Yvon Villarceau then presented the elements and ephemerides of the planet 125, calculated by M. G. Leveau. This planet was discovered by M. Henry at the Paris Observatory. Astronomers having powerful instruments are requested to observe it, and communicate their results, as it is exceeding difficult of observation.—M. Maurice Lévy then communicated a paper on the theory of equations of partial differences of the second order of two independent variables.—Next came a continuation of M. Th. du Moncel's paper on the accidental currents which are developed in telegraphic lines, of which one end remains insulated in air.—Next followed a note by M. P. Yvon on a photometer founded on the perception of relief, and a note on the action of a copper and cadmium couple on a solution of cadmic sulphate, by M. F. Raoult, and M. P. Havrez's paper on the formulæ for the laws of colour, and number of "Chevreulian" tints connected with the doses of different generating agents.—This long paper was followed by a note on the paces of horses, studied by the graphic method, by M. E. J. Marey. Several traces of trot and gallop movements accompanied the paper.—Mr. Grace Calvert sent a paper on the power of certain substances in stopping putrefaction and preventing protoplasmic life, which was then read, and followed by a note on the febrifugic and anteperiodic properties of the leaves of *Laurus nobilis* by M. A. Doran, and by a paper on the causes of intermittent fevers, and the means of prevention and cure, by M. E. Ferrière—M. Picot then read a paper on the "antifermentescible" properties of sodic silicate. M. Ch. Robin presented a note by M. E. Dubrueil, on the Capreolus of *Zonites Algirus*. This was followed by a note by M. Carbonnier on the reproduction and development of the telescope fish. This fish is of Chinese origin, its name being Long-tsing-ya in Chinese (*Cyprynus macrophthalmus* Bloch). M. Claude Bernard then presented a note by M. L. Ranvier, on the annular strictures and inter-annular segments of the rays and cramp-fish.—Another communication from M. Thomas on his asserted discovery of fluorine was submitted to the examination of M. Balard.—M. Le Baron Larrey presented an extract from M. Berenger-Féraud, naval surgeon-in-chief at Senegal, on the larvæ and flies (*mouches*) which are developed in the human skin. At the conclusion of the paper M. Émile Blanchard made some remarks on it as regards the Cayor fly, no specimens of which have yet reached Europe. M. Chevreul then presented a copy of M. Paul de Gasparin's work on the "Valuation of Arable Land in the Laboratory;" and after some remarks from him on M. Gasparin's discovery of phosphoric acid in the subsoil waters of the Plain of Orange, the session was adjourned.

Nov. 11.—M. Faye, President.—The first paper was by Capt. Perrier on the determination of a great geodesical base in Algeria.—The President followed with a paper on the triangulation of Algeria for the new military map of the province.—M. Becquerel then read the second part of his paper on the solar origin of atmospheric electricity. He considers that the protuberances come from solar volcanoes, and that they are charged with positive electricity.—A letter from M. Faye to the author on his last paper followed.—M. Le Verrier then read a note on the determination of the secular variations of the elements of the four planets—Jupiter, Saturn, Uranus, and Neptune.—Next came a paper by M. Trécul on the origin of the lactic and alcoholic ferments. The author is very severe on M. Pasteur, who, he states, if 999 experiments are favourable to spontaneous generation and one against it, adopts the one and rejects the 999. This, of course, drew a reply from M. Pasteur, and his reply an answer from M. Trécul.—M. Pasteur then read a note on M. Fremy's paper read at the session of Nov. 4. M. Fremy answered M. Pasteur's criticisms, and M. Pasteur in a few words of answer again demanded a commission of inquiry.—M. Dareste then presented the fourth part of his researches on the osseous fishes, after which two papers on aerostation, by M. Hopin and M. Lamole respectively, were sent to the commission on that subject.—MM. Paul and Prosper Henry then announced the discovery at Paris, on the night of November 5 and 6, of two planets—126 and 127 of the 11th and 11·5 magnitude respectively; and M. Yvon Villarceau then read a letter on the two planets by M. Stephan, who had received information and observed them at Marseilles.—Next came a paper by M. H. Durrande on the acceleration in the displacement of a system of points which remains homographic with itself. At the conclusion of this came a paper on "Chloride of Lime" (bleaching powder), by M. J. Kolb. The author gives a method of valuation of this important commercial product.—M. Balard then presented M. Scheurer-Kestner's note on the loss of sodium in the preparation of soda-ash by Le Blanc's process. The author decides that the loss occurs in the "waste," and augments with the excess of lime compounds.—M. Wurtz presented a note by M. G. Bouchardat on the neutral combinations of Mannite and its hydrates.—M. L. de Saint-Martin presented some researches on Santonin.—This was followed by MM. Legros and Onimus, with experimental researches on the physiology of the pneumogastric nerve; and by an account of "Experimental Researches on the Functions of the Brain," by M. E. Fournie.—M. Brogniart then presented MM. Renault and Grand'Eury's paper on the Fossil Botany of the *Dictyoxylon* and its specific attributes.—M. Béchamp then gave an account of some researches on the function and transformation of mildews.—M. Pasteur presented a note by MM. G. Lechartier and F. Bellamy on the "Fermentation of Fruits."—M. A. Gaudin next read a note on "Some arguments necessary to clear up the fermentation question;" after which came a note by M. A. Leclerc on the Estimation of Manganese in soils and vegetables. After some observations on the geometric markings of microscopic algæ from M. J. Girard the session was adjourned.

DIARY

THURSDAY, NOVEMBER 21.

ROYAL SOCIETY, at 8.30.—On the Mechanical Conditions of the Respiratory Movements in Man: Dr. A. Ransome.—Further Experiments on the more Important Physiological Changes induced in the Human Economy by Change of Climate: Dr. Rattray.—On Linear Differential Equations, VI. and VII.: W. H. L. Russell, F.R.S.

LINNEAN SOCIETY, at 8.—On the *Compositæ* of Bengal: C. B. Clarke, F.L.S.—On Diversity of Evolution under one set of External Conditions: Rev. J. T. Gulick.

CHEMICAL SOCIETY, at 8.—On some New Derivations of Anthraflavic Acid: W. H. Perkin.

SUNDAY, NOVEMBER 24.

SUNDAY LECTURE SOCIETY, at 4.—On the Renaissance of Modern Europe; a Review of the Scientific, Artistic, Rationalistic, Revolutionary Revival, dating from the 15th Century: J. Addington Symonds.

MONDAY, NOVEMBER 25.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.

TUESDAY, NOVEMBER 26.

LONDON INSTITUTION, at 4.—On Elementary Physiology: Prof. Rutherford.

WEDNESDAY, NOVEMBER 27.

ROYAL SOCIETY OF LITERATURE, at 8.30.—On Difficult Words and Phrases occurring in Shakespeare's Works, Part I.: Dr. C. M. Ingleby.

SOCIETY OF ARTS, at 8.—On Technical Education, and the Means of Promoting it: Thomas Webster.

LONDON INSTITUTION, at 7.—On Spontaneous Movements in Plants: A. W. Bennett.

SOCIETY OF TELEGRAPHIC ENGINEERS, at 8.—On Lightning; W. H. Preece.

CONTENTS

ERRATA.—Vol. vii. p. 14: in the article on "Scottish Coal Fields," for "Prof. Geikie" read "Mr. James Geikie."—Vol. vii. p. 15, col. 1: in note on lecture arrangements at Royal Institution, the second announcement should have read thus—"Twelve Lectures on the Forces and Motions of the Body, by Prof. Rutherford, F.R.S.E.; Three Lectures on Oxidation, by Dr. Debus," &c.