Meritorious Service award from Augustana College. He was honored for "his outstanding contributions to society" and also in recognition of the fact that, as a near-octogenarian, he published two major books within a few weeks of each other. One was the *Education of Mentally Handicapped Children,* a volume in Harper's "Education for Living Series," edited by H. H. Rammera, and the other was *The Odyssey of a Psychologist,* a personal record of "pioneering experiences in special education, clinical psychology, and mental hygiene," that was published under his own imprimatur.

The following members of the Columbia University faculty retired on 30 June: HARRY STOLL MUSTARD, professor of public health practice and director of the De Lamar Institute of Public Health; JAMES BURNS ANDERSON, professor of medicine; GEORGE FRANCIS CAHILL, who joined the Columbia faculty in 1917 as an instructor in urology; MAURICE LENZ, professor of clinical radiology; FRANK LAMONT MELENY, who began teaching surgical techniques in 1919 and who was a codiscoverer of bacitracin; and WILLIAM BELL DINSMOR, professor of archeology.

A. G. LOCHHEAD, since 1923 chief of the bacteriology division of the Canadian Department of Agriculture, Ottawa, retired last month. Before joining the department he lectured at the University of Alberta. Through his leadership, the division has become known throughout the world as a center of fundamental research in soil microbiology. Lochhead is a member of many scientific societies. In 1940 he became a fellow of the Royal Society of Canada, and last year he was president of the Canadian Society of Microbiologists.

HARRY KATZNELSON, head of the general agricultural microbiology unit, has been appointed successor to Lochhead. His interest in bacterial viruses led to the development of a widely used diagnostic procedure for detecting bacterial plant pathogens in seed. He is also known for his research on diseases of the honeybee.

A bronze bust of the late ALEXANDER FLEMING, discoverer of penicillin, which is to be erected in the city park in Gijon, Spain, was completed recently by Manuel Laviada.

A travel award fund honoring the memory of ERWIN BRAND for his many years of service to the division of biological chemistry of the American Chemical Society was established by the division through donations from its members and from certain industrial firms. Travel expenses paid from this memorial fund enabled two biochemists, Sidney Schulman of the University of Buffalo and T. R. Riggs of Tufts College of Medicine, to attend the International Congress of Biochemistry in Brussels, Belgium, 1–6 Aug. Industrial firms that contributed were A. E. Staley Manufacturing Co., Decatur, Ill.; Burroughs Wellcome and Co., Inc., Tuckahoe, N.Y.; and Merck and Co., Inc., Rahway, N.J.

Necrology

EGON BRUNSWIK, Berkeley, Calif., 52, professor of psychology at University of California, 7 July.

DAVID CHEEVER, Boston, Mass., 79, associate professor of surgery emeritus at Harvard Medical School, former president of American Surgical Association, 13 Aug.

ALAN DEVOE, Hillsdale, N.Y., 45, author and naturalist, 17 Aug.

HERBERT J. FRENCH, New York, 62, metallurgist, vice president of International Nickel Company, formerly on research staff, 17 Aug.

GEORGE F. PADDOCK, Providence, R.I., 76, professor emeritus of astronomy at Lick Observatory in Mount Hamilton, California, 16 Aug.

THOMAS A. WAINWRIGHT, Dhahran, Saudi Arabia, 50, executive and engineer for Arabian Oil Co., 12 Aug.

ROBERT W. WOOD, Baltimore, Md., 87, research physicist at Johns Hopkins, authority on spectrum research, 11 Aug.

JOSEPH C. YASKIN, Philadelphia, Pa., 64, head of neurology department at Graduate School of Medicine, University of Pennsylvania, 10 Aug.

Education

■ The University of California and the Atomic Energy Commission have entered into a research contract under which the university will construct a nuclear reactor specifically designed for medical treatment and research. The AEC will contribute $75,000 toward the accomplishment of the project and will support an extensive program of research utilizing the reactor. The commission will also make available enriched uranium as fuel for the reactor, which will be constructed at the new medical center in Los Angeles. The university will erect a building to house the reactor at an estimated cost of $400,000.

The North American Aviation Corp. will design and build the reactor, which will be of the low-power water-boiler type. It will operate at a heat power level of about 5 kilowatts, with a maximum power of 50 kilowatts, and it will provide neutron flux up to 10^9 neutrons per square centimeter, per second.

The reactor, which will provide both gamma rays and thermal neutrons, will be used for the treatment of human patients and the training of students in radiation therapy and in reactor techniques and theory relative to the field of medicine. This installation will provide the West Coast with its first source of slow and fast neutrons sufficient for experimental work with animals and for treatment of human beings. The unit also will produce short-lived isotopes for experimental biology and medicine.

The reactor core will be located inside a 5- by 5- by 8-foot stack of graphite bars, shielded by a 5-foot thickness of high-density concrete. Radiation ports will lead from the core to a patient treatment room, laboratory, and another room where research on animals can be performed. An access port will permit materials to be irradiated in a channel leading inside the core itself, where radiation will be the strongest. The underground reactor wing housing the complete installation will be about 45 feet wide, 60 feet long, and 27 feet high. Welton Becket and Associates have been named architects. Rate of fission will be controlled by boron control rods.

■ Under the Oak Ridge Traveling Lecture Program, a joint activity of Oak Ridge National Laboratory and the Oak Ridge Institute of Nuclear Studies, 109 Oak Ridge scientists will make available their services as lecturers to colleges and universities, particularly those in the southern region, during the coming academic year. The lecture series is part of the Atomic Energy Commission's program for disseminating scientific and technical information to institutions of higher education.

According to a brochure that has just been issued, the participants have supplied a total of 188 possible topics, touching virtually every field of scientific endeavor. Copies of the brochure and additional information concerning the lecture program may be obtained by writing to the Chairman, University Relations Division, Oak Ridge Institute of Nuclear Studies, Box 117, Oak Ridge, Tenn.

■ In Indonesian and Jordanian elementary schools, where pupils once learned science only by repeating passages from textbooks, lessons are now being taught with laboratory equipment assembled from odds and ends—burned-out light bulbs, ink bottles, rubber tubing, and bits of string. The man who is chiefly responsible for introducing this practical apparatus, which costs from $10 to $11 per school, is a Canadian educator, Herbert H. Grantham of Vancouver, B.C.

In 1953, Grantham completed a 2-year mission in Indonesia for the United Nations Educational, Scientific and Cultural Organization under the technical