

## AERONAUTICS

## New Glider Operates With Revolving Blades

► A STRANGE air "bird" has been revealed. It is a craft without wings or engine. It is a type of glider that is eased down to the earth by the rotating action of horizontal revolving blades.

This experimental model is a simple affair, merely a framework of pipes arranged like a pyramid with three landing wheels under it and an open seat within for the pilot. The autogyro blades are mounted at the top, and are controlled by levers within easy grasp of the pilot. A vertical tail extends to the rear. It weighs only 120 pounds but can carry a load of 300 pounds.

This revolutionary glider was developed at the General Electric Flight Test Center. It is called the G.E. Gyro-Glider. In use, it is towed aloft by a plane and released from various altitudes like a standard glider. It descends with less speed than a parachute. This is due to the rotation of the nine-foot blades caused to revolve by the air pressure as it descends. It can land on a small spot, and land so gently that its cargo is uninjured.

In tests the Gyro-Glider was put in the air by being towed behind a jeep. It rose 100 feet. Its commercial application will be to reach isolated areas without adequate landing fields.

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## NUTRITION

## Sauerkraut Is Excellent Vitamin C Source

► FERMENTATION that takes place in the making of sauerkraut has little if any effect on the product's excellent vitamin C content, reports Dr. C. S. Pederson of the New York Agricultural Experiment Station at Geneva.

Some loss of the vitamin occurs during storage of kraut, according to his findings, but in an examination of 226 cans of kraut the majority showed a vitamin C content that topped the average for tomato juice.

His experiments also show that kraut may be "fortified" with vitamin C by adding crystalline ascorbic acid in the preheating tank or by adding uniform-sized tablets of ascorbic acid to the containers before filling.

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One problem in the atomic bomb project was to make pure *fluorine*.



**POWERLESS CRAFT**—This Gyroglider, without wings or engine, developed by General Electric, is being towed by a jeep.

## MEDICINE

## Plague Is Still a Menace

Modern medicine and living conditions have reduced death from plague, and urban communities need fear little from it.

► PLAGUE, while virtually conquered by modern communities, still looms on the medical horizon as a grim threat in any major disaster to civilization.

This is indicated by Dr. Karl F. Meyer, noted University of California bacteriologist, who says that while the mortal Black Death of the middle ages appears to be as virulent and more widespread than at any time in history, its harvest of death has been cut to a negligible point by modern civilization.

Obstacles placed in the path of plague, outside certain parts of Asia, include good housing, sanitation, quarantine, and supervision of the infectious sick. More recently new weapons of modern medicine have been added, including the sulfa drugs and streptomycin, with the promise that epidemics may be halted almost before they start.

Dr. Meyer says that laboratory experiments at the University of California and elsewhere and reports from India on the use of sulfadiazine indicate that the rate of fatality among persons who have contracted the disease can be cut to a small percentage. The laboratory research also indicates that the dosing of healthy persons exposed to plague reduces the possibility of their contracting the disease to a small percentage. Preliminary studies with streptomycin

indicate this anti-biotic may be even more effective an agent against plague.

Dr. Meyer says that the disappearance of plague from Western Europe after the London epidemic of 1666 with its 70,000 deaths is still a mystery, but it gave science an opportunity to grow up and mobilize weapons against it.

The disease appeared in epidemic form again in 1894, at Hongkong, and quickly spread all over the world, concentrating in particular areas. When it appeared in China the plague bacillus was quickly isolated and identified and serums were developed against it. Perhaps even more important, its mode of transmission was determined; it is carried by rats in cities and by squirrels and mice in field and forest, and the bacillus is spread among these and to man by flea bites.

Dr. Meyer warns that vigilance must not be relaxed against plague, in spite of the potent defenses against it. Rodent control and flea eradication, the latter with the aid of DDT, must continue.

Urban communities need fear little from plague today, but a constant source of potential outbreaks in rural areas lies in wild rodents. Reservoirs of plague from this source exist in 14 states west of the Mississippi.

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