

methods in the United States. It was early found that the kind and quantity of inorganic constituents greatly influenced the serviceability of a coal. Fieldner himself was closely associated with the necessary tests. As time went on, further specialized tests have been developed—a work in which British chemists have largely participated, particularly in association with the British Standards Institution. Only recently the Institution has issued a new edition of British standard methods for the sampling and analysis of coal. It reveals a noticeable increase in the elaboration of method, even in regard to the simple 'proximate analysis'. This is doubtless due to the fact that the simplicity is more apparent than real, and the complexity of coals provides many pitfalls.

The wisdom of over-elaborating the apparatus and method of the 'proximate analysis' is open to question. There is a place—the largest place—for a test in which a crucible is heated over a Bunsen burner. If a greater precision is required, it is possible that a more precise test than that now prescribed is preferable. Time has brought more and more specialized tests designed to judge the suitability of a fuel for defined applications, for example producers, hand- or machine-fired, mechanical stokers, carbonization processes. War-time conditions have emphasized the need for these. In peace-time, coals tended to gravitate into appropriate channels, which war-time difficulties have choked or diverted. This has forced some industries to give thought to the more exact determination of their needs in order to secure that substitutes shall be really effective. All this has emphasized the importance of the subject of coal testing.

H. J. HODSMAN.

## FORTHCOMING EVENTS

(Meetings marked with an asterisk are open to the public)

### Saturday, December 5

SOCIETY OF CHEMICAL INDUSTRY (YORKSHIRE SECTION) (in the Hotel Metropole, Leeds), at 2.30 p.m.—Dr. G. W. Scott Blair: "Some Rheological Problems in Industry".

### Saturday, December 5—Sunday, December 6

ASSOCIATION OF SCIENTIFIC WORKERS (with the support of the BRITISH ASSOCIATION) (at Gas Industry House, 1 Grosvenor Place, London, S.W.1)—Conference on "Scientists of the United Nations and the War Effort".\*

### Saturday

At 2.30 p.m.—"Allied Scientists" (Chairman: Sir Richard Gregory, Bart., F.R.S.).

### Sunday

At 11 a.m.—"Free National and Refugee Scientists" (Chairman: Prof. John Marrack).

At 2.30 p.m.—"British Scientists" (Chairman: Sir John Russell, F.R.S.).

### Monday, December 7

SOCIETY OF CHEMICAL INDUSTRY (at the Chemical Society, Burlington House, Piccadilly, London, W.1), at 2.30 p.m.—Dr. W. D. Jones: "Powder Metallurgy".

ROYAL GEOGRAPHICAL SOCIETY (at Kensington Gore, London, S.W.7), at 5 p.m.—Dr. L. Dudley Stamp: "The Scott Report on Land Utilization in Rural Areas".

### Tuesday, December 8

CHADWICK PUBLIC LECTURE (at the Royal Society of Tropical Medicine and Hygiene, 26 Portland Place, London, W.1), at 2.30 p.m.—Dr. W. Norwood East: "The Differentiation, Prevention and Treatment of Anti-Social Behaviour Disorders".\*

ROYAL INSTITUTION (at 21 Albemarle Street, London, W.1), at 3 p.m.—Prof. J. C. Drummond: "The History of our More Important Foods", (iii) Dairy Produce.\*

ILLUMINATING ENGINEERING SOCIETY (at the Royal Society of Arts, John Adam Street, Adelphi, London, W.C.2), at 5 p.m.—Discussion on "Lighting and Post-War Reconstruction (Guidance, Specification and Legislation)", to be opened by Mr. A. G. Higgins.

## Wednesday, December 9

ROYAL SOCIETY OF ARTS (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Dr. George Yeh: "The Cultural Life of War-time China".

PHYSICAL SOCIETY (in the Cavendish Laboratory, Cambridge), at 2.30 p.m.—Prof. E. N. da C. Andrade, F.R.S.: A lecture on Newton (in celebration of the Tercentenary of Newton's Birth).

INSTITUTE OF PHYSICS (in the Lecture Theatre of the Royal Institution, Albemarle Street, Piccadilly, London, W.1), at 5 p.m.—To celebrate the Three-hundredth Anniversary of the birth of Sir Isaac Newton. Dr. H. Lowery: "Life of Newton"; Dr. H. F. Buckley: "Some Historical Aspects of Newton's Published Works".

## Thursday, December 10

INSTITUTE OF FUEL (at the Connaught Rooms, Great Queen Street, Kingsway, London, W.C.2), at 2.30 p.m.—Mr. H. E. Partridge: "Fuel Economy at Collieries".

PHARMACEUTICAL SOCIETY (at Friends House, Euston Road, London, N.W.1), at 2.30 p.m.—Dr. R. Melville: "Medicinal Indigenous Plants".

## Friday, December 11

ROYAL SOCIETY OF ARTS (INDIA AND BURMA SECTION) (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Kahn Bahadur Sir Azizul Hogue: "Rural Self-Governing Bodies in India".

PHYSICAL SOCIETY (COLOUR GROUP) (at the Lighting Service Bureau of the E.L.M.A., 2 Savoy Hill, Strand, London, W.C.2), at 2.30 p.m.—Dr. John W. Strange: "Fluorescent Materials and their Colours"; Mr. G. T. Winch: "The Photometry and Colorimetry of Fluorescent Lamps"; Mr. H. G. Jenkins: "Commercially Useful Fluorescent Substances"; Mr. F. W. Coppin: "The Use of Fluorescent Pigments in Colour Printing".

ROYAL INSTITUTION (at 21 Albemarle Street, London, W.1), at 5 p.m.—Mr. E. R. Davies: "The Photographic Analysis of Motion".

## Saturday, December 12

BRITISH MYCOLOGICAL SOCIETY (at the Linnean Society, Burlington House, Piccadilly, London, W.1), at 2 p.m.—Miss E. M. Blackwell: "On Germinating the Oospores of *Photophthora cactorum*" (Presidential Address).

FREE GERMAN INSTITUTE OF SCIENCE AND LEARNING (at 16 Buckland Crescent, Hampstead, London, N.W.3), at 5 p.m.—Prof. M. Polanyi: "The Scientific Community".\*

## APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

ASSISTANT DAIRY BACTERIOLOGIST FOR THE LONDON AREA—The Acting Principal, The College, Wye, Ashford, Kent (December 8).

LECTURER IN BIOLOGY—The Registrar, Technical College, Sunderland, Co. Durham (December 11).

LECTURER IN PHYSICAL CHEMISTRY—The Registrar, The University, Bristol (December 12).

INSTRUCTOR IN BEEKEEPING—The Education Officer, County Hall, Wakefield (December 14).

LECTURER IN CHARGE OF MINING at the St. Helens Municipal Technical College—The Director of Education, Education Office, Cotham Street, St. Helens (December 14).

HEAD OF THE DEPARTMENT OF SCIENCE AND TECHNOLOGY, and HEAD OF THE COMMERCE DEPARTMENT, of the Southend-on-Sea Municipal College—The Chief Education Officer, Education Office, Warrior Square, Southend-on-Sea (December 18).

HEADMASTER of the King Edward VI Grammar School—Mr. John B. Hales, Clerk to the Governors, The Close, Norwich (December 18).

ASSISTANT LECTURER AND DEMONSTRATOR IN BOTANY—The Secretary, West of Scotland Agricultural College, 6 Blythswood Square, Glasgow (December 28).

REGIUS PROFESSOR OF GEOLOGY at Edinburgh University—The Private Secretary, Scottish Office, Fielden House, 10 Great College Street, London, S.W.1 (January 11).

ASSISTANT MASTER WITH GOOD QUALIFICATIONS IN MATHEMATICS AND ENGINEERING, and an ASSISTANT MASTER (OR MISTRESS) TO TAKE GEOGRAPHY AND GENERAL SCIENCE—The Principal, Technical Institute, Gravesend.

ASSISTANT (MALE OR FEMALE) TO THE PUBLIC ANALYST—The Secretary, Health Department, Grey Friars, Leicester.

VETERINARY INVESTIGATION OFFICER—The Principal, University College of Wales, Aberystwyth.

PHYSICS INSTRUCTOR in a leading Technical College in Chile—The British Council, 3 Hanover Street, London, W.1 (endorsed 'Chile').

PHYSICS MASTER, and a CHEMISTRY MASTER, in the Victoria College, Alexandria—The British Council, 3 Hanover Street, London, W.1 (endorsed 'Alexandria').

RESEARCH ASSISTANT (MALE) WITH ZOOLOGICAL OR AGRICULTURAL QUALIFICATIONS TO WORK ON PEST CONTROL—Wood Pigeon Investigation, Edward Grey Institute, 39 Museum Road, Oxford.

ASSISTANT ANALYST—The Medical Director, Evans Biological Institute, Runcorn, Cheshire.

LABORATORY ATTENDANT—The Laboratory Superintendent, Department of Chemistry, Imperial College of Science and Technology, South Kensington, London, S.W.7.