and orchestral, and for various types of exhibitions. The fire affected the Research Laboratories of Baird Television, Ltd., situated at the Palace, but the part of the building leased by the Baird Company for the production of receiver sets and their testing fortunately was sufficiently remote from the main building not to be damaged in any way. While, therefore, a great amount of research apparatus was destroyed, the delivery of Baird receiving sets will not be seriously affected. Immediate measures are being taken to find alternative accommodation for the Baird Company's large number of research workers and for the re-equipment of the laboratories, and it is not considered that the research programme of the Company will be seriously prejudiced. The fire at the Crystal Palace does not affect the B.B.C. television programmes being broadcast from the Alexandra Palace by the Baird system and by the Marconi E.M.I. system.

Television in the London Area

THE issue of *Television and Short Wave World* of December makes some critical comments on the programmes that have been transmitted from the Alexandra Palace. Complaints are made that intervals, sometimes totalling more than fifteen minutes, occur in a programme of an hour. These intervals are usually filled up by gramophone records, but the owner of the set feels that it is extravagant to run about twenty valves together with a cathode ray tube merely to hear these records. It is unfair to be too critical in the early stages of development, but it looks as if more should be spent on the programmes. Television receivers are being advertised for immediate delivery at prices ranging from 85 to 135 guineas, the picture size being about 12 in. by 9 in. Free demonstrations are given by various manufacturers in London. The Science Museum is still giving demonstrations, and the Southern Railway is giving demonstrations at Waterloo Station to railway ticket holders. Carrington House, a large block of flats in Mayfair, has been equipped for 'bulk reception' of television signals and of ordinary broadcast programmes. The building contains seventy-three flats each of which is fitted with plug points for both kinds of services. The residents of any of these flats can purchase a television or a radio set or both with confidence that the programmes will be produced without interference. It is possible that the actual Coronation ceremony in Westminster Abbey may be televized. The two great difficulties are relaying the signals to the Alexandra Palace and the provision of the necessary bright light.

Derbyshire Caves Exhibition

ON behalf of the Derbyshire Caves Exploration Committee appointed by the British Association, Mr. Leslie Armstrong has excavated Pin Hole, a cave in Creswell Crags inhabited in Upper Palæolithic times and exceptionally rich in prehistoric remains. A preliminary report was published in the *Transactions of the Hunter Archaeological Society*, **4**, part 2, with a diagram showing the brick-earth, red above and yellow below, which underlay the present stalagmitic floor, with layers of slabs fallen from the roof marking periods of exceptional cold. The palæolithic cultures represented are Le Moustier and Aurignac, the latter persisting through the glaciation associated elsewhere with La Madeleine ; and the fauna shows severe and temperate conditions alternating. There are chipped pebbles of quartzite, and flint implements of excellent workmanship, nearly all with white patina ; also slight engravings on bone, a bone blade regarded as a bull-roarer, as well as a cowrie shell and piece of mother-of-pearl. Mr. Armstrong has also excavated Mother Grundy's Parlour in the same valley, and published an account in the *Journal of the Royal Anthropological Institute*, **55**, Jan.–June 1925, with eight pages of careful drawings of the stone implements mostly of Aurignac types, but with a microlithic industry in the uppermost layer, and chipped quartzite at the base. The cave-earth of the Parlour has large stones from the roof incorporated throughout, not at intervals, and shows the same difference in colour as Pin Hole. Engravings of animals on bone in the Aurignac style and the best of the finds from both sites are now exhibited in the Department of British and Mediaeval Antiquities at the British Museum, near the top of the main staircase, and will, by the kindness of Mr. Armstrong, remain there for the rest of the year.

Romano-British Pottery Kiln from Berkshire

A ROMANO-BRITISH pottery kiln removed intact to the Science Museum, South Kensington, from its original site in Berkshire was exhibited to the public for the first time on December 1. The kiln, now shown with a reproduction of its original surroundings painted by Mr. E. M. Dinkel as a background, is one of two discovered through the introduction of the tractor-drawn plough in the cultivation of a field overlooking the dried-up bed of the River Pang on Woodrows Farm, Compton, near Aldworth, Berks. The deeper ploughing in soil only a few inches deep on chalk turned up a darker earth mixed with potsherds, which on investigation by General W. K. Hardy proved to be due to the presence of two pottery kilns. Of these, one was found to be intact, while the other had been broken up by the ancient potter. The kilns had been constructed by digging an oval hole in the chalk about four feet deep. One half of this was taken up by a rough oven of clay with a front wall of clay and stones, in which was a stoke-hole. A floor of clay, supported by a wall from centre to back, an inch or two below the level of the chalk, served as the stand on which were placed the 'green' pots for firing, heat from the fire passing through holes in the floor. Over the pots had been a dome-shaped cover of clay, which had to be broken at each firing, but of which fragments were found nearby. Pots reconstructed from the numerous sherds collected, as well as coins associated with the find, give a date not later than the beginning of the fourth century A.D. The removal intact of the undamaged kiln entailed not a little skill and ingenuity, as with reinforcement it weighed nearly

five tons. Recent archæological discovery, notably in Yorkshire, at Colchester and most recently at Lincoln, have made familiar the kiln and mode of firing employed by the Romano-British potter; but as a rule the conditions of discovery have precluded preservation for general inspection. The kiln now on view at the Science Museum is the only example of the period exhibited in Great Britain.

Exhibition of Kinematography

THE fourth Exhibition of Kinematography, arranged by the Royal Photographic Society, was opened at the Society's premises, 35 Russell Square, London, on November 28 and will remain open until December 19. A large selection of still pictures illustrates the ever-widening scope of kinematography, and includes examples of the work of many producing companies and amateur societies, and of films—scientific, instructional and for purposes of entertainment and publicity. Much recent apparatus, standard and sub-standard, is on view, this section including exhibits by most of the leading manufacturers. A Vinten gyroscopic tripod for 16-mm. work is particularly worthy of note. Stock manufacturers are also to the fore. Kodachrome is being exhibited in 16-mm. and 8-mm. sizes, the smaller size being not yet on the market in Great Britain. On this stand, too, Messrs. Kodak show samples of 16-mm. work with Pola screens. Messrs. Ilford have staged an exhibit with photographs illustrating the manufacture and testing of Cine products. Examples of their various products, including Dufaycolor, are on view. A comprehensive programme of lectures has been arranged on subjects varying from sound recording to the making of cartoon films. No charge is made for admission to the Exhibition, to the meetings, or for reserving seats.

Dr. E. Bausch and the Optical Industry of America

THE American Society of Mechanical Engineers made its annual awards for distinguished service in engineering and science, and "for great and unique acts of an engineering nature that have accomplished a great and timely benefit to the public" on December 1 to Dr. Edward Bausch and Mr. Henry Ford, when Dr. Bausch received the A.S.M.E. Medal and Mr. Ford the Holley Medal, the former established in 1920 and the latter in 1923. The A.S.M.E. Medal is awarded once a year, "and that only for inventions and improvements of great merit in the technical and public sense". Among the previous recipients have been H. G. Carlson, Dr. Robert A. Millikan, Dr. Ambrose Swasey, and other distinguished contributors to the progress of engineering. In his long and notable career, which began with the construction of his first microscope in 1872, Dr. Bausch has been a constant contributor to engineering progress. At eighty-three years of age, he is still at work, and recently, with other members of the Bausch and Lomb Optical Co., has designed the contour measuring projector. This new instrument is proving itself a valuable inspection device in many types of industry. It is both a microscope and a projection apparatus of the highest quality and great accuracy with which a highly magnified profile of such parts as screw threads, gears, dies, gauges and shapers may be thrown upon a screen or chart for study and comparison.

DR. BAUSCH entered his company's service sixty-two years ago, immediately upon leaving Cornell University. As assistant to his father, John J. Bausch, he is credited with the great expansion of the industry in the United States through the introduction of new technical methods and machine processes to compete with the cheaper hand labour of Europe. Dr. Bausch has for many years been a fellow of the Royal Microscopical Society, and has a wide acquaintance with workers in this field both in Europe and the United States. Not content with his own efforts in building up the optical industry, Dr. Bausch has been conscious of the necessity of educational work to perpetuate his labours. This explains his interest in the establishment of the Institute of Optics, as a part of the Physics Department of the University of Rochester, and the construction of the Bausch and Lomb Physics Building at the University in honour of his father and Captain Henry Lomb, founders of the Bausch and Lomb Optical Co.

Research on Atmospheric Pollution

THIRTY-THREE representatives of local authorities and other organizations co-operating with the Department of Scientific and Industrial Research met at the Fuel Research Station of the Department at East Greenwich on November 30 to discuss the investigation of atmospheric pollution. Dr. G. M. B. Dobson, chairman of the Atmospheric Pollution Research Committee, presented a report on the progress of the investigations carried out under the auspices of the Committee. The Conference noted especially that arrangements are well in hand for the intensive survey of pollution in and around Leicester. After the meeting, the representatives were shown the work of interest to them which is in progress at the Fuel Research Station. Broadly speaking, there are two fundamental and closely related factors involved in the reduction of atmospheric pollution by coal burning—the nature of the fuel and the appliance in which it is burned. The former of these leads to the selection from the varieties available of fuel most suitable for a given purpose. The preparation of coal for the market, by cleaning and grading, assists materially in the reduction of pollution; the cleaning yields a coal of lower ash content, thus decreasing the potential emission of ash in the form of grit, while grading the coal according to size reduces the content of small particles which may be blown from the fuel bed by the draught. The aim in coal-burning appliances is towards greater control over the combustion. This is obtained by uniform air distribution to the fuel and the regulation of air supply, thereby promoting efficient combustion and a reduction of the unburned products passing into the atmosphere. In the domestic field attention has been devoted mainly to the production from coal of a