

and are published in the *Comptes Rendus*. Polonium, already found by Curie, seems akin to bismuth and radium to barium. DeBierne has worked upon that portion of the solution of pitch-blende which is not precipitated by hydrogen sulfid in acid solution, but is by ammonia or ammonium sulfid. In this portion were present with iron and aluminum small quantities of many other metals, as zinc, manganese, chromium, vanadium, etc., and rare earths. A new radiant substance was found closely akin analytically to titanium, whose power is 5000 times as great as that of uranium, but is not spontaneously luminous as in the case with radium.

In the *Zeitung für Biologie* H. Harms has gone over again the question of the quantity of fluorin in bones, and his conclusion is that the amount varies from 0.005% to 0.022%, and that the quantity is so small and variable that it must be considered, not as belonging to the constitution of the bones and teeth, but as merely accessory.

It has long been believed that the step from the inorganic carbon dioxide and water to organic plant substance, that is to the carbo-hydrates, was by way of formaldehyde, but the actual existence of the intermediate product could not be proven. By macerating fresh leaves with pure water and immediately distilling, it has been possible for Gino Pollacci to detect formaldehyde in the distillate. The test used for formaldehyde is the violet color given with codein and concentrated sulfuric acid.

A NOTABLE contribution to the stereo-chemistry of nitrogen by W. J. Pope and S. J. Peachey appears in the last Proceedings of the Chemical Society (London). When α -benzyl-phenyl-allyl-ethyl ammonium iodid is heated with silver dextro-camphorsulfonate, it is resolved into optical isomers, respectively dextro- and levo-rotary. Here the optical activity appears to be clearly due to the asymmetry of the quinquivalent nitrogen atom, linked to five different groups (or atoms). When the paper was read, Dr. Armstrong characterized it as being the most valuable contribution to stereochemistry since the introduction of geometrical considerations by Le Bel and van't Hoff. J. L. H.

SCIENTIFIC NOTES AND NEWS.

MEMORIAL exercises in honor of the late Edward Orton were held at the Ohio State University on November 26th. Addresses were made by President T. C. Mendenhall, Dr. G. K. Gilbert, Hon. T. J. Godfrey, Professor W. H. Scott and Professor S. C. Derby.

THE bacteriologists of America are planning to organize a society to meet during Christmas week in affiliation with the American Society of Naturalists. The first meeting for organization will be held at New Haven during the coming holidays. A program of papers has, however, been provided, and all interested in bacteriological topics are invited to attend. Information in regard to the Society may be obtained by addressing Professor H. W. Conn, Middletown, Ct.

DR. WILLIAM R. BROOKS, director of Smith Observatory, has just been awarded by the Paris Academy of Sciences 'the Grand Lalande' prize for his numerous and brilliant astronomical discoveries.

PROFESSOR CHARLES R. CROSS of the Massachusetts Institute of Technology will give a series of Lowell lectures on 'The Telephone,' beginning on December 19th.

A DINNER given by the Physical Society, London, was held at the Hotel Cecil on November 17th. The president of the Society, Professor O. J. Lodge, took the chair, and the guests included Right Hon. A. J. Balfour, Mr. G. Wyndham, M.P., Sir W. H. Preece, Major-General E. R. Festing, Dr. J. H. Gladstone, Professor A. W. Rücker, and Professors G. F. Fitzgerald, A. W. Reinhold, A. W. Ayerton, S. P. Thompson, G. C. Foster, and W. Ramsey.

A TOTEMIC column from southern Alaska has been presented to the museum of the University of Michigan by Leon J. Cole, assistant in zoology, who visited Alaska last summer as a member of the Harriman Alaska Expedition. The column is about ten feet high and three feet wide and is made from a tree trunk split lengthwise. It was taken by Mr. Cole from the interior of a house in a deserted village of the Tlingit Indians near Cape Fox.

DR. HENRY HICKS, F.R.S., died, near London, on November 18th aged sixty-two years. His father was a surgeon and he was himself a physician, being a specialist in mental diseases. He was, however, best known as a geologist, having contributed many important papers on geology and paleontology. He was secretary of the Geological Society from 1890 to 1893, and president from 1896 to 1898.

PROFESSOR JOHANN CARL WILHELM FERDINAND TIEMANN died of heart disease at Meran on November 13th, aged fifty-one years. He became a Ph.D. of Göttingen in 1870, and in 1882 was appointed professor of chemistry in Berlin University, undertaking from the same date the editorship of the proceedings of the German Chemical Society. Professor Tiemann was the author of numerous important researches having for their object the discovery of the constitution of the camphors, the terpenes, and other organic bodies. As a result of his work in theoretical chemistry, the manufacture of artificial flavoring matters and perfumes resulted, which is now an important German industry. Professor Tiemann was a brother-in-law of the eminent chemist A. W. von Hofmann.

THE death of Dr. Camara Pestana at Lisbon on November 15th, adds, says the London *Times*, another distinguished name to the list of martyrs to science. He caught the plague while studying the disease at Oporto. Dr. Pestana was chief of the Bacteriological Institute at Lisbon, a man in the prime of life, an ardent and most accomplished bacteriologist. It was his verdict on specimens sent him from Oporto for examination that conclusively established the existence of the plague there in August last. He paid several visits to Oporto to study the outbreak, and was present there when the foreign representatives of science visited the city. His courtesy and amiability greatly endeared him to all his colleagues, while his scientific attainments commanded their respect. His contributions to bacteriology, being written in Portuguese, are but little known, and the foreign bacteriologists visiting Oporto only then became acquainted with them for the first time. They were not less sur-

prised than delighted with the originality and brilliancy of Dr. Pestana's work, and several of them expressed the opinion that if he had used a different language he would undoubtedly have enjoyed the European reputation which his researches deserved. He will be deeply and sincerely regretted.

SIR RAWSON WILLIAM RAWSON, died, in London, on November 20th in his 88th year. He was formerly vice-president of the board of trade and Governor of Barbados, but was interested in scientific matters, having been a member of the council of the Geographical and Statistical Societies, and president of the latter. He was the first president of the International Statistical Society established in 1885, and held this office for ten years.

THE death is announced of Mr. William Pamplin at the advanced age of ninety-two years. He was elected an associate of the Linnæan Society in 1830, and made various contributions on the geographical distribution of British plants.

THE death is also announced of Professor Spigalis, for thirty years director of the laboratory of pharmaceutical chemistry at Königsberg.

A COLOSSAL bronze statue in honor of Ferdinand de Lesseps was unveiled at Port Said on November 17th. Among the addresses was one by Vicomte Melchior de Vogüé, representing the French Academy, who testified to de Lesseps's services to art and science and especially to his indomitable energy.

THE Parliament of Queensland has voted £1,000 towards the funds of the British Antarctic expedition.

THE American Society of Mechanical Engineers is holding its meeting in New York during the present week.

THE third International Congress of Photography is to be held in Paris from July 23 to July 28, 1900. The General Secretary is M. S. Pector, 9 Rue Lincoln, Paris.

IN accordance with the policy of the War Department for a systematic collection of as many interesting relics from Cuba, Puerto Rico and the Philippines as possible for exhibition in

Washington, Major General Brooke, commanding the division of Cuba, has issued the following circular to the officers serving on that Island:

"Officers of the army serving in Cuba are requested to procure wherever practicable any object of historical, ethnological or artistic interest that it may be possible for them to obtain in a proper manner for shipment by government transports, to be deposited among the government collections in the Smithsonian Institution at Washington."

THE Indian correspondent of the *British Medical Journal* reports that the Muktesar Bacteriological Laboratory, including the residence of the Imperial Bacteriologist, which formed part of it, has been completely gutted by fire. Owing to the large amount of pinewood which had been used in the construction of the building, including an enclosed wooden veranda on either side, the flames, which broke out at night, aided by a strong wind, spread with such rapidity that much of the laboratory apparatus, and nearly all private property, was lost. It is stated, however, that the whole of the records of the rinderpest experiments which have been carried out throughout the present year, together with efficient apparatus to allow of their being continued, and all the Government library, have been saved. Surgeon-General Harvey will visit Muktesar early in November, when it is expected that arrangements will be made for the reconstruction of the building, as the walls are reported to be sound.

UNIVERSITY AND EDUCATIONAL NEWS.

THE University of Pennsylvania has received a gift of \$250,000 for the construction and equipment of a laboratory of physics, which will be erected at Thirty-fourth and Locust streets. The name of the donor is withheld for the present.

IT was announced in this JOURNAL last week that funds had been provided for a chair of geology in McGill University in memory of the late Sir William Dawson, the income to be given to Lady Dawson during her life. At the last meeting of the Governors of the University, it was announced that the donor is Sir William MacDonald, to whom the University is already indebted for such great gifts. The

amount of the endowment is \$62,000 and the chair is to be known as the Dawson chair of geology. There is already a Logan chair of geology in the University, filled by Professor Frank D. Adams, but a second will be filled when the income becomes available.

WESLEYAN UNIVERSITY has received a gift of \$38,000 from Miss Elizabeth A. Mead, subject to an annuity during her lifetime. St. Lawrence University has received \$34,000 from various sources. North Western University has received \$15,000 from Dr. R. D. Sheppard toward the cost of a gymnasium.

HON. WM. C. TODD, of Atkinson, N. H., the founder of the newspaper reading room of the Boston public library, has just made the gift of \$500 to the library of Washington and Lee University, to be used chiefly for books on chemistry.

IT is probable that a college for teachers will be established at Cornell University with the aid of funds from New York State. By the increase in the number of the assembly districts in the State, Cornell University must educate eighty-eight additional students without charge, and it is reported that President Schurman and the Superintendent of Public Instruction have asked for support for the college for teachers in return for these scholarships. The College will be on the same basis as the State Veterinary College and the State College of Forestry, in which the cost of professional training is provided by the State, and the other instruction by the University.

A UNIVERSITY Council has been established at Yale University, the function of which is specially to consider questions which concern more than one school or department. The first members are Dean Wright and Professors Dana, Perrin and Sumner of the academic department; Dean Chittenden and Professors Lounsbury and Pirsson of the Scientific School; Dean Phillips of the Graduate School; Dean Wayland and Professor S. E. Baldwin of the Law School; Dean Smith and Professor Carmalt of the Medical School; Dean Fisher and Professor Brastow of the Divinity School; Dean Weir of the Art School, and either Professor Parker or Professor Sanford of the musical department.