

had already begun to tell on him, and he died Nov. 20, 1882, after a brief illness. As an instructor, Henry Draper received the highest praise from his students; for he possessed to an unusual degree the power of kindling their enthusiasm while adding to their store of knowledge. Yet, engrossing as were the duties of Dr. Draper's chosen vocation, he still found time for an avocation that would have sufficed for the life-work of most men. Furthermore, on the death of his father-in-law, Mr. Cortland Palmer, in 1871, he became managing trustee of a large estate, and in this position was known as an exceedingly efficient business man. Finally, he by no means neglected society, but had a large circle of warm friends, among whom he was distinguished for his wit and conversational powers. He was fond of art, music, and outdoor sports; and he spared neither the great wealth at his command nor his own energy to pursue to a successful end those scientific investigations in which he was interested.

The avocation referred to above was spectroscopic photography. In this branch of practical astronomy, Dr. Draper was an indefatigable worker. His fame as a scientific man is based on his photographic investigations, as regards, —

1. Diffraction spectrum of the sun.
2. Stellar spectra.
3. The existence of oxygen in the sun.
4. Spectra of the elements.

Undoubtedly, the fact that from earliest youth Henry Draper had been his father's assistant and confidant in many of the experiments undertaken by the latter did much to develop his scientific ability and acumen. His interest in photography was aroused during his medical course, when he had had occasion to make a series of micrographs, illustrating certain microscopic studies, for his graduation

thesis; and his interest in astronomy received an impetus when, in 1857, during a European tour, he had an opportunity to see the great Rosse telescope. On his return to America, he began to construct for his own use, a telescope similar to the Rosse telescope, though much smaller. So striking were the experiments successfully carried on by the young man while constructing this fifteen and one-half inch reflecting telescope, that they attracted



Region of Bright Line Stars in Cygnus, — Spectrum Plate.

the attention of Prof. Joseph Henry. The latter, visiting Dr. Draper's observatory in 1863, induced him to write a monograph "On the Construction of a Silvered Glass Telescope fifteen and one-half inches in aperture, and its use in Celestial Photography," which appeared in July, 1864, as No. 180 of the *Smithsonian Contributions to Knowledge*.

To his observatory at Hastings on the Hudson, Dr. Draper soon added a photographic laboratory, and for several years devoted himself to celestial photography.