

FOOD TECHNOLOGY

Soybean Protein Whipped

Extracted after oil has been removed, these proteins make excellent whipping compounds. Other reports from the Institute of Food Technology are given.

►THE SOYBEAN, versatile gift of Orient to Occident, has found yet another job in its adopted home in the West. Soybean proteins, extracted after the oil has been taken out, make superior whipping compounds, Dr. Ralph M. Bohn, Minneapolis food chemist, stated before the meeting of the Institute of Food Technologists in Boston. Whipping compounds include such things as meringues, marshmallows, nougats, and other kinds of "sweetened air" that play highly important roles in the pastry and confectionery trades. The new soybean products will capture more air quicker and hold it longer than either egg white or gelatin, the speaker pointed out.

Storing Dried Egg White

Dried egg white, used by tons in making baked goods, tends to deteriorate in storage because it contains a certain amount of sugar, John C. Ayres and George F. Stewart of Iowa State College told the meeting. This undesirable sugar can be eliminated by fermentation with ordinary yeast, which is added along with a small quantity of yeast extract. By careful control of the fermentation process, the substance called mucin, essential for good results with egg white, can be retained.

Research on Packaging

Packaged food products can be kept from spoiling longer by treating the wrapping material, or even the paper-pulp out of which it is made, with fungicides, antibiotics and antioxidants, according to the requirements of the particular product, Dr. Louis C. Barail of the U. S. Testing Company, Hoboken, N. J., stated. He regards as ideal a group of new synthetic wrapping plastics known collectively as Vyncote, because they are "inert, non-toxic, tasteless, non-inflammable, and capable of being treated with germicides, fungicides and insecticides."

Fish Byproduct Uses

Non-edible byproducts of fish have a wide range of industrial and other uses, Dr. H. L. A. Tarr of the Fisheries Research Board of Canada told the meeting. Uses in such things as fertilizer and chicken-feed are so well known as to be commonplace; less familiar, perhaps, is their usefulness to makers of linoleum and plastics, as well as in leather preparation. Vitamins from fish livers are an old story, but the pharmaceutical industry is also drawing on fish for insulin, the protamin used with insulin, and the anti-pernicious anemia factor.

Science News Letter, June 14, 1947

MEDICINE

Adrenal Glands Found To Produce Fat Hormone

►DISCOVERY of a new fat hormone produced by the adrenal glands was announced at the meeting in Atlantic City by Drs. Frank A. Hartman, Katherine A. Brownell and Jonathan S. Thatcher of Ohio State University.

The adrenal glands, located just above the kidneys, are most familiar to the layman through another of their hor-

mones, adrenalin or epinephrine, sometimes dramatically used as a stimulant to dying patients and also commonly used to relieve acute asthma attacks.

Besides adrenalin, these small glands produce at least one other vital hormone, a chemical generally referred to as cortin. Lack of this hormone results in Addison's disease in which the patient's skin is a gray-bronze color and which was always fatal until the discovery of cortin.

The new fat hormone from these same glands is responsible for moving fat from the reserves of the liver during starvation, the Ohio State scientists found. When given to laboratory animals from which the adrenal glands had been removed, it caused fat to be deposited in their livers even when they were starving.

Science News Letter, June 14, 1947

AERONAUTICS

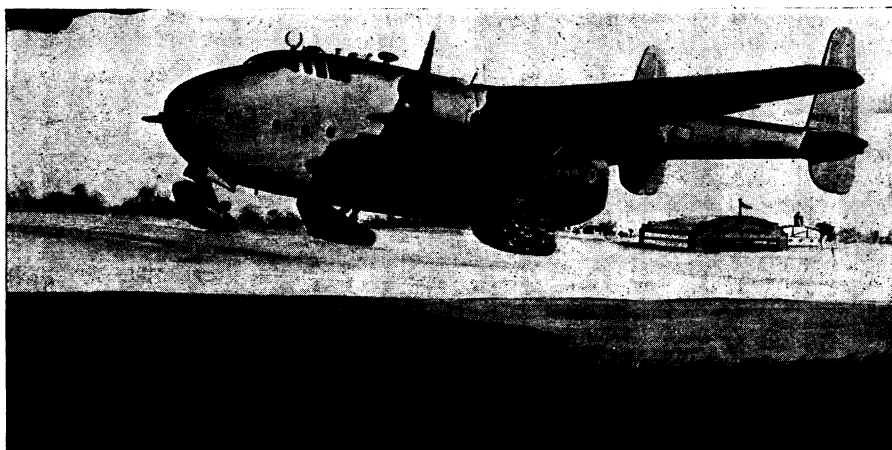
Inflated "Doughnuts" Make Landing on Water Possible

See Front Cover

►HELICOPTERS can now land on water or marshy ground by means of newly developed landing gears attached to each of the three landing wheels. Tests made by the U. S. Coast Guard at Elizabeth City, N. C., showed these gears that are really rubber lifeboats to be satisfactory. They look somewhat awkward when blown up but do not interfere with normal landing on ground.

If a helicopter engine should fail over water the flotation gear would make possible a landing instead of a crash.

Science News Letter, June 14, 1947



TRACK LANDING GEAR—This landing gear, similar to the tractor tread used on tractors and tanks, is being built for the Fairchild C-82 Packet.