On the Spectrographic Performance of the Thirty-inch Pulkowa Refractor: A. Bélopolsky.

The work of the great refractor with a spectrograph not well adapted to it compares unfavorably with that of the new thirteen-inch photographic telescope.

Note on the Spectrum of Argon: H. F. Newall.

A line spectrum obtained last year under peculiar conditions of low pressure has been identified as that of argon. A glass bulb was sealed to a mercury pump and the air exhausted. Two photographs, with an exposure for each of thirty minutes, differed in that the second showed the nitrogen bands much weaker than the first, besides containing lines since identified as those of argon.

Preliminary Table of Solar Spectrum Wave-Lengths, V: Henry A. Rowland.

The table is continued from λ 4414 to λ 4674.

On Martian Longitudes: Percival Lowell.

A series of observations on the positions of thirty-six points on Mars with a view to the construction of a map. A discrepancy of five degrees between present longitudes and those determined by Schiaparelli in 1879 suggests that the received time of rotation of the planet is too small.

A Combination Telescope and Dome: A. E. Douglass.

The article describes a novel plan of mounting a telescope within a hollow sphere supported like an ordinary globe, but with much of the weight taken off from the supports by floating the sphere in water. The plan is the result of an effort to reduce the instability of the usual mounting by flotation, and the application of the motive power as far as possible from the axes of rotation.

Stars Having Peculiar Spectra; Eleven New Variable Stars: M. Fleming.

Some Arequipa photographs show eleven peculiar star spectra and eleven new variables.

A Spectroscopic Proof of the Meteoric Constitution of Saturn's Rings: James E. Keeler.

The spectrum of the planet was photographed with the slit parallel to the major axis of the rings. The inclination of the spectral lines of the ansæ show that the inner part of the ring is moving faster than the outer portion, which would not be the case were the rings moving as a solid. The indicated velocities of the different parts satisfy Kepler's third law.

Remarks on Professor Pickering's 'Comparison of Photometric Magnitudes of the Stars,' in A. N. 3269: G. Muller and P. Kempf.

A criticism of the Cambridge catalogues, translated from the Astronomische Nachrichten.

The Short Wave-Lengths of the Spark Spectrum of Aluminium: C. Runge.

A Large Eruptive Prominence; On a Photographic Method of Determining the Visibility of Interference Fringes in Spectroscopic Measurements; Note on the Exposure Required in Photographing the Solar Corona Without an Eclipse: George E. Hale.

Terrestrial Helium (?).

A Large Reflector for the Lick Observatory: Edward S. Holden.

S. B. Barrett.

NEW BOOKS.

The Natural History of Plants; their Forms, Growth, Reproduction and Distribution. From the German of Anton Kerner von Marilawn, by F. W. Oliver, with the assistance of Marian Busk and Mary F. Ewart. With almost 1,000 original wood-cut illustrations and 16 plates in colors. New York, Henry Holt & Co. 1895. 40, Vol. I., in two parts. Pp. 777. Price $7.50.

Twentieth Annual Report of the Secretary of the State Board of Health of the State of Michigan. Lansing, Robert Smith & Co. 1894. Pp. cxlvi + 416.