Minor Contributions and Notes

GEORGES RAYET

Science has suffered a severe loss in the sudden decease, on June 14, 1906, of M. Georges Rayet, founder, and for more than twenty-five years director, of the Observatory of Bordeaux.[1]

Born at Bordeaux on December 12, 1839, he became attached to the Observatory of Paris in 1862. Here he was more particularly occupied with the weather service, but he was also attracted by spectroscopy, then a new branch of research, and he undertook the spectroscopic study of numerous celestial objects. His published works during the following years deal with the spectrum of the Sun, prominences, and sun-spots; with the spectra of several comets, and with terrestrial magnetism and auroras. Some of his investigations were made in conjunction with M. C. Wolf, and together, in 1867, they discovered the three stars in *Cygnus* having bright lines in their spectra. The names of MM. Wolf and Rayet have been always associated with the spectra of this interesting type, the number of stars belonging to which has since been greatly enlarged. Present-day students of stellar spectra, dealing with photographs made with powerful instruments, are perhaps unable to fully appreciate the difficulties of the early visual spectroscopic observations of faint stars; such discoveries certainly deserve far more credit than those which may be made upon modern spectrograms.

At the solar eclipse of August 18, 1868, M. Rayet gave his attention to the spectra of the prominences, which were then objects of great interest and supposedly observable only at the time of an eclipse. He established the fact that the prominences contained other substances than hydrogen, and found the line D_3, subsequently ascribed to helium.

From 1874 to 1876 M. Rayet occupied the chair of physical astronomy of the faculty of sciences of Marseilles, and in 1876 became professor at Bordeaux in the same chair, which he was the first to

[1] This note is based upon facts kindly communicated by M. Ernest Esclangon.

occupy; and the duties of which he discharged for thirty years until his death.

The construction of an observatory at Bordeaux was decided upon in 1877, and M. Rayet was designated as director. The observatory began its activity in 1881, and for twenty-five years M. Rayet here worked steadily, making numerous observations on nebulae, double stars, and comets. He was a successful executive as well as scientist, and was devoted to the interests of the observatory to which he had given so many years of his life.

A LIST OF EIGHT STARS WHOSE RADIAL VELOCITIES ARE VARIABLE

The following stars have been found to be spectroscopic binaries. All of them, with the exception of *SU Cygni*, were discovered with the Mills spectrograph in the course of the regular observing program. Velocities expressed without decimals indicate either that the measures are preliminary and approximate, or that the type of spectrum does not permit accurate measurements to be made.

1 Geminorum ($\alpha = 5^h\ 58^m.0$, $\delta = +23°\ 16'$)

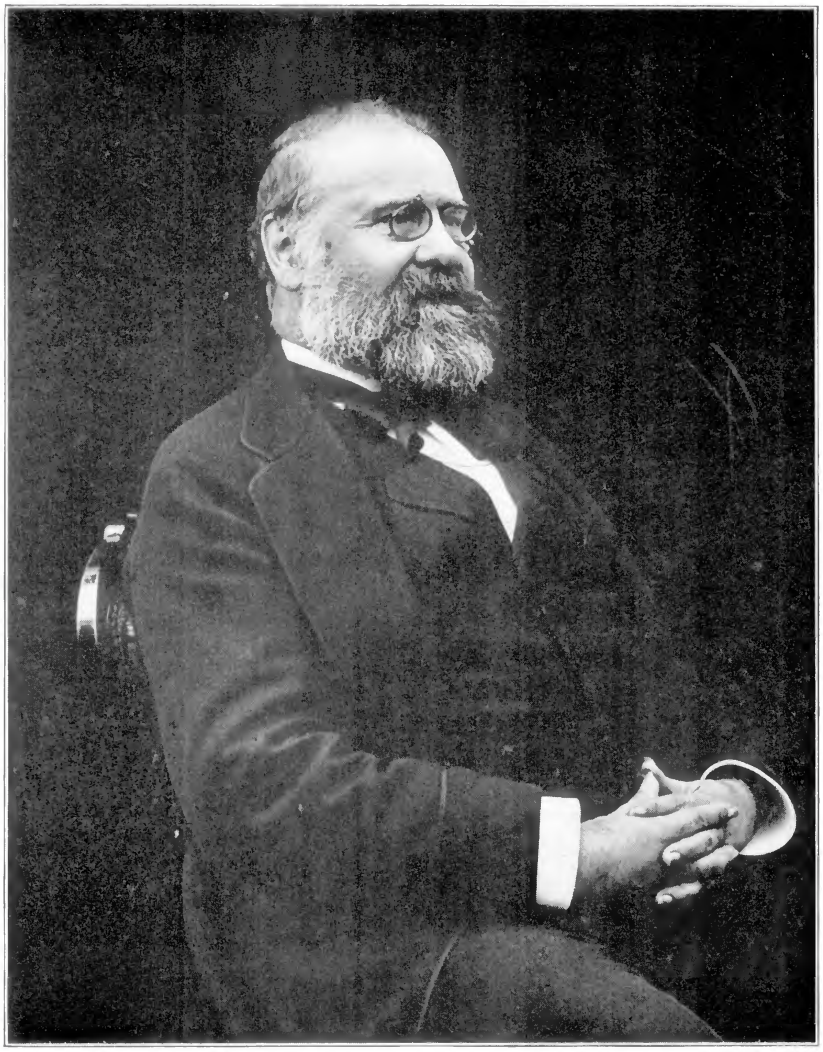
Plate	Date	Velocity	Measured by
2643 D	1903, January 4	+32. km	Curtis
		+33.7	Burns
4027 D	1905, September 27	+19.	Moore
4471 E	1906, October 1	+13.	Moore
		+15.7	Newkirk
4538 C	1906, November 9	+20.	Moore
		+20.5	Newkirk

This star is of type H. Its binary character was discovered by Mr. Moore.

B. A. C. 5890=*D. C.* 7579 ($\alpha = 17^h\ 21^m.3$; $\delta = -5°\ 0'$)

Plate	Date	Velocity	Notes
1343 B	1899, July 18	+ 7.±km	lines single
1738 C	1900, May 20	−27.±	
3851 B	1905, June 21	+69.	strong component
		−82.	faint component
4314 B	1906, July 16	+ 4.	lines single
4324 B	1906, July 22	+29.	strong component
		−31.	faint component
4348 A	1906, August 1	+30.	strong component
		−25.	faint component
4353 A	1906, August 6	− 4.	lines single
4467 A	1906, September 30	+ 3.	lines single

PLATE II



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