clusively in the methyl group; the para-derivative behaves similarly.-Researches on the aβ-dimethylglutaric acids, by M. E. E. Blaise.-The preparation and properties of 1:6 hexanediol or hexamethylene glycol and its principal derivatives, by M. l'Abbé J. Hamonet. Diphenoxyhexane is converted into diiodohexane by the action of hydriodic acid, and from this the acetin is obtained and hydrolysed, yielding the glycol, the properties of which are described.-Contribution to the physiology of the internal ear, by M. Marage. The experiments described are not in exact accordance with either of the current theories of audition. A third theory is developed, one of the consequences of which is that the variations of pressure in the internal ear are of the same order as actions affecting other nerves. The acoustic nerve thus ceases to be exceptional in its behaviour.-The evolutine cycle of tissues deprived of their intimate relations with nerves, by M. N. Alberto Barbieri. -On the ovule and fertilisation in the Asclepiadeæ, by M. Paul Dop .- Contribution to the study of the epiplasm in the Ascomycetes, by M. A. Guillermond.—On a cave con-taining fossils near Châteauneuf-les-Martignes, by MM. A. Cotte and Ch. Cotte.-On the former existence of a direct communication between the Parisian and Belgian basins, by M. Maurice Leriche.—On the laccolites on the north side of the Caucasus, by Mlle. Véra Devis.—On a drawing in the cave of Mas-d'Azil, by M. Edouard Piette.

DIARY OF SOCIETIES.

THURSDAY, FEBRUARY 5.

ROVAL SOCIETV.-In consequence of the death of Sir George Gabriel Stokes, no meeting will be held.

ROVAL INSTITUTION, at 5.-Arctic and Antarctic Exploration: Sir Clements Markham, K.C.B.

CHEMICAL SOCIETY, at 8.--(1) A New Vapour-Density Apparatus; (2) A New Principle for the Construction of a Pyrometer : J. S. Lumsden.

LINNEAN SOCIETV, at 8.—Stephanospermum, Brongniart, a Genus of Fossil Gymnospermous Seeds: Prof. F. W. Oliver.

RÖNTGEN SOCIETV, at 8.30.—Discussion on Some Points suggested by the Presidential Address of November, 1902, opened by J. H. Gardiner. INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Adjourned Discussion on the Metric System.

FRIDAY, FEBRUARY 6.

ROYAL INSTITUTION, at 9.—George Romney and his Works: Sir Herbert Maxwell, Bart.

GEOLOGISTS' ASSOCIATION, at 7.30.—Annual General Meeting.—The President will deliver an address on The Recent Geological History of the Bergen District of Norway.

MONDAY, FEBRUARY 9.

ROVAL GEOGRAPHICAL SOCIETY, at 8.30.—Changes in the Neapolitan Coast Line: R. T. Günther.

SOCIETY OF ARTS, at 8 .- Paper Manufacture : Julius Hübner.

TUESDAY, FEBRUARY 10.

ROYAL INSTITUTION, at 5.-The Physiology of Digestion: Prof. Allan Macfadyen.

SOCIETY OF ARTS, at 5 .- Women in Canada : Countess of Aberdeen.

- ANTHROPOLOGICAL INSTITUTE, at 8.15.—On Two Medicine Baskets from Sarawak: R. Shelford.—The Lo-Los and other Tribes of Yunnan: A. Henry.
- INSTITUTION OF CIVIL ENGINEERS, at 8.--The Manufacture and Efficiency of Armour-piercing Projectiles : D. Carnegie.

WEDNESDAY, FEBRUARY 11.

SOCIETY OF ARTS, at 8.-The Port of London : Dr. B. W. Ginsburg.

THURSDAY, FEBRUARY 12.

THURSDAY, FEBRUARY 12. ROYAL SOCIETY, at 4.30.—Probable Papters:—On the Decline of the Injury Current in Mammalian Nerve, and its Modification by Changes of Temperature: Miss S. C. M. Sowton and J. S. Macdonald.— On the Negative Variation in the Nerves of Warm-Blooded Animals: Dr. N. H. Alcock.—On the Optical Activity of Hæmoglobin and Globin: Prof. A Gamgee, F.R.S., and A. Croft Hill.—On the Nucleo-Proteids of the Pancreas, I hymus and Suprarenal Gland, with especial reference to their Optical Activity: Prof. A. Gamgee, F.R.S., and Dr. W. Jones.—Studies in the Morphology of Spore-producing Members. No. V. General Comparisons and Conclusion: Prof. F. O. Bower, F.R.S.—Primitive Knot and Early Gastrulation Cavity coexisting with Independent Primitive Streak in Ornithorhynchus: Prof. J. T. Wilson and J. P. Hill.—The Brain of the Archæoceti: Prof. Elliot Smith. Smith.

NO. 1736, VOL. 67]

- ROVAL INSTITUTION, at 5.—Arctic and Antarctic Exploration: Sir Clements Markham, K.C.B.
- INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—If the adjourned discussion on the Metric System is concluded at the Meeting on February 5, the adjourned discussion of Messrs. Scott and Esson's page will be taken.

WILDE TAKEN. MATHEMATICAL SOCIETY, at 5.30.—Note on a Point in a Recent Paper by Plof. D. Hilbert : E. T. Dixon —Some Properties of Binodal Quartics : H. Hilton.—The Field of Force due to a Moving Electron : Prof. A. W. Conway —On Birational Transformations of the Type of Inversion : Prof. W. Burnside.

FRIDAY, FEBRUARY 13.

ROVAL INSTITUTION, at 9.- Health Dangers in Food : Prof. Sheridan Delépine.

ROYAL ASTRONOMICAL SOCIETY, at 5.-Anniversary Meeting.

PHYSICAL SOCIETY, at 5.-Address by the President elect.

MALACOLOGICAL SOCIETY, at 8.—Annual General Meeting.—Address on the Molluscan Larva in Classification : Prof. G. B. Howes, F.R.S.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Construction and Setting-out of Tunnels in the London Clay : H. A. Bartlett.

CONTENTS.

PAGE

India-Rubber. By C. Simmonds	313
A British Book of Constants. By J. A. H	314
Our Book Shelf:-	
Iones and Roechling : "Natural and Artificial Sewage	
Treatment "	315
"Thomson's Gardener's Assistant."-G. N	315
"Proceedings of the Aristotelian Society."-A. E. T.	315
Tackson: "Directions for Laboratory Work in Physi-	
ological Chemistry"	316
Emmerling: "Die Zersetzung stickstofffreier organ- ischen Substanzen durch Bakterien."F. Es-	
ischen Substanzen durch Bakterien."F. Es-	
combe	316
Vogel: "Das Motor-Zweirad und seine Behand-	
lung",	316
lung" Munby: "A Course of Simple Experiments in Mag-	
netism and Electricity"	316
Letters to the Editor :	
The Holy Shroud of TurinMajor-General J.	
Waterhouse; Worthington G. Smith. (Illus-	
trated.)	317
trated.) . The Theory of Laughter.—Dr. W. McDougall	318
Insects and Petalless FlowersG. W. Bulman	
A Romance of the Deep Sea. (Illustrated.)	320
A Traveller in Patagonia. (Illustrated.) By Colonel	
G. E. Church	321
The Geography of North-West Europe. (Illus-	
trated.)	322
British Forestry	324
Notes. (Illustrated.)	324
Our Astronomical Column :	
Comet 1903 a (Giacobini)	329
Return of Perrine's Comet, 1896 vii	329
Physical Constitution of Jupiter	329
Observations of Variable Stars	329
Definition of Jupiter's Markings. Acceleration in	
the Motion of the Great Red Spot. (With Dia-	
gram.) By W. F. Denning	329
Society for Psychical Research	33 0
The Mexican Axoloti. (Illustratea.) by Dr. H.	
Gadow, F.R S Isomeric Change in Benzene Derivatives	330
Isomeric Change in Benzene Derivatives	332
A Daylight Photometer. By Albert Campbell University and Educational Intelligence	332
University and Educational Interingence	332
Societies and Academies	333
Diary of Societies	336

SUPPLEMENT.

The late Lord Lilford. By T. Digby Pigott, C.B.	iii
The Principles of Teaching. By J. G. F.	iv
A Work on Surveying. By W. E. P	v
Protozean Natural History	vi
A New Atlas of the Atlantic Ocean. By	
W. J. S. L.	vii
The Wanderings of a Naturalist	viii
An Aspiring Glacialist. By J. G	viii
Properties of Matter. By H. L. C	ix
Zittel's Text-Book of Palæontology	х