

A Science Service Feature

Released on receipt
but intended for use
May 19, 1926

? WHY THE WEATHER ?

Mailed May 12, 1926

By Dr. Charles F. Brooks
of Clark University

A RAIN OF METEOROLOGICALS

Have you seen a balloon and a meteorograph floating down on a bright silk parachute? About 100 are being sent up this month from Royal Center, Indiana, Dayton, Ohio, and Toronto. If you find one and send it back you will thereby have contributed an essential link in one line of evidence as to the state of the atmosphere up to a height of 10 or 20 miles.

The U. S. Weather Bureau and Signal Corps and the Canadian Meteorological service are releasing these balloons with their attached instruments. One large balloon, partially inflated with hydrogen to a diameter of about four feet, or two smaller balloons in tandem are employed to lift the recording apparatus called the meteorograph. The word means a combination instrument for recording several meteorological elements at once.

While the balloon or balloons carry the instrument aloft three records are made as a clock turns a drum on which three pens from the pressure, temperature and humidity elements are scratching a smoked film. At the same time, if the weather is clear, observers with two theodolites some distance apart are watching the position of the balloon, not only in order to determine the altitude each minute, but also to find the direction and velocity of the wind.

At a great height the expansion of the hydrogen bursts a balloon, and the descent begins, the simple parachute or the other balloon hindering the fall to such an extent that it may take over an hour to reach the earth again. A wicker basket prevents damage to the instrument on landing.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE,
21st and B Sts.,
Washington, D.C.