National Trust in 1944 by his granddaughter, Miss M. T. Talbot. On its walls are portraits of a number of Fox Talbot's ancestors; but there is no portrait of Fox Talbot himself. The hundred and fiftieth anniversary of his birth will occur in February 1950, and a fund has therefore been opened to commission a portrait in oils for the South Gallery of Lacock Abbey opposite the window which was the subject of the earliest existing photograph, taken by Fox Talbot in 1835 and now in the Science Museum, London. A portrait of this character is considered to be preferable to a photograph, so as to accord with the others in the gallery. The honorary treasurer of the fund is Mr. Harold White, and donations should be sent to him at the Royal Photographic Society, 16 Princes Gate, London, S.W.7, and made payable to the "Fox Talbot Portrait Fund".

Use of Glass Apparatus in the Laboratory and in Industry

THE past fifteen years have seen a revolution in the uses of glass apparatus both in the laboratory and in industrial plants. In particular, the adoption in the laboratory of standardized ground-glass joints has provided an alternative to old arrays of corks and rubber tubing. Quickfit and Quartz, Ltd., started to produce such equipment in 1934 on the initiative Sir Graham Cunningham, chairman of Triplex Safety Glass Co., and until 1946 the works were wholly situated in the factory of the Triplex Co. at King's Norton, Birmingham. Quickfit and Quartz, Ltd., made gradual headway until 1939, and then, with the advent of the War, the abrupt cessation of laboratory supplies from Germany coupled with the greatly increased needs of research caused the output to go up ten-fold. Further expansion at King's Norton being impossible, in 1946 a new works was started at Stone in Staffordshire, which is now in production, and extensions are contemplated. With large pieces of glassware the question of annealing is extremely important, and special continuous-tunnel annealingchambers are used, with polariscopes for viewing the strain contours by polarized light. The adoption by industry of glass for use in engineering plant was almost entirely a war-time development; but the value of glass in large condensers, heat-interchanges and for piping corrosive liquids, etc., is now universally recognized. Besides its use in the laboratory, glass has definitely taken its place as an important material in the whole field of engineering. The shop for production of industrial plant at Stone is only in part production, and the bulk of this work is still done at King's Norton.

Journal of Experimental Botany. THE Journal of Experimental Botany has been founded by the Society (of Experimental Biology to provide a medium for the publication of original research in plant physiology, biochemistry and bio-physics and in affch related fields as experimental agronamy. The editorial committee consists of Prof. N. Ashby, Prof. T. A. Bennet-Clark, Prof. G. E. Blackman, Dr. R. Brown, Prof. F. G. Gregory, Dr. W. O. James, Prof. W. H. Pearsall, Dr. R. D. Preston W. O. James, Prof. W. H. Pearsall, Dr. R. D. Preston and Prof. M. Thomas. The Journal will not be restricted to papers submitted by members of the Society, and contributions from research workers, both in Great Britain and abroad, will be considered. Manuscripts of papers submitted for publication should be addressed to the executive editor, Prof. T. A. Bennet-Clark, University of London, King's

College, Strand, London, W.C.2. Three numbers will comprise a volume, and they will appear at fourmonthly intervals, commencing in January 1950. The subscription price for three consecutive numbers is 35s., including postage. Single number 14s. net.

Sugar Research Foundation : Awards

THE fourth (1949) annual award of 5,000 dollars by the Sugar Research Foundation, Inc., New York, established by the Foundation to stimulate scientific studies of sagar as a food and as an industrial raw material, with the aim of improving its usefulness, has been made to Dr. Hermann O. L. Fischer, of the University of California, Berkeley, for his contributions to knowledge of the molecular structure of carbohydrates and his studies of glyceraldehyde, inositol and the nitromethane synthesis. Following the four annual awards of 1946-49 a grand prize of 25,000 dollars will be given in 1950 for the most significant discovery of the preceding five years. This prize will be awarded in recognition of discoveries, inventions or developments in the scientific or technological application of carbohydrates which contribute most significantly to an understanding of the functions of sugar (that is, sucrose), or its practical utilization, as a foodstuff or in its use in any other field of human activity. The award is open to any person, including the recipients of the four annual awards, and all entries should be submitted by February 1, 1950. Further details can be obtained from the Executive Secretary, National Science Fund of the National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington 25, D.C.

Exhibition: Medicine in History

An exhibition entitled "Medicine in History" will be opened on November 26 at the Glasgow Art Gallery and Museum, and will continue until the end of January. The exhibition will mark the three hundred and affieth anniversary of the Royal Faculty of Physicians and Surgeons of Glasgow, founded by King James VI on November 29, 1599, by a charter granted to Peter Lowe and Robert Hamiltone. Special emphasis has naturally been laid upon the work of medical men who were Fellows of the Faculty, among whom may be mentioned William Cullen, Joseph Black, William Hunter, Lord Lister, Sir William Macewen and David Livingstone. Through the courtesy of a Glasgow firm, a reconstruction of a modern operating theatre has been arranged, for contrast with that of an operating theatre in the Glasgow Royal Infirmary in the late nineteenth century. The advances made in radiology in the same space of time are also illustrated. The history of dentistry is traced in examples lent by a Glasgow dentist, and a London collector has loaned pharmacy jars and apothecaries' mortars. The foundations of modern medicine can be seen in a series of historical medical books. The exhibition has been made possible through the generosity and co-operation of institutions and private persons in Glasgow, Edinburgh and London in placing their valuable, and often irreplaceable, records and specimens at the disposal of the Corporation of the City of Glasgow.

Colonial Service: Recent Appointments

THE following appointments in the Colonial Service have been recently announced : J. Chattaway, agricultural officer, Federation of Malaya; W. R. Mills, agricultural chemist, Uganda; C. C. Shapland, agricultural officer, Tanganyika; J. R. Scobie,

lecturer in mathematics, Technical Institute, Yaba, Nigeria; W. M. Bagshaw, assistant conservator of forests, British Guiana; J. M. Boyce and R. P. Farrer, assistant conservator of forests, Tanganyika ; I. Brett, assistant conservator of forests, Northern Rhodesia and Nyasaland; G. W. G. Cottle, assistant conservator of forests, Fiji ; A. E. G. Storrs, assistant conservator of forests, Gold Coast ; K. W. Trenaman and G. H. S. Wood, assistant conservators of forests, Uganda; E. H. Baker, P. V. Caswell and J. M. Miller, geologists, Kenya; J. V. Buller, geologist, Sierra Leone; C. G. B. Du Bois and R. J. Johnson, geologist, Uganda; M. S. Garson, geologist, Nyasa-land; J. Hamilton and G. Henderson, geologists, British Guiana; G. Jefford, mineralogist-chemist, Tanganyika; D. W. Powell, geologist, Water Development Department, Tanganyika; A. M. M. Spurr, geologist, Tanganyika; F. J. H. Adcock, W. G. Midowicz and P. Peterson, assistant meterologists, Federation of Malaya; A. R. Green, veterinary officer, Tanganyika; G. J. Hawkins, ranger (fisheries statistician), Department of Game and Tsetse Control, Northern Rhodesia; R. T. Jarman, meteorological forecaster, Bermuda ; F. I. Parnell, assistant director, Department of Game and Tsetse Control, Northern Rhodesia; I. G. Watterston and G. S. Young, provincial tsetse officer, Tanganyika; W. A. Stuart Williams, government statistician, Nigeria; P. C. Chambers (senior agricultural officer, Kenya), director of agriculture, Cyprus; R. G. Heath (senior agricultural officer, Federation of Malaya), chief field officer, Federation of Malaya; W. J. M. Irving (senior agricultural officer, Uganda), assistant director of agriculture, Uganda ; J. C. Muir (director of agriculture, Tanganyika), member for agriculture and natural resources, Tanganyika ; C. C. Skeete (director of agriculture, Windward Islands), director of agriculture, Barbados; F. H. Fitch (geologist, Federation of Malaya), senior geologist, Federation of Malaya; C. Raeburn (director of geological survey, Nigeria), commissioner on special duties, Nigeria; H. D. Tonking (senior pathologist, Mauritius), pathologist, Nigeria; H. M. Stuchbery (senior veterinary officer, Tanganyika), deputy director of veterinary services, Nyasaland; H. M. Johnston (malaria officer, Jamaica), malariologist, Jamaica.

The Night Sky in December

FULL moon occurs on Dec. 5d. 15h. 13m., U.T., and new moon on Dec. 4794. 18h. 55m. The following conjunctions with the moon take place: Dec. 12d. 23k., Saturn 0.3° S.; Dec. 13d. 09h., Mars 0.6° N., Dec. 20d. 23h., Mercury 3° N.; Dec. 22d. 05h., Jupiter 4° N.; Dec. 22d. 23h., Venus 4° N. In addition to these conjunctions with the moon, Venus is a conjunction with Jupiter on Dec. 7d. 03h., Venus borg 2° S. Venus being 2° S. Mercury is unfavourably placed for observation during the first part of the month, but at the end of the month the planet sets 1h. 20m. after sunset and can be seen in the western sky for a short time. Venus sets more than three hours after the sun during December and is conspicuous in the western sky, attaining its greatest brilliancy (stellar magnitude -4.4) on Dec. 26. On this date the visible portion of the illuminated disk is only 0.26, but the planet is then only 38 million miles from the earth. Mars rises about midnight up to the middle of the month and at 23h. 27m. at the end of the month and can be seen in the morning hours in the constellation of Virgo fairly close to β Virginis about the middle of the month. Jupiter sets at 19h. 35m., 18h. 55m. and

18h. 13m. at the beginning, middle and end of the month, respectively, and is easily seen, lying low in the constellation of Capricornus. Saturn rises soon after midnight on Dec. I and at 22h. 17m. on Dec. 31, on which date it is stationary, and can be seen a little east of σ Leonis. Occultations of stars brighter than magnitude 6 are as follows: Dec. 3d. 22h. 53.6m., τ Arie. (D); Dec. 6d. 17h. 52.1m., 136 Taur. (D); Dec. 6d. 18h. 46.7m., 136 Taur. (R); Dec. 8d. 5h. 14.9m., 47 Gemi. (R); Dec. 9d. 0h. 32.4m., ω Canc. (R); Dec. 23d. 16h. 43.9m., \times Capr. (D); Dec. 25d. 17h. 10.6m., χ Aquar. (D); Dec. 31d. 19h. 18.0m., 104 B. Taur. (D). D and R refer to disappearance and reappearance, respectively, and the latitude of Greenwich is assumed. Winter solstice occurs on Dec. 22d. 04h.

Announcements

At the forthcoming meeting of the American Association for the Advancement of Science, to be held in New York during December 26-31, the British American Association Lecture (founded in 1939) will be delivered by Prof. G. B. B. M. Sutherland, lately of Cambridge and now professor of physics in the University of Michigan. The Lecture will be on "The Growing Importance of Infra-Red Studies in Physics, Chemistry and Biology". Dr. W. A. Macfarlane, of the United Kingdom Scientific Mission in Washington, will give a talk on the organisation of science in Great Britain.

MR. J. R. BARROWMAN has been appointed lecturer in agriculture and farm director, University of Leeds, from January 1, 1950.

THE Council of the University of Sheffield has decided that, in view of their distinction in research and scholarship in their several fields of study, the title of reader be conferred on : W. H. Wilcockson, senior lecturer in geology; Dr. T. S. Stevens, senior lecturer in organic chemistry; Dr. A. S. C. Lawrence, senior lecturer in physical chemistry, to be reader in colloid chemistry.

MISS JEATA M. TROTTER, of the University of Otago, has been appointed a lecturer in the Department of Education of the International Wool Secretariat, Dorland House, 18–20 Regent Street, London, S.W.1. Miss Trotter took her degree in textiles and household science, and also qualified as a teacher. She has spent much time in New Zealand on sheep farms and has also acquired a knowledge of wool marketing problems at various wool-selling centres.

THE Seventh International Botanical Congress will be held in Stockholm during July 12–20, 1950. Communication No. 3 from the Organising Committee, containing information on time of final application, membership fee, costs of exaursions, expenses in Sweden, visa and money regulations, etc., is now being distributed. It can be obtained from the Secretary-General, Dr. Ewert Aberg, Uppsala 7 Sweden.

CHRISTMAS lectures for boys, primarily between the ages of thirteen and seventeen, are being arranged by the Institution of Civil Engineers. The first will be given by H. Shirley Smith, on "The Wonders of Big Bridges", on December 30, at 3 p.m.; the second will be given by C. W. Knight, on "The Building of Dams" on January 2. Applications for tickets, which are free, should be made to the Secretary of the Institu tion, Great George Street, London, S.W.1.