

MEDICINE

Remedy for Influenza Hinted in New Report

Chemical Related to Sulfanilamide Found Effective in Distemper, Which is Animal Equivalent of Influenza

HOPE that influenza can soon be cured or prevented by swallowing a few grains of a new chemical remedy appears in a preliminary report (*Science* Feb. 11).

The report does not mention human influenza but states that distemper has been prevented and cured by giving the chemical, sodium sulfanilyl sulfanilate to dogs, cats and ferrets. This work was done by Drs. A. R. Dochez and C. A. Slanetz, at the departments of medicine and of animal care of the College of Physicians and Surgeons, Columbia University, and Presbyterian Hospital.

Distemper has been called the canine counterpart of human influenza. Dr. Dochez has for years been searching for a way to conquer influenza and researchers both in this country and in England have studied canine distemper closely in the hope of finding a cure or preventive of the very similar human disease, influenza. It is safe to assume that Dr. Dochez' present investigations of distemper have been undertaken with the same hope of finding a cure or preventive for influenza.

The chemical which has been strikingly successful in curing and preventing distemper in animals is related chemically to sulfanilamide and Pron-tosil, chemical remedies that have proved valuable in streptococcus infection, gonorrhoea and other germ diseases. Distemper, however, like influenza, infantile paralysis and epidemic encephalitis, is caused by another class of germ, a filtrable virus. Attempts to conquer the virus-caused diseases by chemical warfare have so far been largely unsuccessful. In their report Drs. Dochez and Slanetz state:

"Sodium sulfanilyl sulfanilate therefore appears to be the first chemical agent to have such definite therapeutic action in an infection due to a filtrable virus. The range of its activity remains to be explored."

The sodium sulfanilyl sulfanilate used in this distemper research was prepared by the Calco Chemical Company. It is a white crystalline substance, easily dissolved in water, and is neither acid nor

alkaline. The dose for small animals is one gram per thousand grams of body weight—about seven grains to every pound. Cats, rabbits and ferrets have been given one gram of the chemical every day for two weeks without loss of weight, appetite or other untoward symptoms. The chemical circulates in the blood in high concentrations for relatively short periods of time. A large dose is completely excreted within 24 hours. Even a large dose did not produce any symptoms of intoxication or other bad after-effects in the animal.

Drs. Dochez and Slanetz do not, in this report, suggest that this chemical can be used for human influenza. It seems likely, however, that the present research will lead in the near future to trial, at least, of this or a similar drug for influenza treatment and prevention.

Dog and cat lovers, however, can probably immediately start using the new remedy for prevention or treatment of distemper, which is a serious plague of these animal pets. The scientists report that 18 cats "suffering from a spontaneous disease commonly known as cat distemper or influenza" have already been successfully treated with the new chemical. Of 28 dogs suffering from

spontaneous canine distemper, 26 recovered after treatment with the chemical. The animals were treated at various stages of the disease. When given to dogs and ferrets after infection but before symptoms of distemper set in, the chemical has prevented development of the disease and the animals remained well.

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HOUSING

Low-Cost Farm Unit Built Wholly of Steel

MEMBERS of Congress and Department of Agriculture officials crowded around and asked questions on Friday, Feb. 11, as the Farm Security Administration held an informal dedication of its new all-steel low-cost farm building unit at the Greenbelt resettlement project.

Assembled within the past few weeks, the pre-fabricated farm unit, which comprises five structures, can be delivered unassembled for \$2,000 when manufactured on a mass production basis, engineers for the builders claimed.

A five-room house, barn, smokehouse, poultry house and sanitary outhouse make up the farmstead, one of a number of experimental projects being carried out by the Farm Security Administration in its attempts to develop low-cost farm housing.

The buildings are assembled from prefabricated panels four feet wide. The model was prefabricated by the Decatur Iron and Steel Company of Decatur, Ala., from material supplied by the Tennessee Coal, Iron and Railroad Company.

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STEEL HOME AMONG THE PINES

Spartan in the simplicity of its outline as it is in the stuff from which it is made, this low-cost house is comfortable, clean and sanitary—and it will never be eaten by termites.