

problems of industrial education will report the effect of auto micro-motion study on educational methods in teaching typewriting and manual training; Professor Earl Clarke, of the Russell Sage Foundation, will present a paper on "The Relationship between the Indebtedness of City School Systems and Current Expenditures for the Operation and Maintenance of Schools." The names of Goddard, Rapeer, Heck, Trabue, Meriam, Mead, Kelly and many others well known for their contributions to current educational literature and methods, serve to indicate that those attending the meetings of Section L will be well repaid for their trouble. Sessions of the section will be held each morning and afternoon on Wednesday, Thursday and Friday. The Friday morning session will be a joint meeting with the American Psychological Association. The address of the retiring vice-president, Elwood P. Cubberley, of Leland Stanford Junior University, will be on Thursday afternoon.

SCIENTIFIC NOTES AND NEWS

MEMBERS of the American Association for the Advancement of Science whose dues are paid later than January 1, will receive the back numbers of *SCIENCE* only on payment of one cent a number to cover the extra cost of mailing. It can not be guaranteed that the copies will be supplied, as, owing to the extraordinary increase in the cost of paper, only so many extra copies will be provided as are likely to be needed. The offices of the permanent secretary of the association and of *SCIENCE* will be greatly assisted by the prompt payment of dues.

DR. HUGO MÜNSTERBERG, distinguished psychologist and author, professor of psychology and director of the psychological laboratory of Harvard University, died suddenly while lecturing to a class on December 16. Professor Münsterberg was born in Danzig in 1863 and was called from Freiburg to Harvard University in 1892.

THE public lectures of the approaching meeting of the American Association for the Advancement of Science will be given by Dr.

Simon Flexner, director of the laboratories of the Rockefeller Institute for Medical Research, and by Dr. A. A. Noyes, professor of physical chemistry at the Massachusetts Institute of Technology. Dr. Flexner's lecture on "Infantile Paralysis and the Public Health" will be given at Columbia University at five o'clock on the afternoon of Thursday, December 28. Professor Noyes's lecture on "Nitrogen and Preparedness," will be given on the evening of the same day at the American Museum of Natural History.

MR. THEODORE ROOSEVELT will make the principal address at the opening of the New York State Museum at Albany on the evening of December 29, his subject being "Productive Scientific Scholarship." Among those who will make addresses at the afternoon exercises are Dr. John H. Finley, president of the University of the State of New York; Dr. Charles D. Walcott, secretary of the Smithsonian Institution, and Dr. John M. Clarke, director of the State Museum.

THE Bruce gold medal of the Astronomical Society of the Pacific for the year 1917 has been awarded to Professor E. E. Barnard, of the Yerkes Observatory, for his distinguished services to astronomy. The formal presentation will take place at the annual meeting of the society at San Francisco, on the evening of January 27. This is the fourteenth award of the medal.

THE 1917 meeting of the Pacific Division of the American Association for the Advancement of Science will be held at Stanford University, California, between the dates of April 4 and 7. It is anticipated that Thursday and Friday, April 5 and 6, will become the principal days for meetings of the several Pacific coast societies which will participate in this occasion. Further announcements concerning the meetings, railroad rates and excursions will be made later.

FIFTEEN members of the American Association for the Advancement of Science residing in the city of Rochester, N. Y., held a meeting recently and organized the Rochester Branch of the association. The executive committee consists of H. L. Fairchild, *chair-*

man; H. A. Carpenter, *secretary*; C. C. Hopkins, Adolph Lomb and C. E. Kenneth Mees. The association now has about forty members in the city and the number is increasing. It is not the intention of the Rochester Branch to compete in any manner with the numerous scientific societies in the city, but it aims to do locally what the association is doing in the national field; that is, to stimulate general interest in scientific study, to secure more scientific operation of the city housekeeping, and to act as the correlating body for greater union and effectiveness of the scientific forces in the city, which has a remarkable development of applied science.

At the annual election of the New York Academy of Medicine on December 7, the following officers were elected: President, Dr. Walter B. James; vice-president, Dr. Edwin B. Cragin; trustee, Dr. Charles L. Dana; member of committee on admissions, Dr. Samuel A. Brown, and member of committee on library, Dr. Warren Coleman.

At the seventy-first annual meeting of the Smithsonian Institution held in Washington on December 14 the resignation of Dr. Andrew D. White as a regent was presented and accepted, the board adopting a resolution of appreciation of his nearly thirty years of service. Dr. White wrote that with advancing age he found it impossible to attend to the duties. Representative James T. Lloyd, of Missouri, was appointed to succeed Maurice Connolly, of Iowa, whose Congressional term had expired.

THE five members of the International Health Board Commission of the Rockefeller Foundation, which left June 15 for South and Central America to study yellow fever and other contagious tropical diseases, have returned to the United States. The commission was headed by Major-General William C. Gorgas, U. S. A., and included Dr. Henry R. Carter, of the United States Public Health Service; Dr. C. C. Lyster, Dr. Eugene R. Whitmore, Dr. William R. Wrightson and Dr. Juan Guiteras, head of the Public Health Service of Cuba. Dr. Guiteras stopped at Barbados to investigate reported yellow-fever con-

ditions there. General Gorgas said that the members of the commission had a very successful trip, and that details of their investigations and their recommendations would be made public through the Rockefeller Foundation.

DR. WALDON E. MUNS, formerly of Bellevue Hospital laboratory, New York, has been appointed first assistant bacteriologist in the Syracuse city laboratory, succeeding Dr. William L. Culpepper, who resigned to accept a position with the International Health Board of the Rockefeller Foundation.

DR. RUDOLF RUBRECHT, for several years research chemist in the chemical laboratory of the Massachusetts Agricultural Experiment Station, has resigned to accept an industrial position in Philadelphia.

ARRANGEMENTS have been completed by the American Museum of Natural History for an exhibit of some of Charles R. Knight's recent paintings and small bronzes of modern animals and also of a mural decoration of prehistoric animals in the West Assembly Hall of the Museum from December 15, 1916, to January 15, 1917.

DR. WILLIAM W. KEEN (Brown, '57), emeritus professor of surgery at Jefferson Medical College, will deliver three lectures on January 10, 15 and 17 on the Colver Foundation of Brown University, taking as his subject: "Medical Research and Human Welfare." The lectures will be "the record of personal experience and observation during a professional life of fifty-seven years."

PROFESSOR MARY W. CALKINS, of Wellesley College, is this year the lecturer in philosophy on the Mills Foundation at the University of California. Her subject is "The Fundamental Problems of Philosophy."

THE first lecture in the Adolfo Stahl Lecture Course in Astronomy was given in San Francisco, on the evening of November 10, 1916, by Dr. W. W. Campbell, on the subject "The Solar System." The course is given under the auspices of the Astronomical Society of the Pacific, and provision for it was made by

Mr. Adolfo Stahl, a public-spirited citizen. The course will include five additional lectures, all free to the public, as follows:

December 8, 1916, "Comets," W. W. Campbell.

January 12, 1917, "A Total Eclipse of the Sun," R. G. Aitken.

February 9, 1917, "Double Stars and Star Clusters," R. G. Aitken.

March 9, 1917, "The Nebulæ," H. D. Curtis.

April 6, 1917, "How Astronomical Discoveries are Made," H. D. Curtis.

PROFESSOR HENRY MELVILL GWATKIN, Dixie professor of ecclesiastical history in the University of Cambridge, England, died in November. He was known as a specialist in Mollusca, and his collection of Molluscan radulæ was doubtless the largest in existence. It is understood that this collection now goes to the British Museum.

PROFESSOR J. H. MERIVALE, formerly of Armstrong College, Newcastle, since engaged in mining engineering, died on November 18 at the age of sixty-five years.

LIEUTENANT CORIN H. B. COOPER, R.E., for a time demonstrator in geology at McGill University, and later engaged on government survey work in the oilfields of the Rocky Mountains, has been killed in the war.

THE directors of the Fenger Memorial Fund announce that the sum of \$500 has been set aside for investigation in medicine or surgery in 1917. The money will be used to pay all or part of the salary of a worker, the work to be done under direction in an established institution, which will furnish the necessary facilities and supplies free of cost. It is desirable that the work undertaken should have a direct clinical bearing. Applications giving full particulars should be sent to Dr. L. Hektoen, 629 S. Wood St., Chicago, before January 15, 1917.

THE Naples Table Association for Promoting Laboratory Research by Women announces the offer of the Ellen Richards Research Prize of \$1,000 for the best thesis written by a woman embodying new observations and new conclusions based on independent laboratory research in biology (including psychology), chemistry or physics. Theses offered in

competition must be in the hands of the chairman of the committee on the prize before February 25, 1917. Application blanks may be obtained from the secretary, Mrs. Ada Wing Mead, 283 Wayland Avenue, Providence, R. I.

THE Sarah Berliner Research Fellowship for Women of the value of \$1,000 is offered annually, available for study and research in physics, chemistry or biology. Applicants must already hold the degree of doctor of philosophy or be similarly equipped for the work of further research. Applications must be received by the first of February of each year. Further information may be obtained from the chairman of the committee, Mrs. Christine Ladd-Franklin, 527 Cathedral Parkway, New York.

FORTY-SEVEN students who recently passed final examinations of the Faculty of Medicine, University of Toronto, have enlisted for service in the medical corps, and will leave in the immediate future for overseas service. A special convocation was held on the evening of November 28 in Grant Hall, Queen's University, Kingston, Ont., at which sixty-three medical graduates were granted their degrees. All these graduates will go overseas shortly to serve at the front.

LEGISLATION has recently been enacted which will provide for approximately 300 additional medical officers in the Medical Corps of the United States Navy. The pay ranges from \$2,000 per year, with quarters or an allowance therefore, for assistant surgeons with the rank of lieutenant, junior grade, to \$8,000 with allowances upon attaining the grade of medical director with the rank of read admiral of the upper half. Applicants must be between the ages of 21 and 32 years, citizens of the United States, and must submit satisfactory evidence of preliminary and medical education. The examination for appointment in the medical corps consists of two stages, the first stage securing appointment in the Medical Reserve Corps, and the second stage securing an appointment as a commissioned officer in the regular medical corps. After the candidate passes the preliminary examination he attends

a course of instruction at the Naval Medical School. During this course he receives full pay and allowances of his rank, and at the end of the course he takes a final examination. Two of these courses begin each year, one commencing about the first of October, and the second course beginning early in February. The examinations are held in several of the coast cities in the United States, both on the east coast and the west coast, and also at Chicago, Ill. Literature describing the navy as a special field for medical work, and circulars of information for persons desiring to enter the medical corps, may be obtained by addressing the Surgeon General, U. S. Navy, Navy Department, Washington, D. C.

UNIVERSITY AND EDUCATIONAL NEWS

By the will of Mrs. Mary W. Harkness, widow of Charles W. Harkness, about \$1,100,000 is bequeathed to public purposes. The largest bequest is \$300,000 to Yale University, the income to be used in the payment of salaries of officers of instruction.

BOSTON UNIVERSITY has received an anonymous gift of \$100,000 for scholarships for young men in the college. The gift is made in honor of Augustus Howe Buck, emeritus professor of Greek.

PROFESSOR AND MRS. WILLIAM A. HERDMAN, of the University of Liverpool, have given to the university the sum of £10,000 for the endowment of a chair in geology in memory of their son, who was killed in the war.

PAUL SABINE, of Harvard University, has been appointed assistant professor of physics at the Case School of Applied Science and will have charge of the physics laboratory.

DR. A. R. DAVIS, formerly research assistant at the graduate laboratory, Missouri Botanical Garden (Shaw School of Botany, Washington University), has been appointed assistant professor of botany at the University of Nebraska. Mr. R. A. Studhalter and Mr. H. C. Young, formerly Rufus J. Lackland research fellows in the same institution, have been appointed, respectively, assistant botanist in the Mon-

tana Agricultural Experiment Station and instructor in botany in the Michigan Agricultural College. Miss Ruth Beattie has accepted a position as instructor in botany at Wellesley College.

At the University of Sheffield Dr. W. E. S. Turner has been appointed lecturer in charge of the new department of glass technology.

DISCUSSION AND CORRESPONDENCE PSYCHOLOGY AND MEDICAL EDUCATION

TO THE EDITOR OF SCIENCE: In your issue of November 10, Dr. Cecil K. Drinker has approached the problem of advising students planning to enter the medical profession as to what courses over and above those required they can most profitably give their attention to during their college years. Dr. Drinker has urged the undergraduate to take as much physics and chemistry as possible: I should like to enter a similar plea in favor of psychology.

The importance of a knowledge of psychology to all persons engaged in the practise of medicine is, no doubt, widely recognized by both practitioners and teachers of that science and art to-day, and the value of psychological study as a part of medical education received special attention in a symposium and report on the subject in SCIENCE for October 17, 1913. Little has been heard of the matter recently, however, and I feel it can do no harm to bring up the subject again in the hope that real interest may be aroused in pushing it more effectively to the front.

The conclusions of the report referred to clearly enunciate the need of more cooperation than is at present existent between psychologists and—not only psychiatrists, whose concern is primarily with the problems of the diseased mind—but also the physicians of the body. For all schools of psychology to-day acknowledge and even emphasize the inseparableness of mental states and processes from the physiological conditions which underlie or at least invariably accompany them, and medical men are fully aware of the influence which mental states have upon the health of the body.