

as given by the authors have been multiplied by $\sqrt{2/\pi}$ in order to reduce them to arithmetic average velocities.

Asymmetry in the distribution. I have studied the areas situated less than 45° from the principal vertex (about 25 areas) in order to see whether any asymmetry can be discovered in the motions parallel to the major axis of the ellipsoid. The 2nd and 3rd columns of the table below show the number of stars moving towards the vertex of KAPTEYN's stream I (in the general direction opposite to the galactic centre) and their average velocity. The last two columns show the same data for the stars moving towards vertex II.

G5-Mc.	240	20'1	243	20'3
K3-Mc.	126	20'7	135	23'4

There seems to be no trace of an asymmetry like that found by EDDINGTON from the discussion of the proper motions in Boss' Catalogue ¹⁾, where $2/3$ of the stars were found to belong to stream I and $1/3$ to stream II. In the article mentioned EDDINGTON and HARTLEY also concluded, from the much smaller material then available, that the radial velocities gave no evidence of an appreciable asymmetry.

It is a pleasant duty to give my thanks to Dr. J. H. OORT for his guidance and advice in carrying out this investigation, and also to MRSs PELS and KRIEST who assisted in part of the computations.

¹⁾ *Stellar Movements and the Structure of the Universe*, p. 101.

A nova (1931) in Sagittarius, by *J. G. Ferwerda*.

On Fr. Ad. plates a star, the position of which is

$$18^h40^m18^s.3, -25^\circ30'2'' (1875)$$

was noted as variable by Dr. H. VAN GENT. After examination of 350 plates this object proved to be a nova. The star is invisible on 16 plates taken in the night of J. D. 2426569 and on all plates before that date. Part of the rising branch of the lightcurve is shown by another series of 16 plates on the next night, J. D. 6570, while on the 3 nights following thereupon the nova is decreasing in brightness.

There is then a gap of two years until the next

plate was taken on J. D. 7367. This plate and those taken since do not show any trace of the nova.

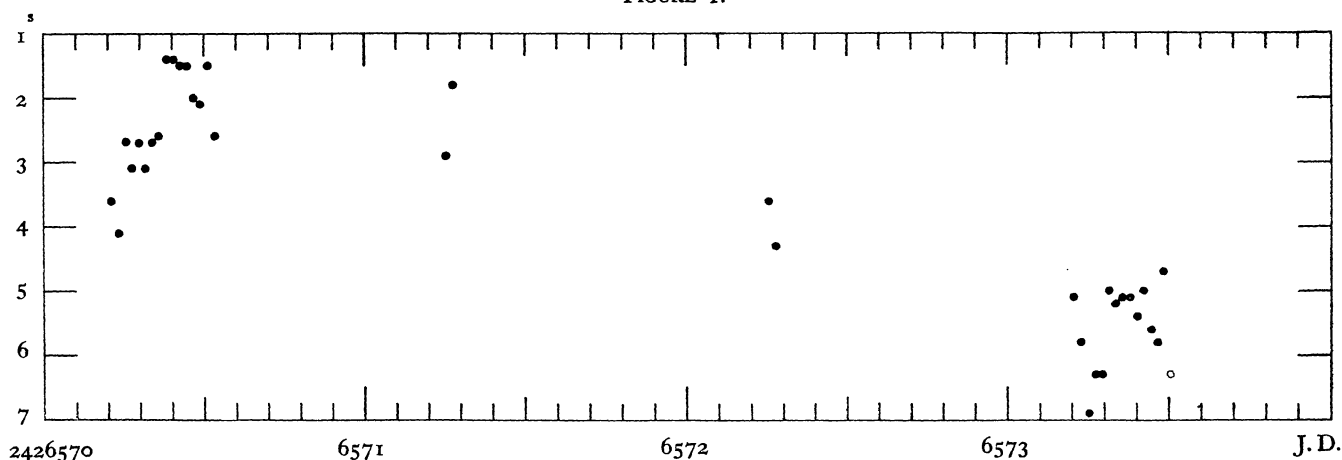
The individual observations are given in the accompanying table. ¹⁾

Magnitudes and brightnesses in steps of the comparison stars are

	^m	^s
a	12'7	0
b	13'1	3'6
c	13'4	6'3

The limiting magnitude of the plates is $15^m.3$.

FIGURE 1.



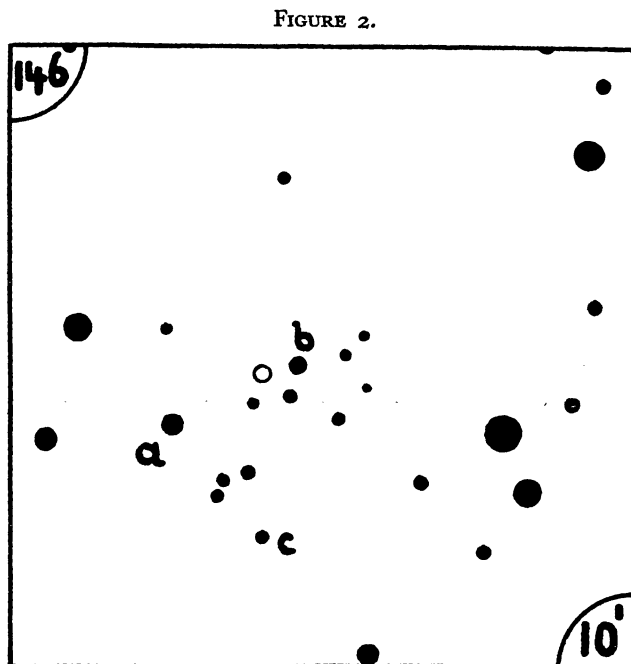
¹⁾ For particulars about methods of estimate and reduction see *B. A. N.* 231 p. 201, 1932.

From these observations it cannot be decided whether the top of the rising branch has been observed or not. The maximum brightness actually

observed is $12^m.9$ at J. D. 2426570.4. It seems likely that the brightness has been still higher between J. D. 6570.5 and 6571.3.

The mean error of a single estimate is supposed to be about ± 0.9 of $\pm 1^m$.

The size of the diagram showing the surroundings of the nova is $10' \times 10'$. The number 146 in the upper left hand corner refers to VAN GENT's designation of 223 objects in the Sagittarius region, suspected by him to be variable.



d	s	d	s
2426569.5357	invis.	2426571.2801	1.8
70.2102	3.6	72.2552	3.6
2317	4.1	2766	4.3
2531	2.7	73.2087	5.1
2746	3.1	2302	5.8
2961	2.7	2517	6.8
3175	3.1	2731	6.3
3390	2.7	2946	6.3
3605	2.6	3161	5.0
3819	1.4	3375	5.2
4034	1.4	3590	5.1
4249	1.5	3805	5.1
4464	1.5	4019	5.4
4678	2.0	4234	5.0
4893	2.1	4449	5.6
5108	1.5	4664	5.8
5322	2.6	4878	4.7
71.2587	2.9	5093	6.3