action is largely in recognition of the desire of industry to carry on standardization through its own cooperative organization, I have no doubts concerning the ultimate success of our efforts.

THE NEW HALL OF PHYSICS AT WASHINGTON UNIVERSITY

THE Board of Directors of Washington University has announced an anonymous gift amounting approximately to $700,000 to be used for the construction and maintenance of a new physics laboratory and for the support of teaching and research in physics. Of this sum approximately $250,000 will be used for construction of the new building, $100,000 will be used as an endowment for its maintenance (heating, lighting, janitor service, etc.) and $350,000 as an endowment, the income from which will be used for the support of the department. Contracts for the building have been let and construction is to start immediately. It is planned to have it ready for occupancy by next summer.

The plans have been worked out with great care by the architects, Jamieson and Spearl, St. Louis, with the cooperation of the staff of the physics department, which is headed by Professor A. L. Hughes. They call for a 2-story building 175 feet long, the rear wing being 52 feet wide and the front portion 105 feet wide. It will be the first unit of a proposed applied science group which will eventually form an imposing quadrangle on the north side of the campus. The laboratory is especially designed to provide adequate facilities for carrying on the research of the department. In addition to the basement, given over entirely to research, there will be a sub-basement, 53 x 66 feet, which will be air-conditioned, and designed for experiments requiring temperature regulation or freedom from vibration. Provision is made so that a large portion of the roof can be used for an out-of-door laboratory.

The plans for the wiring and plumbing call for an unusually elaborate layout for a building of this size. Over eight miles of copper wire, in addition to that used for ordinary lighting circuits, will be used to furnish each research room, lecture room and laboratory with an adequate power supply for all experimental and demonstration purposes. A specially designed system of local wiring in each individual room will make it possible for each piece of apparatus to be placed near the power outlets. Water, gas, air and vacuum lines will also have several outlets in each room. Adjacent to the elevator shaft there will be an open experimental shaft, with balconies at each floor, extending from the sub-basement to the top of the tower room, a total height of about 60 feet.

Special precautions have been taken to keep the building as free as possible of mechanical vibrations. All heavy machinery in the shops will be on concrete floors which are insulated from the rest of the building by 3 inches of cork. A special girder construction will add to the rigidity of the structure and reduce wind sway and other vibration.

The increased facilities afforded by the new building and its accompanying endowment will allow a considerable expansion of work. The research of the department first attained national recognition under the leadership of Professor A. H. Compton, who was department head from 1920 to 1923, and it was in this period that the Compton effect was discovered. Research activities have continued to expand in various fields under the direction of Professor Hughes since 1923. The present gift to the university has been made by the donor in recognition of the place of distinction which the present staff of the department holds in the scientific world and of the importance to the world of continued research in the field of physics.

A list of the present permanent members of the department and the fields of research in which they are active follows:

A. L. Hughes, D.Sc., Wayman Crow professor of physics and head of the department. Electron scattering, photoelectricity, spectroscopy.

G. E. M. Jauncey, D.Sc., professor of physics. Absorption and scattering of x-rays; the Compton effect.

C. F. Hagenow, Ph.D., associate professor of physics. Spectroscopy.

L. A. DuBridge, Ph.D., associate professor of physics. Photoelectricity; direct current amplifiers.

J. A. Van den Akker, Ph.D., instructor in physics. Photoelectric effect of x-rays.

RETIREMENT OF INVESTIGATORS OF THE U. S. GEOLOGICAL SURVEY

VERNON BAILEY and T. S. Palmer, of the Bureau of Biological Survey, U. S. Department of Agriculture, retired on July 31, Mr. Bailey after forty-six years' service and Dr. Palmer after forty-four years.

Vernon Bailey, chief field naturalist of the bureau, has achieved wide recognition for his studies of the geographic distribution of mammals, birds and plants. His work in building up the collections and files of information of the survey is especially noteworthy. Practically every season since Mr. Bailey's first service has been marked by his field work in some part of the United States, and wild-life studies have taken him to every state of the Union and to Mexico and Canada. He has conducted biological surveys of Texas, New Mexico, North Dakota and Oregon, and has published reports on the mammals of Glacier National Park, on the animal life of the Carlsbad Caverns and on that of Yellowstone National Park. On the pocket gophers and on the

ground squirrels of the Mississippi Valley he has prepared special publications based on his field work, and has revised the classification of rodents in these and other genera. Only recently the bureau added to the list of publications written by Mr. Bailey the "Mammals of New Mexico," in its North American Fauna Series. At present, as joint author with Dr. Florence Merriam Bailey, his wife, he has in press a work on the wild life of the Mammoth Cave region of Kentucky. His work on Oregon has not yet been published. Mr. Bailey has also been widely recognized for his efforts in behalf of the humane treatment of animals, especially because of the traps he has invented to capture them alive and unhurt.

A native of Michigan, Mr. Bailey was first employed in the Department of Agriculture as a special field agent in 1887, when he was twenty-four years old and living in Minnesota. In 1890 he gained his present title of chief field naturalist. From 1906 to 1913 he was in charge of what is now the division of biological investigations of the survey.

Mr. Bailey is president of the American Society of Mammalogists and a former president of the Biological Society of Washington.

Dr. Theodore Sherman Palmer is known as a zoological historian and biographer, as an authority on the nomenclature of mammals and also for his activities in game protection. He was chairman of the committee that prepared regulations under the migratory-bird law of 1913, and he also prepared the preliminary draft of the Migratory Bird Treaty of 1916 between the United States and Great Britain.

He was instrumental in initiating legislation governing importations of game and other wild animals and birds from foreign countries and has cooperated with officials of the Customs Service in drafting regulations. He originated the present system of Federal publication of the game laws and open-season posters and of directories of game-protective officials and organizations, and the numerous official publications of the Biological Survey on trends in game conservation and in legislation for the protection of wild life, some of which have been translated and published abroad. Monumental among his published writings is his "Index Generum Mammalium," issued by the Biological Survey in 1904 as North American Fauna No. 23. He is now completing a supplement to it.

Dr. Palmer, a native of California, was graduated from the University of California in 1888 and came to the Department of Agriculture the following year, at the age of 21. In 1895 he completed medical studies and was granted the M.D. degree by Georgetown University. He early engaged in field studies and has visited most parts of the United States, and for five months in 1891, as first assistant ornithologist, he was acting in charge of the Death Valley Expedition. He was assistant chief of the Biological Survey from 1896 to 1902, and from 1910 to 1914, and acted as chief over extended periods, including the time when the chief, Dr. C. Hart Merriam, was in Alaska as a member of the Bering Sea Commission. From 1900 to 1916, Dr. Palmer was in charge of the bureau's division of game preservation, and since the passage of the Lacey Act in 1900 he has been in charge of the regulation of the importation of foreign birds and mammals.

OBITUARY

FRANK WILLIAM PEEK, JR., chief engineer of the Pittsfield works of the General Electric Company, was killed at Gaspé, Quebec, on July 27, when the automobile he was driving was struck by the locomotive of a Canadian Railway train at a grade-crossing. Mr. Peek was in his fifty-second year.

DR. EDWARD CAMERON KIRK, seventy-seven, professor emeritus of the School of Dentistry of the University of Pennsylvania, died on July 21.

THE death is announced of John Eliot Thayer, member of the Museum of Comparative Zoology of Harvard University. Mr. Thayer built a museum in Lancaster, Massachusetts, for the public with one of the best collections of birds in North America.

SCIENTIFIC NOTES AND NEWS

WITHIN the last few months Professor John J. Abel, director of the Laboratory of Endocrine Research at the Johns Hopkins University, has been made an honorary member of the American Association of Physicians and of the Pharmacological and Physiological Societies of Great Britain. He has also been made an honorary fellow of the Royal Society of Edinburgh.

PROFESSOR EDWIN GRANT CONKLIN, of Princeton University, has been elected an honorary fellow of the Royal Society of Edinburgh.

DR. THOMAS B. NOLAN, geologist of the U. S. Geological Survey, has been awarded the Spendiaroff Prize of the International Geological Congress in recognition of his studies of the complex earth structure of western mining districts of the United States.

THE daily press reports that a bill now before the House of Commons will enable Professor Albert Einstein to acquire British citizenship.

SIR COLIN MACKENZIE, director of the Australian Institute of Anatomy, has been elected president of the Royal Society of Australia. The society has its