

## ORNITHOLOGY

**First Whooping Cranes Arrive in Texas Refuge**

➤ **WHOOPING CRANES**, some of America's rarest birds, have landed safely in their winter home after a 2,500 mile journey through Canada and the United States.

The safe arrival this week of 33 birds—seven young and 26 adults—has raised hopes that the nearly extinct birds are making a come-back.

The birds are a little bit late this year, according to officials of the Wildlife Research Service, Department of Interior in Washington, D. C. They usually arrive the second or third week of October, although they once arrived as late as Nov. 11.

More of the large white birds with black-tipped wings are on their way to the Aransas National Wildlife Refuge on the Gulf Coast of Texas from their summer quarters in Great Slave Lake, Canada. Special protection is urged for this rare bird on its long flights each spring and fall.

• Science News Letter, 84:312 Nov. 16, 1963

## PSYCHIATRY

**President Honors Retardation Study**

➤ **SCIENTIFIC WORK** on mental retardation, a problem in 30 of every 1,000 children, was honored by President Kennedy in Washington, D. C., when he presented an award of merit to Dr. Richard L. Masland, director of the National Institute of Neurological Diseases and Blindness, Bethesda, Md.

The award was given by the National Association for Retarded Children, which at its national convention, also presented an annual sustaining grant of \$25,000 to Dr. Harry H. Gordon of the Albert Einstein College of Medicine, New York.

Now scientific director of the Albert Einstein Center for Research, Dr. Gordon told **SCIENCE SERVICE** that he expects to use the additional \$25,000 as a "fluid research fund" so that young researchers will not have to wait to start projects needing to be done at once.

"I look on the grant as a kind of seeding fund that can be set aside for getting projects started and covered until regular funds can be made available," he said. "With Government, every dollar must be accounted for, and there are sometimes necessary delays.

"My personal interest in research has been in the premature infant," he said, explaining that there are many phases to such a study—including the child's neurology, enzyme chemistry and genetics. A center should not only be many sided, but "interdisciplinary" so that necessary information will be exchanged on babies, families and backgrounds.

The decision to keep mentally retarded children in the home with normal children, he said, is always a personal decision.

More sociological study is needed to learn reactions of various racial and geographic groups toward retardation, Dr. Gordon said.

Other illnesses, such as heart defects, are accepted by some families sooner than they can adjust to mental retardation.

One family who has adjusted to a mentally retarded child is the Eau Claire, Wis., family of Wendy Sue Wagner, the 1963 poster child for the National Association for Retarded Children. With three older sisters and a younger brother, Wendy is never called a mongoloid, although she was born with Down's Syndrome, meaning mongolism.

In a class for trainable youngsters, Wendy, like many other retarded children, is taught speech, music, dancing, singing, social studies, arts and crafts, numbers, rhythms, games and household tasks. She goes to school and returns home at noon on the school bus, has a bicycle and is very athletic.

• Science News Letter, 84:312 Nov. 16, 1963

## GENERAL SCIENCE

**Thomas Paine Statue Planned for London**

➤ **A STATUE HONORING** Thomas Paine, American Revolution patriot and author of the classic book, "The Rights of Man," will be erected in London as a result of public subscription by Americans.

The Thomas Paine Foundation, which has been responsible for the erection of similar statues in Paris and Morristown, N. J., as well as the New York Hall of Fame, is soliciting funds for the British statue which will be erected June 8 of next year.

Joseph Lewis, secretary of the Thomas Paine Foundation, New York, declared in a fund announcement that nearly all the welfare laws of modern civilized governments such as old age pensions, social security and public education, stem from the principles which were first expressed by Thomas Paine.

The purpose of the Thomas Paine Foundation is to keep alive the progressive, social and political principles of Thomas Paine.

• Science News Letter, 84:312 Nov. 16, 1963

## PUBLIC HEALTH

**Faster Method Devised For Polluted Water Test**

➤ **A NEW TESTING METHOD** now permits scientists to measure the pollution of water in four to six hours.

Standard procedure for determining water pollution takes about five days, report Drs. Lee L. Hiser, senior research engineer at the Southwest Research Institute, and Arthur W. Busch of Rice University, Houston.

With the rapid development of the chemical industry in recent years, modern science needs a quick, accurate method for measuring the content of waste waters, the engineers told the 36th annual Water Pollution Control Federation in Seattle.

By using a special test called the Total Biological Oxygen Demand Test, scientists can measure how much soluble organic material disappears when it comes in contact with active microbes.

• Science News Letter, 84:312 Nov. 16, 1963

**IN SCIEN**

## ASTRONOMY

**4,000-Year Stonehenge Mystery Believed Solved**

➤ **STONEHENGE**, the mysterious ancient monument of rough-hewn stone blocks near Salisbury, England, may have been a calendar for predicting seasons and signaling danger periods of the eclipses of the sun or moon, a prominent astronomer believes.

Dr. Gerald S. Hawkins of the Smithsonian Astrophysical Observatory, Cambridge, Mass., bases this interpretation on one minute of calculations on an International Business Machines 7090 computer.

There were definite correlations, he found, between the directions defined by the lines that join the various stones and holes of the monument and the direction of the rising and setting of the sun and moon at midsummer and midwinter, at the time of 1500 B.C. when Stonehenge was probably completed.

The unexpected astronomical order to the Stonehenge layout is reported in *Nature*.

• Science News Letter, 84:312 Nov. 16, 1963

## EDUCATION

**Lipreading Course Planned for TV**

➤ **THE SILENT**, yet eloquent, language of lipreaders will be taught in a television series which will be available to stations early next year.

The lessons primarily are directed at the one out of every 10 persons who has a hearing problem, but they will prove useful also to many persons with normal hearing.

Production of the 30 shows is sponsored by a Public Health Service grant to the Greater Washington Educational Television Association and American University in Washington, D. C.

"It's not how loud you talk, but a question of understanding," Mrs. Rose Broberg, instructor of the shows, said. Lipreading will help a person who is hard of hearing far more than shouting at him, she said.

The television series will teach these essentials by showing how basic sounds look on lips, and how lips look when forming words, sentences and stories. It will also present situations and build up to understanding them by giving clues about what is being said.

Mrs. Broberg, who is hard of hearing herself, said that in teaching a sentence like "Is it going to rain tomorrow?" she will first mouth the words silently, then say them aloud and then show a caption.

By the end of the 30 programs, she said, a man and wife should be able to lipread well enough to converse.

FBI agents find that lipreading helps with crime detection, Mrs. Broberg pointed out.

• Science News Letter, 84:312 Nov. 16, 1963

# CE FIELDS

## ASTRONOMY

### New Minor Planet Named Armisticia

► **THREE NEW** minor planets or asteroids have been officially named by their discoverers, the Cincinnati Observatory reported. One of them commemorates the signing of the Armistice ending World War I.

Following an international custom, the right to name a planet is given to the astronomer who first spots these celestial fragments. Armisticia, previously known as 1939 VO, was discovered by Dr. G. Van Biesbroeck at Yerkes Observatory, Williams Bay, Wis., on Nov. 11, 1939. At that time Hitler was menacing the rest of Europe and the universal hope was for a continuation of world peace.

Two other minor planets or asteroids discovered in the 1940's are now officially named Danjon and Patry. Both were discovered by Dr. L. Boyer of the Algerian Observatory, Algiers, and both are named for French astronomers.

Danjon, formerly known as 1949 WA, is named in honor of Prof. Andre Danjon, director of the Paris Observatory and former president of the International Astronomical Union. The asteroid was spotted on Nov. 23, 1949.

The minor planet 1942 KA is now called Patry in honor of A. Patry at the Nice Observatory. He is especially distinguished for his research in establishing identities of minor planets from observations in widely separated years. Dr. Boyer spotted this minor planet on May 18, 1942.

Minor planets are believed to be remnants of an exploded planet that once traveled in an orbit between Mars and Jupiter. Stellar in appearance, they have no light of their own, shining only in reflected sunlight.

• Science News Letter, 84:313 Nov. 16, 1963

## TECHNOLOGY

### Handle Gas With Care To Avoid Explosions

► **THE HALLOWEEN** night explosions in Indianapolis, Ind., and Marietta, Ga., are tragic reminders that the tremendous energies locked in man-made and natural gases must be released only with extreme care.

A broken valve in a tank of "packaged" butane is suspected of triggering the blast that killed at least 67 persons and injured more than 300 at the Indiana State Fairgrounds Coliseum.

The explosion that killed seven and injured scores in the Georgia drugstore has been blamed on a leak from a heater fed with piped-in natural gas.

If only five percent of air is composed of a flammable gas, such as butane, propane or methane, it will blow up when sparked.

That is what happens—on a highly controlled and small-scale—in an automobile

motor. But when the gaseous mixture fills a chamber the size of a room, its explosive force can rip easily through 18 inches of concrete and hurl bodies across streets.

Most states forbid the installation of propane and butane tanks indoors or close to buildings with basements. Those gases are heavier than air and, should they leak out, they seek low levels where they collect in lethal layers.

Most states also require people running hot dog stands to keep their bottled gas tanks a good distance away from the stoves and ranges the gas heats.

If overfilled, carbon dioxide bottles, used to make soft drinks, also can be highly dangerous. They can build up enough pressure inside to go off like a bomb. At first, some thought this to be the cause of the Indianapolis blast.

Methane, which is piped to most cities and towns, is lighter than air and tends to thin out when released. But if it should be caught in a pocket, such as a badly ventilated basement, it can explode with the same violence as butane.

Gas companies are therefore constantly checking for leaks in their vast network of pipes.

Additional safety is sought through Government regulations on materials and workmanship used on mains, service lines, pipes and meters.

• Science News Letter, 84:313 Nov. 16, 1963

## MEDICINE

### Help Seen for Allergy of Ragweed-Sensitive Dogs

► **A COLONY** of allergic dogs in Chicago is contributing to experiments that could help them more than humans.

Basic studies reported in *Science*, 142:589, 1963, have implications for future relief of weeping canines.

The allergies of humans to ragweed and other substances, although not completely understood, can be helped by remedies such as antihistamines. Not so, scientists say, with dogs.

Dr. Roy Patterson of Northwestern University Medical School told *SCIENCE SERVICE* by telephone that he and his collaborators have been working with veterinarians in the hope that useful results may be obtained from their basic work.

What the Northwestern investigators have reported in their preliminary work is that the serum of allergic dogs can sensitize normal dogs. Skin reactions or severe systemic reactions can be produced in these normal dogs by ragweed extract. Then canine antiserum produced by the immunization of the normal dogs was found to inhibit the reactions.

Dr. Patterson said much more work will be necessary, not only to perfect the treatment of allergy in dogs, but to understand what happens in the treatment of humans.

"The reason we are studying dogs," he said, "is that their allergic reactions are similar to those of humans."

Dr. Patterson's coworkers in the investigation were Drs. James I. Tennenbaum and Jacob J. Pruzansky.

• Science News Letter, 84:313 Nov. 16, 1963

## PSYCHIATRY

### Most Sleep-Walkers Emotionally Unstable

► **DID YOU EVER SEE** a dream walking? Well, be careful if you did, for the person walking in his sleep may have deep-rooted inner conflicts.

A study of 14 sleepwalkers at the Naval Aviation Medical Center in Pensacola, Fla., showed that a third of the somnambulists were definite schizophrenics and another third had marked schizoid tendencies.

The other men had neurotic disorders that were increasingly difficult to repress, report Navy Lt. Cmdr. John A. Sours, Lt. Paul Frumkin, and Ens. Richard R. Indermill in the *Archives of General Psychiatry*, 9:400, 1963.

The families of the sleepwalkers showed a consistent home pattern, the study revealed. The father is usually an alcoholic, an excitable man who fluctuates between violence and passive low spirits. The mother is a protective, soothing and domineering female.

From these parents springs the child who grows to an adult with conflicts, fears and anxieties that can manifest themselves in walking around in his sleep.

Sleepwalking has been studied among young children, but few studies have been made of somnambulist adults. This report shows that the adult or late adolescent sleepwalker is confused over his masculinity and his relationship to aggressive and sexual activity, the doctors said. They examined the 14 men, who were 17 to 27 years old, had an average I.Q., and were in the Marine Corps and Navy. Only three of them were married. Two had "unrealistically long" engagements.

Sleepwalking rarely occurs in an overt homosexual, their study showed.

Strangely enough, women rarely sleepwalk, according to Navy Wave personnel statistics.

• Science News Letter, 84:313 Nov. 16, 1963

## IMMUNOLOGY

### Immunity to Smallpox Down in the U.S.

► **SMALLPOX** is on the increase overseas at the same time the level of immunity in the United States appears to be going down.

An American Medical Association official warned in Washington that the U.S. has not had a confirmed case since 1949, but smallpox has appeared again in Sweden and other countries long free of the disease.

In most parts of the world the smallpox average is up 13%. Children should be vaccinated before they enter school or sooner, and adults likely to be exposed to travelers from overseas should renew their vaccination at least every five years.

Dr. Raymond L. White, director of Environmental Medicine and Medical Services for the AMA, cautioned that one infected person could touch off 100 cases before it is even known that smallpox is in the country.

• Science News Letter, 84:313 Nov. 16, 1963