Contemporary Birthdays.

November 20, 1851. Prof. John Merle Coulter.
November 21, 1866. Sir John Carruthers Beattie.
November 22, 1868. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., F.R.S.
November 22, 1875. Prof. L. N. G. Filon, F.R.S.
November 23, 1864. Dr. P. Chalmers Mitchell, F.R.S.
November 26, 1851. Prof. J. Cossar Ewart, F.R.S.

Prof. COULTER, botanist, was born at Ningpo, China, and he was educated at Hanover College, U.S.A. Early in his career, when only twenty-one years of age, he was botanist with the United States Geological Survey in expedition work in the Rocky Mountains. Afterwards he returned to his old college, becoming professor of natural sciences; next he accepted the chair of biology in Wabash College. President, and professor of botany in Indiana University from 1891 until 1893, he has been, since 1896, professor and head of the department of botany in the University of Chicago. He is a member of the National Academy of Sciences, Washington and of the National Research Council; and a foreign member of the Linnean Society of London.

Sir J. C. BEATTIE, a graduate of the University of Edinburgh, studied also at Berlin and elsewhere abroad. Professor of physics in the South African College, Cape Town, from 1897 until 1918, he is now vice-chancellor and principal of the University of Cape Town. In 1909 (collaborating with Prof. J. T. Morrison) he brought to successful issue a magnetic survey of South Africa.

Sir THOMAS HOLLAND, Rector of the Imperial College of Science and Technology, received his scientific training at the Royal College of Science, South Kensington. He joined the Geological Survey of India in 1890, and was appointed professor of geology and mineralogy in the Presidency College, Calcutta, in 1893. From 1903 until 1909 he was director of the Geological Survey of India. Returning to England he became professor of geology and mineralogy in the University of Manchester, occupying the post for nine years. The Geological Society of London awarded him its Bigsby medal in 1913 in recognition of eminent services rendered to geology, more especially during his tenure of office in India. Sir Thomas is chairman of council of the Royal Society of Arts.

Prof. FILON has been Goldsmid professor of applied mathematics and mechanics in the University of London since 1912. Born at St. Cloud, France, he was educated at University College, London, and his energies, in the past and present, have centred there.

Dr. CHALMERS MITCHELL was born at Dunfermline. He graduated at the University of Aberdeen and Christ Church, Oxford, studying as well at Berlin and Leipzig. Since 1903 he has been secretary of the Zoological Society of London. Dr. Mitchell has made notable contributions to biological science, and has in addition promoted wide interest in scientific progress generally by numerous articles and other works.

Prof. J. COSSAR EWART was born at Penicuik, Midlothian, and graduated at the University of Edinburgh. Sometime occupant of the chair of natural history in the University of Aberdeen, he returned to Edinburgh in 1882, becoming Regius professor of natural history. Prof. Ewart has specially studied fishery questions; whilst he has written many critical memoirs on the development of the horse and on animal heredity.

Societies and Academies.

LONDON.

The Physical Society, October 22.—Ernest **Wilson**: The corrosion products and mechanical properties of certain light aluminium alloys, as affected by atmospheric exposure. Experiments have been made upon the electrical conductivities, the corrosion products and tensile properties of high purity aluminium, and certain light aluminium alloys, which have been exposed to London atmosphere for a period of twenty-four years. The elements concerned are copper, nickel, manganese, and zinc in varying amounts up to a few per cent. There is also a note on the corrosion products of high conductivity copper.—M. C. **Johnson**: The distribution of intensity in a positive ray spectral line (Part 2). The distribution of velocity among the particles contributing to the 'moving' spectrum is compared with the distribution of velocity in positive rays measured by the electromagnetic method and with some investigations of Betschinsky and Döpel. The appearance of the many-lined spectrum of hydrogen in the positive rays, and the ratio of intensity of the 'moving' and 'resting' spectra is also considered. The inverse square law of probability of electron capture, and some consequences of the work of Wien and Rüchardt, are the most likely controlling factors in the several phenomena.

Optical Society, October 28.—R. **Kingslake**: The analysis of an interferogram. It has been frequently suggested that it should be possible to analyse mathematically the interferometer pattern produced by a lens, in order to obtain a measure of the aberrations from the coefficients of the terms in the various orders of x and y. x and y are here the co-ordinates of a point on the interferogram, the optical path difference of which relative to the central ray of the lens is known at once by counting the fringes. Results obtained by this method do not agree well with those obtained under identical conditions by the oblique Hartmann test.—T. **Smith**: The stationary value of axially symmetric functions (Part 2). Alternative methods to those described in Part 1 of constructing a series representing the stationary value of a given function are developed and applied to evaluate all the terms not involving powers and products of the coefficients of the function higher than the eleventh. The formula in its optical applications enables the first 451 monorythmic aberrations of a symmetrical optical instrument to be determined.

Mineralogical Society, November 2.—L. J. **Spencer**: (1) Schultenite, a new mineral from South-West Africa. The colourless platy crystals from Tsumeb are monoclinic ($a:b:c = 0{\cdot}8643:1:0{\cdot}7181$, $\beta = 84° 36'$ and gave on analysis by E. D. Mountain the formula $PbHAsO_4$. They are identical with crystals prepared artificially by the late Baron A. de Schulten in 1904 (see NATURE, Sept. 18, 1926, p. 411). (2) Aramayoite, a new mineral from Bolivia. This was found in 1925 in a silver-tin vein in the Animas mine at Chocaya. It shows a confused aggregate of cleavage plates with iron-black colour and brilliant metallic lustre. In addition to the perfect basal cleavage there are also good cleavages following a steep tetragonal pyramid. The mineral is pseudotetragonal. Analyses by T. B. McGhie and by E. D. Mountain give the formula $Ag(Sb, Bi)S_2$.—K. **Yardley**: (1) X-ray examination of aramayoite. Some photographs taken with the beam perpendicular to the perfect basal cleavage (001) show no symmetry; powder photographs also show that the tetragonal symmetry