

MEDICINE

New Type Blood Bank

Lives of mothers and babies will be saved by a new kind of blood donor's club. Members will all have Rh negative blood.

► MOTHERS and babies threatened with death because of a difference between the mothers' and fathers' blood will be saved through a new kind of blood donor's club being formed through the Paterson, N. J., Board of Health and the Passaic County Medical Society.

Creation of this unusual, if not first and only such club is reported by Dr. Frederick P. Lee, Miss Anna I. van Saun and Miss Evelyn L. Brown, of the Paterson Board of Health. (*Journal, American Medical Association*, May 5.) Miss van Saun is director of the Board of Health's laboratories.

Members of the club will all have Rh negative blood. Their names and addresses will be on file at the county medical society. Then when an Rh negative mother gives birth to a baby whose father is Rh positive, the doctor will know where to find blood to save the baby and perhaps the mother, too, without having to send out a call over the radio and through the newspapers.

The baby of an Rh positive father has Rh positive blood, but, before his birth, this sets up antibodies in the blood of his Rh negative mother which cause trouble, sometimes fatal, for both. The antibodies destroy the Rh positive blood in the baby's body. Doctors try to save the baby by replacing this with repeated transfusions of Rh negative blood which will not be destroyed by the antibodies. The mother may also be sick and need a blood transfusion after the baby's birth. She also must receive Rh negative blood.

The Paterson health department got into this unusual field at the request of the medical society. One of the largest hospitals in the city could not take on the job of making Rh tests for its blood bank. So the health department started doing it on all blood sent to it for premarital Wassermann tests and for Wassermann tests on expectant mothers. Lack of testing serum forced the health department to abandon the test on the

premarital blood specimens, but it is being done on the blood of expectant mothers. About 15% of these have been found Rh negative.

When the test shows the expectant mother's blood is Rh negative, the obstetrician is asked to request a sample of the husband's blood for testing. All but two husbands have cooperated. Of 98 tested, 80 were Rh positive and 14 Rh negative.

"Prospects for an Rh negative woman to secure an Rh negative husband are not very brilliant, it would seem," the scientists comment.

Science News Letter, May 12, 1945

ENGINEERING

Aluminum Lifeboats Improve Ship's Stability

► A NEW aluminum lifeboat that weighs less than a wood boat and only half the weight of a steel boat of the same capacity has been approved by the U. S. Coast Guard for use on American merchant ships. It is resistant to action of such corrosive agents as salt spray and because of its lightness reduces the weight installed on the upper decks, thereby improving the stability of the ship.

Lighter-weight davits may be employed to handle the aluminum boat than those required for a steel or wood boat of the same capacity, since when loaded with the same sea rescue equipment, it weighs less than two and one-half tons. Most standard lifeboats weigh more. The equipment carried includes oars, seats for a large number of men, an axe, provisions for sustaining survivors until they are rescued, and may have an in-board motor.

Experimental lifeboats were built of aluminum over ten years ago. In 1938, one steamship company installed them on one of its craft, with good results.

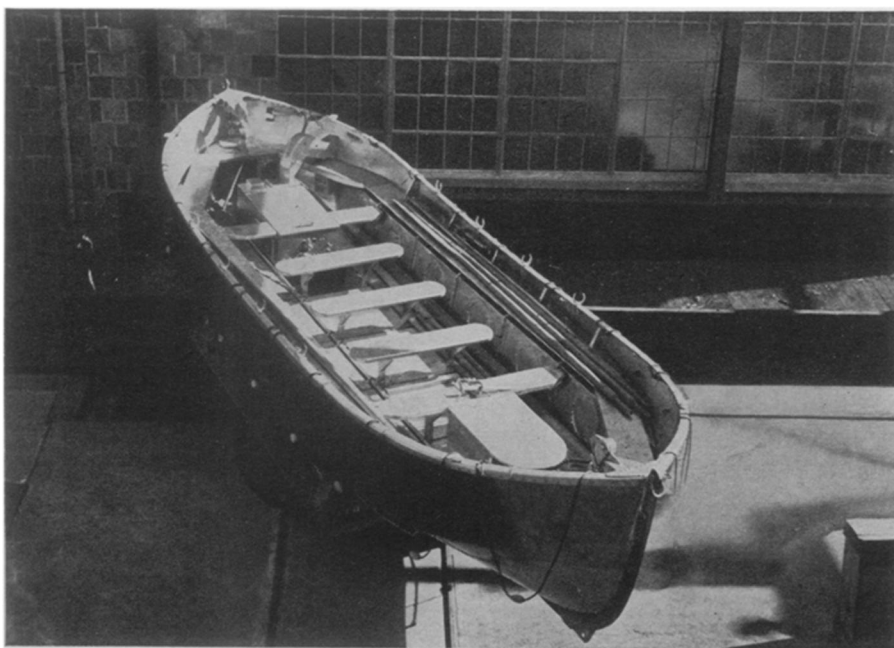
Science News Letter, May 12, 1945

PHYSICS

High Vacuum Research Fellowship Established

► A GRADUATE fellowship in high vacuum research has just been established at the Massachusetts Institute of Technology with funds donated by the National Research Corporation of Boston. An initial grant of \$2,500 has been made. It is expected that the award will foster interest in new processes performed under high vacuum in the fields of chemistry, physics, metallurgy, and chemical and mechanical engineering.

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