When these corrections were added to the approximate elements and the normal places represented, Σpv^2 was lowered from 44 to 34. The individual observations were represented graphically and the residuals are given in the tables of the observations under the heading O–C. The Lick and Potsdam observations are very consistently positive. Part of this difference may be due to the scale of wave-lengths used, but some other factor must be operative also.

The final elements are

T	= J. D. 2,420,561·18	±0·90
K	= 18·02 km.	±0·59
ω	= 223°·42	±2°·60
e	= 0·54	±0·024
γ	= 25·62 km.	±0·45
P	= 211·95 days	
μ	= 1°·6985	
$a \sin i$	= 44,000,000 km.	
$\frac{m_1^3 \sin^3 i}{(m + m_1)^2}$	= 0·076 ⊙	

The residuals from our own measures are often very large, in one case thirteen kilometres. The agreement of the individual lines would lead one to expect a probable error for a single plate between one-half and one kilometre, whereas it actually came out 2·8. The measures were so discordant, that an investigation was undertaken to try and locate some reason for the erratic manner in which the velocities behaved.

Part of the trouble may lie in the star itself, the conditions there changing irregularly so as to alter the apparent wave-lengths of the lines. The effect of such changes are small, provided they do not arise from a third body, for the higher the dispersion employed and the more perfect the method of observation the smaller do the variations in velocity become. This is practically conclusive evidence, so far as one-prism work is concerned, that the anomalies in velocities, for good line stars at least, arise within the spectrograph.