

*Note on two Photographs of the Nebulæ in the Pleiades taken in October 1886.* By Isaac Roberts.

On the night of October 23 (last month), I had an opportunity of taking a photograph of the *Pleiades*, and intended to expose the plate for three hours so as to be able to compare the result with that obtained by MM. Henry, but clouds caused me to stop the exposure after eighty-nine minutes. The plate when developed showed clearly that the stars *Alcyone*, *Maja*, *Electra*, and *Merope* are surrounded by nebulæ, indications of which about three of the stars are shown on MM. Henry's chart, which is published in the *Annales de l'Observatoire de Paris*.

On the following night (the 24th) I exposed another plate for three hours, which, after development, showed that not only are the stars which I have just named surrounded by nebulæ, but that the nebulosity extends in streamers and fleecy masses, till it seems almost to fill the spaces between the stars, and to extend far beyond them. It suggests the probability that these principal stars in the *Pleiades*, together with many of the stars around them, are involved either directly or else in sight alignment with one vast nebula. The negatives and the enlargements to six diameters, which I now exhibit, will enable you to appreciate and to form your own judgment as to the credibility of the evidence upon which these inferences rest, and I await with watchfulness for a clear interval which will enable me to try an exposure of *five hours* in order to obtain more light upon the subject.

The star discs upon the photographs are somewhat deformed by refraction and uncorrected instrumental movements, but I think you will not have much difficulty in mentally making the corrections necessary to form accurate judgment; and I anticipate being able to obviate this slight distortion in future exposures.

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*The Orbit of Comet II., 1883, discovered by Mr. Ross.*

By Lieut.-General J. F. Tennant, R.E., F.R.S.

Some considerable time ago I made some efforts to get a satisfactory orbit for this comet, but circumstances were unfavourable and I had to give it up. More recently I was induced to take it up to see if there were any real departure from a Parabolic Orbit such as Mr. Bryant found, or whether his result was only due to the selection he had made of observations. My conclusion was that there was no real justification for departing from the parabola. Then I found that the compilers of the *Annuaire du Bureau des Longitudes* had adopted Mr. Bryant's