

non-linear terms of the equations of movement are not neglected, by M. J. Boussinesq.—On the combination of free nitrogen with the elements of carbon disulphide, by M. Berthelot. (See Notes, p. 202.)—A new combination of argon, its synthesis and analysis, by M. Berthelot. (See Notes, p. 202.)—Preparation and properties of pure fused molybdenum, by M. Henri Moissan. Pure fused molybdenum has been obtained by means of the electric furnace. Its properties and reactions are very fully given in the paper. Among these it is stated to have a density = 9.01, to be as malleable as iron, and capable of being filed cold or forged hot. When heated in contact with carbon, it forms a steel by cementation much harder than the pure metal. It is suggested that molybdenum may be used in the Bessemer process in place of manganese, because it furnishes a volatile oxide disengaged in the gaseous state, and any excess of the metal remaining in the iron would be as malleable as the iron itself, and similarly capable of being hardened.—Action of phenyl isocyanate on camphol, carboxylcampholic, and phthalic acids, by M. A. Haller.—Discovery of a third permanent radiation of the solar atmosphere in the gas from cleveite, by M. H. Deslandres. The line of wavelength 706.55 has been obtained in the spectrum of cleveite gas, using a very luminous tube. This corresponds to a third permanent chromospheric line, leaving now only the green line 531.66—the coronal line not obtained from terrestrial sources. The new line corresponds with a line observed in the argon spectrum by the author, employing argon prepared by means of lithium. It bears out the suggestion of Prof. Ramsay, that argon and cleveite gas contain a common constituent.—Comparative observations with declinometers of different magnetic moments, by M. Ch. Lagrange.—On the molecular transformations of chromic hydrate, by M. A. Recoura.—On some basic halogen compounds of the alkaline-earthly metals, by M. Tassilly.—Action of heat on the double alkaline nitrites of metals of the platinum group: Iridium compounds, by MM. A. Joly and E. Leidié. Among the products of the action of heat on potassium iridium nitrite, the author signalises the compounds: $6\text{IrO}_2 \cdot \text{K}_2\text{O}$, and $12\text{IrO}_2 \cdot \text{K}_2\text{O}$.—On the ammonium sodium acid tungstates, by M. L. A. Hallopeau. The compounds $16\text{WO}_3 \cdot 3\text{Na}_2\text{O} \cdot 3(\text{NH}_4)_2\text{O} \cdot 22\text{H}_2\text{O}$ and $12\text{WO}_3 \cdot 4\text{Na}_2\text{O} \cdot (\text{NH}_4)_2\text{O} \cdot 25\text{H}_2\text{O}$ are described.—Rotatory powers of some amyl derivatives in the liquid and gaseous states, by MM. Ph. A. Guye and A. P. do Amaral.—On synthesised colloids and coagulation, by M. J. W. Pickering. Synthetic colloids behave, when injected into the vascular system, in a very similar manner to the nucleo-albumins.—On a new bed of "cipolin" in the rocks of the Central Plateau, by M. L. de Launay.—Glacial and fluvi-glacial deposits of the basin of the Durance, by MM. W. Kilian and A. Penck.—On the coexistence, in the basin of the Durance, of two systems of conjugate folds of different age, by M. Émile Haug.—On the Jurassic and Cretaceous systems in the Balearic Islands, by M. H. Nolan.—On the Miocene of the Novalaise Valley, by MM. J. Révil and H. Douxami.—Researches on the sugar and glycogen in lymph, by M. A. Dastre. Lymph contains an appreciable quantity (0.097 per thousand) of glycogen, obtainable by the usual methods. Glycogen is destroyed in lymph, in less than twenty-four hours, by a diastasic ferment (lymphodiastase). Rohmann has shown the existence of a ferment of this kind in lymph. The glycogen appears to be entirely carried by the solid elements, and absent from the liquid plasma. The doctrine that sugar is the circulating form of carbohydrate is thus confirmed.—Modification of the heat radiated by the skin, under the influence of continuous currents, by M. Lecerclé.—Demonstration, by a new pupillometer, of the direct action of light on the iris, by M. Charles Henry.—Experimental production of generalised ganglionic lymphadenoma in a dog, by M. Pierre Delbet. The author has proved the infectious nature of this disease, and has isolated the pathogenic bacillus causing it.—On serotherapeutics in cancer, by M. Paul Gibier. Details of serum inoculation in two cases of cancer and the consequent effects.—Kildine Island and its hydrological peculiarities, by M. Venukoff.—The recent earthquakes and their periodicity, by M. Ch. V. Zenger.

BERLIN.

Meteorological Society, May 7.—Prof. Hellmann, President, in the chair.—Dr. H. Meyer spoke on most probable and mean temperatures of the air. He showed by several examples (Berlin, Nertschinsk, Alexandria) that the values of the summit of the curve of frequency and of the arithmetic

mean exhibit a relationship to each other which is dependent on cloudiness, and shows diurnal and annual periodicities which are of considerable importance for the characterising of climate. The same speaker next dealt with the applicability of Lambert's formula to the calculation of the average direction of the wind. He showed that later observers had neglected Lambert's presupposition that either the velocity or pressure of the wind must be introduced into his formula, and had employed the "frequency" instead, a fact which must lead to worthless results. But even when the formula is employed in accordance with Lambert's instructions the resultant direction arrived at has no climatic significance. A lengthy discussion ensued, which the President summed up as indicating that Lambert's formula was not generally regarded as sufficing for the calculation of the average direction of the wind. Only in the case where the movements of the air lie close together for a given period, and do not differ by more than 2°, does it appear at all profitable to calculate the resultant by means of this formula.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

Books.—Garden Flowers and Plants: J. Wright (Macmillan).—Longmans' School Algebra: W. S. Beard and A. Telfer (Longmans).—Bulletin of the U.S. National Museum, No. 48. A Revision of the Deltoid Moths: Dr. J. B. Smith (Washington).—Heligoland as an Ornithological Observatory: H. Gätke, translated by R. Rosenstock (Edinburgh, Douglas).—An Introduction to Chemical Crystallography: Dr. A. Fock, translated and edited by W. J. Pope (Oxford, Clarendon Press).—Leitfaden für Histologische Untersuchungen: Dr. B. Rawitz, Zweite Auflage (Jena, Fischer).—Das Pflanzenphysiologische Praktikum: Dr. W. Detmer, Zweite Auflage (Jena, Fischer).—Untersuchungen über die Stärkekörner: Dr. A. Meyer (Jena, Fischer).—A Text-Book of the Science and Art of Bread-Making: W. Jago (Simpkin).—The Structure and Life of Birds: F. W. Headley (Macmillan).—Photography Annual for 1895 (Liffé).—Exterior and Interior Photography: F. W. Mills (Dawbarn).—La Géologie Comparée: Prof. S. Meunier (Paris, Alcan).—Mind and Motion and Monism: Dr. G. J. Romanes (Longmans).—PAMPHLETS.—Protoplasme et Noyau: Prof. J. Pérez (Bordeaux).—Ueber die Auslese in der Erdgeschichte: Dr. J. Walther (Jena, Fischer).—Walks in Belgium (30 Fleet Street).—SERIALS.—Bulletin de l'Académie Royale des Sciences, &c., de Belgique, Tome 29, Nos. 4 and 5 (Bruxelles).—American Journal of Mathematics, Vol. xvii, No. 3 (Baltimore).—Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie, Einundzwanzigster Band, 1 and 2 Heft (Leipzig, Engelmann).—Morphologisches Jahrbuch, 22 Band, 4 Heft (Leipzig, Engelmann).—Economic Journal, June (Macmillan).—Royal Natural History, Vol. 4, Part 20 (Warne).—Travaux de la Société des Naturalistes à l'Université Impériale de Kharkov, tome xxviii, 1893-94.—Quarterly Journal of Microscopical Science, June (Churchill).—Astrophysical Journal, June (Chicago).—Bulletin of the Geographical Club of Philadelphia, Vol. 1, No. 5 (Philadelphia).—Zeitschrift für Wissenschaftliche Zoologie, lix. Band, 3 Heft (Leipzig, Engelmann).—Longman's Magazine, July (Longmans).

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