

AGRICULTURE

Report on U.S.S.R. Farms

► **MORE FARM LABOR** than farm machinery is how one expert describes Russian agriculture.

Dr. Sherman Johnson, agricultural economist with the U. S. Department of Agriculture, reported that the Russians have "quite good potential" in increasing crop and livestock production, but that they are still behind the United States in many respects.

Dr. Johnson, group leader of a U. S. agricultural delegation recently returned from the U.S.S.R., pointed out that hand labor seems to dominate the farm scene, from hand milking cows to working combines and cleaning wheat.

The delegation spent close to a month in Russia, traveling from the semi-tropical southern region to Novosibirsk close to Siberia. They saw farms where wheat and cotton were grown as well as dairy and poultry farms and a hot-house vegetable farm. Collective farms averaged in size from 2,500 acres to 60,000 acres, Dr. Johnson estimated.

Although information on grain production and utilization was not available—this

may be a political factor, the U. S. expert suggested—information on Russian cotton production was given to the Americans.

Production methods with this crop are resulting in very high yields, Dr. Johnson said. The Russians are using irrigation and getting between one and one and one-half bales of cotton per acre. This is, however, no higher yield than the U. S. gets with the same method.

Concerning livestock, Dr. Johnson said that although the cows were generally low-producing animals, they were milked three times a day. Also, most herds were fed in barns the year round, again pointing to the availability of farm labor in Russia.

Russian agricultural experts say that with greater irrigation, higher commercial fertilizer production, and mechanization, farm production will increase greatly. All the available virgin land that is usable without drainage or clearing, etc., is being farmed. However, there are some 10,000,000 acres that could become available with some treatment.

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PHARMACOLOGY

Charge Drug Monopoly

► **SIX OF** the country's leading wonder drug producers have been charged with monopolizing the antibiotic business, fixing and maintaining unreasonable high prices and squeezing out companies that attempted to compete in antibiotic manufacture and sale.

The charges were brought on Aug. 1 by the Federal Trade Commission simultaneously with the long-awaited release of the Commission's "Economic Report on Antibiotics Manufacture."

The six companies, which have been given 30 days in which to answer the FTC complaint, are American Cyanamid Co., Bristol-Myers Co., Olin Mathieson Chemical Corp., Chas. Pfizer & Co., Inc., all of New York City, Bristol-Laboratories, Inc., Syracuse, N. Y., and The Upjohn Co., Kalamazoo, Mich.

One of the strongest charges made in the heretofore closely guarded report, more than two years in preparation, was that some antibiotics were patented when there actually were no grounds for patents.

The formal complaint vigorously attacked Pfizer on this count and also charged American Cyanamid and the two Bristol companies.

The Commission alleged the companies withheld information that would have shown any chemist with experience in antibiotics could have produced some of the wonder drugs and that patents, therefore, were not justified.

W. G. Malcolm, president of American Cyanamid, told reporters "Cyanamid has not engaged in any price fixing," nor any of the other activities spelled out in the

FTC complaint. Admitting he had "not had an opportunity to study" the report and complaint, Mr. Malcolm pointed out that pharmaceutical preparations were almost "alone in resisting" rising price trends.

Among the many diseases for which antibiotics are effective, the complaint says, are pneumonia, syphilis, typhoid fever, meningitis, tuberculosis, plague, and streptococcal sore throat. They also are effective in forestalling infections from surgery and in preventing recurrences of infection and disease as in the case of rheumatic fever.

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PUBLIC HEALTH

Snails Prove Greater Radioactivity in Air

► **"A REMARKABLE increase"** in the concentration of radiocarbon in the atmosphere has occurred in recent years.

This increase, Dr. H. de Vries of Natuurkundig Laboratorium, Groningen, Netherlands, reports, can be due only to the production of carbon-14 by atomic bombs.

Measurements of the radioactive carbon in the shells and flesh of snails, mussels and fresh water mollusks, and in an alga give proof of this rapid increase, the biologist reports in *Science* (Aug. 1). Examination of the flesh of land snails, *Helix pomatia*, showed the radiocarbon concentration increased by 4.3% between November, 1953, and June, 1957.

The experiments also point to differences in radiocarbon in the animals' shells and flesh: shell activity increased only about one

percent. Another difference, that between the carbon-14 concentration of the air and the ocean, is "of considerable interest," Dr. de Vries reports.

Environment and species apparently influence variations in radiocarbon content in plants, shells, and snails.

"The new data cannot be fitted into the picture, however," the Dutch scientist concludes, "before an international carbon-14 standard is available. Such a standard will permit the expression of all activities relative to the same standard."

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ICHTHYOLOGY

Tuna Caught Off Alaska, First Time So Far North

► **A LARGE** fish caught in the Gulf of Alaska has been positively identified as tuna by biologists of the U. S. Fish and Wildlife Service.

It was the first time tuna, which prefers warmer tropical waters, has been caught this far north.

Howard Balzo, assistant regional director of fisheries management for USFWS, said the tuna was presumed to be a bonito, and will be sent to Juneau for further study and identification.

The 15-pound fish was caught in Wide Bay off the Alaska Peninsula.

Fish and Wildlife Service biologists are particularly interested in reports on the travels and habits of the tuna because little is known about the life cycle of this important food fish.

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STOMACH CAMERA — A nurse holds the three-fourths of an inch gastro-camera that fits inside a stainless steel shell that is two and one-fourth inches long. The device, described as the first of its kind to fit inside the stomach, was invented by Norman Gosselin, formerly of Boston University.