## FROSTBITE.

Lieutenant-Colonel A. B. Cottell, P.M.O. of the hospital yacht *Albion*, states in the *British Medical Journal* that many men now arriving from the front are suffering from frostbite of varying severity. He describes the symptoms and appearances as follows :--

"The frostbite has attacked the toes, and in many cases extended up to the metatarsus, the limb being œdematous nearly to the knee. The, toes stood wide apart, were extended, and of a purplish-black colour, and in all the severe cases bullæ filled with clear gangrene-smelling fluid have formed on the extensor surface. In about 10 per cent. of the cases the glands in the groin were tender, but in no case swollen. Some men said they were quite comfortable, and read, ate, and slept peacefully; others complained of pins and needles, and sharp stinging pain; but the majority said that the whole foot seemed heavy as lead, and that there was a dull ache all the time. The treatment adopted has been to dust the affected part with boracic powder, and to keep the foot slightly raised and covered with wool loosely bandaged. The highest temperature recorded was 102° F.; in most the temperature was slightly raised, while in a sixth it remained subnormal throughout. Owing to weather conditions and other circumstances I was able to keep thirty of the cases under my observation for forty-eight hours, during which time all of them showed signs of

improvement except one. "The history was much the same in all cases —trench work in saturated boots and sharp frost at night, and dull aching pain in the feet and inability to stand in the morning. I was struck with the frequency with which frostbite had supervened when men, to keep warm, had put on two pairs of socks, and had in doing so restricted the superficial circulation. If the men had had ' trench boots '—very large boots made of canvas stuffed with straw to pull on over their boots—much preventable suffering and loss of men in the firing line would have been avoided."

It is to be expected that the Indian troops must suffer severely, and Madame Péron, the late Mayoress of Boulogne-sur-Mer, writing to the Lord Mayor of London to acknowledge donations for her Anglo-French Shelter, said : "Last evening I was at the station when a sanitary train came in from the front with some Indian troops. Many were wounded, but more were unable to walk through frostbitten feet—very painful and dangerous. The ambulance cars are placed just at the entrance of our little hospital." Madame Péron's address is r bis, Rue du College, Boulogne-sur-Mer.

## OUR PRIZE COMPETITION.

WHAT IS ACUTE NEPHRITIS? NAME TWO CAUSES. OUTLINE BRIEFLY THE TREATMENT.

We have pleasure in awarding the prize this week to Miss J. G. Gilchrist, Gilmore Place, Edinburgh.

## PRIZE PAPER

Acute nephritis is a condition of progressive inflammation diffused throughout the tissues of the kidney, more especially at first affecting the cortical secreting portion of that organ, which is more or less congested and enlarged, while the tubules, connective tissues, blood vessels and cells become involved and degenerated as the disease develops.

The two main characteristics are the presence of albumen in the urine and the co-existence of dropsy.

There may be a sudden onset of symptoms, which may take the form of pain in the back; vomiting and nausea; feverishness; the urine is reduced in quantity, of a dark, smoky, or bloody colour; the chemical reaction shows a large amount of albumen, while under the microscope blood corpuscles and casts from the blood and epithelial cells may be found in abundance, the scanty urine being heavily laden with solids. Dropsy may vary in degree from a slight puffiness in the face and loose skin round the ankles to an accumulation of fluid distending the available spaces in the body, which may cause difficulty in breathing and also affect the function of other organs. The pulse is usually hard and of high tension, the skin white and dry, and the bowels constipated.

An acute nephritis may cause death by the severity of the attack, the patient succumbing to the toxæmia, pneumonia, or failure of the heart, or it may result, in spite of treatment, in the establishment of a chronic form of nephritis, which is followed by permanent alteration in the kidneys not directly amenable to treatment. An acute nephritis, causing active congestion and inflammation, with alterations in the composition of the urine, usually occurs from the toxin of acute infectious diseases. It is usually temporary in character, amenable to treatment, and abates with the original disease, though the condition may lay the foundation of permanent renal disease.

The true chronic nephritis, commonly called Bright's disease, from its description by Dr. Bright about the year 1827, is different in character, and is usually established from the beginning.

The two causes of acute nephritis are (a) toxin produced in the circulatory system, such



