

plasma and medical supplies, canned foods, fishing tackle, blankets, air mattresses, rain-repellent parkas and pants, underwear, fatigue hats, stockings, radio equipment, signalling and navigational devices, as well as cigarettes, and chewing gum.

The new rescue boat, popularly called "The Flying Dutchman," was developed by the Army Air Forces Materiel

Command last fall to provide navigable craft for floating survivors of ship sinkings or ditched planes, when rough seas prohibit seaplanes from landing, or when there are too many survivors to be picked up by aircraft; and for survivors stranded on isolated islands which are not accessible because of coral reefs and jungle.

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MEDICINE

## Sulfa for Gas Gangrene

**Sulfabenzamine has been found to be effective against germs prolific in the soil of France. May soon be prepared in tablet form.**

► A NEW SULFA drug effective against the kind of germs that cause gas gangrene in wounds has been developed and given extensive study, Dr. Theodore G. Klumpp, president of the Winthrop Chemical Company of New York, announces.

The new drug is sulfabenzamine. Winthrop calls it Sulfamylon. It is superior, Dr. Klumpp says, to other sulfa drugs in infections with anaerobic bacteria. These germs grow without air,

include the group that causes gas gangrene, and are especially prolific in the soil of France.

Two German preparations containing Sulfamylon, captured by the British in North Africa, spurred the interest of the Winthrop scientists in developing a better sulfa drug for anaerobic infections. The captured drugs were called Marfanil and Marfanil Prontalbin. They were in powder form for dusting on wounds.

Preparation of Sulfamylon in tablet

form to be taken by mouth, which may be more effective than its use as a powder dusted on wounds, may be expected soon, Dr. Klumpp believes.

A test for determining the concentration of the new drug in the blood of patients, necessary for determining proper dosages, has been developed. In this connection Dr. Klumpp states that laboratory experiments are already under way under the direction of the National Research Council and that tests on patients will follow.

Besides its effectiveness against anaerobic bacteria, sulfabenzamine, or Sulfamylon, has two other advantages over other sulfa drugs: Its antibacterial activity is not affected by pus or other wound discharges and is not neutralized by para aminobenzoic acid.

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PHYSIOLOGY

## Male Brain Becomes Female Through Chemical Change

► MALE brains can be changed to female and female brains to male ones by injections of appropriate sex hormones, Dr. Arthur Weil, of Northwestern University, reported at the meeting of the Association for the Study of Internal Secretions.

The brain sex reversal is a change in chemical constitution of the brain, specifically in its phospholipid content. Injection of a female sex hormone into a young male rat changes its brain chemical composition to the female type. Male sex hormone injection into the female accomplishes the reverse change.

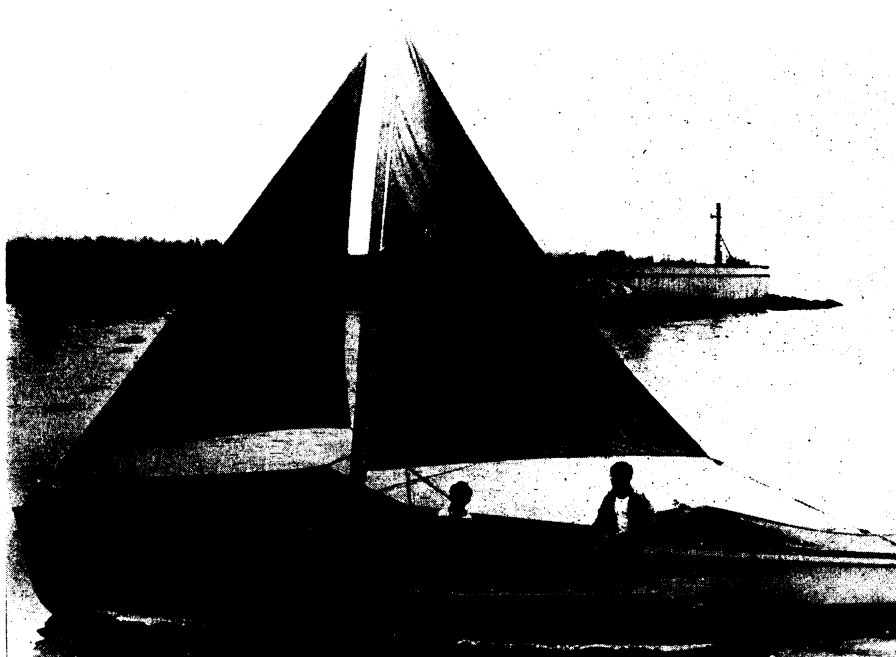
Removal of the sex glands changes the chemical constitution of the male and female brain to a more neutral intermediate level, Dr. Weil reported.

Hormones from other glands also affect the chemical composition of the brain. When the adrenal glands, which produce the familiar adrenalin as well as another powerful hormone, are removed, both male and female brains increase considerably in size. The amount of different lipid fractions increases proportionately, but without qualitative changes.

Removal of the pituitary gland in the head affects the male brain slightly more than the female brain, and leads to a slight increase in the amount of phospholipids and their phosphorus content.

Previous study has shown that the phospholipid content of the brain is not changed qualitatively by either excess or deficiency of thyroid gland hormone.

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**RESCUE**—The lifeboat, shown in this official U. S. Air Forces photograph, was dropped from a plane. Although it is a powerboat, sail can be used to conserve gasoline.