

MEDICINE

Vaccination For Influenza

Experiments have shown that this method is more satisfactory than the inhaling of serum. Conscientious objectors used in this and pneumonia studies.

► VACCINATION "offers more hope of protection against influenza" than inhalations of blood serum from persons recovered from the disease, Army experiments upon conscientious objector volunteers have demonstrated.

A War Department announcement tells of a report on influenza made by Dr. Francis G. Blake, of Yale University, president of the Board for the Investigation and Control of Influenza and other Epidemic Diseases in the Army, to the Preventive Medicine Service of the Office of the Surgeon General. It covered studies made on conscientious objectors in Michigan by Dr. Thomas Francis, Jr., and Dr. Jonas E. Salk, of the University of Michigan, Dr. Paul R. Cannon, Dr. Francis B. Gordon and Dr. Clayton G. Loosli, now Capt. Loosli, of the University of Chicago.

Other investigators had previously reported that inhaling sprayed blood serum from persons recovered from influenza would protect against the disease. The experts working for the Army found that it did not in their experiments.

The serum they used for testing the value of this method of giving protection against influenza was not the same as that used in tests at the Naval Laboratory Research Unit at the University of California under the direction of Capt. Albert P. Krueger. In the Navy tests a globulin fraction of influenza immune horse, not human, serum was found to give protection to laboratory animals. Although this is encouraging, nothing conclusive as to results of human immunization is known yet because tests have not been carried out on a large enough scale. After two years of study of the problem, however, Capt. Krueger's group is coming more to the view that injecting the serum under the skin would be more practical than giving it by inhalation because of the greater certainty that the necessary amount would be assimilated.

Besides the influenza work, the Army has been using volunteers among conscientious objectors in Tennessee for study of the kind of pneumonia which

has been causing considerable concern in recent years. This is variously known as virus pneumonia and primary atypical pneumonia. Its symptoms differ from those of pneumonia caused by the pneumococci and it does not respond to treatment with serums and sulfa drugs.

Washings from the noses of seven soldiers at Fort Bragg, N. C., who had this atypical pneumonia were sprayed into

the noses of 12 healthy, sound conscientious objectors who volunteered for the study at the camp at Gatlinburg, Tenn. Ten of the 12 developed respiratory illness and three were quite sick and went to the hospital but recovered quickly.

This, the War Department report states, was the first time primary atypical pneumonia had been transmitted in this fashion and makes important further study of the test material for the purpose of isolating the germ. This work is now in progress.

The pneumonia studies were made by Dr. John H. Dingle, of Fort Bragg, and Dr. Theodore J. Abernethy, Dr. Alexander D. Langmuir and Dr. Charles H. Rammelkamp of the Army's Respiratory Diseases Commission.

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AERONAUTICS

Night Fighter Plane

► THE "BLACK WIDOW," known to the Army Air Forces as the P-61, is the world's largest and most powerful long-range pursuit plane. It is the first warplane designed from the ground up as a night fighter in World War II.

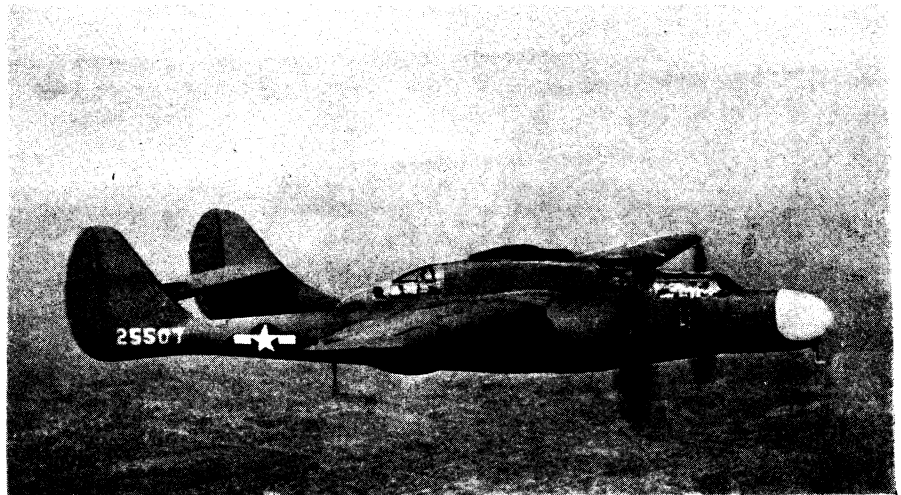
In addition to a battery of 20-millimeter cannon and .50-caliber machine guns, the P-61 is equipped for its job of night fighting with the latest devices.

The plane weighs more than eight tons; much of this weight is due to its

heavy armor. It carries a crew of two or three.

It looks somewhat like the P-38 Lightning, since it has twintail booms, and a long central crew nacelle. Other distinctive features include 2,000 horsepower Pratt and Whitney engines turning four-bladed Curtiss propellers, and the long crew nacelle nose.

While no information as to speed has been released, it may be assumed that the speed is greater than 300 miles an



BLACK WIDOW—Said to be the world's largest pursuit plane, the P-61 has a battery of 20-millimeter cannon and .50-caliber machine guns and weighs more than 8 tons.