

	$\Delta\alpha$	C-O.	$\Delta\delta$
May 29	+18' 3		+12' 0
June 7	-20,0		+ 2,1
June 13	-48,2		- 1,8

That the fault was not in the Ephemeris was plain from the fact of its representing the Cambridge observations of Maja from April 9 to May 27, nine in number, and the first three of those made by Dr. *Peters*. It was at once conjectured that in the interval between May 12 and May 29, when clouds and moonlight intervened to prevent a close following of Maja which was only of the 13<sup>th</sup> magnitude, Dr. *Peters* had lost its trace, and on resuming his observations had fallen upon a new planet. The subjoined elements were derived from the approximate places printed in the *Astronomical Notices*.

1861 May 29,3851 Wash. m. t.

$M$	=	221° 24' 45" 6
$\pi$	=	350 28 7,3
$\Omega$	=	208 37 18,8
$i$	=	5 20 2,6
$\phi$	=	8 21 49,8
$\mu$	=	1253"997

These were found to represent the series eight<sup>h</sup> in number within a small fraction of a minute. Subsequently on Cambridge U. S. 1862 Febr. 12.

obtaining corrected places of the comparison stars. Mr. *Safford* derived the following elements:

1861 May 29,375 Wash. m. t.

$L$	=	213° 3' 24" 1	} M. Eq. 1861,0.
$\pi$	=	329 22 16,5	
$\Omega$	=	208 1 28,0	
$i$	=	5 23 16,2	
$\phi$	=	6 50 26,0	
$\mu$	=	1129"372	
$\log a$	=	0,331446	

Representing the observations as follows:

	$\Delta\alpha$	C-O.	$\Delta\delta$
May 29	+1"		0"
30	-1		-2
31	-4		0
June 1	-4		0
7	+2		0
8	-1		-2
10	+3		-3
13	+1		0

These numbers leave no doubt of the correctness of the hypothesis that the Hamilton College positions from May 29 to June 13 belong, not to Maja but to a new planet. It will be noticed that (72) has the least mean distances yet recognised among the asteroids.

*G. P. Bond.*

### Elements of Comet III. 1861.

The following elements have been computed by Mr. *H. P. Tuttle* for the Comet discovered by him Dec. 28 at this observatory and by Dr. *Winnecke* on Jan. 8.

$T$	=	Dec. 7,20249 Gr. m. t.
$\pi$	=	173° 27' 42" 7
$\Omega$	=	145 7 59,4
$i$	=	41 51 54,2
$\log q$	=	9,923922

Motion Retrograde.

Observations of Dec. 28, Jan. 1, 4 and 7.

### On the Companion of Sirius, by Prof. *G. P. Bond*, Director of the Observatory of Harvard College.

An interesting discovery of a companion to Sirius was made on the evening of Jan. 31 by Mr. *Clark* with his new object-glass of eighteen and one half inches aperture.

I have been able to observe it with our refractor of fifteen inches, as follows:

1862 Febr. 10	Angle of Position	85° 15' ±1° 1
	Distance	10"37 ±0"2

When the images are tranquil the companion is distinctly enough seen, but these moments are quite rare, as the low altitude of Sirius exposes it to almost continual atmospheric

disturbances. I shall take the first favourable opportunity of repeating the measures which not improbably may stand in need of correction, especially in the distance.

The discovery is a very strong testimonial to the excellence of the new object-glass, but I was quite prepared for such a proof of its powers from having already witnessed

its excellent performance on other stars. The focal length is twenty-three feet which is only a few inches longer than that of the great refractors of Cambridge and Poulkova; the angle of aperture is consequently considerably larger which must be regarded as an advantage since it seems to have been gained without sacrifice of defining power.

Beobachtungen auf der Wiener Sternwarte, mitgetheilt von Herrn Director v. Littrow.

59 Elpis.

	Mittl. Wien. Zt.	Scheinb. AR.	L. F. P.	Scheinb. Decl.	L. F. P.	Stern	Vergl.	Beob.
1861 Febr. 27	10 <sup>h</sup> 16 <sup>m</sup> 59 <sup>s</sup> 2	8 <sup>h</sup> 15 <sup>m</sup> 48 <sup>s</sup> 64	7,774	+12° 25' 25" 3	9,769	b	5	Weiss
27	11 24 24,7	8 15 47,44	8,275	+12 25 55,3	9,777	a	3	"
28	8 4 53,6	8 15 25,04	8,271	+12 30 26,6	9,776	a	6	"

Die Beobachtungen sind am Refractor von 6" Öffnung angestellt, die Declinationsbestimmungen vom 27<sup>ten</sup> Februar mit Stern b unsicher.

Mittlerer Ort der Vergleichsterne für 1862,0.

	AR.	δ	
a	8 <sup>h</sup> 17 <sup>m</sup> 15 <sup>s</sup> 83	+12° 11' 17" 3	Lal. 16476
b	8 16 19,04	+12 28 37,1	Mikrom.-Vergl. mit a.

Beide Sterne werden am Meridiankreise bestimmt.

Im Mittel aus sämtlichen Positionen ergibt sich der Fehler der Weiss'schen Ephemeride (Beob.—Rechn.)

$\Delta\alpha = -11^s 32$        $\Delta\delta = +37^u 9$ .

Wien 1862 März 1.

Littrow.

Schreiben des Herrn Karlinski, Adjuncten der k. k. Sternwarte in Prag, an den Herausgeber.

Soeben bekam ich die № 1350 der Astr. Nachr. und beeile mich, zu melden, dass der von Herrn Pogson am 9<sup>ten</sup> August 1861 gesehene Planet kein neuer war, sondern 46 Hestia, deren Position nach meiner, nur handschriftlich Herrn Dr. Förster mitgetheilten Ephemeride war

12 <sup>h</sup> m. Berl. Zt.	geoc. AR.	geoc. Decl.	log Δ
1861 Aug. 8	20 <sup>h</sup> 14 <sup>m</sup> 14 <sup>s</sup> 85	-16° 27' 10" 9	0,081178
9	20 13 25,50	-16 31 8,3	0,081782

und nach den mir gütigst mitgetheilten Berliner Beobachtungen die Correction dieser Ephemeride

Beobachtung — Rechnung

am 6<sup>ten</sup> August       $d\alpha = +0^s 75$        $d\delta = -3^u 5$   
 „ 15<sup>ten</sup> „      „       $+0,73$       „       $-3,1$

betrug.

Prag 1862 März 4.

Fr. Karlinski