isomeric dibromo-derivatives of the linear pentacenediquinone-5, 7, 12, 14.—**F. Lieben** and **G. Ehrlich**: The decomposition of glucose and fructose by *Bacillus coli*. Fructose is more rapidly attacked than glucose.

Nov. 14.—**M. Beier**: Results of a zoological expedition to the Ionian Islands and the Peloponnesus. (4) Myriopoda by **K. Attems**. (5) Reptilia, Amphibia, Orthoptera, Embidaria, and Scorpiones by **F. Werner**. —**J. Mayer**: The absolutely smallest discriminants of the biquadratic number-body.—**G. Nöbeling**: The theory of regular curves. The theory of universal assemblages. Remarks on a theorem by O. Schreier.

Nov. 21.—**W. Figdor**: The positive geotropism of the axial bulbs in *Gloriosa superba*.—**H. Pettersson**: The disappearance of radon in quartz capillary tubes during electrodeless discharge. To be compared with the disappearance of xenon in discharge tubes.—**S. Schneidt**: The electro-chemical behaviour of polonium in solutions of various hydrogen ion concentration. Polonium must be in the colloidal form in dilute solutions.—**M. Hoschtalek**: The conductivity on old and new rock-salt surfaces in damp air. The conductivity is first noticeable when the vapour pressure of the air is above 4·4 mm.—**K. W. F. Kohlrausch**: The calculation of chemical bonding forces from the frequencies of the Raman lines.—**A. Steuer**: The species of the Copepod genus *Acartia* in the Mediterranean province.

Official Publications Received.

BRITISH.

The North of Scotland College of Agriculture. Report on the Work of the North of Scotland College for the Year 1928-29. Pp. 30. (Aberdeen.)

Records of the Indian Museum. Vol. 31, Part 2, July. Pp. 81-159+plate 6. 2.12 rupees; 5*s*. Vol. 31, Part 3, September. Pp. 161-257+plates 7-11. 2.12 rupees; 5*s*. Vol. 30, Appendix: List of Literature referring to Indian Zoology (excluding Insecta) received in Calcutta during the Year 1928. Pp. xxvi. 7 annas; 9*d*. (Calcutta.)

Memoirs of the Indian Museum. Vol. 9, No. 3: A Revision of the Fissilabioidae (Cordulegasteridae, Petallidae and Petaluridae). Part 1: Cordulegasteridae. By Lieut.-Col. F. C. Fraser. Pp. 69-167+plates 9-12. (Calcutta.) 4 6 rupees; 7*s*. 6*d*.

FOREIGN.

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 49: A New Index to Control Cable Endurance. By Taitiro Ogawa and Sigetake Suzuki. Pp. 243-258. 0.22 yen. No. 50: Air Flow through Suction Valve of Conical Seat. Part i: Experimental Research. By Keikiti Tanaka. Pp. 259-360+plates 13-16. 1.17 sen. (Tôkyô: Koseikai Publishing House.)

Regenwaarnemingen in Nederlandsch-Indië. Vijftigste Jahrgang, 1928. Pp. ii+133. (Weltevreden: Landsdrukkerij.)

Proceedings of the Imperial Academy. Vol. 5, No. 8, October. Pp. xvii-xx+307-402. (Tokyo.)

Diary of Societies.

SATURDAY, DECEMBER 28.

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—S. R. K. Glanville: How Things were done in Ancient Egypt (Christmas Lectures) (1): The Elementary Use of Nature.

MONDAY, DECEMBER 30.

ROYAL SOCIETY OF ARTS, at 3.—Capt. C. W. R. Knight: The Golden Eagle (Dr. Mann Juvenile Lectures) (1).

TUESDAY, DECEMBER 31.

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—S. R. K. Glanville: How Things were done in Ancient Egypt (Christmas Lectures) (2): Making a Home.

WEDNESDAY, JANUARY 1.

ROYAL SOCIETY OF ARTS, at 3.—Capt. C. W. R. Knight: Wild Life in the Treetops (Dr. Mann Juvenile Lectures) (2).

CHILD-STUDY SOCIETY (at University College), at 5.30.

ROYAL MICROSCOPICAL SOCIETY (Biological Section).

THURSDAY, JANUARY 2.

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—S. R. K. Glanville: How Things were done in Ancient Egypt (Christmas Lectures) (3): Building in Stone.

PHYSICAL SOCIETY (at Imperial College of Science and Technology), at 5.—

FRIDAY, JANUARY 3.

INSTITUTION OF MECHANICAL ENGINEERS, at 6.—Eng. Vice-Admiral R. W. Skelton: Progress in Marine Engineering (Thomas Lowe Gray Lecture).

INSTITUTION OF ELECTRICAL ENGINEERS (Meter and Instrument Section), at 7.—J. G. Wellings and C. G. Mayo: Instrument Transformers.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (Pictorial Group—Informal Meeting), at 7.

SATURDAY, JANUARY 4.

ROYAL INSTITUTION OF GREAT BRITAIN (at Institution of Electrical Engineers), at 3.—S. R. K. Glanville: How Things were done in Ancient Egypt (Christmas Lectures) (4): Boats and Furniture.

CONFERENCES.

JANUARY 1 TO 8.

EDUCATIONAL ASSOCIATIONS (at University College).

Wednesday, Jan. 1, at 3.—Prof. Winifred Cullis: The Lure of Investigation (Presidential Address).

EUGENICS SOCIETY.

Wednesday, Jan. 1, at 5.—Prof. E. W. MacBride: The Teaching of Biology in General Education.

CHILD-STUDY SOCIETY.

Wednesday, Jan. 1, at 5.30.—Dr. H. Crichton-Miller: The Study of the Child.

SCHOOL NATURE STUDY UNION.

Thursday, Jan. 2, at 3.—Dr. C. T. Green: Our Beautiful Wild Flowers.

NATIONAL COUNCIL FOR MENTAL HYGIENE.

Tuesday, Jan. 7, at 3.—Discussion: Preventable Mental and Physical Strains of School Life.

JANUARY 1 TO 4.

SCIENCE MASTERS' ASSOCIATION (at Imperial College of Science).

Wednesday, Jan. 1, at 8.15.—Prof. J. C. Philip: Presidential Address.

Thursday, Jan. 2, at 10.30 A.M.—A. F. Walden: Lecture on Liquids, with Discussion on Broadcasting.

At 6.—S. R. Humby: Lecture Experiments in Sound with an Electrically Controlled Source.

At 8.15.—Prof. W. A. Bone, assisted by R. P. Fraser: The Photographic Investigation of Flame Movements in Explosions (Lecture).

Friday, Jan. 3, at 9.30 A.M.—W. Corbridge: Lecture Demonstration on Some Home-Made Physical Apparatus.

At 10.45 A.M.—Dr. J. C. Munro: Industrial Biology (Lecture).

At 12.—Prof. Truscott and others: Discussion on Openings for College Trained Men in the Mineral Industry.

At 5.15.—Discussion with the Physical Society on Examinations in Practical Physics.

At 8.15.—Discussion on School Certificate Biology.

Saturday, Jan. 4.—Visits to the National Physical Laboratory and the Government Laboratory.

JANUARY 2 TO 6.

GEOGRAPHICAL ASSOCIATION (at London School of Economics).

Thursday, Jan. 2, at 11.30 A.M.—Sir Henry G. Lyons: Presidential Address.

At 5.—Discussions:—Village Survey Making. Opened by Miss J. K. Jones.—The Inter-Relation of History and Geography in Central Schools. Opened by Miss D. Sarjeant.—Land Utilisation Map of Northampton. Opened by E. E. Field.

At 6.15.—H. E. Raynes: Mortality of Europeans in Equatorial Africa—A Study of the Effect of Improved Conditions and Mode of Life (Lantern Lecture).

Friday, Jan. 3, at 10 A.M.—Discussions:—The Physical Basis of Geography in Independent Schools. Opened by B. B. Dickinson.—Geography and the Training of Teachers. Opened by T. Herdman.

At 11.30 A.M.—Col. H. L. Crosthwait: Air Survey (Lantern Lecture).

At 2.30.—The Geography I was Taught, by Members of the Association.

Saturday, Jan. 4, at 10.30 A.M.—Sir E. J. Russell: Agricultural Developments in South Africa (Lantern Lecture).

At 11.45 A.M.—Dr. Vaughan Cornish: National Parks.

JANUARY 6 AND 7.

MATHEMATICAL ASSOCIATION (Annual Meeting) (at London Day Training College).

Monday, Jan. 6, at 4.—B. L. Gimson and others: Discussion on Arithmetic of Citizenship.

At 5.30.—Prof. S. Chapman: The Use of Spherical Harmonic Functions in Mathematical Physics.

Tuesday, Jan. 7, at 10 A.M.—G. W. Spriggs and others: Discussion on Problems of Individual Education, with Special Reference to Work in Mathematics.

At 11.45 A.M.—Prof. W. M. Roberts: Gunnery and some of its Mathematical Problems (Lecture).

At 2.30.—Dr. W. F. Sheppard: Mathematics for Study of Frequency Statistics.

At 3.45.—Miss Hilda P. Hudson and others: Discussion on The Mathematician in Ordinary Intercourse.

EXHIBITION.

JANUARY 7, 8, AND 9.

ANNUAL EXHIBITION OF THE PHYSICAL SOCIETY AND THE OPTICAL SOCIETY (at Imperial College of Science), from 3 to 6, and from 7 to 10.

Jan. 7, at 8.—Lord Rayleigh: Iridescent Colours in Nature from the Standpoint of Physical Optics (Lecture).

Jan. 8.—S. G. Brown: Gyro Compasses for Gun-Fire Control (Lecture).

Jan. 9.—Sir Ambrose Fleming: Television, Present and Future (Lecture).