appointment of aide-de-camp to Major-General Louard in Canada has not yet been filled. Indeed, it seems probable that some difficulty will be experienced in getting any officer to accept the appointment, for the Canadian Government refuse to grant any regimental pay, which has to be abandoned from the date of embarkation; and as the total sum allowed is only £200 per annum, as against £317 and regimental pay, the pay of aides-de-camp in all other colonies, it is scarcely likely that any officer will voluntarily undertake the responsibilities of a staff appointment on such terms."

Major-General Louard will probably find little difficulty in getting an aide-de-camp in Canada that will suit him, for the "only £200 salary," paltry as "such terms" are. The General had better apply for one to the Commandants of the Royal Schools of Gunnery. It is surely time that the Dominion was capable of furnishing her own staff and other officers.

### Modern Fire.

A lecture upon "Modern Fire: its Influence on Armament, Training, and Tactics," was delivered by Captain W. H. James, R. E., at the Royal United Service Institution last week. General Beauchamp Walker presided. The lecturer said that although in no struggle which had yet taken place had we seen artillery and small arms fire such as would be witnessed in the next great European war, yet recent wars had taught two important lessons, viz., the value of long-range infantry fire, by which alone the true advantages of the modern rifle are gained; and the necessity for increased power and accuracy in our guns, and the need of a powerful shrapnel. In the next war weapons will probably be used greatly superior (with the exception of the Remond-Henry) to those employed by any nation, and in addition to these would be found powerful guns chiefly for shrapnel shell, the man-killing power of which would be far in excess of anything yet seen in the shape of artillery. Infantry fire would be used up to ranges of 2000 yards against suitable objects, while shrapnel fire would no doubt be efficacious up to 3000 yards, and common shell at 4000 yards. Open order was now universally acknowledged to be a necessary condition of modern fighting, and in modern wars few attempts were made to force by dint of "shock" the enemy out of a position, the only successful means of attack being superiority of fire. The keynote of our tactical training must therefore be the development to the uttermost of the fire power of troops. Deadliness of fire could be increased either by still further flattening the trajectory of the rifle, or by augmenting the number of bullets poured on a certain spot by the use of repeating rifles. If, in future, fire was to be opened in some cases at 1600 yards, instead of 500 yards, it was obvious that more ammunition would be expended. The number of rounds now allowed to each European soldier was—France, 93; England, 160; Germany, 147; Austria, 119; and 420; but, looking to the experience of the Russo-Turkish war, it was fairly open to doubt whether any of these were sufficient. Most Russian military writers said that each man should carry from 50 to 120 rounds, and that a regimental reserve making the total up to about 150 was necessary, and he (the lecturer) was of opinion that it would be well to give each man 100 rounds, and to have a regimental reserve of 40. With regard to the tactical employment of infantry fire, as the effect of fire at long ranges was due to the probability of a certain proportion of bullets fired at a given object hitting the mark, it followed that such fire (at anything over 600 to 700 yards) should not be independent, but should be delivered only at the command of the fighting unit leaders—or, in other words, volleys must be