

MEDICINE

Fewer Cripples Foreseen

Streptomycin may prove effective in tuberculosis of the bones and joints as well as of the lungs, the larynx and vocal cords.

► THERE will be fewer crippled children in the future, fewer hunchbacks, fewer men and women limping through life on a stiffened or shortened leg, thanks to streptomycin.

Hailed for over a year as the first drug with real usefulness in tuberculosis, this earth mold chemical is only now being studied as a remedy for tuberculosis of the bones and joints which cripples so many children.

Doctors do not yet know whether it can do as good a job in this form of tuberculosis as it has in other forms of the great white plague.

"But there is reason to hope," says Dr. H. Corwin Hinshaw of the Mayo Clinic, "that streptomycin alone or in combination with surgery may be of considerable help in some of the most baffling problems in this field."

Scores of persons, many of them infants and young children, who would have died two years ago of tuberculous meningitis or of another previously always fatal disease, miliary tuberculosis, are alive and well today and "may be regarded as cured," he said.

Streptomycin has not cured all patients with this form of the disease, which kills thousands annually. But it is the only effective remedy in these forms of the disease.

Effective for Larynx

The earth mold chemical has been effective very promptly and in a very high percentage of cases of another form of tuberculosis. This is the dreaded and painful type which involves the larynx and vocal cords. A somewhat similar type of tuberculosis may produce ulcers in the windpipe and larger bronchial tubes. This type which has been so hard to cure by other forms of treatment responds very well to streptomycin.

Tuberculosis of the lungs accounts for more than 90% of tuberculosis deaths. This type of the disease is a destructive process, and lung tissue which has been destroyed cannot be regenerated. But there "is no longer any doubt," Dr. Hinshaw said, "that streptomycin has very great value in some of the most fulminating types of lung tuberculosis."

Streptomycin, Dr. Hinshaw emphasized, is not the only treatment for tuberculosis. Just as the pneumonia patient who gets penicillin treatment must go to bed and be given other helpful remedies, the tuberculosis patient who gets streptomycin will need to rest in bed and get other forms of treatment as well as the mold drug. And like the pneumonia patient cured by penicillin, the tuberculosis patient who gets streptomycin also needs to be guarded during the convalescent period.

Price Now Low

Speaking in New York at the presentation to Merck and Company of the biennial award for chemical engineering achievement given by *Chemical Engineering*, McGraw-Hill publication, Dr. Hinshaw said that two and three years ago anything said or written about streptomycin had to be guarded because scientists then feared that streptomycin would never be made in sufficient quan-

tity or at a low enough price to make it available to the hundreds of thousands suffering with tuberculosis. This situation is changing, he said, and the one gram a day now considered enough in many types of tuberculosis now costs only a few dollars.

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GENETICS

Vitamin Content Is Being Bred into Hybrid Corn

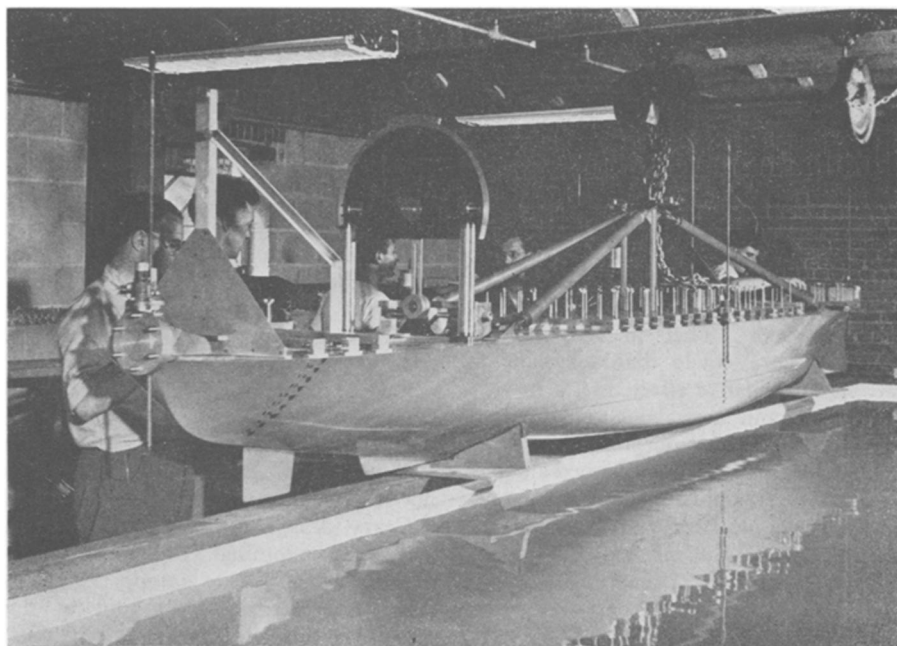
► VITAMINIZING corn by breeding changes into its chemical make-up is being undertaken by Pennsylvania State College scientists, L. W. Aurand, R. C. Miller and L. L. Huber.

Striking differences between the carotene content of some inbred lines of corn was found by them in experiments reported in the journal, *Science* (Nov. 21). Carotene is the yellow color which is changed to vitamin A in the body of humans and other animals.

The genetic constitution of corn may be responsible, in large part, they state, for its content of carotene.

In developing new corn hybrids, they suggest, attention should be given to the content of important nourishing factors, of which carotene is one.

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MODEL CARRIER—This 20-foot scale wooden model airplane carrier was installed in a testing tank at the Stevens' Institute of Technology Damage Control Research Laboratory to determine, if possible, how stable a ship is after she is damaged, when it is safe to continue fighting her, and at what moment it becomes necessary to abandon ship.