On the Positions of the Fundamental Stars. By Professor Dr. A. Hall.

I beg leave to offer the following suggestions with respect to the positions of the Fundamental Stars.

1st. That the determination of their positions should be made a special problem, to which the undivided attention of the observer should be given. The observations should be made with Instruments whose objectives shall not exceed five inches, and whose circles shall not exceed two feet and six inches in diameter. These Instruments should be constructed after the manner of the best German artists, with proper means of reversal and having their objectives and oculars interchangeable in order to eliminate, as far as possible, constant errors and flexure. Each series of observations should be made by a single observer who should be an experienced astronomer.

2^d. The number of the stars should not be great, and perhaps should be limited to the 47 chief stars of the Berlin Jahrbuch, together with a few circumpolar stars.

By some such method as the above it seems to me that the positions of the Fundamental Stars may be advanced to a degree of accuracy almost hopeless under the present methods of observing: in which the uncertainties of personal Equation and rate and error of clock, the partial and unsatisfactory determination of the errors of graduation, the use of *Bessel's* Tables of refraction at all observatories together with careless use of meteorological instruments, and finally the relative weakness of large instruments and their liability to changes from temperature, all combine to render our results erroneous.

Washington, March 1868.

A. Hall.

Fortsetzung der Ephemeride des Planeten (96) Aegle. Von Herrn Vogel in Leipzig.

Da eine Beobachtung vom 23. April noch vollkommen mit der von mir in N^o 1687 der Astronomischen Nachrichten gegebenen Ephemeride übereinstimmte, habe ich die letztere weiter fortgeführt. Den Planeten schätzte ich am 23. April 11. Grösse, wonach zu erwarten steht, dass derselbe noch längere Zeit zu beobachten sein wird.

Mittl. Zt. Berlin.	α	δ	$\log \Delta$
1868 Mai 3,5	9 ^h 19 ^m 53 ^s	+9° 8' 3	0,3661
5,5	21 25	+8 56,2	
7,5	22 58	+8 44,2	
9,5	24 33	+8 31,8	
11,5	26 11	+8 19,1	0,3847
13,5	27 52	+8 6,3	
15,5	29 38	+7 53,1	
17,5	31 29	+7 39,5	
19,5	33 24	+7 26,0	0,4025
21,5	35 22	+7 12,1	
23,5	37 23	+6 58,0	
25,5	9 39 26	+6 43,6	

Mittl. Zt. Berlin.	α	δ	$\log \Delta$
1868 Mai 27,5	9 ^h 41 ^m 31 ^s	+6° 29' 0	0,4194
29,5	43 39	+6 14,1	
31,5	45 50	+5 59,0	
Juni 2,5	48 3	+5 43,7	
4,5	50 18	+5 28,1	0,4355
6,5	52 35	+5 12,3	
8,5	54 55	+4 56,2	
10,5	56 18	+4 39,9	
12,5	9 59 43	+4 23,4	0,4506
14,5	10 2 10	+4 6,7	
16,5	4 39	+3 49,7	
18,5	7 9	+3 32,4	
20,5	9 41	+3 14,9	0,4647
22,5	12 15	+2 57,1	
24,5	14 50	+2 39,1	
26,5	17 27	+2 20,9	
28,5	20 6	+2 2,6	0,4778
30,5	10 22 47	+1 44,2	

Leipzig, 1868 April 27.

H. Vogel.

Inhalt.

- (Zu N^o 1691.) Observations of Asteroids, made at U. S. Naval Observatory, Washington. During the year 1867. Communicated by Commodore B. F. Sands, Superintendent of the Observatory. 161. —
 Beobachtungen von Verfinsterungen der Jupiters-Satelliten auf der Sternwarte Windsor in New South Wales. 169. —
 Leipziger Meridianbeobachtungen. Von Herrn Dr. R. Engelmann. 173. —
 (Zu N^o 1692.) Ueber die Wiederkehr des *Encke'schen* Cometen im Jahre 1868. 177. —
 Beobachtungen des *Brorsen'schen* Cometen auf der Leipziger Sternwarte. Mitgetheilt von Herrn Professor Dr. Bruhns. 185. —
 Ephemeride von *Brorsen's* Comet für die Erscheinung im Jahre 1868. Von Herrn Professor Dr. Bruhns. 187. —
 On the Positions of the Fundamental Stars. By Professor Dr. A. Hall. 191. —
 Fortsetzung der Ephemeride des Planeten (96) Aegle. Von Herrn Vogel in Leipzig. 191. —