SEVENTY YEARS AGO

NATURE, vol. 1, January 27, 1870

Tyndall on Haze and Dust

THE Friday Evening Discourse entitled "On Haze and Dust" delivered by Prof. Tyndall at the Royal Institution on January 21, 1870, is printed in full. Prof. Tyndall referred to experiments carried out at the Royal Institution, in which he passed a "powerfully condensed beam" of light through tubes originally exhausted and "optically empty", to which air from the laboratory was admitted after passing through potash and sulphuric acid. In every case, floating matter entered the tube, and revealed itself by scattering the light, showing the "conical track of the electric beam". If the air was heated before passing through the drying apparatus, the floating matter was burnt up. "It was therefore *organic matter*". Tyndall then tried different methods of heating the air stream. Imperfect combustion of the particles produced fine blue clouds in the experimental tube, which gave perfectly polarized light at right angles to the illuminating beam. He also reported experiments in which a heated body placed below a cylindrical beam of light produced wreaths of blackness like thick black smoke, due to air currents removing the scattering particles which made the beam visible.

Tyndall then went on to associate the "organic matter" which the flame consumes with the germs causing disease. For this he was taken to task in the leading article in the same issue. "Practically, so far as health is concerned, Prof. Tyndall has given us a scientific account, not only of certain optical properties of impure air, but likewise of the benefit of several popular practices, such, for example, as lighting fires during epidemics to purify the air, the use of gauze curtains in malarious districts as a protection against fever, covering the mouth with a cloth during sleep in fever countries, and the like . . . On the real proximate aerial cause of disease, if such there be, no new light has been yet thrown either by the optician, the microscopist, or the chemist."

FROM a correspondent: "Professor Struthers, of Aberdeen, and Professor Bell, of St. Andrews, hearing that the five ladies who are studying at the Edinburgh University are excluded from the opportunity of studying anatomy there, have severally offered their services as instructors. Many a lady will rejoice that the numbers of those willing and ready to help in the good cause of fuller knowledge for women are increased by two professors, who have bravely come forward with much moral courage and chivalrous feeling."

"WE are happy to be able to announce that the council of the Chemical Society has decided to have a report of their proceedings and an abstract of the papers read before the society drawn up immediately after its meetings, and to offer copies of this report to the editors of journals who may be likely to wish to publish it. The days when the newest results of science were regarded as something secret—or, at all events, of no concern to the ordinary man of education—are gone by, we trust, for ever."

APPOINTMENTS VACANT

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

DEMONSTRATOR IN BACTERIOLOGY—The Registrar, University, Leeds (February 3).

AN APPOINTMENT IN THE MECHANICAL ENGINEERING AND TRANSPORTATION (POWER) DEPARTMENT of the Indian State Railways—The High Commissioner for India, General Department, India House, Aldwych, W.C.2 (quoting Appointment 1/4A) (February 12).

LECTURER IN AGRICULTURAL BIOCHEMISTRY in the Massey Agricultural College, Palmerston North, New Zealand—Universities Bureau, 88a Gower Street, W.C.1 (April 15).

TECHNOLOGISTS—The Under-Secretary of State, S.2.G., Department Z.A., Air Ministry, Adastral House, Kingsway, W.C.2 (quoting reference number B.380).

TEMPORARY FORECASTERS, Grade II (Male) in the Meteorological Office—The Under-Secretary of State, S.2.B.(Met.), Department Q.A., Air Ministry, Adastral House, Kingsway, W.C.2.

REPORTS AND OTHER PUBLICATIONS

(not included in the monthly Books Supplement)

Great Britain and Ireland

London Shellac Research Bureau. Bulletin No. 3: Iodine Values of Lac; Reaction between Halogen and Lac. By Dr. B. S. Gidvani and Dr. R. Bhattacharya. Pp. 14. Technical Paper No. 17: Ethers and Ether-Esters of Lac and their Polymerisation. By Dr. B. S. Gidvani. Pp. 24. (London: London Shellac Research Bureau.) [31

Department of Scientific and Industrial Research. Report of the Water Pollution Research Board for the Year ended 30th June 1939; with Report of the Director of Water Pollution Research. Pp. iii+49. (London: H.M. Stationery Office.) 1*s.* net. [41

Imperial Institute. The Mineral Industry of the British Empire and Foreign Countries. Statistical Summary (Production, Imports and Exports) 1936–1938. Pp. 453. (London: H.M. Stationery Office.) 7*s.* 6*d.* net. [41

Battersea Polytechnic. Report on the Work of the Session 1938–39, by the Principal, being the 46th Annual Report presented to the Governing Body. Pp. 36. (London: Battersea Polytechnic.) [91

Friends of the Hebrew University of Jerusalem. Annual Report 1938–9. Pp. 16. (London: Friends of the Hebrew University of Jerusalem.) [101

Hull Museum Publications. No. 205: On Dating Old Horse-Shoes. By Dr. Gordon Ward. Pp. v+38+7 plates. No. 206: Excavations at the Roman Town of Brough, E. Yorkshire, 1937. By Philip Corder and the Rev. Thomas Romans. Pp. ii+62+6 plates. (Hull: Hull Museum.) [101

Department of Scientific and Industrial Research. Index to the Literature of Food Investigation. Vol. 2, No. 2, September 1939. Compiled by Agnes Elisabeth Glennie, assisted by Gwen Davies and Catherine Robson. Pp. v+113–198. (London: H.M. Stationery Office.) 4*s.* 6*d.* net. [101

Other Countries

Canada: Department of Mines and Resources, Mines and Geology Branch: Bureau of Mines. The Canadian Mineral Industry in 1938. Reviews by the Staff of the Bureau of Mines. (No. 804.) Pp. iv+102. (Ottawa: King's Printer.) 25 cents. [91

Publications of the Dominion Astrophysical Observatory. Vol. 7, No. 8: The Spectrographic Orbits of the Components of Boss 2112. By W. E. Harper. Pp. 149–154. (Ottawa: King's Printer.) [91

Field Museum of Natural History. Botany Leaflet No. 24: Mistletoe and Holly. By Sophia Prior. Pp. 30. (Chicago: Field Museum of Natural History.) 25 cents. [91

Scientific Publications of the Cleveland Museum of Natural History. Vol. 8, No. 2: A New Arthrodire from the Cleveland Shale Formation. By David H. Dunkle and Peter A. Bungart. Pp. 13–28+plate 3. (Cleveland, Ohio: Cleveland Museum of Natural History.) [91

Department of Agriculture: Tanganyika Territory. Pamphlet No. 24: Reports from the General Experiment Farms 1938. Pp. 48. (Dar es Salaam: Government Printer.) 1*s.* [91

Transactions of the San Diego Society of Natural History. Vol. 9, No. 14a: A New Subspecies of the Western Worm Snake. By Laurence M. Klauber. Pp. 67–68. Vol. 9, No. 15: Two New Pocket Gophers from the Desert Slope of Eastern San Diego County, California. By Laurence M. Huey. Pp. 69–72+plates 4–5. (San Diego, Calif.: San Diego Society of Natural History.) [91

Egyptian Government: Ministry of Public Works. Annual Report for the Year 1932–33. English Version. Part 2. Pp. 478+15 plates. (Cairo: Government Press.) P.T. 100. [101

Catalogues

Old Books of interest to the student of the Social Sciences. (Catalogue 54.) Pp. 42. (London: E. P. Goldschmidt and Co., Ltd.)

Level Measurement and Control. Pp. 24. (London: Negretti and Zambra.)

Marmite (Yeast Extract) in Medicine and Dietetics. Pp. 24. (London: The Marmite Food Extract Co., Ltd.)