Middle place (C − O) $\Delta\alpha = -0^s.005$ $\Delta\delta = -0''.6$

$$x = [9.9971854]r \sin(v + 50^\circ\ 39'\ 22''.60)$$
$$y = [9.9977319]r \sin(v + 321\ 19\ 36.79)$$
$$z = [9.1833907]r \sin(v + 272\ 55\ 27.04)$$

accenting ω, Ω and i to denote these quantities for the year 1900, then

$\omega_1 - \omega = +1''.07$, $\Omega_1 - \Omega = +149''.77$, $i_1 - i = -1''.39$

These elements will give some idea of the corrections necessary; no doubt observations of this planetoid at previous oppositions are available, and will be used in the final corrections.

Sydney, N.S.W., 1897 *Nov.* 2.

NEBULAS NEAR *CASTOR*,

By E. E. BARNARD.

In 1888, when we first went to Mt. Hamilton, and before the completion of the Lick Observatory, I found quite a number of new nebulas with the 12-inch equatorial. Among these were five within less than a degree of *Castor*. The positions of these nebulas were determined by equatorial pointings — carefully corrected by pointings on *Castor* — before the micrometer could be used.

These nebulas are interesting on account of their closeness to this well-known star, and I have taken them from a list of unpublished new nebulas which I have in hand, waiting for star catalogues to complete the positions of a number of those which were micrometrically observed, before publication.

These nebulas near *Castor* were all discovered on 1888 May 9, except No. 1, which was found May 12 of that year. They were all subsequently seen.

Yerkes Observatory, Williams Bay, Wisconsin, 1897 *Dec.* 18.

The positions here given are reduced to 1860.0, the epoch of Dreyer's New General Catalogue.

No.	α	δ	Description
1	7h 24m 23s	+31° 44.4	close p. 10M star
2	7 24 43	+31 35.5	small, faint
3	7 25 12	+31 40.5	small, 3 S ∗s in curve 2′ p±
4	7 25 27	+31 40.5	very, very faint
5	7 25 59	+31 31.0	small, faint

This close clustering together of a few nebulas in isolated spots is a remarkable feature which I have come across a number of times. I have discovered several nests of these similar to this one near *Castor*. In most of the other cases, however, the individual nebulas are very much smaller.

It is now nearly ten years since these nebulas were discovered, and I regret that they were not published sooner.

MERIDIAN-CIRCLE OBSERVATIONS OF COMPARISON-STARS, FOR COMET *b* 1897,

By R. H. TUCKER.

DM. No.	R.A. 1897.0	Decl.	Mag.	Epoch
78°70	1h 59m 32.83	+78° 27′ 58.0	8½	1897.82
78°74	2 5 19.16	+78 13 30.3	9¼	1897.82
77°84	2 22 11.68	+77 12 25.4	7½	1897.84

NOTICE.

A moderate number of copies of the *Third Catalogue of Variable Stars* are still available, and will be distributed gratuitously to those interested in the subject, on application to the Editor of this Journal.

CONTENTS.

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