4th Hussars, LieutCol. Duff
Clothing and accourrements, 10; arms and armouries, 20; manual exercise, 8; firing exercise, 8; company drill, 20; interior economy, records, etc., 10; ½ p.c. score, rifle practice, 50; answers to questions, officers, 24; total, 150. Results are as follows:
MILITARY DISTRICT NO. 5.
1st Batt., Prince of Wales' Rifles, LtCol; Butler. 65 5-6 3rd Batt. "Victoria Rifles," LieutCol. Starke. 93½ 5th Batt. "Royal Scots," LieutCol. Hood 83½ 6th Batt. "Fusiliers," LieutCol. Massey. 1195% 65th Batt. "Mount Royal Rifles," LieutCol. Prevost. 605% 76th Batt. LieutCol. Beaudreau. 24 1-20 83rd Batt. Major Foucher. 42¾
MILITARY DISTRICT NO. 6.
53rd Batt., LieutCol. Morehouse 86½ 52nd Batt., LieutCol. Hall 37½ 54th Batt., Major Morey 43 3-5 58th Batt., LieutCol. McAuley 521-5 60th Batt., LieutCol. Gilmour 23½ 79th Batt., LieutCol. Cox 35 3-7 80th Batt., LieutCol. DeFoy 30
MILITARY DISTRICT NO. 7.
23rd Batt. 44.67 61st Batt. 42.59½ 70th Batt. 45.82¾ 89th Batt. 47.39½
military district no. 8.
62nd Batt., LieutCol. Blaine 96 St. John Rifle Company, Capt. Smith. 104 73rd Batt., LieutCol. McCully 77 1-5 74th Batt., LieutCol. Beer 95 45 82nd Batt., LieutCol. Dogherty 94 6-7
MILITARY DISTRICT NO. 9.
63rd Batt., LieutCol. Egan 105 66th Batt., LieutCol. Humphrey 104½ 72nd Batt., LieutCol. Spurr 92 1-6 78th Batt., Major Sutherland 94 4-7 94th Batt., Major Hill 80 3-5
MILITARY DISTRICT NO. 10.
90th Batt., LieutCol. Boswell
MILITARY DISTRICT NO. 11. Nanaimo Infantry Company, Capt. McGregor 76

3rd Dragoons, Lieut.-Col. Boulton..... 64

SMOKELESS POWDER.

In our last issue we referred to the lecture on this subject delivered by Mr. Duff Grant, of London, in the Victoria Rifle Armory on 7th Feb. The following is a brief summary of the paper, which was a most thorough and exhaustive one.

The lecturer began by giving a history of the introduction of black powder in England for military purposes in 1346, and showed that no important improvement had been made in it for 500 years. He then related the attempts to find a substitute for it within the last 45 years, which culminated in the discovery of gun cotton and later of smokeless powder and their application for military and sporting purposes. He referred to the various forms of smokeless powder which had been introduced into Europe and the United States. The advantages obtained by smokeless powder are absence of smoke, remarkable reduction in recoil, abolition of fouling, reduction of heating of the barrel, increased accuracy of shooting, and reduction in the weight of the cartridge. Much misconception has been created by classing nitro-compound gunpowders for firearms with "high explosives." They are the very reverse, and should be called "low explo-

sives," if any qualifying term be applied to them at all. Their whole purpose and action are comparative slowness and mildness in use in accordance with the requirements of modern firearms, while, if kindled otherwise than when confined in a gun and ignited by a percussion cap, they do not explode at all, but merely deflagrate. For these reasons such explosives are remarkably safe in storage and transit. The manufacture is also remarkably free from danger, the whole process up to the final drying and packing dealing with wet substances. After dealing with the powders used for blasting and mining, the lecturer turned his attention to magazine rifles, the choice of which, he said, was of vital importance. The gain of a magazine rifle, whether it was of large or small calibre, over a single loader, apart from the confidence it inspired, consists in the number of rounds that can be fired continuously through the magazine. The magazine rifle has no advantage over the single loader as regards rapidity of fire, if the firing be continued for one minute, owing to the time necessary to refill the magazine after its contents have been expelled. Unless special precautions were taken, the barrel would become terribly heated after one minute of such firing. Naturally no aim could be taken under such conditions of rapidity. The advantage of the magazine rifle is that a soldier, when the enemy are about to charge, can fire eight shots in rapid succession, or with deliberation without removing his rifle from the shoulder or seeking for cartridges, which, in the excitement, he may be clumsy about seizing and placing in the breech. It may be taken for granted that the single breechloader will soon be as obsolete a weapon for military purposes as the old muzzle-loader now is. In the English army the reduction of calibre has been carried to an extreme point, the Lee-Metford of .303 bore having been adopted. In every point it comes up to the following standard laid down by the Committee of Selection: - (1) Strength to stand the rough usage of service in the field; (2) non-liability to get out of order; (3) easy extraction of cartridge case after firing; (4) lowness of trajectory; (5) accuracy; (6) ease of manufacture and repair. The introduction of magazine rifles, and a smokeless explosive agent, must be followed speedily by a revolution in tactics. The advantages of smokeless powder were summed up as follows:—The demoralizing and bewildering effect on the corps exposed to infantry fire, and the difficulty experienced by the enemy in determining the distance and the direction whence the fire comes, the increased certainty -of aim arising from the absence of smoke from their own fire, especially in the case of artillery, where it enables at least three times as much to be fired as with the old powder. For the defence it is an inestimable boon, for the attack it means certain death.

The lecturer concluded by remarking, "I have every reason to hope that at a date, not very far distant, this powder will be adopted by the Canadian Government for the Martini and Snider rifles. The extra cost of the ammunition will be practically nil, as solid drawn cartridges, which are used for smokeless powder, can be reloaded and used more than once, and owing to the absence of recoil, recruits can be trained with half the number of rounds at present required with black powder. The matter is now occupying the attention of the authorities, and I am sure that if General Herbert can only see his way to have it he will have it. No man has the interests of the militia or volunteers more thoroughly at heart than he has, and I have no doubt it is only a question of ways and means, and if some of those who are now present would only invent a process by which Mr. Patterson's cash balance would become like the widow's cruse of oil, you might see it in use at the ranges during the coming shooting season. If it were a case of altering the arm as well as the ammunition it would be more serious, but when that is not so there ought to be no great difficulty, and if the officers and men of the various volunteer regiments and militia make up their minds that they wish to have it, and will have it, probably a march upon Ottawa, not exactly with fixed bayonets, but in the form of humble petitioners to the powers that be, would produce the desired result. If we volunteers (for I am now speaking to you as a fellow-soldier, a member of the London Scottish,) are willing to devote our spare time, as well as our spare cash, to perfecting our rifle shooting, it does seem hard, it is hard, that we should not have the best, the very best, of what is going, and that, as far as possible at least, we should not be placed on an equal footing with the regular armv."