carbon to be volatilised ; the sublimed carbon is always deposited under the form of graphite at ordinary pressures, and there is no evidence whatever of the liquefaction of the carbon, for instance the lid of a carbon crucible did not adhere when the whole mass had been converted into graphite, and a carbon needle heated in a carbon tube did not in any case become attached to the latter. Previous experiments have, however, shown that under great pressures carbon may be fused, and diamond is then formed.—New observations on the menhirs of the Meudon woods, by M. Berthelot.—Note by M. Maurice Lévy accompanying the presentation of his "Study of the mechanical and electrical methods of traction of boats." The author gives a short account of the contents of the first volume of his work dealing with cable traction only.—M. Bouquet de la Grye, in the name of the Bureau des Longitudes, presented the "Connaissance des Temps" for the year 1897. This volume contains, on the maps of solar eclipses, the curves passing through the points on the earth at which the commencement and end of the eclipse are simultaneous. The ecliptic elements of the great planets and their satellites, including their elongations and the elements of Saturn's ring, are also given.—Observations of the new planet BE, made at Paris Observatory, by M. G. Bigourdan.—The polar snows of Mars, by M. C. Flammarion (see "Our Astronomical Column").—Relations between the vapour pressures of a body in the solid and in the liquid state: influence of pressure on the temperature of fusion, by M. A. Ponsot.—Influence of form on the sensitiveness to light and aberration of the eye, by M. Charles Henry.—Researches on mercuric nitrates, by M. Raoul Varet. The heats of formation are determined. In the dissociation of mercuric nitrate by water the least endothermic of the possible reactions is the one that takes place. Nitric acid, like sulphuric, picric, acetic, and oxalic acids, is displaced completely from mercuric combinations by hydrochloric and by hydrocyanic acids.—On the campholenic acids and the campholenamides, by M. A. Béhal.—On the presence of methyl salicylate in some native plants, by M. Em. Bourquelot.—On the formation of new colonies by *Termes lucifugus*, by M. J. Pérez.—The defence of the organism against parasites among insects, by M. L. Cuénot.—External characteristics of chytridiosis of the vine, by M. A. Prunet.—On a mycobacterial disease of *Tricholoma terreum*, by M. Paul Vuillemin.—Defence of "Saharien" as a name for the last geological period, by M. Mayer-Eymar.—On the presence and distribution of glycogen in tumours, by M. A. Brault.

BERLIN.

Meteorological Society, October 9.—Prof. Hellmann, President, in the chair.—After the President had dwelt on the loss sustained by meteorology owing to the death of von Helmholtz, Dr. Schwalbe spoke of his own endeavours to utilise for scientific purposes the curves of temperature obtained from the "Uranus" pillars. He found among the many meteorological pillars in Berlin which had given continuous records during the years 1892 and 1893, very few whose readings corresponded with those of control instruments. Taking the month of July for each year, he had endeavoured to arrive at the mean daily temperature by taking the mean of the temperatures registered every hour of each day in the month. He found this mean temperature to lie between the values of the expressions $\frac{6+2+10}{3}$ and $\frac{7+2+9+9}{4}$.—Dr. Kassner had instituted observations during the year on cloud-waves, to which, since Helmholtz' researches on the formation of waves when two layers of air of different density and travelling with different velocity move past each other, meteorologists have devoted very special attention. From these it appears that the above form of cloud, consisting mostly of cirrus and cirrocumulus, usually causes deposits. The speaker expressed the wish that thorough and continuous observation of this phenomenon might be made in order to test it.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—Integral Calculus: J. Edwards (Macmillan).—A Treatise on Chemistry: Sir H. E. Roscoe and C. Schorlemmer, Vol. 1, new edition (Macmillan).—Reise nach Südindien: E. Schmidt (Leipzig, Enge mann).—Lehrbuch der Petrographie; Dr. F. Zirkel, Dritter Band (Leipzig, Engelmann).—Resultaten der Aetzmethode in der Krystallographischen Forschung: Dr. H. Baumhauer, Text and Atlas (Leipzig, Engelmann).—Electric Lighting and Power Distribution: W. P. Maycock, new edition (Whittaker).—Electric Light Installations: Sir D. Salomons, Vol. 3: Application, 7th edition (Whittaker).—Forest Birds, their Haunts and Habits: H. F. Witherby (K. Paul).—By Order of the Sun to Chile to see his Total Eclipse, April 16, 1893: J. J. Aubertin (K. Paul).—The Vaccination Question: A. W. Hutton (Methuen).—Reports from the Laboratory of the Royal College of Physicians, Edinburgh, Vol. 5 (Edinburgh, Clay).—Dr. William Smellie and his Contemporaries: Dr. J. Glaister (Glasgow, MacLehose).—The Dawn of Civilisation: G. Maspero, translated by M. L. McClure (S.P.C.K.).—Preparatory Physics: Prof. W. J. Hopkins (Longmans).

PAMPHLETS.—The Maya Year: C. Thomas (Washington).—Tableau Métrique de Logarithmes: C. Dumesnil (Paris, Hachette).—On Pedal and Antipedal Triangles: A. S. Ghosh (Calcutta, Patrick Press).—Weismannism once more: H. Spencer (Williams and Norgate).—On the Use of Detached Coefficients in Elementary Algebra: J. D. Paul (Bell).—Pearl and Chank Fisheries of the Golf of Manaar: E. Thurston (Madras).—Die Temperature: Dr. A. E. Forster (Wien, Hölzel).—Mean Density of the Earth; E. D. Preston (Washington).—Analytische Theorie der Organischen Entwickelung: H. Driesch (Leipzig, Engelmann).—Das Verhältnis der Philosophie, &c.: D. Wetterhan (Leipzig, Engelmann).—Gedächtnisserede auf Hermann von Helmholtz: Th. W. Engelmann (Leipzig, Engelmann).—Grundzüge der Mathematischen Chemie: Dr. G. Helm (Leipzig, Engelmann).—Verhandlungen der Deutschen Zoologischen Gesellschaft auf der vierten Jahresversammlung zu München, den 9, bis 11, April 1894 (Leipzig, Engelmann).

SERIALS.—Science Progress, November (Scientific Press, Ltd.).—Scientific Roll—Climate: Baric Condition, No. 6 (Castle Printing and Publishing Company).—Medical Magazine, November (Southwood).—Zeitschrift für Physikalische Chemie, xv. Band, 2 Heft (Leipzig, Engelmann).—Imperial University, College of Agriculture, Bulletin Vol. 2, No. 2 (Tokyo).—Memoirs and Proceedings of the Manchester Literary and Philosophical Society, Vol. 8, No. 3 (Manchester).—Himmel und Erde, November (Berlin).—American Journal of Science, November (New Haven).—Engineering Magazine, November (Tucker).—Journal of the Sanitary Institute, October (Stanford).—Portfolios of Photographs: Beautiful Britain, Art Series, No. 1. (Werner Co.).—Journal of the Asiatic Society of Bengal, Vol. lxiii. Part 2, No. 2 (Calcutta).

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