

suggests one of its primary functions to be finding and restoring the purity of water. This is the premier requirement of an army. Practically every other kind of sanitary work is under effective control. Filth can be disposed of effectually and without causing danger; the work can be inspected frequently, and if any neglect takes place it can usually be observed. But with water supplies the dangers are more subtle, often unobservable. Still, neglect or inefficiency in the past has caused the loss of thousands of lives and will again produce disastrous results. Often when the army was engaged in important movements men were stricken with illness, epidemics burst with violent abruptness, as at Bloemfontein, and the forces were compelled to postpone their attacks, for even if the soldiers were not all in hospital, the majority of them were probably suffering in a mild way. One healthy soldier is assuredly worth more than ten sick ones, and consequently it pays to preserve the health and conserve the lives of the men by maintaining the purity of the water supply and the sanitary condition of the camps. Canadian camps are fortunate that their health bill has been excellent. The water supplies have been carefully watched, usually by members of the Hydrological Corps, to whose efforts are due in a great measure the good health of the soldiers, and also the consequent increase in their vitality.

While the Canadian Army Hydrological Corps and Advisors on Sanitation are recognized by the Militia Department and their services are utilized in a limited way, it is felt that the potential value of the corps has not been appreciated by the Department, but that its attitude is rather one of benevolent passivity. This situation is one to be regretted, for the Corps, if properly recognized and employed, will develop into a most practical and valuable branch of the military service by virtue of the fact that it is composed of men who are well qualified in their respective professions.

Lt.-Col. Nasmith is the chief of the Corps, and is engaged in France on water examinations. Major Woodhouse is second in command. There are at present fifteen captains, all of whom are well known in connection with sanitary work; for example, Mr. F. A. Dallyn, C.E., the Provincial Sanitary Engineer of Ontario; Mr. A. V. Delaporte, B.A.Sc., Mr. J. Race, Mr. G. H. Ferguson, B.A.Sc., are familiar names to our readers.

We are profoundly of the opinion that Canada should take a prominent position in the organization of a corps of technical men in connection with the military forces, both at home and on the battlefields. Every encouragement should be extended to men to place their services at the disposal of the nation, and their individual and specific experience, training and talents should be utilized to the utmost possible extent. It would manifestly be unwise to employ an experienced chemist and bacteriologist to handle the rifle when he could, by means of his scientific training, render greater assistance in conserving the lives of numbers untold from the ravages of preventable disease. Moreover, as medical men are so urgently needed—it is reported that even alien doctors are invited to render service—it would appear strange to employ them on sanitary work when sanitary engineers could attend to it quite as effectually. The employment of technical men in connection with military operations in capacities which will draw the very best service is advocated; and furthermore, the experience and knowledge gained by such men under the varied conditions of warfare will be invaluable to the country in time of peace.

When the conflict ceases there will be a gigantic task of reconstruction. Will Canada lend her aid by placing the services of her technical corps at the disposal of the governments concerned? It must not be assumed that because under rigorous military discipline a high standard of sanitation has been maintained that the same condition will be possible under the less rigorous civil administration. Canada will doubtless be called upon to help to re-establish the civil life in the frightfully devastated countries, and every Canadian will be proud of her ability to do her share in the reconstruction of the countries which have suffered so sadly by this war.

We hope that the Hydrological Corps will be permanently established, that men trained in engineering, chemistry, bacteriology, sanitation and other allied sciences will constitute its strength, and these men, fortified by their military experiences, equipped with knowledge gained under varied and peculiar conditions, with visions enlarged by intimate contact with their comrades in service, will be of still greater value as public servants when they return to their normal vocations.

### MONTREAL'S MUDDLED WATERWORKS.

THE Council of the Canadian Society of Civil Engineers has sent a second letter to the Montreal civic officials relative to the waterworks extensions proposed by the latter. In our issue of August 12th, 1915, the attention of our readers was called to the Society's first letter, urging the authorities to have the project reported upon by a board of independent engineers before incurring further expenditure. The system had already cost the city over five millions and the present scheme which, if carried out, would raise the amount to nine and a half millions, or more, is such as to command at the very least, a more authoritative and painstaking investigation than has been given it.

Before presenting the text of the second letter of the Society, whose admirable stand in the matter merits the sanction and approval of all who desire to safeguard the interests of the profession against the derogatory influence of irresponsible civic authority, it is interesting to review the events that have transpired since the reference to the subject in our issue of August 12th. There it was noted that two protests were launched, one by the Council of the Canadian Society of Civil Engineers and another by Mr. J. A. Jamieson, a Montreal consulting engineer, and a former member of the board which investigated the water supply trouble in 1914. These two protests had no relation whatever to each other. Mr. Jamieson apparently did not know that the Council of the Society had the question in hand, and the Council was not aware that Mr. Jamieson was taking it up. However, both expressed the same desire, namely, that the scheme should at once be reported upon by competent engineers.

It so happened that both protests reached the civic authorities about the same time. Evidently the city hall suspected collusion, for in due time the communication of the Council of the Society was acknowledged, enclosing as an answer to its urgent appeal, a copy only of the open letter which Controller Cote had published in the papers in reply to Mr. Jamieson. The text of Mr. Cote's letter, let it be stated, carried meagre conviction, and the technical points raised therein comprised nothing of value that was new. It is an interesting sidelight that Mr. Cote relied on the approval of Mr. Ernest Marceau, a member of the Society Council, who publicly repudiated Mr. Cote's