

MEDICINE

Hayfever Has Increased

Estimates point to over 4,000,000 victims of the disease at present. "Shots" of the pollen are the best means for controlling the hayfever.

► HAYFEVER sufferers have more company in their misery now than they did some years ago. The a-choo ailment is "definitely a disease of civilization" and during recent years there has been an increase in cases of hayfever and other allergies, specialists agree.

A conservative estimate by authorities places the number of pollen hayfever victims in the United States now at three per cent of the entire population, or considerably over 4,000,000 persons, says Dr. Fred Wittich, secretary of the American College of Allergists.

The hayfever victim's best hope for effective control of his disease lies in proper methods of immunization, or desensitization as it is sometimes called. This consists in regular "shots" of gradually increasing doses of the pollens that cause his trouble. Specialists say these should be given months before the hayfever season starts, so that the patient gets well immunized or desensitized by the time he is exposed to quantities of the pollens in the air. But for those who do not get started early, "shots" during the hayfever season offer some help.

Results of immunization give greater relief, Dr. Wittich says, when the new hayfever drugs, antihistamines and epinephrin-like substances, are used during the hayfever season. These newer drugs do not keep the pollens from entering the nose, however, so if the patient is not receiving protection through immunization, the "shock" organ may change from the nose to lower in the breathing tract and cause asthma.

The most beneficial results are obtained

when these new drugs are used in conjunction with immunization measures for preventing reactions from the immunizations. Used in this way, the drugs permit increasing the maximum dose of pollen extract above that which the patient can stand when pollen extracts are given alone.

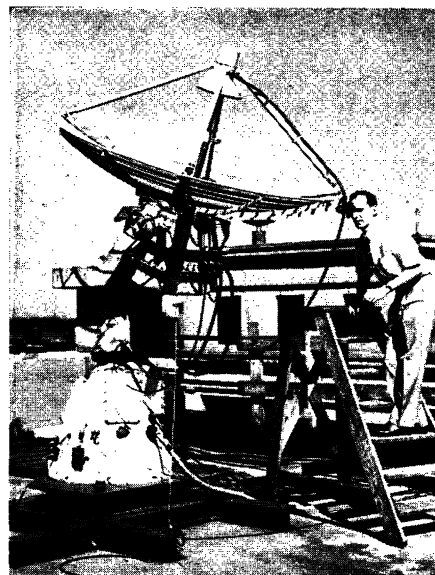
The drugs must be suited to the individual case, however. As Dr. Harry Bernton, allergy specialist of Washington, puts it, "It's anyone's guess what any one drug will do for any one patient."

Reasons given by authorities for the increase in number of hayfever victims in recent years are: 1. More people and more physicians are becoming allergy conscious. 2. Plant vegetation has increased, particularly in the case of weeds such as ragweed which thrive on land turned over in road building and other projects. (This in spite of attempts by many communities to wipe out weeds, because eradication of any plant species is considered almost impossible.) 3. More people are moving about, migrating to the suburbs, or travelling about the country. 4. The tensions of our way of life probably play a part in the increase in allergies in general.

This last is an important factor, in Dr. Bernton's opinion. He thinks it is why he is seeing hayfever and asthma in young children with no family history of allergy, which is usually a familial or hereditary condition.

Dr. Bernton is considering a study of allergies in displaced persons in Europe, to see whether there is a relation between allergic diseases and emotional and nervous tensions.

Science News Letter, September 3, 1949



ANALYZING CLOUDS—A weather balloon, which will radio data 120 times per minute to the ground equipment, is being automatically tracked by this antenna. The airborne equipment will reveal the thickness, height, and density of clouds.

their readings are safe because they have been made a permanent record by the ground receivers in operation during the balloon's flight.

Science News Letter, September 3, 1949

MEDICINE

Jaundice Acquired on Job Is Granted Compensation

► COMPENSATION has been granted for the first time for the contraction of jaundice which developed from the prick of a needle used in withdrawing an infected donor's blood. This has opened the way to a new compensable occupational hazard, four New York doctors declared.

Compensation was awarded a woman blood bank worker who got jaundice by accidentally pricking her hand and fingers with the needles used in withdrawing blood from donors. Drs. Sidney Leibowitz, Louis Greenwald, Ira Cohen, and Joseph Litwins of Beth Israel Hospital reported in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION (Aug. 27).

The danger of transmitting the virus causing jaundice via the blood of donor to patient has previously been recognized, they pointed out. But infection in nurses, doctors and technicians performing this operation has been rare.

This case is important in two respects. It serves as a warning to medical personnel of the danger of accidental self-inoculation and is the first known case to get compensation for contracting the disease.

Science News Letter, September 3, 1949

METEOROLOGY

Device Gets Cloud Data

► THE height of the base of a cloud above the earth has long been measurable, but a new instrument revealed by General Electric gives the height of the cloud at its summit as well as at its base, and it also indicates the density of the cloud.

The instrument, called a cloud analyzer, is designed to be carried aloft by a weather balloon which climbs into the upper atmosphere at a speed of about 1,200 feet per minute. It carries its own tiny radio transmitter, and sends data to the ground receiver at a rate of 120 times a minute. The balloon carries other instruments to provide data on temperature, air pressure and humidity.

The heart of the new instrument is a piece of string, saturated with a salt solution, through which an electric current is passed. Resistance readings indicate the liquid water content of the cloud. In passing through a cloud, the string picks up moisture and becomes a better conductor of electricity. A low resistance indicates water or rain. An increase in resistance indicates a decrease in the amount of liquid water in the air.

The balloon used climbs to about 75,000 feet, where it bursts because of the greatly decreased atmospheric pressure. The instruments in it are lowered safely to the ground by tiny parachutes. Even if lost,