

## A REVISED ORBIT OF BOSS 1275

BY W. E. HARPER

AN orbit of this double-lined spectroscopic binary was published in 1918 by Mr. J. B. Cannon in the *Dominion Observatory Publications*, Volume IV, page 185. The period then determined, 27.43 days, seemed to be the correct one, even though some of the observations gave rather ragged agreement with the curve.

A couple of years later the present writer noted that a short period seemed to satisfy most of the observations but his communication to Mr. Cannon apparently went astray in the mails and nothing was done about it. Recently at Victoria in obtaining spectra of A-type stars for absolute magnitude work the rapid shift of the spectrum lines again emphasized the apparently short period character of this binary, and it was felt advisable to secure the correct period and other orbital elements.

As Mr. Cannon has been out of spectroscopic work for some time he asked the writer to undertake the necessary revision. The period suggested by the Victoria plates alone is 2.15 days, which period also satisfies the Ottawa observations much better than the longer one originally determined. Connecting up the two series of observations it was found that either of two periods was possible, namely 2.15165 or 2.15236 days. The former value was preferred as only ten of the Ottawa observations fell on the wrong branch of the curve, whereas with the latter value there were thirteen or fourteen.

It was here realized that a re-examination of the Ottawa plates was desirable and through the kindness of the Director, Mr. R. M. Stewart, they were forwarded to Victoria. While the component spectra are much alike, yet one is somewhat stronger than the other and on well exposed plates the two spectra are readily distinguishable. The Ottawa plates are weak in the violet and