parture in the American scheme is proposed, however, made necessary by the vastness of the country. In addition to the central collection at Washington special collections such as replicas of the historical exhibits will be carried to the people, also the machinery of modern processes will be placed in affiliated museums in industrial centers of every state.

Incorporation was effected in March last under the laws of the District of Columbia by the "Organizing Committee of 100" composed of chairmen of boards of directors, presidents and chief engineers of industries and railroads, and professors of engineering and history in universities and colleges.

HELMHOLTZ'S PHYSIOLOGICAL OPTICS

It is announced that the first volume of the English translation of Helmholtz's Handbuch der Physiologischen Optik, prepared under the editorship of Professor Southall, of Columbia University, and published by the Optical Society of America, is now ready for distribution. The importance of this work as one of the monuments of scientific creation is universally recognized, but this translation is inspired by a realization of its present value to scientific workers and not merely of its historical significance. Although of course many things in it have become antiquated, there are also many that have been overlooked or neglected, and whose value has not been diminished by subsequent research. Moreover, there is no other book, nor even any combination of books, in which anything comparable to it as a conspectus of the whole subject can be found.

In selecting for translation the third (and latest) edition, 1909-10, the editor has in large measure been influenced by the incorporation in that edition of most valuable appendices by v. Kries, Nagel and Gullstrand; and besides these appendices the English translation will include (in the first volume) an entirely new chapter on ophthalmoscopy taken from Professor Gullstrand's Einführung in die Methoden der Dioptik des Auges des Menschen. Since, on the other hand, the third edition (based by v. Kries and Nagel on the first) omitted the very important work of König, done in direct development of Helmholtz's ideas and incorporated in the second edition, this phase of the subject is briefly treated in an appendix (to appear in the second volume) by Christine Ladd-Franklin, which will also contain a critical examination of the Helmholtz and Hering theories of color vision and a concise exposition of her own theory. The time of the publication of the second and third volumes is not yet fixed. The edition is limited to one thousand copies. Orders should be placed with F. K. Richtmyer, Cornell University, Ithaca, N. Y.

THE SECTION OF PHYSIOLOGY OF THE BRITISH ASSOCIATION

OVERSEA members of the British Association for the Advancement of Science coming to the Toronto meeting, beginning August 6, include the following:

President of Section I—H. H. Dale, head of the department of biochemistry and pharmacology, Medical Research Council, London. Former director of the Wellcome Physiological Research Laboratories. His presidential address will deal with "Progress and prospects in chemotherapy."

Vice-president—G. H. F. Nuttall, Quick professor of biology, Cambridge. Editor and founder of the Journal of Hygiene and the Journal of Parasitology.

Recorder—Dr. C. Lovatt Evans, of the department of physiology, St. Bartholomew's Hospital Medical College, London, will discuss "The physiology of muscular contraction in relation to efficiency and fatigue."

Secretary—E. P. Cathcart, Gardiner professor of chemical physiology, University of Glasgow, and adviser in physiology to the War Office, will deliver a paper on the "Respiratory quotient," and a popular lecture on "Seeing is believing" and will discuss "Energy exchange in relation to muscular performance in laboratory investigations."

- J. H. Burn, of the biochemistry department of the Medical Research Council, London, will speak on "The factors controlling the normal output of sugar from the liver."
- S. Monckton Copeman, medical officer, Ministry of Health.
- J. C. Drummond, of University College, London, will give a popular lecture on the "Importance of the infinitely small in nutrition," and will speak also on "Modern tendencies of vitamine research."

Sir Henry Gauvain, medical superintendent to Lord Mayor Treloar's Cripples' Hospital and College, will discuss light therapy in the symposium on "Vitamines and the relation of light to their action."

- E. Mellanby, St. Thomas Hospital, London.
- J. S. Owens.

Sir J. Herbert Parsons, surgeon of the Royal London Ophthalmic Hospital, optical surgeon in University College Hospital and a member of various government committees.

H. E. Roaf, professor of physiology, London Hospital Medical College, will give papers on "Color vision" and on "Urinary pigments."

Alfred Herbert Tubby, consulting surgeon, especially on diseases of children.

THE EDWARD HART CELEBRATION AT LAFAYETTE COLLEGE

Dr. Edward Hart has now completed fifty years of service in connection with the chemistry department of Lafayette College and it is proposed to cele-

brate the event on October 16, 17 and 18 by an intersectional meeting participated in by the Lehigh Valley section, the New York section, the Philadelphia section, the Wilmington section and the South Jersey section of the American Chemical Society. This time is chosen because it immediately follows the centennial celebration of the founding of Lafayette College with a pageant on October 15.

On Thursday afternoon the general theme "Fifty years of chemistry in America" will be discussed by Dr. Edgar F. Smith, Dr. Harvey W. Wiley, Dr. William H. Nichols and Dr. Bradley Stoughton. In the evening there will be a dinner in honor of Dr. Hart. Friday will be devoted to a plasticity symposium during the entire day. Our knowledge of plasticity is very defective, but the science of the flow of matter is fundamental to an understanding of colloid chemistry and many industries have plasticity problems which urgently demand solution, so it is hoped that the conference will be of benefit. On Saturday there will be excursions to different points of the Lehigh Valley: (1) Cement and slate industries and the Delaware Water Gap. (2) Chemical and metallurgical industries of Easton and Philipsburg. (3) Lehigh University of the Bethlehem Steel Company. (4) The New Jersey Zinc Co., at Palmerton, Pa.

Correspondence should be addressed to Professor Eugene C. Bingham, Lafayette College, Easton, Pa.

SCIENTIFIC NOTES AND NEWS

In recognition of his nomination for the presidency of the American Society of Mechanical Engineers, and of his imminent retirement from the position of head of the department of mechanical engineering at Stanford University, Professor William F. Durand was entertained with a dinner in his honor on June 18, under the auspices of the Stanford branch of the American Society of Mechanical Engineers.

Dr. Albert F. Blakeslee, plant geneticist at the Carnegie Station for Experimental Evolution, Cold Spring Harbor, N. Y., has been elected a corresponding member of the Dutch Botanic Society.

PROFESSOR MICHAEL I. Pupin has received the honorary degree of doctor of science from Princeton University.

Dr. Frank Billings was awarded the honorary degree of LL.D. at the recent convocation at the University of Cincinnati.

THE Journal of the American Medical Association reports that as a result of the general election in Japan held on May 10 fifteen medical candidates secured seats in the lower house. These include Dr. Milzinosuke Miyajima, director of the Kitasoto Institute for infectious diseases.

Dr. Edward Mellanby, professor of pharmacology at the University of Sheffield, has been awarded the Stewart Prize of the British Medical Association for work on the relation between rickets and dietetic deficiency.

CHARLES M. UPHAM, state highway engineer of North Carolina, has been recently appointed director of the advisory board on highway research of the National Research Council, to succeed Dr. W. K. Hatt, who has resigned in order to resume his work at Purdue University.

Dr. C. W. Larson has been appointed chief of the new bureau of dairying of the Department of Agriculture created under an act of the last session of congress. The work of the bureau was formerly carried on by the dairy division of the bureau of animal industry of which Dr. Larson was chief.

Dr. CHARLES N. GOULD has been appointed director of the Oklahoma Geological Survey.

THORNTON T. MUNGER has been appointed director of the Northwest Forest Experiment Station now being organized in the United States Forest Service.

Dr. Frank D. Kern and Professor H. H. Whetzel have sailed for a two-month stay in the West Indies for the purpose of studying the plant rusts of that region.

Professor Wilhelm Stepp, director of the university polyclinic at Giessen, has been given a six months' leave of absence to study vitamins in the United States, on the invitation of the Rockefeller Foundation.

NORMAN TAYLOR, curator at the Brooklyn Botanic Garden, is spending the summer at Montauk, Long Island, studying the effect of wind on the transpiration and growth of plants. A temporary laboratory has been erected on an exposed part of the Montauk Downs, where the wind movement is among the greatest recorded for any part of the Atlantic Coast.

Dr. Kazumi Kawamura, professor of soils and agricultural geology at the Imperial University of Tokio, is spending a five-month period of investigational work in the department of soils, University of Wisconsin. He has been appointed to an honorary fellowship and is pursuing his researches under the direction of Professor Truog.

C. P. LATHROP, junior chemist of the Food Control Laboratory, has resigned from the Bureau of Chemistry, to accept a position as technical adviser of the National Preservers and Fruit Products Association, with headquarters in Washington.

Dr. H. M. Leake, late director of agriculture of the United Provinces, India, and late principal of the Cawnpore Agricultural College, has been appointed