

isms that are called "filterable viruses." A curious fact was recently discovered. Rabbits that have recovered from an attack of fibroma can not be made to catch the deadly myxoma, just as cowpox vaccinates against smallpox.

But when Dr. Berry and his assistants tried the experiment of killing with heat some myxoma virus, mixing it with active fibroma virus and injecting it into rabbits, the animals fell ill and died of myxoma, not fibroma. The harmless disease had been converted into the deadly one, despite the fact, as control

experiments showed, that the dead myxoma virus alone had no effect. Not once but thirty times was the experiment performed and scientists at the Rockefeller Institute for Medical Research have repeated and confirmed the discovery.

With one virus disease that can be made to evolve into another one, scientists may be expected to turn their attention to other virus diseases, some of which like infantile paralysis and encephalitis are human killers.

*Science News Letter, July 25, 1936*

## METEOROLOGY

**"Robot" Weather Apparatus On Balloons Proves Worth**

**R**OBOT" weather instruments, carried high aloft on small unmanned balloons, proved their worth during the Seventh Annual National Soaring Contest. Each one automatically reported by radio the altitude of the balloon, relative humidity and temperature every minute throughout its flight into the upper atmosphere.

The information secured in this way has been added to the periodic meteorological data collected for the use of soaring pilots in their annual assault upon world and national records in motorless flight. The radiometeorograph ascensions have been conducted by representatives of the Blue Hill Observatory, Harvard University, Milton, Mass., under the direction of Dr. K. O. Lange, who has pioneered in the development of this new type of medium for collecting meteorological data.

**Great Altitudes Reached**

The first ascension during the soaring contest was made from Harris Hill on June 27. The twin balloons needed to carry the tiny apparatus rose to an altitude of 68,000 feet and signals were heard for 64 minutes from the take-off time, 4:10 in the afternoon. During the second ascension, made on the following day, the balloons carrying the instruments reached an altitude of about 80,000 feet and the signals were heard for 1 hour, 58 minutes.

The balloons reached an altitude of about 100,000 feet on June 29, the signals being heard from 12:14 p.m. to 2:57 p.m.

A specially interesting ascension was made on June 29. The balloons were released after dark in the evening and were followed to 13,200 feet. At that point the signals began to record a descent. They were followed to a point where the temperature was lower than at the take-off site, indicating that the apparatus had landed. The failure of the balloons to go higher in this flight probably was due to the bursting of one of the balloons.

Beginning in 1932, the soaring contests conducted by the Soaring Society of America have had the advantage of the most advanced meteorological service available. The soaring pilots were among the first in this country to be taught to use the air mass system of weather forecasting and interpretation.

*Science News Letter, July 25, 1936*

## FISHERIES

**Oysters Shuck Easily After Vinegar Anesthetizes Them**

**T**IGHT-MOUTHED oysters can now be made to open up automatically by a novel method of putting them under "ether," which is described in a patent (No. 2,041,727) granted to H. F. Prytherch and Vera Koehring, U. S. Bureau of Fisheries workers, of Beaufort, N. C.

Before being put under the anesthetic, the oysters are given a "shock" treatment. This may be a good shaking up, an electrical shock, dropping them on a hard floor, or spinning them around in a centrifuge. Stupefied by such rough handling, the stunned oysters are then put into the "anesthetizing" solution which may be nothing more than water containing a small amount of acetic acid, well-known ingredient present in ordinary vinegar. Real ether, chloroform, alcohol, and salts of many kinds, may be also used for the purpose, however. Ten minutes to a half-hour in such a bath is sufficient to cause the oyster to open up automatically.

**No Prying**

There is no breaking, puncturing or prying open of the shell with knives as in the usual method of shucking

oysters. The inventors solve the problem by making the oyster relax the powerful muscles which keep the shells closed and make it so hard to shuck oysters in the usual way. Shock and bathing in the anesthetizing bath are the muscle relaxers.

When the muscles relax, the shell opens. It is held open by the hinge cushion, which, like a spring wedge, exerts considerable pressure on the shells, forcing them apart.

While open, the meat can be removed from the oyster. Or where the oysters are used in pearl culture, "seeds" can be planted in them and the oysters replaced in the sea water.

*Science News Letter, July 25, 1936*

## SEISMOLOGY

**Quake Center Located Near Walla Walla**

**S**CIENCE placed a finger on the center of disturbance of the Washington-Oregon earthquake shortly after it happened. It was in a spot some ten or fifteen miles northwest of Walla Walla, Wash., in latitude (approximately) 46.2 degrees north, longitude 118.2 degrees west. This location was worked out by scientists of the U. S. Coast and Geodetic Survey.

Stations wiring data to Science Service were: St. Louis University, Fordham University, University of California, University of Montana, Pasadena Observatory, the Coast Survey observatory at Sitka, and the Dominion Meteorological Observatory, Victoria, B.C.

*Science News Letter, July 25, 1936*

**● RADIO**

July 28, 2:15 p.m., E.S.T.

**GROWING UP**—Dr. Paul H. Furfey, Psychologist of the Catholic University of America.

August 4, 2:15 p.m., E.S.T.

**WORLD POWER CONFERENCE**—Dr. Morris L. Cooke, Chairman, Executive Committee, World Power Conference.

In the Science Service series of radio discussions led by Watson Davis, Director, over the Columbia Broadcasting System.