

the College of Forestry. The institute will also promote conferences, seminars, and forums.

The new organization will be housed in the Hugh P. Baker Memorial Wood Products Laboratory building of the college, which has just been completed at a cost of nearly \$4 million. This modern laboratory, which is to be dedicated 2-3 May, will have numerous rooms equipped for organic and physical chemical studies of cellulose, wood, and polymers. Membership in the institute is open to all companies manufacturing cellulose products such as rayon, film, lacquers, plastics, and so forth, as well as companies making chemical pulps, and all other companies interested in research on cellulose.

### **Powder Diffraction, a Note to Authors**

When authors submit for publication papers that describe investigations in which x-ray powder measurements were made, but which omit the actual x-ray data, it is requested that these data be sent to the editor of the Joint Committee on Chemical Analysis by Powder Diffraction Methods for possible inclusion in the *X-ray Powder Data File* that is published by the American Society for Testing Materials.

The data should contain accurate listings of *d* values and intensities of reflections. Other items of information of value for the data file are: *hkl* indices and lattice parameters if known, radiation used, type of x-ray recording employed, method of estimating intensities (visual, photometric, Geiger-counter), plus any relevant information concerning the nature and preparation of specimens studies. For additional details, communicate with the editor of the Data File, G. W. Brindley, College of Mineral Industries, Pennsylvania State University, University Park, Pa., U.S.A.

### **Japanese Protesting British Tests**

A public debate is being held in Tokyo, Japan, on whether to send a "suicide sitdown fleet" to the forbidden waters around Christmas Island, the site of the forthcoming British hydrogen bomb tests. Premier Nobusuke Kishi and the All-Japan Seamen's Union have come out publicly against the proposed venture.

The *New York Times* reports that numerous fanatic opponents of nuclear demonstrations have offered to man small ships that would hover in the danger area. The first object of the expedition would be to prevent the British test blast, but if that failed the crusaders

would risk their lives as a protest against the development of advanced weapons.

This proposal for action against nuclear tests, made at a meeting of the Japan Council for Prohibition of Atomic and Hydrogen Bombs, has been criticized by more conservative Japanese. The idea for the protest is reported to have originated with a British pacifist journal called *Peace News*. The magazine is said to have written to the Japanese antibomb organization last week to state that five Britons had volunteered to take a suicide ship to the waters around Christmas Island if Japan would supply the vessel.

While the suicide fleet was being debated, the Japanese Government was reported to be preparing a third note to London, requesting advance notice of every blast, urging that "adequate measures" be taken to prevent damage and casualties, and asking that compensation be paid for any damage or casualties suffered by the Japanese.

Previous Japanese notes have asked the British to call off the tests. Japanese fishing interests have protested strongly that the exclusion of their ships from the waters around Christmas Island for the 5-month period of the tests will cost millions of dollars to the marlin and tuna industries. They demand compensation.

### **Chromosome Count**

Confirmation of the previously noticed revision of the count of human chromosome numbers [*Science* 124, 576 (28 Sept. 1956)] has not been long in forthcoming. On 10 Nov. 1956, *Nature* carried an article by C. E. Ford and J. L. Hamerton reporting extensive studies carried out on testis tissue from three adult males. Very clear spermatogonial and spermatocytic counts showed 23 bivalents (or 46 chromosomes) in all but 14 among 188 cells. In those few cells one or more chromosomes had apparently been lost. No counts of 48 chromosomes, the formerly accepted number, were found.

It was noted that the two sex chromosomes, X and Y, were terminally associated in the great majority of cells, but in one cell they were held together by a subterminal chiasma. For the totality of chromosomes, an average of 55.9 chiasmata per cell, or between one and two chiasmata per chromosome pair, were observed at late diplotene to mid-diakinesis. The total amount of genetic recombination by crossing over can consequently be estimated to be half again as much as in the mouse, although it must be stated that the present data apply only to middle-aged and elderly males. Ford and Hamerton, who presented these studies at the first International Congress

of Human Genetics in Copenhagen last summer, believe that the formerly accepted number of 48 was arrived at because of some exceptionally long centric constrictions in certain chromosomes, which may have led them to be counted doubly; or else because in spermatocytes the X and Y chromosomes may have joined precociously, so that 24 instead of 23 bodies were counted.

Meanwhile verbal communication has come from Japan that M. Kodani has found various numbers in different individuals or in different tissues. Additional studies will be required before the question is finally resolved.—B. G.

### **Wisconsin's Bardeen Laboratories**

The University of Wisconsin Medical School will dedicate the Bardeen Medical Laboratories on 17 May. This unit, named for Charles Bardeen, first dean of the Wisconsin Medical School, will afford space for the department of anatomy and physiological chemistry. The entire top floor will contain animal quarters. Speakers for the dedication, which will coincide with Alumni Day, will include Eugene Opie, George Corner, and Willard Rappleye.

### **Proposed Legislation**

From 3 Jan. through 24 Feb., 1532 bills and resolutions were introduced in the Senate and 5809 in the House. Some of these have a special relevance to science and education. A list of such measures follows:

HR 783. Authorize and direct Secretary of Interior to undertake continuing studies of effects of insecticides, herbicides, and fungicides upon fish and wildlife for purpose of preventing losses of those natural resources. Metcalf (D Mont.) House Merchant Marine and Fisheries.

S 511. Establish deferred grazing program and protein feed program as parts of relief available to drouth-stricken areas under P.L. 875, 81st Congress. Johnson (D Tex.) Senate Agriculture and Forestry.

HR 1080. Provide for standards to be prescribed by Secretary of Agriculture governing imported agricultural food products. Byrnes (R Wis.) House Agriculture.

HR 1107. Provide for emergency federal financial assistance to states and territories in construction of public elementary- and secondary-school facilities urgently needed because of overcrowding, and encourage full and efficient use of state and local resources in meeting school-construction needs. Donohue (D Mass.) House Education and Labor.

HR 1073. Protect the public health by regulating manufacture, compounding, processing, distribution, and possession of habit-forming barbiturate and amphetamine drugs. Boggs (D La.) House Interstate and Foreign Commerce.

HR 2498. Same as HR 1073. Sadlak (R Conn.) House Interstate and Foreign Commerce.

HR 1055. Provide for establishment of U.S. Armed Forces Medical Academy. Bennett (D Fla.) House Armed Services.

HR 935. Preserve permanently as a national park an area of national significance in Colorado and Utah, such park to be known as Dinosaur National Park, which shall supersede Dinosaur National Monument. Saylor (R. Pa.) House Interior and Insular Affairs.

HR 906. Establish on public lands of U.S. a National Wilderness Preservation System. Reuss (D Wis.) House Interior and Insular Affairs.

HR 965. Promote and establish policy and procedure for development of water resources of lakes, rivers, and streams. Trimble (D Ark.) House Public Works.

HR 1058. Preserve key deer and other wildlife resources in Florida Keys by establishment of National Key Deer Refuge in Florida. Bennett (D Fla.) House Merchant Marine and Fisheries.

HR 847. Provide for more comprehensive development and utilization of natural water resources in plans and construction of reservoir projects. Nat-cher (D Ky.) House Public Works.

HR 866. Authorize President to make permanent replacements of public facilities and public and private school buildings damaged or destroyed in major disaster. Philbin (D Mass.) House Public Works.

S 432. Allow additional income tax exemptions for taxpayer or spouse or dependent child under 23 years of age, who is full-time student at educational institution above secondary level. Fulbright (D Ark.) Senate Finance.

HR 1082. Encourage prevention of air and water pollution by allowing cost of treatment works for abatement of air and stream pollution to be amortized at accelerated rate for income tax purposes. Byrnes (R Wis.) House Ways and Means.

HR 1245 Establish policy of Congress *re* public use of public domain forest lands and woodlands. Saylor (R Pa.) House Interior and Insular Affairs.

HR 1227. Provide research and technical assistance *re* control of salt-marsh and other pest mosquitoes of public-health importance and mosquito vectors of human disease. Rivers (D S.C.) House Interstate and Foreign Commerce.

HR 1235. Authorize and request

President to undertake to mobilize at some convenient place in U.S. adequate number of world's outstanding experts and coordinate and utilize their services in supreme endeavor to discover means of curing and preventing cancer. Rooney (D N.Y.) House Foreign Affairs.

HR 2213. Reorganize civil defense functions of Federal Government, establish federal Department of Civil Defense. Fascell (D Fla.) House Government Operations.

HR 2220. Establish Medical Advisory Committee on Alcoholism in Department of Health, Education, and Welfare. Huddleston (D Ala.) House Interstate and Foreign Committee.

H J Res 85. Provide U.S. shall withhold from representatives of foreign nations privileges which such nations withhold from representatives of U.S. Rivers (D S.C.) House Foreign Affairs.

H J Res 99. Establish joint Congressional committee known as Joint Committee on U.S. International Exchange of Persons Program. Scott (R Pa.) House Rules.

H J Res 102. Provide for construction of nuclear power reactor in Japan. Smith (D Miss.) Atomic Energy.

H J Res 30. Establish Commission on Utilization of Manpower in U.S. Dollinger (D N.Y.) House Education and Labor.

HR 2178. Authorize appointment of doctors of chiropractic in Department of Medicine and Surgery of Veterans' Administration. Rogers (R Mass.) House Veterans' Affairs.

H J Res 5. Provide for observance and commemoration of 50th anniversary of founding and launching of conservation movement for preservation of natural resources of U.S. Celler (D N.Y.) House Judiciary.

H Res 43. Create select committee to conduct investigation and study of hurricane and flood control and warning problems. Keating (R N.Y.) House Rules.

H J Res 23. Provide for reappointment of Dr. Arthur H. Compton as Citizen Regent of Board of Regents of Smithsonian Institution. Cannon (D Mo.) House Administration.

HR 1240. Provide for certain inspection and investigation in metallic and nonmetallic mines (excluding coal and lignite mines) in obtaining information *re* health and safety conditions, accidents, and occupational diseases. Saylor (R Pa.) House Education and Labor.

HR 2154. Provide for a civilian atomic power acceleration program. Holfield (D Calif.) House Atomic Energy.

H J Res 32 Establish Northeastern United States Watershed Development and Flood Protection Commission. Donohue (D Mass.) House Public Works.

HR 1268. Authorize comprehensive project for control and progressive eradication of obnoxious aquatic plant growths from navigable waters. Willis (D La.) House Public Works.

S 575. Provide for establishment of four soil- and water-conservation laboratories. Thye (R Minn.) Senate Agriculture and Forestry.

S 608. Establish national grazing reserve by providing assistance to livestock producers who carry out certain range-conserving practices on privately owned grazing lands or on grazing lands under jurisdiction of Forest Service or Bureau of Land Management. Watkins (R Utah) Senate Agriculture and Forestry.

HR 1980. Establish public use of national forests as policy of Congress. Price (D Ill.) House Agriculture.

HR 1211. Authorize Secretary of Health, Education, and Welfare to make loans to assist students in pursuing courses at colleges and universities in U.S. Poage (D Texas) House Education and Labor.

HR 1946. Authorize federal payments to states to assist in constructing schools. Kearns (R Pa.) House Education and Labor.

HR 1961. Assist several states in providing scholarships to enable high-school graduates of Indian blood to pursue education at colleges and universities. Metcalf (D Mont.) House Interior and Insular Affairs.

HR 1976. Provide system of scholarships for persons of unusual ability in certain sciences. Osmer (R N.J.) House Education and Labor.

HR 2450. Amend National Science Foundation Act of 1950 to encourage training of additional engineers and expansion of facilities for engineering education by providing supplementary salary grants for engineering teachers and scholarships and fellowships for engineering students. Holland (D Pa.) House Interstate and Foreign Commerce.

HR 2413. Promote progress of medicine and advance national health and welfare by creating a National Library of Medicine located in Chicago, Ill. Collier (R Ill.) House Administration.

S 539. Direct Secretary of State and Secretary of Interior through Bureau of Reclamation to study economic and engineering feasibility of acquiring riparian rights from Republic of Mexico to water in Gulf of California for piping and pumping of water from Gulf of California to Arizona for irrigation purposes. Goldwater (R Ariz.) Senate Foreign Relations.

HR 2008. Establish system for classification and compensation of scientific and professional positions in government. Huddleston (D Ala.) House Post Office and Civil Service.

S Res 38. Provide until 31 Mar. 1957

for study of administration of government employees security program. Johnston (D S.C.) Senate Post Office and Civil Service.

HR 1945. Provide for establishment of Federal Advisory Council on the Arts. Kearns (R Pa.) House Education and Labor.

HR 2435. Provide a Federal Advisory Council of Health in Executive Office of President in accordance with recommendations of Commission on Organization of Executive Branch of Government. Frelinghuysen (R N.J.) House Interstate and Foreign Commerce.

HR 2419. Provide that one floating ocean station be maintained at all times in Gulf of Mexico to provide storm warnings for states bordering Gulf of Mexico. Colmer (D Miss.) House Merchant Marine and Fisheries.

HR 2378. Designate building to be constructed as principal office of Atomic Energy Commission under act of 6 May 1955, as "Enrico Fermi Building," to provide for establishment of appropriate memorial to Dr. Fermi. Addonizio (D N.J.) House Atomic Energy.

HR 2451. Authorize Secretary of Interior to conduct cloud-seeding experiments in Colorado River Basin. Hosmer (R Calif.) House Interior and Insular Affairs.

S 555. Authorize construction, operation, and maintenance of Hells Canyon Dam on Snake River between Idaho and Oregon. Morse (D Ore.), Magnuson (D Wash.) *et al.* Senate Interior and Insular Affairs.

## Scientists in the News

CARL-GUSTAV ROSSBY, director of the Institute of Meteorology, University of Stockholm, has been appointed visiting professor of meteorology at the department of meteorology, University of California, Los Angeles, for the period 4 Mar.-10 Apr. During his visit Rossby will deliver a series of lectures on the scope of modern meteorology, giving examples ranging from the central topics of classical meteorology to the newest territories to which meteorological research has led.

ARTHUR G. STEINBERG, formerly of the Children's Medical Center, Boston, Mass., is now professor of biology at Western Reserve University.

EDWARD TELLER, professor of physics and associate director of the Radiation Laboratory at the University of California, Berkeley, has received Dickinson College's Priestley memorial award. The award, a Wedgwood portrait medalion of Joseph Priestley and \$1000, is con-

ferred each year upon a scientist for research or discovery that is of benefit to mankind.

CORNEILLE HEYMANS, professor of pharmacology at the University of Ghent, Belgium, and 1938 Nobel prize winner, delivered Georgetown University's 1957 Raskob lecture on 4 Mar. His subject was "Regulation of blood pressure and hypertension."

LAWRENCE E. YOUNG will succeed WILLIAM S. McCANN as Charles A. Dewey professor of medicine and chairman of the department at the University of Rochester Medical School, effective 1 July. Young, a member of the faculty since 1943, also will be physician-in-chief of Strong Memorial Hospital, teaching hospital of the medical school. McCann will become professor emeritus 1 July.

OSCAR TOUSTER, associate professor of biochemistry at Vanderbilt Medical School and winner of last year's AAAS Theobald Smith award, will participate in a series of seminars with research personnel of the Samuel Roberts Noble Foundation, Inc., Ardmore, Okla., 28-30 Mar. The principal area of discussion will be cell metabolism of both normal and malignant cells. Culminating these talks, Touster will speak before a group of Noble personnel and invited guests from Oklahoma and Texas.

HAROLD H. BEVERAGE, vice president, RCA Communications, Inc., and director of the Radio Research Laboratory's RCA Laboratories, has been awarded the 1956 Lamme gold medal of the American Institute of Electrical Engineers. Presentation of the medal will take place on 24 June during the summer general meeting of AIEE in Montreal. Beverage is being honored "for his pioneering and outstanding engineering achievements in the conception and application of principles basic to progress in national and world-wide radio communications."

EDWARD E. SWANSON, head of Eli Lilly and Company's bio-assay department, ended nearly 40 years of service at Lilly when he retired on 31 Jan. Swanson is the author or coauthor of more than 75 papers dealing with the pharmacology of such drugs as digitalis, the barbiturates, and vasoconstrictors. He contributed to the development of insulin and, more recently, has done important work on curarelike substances. In 1955, when he received an honorary degree from Butler University, the citation referred to him as "a noted Pharmacist and renowned Pharmacologist who

has made exceptional contribution to both professions and one whose researches have benefited all mankind."

The State University of Iowa gave Swanson a degree as pharmaceutical chemist in 1916 and a bachelor of science degree in pharmacy in 1917. He has done graduate work at both the University of Wisconsin and Butler. In 1928 he received the American Pharmaceutical Association's Ebert medal, the highest scientific honor bestowed in American pharmacy, for his research in digitalis.

Since 1929 Swanson has lectured on bio-assay and pharmacology as a member of the faculty of the Butler University College of Pharmacy. He plans to continue teaching at Butler.

VERGIL M. McINTOSH has been named as associate professor of psychology by the Air University, Maxwell Air Force Base, Ala. Announcement of the academic title was made by Headquarters, Air Force ROTC, where McIntosh is employed in the education branch.

## Recent Deaths

HERBERT E. ARNOLD, Durham, Conn.; 60; professor of mathematics at Wesleyan University; 2 Mar.

GEORGE L. DRESSER, Albany, N.Y.; 71; civil engineer; 25 Feb.

EMIL C. FANTO, Manhasset, N.Y.; 82; retired assistant secretary and research director of McKesson and Robbins, Inc.; 22 Feb.

TOWNSEND B. FRIEDMAN, Chicago, Ill.; 51; permanent chairman of the Michael Reese Hospital and Children's Memorial Hospital departments of allergy; 6 Mar.

GEORGE GOMORI, Palo Alto, Calif.; 52; president of the Histochemical Society; former professor of medicine at the University of Chicago School of Medicine; 28 Feb.

ALFRED GROSS, New Haven, Conn.; 64; associate clinical professor of psychiatry at Yale University; 1 Mar.

ERIC A. LOF, New Rochelle, N.Y.; 77; retired electrical and chemical engineer formerly with General Electric Company and American Cyanamid Company; 6 Mar.

ROBERT H. MAYO, London, England; 66; aeronautical engineer, inventor of the pickaback plane; 26 Feb.

JOHANN O. PLESCH, Los Angeles, Calif., and Montreux, Switzerland; 78; retired professor of medicine at the University of Berlin; 28 Feb.

*Erratum:* In reference 5 of "Eastern equine encephalomyelitis virus isolated from three species of Diptera from Georgia," by L. H. Karstad *et al.* [*Science* 125, 396 (1 Mar. 1957)], the name of J. E. McCroan is incorrectly spelled as Croan.