ADDITIONAL OBSERVATIONS OF 50 DRACONIS

The orbit of this star was published by the writer in the *Dominion Observatory Publications*, volume II, page 123, and therein it was indicated that further observations would be made to improve the value of the period which was determined solely from one season's observations.

To the 32 plates obtained in '14 were added eight in 1945 and twelve in 1946, and from these 52 plates a solution was made which changed the value of the period from 4·120 days to 4·118 days and made small changes in the other elements. Eight plates have been obtained at odd times since then and these would indicate an even smaller value for the period, namely 4·1175, which is thus given as the best value from all the observations.

With the exception of T, the time of periastron passage, which was adjusted to conform to the revised period, the other elements from the solution of the 52 plates have been retained and are as follows:

$$
\begin{aligned}
P &= 4{\cdot}1175 \text{ days} \\
e &= {\cdot}012 \pm {\cdot}009 \\
K_1 &= 79{\cdot}12 \text{ km.} \pm 0{\cdot}97 \text{ km.} \\
K_2 &= 83{\cdot}90 \text{ km.} \pm 0{\cdot}97 \text{ km.} \\
\gamma &= -8{\cdot}79 \text{ km.} \pm 0{\cdot}49 \text{ km.} \\
\omega_1 &= 107^\circ{\cdot}6 \pm 8^\circ{\cdot}9 \\
\omega_2 &= 287^\circ{\cdot}6 \pm 8^\circ{\cdot}9 \\
T &= \text{J. D. } 2{,}420{,}293{\cdot}519 \pm {\cdot}102 \\
a_1 \sin i &= 4{,}480{,}000 \text{ km.} \\
a_2 \sin i &= 4{,}750{,}600 \text{ km.} \\
m_1 \sin^3 i &= {\cdot}95 \odot \\
m_2 \sin^3 i &= {\cdot}90 \odot
\end{aligned}
$$

The probable error of a plate is $\pm$ 4·6 km. per sec. for component I, and $\pm$ 4·8 km. per sec. for component II. The table of measures following is a continuation of the table on page 123 of the volume mentioned above, but the phases there given, if used, should be revised to suit the new P and T.