

III. *A Catalogue of new Nebulæ discovered at Malta with the Four-foot Equatoreal in 1863 to 1865.* By WILLIAM LASSELL, F.R.S.

Read November 9, 1866.



DURING our sojourn in Malta there were many opportunities of clear sky when the objects I especially wished to observe were not to be seen at all, or not favourably situated; and, that no time might be lost, the telescope was then employed in a search after new Nebulæ, from which has resulted the following very fragmentary list; which has been entirely the work of Mr. MARTH on those occasions when the telescope was not otherwise engaged.

From the extremely small portions of the heavens which have been thus surveyed—and that in a very cursory manner—it may be inferred that a large reward would still attend upon an industrious search for Nebulæ, with a sufficiently powerful telescope. Yet an astronomer entering upon such a search could not hope for a series of splendid discoveries like those which resulted from the labours of Sir WILLIAM and Sir JOHN HERSCHEL; and I cannot but admire the patient and zealous industry of those distinguished observers, which allowed so few objects of interest to escape them. It will accordingly be remarked, that the majority of the objects contained in the following Catalogue are faint, or very faint, and could not be expected to be visible in the twenty-foot telescope.

The notation and brief descriptions are according to the terms of Sir JOHN HERSCHEL'S "General Catalogue," and though Mr. MARTH suspects

there may be some small errors in the places given, he trusts they will be neither numerous nor large, and that the recorded places will be generally more than sufficient for identification. Some 200 to 250 more Nebulae were discovered, but are not included in this list, from the want of any Catalogue or Map containing the small stars with which they were compared. The syllable "ver." affixed to many of the Nebulae indicates that they have been verified by subsequent examination.

The Nebulae of the Catalogue are not all new, though new to us at the time of discovery; for some of them, as it now appears, had been seen previously by D'ABREST or SCHMIDT, and are mentioned in the *Astron. Nachrichten*. Also, many *not* included in this Catalogue were thought to be new when detected; but on the "General Catalogue" reaching us in July, 1864, were found to be inserted there, and therefore excluded from this.

discovered at Malta in 1863 to 1865.

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A List of 600 Nebulæ found at Malta, not contained in Sir JOHN HERSCHEL'S General Catalogue of Nebulæ and Clusters of Stars. (Phil. Trans. 1864.)

No.	R.A. 1860.	P.D.	Summary Description.	Date when First Found.
1	^h 0 ^m 0 ^s 6	82° 28'	F, v S, R, alm. stellar	1864·91 ver.
2	0 16	82 23	e F	4·91
3	1 50	69 10	v F, v S, R, b M	4·83
4	3 38	68 49	neb. * 13m.	4·83
5	3 45	87 6	e F, v S or neb. *	4·69
6	5 33	68 46	p F, S, l E, g b M	4·83
7	5 42	68 41	F v S, stell.	4·83
8	20 0	89 27	F v S	3·70 ver.
9	23 47	85 37	F, e S, s b M	4·66
10	23 54	85 39	e F, S	4·66
11	0 24 6	85 35	v F, v S irr. R	4·66
12	29 23	88 2	e F	4·59
13	29 35	88 52	F, S, R	3·84
14	32 9	89 53	e F, (near h. 41)	3·79 ver.
15	33 8	88 1	p F	3·76 ver.
16	36 14	87 47	v F, p L	4·59
17	46 27	99 32	v F, v S. l E, alm. stell.	4·74
18	47 11	98 0	v F S	4·74
19	47 56	98 7	e F	4·74
20	47 58	98 6	p F	4·74

MR. LASSELL, *Catalogue of New Nebulae*

No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
21	^{h m s} ○ 50 34	^{o /} 95 51	e F, v S	1864·74
22	50 41	95 53	v F, v S	4·74
23	50 50	95 54	F, S, E	4·74
24	50 56	95 50	F, E	4·74
25	53 30	97 37	v, F, S, E	4·74
26	53 46	97 32	v F, v S	4·74
27	54 17	97 38	v F, v S, g b M	4·74
28	54 31	97 30	e F, v S	4·74
29	54 47	97 34	v F, v S	4·74
30	54 54	97 34	e F	4·74
31	○ 56 1	97 5	e F, v S	4·74
32	56 5	97 44	v F, S irr. R	4·74
33	57 8	91 31	e F, v S	4·67
34	○ 57 31	91 33	v F, v S	4·67
35	I ○ 49	86 13	e F, S, l E	4·82
36	6 48	88 38	e F, S, E	4·81
37	7 41	88 49	v F, v S	4·81
38	7 48	86 26	F, v S, stell.	4·81 ver.
39	8 45	85 33	F, v S, alm. stell.	4·82
40	10 55	86 30	e F, v S stell.	4·81
41	I 12 9	75 52	e F, S, R	4·84
42	12 35	75 56	neb. * 12m.	4·84
43	12 39	75 52	e F, S	4·84
44	12 54	74 42	e F, v S, stell.	4·84
45	13 59	86 52	e F, S, R	4·82
46	15 37	81 16	v F, v S, stell.	4·75
47	16 3	81 18	v F, S, E	4·75 ver.
48	16 57	81 25	F, v S, R	4·96
49	21 44	79 35	e F, v S, R	4·75
50	29 29	84 53	v F, S, g b M	4·82

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No.	R.A. 1860.	P.D.	Summary Description.	Date when First Found.
51	^h 1 ^m 32 ^s 51	^o 84 ['] 59	F, p L, m E	1864·82
52	1 50 57	65 47	v F, v S	4·77
53	2 1 11	84 22	F, S, m E	3·88
54	2 16	84 34	v F, p S	3·88
55	2 52	82 49	e F, v S	4·67
56	2 56	84 37	F, S	3·88
57	15 30	64 8	v F, v S, stell.	4·68
58	15 33	64 5	e F, v S	4·68
59	17 41	63 26	e F, v S, stell.	4·68
60	17 43	63 25	e F	4·68
61	2 18 11	63 26	e F	4·68
62	19 36	63 25	e F, v S, stell.	4·68
63	29 32	88 34	e F, v S	5·04
64	29 50	83 18	F, S	3·86 ver.
65	29 52	83 17	v F	3·86 ver.
66	30 38	88 29	e F, stell.	5·04
67	30 41	88 32	v F, e S, stell.	5·04
68	31 5	88 30	F, S, R, p s b M	5·04
69	31 30	88 23	e F, v S	5·04
70	31 34	88 24	e F, S	5·04
71	2 31 57	84 3	p F, S, R, p s b M	4·98
72	32 0	79 46	e F	4·75
73	32 2	79 49	F, S, m E	4·75
74	41 49	82 29	F, v S, R	4·67
75	42 0	77 20	v F	3·92
76	42 4	77 21	F, v S, stell.	3·92
77	42 21	77 22	F, p S	3·92
78	42 29	77 17	v F	3·92
79	42 46	77 20	v F	3·92
80	2 42 56	77 15	v F	3·92

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No.	R.A.		P.D.		Summary Description.	Date when First Found.	
	1860.						
	h	m	s	°	'		
81	2	43	4	77	25	close to a small *	1863.92
82		45	12	77	20	v F	3.92
83		47	59	90	6	v F, S	4.76
84		48	1	90	6	p F, S, R } D. neb.	4.76
85		52	57	78	43	e F, S	4.75
86	2	53	9	78	47	e F	4.75
87	3	1	12	88	26	F, p L, R	4.69
88		3	52	79	44	e F, v S, R	4.76
89		7	7	87	51	F, v S, stell.	4.69
90		31	20	74	37	neb. * 13m.	4.83
91	3	37	23	87	37	e F, p L, irr. R	4.69 ver.
92		42	54	83	28	v F, S, v l E	4.70
93	3	46	58	79	51	v F, S, R	4.76
94	4	9	25	63	35	v F, v S, g b M	4.69
95		9	48	89	32	v F, S	3.87
96		9	51	85	34	v F, S, E	3.88
97	4	23	56	89	44	v F	3.85
98	5	14	13	83	28	e F, S, R	3.88
99	6	23	11	84	54	sm. * in nebulosity	4.16
100	7	0	54	69	11	v F, v S	4.86
101	7	1	1	69	10	p F, S, l E, v l b M	4.86
102		14	1	67	39	v F, p S, R, p s b M	4.86
103		16	33	65	56	e F, v S, E	4.86
104		18	10	66	39	e F, v S	4.86
105		23	38	63	49	v F, S, irr. R.	4.85
106		28	5	78	6	e F, S	5.07
107		49	17	82	9	neb. * 12m.	4.23
108		49	25	64	26	v F, S, p s b M	4.85
109		49	49	64	27	v F, S, g b M	4.85
110	7	50	58	90	15	F, S, l E	4.10

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No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
	h m s	° ' "		
111	7 51 23	82 8	e F, p S, irr. R	1864.23
112	52 20	67 14	e F, S, g l b M	5.13
113	52 27	84 1	v F, S, R	4.23
114	58 11	71 54	v F, v S, E, p s b M	5.07
115	7 59 26	81 36	v F, S, m E	4.23
116	8 9 22	68 38	v F, S, g l b M	5.13
117	10 49	68 36	v F, v S	5.13
118	14 32	63 50	e F, e S, stell.	5.24 ver.
119	18 49	72 10	e F, v S	5.07
120	18 52	63 40	e F	5.24
121	8 19 37	72 15	v F, S, l E	5.07
122	21 49	68 2	e F, v S	4.00
123	21 54	68 2	F, S	4.00
124	27 9	64 30	v F, S, p m E, g b M	5.24
125	29 9	64 35	F, S, E, found by L.	3.34 ver.
126	29 18	64 32	v F, S, R	5.24
127	29 52	64 37	F, S, R	5.24 ver.
128	30 6	69 48	e F	4.83
129	30 19	69 48	e F, v S	4.83
130	33 17	69 57	e e F, v S	4.83
131	8 34 8	69 59	e F neb. *	4.83
132	34 42	69 52	neb. *	4.83
133	36 11	77 45	e F, S, E	4.19
134	49 31	72 11	v F, S, R	4.24
135	50 2	86 34	p B, irr. R, m b M	4.17
136	50 19	86 23	F, S, R, m b M	4.17
137	51 30	78 18	F, S, R, b M	4.19
138	53 2	86 16	F, S, R	4.17
139	53 26	78 22	F, p L	4.19
140	8 54 3	78 22	v F, p L, l E	4.19

No.	R.A. 1860.	P.D.	Summary Description.	Date when First Found.
141	^h 8 ^m 54 ^s 3	^o 85 ['] 44	v F, v S, R	1864·17
142	54 26	72 35	v F, L, R	4·24 ver.
143	54 35	81 8	F, v S, R	4·17 ver.
144	55 11	72 33	e F, v S, R	4·24 ver.
145	56 23	71 11	v F	4·24 ver.
146	56 45	71 12	e F, v S, stell.	4·24 ver.
147	57 23	71 0	v F, v S, stell.	5·24
148	57 40	71 11	e F, e S, stell.	4·24 ver.
149	57 48	71 7	v F, p L, v m E, g b M	4·24 ver.
150	8 59 37	71 1	v F, S	5·24
151	9 2 18	82 15	v F, S, l E	4·18 ver.
152	3 16	82 13	F, S	4·18 ver.
153	6 17	77 17	v F, v S, m b M	4·26 ver.
154	7 5	69 44	v F, S, R, l b M	5·13
155	7 8	71 50	F, R	3·97
156	8 10	71 47	F, R	3·97
157	8 46	69 30	e F, p L	5·13
158	9 46	69 29	e F	5·13
159	9 50	69 29	F	5·13
160	10 23	73 13	p B, v S, R	3·97 ver.
161	9 15 39	86 15	v F, S m b M	4·17
162	16 20	87 15	p B, R	4·24
163	16 49	83 28	v F, p L, l E	4·18
164	18 31	87 10	v F, S, v l E	4·24
165	18 33	87 18	v F, S, v l E	4·24
166	19 8	81 26	F, p L, E	4·18 ver.
167	22 29	87 12	e F, S	4·10 ver.
168	22 37	87 20	v F, v S, l E	4·10 ver.
169	26 29	79 54	v F, p L, irr. R.	4·19
170	9 27 21	91 53	p F, S, m b M	4·10 ver.

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No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
	^h ^m ^s	^o [']		
171	9 28 17	72 35	v F	1864.25
172	29 22	72 23	v F, S, R, b M	4.25 ver.
173	30 10	72 20	F, v S, l E	4.25 ver.
174	30 13	72 18	e F	5.25
175	30 26	86 38	v F, irr. R	4.17 ver.
176	30 27	86 38	F, S, like neb. *	4.17 ver.
177	30 39	72 19	e F, v S, l E	4.25 ver.
178	30 47	72 20	F, S, irr. R, b M	4.25 ver.
179	31 16	72 20	v F, S, E	4.25 ver.
180	32 9	72 35	v F, query: double?	4.25
181	9 32 29	89 37	p F, S, E	4.10
182	33 33	84 12	F, v S, v l E, p s b M	4.94
183	42 11	88 11	F, v S, alm. stell.	4.31
184	45 12	87 12	v F, S, irr. R.	5.06
185	46 7	88 39	p B, S, v l E, g b M	4.33 ver.
186	47 17	72 53	e F	4.32
187	49 22	87 54	v F, v S, alm. stell.	4.33
188	52 42	92 13	e F, S, E	5.06
189	53 4	92 19	e F, S, irr. R	5.06
190	53 23	92 18	v F, v S	5.06
191	9 53 41	92 23	e F, S	5.06
192	53 47	92 18	e F, v S	5.06
193	54 29	92 20	e F	5.06
194	9 59 14	74 58	v F	3.95
195	10 9 57	82 15	p F, v S, g b M	5.23
196	32 12	84 10	v F, e S, stell.	5.22
197	34 30	84 17	e F, v S, alm. stell.	5.22
198	35 1	89 38	e F, stell.	5.08
199	35 8	89 39	F, S, R	5.08
200	10 35 15	84 14	v F, v S	5.22

Mr. LASSELL, *New Nebulae*

No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
201	^h 10 ^m 36 ^s 31	^o 82 ['] 30	e F, v S	1865'22
202	36 54	75 10	F, p S, m b M	4'26
203	37 32	82 41	v F, S, R	5'22
204	41 32	75 3	* * in F nebulosity	4'25 ver.
205	43 2	73 2	F, v S	4'25
206	43 18	73 1	{ F, e S, alm. stell., close to sm. * }	4'25
207	43 41	80 48	e F, v S, alm. stell.	5'23
208	43 54	75 20	{ F, v S, R, alm. stell., close to sm. * }	4'25
209	44 10	79 59	v F, S, l E, g l b M	5'23
210	45 6	78 43	v F, e S, alm. stell.	5'23
211	10 45 6	80 43	e e F, v S, alm. stell.	5'23
212	45 39	79 4	e F, v S, p m E	5'23
213	50 52	79 55	e F, v S, alm. stell.	5'23
214	50 57	79 58	e e F, e S, stell.	5'23
215	10 59 40	82 5	{ e F, perh. z' l, v m E ray } pos. ab. 50°	5'23
216	11 7 7	71 58	e F, S, p m E, pos. 60°	5'17
217	7 50	71 58	F, v S, stell.	5'17
218	8 19	84 8	v F, p S, alm. stell.	5'22
219	8 27	71 49	e e F, v S, alm. stell.	5'17
220	13 56	86 2	F, v S, alm. stell.	5'22
221	11 14 11	86 13	e F, v S	5'22
222	14 21	86 25	v F, v S	5'22
223	14 26	86 20	e F neb. *	5'22
224	37 53	80 46	{ v F, perh. z' l, m E, alm. } ray, pos. 70°, g l b M }	5'23
225	51 17	79 12	v F, S, l E	5'23
226	52 50	81 2	{ v F, v S, l E, with stell. } nucleus }	5'23
227	55 10	69 5	v F, v S	5'21
228	56 0	69 30	F, v S, v l E, alm. stell.	5'21
229	56 36	68 57	e F, v S	5'21
230	11 56 48	68 55	e F	5'21

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No.	R.A. 1860.	P.D.	Summary Description.	Date when First Found.
231	^h 11 ^m 57 ^s 35	^o 78 ['] 38	F, v S, g b M	1865.23
232	57 59	78 34	v F, v S, 1 E, 1 b M	5.23
233	11 58 1	78 37	e F, v S	5.23
234	12 10 50	83 38	F	4.40
235	11 19	83 39	F, E	4.40
236	12 34	83 40	p F	4.40
237	13 16	83 37	p F	4.40
238	13 40	83 36	p F	4.40
239	18 32	88 40	v F, v S, alm. stell.	5.22
240	20 24	83 0	z * * in e F nebulosity	5.22
241	12 23 57	88 37	v F, v S, irr. R	5.22
242	27 31	85 55	e F, v S, nearly R	5.22
243	47 40	81 11	e F, v S, 1 E, v 1 b M	5.23
244	48 1	81 11	{ e F, e S, alm. stell. }	5.23
245	12 48 31	81 0	{ (close to <i>h.</i> 1474) }	5.23
246	13 2 5	86 55	e F, e S, R, 1 b M	5.23
247	2 24	88 23	v F, v S	4.33
248	5 0	86 4	p B, S, R, b M	4.24
249	8 32	86 24	v F, v S	4.33
250	9 57	81 25	F, v S, stell.	4.33
251	13 11 7	99 30	e F, S, 1 E	5.23
252	11 7	99 24	v F, v S	4.41
253	11 36	81 19	v F, v S	4.41
254	12 6	81 25	e F, e S, stell.	5.23
255	13 59	80 17	v F, e S, stell.	5.23
256	14 12	88 56	v F, v S, 1 b M	5.22
257	19 30	86 58	F, S, 1 E	4.28
258	21 9	86 18	e F, S	4.33
259	23 56	91 1	e F, S, 1 E	4.33
260	13 24 5	90 54	v F	4.28
			v F	4.28

No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
	^h ^m ^s	^o [']		
261	13 24 9	90 59	v F	1864.28
262	24 45	90 59	v F	4.28
263	26 35	85 10	v F, S, 1 E	4.33
264	28 42	86 18	F, S, b M	4.33
265	28 49	97 46	F, v S, stell.	4.41
266	30 22	85 26	v F, v S	4.33
267	30 26	85 11	v F, v S	4.33
268	48 34	84 18	v F, v S, 1 E	4.35
269	50 5	84 3	v F, v S, stell.	4.35
270	51 18	82 49	F, v S, stell.	4.35
271	13 51 24	83 15	v F ray, z' 1	4.35
272	13 57 18	99 2	v F, v S, irr. R.	5.03 ver.
273	14 10 38	81 9	e F, S, irr. R	4.35
274	10 40	82 18	e e F, S, 1 E	4.35
275	10 41	81 53	e F, S, E	4.35
276	11 53	83 55	3 * * in nebulosity	4.35
277	12 12	82 19	v F, S	4.35
278	12 19	82 19	e F, S	4.35
279	13 16	82 17	e F, S, 1 E	4.35
280	13 46	82 27	v F, S, 1 E	4.35
281	14 14 0	83 8	F, v S or neb. *	4.35
282	28 34	89 23	v F, v S	4.28
283	35 35	89 45	v F, S, m E	4.28
284	36 49	87 48	F, S, b M	4.28
285	53 22	87 48	v F, S, irr. R	4.28
286	58 31	87 28	F, S, E	4.28
287	14 59 28	83 5	e F, S, irr. R	5.23
288	15 27 59	84 33	e F, v S, alm. stell.	5.23
289	28 15	84 27	e F, v S, stell.	5.23
290	15 29 23	83 52	v F, S neb. *	4.28

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No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
	^h ^m ^s	^o [']		
291	15 32 44	98 9	F, v S, irr. R	1864.40 ver.
292	35 59	81 18	e F, e S, R, v l b M	5.23
293	40 41	81 15	e F, e e S, stell.	5.23
294	46 27	77 35	v F, S	4.42
295	46 46	77 38	F, p L	4.42
296	46 48	77 31	F, v S, stell.	4.42
297	50 4	62 38	v F, S, E	4.49
298	55 24	77 1	v F, v S	4.42
299	57 9	91 44	v F neb. *	4.56
300	57 31	85 45	v F, v S, R, stell.	4.56
301	15 57 32	85 49	v F, S	4.56
302	15 59 5	69 4	F, ab 1'd, irr. R.?? III. 140	4.50
303	16 5 28	62 45	v F, S, E	4.48
304	5 29	62 42	F, s b M	4.48
305	6 58	60 15	F, S	4.50
306	7 0	60 10	F, v S, with stellar nucleus	4.48 ver.
307	9 1	63 6	v F, v S, R, b M	4.48 ver.
308	9 57	61 29	v F, S, R	4.48
309	14 15	52 35	v F, S, R	4.51 ver.
310	20 38	65 31	v F, S, with * *	4.44
311	16 32 13	53 37	v F, v S, stell.	4.52
312	32 18	53 42	e F, E, stell.	4.52
313	33 50	53 38	e F	4.52
314	34 22	65 58	e F, v S	4.43 ver.
315	34 34	65 57	e F, v S	4.43 ver.
316	40 8	80 41	F, S	3.44 ver.
317	42 18	63 33	v F, S	4.49
318	45 1	85 24	F, S, R	3.46 ver.
319	51 9	61 57	e F, v S, R	4.49
320	16 51 43	61 55	e F, v S	4.49

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K

No.	R.A.		P.D.	Summary Description.	Date when First Found.	
	1860.					
	^h	^m	^s	[°]	[']	
321	16	51	55	61	56	e F, v S 1864.49
322		52	25	61	55	F, S, R 4.49
323		53	11	61	54	v F, S, R 4.49
324		53	18	61	49	v F, R 4.49
325		53	26	61	52	v F 4.49
326		54	8	60	2	e F, v S 4.49
327		54	40	66	42	e F 4.44
328		54	48	66	44	v F, S 4.43 ver.
329		55	10	83	7	p B, S, l E 4.35
330	16	55	21	59	58	v F, S, R 4.49
331	17	1	46	85	53	p B 3.46 ver.
332		6	8	66	27	v F, S, R, s b M 3.43 ver.
333		6	48	66	33	F, v S, R, b M 3.43 ver.
334		6	53	66	36	e F, S 3.43 ver.
335	20	39		78	20	F, S, E 3.52
336	21	43		63	22	v F, S, R 4.48 ver.
337	23	6		73	40	F, v S, R 4.37
338	24	20		73	35	v F, p L 4.37
339	25	38		82	46	p B, S, l E 3.44 ver.
340	32	41		71	1	F, S, R, g b M 4.42
341	17	36	0	66	15	p F, S, v l b M 4.50
342		37	57	64	25	v F, v S, stell. 4.50
343		38	22	64	34	F, S, stell. 4.50
344		38	27	71	47	v F, S, m E 4.42
345		39	8	53	9	v F, S, p m E, b M 4.52 ver.
346		40	50	69	10	p F, S, irr. R, g b M 4.42 ver.
347		41	10	54	22	e F, v S, irr. R 4.52 ver.
348		41	20	54	22	v F, S, R 4.52 ver.
349		41	57	69	5	e e F, S 4.50
350	17	43	10	69	8	e F, v S, stell. 4.50

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No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
351	^h 17 ^m 43 ^s 30	[°] 69 ['] 11	v F, p L, irr. R	1864.42 ver.
352	44 27	72 25	v F, v S, l E	4.42
353	44 28	72 25	v F, S, R	4.42
354	46 40	58 31	v F, v S, R	4.57
355	48 25	71 35	v F, v S, stell.	4.36 ver.
356	48 44	71 38	F, S, R	4.36 ver.
357	49 14	71 36	sm. D * in neb.	4.36 ver.
358	50 55	56 46	F, v m E, z' l, s b M	4.57
359	53 50	65 6	v F, v S, stell.	4.60
360	59 26	64 46	F, v S, E, m b M	4.60
361	17 59 40	71 28	v F, p L, irr. R (near III. 555)	4.57 ver.
362	18 2 52	72 37	e F, v S	4.37
363	4 44	75 56	v F, p L, R	4.42
364	4 51	68 48	e F, v S, stell.	4.57
365	5 30	75 3	p B, S, R	3.52 ver.
366	5 51	68 35	e F, v S	4.60
367	6 4	68 34	v F, S	4.60
368	6 35	68 36	F } D neb.	4.60
369	6 37	68 36	F }	4.60
370	7 38	68 57	e F, S, R	4.57
371	18 7 43	71 13	F, v S, R, stell.	4.58
372	8 2	68 59	e e F, v S, stell.	4.57
373	8 10	67 47	v F, v S	4.44 ver.
374	9 59	65 1	F, v S, stell.	4.43 ver.
375	12 7	76 49	v F, v S	3.52 ver.
376	13 7	66 25	F, S, E	4.43 ver.
377	14 1	66 22	p F, S, R, b M	4.43 ver.
378	16 22	74 23	v F, p L	3.53 ver.
379	16 34	66 35	v F, S, l E, b M	4.43 ver.
380	18 19 31	62 32	F, S, R, g b M	4.48 ver.

No.	R.A.		P.D.		Summary Description.	Date when First Found.
	1860.					
	h	m	s	°	'	
381	18	21	15	75	18	1863'52 ver.
382		28	5	67	14	4'43 ver.
383		28	46	67	13	4'43 ver.
384		31	19	67	56	4'50
385		31	47	63	42	4'43 ver.
386		32	51	64	45	4'43 ver.
387		33	50	67	48	4'50
388		35	47	53	51	4'59
389		36	40	53	13	4'59
390		39	33	64	38	4'50
391	18	44	57	63	20	4'49 ver.
392		45	39	56	12	4'59
393		52	14	127	5	* 7 m. in a F, p L, white envelope
394		52	16	127	4	* 7.5 m. in a F, p L, white envelope
395		52	26	127	9	* 13 m. with v F, neb. tail
396		55	20	61	25	e e F, S
397	18	58	27	96	14	p B, S
398	19	5	42	59	41	F, S, m E or ray
399		11	4	91	52	S, E, ill defined whitish disk
400		34	41	63	1	D* in v F, S neb.
401	19	36	32	67	15	F, S, R, b M
402		36	54	97	9	F, p L, R
403		49	23	61	5	v F, p L, R
404		53	28	88	39	F neb. within a group of small *
405	19	58	20	99	26	F, S, E
406	20	13	18	102	42	v F, S
407		13	24	102	48	F, S, irr. R
408		14	18	92	59	v F, S, R
409		14	22	83	59	e F
410	20	16	39	83	59	p F, p L, R

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No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
411	^h 20 ^m 16 ^s 46	[°] 115 ['] 15	e F, v S, l E (close to <i>h.</i> 2076)	1864.73
412	20 27	93 30	p B, S, R	3.56 ver.
413	20 38	82 22	v F, S, attached to a sm. *	3.62
414	22 36	64 45	F, S, E	3.68
415	22 36	92 39	v F, p L, R	3.56 ver.
416	25 52	80 35	e F, l E	3.62 ver.
417	26 4	80 34	p B, p L, m E	3.62 ver.
418	26 13	80 37	F, m E	3.62 ver.
419	31 30	83 30	p F, S, R	3.62
420	31 37	95 28	v F, v S, R, stell. or neb. *	4.53 ver.
421	20 37 1	87 18	F, S, v l E	3.60 ver.
422	37 12	87 55	e F, p L, R	3.60 ver.
423	37 41	87 55	v F, S, R	3.60 ver.
424	41 36	82 47	F, p L, E	3.62 ver.
425	42 28	84 32	v F, S, R	3.62 ver.
426	43 14	80 36	F, S, R	3.62 ver.
427	45 1	96 17	e F, irr. R	4.53 ver.
428	45 5	96 16	v F, S, irr. R	3.55 ver.
429	45 11	96 14	v F	3.55 ver.
430	49 7	80 3	e F, p L, R	3.62 ver.
431	20 53 16	118 34	e e F, v S	4.80
432	20 53 38	118 36	e e F, v S	4.80
433	21 1 14	74 13	v F, v S, R, stell.	3.71 ver.
434	1 48	72 5	v F, S, v l E	3.71 ver.
435	3 2	75 27	v F, S, R	3.71 ver.
436	3 4	75 25	v F, v S, R	3.71 ver.
437	7 23	76 57	v F, S, R	3.63 ver.
438	14 46	67 31	p B, S, v l E	3.67 ver.
439	15 37	71 56	p F, S, R	3.71 ver.
440	21 19 33	97 38	e F, irr. R	4.59

No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
441	^h 21 ^m 19 ^s 47	^o 78 ['] 26	e F, close to a sm. *	1863·85 ver.
442	20 52	92 15	v F, S, R, stell.	3·78 ver.
443	21 52	102 6	v F, S, irr. R	4·65
444	22 41	83 49	v F, S, E	3·79 ver.
445	22 55	88 12	F	3·61 ver.
446	23 48	63 54	v F, S, v l E	3·68 ver.
447	25 28	84 2	e F, S, E	4·59
448	32 41	81 39	F, v S, R, stell.	4·59
449	32 43	84 20	F, p L, R	3·79
450	33 31	97 24	v F, S, R, stell.	4·59
451	21 35 40	78 1	v F, S, stell.	4·59
452	36 29	61 41	v F, p L, m E	3·69 ver.
453	37 12	97 10	v F, S, v l E	4·59 ver.
454	40 1	103 53	v F, S, v l E, v g b M	4·60
455	42 14	78 9	v F, v S, stell.	4·59
456	44 42	87 37	F, R	3·61 ver.
457	44 53	87 35	v F	3·61 ver.
458	54 32	92 38	e F, v S, stell.	4·58
459	54 37	92 52	e F, v S, stell.	4·58
460	56 7	90 6	F, S, l E	3·78 ver.
461	21 58 3	91 20	e F, v S, stell.	4·58
462	58 56	73 54	F, S, l E, b M	4·60
463	59 0	73 55	v F, S	4·60
464	21 59 58	98 47	e F, S, stell.	4·59
465	22 1 23	90 11	v F, S, E	4·61
466	3 45	88 35	v F, S	4·61
467	5 7	64 49	F, S, R	3·68 ver.
468	7 56	76 52	v F, S, stell.	4·65
469	7 58	76 52	v F, S, stell.	4·65
470	22 8 46	95 44	e F, v S	4·75

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No.	R.A. 1860.	P.D.	Summary Description.	Date when First Found.
471	^h 22 ^m 13 ^s 1	^o 61 ['] 19	v F, p E	1863·69 ver.
472	14 55	112 36	{ 3 ** involved in F } nebulosity	4·74 ver.
473	14 56	94 44	F, v S, l E	4·75
474	15 33	54 21	F, S, R	3·69 ver.
475	16 2	54 19	v F, p S, m E	3·71 ver.
476	16 18	94 41	F, v S, R, alm. stell.	4·75
477	17 28	58 16	v F, S, E	3·69 ver.
478	17 38	58 19	v F, S, v l E	3·69 ver.
479	17 43	74 7	v F, S, irr. R	4·60
480	17 58	58 14	e F, S, m E	3·69 ver.
481	22 20 51	73 17	v F, v S, R	4·60
482	21 0	93 36	v F, e S, stell.	4·75
483	21 40	73 34	p B, S, p m E	4·60
484	23 18	104 54	v F, p L, irr. R	4·60
485	27 32	84 54	F, S	3·83 ver.
486	27 46	116 50	e F, E	4·73
487	30 6	71 35	p F, p L, irr. R	3·70 ver.
488	30 14	71 34	v F, v S neb. *	3·70 ver.
489	32 21	94 53	p F, v S, R	4·75
490	32 39	79 39	e F, v S, stell.	4·60
491	22 33 39	78 50	v F, p L, irr. R	4·60
492	34 7	78 46	v F	4·60
493	34 27	78 48	e F	4·60
494	36 26	86 34	e F, v S	4·66
495	37 26	79 56	e F, S, stell.	4·60
496	37 28	87 6	e F, v S, irr. R, stell.	4·66
497	38 36	79 41	e F, v S	4·60
498	38 46	79 37	F, S, irr. R	4·60
499	39 0	87 31	F, v S, b M, stell.	4·61
500	22 39 2	79 52	v F, p L, R	4·60

No.	R.A. 1860.	P.D.	Summary Description.	Date when First Found.
501	^h 22 ^m 40 ^s 11	[°] 87 ['] 7	e F, v S, R	1864.66
502	46 38	78 16	e F, S, R	4.68
503	46 40	97 18	F, S, l E	4.65
504	46 58	70 32	e F	3.72
505	47 42	70 30	v F, v S	3.70 ver.
506	47 59	70 28	e F	3.70 ver.
507	48 27	96 15	F, p L, p m E, v g b M	4.65 ver.
508	48 54	60 56	v F, S	3.68 ver.
509	49 4	86 49	F, S, irr. R	4.61
510	50 7	91 47	F, v S, R, b M	4.57 ver.
511	22 51 10	91 55	v F, v S, R, stell.	4.57 ver.
512	51 58	61 30	long patch of F. nebulosity	3.69 ver.
513	54 52	75 11	v F, v S, alm. stell.	4.60 ver.
514	54 57	74 47	v F, e S (near <i>h</i> 2202)	4.81 ver.
515	55 30	75 12	e F, v S	4.81
516	57 8	60 36	v F, S, R	3.68
517	57 11	70 41	e F, v S	4.69
518	57 17	70 40	v F, S	4.69
519	57 44	88 10	e F, E	4.61
520	58 2	88 12	v F, v S, v l E, v g b M	4.61 ver.
521	22 58 33	87 41	F, v S, stell.	4.61
522	23 0 38	89 49	v F, v S, stell.	4.61
523	0 40	67 47	F, S, R; found by L.	3.70 ver.
524	1 27	115 7	e F, v S, stell.	4.73
525	2 25	115 10	v F, S, irr. R	4.73
526	3 17	83 10	v F, v S, stell.	4.67
527	3 25	83 9	e F	4.67
528	3 36	83 11	v F, S, stell.	4.67
529	3 37	76 21	v F, S, stell.	4.67
530	23 5 39	119 7	v F, p L, E, g b M	4.73

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No.	R.A. P.D.		Summary Description.	Date when First Found.
	1860.			
531	^h 23 ^m 5 ^s 53	^o 70 ['] 30	F, v S, stell.	1864·69
532	6 2	92 51	v F, v S, stell.	3·76 ver.
533	6 5	84 26	v F, S, R	3·66 ver.
534	6 9	79 59	v F, p L	4·76
535	6 23	92 30	v F, p S, p s b M	4·88
536	6 30	76 47	e e F, E	4·84
537	6 35	92 30	e F, v S	4·88
538	6 36	76 45	e F, v S, v l E, g b M	4·84
539	6 49	65 51	v F, v S, stell.	4·68
540	7 0	93 32	e F, v S, alm. stell.	4·75 ver.
541	23 7 10	93 29	v F, v S, l E	4·75 ver.
542	7 10	92 48	F, S, R	3·76 ver.
543	7 14	93 27	e F, v S, l E	4·75 ver.
544	7 36	74 49	v F, v S, stell.	4·84
545	7 39	80 7	e F, e S, stell.	4·76
546	7 46	92 57	e F, v S	4·88
547	7 54	93 6	e F, S, irr. R	4·75
548	8 22	74 50	neb. * 13m.	4·84
549	8 29	93 9	{ e F, e S, alm. stell.	4·59 ver.
550	8 41	71 51	{ (near <i>h.</i> 2220)	
			e e F neb. * 13m.	4·84
551	23 9 10	74 56	e e F, v S, E	4·84
552	9 52	72 18	e e F, alm. stell.	4·84
553	10 10	84 7	F, S, v l E	4·66
554	10 34	81 20	e F, v S, stell.	4·76
555	10 46	83 21	v F, v S	4·67
556	10 48	81 20	e F, v S, stell.	4·76
557	10 49	82 10	e F, v S, alm. stell.	4·67 ver.
558	10 53	81 5	v F, v S, l E, g b M	4·76
559	10 59	72 1	e F, e S	4·84
560	23 11 4	90 30	e F, v S	4·81

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Mr. LASSELL, *New Nebulae*

No.	R.A.		P.D.	Summary Description.	Date when First Found.
	1860.				
561	^h 23	^m 11 ^s 10	^o 84 ['] 11	p F, S, R, v g b M	1864.62 ver.
562		11 17	79 25	F, S, R	4.76
563		11 33	72 6	e F, v S, g b M	4.81 ver.
564		11 35	72 1	e F, e S, stell.	4.84
565		11 47	72 4	e F, e S, stell.	4.84
566		11 47	90 31	F, v S, stell.	4.81
567		11 47	83 19	e F, v S, b M	4.91
568		11 48	83 21	v F, S, R, g l b M	4.91
569		12 8	82 26	e F, S, l E, l b M	4.90
570		12 25	81 16	v F, v S, g b M	4.76
571	23	12 38	82 11	p B, v S, p s b M	4.67 ver.
572		13 3	82 36	e F, v S	4.90
573		13 11	66 32	F, S, R	4.68
574		13 18	82 24	e F, v S, stell.	4.90
575		14 9	89 22	v F, v S, stell.	4.80
576		15 43	89 20	v F, v S, b M	4.80
577		20 44	67 11	F, S, R	4.68
578		21 9	67 14	e F, v S, stell.	4.68
579		21 38	87 16	neb. * 12.5 m.	4.81
580		23 20	90 41	F, v S, stell.	3.76 ver.
581	23	26 7	93 29	e F, stell. (very near III. 187)	4.88
582		26 41	85 55	F, S, l E	3.87 ver.
583		27 14	93 41	e F, v S	4.88
584		27 18	93 44	v F, e S, stell. (not far from III. 188)	4.88
585		27 54	85 58	e F	4.82
586		28 33	93 39	v F, v S, stell.	4.88
587		31 4	65 5	v F, S, R	3.68 ver.
588		34 17	87 3	F, S	4.82
589		34 22	87 3	v F, p L	4.82
590	23	37 41	64 52	e F	3.68

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No.	R.A. 1860.	P.D.	Summary Description.	Date when First Found.
591	^h 23 ^m 46 ^s 59	^o 90 ['] 24	F, S, 1 E	1864·69
592	48 41	90 13	v F, S, R	4·81
593	54 56	87 51	e F, v S	4·69
594	55 15	87 26	v F, S, R, stell.	4·62 ver.
595	59 1	82 24	e F neb. * 13 m.	4·91 ver.
596	59 26	82 24	e e F, v S	4·91 ver.
597	59 35	82 21	e F, S, R	4·91 ver.
598	59 41	82 25	e F } D. neb.	4·91 ver.
599	59 43	82 25	e F }	4·91 ver.
600	23 59 56	82 21	e F, S	4·91