

Educational Topics and Events

BIRMINGHAM.—Mr. C. G. Parsons has been awarded a Walter Myers travelling studentship to be used in research in the United States on anaemia.

The following appointments have been announced: Dr. M. Stacey to be lecturer and Mr. F. Smith assistant lecturer in chemistry; Dr. A. Lamont to be assistant lecturer in geology; Mr. J. W. Drinkwater to be lecturer in mechanical engineering.

CAMBRIDGE.—Mr. A. L. Hodgkin, of Trinity College, has been elected to the Michael Foster studentship in physiology, which is offered annually for the encouragement of research. The value of the studentship is £105.

At King's College, O. L. Zangwill and J. W. S. Pringle have been elected to Martin Thackeray studentships.

LEEDS.—The Lord Mayor of Leeds has given a capital sum to provide an annual prize in clinical dental surgery, to be known as the Percy Leigh Prize.

The following appointments have recently been made: J. C. Gregory, to be honorary lecturer in the history of science; Dr. Frank C. Happold, at present lecturer in pathology and bacteriology, to be lecturer in biochemistry; H. R. Noltie, to be lecturer in physiology; W. Hobson, to be part-time lecturer in physiology and hygiene; G. D. A. MacDougall, to be assistant lecturer in economics.

WALES.—At the University Congregation held on July 22 at Bangor the honorary degree of D.Sc. was conferred on Prof. A. A. Read, emeritus professor of metallurgy in University College, Cardiff.

ADULT education in the United States has in the past been academic in scope and method, depending in the main for its inspiration and agencies on the universities through their 'university extension' departments. With the inauguration in a number of States of large-scale projects on the lines of the Des Moines "Public Affairs Forums", it has entered upon a new phase in which it finds inspiration and objectives that are frankly political. In his bulletin "Education for Democracy: Public Affairs Forums" (Superintendent of Documents, Washington, price 10 cents), the United States Commissioner of Education attempts a partial answer to the question "How can we make democracy work?" The success of American democracy depends very largely, he holds, upon how much understanding of our common problems can be diffused among the people, and he suggests that such understanding can be most rapidly and effectively promoted through the instrumentality of public forums to be established throughout the country and conducted on the lines of those which have been for the past four years in successful operation in Des Moines. In this city of 140,000 inhabitants some twenty-five 'small-neighbourhood' forums, five large-district forums and one city-wide forum were attended in 1934 by 70,000 adults. Distinctive features of the system are: it is administered as a fundamental part of the public school system under the control of the local education authority; the forum meetings are conducted by expert leaders; corresponding with the varying size and composition of the membership various techniques are used.

Science News a Century Ago

Suspended Animation

THE *Indian Journal of Medical and Physical Science* of August 1, 1836, gives the following account of a man who submitted to be buried alive for a month and was dug out alive at the end of that period: "He is a youngish man, about 30 years of age . . . he generally travels about the country, and allows himself to be buried for weeks or months by any person who will pay him handsomely for the same. The man is said by long practice to have acquired the art of holding his breath by shutting the mouth and stopping the interior opening of the nostrils with his tongue; he also abstains from solid food for some days previous to his internment, so that he may not be inconvenienced by the contents of his stomach, while put up in his narrow grave; and, moreover, he is sewn up in a bag of cloth, and the cell is lined with masonry, and floored with cloth so that the white ants and other insects may not easily be able to molest him. The place in which he was buried at Jaisulmer is a small building about 12 ft. by 6 ft., built of stone, and in the floor was a hole about 3 ft. long, 2½ ft. wide, and the same depth, in which he was placed in a sitting posture, sewed up in his shroud, with his feet turned inwards towards the stomach, and his hands also pointed inwards towards the chest. Two heavy slabs of stone, 5 or 6 ft. long, several in. thick and broad enough to cover the mouth of the grave, so that he could not escape, were then placed over him. The door of the house was also built up, and people placed outside that no trick might be played. At the expiration of a full month the walling up of the door was broken and the buried man dug out of his grave. . . . He was taken out in a perfectly senseless state, his eyes closed, his hands cramped and powerless, his stomach shrunk very much, and his teeth jammed so fast together that they were forced to open his mouth with an iron instrument to force a little water down his throat. He gradually recovered his senses and the use of his limbs".

Disease in Elm Trees

At a meeting of the Entomological Society held on August 4, 1836, a letter was read from Mr. Spence giving an account of the destruction of elm trees in the promenades of Dunkirk, Boulogne and Calais, by *Scolytus destructor*. The decay of the trees had there, as in many other cases, been attributed to wind, soil and various other causes; but the writer was convinced it was owing to the one he had assigned, regarding which he had gained much information. Mr. Westwood added some observations on the extensive injury sustained by the elm trees in Kensington Gardens, London, the majority of those on the south side being dead. He considered that the Society, having accumulated a large mass of information on the subject, should hold an official communication with the commissioner of Woods and Forests for the purpose of suggesting some means by which the ravages might be restrained, as they had already extended to the trees in Lord Holland's park and along the Western Road past Hammersmith. Some attempts at remedying the evil had recently been made with the young elms, by plastering them over with cow dung, which was, however, quite ineffectual, as the beetles might be

seen in thousands running over the covered surface. The neglect of the authorities was a matter of regret, as there could be no doubt that entomological science would cure the evil.

Giraffes at the Zoological Gardens, London

A CORRESPONDENT writing to *The Times* said that the Zoological Society, "which is now extended to about 3000 members held their monthly meeting for the first time on Thursday last [Aug. 4, 1836] in the room which has been fitted up for that purpose, as also for the scientific meetings which are held every fortnight, at the new museum in Leicester-square, the collection of preserved specimens having been removed from Bruton-street". In the report of the council read at the meeting it was stated that M. Thibaut, who had secured the giraffes for the Society, had now left England. The total cost and expenses connected with the four giraffes had been about £2,340. A building for their accommodation would be ready by October, and it was proposed to heat this by air which had passed through pipes surrounded by hot water, a plan suggested by Mr. Sylvester.

Terrestrial Magnetism in Chile

In its columns of *Miscellanea*, the *Athenæum* of August 6, 1836, said: "M. Gay, residing in Chile, has communicated to the French Academy of Sciences that at the time of the great earthquake in that country in February 1835, he observed great variations in the diurnal movements of the needle; but in the lesser shocks the variations were feeble. His observations amount to more than two thousand, all of which have proved to him, that magnetic phenomena are much more complete in that part of the world than in Europe; for instead of two daily movements he obtained three: one in the morning in the East, another in the middle of the day in the West, and a third in the evening to the East again. This triple movement he considers as permanent, and suggests the great chain of the Cordilleras as one of the influential causes."

Education of French Pharmacists

In the *Records of General Science* of August 1836 is a note on the French School of Pharmacy. The object of this School, it said, is to teach all the sciences connected with pharmacy, and to receive such apothecaries as in four trials prove they possess the requisite knowledge for exercising this profession. Every candidate must produce certificates of his having studied for eight years—of his having attained his twenty-fifth year, and must place in the hands of the treasurer the sum of 1,300 francs. The School consists of a director, a joint-director, ten professors, of which four are joint-professors, and a treasurer. The necessary examinations are two upon theory, one of which is upon the principles of the art, the other upon the botany and natural history of simple drugs, and a third and fourth on the practice of the art which last for four days and consist of at least ten chemical or pharmaceutical operations, which the candidate must perform himself, describing the process, materials and results. The existence of this establishment thus enables every apothecary in France to be a chemist; while in England, whoever heard of an apothecary being a chemist or of doing anything for the improvement of pharmacy?

Societies and Academies

Paris

Academy of Sciences, June 22 (*C.R.*, 202, 2021–2108).

ERNEST ESCLANGON: Observations of the eclipse of the sun of June 19, 1936. Observations of Nova Cephei and Peltier's comet. The partial eclipse in France was observed under excellent conditions at Paris, Meudon, Besançon and Bourges.

VITO VOLTERRA: The canonical equations of biological fluctuations.

W. DOEBLIN and PAUL LÉVY: The sums of contingent independent variables with lower restricted dispersions.

B. HOSTINSKY: Movements depending on chance.

OCTAV ONICESCU and G. MIHOC: Statistical chains.

CHARLES EHRESMANN: The notion of complete space in differential geometry.

DAVID WOLKOWITSCH: A family of surfaces of the fourth order.

VICTOR LALAN: Two groups of transformations defined by geodesy.

ARMAND RAUCH: Integral algebroids.

HENRI PONCIN: The search for the conditions of stability of a limiting surface of cavitation.

LÉOPOLD ESCANDE and GEORGES SABATHE: Experiments on the piers of bridges or of mobile dams with aerodynamic profile.

CHARLES BERTAUD: The star stream of Scorpio-Centaurus.

ROGER MERIGOUX: The movement of contaminated liquid surfaces.

PIERRE JOLIVET: A cause of the small power of electrostatic machines and a means of remedying this. The yield is increased by enclosing the electrostatic machine in a vessel containing air under pressure.

ALEXANDRE MARCEL MONNIER and JOSEPH BAZIN: A continuous voltage amplifier.

PIERRE GIRARD and PAUL ABADIE: Molecular interactions and chemical affinity.

LADISLAS GOLDSTEIN: Collisions of the second kind and electronic affinity.

ROBERT FORRER: Electrons, carriers in supra-conduction.

LEON CAPDECOMME: The substitution of surfaces in comparisons of reflective powers by means of the microscope. Discussions of the magnitude of the errors and precautions to be taken for reducing them.

LEWI HERMAN and MME. RENEE HERMAN-MONTAGNE: The absorption coefficients of the bands 4774, 5770 and 6290 Å. of oxygen. As found by Janssen, the absorption varies proportionally to the square of the pressure. A table is given for calculating the optical densities of atmospheric oxygen for different zenithal distances, neglecting the influence of temperature.

MAURICE ROULLEAU: The spectral transmission of developed photographic emulsions.

Mlle. YVETTE CAUCHOIS: Observation and measurement of the $L\alpha$ satellites for the elements 72, 73, 75, 83, 90 and 92. The presence of satellites has been definitely proved and this suggests the necessity of modifying or completing certain recent theoretical conceptions.

AURELIO MARQUES DA SILVA: The materialization of the energy of the β -rays of radium C.