

ganization of the American Association for Promoting Hygiene and Public Baths. Dr. Simon Branch, professor in the medical department of Columbia University, who has for nearly twenty years led the movement for free public baths, was elected president, and Dr. William H. Hale, permanent secretary. The annual meeting will be held on the second Tuesday of May, the next meeting being at Baltimore, May 13, 1913. The membership fee is one dollar a year and all persons of good character are eligible for membership.

A CABLEGRAM received at the Harvard College Observatory from Kiel states that a spectrogram of Enebos Nova obtained by Kuestner at Bonn shows "dark lines uranium radium emanation."

WE learn from the London *Times* that Messrs. Sotheby sold, on May 17, the scientific books of the late Sir Joseph Dalton Hooker, among which were several presentation copies, whilst many were with valuable MS. notes by the late owner. A set of Hooker's *Icones Plantarum*, 1837-1911, 30 volumes—£67 (Wesley); Edwards's *Botanical Register*, 1815-47, 33 volumes—£26 (Muller); and a collection of books on the "Flora" of the Antarctic regions, New Zealand, etc., in nine volumes—£123 (Wesley). The late Dr. Joseph F. Payne's property included a slightly defective copy of Apuleius Platonius, "Herbarium," Rome, 1488, the earliest printed book with figures of plants—£55 (Leighton); J. Milton, "Areopagitica," 1644, the very rare first edition, one page slightly cut into—£21 (Barnard); and Joannem de Cuba, "Tractatus de Herbis," etc., 1491, with numerous woodcuts of plants and animals, slightly defective—£35 (Quaritch). The two days' sale of books realized £1,488 14s.

ACCORDING to the *Journal* of the American Medical Association the births for 1910 were 35,119 and for 1911, 69,098 below the average for the decade 1901 to 1910, while the number of marriages in the first year was 10,154 and in the latter 20,897 above the average in that period. It is therefore evident that the fertility of married women has shown a considerable decrease. For each 1,000 of the pop-

ulation there occurred in 1911 30.2 births as compared with 31.5 in 1910, 32.7 in 1909, 33.7 in 1908 and 37.4 in 1901, so that in ten years the birth rate has dropped by 7.2 per thousand. The number of deaths in 1911 was 18.1 per thousand, as contrasted with 16.9, 17.9, 18.9 and 21.7 in the four preceding years. According to these figures, the excess of births for 1911 was 12.1, as compared with 14.6 in 1910, 14.8 in 1909 and 1908 and 15.7 in 1901.

UNIVERSITY AND EDUCATIONAL NEWS

NEARLY \$1,000,000 was appropriated by the General Education Board at its meeting on May 24. \$250,000 is given to the George Peabody College for Teachers at Nashville, Tenn., for the establishment of the Seaman A. Knapp School of Country Life. The other colleges awarded conditional appropriations are: Beloit College, Beloit, Wis., \$100,000; Coe College, Cedar Rapids, La., \$100,000; McAlester College, St. Paul, Minn., \$50,000; University of Rochester, Rochester, N. Y., \$200,000. The sum of \$210,000 was set aside for demonstration work in agriculture in the southern states, for professors of secondary education in state universities of the south, and to aid the work of Negro education in the south.

PROFESSOR OTIS F. RANDALL, who holds the chair of mechanics and mechanical drawing at Brown University, has been appointed dean of the university to succeed Professor Alexander Meiklejohn, who is to become president of Amherst College.

DR. GEORGE DOCK has resigned the deanship of the medical department of Washington University, St. Louis. Dr. Dock will continue as professor of medicine.

DR. DAVID RIESMAN and Dr. Joseph Sailer have been elected professors of clinical medicine in the medical department of the University of Pennsylvania, in succession to the late Dr. John H. Musser. Dr. Richard M. Pearce occupies the John Herr Musser professorship of medical research.

VICTOR C. MYERS, Ph.D. (Yale, '09), has been appointed professor of pathological chemistry, and has taken charge of the new labora-

tory for pathological chemistry recently opened at the New York Post-Graduate Medical School and Hospital.

PROFESSOR WILLIAM E. BROOKE, of the College of Engineering, University of Minnesota, has been appointed to fill the vacancy caused by the retirement of Dr. H. T. Eddy, the head of the department of mathematics and mechanics. Dr. William F. Holman takes the place made vacant by the retirement of Dr. Arthur E. Haynes, from the department of mathematics.

THROOP POLYTECHNIC INSTITUTE, of Pasadena, California, is materially enlarging its department of chemistry with a view to keeping in touch with the industrial development of southern California, especially in connection with the oil industry. Dr. Richard Sidney Curtiss, Ph.B. (Yale, '88), Ph.D. (Würzburg, '92), now professor of organic chemistry at the University of Illinois, has been appointed professor of organic chemistry and research associate. Charles Andrew Brautlecht, Ph.B. (Yale, '06), now doing graduate work at Yale, has been appointed instructor in chemistry and physics. William Ruthven Flint, A.B. (Yale, '98), Ph.D. (Yale, '09), continues in the department as professor of inorganic and analytical chemistry.

OWING to the rapidly growing interest in the science of chemistry and the recognition of its importance in the development of the state resources, the president and regents of the University of California have provided for the enlargement and reorganization of the department of chemistry. In addition to the present staff, the following appointments have been made: Professor Gilbert N. Lewis, of the Massachusetts Institute of Technology, professor of chemistry and chairman of the department; Professor William C. Bray, of the same institution, and Professor Richard C. Tolman, of the University of Cincinnati, assistant professors of chemistry. Several additional instructorships and assistantships have also been created. Owing to the absence of Professor Morgan, the course in elementary chemistry will be in charge of Professor Harry W. Morse, who has received for this purpose

leave of absence for one year from Harvard University. Professor Edmond O'Neill has been appointed director of the chemical laboratory. Owing to the crowded condition of the present laboratory, a new building on the site provided in the Hearst plans will soon be begun. In the mean time, a temporary building is being constructed, and will contain a laboratory of physical chemistry, several offices and research laboratories and shops for mechanic and glass blower. Much attention will be given to the development of advanced study and research. A considerable number of men, several of whom come from other institutions, will enter next term as candidates for the doctorate. Advanced seminars will be offered in organic, inorganic and physical chemistry.

DISCUSSION AND CORRESPONDENCE

THE HEATING IN THE CULEBRA CUT

TO THE EDITOR OF SCIENCE: Mr. MacDonald's interesting article on the heatings in Culebra Cut, in your issue of May 3, No. 905, is paralleled by the spontaneous combustion of bituminous coals, and even of the anthracite culm banks, owing to the oxidization of pyrite. It is a common occurrence, and is the cause of endless trouble in preserving museum specimens of pyrite in fine dissemination during damp weather.

In the case at issue the iron content proceeded from the ferro-magnesian silicates, as Mr. MacDonald has stated; but from ordinary surface oxidation, as is always the case in regions containing the black bisilicates, and as shown by the rustiness of springs and streams. The sulphur content is also generally present in lagoons as more or less dilute sulphuric acid. The presence of carbonaceous material points to a lagoon formation at Culebra Cut.

The function of iron is to be a carrier of oxygen from the air to the precipitated organic débris, changing from hydrated sesquioxide to protoxide: picked up by the above acid: again breaking up as hydrated sesquioxide, and continuing its endless rounds unless it happens to be included and imprisoned under a mass