

accorded to the Lorraine steel works by Germany in the matter of coke supplies, since the Germans have failed to carry out their obligations under the terms of the Peace Treaty, and have delivered only about one-third of the tonnage promised, notwithstanding the fact that there are large stores of furnace coke in Westphalia. Since Great Britain has been short of basic pig iron for a long time, and there is every prospect of the shortage continuing, some such reciprocal arrangement as that put forward might be of advantage to both countries.

The Commission states that there is no doubt that economy in fuel consumption is very fully effected, owing to the absence of cheap and suitable fuel and the dependence of the works upon Westphalian coke. All the waste heat is utilised at every works. The blast-furnace gas is suitably cleaned and fully absorbed. The works at Homécourt may be cited as an instance. Before the war they were producing 9000 tons of pig iron and 7000 tons of steel weekly, and they used only 280 tons of coal, all the remaining power being produced from blast-furnace gas. This is quite typical. The molten metal is taken from the blast furnaces to the mixers in the adjacent steel works and the sensible heat thus utilised.

A study of the report leaves the impression that the development of the iron- and steel-producing areas in Lorraine which have passed from German to French management presents problems which will call for patient consideration, dispassionate counsel, and scientific treatment, if they are to be surmounted successfully. The formidable position which Germany had built up between 1871 and 1914 has been lost to her by the war. It remains to be seen what France will make of the heritage which has passed into her hands.

Obituary.

WE regret to note that the death of MR. JOHN W. W. DRYSDALE is recorded in the *Engineer* for June 25 as having occurred on June 21. Mr. Drysdale was in his seventy-second year, and was one of the founders of the well-known Glasgow firm of Drysdale and Co., Ltd. He finished his education at Glasgow University under Prof. Macquorn Rankine, and thereafter started a small works in conjunction with a fellow-student, Mr. Lewis J. Pirrie, son of Principal Pirrie of Aberdeen. Centrifugal pumps formed their outstanding speciality from the first, and the firm has acquired a wide reputation for its products. Mr. Drysdale was a member of the Institution of Engineers and Shipbuilders in Scotland.

WE announce with great regret the death, at the Queen Alexandra Military Hospital, Millbank, of SURGEON-GENERAL W. C. GORGAS, of the U.S. Army, so well known for his work in combating yellow fever and malaria.

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Notes.

THE Lord President of the Council, as president of the Committee of Council for Scientific and Industrial Research, has appointed Dr. J. S. Flett, at present Assistant to the Director in Scotland, to be Director of the Geological Survey and Museum. Dr. Flett succeeds Sir Aubrey Strahan, who retires this month. Mr. G. W. Lamplugh, Assistant to the Director in England, also retires.

SIR JOHN CADMAN, Mr. W. B. Hardy, and Prof. S. Young have been appointed by an Order in Council members of the Advisory Council to the Committee of the Privy Council for Scientific and Industrial Research.

IT is announced that Sir T. Clifford Allbutt is to be sworn a member of the Privy Council.

THE secretaryship of the Royal Irish Academy, vacant through the death of Prof. J. A. McClelland, has been filled by the election of Prof. G. H. Carpenter.

THE Barnard medal of Columbia University has been awarded to Prof. Einstein "in recognition of his highly original and fruitful development of the fundamental concepts of physics through the application of mathematics."

DR. E. SOLVAY has been elected an honorary member of the American Chemical Society.

THE Medical Research Council has recently established at the Lister Institute of Preventive Medicine a national collection of type cultures from which biologists in general, and bacteriologists in particular, may obtain authentic strains of recognised bacteria and protozoa for use in scientific work. The scheme is under the general direction of Dr. J. C. G. Ledingham, while Dr. R. St. John Brooks has been appointed to the post of curator of the collection and Miss Mabel Rhodes to that of assistant curator. It is proposed to collect and maintain bacterial strains from all departments of bacteriology, human, veterinary, and economic, and already considerable work has been done towards the formation of a representative collection on these lines. The efforts of the staff are, however, at present particularly directed towards the securing of fully authenticated strains responsible for or associated with disease in man and animals. The bureau proposes to supply cultures on demand to all workers at home and abroad, and, as a rule, a nominal charge per culture will be made to defray postage and media. Strains sent for identification and maintenance should be accompanied by particulars as to source, date of isolation, etc. In due course a catalogue will be prepared for publication.

IN NATURE of January 1 last an account was given of the Cawthron Institute of New Zealand, founded for the furtherance of scientific research in relation to agriculture and other industries. The scope of the institute has since been extended by the establishment of a biological department, of which Dr. R. J. Tillyard, the eminent Australian entomologist, hitherto