of a young elephant were those of a lynx, snow leopard, or wolf magnified by melting of the snow at their edges.

Some people, while not accepting the "snowman" footprints as those of a giant bipedal primate, have nevertheless regarded them as primate in origin and have attributed them to the langur or black-faced Himalayan monkey. Pranavananda, however, rejects this interpretation, since the langur is seldom or never seen above the tree line and, hence, does not wander on the snow. Moreover, he says, langurs in the upper Himalayas move down to lower, warmer regions well in advance of the snowfall.

Another probable factor in the creation of the "abominable snowman" legend is a linguistic one. The author notes that different persons have translated differently—and sometimes grossly mistranslated—the original local Tibetan words designating the animal that has been identified as the "abominable snowman." In this connection, it is to be noted that most of the current "snowman" stories come from India rather than from Tibet itself. It appears likely that mistranslation of local Tibetan words by foreigners has been responsible for some misconception.

The fact that the matter has not been thoroughly investigated on the Tibetan side of the Himalayas—where the local population has a correct knowledge of the identity of the animal—has helped perpetuate the wrong conception of the animal, according to Pranavananda's view. *Mi-te,* which has been translated by some Himalayan expeditionists as "abominable, filthy, disgusting to a repulsive degree, dirty," actually means "man-bear." *Kangmi,* or "snowman," is merely an alternate word for the same animal. Hence the term *miteh-kangmi,* from whence "abominable snowman," represents an incorrect combination, owing to mistranslation, of two terms that are essentially synonymous.

Thus the "abominable snowman" would seem, on the basis of the best evidence now available, to be no other than the Himalayan red bear. The matter, of course, cannot be conclusively settled until a specimen of undoubted "snowman" is secured for study.

WILLIAM L. STRAUS, JR.
Johns Hopkins University,
Baltimore, Maryland

New Fossil Plants

Roland W. Brown of the U.S. Geological Survey has described several previously unknown species of fossil plants that he found among specimens recently acquired by the U.S. National Museum. In a report on "Paleobotany—new items in Cretaceous and Tertiary floras of the western United States" that appeared in a recent issue of the *Journal of the Washington Academy of Science,* Brown states that while some of these new additions to the museum come from localities and formations already known, others are from strata not yet named. Therefore, they will contribute toward the dating of the strata as well as to a clearer concept of the species the plants represent. Rather than postpone their description to an uncertain time when monographs can be published, it was decided to present the essential facts immediately.

The newly described species include two ferns, two legumes, and others. Of special interest is a small leaflet that has been identified as "the first unequivocal fossil foliage of *Ailanthus.*" Hitherto, Brown points out, the assignment of leaflets to the same species as well-recognized seeds from identical localities, has left much to be desired. None of the leaflets so assigned has clearly shown the characteristic basal, glandular teeth.

In the museum's newly described specimen, however, all the features are comparable with those seen in modern, living *Ailanthus,* especially the glandular tooth. This means that the *Ailanthus* has known ancestors as far back as the mid-Eocene period of geologic history, with evidence now based on leaf structure as well as on fruit. Brown named his find *Ailanthus eureka.*

Great Bahama Bank

The first members of a team of nine research workers and their assistants left New York recently to continue work on a geologic and ecologic survey in the West Indies that may throw new light on the relationships between present-day communities of living organisms and those that existed thousands of years ago. The expedition, which is led by Norman D. Newell, curator of historical geology at the American Museum of Natural History, will make use of such techniques of investigation as skin diving and underwater and aerial photography in an attempt to bring back evidence of the history of life to be found in the waters of the Great Bahama Bank.

The Bank is a limestone platform of some tens of thousands of square miles, almost entirely covered by shallow seas, that is southeast of Florida. Portions of the platform rim projecting above the water constitute several of the Bahama islands. This region is of special interest to geologists because it is one of the few examples of a shallow limestone sea such as those that long ago covered North America.

The expedition is the second in a 3-year project. The study includes comparisons of living plants and animals with their fossil counterparts, which are found in abundance petrified in the rocks of Bimini. This comparison will be a test of the limitations of fossil sea animals in general as indicators of past environmental conditions.

The expedition will remain in the field for 6 weeks. Base of operations will be the Lerner Marine Laboratory. The American Museum's field station on North Bimini Island.

Peat as a Binder

Edgar L. Piret, professor of chemical engineering at the University of Minnesota, has reported that a research team working under the sponsorship of the state's Iron Range Resources and Rehabilitation Commission has found that ground peat reinforced with an alkali solution is an excellent binder for the balling or pelletizing of powdered taconite concentrate. As it is mined, taconite contains only about 25 percent iron. Since this iron content is too low for direct feed of the rock to the blast furnaces, the ore must be concentrated. This is accomplished by grinding taconite into tiny particles and then separating the magnetic iron from the mother rock in magnetic separators.

The resulting purified ore contains about 62 percent iron but is much too fine for the blast furnace. To obtain a suitably loose packing that will allow the furnace blast to pass through the ore during the smelting operation, it is necessary to form the powdered ore into ½- to ¾-inch pellets in a balling drum. The pellets then are baked or sintered in a furnace to strengthen them so that they will withstand handling, shipping, and feeding into the blast furnace.

Scientists in the News

JOHN A. BEHNKE, associate administrative secretary of the AAAS, will resign on 30 June to accept a position as vice president and science editor of the Ronald Press Company, New York.

WALTER H. ZINN, director of Argonne National Laboratory, has been presented with a special commendation by the U.S. Atomic Energy Commission. The presentation was made at a luncheon given in honor of the recipient by the University of Chicago. The citation read:

"In recognition of his achievements as scientist and administrator in the U.S. Atomic Energy Commission program beginning with essential contributions to the production of the world's first self sustaining chain reaction on December 2, 1942 and continuing during 10 years of

service with distinction as Director of Argonne National Laboratory.

"Dr. Zinn has been responsible for advances of the first order of importance in the development and application of nuclear science, particularly in the achievement of practical atomic power where his work ranks as a foremost contribution to the harnessing of nuclear force in the peaceful service of mankind."

CHARLES R. BURROWS, director of Cornell University's School of Electrical Engineering, will join the Ford Instrument Company, a division of the Sperry Rand Corporation, on 1 July. He will become vice president for engineering.

GOTTHOLD STEINER, plant nematologist for the U.S. Department of Agriculture for 34 years, and head of USDA work on nematodes for the past 24 years, retired on 30 Apr. ALBERT L. TAYLOR of the horticultural crops research branch of the Agricultural Research Service succeeds Steiner as head of the branch's nematology section at Beltsville, Md.

Steiner was born in Switzerland and received his scientific training at the University of Berne and the University of Zurich. Before entering the Department of Agriculture he held a research fellowship at Yale University. Recently he left for Puerto Rico, where he will carry on nematode research at the Puerto Rico Experiment Station in Rio Piedras.

HAROLD S. RENNE, until recently technical editor in the electronics group at Ziff-Davis Publishing Company, has resigned that position to join Bell Telephone Laboratories, New York, as technical information supervisor.

W. A. PULVER, chief manufacturing engineer of the California Division of the Lockheed Aircraft Corporation, has been named assistant chief engineer of the company's Georgia Division at Marietta.

W. HERBERT BIXBY, professor of electrical engineering at Wayne University, recently was honored at a special luncheon given in recognition of his 20 years of service. He will leave the university on 1 July to become vice president and director of applied research for the Power Equipment Company, Columbus, Ohio. He is a specialist in voltage regulation and holds a number of patents in the field.

MARGARET A. KENNARD, former director of mental health research at the University of British Columbia, Vancouver, Canada, has assumed a similar position at the Mental Health Research Institute, Fort Steilacoom, Wash.

KENNETH E. CASTER, professor of geology at the University of Cincinnati, is the first recipient of India's new Gondwanaland gold medal. To be awarded every 3 years, the medal is for the scientist making the most significant contribution to the geology of Gondwanaland, the geological name for the areas now embracing South America, Africa, Madagascar, India, Australia, and Antarctica.

During the past 15 years Caster has carried out field studies in South America, Africa, and Tasmania, and he will be in Australia from June until his return to Cincinnati for the 1956–57 academic year. He has just completed a visiting professorship at the University of Tasmania in Hobart.

The medal, which commemorates the centenary of the Indian Geological Survey, is administered by the Mining, Geological, and Metallurgical Institute of India. RAM KUMAR AGARWALA of Grestien Mica Industries, Ltd., provided an endowment to support the award.

DOROTHY W. WEEKS, professor of physics at Wilson College (Chambersburg, Pa.) has left the faculty after 26 years of service to accept a position as a physicist with the Ordnance Materials Research Office at the Watertown Arsenal, Watertown, Mass.

MELVIN CALVIN, professor of chemistry at the University of California, Berkeley, and director of the bio-organic division of the Radiation Laboratory, has received the Theodore William Richards medal of the American Chemical Society's Northeastern Section. He was honored primarily for his years of research on photosynthesis.

Reporting on the latest results of his work, the medalist stated that with coworkers he had succeeded in doubling, and even tripling, the production rate of sucrose in plants by the use of chemical agents that could influence certain biochemical reactions. This, he said, is an indication that the growing processes of living plants can be manipulated "so as to determine the nature, or at least the amounts, of storage products in the plant."

RENÉ-GUY BUSNEL, director of the new Laboratoire de Physiologie Acoustique of the Institut National de la Récherche Agronomique de France, which is in Jouy-en-Josas, is in the United States on a tour during which he will lecture at colleges and universities throughout the country and at the Wright-Patterson Air Base and the Mayo Clinic. While here, Busnel also plans to conduct research with Hubert Frings of the department of zoology and entomology at Pennsylvania State University.

VICTOR K. LaMER, professor of chemistry at Columbia University, has been elected to membership in the Royal Danish Academy of Sciences and Letters.

LEE A. DuBRIDGE, president of the California Institute of Technology, has been elected a member of the board of trustees of the Rockefeller Foundation.

HUGH H. HUSSEY, professor of preventive medicine and public health at Georgetown University, has been named director of the department of medicine. He succeeds HAROLD JEGHERS, who has resigned to join the department of medicine in the newly established medical school at Seton Hall University.

ROBERT E. DAVIES has been appointed professor of biochemistry in the School of Medicine at the University of Pennsylvania. Prior to his recent arrival at the university, he was for 10 years a member of the British Medical Research Council. For the past 2 years he has worked with a unit at Oxford University, England. His special studies have dealt with muscle contraction and with the production of acids in the stomach.

ROGER H. CHARLIER, who since September 1955 has been a special lecturer in geology and physical geography at Hofstra College, has been named chairman of the department of geology at Hofstra, effective 1 Sept.

REAVIS C. SPROULL, industrial chemist who resigned recently as director of the Herty Foundation Laboratory, has been named director of technical services for the research department of Philip Morris, Inc.

MICHAEL J. S. DEWAR, professor of chemistry at Queen Mary College, University of London, England, has been named visiting professor of chemistry at Yale University, effective 1 July.

FRITS W. WENT, professor of plant physiology at the California Institute of Technology and director of the Earhart Plant Research Laboratory, has been elected a corresponding member of the French Academy of Sciences. There are only 116 corresponding members throughout the world. Went was honored for his work on plant hormones and the influence of environment on plant growth.

E. JAMES ARCHER, assistant professor of psychology at the University of Wisconsin, has received one of the two $1000 Kiekhofer teaching awards that the university gives annually to young staff members who have shown outstanding teaching performance.

WOLFGANG FINKELNBURG, physicist at Siemens-Schuckertwerke AG., Erlangen, Bavaria, Germany, will participate in the High Temperature Symposium that is to be held at the University of California, Berkeley, 25–27 June. The symposium, which has as its theme "High temperature—a tool for the future," is being sponsored jointly by the university and the Stanford Research Institute. The U.S. Army Office of Ordnance Research is sponsoring Finkelnburg's trip.

JOSEPH B. PLATT, chairman of the physics department at the University of Rochester, has been named president of Harvey Mudd College, Claremont, Calif. He will assume direction of the new college of science and engineering on 1 Sept. Incorporated last December, Harvey Mudd College will enroll its first class in September 1957.

Recent Deaths

WARD C. BOWEN, Elmsmere, N.Y.; 64; geologist; director of visual education for the New York State Education Department; 22 May.

WILHELM B. BRONANDER, SR., Montclair, N.J.; 68; mechanical engineer; president of Scandia Manufacturing Company; 18 May.

ROBERT W. BUZZARD, Washington, D.C.; 52; project leader in the metallurgy division of the National Bureau of Standards; 3 May.

WILLIAM FOSHAG, Westmoreland Hills, Md.; 62; head curator of the department of geology at the Smithsonian Institution; specialist in gems; 21 May.

FRED GREGG, Washington, D.C.; 89; former teacher of natural sciences at Wayne State Teachers College, Peru Teachers College, and Nebraska Wesleyan University; 21 May.

MARTHA M. KENNERLY, Tucson, Ariz., and White Post, Va.; 83; retired assistant professor of biology at Hunter College; 22 May.

J. R. NELSON, Arlington, Mass.; 56; authority on vacuum tubes; director of work on transistor applications for the Raytheon Manufacturing Company; 18 May.

THOMAS A. C. RENNIE, New York, N.Y.; 52; professor of social psychiatry at Cornell University Medical College; 21 May.

FREDERICK P. REYNOLDS, Santa Barbara, Calif.; 88; former executive secretary of the committee on medical education of the New York Academy of Medicine; army officer during World War I and later professor of military hygiene at the U.S. Military Academy; 18 May.

NATHANIEL McL. SAGE, Brookline, Mass.; 66; civil engineer; director of the office of sponsored research and placement officer at Massachusetts Institute of Technology; 14 May.

Education

■ Stanford University has appropriated $45,000 for additional office and shop space in a new wing that is to be added to the Microwave Laboratory, one of the two buildings that make up the W. W. Hansen Laboratories of Physics. The wing will free space in the High-Energy Physics Laboratory, where the 220-foot Mark III linear accelerator is located.

After other plans for remodeling the accelerator are completed, the extra space will be used to add 40 feet to its length. These changes are expected to increase the machine's output of energy by at least 200 mev.

Previously announced plans for expansion of the Microwave Laboratory called for a $160,000 addition; the revised plans raise the amount for new construction to $205,000. The new wing will nearly double the present size of the laboratory, which was built in 1954 at a cost of $200,000.

■ The University of Texas Medical Branch, Galveston, has announced a 5-year, $250,000 research project in muscular dystrophy that is being sponsored jointly by the university and the National Muscular Dystrophy Research Foundation. The Medical Branch also has announced that it plans to establish a muscular dystrophy clinic, the first in that part of the United States.

■ The establishment of a laboratory for research in parapsychology at St. Joseph's College (Philadelphia), has been made possible by a grant from the Parapsychology Foundation in New York to Carroll B. Nash, professor of biology at St. Joseph's. The laboratory, which will be headed by Nash, will deal with phenomena of extrasensory perception. The only other such laboratory in this country was opened in the early 1930's at Duke University.

Grants, Fellowships, and Awards

■ The American College Health Association has announced that Continental Casualty Company has established grants in support of promising research in student medicine. The purpose of these grants is to encourage investigation that will promote the physical and mental health of college students and benefit student medical practices.

Two grants of $500 will be made annually: one grant will be awarded to support research in a college of less than 2000 enrollment, and one grant will be awarded to a college of more than 2000 enrollment. An award can be used for either clinical or experimental research. The funds can be used as the sole source of support for an exploratory or small-scale study, or they can be used in conjunction with college or other funds to support sections of a large-scale research project.

Recipients will be selected annually by the Committee on Research of the American College Health Association. Member colleges are invited to submit research proposals (6 copies) at any time. Proposals should be mailed to John Summerskill, Student Medical Clinic, Cornell University, Ithaca, N.Y.

■ The Commonwealth Fund has announced the allocation of unrestricted grants totaling $4,850,000 to seven university medical schools. The awards may be used in whatever ways the schools consider most effective to improve their programs of medical education.

These grants bring to a total of $12,600,000 the amount of such gifts made by the fund since November 1955. This is in addition to the sums expended for specific medical education projects during 1955–56.

The medical schools that received the grants are the Albany Medical College of Union University, $500,000; the George Washington University School of Medicine, $500,000; the University of Pennsylvania School of Medicine, $500,000; the Boston University School of Medicine, $600,000; the University of Rochester School of Medicine and Dentistry, $750,000; the Johns Hopkins University School of Medicine, $1 million; and the Stanford University School of Medicine, $1 million.

■ The Glycerine Producers' Association has announced that the fifth annual Glycerine Research awards are now open and that nomination blanks are available. The first award is $1000 and an honor plaque, the second is $300, and the third is $200.

These awards are granted for independent research leading to new and improved applications of glycerine or glycerine derivatives to products or processes. Copies of a bulletin that gives details about the awards may be obtained from the Glycerine Producers' Association, 295 Madison Ave., New York 17, N.Y.

■ The Eastman Kodak Company has announced that it will support 34 predoctoral fellowships in 1956–57 for students working toward degrees in physics, chemistry, or chemical engineering. Grants will be made to 34 colleges and universities in the United States and