

scission of inorganic phosphate, the coupling of the two processes being thus indicated. The glycolysis is accompanied by the appearance of a hexosemonophosphoric acid, the amount of which increases most during the period when the liberation of sugar and phosphate is declining. The hexosemonophosphoric acid isolated from rabbit and dog livers is chemically different both from those previously obtained from biological material and from the artificial products.—H. K. Barrenscheen and Béla Vásihrhelyi: Glycolysis of the blood (2): Pyrophosphate fraction and glycolysis. Except with pig's blood, the content of pyrophosphate in different bloods increases with the glycolytic power. The whole blood and the erythrocytes, and, to a less extent, the serum and plasma, contain an enzyme which effects the scission of inorganic pyrophosphate and is inhibited by fluoride.—H. K. Barrenscheen and Karl Braun: Glycolysis of the blood (3): Restriction of glycolysis. The pyrophosphate fraction seems to contain an essential part of the co-enzyme effecting glycolysis.—H. K. Barrenscheen, Karl Braun, and Miklos Dreguss: Inhibition of glycolysis and accumulation of methylglyoxal.—H. K. Barrenscheen and Karl Braun: Colour and precipitation reactions of methylglyoxal.—H. K. Barrenscheen and Miklos Dreguss: Colorimetric micro-method for determining methylglyoxal. By separating the bis-hydrazone formed with 2:4-dinitrophenylhydrazine, results accurate to  $\pm 4$  per cent are obtainable.—H. K. Barrenscheen, Karl Braun, and Miklos Dreguss: Inhibition of glycolysis and disappearance of methylglyoxal.—H. K. Barrenscheen, Leopold Frey, and Otto Renth: Muscle rigidity and co-enzyme.—H. K. Barrenscheen and Wilhelm Filz: Co-enzyme action (1): Inhibition of glycolysis and liberation of ammonia. The liberation of ammonia appears to be partly responsible for the inactivation of the co-enzyme in glycolysis.—Franz M. Kuen: Oxidation of sugar by atmospheric oxygen and hydrogen peroxide.

### Forthcoming Events

TUESDAY, OCT. 25

ROYAL ANTHROPOLOGICAL INSTITUTE.—Dr. P. V. van Stein Callenfels: "Some Early Migrations in the Far East", at 8.30 P.M.

FRIDAY, OCT. 28

INSTITUTION OF CHEMICAL ENGINEERS—(First Hinchley Memorial Lecture).—Mr. H. T. Tizard: "Chemical Engineering and the Aircraft Industry", at 6.30 P.M.

NORTH EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS—(Andrew Laing Memorial Lecture at Bolbec Hall, Newcastle).—Eng. Vice-Admiral Sir Reginald Skelton: "The Work of Andrew Laing", at 7 P.M.

EAST LONDON CHILDREN'S HOSPITAL, SHADWELL.—Sir Buckston Browne: "Lessons to be Learnt from a Study of the Darwin Family", at 8.45 P.M.

### Official Publications Received

GREAT BRITAIN AND IRELAND

Proceedings of the Royal Irish Academy. Vol. 41, Section B, No. 4: The Flora of the Turloughs, a Preliminary Note. By R. Lloyd Praeger. Pp. 37-45. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 6d.

Transactions of the Institution of Chemical Engineers. Vol. 9, 1931. Pp. 212. (London.)

Journal of the Society for the Preservation of the Fauna of the Empire. New Series, Part 17. Pp. 62. (Hertford: Stephen Austin and Sons, Ltd.) 2s.

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The Royal Technical College, Glasgow. Calendar for the One Hundred and Thirty-seventh Session, 1932-1933. Pp. 449+xxiii. (Glasgow.)

Record of the Royal Institution of Great Britain, 1932. Pp. 176. (London: Wm. Clowes and Sons, Ltd.) 5s.

The Journal of the Royal Anthropological Institute of Great Britain and Ireland. Vol. 62, January to June. Pp. xxvi+192+14 plates. (London: Francis Edwards, Ltd.) 15s. net.

Department of Scientific and Industrial Research. Report of the Building Research Board, with the Report of the Director of Building Research for the Year 1931. Pp. ix+158. (London: H.M. Stationery Office.) 3s. net.

Proceedings of the Royal Society of Edinburgh, Session 1931-1932. Vol. 62, Part 3, No. 19: Filial and Fraternal Correlations in Sex-linked Inheritance. By Prof. Lancelot Hogben. Pp. 331-336. 6d. Vol. 62, Part 3, No. 20: The Diffusion Coefficients of Bromine-Hydrogen, Bromine-Nitrogen, Bromine-Oxygen, and Bromine-Carbon Dioxide. By Dr. John E. Mackenzie and Dr. Harry W. Melville. Pp. 337-344. 9d. (Edinburgh: Robert Grant and Son; London: Williams and Norgate, Ltd.)

Philosophical Transactions of the Royal Society of London. Series B, Vol. 221, B476: Experiments on the Development of Chick and Duck Embryos, cultivated *in vitro*. By C. H. Waddington. Pp. 179-230+plates 22-28. (London: Harrison and Sons, Ltd.)

The Strangeways Research Laboratory, Cambridge. Report for 1931. Pp. 18. (Cambridge.)

Hull Museum Publications. No. 174: Record of Additions and Activities. By Thomas Sheppard. Pp. 14. No. 175: Hull Shipping Pictures. By Thomas Sheppard. Pp. 23. No. 176: Mill and Engine Models at the Hull Municipal Museums; being an Account of some Historic Industrial Models. Made by W. Marshall. Pp. 27. No. 177: Ancient and Modern Wedgwood, exhibited in the Mortimer Museum, Carr Lane, Hull, July-August, 1932. Pp. 32. (Hull.)

### OTHER COUNTRIES

Commonwealth of Australia: Council for Scientific and Industrial Research. Pamphlet No. 29: The Possibility of the Entomological Control of St. John's Wort in Australia, Progress Report. By G. A. Currie and S. Garthside. Pp. 28. Pamphlet No. 30: The Binomics and Economic Importance of *Thrips imaginis* Nagall, with Special Reference to its Effect on Apple Production in Australia. By J. W. Evans. Pp. 48+3 plates. (Melbourne: H. J. Green.)

Memoirs of the Punjab Irrigation Research Institute. Vol. 4, No. 1: An Examination of some of the Factors determining the Hydrogen Ion Concentration of Suspensions of Punjab Soils. Part 1: The Effect of Concentration of the Soil Water Suspension. By R. C. Hoon and Dr. E. McKenzie Taylor. Pp. 11. 4 annas; 5d. Vol. 4, No. 2: An Examination of some of the Factors determining the Hydrogen Ion Concentration of Suspensions of Punjab Soils. Part 2: The Variation of the Hydrogen Ion Concentration of the Soil Suspensions with Time. By R. C. Hoon and Dr. E. McKenzie Taylor. Pp. 12. 4 annas; 5d. Vol. 4, No. 3: The Conductometric Method of Analysis as applied to Soil Survey Work. By R. C. Hoon. Pp. 10+2 plates. 6 annas; 7d. (Lahore: Punjab Irrigation Research Institute.)

The Indian Forest Records. Entomology Series, Vol. 17, Part 1: Entomological Investigations on the Spike-Disease of Sandal (*Santalum album* Linn.). Part 1: An Introductory Survey of the Problem. By Cedric Dover. Pp. iii+53. (Calcutta: Government of India Central Publication Branch.) 1 rupee; 1s. 9d.

Indian Institute of Science, Bangalore. Investigations on the Spike-Disease of Sandal. 5: Report of Progress made during the Quarter ending 31st March, 1932. Edited by Dr. V. Subrahmanyan. Pp. ii+18. (Bangalore.)

### CATALOGUES

Wild-Barfield Electric Furnaces for Works and Laboratories. Pp. 20. (London: Wild-Barfield Electric Furnaces, Ltd.)

Microscopes and Accessories. Pp. 112. (London: C. Baker.)

Movable, Focussing Self-sustaining Fittings for all Purposes. Pp. 8. (Hazel Grove, near Stockport: John Dugill and Co., Ltd.)

Automatic Temperature Control. (List No. T.R.2.) Pp. 32. (London: Negretti and Zambra.)

Patent Pyrometer Controller for Temperatures up to 1400°C (2550°F). (List No. T.R.7.) Pp. 8. The Negretti and Zambra Sea Surface Temperature Recorder. Pp. 4. (London: Negretti and Zambra.)

Standard Books and Periodicals: a Reference Catalogue for Librarians, Institutions, Scholars and Collectors. (No. 393.) Pp. 154. (Cambridge: W. Heffer and Sons, Ltd.)

Newton's Epidiascopes: High Intensity Model fitted with Special Diffusion Reflectors. Pp. 6. (London: Newton and Co.)

Steel Frame Cable Hangers for Armoured Cables. Pp. 2. (Aston, Birmingham: The Electric Depot, Ltd.)

X-Ray Camera. (Ron. 33.) Pp. 2. Electrometer Triode. (Trio. 33) Pp. 2. Glass Double Monochromator. (Specmo. 32.) Pp. 4. (Delft: P. J. Kipp and Zonen.)

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