was unlocked by Sir Gowland Hopkins, president of the Royal Society, and chairman of the general board of the National Physical Laboratory, with a gold key, handed to him by the architect, Mr. F. A. Llewellyn, after speeches by Sir Richard Glazebrook, the first director of the laboratory, and Sir Joseph Thomson.

Sir Joseph Thomson congratulated Sir Richard Glazebrook on this further step in the phenomenal development of the National Physical Laboratory, which owed its prosperity and progress to his wisdom, energy and insight more than to anything else. The National Physical Laboratory had a great part to play in the modern applications of science to industry.

The completed portion of the new physics building will house the heat and general physics section of the physics department, with part of the radiology and sound work. Apparatus for the measurement of noises was on view in this building. The loudness of the noise to be assessed is determined by varying the strength of a standard sound until it is either just "drowned" by the noise or judged to be equally loud. It was explained that, measured on a convenient scale of loudness with zero at the threshold of hearing, sounds become painful at about 130 "degrees" above threshold, where each "degree," known as a decibel, is approximately the least change in loudness perceptible to the ear. The level of conversational speech is at about 50–60 decibels above threshold. Aeroplane cabin noises are at present in the region of 80–110 decibels above the threshold. The lower of these levels corresponds to that of the noise in a tube train, and it is almost impossible to converse in a loudness level of 110 decibels, even by shouting. In street traffic and in ordinary trains the noise ranges from 50–70 decibels above threshold, and the laboratory is assisting the Aeronautical Research Committee in its endeavor to reduce noise in aircraft cabins to such a level.

One of the new exhibits in the Aerodynamics Department this year was a large steel tunnel, the equipment of which is nearly completed, in which compressed air at 25 atmospheres pressure can be circulated round an aeroplane model. Tests carried out under this high pressure are directly comparable with those on a full-scale machine—in other words, the "scale effect" which exists when working with a model in a tunnel at atmospheric pressure is eliminated. When the compressed air is circulated at full pressure by an airscrew the conditions will correspond with those surrounding a full-sized aeroplane flying at 150 miles an hour. In one of the older wind tunnels tests were shown in progress on a model of the Hill Pterodactyl, the new tailless aeroplane. A new and neat method of rendering streamline flow visible was displayed in the same department. A number of fine platinum wires, heated by an electric current, are stretched across the airflow near a model. Each wire gives rise to a band of heated air, which follows the direction of the streamline passing the wire. The shadows of these heated air filaments are cast on a screen and thus give a direct picture of the streamlines.

THE POST-GRADUATE MEDICAL SCHOOL AND HOSPITAL AND COLUMBIA UNIVERSITY

IN accordance with the agreement between the New York Post-Graduate Medical School and Hospital and Columbia University, effective on July 1, by which the former became the Post-Graduate School of Medicine of Columbia, an administrative board of post-graduate studies in medicine has been established on which will be represented members of the governing body of the university, the undergraduate medical school and the postgraduate school of medicine.

Under the terms of the affiliation, this board will have general oversight and control of all post-graduate instruction in medicine offered by the university, whether at the Medical Center, the Post-Graduate Medical School or elsewhere in the city, and is constituted as follows: Dean Willard C. Rappleye, *chairman,* Dr. Linsly R. Williams, Dean Howard Lee McBain, Director James C. Egbert, Dr. Walter W. Palmer, Dr. James W. Jobling, Dr. Frederick Tilney, Dr. Arthur F. Chace, Dr. Herman O. Mosenthal, Dr. Howard F. Shattuck, Dr. Edward H. Hume, Dr. Harry S. Dunning, Dr. Lewis F. Frissell and Mr. Frank D. Fackenthal.

Dr. Edward H. Hume has been appointed director and Dr. Alan R. Anderson associate director of the New York Post-Graduate Medical School.

This incorporation of the New York Post-Graduate Medical School into the teaching system of Columbia University as its post-graduate school of medicine, distinct from the undergraduate school, carries into fruition, after some forty-nine years, the ambition of the seven founders of the Post-Graduate who resigned from the faculty of the New York University upon the refusal of the trustees to grant them a separate building for post-graduate instruction and, early in the year 1882, organized the present New York Post-Graduate Medical School and Hospital.

Dr. D. B. St. John Roosa, first president of the institution he helped to found, in his inaugural address in November, 1882, pointed out that while temporarily undertaken in an independent institution, this type of medical education rightly belonged with other forms of professional instruction within a uni-

versity, and closed with the forecast, "the time will come when this institution will be included within a great university."

DR. SWASEY'S GIFT TO THE ENGINEERING FOUNDATION

AT a dinner on June 31 at University Club, New York City, given by the chairman, H. Hobart Porter, of the Engineering Foundation, President John V. N. Dorr, of the United Engineering Trustees, Incorporated, and Mr. Porter announced that Dr. Ambrose Swasey, founder of the Engineering Foundation, had added $250,000 to his previous gifts, bringing their total to three quarters of a million dollars.

In making this gift Dr. Swasey said: "For many years past, and especially since 1914, I have thought that a great service to mankind might be rendered by the stimulation of research and development work in the engineering profession, and have sought to further that end by assisting in establishing the Engineering Foundation, whose income would be available for such purposes. It has been my privilege on previous occasions to assist in the endowment of this foundation, and, having a high appreciation of the very practical and helpful results that have been already achieved, and believing that the broad and well-laid plans of the foundation promise even greater service in the future, I now take great pleasure in making available to the Engineering Foundation, through United Engineering Trustees, Inc., an additional fund of $250,000 for the furtherance of research in science and engineering, or for the advancement in any other manner of the profession of engineering and the good of mankind."

Mr. Swasey was born at Exeter, New Hampshire, nearly eighty-five years ago. He is the surviving member of the firm of Warner & Swasey, of Cleveland, Ohio, famous for the building of great telescopes, and of instruments and machine tools of precision. The Engineering Foundation was founded by the national societies of Civil, Mining and Metallurgical, Mechanical and Electrical Engineers in 1914 on the basis of his conception of a research instrumentality for the profession of engineering and for broad services to mankind.

There were present more than thirty presidents and former presidents of national engineering societies, of the United Engineering Trustees and of the Engineering Foundation, and other nationally prominent engineers. The guests were:

L. H. Baekeland, former president, American Institute of Chemical Engineers; H. F. Bain, secretary, Mining Engineers; Philip E. Bliss, president, Warner and Swasey Company; H. P. Charlesworth, trustee, United Engineering Trustees; G. H. Clevenger, vice-chairman, Engineering Foundation; H. V. Coes, trustee, United Engineering Trustees; J. Vipond Davies, past president, United Engineering Trustees; J. V. N. Dorr, president, United Engineering Trustees; Gano Dunn, past president, Electrical Engineers and United Engineering Trustees, and first chairman, Engineering Foundation; A. S. Dwight, past president, Mining Engineers; W. S. Finlay, Jr., former member, Engineering Foundation; Alfred D. Flinn, director, Engineering Foundation; Bancroft Gherardi, past president, Electrical Engineers and United Engineering Trustees; A. M. Greene, Jr., past-president, Society for the Promotion of Engineering Education; O. E. Hovey, vice-chairman, Engineering Foundation; C. T. Hutchinson, former secretary, Engineering Foundation; D. S. Jacobus, past-president, Mechanical Engineers; F. B. Jewett, past-president, Electrical Engineers and former vice-chairman of Engineering Foundation; H. A. Kidder, vice-president, United Engineering Trustees; G. L. Knight, trustee, United Engineering Trustees; H. A. Lardner, ex-president, New York Electrical Society; W. S. Lee, president, Electrical Engineers; Geo. A. Orrok, former vice-chairman, Engineering Foundation; G. H. Pegram, past-president, Civil Engineers; H. Hobart Porter, chairman, Engineering Foundation; W. E. Reed, formerly of Warner and Swasey Company; Robert Ridgway, past-president, Civil Engineers; Charles F. Scott, past-president, Electrical Engineers; C. E. Skinner, president-elect, Electrical Engineers; J. Waldo Smith, former vice-chairman, Engineering Foundation; L. B. Stillwell, former chairman, Engineering Foundation, and past-president, Electrical Engineers; Ambrose Swasey, founder Engineering Foundation, past-president, Mechanical Engineers, honorary member, Civil Engineers; Calvert Townley, past-president, Electrical Engineers; A. L. Walker, former member, Engineering Foundation; Roy V. Wright, president, Mechanical Engineers.

THE CENTENARY OF THE HARVEIAN SOCIETY OF LONDON

ACCORDING to an article in *The British Medical Journal* the celebration of the centenary of the Harveian Society of London began with a largely attended meeting at St. Bartholomew's Hospital on the afternoon of June 11, presided over by the president of the society, Sir Thomas Horder. Dr. Raymond Crawfurd delivered the address on "The Place of Medical Societies in the Progress of Medicine," after which Sir Humphry Rolleston proposed a vote of thanks. Sir Thomas Horder then presented medals, specially struck for the centenary to Dr. D. Elliot Dickson, representing the Harveian Society of Edinburgh, and to Dr. W. H. Welch, professor of the history of medicine at the Johns Hopkins University, representing the Harveian Society of New York.

Dr. Dickson, in returning thanks, said that he was proud to represent the Edinburgh society, and also