

proposed they should undertake." It is suggested in this connection that as the use of the rifle is in the ascendant, and that of the sword on the wane, the rifle should be carried on the person and the sword strapped to the saddle, reversing the present arrangement. The description of rifle most appropriate for the service, and the possibility of extending a system of schools of instruction, are also discussed.

If such a reorganization of the yeomanry is advisable in England, the organization of mounted infantry corps in Canada is much more needful, as has been demonstrated by the late campaign, where duties were performed by the Mounted Police and by the hastily equipped scouts that could not have been accomplished either by ordinary cavalry or by infantry. Any future warfare in Canada is likely to occur in country so obstructed as to prevent the employment of legitimate cavalry operations, while the same features that forbade the utilization of the sabre would make corps that could be quickly moved, and then used as skirmishers or scouts, indispensable.

The question of a rifle for mounted corps would require nice consideration. No practical shot could be found to advocate the carbines formerly used, while there are not wanting advocates of the magazine rifle, whose use seems a question of discipline in firing. It has certainly not been proved that increased capacity and speed in loading a rifle have led to waste of ammunition by properly handled troops. The question of arm is affected also by the number of rounds which cavalry can carry, because if they have only thirty to fifty rounds it would be absurd to open fire at very long ranges, and hence the long rifle would be needless. It would therefore seem that an arm between the two extremes here indicated would be best, but the details of this as well as of drill and equipment would require long deliberation and careful working out.

THE WEEKS' MOVEMENTS OF CORPS ON ACTUAL SERVICE.

This week, like last, has been spent in collecting the troops for the return trip, preparations for which are pretty well completed. That the men were not altogether absorbed in quitting the country is most satisfactorily proved by yesterday's news of Big Bear's capture, which was achieved near Carlton by a party of Mounted Police. Col. Irvine has secured several more of the same band, and the Intelligence corps have added to their Batoche laurels by taking a hand in. How much more satisfactory such a finale is to leaving the country with Big Bear's whereabouts undetermined only those who have engaged in his pursuit can realize. The McLeans and their companions in captivity reached Pitt on the 27th, and Gen. Strange's contingent, for which teams had been sent, arrived there on the same day.

A steamer has gone to Edmonton to pick up the few troops left in garrison between that point and Fort Pitt. Major Steele's force of police has been left to garrison Pitt, and all the other mounted troops have left on their way to Qu'Appelle, where French's Scouts, the Intelligence Corps and Boulton's Scouts will be paid off. Col. Herchmer's force of police will escort all prisoners from Pitt and Battleford to Regina. The Gatling detachment and the batteries will be taken to Battleford in the Marquis when that steamer has taken down a load of infantry. The infantry were to have left Pitt on the 2nd as follows: On the Marquis, the 10th, Queen's Own, and Ottawa Sharpshooters; on the North-west, the 65th and Midlanders; on the Baroness the 90th and part of the Winnipeg Light Infantry, a part of the latter corps remaining to garrison Pitt. The Winnipeg Troop of Cavalry are en route home from the Touchwood Hills, and the Moose Mountain Scouts were being disbanded on the 3rd.

Two batteries of the M. G. A. are to remain at Regina until the conclusion of all the trials. One hundred men volunteered for this purpose at once, who will be under Major Baynes. The remainder of the brigade is to await the arrival of General Middleton at Winnipeg, where also the Halifax Battalion, the 9th, and Col. Scott's battalion will be assembled. It is probable that all the troops will have reached Winnipeg by the middle of the month.

IN THE HOUSE.

On the 30th ult. Mr. Caron, in reply to a question by Sir Richard Cartwright, stated that twenty-six graduates of the Royal Military College were attached to the forces in the North-west.

On the 2nd Mr. Charlton drew attention to a report that some of the members of the 65th Batt., who were Protestants, had been punished for refusing to attend the Roman Catholic service, on the feast of Corpus Christi, one of them being placed for eight days on bread and water. This, he pointed out, was a gross violation on the provisions of the Queen's regulations in this matter. Mr. Caron said the Department had no information in the case, but the Premier had drawn his attention on the previous day to the complaint and he at once telegraphed for particulars. He might say, though, that the regulations were perfectly clear, and that every man had a right to worship in the church to which he belonged. Sir John Macdonald remarked that if the report was true the case was an outrage, and stated that the question of the religious worship of the soldiers was settled long ago in Canada, when the 79th Highland regiment was at Montreal. The men were ordered to march to a church to hear a chaplain who was a clergyman of the Church of England. They grumbled a good deal, but they marched to church, the band playing, "This is not my ain house." After that they were not asked to attend any service but their own.

Mr. Blake understood that ministers of religion were not permitted to see the prisoners at Regina, upon which the Premier explained that as the means of keeping them secure were not the most reliable he had forbidden the reception of visitors. He had not intended to deprive the prisoners of religious instructions, and had promptly removed the misapprehension.

Mr. Desjardins enquired into the truth of the report that the troops had carried away valuables from the Metis houses at Batoche as mementoes, and claimed that if true the Government should do more than report on the affair. Mr. Caron stated that General Middleton had given most stringent orders against looting, that his attention had been drawn to the charge that looting had been indulged in, and his reply was that, as far as he could ascertain, the charge was not true.

On the third, before agreeing to the second reading of the Militia Act Amendment bill, Mr. Blake recorded his opinion that instead of increasing the permanent militia force the Government should organize corps in the North-west.

On the sixth the Minister of Militia and the leader of the Opposition united in paying a tribute of respect to the late Col. Williams, whose untimely death it was Mr. Caron's painful duty to announce. Mr. Caron also laid on the table General Middleton's official report of the battle of Batoche.

Want of space has hitherto prevented us from giving the militia estimates. We hope to present them in detail in our next issue.

RIFLES AND RIFLE SHOOTING.—VIII.

BY CAPTAIN HENRY F. PERLEY, HEADQUARTERS STAFF.

When wood is heated in properly prepared piles in the open air, only the more volatile matters burn away, leaving the carbon behind, and this residue is called charcoal. In the preparation of charcoal for the manufacture of gunpowder, the wood is placed in cast-iron cylinders, and submitted to a process of dry distillation, by which the operation is performed with more uniformity and economy, and the charcoal kept more free from particles of grit or earthy matter. A light but spongy wood, not more than three or four years old, and about an inch in diameter, is esteemed the best for the preparation of charcoal, as the quality of the charcoal exercises the greatest influence upon the rate of combustion, so that both the description of wood used and the mode of burning are of the utmost importance. Dogwood (so-called—but in reality it is alder-buckthorn—*rhamnus frangula*, the French *bourdaine*) only is used in England and on the Continent, for all military and small-arm powders, as well as the best descriptions of sporting gunpowder. Alder and willow charcoal are used for making gunpowders for field and heavy ordnance, as well as for the commoner kind of commercial gunpowder.

For the manufacture of gunpowder, only the crystalline electro-negative variety of sulphur, soluble in bi-sulphide of carbon is used. Sublimed sulphur, commonly called "flowers of sulphur," which consists of minute granules of insoluble sulphur enclosing the soluble variety, is considered unfit for gunpowder; the reason assigned being that, from the mode of manufacture, it is impregnated with sulphurous and sulphuric acids. Sulphur performs the part of a second "combustible" in gunpowder; and its chief value arises from its great inflammability, owing to its tendency to combine with oxygen at a moderate temperature, as it inflames at about 560° Fahr., thus facilitating the ignition