ASTRONOMISCHE NACHRICHTEN.

Band 129.

N^o 3094.

22.

Catalogue No. 10 of Nebulae discovered at the Warner Observatory.

No.	Date of discov.	α 1890.0	δ 1890.0	Descriptions and remarks
1	1890 Nov. 12	$0^h 36^m 40^s$	$+ 0^\circ 16' 4$	e F; S; R; bet. 2 st.
2	1890 Sept. 18	0 38 15	$+ 1 15.3$	eee F; p S; R; eee diff. Faintest object ever seen here.
3	" " 25	0 44 45	$+ 10 1.2$	eee F; p S; R; B * in field s. Others suspected.
4	" " 25	0 54 25	$+ 47 5.6$	e F; p L; v E; 2 B st. in field, one f. the other s.
5	" " 18	1 19 14	$+ 14 18.3$	v F; v S; R; * close p.
6	" " 30	1 36 30	$+ 13 5.5$	eee F; p S; v diff.; np of 660.
7	1890 Aug. 11	1 38 5	$+ 12 39.0$	e F; p S; np of 2.
8	" " 11	1 38 15	$+ 12 29.0$	e F; S; R; v F * close; sf of 2.
9	1890 Sept. 25	1 38 45	$+ 12 4.5$	e F; p S; R; sp of 2.
10	" " 25	1 39 50	$+ 12 19.3$	eee F; S; R; D * and wide D * p; nf of 2.
11	1891 Jan. 8	1 42 55	$+ 9 48.7$	eee F; v S; R.
12	" " 7	1 42 58	$+ 9 58.8$	eee F; p S; R.
13	1890 June 28	1 53 30	$+ 37 30.0$	p B; S; l E; 9 ^m * nr. nf.
14	1891 Dec. 25	4 6 41	$+ 27 25.0$	eee F; p L; R; Not no. 29 cat. 2. That is still missing.
15	1891 Jan. 7	5 48 0	$- 17 53.8$	eee F; p S; E in meridian; wide D * nr. p.
16	1890 Dec. 19	6 56 0	$- 30 1.0$	v F; p S; R; B * p close nf; B * with p B distant com. np.
17	1891 Oct. 2	7 15 30	$+ 46 17.0$	e F; e S; stellar.
18	1891 Mar. 29	10 55 0	$+ 11 1.8$	eee F; p S; R; triangle with 2 F st. s; 1 st of 3; 3492 in field. <i>Edward.</i>
19	" " 29	10 55 5	$+ 11 9.8$	e F; p S; R; 2 nd of 3; 3492 near. <i>Edward.</i>
20	1891 Apr. 8	11 7 0	$+ 9 39.8$	v F; p S; l E; bet. 2 distant stars. <i>Edward.</i>
21	" " 28	13 12 40	$+ 6 56.2$	eee F; p S; R; l b M; 1 st of 5; 5060 in field = 2 nd of 5; e e diff.
22	" " 28	13 13 25	$+ 6 39.7$	eee F; p S; p B * f 13 th ; 3 ^d of 5.
23	" " 28	13 13 28	$+ 6 42.0$	eee F; p L; 4 th of 5; eee diff.
24	" " 28	13 13 35	$+ 6 41.5$	eee F; p S; E in meridian; p B * nr. s; 5 th of 5; eee diff.
25	1891 May 3	14 4 0	$+ 15 21.9$	eee F; p S; R; e diff.
26	1891 Apr. 28	14 23 20	$+ 5 19.2$	v F; v S; R; f of 5619.
27	1891 June 25	14 48 40	$+ 5 10.0$	e F; S; R; B M.
28	Uncertain	15 5 ?	$+ 5 ?$	eee F; p S; p of close double
29	"	15 5 ?	$+ 5 ?$	eee F; p S; f of close double } Lost before measured. <i>Edward.</i>
30	1891 June 24	15 5 40	$+ 4 41.1$	eee F; v S; F * with distant com. nr. sf; eee diff.
31	" " 24	15 7 50	$+ 4 40.6$	eee F; S; l E; F * nr np; 3 distant st. in a curve sf.
32	" " 25	15 11 35	$+ 5 38.5$	eee F; p S; R; * nr nf; eee diff.
33	1890 July 17	15 56 5	$+ 2 1.3$	eee F; p L; i R.
34	" " 21	16 24 6	$+ 8 42.0$	eee F; p S; E.
35	" " 10	16 31 31	$+ 46 38.3$	eee F; p S; E; p of 2.
36	" " 10	16 31 50	$+ 46 27.3$	eee F; p L; R; f of 2.
37	" " 11	16 32 25	$+ 49 29.3$	eee F; p S; R; bet. 2 distant F st; B * with very dist. com. s.
38	" " 11	16 37 55	$+ 46 13.3$	e F; S; R; Forms arc of circle with 4 stars.
39	1890 Sept. 13	16 41 38	$+ 65 47.5$	v F; p S * nr. n; 4 st. in curve s.
40	" " 18	16 42 15	$+ 51 29.5$	eee F; p S; another nr. s; D * in field n; others susp.; np of 2; e e diff.
41	" " 18	16 42 33	$+ 51 25.5$	eee F; S; R; D * in field n; sf of 2; eee diff.
42	" " 17	16 53 50	$+ 20 13.0$	e F; p S; l E; B * nr. n; v F * close p.
43	" " 18	17 12 16	$+ 72 33.0$	eee F; p S; R; 6340 nr; sp of 2; e e diff. <i>Edward.</i>
44	" " 18	17 13 48	$+ 72 33.5$	eee F; p S; R; nf of 2; e e diff. <i>Edward.</i>
45	1891 June 5	17 18 0	$+ 12 46.0$	v F; p S; R; Trapezium with 3 stars.
46	" " 5	18 30 50	$+ 49 14.0$	e F; v S; R; F * close n.

No.	Date of discov.	α 1890.0	δ 1890.0	Descriptions and remarks
47	1891 Oct. 2	19 ^h 21 ^m 25 ^s	+52° 26' 0"	e F; v S; R.
48	1891 Sept. 28	21 8 25	+ 2 6.0	eee F; S; R; eee diff.; Found searching for Comet Tempel ₃ -Swift. <i>Edward.</i>
49	" " 28	21 8 40	+ 1 42.5	eee F; S; R; eee diff.; Found searching for Comet Tempel ₃ -Swift. <i>Edward.</i>
50	" " 8	21 24 15	— 1 8.8	e F; v S; v wide D * nr nf.
51	" " 29	22 24 30	— 5 42.5	eee F; p S; R; Munich, 12516 3' n; Found searching for Comet Tempel ₃ -Swift. <i>Edward.</i>
52	1891 Nov. 5	23 23 23	— 4 44.3	e F; p S; R; v F * close n; 6 p B = Mag. st. p.
53	1891 Oct. 17	23 24 56	— 3 38.5	e F; S; R; sp of 2. <i>Edward.</i>
54	" " 17	23 25 5	— 3 33.0	eee F; p S; R; nf of 2. <i>Edward.</i>
55	1891 Nov. 5	23 26 12	— 5 36.3	eee F; p S; R; 9 ¹ / ₂ * p 36 ^s , s 3' 15"; D * s points to 11 ^m * f. neb. 7 ^s ; another 11 ^m * f. neb. 14 ^s ; not 7962; seeing poor; could not find 7962.
56	1891 Oct. 15	23 31 45	+75 2.8	v F; S; v F * close.
57	1891 Nov. 12	23 35 45	— 4 10.3	eee F; p S; R; 3 p B st. f. and 4 or 5 st. p; eee diff.
58	" " 12	23 50 23	— 1 36.0	eee F; p S; R; 9 ¹ / ₂ ^m * inv; B * nf. and p F * sp; sp of 2; eee diff.
59	" " 12	23 50 25	— 1 31.3	v F; p S; R; B * nr sf; nf of 2.
60	" " 12	23 50 38	— 0 55.2	eee F; v S; R; 3 st. in a curve p.

Though the above list of Nebulae falls short of my previous catalogues in the number incorporated, yet I do not think it advisable to longer withhold its publication in the endeavor to extend it to the usual length of one-hundred, as the large and increasing number of electric street lights of this city has rendered the search for these faint bodies almost useless, and may compel me to entirely abandon their quest and enter upon some other line of work.

Warner Observatory, Rochester N. Y., 1892 Feb. 20.

L. Swift.

Ueber den neuen Stern in Auriga.

Schreiben von Herrn Dr. B. von Engelhardt in Dresden.

Die von Rev. Anderson entdeckte Nova Aurigae habe ich wie folgt beobachtet:

Anschluss der Nova an W₂ 5^h 709 (9^m 1).

Die Position des Vergleichsterns ist dem Schreiben von Herrn A. Kammermann, A. N. 3077, entnommen.

1892	Red. ad l. app.	Vergleichstern		Nova—Vergl. st.		Nova		Einst.
		α app.	δ app.	$\Delta\alpha$	$\Delta\delta$	α app.	δ app.	
März 5	—0° 11' 5" +8° 8' 1"	5 ^h 26 ^m 50 ^s 765	+30° 28' 20".41	—1 ^m 48 ^s 286	—6' 23".48	5 ^h 25 ^m 21 ^s 48	+30° 21' 56".9	14.7
13	—0.269 +8.82	50.611	20.42	—1 48.410	—6 22.63	2.20	57.8	24.8

März 5. Refr. 0.000 — 0".14. Luft ziemlich gut. Die Nova ist von orange-gelber Farbe. Sie ist um 0.2 Gr. schwächer als der Stern 6^m 0 BD. +30° 963.

März 13. Refr. 0.000 — 0".14. Luft nicht gut. Sehr heller Mond. Die Nova ist von röthlich gelber Farbe. Im 5 z. Sucher ist die röthliche Färbung sehr ausgeprägt. Sie ist bedeutend lichtschwächer geworden, und ist etwa um 1^m 5 schwächer als der Stern 6^m 0.

Anschluss der Nova an den Stern 9^m 5 BD. Revisionszone 1858 März 23, vgl. A. N. 3076.

1892	Stundenwinkel		Gemess. u. verbess.		Einst.	Verwandlung in	
	PW.	Dist.	PW.	Dist.		$\Delta\alpha$	$\Delta\delta$
März 5	+2 ^h 2 ^m 4	+2 ^h 10 ^m 7	212° 43' 1	84° 982	8.6	—3° 549	—71° 50
13	+2 24.8	+2 34.5	212 43.3	85.371	8.6	—3.566	—71.82

Der Vergleichstern scheint etwas schwächer als 9^m 5 zu sein.

Dresden 1892 März 21.

Dr. B. von Engelhardt.