

AGRICULTURE

Reds Weak in Agriculture

➤ AGRICULTURE is the Achilles heel of the Red Empire, Rep. Jamie L. Whitten (D-Miss.) told the House Subcommittee on Appropriations in hearings released in Washington.

Rep. Whitten, chairman of the House Agricultural Subcommittee, said, "along with lack of roads, railroads and communications, perhaps the greatest single weakness in the economy of the Iron Curtain countries is their inability to improve agricultural production. This is especially true of Russia."

The Congressman led a tour of Russia, Poland, Hungary, Yugoslavia and Western Europe in the fall of last year.

Rep. Whitten pointed out that most of the principal agricultural areas are located at a considerable distance from large bodies of water, and that the climate consists of short, warm summers and long, cold winters. This relatively short growing season "makes it difficult for the country to produce all of the various agricultural commodities needed to support its economy."

In addition, much of the area is afflicted with marginal rainfall.

"Further," Rep. Whitten said, "the socialized agricultural system which the Soviets have imposed upon themselves has failed to

stimulate the interest and initiative of the farm workers."

Rep. Whitten also reported that as a direct result of observations made by the Soviet agricultural delegation to the United States and Canada in 1955, the Russians have reduced the market weight of pigs; reduced the number of milkings of dairy cows from three or four per day to two; changed the design of farm machinery; increased the use of chemical weed-control agents; increased attention to soil and climatic conditions; increased the productivity of farm labor; and paid more attention to the type of soil on which corn thrives best.

Rep. Whitten also took the opportunity of telling his fellow colleagues that stopping visits to Russia by Americans would be a "short-sighted action."

Science News Letter, March 2, 1957

BIOCHEMISTRY

Cancer Causes Iodine To Spread in Body

➤ RADIOACTIVE IODINE studies have shown that an unusual spread of iodine takes place in the body when cancer is present.

Normally, almost all iodine goes to the thyroid gland to be used in thyroid hormone, or is excreted. However, Drs. Kenneth G. Scott and Marie B. Daniels of the University of California Medical School, San Francisco, have found that in cancerous animals the iodine is channeled from the thyroid gland to the tumor site and to other body areas.

This "iodine trapping syndrome" seems to work only if the cancers involved are those destined to progress until they kill the animals. In cancer-susceptible rats with small growing tumors, a little of the iodine went to tissues around the tumors and then, as the tumors grew, the iodine dispersed throughout the skin, digestive tract, muscle and blood plasma.

When tumors were injected into cancer-resistant rats, however, the iodine did not disperse, but went to the thyroid or was excreted as usual. Even when the tumor grew vigorously for three or four days before regressing in these animals, no iodine was found in nearby tissue.

The iodine trapping process is started by a protease or polypeptide, a small constituent of protein existing in the tumor, the scientists found. When they injected this substance into cancer-susceptible animals that were not cancerous, they found that it caused the iodine to divert from the thyroid to other sites.

The research was reported by the American Cancer Society, which supported the work in cooperation with the University of California.

Science News Letter, March 2, 1957

MEDICINE

Overactive Thyroid Is Best Treated by Removal

➤ THYROID glands that are persistently overactive are great masqueraders of other serious illnesses and are best treated with surgical removal, Dr. Max M. Simon, St. Francis Hospital, Poughkeepsie, N. Y., told a regional meeting of the International College of Surgeons in White Sulphur Springs, W. Va.

An overactive thyroid can simulate organic heart disease, involve the respiratory system suggesting tuberculosis, and lead to wrong diagnoses involving the gallbladder, stomach or bowel, he said.

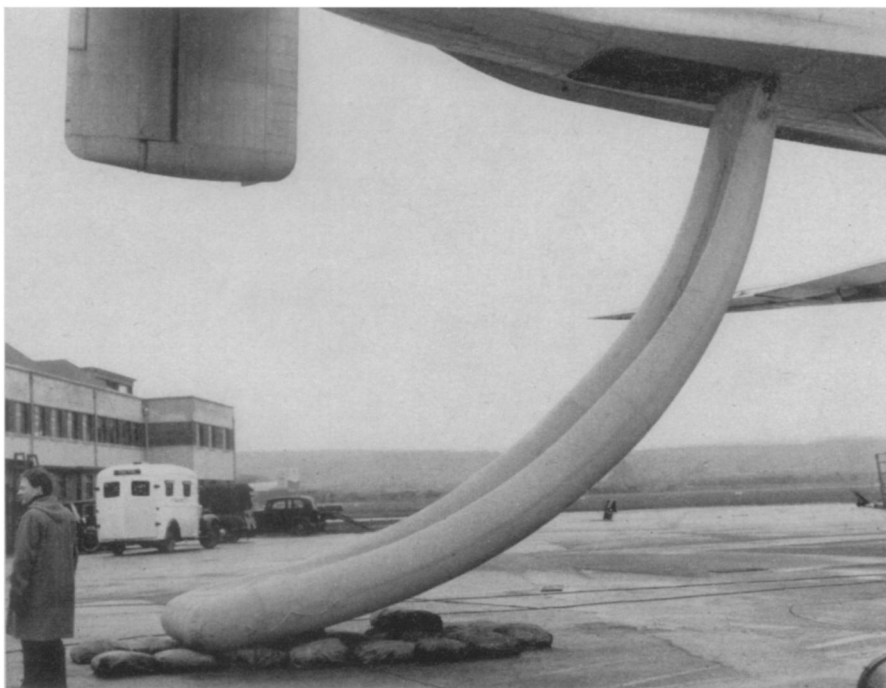
When it involves the nervous system, it may be confused with psychiatric conditions, he added.

In the past the condition has been treated with X-rays, iodine, anti-thyroid drugs and more recently with radioactive iodine (I-131) but none of these methods are without hazards, complications and uncertainties, he reported.

"The risk of thyroidectomy (removal of the gland) has been reduced to almost zero," the surgeon reported.

Improvements in pre-operative preparation, anesthesia and surgical technique have made this the best form of treatment, Dr. Simon concluded.

Science News Letter, March 2, 1957



ESCAPE CHUTE—To provide an emergency escape route from giant British Beverly air freighters and troop-transport planes, a self-inflating chute, shown fixed at the parachute exit, has been designed. Carried in a small valise stowed on the side wall of the rear compartment, it can be quickly anchored to the floor inside the parachute exit and inflated by CO₂ bottles in 15 seconds to a length of 30 feet. It has side walls and cushioned padding at the foot to lessen the shock to escapees on arrival at the ground.