

alcohol, phenylhydroxylamine, and benzenesulphenic acid, containing groupings including respectively carbon, nitrogen, and sulphur atoms, are able to undergo simultaneous reduction and oxidation, yielding: toluene and benzoic acid (from benzaldehyde formed as an intermediate product); aniline and nitrobenzene; thiophenol and benzenesulphonic acid. Toluene, aniline, and thiophenol also exhibit analogies in behaviour, since they are able to yield respectively dibenzyl, hydrazobenzene, and diphenyl disulphide on oxidation.—F. Rodolico: Phosgenite from Monteponi.

### Official Publications Received.

#### BRITISH.

Proceedings of the Society for Psychical Research. Part 109, Vol. 38, December. Pp. 209-279. (London: Francis Edwards Ltd.) 4s.

The National Institute of Agricultural Botany. Ninth Report and Accounts, 1927-28. Pp. 19. (Cambridge.)

Imperial Department of Agriculture for the West Indies. Report on the Agricultural Department, St. Kitts-Nevis, 1927-28. Pp. iv+25. (Trinidad, B.W.I.) 6d.

Leeds University. Report to the Worshipful Company of Cloth-Workers of the City of London of the Advisory Committee on the Departments of Textile Industries and Colour Chemistry and Dyeing, during the Session 1927-28. Pp. 14. (Leeds.)

British Museum (Natural History). Picture Postcards. Set F22. British Trees: Alder. 2 cards in Colour and 2 in Monochrome. 6d. Set F23. British Trees: Wild Apple. 2 cards in Colour and 2 in Monochrome. 6d. Set F24. British Trees: Ash. 2 cards in Colour and 2 in Monochrome. 6d. Set F25. British Trees: Beech. 2 cards in Colour and 2 in Monochrome. 6d. Set F26. British Trees: Sweet Chestnut. 2 cards in Colour and 2 in Monochrome. 6d. Set F27. British Trees: Horse-Chestnut. 2 cards in Colour and 2 in Monochrome. 6d. Set F28. British Trees: Sycamore. 2 cards in Colour and 2 in Monochrome. 6d. (London: British Museum (Natural History).)

Quarterly Journal of the Royal Meteorological Society. Vol. 54, No. 228, October. Pp. 287-360. (London: Edward Stanford, Ltd.) 7s. 6d.

The Ninety-fourth Annual Report of the Royal Cornwall Polytechnic Society. New Series, Vol. 6, Part 1, 1927. Pp. xv+75+14. 5s.

The Ninety-fifth Annual Report of the Royal Cornwall Polytechnic Society. New Series, Vol. 6, Part 2, 1928. Pp. xvi+xxviii+77+182+13. 5s. (Camborne.)

Union of South Africa: Department of Agriculture. 13th and 14th Reports of the Director of Veterinary Education and Research. Part 1. Pp. 729. 10s. Part 2. Pp. 731-1270. 10s. (Pretoria: Government Printing and Stationery Office.)

Transactions of the Mining and Geological Institute of India. Vol. 22, Part 3, October. Pp. 177-274+x+plates 27-48. (Calcutta.) 4 rupees.

Journal of the Royal Microscopical Society. Series 3, Vol. 48, Part 4, December. Pp. xvi+379-503. (London.) 10s. net.

Society of Chemical Industry: Chemical Engineering Group. Proceedings, Vol. 9, 1927. Pp. 147. (London.) 10s. 6d.

Journal of the Indian Institute of Science. Vol. 11A, Part 10: i. Studies on Soil Protozoa, Part 1: Protozoan Fauna of some Mysore Soils, by H. S. Madhava Rao: ii. Studies on Soil Protozoa, Part 2: The Function of Mitochondria in some Soil Protozoa, by H. S. Madhava Rao. Pp. 111-119+1 plate. 1 rupee.

Vol. 11A, Part 11: i. Studies in Enzyme Action, Part 1: Amylase from Cholam (*Sorghum vulgare*), by V. N. Patwardhan and Roland V. Norris; ii. Studies in Enzyme Action, Part 2: The Nature of Amylase, by D. Narayananmurti and Roland V. Norris. Pp. 121-139. 1.8 rupees. (Bangalore.)

#### FOREIGN.

Spisy vydávané Přírodovědeckou Fakultou Masarykovy Univerzity (Publications de la Faculté des Sciences de l'Université Masaryk.) Cis. 96: "Lonchopteris Jongmansii nov. sp." z kamenouhelné pánve rošicko-slavanské ("Lonchopteris Jongmansii nov. sp." du bassin houiller de Rosice-Slavany en Moravie (Tchécoslovaquie).) Napsal J. Augusta. Pp. 11. Cis. 97: "Pásma porfyroidové ve Vrbenském devonu na východním okraji Vysokého Jeseníku (La zone de porphyroïdes dévonien de Vrbno aux abords Est de Vysoký Jeseník en Silesie.) Napsal Jan Stejskal. Pp. 34. Cis. 98: La réfraction de l'hélium et de l'argon et sa dépendance des pressions inférieures à une atmosphère. Par Fr. Schacherl. Pp. 15. Cis. 99: La réfraction de l'oxyde de carbone, de l'azote et de l'oxyde azoteux et sa dépendance des pressions inférieures à une atmosphère. Par Fr. Schacherl. Pp. 29. Cis 100: Contribution à l'étude des propriétés physiques du contact. Par Miroslav Konečný. Pp. 19. Cis. 101: Quod momentum significat *Carex pediformis* in stepposis silvaticis Europae mediae. Scriptis J. Podpéra. Pp. 22. Cis. 102: Generis Trigonella L. revision critica. I. Scriptis G. Sirjaev. Pp. 57. (Brno: A. Piša.)

Spisy Lékařské Fakulty Masarykovy Univerzity, Brno, Československá Republika. Svazek 6, Spis 52-60. (Publications de la Faculté de Médecine, Brno, Tchécoslovaquie, Tome 6, Fascicule 52-60.) Pp. 64+

40+8+6+14+21+12+61+24. (Brno: A. Piša.) 40 Kč.

Biologické Spisy Vysoké Školy Zvěrolékařské, Brno, Československá Republika. Svazek 6, Spis 76-95. (Publications biologiques de l'École des Hautes Études Vétérinaires, Brno, Tchécoslovaquie, Tome 6, Fascicule 76-95.) Pp. 10+28+28+37+16+15+7+7+87+6+7+6+7+13+8+28+5+22+11+5. (Brno: A. Piša.) 40 Kč.

Práce Moravské Přírodovědecké Společnosti, Brno, Československá. (Acta Societatis Scientiarum Naturalium Moraviae, Brno, Tchécoslovaquie.) Svazek 3, Spis 21-32. (Tomeus 3, Fasciculus 21-32.) Pp. 344. 80 Kč.

Svazek 4, Spis 33-41. (Tomeus 4, Fasciculus 33-41.) Pp. 536. 100 Kč. (Brno: A. Piša.)

SBorník Vysoké Školy Zemědělské v Brně, ČSR. (Bulletin de l'École Supérieure d'Agronomie, Brno: RCS.) Sign. C12: Mykologický rozbor rozkladu rostlinné hmoty a jeho význam pro praxi konservování pice (Analyse mycologique de la décomposition de la matière végétale et son importance pour la pratique de la conservation du fourrage). Napsal Dr. Miloš Bayer. Pp. 64+8 tabulkami. Sign. C13: Přispěvěk k rozšíření zoocidí v Jugoslavii a zemích sousedních (Contribution à la distribution des zoocidés en Yougoslavie et dans les pays voisins). Napsal Dr. Eduard Baudyš. Pp. 99. Sign. C14: Studie o významu stříny a brždiku pro opěrování, vzhled a jakost masa drůbeže (Studies on the Importance of the Throats and of the Thymus in the Feathering, Growth and Flesh-quality in the Poultry). Napsal Michal Nevalony. Pp. 187. Sign. D9: Lesnické pokusnictví pístební; Nástin soustavy a pracovních zásad (The Silvicultural Experimentation; a Short Outline of the System and Work's Manner). Napsal Prof. Jos. Konšel. Pp. 52. Sign. D10: Stálost rostlinných bunk proti vyschnutí (La stabilité des cellules végétales contre la sécheresse). Napsal Prof. Vasil Sergejevič Iljin. Pp. 18. Sign. D11: Závislost přírůstku dřeviny na obsahu ústrojného látek v pídu. Několik poznámek k práci A. Němců a K. Kvapila: Studie o chemické povaze profilu lesních píd. Napsal Alexandr Leporský. Pp. 25. (Brno: A. Piša.)

Methods and Problems of Medical Education. Eleventh Series. Pp. iii+268. (New York: The Rockefeller Foundation.)

Journal of the Faculty of Agriculture, Hokkaido Imperial University, Sapporo, Japan. Vol. 24, Part 1: Beitrag zur Chemie der Haut (i. Die Hydrolyse in sauren und alkalischen Medien), von G. Grasser, Dr. Sh. Taguchi und Sun Tau; Beitrag zur Chemie der Haut (ii. Einfluss der Ascher- und Beiz-Methoden auf die chemische Zusammensetzung der Blössen), von G. Grasser und H. Nakanishi; Die gerbenden Eigenschaften der Methylendianaphthole, von G. Grasser und K. Hirose; Die Reduktion der Bichromate zu basischen Chromsalzen, von G. Grasser und T. Nagahama. Pp. 38. (Tokyo: Maruzen Co., Ltd.)

### Diary of Societies.

#### FRIDAY, FEBRUARY 1.

ROYAL SOCIETY OF MEDICINE (Otology Section), at 10.30 A.M.—S. Scott: Vertigo.—A. R. Tweedie: Some Notes on the Rotation, Caloric, and Galvanic Tests.—Dr. A. L. Yates: Demonstration of Some Graphic Records of Instability, illustrative of Cases referred to by Mr. Sydney Scott.

ANDERSONIAN CHEMICAL SOCIETY (at Royal Technical College, Glasgow), at 3.15.—Dr. R. Hay: Manufacture of Sulphuric Acid by the Contact Process.

ROYAL SOCIETY OF MEDICINE (Laryngology Section), at 5.

ROYAL SANITARY INSTITUTE, at 5.—F. R. Humphreys and others: The Civilian Population and Chemical Warfare.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, at 5.—Prof. C. A. Pannett: Local Anesthesia in the Surgery of the Upper Abdomen.

PHILOLOGICAL SOCIETY (at University College), at 5.30.—Prof. V. G. Childe: Philology and Archaeology.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—Prof. A. S. Eddington: Engineering Principles in the Machinery of Stars (Thomas Hawksley Lecture).

SOCIETY OF CHEMICAL INDUSTRY (Manchester Section) (jointly with Liverpool Section) (at Engineers' Club, Manchester), at 7.—Dr. F. Challenger: The Sulphur Compounds of Shale Oil and Petroleum.

INSTITUTION OF ELECTRICAL ENGINEERS (Meter and Instrument Section), at 7.—J. L. Carr: Recent Developments in Electricity Meters, with particular reference to those for special purposes.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Pictorial Group—Informal Meeting), at 7.—P. F. Fripp: Some Aspects of Craftsmanship.

SOCIETY OF CHEMICAL INDUSTRY (South Wales Section) (jointly with Institute of Chemistry) (at Thomas' Café, Swansea), at 7.30.—E. A. Tyler: Further Notes on Pure Chemicals.

JUNIOR INSTITUTION OF ENGINEERS (Informal Meeting), at 7.30.—T. H. Cross: Notes on Road Construction.

TEXTILE INSTITUTE (Lancashire Section) (jointly with Nelson Textile Society) (at Nelson), at 7.30.—O. S. Hall: The Economic Aspect of some Developments in the Textile Industry (Lecture).

ROYAL SOCIETY OF MEDICINE (Anæsthetics Section), at 8.30.—Dr. R. D. Lawrence: Post-operative Acidosis.

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. J. L. Myres: Geometrical Art in S.E. Europe and Western Asia.

#### SATURDAY, FEBRUARY 2.

ROYAL INSTITUTION OF GREAT BRITAIN, at 8.—Dr. E. Cammaerts: Flemish and Belgian Art (III.): Genre Painting.

INSTITUTE OF BRITISH FOUNDRYMEN (Lancashire Branch) (at College of Technology, Manchester), at 4.30.—J. O. Gray: Works Accounting and Foundry Practice.

#### MONDAY, FEBRUARY 4.

ROYAL SOCIETY, EDINBURGH, at 4.30.—Dr. Nellie B. Eales: On the Anatomy of a Fetal African Elephant *Elephas africanus* (*Loxodonta africana*): Pt. 3—The Contents of the Thorax and Abdomen, and the Skeleton.—A. D. B. Smith and J. R. Brown: The Role of Inbreeding in the Development of the Jersey Breed of Cattle in England.—Dr. A. W. Greenwood and J. S. S. Blyth: Experimental Study of the Thyroid Gland in the Domestic Fowl, with Special Reference to Plumage Characterisation.—To be read by title only:—Prof. C. W. Stump: A Human Blastocyst *in situ*.

VICTORIA INSTITUTE (at Central Buildings, Westminster), at 4.30.—P. J. Le Riche: Scientific Proofs of a Universal Deluge.

BIOCHEMICAL SOCIETY (at Lister Institute), at 5.—H. Chick and M. H. Roscoe: (a) Methods for the Assay of Vitamins B<sub>1</sub> and B<sub>2</sub>; (b) On the Separation of Vitamins B<sub>1</sub> and B<sub>2</sub> from Yeast.—M. H. Roscoe: Rats Reared Eight Months after Weaning on Diets Deprived of B Vitamins.—T. Lumsden: The Effect of Various Reagents upon Cells Cultured *in vitro*.—L. F. Hewitt: Hormones of the Anterior Pituitary Lobe.—N. F. MacLagan: The Use of Decinormal Hydrochloric Acid for