

determined by Dr. Auwers from the meridian observations of Bradley and Mayer, and these show in the mean a correction to the heliometrically deduced proper motions of  $-0^{\circ}0003$  and  $+0^{\circ}0039$  in R.A. and Declination, respectively. This discrepancy is subsequently traced to corrections due to the fundamental catalogues employed, and the final star places given on pp. 298-9 possess an accuracy that will make them of value for many purposes.

Finally, a comparison is instituted between the proper motion of the group as observed, and the motion that might be expected from the progressive motion of the solar system. The result is not in very satisfactory agreement. The parallactic displacement of the solar system is

$$\begin{array}{rcl} \Delta\alpha & = & -0^{\circ}0016 \quad \dots \quad \Delta\delta \quad -0^{\circ}0020 \\ \text{Proper motion, Auwers} & = & -0^{\circ}0044 \quad \dots \quad +0^{\circ}0007 \\ \text{,, ,, other sources} & = & -0^{\circ}0041 \quad \dots \quad -0^{\circ}0032 \end{array}$$

The question of absolute parallax enters here, and to this point Dr. Schur promises to return, possibly in connection with photographic researches. W. E. P.

### UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

THE following appointments have recently been made abroad:—Bâle, Dr. R. Metzner, of Freiburg, to the Chair of Physiology; Barcelona, Dr. Gil Saltor Laval to the Chair of Surgical Pathology; Breslau, Dr. Jacobi, Professor of Forensic Medicine; Bonn, Dr. Finkler, Ordinary Professor of Hygiene; Columbian University, Wisconsin, Dr. W. Reed to the Chair of Bacteriology and Pathology, and Dr. M. T. Phillips to that of Hygiene; Granada, Dr. Rafael Mollá y Rodríguez, of Havana, Professor of Clinical Surgery; Genoa, Dr. Canalis, Ordinary Professor of Hygiene; Harvard, Dr. H. C. Ernst, Professor of Bacteriology; New York (Polyclinic) Dr. Wilbur B. Marple Professor of Ophthalmology, Dr. W. R. Pryor Professor of Gynecology, and Dr. W. R. Townsend, Professor of Orthopædic Surgery; Prague (Bohemian University), Dr. J. V. Rohon Extraordinary Professor of Histology; Tomsk, Dr. F. Krüger Extraordinary Professor of Medical Chemistry; Würzburg, Dr. K. Rieger Ordinary Professor of Psychiatry; Zürich, Dr. H. von Wyss Extraordinary Professor of Forensic Medicine.

Dr. J. H. HYSLOP has been appointed Professor of Logic and Ethics in Columbia College, New York. Dr. J. Allen Gilbert, of Yale, goes to the University of Iowa as Assistant Professor of Psychology.

ACCORDING to *Science*, Dr. Wilhelm Roux, of Innsbruck, has been called to the chair of Anatomy in the University of Halle; Dr. K. Seubert, of Tübingen, to the chair of Chemistry in the Technical High School, Hanover, and Dr. Kallius, of Göttingen, to the chair of Anatomy at Tübingen.

MESSRS. E. B. TITCHENER and J. E. CREIGHTON have been made full professors in the Sage School of Philosophy in Cornell University.

PROF. MARK W. HARRINGTON has accepted the presidency of the University of Washington.

THE Aberdeen Town Council have agreed to give an annual contribution of £200 for the establishment of a department for instruction in agriculture, in connection with the University of Aberdeen, provided that a similar sum be given by the County Council.

THE prospectus of the Science, Art and Technical Schools, Plymouth, for the fourth session, 1895-96, has been issued. Copies may be had of the Secretary.

WE have received a copy of the syllabus of lectures to be delivered in the Engineering Department of the City of London College, Moorfields, during the coming session.

### SOCIETIES AND ACADEMIES.

#### PARIS.

Academy of Sciences, September 9.—M. Marey in the chair.—A memoir was presented by M. Wladimir de Nicolaiew, entitled "On the attempt to show currents of electric displacement and on the magnetic induction of iron in the alternative state."—Results of solar observations, made at the Royal Observatory of the Roman College, during the first quarter of 1895, by M. P. Tacchini. The diminution of

frequency of spots was maintained during this quarter with a secondary minimum in January. Protuberances showed the same minimum although the season was unfavourable for their observation.—On the forces developed by differences of temperature between the two main plates of a beam with continuous trusses, by M. H. Deslandres. From the experiments made, differences of temperature between the upper and lower plates of a continuous girder cause supplementary forces of compression and extension, frequently reaching in the hot season 2 kg. per millimetre.—Observations on M. Deslandres' note, by M. Maurice Lévy. An exact demonstration giving the means of deducing the strains in every case.—On a theorem in geometry, by M. Mendeléef.—On nitro-substitutions, by MM. C. Matignon and Deligny. The conclusions are given: (1) Isomerides of position have always been found to have the same heats of combustion within the errors of experiment; one only need be examined from a number of isomerides. (2) The mean difference in heats of combustion of a compound and its nitro-derivative is 45 Cal. Hence is deduced the equation



that is, the exact value found by Berthelot for the formation of nitro-hydrocarbons.—On the explosion of endothermic gases, by M. L. Maquenne. The conditions of propagation of an explosive wave initiated by detonators are given, and the influence of this explosive character on the industrial applications of acetylene is pointed out.—Influence of the winter 1894-95 on the marine fauna, by M. Pierre Fauvel.—On a gigantic terrestrial tortoise, from a specimen living in Egmont Islands, by M. Th. Sauzier. Dimensions are given of a specimen of *Testudo Daudinii*, and compared with the dimensions of other known tortoises and the fossil *T. Perpiniana*.—Results of palæontological excavations in the Upper Miocene of the "colline de Montredon," by M. Ch. Depéret.—On a superior limit to the mean area affected by an earthquake, by M. F. de Montessus de Ballore. From Japanese observations it is deduced that this higher limit is 1200 square kilometres.

### BOOKS, PAMPHLET, and SERIALS RECEIVED.

BOOKS.—Mental Physiology: Dr. T. B. Hyslop (Churchill).—A Text-Book on Applied Mechanics; Prof. A. Jamieson, Vol. 1 (Griffin).—Justus von Liebig; W. A. Shenstone (Cassell).—The English Lakes: Dr. H. R. Mill (Philip).—Light: H. P. Highton (Rivington).—Facts about Processes, Pigments, and Vehicles: A. P. Laurie (Macmillan).—Ostwald's Klassiker der Exakten Wissenschaften, No 63 to 66 (Leipzig, Engelmann).—Müller-Pouillet's Lehrbuch der Physik und Meteorologie, new edition, by Drs. Pfundler and Lummer (Braunschweig, Vieweg).—British Museum (Natural History) Mineral Department: An Introduction to the Study of Rocks (London).

PAMPHLET.—The Cost of Warships: Dr. F. Elgar (Institution of Naval Architects).

SERIALS.—American Naturalist, September (Philadelphia).—Psychological Review, September (Macmillan).—Strand Magazine, September (Newnes).—Picture Magazine, September (Newnes).

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