Seminary, Williamsport, Pennsylvania, 1900–01; teacher of biology, Southwestern State Normal School, California, Pennsylvania, 1901–04; professor of biology, DePauw University, Greencastle, Indiana, 1904–14; investigator in the Eugenics Record Office of the Carnegie Institution of Washington, located at Cold Spring Harbor, New York, 1914–33. He was a member of Phi Beta Kappa and Sigma Xi.

His botanical interests, chiefly in the fungi, found expression in a monograph of the Hydnaceae of North America. He compiled a genealogy of the Bancker or Banker families. His interest thus shown in genealogy brought him to the Eugenics Record Office, where he compiled an extensive history of the Bowditch family of Boston as an example of heredity in an aristogenic family. He invented a method of measuring intelligence on the basis of teachers' marks, and this has been applied to the study of inheritance of mental traits in normal populations. His later contributions were in the field of aristogenic human heredity, and he promoted the introduction of personality traits into family histories in order to render genealogical studies of greater scientific and social value.

ALBERT F. BLAKESLEE

RECENT DEATHS

DR. FRANK M. ANDREWS, professor of botany at Indiana University, with which he had been connected for forty-six years, died on November 26 at the age of seventy years.

MARIUS ROBINSON CAMPBELL, who retired as principal geologist of the U. S. Geological Survey in 1932, died on December 7 at the age of eighty-two years.

DR. JOHN AUGUSTUS HARTWELL, surgeon, of New York City, president of the New York Academy of Medicine from 1930 to 1933 and from 1934 to 1939 director of the academy, died suddenly on November 30. He was seventy-one years old.

DR. PAUL FERDINAND SCHILDER, research professor of psychiatry at the College of Medicine of New York University and clinical director of the psychiatric division of Bellevue Hospital, died on December 8 as the result of an automobile accident. He was fifty-four years old.

DR. JOSEPH BEAL STEERE, from 1879 to 1893 professor of zoology at the University of Michigan, died on December 7 in his ninety-eighth year.

A CORRESPONDENT writes that Dr. James Harvey Ransom, since 1921 professor of chemistry and head of the department at the James Millikin University, died on May 30 at the age of seventy-nine years.

SIR HERBERT WRIGHT, treasurer of the Imperial College of Science and Technology, London, known for his work on tropical agriculture, died on October 28 at the age of sixty-six years.

THE death of Dr. Charles Hesterman Merz, the well-known consulting electrical engineer of Great Britain, and his son and daughter as a result of enemy action is announced in *Nature*. He was sixty-six years old. Dr. Merz was a fellow of the American Institute of Electrical Engineers.

SCIENTIFIC EVENTS

DAMAGE TO SCIENTIFIC INSTITUTIONS IN LONDON

A CORRESPONDENT writes: "A further bombing attack was made upon the British Museum (Natural History) during the night of October 15–16. The building was hit by high explosive and incendiary bombs. The damage was not very extensive and was almost entirely confined to the exhibition galleries, but water seepage was reported to have endangered the insect collections. The zoologists and botanists of every nation, including Germany, would view as a major calamity the destruction of the Natural History Museum and its enormous research collections."

The London *Times* reports that the Royal College of Surgeons, in Lincoln's Inn Fields, was comparatively little damaged when a bomb fell in the garden in the center of the square. Windows and their frames were destroyed, doors and partition walls blown down, and several ceilings damaged. The Hunterian Collection had been removed to a place of safety, but some damage was done to specimen jars, particularly in the army medical war collection.

THE CLASSIFICATION OF TOOL STEELS

THE American Standards Association has announced that it has been requested by the American Society of Tool Engineers to undertake a new project on the classification of tool steels by classes of usage. The purpose of this will be to eliminate the guesswork in selecting the proper steel for various uses, thus prolonging tool life, wearing qualities, etc. This project does not concern tool steels alone but also other materials used for cutting tools, such as cemented carbides and stellite.

According to the American Society of Tool Engineers, there are about 1,000 brands of tool steel on the market, of which many are identical or nearly so. Since there are no standards by which the qualities of these multitudinous brands can be judged and classified, the user is bound gradually to drift into a general use of a certain few varieties of tool steel from

which he has happened to obtain generally satisfactory results in the past. Many times, therefore, he may be using the wrong steel for particular applications.

There have been many attempts to classify tool steels by numbering systems or by composition but so far they have been unsuccessful. At present, some steel companies are using a system which classifies tool steels into seven main types, or families, as follows: plain tool steels, oil- or air-hardened die steels for punch press work, oil-hardened die steels for hot work, tough tool steels, high-speed steels, cemented carbides, miscellaneous tool materials, such as "Graphitic Steels." This system of classifying steels has been copied by both manufacturers and users.

The new project for the standardization of materials for cutting tools proposes to index all tool steels by class designation, by manufacturer, by trade name and by classes of usage. The American Society of Tool Engineers believes that this classification of tool steel by types, or uses, rather than by trade name alone will make the choice of the steel for a particular application a simple matter to the user.

THE NEW HYDRAULIC LABORATORY OF THE NATIONAL RESEARCH COUNCIL OF CANADA

THE National Research Council of Canada has recently provided in Ottawa facilities for research on hydraulic structures. Hon. J. A. MacKinnon, chairman of the Committee of the Privy Council on Scientific and Industrial Research, which deals with matters of policy relating to the National Research Council, states that the laboratory has been set up on the recommendation and under the guidance of a committee composed of technical representatives from four Dominion Government departments.

The new laboratory, which is a part of the Division of Mechanical Engineering, has been planned to supplement the limited facilities which are at present available in Canada for work of this kind. Space and equipment have been provided for model research on many classes of hydraulic structure to a scale which will ensure correct flow conditions and freedom from uncertainty regarding "scale effect." The design of structures such as canal locks, dams, spillways, gates and power plant details can be investigated and work may be undertaken on river hydraulic problems of limited extent. Many pipe-flow problems are also within the scope of the laboratory. A feature of the laboratory is the large flow of water available which will be adequate for the largest models that can be accommodated. The present location of the hydraulic equipment is temporary, and the equipment has been designed for more commodious quarters for which plans have been made.

This hydraulic laboratory provides the engineering profession with a useful tool not hitherto available in Canada for the solution of many problems in hydraulic design. Like all the facilities of the National Research Council, the new laboratory is provided to serve the needs of the country, and its facilities are available not only for investigations of national interest, but also for the solution of those specific problems which arise in private industrial development.

THE PROPOSED NEW CANCER HOSPITAL IN NEW YORK CITY

THE Board of Estimate of New York City referred on December 3 to the City Planning Commission between the city, the trustees of Columbia University and the Presbyterian Hospital an agreement which has been under consideration for the last year for the building of a new cancer hospital.

Under this agreement the trustees of the university and the hospital would convey to the city without charge a two-and-a-half acre site adjacent to the Columbia Medical Center, which is valued at $750,000. It is planned that the hospital be ten stories high, large enough to accommodate 315 beds. The total estimated cost is $2,650,000. The capital budget for 1940 of the Board of Estimate includes $350,000 for design and preliminary work, and an appropriation of $600,000 is contained in the capital budget for 1941. The College of Physicians and Surgeons of the Medical Center will collaborate with the Department of Hospitals in the scientific work and in maintenance of the hospital.

The university will nominate the professional staff of the hospital, except for such appointments as are made under the rules of the Municipal Civil Service Commission.

The city is required to build, equip and maintain the hospital. Unless the building is begun within five years of the date of delivery of the deed, the land reverts to the Presbyterian Hospital.

Dr. Willard Cole Rappleye, commissioner of hospitals, who is on leave of absence as dean of the College of Physicians and Surgeons, stated that the hospital should be completed in 1942. If the Planning Commission and the Board of Estimate approve the agreement and the plans, construction will begin in a few months.

SYMPOSIUM ON MALARIA

A SYMPOSIUM on malaria consisting of six programs will be held in Mitchell Hall, College of Physicians Building, 19 S. 22nd Street, Philadelphia, on Monday, Tuesday and Wednesday, December 30 and 31, 1940, and January 1, 1941. The symposium has been organized by Section N (Medical Sciences) as part of the annual program of the American Association for the