

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