sultaten, wenn überhaupt, doch erst dann die Rede sein könnte, wenn eine ähnliche oder gründlichere Durchsicht des südlichen Himmels in spectroscopischer Rücksicht zu Stande gebracht wäre. Und selbst dann möchte, nach der Natur der Sache, nicht viel zu erwarten sein.

4) Es wäre noch Einiges über die Verschiedenheit zu bemerken, welche mir in gewissen Fällen aufgefallen ist zwischen dem, was ich am Himmel fand, und den Angaben in den Büchern, die Fixsternspectra betreffend. Da jedoch Dr. *W. Huggins* in seinen Noten zur Lon-

doner Ausgabe von *Schellen's* Spectrum Analysis (1872) in den wesentlichsten Punkten schon widersprochen hat, will ich jetzt nur dies sagen. Generelle Unterschiede in den Spectren, nach gewissen Richtungen in den Raum hinaus, existiren gar nicht, oder sind gegenwärtig keineswegs nachweisbar. In dem Satze z. B., dass Roth und Gelb in den Spectren der kleinen Sterne in der Oriongegend total fehle, ist zuverlässig kein Wort richtig.

Kopenhagen, Juni 1875.

d' Arrest.

Observations of the Moon and Moon Culminating Stars made at the Melbourne Observatory.

Date. 1874	Name of Object.	Weight.	App. RA. at Transit. h m s	Date. 1874	Name of Object.	Weight.	App. RA. at Transit. h m s
October 1	B. A. C. 1746	4 d	5 28 3.76	October 30	☽ 2nd Limb	3 u	7 38 50.47
	136 Tauri	5	5 45 27.01	31	☽ 2nd Limb.	4 u	8 37 53.37
	☽ 2nd Limb	5	5 56 37.43	Novbr. 2	α Leonis	5	10 1 41.45
6	☽ 2nd Limb	5	10 36 36.87		γ^1 Leonis	4 u	10 13 3.30
13	α Librae	2 u d	14 43 55.32		☽ 2nd Limb	5	10 21 31.53
	☾ 1st Limb	3 f	15 2 11.71	12	☾ 1st Limb	2 f	17 23 11.96
	β^1 Scorpii	2 u d	15 58 7.65		λ Sagittarii	2 d	18 20 13.06
16	☉ Ophiuchi	2 c f	17 14 17.68	14	☾ 1st Limb	2 c f	19 19 6.54
	☾ 1st Limb	3 c f	17 41 6.54		ω Sagittarii	4 f	19 48 9.05
	σ Sagittarii	4 u	18 47 29.14	19	24 Piscium	4	23 46 30.06
17	☾ 1st Limb	5	18 39 18.86		☾ 1st Limb	5	23 53 1.62
	σ Sagittarii	4 d	18 47 28.96		12 Ceti	3 d	0 23 39.57
	h^2 Sagittarii	5	19 29 4.48		B. A. C. 221	1 c f	0 41 49.65
	ω Sagittarii	5	19 48 9.49		73 Piscium	1 c f	0 58 24.15
	A Sagittarii	5	19 51 18.78	23	τ^2 Arietis	4 d	3 15 34.03
21	☉ Aquarii	3 c f	22 10 13.80		☾ 1st Limb.	5	3 43 15.55
	56 Aquarii	4 c f	22 23 34.97	24	B. A. C. 1518	3 d	4 48 39.18
	☾ 1st Limb	4 c	22 30 2.48		k Tauri	3 d	4 50 30.85
	τ^2 Aquarii	4 c d	22 42 58.07		☽ 2nd Limb	4 d	4 52 45.21
	ψ^1 Aquarii	2 c f	23 9 20.44		β Tauri	4 d	5 18 23.83
22	ψ^1 Aquarii	2 c f	23 9 20.35		B. A. C. 1746	3 d	5 28 5.30
	☾ 1st Limb	4 d	23 24 40.80		136 Tauri	3 d	5 45 28.68
	29 Piscium	1 c f	23 55 25.11	25	B. A. C. 1746	3 d	5 28 5.31
23	29 Piscium	2 d	23 55 25.01		136 Tauri	3 d	5 45 28.71
	☾ 1st Limb	3 c	0 19 12.80		☽ 2nd Limb	4 d	6 1 32.74
	ϵ Piscium	3 c d	0 56 27.43		53 Geminorum	3 d	7 8 8.79
	ζ^1 Piscium	2 c d	1 7 12.15		1 Geminorum	3 d	7 17 57.92
28	B. A. C. 1648	2 c f	5 13 8.32	Decbr. 4	☽ 2nd Limb	5	13 46 38.10
	β Tauri	4 u	5 18 23.04		α Librae	2 d f	14 43 55.92
	☽ 2nd Limb	5	5 28 33.25	5	☽ 2nd Limb	1 c f	14 32 12.48
	B. A. C. 2097	3 u	6 22 28.35	13	☾ 1st Limb	5	20 56 13.06
	49 Aurigae	4 u	6 27 19.20		☉ Capricorni	5	20 58 53.62
30	59 Geminorum	3 u d	7 16 45.97	14	ϵ Capricorni	1 f	21 30 3.45

Date.	Name of Object.	Weight.	App. RA. at Transit.		
1874			h	m	s
Decbr. 14	☾ 1st Limb	3 u d	21	50	42.25
15	♈ Aquarii	3 f	22	24	0.88
	☾ 1st Limb	5	22	43	3.81
16	☾ 1st Limb	5	23	34	6.61
	12 Ceti	4 c	0	23	39.28
17	☾ 1st Limb	5	0	25	2.68
18	☾ 1st Limb	3 f	1	17	17.47
	B. A. C. 609	1 c f	1	52	44.58
19	☾ 1st Limb.	5	2	12	19.52
	♈ Arietis	3 d	2	44	36.01
	♈ Arietis	4 d	2	52	4.40
	♈ Arietis	5	3	4	29.40
20	♈ Arietis	3 u d	2	52	4.26
	♈ Arietis	4 u d	3	4	29.32
	☾ 1st Limb.	4 u	3	11	24.76
	♈ Tauri	3 d	3	40	3.80
	33 Tauri	4 u	3	49	39.86
	χ ¹ Tauri	3 u d	4	14	59.25
21	33 Tauri	5	3	49	39.77
	☾ 1st Limb	3 c	4	15	5.33
	β Tauri	3 d	5	18	24.30
	B. A. C. 1746	5	5	28	5.69
23	B. A. C. 2097	5	6	22	29.72
	49 Aurigae	5	6	27	20.60
	♃ 2nd Limb	5	6	33	43.61
	♊ Geminorum	4 d	7	28	14.00
	♊ Geminorum	5	7	36	30.18
24	♊ Geminorum	2 c	7	28	14.08
	♊ Geminorum	1 c f	7	36	30.34
	♃ 2nd Limb	3 c	7	40	15.74
	6 Cancri	2 c	7	55	51.27
	υ ² Cancri	4 d	8	21	12.79
	32 Cancri	1 c f	8	25	37.58
26	λ Leonis	3 d	9	24	35.91
	B. A. C. 3292	3 d	9	31	54.36
	♃ 2nd Limb	4 d	9	38	34.35
	γ ¹ Leonis	3 d	10	13	5.24
	42 Leonis	3 d	10	15	7.34
	B. A. C. 3579	4 d	10	22	7.86
27	42 Leonis	6	10	15	7.24
	B. A. C. 3579	5	10	22	7.93
	ρ Leonis	5	10	26	14.06
	♃ 2nd Limb	6	10	29	53.65
	1 Leonis	5	10	42	41.38
	χ Leonis	5	10	58	34.17
1875	♈ Leonis	5	11	14	41.41
Januar 1	♃ 2nd Limb	3 c f	14	14	11.88
12	☾ 1st Limb	2 c f	23	18	36.98

Date.	Name of Object.	Weight.	App. AR. at Transit.		
1875			h	m	s
Januar 13	☾ 1st Limb	3 u v	0	9	15.39
14	♈ Piscium	1 f	0	56	26.95
	☾ 1st Limb	3 u	1	0	14.83
15	☾ 1st Limb	4 b	1	53	1.29
16	☾ 1st Limb	8	2	48	54.93
17	17 Tauri	4 d	3	37	27.70
	η Tauri	4 d	3	40	3.74
	27 Tauri	4 d	3	41	44.36
	☾ 1st Limb	6	3	48	52.36
	τ Tauri	4 d	4	34	45.34
	k Tauri	3 d	4	50	31.35
18	τ Tauri	5	4	34	45.28
	k Tauri	5	4	50	31.31
	☾ 1st Limb	5	4	52	53.42
	β Tauri	5	5	18	24.53
	136 Tauri	5	5	45	29.37
	κ Aurigae	5	6	7	26.05
19	β Tauri	4 d	5	18	24.38
	136 Tauri	4 d	5	45	29.28
	☾ 1st Limb	4 u	5	59	33.51
	κ Aurigae	3 d	6	7	25.99
	28 Geminorum	2 f	6	36	51.57
	1 Geminorum	3 u d	7	17	59.11
20	28 Geminorum	5	6	36	51.40
	☾ 1st Limb	8	7	6	12.55
	z Geminorum	5	7	17	59.10
	β Geminorum	6	7	37	41.40
	ψ ² Cancri	5	8	2	56.76
	υ ³ Cancri	5	8	24	8.36
21	ψ ² Cancri	4 d	8	2	56.81
	☾ 1st Limb	5	8	10	0.49
	υ ³ Cancri	4 d	8	24	8.32
	λ Leonis	4 u d	9	24	36.68
26	η Virginis	4 d	12	13	31.25
	♃ 2nd Limb	4 u	12	26	31.51
	γ Virginis (Mean)	3 d	12	35	20.07
	k Virginis	4 d	12	53	13.53
	⊙ Virginis	3 d	13	3	28.95
27	k Virginis	5	12	53	13.54
	⊙ Virginis	5	13	3	29.05
	♃ 2nd Limb	5	13	10	31.45
	α Virginis	4 d	13	18	36.66
	86 Virginis	3 f	13	39	16.76
29	♃ 2nd Limb	2 c f	14	41	13.51
	α Librae	2 c d	14	43	57.65
	β Librae	3 d	15	10	16.53
30	♃ 2nd Limb	6	15	29	59.07
	α Scorpii	3 d	16	21	43.78

Date.	Name of Object.	Weight.	App. Alt. at Transit.
1875			h m s
Febr. 1	♃ 2nd Limb	5	17 17 27.11

The weights are estimated at the time of observation, they are reckoned from 0 to 10; the letters attached

to the weights signify as follows. b. boiling; c. cloudy; d. diffused; f. faint; u. unsteady.

Adopted Latitude $37^{\circ}49'53''3$ S.

Adopted Longitude $9^{\text{h}}39^{\text{m}}54^{\text{sec}}.8$ E. of Greenwich.
12. Februar 1875.

Robth. J. Ellery, Government Astronomer.

Note on the double star, H 546.

This pair is described by Sir *John Herschel* as follows:

RA. = $14^{\text{h}}12^{\text{m}} \pm$ } P = $40^{\circ} \pm 5.6$ mag. Third class.
Decl. = $-11^{\circ}28' \pm$ } Red: blue very pretty.

The distance of the pair is not given, nor the magnitude of the small star. Not being able to find any bright star catalogued in this place, I examined the vicinity a few night since with a 6-in. refractor, and after some search succeeded in identifying the pair. *Herschel's* place is largely in error both in RA. and Decl., the later amounting to about $1^{\circ}7'$. This star is B. A. C. 4777, and its place (for 1830 as above) is, —

RA. = $14^{\text{h}}16^{\text{m}}5^{\text{s}}.6$,

Decl. = $-12^{\circ}34'44''$.

In that Catalogue it is entered as a 7th magnitude star and on this occasion appeared to be about that, or perhaps a little brighter. The companion is of *Herschel's* 11th magnitude, and about $30''$, or $40''$ from the primary in the direction of 40° . The colors are not very striking in a small aperture. It is not found in any other catalogue of double stars. There is no doubt of the identity of this with *Herschel's* pair.

Chicago, May 10, 1875.

S. W. Burnham.

Todes-Anzeige.

Am 14. Juni, gegen 6 Uhr Morgens, entschlief, nach nur einiger Tage Leiden, der Direktor der hiesigen Sternwarte,

Professor Dr. Heinrich Louis d'Arrest,

wovon der Unterzeichnete, mit Schmerz über das frühe Hinscheiden seines Freundes, den Lesern dieser Zeitschrift Mittheilung macht.

Sternwarte Kopenhagen, 18. Juni 1875.

H. C. F. C. Schjellerup.

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Kiel. 1875, Juni 25.

Druck von Fiencke & Schachel in Kiel.