in the presence of antiseptics, such as camphor. The author therefore regards the decomposition of carbonic acid outside the plant as unproven.—On the composition of brandy from wine: X. **Rocques.** A table is given showing the results of analysis of twenty-two samples of brandy arising from the distillation of wine, and it is pointed out that a brandy containing a relatively small amount of esters con-tains an increased amount of higher alcohols.—The prediction of a chemical reaction forming a monovariant system : Camille Matignon.—On two plants producing rubber : E. de Wildeman. A description of two plants, Bassea gracillima and Periploca nigrescens, the rubber producing properties of which have not hitherto been recog-nised.-On a new coffee plant in Central Africa: Aug. Chevalier. A detailed account of Coffea excelsa, with analyses of the soil in which it flourishes and of the coffeebean produced from it. The amount of caffeine and the taste and aroma of the coffee are good, and would be worth cultivating in the French Congo .- On the secreting apparatus of Dipterocarpus : P. **Guérin**.—On the effect of low temperatures on the zoospores of the Algæ : E. C. Teodoresco. The spores of Dunaliella salina were found to retain their activity in a salt solution even after exposure to a temperature of -30° C.—On a new cellular type with metamerised cytoplasm, *Taenicystis mira*: Louis Léger.— Geographical variations of the Pleuronectidæ : A. Cligny. The extension of the functional states of the auricle to the ventricle: H. Kronecker. The author's experiments lead him to regard this effect as being entirely due to nervous elements.—Variations in morbid processes according to the composition of the organs: MM. **Charrin** and **Le Play**. Hydrolysis of the hepatic glycogen produced by the injection of amylase into the portal vein: M. Pariset .- On the stimulation of the nerves by very short electric waves : Louis Lapicque.-The experimental reproduction of leprosy in the ape: Charles Nicolle.—The geology of the Pyrenees of Haute-Garonne and Ariege: Leon Bertrand.—On the Amana meteorites: G. D. Hinrichs.-The cave lions: Marcellin Boule.

DIARY OF SOCIETIES.

- DIARY OF SOCIETIES. THURSDAY, MARCH 2. ROVAL SOCIETY, at 4.30. -Further Researches on the Temperature Classi-fication of Stars. No. 2: Sir Norman Lockyer, K.C.B., F.R.S. -On the Radio-active Minerals: Hon. R. J. Strutt. -Atmospheric Electricity in High Latitudes: G. C. Simpson. -On the Spectrum of Silicon, with a Note on the Spectrum of Fluorine: J. Lunt. -On the Electric Resist-ance to the Motion of a Charged Sphere in Free Space or in a Field of Force: G. W. Walker. ROYAL INSTITUTION, at 5.-Recent Astronomical Progress: Prof. H. H. Turner, F.R.S. CHEMICAL SOCIETY, at 8.-The Latent Heat of Evaporation of Benzene and some other Compounds: J. Campbell Brown. -The Relation between Natural and Synthetic Glycerylphosphoric Acid: F. B. Power and F. Tutin.-The Reduction of Isophtbalic Acid: W. H. Perkin, jun., and S. Spickles.-The Transmutation of Geometrical Isomers: A. W. Stewart.
- Stewart
- RÖNTGEN SOCIETY, at 8.15.—A discussion on "The Necessity of Accurate Measurement in X-ray and High Frequency Work," opened by Dr. W. D. Butcher.
- W. D. BUICHER. CIVIL AND MECHANICAL ENGINEERS' SOCIETY, at 8.—Engineering Expert Evidence : J. F. Reade. LINNEAN SOCIETY, at 8.—Zoological Nomenclature ; International Rules and Others (to be followed by a discussion) : Rev. T. R. R. Stebbing, F.R.S.—Biscayan Plankton. Part IV. The Thaliacea : Dr. G. Herbert E-subre Fowler
- INSTITUTION OF ELECTRICAL ENGINEERS, at 8 .- Type-setting by Telegraph : D. Murray.
- ROVAL INSTITUTION, at 9.—Recent Advances in Wireless Telegraphy : Chev. G. Marconi.

- Chev. G. Marconi. GEOLOGISTS' ASSOCIATION. at 8.—The Diamond Mines of South Africa: Prof. H. A. Miers, F.R.S. SATURDAY, MARCH 4. ROYAL INSTITUTION, at 3.—Archæolegy : D. G. Hogarth. MONDAY, MARCH 6. SOCIETY OF ARTS, at 8.—Internal Combustion Engines: Dugald Clerk. SOCIETY OF CHEMICAL INDUSTRY, at 8.—Mechanics of Fire: Prof. H. E. Armstrong, F.R.S.—On the Estimation of Arsenic in Fuels—A Shortened Method: Dr. G. McGowan and R. B. Floris. Victorat Institute, at 4.30.—Geological Exterminations: Dr. C. B. Warring.
- VICTORIA INSTITUTE, at 7.50.—Annual general meeting.—At 8.15.—Recent Developments in Electric Smelling in Connection with Iron and Steel: F. W. Harbord.
 TUESDAY, MARCH 7.
- TUESDAY, MARCH 7. ROVAL INSTITUTION, at 5.—Some Recent Biometric Studies: Prof. K. Pearson, F.R.S.
- ZOLOGICAL SOCIETY, at 8.30. INSTITUTION OF ICIVIL ENGINEERS, at 8.—Surface-Condensing Plants, and the Value of the Vacuum produced: R. W. Allen. (Continuation of Discussion.)

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- WEDNESDAY, MARCH 8. GEOLOGICAL SOCIETY, at 8.—(1) Observations on some of the Loxonema-tidz, with Descriptions of two New Species: (2) On some Gasteropoda from the Silurian Rocks of Llangadock : Miss Jane Donald. SOCIETY OF ARTS, at 8.—Ethics of Japanese Society : Baron Suyematsu. THURSDAY, MARCH 9. ROVAL SOCIETY, at 4.30.—Probable Papers : The Rate of Transmission of the Guatemala Earthquake of April 10, 1902; R. D. Oldham.—Ionic Sizes in Relation to the Conductivity of Electrolytes: W. R. Bousfield. —Explosions of Mixtures of Coal Gas and Air in a Closed Vessel: L. Bairstow and A. D. Alexander. ROVAL INSTITUTION, at 5.—Recent Astronomical Progress : Prof. H. H. Turner, F.R.S. INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Report on Experiments carried out at the National Physical Laboratory : On the Effect of Heat on the Electrical and Mechanical Properties of Dielectrics, and on the Temperature Distribution in the Interior of Field Coils: Dr. R. T. Glazebrook, F.R.S.—On Temperature Curves and the Rating of Electrical Machinery : R. Goldschmidt. *FRIDAY*, MARCH 10. ROVAL INSTITUTION, at 9.—The Structure of the Atom : Prof. J. J. Thomson, F.R.S. ROVAL ASTRONOMICAL SOCIETY, at 5. MALACOLOGICAL SOCIETY, at 5.

- ROVAL INSTITUTION, at 9.—Ine Structure of the Atom: Prof. J. J. Thomson, F.R.S.
 ROVAL ASTRONOMICAL SOCIETY, at 5.
 MALACOLOGICAL SOCIETY, at 8.—On a Dibranchiate Cephalopod from the Eocene of Arabia: G. C. Crick.—Note on the Horizon and Locality of the Type Specimen of *Pleuromautilus pulcher*: G. C. Crick.—New Marine Mollusca from the Collection of the late Admiral Keppel: G. B. Sowerby.—On the Occurrence of Internal Septa in *Glyptostoma newberryanum*: G. K. Gude.—Note on a Dart found in the Body Cavity of *Helix aspersa*: R. G. Barnes.
 INSTITUTION OF CIVIL ENGINEERS, at 8.—The Purification of Sewage : F. G. Helsby.—The Purification of Sewage by Hydrolysis and Oxidation : F. O. Kirby.
 PHYSICAL SOCIETY, at 8.—On the Stresses in the Earth's Crust before and after the Sinking of a Bore-hole: Dr. C. Chree, F.R.S.—On the Lateral Vibration of Bars of Uniform and Varying Sectional Area: J. Morrow.—On Direct Reading Resistance-Thermometers, with an Appendix on Composite Thermocouples: A. Campbell.
 SOVAL INSTITUTION, at 3.—Electrical Properties of Radio-active Substances: Prof. J. J. Thomson, F.R.S.

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