## A remarkable nebulous multiple star, by W. H. van den Bos.

$$7^{h} 18^{m} 52^{s} - 25^{\circ} 34' (1900)$$

7.5 Ma

C. P. D.  $-25^{\circ}2286$  has been listed as a quadruple star by the LOWELL observers ( $\lambda$  78), who measured a 12.8 at 2", a 12 at 3" and a 12.4 at 7" with the 24-inch. INNES, with the Cape 18-inch measured the

nearest and saw the other two, but estimated them much brighter, 9.5, 9 and 10 respectively.

The measures of  $\lambda$  78 are:

AB, C	1897·84 1900·00 1900·08	See Cogshall Innes van den Bos	24-inch 24 18 26 <u>1</u>	In 3 I 2	288 <sup>°</sup> ·4 290 <sup>°</sup> ·1 288 <sup>°</sup> ·5 291 <sup>°</sup> ·8	2 <sup>"</sup> 34 . 1.62 2.15 2.38	12.8 diff 1.8
AB, D	1897·84 1900·00 1927·07 1927·09	See Cogshall van den Bos van den Bos	24 24 26½ 26½	I 3 I I	13.6 10.2 353.0 354 ±	2·98 2·49 2·85 glimpsed	12·0 14 +
AB, E	1897.84 1900.00 1927.08	Cogshall	24 24 26 <u>1</u>	1 3 2	30·5	6.86 6.94 nothing seen	12.4

The primary was found to be double itself:

AB 1927.08 van den Bos  $26\frac{1}{2}$  2 171.1 0.52 7.7-9.2

Both stars of this (still unnumbered) close double have the same red colour, 8 in a scale where o = white and 1o = very red (such as the Nb variable R Scl); on the night of discovery the definition had been good but was quickly going off; the blurred look of the whole group as well as the faintness of C and D and the invisibility of E were ascribed to this and to forming clouds. On the second night the definition was fair and the sky clear, but the blurred appearance, contrasting with the sharp images of the many faint stars in the field, was noted again, making the measures difficult; E was invisible, D was glimpsed but too faint to measure, at least two magnitudes

fainter than C. The change in the position of D is noteworthy. The nebulous character of the group was placed beyond doubt by looking at the brighter star  $-25^{\circ}2282$ , 6.96 BI p ( $H\beta$  bright), which gave a sharp image. As seen in the 4-inch finder this star is at least fully a magnitude brighter. With a low power the nebulous look was plainly seen, but no extended nebula could be perceived. It may be interesting to observe this object with a large reflector, photographically and spectroscopically. Variability of one or more of the companions (or nuclei?) is not unlikely.