

are closely concerned with the movement for industrial standardisation and simplification in their respective countries, the overseas delegates on research matters also attended the conference on standardisation. This conference dealt with the two main questions of fundamental standards and industrial standardisation.

The deliberations on fundamental standards of mass, length, etc., had as an objective the securing of uniform fundamental standards within the British Commonwealth of Nations, and it is pleasing to observe that a considerable measure of progress has been made towards this objective. Hitherto no guide to common procedure has been available, and there has been a tendency among the nations of the British Commonwealth for minute but serious errors to arise through lack of regular intercomparison of local standards, such as the pound, yard, ohm, volt, etc. The conference, however, after recommending that there should be uniformity between the standards for all units of measurement of common use in the British Commonwealth of Nations, clearly indicated the procedure by which that uniformity may be established and maintained. Briefly, this involves a periodic reverification of the

Dominion reference standards for each primary unit with the corresponding standards in Great Britain.

The position of industrial standardisation within the British Commonwealth was a much more involved question than that of fundamental standards, since the issues at stake are closely related to the complex economic and political affairs of the Commonwealth.

At this, the first Imperial Conference on the subject, the oral exchange of views was valuable in showing the present position of industrial standardisation in each part of the Commonwealth and the directions in which the movement was spreading. Though considerable attention was given to such questions as uniformity of industrial specifications within the Commonwealth, consultation and modification of draft specifications, adherence to standards, and the relation of Governments to the local standardisation authorities, it must be admitted that there is a great deal still to be done if the subtle but potentially great force of industrial standardisation and simplification is to exert its maximum influence on Imperial trade developments.

A. S. F.

Obituary.

MR. EMILE GARCKE.

MR. EMILE GARCKE, one of the pioneers of the electrical industry, died on Nov. 14, at the age of seventy-four years. He was born in Germany in 1856, and came to England when he was very young. He became naturalised in 1880. In 1883 he was appointed secretary to the Brush Engineering Co., and four years later became the managing director. He was specially interested in the continental export trade of the company. In 1900 he began to study the question of industrial co-partnership, and in 1926 he initiated the co-partnership scheme of the Brush Co., which is operating very successfully. He was chairman of the council of the Industrial Co-partnership Association.

Mr. Garcke founded the electrical section of the London Chamber of Commerce and became its chairman. He is, perhaps, best known in connexion with the work he did as a director of the British Electric Traction Co., which owns electric tramway systems all over the country. He founded and became chairman of the Tramways and Light Railways Association. His commercial interests were very widely spread, and his life was a very busy one, as he was prominently associated with the legislation, finance, promotion, and organisation of many electrical undertakings. He was a member of the Institution of Electrical Engineers for more than forty years, and recently presented a very interesting portrait of André Marie Ampère to the Institution. He was also a fellow of the Royal Statistical Society and was a member of the Institute of Actuaries. In 1896 he founded "Garcke's Manual of Electrical Undertakings", which was an immediate success. He was chairman

of the Electrical Press, Ltd., which publishes several technical journals.

In private life, Mr. Garcke was of a lovable and retiring nature. He was intensely interested in philosophy and loved nothing better than to discuss it with his friends. In 1929 he published a book which he called "Individual Understanding, a Layman's Approach to Practical Philosophy". In this he discusses the whole philosophy of life. He is not afraid to lay his inmost thoughts bare when he thinks that by so doing he will help others. In his opinion, the waste of material and mental energy by the human race due to a lack of mutual confidence, sympathy, and veracity is lamentable. He strongly believed that Nature is not against us, but is on our side in beneficent partnership. For every man the outstanding problem is to make the best use of his limited freedom of choice. He leaves a widow and one son, Mr. Sidney Garcke, who is a well-known company director.

WE regret to announce the following deaths:

Prof. C. Eykman, professor of hygiene in the University of Utrecht, who shared the Nobel Prize for medicine for 1929 with Sir F. Gowland Hopkins for discoveries in connexion with vitamins, aged seventy-two years.

Dr. Nathaniel O. Howard, forest pathologist of the U.S. Department of Agriculture, stationed at Brown University, who was known for his studies of the fungous diseases of forest and woody ornamental plants, on Sept. 14, aged fifty years.

Prof. C. E. Moss, professor of botany in the University of the Witwatersrand, Johannesburg, on Nov. 11, aged fifty-eight years.

Capt. O. Sverdrup, commander of the *Fram* and a well-known arctic explorer, on Nov. 26, aged seventy-six years.