# THE NURSING SERVICES IN THE MIDDLE EAST.

### CHURCHILL HOUSE.

Among the many amenities provided for the recreation of the Nursing Services in the Middle East, none has been more appreciated than Churchill House, the Lady MacMichael Convalescent Home for members of the Nursing Services.

Nursing Services. This Home was provided by the kindness of the B.R.C.S. Joint War Organisation of Palestine under their Lady President, Lady MacMichael.

Churchill House stands high in a quiet part of Jerusalem, and has single-room accommodation for eight Sisters, in addition to a charming lounge and very comfortable dining-room.

The rooms have been furnished in attractive modern style, and curtains, rugs and furniture were chosen by Lady MacMichael herself.

This Home is open to Sisters requiring a rest, who have been sent under the recommendation of a medical officer, as well as to convalescent Sisters. The charge of 6s. per day is very moderate, especially as the cost of living in the area has soared very high.

Many Sisters from all parts of the Middle East have been helped towards complete recovery in these restful and homelike surroundings; others have warded off a breakdown through fatigue by making a short stay there.

Much of the success of the running of the House was due to the Lady Warden, Mrs. Morgan, who has now relinquished her post. Enlargement of the Home was under discussion as it was found that applications exceeded the number at first anticipated.

The Sisters were honoured by a visit from H.R.H. the Duke of Gloucester, who showed keen interest in all he saw there.

Many Sisters will remember with gratitude and pleasure their quiet and restful time at Churchill House, which sent them back fortified for their arduous wartime nursing.

## BACTERIA IN BLOOD.

## THE TECHNIQUE OF BLOOD CULTURE. By John Hatcher.

In health, the circulating blood is free from bacteria. Any odd organisms which may accidentally gain entrance are rapidly dealt with by cells with phagocytic properties, while in a number of conditions when the patient's resistance has been lowered by prolonged disease, an actual invasion of the bloodstream may come about shortly before the fatal issue. It is, however, with the diseases in which a bacteriemia is an essential and usually early feature of the clinical picture that blood culture as a means of diagnosis is concerned. Blood culture is of particular importance in two infections-that is, those of the enteric group; and with the pyogenic cocci infections -that is to say, septicæmia and infective endocarditis. It must, of course, be confessed that the pyogenic cocci are not necessarily the only organisms which may bring about a septicæmia; they are, however, the principal causative organisms.

#### Collecting the Specimen.

The actual collection of the specimen is extremely simple and merely demands that it must be collected with strict aseptic precautions; it also is essential that the operator should at least be reasonably competent at obtaining blood by vein puncture. There are various ways of carrying out the technique of blood culture, but the usual procedure is to inoculate the bottle of culture broth at the bedside of the patient. Particular care must be taken in cleaning up the surface of the patient's skin and the needle and syringe used must be sterilised by boiling or in the autoclave, preferably the latter. The culture broth is usually put up in screw-cap bottles with a small hole in the metal cap, but covered with a rubber washer. Also this cap is covered with a further cap of paper which protects it from contamination during storage; this paper cap is not removed till the last moment, the needle being plunged straight through the rubber washer and the blood injected directly into the broth without any risk of contamination by air-Usually 6-oz. or 8-oz. bottles are borne organisms. employed about half filled with broth, and up to 10 c.c. of blood may be inoculated, the blood and broth being gently mixed by slowly rotating the bottle.

## **Enteric Infections.**

In the early stages of typhoid and paratyphoid fever, blood culture offers the best chance of isolating the infecting organism. While the Widal reaction is apt to be regarded as the diagnostic test in these conditions in the first 10 to 14 days of the disease, a blood culture is much more likely to give diagnostic results. Incidentally, there is no reason why, if 10 c.c. of blood is obtained, both tests may not be performed. Though both B. typhosus and B. paratyphosus may be readily grown in the ordinary laboratory broth used for blood culture, it is recommended that a special medium known as bile broth be used. It is, of course, often difficult to determine the onset of the disease, but the procedure employed in most cases is to take the date of the patient's admission to hospital. The early and accurate diagnosis of enteric infections is largely a matter of laboratory investigation and a blood culture in the early stages can be a tremendous help, and this fact cannot be too widely appreciated.

#### **Pyogenic Infections.**

Included in this group are such conditions as ulcerative endocarditis and septicæmia. Usually these conditions are due to infection by the staphylococcus and streptococcus, the true pyogenic cocci; it should, however, be borne in mind that other organisms may less commonly be the invaders in septicæmia-for example, cases of puerperal septicæmia due to the B. coli have been recorded. Generally speaking, the results are often apt to be somewhat disapppointing, at least, as far as endocarditis cases are concerned, and a number of attempts may have to be made. It is very important that the specimen should be collected when the patient's temperature is rising. Ordinary laboratory culture broth is usually employed, though some workers prefer citrate broth. Since the introduction of the sulphonamide group of drugs, it has become the practice to include in the medium a small amount of p-aminobenzoic acid to neutralise any sulphonamide which may be present in the blood, otherwise the bacteriostic power of the drug may inhibit the growth of any organisms present.



