Schreiben des Herrn J. G. Porter an den Herausgeber.

The occultation of Saturn by the Moon which occurred on the night of the second inst. was observed here with the Equatorial, power 130.

At the time of immersion the sky was clear, and the following phases were well seen:

First contact of ansa	14 ^h 43 ^m 31 ^s .4	Ham. Coll. m. t.
" " " limb	43 54.4	" " " "
Disc of planet bisected by		
Moon's limb	44 14.3	" " " "
Last limb disappeared	44 35.7	" " " "
" ansa "	44 59.6	" " " "

The Huyghenian satellite, preceding the planet, was noticed and followed very nearly to the Moon's limb, but was lost sight of before its immersion.

At the time of emersion the Moon was partially observed by clouds, and the planet was not seen until nearly the instant of last contact. The following times were noted, but may be 3 or 4 seconds in error:

Last contact of limb	15 ^h 49 ^m 23 ^s .6	Ham. Coll. m. t.
" " " ansa	49 29.6	" " " "

Litchfield Observatory of Hamilton College,
Sept. 4, 1876.

On the Relative brilliancy of β and γ Bootis.

Either β or γ Bootis has probably changed in lustre since Bayers time (1603). γ is now distinctly the brighter of the two. Heis seems to have seen β brighter than γ as he rates β 3^m and γ 3.4^m.

In March 1875 I found γ about equal to η Bootis, which Sir J. Herschel rated as 3.01, γ on the same scale being 3.43.

April 28, 1876. γ seemed only a little brighter than β .

June 30, 1876. I estimated γ to be nearly half a magnitude brighter than β .

15. July 1876. γ almost exactly equal to Cor Caroli (α Can. venat.) which Heis rates as 3.2 and Sir J. Herschel 3.22.

These observations seems to show slight variations in the light of γ .

J. E. Gore.

Correction of the Ephemeris of Antigone (129) 1876.

Mr. E. S. Austin finds from the observations of Antigone in 1875 that the elements of its orbit in the Berlin Jahrbuch for 1878 require large corrections. The correction of the Ephemeris for 1876 in the Jahrbuch for 1878, p. 68 is

$$\Delta\alpha = +1^m5^s; \Delta\delta = +3'.$$

To determine the elements with greater precision he wants a good series of observations at the opposition in November and December next, and that they

should be communicated to me as early as may be practicable.

To facilitate the reduction of observations he proposes the following list of comparison-stars with the reductions to their apparent places. This mean places have been given by Mr. W. A. Rogers from his observations at Harvard College Observatory, Cambridge; except that of 8^o962, which is taken from Weisse's reduction of Bessel's Zones.

The numbers are from the Bonner Durchmusterung. The reductions are given for Berlin mean midnight.

Comparison stars for Antigone in 1876.

Nr. of star	Mag.	α		Red'n to App't α						δ		Red'n to App't δ					
		1876.0	Prec.	Nov. 20	30	Dec. 10	20	30	1876.0	Prec.	Nov. 20	30	Dec. 10	20	30		
8 ^o 819	9.1	4 ^h 51 ^m 26 ^s .79	+3 ^s 2616	+4 ^s 38	4 ^s 55	4 ^s 67	4 ^s 76	4 ^s 80	+8 ^o 25' 44''5	+5''909	+17''4	16''6	15''9	15''1	14''4		
8 854	8.5	4 58 50.08	3.2603	4.37	4.54	4.67	4.76	4.81	8 17 49.8	5.289	16.8	16.0	15.3	14.5	13.7		
7 802	8.8	5 0 2.18	3.2522	4.36	4.53	4.66	4.75	4.81	7 55 43.4	5.193	16.7	15.9	15.1	14.3	13.5		
7 819	7.6	5 3 14.68	3.2549	4.36	4.53	4.67	4.76	4.82	8 1 4.4	4.916	16.4	15.5	14.8	14.0	13.2		
7 857	7.8	5 11 13.37	3.2552	4.35	4.53	4.68	4.78	4.84	7 58 2.4	4.236	15.8	14.9	14.1	13.3	12.4		
8 959	8.1	5 19 47.72	3.2608	4.34	4.53	4.68	4.79	4.87	8 8 44.2	3.500	15.0	14.1	13.3	12.4	11.6		
8 962	8.5	5 19 55.37	3.2581	4.34	4.53	4.68	4.79	4.87	8 1 50.2	3.489	15.0	14.1	13.2	12.3	11.5		
8 982	8.0	5 24 2.64	+3.2650	+4.34	4.54	4.69	4.81	4.88	8 17 58.7	3.134	14.6	13.7	12.8	11.9	11.1		

Washington, D. C., 28. Sept. 1876.

J. H. C. Coffin, Sup't Am. Ephemeris and Nautical Almanac.