

Dec. 10 1894.

My Dear Mr. Lumsden,

With this I return the drawing to accompany the article on correcting lenses, &c. I should have returned it before, but thinking you had already made a copy, I sent it to Prof. Hale for our new journal.

"As for that matter about the nebulae, referred to in your letter, My spectroscopic observations (and those of Mr. Campbell, which are substantially the same) merely show that there is no spectroscopic evidence that the trapezium stars are in the Orion nebula. They may be anywhere in the line of sight, either on this or the other side of the nebula. According to the earlier observations (notably those of Huggins), the nebular lines were bright in the trapezium stars, and the star lines blended with the nebular lines, which would indicate that the stars were actually within the nebula. It seems to me probable that such is actually their position; - there is simply no spectroscopic evidence in favor of this view. Taking the evidence of every kind into account, the distances of the stars and of the nebulae are probably of the same order."

Please excuse some delay in replying to your letter. Public lectures and journal work have kept me very busy.

G. E. Lumsden, Esq.

Ast. & Physical Society of Toronto.

Yours very sincerely

James E. Keeler.