

dom, but sometimes shifting rapidly to cirrus streamers with delicate wave patterns.

Alto cumulus, fleecy, nearly stationary formations with lens-shaped clouds, piled layer upon layer at middle altitudes.

Billowing alto cumulus clouds which often extend from horizon to horizon, with parallel waves running at right angles to the direction of air flow.

Other tell-tale signs of the proximity of the major axis of the stream, Dr. Schaefer said, include gustiness at ground level in about half the cases observed; persistent cool, crisp air; generally blue skies, with visibility unlimited; precipitation often limited to sporadic sprinkles of rain or snow, and rapid changes in cloud cover, from one-tenth of the sky to nine-tenths and back again in less than an hour.

Quick identification of jet streams would be helpful both to pilots and to weather forecasters. The speedy wind currents, often 100 miles wide, circle the world in a meandering fashion, although the flow is generally from west-to-east. Their existence has been known only a few years.

Science News Letter, February 7, 1953

#### METEOROLOGY

## Hurricane "Eye" Curves

► A HURRICANE'S EYE—the calm center around which winds whirl—goes up to the top of the storm, curves around and then comes down to earth again some 200 to 300 miles away, the American Meteorological Society meeting in New York was told.

On its way down to earth, however, this second column of calm air can no longer be properly called an eye. It is, in the language of the hurricane watchers, a "hyperbolic point." Tracking of the hyperbolic point, Dr. Leon Sherman of Florida State University said, may permit forecasting more accurately the path a raging hurricane will take.

The hyperbolic point almost always keeps its position in relation to the eye of the hurricane and the direction in which the hurricane is moving, Dr. Sherman said. Thus if it begins to swing around the eye, this fact is a good indication that the hurricane is going to change its path.

Hurricane forecasters many times have a difficult job determining whether an Atlantic storm is going to come in over the coast to do its damage, or whether it will swing to a northeasterly path to spend itself harmlessly over the ocean. The movement of the hyperbolic point, Dr. Sherman declared, can help in determining in which way the hurricane will go.

The hyperbolic point, Dr. Sherman said, is removed from the terrific winds around the eye of the hurricane and thus is much easier to observe. Winds around its dead calm center are usually no more than 15 or 20 miles an hour, presenting little danger to the Navy and Air Force pilots of the planes used to trace hurricanes.

#### SURGERY

## Aid Ankle Sprain Recovery

► A CHEMICAL extracted from the tissues of a bull is being used to speed recovery from painful ankle sprains, Dr. W. R. MacAusland, Jr., of the U. S. Air Force Hospital, Maxwell Air Force Base, Ala., reported at the meeting of the American Academy of Orthopaedic Surgeons in Chicago.

The chemical is an enzyme named hyaluronidase. Within two hours after it is injected into the injured ankle, swelling is reduced and pain relieved. The patient can walk, bearing his full weight, shortly after the drug is injected.

Patients with hemophilia, the hereditary bleeders' disease, are also being helped by this chemical, Dr. MacAusland reported. In this condition the joints often "balloon up" and become painful because of bleeding around the joint. The bleeding may be started by a slight blow or bump even when there is no break in the skin.

The hyaluronidase is injected, with a local anesthetic, into the joint after the blood has been removed with a needle. The joint is bandaged and the patient kept in bed for 24 hours during which time the pain disappears and movement of the joint is greatly improved. After 48 hours he is able to walk without pain.

Prevention of subsequent crippling arthritis is the chief advantage of this new treatment, in Dr. MacAusland's opinion.

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#### GENERAL SCIENCE

## Heart Specialist Gets First of New Awards

► FIRST TO receive a newly established health award was Dr. Paul Dudley White, world famous heart specialist of Boston, Mass.

The award, consisting of \$1,000, a scroll and a gold statuette of the Winged Victory of Samothrace, has been established by the Albert and Mary Lasker Foundation and the American Heart Association "for distinguished achievement in the field of cardiovascular (heart and blood vessel) diseases—the leading cause of disability and death in the United States."

Dr. White's award was formally presented to him at the 1953 Heart Fund Dinner of the Massachusetts Heart Association in Boston, Feb. 2, by Dr. Irving S. Wright, president of the American Heart Association.

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