

MEDICINE

Chickens Are Incriminated As Source of Encephalitis

This Summer's Epidemic, Largest on Record and Affecting Three Thousand Persons, Traced to Fowl

CHICKENS are the probable source of encephalitis, or "sleeping sickness" attacks of man and horses.

Evidence strongly incriminating domestic barnyard and wild prairie fowl appears in two reports, one from the U. S. Public Health Service (*Public Health Reports*, Sept. 26) and the other from scientists of the University of California and State College of Washington. (*Science*, Sept. 26.)

The virus or germ of the disease was found in the brain and spleen of a prairie chicken shot on Aug. 27, 1941, near Rugby, N. D., then the center of an encephalitis epidemic, Herald R. Cox, William L. Jellison and Lyndahl E. Hughes, of the Public Health Service's Rocky Mountain Laboratory at Hamilton, Mont., announce. This marks the first time the encephalitis virus itself has been found in an animal other than horses and man.

A much more widespread reservoir than previously suspected for both the horse encephalitis virus and the virus that caused a severe epidemic of encephalitis in St. Louis some years ago is indicated by the findings of William McD. Hammon, John A. Gray, Jr., Francis C. Evans and Ernest M. Izumi, of the University of California, and Howard W. Lundy, of State College of Washington.

They found evidence of encephalitis infection, though not the virus itself, in a significant proportion of domestic fowl from areas where encephalitis cases occurred in 1939, 1940 and 1941.

"It would appear," they state, "that barnyards and fowl runs, found in large numbers in small towns, rural and suburban areas, are the principal foci (centers) of infection for encephalitis of either Western equine or the St. Louis type."

Encephalitis, epidemic in the Northwest this summer, attacked more than three thousand persons, killing at least 190 and probably many more. It was "the largest encephalitis epidemic of record," according to a statement from Dr. James P. Leake, medical director of the U. S. Public Health Service.

The approximately four-to-one ratio of attacks of men and boys of working age over females of the same age, plus the heavy mosquito infestation in North Dakota this summer, Dr. Leake pointed out, indicates strongly that mosquitoes spread the disease from the prairie chickens to the men and boys working in the wheat fields.

Science News Letter, October 4, 1941

RADIO

Radio Static Is Used To Locate Hurricanes

STATIC is just a disagreeable noise to most of us. But, in the hands of Dr. G. W. Kenrick of the University of Puerto Rico, it has become a useful servant for locating and predicting the course of a hurricane.

A method of triangulation similar to that of the land surveyor is used. Stations in Puerto Rico and in Florida pick up the static of the storm, and determine the direction from which it comes. Two lines drawn on a map in the proper directions from the stations determine, by their point of intersection, the position of the source of the static.

Several stations in Puerto Rico are experimenting with this method.

By making continuous photographic records of the flashes of the static receiving tubes at the several stations, the course of a storm can be followed. The camera films are driven by synchronous motors, like those that actuate electric clocks, and the time of receiving a flash is recorded at each station to one-tenth of a second. In this way, Dr. Kenrick explained, it has been possible in several cases to follow the course of a hurricane for more than a thousand miles.

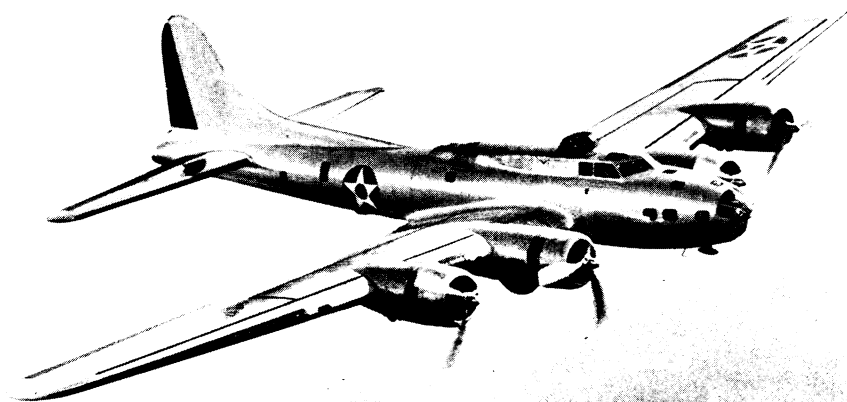
The method is still in the experimental stage, but may become eventually a valuable aid to our Uncle Sam.

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PUBLIC HEALTH

Infantile Paralysis Rate Unchanged Over Nation

THE infantile paralysis picture remained practically unchanged throughout the nation during the week ending Sept. 20, with 596 cases reported



"MASS PRODUCTION" FLYING FORTRESS

This is the new four-engine Boeing B-17E, described by the War Department as "bigger and more deadly" than any of its predecessors in the famous Boeing Flying Fortress series. It will be built in quantity by Douglas Aircraft Company and Vega Aircraft Company as well as by Boeing.