CONVULSION

This group of physicians watching the first electric treatment for mental disease to be given at the Institute are all needed to hold the patient on the bed as the convulsion wracks his body.

fixed posture and mutism may some day be cured simply in his own home or a local hospital by a physician who places two electrodes on the distressed head and then just plugs in on ordinary house current stepped down to the harmless voltages used.

Science News Letter, July 20, 1940

MEDICINE

Cure for Bubonic Plague Seen in New Chemical

CURE of bubonic plague by chemical remedies of the sulfanilamide group is expected as a result of successful experiments with plague-susceptible mice. The experiments were made by Dr. S. S. Sokhey, director, and Dr. B. B. Dikshit, pharmacologist, of the Haffkine Institute, Bombay, India, and are reported to physicians. (*Lancet,* June 8)

One of these remedies, sulfathiazole, saved 80% and 90% of the plague-stricken mice after the disease had reached the most dangerous stage, when the germs had invaded the blood stream.

Even better curative results are hoped for when sulfathiazole is used to treat humans because the disease is much more severe in mice than in men. Drs. Sokhey and Dikshit hope soon to try it on human cases of plague.

Sulfathiazole proved, in mouse plague, to be more effective than sulfapyridine or other of the sulfanilamide group of chemical remedies. Results of treatment with sulfathiazole are as good as those obtained with the Haffkine Institute anti-plague serum.

Because plague is present in wild rodents in the Pacific Coast area of the United States, the use of sulfanilamide chemicals in combatting this disease may some day be of practical importance in this country.

Science News Letter, July 20, 1940

PHYSIOLOGY

Ability to Make Vitamin C Linked With TB Resistance

Men, Monkeys and Guinea Pigs, Who Must Get Their Vitamin C From Diet, Are All Susceptible to TB

ABILITY to manufacture anti-scurvy vitamin C in the body and ability to resist invasion of the tuberculosis germ are apparently linked in some as yet unexplained way.

The relationship is pointed out by Dr. T. W. B. Osborn, of the University of the Witwatersrand, and Dr. J. H. S. Gear, of the South African Institute for Medical Research, Johannesburg. (*Nature,* June 22)

Man requires vitamin C in his diet because he is unable to manufacture it in his body. Monkeys and guinea pigs also must get their vitamin C rations from their diet. Men, monkeys and guinea pigs are also susceptible to both human and bovine tuberculosis.

Dogs and rats, on the other hand, are known to be able to manufacture the anti-scurvy vitamin C in their bodies. These animals and also mice are resistant to both human and bovine tuberculosis germs.

Mice may or may not be able to manufacture vitamin C in their bodies. Authorities are still in doubt on this point. There is also some question as to whether or not rabbits, pigs and cattle can make this vitamin or whether they depend on food for it.

These same animals, rabbits, pigs and calves, as well as goats, sheep and horses, stand between man and dogs in ability to resist tuberculosis germs, having resistance to the germs of the human disease but being susceptible to germs of the bovine or cattle tuberculosis.

The South African investigators believe this cannot be pure coincidence. In support of the view that there is a relationship between ability to resist tuberculosis and ability to manufacture vitamin C in the body are many reports showing that tuberculosis patients use more vitamin C than normal persons. No one knows just why this is so, but tests of the amount of vitamin C in the blood of such patients have shown it.

Patients with other infectious diseases besides tuberculosis also seem to use more vitamin C than normal. Some authorities believe that this may be because of the fever in these sicknesses which speeds up the body processes known as metabolism. This would include a speeding up of use of vitamin C.

Science News Letter, July 20, 1940

BOTANY—PHOTOGRAPHY

Plant Growth Shown Fast With Amateur Movie Outfit

DEVELOPMENT of an inexpensive electrical movie outfit which will permit amateurs to record the growth of plants on 8 mm. film, so that the growth of days and weeks can be animated on a 30-foot roll of film may lead to important discoveries in plant growth. The device, perfected by Wesley C. Casson, chemical engineer, of suburban Birmingham, Mich., permits running off the reel in two and a half minutes growth which may have covered months.

The equipment consists of an eight-millimeter motion picture camera, and an electric motor drive, controlled by a timing clock electrically driven. Individual frames can be exposed at intervals ranging from 15 minutes to two days apart, without any attention on the part of the operator. A battery of photoflood lights can be connected for continuing the sequence of pictures through the night or in overcast weather.

The entire unit is weatherproofed and may be left in position in the garden. A completed picture when screened shows