

years to ensure inclusion of all stages in development from conception to parenthood. Preconceptional parents, expectant mothers, children at every age level are methodically studied from the point of view of constitutional fitness and developmental health. It is not a clinical examination but one of human biology in which, however, physician-in-charge as well as parents and educators join with the foundations, each participant supplying his special information to the common stock. Studies are made of progress, not of status, and cover the following themes: Growth increments and proportions, physical maturity progress, weight gain and analysis, dento-facial development, brain potentials and muscle action currents, mental expansion, psychomotor development, hand-eye coordination, motor development, skills, steadiness, dexterity, emotional stability, intellectual and social adjustment, interests and talents, personality ratings, vocational leanings and choices. It is obviously as nearly complete a study of the preparation of human

beings for entry into full citizenship as a practical scheme will permit. It is, moreover, facilitated by the essential services of instrument-making, chart-making, statistics, photography and motion picture studies, the resources of the Hamann Museum, of the experimental laboratory for constitutional chemistry and of the animal farm maintained by the Anatomical Department and its Associated Foundations.

Here, then, is the answer to the appeal made by my brilliant and vigorous colleague, Dr. E. A. Hooton, in the pages of *SCIENCE* for March 20, 1936; an answer originating indeed in the casual scratchings of medical leisure but now a truly cooperative effort covering the disciplines pertaining to body, mind and constitution; an answer in which medical science, far from myopic, works forward from the cradle, not backward from the morgue, except in so far as death is but the stepping-stone to a larger more abundant life; an answer for which we are indebted in its inception to the man who took the typhoid out of Cleveland water.

SCIENTIFIC EVENTS

THE BRITISH INSTITUTE OF PHYSICS

Nature reports that the annual general meeting of the Institute of Physics was held on May 19. After election of the officers and completion of the panel of the board, it was announced that the following would take office on October 1, 1936: *President*, Professor A. Fowler; *Vice-president*, F. Twyman; *Honorary Treasurer*, Major C. E. S. Phillips; *Honorary Secretary*, Professor J. A. Crowther; *New Members of the Board*, Colonel K. W. E. Edgecumbe and Professor R. Whiddington.

The annual report for the year 1935 which was adopted at the meeting shows that membership has continued to increase and that the high standard required for corporate membership has been maintained. The total membership at the end of the year was 822.

The first Industrial Physics Conference to be held in Great Britain took place in Manchester in March, 1935, and the attendance was nearly 550. The subject of the conference was "Vacuum Devices in Research and Industry" and an exhibition of instruments, apparatus and books cognate to the subject was arranged and was open to the public. Some 3,500 people visited the exhibition.

A Midland Local Section was inaugurated in November, the towns covered being Birmingham, Leicester, Nottingham and Rugby.

The report shows that the scheme for the training and certificating of laboratory assistants has developed satisfactorily and 21 certificates were issued during the year. The institute's services in placing employers in touch with physicists seeking permanent posts and

with consultants were in constant demand throughout the year. The circulation of the *Journal of Scientific Instruments* increased during the year, both on account of the commencement of its distribution to "associates" without extra payment and on account of sales to non-members.

THE BRITISH INSTITUTE FOR THE STUDY OF ANIMAL BEHAVIOR

THE British Institute for the Study of Animal Behavior has been formed by a number of zoologists, naturalists, physiologists and psychologists with the object of promoting and encouraging research into animal behavior. The institute intends to act as a clearing-house for information regarding work that is being done upon animal behavior in all its aspects and to bring together for the discussion of their problems field and laboratory workers. It is hoped to issue to members a quarterly bulletin in which will be provided summaries of and references to the chief work being done in the various branches of the subject. Meetings for the transactions of scientific business will be held at intervals.

The institute hopes eventually to obtain the means of supporting research and, possibly, of maintaining its own research station.

Those whose work is concerned with animal behavior will materially assist the task of the institute if they will send offprints of their papers to the Honorable Secretary, R. C. Oldfield, The Psychological Laboratory, Cambridge.

Officers of the society have been elected as follows:

President, Julian S. Huxley.

Treasurer, F. B. Kirkman.

Honorary Secretary, R. C. Oldfield.

Council, J. C. Flügel, G. C. Grindley, C. F. A. Pantin, E. S. Russell, B. P. Wiesner and S. Zuckerman.

THE LIBRARY AND LABORATORY OF THE LATE SAMUEL COX HOOKER

PRESIDENT ROBERT H. RUFF, of Central College, Fayette, Missouri, announces that through the assistance of Wm. R. Warner and Company, of New York and St. Louis, Central College has just acquired the entire scientific library of the late Samuel C. Hooker, Ph.D.

Dr. Hooker's children, Mrs. Douglas Treat Davidson, Mrs. Sidney W. Davidson and Samuel Cox Hooker, Jr., have presented to Central College their father's private research laboratory, which was located with the library at his residence, 82 Remsen Street, Brooklyn, New York, including the supplies and equipment and their father's study. The library, laboratory and study are now being packed under the direction of Dr. Neil E. Gordon for removal to Central College, where the library will be installed and the laboratory reconstructed on the campus of the college in order to duplicate so far as possible the original arrangements.

President Ruff writes:

Dr. Hooker's death on October 12, 1935, removed from the ranks of American chemists one of its most remarkable figures. He was a former director and one of the chief technicians of the American Sugar Refining Company and was largely responsible for the development of the beet sugar industry in the United States. He organized the technical operation of all the company's beet sugar factories west of the Mississippi River and retired in 1916 at the age of fifty-six to devote himself to research in organic chemistry and the enjoyment of one of his principal recreations, the collection of scientific books. He continued his research and the building up of his scientific library until the time of his death. His library is recognized as one of the most complete and comprehensive scientific libraries in the world. It was catalogued after Dr. Hooker's death under the supervision of William W. Shirley, of the Pratt Institute Free Library of Brooklyn. It consists largely of scientific journals and includes many sets of obscure periodicals. In addition to chemistry other fields represented are sugar technology, pharmacology, metallurgy, dyes, physics and botany. The periodicals consist of over 18,000 volumes in addition to over 2,400 books and pamphlets.

Among other extraordinary items is a complete set of the Philosophical Transactions of the Royal Society of London from the commencement in 1665. This is the oldest scientific periodical in the world which is still being published. The earlier volumes include the bookplate of Richard Arkwright, the inventor of the spinning jenny.

The library includes many volumes which were at one time owned by the late Sir William Crookes. Early American titles include the *American Journal of Science* from 1818 and the *Journal of the Franklin Institute* from 1826. Dr. Hooker assembled the library from many sources both in this country and abroad and the periodicals are written not only in English but in many foreign languages, including Italian, Swedish, Dutch, Polish, French, German, Danish, Magyar and Japanese.

In his boyhood Dr. Hooker was interested in photography, and his library includes some of the earliest volumes on that subject, dating as far back as 1855 and a treatise on color photography published in 1878.

Dr. Gordon, who is now professor of chemistry at the Johns Hopkins University, will assume his duties as chairman of the chemistry department at Central College at the beginning of the next college year. The acquisition of Dr. Hooker's scientific library and laboratory will afford Central College the opportunity of developing scientific work of the first order.

FIELD CONFERENCE OF PENNSYLVANIA AND NEW YORK GEOLOGISTS

A LARGE and representative group took part in the field conference of Pennsylvania and New York Geologists held in the anthracite region of Pennsylvania from May 22 to 24, 1936. The registrants, 99 in number, came from thirty-three institutions and organizations in New Hampshire, Massachusetts, New York, New Jersey, Pennsylvania, Delaware and Washington, D. C.

The conference assembled in Scranton, spending the first afternoon in visiting the Marvine Breaker, the Grassy Island Mine and the Baltimore Fire Stripping of the Hudson Coal Company and the Archbald Pot-hole. Remarkably fine fossil plants were seen at Grassy Island and numerous fossil stumps at Baltimore Fire Stripping. Mr. R. Y. Williams, of Pottsville, gave a brief history of the anthracite industry at the evening meeting in Wilkes-Barre.

Saturday was spent in a traverse of the different anthracite fields to show the structures, stripping operations, "bootleg" coal mines, the extent of the workings and the problems involved in obtaining the coal. The St. Nicholas Breaker of the Philadelphia and Reading Coal and Iron Company was visited on this day.

Saturday night a moving picture entitled "Stolen Coal," dealing with the "bootleg" coal industry, was shown by the Stevens Coal Company, and one entitled "Buried Sunshine" on the mining and preparation of coal by the Pennsylvania and Reading Coal and Iron Company.

Sunday the party studied the Mauch Chunk-Pottsville contact south of Tamaqua and then proceeded to Lansford for a trip underground in the Coaldale Colliery of the Lehigh Navigation Coal Company. The