rock specimens and again placed most of them on the floor that time when you were finishing the drawing of the microscopic thin section. And how he pronounced to his father the new words he had learned when we met last time. My last wish is that the young life of my only dear son be protected by all means and that care be taken of his education in the community with western civilization, in freedom of human spirit, in knowledge and appreciation of all our common values and his Finnish descent, and in consciousness of his father's life ideals and aims. Profession and so-called social standing, again are altogether matters of minor importance. I sometimes feel that the fate of our country in the immediate future is at stake to such a degree that our whole nation may have to suffer incomparably graver misfortunes and that great numbers of our most helpless citizens must emigrate to foreign countries, as Finnish children have already been sent over to Sweden. But even in such a case we believe in the final preservation and progress of our country and the victory of the western countries and above all upon the victory of western civilization, which honors the individuality of man and the freedom of action and thought. If God allows, and wonderful opportunities or some quick favorable series of events come to our aid, we may clear with lesser sacrifices, but we should be infinitely thankful to the Highest, if we need not lose many times more than up to present date. The widowed women of our people may in that case only with pride remember their beloved ones who were asked to give their life for this great cause. And if our Tapani some day, as a grown-up man, be asked to do the same, then his father, either living or in the grave, will be glad to make this sacrifice, though now there exists nothing to which he is more ready than to give his own life to protect the little man's life from any imminent danger.

YALE UNIVERSITY

RICHARD FOSTER FLINT

## RECENT DEATHS

DR. J. ANDREW DRUSHEL, since 1928 professor of education at New York University, previously for two years associate professor of mathematics, died on June 20. He was sixty-seven years old.

SIR ARTHUR HARDEN, professor of biochemistry, emeritus, at the University of London, died on June 17. He was seventy-five years old.

DR. JOHN GERALD FITZGERALD, professor of hygiene and preventive medicine at the University of Toronto and director of the School of Hygiene and of the Connaught Laboratories, died on June 20 at the age of fifty-seven years.

DR. W. E. HARPER, director of the Dominion Astrophysical Observatory at Victoria, B. C., died on June 4 at the age of sixty-two years. A correspondent writes: "In 1938 Dr. Harper attended the Stockholm meeting of the International Astronomical Union, and while crossing from Denmark to Germany was stricken with pneumonia. After spending six weeks in a hospital at Rostock he was taken to England and subsequently reached Canada in October, 1938. He never completely recovered from this serious illness; heart trouble followed with complications, which resulted in his death last week. Dr. Harper succeeded Dr. J. S. Plaskett in 1935, and during his short five-year directorship the work of the institution was pushed forward with vigor, with an increased staff and some additional equipment. His own contributions in the field of radial velocities, parallaxes and spectrographic binaries will long remain a memorial to his industry as a research worker."

## SCIENTIFIC EVENTS

## NATIONAL RESEARCH FELLOWSHIPS IN THE NATURAL SCIENCES

THE National Research Fellowship Board in the Natural Sciences, of the National Research Council, has made the following fellowship appointments for the academic year 1940-1941:

John Nathaniel Adkins, Ph.D. in seismology, University of California, 1939. To work at Massachusetts Institute of Technology. Subject: Deformation of the earth under the action of ice loads and tidal forces.

Daniel I. Axelrod, Ph.D. in tertiary paleobotany, University of California, 1938. To work at the United States National Museum, Washington, D. C. Subject: The later Tertiary floras of California (with particular reference to criteria for age determination).

Herbert Irving Bernstein, Ph.D. in chemistry, Pennsylvania State College, 1940. To work at Princeton University. Subject: A stereochemical approach to the problem of molecular rearrangements. Albert Patrick Blair, Ph.D. in zoology, Indiana University, 1940. To work at Columbia University. Subject: Interrelations of the toads of eastern North America.

Robert Harza Burris, Ph.D. in agricultural bacteriology, University of Wisconsin, 1940. To work at Columbia University. Subject: Biological nitrogen fixation with the aid of isotopic nitrogen.

Robert Avery Chipman, Ph.D. in physics, University of Cambridge, 1939. To work at the Johns Hopkins University. Subject: Methods of electrical measurements and the electrical properties of matter at very high radio frequencies.

Charles Louis Critchfield, Ph.D. in theoretical physics, George Washington University, 1939. To work at Princeton University. Subject: Forces between elementary particles.

Max Demorest, Ph.D. in geology, Princeton University, 1938. To work at Yale University. Subject: The structural petrology of ice.

Richard Wolford Dodson, Ph.D. in chemistry, the Johns

Hopkins University, 1939. To work at California Institute of Technology. Subject: Radiochemical study of the products of the neutron-induced fission of uranium and thorium nuclei.

Arthur John Dziemian, Ph.D. in physiology, Princeton University, 1939. To work at University of Pennsylvania. Subject: The effects of changing the chemical constitution of the erythrocyte on its permeability.

Ralph Stanley Halford, Ph.D. in chemistry, University of California, 1938. To work at Harvard University. Subject: Thermodynamic properties of solutions and their relations to the kinetics of chemical reactions therein.

Felix Webster McBryde, Ph.D. in geography, University of California, 1940. To work at the University of California Experiment Station. Subject: Detailed survey of native crops and agricultural practices in the north Middle American region.

Walter John Moore, Jr., Ph.D. in chemistry, Princeton University, 1940. To work at California Institute of Technology. Subject: The crystal structure of tripeptides.

Harry Townsend Muhly, Ph.D. in mathematics, the Johns Hopkins University, 1940. To work at Princeton University. Subject: The theory of the singularities of algebraic varieties.

Jack Edgar Myers, Ph.D. in botany, University of Minnesota, 1939. To work at the Smithsonian Institution, Washington, D. C. Subject: A comparison of the photosynthetic behavior of several types of plants.

Myron Hiram Nichols, Ph.D. in physics, Massachusetts Institute of Technology, 1939. To work at Princeton University. Subject: Thermionic properties of the various crystal faces of tungsten.

Darrell Wayne Osborne, Ph.D. in physical chemistry, California Institute of Technology, 1938. To work at the University of California. Subject: Rotation of methyl groups in metal alkyls by measurement of entropies.

Daniel Chapin Pease, Ph.D. in experimental embryology, Princeton University, 1940. To work at Stanford University. Subject: Determination of the bilateral axis of echinoderm eggs (*Dendraster*).

John Robert Raper, Ph.D. in general biology, Harvard University, 1939. To work at the California Institute of Technology. Subject: The sexual mechanism in the Saprolegniales.

Carl Keenan Seyfert, Ph.D. in astronomy, Harvard University, 1936. To work at Mount Wilson Observatory. Subject: The detection and study of emission nebulae in spirals.

Claude Elwood Shannon, Ph.D. in mathematics, Massachusetts Institute of Technology, 1940. To work at the Institute for Advanced Study. Subject: A non-associative algebra applicable to dynamics of Mendelian populations.

Henry Keith Townes, Jr., Ph.D. in systematic entomology, Cornell University, 1937. To work at the Academy of Natural Sciences of Philadelphia. Subject: A catalogue of the ichneumon flies of America north of Mexico with new synonymy from a study of the types.

George E. Valley, Jr., Ph.D. in physics, University of Rochester, 1939. To work at Harvard University. Subject: Gamma radiation spectra. Stanley Wawzonek, Ph.D. in organic chemistry, University of Minnesota, 1939. To work at the University of Illinois. Subject: The synthesis of Cycloöctatetraene.

## THE WASHINGTON HEIGHTS HEALTH AND TEACHING CENTER

DEDICATION ceremonies of the Washington Heights Health and Teaching Center, New York City, a sevenstory building at the southwest corner of 168th Street and Broadway, were held on June 10. Mayor Fiorello H. La Guardia made the principal address, and Health Commissioner John L. Rice presided. This is the eleventh new health center building completed under the present administration and the fifth and final unit in New York City's health and teaching program being carried forward in cooperation with the five medical schools of the city and the Department of Health.

The new building was constructed with city funds under supervision of the Department of Public Works at an approximate cost of \$400,000. The brick and stone construction is of an architectural design which harmonizes with the adjoining Columbia-Presbyterian Medical Center buildings. James Gamble Rogers was the architect. Presbyterian Hospital made available the land for the new building, which on its fifth, sixth and seventh floors houses the DeLamar Institute of Public Health of the College of Physicians and Surgeons of the university.

In addition to the mayor and health commissioner, speakers at the ceremony were William Hale Harkness, vice-president of Presbyterian Hospital, who represented Dr. Nicholas Murray Butler, president of Columbia University, who was unable to be present, and Dr. Nathan B. Van Etten, president-elect of the American Medical Association, which opened its annual meeting in New York on June 10. Participants also included Dr. Willard C. Rappleye, dean of the College of Physicians and Surgeons, the cooperating medical school; Dr. Haven Emerson, professor of public health at Columbia; Frederick Guggenheimer, executive director of the City Affairs Committee of New York, who is chairman of the Washington Heights-Riverside District Health Committee, and Dean Sage, president of the Board of Managers of Presbyterian Hospital.

Following the dedication program, a reception and tour of the new building was held. Approximately 200 representatives of the university and the medical school, community health, welfare and civic leaders, public officials and officers and delegates to the American Medical Association convention attended.

In addition to the Washington Heights Health and Teaching Center, where the training program is in cooperation with the College of Physicians and Surgeons of Columbia University, similar cooperative arrangements obtain in the following new health and