

the solid remaining dissolved in the gaseous vapours. Solutions of colouring matter behaved similarly.

January 25.—Prof. du Bois Reymond, President, in the chair.—Mr. Archenhold discussed the principles and advantages of two recently projected telescopes, of which one with a 44-inch object-glass and short focal length is to be set up in the Berlin Industrial Exhibition in May 1896, while the second, with a 50-inch object-glass, is to be taken in hand later on. The glass for the first of the two is already cast by Dr. Schott, of Jena, and is to be ground according to scientific principles by Dr. Steinheil. The speaker further discussed a series of fundamental novelties in the mounting of the telescopes, by which the cost of the same would be materially reduced. The discussion, which was then opened by Prof. von Bezold, on behalf of Profs. Auwers and Vogel, and continued by Prof. Lummer, was adjourned to the next meeting.

[Notice.—In the report of the meeting of the Physiological Society of December 7, 1894, NATURE, vol. li. p. 288, for "Dr. G. Joachim," read "Dr. G. Joachimstal."]

## PARIS.

Academy of Sciences, February 18.—M. Marey in the chair.—On Neumann's method and Dirichlet's problem, by M. H. Poincaré.—On the form of the intrados of arches, by M. H. Resal.—On the kinds of chlorophyll; remarks *à propos* of the note by M. Étard, by M. Arm. Gautier. The author claims priority for the proof that several chlorophylls exist, and that chlorophyll contains no iron, but contains organic phosphorus.—On the agricultural value of aluminium phosphates; remarks *à propos* of M. Andouard's note, by M. Arm. Gautier. In 1893 the author showed that amorphous aluminium phosphate was of value in agriculture owing to its solubility in the products of decomposition present in soils. This does not extend to crystallised phosphates of aluminium or of aluminium and calcium.—On the estimation of tannic compounds, by M. Aimé Girard.—Remarks on atomic weights, by M. Lecoq de Boisbaudran. The author mentions a method of classification of the elements which enables him to calculate their atomic weights as well as predict their properties; this system has not yet been published. According to it, argon belongs to a group of elements of which no other members are yet known. They should be octads of atomic weights as follows: 20·0945, 36·40 ± 0·08, 84·01 ± 0·20, 132·71 ± 0·15; (O = 16). They should be metalloids, the first two members relatively abundant, the others rare. Taken in order, they should respectively be more volatile than oxygen, sulphur, selenium, and tellurium.—The scope and method of a work on the "theory of algebraical functions and their integrals," by M. Appell and M. Édouard Goursat, is explained in a short note by the former.—On the astronomical inscription of Kes-kinto, by M. Paul Tannery. The author draws conclusions with regard to the state of knowledge of planetary periods about 150–50 B.C.—On a surface of the sixth order, allied to abelian functions of the third type, by M. G. Humbert.—On the properties of amorphous silicon, by M. Vigouroux. These properties are very fully given. Speaking generally, amorphous silicon prepared by reduction with magnesium somewhat resembles crystalline silicon in properties. Though somewhat inert at lower temperatures, at high temperatures it is chemically very active.—On the oxidation of the tannin of the cider apple, by M. L. Lindet. This oxidation appears to be due to the action of a ferment of the *laccose* type.—On the composition and analysis of eaux-de-vie, by M. X. Rocques.—On the seeds of the Moabi, by MM. H. Lecomte and A. Hébert. An account of a tree found in French Congo, and of a fat produced from its seeds.—On ferrocyanide, ruthenocyanide, and osmiocyanide of potassium, by M. A. Dufet. A crystallographical paper giving measurements of axial ratios, angles, and optical constants of (1)  $K_4FeCy_6 \cdot 3H_2O$ , (2)  $K_4RuCy_6 \cdot 3H_2O$ , (3)  $K_4OsCy_6 \cdot 3H_2O$ . A remarkable similarity is shown by these compounds throughout the extensive series of measurements given.—On modifications of the blood, brought about by the thermal treatment with Bourbon-le-water from the spring Choussy-Perrière, by M. Ph. Lafon. Conclusions from results of many analyses (quoted): (1) In cases of chloro-anæmia there is generally a notable increase of red corpuscles and oxyhæmoglobin in the blood of patients, due to the treatment. (2) In cases of leucocytæmia the treatment produces a diminution of the numbers of white corpuscles.—On the nucleus and nuclear division in the *Benedictia*, by M. Alphonse Labbé.—On egg-deposition of *Vespa*

*crabro*, L.; conservation of heat in the nest, by M. Charles Janet.—Observations on the upper Tongrian or *Stampien* strata in the Chalosse, by M. L. Rey. —Considerations on contact-metamorphism, derived from a study of the contact phenomena of lherzolite in the Pyrenees, by M. A. Lacroix.—Mineralogical composition and structure of the *silex* of the Paris gypsum, by M. L. Cayeux. Conclusions: (1) The siliceous nodules from gypsum, known as *silex*, have an essentially different micro-structure and mineralogical composition from *silex* properly so called. (2) They result from a substitution of silica for gypsum. (3) The silicification of gypsum causes the production of some one of the arrangements of which quartz is capable. (4) The ultimate term of the series of transformations of saccharoidal gypsum, under the action of silica, is the production of wholly quartzose plates, having the same structure as quartzites.—Earthquake recorded at Grenoble, a note by M. Kilian, February 3, 6h. 2m. 40s. morning.

## BOOKS, PAMPHLETS, and SERIALS RECEIVED.

Books.—Introduction to Physiological Psychology: Dr. Th. Ziehen, translated, 2nd edition (Sonnenschein).—An Elementary Text-Book of Anatomy: Prof. H. E. Clark (Blackie).—Report of Observations of Injurious Insects, &c., 1894: E. A. Ormerod (Simpkin).—Economic Classics—David Ricardo (Macmillan).—Economic Classics—Adam Smith (Macmillan).—A Course of Elementary Practical Bacteriology: Drs. Kanthack and Drysdale (Macmillan).—The Pathology of Mind: Dr. H. Maudsley (Macmillan).—Notes on a Journey on the Upper Mekong, Siam: H. W. Smyth (Murray).—Das System der Übergewalt oder das Analytisch-Synthetische Princip der Natur: K. Beyrich (Berlin, Oppenheim).  
PAMPHLETS.—Revue de l'Aéronautique, 1893, 3<sup>e</sup> Livr.: Le Travail Intérieur du Vent: S. P. Langley (Paris, Masson).—Tableau Economique: F. Quesnay (Macmillan).—Philosophical Transactions of the Royal Society of London, Vol. 185 (1894) A, pp. 93–121: Propagation of Magnetisation of Iron as affected by the Electric Currents in the Iron: J. Hopkinson and E. Wilson (Dulau).  
SERIALS.—Brain, Part 69 (Macmillan).—Royal Natural History, Part 16 (Warne).—English Illustrated Magazine, March (198 Strand).—London Home Monthly, March (Cox).—Journal of the Royal Microscopical Society, February (Williams and Norgate).—Good Words, March (Isbister).—Sunday Magazine, March (Isbister).—Chambers's Journal, March (Chambers).—Longman's Magazine, March (Longmans).—Le Monde Moderne, February (Paris, Quantin).—Century Magazine, March (Unwin).

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