

### University and Educational Intelligence

CAMBRIDGE.—The title of Stokes lecturer in mathematics has been conferred on Dr. M. Born.

Prof. E. A. Owen, professor of physics at University College, Bangor, of Trinity College, has been approved for the degree of Sc.D.

The subject for the Sedgwick Prize for the year 1937 is "The Application of Modern Technique to the Elucidation of Some Specific Geological Problem". The prize is open to all graduates of the University, and essays are to be sent in on October 1, 1936.

OXFORD.—The question of the provision of sites in the University Park for the extension of the science departments, which has lately given rise to much discussion, has been settled by the adoption of certain decrees by Congregation. By these it is provided that, in addition to the area at present reserved, a further area on the western frontage should be allotted for such extension when required, while the remainder of the Park should be declared a public open space. This arrangement has been approved without opposition, though it would appear that if the requisite negotiations under the provisions of the Town and Country Planning Act, 1932, are carried through, the University will to some extent have forgone its freedom of action with respect to the portion not reserved for science.

THE following International Lady Tata Memorial Scholarships, each of the value of £400 for the academic year 1934–35, for research work in diseases of the blood with special reference to leukaemias, have been awarded: Dr. W. Büngeler (Danzig), Dr. L. Doljanski (Copenhagen), Dr. M. C. G. Israels (Manchester), Dr. C. Oberling (Paris), Dr. J. Engelbreth-Holm (Copenhagen), Dr. M. O. K. Jørgensen (Aarhus, Jutland), Dr. R. Meier (Leipzig), Dr. Lucy Wills (London).

"LEHRFREIHEIT" manifestoes by organisations representing twenty-two thousand American professors have been recently promulgated. They are reviewed in a Press *communiqué* circulated on March 12 by the Institute of International Education of New York. Specific reference to any foreign country is avoided, but recent events in Germany are doubtless responsible for these declarations, which do not ignore the fact that the United States itself is not immune from attacks upon academic freedom. The following excerpts are typical: American Association for the Advancement of Science—"Our existing liberties have been won through ages of struggle and at enormous cost. If these are lost or seriously impaired there can be no hope of continued progress in science, of justice in government, or international or domestic peace, or even of lasting material well-being. . . . Whether by governmental action, administrative coercion or extra-legal violence, we feel it our duty to denounce all such actions as intolerable forms of tyranny." American Political Science Association—"Every people has the right to live under the form of government it selects for itself. It is not for outsiders to object because they do not like it. But it is reasonable to deplore an action anywhere that may be absolutely destructive of gains in human progress that have been made only by great sacrifice. Freedom of teaching is one such gain."

### Science News a Century Ago

Sir Gilbert Blane, F.R.S.

June 26 marks the centenary of the death of Sir Gilbert Blane, F.R.S., who with Robert Lind contributed more than anyone else to naval medicine and hygiene and the welfare of seamen. He was born at Blanefield, Argyllshire, on August 26, 1749, and received his medical education at Edinburgh under the celebrated William Cullen. After obtaining his M.D. degree at Glasgow in 1778, he went to London, became private physician to Sir George Rodney and accompanied him on a voyage to the West Indies. On his return, he submitted to the Board of Admiralty a memorial on the lack of cleanliness, ventilation and dryness in ships, the need for a supply of lemon juice for the prevention and treatment of scurvy, the prevalence of drunkenness, the inadequate care of the sick aboard ship, the absence of proper bedding and soap, and the need of a free supply of medicines and other necessaries to naval surgeons. In 1782 he left Plymouth with Rodney and remained on active service until the end of the War with the American Colonies, during which time he collected materials for his principal work entitled "Observations on Diseases of Seamen" published in 1785. This book consisted of three parts, devoted respectively to the health and diseases of the Fleet during the years 1780–83, the causes and prevention of diseases in fleets, and the description and treatment of affections such as fevers, dysentery and scurvy, most frequently seen at sea. During the last forty years of his life, Blane was frequently consulted by the Government and others on various aspects of public health, especially in connexion with the Navy.

#### Babbage and Parliament

In his "Passages from the Life of a Philosopher", Babbage gives an entertaining account of the elections in which he took part. On more than one occasion he was invited to become a candidate for Parliament, and on June 27, 1834, was nominated for Finsbury. In proposing his name, Mr. F. O. Martin said that although Mr. Babbage had never been in Parliament before, that did not take from his utility. He had, however, laboured to serve the public in other capacities, and had the honour of being the successor in an office formerly filled by the illustrious Newton. He was an advocate for the emancipation of the Jews, and the removal of the disabilities affecting their Dissenting brethren.

The candidature of Babbage was not regarded with favour in some quarters, as there were three other candidates; and in the end his name appeared at the bottom of the poll with 379 votes, while the two successful candidates secured 2,514 and 1,915 votes respectively. In his "Passages", when recalling that he afterwards declined the honour of standing for Stroud, he wrote: "I was not particularly desirous of wasting my time for the benefit of my country. The constituency of Finsbury had already expressed their opinion that Mr. Wakley and Mr. Thomas Duncombe were fitter than myself to represent them in Parliament, and in that decision I most cordially concurred."

#### Travels of Lieut. A. Burnes

On June 28, 1834, the *Athenæum* began a long review of the "Travels into Bokhara" of Lieut.

Alexander Burnes with the remark that, "Since the days when we hung with rapture over the pages of Cook's voyages and felt ourselves inspired by some portion of the enthusiasm that animated the adventurous navigator, we have met with no work by which we have been more interested, delighted and instructed than the travels of Lieut. Burnes". Born at Montrose on May 16, 1805, Burnes at the age of sixteen years entered the Indian army. He became well acquainted with Oriental languages, and soon gaining promotion, became an assistant political officer and was sent on various missions. In 1832, at his own request, he was sent on a twelve-months' expedition into Central Asia. "By his success in this expedition," one writer said, "our traveller at once became famous. He had retraced the greater part of the route of Alexander, surveyed the kingdoms of Porus and Taxiles, sailed on the Hydaspes, crossed the Indian Caucasus, beheld the scenes of the inroads of Jengis, and Timour, and Baber; but more than this, he had detected a new pathway by which India might be invaded." From this journey, Burnes in 1833 returned home to receive the medals of the Geographical Societies of London and Paris and to be lionised by society. Returning to India in 1835, he was employed by the Government on a mission to Afghanistan and six years later lost his life in the terrible massacre of November 1841.

#### Sir James South's Telescope

Referring to the note in these columns under this title in NATURE of June 9, p. 882, Messrs. Sir Howard Grubb, Parsons and Co. inform us that they have a copy of the extraordinary poster which Sir James South used to advertise the sale of his great equatorial telescope. The accompanying reproduction is from a photograph of the poster.

## OBSERVATORY, Campden Hill, Kensington.

To Shy-cock Toy Makers—Smoke Jack Makers—  
Mock Coin Makers—Dealers in Old Metals—  
Collectors of—and Dealers in Artificial Curiosities—  
and to such Fellows of

### THE ROYAL ASTRONOMICAL SOCIETY,

as at the Meeting of that most learned and equally  
upright Body, on the 13th of May last, were en-  
lightened by Mr. Airy's (the Astronomer Royal's),  
profound exposé of the Mechanical Incapacity of  
English Astronomical Instrument Makers of the  
present day.

## TO BE SOLD,

BY HAND, ON THE PREMISES BY  
**Mr. Macleland,**

On WEDNESDAY next, DEC. 21st,

BETWEEN 11 AND 12 IN THE FORENOON.  
Several Hundred-weight of Brass, Gun Metal, &c. &c.  
being the Metal of the

**GREAT EQUATORIAL INSTRUMENT,**  
MADE FOR THE KENSINGTON OBSERVATORY.

### TROUGHTON AND SIMMS,

The Wooden Polar Axis of which, by the same Artists, and its Bittings  
cubbed up by their Assistants.

## MR. AIRY AND THE REV. R. SHEEPHANKS,

were, in consequence of public advertisement on the 8th of July, 1833,  
purchased by divers Venders of Old Clothes, and Licensed Dealers in Dead  
Cows and Horcses, &c. &c. with the exception of a fragment of Mahogany,  
specially reserved, at the request of several distinguished Philosophers,  
which, on account of the great anxiety expressed by Foreign  
Astronomers and Foreign Astronomical Instrument Makers, to possess  
what converted into Sun's Axes, as a souvenir pigment of the state of  
the Art of Astronomical Instrument Making in England during the 19th  
Century, will, at the conclusion of the Sale, be disposed of, at—per pound.

H. Johnson, Printer, 8, York Street, Oxford Street.

## Societies and Academies

### LONDON

Physical Society, June 1. G. F. HULL, S. E. GREEN and MARY BELL: The pressure of radiation. A historical statement. A brief account of some early experiments on radiation pressure, dealing in particular with the investigations of Lebedew and of Nichols and Hull. A. H. JAY: The estimation of small differences in X-ray wave-lengths by the powder method. It has been found possible by the use of a microphotometer to determine accurately the positions of lines at high angles of reflection on a powder photograph. With a powder photograph of clear colourless quartz taken with copper  $K_{\alpha}$  radiation, the distance apart of the two component lines of a well-resolved doublet was measured to within 0.0002 cm. The measurements were then corrected for systematic errors—eccentricity of specimen, absorption of the radiation in the specimen, and divergence of the X-ray beam. The wave-length difference ( $\lambda_2 - \lambda_1$ ) was finally calculated in terms of the given wave-length  $\lambda_1$ . The value of ( $\lambda_2 - \lambda_1$ ) for copper  $K_{\alpha}$  radiation is given as 3.833 X. H. STAFFORD HATFIELD: The action of alternating and moving magnetic fields upon particles of magnetic substances. An explanation of the translatory movement observed by Mr. W. M. Mordey in magnetic particles subjected to a multi-phase alternating field. A. MORRIS CASSIE: Time scale and electron relay used with a cathode ray oscillograph for the investigation of switch-gear and circuit phenomena. E. GWYNNE-JONES: Note on the hyperfine structure in the arc spectrum of xenon. The hyperfine structures of the Xe I lines  $\lambda\lambda$  9045, 9799 and 9923 are described and analysed, and the hyperfine separations of the terms  $2p_0$  and  $2p_{10}$  are derived. It is also found that the lines  $1s_3 - 2p$  are readily self-reversed. Previous nuclear spin data are confirmed.

### PARIS

Academy of Sciences, April 30 (C.R., 198, 1557-1644). P. VIALA and P. MARSAIS: The biology of *Pumilus medullæ*, the cause of the parasitic *court-noué* of the vine. This parasite belongs to the family of the Sphæriaceæ: it forms a new genus near the genera *Xylaria* and *Eutypa*. BORIS KAUFMANN: General closed surfaces and the local dimension. GEORGES KUREPA: Ramified tables of *ensembles*. MAURICE JANET: Systems of two partial differential equations with one unknown function of  $n$  independent variables. ANDRÉ MAGNIER: The integral of Kronecker. F. MARTY: The modulus of the Maclaurin coefficients of a univalent function. G. DEDEBANT, PH. SCHERESCHEWSKY and PH. WEHRLE: The statistical similitude in turbulent movements of fluids. MAX SERRUYS: The passage from the deflagrating to the detonating regime in petrol motors. JEAN LOUIS DESTOUCHES: The definition and properties of the centre of gravity in wave mechanics. HENRI MINEUR: Researches on the movements of the  $B$  stars. J. GÉHÉNIU: The magnetic electron and the correspondence principle of Th. De Donder and J. M. Whittaker. BERNARD KWALL: A system of real matrices which interpose in the theory of the magnetic electron when placed in space-time of special relativity. PIERRE VERNOTTE: How to approach the problems of the propagation of heat with fixed boundaries when the thermal properties of