DESCRIBE THE ONSET OF TETANUS AND THE NURSING CARE OF A PATIENT SUFFERING FROM THIS DISEASE.

We have pleasure in awarding the prize this week to Miss W. D. Maton, Coombe, Netheravon, near Salisbury.

PRIZE PAPER.

Until the year 1889, the real cause of tetanus (or lockjaw) was unknown. In that year Kitasato discovered the bacillus tetani, which has since been found in the soil of many cultivated districts, in animal fæces, dust, water, mud, manure, &c. In pre-war days we found very few cases of tetanus, but it has become one of the greatest dangers of war, where wounds stay for hours or even days before being dressed, with the result that dirt finds its way in, and sad to relate, many cases died of it in the earlier stages of the war before the patient ever reached the dressing station. The soil along the Aisne Valley is particularly virulent with tetanus bacilli.

Onset .--- Unfortunately, the disease is usually well advanced before noticed, as the symptoms are both varied and changeable. Should, however, a case be suspected, a general restlessness is first noticed about two days after infection has taken place. This is followed by sleeplessness and possibly slight delirium, headaches are pretty certain, and there may be some yawning. Gradually a profuse sweating comes on, with increased flow of saliva, and stiffness about the jaws, the muscles of which are the first to be attacked-hence the name "lockjaw." As this increases it is accompanied by general muscular spasms, during which the jaws are tightly clenched and the back arched.

At this stage there is probably a cough, ear trouble, and either strabismus or nystagmus may be noticed. The spasms increase both in frequency and severity, and in the majority of cases death follows from utter exhaustion. The lymphatics are reddened and swollen, glands enlarged, and the infected area becomes very tender, and there will also be difficulty in micturition, due to contraction of the sphincter vesicæ.

Provided the serum treatment is begun early enough there is some hope of recovery, but it is easier to prevent than cure, and now the antitetanic serum is being used prophylactically as well as therapeutically amongst the soldiers, whose wounds are more liable to become infected than the civilian. Before an operation, too, a lumbar injection of the serum is becoming part of the ordinary preparation, especially in the French hospitals.

Nursing Care .- The immediate injection of the serum affords the best chance of recovery, and then the nurse will have to devote her whole time to the patient, who must on no account be left. The room must be darkened, and kept absolutely quiet. Any sudden noise, such as the banging of a door, will bring on a spasm, which every precaution must be taken to pre-The teeth being locked, food must be vent. given either by suppositories or nutrient enemata, but never by the nose, which is almost certain to cause a spasm.

As an opiate, bromide or opium are mostly used, and inhalations of chloroform give temporary relief, but no drug is of the slightest use as a cure unless the serum has commenced doing its work, and the disease is not very far advanced.

The actual wound must be dressed accordingly under the strictest aseptic measures, free irrigation often being advisable, especially if emphysematous traumatic gangrene is the forerunner. The latter is commonly called "gas" gangrene, and renders the tissues more liable to tetanic infection.

Personally, the writer knows of a case where tetanus was contracted in a military hospital last winter from septic surgical instruments used for an heniotomy, having no apparent connection with any soil infection. This patient has now completely recovered (owing to the prophylactic use of serum on joining the Army), excepting for an occasional "drawn-up" feeling in the back, and a momentary " jumping ' in the legs caused by sudden muscular contraction. This, however, does not give rise to any pain, discomfort, or sleeplessness, though the contractions are as frequent as several times in an hour, particularly so after much exertion, though the patient is able to lead a perfectly normal life.

HONOURABLE MENTION.

The following competitors receive honourable mention :---Miss M. L. Beebe, Mrs. Farthing, Miss B. Grey Johnson, Miss E. Brodie, Miss A. M. M. Culler, and Miss M. Bridgwater.

Miss Beebe says :-- Complete rest and quiet is absolutely essential. If possible the patient should be nursed in a darkened room. All impression of sight and sound should be avoided. The patient should be moved with the utmost care, and must not be left for a moment during the acute stages. Great precautions must be taken to guard against bed sores, and as every movement of the patient may bring on the spasms, an air or water bed will be found of great use.



