

from Borneo to off the Alaskan coast.

By sending radio waves and allowing them to be reflected by the ionized layers of the earth's upper atmosphere, it is possible to determine the effect that the moon's shadow and the solar eclipse have on the ionized layers at heights of 70 to 130 miles. This is of importance practically to radio broadcasting and communication.

K. A. Norton of the U. S. Bureau of Standards, who was one of the group of physicists who observed the radio effects of the 1932 eclipse of the sun, has urged the importance of similar observations at the coming eclipse.

So far as known, no preparations for special radio observations have been made by Americans. It is believed that the Japanese are planning radio observations.

*Science News Letter, January 27, 1934*

## Front Cover Picture

**B**EAUTY is, indeed, the most important if not the only reason for the choice of this week's front cover picture. A glass insulator, of the kind that electrically isolates high tension so that they may carry their power uninterruptedly, is shown flashing over after withstanding a potential of 125,000 volts. A routine laboratory operation at the University of Wisconsin has been glorified by the photographer.

The photograph does not show the insulator in the position in which it is used on power lines. To make the picture fit the frame of the cover it has been turned clockwise through a right angle. Ordinarily the tube conductor shown on the right of the picture would be across the top.

*Science News Letter, January 27, 1934*

## OCEANOGRAPHY

# Expedition Will Study Sargasso Weed and Flying Fish

**F**ANTASTIC tales about the secrets of the Sargasso Sea had better be published in the very near future or forever be relegated to the trunk in the attic, for the secrets of this region are going to be subjected to the matter-of-fact scrutiny of an expedition of scientists, whose boat, it is expected, will not be enmeshed in the sea-weed and "never return to tell the tale."

Last Saturday the research ship *Atlantis*, sailed from Woods Hole, Mass., bearing an expedition sponsored by Yale University and Woods Hole Oceanographic Institution which will go to the Central American Seas and there make investigations not only of Sargasso sea weed and animals, but also of the flying fishes of those waters. Under the leadership of Prof. Albert E. Parr, Curator of the Bingham Oceanographic Collection of Yale University and Research Associate of Woods Hole Oceanographic Institution, the expedition will also complete the investigations of two previous cruises by hydrographic observations in the sectors between Jamaica and Central America, and between the Caiman Islands and the southern coast of Cuba.

Yale scientists explained that there are few biological phenomena in the sea of a similar magnitude which have been subject to such entirely contradictory views among scientists as have the floating Sargasso weeds. Some hold

that the floating weeds lead a life of their own, essentially independent of any contribution of weeds torn away from the bottom, growing and multiplying by breaking apart as they grow; while others maintain that the floating weeds are only to be regarded as short-lived fragments recently torn loose from the bottom.

One of the chief difficulties, and also one of the most interesting points in the biology of the weeds, it was pointed out, is that the floating weeds never form fruit-leaves and multiply by reproduction, but increase only by growth and subdivision. Since the characters of the fruit-leaves, however, are the main characters for the identification of the weeds, it has been impossible to prove or to disprove the identity of the floating weeds with any weed found growing on the bottom and the problem of the origin of the floating weeds naturally hinges upon this question. During the cruise preliminary attempts will be made to apply to the floating Sargasso-weeds a method recently developed by marine botanists for inducing the formation of fruit-leaves and causing reproduction of marine algae under experimental conditions. If the treatment proves effective, it will offer a possibility of settling the question as to their origin.

By continuous towing of a surface collector, the expedition will also attempt to obtain approximate figures for the actual amount of floating weed present in the areas visited. Heretofore the records of distribution of the floating weed have been based chiefly upon such observations as the frequency with which large rafts have been noticed from passing ships, which does not give information as to the actual quantities present in terms of weights or measurements.

C. M. Breder, of the New York Aquarium, will also participate in the cruise, as a Research Associate of the Bingham Oceanographic Laboratory. He will study the habits, development and relationships of the flying fishes about which surprisingly little is known despite the wide attention they always attract among travelers.

*Science News Letter, January 27, 1934*

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