PREVENTIVE MEDICINE IN THE ARMY.

By Major A. PEARSE.
Royal Army Medical Corps.

There are few subjects which affect an army, as a whole, more than sanitation or preventive medicine, and this is at last becoming fully realised. I use the term "preventive medicine" as I consider it more appropriate and descriptive of this particular branch of medical science, and also because the words "sanitation," "sanitary," "insanitary," convey the impression to the general public of either the presence or absence, as the case may be, of nuisances—a very limited field compared with that covered by the term "preventive medicine," of which "sanitation," as popularly understood, forms a comparatively small part.

Having held the appointment of Specialist Sanitary Officer of a command for more than a year, one has had opportunities and chances of seeing wherein the present system falls short of requirements, and I therefore propose to state briefly the lines which, it appears to me, should be followed before the Service will receive the full benefit of these appointments.

There is a point sometimes forgotten, at least by medical officers, and this is that military considerations *must* come first with a fighting force, be it large or small. Herein lies one of the strongest arguments in favour of preventive medicine. The Army exists to fight, and it is our duty as experts in preventive medicine to advise the officer in command, be he a General or the last joined subaltern, to the best of our ability, how he can best keep his troops healthy and in good fighting trim. A sick and wounded man is only an encumbrance, and the sooner he is got rid of the better for those that are left to fight; with him I do not propose to deal, as it is the duty of the ordinary medical officer to attend him, arrange for his removal from, and ultimate return to, the fighting line. This is not the duty of those who are specially qualified to advise the combatant officer how to prevent sickness, and so to keep his men fit and ready to do their duty when called on, viz., fight and beat their opponent. This raises the question of recommendations, and on this point there is no doubt, I think, that they should be made to the officer commanding direct by the sanitary officer. He (the commanding officer) knows, or should do so, what are the military requirements of the situation. Being informed,

ERRATA.

VOL. VII., No. 6, December, 1906: "Preventive Medicine in the Army," by Major A. Pearse, R.A.M.C., page 585, line 4 of the last paragraph, and page 586, line 2, for the words "Commanding in charge" read "Commanding-in-Chief."

then, what to expect in loss of men from bad surroundings or an unhealthy country, or both, he will be in a position the better to judge whether the risk run of disease will be worth the advantages gained thereby. His is the responsibility to win, and that quickly and with as little loss as possible. To do so he must know all sides of the question. The preventive medicine side of the question he can only obtain from those who have studied such questions and who are specially qualified to give advice on such points.

It is essential that an army to be ready to fight must be organised and trained during peace in the duties it will have to perform during war; this applies to all branches of the Service. Let us take the preventive medicine branch of the Army in peace and see how this applies. Here, under the present arrangements, the sanitary officer makes his reports and recommendations to the principal medical officer. Both are doctors; one has special qualifications and education in the preventive medicine, the other may, or may not, have the same. What is the result if he has not? It is this, that every recommendation made is liable to be so modified as to be rendered useless, or practically so. This is not from any desire to prevent progress, but because the real reason may not be understood, and further, the position that has been acquired by length of service in the Army is considered sufficient to override all else, no matter what are the special qualifications of an expert, if a junior. It is the General who should decide, as it is he who requires his men to be fit and in good fighting trim. But, under such circumstances, how can he know what to do or by whose advice to be guided? A dual control never did succeed and will not do so even in preventive medicine.

Let us see what is the procedure in civil life. A corporation chooses its own medical officer of health, a man specially qualified for the work, and it is to him they refer and on his advice they act in sanitary matters, and not on the advice of other doctors who may happen to be older or to have large practices in the neighbourhood.

So in the Army the sanitary officer should give his advice to his General and not through the medium of another medical officer. To make my meaning more clear, the sanitary officer should be the sanitary adviser of the General Officer Commanding in charge, and not that of the Principal Medical Officer, though the latter could refer to him for expert advice, if necessary, in the same way that any other officer in the command might do. The Command

Sanitary Officer would then be responsible to the General Officer Commanding in charge for sanitary duties in much the same way as the officer in charge of musketry duties, and be attached in like manner to the general staff. By so doing he would hold a definite position on the staff of a command—independent of his own corps for the time being—a point of great importance when performing duties of this kind, and become, as it were, an Intelligence Officer, (Medical Branch). What would be the result of this arrangement? It would be as follows:—

(1) *During War.*—The General would have on his staff an officer who would have made it his special business to become acquainted with the diseases, climate, and people of the particular country in which the war was being carried on. This officer would be able to tell his General before starting on a march, or otherwise, the risks to be incurred by the Army passing through certain places or districts, drinking certain waters, eating certain foods, &c., and the best means of avoiding these risks. The General's attention would not be called to these matters, as is so often the case, only after the mischief was done, by those who were treating the sick, resulting from the want of a few precautions. The sanitary officer would be at the disposal of the General Officer Commanding to go off at a moment's notice with a reconnoitring party, or in any other capacity, to obtain necessary information and then give expert advice, without reference to the Principal Medical Officer of the Force, who may not be near at hand, or be fully occupied with other duties, *e.g.*, administration, visiting hospitals, &c. It might even be found advisable that he (the sanitary officer) should not wear a Red Cross badge on service, as in this position he would probably be called upon to perform duties which would scarcely be permissible under the Articles of the Geneva Convention. Working with the Engineer Officer concerned he would he able to give much valuable assistance in primary selection and arrangements of permanent camps, and, by being specially responsible to the General Officer Commanding in sanitary matters, would relieve the Principal Medical Officer and other medical officers of much work which at present falls to their lot, leaving them free to carry out with greater freedom their duties with the sick and wounded, and also their administrative and corps duties.

(2) *In Peace Time.*—Either at home or abroad the General would have an officer who would, as during war, be available to bring him, first hand, the specialist and expert information he might require about certain localities, buildings, spread of disease,

&c., and thus assist him directly in deciding on the manner in which best to expend the money at his disposal. Under present arrangements, the sanitary officer sends in his recommendations through the Principal Medical Officer, who may or may not send them on or modify them, as he thinks fit, without even suggesting that they are the opinion of an officer specially trained and qualified to give such expert opinion. Let us now consider the qualifications, organisation and *personnel* required to carry out these suggestions. It will be found that they are economical in themselves and that in the ultimate result there will be a great saving of public money, owing to the improved conditions of health of the Army, both in peace and war.

Qualifications of a Sanitary Officer.—(*a*) It should be a *sine quâ non* that the officers holding these appointments should have the Diploma of Public Health of London or some other well-known examining body; (*b*) he should have been through a course of, or taken a degree, in tropical medicine; (*c*) the officer should be of active habits, fond of travel, and not afraid of hard work, whether mental or physical, when necessary; (*d*) if serving at home he should have been abroad previously to India or a colony; (*e*) if on active service abroad he should, if possible, have served in that particular country previously or have had some special knowledge of the country and its people.

Organisation (War).—(*a*) One Sanitary Officer (a Colonel or Lieutenant-Colonel) on General Staff of each Army Corps; (*b*) one Sanitary Officer (a Major) attached to General Staff of each Division; (*c*) one Sanitary Officer (a Captain) attached to General Staff of each Brigade; each Sanitary Officer to have one trained assistant (private or corporal of Royal Army Medical Corps) with him; (*d*) the medical officers of units to be responsible for the removal of nuisances from, cleanliness and general sanitary condition of, their particular lines. For this purpose one man per company and one non-commissioned officer (a corporal) to be detailed by the officer commanding of corps or regiment; this non-commissioned officer and these men not to be relieved of this duty without reference to the medical officer, except in case of great emergency; (*e*) correspondence and reports on sanitary matters to pass to sanitary officers concerned, direct, for the information of the General Officer Commanding, and not through the Principal Medical Officer.

In Peace Time.—(*a*) One, or in large commands (as in India), two Sanitary Officers (a Colonel or Lieutenant-Colonel) attached to the General Staff of the Command; (*b*) two or four laboratory

assistants (Royal Army Medical Corps) as the case may be; (*c*) a medical officer in each division (a Major) and brigade (a Captain) to supervise the general sanitary arrangements of such division or brigade, and if possible, to be the officer who, on mobilisation, would be the Sanitary Officer of that Division or Brigade; (*d*) the medical officers of regiments or corps where such exist, and those in charge of depôts or other small stations; (*e*) one man per company and one non-commissioned officer of regiment or corps concerned to work under medical officer for cleanliness of, removal of nuisances from, and general sanitation of barracks or camps.

Lastly.—The name "Sanitary Officer," would, I think, be changed with advantage. At present it is suggestive to the general public and most officers of the "Sanitary Inspector" of civil bodies. There is, of course, no connection between the two—the Army sanitary officer being highly trained and qualified in a special branch of the medical science, the other simply an inspector of nuisances working under the orders of the medical officer of health. Such names as Army Health Officer, Travelling Health Officer, Intelligence Officer (Medical Branch), Staff Officer for Army Health, Staff Health Officer, Staff Officer for Preventive Medicine, would be much more descriptive of, and suited to the duties performed by, these officers in the Army.

Such, I think, are the lines at present indicated for future development of this important branch of the Service, and which, if carried out, will, I am convinced, be to the advantage of all concerned.