

borough, in the branch dealing with problems of aircraft design and safety. In 1935 he was transferred to the Air Ministry in London, and up to the outbreak of war took part in the organization of the research, development, production, and safety certification of civil aircraft of all kinds. He went to the Ministry of Aircraft Production on its creation in 1940, and throughout the War was concerned with the expansion of research and development activities here and in Commonwealth countries. Mr. Spencer was a member of the first Brabazon Committee, whose recommendations shaped the first post-war generation of civil air-liners. Towards the end of the War he was seconded to the Air Registration Board to help them build up the technical organization needed to discharge civil aircraft certification duties delegated to them by the Secretary of State for Air. In 1946 he served for six months as an international Civil servant with the Provisional International Civil Aviation Organization in Montreal, and set up their Airworthiness Section. Later he went to New Zealand with a United Kingdom Civil Aviation Mission, led by Sir Frederick Tymms, invited by the New Zealand Government to advise them on aviation matters. He joined the Ministry of Fuel and Power in 1950 as deputy chief, under Sir Harold Cox, of the Scientific Division that had been set up in 1948.

#### Bacteriology at Belfast: Prof. G. W. A. Dick

DR. GEORGE W. A. DICK, of the scientific staff of the National Institute for Medical Research, Mill Hill, has been appointed to the chair of bacteriology in The Queen's University of Belfast. Prof. Dick, who is thirty-nine, graduated from the University of Edinburgh in 1938 and gained his M.D. in 1949, when he was awarded a gold medal for his thesis. He served with the Royal Army Medical Corps during the Second World War, mainly in Africa with a mobile bacteriology laboratory, and was promoted to lieutenant-colonel in 1945. Having acquired an interest in viruses and rickettsiae, Prof. Dick was appointed in 1946 to the staff of the Virus Research Institute, Entebbe, Uganda, and there he made valuable contributions to knowledge of yellow fever and some of the recently isolated African viruses. During 1948-50 he held a Rockefeller Foundation fellowship, working at the Rockefeller Institute, New York, and later in Baltimore, largely on poliomyelitis. He then returned to Entebbe and acted for a time as deputy director before going to England in 1951 to the National Institute for Medical Research, where for almost three years he has been working in the Department of Bacteriology and Virus Research, chiefly on hepatitis. Prof. Dick has published forty papers, almost all on viruses. He has lately been appointed joint secretary of the Medical Research Council's Poliomyelitis Committee.

#### Olaus Wormius (1588-1654)

OLAUS WORMIUS (Ole Worm), who died at Copenhagen three centuries ago, on August 31, 1654, is an interesting example of the seventeenth-century polyhistor, whose fame and authority were as great in his own country as they were abroad. Of Dutch descent, he was born on May 13, 1588, at Aarhus in Jutland, where his father was burgomaster. He was educated at the Gymnasium in Lüneburg, studied theology at Giessen and Marburg, medicine at Strasbourg and at Basle under Caspar Bauhin, and at Padua under

Fabricius and Giulio Casserio; after visiting Montpellier and Paris, he took his doctorate at Basle in 1611. Having practised in London for a time, he was appointed professor of Greek and of philosophy at the University of Copenhagen in 1613, and in 1624 succeeded his brother-in-law, Caspar Bartholin Primus, as professor of anatomy and of medicine. Bauhin had inaugurated the Paduan tradition of anatomy at Basle, and Bartholin and Worm took it to Denmark. An able and enthusiastic teacher, Worm was also five times rector of the University of Copenhagen, and physician to King Christian IV. He made no original discoveries in science, though his name was attached by Bartholin to the Wormian bones in the sutures of the skull, which were familiar to the ancients and were also described by Eustachius. Known as the 'father of Danish archæology', Worm compiled six volumes of runic inscriptions, "Monumenta Danica" (1643), and founded a collection of natural history, ethnographic and archæological objects, which after his death passed into the possession of the Cabinet of Curiosities at Copenhagen. His son Willum, professor of medicine in the University, edited the catalogue of the museum in 1655, and he was succeeded in the chair by his son Ole.

#### Energy Transfer in Hot Gases

THE sixth in the series of twelve conferences which were held at the United States National Bureau of Standards during 1951 to mark the fiftieth anniversary of its establishment consisted of a symposium on energy transfer in hot gases and dealt with the problems of radiation from flames and hot gases and the basic and physical mechanisms governing energy transfer in these media. The proceedings of the symposium have now been issued in book form (Circular 523, March 10, 1954; pp. 126. Washington, D.C.: Govt. Printing Office; 1.50 dollars). The contents consist of sixteen scientific papers covering many different aspects. A. G. Gaydon deals with processes of electronic excitation in relation to flame spectra; G. A. Hornbeck and R. C. Herman indicate the importance of using low-temperature, high-intensity sources for the study of polyatomic flame spectra; S. S. Penner, M. Gilbert and D. Weber summarize recent work on high-resolution spectra of hydrocarbon flames in the infra-red between 1 and  $2.6 \mu$  using lead sulphide photoconductive cells; and S. S. Penner gives an outline of basic theoretical relations used for calculating the infra-red emissivity of diatomic gases. The present position of the theory of flames, by B. Lewis, is a more general survey of the subject in which fields that require further basic study are indicated. A paper on some reactions of atomic hydrogen in flames, by J. R. Arthur and D. T. A. Townend, is a summary of methods of detecting the presence of atoms in flames and includes a description of some of the experiments conducted at the British Coal Utilization Research Association, Leatherhead. The concluding article in the volume is a brief account by H. K. Sen of an astrophysicist's concept of temperature.

#### Strength Properties of Plywood

IN Bulletin No. 29 of the Forest Products Research Laboratory, Princes Risborough, the strength properties of plywood are considered in "Comparison of 3-Plywoods of a Standard Thickness, Part 1", by W. T. Curry (pp. iv+10; London: H.M.S.O., 1953; 1s. 3d. net). The methods described in the bulletin