

of his youth, the strength of his manhood and the counsel of his riper years.

The American Chemical Society has lost a member who through both his experimental researches and his theoretical studies and especially by his now classical work on reaction velocities has made unusual contributions to the advancement of the science for the promotion of which this society exists. These distinguished services have placed all who are interested in chemistry under lasting obligations, and his name will be honored so long as this science is cultivated.

The student of chemistry has lost a friend who was always ready to extend a helping hand and to contribute freely from his rare store of knowledge and extended experience.

The community has lost a man who by his civic virtues, his high ideals, his willingness to assume and faithfulness to perform duties of an unusually trying kind, his catholicity of views and of interests, and his tolerance of and kindly sympathy for the opinions of others commanded the respect and admiration of all with whom he came in contact.

His life was a benefaction, his presence a blessing, his practical christianity a continual source of edification and his career one of great usefulness to man.

We ask that this tribute to his memory be spread upon the minutes of the society; that it be printed in the proceedings and in *SCIENCE*, and that a copy be forwarded to Mrs. Warder.

On behalf of the society,

FRANK V. CAMERON,
F. W. CLARKE,
WM. H. SEAMAN,
FREDERIC P. DEWEY.

SCIENTIFIC NOTES AND NEWS.

THE German emperor has conferred on Professor Simon Newcomb the order 'pour le mérite' in science and the arts.

PROFESSOR EMIL FISCHER, of Berlin, has been elected president of the German Chemical Society.

THE Technical Institute at Munich has conferred the honorary degree of doctor of engineering on Dr. Felix Klein, professor of mathematics at Göttingen.

THE Geological Society of London has made the following awards: The Wollaston medal to Dr. Henry Woodward, formerly keeper of the geological department of the British Mu-

seum; the Murchison medal to Mr. C. T. Clough, of the Geological Survey, known for his excellent work in Scotland; the Lyell medal to Professor F. D. Adams, the Canadian geologist, whose petrographical work is well known; the Prestwich medal to Mr. William Whitaker, whose long labors on the Tertiary deposits of England render him a most fitting recipient. The funds are awarded as follows: The Wollaston to Dr. F. L. Kitchin, who, not long ago, was appointed paleontologist to the Geological Survey of Great Britain; the Murchison to Mr. Herbert Lapworth, who has followed in his father's footsteps with excellent work on the Welsh border; the Lyell is divided between Mr. W. G. Fearnside and Mr. R. H. Solly; the Barlow-Jameson goes to Mr. H. C. Beesley.

DR. A. B. RENDLE, who has been an assistant in the botanical department of the British Museum since 1888, has been appointed keeper of that department in succession to Mr. George Murray, recently retired.

PROFESSOR T. J. J. SEE, U. S. Navy, has recently been elected to membership in the Société française de Physique, Société astronomique de France, Circolo Matematico di Palermo, and to life membership in the Astronomical Society of the Pacific.

MR. G. W. ROLFE, instructor in sugar analysis in the Massachusetts Institute of Technology, has been given leave of absence for several months in order that he may go to Porto Rico to take charge of a sugar plantation on the Constancia estate.

PROFESSOR FRANCIS E. LLOYD, of the department of biology of Teachers College, Columbia University, has resigned to accept a position in connection with the Desert Laboratory of the Carnegie Institution.

IN accordance with the terms of the fund established anonymously, a course of eight lectures will be delivered by Harvard professors at Yale, following the first lecture under the fund delivered by President Eliot on November 13, on the subject, 'Resemblances and Differences among the American Universities,' and printed in this journal. The remainder of the series will be on philosophy.

Professor Palmer will give seven lectures on 'Some Aspects of Ethics' and Professor Münsterberg will give one lecture.

PROFESSOR WILHELM OSTWALD, of the University of Leipzig, has completed his courses at Harvard University, and has since been giving a course of lectures on 'The Relations of Energy to Life and Thought' before the psychological department of Columbia University, and a course of lectures on 'Physical Chemistry' before the chemical department. Professor Ostwald will return to Germany next week.

THE sixth lecture in the Harvey Society course was given by Professor Lewellys F. Barker, of Johns Hopkins University, at the New York Academy of Medicine on January 27 on 'The Neurones.'

PROFESSOR J. J. THOMSON lectured before the Royal Institution on January 19 on 'Some Applications of the Theory of Electric Discharge to Spectroscopy,' and on February 2 Professor S. P. Thompson lectured on 'The Electric Production of Nitrates from the Atmosphere.'

It is said that a library building to be erected on the campus of the University of Chicago is to be the memorial of the late President Harper. It will be erected on the Midway Plaisance, between Lexington and Ellis Avenues, and the cost is to be defrayed by popular subscription.

It is planned to present to the city of Philadelphia a statue of Dr. Joseph Leidy, to be erected in the City Hall Plaza. Dr. Leidy, who was born in that city in 1823 and died there in 1891, added much to its scientific eminence, and as president of the Academy of Natural Sciences, professor of human and comparative anatomy and zoology in the University of Pennsylvania, and president of the Wagner Free Institute of Science, accomplished much for these institutions. The sum of \$10,000 is being collected for the memorial. Contributions may be sent to Mr. Edward B. Smith, treasurer of the Leidy Memorial Committee, 511 Chestnut Street, Philadelphia, Pa.

WE learn from *The British Medical Journal* that in connection with the centenary of the

birth of Joseph Skoda the Vienna Medical Society has decided to issue a complete edition of the famous physician's writings. A committee has been formed for the purpose of carrying this scheme into execution; it consists of Professors Chrobak, von Schrötter, von Neusser, Benedikt and Heitler, with Professors Neuburger and Töply as representatives of the historical sciences. In this edition will be collected Skoda's lectures in the University of Vienna, the articles contributed by him to medical journals, and the special scientific opinions and judgments often delivered by him, together with the other published works of the great clinician.

WE learn from *Nature* that a memorial to the late Dr. George Salmon, F.R.S., provost of Trinity College, Dublin, was unveiled on Friday, January 5, in the national cathedral of St. Patrick's, with which Dr. Salmon was officially associated during the best years of his life. An account of the ceremony appeared in the *Kensington Express* of January 5, from which we learn that the memorial consists of two windows in St. Peter's Chapel, the work of Mr. C. E. Kempe, depicting scenes in the career of St. Peter, and a medallion of Dr. Salmon, by Mr. A. Bruce-Joy, with a Latin inscription of which the following is a translation: "That the name of George Salmon may abide in the memory of mankind this monument has been erected by his faithful friends and grateful pupils. Fellow of Trinity College, Dublin—afterwards regius professor of divinity, and finally provost, he was for thirty-three years chancellor of this cathedral church. A mathematician both adroit and powerful, he probed with keen insight the beginnings of christian history, and specially the origin of the New Testament Books; as teacher and councillor he was unwearyed in the service of the Irish church. Shrewd, courteous, serious, kindly. He was born in 1819, and died in 1904. The fear of the Lord is the distinction of wisdom, and before honor is humility."

DR. H. J. P. SPRENGEL, F.R.S., the inventor of the mercury air-pump, died on January 14, aged seventy-two years.

THE deaths are announced of Professor H. Ravi-Rückhard, docent in anatomy at Berlin, and of Dr. Chelius, professor of geology in the Technical School at Darmstadt.

By the will of Marshall Field, filed on January 24 in Chicago, the city receives \$8,000,000 for the endowment and maintenance of the Field Columbian Museum, now situated in Jackson Park. The bequest is on condition that within six years from the death of Mr. Field there shall be provided a satisfactory site for the permanent home of the museum.

By the will of W. C. Putnam, the Davenport (Iowa) Academy of Sciences becomes prospectively one of the most richly endowed institutions of its kind in the world. Mr. Putnam left an estate of \$700,000 with provisions for limited incomes to relatives, the remainder of the revenues to be paid the academy and the entire estate to go to that institution at the death of the surviving brothers and sisters. His art collection and library, each the most valuable private collection in the state, are left to the academy, with provision for a fireproof building in which they are to be installed.

At its annual meeting on January 24 the board of regents of the Smithsonian Institution adopted a resolution accepting the offer of Mr. Charles L. Freer, of Detroit, to convey to the institution the title to his art collection, and to bequeath \$500,000 for the construction of a fireproof building in which to house it. Mr. Freer is to make the conveyance at once, although the collection is to remain in his possession until his death.

By the will of the late Charles H. Nelson, of Grafton, Mass., his home and \$75,000 is to be given to the city of Grafton for a library, and \$10,000 is to be given to Vassar College, both bequests to take effect after the death of his widow.

By the will of the late Dr. John C. Warren, professor of anatomy and surgery at Harvard University, who died in 1856, the most perfect mastodon skeleton in the world and many other specimens of great value are likely to pass into new hands. Dr. Warren wrote a

still classical monograph on the 'Mastodon Giganteus of North America' in 1852, in which the skeleton in question was described. He put it into a private museum of his own in company with many other curious specimens. There is the great 'Shawangunk' head, which is that of a still larger mastodon. There are many non-articulated bones of the Baltimore mastodon. The very fine collection of fossil foot-prints may be mentioned, but the reader is referred for further details to the *Harvard Bulletin* of January 17, 1906. Dr. Warren left this collection to be held by his children in trust as long as any should survive, after which it is to be shared by the living grandchildren. The time has now come for the latter to consider what disposition they will make of it. Professor J. Collins Warren and Professor Thomas Dwight, both of the Harvard Medical School, are among the heirs.

THE Royal Botanic Society, London, has received £1,000 from Dr. Robert Barnes, £200 from Lord Lister and other gifts.

THE department of mammalogy of the American Museum of Natural History received in December a series of eight hippopotamus skulls showing various stages of growth from the young to the adult from Lake Ngami, South Africa. The department has also secured four huge giraffe skulls from Bechuana Land, South Africa. Comparison with the skull of the museum's mounted giraffe skeleton shows that these newly acquired skulls must have belonged to animals 18 feet high.

THE government of Brazil has decreed a prize of \$10,000 for any one who exhibits 100,000 Maniçoba rubber trees within 18 months from the date of the announcement, and three other prizes for the three next largest plantations, the smallest of which, in order to gain a prize, must not be of less than 20,000 trees.

WE learn from the London *Times* that the first expedition sent out to West Africa by the Liverpool Institute of Commercial Research in the Tropics left the Mersey on January 6 by the Elder-Dempster steamer *Zungeru*. The members, who are conducted by Lord Mountmorres, director of the insti-

tute, are—as chemist, Mr. Kenneth Fisher, senior demy of Magdalen College, Oxford, who has been for some time engaged on research work at Jena University; as botanist, Mr. L. Farmer, assistant curator of herbarium at Kew; as entomologist, Dr. Slater Jackson, of McGill University, and formerly curator of the Canadian government biological station; and as commercial adviser, Mr. Coates, a trader who has long acted as buyer on the West Coast of Africa for Mr. John Holt, one of the best-known of African merchants. The expedition is proceeding to Dakar, Bathurst, Konakey, and, if possible, to the Cameroons. Being only an experimental expedition, the stay on the West Coast will not be of very long duration; in fact, Lord Mountmorres is to return in time to visit the exhibition of rubber at Ceylon in April. But should the results prove satisfactory, there is every probability that the institute will despatch a second expedition to spend a long period in Africa. Sir Alfred Jones (president of the institute) and many leading Liverpool gentlemen were present on board the *Zungeru*, and gave the members of the expedition a most cordial send-off.

UNIVERSITY AND EDUCATIONAL NEWS.

ANNOUNCEMENT is made that Mr. John D. Rockefeller has given \$1,450,000 to the University of Chicago. Of this sum, \$1,000,000 is for the permanent endowment, \$350,000 to cover the current expenditures or deficit of the various departments of the university to July 1, 1907, and the remaining \$100,000 is to provide a fund, the interest of which is to go to the widow of the late President Harper during her lifetime.

BROWN UNIVERSITY will build a library as a memorial to John Hay. Mr. Andrew Carnegie has consented to give one half of the cost, which is estimated at \$300,000.

MR. JOHN D. ROCKEFELLER has given \$115,000 to Acadia College, at Wolfville, N. S., a Baptist institution.

A NEW building is to be erected immediately at the Worcester Polytechnic Institute to be devoted to the department of electrical engi-

neering. For some time past the quarters have been inadequate for the work, and the increasing size of the entering classes for the past three years has finally resulted in the decision on the part of the trustees to proceed immediately with the erection of this new building. Last fall a course in electric railway engineering was added. In the erection of the new building it is proposed to provide ample facilities for the course of instruction in this work and also to introduce the most complete experimental facilities possible. The quarters which have in the past been occupied by the electrical engineering department will be divided between the departments of physics and of chemistry, thus affording to each of these departments much needed relief.

MESSRS. MALLINCKRODT, of St. Louis, offer \$500 for the year 1906-07 to a student of chemistry in the Graduate School of Harvard University, on condition that he serve the subsequent year in the Mallinckrodt chemical works at a suitable salary.

By the will of the late Sir J. S. Burdon-Sanderson, formerly regius professor of medicine at Oxford, the laboratory of the pathological department of the university is bequeathed the sum of £2,000, as an endowment to provide for pathological research there, the fund to be vested in the professors of human anatomy, physiology and pathology, who are to have absolute discretion as to the application of the fund.

THE widow and children of the late Dr. von Siegle, of Stuttgart, have, as we learn from *Nature*, presented 50,000 Marks in memory of the deceased to the chemical institute of the University of Tübingen.

DR. LOUIS COBBETT has been appointed professor of pathology, and Mr. L. T. O'Shea, professor of applied chemistry, in the University of Sheffield.

MR. CHARLES S. BRADLEY, practising electrician of New York City, known for his contributions to electricity and chemistry, has been elected acting professor of chemical practise in the Carnegie Technical Schools, Pittsburg.