

## DERMATOLOGY

# Anti-Wart Vaccine

► A VACCINE against warts may result from a discovery by Dr. James A. Bivins of the New Jersey Agricultural Station and Rutgers University, New Brunswick, N. J.

Even more important, Dr. Bivins told SCIENCE SERVICE, the findings may lead to better knowledge of tumors including, possibly, cancers.

What Dr. Bivins has done is to make a virus from a wart grow on developing chick embryos. So far as is known, this is the first time this has been done.

Growth of a virus on chick embryos is often a first step to vaccine production.

The virus came from a wart removed from Dr. Bivins' own right hand by Dr. O. J. Sokoloff, dermatologist of New Brunswick. The wart was one of 17 developing on Dr. Bivins' hand during the past two years. Dr. Bivins hesitates to call it "the" wart virus because his virus from the chick embryos has not yet been used to produce warts on another human.

## PSYCHIATRY

# Soviet Psychiatry Progress

► SOVIET PSYCHIATRY is in a state of "ferment, movement, some conflict, some confusion and forward progress."

This is the impression of an American psychiatrist, Dr. Joseph Wortis of Brooklyn, N.Y., based on his reading of Soviet psychiatric journals and reports which he receives regularly by mail.

Soviet psychiatrists use a "lot of methods we consider old-fashioned, such as baths, general hygienic measures and long vacations," Dr. Wortis told SCIENCE SERVICE.

On the other hand, prolonged sleep treatment is a Soviet method which he thinks might be more widely tried by American physicians.

Sleep treatment is used by Soviet physicians for medical as well as psychiatric disorders. Ulcers and high blood pressure are among those so treated. Only one American physician, so far as Dr. Wortis knows, is doing anything like this. The American is trying insulin sleep for asthma.

Insulin and electroshock treatment are used by Soviet psychiatrists but many consider electroshock "unduly crude, unpleasant and injurious," he states in the *American Journal of Psychiatry* (March).

Prefrontal lobotomy, operation in fairly wide use in the United States, was forbidden by a Soviet Ministry of Health order in 1950.

Pavlov's work on conditioned and unconditioned reflexes is greatly emphasized and his theories extended.

"Whatever its mistakes and shortcomings, Soviet psychiatry compares favorably with our own and is well worth our serious scientific attention," Dr. Wortis believes.

Dr. Bivins is a veterinarian, not a doctor of medicine, so he has not been able to make this test nor to try the chick embryo-grown virus as a vaccine. Dr. Bivins reports his research on the wart virus in *Science* (March 20).

The "dramatic" growth of his wart virus on chick embryos, however, may give scientists an easy and rapid way of studying a virus that causes human tumor growths. Warts are considered one example of benign human tumors and study of them is important because of what it may tell about malignant tumors, or cancer.

A wart vaccine that "dramatically" clears warts on cattle and dogs has been made. The virus used for the cattle wart vaccine, however, although taken from cattle with warts, has never produced warts in non-infected cattle. This contradictory situation has not yet been cleared by scientists studying it.

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He thinks it a "shortsighted policy" that the *Journal of the American Medical Association* which abstracts about 250 foreign scientific journals does not abstract a single Russian one.

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## AERONAUTICS

## CAA Head Cites Problems Facing Jetliner Design

► TO PROTECT passengers and crews, some sort of a gadget is "urgently needed" to warn jetliner pilots instantly when an engine fails.

Fred B. Lee, acting Administrator of the Civil Aeronautics Administration, told the Airport Operators Council meeting in Kansas City, Mo., that the pilot might lose several seconds before he spots an engine "blowout" without such a device. In a take-off, those seconds may spell life or death for the jetliner's passengers and crew.

Outlining some of the major problems now facing designers of jet aircraft for commercial airlines, Mr. Lee pointed out that the take-off acceleration of a jet is low. He suggested that afterburners might be used to supplement the jet's low thrust. This means more noise around airports. However, the British have reported that public objections to the noise diminished after the sound of jet take-offs became commonplace.

Other problems Mr. Lee listed were these: Jetliners should be designed to use existing airstrips. It is no longer economically feasible to extend runways to meet the

highspeed landings of new jet aircraft. Some sort of reverse-thrust device should be perfected for the planes.

Since jets operate in the thin atmosphere at 35,000 to 45,000 feet, loss of pressure in the plane could be fatal unless the plane can dive quickly to a lower altitude. Some sort of dive brakes might make rapid descent possible.

Communications need to be improved. Above 35,000 feet, so many VHF stations are received at once that the chatter "sounds like a ladies' bridge club." Ice clouds severely reduce reception on medium frequencies.

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