

METEOROLOGY

Temperature Records

► MANY HIGH temperature records have already been broken in this year's heat wave, but undoubtedly several others will fall when July readings taken by some 5,000 unpaid volunteers in about every county in the nation are received at the Weather Bureau, James McQuigg of the U. S. Weather Bureau has predicted.

One record likely to stand, however, is that of the highest temperature ever recorded in the United States, a sizzling 134 degrees Fahrenheit at Greenland Ranch in Death Valley on July 10, 1913.

Six months ago, on Jan. 20, the thermometer plunged to a new official low at Rogers Pass, Mont., when it hit 70 degrees below zero. The previous low record had been 66 below, reached at Riverside Ranger Station in West Yellowstone National Park on Feb. 9, 1933.

The world's record high temperature was taken on Sept. 13, 1922, in northwestern Libya, where the thermometer soared to 136.4 degrees. The reading recognized as the world's lowest was made in Siberia in 1892 when the thermometer hit 90 degrees below zero.

Representative of the high temperature records broken in the oven-like temperatures hitting the Midwest are:

Norfolk, Neb., on July 11, when the thermometer officially read 113 degrees, four degrees higher than the previous top of 109 in July, 1947.

Rapid City, S. D., on July 12, with 109 degrees, capping 108 in July, 1952.

Columbia, Mo., on July 12, with 113 degrees, replacing 111 in July, 1934.

Casper, Wyo., on July 12, with 104 degrees topping the previous even 100 record of July, 1940.

St. Louis, Mo., on July 14, with 115 degrees, five higher than 110 in July, 1934.

Springfield, Ill., on July 14, with 112 degrees, two more than the 110 in July, 1936.

Springfield, Mo., with 108 degrees, topping the 106 recorded in July, 1936.

These broken records were taken from Weather Bureau teletype information. When the 5,000 volunteers who, without pay, keep daily records of the weather in their part of the country mail in their data, the Weather Bureau expects to find that thermometers this summer soared to new heights at other places.

Science News Letter, July 31, 1954

SURGERY

Sharp Sterile Scalpels Packaged in Aluminum

► SURGEONS MAY now have their scalpels both sharp and sterile, thanks to a new aluminum foil package developed by Drs. Clinton Van Zandt Hawn and Carl W. Walter of Peter Bent Brigham Hospital and Harvard Medical School, Boston.

Techniques used by hospitals for disinfection or sterilization of scalpels are often unreliable bacteriologically and destroy the keenness of the cutting edge.

Drs. Hawn and Walter hermetically seal each scalpel in a foil package that can be opened by pulling away two tabs that expose the blade to instant use. The sealed packet is sterilized by exposure to dry heat.

Not only can the scalpel packages be opened as needed by nurses in the operating room, but they can be used in doctors' offices, in the field for military use and carried in the physician's bag.

Drs. Hawn and Walter report this new development in *Surgery, Gynecology and Obstetrics* (July).

Science News Letter, July 31, 1954

• RADIO

Saturday, August 7, 1954, 3:15-3:30 p.m. EDT "Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Carroll W. Lufcy, chief of the magnetics division, U. S. Naval Ordnance Laboratory, White Oak, Md., will discuss "Magnetism at Work."

MEDICINE

Hayfever Index for 604 American Places

► FOR HAYFEVER due to ragweed pollen, American communities have an index that shows what chance there is for sufferers in that particular locality.

Alaska, where the index is 0, contrasts with Coldwater, Mich., where the index is a top 190.

Any index over 10 means the place is not recommended to those susceptible to ragweed pollen. The index figure for 604 communities is listed by the American Foundation for Allergic Diseases, as compiled by Oren C. Durham. The figure is based on length of season, maximum aerial concentration of pollen, and total pollen catch on test slides throughout the season.

There are an estimated 4,000,000 hayfever sufferers in the nation. Grasses, trees and molds can cause hayfever, but most of those who are sensitive are affected by ragweed pollen, which is the basis of the index figures published.

Science News Letter, July 31, 1954

MEDICINE

Normal Heart Not Hurt By Strenuous Exercise

► DO NOT worry about exercise and energetic work damaging your heart, if it is normal. The *Journal of the American Medical Association* (July 17) declares editorially:

1. Exercise even when strenuous will not damage a normal heart.

2. Infections are more important as a cause of cardiac disease than exercise.

3. Athletes with a heavy body build have a lower life expectancy than those with a lighter build, regardless of the type or extent of their participation in sports.

4. The term "athletic heart" should be dropped from medical writing because it is used with a wide variety of meanings to describe a condition that probably does not exist.

5. Because strenuous exercise may injure a heart that is already weakened, there should be closer medical supervision of young athletes.

Exertion is often blamed when death occurs during or shortly after exercise, the editorial observes. Investigation of such cases frequently reveals that the physical effort involved was slight or that an unsuspected organic lesion of long duration was the cause of death.

Science News Letter, July 31, 1954



DUMPING FUEL FOR SAFETY—A Grumman F9F Cougar jet fighter releases the fuel from its wing tip tanks for safety reasons, a precaution taken just before landing to minimize danger of fire. Sparks from a dragging wing or similar mishap could send the expensive Navy fighter up in flames.