SCIENTIFIC EVENTS

THE BRITISH POST-GRADUATE HOSPITAL AND MEDICAL SCHOOL

THE corner-stone of the new building of the British Post-Graduate Hospital and Medical School at Hammersmith was laid recently by Mr. Neville Chamberlain.

According to the London *Times,* a representative committee, under the chairmanship of Mr. Neville Chamberlain, was appointed as long ago as July, 1925, to draw up a practical scheme of post-graduate medical education centered in London, and their report was issued on April 9, 1930. They recommended the establishment of a joint institution by means of the conversion of the existing Hammersmith Hospital, at which the four hundred beds required at the outset of the scheme were already available. The committee stated that it was of urgent importance that the serious defect that there was no hospital and medical school in London exclusively devoted to providing post-graduate medical education should be remedied by the establishment of a British post-graduate hospital and medical school. They considered that such an institution should include from the outset a hospital with not less than four hundred beds, a medical school on the scale appropriate to a hospital of this size, residential accommodation for the post-graduate students of the hospital and medical school, and provision for expansion.

When the scheme began to assume definite shape it was proposed that approximately £500,000 should be spent on it, about half to be provided by the London County Council and the other half by the government. Since then, however, it has been modified from time to time, and during the economic crisis of a year or two ago it was shelved for the time being.

The scheme now to be carried out is estimated to cost about £200,000, of which the London County Council will be responsible for half and the government half. The commitments in respect of the scheme up to the present amount to £103,595, which will be borne by the government and the County Council in the proportions of £50,195 and £53,400, respectively.

ANNUAL MEETING OF THE METALLURGICAL ADVISORY BOARD

AT the invitation of the Carnegie Institute of Technology, metallurgists from all parts of the country will gather at Pittsburgh on October 20 for the seventh annual open meeting of the Metallurgical Advisory Board. Reports of research activities at the institute will be made by investigators and will be discussed by experts from the industry, thus furnishing a valuable interchange of opinion between the theoretical and practical side of steel making.

At the opening session to be held in the Carnegie Union, Jerome Strauss, chief research engineer of the Vanadium Corporation, will preside. Dr. F. N. Speller, chairman of the advisory board, will make the address of welcome.

The opening report will be made by Dr. Robert F. Mehl, director of the metals research laboratory at Carnegie. During the first year of its reorganization the laboratory has undertaken a number of new lines of research. The studies of iron-manganese and iron-manganese-carbon alloys has been continued throughout the year and will be reported. The constitution of the ternary iron-manganese-carbon alloys with 2.5 and 4.5 per cent. manganese has been finished; the electrical conductivity and thermal magnetic properties of binary magnetic alloys have been investigated, and the constitution of high manganese binary iron-manganese alloys has been studied. The studies nearly complete the proposed program on these alloys. In addition to these research subjects, the laboratory has inaugurated two new general programs, on precipitation from solid solutions and on internal strains in metals.

New work will be reported by Dr. Francis M. Walters, Jr., on the study of the formation of ferrite from austenite in low carbon steels in which a new dilatometer, which bids fair to be of considerable use in metallurgical investigations, will be described.

The studies on internal strain, to be reported by Dr. C. S. Barrett, have to do principally with x-ray determinations of internal strains in worked and heated metals and alloys. A new x-ray method will be reported which offers an opportunity to determine stress distribution in the surface of stressed materials. The complete research program on this subject will be presented and discussed at the meeting.

At the afternoon session Mr. L. F. Reinartz, representing the open hearth committee of the American Institute of Mining and Metallurgical Engineers, will preside. Dr. V. N. Krivobok, head of the graduate metallurgical work at Carnegie, will report on his recent studies of corrosion-resisting and heat-resisting alloys.

The work of the research staff of the Metallurgical Advisory Board for the year has consisted chiefly in open hearth studies designed to enable the operator to control the finishing stages of liquid steel manufacture to a much finer degree than has been heretofore possible. To date, methods have been worked out in detail for high carbon steels, and studies have been started on low carbon steels for deep drawn products.

As a corollary to this work the problems of variation in response to heat treatment and age hardening are being studied with particular respect to the effect

of the oxygen content of liquid steel. In this connection non-aging steels have been produced which have superior properties to the ordinary structural steels with regard to the ductility of the steel and its ability to withstand high temperature heat treatment without detriment to its physical properties. This work will be described by Dr. Charles H. Herty, Jr., director of cooperative research, and his assistants.

Following the presentation of papers members of the board will hold the annual business meeting. In the evening an informal dinner will be held at the Hotel Schenley with Dr. Thomas S. Baker, president of the Carnegie Institute of Technology, presiding. The speaker for this meeting will be announced later.

These annual meetings of the board have grown in importance each year, and at the last meeting, despite business conditions and the slackening of industrial research, more than four hundred persons attended.

THE CENTENNIAL OF THE BASIC LAWS OF FARADAY

SEPTEMBER 12 marked the hundredth anniversary of Michael Faraday's discovery of the two basic laws of electrochemistry: Faraday observed that the amount of metal or gas produced at the cathode during electrolysis was directly proportional to the amount of current passing through the cell. The internationally accepted value of the ampere is based on this cell. Faraday furthermore found that upon connecting several cells in series, these cells containing different metal solutions, the amount of metal deposited upon the first cathode was equivalent to that of the second cathode, and this in turn equivalent to that of the third cathode and so on. Or, in other words, the same quantity of electricity sets free the same number of equivalents of substances at the electrodes.

The Electrochemical Society celebrated this centennial on the evening of September 8, the day that had been set aside by the Century of Progress Exposition at Chicago as "Faraday Day." Members and guests gathered in the large auditorium of the Illinois Host Building. Among those present was Mrs. Walter S. Faraday, of Chicago, widow of a grandnephew of Michael Faraday; Professor Robert S. Hutton, Goldsmiths' professor of metallurgy, University of Cambridge, England, and a charter member of the society, gave the principal address. Dr. Hutton reviewed the remarkable career of Faraday, illustrating his address with a series of reproductions of the pages of Faraday's note-book and diary.

Dr. George W. Vinal, of the Bureau of Standards, displayed a number of different types of coulometers which were exact replicas of those used and designed by Faraday. Dr. Vinal also demonstrated the laws of Faraday, using solutions of copper and of silver.

At this meeting the Edward Goodrich Acheson Medal and $1,000 prize were bestowed upon Dr. Colin G. Fink.

RECENT DEATHS

GEORGE HENRY PERKINS, vice-president emeritus of the University of Vermont and dean emeritus of its department of the arts and sciences, died suddenly on September 12. He would have been eighty-nine years old on September 25. When he gave up teaching this summer he had been a member of the faculty for sixty-four years. Dr. Perkins had been state geologist since 1898 and was Howard professor of natural history from 1869 to 1931.

DR. JOHN C. SHEDD, professor of physics in Occidental College from 1916 to 1930, and professor emeritus for the last three years, died on May 20, at the age of sixty-four years.

DR. CHARLES LEWIS BEACH, president emeritus of Connecticut State College, formerly professor of dairy husbandry at the University of Vermont, died at Storrs on September 15, at the age of sixty-seven years. He had been ill for some years and resigned the presidency in 1928.

DR. RAMSAY WRIGHT, who retired in 1912 as professor of biology at the University of Toronto, died on September 6, in Worcestershire, England, at the age of eighty-one years.

DR. WALTER GROSS, professor of pathology and pathological anatomy in the medical faculty at Münster, committed suicide on September 15.

SCIENTIFIC NOTES AND NEWS

DR. FRANK BLAIR HANSON, professor of zoology at Washington University, St. Louis, has been appointed assistant director of the Natural Science Division of the Rockefeller Foundation. Dr. Hanson returned from Paris a year ago after a two-years leave of absence, during which time he was fellowship administrator in Europe of the Rockefeller Foundation.

PROFESSOR HEZZLETON E. SIMMONS, head of the department of chemistry and a specialist in rubber technology at the University of Akron, has been ap-