

script, with others, had been preserved and was ultimately published. Nearly two centuries passed before any memorial was raised to him whom Herschel called "the pride and boast of British astronomy". In 1826, however, the Preston astronomer and lecturer Moses Holden (1777-1864) devoted the proceeds of a lecture to the erection of a tablet to Horrocks in St. Michael's Church, Toxteth, Liverpool; in 1859 a memorial chapel and window were added to Hoole Church; and after the transit of 1874 a movement was set on foot which resulted in the placing within the monument to Conduitt, Newton's nephew, in Westminster Abbey, of a scroll recalling the great achievement of Horrocks in 1639.

#### August Kundt (1839-1894)

ON November 18, the centenary occurs of the distinguished German physicist August Adolph Eduard Eberhard Kundt, the successor of Helmholtz at Berlin. Born at Schworin, Mecklenburg, he studied at Leipzig under Hankel, Bruhns and Neumann, and at Berlin under Encke and Förster, first devoting himself to astronomy. Entering the laboratory of Magnus, in 1864 he graduated with a thesis on the polarization of light. He became a *Privat Dozent* in Berlin in 1867 and then was successively professor of physics at Zurich Federal Technical Highschool (1868), at Würzburg (1870), and at Strasburg (1872), where he took a prominent part in the organization of the new university; of this he became rector in 1877. Finally, in 1888, he was chosen to succeed Helmholtz in the chair of experimental physics and as director of the Physical Institute at Berlin. He died at Israelsdorf near Lübeck on May 21, 1894, a few months before Helmholtz. His original researches were mainly in the domains of light and sound. By an ingenious method he was able to determine the velocity of sound in various gases. In light, he made inquiries into the problems of anomalous dispersion by liquids and vapours and by very thin films of metal. 'Kundt's phenomenon' is the rotation observed, under the influence of magnetic force, of the plane of polarization in certain vapours and gases. For his experiments on dispersion by metal films he made no fewer than 2,000 prisms prepared by electrolytic deposition upon platinized glass.

#### Prof. Georges Dieulafoy (1839-1911)

PROF. GEORGES DIEULAFOY, a celebrated Paris physician, was born on November 18, 1839, at Toulouse, where his uncle, Paul Dieulafoy, was professor of clinical surgery in the medical faculty and induced him to become a doctor. After acting as his uncle's house surgeon for two years, he went to Paris to complete his education and spent seven years as hospital resident under Trousseau, Velpeau, Denonvilliers, Jaccoud, Potain, Axonfeld and Tardieu. He qualified in 1869 with a thesis on sudden death in typhoid fever. In 1872 he became an assistant professor (*agrégé*) with a thesis on contagion, and the following year published a medico-chirurgical treatise on the diagnosis and treatment of morbid fluids in

which he described the aspirator to which his name has been given. In 1880 appeared the first edition of his famous "Pathologie de médecine interne", which in the course of thirty-one years went through sixteen editions and was translated into English, Italian, Spanish, Russian, Polish and Greek. Six years later he was appointed to the chair of internal pathology at the Necker Hospital, where he remained until 1896, when he succeeded Germain Sée at the Hôtel Dieu as professor of clinical medicine; he held that office until his retirement in 1909. During this period he published a number of clinical lectures in six volumes under the title of "Clinique médicale de l'Hôtel Dieu de Paris". In 1910 he was elected president of the Academy of Medicine, of which he had been a member since 1879. His death took place on August 16, 1911, at the age of seventy-two.

#### The Newcomen Society

THE annual meeting of the Newcomen Society was held on November 8, when Col. C. E. Davies, secretary of the American Society of Mechanical Engineers, was elected president for the ensuing year. Col. Davies for many years acted as corresponding honorary secretary in the United States for the Society. The annual report referred to a further large increase in membership, the total number of members on October 1, 1939, being 1,252. Twenty-five papers were contributed during the year, while in England a summer meeting was held in Suffolk and in the United States a pilgrimage was held in Alabama. For the information of members a *Newcomen Quarterly Bulletin* is now published. The finances of the Society continue to remain in a satisfactory state and the issue of a fifth *Extra Publication* is under consideration. Though for the time the monthly meetings have been suspended, papers are being sent in for the *Transactions*. At the close of the business, the retiring president, Mr. W. A. Young, read his presidential address on "Thomas Newcomen—Ironmonger: the Contemporary Background", and Dr. T. E. Lones read "A Précis of Metallum Martis and an Analysis of Dud Dudley's Alleged Invention".

#### Statistics of London

THE latest volume of "London Statistics," that for 1936-38 (London: P. S. King and Son, Ltd., 15s. 6d.) raises once more in an acute and realistic form some of the most vital and interesting questions in social science and economics and in practical statesmanship that we of the present generation have to face. Among them not the least significant are those concerned with population movements to and from the London area and within that area. The population of this Greater London increased during 1937 by 80,000, and numbered 8,655,000 before evacuation, as compared with 7,000,000 for New York. This huge total is about double that of the administrative county over which the L.C.C. has partial control and from which there has been continuous migration since 1901. In that year the population of the administrative county was 4,536,267,

but it has steadily declined, so that in 1938 it was 4,062,800. This has involved among other things difficult readjustments in educational facilities, especially elementary schools; for the decrease in elementary school children from 900,000 in 1915 to 543,000 in 1937 is very much greater proportionately than that in the total population. In this connexion it is interesting to note that, of the 50,000 children leaving elementary schools in 1937, 89 boys and 127 girls were described as of "super-normal" mental condition.

THE subject chosen in this volume for special analysis is libraries. In the year ended March 31, 1938, 40,116,733 books were issued to borrowers from public libraries in Greater London, and 20,175,088 from libraries maintained by local authorities in extra-London. In addition there were 2,078,559 issued from public libraries in extra-London under county council control. In the administrative county alone, issues of books have risen from 14,512,112 in 1928 to 19,941,654 in 1938, the number per registered borrower increasing from 29.3 to 31.1. For some reason or other, Woolwich heads the boroughs in respect of reading—as measured by use of public libraries—whilst St. Pancras is at the bottom of the list. Readers have 2,431,832 books from which to choose, and they borrow three novels for every non-fiction work.

#### Recent Comets

AN I.A.U. telegram from Copenhagen announces that Comet Faye has been discovered by Jeffers at Harvard on November 3 at 4h. 1m. U.T. Its position is given as R.A. 20h. 13m. 28.3s., S.Dec.  $10^{\circ} 18' 15''$ , and it is described as diffuse with central condensation. In the "Handbook of the British Astronomical Association", 1939, the elements and ephemeris of this comet have been computed by Messrs. W. P. Henderson and P. J. Harris, who applied the perturbations of Jupiter and Saturn. Perihelion passage is given as April 23, 1940, but it will be apparently half a day later. A comet was discovered by Frier at Harvard on November 4 at 13h. 30m. Its position is given as R.A. 16h. 52.9m., N. Dec.  $34^{\circ} 03'$ . The daily motion is +7m. 30s. in R.A. and  $-10'$  in Dec. It is described as diffuse without central condensation or nucleus. Nothing is stated about its magnitude.

#### Engineers' Study Group on Economics

AN emergency programme to meet the difficulties occasioned by the war has been issued by the Engineers' Study Group on Economics. Consideration of the problems which followed the War of 1914-18 has led to the view that, while the first effort must be directed towards winning the present war, attention must be given in good time to plans for reconstruction, so that practical proposals may be ready when required. The Group has accordingly resolved to make a special study of reconstruction, dealing particularly with such problems as demobiliza-

tion, industrial change-over, agricultural changes, international trade, paying for the war, etc. Those interested are asked to communicate with the Group at 35, Gordon Square, London, W.C.1.

#### Announcements

THE annual Huxley Memorial Lecture of the Royal Anthropological Institute will be delivered on November 28, at 2.30 p.m., at 21 Bedford Square, W.C.1, on "Charity and the Struggle for Existence", by Dr. R. R. Marett.

THE Tilden Lecture of the Chemical Society will be delivered by Dr. L. E. Sutton on December 14, at 2.30 p.m. in the Society's rooms. The title of the lecture will be "The Present State of Valency Theory".

A PAPER on the "Penetration of Rays through the Skin and Radiant Energy for the Treatment of Wounds" will be read by Sir Leonard Hill, at the Royal Society of Arts, on November 22 at 2.30 p.m. Applications for tickets should be made to the Secretary, Royal Society of Arts, John Street, Adelphi, W.C.2.

THE following have been elected officers for 1940 of the Mineralogical Society: *President*, Mr. Arthur Russell; *Vice-Presidents*, Prof. C. E. Tilley, Dr. W. Campbell Smith; *Treasurer*, Mr. F. N. Ashcroft; *General Secretary*, Dr. G. F. Claringbull; *Foreign Secretary*, Sir Thomas H. Holland; *Editor of the Journal*, Dr. L. J. Spencer.

THE following appointments and promotions have recently been made in the Colonial Service: C. B. Johnston, chemist, Department of Science, Barbados; F. H. Ormerod, agricultural superintendent, Gold Coast; V. D. Van Someren, zoologist, Central Veterinary Research Institute, Kenya; H. B. Waters, director of agriculture, Kenya, director of agriculture, Gold Coast.

MR. G. M. HARVEY, deputy electrical inspector of mines, has been appointed electrical inspector of mines, with effect from November 1, in succession to Mr. J. A. B. Horsley. Mr. Horsley is undertaking special duties for the Mines Department during the war, more particularly in connexion with the organization of the electrical supplies required for the working of mines and quarries. He will also complete, so far as possible, the work in connexion with the revision of the existing code of safety regulations for coal mines.

THE Geological Society of London announces that the eighteenth session of the International Geological Congress, which was to have been held in London during July 31-August 8, 1940, is postponed indefinitely.