HOW DISEASE MAY BE FOUGHT.

THE RELIGION OF SANITATION.

Sir William Osler has an effective way of putting a case which specially appeals to men, and in his address to the officers and men in camp at Churn last week, he dealt on the importance of safeguarding troops in active service against attacks of disease, which, as he showed, are more destructive of life than the assault of the enemy. For the benefit of nurses on active service we quote from the admirable report in the *Morning Post*:—

Sir William Osler said he had been asked to say a few words on the general question of health in war-time. Formerly it was said that an army marched on its belly, now it marched on its brains. Only by utilising fully existing knowledge, in all grades, from Commander-in-Chief to private, was the maximum of success available. To put the largest number of the enemy out of action with a minimum of loss to his own men was the aim of every general. While in one way modern war merged the individual in a great machine, on the other hand the intelligent action of the unit had never been so important a factor in making the machine work smoothly and efficiently. After all, it was the man behind the gun who won the victory. What he wished to urge was a true knowledge of the foes to be met, not simply of the bullets, but of the much more important enemy—the bacilli. In the wars of the world they had been as Saul and David-the one slaying thousands, the other tens of thousands. He could never see a group of recruits marching to the depot without mentally asking what percentage of these fine fellows would die legitimate and honourable deaths from wounds ; what percentage would perish miserably from neglect of ordinary sanitary precautions. It was bitter enough to lose thousands of the best of our young men in a hideous War, but it added terribly to the tragedy to think that more than one-half of the losses might be due to preventable disease. Typhus fever, malaria, cholera, enteric and dysentery had won more victories than powder and shot. Some of these diseases need no longer be dreaded. Typhus and malaria, which one hundred years ago routed a great English army in the Walcheren expedition against Antwerp, were no longer formidable foes. But enough remain, as we found by the sad experience in South Africa. Of the 22,000 lives lost in that War, bullets accounted for only 8,000, bacilli for 14,000.

A LESSON FROM JAPAN.

In the long, arduous campaign before us now, more men would go into the field than ever before in the history of the Empire. Before it was too late, let them take every possible precaution to guard against a repetition of such disasters. He was there to warn soldiers against enemies more subtle, more dangerous, and more

fatal than the Germans—enemies against which no successful battle could be fought without their intelligent co-operation. So far the world had only seen one great war waged with the weapons of science against these foes. The Japanese went into the Russian campaign prepared as fully against bacilli as against bullets, with the result that the percentage of deaths from disease was the lowest that had ever been attained in a great war. We were not likely to have to fight three of the greatest of former scourges—typhus, malaria, and cholera though the possibility of the last had to be considered. But there remained dysentery, pneumonia and enteric—against two of which we should be able to bring to bear successfully resources of modern science.

DYSENTERY AND PNEUMONIA.

Dysentery, an inflammation of the large bowel, has been for centuries one of the most terrible of camp diseases, killing thousands, and in a prolonged damage to health was one of the most fatal of foes to armies. So far as we knew, it was conveyed by water; and only by carrying out strictly, under all circumstances, the directions about boiling water could it be prevented. It was a disease which, even under the best of circumstances, could not always be prevented, but with care the incidence should be reduced to a minimum, and there should never again be widespread outbreaks in the camps themselves.

Pneumonia was a much more difficult disease to prevent. Many of us, unfortunately, carry the germ with us. In these bright days all went well, and in a holiday camp; but when the cold and rain came and the long marches, in the exhausted or the wounded the resisting forces of the body were lowered, the enemy—the pneumococci—always on the watch, overpowered the guards and rushed the defences and attacked the lungs. They must be careful not to neglect coughs and colds. A man in good condition should be able to withstand the ordinary wettings and exposures without much lowering of the system, but in a winter campaign pneumonia caused a large amount of sickness and was a serious enemy of the soldier.

RAVAGES OF ENTERIC.

Above all others, one disease had proved most fatal in modern warfare—enteric, or typhoid fever. Over and over again it had killed thousands before they ever reached the fighting line. The United States troops had a terrible experience in the Spanish-American War. In six months, between June and November, inclusive, among 107,973 officers and men in 92 Volunteer regiments, 20,738, practically one-fifth of the entire number, had typhoid fever, and 1,580 died. Fortunately, in this country, typhoid was not prevalent in the districts in which camps were placed. The danger was chiefly from persons who had already had the disease, and who carried the germs in their intestines, harmless messmates in them, but capable of infecting barracks or camps. They could easily understand how flies could convey



