be attained at once, so that, ordinarily, nothing is to be gained by a second adjustment except as a check upon the first.

THE SPECTROSCOPIC ORBIT OF ε AQUILAE.

BY W. E. HARPER.

Seventeen single-prism spectrograms of this star form the basis of the determination of its orbit. Its right ascension is 19h 51m.5, declination +11° 09′, visual magnitude 5.29 and type A2.

In the region of spectrum used, from λ4600 to λ3930, more than fifty lines can be seen on our plates but on the average about a dozen of the best were measured on each plate.

Those most commonly used, with their approximate intensities, are as follows: Hα, 75; Hγ, 50; K-line, 20; Mg 4481, 5; λλ4549, 4233, 4215, 4143, 4132, 4128, 4077 and 4005 are all about the same intensity, namely 2 on the scale used.

Preliminary elements were adopted and a least-squares solution was carried through to obtain corrections to the six elements, including the period. Each observation was treated separately.

The resulting elements were as follows:

\[ P = 3.5204 \text{ days} \]
\[ e = 0.055 \]
\[ ω = 56° \]
\[ γ = -27.63 \text{ km} \]
\[ K = 38.25 \text{ km} \]
\[ T = \text{J.D.} 2,423,264.278 \]

The probable error of a single plate is ±1.6 km/sec.

(To be continued.)

EDWARD EMERSON BARNARD.

By PHILIP FOX.

In my observing book under date of 6 February, 1923, is found this entry: Professor E. E. Barnard died at 13h 55m G.M.T. today. Professor Frost has just telephoned to me and asked me to notify Professor Gale and others at the University of Chicago of the arrangements for his funeral. And under date of 7 February: Professors Gale, F. R. Moulton, Crew, and I took the 8:15 train from the Northwestern Station and went to Williams Bay. Professor Stebbins from Madison joined us there. Together with the members of the staff of Yerkes Observatory and the people of the community we attended the funeral exercises held in the rotunda of the Observatory. Thereafter his body was taken to Nashville, Tennessee, for interment. He appeared pitifully wasted in body and was pitifully wasted indeed. With less furious pace he might have continued for some years his devoted