

Educational Topics and Events

CAMBRIDGE.—The Vice-Chancellor announces that he has received a letter from Sir John D. Siddeley offering to the University the sum of £10,000, spread over a period of seven years, to help the development of aeronautical research and to assist the work of Prof. Melvill Jones and his associates in the Sub-Department of Aeronautics in the University. No specific conditions are attached to the offer, but Sir John Siddeley suggests that it may be found best to allow a considerable proportion to accumulate to form a capital endowment and to use the remainder for immediate purposes.

The Harkness Scholarship for 1935 has been awarded to Miss D. H. Rayner, of Girton College.

The Frank Smart Prizes are awarded to M. F. Mare of Newnham College (Botany) and D. W. Ewer, of Trinity College, and R. S. Sturdy, of Trinity College (Zoology and Comparative Anatomy).

LONDON.—University Postgraduate Travelling Studentships of the value of £275 for one year have been awarded to R. G. R. Bacon (Imperial College—Royal College of Science) and to A. E. J. Went (Imperial College—Royal College of Science). Mr. Bacon proposes to carry out chemical research in the University of Zurich, and Mr. Went will study the ecology of the mackerel in Norway.

The University Studentship in Physiology of the value of £100 has been awarded to R. A. Gregory (University College), who will carry on physiological research at University College.

OXFORD.—Lord Nuffield has given £16,000 for the purposes of the new institute for medical research. This is additional to the Radcliffe Observatory buildings and their surrounding land, which he bought when it was proposed to remove the observatory to South Africa. The institute is now to be called the Nuffield Institute for Medical Research.

In 1936 the Halley Lecture is to be delivered by Prof. P. M. S. Blackett and the Herbert Spencer Lecture by Emeritus Prof. J. A. Smith.

The Osler Memorial Medal for 1935, for the most valuable contribution to the science, art or literature of medicine made by an Oxford medical graduate, has been awarded to Dr. A. F. Hurst of Magdalen College.

SHEFFIELD.—The following appointments have recently been made: Dr. Francis Davies, reader in anatomy in King's College, University of London, to be professor of anatomy, in succession to Prof. C. J. Patten, who is retiring; Mr. R. T. Percival, to be lecturer in metallurgy (founding); Mr. John S. Bennett, to be assistant lecturer in metallurgy (founding).

THE following studentships and scholarships for 1935 have been awarded by the Royal Commission for the Exhibition of 1851, the name of the recommending university or college being given in brackets: *Senior Studentships*. Dr. Dorothy Hill (Cambridge), for research in geology at the University of Cambridge; S. F. Boys (Imperial College of Science and Technology, London), for research in physical chemistry at the University of Cambridge; Dr. H. Dickson (Imperial College of Science and Technology, London), for research in botany at the Imperial College; Dr. J. Walker (St. Andrews), for research in organic

chemistry at the University of Oxford; Dr. W. C. Price (University College, Swansea), for research in physics at the University of Cambridge. *Overseas Scholarships*. R. C. Rose (Alberta), for research in physical chemistry at University College, London; Dr. A. B. Van Cleave (McGill), for research in physical chemistry at the University of Cambridge; J. S. Marshall (Queen's University, Kingston), for research in physics at the University of Cambridge; A. M. Crooker (Toronto), for research in physics at the University of Cambridge or the Imperial College of Science and Technology, London; J. R. Price (Adelaide), for research in organic chemistry at the University of Oxford; J. C. Bower (Melbourne), for research in physics at the University of Cambridge; J. W. Mitchell (New Zealand), for research in physical chemistry at the University of Oxford or King's College, London; Dr. H. A. Shapiro (Cape Town), for research in physiology at the University of Edinburgh. A number of senior studentships and overseas scholarships have been renewed for further periods.

Science News a Century Ago

European Aeronautical Society

UNDER the above heading, in *The Times* for July 14, 1835, was the following advertisement: "First Aerial Ship, the Eagle, 160 feet long, 50 feet high, 40 feet wide, manned by a crew of 17; constructed for establishing direct communication between the several capitals of Europe. The first experiment of this new system of aerial navigation will be made from London to Paris, and back again. May be viewed from 6 in the morning till dusk, in the dock-yard of the Society, at the entrance of Kensington, Victoria-road, facing Kensington Gardens, near the first turnpike from Hyde-park-corner. Admittance every day of the week 1s.; children half price."

A sketch and description of the airship appeared in the *Mechanics' Magazine* of July 18, 1835. The balloon or gas holder, it was said, was composed of 2,400 yards of cotton lawn, thoroughly varnished, and contained 7,000 cub. ft. of gas. The car was 75 ft. long and from it were worked the wings with which the machine was to be propelled.

The Scientific Association of Germany

In its "Weekly Gossip on Literature and Art", the *Athenaeum* of July 18, 1835, said: "The Annual Meeting of the Scientific Association of Germany is to be held this year at Bonn on the Rhine, from the 17th to the 27th of Sept. At the meeting last year at Stuttgart, Dr. Christian Frederick Harless, Privy Councillor of Prussia and Professor of Medicine in the University of Bonn, and Dr. Jacob Noeggerath, one of the Directors in Chief of the Council of Mines for the Rhenish Provinces of Prussia, were respectively chosen President and Secretary of the ensuing meeting.

"The Geological Society of France meets in the beginning of September at Mezières and after examining the country there and around Namur, Liège and Aix-la-Chapelle joins the German Association at Bonn.

"There will be sufficient time to go to Bonn after the meeting of the British Association in Dublin, and we hope that our country will be worthily represented. . . . We know that, in the true spirit of German hospitality the Committee are anxious to provide

comfortable quarters for all strangers; but the town is small, and therefore they should get as early advice as possible. Letters should be addressed to Prof. Noeggerath."

The German Association was formed some years before the British Association, and Brewster, writing to Phillips on February 22, 1831, said: "It is proposed to establish a British Association of men of science similar to that which has existed for eight years in Germany, and which is now patronized by the most powerful sovereigns of that part of Europe."

Darwin in Peru

ON July 19, 1835, Darwin records that the *Beagle* anchored in the Bay of Callao, the seaport of Lima, the capital of Peru. Callao he found 'a filthy, ill-built, small seaport', while, owing to the troubled state of affairs, he was able to see little of the country. "I cannot say," he wrote, "I liked the very little I saw of Peru; in summer, however, it is said that the climate is much pleasanter. In all seasons, both inhabitants and foreigners suffer from severe attacks of ague. This disease is common on the whole coast of Peru, but is unknown in the interior. The attacks of illness which arise from miasma never fail to appear most mysterious. So difficult is it to judge from the aspect of a country, whether or not it is healthy, that if a person had been told to choose within the tropics a situation appearing favourable for health, very probably he would have named this coast. The plain round the outskirts of Callao is sparingly covered with a coarse grass, and in some parts there are a few stagnant, though very small, pools of water. The miasma, in all probability, arises from these: for the town of Arica was similarly circumstanced, and its healthiness was much improved by the drainage of some little pools. . . . In all unhealthy countries the greatest risk is run by sleeping on shore. Is this owing to the state of the body during sleep, or to a greater abundance of miasma at such times?"

Faraday on Tour in Switzerland

THE year 1835 was not one of Faraday's periods of great activity. It was in fact a time of rest and recuperation between the electrochemical researches, which were completed, and those on electrostatics, which he began to think of in November 1835. There is no entry of any kind in his Diary after April 27 until August, and in the month of July he was on a holiday tour in Switzerland with his wife and brother-in-law, George Barnard. The need for relaxation after a long period of hard work had evidently been felt, for in a letter he wrote to Magrath from Switzerland on July 19, he speaks of "occupation, fatigue and rheumatism". In the same letter he says: "We had a rough passage to Dieppe from Brighton, so rough that we found the French people wondering that we had ventured, but were so unhappy in our sickness as to be quite unconscious of everything else".

The party travelled by Rouen and Paris to Geneva, where Faraday met Prof. De la Rive again, and then to Chamonix and on for a tour of the mountain scenery. "We are almost surfeited with magnificent scenery", he wrote to Magrath; and again: "No artist should try to paint Mont Blanc; it is utterly out of his reach. He cannot convey an idea of it". They were back in England in August, for on August 6 the Diary entries begin again.

Societies and Academies

DUBLIN

Royal Irish Academy, June 25. H. L. MOVIOUS, JR.: An excavation in the diatomaceous deposit of the Lower Bann Valley. The site, which was excavated in June 1934 by the Harvard Archaeological Expedition to Ireland, lay at the base of an extensive deposit of diatomite where some thirty hearths were discovered. Implements of flint in addition to three polished stone axes were found. Typical of the industry are pointed flakes with a superficial tanging of the bulbar end. The site never served as a place of permanent habitation, since the hearths show evidence of seasonal floodings by the river. A nearly complete pot from quite near the site has proved to belong to the Windmill Hill family of Neolithic ware, according to Prof. V. G. Childe. The archaeological evidence points to about the beginning of the second millennium B.C. as a rough date for the culture. Such a view is substantiated by Prof. K. Jessen's palaeobotanical studies at the site, and on the basis of his work Late Atlantic to Early Sub-Boreal time is probable. As a whole, the industry seems to be an indigenous North Irish development derived from earlier coastal elements which had come in contact with a fully developed neolithic civilisation.

PARIS

Academy of Sciences, May 27 (*C.R.*, 200, 1805-1892). The president announced the death of Hugo de Vries, *Correspondant* of the Academy. ARMAND DE GRAMONT: An optical inverter. CHARLES CAMICHEL, JEAN PARMENTIER and LOUIS ESCANDE: Contribution to the study of liquid veins: multiple solutions: non-commutative operations. Experiments carried out on reduced models and on the Vives-Eaux barrage on the Seine. RENÉ MAIRE and LOUIS EMBERGER: The vegetation of the western Anti-Atlas. MARC KRASNER: The theory of the ramification of ideals. EMILE VAULOT: The application of the calculus of probabilities to the theory of telephone traffic. P. J. MYRBERG: The determination of the type of a simply connex Riemann surface. PIERRE BOOS: The general integral of certain differential equations considered as a function of the constants of integration. CARLO MIRANDA: A new criterion of normality for families of holomorphic functions. NIKOLA OBRECHKOFF: The summation of the ultra-spherical series by the method of arithmetical means. GEORGES VALIRON: A generalisation of Schottky's theorem. EUGÈNE BLANC: Monotone multifunction correspondences. GÉRAUD PETIAU: A form of the equation of the photon. JULIEN KRAVCHENKO: The validity of solutions of the problem of [ships] wakes. F. CHARRON: Various utilisations of the bifilar suspension. L. DUNOYER: The principal cause of the inferiority of spirit-levels compared with liquid baths. JEAN P. E. DUCLAUX: The influence of light on the anodic polarisation of tungsten. ROBERT GUILLIEN: The electrical double refraction of liquid oxygen and nitrogen. MME. IRÈNE CURIE, HANS VON HALBAN, JR. and PIERRE PREISWERK: The artificial creation of the elements of an unknown radioactive family, during the irradiation of thorium by neutrons. M. H. ZAVIZZIANO: The co-precipitation of protactinium with titanium. Titanium dioxide, formed by the hydrolysis of titanium