## J. S. Plaskett:

as certainly present in its spectum. St bbins doubts the presence of  $\mathcal{T}i$ , but the number of positive identifications in Nos. 486 and 515, and its analogy with the other sun spot elements. seem to offer conclusive evidence in its favor.

As the spectrum does not extend much below  $\lambda$  5000, only the bards in the blue-green are shown, but they are distinctly marked, sharply limited towards the red if considered as bright They are brighter than the neighboring bands, and bands. fade off gradually towards the violet. There is one exception to this last statement however, the band beginning at  $\lambda$  4626.0, which is of quite uniform intensity and sharply limited toward the violet at  $\lambda$  4607.3. As the measures of plate 486 show, when the band was very distinctly and sharply limited, its edge was measured, and generally also the centre of intensity of the absorption line to the red side of the edge, but where not very sharply limited the absorption line at the red edge was measured. Taking these measures and estimating the distance of the edges from the measured positions, we get the following approximate wave lengths :--

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4954.0	Red Edge of Band	
4847.5		
4804.5		
4761-4	** ** ** **	
4626.2		
4607.6	Violet Edge of above ban	đ
4584.2	Red Edge of Band	

These measures are only given to the nearest tenth of a tenth-metre, as, owing to the poor focus in this region, they are not trustworthy beyond that limit.

The spectrum of o *Ceti* is very interesting, and will well repay a more extended study than has yet been given to it. Sufficient has been learned about it, however, to say that it is not necessarily identical at successive maxima, and this is very well shown by the behaviour of the  $H\beta$  and  $H\epsilon$  lines. It may be considered as well established now that it has a constant velocity of recession with respect to the sun of about

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