TABLE 1. (Continued).

J. D. hel. M. T. Grw. 2420000 +	phase 24811 +	Δ m	J. D. hel. M. T. Grw. 2420000 +	phase 24811 +	Δ m
d	P	m	d	P	m
3816·487	197·240	·06	3831·544	295·902	—·12
17·404	203·244	·04	·570	296·070	—·10
·433	·439	·31	33·579	309·235	·16
·462	·625	·00	·604	·403	·25
·488	·798	—·01	40·307	353·324	·14
·512	·956	—·16	41·309	359·887	—·03
18·533	210·646	·01	·334	360·055	—·03
·559	·814	—·05	·355	·190	·10:
·584	·980	—·09	42·286	366·290	·29
20·443	223·158	·09	·342	·656	—·07
21·377	229·281	·04	·368	·830	—·05
28·334	274·872	·05	44·293	379·442	·06
·362	275·049	—·08	·321	·623	·03
·387	·216	·09	·340	·751	—·06
·413	·389	·10	45·282	385·926	—·09
·439	·556	·15	·309	386·099	·01
·466	·734	·02	57·269	464·469	·28
29·459	282·242	·16	·295	·641	—·04
·490	·444	·36	·321	·809	—·08
30·479	288·926	·00	·348	·991	—·16
·505	289·094	—·09	58·241	470·839	·05
·530	·257	·24	·253	·914	·04
·555	·421	·31	·488	472·456	·17
31·519	295·739	·03	·513	·619	·07

The range in the scale adopted here is only about $^{m}\cdot3$. The mean error of a single observation in the same scale is ± $^{m}\cdot075$.

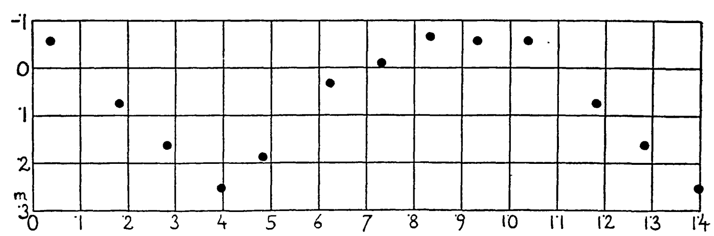
The estimates were arranged according to phase and divided into 9 groups of 10 plates each. The mean values thus obtained are given in Table 2 and graphically represented in the accompanying diagram. The provisional ephemeris of the minimum is

TABLE 2.

number of plates	phase	Δ m
	P	m
10	·038	— ·06
10	·182	·08
10	·284	·16
10	·398	·25
10	·484	·19
10	·622	·03
10	·731	— ·01
10	·833	— ·06
10	·931	— ·06

J. D. hel. M. T. Grw. 2423819·259 + ·152609 E
± ·003 ± ·000020 (m. e.)

The magnitude of the variable is estimated to be in the neighbourhood of 13^{m}. It is thus the faintest



variable star at present known to be similar to W Ursae majoris, SW Lacertae and the one announced in *A. J.* 821. There will, as anticipated in *B. A. N.* **16**, p. 84; 1922, probably be many more of this type.

Improved ephemeris of SS Carinae, by *Ejnar Hertzsprung.*

This eclipsing variable star was discovered at Harvard and in *H. C.* 115 the ephemeris of the minimum was given as J. D. $2410001^{d}\cdot53 + 3^{d}.30070\,E$. On my plates of the η Carinae region the star was observed during increasing brightness corresponding to the Harvard phase $+\,^{d}\cdot121$ at J. D. hel. M. T. Grw. $2423818^{d}\cdot57$ and $3828^{d}\cdot49$. The ephemeris corrected by the aid of these new data is:

Min. J. D. hel. M. T. Grw. $2423828^{d}\cdot36 + 3^{d}\cdot300759\,E$.

Provisional elements of 2 variable stars of the RR Lyrae type, by *Ejnar Hertzsprung.*

In an area of 100 square degrees round η Carinae there have as yet been found about 2 dozen variable stars of the δ Cephei-type and a similar number of the eclipsing type, while I have only been able to classify 3 variable stars in this region as belonging to the RR Lyrae type. This may be related to the fact that stars of the latter type do not show any sensible concentration towards the milky way. Provisional elements of one of these 3 stars, TX Carinae, have already been published in *B. A. N.* **52**, p. 86.