

MEDICINE

War Stops Research Giving Lead on Cancer

GERMAN bombs have stopped a promising lead in cancer investigations and thus delayed possible development of means of saving cancer-threatened lives in Germany as well as elsewhere.

This effect of the war appears in a report from Dr. I. Hieger, of The Royal Cancer Hospital (Free), London, England, to *Science*. (March 14). Dr. Hieger, stopped by war conditions from breeding the mice needed for his experiments, has turned to this American publication to report his results to date, probably with the hope that other cancer researchers in peaceful countries will continue the work.

He has been trying to extract cancer-causing substances from "precancerous" tissues of mice. Other scientists have reported extracting such material from human breast cancer and from the liver of a patient dead of cancer of the stomach. Among the small number of mice with which Dr. Hieger was starting the work, one developed cancer at the place where he had injected fatty material extracted from precancerous breast tissue of other mice.

Science News Letter, March 29, 1941

AERONAUTICS

New Riveting Method For Use on Airplanes

ANEW method of riveting, especially valuable for airplanes in putting together the metal sheets that form its outer shell, is one of the 770 inventions protected recently with patents from the U. S. Patent Office. This method gives a perfectly smooth outer surface, without the projecting domed rivet heads used in earlier methods. It possesses great strength and makes an airtight seal, important where the cabin pressure of a plane at high altitude is kept at its sea level value.

Invented by Vladimir H. Pavlecka, of Santa Monica, California, and granted patent 2,233,820, rights on the idea are assigned to the Douglas Aircraft Co. Though especially designed for aircraft construction, Mr. Pavlecka states that his invention will be of use in other industries as well.

At the high speeds reached by modern planes, even the slight projections made by old style rivets cause a noticeable

drag and loss of speed. In this invention, the rivet is hammered into a hole in the sheets to be joined. In back of the rivet is a cup, with a hole into which the shank of the rivet passes. The conical head of the rivet bends down the metal around the hole in the sheets until it is flush with their surface. Then, while the hammer is still in place, a piston-like rod in the hole of the rear support is driven up, and this mashes down the shank of the rivet over the inside of the metal sheets. Thus, on the inside of the plane, there are small bumps, but these do not affect the speed.

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ZOOLOGY

Two Albatrosses Brought Back From Galapagos

TWO MALE albatrosses, believed to be the only living specimens of their kind in captivity, are the special prizes of the Mandel Expedition of the Field Museum of Natural History, just returned from a three-months' expedition to the Galapagos islands. They will be turned over to Chicago's Brookfield Zoo, along with other birds and reptiles collected by the expedition.

The expedition has also brought back about 2,000 skins and preserved specimens representing the bird, reptile and fish faunas of the 15 islands visited during the cruise. These will be deposited at the Field Museum.

The bird collection, comprising 425 skins, will be used in preparing a museum exhibit illustrating the theory of evolution. It was during a scientific voyage that took him to the Galapagos islands a little more than a century ago that Charles Darwin conceived the famous theory connected with his name.

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INVENTION

Nickel Gadget Lifts Paraffin From Jelly

APURE nickel handle and tab will be useful to housewives putting up jellies. It is laid on the top of the jelly, paraffin is poured around it. A tab projecting upward passes through a slit in the cap, also of nickel, and is bent down to hold it in place as a lock. When opened, the tab is a handle for lifting the paraffin. Unaffected by the preserves or the bending, it may be used over and over again. (*H & H Co., Mountain Lakes, N. J.*)

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GEOLOGY

U. S. Scientists Study American Ore Deposits

SCIENTISTS of the U. S. Bureau of Mines are carefully examining American deposits of tungsten, nickel, mercury and other strategic metals with an eye to their use if overseas sources should be suddenly cut off. Exploratory operations on some of these deposits have already been completed. Six new ones will be started up as soon as weather permits. Sayers, director of the Bureau,

believes the existence of these ore bodies has not been known, but many of them are of low-grade to be economic under present conditions. A serious emergency would justify the higher cost of working them.

Tin remains the outstanding problem, for there is practically no tin in all North America. If we lose access to overseas sources, it will be necessary to rely on accumulated stocks and find substitutes.

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AGRICULTURE

Cotton Grown in Italy As During U. S. Civil War

COTTON is being grown in Italy, states *Die Umschau* (March 19). Last year's crop was only a little under 125,000 acres, but it is planned gradually to increase this to double that figure. Even so, the amount of cotton grown can satisfy only a small part of Italy's normal needs; yet greater acreage could be devoted to cotton at the expense of the area now planted in wheat.

Italy's present cotton-raising program repeats the country's experience during the American Civil War, when the American Civil War, when the supply of American cotton was cut off by the Federal blockade of Southern ports. In 1864, which was peak production, Italy had well over 200,000 acres of cotton. In subsequent years, Italian cotton production declined, to only a little more than 8,000 acres in 1930.

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