## OUR PRIZE COMPETITION.

HOW ARE WOUNDS INFECTED? HOW MAY INFECTION BE AVOIDED OR MINIMISED?

We have pleasure in awarding the prize this week to Miss E. H. Gibert, 1st London General Hospital, Camberwell, S.E.

## PRIZE PAPER.

One of the most essential points to be early impressed on the mind of the nurse in training is the necessity of absolute and scrupulous cleanliness, both in person and work.

This is important enough during her training, but it may be of even greater importance when she has secured her certificate and has the awful responsibility of actual lives in her hands, and she deals with what may prove of fatal result if she allows herself for a moment to forget her early training in the matter of cleanliness.

Take, for an apparently trifling example, dusting. If efficiently carried out it should be the means of *preventing* infection; if carelessly done, on the other hand, and the dust is merely moved from place to place, it may be the real *cause* of infection, owing to the scattering of dried particles laden with germs. The nurse must also exercise her faith in the unseen to a marked extent, and realize that one of the greatest dangers of infection lies in the organism not even seen by the naked eye.

We see, then, that the chief cause of infection is :---

Dirt.—(a) On person; (b) in work. Hands, nails, uniform, all these must have scrupulous care given to them. Nothing will teach a patient more the importance of being clean himself than a constant example of cleanliness in front of him, so that it is of twofold importance. Instruments, bowls, gloves, appliances—all these, if not clean, are sources of infection.

Under the same heading we may show the importance of covering all wounds, even when said to be "exposed," with a gauze dressing to prevent the admission of dust and flies.

The latter are frequent causes of infection, especially in hot climates or extremely hot weather.

2. The use of strong antiseptic lotions. These may give rise to a form of irritation, followed by inflammation.

3. The use of jaconet sometimes is responsible where fomentations are being applied. It renders the skin very sodden, and more liable to become a good medium for micro-organisms.

4. The inefficient application of dressings. These should be firmly applied, and re-infection

sometimes occurs from the constant chafing over the surrounding area.

5. The interference — intentional — of the patient with his wound from ulterior motives. Unfortunately this is not infrequently met with at the present time.

6. The interchange of certain utensils, &c., with those used by an already infected patient.

If these points are constantly watched, the danger of infection should be considerably minimized and in many cases avoided.

The chief means of assistance further in this matter is the free use of soap and water. There is practically no wound which will not benefit by the application of a good lather and plenty of water.

The surrounding area should be periodically shaved and cleaned as suggested, and, if necessary, ether soap used.

If the wound shows signs of complication, inflammation is the first of those signs, and means must be taken to reduce it, the most simple of which are :—( $\mathbf{x}$ ) The application of fomentations; (2) evaporating lotions; (3) baths (local or entire); (4) continuous irrigation; (5) Carrel's tubes, with Dakin's solution; (6) when possible, exposure to the sun—the finest germicide of all; (7) surgical interference—at the correct moment; (8) disinfection by heat of all clothes worn before the wound was received in the case of military patients from active service.

These are the chief means which are uppermost in the minds of all under the present circumstances, when it is a daily battle against the many and varied organisms that are showing themselves.

There are still a few points reserved to the last.

The use of various vaccines and serums for the destruction of special bacteria.

Also the use of antiseptic lotions. A word about these. They are helpful, but they are also harmful, and a carefully chosen use is recommended. Great attention should be paid to the strength at which they suit the patient's skin. What suits one will not necessarily suit another, and one wound will thrive on a certain lotion, while another on the same will readily become unhealthy. Certain drugs, too, prove more effectual in the destruction of certain germs than another. For instance, acetic acid should destroy pyo-cyaneus, but this does not always hold good, and the germ has seemed invulnerable at times.

Careful watching and constant must be the work of the nurse, and an accurate report be given to the medical officer of the progress of the patient and the condition of the wound.



