

Designation	RA. 1900	Decl. 1900	Mag.	Description
-7°4689	18 ^h 39 ^m 1	- 7° 12'	8.2	H β bright
-7°5141	19 55.7	- 7 39	9.8	Type IV
—	20 8.5	-44 43	—	Peculiar. Variable
Cord. GC. 29191	21 11.5	-39 15	7.3	Peculiar
Cord. GC. 31272	22 55.0	-23 4	8	Peculiar

The position of the first star is RA. = 0^h24^m23^s.9 Decl. = -47°6'3" (1875). Dr. De Lisle Stewart, at Arequipa, called attention to the spectrum of this star on a plate taken with the Bruce 24 inch telescope, adding the remark »bright lines (hydrogen?)«. On examination by Mrs. Fleming it proved to be variable having a spectrum of the type characteristic of such stars.

The position of the second object which is in the larger Magellanic Cloud is RA. = 5^h35^m20^s.0, Decl. = -69°52'51" (1875).

The bright band in ζ Puppis having wave length 4688 is dark in the spectrum of 30 Canis majoris. This spectrum, like that of the adjacent star, 29 Canis majoris, was found by the writer to contain the additional hydrogen lines having wave lengths 3925, 4027, 4202, and 4544.

The bright line in the spectrum of σ Puppis was found independently by Dr. Stewart.

The position of the ninth star is RA. = 13^h29^m32^s.3, Decl. = -55°50'10" (1875). The spectrum of this star

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may resemble that of ζ Puppis, since it contains two bright lines which may coincide with the lines having wave lengths 4633 and 4688 in the spectrum of that star. ζ Puppis, 29 Canis majoris, 30 Canis majoris, and this star may form a subdivision of Type V. All of these stars are near the central line of the Milky Way.

The bright line in the spectrum of Cord. GC. 19273 was found by Miss A. J. Cannon.

The position of the eleventh star is RA. = 16^h19^m15^s.9, Decl. = -43°22'49" (1875).

The thirteenth object, -36°11341, is NGC. 6302.

The position of the fourteenth star is RA. = 17^h9^m46^s.1, Decl. = -45°49'44" (1875).

The position of the seventeenth star is RA. = 20^h6^m45^s.2, Decl. = -44°46'59" (1875). Dr. Stewart noted »bright line star (faint)« on a Bruce photograph. An examination by Mrs. Fleming shows that the star is variable and that the spectrum is peculiar.

Edward C. Pickering.

Distribution of Stars in Clusters.

Professor Bailey has recently made a count of the stars in the vicinity of several clusters. An enlargement was made of a photograph of the Pleiades taken with the Bruce telescope and having an exposure of six hours. A region 2° square, with η Tauri (Alcyone) in the centre was divided into 144 smaller squares, each 10' on a side. The stars in each of these squares were then counted. The total number thus found was 3972, an average of 28 in each square. The 42 squares including the brighter stars in the group contain 1012 stars, an average of 24 per square. It therefore appears that the total number of stars in the region of the Pleiades is actually less than that in adjacent portions of the sky, of equal area, and it is much less than the corresponding number in many parts of the Milky Way. The Pleiades must, therefore, be regarded, first as a group consisting of comparatively bright stars,

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secondly, if we omit the bright stars, the number of faint stars will be much less than in the adjacent portions of the sky. This absorption of the faint stars is probably due to the nebulosity surrounding this group. A similar absence of faint stars is noticeable near other diffused nebulae, for example, that surrounding NGC. 6726-7. This condition would be explained if we assume that stars have not yet been formed by the condensation of this portion of the nebula or that the latter is less distant and slightly opaque.

A similar count was made of ten regions 6' square, in the vicinity of η Carinae. The plate used was taken with the 24 inch Bruce telescope, and had an exposure of four hours. From this count it appears that in a region 5° square, and represented in Plate 2, described in A.N. 3406, the total number of stars was about 250000, while the number contained on the entire plate exceeded 400000.

Edward C. Pickering.

Definitive Bahnbestimmung des Cometen 1895 III.

Am 21. November 1895 wurde von Herrn Brooks in Geneva N. Y. ein teleskopischer Comet entdeckt. Derselbe erschien wie ein schwacher runder Nebel von ungefähr 2'-3' Durchmesser ohne jede Verdichtung und wurde dann während eines Monats an verschiedenen Sternwarten beob-

achtet und zwar nach dem Periheldurchgang, der am 21. October 1895 schon stattgefunden hatte.

Es fanden sich im Ganzen 78 Beobachtungen, welche in den Astr. Nachr., Comptes Rendus, Bulletin Astr., Monthly Notices und in Astr. Journal veröffentlicht sind.