their help, to say nothing of men and women awaiting admission to sanatoria through lack of staff, we should not appeal in vain. There are still those in this country who believe and know from experience that the words of the following quotation from Hugh Black's book on Friendship are true :---

are true :----"The Glory of Life is to love and not to be loved, to give and not to get, to serve and not to be served, to be a strong hand in the dark to another in the time of need, to be a cup of strength to any soul in the crisis of weakness; this is to know the Glory of Life."

## PARALYSIS AGITANS.

### By L. GODDARD, S.R.N.

Paralysis Agitans, also known as Parkinson's disease, Shaking Palsy or Shaking Paralysis and Trembling Palsy.

It is characterised by the stiffness and involuntary tremors of certain muscles of the limbs.

It is a chronic disease, occurring in the later part of life in men and women, but chiefly men.

#### Cause.

The cause is practically unknown. Shock, injury, and anxiety are often the cause, it may occur after acute diseases or exposure.

It is not considered heredity.

A similar condition may be seen after encephalitis lethargica, known as Parkinson's syndrome.

It is due to degeneration of the motor cells of the corpus stratium at the base of the brain.

#### Symptoms.

Insomnia, irritability, cramp, and tremor in some of the muscles of the fingers are the first symptoms.

The fingers are flexed at the metacarpal joints, and work against the thumb in such a way that they rest against each other, and the patient by flexion and extension of the finger and thumb gives the movement as if rolling a pill or a cigarette.

Gradually these tremors spread to the arm and leg of the affected side, in some cases the one side only for years, before it progresses to the other side.

The face often has an anxious expression, till later, when it lacks expression and is mask-like.

It is not often that the face is involved with the tremors.

Articulation is not affected, but may be slow and the sentence finished hurriedly.

In walking there is a similarity by which the patient walks at first slowly, and then increases his pace until he would appear to trip hurriedly in a forward position.

This gait is known as festination.

Should the patient be stopped in his walk and pulled backwards, he will continue to walk backwards and give the impression that he is going to fall back, as he is unable to stop himself, although his posture is one of flexion.

This is called retropulsion.

The disease as it advances causes this stiffness of the limbs and the unsteady gait which causes the body to bend forward from the hips, also the neck and the head protrude causing the posture of the body to be one of general flexion.

There is not any wasting of the muscles, the knee jerks are sometimes increased.

The disease is chronic, and so slow does it advance that the patient can carry on his occupation for several years.

Voluntary movements become feeble as the disease advances, and any excitement or effort causes the tremors to increase.

Complete paralysis occurs only towards the end.

Treatment.

Fresh air and good food is essential. Alcohol should be avoided, sedatives and tonics such as Hyoscine hydrobromide gr. 150, may be ordered twice daily, which in most cases will lessen the tremors.

Galvanism and passive movements of the limb is sometimes given.

All mental strain must be avoided.

# MUSTARD GAS STUDIED AS ANÆMIA TREATMENT.

It is with great interest that we publish news of a wonderful new investigation just released from the Surgeon General's Office in Washington, D.C.

A chemical agent which would have about the same effect as x-radiation on neoplastic tissue—the tissue of such malignant growths as cancer—has been• sought for some years by medical investigators.

One now appears to have been discovered in a curious way. Although as a means of therapy it appears to have no particular advantage over x-radiation and in some ways is decidedly inferior, it is of great interest as the first material with some capacity for selective destruction of neoplasms to appear, and considerable research on its properties now is underway. It is of great significance, at least theoretically, as an opening wedge into a possible new field of medicine.

One of the terrors of the First World War was mustard gas. While this was not used by any combatant in the Second World War, it naturally was studied by all the countries involved and improved forms were produced. Among these, both in the United States and Great Britain, were the so-called "nitrogen mustards." Their precise effects in the human organism were investigated in order to devise adequate defences and proper medical treatment in case they were introduced by the enemy. They were found to produce profound anæmias due to their specific effects on lymphatic tissue and bone marrow where blood cells are formed. The effect was very similar to that caused by heavy x-radiation.

This finding led to the possibility that, used in rigidly measured doses, they might actually be used as medicines for blood and lymph neoplasms. They are very potent poisons. The problem is to administer them by injection in such balance that they will do much more harm to unwanted tissue than to surrounding healthy and normal tissue. This also is the problem with x-Ray treatment.

Experiments have been carried out in several institutions in order to obtain a fair evaluation of the nitrogen mustards before they are accepted as recognised medicinal agents. Among these institutions is the New York Memorial Hospital. The results have just been reported in a paper submitted to the War Department Surgeon General's Office by Captain D. A. Karnofsky of the Army Medical Corps, who worked in co-operation with Drs. L. F. Craver, C. P. Rhoads, and J. C. Abels.



