giving the velocity at any point in the orbit. The values of e, ω and γ being known, that of u was determined in the usual way from the mean anomalies at the observed velocities. Successive trials of the value of K in the above equation gave 120 km. as the most satisfactory. Hence a comparison of the masses of the system may be had from the relation :

$$M_1 : M_2 = K_2 : K_1 = 120 : 20{\cdot}6 = 5{\cdot}8 : 1.$$

It is interesting to note that if further measures of the secondary substantiate this value of K this proportion of the
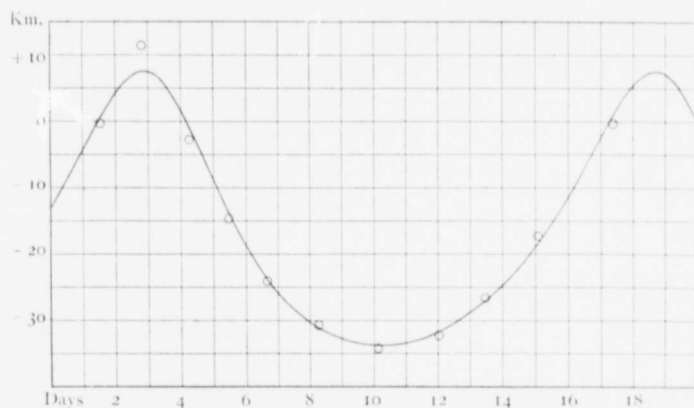
VELOCITY CURVE OF ω URSÆ MAJORIS

masses is one of the highest yet obtained. It is probably due to the resulting faintness of the companion that more plates showing the double spectrum were not obtained.

In conclusion I wish to acknowledge with thanks the kindly interest shown by the Director throughout this work.

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