## SOME THOUGHTS ON THE WAR.

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When I was asked by the Editor to write a few notes on the war as it might affect the nursing profession, it seemed to me that what many nurses want to know just now is what sort of cases they will have to look after over here, either in the many hospitals which have set apart beds for the reception of the wounded, or in the private houses of those who have patriotically undertaken to care for any sick or disabled men who may need their care. As a nurse put it to me the other day, "We want to know what to look up."

Well, it is a big subject. Obviously it will. be advisable for every nurse to know something about the kind of wounds that are inflicted by bullets or shell fire, and it may be necessary for those who have been away from hospital for some time to rub up their bandaging, applica-tion of splints, and so on. Then there may be outbreaks of enteric fever, which will leave those who survive in a state of great bodily weakness. Still, all these things can be read up, or practised, and there is no advantage in an article of this sort in giving a rechauffe of the text-books which are nowadays accessible to every nurse. Still, I would advise any who are likely to be employed in the treatment of the wounded and who may not have access to a library, to borrow a surgery book from any available doctor, and polish up any rusty spots in their memory of which they may be conscious.

On thinking things over I found myself wondering whether we all of us realise how great a part is played in a modern war by the problems of infection, and I think we shall do well just to take stock of our knowledge on this point.

Now provided that a bullet or a piece of shell does not do immediate damage to some vital organ or large blood vessel, and the wound does not get septic, no great harm results, and the wounded man makes a quick recovery, and is not likely to want much nursing. The modern rifle bullet is so hot as to be quite aseptic itself, and it either goes clean through a man, or perhaps, if its force has been already spent, it may lodge somewhere in the tissues. In either case, we are not likely in this country to have to deal with simple wounds of unimportant We may perhaps see some instructures. stances of badly smashed bones, which will require to be united by plates, screws, or other means in our hospitals, but this class of case will not give the nurse much anxiety.

It is far different with wounds that have been infected. The chances of this calamity are far greater in warfare than in ordinary life. On the one hand, we have the probability that the wound itself will not or cannot be immediately protected from infection. It is true that everyone going into action carries an antiseptic dressing, which he is supposed to apply himself to the wound, but he may be too ill to do this, or he may have used it previously for a slight wound, and then have no other to put on if he should be unfortunate enough to be wounded again. Or the dressing may be soaked through with blood from inside, or with dirty water or mud from without, or it may have become displaced in the stress of battle. Obviously the chances of septic material entering either from his clothes or the earth, or some other source, are very great indeed.

Not only this, but there will be many factors which tend to lower the man's powers of resistance to infection. He may have had to go without food, or have been weakened by loss of blood, so that the organisms in infection, once they have gained entrance to his system, may find but a poor force opposed to them inside.

Let us then consider what actually happens under these circumstances. It does not matter for our purpose what kind of organisms are concerned, though I may remark that the bacillus of that deadly disease tetanus is found in soil, and often plays havoc with wounded men who may have lain untended for some time on the field of battle; but in any case germs begin to multiply in the wound. White blood corpuscles are called up in the blood stream to fight them.

Now the microbes manufacture poisonstoxins-which circulate in the blood, and if not neutralised by the antitoxins secreted by the leucocytes, give rise to such signs as fever, headache, prostration, delirium, and so on. If the patient's leucocytes are inadequate for defence, the output of toxins may be so great as to kill the man in a short time from acute septicæmia, or, in other words; from true blood poisoning. In such a case, what happens in the wound is not of so much consequence, for the essential condition for acute septicæmia is that the leucocytes are unable to confine the fight to the wound at all, and the country is, as it were, overrun with hostile troops, who attack the citadels, or centres in the brain which control the vital processes of circulation, respiration, and so on, and the patient succumbs to the invasion. In such a case, the blood is found to be loaded always with toxins, and sometimes also with the bacilli themselves.



