expedition this year to explore the mines further, and to work the ore which was left unextracted by the ancient miners.

## Atmospheric Pollution

THIRTY-EIGHT representatives of local authorities and other organizations co-operating with the Department of Scientific and Industrial Research met on May 31 at the offices of the Department in the usual half-yearly conference. Dr. G. M. B. Dobson, chairman of the Atmospheric Pollution Research Committee, presented, as usual, a report on the progress of the investigations carried out under the Committee. Systematic observations in connexion with the intensive survey of the pollution in and around the City of Leicester were begun on April 1. During the preceding four months, the survey staff were installing different standard measuring apparatus at twelve sites. The decision of the authorities at Leicester to equip and maintain a station for regular meteorological observations was greatly welcomed. Conference also recorded its appreciation of the valuable assistance given by the public analysts of Glasgow, Hull and Sheffield, in an investigation of the possibility of combining a dust filter with apparatus for the determination volumetrically of sulphur dioxide in the atmosphere. A report was submitted through the Medical Officer of Health for Leeds on the analysis of dust samples collected in Leeds, Halifax and Huddersfield. The Conference endorsed a proposal made by the Research Committee that a meeting should be convened of public analysts and others who are directly responsible for making observations on behalf of co-operating bodies,

to discuss technical problems and to interchange ideas on the measurement of atmospheric pollution. Mr. Brownhill Smith retired from the chairmanship of the Conference, having served for the maximum period of three consecutive years. Alderman David Adams, a representative of Newcastle-upon-Tyne, was elected chairman for the ensuing year.

### Study of Bird-Migration

The British Trust for Ornithology has accepted responsibility for the future conduct of the principal scheme in Great Britain for the study of migration and other aspects of bird-life by the ringing method. This scheme was instituted in 1909 by Mr. H. F. Witherby, editor of British Birds, and has been maintained with the co-operation of readers of that journal. More than half a million birds have been marked to date, and the recoveries of a proportion of these have already added greatly to knowledge of the subject.

Important facilities for the work have at the same time been granted by the Trustees of the British Museum (Natural History), who are providing accommodation for the headquarters of the scheme in the Bird Room at South Kensington and permitting the Museum's address to be used. Rings will in future be inscribed "British Museum Nat. Hist. London", instead of "Witherby High Holborn London", with an individual identification number in addition as before. The scheme will now be directed by a special Bird-Ringing Committee, constituted as follows: Dr. A. Landsborough Thomson (chairman); Mr. A. W. Boyd; Mr. A. B. Duncan; Mr. P. A. D. Hollom; the Earl of Ilchester; the Earl of Mansfield; Mr. H. F. Witherby; and Miss E. P. Leach (hon. secretary). The headquarters' work will be in the hands of Miss Leach, who has had much experience of it as Mr. Witherby's collaborator in recent years. British Birds will continue to be the medium for publishing results.

## Institution of Civil Engineers

When the foundation stone of the present building of the Institution of Civil Engineers was laid in 1910 by the late Sir James Charles Inglis, then president of the Institution, the north-west corner could not be completed owing to the existence of a lease covering offices flanking that corner of the site. The demolition of the offices was, for various reasons, deferred until 1936; but the corner, with the consequent internal modifications in the library and reading-room, is now practically completed (Fig. 1), and Princes Street, which is to be known as Rennie Street from July 1, 1937, has also been widened to



Fig. 1
Completed building of the Institution of Civil Engineers

its full width. The rebuilding of the north-west corner has allowed of an extension to the main library, in addition to extensions to the rooms on the other floors, and advantage is being taken of this extension to house, at the west end of the main library, the original collection of books, etc., presented by Thomas Telford to the Institution in 1820, which formed the nucleus of the existing library, now containing more than 62,000 volumes.

#### Television Exhibition

Partly with the view of demonstrating that television has now emerged from the experimental stage, partly to illustrate the general principles which underlie the modern technique, and partly to foster the widest possible appreciation of television as a home entertainment, a special exhibition has been organized by the Science Museum, South Kensington, in co-operation with the British Broadcasting Corporation and the leading manufacturers. exhibition will be opened by Lord Selsdon, chairman of the Television Advisory Committee, on June 10. The exhibition incorporates a historic section dealing briefly with early proposals for television, and a number of exhibits describe the developments of the past ten years. There is a working demonstration of the low-definition television which was broadcast by the Baird process a few years ago, there are demonstrations on modern cathode ray receivers supplied by the various manufacturers, and a demonstration of large-screen television by a mechanicaloptical process. In order that these demonstrations can be given when there is no B.B.C. transmission available, a local transmitter has been installed which will provide programmes from cinema films. connexion with the exhibition a handbook has been compiled by Mr. G. R. M. Garratt, assisted by members of the Exhibition Committee. Copies will be on sale at the Science Museum, or may be obtained from the publishers, H.M. Stationery Office, price 6d. (by post 7d.).

### The Royal Society of Arts

FEW societies have done more to stimulate the arts and industries of the British Empire than the Royal Society of Arts, which during the last few days has had on exhibition, for the benefit of overseas visitors, a series of documents and objects illustrating its achievements since its foundation in 1754. Before the modern practice of holding frequent meetings to hear papers and lectures, the Society instituted awards for improvements in science, art and manufacture; and many of the objects exhibited illustrate the work of some of the Society's medalists. Hanging on one side of the room in which the exhibition was arranged was the first geological map of Great Britain prepared by William Smith. The map was published in 1815, Smith being assisted by a grant of £50. On the other side of the room were a model of Abraham Darly's iron bridge of 1788 (happily still standing); a model of Greathead's lifeboat and Bell's lifeline-throwing mortar for ships, for which medals were awarded. On another stand were samples of coco-nut oil, einnamon, silk, tea, nutmegs, cloves, mace, wool and indigo from the Colonies, all representing products the cultivation of which has been stimulated by the Society. In addition to these and similar objects, were many books, prints and letters recalling the history of the Society and its never-ceasing activity.

#### Institute of Physics

THE annual report for the year 1936 of the Institute of Physics presented at the annual general meeting held on May 26 shows that the total membership has continued to increase in a very satisfactory way. The membership at the end of the year was 902. An informal discussion on the training of industrial physicists was held on February 11, 1936, at which appointed representatives of nearly every university and college in Great Britain and Ireland, of firms employing physicists and of research associations and Government establishments were present. direct result of this discussion, a scheme was inaugurated whereby registered students of the Institute are enabled to gain first-hand experience of industrial research and development work in physics during their vacations. The report records that in its first year this scheme proved most successful. The fifth conference of Australian physicists and astronomers was convened by the Australian Branch of the Institute and was held in Sydney on May 25-28, 1936. A London and Home Counties Branch of the Institute was founded in November. The general improvement in industry is reflected by the report of a great increase in the activities of the appointments register and panel of consulting physicists maintained by the Institute. The following officers have been elected to take office on October 1: President, Mr. C. C. Paterson; Vice-President, Prof. W. Makower; Honorary Treasurer, Major C. E. S. Phillips; Honorary Secretary, Prof. J. A. Crowther; New Members of the Board, Prof. J. Chadwick and Mr. D. C. Gall.

# Maynard Ganga Ram Prizes

In 1925, the late Sir Ganga Ram, presented to the Punjab Government a sum of Rs. 25,000 for the endowment of a prize of the value of Rs. 3,000 to be called the Maynard Ganga Ram prize and to be awarded every three years, for a discovery, invention, or a new practical method which will tend to increase agricultural production in the Punjab on a paying The competition is open to all. The first award, due in 1929, was made in 1931 to Dr. C. A. Barber, late Imperial sugar expert, for his fundamental discoveries which resulted in the production of Coimbatore sugar-cane. During the last five years, no further awards have been made owing to lack of suitable entries. The 1932 award has now been made to T. A. Miller Brownlie, lately agricultural engineer to the Government of Punjab, for his invention of a slip strainer suitable for water augmentation supplies derived from bores sunk in open wells. This strainer has the particular merit that it is not affected by alkaline sub-soil water—a defect from which many of the earlier metal strainers