Plate	Date	Gr. M. T.	Julian Day	Mag.	E	Phase
AM 3148	1904 Oct. 20	$18^h 32^m$	6774.772	9.98	2435	+0.017
AC 5514	» Nov. 11	19 35	6796.816	8.04	2454	−0.077
» 5525	» » 14	14 42	6799.612	8.73	2455	−0.050
AM 3228	» » 14	15 35	.649	(9.6)	»	−0.013
AC 5526	» » 14	15 47	.658	10.40	»	−0.004
» 5527	» » 14	16 57	.706	9.88	»	+0.044
» 5597	» » 25	16 6	6810.671	8.63	2459	−0.067
» 5598	» » 25	17 12	6810.717	9.52	»	−0.021
AM 3248	» » 28	13 21	6813.556	(10.1)	2460	+0.051
AC 5832	1905 Jan. 14	14 21	6860.598	10.60	2477	+0.021
» 5966	» Febr. 8	13 31	6885.563	9.42	2486	+0.067
» 6034	» » 19	13 9	6896.548	9.25	2490	−0.024

Table III gives the correction for the light equation, or the amount to be added to the observed time to give the heliocentric time of observation.

Table III. Light equation.

Dates	Corr.	Dates	Corr.	Dates	Corr.
Jan. 1 – Jan. 14	+0.004	April 1 – April 15	−0.004	Aug. 24 – Sept. 1	0.000
» 15 – » 25	+0.003	» 16 – May 6	−0.005	Sept. 2 – » 11	+0.001
» 26 – Febr. 6	+0.002	May 7 – June 13	−0.006	» 12 – » 22	+0.002
Febr. 7 – » 17	+0.001	June 14 – July 4	−0.005	» 23 – Oct. 4	+0.003
» 17 – » 27	0.000	July 5 – » 23	−0.004	Oct. 5 – » 19	+0.004
» 28 – Mar. 9	−0.001	» 24 – » 31	−0.003	» 20 – Nov. 12	+0.005
Mar. 10 – » 20	−0.002	Aug. 1 – Aug. 11	−0.002	Nov. 13 – Dec. 8	+0.006
» 21 – » 31	−0.003	» 12 – » 23	−0.001	Dec. 9 – » 31	+0.005

An ephemeris giving the Greenwich Mean Time of the minima occurring during the next three months is given in Table IV.

Table IV. Ephemeris.

E	J. D.	Gr. M. T. 1905	E	J. D.	Gr. M. T. 1905	E	J. D.	Gr. M. T. 1905
2545	7048.858	July 21 $20^h 36^m$	2555	7076.546	Aug. 18 $13^h 6^m$	2565	7104.235	Sept. 15 $5^h 38^m$
2546	7051.627	» 24 15 3	2556	7079.315	» 21 7 34	2566	7107.003	» 18 0 4
2547	7054.395	» 27 9 29	2557	7082.084	» 24 2 1	2567	7109.772	» 20 18 32
2548	7057.164	» 30 3 56	2558	7084.853	» 26 20 28	2568	7112.541	» 23 12 59
2549	7059.933	Aug. 1 22 24	2559	7087.622	» 29 14 56	2569	7115.310	» 26 7 26
2550	7062.702	» 4 16 51	2560	7090.390	Sept. 1 9 22	2570	7118.079	» 29 1 54
2551	7065.471	» 7 11 18	2561	7093.159	» 4 3 49	2571	7120.848	Oct. 1 20 21
2552	7068.240	» 10 5 46	2562	7095.928	» 6 22 16	2572	7123.616	» 4 14 47
2553	7071.009	» 13 0 13	2563	7098.697	» 9 16 44	2573	7126.385	» 7 9 14
2554	7073.777	» 15 18 39	2564	7101.466	» 12 11 11	2574	7129.154	» 10 3 42

The position of this variable for 1900 is

RA. $= 3^h 57^m 45^s.27$ Decl. $= +27° 50' 59''.7$.

Its designation is, therefore, 035727. It is in the constellation Taurus, and of the variables discovered here, it is H. 1174. Its spectrum, like that of other Algol variables, is of the first type. On the map of the sky, Plate 12, its light is normal, and its position is [95, 90].

Harvard College Observatory, 1905 July 28.

Edward C. Pickering.

Observations of Jupiter and Saturn.

During the past 12 months the motion of the hollow in the southern equatorial belt of Jupiter in which the Great Red Spot is situated appears to have conformed exactly with the rate of System II of Marth-Crommelin's ephemerides based on a rotation period of $9^h 55^m 40^s.63$. My observations since 1904 October are:

Date	Transit time	Longitude	Telescope and powers
1904 Oct. 29	8h 9m	26°4	4 inch Refractor power 150 and 200
Dec. 18	9 24	25.7	
1905 Jan. 12	5 13	27.4	
» 26	6 48	25.9	
» 31	5 57	25.4	
Febr. 2	7 36	25.3	
» 16	5 8	26.5	
» 19	6 48	27.0	
Mar. 22	7 34	25.3	
» 27	6 43	24.6	
June 24	15 43	25.1	10 inch Reflector power 300 and 360
July 6	15 40	24.8	
» 13	16 32	27.1	
» 16	13 57	24.0	
» 18	15 39	25.8	

The S. equatoreal belt and S. temperate belt are now very dark and conspicuous while the N. equatorial and N. temperate belts are very faint.

On eleven mornings between June 24 and July 22 I obtained fine views of Saturn with a 12 1/2 inch Calver Reflector, powers 300 and 360. The broad, and apparently multiple, belt in the N. hemisphere is still a prominent feature of the globe. The equatoreal region is not so bright as formerly. A very luminous zone outlies the broad belt northwards separating it from the dusky polar cap. There are a few white and dark spots on the N. border of the belt and in approximately the same latitude as the markings seen in 1903 but they are not nearly so conspicuous. The following observations probably relate to three different white spots:

Spot	1905	Transit time	Longitude System II
1	July 6	13h 40m	155°0
»	» 13	15 40	151.7
2	» 8	14 0	351.8
»	» 16	13 15	348.3
3	» 13	13 20	72.7
»	» 16	15 35	67.3
»	» 21	12 35	69.5

These small spots are followed by dark markings on the border of the belt.

Whether the irregularities now visible are the relics of the disturbance which affected the northern hemisphere in 1903 or represent new appearances I cannot say as I have no satisfactory connecting observations for 1904.

Bristol, 1905 July 22. *W. F. Denning.*

Partielle Mondfinsternis 1905 Februar 19.

(Mitgeteilt von Prof. Dr. *G. Gruss.*)

Die Mondfinsternis ließ sich in Prag-Smichow in ihrem Verlaufe nicht verfolgen, weil die fortwährend vorübergehenden Wolken manchmal kaum die Umrisse des Mondes zu erkennen erlaubten. Erst kurz vor dem Ende der Finsternis klärte sich der Himmel so auf, daß der Austritt des Mondes aus dem Kernschatten um $9^h 2^m.9$ M. Z. Prag beobachtet werden konnte, wohl ziemlich unsicher. Um $9^h 13^m$ zeigte die Mondscheibe an der Austrittstelle keine dunklere Färbung mehr.

Die Beobachtung geschah am 8zölligen Äquatoreal von Reinfelder & Hertel mit Benutzung des Kreismikrometers von etwa 40facher Vergrößerung.

Prag-Smichow, Astronomisches Institut der k. k. böhm. Universität, 1905 Juli. Dr. *Jiří Kaván.*

Nova 104.1905 Aquilae.

Mitteilung von Prof. *E. C. Pickering,* Harvard College Observatory, Cambridge, Mass., 1905 Aug. 31:

»A new star in the constellation Aquila (Nova Aquilae No. 2) was discovered this morning by Mrs. *Fleming* from an examination of the Draper Memorial photographs. Its approximate position for 1900 is in RA. = $18^h 56^m.9$, Decl. = $-4° 34'$, so that it precedes the bright star λ Aquilae, $4^m.0$, north 28′. A photograph of its spectrum on Aug. 18, 1905 shows the hydrogen lines *Hδ*, *Hγ*, and *Hβ* bright and broad, also faint traces of the bright bands 4472 and 4646. Its magnitude was then about 6.5. On Aug. 21, its magnitude was 7.5, and on Aug. 26, 10.0. A plate, taken on Aug. 10, 1905, shows stars of the magnitude 9.5, but does not show the Nova. A plate taken with the Bruce Telescope at Arequipa, on Aug. 15, 1903, and having an exposure of four hours, shows stars of the sixteenth magnitude but no object that can with certainty be identified as the Nova.«

Mitteilung von Prof. *E. Hartwig,* Sternwarte Bamberg, vom 7. September:

»Meine gestern, Sept. 6, telegraphisch mitgeteilte Annahme, daß für den Ort der Flemingschen Nova Aquilae das Äquinoktium nicht richtig angegeben sei, scheint nach einer mir vorhin in Wolkenlücken geglückten Helligkeitsschätzung des nach seiner Position für 1905 gleichzeitig angemerkten Sterns sich als richtig zu erweisen. Dieser Stern, den ich an Sj. 7092 mit dem Lamellenmikrometer des zehnzölligen Refraktors am 5. September angeschlossen habe, mit dem Ergebnis:

	1905	$18^h 57^m 5^s.08$	$-4° 34' 49''.6$,
also	1855	18 54 26.25	−4 38 51.1
	1900	18 56 49.20	−4 35 13.8,

hatte am 5. September eine Helligkeit, die ziemlich genau mitten zwischen der des Sterns BD. −4°4666, die als $9^m.4$ zu hell angegeben ist, und der eines der mutmaßlichen Nova