

and other amenities, and the whole town is flood-lit in winter. The one interest is timber, which is exported by the river in late summer. Work goes on all the year round, and the inhabitants rarely suffer from cold even with temperatures of -35°C . A modern port is being built. Norilsk, farther north than Igarka, is being built for new coal mines on the Pyasina River and is being connected by a 70-mile railway to its port of Dudinka, another new growth 400 miles up the Yenisei River. Nordvik, at the mouth of the Khatanga River, in nearly lat. 70°N ., is an even more amazing growth. It was started last year as a town for the new salt mines. With these urban growths there are developing also experiments in arctic agriculture. In lat. 68°N ., onions, radishes and cabbages have been grown in the open, and tomatoes, cucumbers and asparagus in hothouses. Experiments are being made in growing vegetables in electrically heated and lighted subterranean chambers, the current being provided by windmills.

Central Water Advisory Committee

THE Minister of Health has appointed a Central Water Advisory Committee under the chairmanship of Lord Milne. The following have been appointed to serve on the Committee: Sir Albert Atkey, Mr. E. T. L. Baker, Mr. H. K. Beale, Mr. R. Beddington, Mr. John Chaston, Lieut.-Colonel E. J. Clarke, Mr. A. E. Cornwall-Walker, Sir Robert Doncaster, Lieut.-Colonel A. P. Heneage, Capt. R. T. Hinckes, Mr. S. R. Hobday, Mr. J. E. James, Mr. E. W. Cemlyn Jones, Sir David Owen and Mr. D. Verity. The Committee's terms of reference are to advise the Government Departments on questions relating to the conservation and allocation of water resources; on any questions which may be referred by the Departments with respect to matters arising in connexion with the execution of, or any proposed amendment of, the enactments relating to water; and to consider the operation of the enactments relating to water and to make to the Government Departments such representations with respect to matters of general concern arising in connexion with the execution of those enactments, and with respect to further measures required, as the Committee thinks desirable. Any communications concerning the work of the Committee should be addressed to the Secretary, Mr. A. Titherley, at the Ministry of Health.

American Tour of British Research Organizations

BETWEEN twenty and thirty American executives and bankers are making a rapid tour of Great Britain, France and Germany to study European research organization at first hand lasting from May 24 until June 30. The tour is being arranged under the auspices of the American National Research Council by Mr. Maurice Holland, the director of the Division of Engineering and Industrial Research of the Council. The tour in Great Britain has been arranged in co-operation with the Department of Scientific and Industrial Research, and visits will be made to the National Physical

Laboratory, the Building Research Station and the Fuel Research Station. The party will also spend a day at the Shirley Institute, the headquarters of the Cotton Research Association at Didsbury, and will be able to visit the laboratories of the Leather, the Boot and Shoe and the Rubber Research Associations. The party is visiting the research laboratories of several large firms. A visit is also being paid to the Cavendish Laboratory at Cambridge. During the tour, about thirty-five laboratories will have been visited, covering eighteen different fields of industrial research.

Scottish Science and the Industrial Revolution

FOR his inaugural address as regius professor of natural history in the University of Aberdeen, delivered on April 21, Prof. L. Hogben took for his subject "The Theoretical Leadership of Scottish Science in the English Industrial Revolution". In this he showed how eminent men trained in the biological sciences stimulated the progress of chemistry and physics, and thereby influenced the growth of various industries at the end of the eighteenth and the beginning of the nineteenth centuries. The Industrial Revolution was, of course, bound up with the development of the textile, iron and coal industries, but more especially with the introduction of the steam engine and to a lesser extent with the rise of the chemical industry. The part played by Watt and Murdock in the improvement of the steam engine is well known, but Prof. Hogben showed how to men such as Joseph Black, James Keir, John Roebuck and Francis Horne—all graduates of medicine—can be traced some of the advances in industry. Black's connexion with Watt is familiar to all, while Roebuck not only endeavoured to assist Watt, but also had a principal share in establishing the Carron Iron Works, and was a pioneer in the manufacture of sulphuric acid. The address contains some interesting notes on the early members of the Royal Society of Edinburgh when James Hutton and John Playfair were leaders of Scottish science, and it recalls that Hutton, though generally regarded as one of the fathers of modern geology, yet is also remembered as the founder of a manufactory for sal ammoniac. In concluding his review of the subject, Prof. Hogben said that "The restricted class basis of English education could not supply the theoretical leadership which its industrial expansion demanded. It had to rely largely on a fund of personnel from Scotland".

Flood-lighting and Broadcasting during the Paris Exhibition

DURING the Paris Exhibition, it has been arranged that some four hundred monuments and buildings in the smaller villages of France and in the open country will be flood-lighted by five mobile units carrying flood-lighting equipment. Each of the lorries will carry generating plant, and will be manned by three men. It will carry ten spotlights of 3 kilowatts each and ten floodlights of $1\frac{1}{2}$ kilowatts.