

Controller-General of the Ministry of Fuel and Power: Dr. H. S. Houldsworth, K.C.

DR. H. S. HOULDSWORTH, K.C., who from January 1, 1944, becomes controller-general of the Ministry of Fuel and Power, graduated in science at the University of Leeds in 1911, taking first-class honours in physics as a student of the late Sir William Bragg. After some years of school-teaching and after the outbreak of war, he entered the Fuel Department of the University on the staff of Prof. J. W. Cobb, the regional deputy inspector of high explosives, visiting works for the sampling and testing of their products. In 1918 with the coming of peace he remained with Prof. Cobb in a newly created post as research assistant on refractory materials, working, and later lecturing, on that subject. In a period of seven years he was joint (or sole) author of a series of papers, mainly for the Ceramic Society, dealing with such matters as the thermal expansion of refractories and the transformations of silica, and although he entered on this work with no special knowledge of the subject, then little studied, he grappled with it effectively and in 1925 was awarded the D.Sc.

Meanwhile Dr. Houldsworth retained and developed an interest in public work in close association with Sir John (now Lord) Simon, the member of Parliament for Spen Valley, and with his encouragement read successfully for the Bar examinations and entered on a new career as barrister. Here he had no long waiting period, but was soon busy, particularly with the coal industry and its multitude of agreements and discussions of one kind and another, in which owners, miners, users and Government authorities were involved. His variety of experience with people differing so widely in training, position and outlook, combined with innate qualities to make him increasingly valued both for sanity of judgment and honesty of purpose. The same qualities have no doubt marked his tenure of office as regional controller of the Ministry of Fuel and Power for the North Eastern Division, to which he was called when the war effort for fuel economy came under Government organization. The extension of his responsibilities now announced will be widely welcomed, particularly by those who have known his work. Typical of his methods was the Yorkshire Fuel Efficiency Committee, for which he secured the effective collaboration of industrial, academic and official representatives and the willing assistance of trained men, in the drive for economy in the industrial uses of fuel.

Government Fuel Research in Great Britain

In an address to the Institute of Fuel in Newcastle upon Tyne on December 13, Dr. A. Parker, director of fuel research of the Department of Scientific and Industrial Research, surveyed the activities of the Fuel Research Board. To-day, this State organization, with a staff of more than 250, includes the central Fuel Research Station, equipped not only for experiments in the laboratory, but also for experiments on a semi-commercial scale and on a full commercial scale. The full-scale units include plants for cleaning, drying and pulverizing coal, for the manufacture of fuel gases, hydrogen and coke, and there are full-size boilers of several kinds. Experimental work has also been undertaken in co-operation with industry. In addition to the Fuel Research Station, there are nine coal survey laboratories in various parts of England, Scotland and Wales which have

been undertaking, in collaboration with the Geological Survey, a comprehensive survey of the qualities of the coal resources of Great Britain. This survey is now being put on a quantitative basis in co-operation with the Coal Commission and the Ministry of Fuel and Power. As a result of this survey, we already have much more information about our coal reserves and the coals on the market than there is about the coals in any other country. Referring to achievements of the fuel research organization, Dr. Parker stated that simple equipment has been developed for fitting to large industrial boilers, which not only greatly reduces the quantity of smoke from the boiler chimney but also increases the efficiency of the coal in raising steam, and work on transport producers using coal and coke in place of petrol for road vehicles, begun at the Fuel Research Station before the War, has led to the introduction of the Government Emergency Producer now in use on many road vehicles. Processes for the production of petrol and other oils and chemicals from coal have received considerable attention at the Fuel Research Station, and a great deal of information has been obtained from experimental work on the distillation of coal, hydrogenation of coal and of tar, and on synthetic methods of producing oils and chemicals from gases made from coal and coke.

Continuing, Dr. Parker said that if Great Britain is to maintain its position in industry, we must rapidly develop our scientific and industrial research in relation to coal and other fuels, in the widest national interest. There must also be a spirit of mutual help in research, involving friendly discussion and collaboration between the scientific men in universities, in Government establishments, industrial research associations, and other research organizations. In relation to fuel in Great Britain, a good beginning in this direction has already been made. The Department has set up a consultative conference on fuel research, which is attended by representatives of the Iron and Steel Industrial Research Council, the British Refractories Research Association, the British Electrical and Allied Industries Research Association, the British Coal Utilization Research Association, the British Hard Coke Research Association, and the Gas Research Board. In his concluding remarks, Dr. Parker issued a note of warning. He said that where there is a lack of the real appreciation of the conditions under which successful research is carried out, there is an impression that if large sums of money are provided for research, marvellous discoveries would follow as a matter of course. While adequate financial provision is naturally essential, it is not in itself enough. The primary requirement is men of the right training and outlook.

Commemoration of the Invention of the Barometer

At the University of Toronto on October 19, two meetings were held to commemorate the invention of the barometer by Torricelli, three hundred years ago. Last spring, the Canadian Branch of the Royal Meteorological Society decided that this important scientific event should be fittingly commemorated, and invited the Royal Astronomical Society of Canada, the Royal Canadian Institute, and the University of Toronto to join with it in making the arrangements, which were entrusted to a committee under the chairmanship of Mr. W. E. K. Middleton. At the afternoon meeting held in the West Hall of the University College, Prof. C. A. Chant was chairman, and pres-