

At St. John's College, A. V. Stephens has been elected to a fellowship. Mr. Stephens gained a first class in the Mechanical Sciences Tripos in 1930 with distinction in aeronautics and the award of the Seeley Prize. For the last three years he has been engaged in scientific research at the Royal Aircraft Establishment, Farnborough, and has conducted experiments and published papers on the spinning of aeroplanes.

In Congregation on May 11, the degree of Sc.D. was conferred on John Read (Emmanuel College), professor of chemistry in the University of St. Andrews and formerly professor of organic chemistry in the University of Sydney. Prof. Read is the author of publications on organic chemistry and historical chemistry, and is known also for his original investigations on stereochemistry, terpene chemistry, and the chemistry of Australasian natural products.

SHEFFIELD.—Mrs. Edward Mellanby has been appointed honorary lecturer in the Department of Physiology.

THE following Commonwealth Fund Fellowships, among others, tenable by British graduates in American Universities for the two years beginning September 1934, have recently been awarded: R. N. Arnold (Glasgow and Sheffield) to the University of Illinois, in engineering; Stewart Bates (Glasgow and Edinburgh), to Harvard University, in economics; J. H. Brown (Glasgow and Oxford), to the University of California, in philosophy; Philip Chantler (Manchester) to Harvard University, in economics; C. J. M. Fletcher (Oxford) to the University of California, in chemistry; E. N. Fox (Cambridge), to the University of Michigan, in engineering; E. G. Hancox (Liverpool and Imperial College of Science and Technology), to the University of Arizona, in geology; Joseph McGinn (Armstrong College, Newcastle), to Harvard University, in business administration; F. G. W. Smith (Imperial College of Science and Technology), to Princeton University, in zoology; A. D. Thackeray (Cambridge), to the California Institute of Technology, in astrophysics; J. C. Trevor (Oxford), to Northwestern University, in anthropology; A. G. M. Weddell (St. Bartholomew's Hospital Medical College), to the University of Rochester, in medicine; Shaun Wylie (Oxford), to Princeton University, in mathematics.

The following have been appointed to fellowships tenable by candidates from the British Dominions: M. M. Burns (New Zealand and Aberdeen), to Cornell University, in agriculture; James Melville (New Zealand and Imperial College of Science and Technology), to Yale University, in biochemistry.

The following have been appointed to fellowships tenable by candidates holding appointments in Government service overseas: J. D. W. A. Coles (Witwatersrand and Department of Agriculture, South Africa), to Washington University, in veterinary science; Dr. R. H. Le Pelley (Imperial College of Science and Technology and Department of Agriculture, Kenya Colony), to the University of Illinois, in entomology; H. E. McMillan (Saskatchewan and the Department of Agriculture, Canada), to the University of California, in entomology; E. A. Moore (Bristol and the Irrigation Department, Bengal), to the University of Illinois, in engineering; C. W. O. Turner (Wales and the Public Works Department, New Zealand), to Stanford University, in engineering.

Science News a Century Ago

Poinsot and Poisson

Among the journals of a century ago which recorded scientific events were the *Athenæum*, from which the following note is taken. It was at a sitting of the Paris Academy of Sciences on May 20 that M. Poinsot commenced reading his memoir, a "New Theory of the Rotation of Bodies", in which he presented new views. Having arrived at these by a direct consideration of the nature of rotation, M. Poinsot launched out into praise of the mode of discovery and spoke at the same time in terms rather slightly of the analytic and algebraic modes of examining a question. M. Poisson, an academician of the analytic school, took fire at these reflections and came down the next week with refutations. M. Poinsot rejoined, instancing a mistake made by D'Alembert. During the discussion, divers allusions, so the writer said, were made such as in a certain honourable house would have called for the interference of the 'Speaker'. Upon the whole, the synthetic method seemed to have had the best of the argument, although M. Libri, the Florentine geometer, joined his anger and argument to those of M. Poisson.

London Mechanics Institution

The tenth anniversary of this institution, now known as Birkbeck College, was held in the theatre of the institution in Southampton Buildings, Chancery Lane, London, on May 22, 1834. Dr. Birkbeck presided over an audience which included many distinguished literary and scientific men. After some preliminary remarks by Dr. Birkbeck and the award of the prizes, five resolutions were passed. The third of these was "that the manifestation of talent developed within the walls of this institution shown on the present, as on former occasions, is a proof of the wisdom of the plan here first widely called into practice of disseminating useful science through the industrious classes of the community and gives substantial earnest that through the agency of these self-ruled and self-supported establishments the barbarism of ignorance, with its concomitants, vice and misery, will be more rapidly dispelled and the moral, the intellectual, and the social condition of man be raised to that higher level which becomes his character as a rational and responsible being". By the fifth resolution the meeting offered "its unalloyed congratulations to Dr. Birkbeck on the steady advancement and the present state of this flourishing and useful institution over which he has from its foundation paternally and anxiously presided without deviation, and that the most hearty thanks of this meeting are due, and are hereby presented to that able individual for the powerful assistance given to this institution on this and every occasion".

The Franklin Institute

At the monthly conversation meeting of the Franklin Institute held at Philadelphia on May 22, 1834, Prof. Johnson made experiments on the centrifugal force of liquids, in refutation of certain statements made by M. Thayer, in a paper read to the French Institute, an outline of which had been given in the *Revue Encyclopedie* of September 1833. The liquids used were oil, water, alcohol and mercury,

and the experiments embraced the cases of rotation about the axis of a vessel in which the oil and water were placed, as well as the vibration of the vessel containing alcohol, water and mercury.

At the same meeting, Dr. Jacob Green exhibited an electromagnetic apparatus by Dr. Henry for the production of reciprocating motion, by the combined action of electromagnetic currents and of permanent magnets, and Prof. A. O. Bache showed apparatus for the polarisation of light. This apparatus had recently been imported for the Friends' College at Haverford. The polarising effect of the tourmaline was seen by a simple arrangement of two plates of that mineral cut parallel to the axis, and fitted with wire rings so as to admit of rotation while the planes remain parallel to each other.

The Duke of Sussex's Soirées

"His Royal Highness the Duke of Sussex, as president of the Royal Society, manifests a liberality and courtesy highly honourable to himself, and entitled to imitation by other noble and eminent persons who are advanced to similar stations by the members of their respective societies. Occasionally, during the winter season, his Royal Highness invites some of the leading members of the Royal Society to dine with him at Kensington Palace, and, on the same evening receives a large assembly of visitors from 9 to 12 o'clock. On these occasions, many of the first nobility and gentry of the country thereby meet some of the most eminent men of science, professors of the fine Arts, and literary characters. . . .

"The presidents of the Astronomical Society, Mr Baily—of the Geological, Mr. Greenough, are in the habit of having frequent dinner and evening parties of the members of their respective societies, and thereby contribute very materially to promote science and a friendly intercourse amongst its lovers and patrons. These gentlemen are rarely ever absent from their presidential duties, and thus manifest a laudable zeal and a positive attachment to that science over which they are elected as professional guardians.

"Two of the Duke of Sussex's meetings have taken place since Christmas and two others named on the invitation cards. For the purpose of gratifying the company, and furnishing matter for conversation, various objects of art, science, vertu, literature, etc., are placed on the tables and the choice treasures of the library are accessible through the obliging attentions of Mr. Pettigrew, his Royal Highness's librarian. The unrivalled collection of Bibles is a source of great interest to many persons. Among other objects exhibited have been a series of marbles of different countries and qualities, on which Mr. C. H. Smith has lectured; a model of a machine for polishing lenses; a very curious model of the Great Pyramid of Egypt, made by Mr. Davidson; and a series of drawings illustrating the architectural antiquities of different ages and different countries, being part of Mr. Britton's extensive series for his lectures." (*Gentleman's Magazine*, May 1834).

London Horticultural Society and Garden

"The Anniversary Meeting took place, when a report on the affairs of the Society was read, and officers elected. It appears that there has been a surplus of income over expenditure for the year ending March 31, 1834, of 1574l. 18s. 7d. Out of

this sum the Society have paid off two bonds amounting to 920l., leaving the gross amount of the debt at 17,602l. 11s. 9d.; which, there can be no doubt, they will soon be able to discharge. The Show at the Gardens on May 10 was the best that has yet taken place. The first striking object on entering was the Wistaria Consequana, covered with some thousands of bunches of flowers; most of which were expanded to the point of their greatest beauty, and but a few so far have begun to drop their corollas." (*Gardener's Magazine*, May 1834).

Societies and Academies

PARIS

Academy of Sciences, March 19 (*C.R.*, 198, 1089–1192). The president announced the deaths of Camille Matignon, D. H. Scott and W. M. Davis. E. FICHOT: Poincaré waves of the second species. J. COSTANTIN: Exteriorisation of degenerations by the action of altitude. Discussion of the effects of growth at high altitudes on plant diseases. A. GOSSET, JOSEPH MAGROU and A. TCHAKIRIAN: The action of various elements on the bacterial tumours of *Pelargonium*. Of various elements introduced, only salts of germanium showed a selective action on the tumours, and the effect was not permanent. GABRIEL BERTRAND and PIERRE SERBESCA: Does the daily injection of small quantities of aluminium favour cancer? The author's experiments on rabbits lend no support to the view that aluminium is toxic and predisposes to cancer. M. HAIMOVICI: The general spaces which correspond point by point with conservation of the parallelism of Cartan. SERGE ROSSINSKI: A transformation of minimal surfaces. ALFRED ROSENBLATT: A bi-harmonic non-linear equation with two independent variables in a general domain. G. VRANCEANU: A classification of the equations of a Pfaff system. B. DE KERÉKJARTÓ: The regularity of the transformations of a simply transitive continued group. N. LUSIN: A new property of measurable B ensembles. MLE. H. SZMUSZKOWICZOWNA: A theorem on polynomials and its application to the theory of quasi-analytical functions. E. VESSIOT: The refraction and reflection of waves. FLORIN VASILESCO: A manner of considering the study of plane movements with ridges independently of the theory of functions with complex variables. ANTOINE APPERT: Some remarks on the Poisson stability in the Poincaré sense. CRESTIN and CAMPREDON: Study of the deformations and of the distribution of the internal forces in a piece of wood by means of an adherent film. Description of a method applicable to material to which, on account of non-isotropic properties, photoelastic methods are inapplicable. LOUIS BESSON: Total radiation measured by the Bellani lucimeter. L. DUNOYER: The expansion of fused silica. A negative coefficient of expansion of fused silica over a certain range of temperature has been proved. ANDRE EGAL: Thermoelectric meter compensated for all fluids. An instrument for measuring the rate of flow of fluids is described and illustrated. RENE REULOS: The deduction of the laws of electrodynamics starting from certain solutions of the equation of electric waves. MLE. M. QUINTIN and A. LEBETTRE: Study of the chain: lead, lead sulphate, copper sulphate, copper. A. PORTEVIN, E. PRETET and H. JOLIVET: Displacement of the