

University Events

LONDON.—Sir Robert Pickard, director of the British Cotton Industry Research Association, and a member of the Senate since 1926, has been elected vice-chancellor for the remainder of the year 1936–37 and for the year 1937–38. He succeeds Mr. H. L. Eason, who took up his duties as principal on July 1. Prof. J. C. Philip has been appointed deputy vice-chancellor for the year 1937–38.

Dr. William Wardlaw has been appointed to the University chair of physical chemistry tenable at Birkbeck College as from October 1. Since 1918 he has been on the teaching staff of the University of Birmingham and has held the post of senior lecturer in chemistry since 1926.

The title of professor of morbid anatomy in the University has been conferred on Dr. G. R. Cameron (Melbourne), in respect of the post held by him at University College Hospital Medical School, and that of reader in chemistry in the University on Mr. Henry Terrey, in respect of the post held by him at University College.

The degree of D.Sc. has been conferred on the following: G. P. Crowden, university reader at the London School of Hygiene and Tropical Medicine (applied physiology), G. E. R. Deacon (chemistry), G. S. Hartley (chemistry), H. L. Chhibber (geology), Dr. W. F. Whittard (geology), Marion G. Eggleton (physiology), T. H. C. Taylor (entomology), R. A. Frazer (mathematics) and H. O. Bull (zoology).

MANCHESTER.—Among the numerous appointments announced at the end of this session is one of somewhat unusual interest—that of Mr. A. D. Ritchie, at present lecturer in physiological chemistry, to the Sir Samuel Hall chair of philosophy and public administration in succession to the late Prof. J. L. Stocks. Mr. Ritchie took first-class honours in philosophy at St. Andrew's in 1911, and second-class honours in Part I Natural Sciences Tripos at Cambridge in 1914. He was elected fellow of Trinity College, Cambridge and worked on the philosophy of science, and was Tarned Lecturer in 1935. Though for the last twenty-three years he has been professionally engaged as a teacher of physiology, he has published various philosophical works in this period.

The following further appointments have also been announced: Prof. P. M. S. Blackett, professor of physics in Birkbeck College, University of London, to succeed Prof. W. L. Bragg in the Langworthy chair of physics; H. Davenport, P. Du Val and W. W. Sawyer, assistant lecturers in mathematics; G. D. Rochester, assistant lecturer in physics; D. G. Evans, assistant lecturer in chemistry in the Department of Bacteriology; E. L. Patterson, assistant lecturer in anatomy; and Miss Margaret I. Williams, assistant lecturer in applied physiology.

SHEFFIELD.—The following appointments have recently been made: J. W. Watson to be assistant lecturer in geography; Gilbert Forbes to be lecturer in forensic medicine; J. M. Kennedy to be lecturer in infectious diseases; G. A. de Belin to be assistant lecturer and research assistant in the Department of Metallurgy.

ST. ANDREWS.—A lectureship in political science has been instituted in the United College, St. Andrews, and Mr. J. M. Brown of Glasgow has been appointed to the new post. Mr. B. S. Robertson has been appointed lecturer in regional anatomy in University College, Dundee.

Science News a Century Ago

The Diet of Silkworms

At a meeting of the Paris Academy of Sciences on July 31, 1837, reported in the *Gazette Médicale de Paris* of August 5, MM. Moriset, de Clavaison and Durrand recorded the results of an experiment on the feeding of silkworms by substituting for mulberry leaves those of the Spanish *scorsonera*. The silkworms which had been so fed from the time that they had been hatched did not appear to suffer from this diet, and had produced cocoons which were in no way inferior to those of silkworms which had been given mulberry leaves at the same time. Some of the cocoons had been sent to the Academy, but did not appear to competent judges to be the product of healthy silkworms. Similar trials had previously been made at different times with the leaves of *scorsonera*, and had always been abandoned. In any event, what had encouraged the speakers to pursue the experiment was the fact that the silk industry would never acquire a great development in the south of France so long as silkworms were fed exclusively by mulberry leaves, in view of the fact that cultivation of the mulberry tree did not harmonize with the other principal cultivations in the country; whereas cultivation of *scorsonera* did very well and would yield a double profit, the root forming a wholesome food similar if not preferable to salsify root.

Hospitals in Russia

A PAPER in the *British and Foreign Medical Review* of July 1837 on the present state of medicine and medical institutions in Russia by Dr. George Lefevre, late physician to the British Embassy at St. Petersburg, contains the following account of the hospitals in that country: "Although few countries can boast of finer institutions for the sick and infirm than Russia at the present day, it has nevertheless been the work of nearly two centuries to bring them to their actual state of perfection. Commenced by a private individual, whose example was soon followed by Government, they only began to have a character of importance under Peter the Great. . . . As regards the external appearance of the hospitals in Moscow and St. Petersburg, they are splendid in the extreme, resembling more the palaces of princes than the abodes of the sick. But it is of their discipline we have to speak, and many of the regulations of these institutions are worthy of imitation by similar establishments in other parts of Europe. One great advantage they possess over charitable institutions of a similar kind in England is the daily admission of patients, the vacant beds being immediately occupied by the most urgent cases. All applicants are not admitted indiscriminately into the General Hospitals; for there are others devoted to the reception of particular diseases, as eruptive fevers, venereal diseases, etc., and persons labouring under diseases which are considered incurable are not treated in the hospitals but are admitted to almshouses. . . . As regards the internal arrangements there is no cause for complaint. The wards are spacious and lofty, the beds not too much crowded together and cleanliness is carried to a point almost deserving of ridicule. . . . The most decided defect in all these institutions is a thorough disregard of ventilation."

The Botanical Society

At a meeting of the Botanical Society held on August 3, 1837, the secretary read a letter from the Botanical Institution of Brussels requesting it might be admitted into friendly correspondence with the Society. Mr. Dennes then read a paper entitled "Observations on the Structure and Germination of the Reproductive Organs of *Marsilea*". The paper was accompanied by a translation of a memoir on the same subject, made to the Paris Academy of Sciences by MM. Mirbel, Dutrochet and St. Hilaire. In *M. quadrifolia* (which much resembles our common trefoil, excepting in its petals being furnished with an additional leaf) there is apparently a longitudinal membranous partition, containing a number of cells each enclosing an hermaphrodite flower. The stamens of these flowers are stated by Jussieu, who was the first to examine the plant minutely, to be so small, and in such numbers, as to render it impossible to count them: they open transversely, to scatter the grains of the spherical yellow pollen. Convincing proofs were adduced from the researches of Dutrochet and St. Hilaire especially, that germination takes place by the impregnation of the ovules with the antheric dust, although this has been strongly opposed by other botanists, who keep all the species of *Marsilea* in the class Cryptogamia.

The *Athenæum* and Meteorology

In its issues of August 5 and 12, 1837, the *Athenæum* devoted several pages to an essay on meteorology, the subject being suggested by a review of two recently published works. The first of these was by Partick Murphy (1782-1847), and was entitled "Meteorology considered in its Connexion with Astronomy, Climate, and the Geographical Distribution of Animals and Plants". Of the author and this book the *Athenæum* said: "We state our firm conviction, that nothing but loss can be the result of his publishing such books as the one before us". Of the other book, Graham Hutchison's "Treatise on the Causes and Principles of Meteorological Phenomena" the reviewer remarked: "This is a sensible, well-executed compilation, interspersed with some new views and explanations of meteorological facts". The subject was one in which the *Athenæum* took a particular interest and at the beginning of the essay it said: "If there be one branch of science, more than another, which we have endeavoured to place prominently before the public, it has been Meteorology, because it appeared to us of great importance and to have been especially neglected".

The London Electrical Society

As a result of a resolution passed at a general meeting of the Electrical Society held on August 5, 1837, the Committee issued a report stating that the object for which the Society was formed, as stated in a resolution of May 16, 1837, would be fully carried into effect. The publication of papers had been deferred, as members had intimated their intention of presenting communications, after the recess, containing new facts in electrical science. Among the communications which had already been received was one from Andrew Crosse, of Broomfield, near Taunton, describing some results obtained by him in producing crystals by transferring the electrical energy from the zinc and copper plates to other substances not metallic in contact with them.

Societies and Academies

Paris

Academy of Sciences, May 31 (*C.R.*, 204, 1597-1692).

JULES DRACH: The logical integration of linear differential equations: the reduction of the group.

MARCEL DELÉPINE and ALAIN HOREAU: The catalysis of the Cannizzaro reaction by active nickel and platinum. The application to some aldoses. The conversion of an aldehyde into alcohol and acid by alkali (Cannizzaro reaction) is greatly accelerated by the addition of a catalyst, Raney nickel or platinum. Results are given for galactose, glucose and arabinose.

PAUL VINCENSINI: The reconstitution of the ensemble of convex bodies of n dimensional space starting from certain base sub-ensembles.

ARNAUD DENJOY: A theorem of Mandelbrojt.

JOSEPH CHALOM: Reaction pumps with supersonic flow.

ASSÈNE DATZEFF: The solution of Schrödinger's equation.

JEAN LOUIS DESTOUCHES: The relativistic wave mechanics of systems and the interaction of light and matter.

HENRI MINEUR: Clusters of stars in kinetic equilibrium.

PAUL BOURGEOIS and JACQUES COX: The frequency of the concentrations in extra-galactic nebulae detected by Hubble's tests.

LUCIEN D'AZAMBUJA: International co-operation for the continuous observation of the sun, and its first results. A summary of results obtained between July 1, 1935, and December 31, 1936. Study of the connexion between chromospheric eruptions and electrical and magnetic disturbances on the earth.

PIERRE VERNOTTE: How to formulate empirical laws. The exponential development.

HENRI LEMONDE: The interpretation of variations of viscosity with concentration in binary liquid mixtures.

RENÉ LUCAS: The thermal waves of liquids.

RENÉ PLANIOL: The application of molecular jets to the production of light ions.

JEAN P. E. DUCLAUX: The anodic polarization of tungsten. Study of the electrolysis of sulphuric acid with tungsten electrodes. The fall of current with time, due to the formation on the anode of a layer possessing a high resistance, depends on the condition of the surface, and is independent of the current.

VITOMIR H. PAVLOVIĆ: A new method for studying subjectively the mixture of colours.

MAURICE PARODI: Study of the transmission of some oxides in the extreme infra-red. Measurements for the oxides of manganese, strontium, cadmium and barium are given. The wave-lengths of the absorption bands plotted against the atomic number fall on a curve resembling a parabola.

HENRI BIZETTE and BELLING TSAI: The magnetic rotatory power of compressed and of liquefied nitric oxide, NO. The experimental results suggest that the molecules of nitric oxide commence to polymerize under high pressure at -80°C . From the Verdet constant at -163°C , it is concluded that 93 per cent of the liquid is in the state of double molecules (NO)₂, and this agrees with the results of Rice, based on the entropy of vaporization.

P. BONÉT-MAURY: The utilization of photoelements with semi-conducting layer for radioactive measurements. Selenium or copper photo-cells,