

at the sixtieth annual general meeting of the Institution, to be held in London on January 28, 1954. Major Webster, who was born in 1893, received his early training at the then University College, Nottingham, and obtained his colliery manager's certificate in 1919. During the First World War he gained first the M.C. and later the O.B.E., this latter being awarded for his services in connexion with the development of sound-ranging and flash spotting for counter-battery fire. He was for many years managing director of the Nunnery Colliery and associated companies, where he was concerned with the development and early application of mobile coal-getters for working under Sheffield. At present he is chairman of several companies connected with equipment for mine-working and the utilization of coal, and is associated with many other concerns in these lines. As one who conducted research on strata control and on the application of electrical power to mining practice, Major Webster is naturally keenly interested in the training and education of mining engineers, and, among his services in this field, he is chairman of Sheffield University Mining and Fuel Committee.

The Smithsonian Institution: Mr. Andrew Kramer

MR. ANDREW KRAMER, the instrument-maker, who has produced some of the most precise instruments known to science, retired from the Smithsonian Institution, Washington, after sixty-one years service. He joined the Institution in 1892 and then worked with S. P. Langley on the latter's famous aeroplane and the models which preceded it. After that he always remained associated with the Institution's Astrophysical Observatory which was founded by Langley. Some of Abbot's well-known pyroheliometers and pyranometers, constructed by Mr. Kramer, and designed to measure extremely fine differences in solar heat radiation, are sufficiently sensitive to measure accurately the heat of a candle twenty miles away. Mr. Kramer was not merely an instrument-maker, for he understood the theory and purposes of all the instruments he made, and often suggested steps to increase their precision. His *magnum opus* was the chamber for Abbot's water-flow pyroheliometer. Mr. Kramer is eighty-four years of age. Men of science will wish him and Mrs. Kramer happiness during his retirement.

Hilda Martindale Educational Trust for Women

By the terms of the will of the late Miss Hilda Martindale, an educational trust has been set up, with capital amounting to £30,000, which will be administered by trustees appointed by Bedford College, London. The income will be used to help "girls and women of the British Isles intending to fit themselves for some profession or career, likely to be of use or value to the community, for which special training is required". Medicine, nursing, agriculture, architecture, engineering, posts in the higher grades of the Civil Service and inspectorships are some of the careers cited by Miss Martindale in her will as examples of what she had in mind. Miss Martindale's life was one of continual social service, and she was particularly interested in the welfare of children, especially in regard to the work of juvenile courts and orphanages. Educated at Royal Holloway College, London, the Royal Sanitary Institute and Bedford College, her first post was in 1901 as a factory inspector in the Home Office, and in the Civil

Service she rose to become deputy chief inspector of factories and then, from 1933 until her retirement in 1937, director of women's establishments for the Treasury. After she had retired, Miss Martindale was able to devote more of her time to her two great interests—the Friendly Almshouses, founded by her great-grandmother, and Dr. Barnardo's Homes.

The Wilfred Hall Telescope

FEARS which had earlier been expressed regarding the future of the 15-in. twin astrographic telescope left by the late Dr. Wilfred Hall to the Royal Astronomical Society were dispelled by the president of the Society, Dr. John Jackson, at its summer meeting in Newcastle on July 22. The Society could not have accepted the bequest, under the terms of the will, unless the telescope could be re-erected at some place at which it could be used for scientific research. The testator's intentions will be complied with by a long-term loan of the instrument from the Society to the municipality of Preston, Lancashire, which already manages the Jeremiah Horrocks Observatory. Support from the Ministry of Education will enable the telescope to be re-mounted at Preston, where, it is hoped, it will shortly enter upon a new lease of useful life.

Use of Peat for Gas Turbines in Scotland

IN the course of a debate in the House of Commons on Scottish affairs on July 14, the Secretary of State for Scotland, Mr. James Stuart, stated that the report of the committee, under Sir Edward Appleton's chairmanship, which has been investigating the possibility of developing Scottish peat deposits, is in an advanced stage of preparation. Meanwhile, a specific recommendation of the committee, supported by Sir William Stanier's gas turbine committee, that the North of Scotland Hydro-Electric Board, with assistance from the Development Fund, should set up an experimental peat-burning power station at Altnabreac, Caithness, has been accepted by the Development Commissioners and the Treasury. The plant will consist partly of a 2,000-kW. closed-cycle gas turbine on which the North of Scotland Hydro-Electric Board and Messrs. John Brown and Co., of Clydebank, have been working since 1947. An oil-burning turbine of this type, the first in Great Britain, is expected to be in operation at Carolina Port, Dundee, in three or four months time. A pilot gas turbine burning dried peat has also run for a thousand hours at Clydebank with promising results, and the new peat plant is a development of this. In addition, the scheme will include a 750-kW. open-cycle turbine built to the order of the Ministry of Fuel and Power out of a grant from the Development Fund, which will be installed as soon as it has completed the necessary tests and is in full working order. The whole pilot scheme will take three to four years to complete, and the capital and development costs, estimated at about £500,000, will be met mainly from the Development Fund with contributions from the Hydro-Electric Board and the British Electricity Authority. If the scheme is successful, it is the intention of the Hydro-Electric Board to proceed to larger schemes on other suitable areas in the Scottish Highlands. It is estimated by the peat committee that about 600 million tons of peat solids are available in Scotland, in areas where depth, accessibility and other features make them suitable for utilization, and, of these, about 130 million tons are in Caithness and Sutherland.