

"The Collected Mathematical Papers of Prof. J. J. Sylvester, F.R.S.," vol. ii.; "The Dynamical Theory of Gases," by J. H. Jeans; "The Analytical Theory of Light," by J. Walker; "A Treatise on Analytical Dynamics," by E. T. Whittaker; "Alternating Current Theory," by A. Russell, in two vols.; "The Study of Chemical Composition," by I. Freund; "The Fauna and Geography of the Maldive and Laccadive Archipelagoes: being the Account of the Work carried on and of the Collections made by an Expedition during the years 1899 and 1900 under the leadership of J. S. Gardiner," vol. ii., part iv., illustrated; "Reports of the Anthropological Expedition to Torres Straits by the members of the Expedition," edited by Dr. A. C. Haddon, F.R.S.; "Studies from the Anthropological Laboratory in the University of Cambridge," by W. L. H. Duckworth, vol. i.; "On two Orders of Arachnida: Opiliones, especially the Suborder Cyphophthalmi and Ricinulei, namely the family Cryptostemmatoidæ," by Drs. H. J. Hansen and W. Sørensen, illustrated; "Immunity in Infectious Diseases," by Prof. Metchnikoff, authorised English translation by F. G. Binnie, illustrated; "Morphology and Anthropology," by W. L. H. Duckworth; "The Origin and Influence of the Thorough-bred Horse," by Prof. W. Ridgeway; "Fossil Plants: a Manual for Students of Botany and Geology," by A. C. Seward, F.R.S., vol. ii.; "Trees: a Handbook for Students of Forest Botany," by Prof. H. M. Ward, F.R.S., in six volumes, vols. ii. to vi.; "The Morphology of Plants," by J. C. Willis; and "The Journal of Agricultural Science," edited by Prof. T. H. Middleton, T. B. Wood, R. H. Biffen, and A. D. Hall.

MESSRS. JOHN WILEY AND SONS (New York) and Messrs. Chapman and Hall, Ltd. (London), have in preparation:—"An Elementary Treatise on the Differential Calculus, Founded on the Method of Rates," by W. W. Johnson; "A Treatise on Concrete, Plain and Reinforced," by F. W. Taylor and S. E. Thompson; "Elements of General Drafting for Mechanical Engineers," by C. E. Coolidge and H. F. Freeman; "Conversations on Chemistry," by W. Ostwald, translated by E. C. Ramsay, part i.; "Machine Shop Tools and Methods," by W. S. Leonard; "Ordinary Foundations, including the Cofferdam Process for Piers, with numerous Practical Examples from Actual Works," by C. E. Fowler; "The Textile Fibres, their Physical, Microscopical, and Chemical Properties," by J. M. Matthews; "Manual of the Chemical Analysis of Rocks," by H. S. Washington; "Untechnical Addresses on Technical Subjects," by J. Douglas; "Techno-Chemical Analysis," by G. Lunge, translated by A. I. Cohn; "Application of some General Reactions to Investigations in Organic Chemistry," by Prof. Lassar-Cohn, translated by J. B. Tingle; "Notes on Assaying and Metallurgical Laboratory Experiments," by R. W. Lodge; "Elements of Mechanism," by P. Schwamb and A. L. Merrill; "An Introduction to Projective Geometry and its Applications, an Analytic and Synthetic Treatment," by A. Emch; and "Manual of Serum Diagnosis," by O. Rostoksi, translated by C. Bolduan.

OUR ASTRONOMICAL COLUMN.

THE SOUTH TEMPERATE SPOTS ON JUPITER.—In a letter to No. 348 of the *Observatory*, Mr. Denning directs attention to the need for further observations of the white spots which encroach on the south side of the south temperate belt of Jupiter.

On August 9 he saw two brilliant spots in this locality, having the longitudes $254^{\circ}.1$ and $290^{\circ}.1$ respectively, and has little doubt that these are identical with those he observed in 1903 and previously.

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As Mr. Denning has suggested that the movements of these objects may cause the observed irregularities in the velocity of the great red spot—the velocity of which is a little less—it is important that they should be frequently observed, and the results of the observations published.

The spots lose about $16^{\circ}.4$ per month relatively to Crommelin's System II., and their positions for the next few months will be as follows:—

			I.				II.
			Long.				Long.
1904	Oct. 15	...	$218^{\circ}.4$	...		$254^{\circ}.0$	
	Nov. 15	...	$202^{\circ}.0$	...		$237^{\circ}.6$	
	Dec. 15	...	$185^{\circ}.6$	...		$221^{\circ}.2$	
1905	Jan. 15	...	$169^{\circ}.2$	...		$204^{\circ}.8$	
	Feb. 15	...	$152^{\circ}.8$	...		$188^{\circ}.4$	

Mr. Denning will be pleased to receive records of new or old observations of these objects.

A RAPIDLY MOVING SOLAR PROMINENCE.—A fairly large prominence having a great velocity was observed by Mr. J. B. Coit, of Boston University, on May 23. Whilst setting the slit of his spectroscope on Ha he noticed a cloud-like arch, made up of radial filaments, stretching from $P=89^{\circ}$ to $P=100^{\circ}$, the space below the arch being apparently quite blank. At 11h. 55m. the altitude of the prominence was $90''$, and it quickly increased to $105''$, after which it rapidly decreased until, at 11h. 58m., it was only $70''$. By this time all semblance to the original structure was lost, and only a few cloudlets remained. At 12h. 1m. nothing could be seen above the limb, and the chromosphere between 89° and 100° was quite tranquil, except for a few small shreds at the places where the ends of the arch had rested. Subsequent observations with a 5-inch equatorial showed no trace of spots or bright faculæ on or near the limb in this region (*Popular Astronomy*, No. 7, vol. xii.).

PUBLICATIONS OF THE GRONINGEN ASTRONOMICAL LABORATORY.—Two numbers of these *Publications*, which are printed in English and edited by Prof. Kapteyn, have just been received. No. 12 is devoted to the results of an investigation by Dr. W. de Sitter of the systematic differences between the photographic and visual magnitudes of stars depending upon the galactic latitude. The investigation was carried out at the Cape Observatory, Dr. de Sitter taking the photographs and Mr. R. T. A. Innes making the visual observations.

The results show, among other things, that the colours of the stars near the galactic poles seem to be distributed at random, and, further, that no *average* colour exists for those in the galaxy, but rather that there are colour differences which vary irregularly with the galactic *longitude*. This interesting result calls for further investigation, and Dr. de Sitter suggests several methods which might be employed to elucidate the matter further.

No. 13 of the *Publications* contains a catalogue of the proper motions of 66 stars of the Hyades, derived from the comparison of thirty-four catalogues published between 1755 and 1900. This work was performed by Herr H. A. Weersma to facilitate the reduction of Prof. Duner's plates, which were taken for the purpose of determining the proper motions of the Hyades stars. The results are given in detail in the paper, which concludes with a general catalogue of the 66 stars, showing their magnitudes, their positions for 1900, and their proper motions.

THE GOODSSELL OBSERVATORY EXPEDITION TO THE ROCKY MOUNTAINS.—A short general description of the results obtained by Dr. H. C. Wilson and Prof. Payne during their sojourn at Midvale (Mont.), which is situated at an altitude of about 4800 feet in the Rocky Mountains, is given in No. 7, vol. xii., of *Popular Astronomy*.

The expedition was undertaken in order to photograph some of Herschel's suspected nebulous regions under exceptionally good atmospheric conditions. The heavy dews, caused by a difference of 40 or 50 degrees between the day and night temperatures, and the smoke from neighbouring forest fires somewhat interfered with the carrying out of the entire programme, but on the whole the photographs obtained were very successful. A full description of the work accomplished, the observing conditions, &c., is promised for a later publication.