experiments in New York, Paris and other places. It will be evident from this very brief account of his work that Prof. Hahn's contributions to radioactivity have been of outstanding importance. He has also taken a prominent part, with his students and colleagues, in developing methods of studying chemical problems by the use of radioactive indicators.

Dr. C. D. Darlington

Dr. C. D. DARLINGTON has been appointed to succeed Sir Daniel Hall as director of the John Innes Horticultural Institution, Merton. Dr. Darlington was educated at St. Paul's School, Hammersmith. where he was a Foundation Scholar, and the South-Eastern Agricultural College, Wye. He went to the John Innes Horticultural Institution in 1923, in Dr. Bateson's time. Here his interest was attracted to chromosome studies by the late W. C. F. Newton. As the importance of this kind of work in relation to breeding became recognized, it was considerably extended at the John Innes Institution, and in 1937 Dr. Darlington was appointed head of the Cytology Department. In 1929, he travelled to Persia and Transcaucasia to investigate the origin of cultivated forms of Prunus and Tulipa. During 1932-33, he worked in the United States for eight months as a Rockefeller Foundation Scholar, visiting Japan and India on his way home. In the winter of 1937-38, he was a delegate to the Indian Science Congress jubilee meeting. He is at the present time acting as recorder to the Cytology Section of the International Genetical Congress. Dr. Darlington, who is well known for his work in the field of genetics and cytology, has published "Chromosomes and Plant Breeding" (1932), "Recent Advances in Cytology" (1932; second edition 1937), "The Evolution of Genetic Systems" (1939), together with numerous scientific communications. He is a collaborating editor of the new journal Chromosoma (see p. 372 of this issue). The appointment takes effect from October 1, 1939.

Mr. James Henderson

THE Iron and Steel Institute has awarded the Bessemer Gold Medal to Mr. James Henderson. The Bessemer Medal was founded by Sir Henry Bessemer, and is awarded annually for distinguished merit in promoting the technical and metallurgical development of the iron and steel industry; it is the highest honour which the Institute can give. Mr. Henderson was associated for forty-five years with the technical development of the Frodingham Iron and Steel Co., Ltd., in North Lincolnshire and held all positions from chief metallurgist to managing director. During that period, the works became one of the most important in the country, and were associated with such important developments as the introduction of the Talbot direct metal process, the use of blast-furnace gas in blowing and power engines, and the installation of modern plate mills. Mr. Henderson is now deputy chairman of the renamed Appleby-Frodingham Steel Co., Ltd., and a director of the United Steel Companies, Ltd.; he is past-president of the British Iron and Steel Federation and of the Lincolnshire Iron and Steel

Institute. He is one of the only two Englishmen whose services to the industry have been recognized by nomination to honorary membership of the Verein deutscher Eisenhüttenleute.

Ludwig Mond, F.R.S. (1839-1909)

LUDWIG MOND, patron of the arts and sciences, was born on March 7, 1839, and the commemoration of his centenary is a convenient opportunity to recall something of what we owe to him. Originally German and later a naturalized British subject, he perfected and established in Great Britain the ammonia-soda process which brought into being the firm of Messrs. Brunner, Mond and Company, the nucleus of Messrs. Imperial Chemical Industries, Limited. devised satisfactory processes of nitrogen recovery and for the manufacture of producer gas, which latter process is the property of the Power Gas Corporation. No less well known is Ludwig Mond's process for the production of pure nickel, in which a newly discovered and unique compound immediately found important technical application. Throughout his life, he was pre-eminent as a chemist and investigator. His amassing great wealth was the result and not the object of his work.

Some of Ludwig Mond's public benefactions for the encouragement of scientific investigation may be recalled. During his life he gave £100,000 for the founding and endowment of the Davy Faraday Laboratory of the Royal Institution, and £16,000 for the continuance and improvement of the catalogue of scientific papers of the Royal Society. He bequeathed £50,000 to the Royal Society "for the endowment of research in Natural Science more particularly but not exclusively in Chemistry and Physics". He also bequeathed a similar sum to the University of Heidelberg and £25,000 to Cassel, his native town in Germany. He gave to the nation, together with an endowment for its maintenance, the Mond Collection, chiefly of early Italian paintings, now well known as an important part of the National Gallery. This, and his bequest of £20,000 to the Münich Akademie der bildenden Künste, are memorials to Ludwig Mond's own appreciation of art and to the care he took that others should benefit by it. Truly, this was a great man.

Frederick Howard Marsh (1839-1915)

Howard Marsh, an eminent London surgeon and master of Downing College, Cambridge, was born on March 7, 1839, at Homersfield, near Bungay, Suffolk, the son of a gentleman farmer. He received his medical education at St. Bartholomew's Hospital, where he was a contemporary of Alfred Willett (see Nature, 139, 61; 1937) and qualified L.S.A. and M.R.C.S. in 1861. Five years later he became F.R.C.S. and was appointed surgeon to the Queen Square House of Relief for Children with Chronic Disease of the Joints. In 1868, he was elected assistant surgeon to the Great Ormond Street Hospital for Sick Children, where he afterwards became full surgeon and consulting surgeon. Between 1865 and

1870 he acted twice as private assistant to Sir James Paget, several of whose works he afterwards edited. From 1873 until 1891, when he became full surgeon, he served as assistant surgeon to St. Bartholomew's Hospital, where he lectured on anatomy, practical surgery and orthopædics. In 1903 he was appointed professor of surgery at Cambridge in succession to Sir George Murray Humphry, who had died in 1896, and in 1907 succeeded Dr. Alexander Hill as master of Downing College. He was the author of "Diseases of the Joints" (1886), which went through three editions and was translated into German, "Clinical Lectures and Essays" (1902) and numerous contributions to St. Bartholomew's Hospital Reports. Besides the distinctions already mentioned, Marsh was an honorary fellow of the Royal Academy of Medicine in Ireland, president of the Clinical Society of London and a corresponding member of the Orthopædic Society of New York. He died on June 24, 1915. A sympathetic obituary notice by Sir D'Arcy Power, accompanied by his portrait, appeared in St. Bartholomew's Hospital Reports (51, 1; 1915).

The Bastardy (Blood Tests) Bill

IT is to be hoped that the Bastardy (Blood Tests) Bill, which was given its second reading after a debate in the House of Lords on February 8 (NATURE, Feb. 18, 294), will duly pass into law. The use of blood group tests has already become a common practice in several other countries, notably Sweden, Germany and the United States. The Bill provides that the Lord Chancellor may make rules under the Act, governing the taking, identifying and posting of blood samples, the form of certificate to be given, the qualifications of the 'approved persons' who make the tests, and the scale of fees payable. It may be pointed out that the M and N tests require much more skill in determination than the A and B. It would therefore seem desirable for a local practitioner to take the samples as arranged and send them to one of a very limited number of experts who would make the actual tests. The Galton Laboratory is one of the very few places where the M and N as well as the A and B tests are constantly being made as a routine operation. In Denmark, a Government laboratory has been established for the purpose, where the tests are made for a small charge. Probably a similar arrangement would be best for Great Britain.

Television in Cinemas

The practical application of television moved a step forward on February 23, when a view of the whole progress of the British light-weight boxing championship was transmitted from the Harringay arena. On this occasion, for the first time, the television programme was relayed to three cinema theatres in the West End of London, where the public had paid for admission. A report in *The Times* states that two of these theatres used Baird apparatus, while the third used the Scophony system. These cinemas became in effect overflow meeting places, where those unable to watch the fight in the arena could still follow its progress in black and white

pictures; and the view so provided on a fifteen foot screen was the equivalent of a ring-side seat. At the transmitting end, two cameras were used, one giving a general view of the ring with the spectators scarcely visible in the surrounding darkness, while the other gave a close-up view of the two boxers. The latter was used most of the time and enabled viewers to watch the detailed progress of the contest. With the exception of one or two occasions, when there appeared to be a loss of synchronism in the transmitted pictures, the apparatus worked quite satisfactorily, and the accompanying running commentary was up to the usual high standard for sound broadcasting. The successful transmission of this fight demonstrated that such an event is very suited to television, and that the inevitable technical difficulties of relaying the programme to cinemas have been largely overcome. As a result, according to a further announcement in The Times, Baird television apparatus is to be installed in some 350 cinemas controlled by the Gaumont-British Picture Corpora-

University of Birmingham: Annual Report

In the report of the Council which was presented to the Court of Governors at its annual meeting on February 23, reference is made to two recent benefactions, namely, one of £10,000 by Sir Charles Hyde and the other of £2,000 by the Pro-Chancellor and Mrs. Barrow. These were given as peace thankofferings. Sir Charles Hyde's gift, to be applied to a purpose chosen by the Prime Minister, is to be known as the Neville Chamberlain Physical Fitness Fund, and the income is to be used towards the maintenance of the University's scheme for physical education. The contribution of Mr. and Mrs. Barrow is to be added to the Medical School building fund. Mrs. Ellen M. Parrott has given £500 in memory of her late husband, to be known as the T. H. Parrott Geological Research Fund, for "advancement of research in Geology". Dr. and Mrs. Edward Cadbury, who recently provided funds for the building of the St. Francis Hall, have given a further sum of £3,000, the income of which is to be used for the maintenance of the Hall. As part of the scheme for physical education, a gymnasium (with ancillary rooms and three squash courts and one fives court) is to be built at a cost of £15,000, of which £10,000 has been promised by the University Grants Committee and £5,000 by a private benefactor. Funds for the establishment of a department for research into mental diseases in the new building of the Medical School have been guaranteed for a number of years. The laboratories are now occupied, and Dr. Stanley Barnes has been appointed honorary director of mental diseases research, with Dr. F. A. Pickworth as senior research officer. Several investigations into cancer, financed by the Local Committee of the British Empire Cancer Campaign, are being carried out in the new Medical School. The Poynting Memorial Lecture is to be given on March 7 in the Physics Department by Dr. H. B. G. Casimir, of Leyden, on "The Approach to the Absolute Zero of Temperature, and the Properties of Matter at the