

British Science Guild.

MUCH success attended the annual dinner of the British Science Guild, which was held at the Prince's Restaurant, Piccadilly, on May 23, with the president of the Guild, Lord Montagu of Beaulieu, in the chair. After the loyal toasts had been given by him, Sir Arthur Mayo-Robson, in proposing "The British Science Guild," said he was sure that there is a wider and deeper interest among the public in regard to recent scientific work, and this interest would be far greater if only scientific discoverers would put their discoveries into works that were more accessible to the public. In nearly all cases technicalities could be very much modified in description, and it would be a great advantage if some of the wonderful discoveries could be put in plain language. Thinking people of various parts of the Empire are just as anxious to learn of these matters because they see much of the application of science. The Guild would be doing very valuable work if it could establish centres in those distant places. The toast was supported by Comdr. L. C. Bernacchi, who spoke of the appeal which will shortly be launched with the object of raising funds to enable the Guild to carry out its legitimate and laudable aims, the encouragement of research and the application of scientific method to all public affairs.

Lieut.-General Sir Alfred Keogh, proposing "Science and Industry," said it had been the custom to rail at industries as having no appreciation of science, or modern discovery, and of being slow to adapt themselves to new developments. However true this may have been in the past, there is no truth in it now. The leaders of industry are fully alive to the importance of science, and that is due partly to the wonderful work of the Department of Scientific and Industrial Research and the Research Associations which had been formed in connection with the great trades.

Sir Edward Boyle, replying, said that we were faced to-day as never before by political, social, industrial, economic, and ethical questions. We can face them with hopes of success only in the spirit in which men of science have fought disease; that is, if we face them logically, by investigation, by experiment, impartially, thoroughly, accurately; in a word, if we face them scientifically. Prof. Huxley, who was fighting the battles of the Guild thirty and forty years ago, said that science was nothing more than organised common-sense.

The president gave the toast of "The Guests," and referred to the way in which science was solving modern problems. In one direction with which he was associated, the making of roads, we had only just begun to apply the teachings of science. The chemist is just as necessary to-day for making roads, for example, in deciding the proper mixture of bitumen and sand to make the surface or carpet of the road, as he is for making dyes, explosives, or medicines. The toast was acknowledged by Principal Ernest Barker, Mr. H. G. Wells, and Mr. F. W. Sanderson.

Mr. H. G. Wells, who was called upon unexpectedly, said that science was to him a thing so great, so all-important, so entirely such salvation as man had before him, that it was with a feeling of irreverence that he found himself talking about it in an unprepared fashion. By science is meant a process of human intellectual energy which is exhaustively and reverently criticised, leading, it is hoped, to action exhaustively criticised before it is exhaustively planned. In that he expressed the whole of his faith, the whole of his belief in human life. An uncharitable person might entertain the view that the

Guild had some idea of monopolising science or claiming science for the purposes of the British Empire, but there was something bigger in their minds than that. Science is a great thing which is going to carry human affairs above those levels, and when we think of science and of the Guild, it means that we of the British community hope to contribute our share to the bigger human process, and to play our part to the best of our ability, with no national and imperial aggressiveness, in the huge task of humanity which is involved in the scientific process.

University and Educational Intelligence.

CAMBRIDGE.—Dr. Searle, Peterhouse, has been re-appointed University Lecturer in Experimental Physics, Mr. S. Lees, St. John's College, University Lecturer in Thermodynamics, and Mr. F. Lavington, Emmanuel College, Girdlers' University Lecturer in Economics.

The Botanic Garden Syndicate invite the attention of the University to the very critical financial position of the garden. They have received generous gifts to help in restoring the garden to its pre-war efficiency, but unless the income of the garden can be considerably increased drastic steps will have to be taken which must involve a diminution in its educational value.

It is proposed that a site of seven acres belonging to King's and Clare Colleges and lying between West Road and Burrell's Walk should be purchased for the erection in due course of a new library, the present library not being large enough to meet its growing requirements.

LONDON.—The Senate has made the following appointments:—Dr. R. W. Chambers to the Quain Chair of English language and literature, tenable at University College, in succession to Dr. W. P. Ker, resigned.

At the meeting of the Senate on May 24, Dr. R. M. Walmsley took his seat for the first time since his election as Chairman of Convocation in succession to Sir Edward Busk. In this connection a resolution was adopted in the following terms: "That on the occasion of Sir Edward Busk's retirement from the Chairmanship of Convocation the Senate desire to place on record their cordial appreciation of the services which he has rendered to the University during the past thirty years."

Mr. N. B. Jopson has been appointed to the University Readership in Comparative Slavonic Philology, tenable at King's College, and Mr. R. B. Forrester, to the Sir Ernest Cassel Lectureship in Commerce, tenable at the London School of Economics.

A course of four lectures on "Phänomenologische Methode und phänomenologische Philosophie" will be given in German by Prof. Edmund Husserl, professor of philosophy in the University of Freiburg, at University College, on June 6, 8, 9, and 12 at 5.30 P.M. At the Imperial College of Science and Technology (South Kensington, S.W.) Dr. A. F. Holleman, professor of organic chemistry in the University of Amsterdam, will lecture in English on recent investigations on the substitution in the benzene nucleus, on Wednesday, June 7, at 5.15 P.M.

The following lectures will be given by professors of Dutch Universities at the Royal Society of Medicine (1 Wimpole Street, W.1): On Monday, June 12, "Injurious Agents and Growths," by Dr. M. Jansen (of Leiden) at 5 o'clock. On Wednesday, June 21, "The Pathology of Hæmoglobin," by Prof. Dr. A. A. Hijmans van den Bergh (of Utrecht),

Both lectures will be delivered in English. Admission to all the above lectures is free without ticket.

APPLICATIONS for a Mackinnon Research Studentship of the annual value of 300*l.* will be received by the Secretaries of the Royal Society until June 19. The studentship, which is awarded in the first instance for two years with a possible extension, is for the furtherance of natural and physical science, and for original research and investigation in pathology. Particulars and forms of application can be obtained from the Assistant Secretary of the Royal Society, Burlington House, W.1.

APPLICATIONS are invited by the Ministry of Agriculture and Fisheries for a number of research scholarships in agricultural science, each of the annual value of 200*l.* and tenable for three years. Candidates must be honours graduates of a British University with special qualifications in chemistry, botany, zoology, physiology, or economics. The object of the scholarships is to train agricultural research workers, and the work undertaken must be approved by the Ministry. Scholars may be required to spend a part of their time at an approved foreign laboratory or university. Conditions of the award and copies of the form upon which applications must be made are obtainable from the Secretary of the Ministry of Agriculture and Fisheries, Whitehall Place, S.W.1. Nominations for scholarships, which must be signed by a professor or lecturer of a university or college, must be received by July 15.

THE *Chemiker Zeitung* of May 11 reports that Prof. K. Freudenberg is to succeed Prof. Pfeiffer at the Technische Hochschule, Karlsruhe.

It is announced in *Science* that Miss Kate C. Garrick, daughter of the late Sir James Francis Garrick, for ten years agent-general in London for Queensland, has by her will bequeathed 10,000*l.* to the University of Queensland to found a James Francis Garrick professorship of either law or medicine, as may seem best to the University, in memory of her father.

ON Saturday, May 6, the undergraduates of Aberdeen University concluded a week's "Carnival" on behalf of the local hospitals with a sand-castle competition on the beach and a pageant in the Mitchell Hall. There were 20,000 spectators at the building of the sand castles. More than 3000*l.* was collected in the city and surrounding towns to which artistes were dispatched in the early days of the week.

FURTHER Research Studentships, about four in number, are being offered to university graduates by the Empire Cotton Growing Corporation and the British Cotton Industry Research Association. The studentships are each of the value of 250*l.*, with certain additional allowances, tenable for one year with a possible renewal for a second year. They are intended to provide opportunities for further training in scientific research bearing on plant genetics and physiology, entomology, physics, etc., or in special subjects relating to administration and inspection in tropical agriculture. One studentship is offered for a candidate having special interest in bacteriology. Further particulars and forms of application are obtainable from the Secretary of the Empire Cotton Growing Corporation, Millbank House, Millbank, S.W.1, not later than June 19.

WE learn from *Chemiker Zeitung* of April 22 that Prof. A. Gutbier, Rector of the Technische Hochschule, Stuttgart, has succeeded Ludwig Knorr as professor of chemistry at the University of Jena.

Calendar of Industrial Pioneers.

June 3, 1803. William Reynolds died.—The son of a successful ironmaster at Ketley, Staffordshire, Reynolds invented a method of raising boats from one level to another by inclined planes, with Telford constructed a cast-iron aqueduct at Longden, Shropshire, and in 1799 patented a method of preparing iron for conversion into steel by the use of manganese.

June 3, 1899. John Nixon died.—The pioneer of the steam-coal trade of South Wales, Nixon was born in Durham in 1815 and was trained there as a mining engineer. In 1839 he removed to South Wales and then to France. His observations on the steaming qualities of Welsh coal led to his shipping a cargo to Nantes, and to a contract for the supply of coal to the French Navy, steps which led to the foundation of the great trade in this coal.

June 4, 1907. Sir Charles Mark Palmer died.—The founder of the great shipbuilding and iron-works at Jarrow, Palmer, who was born in South Shields in 1822, was the son of a shipowner. He early became partner in a colliery business, and in 1851 built the first iron steam-collier for carrying coals from Newcastle to London. During the next forty years no fewer than 600 vessels were built at Jarrow.

June 4, 1906. Francis William Webb died.—A prominent locomotive engineer, Webb was an assistant first to Francis Trevithick and then to John Ramsbottom of the London and North-Western Railway, and in 1871 succeeded the latter as chief mechanical engineer, a post he held till 1903. He was a pioneer of the compound locomotive, and in 1881 with the *Experiment* introduced three-cylinder compound engines, and in 1897 with the *Black Prince* introduced the four-cylinder compound engine.

June 6, 1878. Robert Stirling died.—Stirling, who was born in 1790, was for 53 years minister of the parish church of Galston, Ayrshire. Ordained in 1816, the same year he took out his patent for an engine which produced motive power by means of heated air.

June 7, 1884. Richard March Hoe died.—The well-known New York firm of printing-machine makers, Messrs. R. Hoe and Co., was founded by Robert Hoe, an inventor who was born in England in 1784, emigrated to America in 1803, and died in 1833. His son, Richard March Hoe, born in 1812, was the inventor of the high-speed printing press. He devised the means of holding the type on the cylinder, and built machines having ten cylinders and capable of printing 20,000 newspapers per hour. These machines were used in London in 1858. Many improvements were added by Richard Hoe and by his nephew Robert Hoe (1839-1909), who became head of the firm, and it has been said that "to think of 166,000 sixteen-page newspapers printed in an hour, all folded ready for delivery, a feat made possible by the combination of distinct machines, is to think of the name of Hoe."

June 8, 1882. John Scott Russell died.—One of the most eminent naval architects of last century, Russell was born in Glasgow, May 8, 1808. An original investigator, he made experiments on the resistance of water to the motion of floating bodies, discovered the wave of translation, and developed the wave-line system of construction of ships. Removing to London he became secretary to the Society of Arts, and a commissioner of the Great Exhibition of 1851, and established shipbuilding works at Millwall, where Brunel's *Great Eastern* was built. This remarkable vessel, begun in 1854 and completed in 1859, was 680 feet long, 82 feet beam, and of 27,384 tons displacement.

E. C. S.