

over 15 magnitudes and therefore, while less brilliant at maximum than Nova Aquila, it outrivalled it in the extent of its variation. Estimates of its magnitude were made here by the writer when clear weather permitted, either with the naked eye or with binoculars, or sometimes with the 4-inch finder of the telescope. Dr. R. K. Young also kept a record of its magnitude from night to night and, though made quite independently of one another, the naked-eye estimates generally agreed to 0.1 magnitude. The nova was compared with the surrounding stars, the magnitudes of these being taken from Harvard Annals, Volume 50. My own observations, limited in number as they are, are given below.

MAGNITUDE OF NOVA CYGNI

1920,	Aug	21.7	2.1	glimpsed through clouds
	"	25.7	2.3	
	"	27.7	3.4	
	"	29.7	3.9	
	"	30.7	4.1	little haze
	"	31.7	4.2	
	Sept.	1.7	4.3	
	"	3.7	4.6	
	"	6.7	4.8	
	"	7.7	4.8	
	"	24.7	6.5	brick red
	"	27.7	7.0	observed by J. S. P. Very red
	"	28.7	7.2	very red on slit

While our observations are entirely too few to decide the matter, yet, so far as they go, they do not reveal any oscillations in brightness so marked in Nova Persei and in Nova Aquilae. The decline was very rapid but continuous.

GENERAL DESCRIPTION OF THE SPECTRUM

The plates of August 24 showed a strong continuous spectrum with broad absorption lines of hydrogen displaced toward the violet corresponding to a velocity of 650 km. per sec. approach—the equivalent of 9 angstroms at the $H\gamma$ region. Broad but faint and more elusive absorption lines which could be identified with enhanced lines of iron and other elements, were also present with displacements similar to the hydrogen lines. The H and K lines of calcium were especially strong and similarly shifted. As there seems to be some difference of opinion as to when emission first made its appearance, it may not be amiss to record that there seems no reasonable doubt of its presence on our plates of this night at G.M.T. 16½ hours. Its presence at $H\gamma$ and farther to the violet is open to question, but at $H\beta$ and at the enhanced lines at $\lambda 4924$, $\lambda 5018$ and $\lambda 5169$ there is a decided strengthening of the continuous spectrum which is unmistakable. Fine sharp H and K lines of calcium undisplaced were also a feature of the spectra as in other recent novae.

The development of the spectrum during the remaining days of August and the first few days of September was marked by the formation of the usual nova emission bands,