

The fact that many persons inhale the same plant pollens without ill effect seems to show that in themselves they are not harmful and that the symptoms they sometimes cause result from a mistake by the tissue guardians of the body.

The mistake, Dr. Kahn suggests, is

the result of modern living conditions. Enclosed homes and large group contacts in the office, factory, classroom and theater may lead to over-stimulation, particularly of the defensive forces in the nose and throat, by constant bombardment with disease germs.

Science News Letter, July 14, 1934

METEOROLOGY

Nation-Wide Flights To Secure Weather Information

CLIMBING to altitudes of over three miles, Army, Navy, and commercial pilots for the U. S. Weather Bureau will now carry instruments aloft with them each day from twenty different airports, on vertical hops to record conditions in the higher air and give weather experts increased data on which to base their forecasts.

For the past two or three years commercial pilots have been making daily jaunts above the clouds to take observations for the weather man, but up until the beginning of July, mass analyses for the upper air have not been conducted on a large scale.

Each observation pilot has attached to the wing of his plane a meteorograph, an instrument which automatically records humidity, temperature, and pressure. These are the three R's in the science of predicting the waves, eddies, and cross currents of that turbulent sea, the atmosphere. In addition, the pilot notes the altitudes of the top and bottom of cloud banks, the positions and altitudes of rainstorms which pelt down into dry strata of air and never reach the ground, and local disturbances such as thunderstorms or dust clouds. Pilot balloons sent up from the ground and watched through precise telescopic instruments furnish a method of finding accurately the direction and speed of different layers of air as the small gas-filled spheres rise through them.

The use of airplanes furnishes a striking contrast to the methods of thirty years ago; the principle, however, is the same. In the days when flying was still a matter of conjecture as to its possibility, large box kites were used. These were about eight feet long and rose to altitudes of 10,000 to 18,000 feet, carrying instruments with them. They were primitive from the viewpoint of scientific precision, and dangerous

when they broke loose and trailed their piano-wire kite strings along the ground.

Of the many services, regional and national, which the U. S. Weather Bureau accomplishes, Dr. C. C. Clark, Acting Chief, considers that the use of extensive airplane observations at high altitudes will be most important to commercial and military air travel. Pilots will know more definitely what lies ahead when they hop off; they will know whether they can climb to a desired altitude without encountering a snow squall or head wind, or whether danger lies before them.

Science News Letter, July 14, 1934

POLITICAL SCIENCE

Wilson Called Best Recent President; Roosevelt Fourth

THE FOURTH best of the ten most recent presidents of the United States—that is where students of political history at Stanford University rate President Franklin D. Roosevelt.

The students' ratings, just announced by Leonard W. Ferguson of the psychology department of Stanford University, list the presidents in order of effectiveness as follows:

Woodrow Wilson, Theodore Roosevelt, Grover Cleveland, Franklin D. Roosevelt, Herbert Hoover, William McKinley, Calvin Coolidge, Benjamin Harrison, William Howard Taft, and Warren G. Harding.

President Wilson was rated three times as efficient as Harding.

The students' verdict, given at the end of a quarter term of United States history study, shows a slight change from their opinions of the same presidents before study of their administrations. At the beginning, they rated the presidents in this order: Theodore Roosevelt, Wilson, Cleveland, F. D. Roosevelt, Hoover, Coolidge, McKinley, Taft, Harrison, Harding.

Science News Letter, July 14, 1934



RESEARCH IN THE SKY

Meteorographs, like the one strapped to the wing of this airplane will now be carried aloft daily by twenty pilots throughout the country to give the U. S. Weather Bureau increased data for weather forecasts. This instrument, which records temperature, pressure and humidity, is lashed to the plane with garter-like straps which are elastic and prevent vibration.