

establishment of a system of main transmission lines called the 'Grid Iron' for the purpose of interconnecting the principal generating stations of Great Britain, and in due course proposed the shutting down of less efficient stations. To effect this, a new organisation called the Central Electricity Board was set up to manage what may be called the 'wholesale' side of the supply industry. This Board is now hard at work accelerating the completion of the 4000 miles of transmission line and the numerous transforming and switching stations involved, and is already well ahead of its original programme.

Although on technical and financial grounds it was advisable to use overhead lines, it was necessary to use a considerable mileage of cable, mainly in the London district. The value of the orders given by the Board to British firms now exceeds 22 million pounds. This has reacted on unemployment figures and the electrical industry is one of the few flourishing industries in the country. The Board is in no sense a government department. It is part of the supply industry and is financially self-supporting.

Great Britain with its dense population, diversified industries, cheap coal, and extensive coast-line is an ideal country to electrify. What is needed is an efficient organisation to ensure that expansion of output which will bring cheap electricity to the consumer. The field is wide. Only about 65 per cent of the machinery utilised in industry is electrically driven. There are eleven million potential consumers in Great Britain and only about four and a quarter million are connected with the supply mains.

Sir Archibald Page pointed out that Great Britain was the first country to lay down a national system of electric trunk mains. It was now almost impossible to make a train or car journey of any distance without seeing some of the lattice steel towers supporting the electrical conductors which constitute the 'grid'.

### University and Educational Intelligence

CAMBRIDGE.—At Emmanuel College the studentship offered for competition to graduates of other universities intending to commence residence as research students in October has been awarded to L. Belchetz, Rhodes University College, Grahamstown, South Africa (chemistry). The studentship held by J. W. Harding (Victoria University College, Wellington, New Zealand) for mathematical physics has been renewed for a third year. Internal studentships offered for competition to members of the college have been awarded as follows: B. V. Bowden (physics) for one year, A. J. Ward (mathematics) for two years.

LONDON.—The following degrees have been conferred: D.Sc. in biochemistry on Manayath Damodaran (Imperial College—Royal College of Science) for a thesis on "The Amino-Acids of Gluterin" (*Biochem. J.*, 1931), "The Dicarboxylic Acid Nitrogen of Proteins" (*Biochem. J.*, 1931), and "The Isolation of Asparagine from an Enzyme Digest of Edestin" (*Biochem. J.*, 1932). D.Sc. in chemistry on Ranchhodji Dajibhai Desai (Imperial College—Royal College of Science) for a thesis entitled "The Influence of Methylcyclopentane and Methylcyclohexane Rings on Carbon Tetrahedral Angle" (*J. Chem. Soc.*, May 1931 and April 1932). D.Sc. in mining geology on Mr. G. C. A. Jackson (Imperial College—Royal School of Mines) for a thesis entitled "The Geology and Ore-deposits of the N'Changa Mine and District, Northern Rhodesia", a portion of which, entitled "The Ores of the N'Changa Mine and Extensions, Northern Rhodesia", has been published in *Economic Geology*, vol. 27, No. 3, 1932. D.Sc. in psychology on Mr. S. J. F. Philpott

(University College) for a thesis entitled "Fluctuations in Human Output" (*Brit. J. Psych.*, 1932).

It is announced that the Prudential Assurance Company has offered to contribute £1500 a year for a term of seven years to the London School of Hygiene and Tropical Medicine. The suggestion that the contribution shall be directly associated for the duration of the gift with the University chair of public health has been accepted by the governors of the School.

THE Science Scholarships Committee of the Royal Commission for the Exhibition of 1851 has made the following appointments to Overseas Scholarships for 1932:—On the recommendation of McGill University: Mr. J. F. Heard (physics, Imperial College of Science and Technology, London), Mr. M. K. McPhail (biochemistry, National Institute for Medical Research, London); on the recommendation of Queen's University, Kingston: Mr. W. J. Henderson (physics, University of Cambridge), Mr. G. S. Farnham (metallurgy, University of Manchester); on the recommendation of the University of Melbourne: Mr. A. B. Edwards (geology, Imperial College of Science and Technology, London); on the recommendation of the University of Sydney: Thelma M. Reynolds (organic chemistry, University of Oxford); on the recommendation of the Universities of Cape Town and the Witwatersrand: Dr. E. C. Halliday (physics, University of Cambridge and the Experimental Station of the Radio Research Board, Slough); on the recommendation of the University of New Zealand: Mr. R. M. Barrer (physical chemistry, University of Cambridge).

### Calendar of Geographical Exploration

Aug. 10, 1537.—De Vaca and the Gulf of Mexico

In 1528, Cabez de Vaca had accompanied Pamfilo de Navarez on an expedition which landed on the west coast of Florida near Tampa Bay. In a subsequent march they lost touch with their ships and the party broke up. In the winter of 1528–29, of a party of 80 on the 'Island of Misfortune' off the coast of Texas, only 15 survived. De Vaca was one; he crossed to the mainland and spent five years among the natives. Then, with a companion, he travelled south, crossing the Brazos and Colorado Rivers and reaching San Antonio Bay. Ultimately he reached Mexico City and returned to Europe, arriving at Lisbon on Aug. 10, 1537. His account of the riches of the region which he had visited resulted in the journeys of Coronado and de Soto.

Aug. 11, 1901.—Kaiser Wilhelm II. Land

Prof. von Drygalski left Kiel on Aug. 11 in the *Gauss*, reaching Kerguelen Island on Dec. 31, where a party of German scientific workers had landed a few months earlier and had set up an observatory. The *Gauss* wintered in the ice, and a sledging party discovered the land named Kaiser Wilhelm II. Land, with a hill 1500 ft. high, which was named the Gaussberg. The expedition not only discovered new land, but also recorded many valuable scientific observations.

Aug. 12, 1767.—Carteret's Discoveries in the Pacific

Capt. Carteret in the *Swallow*, after discovering Pitcairn Island, reached the Santa Cruz group. Although these islands had been discovered by Mendaña a century before, their position was but imperfectly known and Carteret may be credited with their rediscovery. Later the group now known as the Carteret