ROYAL OBSERVATORY, GREENWICH.

TRANSITS OBSERVED WITH THE TRANSIT-CIRCLE

AND

COMPUTATIONS

OF

APPARENT RIGHT ASCENSION.

1864.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Jan. 1	1	γ Aquilæ	C	40·0	42·9	45·7	48·4	54·0	..	..	5·3	8·1	19. 38. 54·02	+0·88	54·39	47·17	52·78	53·29	19. 39. 47·16	+ 0·46
	2	α Aquilæ	C	1·4	4·2	7·0	9·7	15·3	20·9	23·8	26·6	29·4	19. 43. 15·32	(+9·93)	15·67	8·40	52·73	[−0·64]	19. 44. 8·43	+ 0·43
	3	β Aquilæ	C	30·6	33·4	36·2	39·1	44·5	50·0	52·9	55·6	58·4	19. 47. 44·47	[−4·39]	44·79	37·52	52·73		19. 48. 37·55	+ 0·41
	4	γ Piscium.....	C	0·5	3·4	6·2	9·0	14·4	19·9	22·8	25·4	28·2	23. 9. 14·37		14·64	7·29	52·65		23. 10. 7·31	− 0·40
	5	ο Cephei	C	..	..	47·6	54·8	8·8	23·5	30·6	..	..	23. 12. 8·92		10·97				23. 13. 3·64	− 0·30
	6	κ Piscium.....	C	51·4	54·1	56·9	59·7	5·2	10·7	13·6	16·2	18·8	23. 19. 5·13		5·38	58·06	52·68		23. 19. 58·05	− 0·45
	7	Piazzi XXIII. 101	C	..	..	..	42·2	52·4	2·9	7·9	13·2	18·3	23. 22. 52·35		53·77				23. 23. 46·44	− 0·58
	8	Oeltz. Arg. 25927	C	2·5	14·6	26·6	38·3	2·3	..	..	..	..	23. 34. 2·09		5·52				23. 34. 58·18	− 0·67
	9	τ Cassiopeiæ	C	..	..	16·6	22·0	32·0	42·5	47·9	..	..	23. 39. 32·10		33·52				23. 40. 26·18	− 0·80
	10	γ Ursæ Maj. S.P..	C	..	29·9	34·5	39·3	49·0	58·4	3·0	7·9	..	23. 45. 48·96		48·04				11. 46. 40·70	− 0·95
	11	ω Piscium.....	C	13·6	16·4	19·0	21·9	27·4	33·0	35·8	38·5	41·3	23. 51. 27·38		27·69	20·38	52·69		23. 52. 20·34	− 0·68
	12	Groombridge 4207	C	59·0	2·8	6·7	10·1	17·5	25·2	28·9	32·6	36·2	23. 55. 17·60		18·50				23. 56. 11·15	− 0·90
	13	12 Ceti	C	0·0	2·7	5·6	8·3	13·8	19·4	..	..	..	0. 22. 13·80		13·99	6·66	52·67	52·65	0. 23. 6·63	− 0·78
	14	16 Cassiopeiæ ...	C	..	..	18·4	25·1	38·4	52·5	59·0	..	..	0. 25. 38·55		40·48				0. 26. 33·12	− 1·67
	15	Argelander 599..	C	..	..	..	..	49·0	58·9	3·7	8·7	13·3	0. 31. 48·87		50·19				0. 32. 42·83	− 1·47
	16	α Cassiopeiæ	C	..	..	..	46·0	56·0	6·1	11·0	15·3	20·6	0. 31. 55·91		57·23				0. 32. 49·87	− 1·48
	17	μ Andromedæ ...	C	3·2	6·8	10·2	13·7	20·7	27·8	31·4	34·8	38·1	0. 48. 20·70		21·51	14·16	52·65		0. 49. 14·14	− 1·34
	18	ε Piscium.....	C	47·5	50·2	53·0	55·7	1·4	7·0	9·8	12·4	15·2	0. 55. 1·31		1·64	54·30	52·66		0. 55. 54·27	− 1·07
	19	Polaris ...(E & E)	C	0·5	55·0	48·0	41·0	22·5	..	..	..	..	1. 8. 22·55		53·45	46·38	52·93		1. 9. 46·13	−27·39
	20	α Cancri.....	JC	57·8	0·6	3·6	6·4	12·1	17·8	20·7	23·4	26·2	8. 50. 12·02		12·42	4·86	52·44	52·67†	....	
	21	κ Cancri.....	JC	17·7	20·7	23·6	26·4	32·0	37·7	40·6	43·2	46·2	8. 59. 31·96		32·34	24·76	52·42		....	
	22	☽ 2 L.	D	..	..	..	58·9	..	..	41·7	..	..	12. 31. 58·84		58·98			52·72	12. 31. 48·24	
	23	δ Virginis.....	D	39·4	42·2	45·1	47·7	53·2	58·9	1·6	4·4	7·2	12. 47. 53·25		53·55	46·08	52·53	[−0·41]	12. 48. 46·05	− 0·83
	24	Saturn 1 L.	D	10·4	13·2	16·0	18·6	24·2	29·8	32·6	35·4	38·1	13. 7. 24·21		} 25·01				13. 8. 17·51	
	25	Saturn 2 L.	D	11·6	14·5	17·2	20·0	25·4	31·0	33·8	36·6	39·3	13. 7. 25·44							
	26	Polaris S.P. (E&E)	D	..	..	42·0	37·5	..	7·0	0·0	..	..	13. 9. 24·31		53·78	45·97	52·19		1. 9. 46·28	−26·98
Jan. 2	27	μ Andromedæ ...	D	3·6	7·2	10·7	14·2	21·0	28·1	31·6	35·0	38·6	0. 48. 21·06		21·87	14·14	52·27	52·31	0. 49. 14·17	− 1·32
	28	ε Piscium.....	D	47·7	50·6	53·4	56·2	1·6	7·4	10·2	12·8	15·6	0. 55. 1·67		2·01	54·29	52·28		0. 55. 54·30	− 1·06
	29	β Andromedæ ...	D	59·0	2·4	5·8	9·2	15·9	22·7	26·2	29·5	32·8	1. 1. 15·88		16·62	8·93	52·31		1. 2. 8·91	− 1·38
	30	Polaris ...(E & E)	D	..	..	47·5	41·5	22·0	12·0	4·0	..	..	1. 8. 23·25		54·15	45·56	51·41		1. 9. 46·44	−26·57
	31	θ Ceti	D	8·2	11·0	13·9	16·6	22·0	27·8	30·6	33·4	36·2	1. 16. 22·14		22·28	14·56	52·28		1. 17. 14·57	− 1·05
	32	η Piscium.....	D	7·0	9·7	12·6	15·5	21·2	27·0	29·8	32·6	35·4	1. 23. 21·15		21·58	13·87	52·29		1. 24. 13·87	− 1·30
Jan. 3	33	ε Corvi	C	..	..	..	..	17·6	23·5	26·6	29·6	32·5	12. 2. 17·57	+0·43	17·44	9·47	52·03	52·12† [−0·18]	....	
	34	Saturn 1 L.	E	30·4	33·4	36·2	38·8	44·5	49·8	52·6	55·4	58·2	13. 7. 44·32	(+10·06)	} 45·07			52·29	13. 8. 37·26	
	35	Saturn 2 L.	E	31·7	34·6	37·4	40·1	45·8	51·2	54·0	56·5	59·5	13. 7. 45·59	[−5·51]						
	36	Polaris S.P. (E&E)	E	..	..	..	..	..	7·0	57·5	52·5	47·0	13. 9. 24·54		53·02	44·41	51·39		1. 9. 45·21	−25·42
	37	ζ Virginis	E	40·4	43·3	45·9	48·6	54·2	59·6	2·5	5·4	8·1	13. 26. 54·17		54·34	46·62	52·28		....	
	38	☽ 2 L.	E	..	..	..	..	4·0	10·2	13·0	..	..	14. 15. 4·09		4·04				14. 14. 48·87	
	39	α Serpentis	E	27·8	30·8	33·5	36·2	41·6	47·4	50·1	52·8	55·7	15. 36. 41·72		41·98	34·20	52·22		....	
	40	Venus 2 L.	E	33·6	36·4	39·4	42·2	48·0	53·9	56·8	59·6	2·6	15. 45. 48·00		47·93				15. 46. 39·40	
Jan. 4	41	☉ 1 L.	E	11·4	14·4	17·6	20·6	26·4	32·5	35·5	38·5	41·5	18. 56. 26·44		} 37·18				18. 58. 29·33	
	42	☉ 2 L.	E	33·3	36·0	39·3	42·3	48·2	54·3	57·3	..	..	18. 58. 48·21							
	43	Polaris...(E & E)	E	..	..	..	..	..	7·5	..	..	45·5	1. 8. 20·98		52·76	44·04	51·28	52·11	1. 9. 44·86	−25·05
	44	ν Piscium	E	..	..	..	24·8	30·4	35·9	38·6	41·4	44·3	1. 33. 30·30		30·53	22·56	52·03		....	
	45	β Arietis.....	E	..	..	..	..	..	22·8	25·8	28·8	..	1. 46. 16·90		17·35	9·38	52·03		....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 22, 38, and 40, $-63^s \cdot 25$: $-67^s \cdot 35$: and $-0^s \cdot 70$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
January 1 and 2. The azimuthal error by Polaris, Polaris S.P. and Polaris.
January 3 and 4. The azimuthal error by Polaris S.P. and Polaris, allowing $0^s \cdot 26$ for clock-rate and change of R.A.

13, 15, 16, 24, 25, 26, 30, 31, 44, 45. Cloudy.
22. The limb was only visible at the transit over the wires T and Z.
15, 32. Very faint.
22, 38, 43. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Jan. 4	1	ρ Boötis	D	49·5	52·8	56·0	59·4	5·6	12·2	15·4	18·6	21·8	14. 25. 5·64	+ 0·43 (+ 9·59) [− 5·51]	6·23	58·12	51·89		....	
	2	α Lyræ	C	9·0	12·6	..	19·6	26·6	33·9	..	41·0	44·4	18. 31. 26·68	[−6·43]	27·41	18·99	51·58	51·81 [−0·20]	18. 32. 19·07	+ 1·05
Jan. 5	3	⊙ 1 L.	C	35·9	38·9	42·0	45·1	50·9	57·0	0·0	3·2	6·1	19. 0. 50·96		} 1·61				19. 2. 53·26	
	4	⊙ 2 L.	C	57·7	0·7	3·7	6·7	12·7	18·7	21·8	24·8	27·8	19. 3. 12·69							
	5	α Aquilæ	C	2·6	5·4	8·2	11·1	16·7	22·2	25·1	27·7	30·6	19. 43. 16·57		16·79	8·42	51·63		19. 44. 8·44	+ 0·41
	6	ω Piscium	C	..	..	..	22·9	28·4	34·1	36·8	39·6	42·4	23. 51. 28·42		28·61	20·33	51·72		23. 52. 20·22	− 0·63
	7	ε Andromedæ	C	15·6	18·9	22·0	25·3	31·4	37·9	41·0	44·2	47·1	0. 30. 31·44		31·96	23·52	51·56	51·61	0. 31. 23·57	− 1·03
	8	α Cassiopeiæ	C	..	..	..	..	56·9	6·8	11·8	16·6	21·6	0. 31. 56·89		58·15				0. 32. 49·76	− 1·37
	9	ε Piscium	C	48·5	51·4	54·2	57·0	2·4	8·1	10·8	13·6	16·5	0. 55. 2·45		2·65	54·25	51·60		0. 55. 54·25	− 1·02
	10	Polaris ...(E & E)	C	57·0	50·5	43·0	37·0	..	..	..	..	..	1. 8. 18·34		50·61	43·30	52·69		....	
	11	W.B. I. 206	C	..	..	..	0·4	6·0	11·4	14·1	17·1	19·8	1. 13. 5·89		5·97				1. 13. 57·57	− 1·05
	12	ψ Cassiopeiæ	C	..	..	..	..	..	45·6	52·8	59·8	6·8	1. 15. 30·90		32·91				1. 16. 24·51	− 2·47
	13	η Piscium	C	7·7	10·7	13·4	16·1	21·7	27·8	30·6	33·4	36·2	1. 23. 21·91		22·22	13·83	51·61		1. 24. 13·82	− 1·26
	14	β Libræ	JC	36·4	39·2	42·1	44·8	50·3	56·2	58·6	1·6	4·5	15. 8. 50·37	[−8·18]	50·25	41·77	51·52	51·65† [−0·20]	....	
	15	Venus 2 L.	D	..	..	..	..	..	12·6	15·6	18·5	21·4	15. 55. 6·78		6·52			51·82	15. 55. 57·48	
	16	α Lyræ	D	8·9	12·6	16·2	19·6	26·7	33·8	37·4	40·8	44·4	18. 31. 26·75		27·45	19·00	51·55	[−0·26]	18. 32. 19·07	+ 1·04
Jan. 6	17	⊙ 1 L.	D	59·7	2·8	5·8	8·8	14·6	20·9	23·8	26·7	29·8	19. 5. 14·72		} 25·11				19. 7. 16·72	
	18	⊙ 2 L.	D	21·3	24·3	27·2	30·3	36·3	42·2	45·3	48·3	51·2	19. 7. 36·21							
	19	α Aquilæ	D	2·6	5·6	8·4	11·3	16·7	22·3	25·0	27·9	30·6	19. 43. 16·66		16·80	8·43	51·63		19. 44. 8·41	+ 0·40
	20	γ Pegasi	D	8·6	11·8	14·4	17·4	22·9	28·7	31·7	34·5	37·4	0. 5. 23·00		23·22	14·86	51·64	51·56	0. 6. 14·78	− 0·75
	21	ρ Andromedæ	D	49·3	53·0	56·3	59·8	6·6	13·8	17·2	20·7	23·9	0. 13. 6·68		7·34				0. 13. 58·90	− 0·94
	22	16 Cassiopeiæ	D	..	..	..	..	..	53·3	0·2	7·1	13·4	0. 25. 39·56		41·50				0. 26. 33·06	− 1·45
	23	α Cassiopeiæ	D	32·2	37·3	42·4	47·2	57·0	6·9	11·8	16·7	21·7	0. 31. 56·97		58·24				0. 32. 49·79	− 1·34
	24	β Ceti	D	40·4	43·4	46·3	49·2	54·9	0·8	3·9	6·8	9·6	0. 35. 54·98		54·70	46·32	51·62		0. 36. 46·25	− 0·68
	25	μ Andromedæ	D	4·4	8·2	11·5	15·1	22·0	29·0	32·5	36·2	39·6	0. 48. 22·00		22·68	14·07	51·39		0. 49. 14·23	− 1·25
	26	ε Piscium	D	48·6	51·4	54·2	57·1	2·5	8·2	11·0	13·7	16·5	0. 55. 2·53		2·65	54·23	51·58		0. 55. 54·20	− 1·00
	27	Polaris ...(E & E)	D	..	51·0	44·0	35·5	15·5	5·0	..	..	..	1. 8. 17·48		52·59	42·57	49·98		1. 9. 44·14	−23·58
	28	υ Piscium	D	..	57·0	0·0	3·1	9·0	15·4	18·4	21·5	..	1. 11. 9·14		9·58				1. 12. 1·13	− 1·30
	29	Saturn 1 L.	R	..	..	..	..	..	17·4	20·0	23·0	25·8	13. 8. 11·78		} 12·39			51·66 [−0·26]	13. 9. 3·91	
	30	Saturn 2 L.	R	..	..	..	..	..	18·6	21·6	24·3	27·0	13. 8. 13·11							
	31	Polaris S.P. (E&E)	R	58·0	..	46·0	..	..	14·0	5·0	56·0	48·0	13. 9. 27·51		52·33	42·19	49·86		1. 9. 43·85	−23·20
	32	ζ Virginis	R	..	44·1	47·0	49·6	55·3	0·8	3·7	6·3	..	13. 26. 55·20		55·21	46·72	51·51		....	
Jan. 8	33	⊙ 1 L.	JC	46·4	49·4	52·5	55·4	1·4	7·3	10·4	13·3	16·4	19. 14. 1·34	(+8·94)	} 11·53			51·06	19. 16. 2·43	
	34	⊙ 2 L.	JC	7·5	10·4	13·4	16·4	22·4	28·5	31·6	34·5	37·5	19. 16. 22·42	[−8·12]				[−0·20]		
	35	Polaris ...(E & E)	JC	..	..	42·5	35·0	16·0	3·5	56·0	..	..	1. 8. 16·45		50·07	40·98	50·91	50·86	....	
	36	θ Ceti	JC	..	..	..	..	23·7	29·5	32·3	35·0	37·8	1. 16. 23·78		23·63	14·48	50·85		....	
	37	η Piscium	JC	8·4	11·2	14·2	17·0	22·7	28·5	31·4	34·2	37·0	1. 23. 22·69		22·89	13·79	50·90		....	
	38	ν Piscium	JC	17·7	20·6	23·5	26·2	31·6	37·3	40·0	42·8	45·6	1. 33. 31·65		31·71	22·51	50·80		....	
Jan. 10	39	α Ophiuchi	JC	32·1	35·0	37·8	40·7	46·3	52·0	54·9	57·6	0·5	17. 27. 46·27	+1·02	46·42	36·99	50·57	50·61 [0·00]	17. 28. 37·03	+ 0·34
	40	δ Ursæ Minoris	JC	..	..	..	..	..	..	1·0	49·0	36·5	18. 14. 41·19	(+7·18)	53·65	44·79			....	
	41	α Lyræ	JC	10·1	13·8	17·4	20·8	27·8	35·0	38·6	42·1	45·7	18. 31. 27·87	[−7·26]	28·43	19·06	50·63		18. 32. 19·04	+ 0·98
	42	Ceph. 51 S.P. (E&E)	JC	..	..	..	..	40·0	37·0	32·5	29·5	..	18. 35. 41·44		25·91	17·95			....	
Jan. 11	43	⊙ 1 L.	JC	51·5	54·7	57·5	0·6	6·4	12·4	15·6	18·3	21·4	19. 27. 6·44		} 16·57				19. 29. 7·18	
	44	⊙ 2 L.	JC	12·3	15·4	18·3	21·4	27·2	33·1	36·3	39·3	42·2	19. 29. 27·23							

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^{r}\cdot700$.
Correction for passage of Semidiameter, No. 15, $-0^{s}\cdot69$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
January 5. The azimuthal error by tabular places of ε Piscium and Polaris, the correction for clock-rate insensible.
January 6. The azimuthal error by Polaris and Polaris S.P., allowing $0^{s}\cdot27$ for clock-rate and change of R.A.
January 8. The azimuthal error by tabular places of Polaris and η Piscium, the correction for clock-rate insensible.
January 10 to 16. The azimuthal error used is the mean of those determined by tabular places of δ Ursæ Minoris and Cephei 51 S.P. on January 10, and of Polaris and η Piscium on January 11, the correction for clock-rate in both cases insensible. The separate results are, − 6″·70 and − 7″·82.

6, 32. Cloudy.
14, 15, 32. Very faint.
31. Very much diffused and at times scarcely observable. The observation has not been made use of.
42. Extremely faint.
29, 30. The image excessively bad; a slight fog.
33, 34. The limbs extremely faint from cloud.
43, 44. Exceedingly tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s		s	s	s	s	h m s	s
Jan. 11	1	α Aquilæ.....	JC	3·8	6·7	9·5	12·4	17·7	23·4	26·3	29·1	31·9	19. 43. 17·81	+ 1·02	17·91	8·46	50·55	50·61	19. 44. 8·52	+ 0·37
	2	Mercury, center..	JC	43·4	46·4	49·2	52·3	58·0	3·8	6·8	9·6	12·6	20. 46. 57·96	(+7·18)	57·73			[0·00]	20. 47. 48·34	
	3	Polaris ...(E & E)	JC	..	..	42·0	..	16·0	4·5	56·5	49·0	..	1. 8. 16·58	[−7·26]	46·61	38·16	51·55		....	
	4	η Piscium	JC	8·6	11·6	14·4	17·4	23·0	28·6	31·6	34·5	37·4	1. 23. 22·96		23·13	13·75	50·62		1. 24. 13·74	− 1·18
	5	ν Piscium.....	C	..	..	..	..	..	0·0	13·5	..	..	1. 33. 32·06		32·11	22·48	50·37	50·46†	....	
	6	β Arietis	C	3·8	6·8	9·7	12·6	18·5	24·5	27·4	30·3	33·3	1. 46. 18·49		18·73	9·29	50·56		....	
	7	α Arietis	JC	..	..	32·3	35·4	41·3	47·3	50·4	..	..	1. 58. 41·28		41·56	32·25	50·69	50·61	1. 59. 32·17	− 1·51
	8	6 Persei	JC	..	..	..	36·7	45·4	54·0	..	..	..	2. 3. 45·30		46·16				2. 4. 36·77	− 2·11
Jan. 14	9	τ^1 Arietis.....	D	18·6	21·7	24·6	27·6	33·4	39·4	42·4	45·4	48·3	3. 12. 33·44	(+8·07)	33·75	24·68	50·93		....	
	10	o Tauri.....	D	26·6	29·4	32·2	34·8	40·4	46·0	49·0	51·8	54·5	3. 16. 40·48		40·62	31·61	50·99		....	
Jan. 16	11	γ Eridani.....	D	37·4	40·4	43·2	46·0	51·5	57·5	0·2	3·1	6·0	3. 50. 51·65	(+8·63)	51·52	42·76	51·24	51·23†	....	
	12	Aldebaran	D	3·4	6·4	9·4	12·0	17·7	23·6	26·5	29·4	32·2	4. 27. 17·79		18·07	9·34	51·27	[0·10]	....	
Jan. 18	13	ι Aurigæ	D	2·5	6·0	9·2	12·5	19·0	25·7	29·0	32·3	35·5	4. 47. 19·02	+ 1·09	19·59	11·02	51·43	51·31†	....	
	14	Rigel	D	56·9	59·7	2·5	5·4	10·8	16·5	19·4	22·2	24·9	5. 7. 10·88	(+8·29) [−5·88]	10·90	2·20	51·30	[0·23]	....	
Jan. 19	15	β Andromedæ ...	C	..	..	..	..	..	..	7·0	..	..	1. 1. 16·44	(+7·48)	16·98	8·65	51·67	51·51† [0·43]	....	
	16	β Andromedæ ...	C	59·5	3·0	6·4	9·7	16·4	23·5	..	..	..								
	17	η Piscium.....	C	38·9	53·4	..	..	..	..	..	..	..	1. 23. 21·95		22·20	13·65	51·45		....	
	18	η Piscium.....	C	..	..	..	..	22·0	27·4	30·7	33·6	36·4								
	19	☽ 1 L.....	E	12·7	15·9	18·8	21·9	28·0	34·0	37·0	40·0	43·1	4. 52. 27·88		28·21				4. 54. 26·55	
Jan. 21	20	Polaris ...(E & E)	C	..	..	..	26·0	9·0	57·5	51·0	43·0	..	1. 8. 9·82	(+6·97)	37·33	29·84	52·51	52·46	....	
	21	θ Ceti.....	C	..	..	..	..	22·0	27·6	30·4	33·2	36·0	1. 16. 21·96		21·93	14·31	52·38	[0·36]	....	
	22	ν Piscium.....	C	..	18·6	21·5	24·3	29·7	35·4	38·2	40·8	..	1. 33. 29·73		29·83	22·35	52·52		....	
	23	50 Cassiopeiæ ...	C	17·4	26·4	35·1	43·7	1·2	..	..	..	..	1. 51. 1·35		3·43				1. 51. 55·92	− 2·70
	24	α Arietis	C	24·4	27·4	30·4	33·4	39·3	45·4	48·4	51·3	54·2	1. 58. 39·30		39·63	32·11	52·48		....	
	25	δ Ceti	E	..	..	..	..	..	44·9	47·6	50·4	53·0	2. 31. 39·24		39·29	32·15	52·86	52·79†	....	
	26	γ Ceti.....	E	10·0	12·8	15·6	18·3	23·9	29·5	32·2	34·9	37·7	2. 35. 23·83		23·92	16·72	52·80		....	
	27	☽ 1 L.	C	52·7	55·7	58·7	1·7	7·8	13·7	16·8	19·8	22·8	6. 39. 7·69		7·97			52·46	6. 41. 5·75	
	28	θ Canis Majoris ..	C	47·9	50·8	53·6	56·4	2·0	7·8	10·6	13·4	16·3	6. 47. 2·04		1·98	54·61	52·63		....	
	29	ζ^2 Geminorum ...	C	57·4	0·5	3·4	6·4	12·2	18·2	21·2	24·0	27·0	6. 55. 12·21		12·51				6. 56. 5·07	− 2·63
Jan. 24	30	α Arietis	JC	..	26·5	29·6	32·6	38·4	44·6	47·5	50·6	..	1. 58. 38·48	(+6·54)	38·78	32·06	53·28	53·28†	....	
	31	67 Ceti.....	JC	6·0	8·8	11·5	14·4	19·8	25·5	28·3	31·0	33·7	2. 9. 19·83		19·79	13·12	53·33	[0·22]	....	
	32	κ Cancri.....	D	17·4	20·4	23·2	26·1	31·6	37·3	40·0	42·8	45·6	8. 59. 31·55		31·71	25·19	53·48	53·37	....	
	33	☽ 2 L.	D	49·2	52·1	54·9	57·8	3·4	9·2	12·2	15·0	17·8	9. 10. 3·46		3·61				9. 9. 55·07	
	34	α Hydræ.....	D	49·4	52·0	55·0	57·7	3·2	8·8	11·6	14·5	17·2	9. 20. 3·22		3·18	56·63	53·45		....	
	35	o Leonis	D	48·0	51·1	53·8	56·5	2·3	7·8	10·6	13·4	16·4	9. 33. 2·16		2·31	55·77	53·46		....	
	36	18 Leonis.....	D	58·3	1·2	3·8	6·8	12·4	18·0	20·8	23·7	26·5	9. 38. 12·34		12·51				9. 39. 5·97	− 2·39
Jan. 25	37	o Tauri.....	C	24·2	27·0	29·6	..	..	..	..	..	..	3. 16. 37·96	+ 1·00	38·16	31·48	53·32	53·41	....	
	38	f Tauri.....	C	16·0	18·8	21·6	24·5	30·1	35·8	38·6	41·5	44·3	3. 22. 30·09	(+7·52)	30·32	23·80	53·48	[0·22]	....	
	39	μ Eridani.....	E	36·5	39·3	42·0	44·7	50·4	55·7	58·6	1·4	4·2	4. 37. 50·27	[−5·52]	50·33	44·15	53·82	53·75†	....	
	40	ι Aurigæ	E	0·1	3·4	6·8	..	16·6	..	26·7	30·1	33·4	4. 47. 16·67		17·18	10·95	53·77		....	
	41	☽ 2 L.....	C	32·0	34·7	37·7	40·6	46·3	51·9	54·8	57·6	0·4	9. 56. 46·17		46·34				9. 56. 38·51	
	42	Regulus	C	1·9	4·9	7·6	10·5	16·2	21·8	24·7	27·5	30·3	10. 0. 16·10		16·34	9·92	53·58		....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

Corrections for passage of Semidiameter, Nos. 19, 27, 33, and 41 : $+66^s{\cdot}73$: $+65^s{\cdot}21$: $-61^s{\cdot}99$: and $-61^s{\cdot}34$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

January 18 to 22. The azimuthal error used is that determined on January 21 by tabular places of Polaris and ν Piscium, the correction for clock-rate insensible.

January 25 and 26. The azimuthal error used is the mean of those determined by tabular places of δ Ursæ Minoris and Cephei 51 S.P. on January 25, and of Polaris and θ Ceti on January 26, the correction for clock-rate insensible in both cases The separate results are, $-5''{\cdot}28$ and $-5''{\cdot}76$.

2. The image much diffused.
15. Observed over wire Z.
17, 18, 37. Observed over the wires illuminated.
19. Rain falling during the Moon's passage.
5. Observed over wires Y, Z.
17, 18. Extremely faint.
17. Observed over wires N, O.
27, 37. Very cloudy.
15, 16. Scarcely visible from moisture on the eye-glass.
17, 18, 23. Cloudy.
19, 27, 41. Correction to R. A. on true meridian $+0^s{\cdot}01$.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Jan. 25	1	δ Ursæ Min.(E&E)	JC	..	..	..	8·5	41·0	15·0	1·5	48·5	35·0	18. 14. 40·77	+1·00	52·39	46·43		53·51	....	
	2	α Lyræ	JC	7·3	11·0	14·4	18·0	..	32·1	35·6	39·3	42·8	18. 31. 24·99	(+7·52)	25·61	19·31	53·70	[0·23]	18. 32. 19·3c	+ 0·73
	3	Ceph.51 S.P.(E&E)	JC	..	..	42·5	40·0	37·0	..	27·5	24·5	24·0	18. 35. 36·57	[−5·52]	22·29	16·71			....	
	4	γ Aquilæ	JC	39·4	32·2	45·2	..	53·5	..	2·0	4·9	7·6	19. 38. 53·5c		53·72	47·4c	53·68		19. 39. 47·42	+ 0·23
	5	δ Cygni	JC	..	..	..	..	..	55·9	59·8	3·7	7·4	19. 39. 47·98		48·72				19. 40. 42·42	+ 1·00
	6	α Aquilæ	JC	0·7	3·6	6·4	9·1	14·7	20·3	23·2	25·9	28·7	19. 43. 14·68		14·88	8·62	53·74		19. 44. 8·58	+ 0·21
	7	β Aquilæ	JC	30·0	32·7	35·6	38·4	43·9	49·5	52·3	55·0	57·8	19. 47. 43·86		44·03	37·73	53·70		19. 48. 37·73	+ 0·20
	8	ρ Draconis	JC	..	44·7	51·8	58·9	13·4	28·0	35·2	42·4	..	20. 1. 13·34		15·04				20. 2. 8·74	+ 2·89
	9	θ Aquilæ	JC	..	..	15·1	17·7	23·3	28·7	31·5	34·3	37·3	20. 3. 23·23		23·32	17·00	53·68		20. 4. 17·02	+ 0·17
	10	θ Cephei	JC	50·4	56·5	2·7	8·5	20·4	32·6	38·5	44·7	50·6	20. 26. 20·45		21·83				20. 27. 15·53	+ 2·c6
Jan. 26	11	⊙ 1 L.	JC	41·1	44·1	..	49·9	55·8	1·6	..	7·4	10·4	20. 30. 55·72		} 4·48				20. 32. 58·19	
	12	⊙ 2 L.	JC	58·6	1·8	4·8	7·6	13·5	19·3	22·4	25·4	28·2	20. 33. 13·46							
	13	ζ Cygni	JC	58·5	1·7	5·0	8·0	14·3	20·8	23·9	27·2	30·4	21. 6. 14·36		14·82	8·57	53·75		21. 7. 8·53	+ 0·37
	14	Polaris ...(E & E)	JC	..	..	28·5	23·5	3·0	30·0	42·0	..	..	1. 8. 3·25		31·11	25·26	54·15	53·74	....	
	15	θ Ceti	JC	6·4	9·4	12·2	15·0	20·4	26·2	29·0	31·7	34·5	1. 16. 20·49		20·50	14·24	53·74		1. 17. 14·25	− 0·73
	16	η Piscium	JC	..	..	..	..	19·6	25·4	28·2	31·2	33·9	1. 23. 19·61		19·87	13·55	53·68		1. 24. 13·62	− 0·98
	17	ι Aurigæ	D	..	..	..	..	16·5	23·2	26·5	29·8	33·0	4. 47. 16·52		17·04	10·94	53·90	53·85†	....	
Jan. 27	18	⊙ 1 L.	E	49·9	53·0	55·8	58·7	4·6	10·4	13·4	16·5	19·4	20. 35. 4·58		} 13·29			54·14		
	19	⊙ 2 L.	E	7·7	10·6	13·6	16·4	22·2	28·2	31·0	34·0	36·8	20. 37. 22·23					[0·04]	20. 37. 7·46	
	20	64 Arietis	E	..	12·2	15·3	18·3	24·1	30·4	33·4	36·4	..	3. 15. 24·24		24·62				3. 16. 18·81	− 1·80
	21	f Tauri	E	15·2	18·2	21·0	23·8	29·4	35·1	37·9	40·7	43·6	3. 22. 29·38		29·61	23·77	54·16		....	
	22	ε Eridani	E	24·6	27·5	30·3	33·2	38·8	44·4	47·0	50·0	52·8	3. 25. 38·68		38·67	32·90	54·23		....	
	23	ξ Navis	C	28·3	31·4	34·2	37·4	43·3	49·4	52·6	55·5	58·4	7. 42. 43·34		43·16	36·95	53·79	53·78†	....	
	24	Venus 2 L.	JC	44·0	47·0	50·0	53·1	58·9	4·8	7·8	10·8	13·9	17. 42. 58·87	[−4·25]	58·81			53·89	17. 43. 52·13	
	25	α Lyræ	JC	..	..	..	..	..	0·0	17·9	..	..	} 18. 31. 24·77		25·42	19·36	53·94	[0·07]	....	
	26	α Lyræ	JC	..	..	..	..	..	..	35·5	39·2	42·5								
	27	γ Aquilæ	D	39·2	42·0	45·0	47·6	53·2	58·8	1·6	4·4	7·3	19. 38. 53·19		53·46	47·42	53·96	53·88	....	
	28	α Aquilæ	D	0·5	3·4	6·2	8·9	14·5	20·1	23·0	25·7	28·4	19. 43. 14·47		14·73	8·64	53·91	[0·07]	....	
Jan. 28	29	⊙ 1 L.	D	..	..	4·6	7·4	13·2	19·1	22·1	25·0	27·8	20. 39. 13·23		} 21·95				20. 41. 15·89	
	30	⊙ 2 L.	D	16·2	19·2	22·0	25·0	30·7	36·6	39·5	42·4	45·3	20. 41. 30·72							
	31	α Ophiuchi	S	28·6	31·6	34·5	37·3	42·6	48·6	51·4	54·3	57·0	17. 27. 42·83	(+8·55)	43·18	37·41	54·23	54·02	....	
	32	Venus 2 L.	S	49·6	52·7	55·6	58·6	4·4	10·6	13·5	16·4	19·4	17. 48. 4·48		4·44			[0·29]	17. 48. 58·05	
	33	δ Ursæ Min.(E&E)	D	..	..	..	..	..	16·5	4·0	49·5	36·0	18. 14. 42·24		53·99	47·02			18. 15. 48·23	+25·80
	34	Ceph.51 S.P.(E&E)	D	..	47·0	42·0	39·0	..	30·0	27·5	24·0	23·0	18. 35. 36·15		21·96	16·14			6. 36. 16·20	−34·74
	35	α Aquilæ	C	..	..	..	8·6	14·4	20·1	22·9	25·7	..	19. 43. 14·37		14·68	8·66	53·98	53·81	19. 44. 8·73	+ 0· 7
Jan. 29	36	⊙ 1 L.	C	6·3	9·3	12·0	15·0	20·8	26·6	29·6	32·4	35·4	20. 43. 20·78		} 29·45				20. 45. 23·51	
	37	⊙ 2 L.	C	23·5	26·4	29·4	32·4	38·1	44·0	46·9	50·0	52·8	20. 45. 38·11							
	38	ζ Cygni	C	58·2	1·4	4·6	7·7	14·0	20·4	23·5	26·7	29·8	21. 6. 13·97		14·55	8·57	54·02		21. 7. 8·61	+ 0·37
	39	Polaris ...(E & E)	C	..	..	..	21·0	1·0	46·0	..	31·0	21·0	1. 7. 59·79		27·82	22·64	54·82	54·10	1. 9. 21·93	− 3·65
	40	η Piscium	C	4·8	7·6	10·6	13·4	19·2	24·8	27·6	30·6	33·3	1. 23. 19·05		19·42	13·51	54·09		1. 24. 13·54	− 0·94
	41	ω Cassiopeiæ	C	..	..	3·0	10·4	24·4	39·0	46·3	..	..	1. 31. 24·48		26·29				1. 32. 20·41	− 1·64
	42	50 Cassiopeiæ	C	14·6	24·2	33·0	41·4	59·2	..	..	..	..	1. 50. 59·08		1·33				1. 51. 55·45	− 2·22
	43	W. B. I. 990	C	51·0	53·8	56·6	59·2	4·8	10·3	13·1	16·0	18·7	1. 55. 4·78		4·96				1. 55. 59·08	− 0·97
	44	α Arietis	C	22·3	25·5	28·4	31·5	37·5	43·5	46·6	49·5	52·4	1. 58. 37·41		37·88	31·98	54·10		1. 59. 32·00	− 1·24
	45	6 Persei	C	..	..	28·4	32·7	41·2	50·3	54·3	..	..	2. 3. 41·30		42·30				2. 4. 36·42	− 1·67

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 24 and 32, $-0^s \cdot 62$ and $-0^s \cdot 62$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
January 28 and 29. The azimuthal error used is the mean of those determined by δ Ursæ Minoris and δ Ursæ Minoris S.P., and Cephei 51 S.P., and Cephei 51 on January 28 and 29 (separate results $-2'' \cdot 96$ and $-5'' \cdot 09$, allowing $0^s \cdot 01$ for clock-rate and change of R.A. in both cases); and by tabular places of Polaris and η Piscium on January 29 (no correction being necessary for clock-rate) the result given by which is $-4'' \cdot 69$.

17. Very cloudy.
34. Very faint.
25. Observed over wires Y, Z.
35. Cloudy.
29, 30, 32. Very tremulous.
43. Of the 7th magnitude.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Jan. 29	1	Gr. 7-yr. C. No. 144	C	..	..	..	..	..	28·5	43·2	..	..	2. 7. 0·04	+1·00	0·42			54·10	2. 7. 54·55	— 1·22
	2	o Ceti	C	21·6	24·4	27·1	29·8	35·4	40·9	43·8	46·6	49·4	2. 11. 35·39	(+8·55)	35·56			[0·29]	2. 12. 29·69	— 1·06
	3	ξ^2 Ceti	C	48·8	51·6	54·4	57·3	2·6	8·3	11·0	13·9	16·6	2. 20. 2·67	[−4·25]	2·96	57·07	54·11		2. 20. 57·09	— 1·22
	4	γ Ceti	C	8·5	11·4	14·0	16·8	22·3	27·9	30·6	33·4	36·0	2. 35. 22·27		22·51	16·60	54·09		2. 36. 16·64	— 1·25
	5	μ Geminorum	C	37·0	39·8	42·9	45·9	51·7	57·9	0·8	3·8	6·7	6. 13. 51·79		52·26	46·53	54·27		6. 14. 46·44	— 2·57
	6	δ U.Mi. S.P. (E&E)	C	..	..	..	..	3·0	36·5	22·0	8·5	58·0	6. 15. 3·66		52·17	47·13			18. 15. 46·35	+25·69
	7	γ Geminorum	C	44·6	47·7	50·4	53·4	59·1	5·0	7·9	10·6	13·6	6. 28. 59·09		59·48	53·78	54·30		6. 29. 53·66	— 2·51
	8	Cephei 51. (E & E)	C	..	17·0	16·0	13·0	6·0	1·0	..	..	..	6. 35. 6·04		20·49	16·05			6. 36. 14·67	—34·65
	9	π Leonis	E	55·1	58·0	0·9	3·4	9·0	14·7	17·5	20·4	23·0	9. 52. 9·06	[−6·53]	9·26	3·88	54·62	54·53†	....	
	10	l Leonis	E	59·6	2·5	5·4	8·3	13·7	19·4	22·2	24·9	27·8	10. 41. 13·71		13·94	8·63	54·69	[0·29]	....	
	11	χ Virginis	JC	..	10·0	12·8	15·8	21·2	26·8	29·6	32·4	..	12. 31. 21·17		21·17			54·21	12. 32. 15·53	— 1·88
	12	ψ Virginis	JC	10·4	13·3	15·9	18·7	24·3	30·0	32·8	35·7	38·4	12. 46. 24·34		24·32				12. 47. 18·68	— 1·82
	13	δ Virginis	JC	38·6	41·4	44·2	47·1	52·4	58·0	0·6	3·4	6·3	12. 47. 52·40		52·54	46·95	54·41		12. 48. 46·90	— 1·70
	14	ϵ Virginis	JC	17·2	20·2	22·8	25·6	31·4	37·1	40·0	42·6	45·6	12. 54. 31·34		31·58	26·00	54·42		12. 55. 25·95	— 1·61
	15	) 2 L.	JC	16·2	19·0	21·9	24·8	30·6	36·2	39·1	42·0	44·8	13. 3. 30·47		30·42				13. 3. 21·23	
	16	Polaris S.P. (E&E)	JC	..	..	..	11·0	..	40·5	34·5	27·5	..	13. 8. 59·29		27·59	22·24	54·65		1. 9. 21·96	— 3·25
	17	Saturn 1 L.	JC	..	..	..	..	..	43·6	46·3	49·0	51·7	13. 9. 37·88		38·55				13. 10. 32·92	
	18	Saturn 2 L.	JC	..	..	..	..	..	44·7	47·6	50·4	53·0	13. 9. 39·15							
	19	Spica	JC	55·1	58·0	0·9	3·6	9·1	14·8	17·6	20·5	23·3	13. 17. 9·16		9·12	3·55	54·43		13. 18. 3·49	— 1·68
	20	h Virginis	JC	41·7	44·6	47·4	50·3	55·6	1·4	4·1	7·0	9·7	13. 24. 55·70		55·68				13. 25. 50·05	— 1·63
Jan. 30	21	⊙ 1 L.	JC	13·2	16·1	19·0	22·0	27·7	33·7	36·6	39·5	42·4	20. 47. 27·75		36·10				20. 49. 30·56	
	22	⊙ 2 L.	JC	30·2	33·3	35·9	39·0	44·7	50·6	53·5	56·4	59·4	20. 49. 44·73							
	23	ϵ Piscium	JC	45·4	48·2	51·0	53·7	59·2	4·9	7·7	10·5	13·4	0. 54. 59·28		59·47	53·94	54·47	54·50	0. 55. 53·98	— 0·71
	24	Polaris ... (E & E)	JC	..	..	..	13·0	55·0	43·0	34·5	28·5	..	1. 7. 55·33		27·07	21·86	54·79		1. 9. 21·58	— 2·87
	25	θ Ceti	JC	..	..	..	..	19·7	25·5	28·2	31·0	33·7	1. 16. 19·74		19·72	14·19	54·47		1. 17. 14·24	— 0·68
	26	ν Piscium	JC	13·7	16·5	19·4	22·1	27·7	33·2	36·0	38·6	41·5	1. 33. 27·58		27·73	22·23	54·50		1. 34. 22·25	— 0·91
	27	46 Cassiopeiæ	JC	..	..	..	..	34·4	49·3	56·6	4·0	11·5	1. 44. 34·35		36·34				1. 45. 30·86	— 1·86
	28	ξ Piscium	JC	..	..	28·9	31·7	37·2	42·9	45·8	..	..	1. 45. 37·25		37·37				1. 46. 31·89	— 0·95
	29	50 Cassiopeiæ	JC	..	..	..	..	58·6	16·2	25·2	33·7	42·8	1. 50. 58·43		0·84				1. 51. 55·36	— 2·17
	30	β Trianguli	JC	17·1	20·6	23·9	27·2	33·8	40·6	44·1	47·4	50·7	2. 0. 33·87		34·47				2. 1. 28·99	— 1·37
	31	67 Ceti	JC	4·5	7·5	10·2	13·1	18·5	24·3	27·1	29·7	32·5	2. 9. 18·55		18·55	13·03	54·48		2. 10. 13·08	— 0·99
	32	α Hydræ	D	48·1	50·9	53·7	56·5	2·0	7·6	10·4	13·2	16·1	9. 20. 2·01		2·00	56·71	54·71	54·54†	....	
	33	ξ Leonis	D	30·3	33·2	36·0	38·8	44·4	50·0	52·9	55·7	58·5	9. 23. 44·37		44·61	39·21	54·60	[0·29]	....	
	34	Spica	E	55·0	57·6	0·5	3·3	8·7	14·4	17·2	20·0	22·9	13. 17. 8·79		8·75	3·58	54·83	54·72	....	
	35	h Virginis	E	41·3	44·2	47·0	49·8	55·3	1·0	3·7	6·5	9·4	13. 24. 55·31		55·29			[0·28]	13. 25. 50·17	— 1·66
	36	) 2 L.	E	46·6	49·7	52·9	55·5	1·3	7·0	10·2	13·0	16·0	13. 54. 1·31		1·21				13. 53. 50·70	
	37	κ Virginis	E	31·2	34·0	37·0	39·7	45·3	50·9	53·9	56·6	59·4	14. 4. 45·28		45·25	40·11	54·86		....	
	38	Arcturus	E	18·6	21·6	24·6	27·5	33·4	39·2	42·4	45·3	48·3	14. 8. 33·39		33·74	28·68	54·94		....	
	39	λ Virginis	E	37·8	40·7	43·6	46·4	52·0	57·6	0·6	3·3	6·2	14. 10. 51·97		51·90				14. 11. 46·79	— 1·44
Jan. 31	40	Spica	C	55·0	57·7	0·4	3·3	8·6	14·6	17·3	20·1	22·9	13. 17. 8·82	+0·91	8·68	3·61	54·93	54·84†	....	
	41	ζ Virginis	C	38·7	41·6	44·4	47·1	52·5	58·2	0·8	3·6	6·3	13. 26. 52·53	(+7·72)	52·53	47·50	54·97	[0·19]	....	
	42	λ Virginis	S	37·7	40·6	43·4	46·1	51·7	57·5	0·4	3·1	5·8	14. 10. 51·76	[−7·58]	51·59			55·04	14. 11. 46·74	— 1·48
	43	f Boötis	S	58·7	1·8	4·7	7·7	13·6	19·4	22·4	25·5	28·2	14. 19. 13·51		13·76	8·92	55·16		....	
	44	ρ Boötis	S	47·3	50·7	53·8	57·1	3·4	10·0	13·1	16·4	19·6	14. 25. 3·49		3·92	59·04	55·12		....	
	45	) 2 L.	S	..	..	..	..	37·3	43·1	46·2	49·1	52·1	14. 47. 37·15		36·92				14. 47. 24·50	
	46	ι^1 Libræ	S	20·1	23·0	26·1	28·8	34·9	40·7	43·7	46·6	49·5	15. 3. 34·77		34·52				15. 4. 29·68	— 1·25
	47	ζ^1 Libræ	S	27·2	30·0	33·0	35·9	41·5	47·4	50·4	53·1	56·2	15. 19. 41·59		41·39	36·58	55·19		....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S. P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Corrections for passage of Semidiameter, Nos. 15, 36, and 45, $-63^s{\cdot}56$: $-65^s{\cdot}39$: and $-67^s{\cdot}57$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
January 29 and 30. The azimuthal error by Polaris S.P. and Polaris, allowing $-0^s{\cdot}51$ for clock-rate and change of R.A.
January 31. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., the correction for clock-rate insensible.

1. Extremely faint: observed over wires Y, Z.
11, 14, 15, 17, 18, 21, 22. Cloudy.
14. Faint.
15. Faint at times.
16. A very bad image.
45. Correction to R. A. on true meridian $-0^s{\cdot}01$.
47. Very faint.

MONTH and DATE.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Jan. 31	1	Venus 2 L.....	JC	10·7	14·0	16·9	19·8	25·7	31·8	35·0	37·9	40·7	18. 3. 25·78	+ 0·91	25·49			54·85	18. 4. 19·89	
	2	δ Ursæ Min.(E&E)	JC	..	..	..	..	39·0	..	0·5	47·0	33·5	18. 14. 39·34	(+7·72)	52·37	47·66		[0·19]	....	
	3	α Lyræ.....	JC	6·1	9·7	13·4	16·8	23·8	31·1	34·5	38·1	41·6	18. 31. 23·85	[−7·58]	24·44	19·44	55·00		....	
	4	Ceph.51 S.P.(E&E)	JC	..	..	..	39·5	37·0	31·0	26·5	25·0	25·0	18. 35. 36·51		20·27	15·56			....	
Feb. 1	5	⊙ 1 L.....	S	24·0	27·1	30·1	32·8	38·6	44·4	47·2	50·1	53·0	20. 55. 38·53		} 46·53			55·04	20. 57. 41·74	
	6	⊙ 2 L.....	S	40·4	43·4	46·4	49·1	55·1	0·8	3·7	6·7	9·6	20. 57. 54·97							
Feb. 3	7	Polaris ...(E & E)	JC	..	..	..	..	59·0	45·0	..	29·5	22·0	1. 7. 58·12	(+7·45)	23·76	19·00	55·24		....	
	8	η Piscium	JC	3·6	6·5	9·4	12·3	17·9	23·6	26·6	29·4	32·3	1. 23. 17·90	[−4·39]	18·20	13·44	55·24		....	
	9	β Arietis.....	JC	59·6	1·7	4·5	..	..	..	..	..	..	1. 46. 13·66		14·02	8·96	54·94		....	
	10	α Arietis	JC	21·3	24·4	27·4	30·4	36·3	42·4	45·4	48·4	51·4	1. 58. 36·33		36·73	31·90	55·17		....	
	11	ζ Ophiuchi.....	D	31·4	34·4	37·1	40·0	45·5	51·2	53·8	56·9	59·6	16. 28. 45·49	(+8·17)	45·47	41·11	55·64	[55·41† 0·34]	....	
	12	α Lyræ	E	..	..	..	..	23·2	30·1	..	37·4	40·7	18. 31. 23·06	[−5·81]	23·72	19·51	55·79	55·51	18. 32. 19·49	+ 0·53
Feb. 4	13	⊙ 1 L.....	E	34·7	37·5	40·6	43·4	49·4	54·9	57·8	0·7	3·6	21. 7. 49·12		} 56·92					
	14	⊙ 2 L.....	E	50·5	53·5	56·2	59·2	5·1	10·7	13·5	16·4	19·4	21. 10. 4·89						21. 9. 52·73	
	15	σ Arietis	E	50·4	53·2	56·1	58·8	4·5	10·2	13·2	15·7	18·7	2. 43. 4·48		4·76	0·60	55·84	55·85	2. 44. 0·65	− 1·34
	16	47 Arietis	E	9·0	12·0	15·0	17·8	23·7	29·6	32·6	35·5	38·5	2. 49. 23·70		24·05				2. 50. 19·94	− 1·45
	17	α Ceti.....	E	1·7	4·6	7·4	10·2	15·5	21·3	23·9	26·6	29·6	2. 54. 15·59		15·73	11·63	55·90		2. 55. 11·62	− 1·29
	18	κ Persei	E	6·0	9·9	13·7	17·7	25·3	33·1	37·1	40·9	44·8	2. 59. 25·32		26·10				3. 0. 21·99	− 1·91
	19	δ Arietis.....	E	..	..	..	..	56·7	2·6	5·6	8·6	11·5	3. 2. 56·75		57·08	52·93	55·85		3. 3. 52·97	− 1·53
	20	Bradley 448.....	E	..	..	49·4	56·1	9·0	22·1	28·8	..	..	3. 7. 8·97		10·60				3. 8. 6·49	− 2·82
	21	64 Arietis.....	E	7·3	10·4	13·4	16·4	22·5	28·5	31·5	34·6	37·6	3. 15. 22·42		22·84				3. 16. 18·74	− 1·67
	22	Piazzi III. 51 ...	E	..	..	54·3	59·4	10·4	21·4	27·0	..	..	3. 17. 10·39		11·69				3. 18. 7·59	− 2·60
	23	α Camelopardali..	E	..	..	19·1	26·3	39·9	53·4	0·3	..	..	4. 39. 39·67		41·38				4. 40. 37·30	− 4·11
	24	2 Aurigæ	E	20·7	24·3	27·7	31·0	37·9	44·7	48·3	51·7	55·2	4. 42. 37·88		38·50				4. 43. 34·42	− 2·45
	25	ι Aurigæ	E	..	..	4·6	7·8	14·4	21·0	24·3	27·5	30·8	4. 47. 14·33		14·87	10·82	55·95		4. 48. 10·79	− 2·38
	26	Piazzi IV. 269...	E	..	..	37·4	52·4	20·9	50·4	4·9	..	..	4. 59. 20·92		24·76				5. 0. 20·68	− 8·02
	27	δ U. Mi. S.P.(E&E)	E	..	..	43·0	31·0	5·5	37·0	24·0	..	..	6. 15. 5·00		52·77	48·31			....	
	28	Cephei 51 (E & E)	E	17·0	15·5	13·0	9·5	4·5	..	..	..	..	6. 35. 4·18		19·35	14·88			....	
	29	Venus 2 L.....	L	46·2	49·4	52·4	55·3	1·2	7·3	10·3	13·4	16·4	18. 24. 1·25	(+8·77)	1·10			55·36	18. 24. 56·14	
	30	α Lyræ.....	L	5·4	9·2	12·6	16·3	23·3	30·4	34·0	37·4	40·8	18. 31. 23·21		23·92	19·54	55·62	[0·34]	....	
	31	α Aquilæ.....	L	58·7	1·9	4·5	7·4	13·0	18·5	21·4	24·2	26·9	19. 43. 12·90		13·13	8·76	55·63		....	
Feb. 5	32	⊙ 1 L.	L	36·7	39·8	42·6	45·6	51·4	57·0	0·0	3·0	5·7	21. 11. 51·26		51·20				21. 13. 54·66	
Feb. 6	33	α Orionis	D	40·5	43·4	46·0	48·7	54·5	0·0	2·8	5·6	8·4	5. 46. 54·38		54·60	50·76	56·16		....	
	34	μ Geminorum ...	D	35·1	38·0	41·0	44·0	50·0	56·0	58·9	2·0	5·0	6. 13. 49·95		50·38	46·47	56·09		....	
	35	γ Geminorum ...	D	42·9	46·0	48·7	51·6	57·4	3·1	..	..	..	6. 28. 57·34		57·68	53·74	56·06		....	
Feb. 8	36	48 Tauri	C	54·5	57·4	0·3	3·1	8·8	14·6	17·4	20·3	23·0	4. 7. 8·77	+0·91	9·05			55·99	4. 8. 5·02	− 1·78
	37	γ Tauri.....	C	54·7	57·5	0·4	3·4	9·0	14·7	17·6	20·4	23·3	4. 11. 8·95	(+9·25)	9·24	5·23	55·99	[−0·12]	4. 12. 5·21	− 1·81
	38	χ^1 Tauri.....	C	8·9	12·0	14·9	18·0	24·2	30·4	33·4	36·4	39·4	4. 13. 24·13	[−7·27]	24·58				4. 14. 20·55	− 1·97
	39	χ^2 Tauri.....	C	..	..	..	18·7	24·8	31·1	34·1	37·2	40·2	4. 13. 24·85		25·30				4. 14. 21·27	− 1·97
	40	Lalande 8336 ...	C	55·9	58·8	1·8	4·6	10·6	16·4	19·2	22·0	25·0	4. 18. 10·43		10·77				4. 19. 6·74	− 1·90
	41	η Draconis S.P...	C	..	..	..	..	..	25·6	31·4	37·3	43·3	4. 21. 14·02		12·42				16. 22. 8·39	+ 0·82
	42	Aldebaran	C	58·3	1·2	4·2	7·1	12·8	18·7	21·5	24·4	27·2	4. 27. 12·77		13·07	9·08	56·01		4. 28. 9·04	− 1·91
	43	ι Aurigæ	C	57·8	..	4·5	7·7	14·2	21·1	24·2	..	30·7	4. 47. 14·26		14·86	10·76	55·90		4. 48. 10·83	− 2·32

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Corrections for passage of Semidiameter, Nos. 1, 29, and 32, $-0^s{\cdot}59$: $-0^s{\cdot}58$: and $+67^s{\cdot}80$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
February 3. The azimuthal error by tabular places of Polaris and η Piscium, the correction for clock-rate insensible.
February 4. The azimuthal error by tabular places of δ Ursæ Minoris S.P. and Cephei 51, the correction for clock-rate insensible.
February 8 to 10. The azimuthal error used is the mean of those ($-7''{\cdot}29$ and $-7''{\cdot}25$) determined by tabular places of δ Ursæ Minoris S.P. and Cephei 51, on February 8 and February 9; the correction for clock-rate insensible in both cases.

7. Extremely cloudy.
8. Faint.
8, 34, 35, 43. Cloudy.
9. Cloudy after the passage over the 3rd wire.
32. Cloudy during the passage of the 2 L.
35, 43. Very faint.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Feb. 8	1	η Aurigæ	C	46·5	50·1	53·9	57·5	4·8	12·2	15·9	19·4	23·2	4. 56. 4·77	+ 0·91	5·54			55·99	4. 57. 1·52	— 2·59
	2	15 Orionis	C	..	..	..	..	0·9	6·7	9·6	12·4	15·2	5. 1. 0·88	(+9·25)	1·17			[−0·12]	5. 1. 57·13	— 2·07
	3	Rigel	C	..	..	..	..	..	34·1	48·1	..	..	5. 7. 6·14	[−7·27]	6·10	1·98	55·88		5. 8. 2·06	— 1·83
	4	Rigel	C	..	..	..	..	..	..	14·6	17·4	20·1								
	5	δ Orionis	C	55·8	58·6	1·3	4·1	9·5	15·1	17·9	20·6	23·5	5. 24. 9·55		9·62	5·54	55·92		5. 25. 5·58	— 1·98
	6	26 Aurigæ	C	44·4	47·6	50·6	53·8	0·2	6·8	10·0	13·3	16·5	5. 29. 0·30		0·85				5. 29. 56·81	— 2·48
	7	δ U. Mi. S.P.(E&E)	C	12·5	0·0	46·5	33·0	7·0	40·0	..	..	..	6. 15. 7·28		53·06	49·16			....	
	8	Cephei 51. .(E&E)	C	13·5	11·5	9·0	6·0	0·5	56·5	..	..	..	6. 35. 0·35		17·93	14·07			....	
	9	Sirius	C	1·1	4·2	7·1	9·8	15·5	21·3	24·4	27·1	30·0	6. 38. 15·56		15·39	11·43	56·04		6. 39. 11·35	— 2·19
Feb. 9	10	τ^1 Arietis	E	13·2	16·2	19·2	22·3	28·0	34·0	36·9	39·8	42·8	3. 12. 27·99		28·37	24·30	55·93	56·09	3. 13. 24·42	— 1·52
	11	64 Arietis	E	6·7	9·9	13·1	16·0	22·3	28·2	31·2	34·3	37·2	3. 15. 22·05		22·49			[−0·32]	3. 16. 18·54	— 1·58
	12	Bradley 471.....	E	..	..	..	..	..	46·6	55·9	5·4	14·4	3. 19. 27·50		30·29				3. 20. 26·34	— 3·53
	13	* N. P. D. 59°. 52′.	E	..	..	..	..	..	1·8	5·4	8·2	11·6	3. 26. 55·49		56·03				3. 27. 52·07	— 1·75
	14	* N. P. D. 59°. 51′.	E	..	..	..	..	..	14·8	18·3	..	..	3. 27. 8·48		9·02				3. 28. 5·06	— 1·75
	15	11 Tauri	E	..	..	..	..	..	50·6	53·6	56·7	59·8	3. 31. 44·45		44·90	40·93	56·03		3. 32. 40·94	— 1·70
	16	δ Eridani	D	35·5	38·4	41·2	44·0	49·6	55·3	58·2	0·7	3·6	3. 35. 49·56		49·49	45·36	55·87	55·93†	....	
	17	η Tauri.....	D	14·6	17·8	20·7	23·7	29·8	35·7	38·8	41·8	44·8	3. 38. 29·69		30·13	26·02	55·89		....	
	18	ε Tauri.....	E	31·6	34·6	37·5	40·5	46·1	52·3	55·2	58·0	0·9	4. 19. 46·25		46·60	42·58	55·98	56·09	4. 20. 42·63	— 1·90
	19	Aldebaran	E	58·4	1·3	4·2	7·0	12·8	18·7	21·4	24·4	27·3	4. 27. 12·79		13·09	9·06	55·97		4. 28. 9·12	— 1·89
	20	η Geminorum....	E	31·3	34·3	37·4	40·3	46·2	52·3	55·2	58·2	1·3	6. 5. 46·23		46·65	42·59	55·94		6. 6. 42·66	— 2·46
	21	μ Geminorum....	E	35·0	38·3	41·2	44·0	50·1	56·1	59·0	2·1	5·1	6. 13. 50·05		50·47	46·45	55·98		6. 14. 46·48	— 2·49
	22	δ U. Mi. S.P.(E&E)	E	..	..	..	..	7·5	40·0	26·5	13·0	1·0	6. 15. 7·69		53·47	49·44			....	
	23	ν Geminorum....	E	44·6	47·6	50·5	53·5	59·4	5·4	8·2	11·2	14·3	6. 19. 59·36		59·72				6. 20. 55·73	— 2·47
	24	ν^1 Can.Maj. (2dstar)	E	17·5	20·4	23·2	26·2	32·0	37·6	40·6	43·6	46·5	6. 29. 31·91		31·72				6. 30. 27·72	— 2·14
	25	Cephei 51. (E & E)	E	..	12·0	9·0	6·5	0·0	56·5	..	..	..	6. 35. 0·26		17·84	13·79			....	
	26	Sirius	E	1·0	3·8	6·8	9·7	15·5	21·4	24·2	27·0	29·8	6. 38. 15·42		15·25	11·42	56·17		6. 39. 11·25	— 2·18
	27	μ Canis Majoris..	E	44·9	47·7	50·5	53·5	59·0	4·7	7·6	10·4	13·3	6. 48. 59·01		58·89				6. 49. 54·89	— 2·24
	28	3 Cancri.....	E	51·4	54·4	57·3	0·2	5·9	11·8	14·6	17·4	20·4	7. 52. 5·88		6·21				7. 53. 2·20	— 2·65
	29	6 Cancri.....	E	0·4	3·5	6·6	9·8	15·9	22·2	25·4	28·6	31·7	7. 54. 15·96		16·46	12·46	56·00		7. 55. 12·45	— 2·82
	30	B. F. 1128.....	E	45·1	48·1	51·1	54·0	59·8	5·6	8·6	11·5	14·5	7. 55. 59·76		0·11				7. 56. 56·09	— 2·67
	31	β Cancri.....	E	0·6	3·4	6·3	9·0	14·6	20·2	23·0	25·9	28·7	8. 8. 14·58		14·78	10·87	56·09		8. 9. 10·76	— 2·58
	32	χ Cancri.....	E	38·6	41·9	45·0	48·1	54·3	0·5	3·6	6·8	9·9	8. 10. 54·25		54·75				8. 11. 50·73	— 2·82
	33	γ Cancri.....	E	16·1	19·1	22·0	24·9	31·1	37·1	40·0	43·0	46·0	8. 34. 30·99		31·39	27·41	56·02		8. 35. 27·37	— 2·73
	34	Venus 2 L.....	C	37·7	40·8	43·7	46·7	52·6	58·6	1·7	4·6	7·5	18. 49. 52·61		52·37			55·84	18. 50. 47·31	
	35	Mercury, center..	JC	44·5	47·5	50·4	53·4	59·3	5·2	8·2	10·9	13·9	19. 51. 59·20		59·00			[−0·42]	19. 52. 54·49	
Feb. 10	36	⊙ 1 L.....	JC	36·0	38·9	41·8	44·5	50·2	56·1	58·9	1·6	4·5	21. 31. 50·23							
	37	⊙ 2 L.....	JC	..	..	..	58·7	4·6	10·3	13·1	16·0	18·9	21. 34. 4·49		57·23				21. 33. 52·69	
	38	β Tauri	C	32·6	35·8	39·0	42·1	48·4	54·6	57·7	1·0	4·2	5. 16. 48·32		48·84	44·17	55·33		....	
Feb. 12	39	11 Tauri	JC	30·9	33·9	37·0	40·2	46·1	52·2	55·4	58·4	1·4	3. 31. 46·11	(+7·54)	46·50	40·87	54·37	54·52†	....	
	40	δ Eridani	JC	37·0	39·7	42·7	..	51·0	..	59·5	2·4	5·0	3. 35. 51·00	[−5·43]	50·99	45·31	54·32	[−1·14]	....	
	41	24 Tauri	C	8·0	11·1	14·3	17·2	23·2	29·3	32·3	35·2	38·4	3. 38. 23·17		23·55			54·67	3. 39. 18·05	— 1·67
	42	η Tauri.....	C	16·1	19·4	22·4	25·3	31·4	37·4	40·4	43·3	46·4	3. 38. 31·30		31·68	25·96	54·28		3. 39. 26·18	— 1·67
	43	Piazzi III. 177 ..	C	4·0	10·1	16·2	22·2	34·0	..	..	..	..	3. 44. 34·07		35·43				3. 45. 29·92	— 2·82
	44	β Tauri	C	33·6	36·7	39·9	43·1	49·4	55·6	58·7	1·9	5·0	5. 16. 49·27		49·71	44·14	54·43		5. 17. 44·13	— 2·32
	45	Groombridge 966.	C	49·4	0·3	10·0	21·4	42·6	..	..	..	..	5. 20. 42·40		44·98				5. 21. 39·40	— 5·99
	46	G.7-yr.Cat.No.420	C	..	..	37·5	44·2	57·4	10·8	17·6	..	..	5. 27. 57·37		58·93				5. 28. 53·34	— 4·23

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, 30r·700.

Correction for passage of Semidiameter, No. 34, −0s·57.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

February 12 to 14. The azimuthal error used is the mean of those (−5″·37 and −5″·49) determined by tabular places of δ Ursæ Minoris S.P. and Cephei 51 on February 12 and 13; the correction for clock-rate insensible in both cases.

2, 3, 4. Very cloudy.

3. Observed over wires Y, Z.

13, 15, 38. Very faint.

14. Extremely faint from cloud. No satisfactory observation in N.P.D. could be obtained.

35. Scarcely visible.

38. Cloudy.

MONTH and DAY.	No. for Reference	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Feb. 12	1	Lalande 10769...	C	..	..	4·4	12·0	26·7	42·0	49·5	..	..	5. 37. 26·77	+0·91	28·55			54·67	5. 38. 22·95	— 4·71
	2	Piazzi V. 246 ...	C	..	..	29·9	37·0	50·9	5·4	12·4	..	..	5. 45. 50·98	(+ 7·54)	52·65			[−1·14]	5. 46. 47·05	— 4·57
	3	Groom.1004(E&E)	C	..	5·0	54·0	43·0	20·0	59·0	47·5	36·0	..	5. 51. 19·63	[−5·43]	31·71				5. 52. 26·10	—25·05
	4	Piazzi V. 335 ...	C	..	..	..	..	0·0	16·1	24·0	31·7	39·5	6. 3. 0·16		2·01				6. 3. 56·39	— 5·10
	5	η Geminorum....	C	32·8	35·8	38·8	41·9	47·8	53·8	56·8	59·8	2·6	6. 5. 47·74		48·10	42·55	54·45		6. 6. 42·48	— 2·42
	6	δ U. Mi. S.P.(E&E)	C	..	59·5	46·0	32·5	6·5	39·0	26·0	..	..	6. 15. 6·93		55·52	50·32			....	
	7	ν Geminorum....	C	46·3	49·4	52·2	55·1	1·0	7·0	10·0	12·8	15·7	6. 20. 1·01		1·33				6. 20. 55·70	— 2·44
	8	Cephei 51..(E&E)	C	..	..	..	10·5	4·0	0·5	58·0	55·5	52·0	6. 35. 3·94		18·09	12·80			....	
	9	μ Canis Majoris..	C	..	..	..	..	..	6·4	9·4	12·1	14·9	6. 49. 0·67		0·61				6. 49. 54·96	— 2·21
	10	PiazziVI.285(E&E)	C	..	..	..	0·6	37·5	15·5	34·5	53·0	11·6	6. 58. 37·70		42·31				6. 59. 36·65	—11·32
	11	Piazzi VII. 67...	C	..	..	28·4	..	51·3	6·4	14·1	..	..	7. 15. 51·10		52·90				7. 16. 47·23	— 5·37
	12	β Canis Minoris..	C	40·4	43·4	46·3	..	54·4	..	2·8	..	8·3	7. 18. 54·42		54·61	48·99	54·38		7. 19. 48·93	— 2·55
	13	3 Cancri.....	C	53·2	56·1	58·9	1·8	..	13·5	16·4	19·3	22·0	7. 52. 7·59		7·88				7. 53. 2·18	— 2·64
	14	B. F. 1128.....	C	..	..	..	..	..	7·4	10·4	13·3	16·1	7. 56. 1·49		1·81				7. 56. 56·10	— 2·67
	15	β Cancri.....	C	2·4	5·2	8·0	10·7	16·3	22·0	24·9	27·7	30·4	8. 8. 16·35		16·56	10·87	54·31		8. 9. 10·85	— 2·58
	16	χ Cancri.....	C	..	43·4	46·7	49·8	55·9	2·4	5·4	8·5	..	8. 10. 55·95		56·39				8. 11. 50·67	— 2·82
	17	d^1 Cancri	C	28·0	30·9	33·7	36·8	42·5	48·4	51·3	54·2	57·0	8. 14. 42·49		42·79	37·07	54·28		8. 15. 37·07	— 2·68
Feb. 13	18	☽ 1 L.....	E	14·5	17·6	20·6	23·5	..	35·4	38·3	41·3	44·2	2. 44. 29·36	(+ 6·22)	29·56			53·61	2. 46. 30·56	
	19	α Ceti.....	E	4·3	7·1	9·7	12·6	18·1	23·6	26·3	29·2	31·9	2. 54. 18·04		18·11	11·48	53·37	[−2·74]	2. 55. 11·39	— 1·14
	20	δ Arietis.....	E	44·6	47·6	50·5	53·4	59·4	5·2	8·0	11·1	13·9	3. 2. 59·25		59·49	52·78	53·29		3. 3. 52·76	— 1·38
	21	ζ Arietis.....	E	58·6	1·4	4·4	7·4	13·2	19·2	22·1	25·1	28·0	3. 6. 13·22		13·46				3. 7. 6·72	— 1·41
	22	τ^1 Arietis	D	16·2	19·2	22·1	25·0	30·8	36·8	39·8	42·8	45·7	3. 12. 30·89		31·14	24·23	53·09	53·48†	....	
	23	ο Tauri	D	24·0	26·8	29·7	32·4	..	..	46·4	49·2	51·9	3. 16. 37·94		38·06	31·19	53·13		....	
	24	ε Eridani	D	25·7	28·5	31·4	34·0	39·5	45·3	48·0	50·9	53·6	3. 25. 39·60		39·54	32·62	53·08		....	
	25	* N.P.D. 64°. 33′.	E	2·0	5·1	8·4	11·2	..	23·5	26·5	29·6	32·7	3. 50. 17·32		17·63			53·61	3. 51. 10·80	— 1·75
	26	ω^1 Tauri	E	8·5	11·5	14·5	17·4	23·1	29·0	31·9	35·0	37·9	4. 0. 23·15		23·39	16·53	53·14		4. 1. 16·54	— 1·72
	27	48 Tauri	E	57·3	0·3	3·1	6·0	..	17·4	20·3	23·0	26·0	4. 7. 11·62		11·81				4. 8. 4·96	— 1·70
	28	51 Tauri	E	..	17·2	20·2	23·2	28·9	35·0	37·8	40·9	..	4. 9. 28·97		29·24				4. 10. 22·38	— 1·81
	29	φ Tauri.....	E	52·6	55·7	58·8	2·0	8·1	14·4	17·5	20·6	23·5	4. 11. 8·08		8·41				4. 12. 1·55	— 1·91
	30	Lalande 8336....	E	58·7	1·8	4·7	7·6	13·4	19·3	22·3	25·2	28·0	4. 18. 13·40		13·62				4. 19. 6·76	— 1·82
	31	ε Tauri.....	E	34·6	37·4	40·4	43·4	49·2	55·1	58·0	1·0	3·8	4. 19. 49·16		49·38	42·51	53·13		4. 20. 42·50	— 1·83
	32	Aldebaran	E	1·3	4·2	7·2	10·1	15·6	21·5	24·5	27·2	30·1	4. 27. 15·69		15·89	9·00	53·11		4. 28. 8·99	— 1·83
	33	υ^7 Eridani	E	..	..	..	..	24·3	30·8	..	37·3	40·4	4. 29. 24·30		24·02				4. 30. 17·12	— 1·30
	34	Piazzi IV. 151...	E	..	..	..	..	..	49·2	52·4	55·6	58·6	4. 30. 42·59		42·30				4. 31. 35·40	— 1·31
	35	μ Eridani	E	36·9	39·7	42·5	45·2	50·7	56·3	59·1	1·8	4·6	4. 37. 50·71		50·71	43·89	53·18		4. 38. 43·80	— 1·65
	36	G.7-yr.Cat. No.346	E	20·7	23·8	27·0	29·8	35·9	41·6	44·6	47·6	50·6	4. 40. 35·68		35·94				4. 41. 29·02	— 1·99
	37	* N.P.D. 68°. 8′..	E	6·9	10·0	13·0	16·0	21·7	28·0	..	..	..	4. 43. 21·84		22·10				4. 44. 15·17	— 2·01
	38	* N.P.D. 68°. 10′..	E	..	..	..	..	31·0	36·6	39·6	42·4	45·4	4. 43. 30·61		30·87				4. 44. 23·94	— 2·01
	39	β Tauri	E	34·9	38·1	41·4	44·5	50·8	57·0	0·2	3·4	6·5	5. 16. 50·71		51·06	44·12	53·06		5. 17. 44·07	— 2·30
	40	1 Geminorum ...	E	45·4	48·4	51·4	54·4	0·4	6·4	9·4	12·6	15·5	5. 55. 0·39		0·67	53·62	52·95		5. 55. 53·60	— 2·38
	41	δ U. Mi. S.P.(E&E)	E	..	..	..	..	..	7·0	41·0	..	14·0	1·5	6. 15. 8·18		57·87	50·59			....	
	42	Cephei 51 .(E&E)	E	..	..	16·0	14·0	7·0	3·0	0·5	..	..	6. 35. 6·99		19·65	12·47			....	
	43	Niobe	E	..	19·5	22·5	25·5	31·3	37·0	40·5	43·4	..	8. 22. 31·33		31·61	12·47			8. 23. 24·28	
	44	ϵ Hydræ.....	E	30·4	33·3	36·0	38·7	44·2	49·9	52·5	55·4	58·3	8. 38. 44·25		44·35	36·89	52·54		8. 39. 36·97	— 2·58
	45	α Cancri.....	E	58·6	1·5	4·4	7·2	12·8	18·5	21·3	24·2	27·0	8. 50. 12·79		12·95	5·41	52·46		8. 51. 5·55	— 2·64
	46	Regulus	E	3·5	6·4	9·3	12·1	17·7	23·4	26·3	29·0	31·9	10. 0. 17·68		17·85	10·18	52·33		10. 1. 10·32	— 2 59
	47	Themis.....	E	51·2	53·8	56·8	59·5	5·3	10·8	14·0	16·6	19·4	10. 14. 5·22		5·38				10. 14. 57·84	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Correction for passage of Semidiameter, No. 18, +67s·69.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.

14, 22, 23, 24. Cloudy. 16. Very cloudy. 17. Faint. 18. Correction to R. A. on Meridian, + 0s·01.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Feb. 14	1	11 Tauri	JC	36·0	39·0	42·1	45·0	51·2	57·4	0·4	3·4	6·4	3. 31. 51·16	+0·91	51·46	40·84	49·38	49·96	....	
	2	δ Eridani	JC	41·9	44·7	47·5	50·5	56·0	1·6	4·5	7·4	10·0	3. 35. 55·96	(+6·22)	55·90	45·27	49·37	[−3·98]	....	
	3	☽ 1 L.	JC	44·3	47·2	50·2	53·2	59·0	5·2	8·3	11·2	14·2	3. 39. 59·15	[−5·43]	59·01				3. 41. 55·89	
	4	γ^1 Eridani	C	39·0	41·9	44·6	47·4	53·2	58·7	2·0	4·6	7·4	3. 50. 53·15		53·05	42·33	49·28	49·92†	....	
	5	δ^1 Tauri	JC	3·4	6·5	9·4	12·2	18·0	23·7	26·7	29·5	32·5	4. 14. 17·94		18·15			49·96	4. 15. 7·41	− 1·75
	6	ε Tauri	JC	..	..	..	..	53·0	58·9	1·9	4·8	7·7	4. 19. 53·03		53·25	42·49	49·24		....	
	7	Rigel	C	..	..	..	..	..	40·8	54·8	..	..	5. 7. 12·86		12·81	1·89	49·08	49·92†	....	
	8	Rigel	C	..	..	..	..	..	..	21·4	24·1	26·8								
Feb. 16	9	μ Eridani	C	49·1	52·0	54·8	57·5	3·0	8·7	11·4	14·1	16·8	4. 38. 3·00	+1·14	3·16	43·84	40·68	41·43	4. 38. 43·77	− 1·59
	10	Gr.7-yr.C.No.346	C	..	..	..	42·5	48·4	54·1	..	..	..	4. 40. 48·28	(+7·25)	48·69			[−4·27]	4. 41. 29·29	− 1·93
	11	ι Tauri	C	4·4	7·4	10·4	13·4	19·3	25·2	28·2	31·2	34·0	4. 54. 19·22	[−3·60]	19·62				4. 55. 0·17	− 2·00
	12	m Tauri	C	..	..	..	..	..	15·2	29·6	..	..	4. 58. 45·92		46·29				4. 59. 26·84	− 1·99
	13	m Tauri	C	..	..	..	..	..	..	..	57·6	0·5								
	14	Piazzi IV. 317	C	49·4	3·0	15·9	29·2	54·8	..	..	..	..	5. 7. 55·05		58·00				5. 8. 38·53	− 6·54
	15	β Tauri	C	47·5	50·5	53·6	56·8	3·0	9·4	12·6	15·7	18·7	5. 17. 3·04		3·53	44·07	40·54		5. 17. 44·02	− 2·25
	16	Groombridge 966	C	2·8	13·8	24·6	35·2	56·1	..	..	..	..	5. 20. 56·16		58·55				5. 21. 39·04	− 5·73
	17	☽ 1 L.	C	10·3	13·5	16·4	19·5	25·4	31·6	34·5	37·6	40·6	5. 29. 25·44		25·84				5. 31. 12·78	
	18	β Columbæ	C	14·6	18·1	21·6	24·9	31·9	38·6	42·0	45·2	48·8	5. 45. 31·69		31·52				5. 46. 11·93	− 1·71
	19	γ Draconis S.P.	C	24·5	28·9	33·4	37·8	46·9	55·5	0·0	4·4	9·0	5. 52. 46·79		46·12				17. 53. 26·51	+ 0·54
	20	χ^3 Orionis	C	..	..	37·1	40·1	45·9	51·8	54·6	57·7	0·5	5. 54. 45·84		46·23				5. 55. 26·61	− 2·28
	21	ν Orionis	C	55·6	58·6	1·4	4·3	10·0	15·7	18·5	21·4	24·2	5. 59. 9·92		10·26	50·63	40·37		5. 59. 50·63	− 2·22
	22	Piazzi V. 335	C	..	..	..	..	..	29·8	37·6	45·6	53·2	6. 3. 13·92		15·68				6. 3. 56·04	− 4·94
	23	δ U. Mi. S.P. (E&E)	C	27·5	13·3	0·5	47·0	21·0	53·0	..	..	..	6. 15. 21·15		11·08	51·37			....	
	24	ν Geminorum	C	0·2	3·2	6·1	9·1	15·0	20·9	23·7	26·8	29·6	6. 20. 14·91		15·31				6. 20. 55·62	− 2·39
	25	ν^1 Ca. Maj. (1st Star)	C	31·6	34·6	37·5	40·4	46·0	52·0	54·9	57·8	0·7	6. 29. 46·11		46·13				6. 30. 26·41	− 2·05
	26	ν^1 Ca. Maj. (2d Star)	C	32·8	35·9	38·7	41·6	47·4	53·2	56·2	59·2	2·0	6. 29. 47·39		47·41				6. 30. 27·69	− 2·05
	27	Cephei 51 (E & E)	C	..	..	..	23·5	17·5	..	..	..	7·0	6. 35. 17·70		24·54	10·64			....	
	28	Sirius	S	16·4	19·3	22·2	25·2	30·7	36·5	39·4	42·3	45·2	6. 38. 30·75		30·79			41·57†	6. 39. 11·18	− 2·10
	29	θ Canis Majoris	S	59·9	2·8	5·6	8·4	14·0	19·5	22·5	25·3	28·3	6. 47. 13·99		14·07	54·45	40·38		....	
	30	13 Lyræ S.P.	C	12·6	16·4	20·4	24·1	31·8	..	..	..	..	6. 50. 31·84		31·35			41·43	18. 51. 11·57	+ 0·45
	31	γ Cancri	C	32·2	35·2	38·3	41·2	47·0	53·2	56·0	59·0	2·0	8. 34. 47·07		47·48	27·41	39·93		8. 35. 27·38	− 2·73
	32	α Cygni S.P.	C	48·5	52·2	56·3	0·0	7·9	15·7	19·5	23·4	27·4	8. 36. 7·95		7·43				20. 36. 47·33	+ 0·63
	33	Var. (T) Cancri	C	1·5	4·5	7·4	10·4	16·3	22·3	25·2	28·1	30·9	8. 48. 16·24		16·64				8. 48. 56·51	− 2·72
	34	κ Cancri	C	..	..	37·0	39·7	45·3	50·9	..	..	..	8. 59. 45·29		45·59	25·34	39·75		9. 0. 25·42	− 2·63
Feb. 17	35	τ^1 Arietis	JC	32·2	35·3	38·3	41·1	46·9	53·0	56·0	59·0	2·0	3. 12. 47·04	(+9·00)	47·52	24·16	36·64	37·21†	....	
	36	ο Tauri	JC	40·2	43·1	45·8	48·5	54·2	59·8	2·6	5·5	8·1	3. 16. 54·15	[−4·43]	54·48	31·12	36·64	[−4·20]	....	
	37	ω^1 Tauri	E	24·6	27·4	30·5	33·6	39·4	45·2	48·0	51·0	54·0	4. 0. 39·25		39·71	16·46	36·75	37·45	4. 1. 16·46	− 1·65
	38	o^1 Eridani	E	24·3	27·2	30·0	32·8	38·2	43·8	46·6	49·4	52·4	4. 4. 38·25		38·40	15·00	36·60		4. 5. 15·15	− 1·35
	39	β Tauri	E	51·1	54·4	57·5	0·7	6·8	13·2	16·4	19·6	22·6	5. 17. 6·87		7·47	44·06	36·59		5. 17. 44·00	− 2·24
	40	δ Orionis	E	15·0	17·8	20·5	23·4	28·7	34·4	37·1	39·8	42·6	5. 24. 28·76		28·99	5·41	36·42		5. 25. 5·50	− 1·85
	41	Lalande 10769	E	..	..	21·6	29·6	44·2	59·5	7·2	..	..	5. 37. 44·27		46·29				5. 38. 22·76	− 4·50
	42	α Orionis	E	59·9	2·8	5·6	8·3	14·0	19·5	22·4	25·1	27·9	5. 47. 13·90		14·21	50·62	36·41		5. 47. 50·65	− 2·05
	43	χ^3 Orionis	E	35·1	38·0	41·0	44·0	49·6	55·6	58·6	1·5	4·5	5. 54. 49·71		50·17				5. 55. 26·59	− 2·26
	44	ν Orionis	E	59·4	2·5	5·3	8·2	13·8	19·6	22·6	25·4	28·2	5. 59. 13·84		14·24	50·62	36·38		5. 59. 50·65	− 2·21
	45	η Geminorum	E	50·7	53·6	56·7	59·6	5·7	11·6	14·7	17·5	20·5	6. 6. 5·57		6·08	42·49	36·41		6. 6. 42·47	− 2·36
	46	δ U. Mi. S.P. (E&E)	E	..	..	7·0	53·5	27·0	59·0	46·0	..	..	6. 15. 27·40		15·25	51·62			....	
	47	☽ 1 L.	E	19·4	22·4	25·4	28·4	34·4	40·5	43·4	46·4	49·6	6. 22. 34·38		34·84				6. 24. 16·73	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r·700$.

Corrections for passage of Semidiameter, Nos. 3, 17, and 47, $+67^s·54$: $+66^s·48$: and $+65^s·53$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

February 16 and 17. The azimuthal errors by tabular places of δ Ursæ Minoris S.P. and Cephei 51, allowing $-0^s·03$ for clock-rate in both cases.

1. Faint.
10. Exceedingly faint.
1, 30. Cloudy.
7, 8, 34. Very cloudy.
17, 47. Corrections to R. A. on Meridian, $+0^s·01$ and $+0^s·02$ respectively.
7, 12. Observed over wires Y, Z.
33. A very red star: of the 8–9th magnitude.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	//	s	s	s	s	h m s	s
Feb. 17	1	Cephei 51 (E & E)	E	32·0	31·0	29·5	25·5	19·0	..	..	..	..	6. 35. 19·73	+ 1·14	35·03	11·39		37·45	....	
	2	Sirius	E	20·4	23·4	26·4	29·2	35·0	40·6	43·4	46·4	49·4	6. 38. 34·86	(+9·00)	34·89	11·33	36·44	[−4·20]	6. 39. 11·18	− 2·09
	3	μ Canis Majoris	E	4·4	7·3	10·2	12·9	18·6	24·4	27·2	30·1	33·0	6. 49. 18·62	[−4·43]	18·69				6. 49. 54·95	− 2·15
	4	ζ^2 Geminorum	E	13·5	16·6	19·5	22·5	28·4	34·4	37·3	40·1	43·2	6. 55. 28·34		28·82				6. 56. 5·06	− 2·51
	5	Venus, center	D	..	..	25·4	28·2	..	..	..	46·0	49·0	19. 31. 34·11	[−5·91]	33·99			37·41 [−4·20]	19. 32. 7·99	
Feb. 18	6	γ Ceti	C	29·8	32·5	35·4	38·0	43·5	49·2	52·0	54·6	57·4	2. 35. 43·55		43·73	16·30	32·57	33·07†	....	
	7	δ Eridani	C	58·7	1·4	4·4	7·2	12·6	18·3	21·2	24·0	26·8	3. 36. 12·69		12·71	45·20	32·49		....	
	8	φ Tauri	D	13·0	16·2	19·2	22·5	28·4	34·8	37·8	41·0	44·1	4. 11. 28·50		29·03			33·21	4. 12. 1·51	− 1·81
	9	Lalande 8336	D	19·4	..	..	..	..	39·7	42·6	..	..	4. 18. 33·85		34·25				4. 19. 6·71	− 1·73
	10	Aldebaran	D	21·6	24·7	27·5	30·4	36·3	42·1	44·9	47·6	50·6	4. 27. 36·14		36·50	8·91	32·41		4. 28. 8·93	− 1·74
	11	μ Eridani	D	57·4	0·4	3·1	5·7	11·3	16·8	19·5	22·4	25·1	4. 38. 11·25		11·36	43·81	32·45		4. 38. 43·76	− 1·56
	12	2 Aurigæ	D	44·0	47·4	51·2	54·4	1·3	8·1	11·6	15·1	18·4	4. 43. 1·22		1·91				4. 43. 34·30	− 2·19
	13	η Aurigæ	D	10·0	13·6	17·3	21·2	28·2	35·5	39·4	42·8	46·5	4. 56. 28·21		29·02				4. 57. 1·37	− 2·39
	14	μ Aurigæ	D	19·2	22·8	26·4	30·1	36·9	44·0	47·6	51·0	54·5	5. 3. 36·88		37·63				5. 4. 9·96	− 2·36
	15	Capella	D	48·3	52·5	56·5	0·4	8·4	16·2	20·3	24·2	28·2	5. 6. 8·26		9·18				5. 6. 41·50	− 2·59
	16	β Tauri	D	55·6	58·7	1·9	5·0	11·3	17·5	20·6	23·8	27·0	5. 17. 11·22		11·78	44·04	32·26		5. 17. 44·07	− 2·22
	17	δ U.Mi. S.P. (E&E)	D	41·0	25·0	12·0	59·0	33·5	7·0	52·0	39·0	26·0	6. 15. 33·54		20·27	51·87			....	
	18	Cephei 51 (E & E)	D	..	..	..	..	24·0	18·0	17·0	15·0	12·0	6. 35. 23·05		39·57	11·13			....	
	19	ι Canis Majoris	D	20·1	23·0	25·9	28·8	34·5	40·3	43·2	46·1	49·0	6. 49. 34·49		34·42				6. 50. 6·44	− 2·13
	20	ε Canis Majoris	D	..	..	38·0	41·0	47·2	53·6	56·6	59·8	3·1	6. 52. 47·21		46·98	18·99	32·01		6. 53. 18·99	− 2·11
	21	ζ^2 Geminorum	D	17·7	20·8	23·9	26·8	32·7	38·5	41·5	44·4	47·4	6. 55. 32·59		33·02				6. 56. 5·02	− 2·50
	22	δ Canis Majoris	D	6·6	9·7	12·8	15·9	22·1	28·4	31·4	34·5	37·5	7. 2. 22·05		21·86				7. 2. 53·84	− 2·16
	23	λ Geminorum	D	32·4	35·4	38·0	41·0	46·8	52·6	55·4	58·3	1·2	7. 9. 46·74		47·11				7. 10. 19·07	− 2·49
	24	) 1 L.	D	58·6	1·8	4·7	7·7	13·5	19·7	22·6	25·5	28·6	7. 14. 13·59		13·97				7. 15. 50·35	
	25	6 Canis Minoris	D	29·6	32·6	35·4	38·2	43·6	49·4	52·4	55·1	57·9	7. 21. 43·75		44·06				7. 22. 15·99	− 2·47
	26	68 Geminorum	D	..	9·6	12·4	15·2	21·0	26·7	29·5	32·6	..	7. 25. 20·94		21·30				7. 25. 53·22	− 2·53
	27	Procyon	D	27·4	30·2	33·0	35·7	41·2	46·8	49·6	52·4	55·1	7. 31. 41·22		41·45	13·34	31·89		7. 32. 13·35	− 2·42
	28	Pollux	D	14·0	17·2	20·5	23·4	29·7	36·1	39·3	42·2	45·4	7. 36. 29·70		30·25	2·13	31·88		7. 37. 2·14	− 2·73
Feb. 22	29	6 Cancri	C	25·5	28·7	31·6	34·8	41·2	47·5	50·6	53·7	56·7	7. 54. 41·10	+ 1·41	41·68	12·39	30·71	30·41†	....	
	30	β Cancri	S	25·5	..	31·3	34·0	39·6	45·3	48·1	..	53·6	8. 8. 39·59	(+9·50)	39·88	10·82	30·94	[0·91]	....	
	31	o Leonis	S	10·6	13·5	16·3	19·3	24·7	30·4	33·1	35·9	38·7	9. 33. 24·67	[6·64]	24·97	56·02	31·05	30·60	....	
	32	π Leonis	S	19·0	21·7	24·4	27·6	32·8	38·6	41·6	44·4	47·1	9. 52. 32·97		33·24	4·09	30·85		....	
	33	) 1 L.	S	1·9	4·9	7·9	10·6	16·1	21·7	24·8	27·4	30·3	10. 26. 16·13		16·32				10. 27. 48·53	
	34	) 2 L.	S	4·4	7·3	10·4	13·1	18·6	24·4	27·2	29·9	32·9	10. 28. 18·64		18·83				10. 27. 48·64	
	35	c Leonis	S	59·1	1·8	4·6	7·4	12·9	18·5	21·4	24·1	27·0	10. 53. 12·93		13·17				10. 53. 44·18	− 2·59
	36	p^5 Leonis	S	..	8·4	11·0	13·7	19·0	..	27·8	30·4	33·2	11. 6. 19·26		19·42				11. 6. 50·44	− 2·58
Feb. 23	37	β Tauri	JC	..	59·3	2·6	5·6	11·9	18·3	..	24·6	..	5. 17. 11·89		12·47	43·95	31·48	31·29	5. 17. 43·96	− 2·13
	38	δ Orionis	JC	19·6	22·7	25·4	..	33·6	..	41·7	44·6	47·4	5. 24. 33·53		33·67	5·32	31·65	[0·93]	5. 25. 5·17	− 1·76
	39	α Leporis	JC	59·6	2·7	5·6	8·4	14·0	20·0	22·9	25·7	28·8	5. 26. 14·14		14·05	45·53	31·48		5. 26. 45·55	− 1·59
	40	α Orionis	E	4·5	7·4	10·3	12·9	18·4	24·1	26·9	29·7	32·5	5. 47. 18·47		18·71	50·53	31·82	31·52†	....	
	41	1 Geminorum	E	6·2	9·2	12·3	15·3	21·4	27·4	30·4	33·4	36·4	5. 55. 21·29		21·78	53·47	31·69		....	
	42	δ U. Mi. S.P. (E&E)	JC	..	28·5	15·0	1·5	36·0	..	54·0	..	..	6. 15. 35·84		21·31	53·39		31·29	....	
	43	ν Geminorum	JC	8·7	11·8	14·8	17·6	23·6	29·6	32·7	35·4	38·4	6. 20. 23·57		24·01				6. 20. 55·55	− 2·29
	44	Piazzi VI. 75	JC	..	28·3	43·4	59·0	29·7	0·7	16·5	31·9	..	6. 22. 29·61		34·45				6. 23. 5·99	− 8·28
	45	γ Geminorum	JC	7·3	10·2	12·9	15·9	21·7	27·5	30·3	33·3	36·2	6. 29. 21·65		22·04	53·55	31·51		6. 29. 53·58	− 2·28
	46	Cephei 51 (E & E)	JC	31·5	31·0	28·0	24·5	20·0	..	..	..	..	6. 35. 19·35		37·39	9·47			....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Corrections for passage of Semidiameter, Nos. 24, 33, and 34, $+64^s{\cdot}42$: $+61^s{\cdot}20$: and $-61^s{\cdot}20$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
February 19. At 2^h Mean Solar Time, the pendulum of the Transit-Clock was lowered by 5 divisions of the screw.
February 18. The azimuthal error by tabular places of δ Ursæ Minoris S.P. and Cephei 51, allowing $-0^s{\cdot}03$ for clock-rate.
February 22 to 24. The azimuthal error used is that determined on February 23 by tabular places of δ Ursæ Minoris S.P. and Cephei 51, allowing $0^s{\cdot}01$ for clock-rate.

5. Very cloudy: it was not possible to observe the limbs.
9. Very cloudy.
24, 33, 34. Correction to R. A. on Meridian, $+0^s{\cdot}01$.
32. Scarcely visible: observed over the wires illuminated. The observation very unsatisfactory.
33. The correction for defect of illumination insensible.
33, 34. Very tremulous and at times very faint.
36. Very faint.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Feb. 23	1	c Leonis	JC	58·5	1·4	4·4	6·8	12·5	18·2	20·8	23·5	26·4	10. 53. 12·45	+1·41	12·69			31·29	10. 53. 44·40	— 2·60
	2	χ Leonis.....	JC	16·7	19·5	22·4	25·1	30·7	36·4	39·1	42·0	44·6	10. 57. 30·68	(+9·50)	30·94	2·58	31·64	[0·93]	10. 58. 2·66	— 2·58
	3	p^5 Leonis	JC	4·6	7·5	10·5	12·8	18·5	24·1	26·8	29·6	32·4	11. 6. 18·48	[−6·64]	18·64				11. 6. 50·36	— 2·59
	4	☽ 2 L.	JC	..	19·0	21·9	24·7	30·3	35·9	38·8	41·6	..	11. 14. 30·25		30·38				11. 14. 0·83	
	5	υ Leonis	JC	16·1	18·7	21·6	24·3	29·9	35·4	38·2	40·9	43·6	11. 29. 29·80		29·94	1·67	31·73		11. 30. 1·67	— 2·55
	6	β Virginis	JC	53·5	56·4	59·0	1·9	7·3	13·0	15·6	18·4	21·4	11. 43. 7·34		7·52				11. 43. 39·26	— 2·53
	7	Venus 2 L.	C	6·6	9·5	12·5	15·5	21·2	27·3	30·2	33·0	36·0	20. 2. 21·26		21·13				20. 2. 52·68	
Feb. 24	8	⊙ 1 L.....	C	13·8	16·6	19·5	22·3	28·0	33·6	36·4	39·3	42·0	22. 26. 27·89		} 33·76					
	9	⊙ 2 L.....	C	25·4	28·3	31·2	34·0	39·6	45·3	48·2	50·8	53·7	22. 28. 39·56						22. 28. 5·92	
Feb. 29	10	ζ^2 Geminorum...	E	12·4	15·4	18·4	21·3	27·2	33·1	36·0	39·0	42·0	6. 55. 27·15	+1·02	27·46			37·11	6. 56. 4·88	— 2·36
	11	γ Canis Majoris..	E	46·7	49·6	52·6	55·4	1·1	6·9	9·8	12·6	15·4	6. 57. 1·08	(+7·52)	0·95	38·36	37·41	[1·09]	....	
	12	51 Geminorum ..	E	43·8	46·7	49·7	52·6	58·3	4·1	7·0	9·8	12·7	7. 4. 58·25	[−6·45]	58·49	35·93	37·44		....	
Mar. 1	13	Uranus.....	D	56·5	59·6	2·6	5·5	11·5	17·7	20·6	23·6	26·6	5. 20. 11·53		11·87			38·15	5. 20. 50·29	
	14	δ Orionis	D	13·0	15·7	18·5	21·4	26·7	32·4	35·2	37·9	40·5	5. 24. 26·76		26·80	5·21	38·41	[1·21]	5. 25. 5·22	— 1·65
	15	ε Orionis	D	28·3	31·0	33·7	36·6	42·1	47·6	50·3	53·2	55·9	5. 28. 42·03		42·07	20·41	38·34		5. 29. 20·50	— 1·65
	16	α Columbæ.....	D	50·2	53·7	56·9	0·3	7·0	13·7	16·9	20·4	23·6	5. 34. 6·90		6·52	44·84	38·32		5. 34. 44·95	— 1·33
	17	136 Tauri.....	D	54·5	57·9	1·0	4·0	10·2	16·5	19·6	22·7	25·8	5. 44. 10·20		10·60				5. 44. 49·04	— 2·13
	18	β Aurigæ.....	D	37·1	41·1	45·0	48·8	56·6	4·6	8·4	12·4	16·2	5. 48. 56·62		57·35				5. 49. 35·79	— 2·55
	19	δ U. Mi. S.P.(E&E)	D	36·0	22·5	9·5	56·0	30·0	2·5	48·5	..	..	6. 15. 30·12		17·82	55·75			....	
	20	ν Geminorum....	D	..	..	..	10·9	16·6	22·6	25·5	28·5	31·4	6. 20. 16·63		16·92				6. 20. 55·39	— 2·18
	21	γ Geminorum ...	D	0·3	3·2	6·1	9·0	14·7	20·5	23·4	26·3	29·2	6. 29. 14·69		14·93	53·45	38·52		6. 29. 53·41	— 2·18
	22	Cephei 51 (E & E)	D	25·5	24·5	22·5	20·5	..	10·0	..	..	..	6. 35. 13·68		28·79	6·80			....	
	23	Sirius	D	18·4	21·4	24·3	27·0	32·7	38·5	41·5	44·3	47·1	6. 38. 32·75		32·61				6. 39. 11·10	— 1·89
	24	μ Canis Majoris..	D	2·2	5·1	7·8	10·6	16·3	22·1	24·9	27·8	30·6	6. 49. 16·33		16·22				6. 49. 54·71	— 1·97
	25	Piazzi VI. 292...	D	..	..	..	..	42·5	26·4	48·1	9·4	31·2	7. 1. 42·51		48·17				7. 2. 26·67	—10·96
	26	δ Geminorum ...	D	..	11·5	14·5	17·5	23·4	29·5	32·5	35·4	..	7. 11. 23·41		23·74	2·36	38·62		7. 12. 2·25	— 2·43
	27	β Canis Minoris..	D	56·0	58·9	1·6	4·4	10·0	15·6	18·4	21·2	24·0	7. 19. 9·97		10·13	48·73	38·60		7. 19. 48·65	— 2·29
Mar. 4	28	Rigel	E	5·7	8·5	11·3	14·1	19·5	25·3	28·0	30·7	33·5	5. 7. 19·57	(+6·83)	19·50	1·55	42·05	41·84	5. 8. 1·57	— 1·40
	29	β Tauri	E	45·5	48·7	52·0	55·0	1·3	7·7	10·8	13·9	17·1	5. 17. 1·29		1·66	43·76	42·10	[1·10]	5. 17. 43·74	— 1·94
	30	Uranus	E	55·6	58·8	1·8	4·6	10·7	16·6	19·7	22·8	25·7	5. 20. 10·65		10·94				5. 20. 53·02	
	31	δU. Mi. S.P.(E&E)	E	..	..	5·0	51·5	27·0	58·5	..	32·0	..	6. 15. 26·37		14·65	56·67			....	
	32	Piazzi VI. 75 ...	E	..	..	33·8	48·6	19·2	50·5	6·4	..	..	6. 22. 19·40		23·19				6. 23. 5·32	— 7·28
	33	γ Geminorum....	E	56·6	59·6	2·4	5·4	11·0	16·8	19·7	22·6	25·5	6. 29. 11·02		11·22	53·40	42·18		6. 29. 53·36	— 2·13
	34	Cephei 51 (E & E)	E	22·0	21·5	19·5	16·0	9·5	..	..	..	..	6. 35. 10·08		24·41	5·75			....	
	35	Piazzi VI. 285...	E	..	..	..	..	..	25·8	43·6	3·0	21·6	6. 58. 47·63		52·22				6. 59. 34·38	— 9·23
	36	Piazzi VI. 292 ..	E	..	..	..	..	39·0	23·0	44·6	5·5	27·9	7. 1. 38·99		44·35				7. 2. 26·51	—10·55
	37	δ Geminorum....	E	..	8·0	10·9	14·0	20·0	26·0	28·9	31·8	..	7. 11. 19·88		20·17	2·31	42·14		7. 12. 2·34	— 2·38
	38	ε Virginis	E	30·2	33·0	35·8	38·6	44·4	49·9	52·7	55·5	58·4	12. 54. 44·23		44·38	26·81	42·43		12. 55. 26·81	— 2·42
	39	Polaris S.P. (E&E)	E	23·0	13·0	..	..	46·0	26·5	..	..	..	13. 8. 45·32		17·27	59·06	41·79		....	
Mar. 7	40	κ Orionis	JC	..	24·2	..	29·6	35·2	40·7	43·7	46·4	49·3	5. 40. 35·18	+1·09	35·03	19·90	44·87	44·80	....	
	41	Sirius.....	JC	11·7	14·8	17·6	20·6	26·2	31·9	34·7	37·8	40·7	6. 38. 26·17	(+7·03)	25·95			[0·52]	6. 39. 10·89	— 1·78
	42	θ Canis Majoris..	JC	55·4	58·1	0·9	3·7	9·4	15·1	17·7	20·6	23·6	6. 47. 9·33	[−7·65]	9·17	54·15	44·98		....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

Corrections for passage of Semidiameter, Nos. 4 and 7, $-61^s{\cdot}28$ and $-0^s{\cdot}52$.

February 29 to March 4. The azimuthal error used is the mean of three determinations, viz., by tabular places of δ Ursæ Minoris S.P. and Cephei 51 on March 1, of the same stars on March 4, and of δ Geminorum and Polaris S.P. on March 4, allowing $0^s{\cdot}01$, $0^s{\cdot}01$, and $0^s{\cdot}30$ for clock-rate in each case respectively. The separate results are $-6''{\cdot}49$, $-6''{\cdot}01$, and $-6''{\cdot}84$.

March 7 to 10. The azimuthal error used is that determined on March 10, by tabular places of δ Ursæ Minoris S.P. and Cephei 51, the correction for clock-rate insensible.

4. The limb very ill defined.

40, 41. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Mar. 10	1	⊙ 1 L.	S	59·0	1·9	4·6	7·4	12·8	18·4	21·3	24·1	27·0	23. 22. 12·90	+1·09	17·61			45·28	23. 24. 2·81	
	2	⊙ 2 L.	S	..	..	..	..	22·5	28·2	30·8	33·6	36·4	23. 24. 22·47	(+7·56)				[−0·08]		
	3	β Tauri	D	42·4	45·7	48·9	51·9	58·2	4·5	7·6	10·7	14·0	5. 16. 58·16	[−7·65]	58·54	43·64	45·10		....	
	4	δ Orionis	D	6·2	8·9	11·7	14·5	20·0	25·6	28·4	31·1	33·9	5. 24. 19·99		19·97	5·04	45·07		....	
	5	ε Orionis	D	21·4	24·3	27·1	29·7	35·3	40·9	43·6	46·4	49·1	5. 28. 35·26		35·24	20·25	45·01		....	
	6	κ Orionis	S	20·9	23·6	26·6	29·4	34·9	40·4	43·3	46·1	48·9	5. 40. 34·85		34·72	19·84	45·12		....	
	7	α Orionis	S	51·2	54·0	56·7	59·4	4·8	10·6	13·4	16·3	19·0	5. 47. 4·99		5·07	50·26	45·19		....	
	8	δ U.Mi.S.P.(E&E)	S	33·0	18·5	5·0	52·5	26·0	59·0	..	..	..	6. 15. 26·41		13·10	58·88			....	
	9	Cephei 51.(E & E)	S	13·0	12·0	10·0	7·0	1·5	58·0	..	..	..	6. 35. 1·16		17·39	3·16			....	
	10	δ Gemin...(E & E)	D	31·7	46·8	1·8	16·6	31·6	46·5	1·4	..	..	7. 11. 16·63		16·92	2·22	45·30	45·26†	....	
	11	β Can. Min.(E&E)	D	21·5	35·4	49·3	3·4	17·2	31·2	45·2	..	..	7. 19. 3·31		3·41	48·60	45·19		....	
	12	κ Cancri	S	..	..	..	..	39·7	45·7	48·4	51·3	54·0	8. 59. 39·88		40·02	25·25	45·23	45·20	....	
	13	79 Cancri	S	..	..	40·4	43·1	49·0	55·1	58·0	1·0	4·0	9. 1. 49·03		49·32				9. 2. 34·49	− 2·65
	14	ο Leonis	S	56·6	59·5	2·3	5·0	10·7	16·4	19·2	22·0	24·9	9. 33. 10·69		10·81	55·98	45·17		....	
	15	Nysa	S	22·2	25·2	28·0	30·7	36·4	42·2	44·7	47·7	50·6	10. 26. 36·36		36·53				10. 27. 21·70	
Mar. 11	16	1 Geminorum ...	E	52·8	55·8	58·7	1·9	7·8	13·9	16·9	19·9	22·9	5. 55. 7·79	[−6·28]	8·15	53·16	45·01	45·03	5. 55. 53·17	− 1·92
	17	ν Orionis	E	50·8	53·6	56·4	59·3	5·1	10·8	13·6	16·5	19·4	5. 59. 5·01		5·25	50·24	44·99	[−0·06]	5. 59. 50·27	− 1·83
	18	δ Gemin...(E & E)	C	..	..	2·2	17·0	31·9	46·8	1·7	..	..	7. 11. 16·97		17·31	2·20	44·89	44·93†	....	
	19	Procyon ..(E & E)	C	46·4	0·2	14·1	28·0	42·0	55·8	9·6	..	..	7. 31. 28·02		28·15	13·08	44·93		....	
	20	8^2 Corvi	E	53·4	56·4	59·2	2·0	7·7	13·6	16·4	19·4	22·3	12. 22. 7·77		7·66	52·75	45·09	45·03	12. 22. 52·66	− 2·83
	21	κ Draconis	E	..	..	31·7	40·1	56·5	13·2	21·6	..	..	12. 26. 56·46		58·54				12. 27. 43·54	− 3·89
	22	γ^1 Virginis	E	50·1	..	55·5	..	3·8	..	12·3	..	17·6	12. 34. 3·82		3·87				12. 34. 48·87	− 2·65
	23	γ^2 Virginis	E	..	53·0	..	58·6	..	9·5	..	15·1	..	12. 34. 3·99		4·04				12. 34. 49·04	− 2·65
	24	35 Virginis	E	59·5	2·4	5·2	8·0	13·4	19·0	21·8	24·6	27·4	12. 40. 13·43		13·54	58·53	44·99		12. 40. 58·54	− 2·61
	25	Calliope	E	..	59·0	1·7	4·6	10·4	16·1	19·0	21·8	..	12. 44. 10·31		10·57				12. 44. 55·57	
	26	ε Virginis	E	..	..	..	36·2	..	47·4	50·3	53·2	55·9	12. 54. 41·76		41·96	26·92	44·96		12. 55. 26·96	− 2·53
	27	Saturn 1 L.	E	48·5	51·3	54·2	56·9	2·4	8·0	10·6	13·5	16·3	13. 4. 2·36		3·02				13. 4. 48·02	
	28	Saturn 2 L.	E	..	52·6	55·4	58·3	3·6	9·2	12·1	14·7	..	13. 4. 3·64							
	29	Polaris S.P.(E&E)	E	20·0	10·5	2·5	..	41·0	24·0	..	..	..	13. 8. 42·02		12·56	55·89	43·33		1. 8. 57·56	+23·10
	30	α Serpentis	R	..	..	..	45·4	51·2	56·8	59·5	2·4	5·2	15. 36. 51·13		51·28	36·18	44·90	44·90	....	
	31	Jupiter 1 L.	R	..	23·7	..	29·5	35·2	41·2	..	47·0	..	15. 41. 35·27		36·62			[−0·06]	15. 42. 21·48	
	32	Jupiter 2 L.	R	..	26·6	..	32·6	38·3	44·1	..	50·0	..	15. 41. 38·27							
	33	γ Serpentis	R	..	15·7	18·5	21·4	..	32·9	35·7	38·6	41·5	15. 49. 27·07		27·33	12·15	44·82		....	
	34	Venus 2 L.	D	$\frac{2}{3}$..	..	..	..	..	2·5	5·3	8·2	11·0	21. 26. 56·61		56·50			44·92 [−0·01]	21. 27. 40·94	
Mar. 12	35	⊙ 2 L.	D	..	..	..	..	..	..	52·0	54·6	57·4	23. 31. 43·51		43·54				23. 31. 23·75	
	36	Polaris ...(E & E)	D	..	..	..	..	..	30·5	22·0	14·0	5·0	1. 7. 42·72		12·16	55·75	43·59	44·91	1. 8. 57·07	+23·24
	37	1 Geminorum....	JC	..	..	..	..	8·0	14·0	17·1	20·2	23·1	5. 55. 8·00		8·36	53·14	44·78	44·80†	....	
	38	ν Orionis	JC	50·9	53·8	56·6	59·5	5·4	10·9	13·8	16·6	19·4	5. 59. 5·16		5·40	50·22	44·82		....	
	39	δ U.Mi. S.P.(E&E)	D	..	..	6·0	52·5	27·0	58·5	45·0	32·0	20·0	6. 15. 26·72		14·44	59·61		44·91	18. 15. 59·35	+13·21
	40	Piazzi VI. 136 ..	D	..	11·6	14·8	18·0	24·4	31·2	34·5	37·7	..	6. 22. 24·53		24·19				6. 23. 9·10	− 1·43
	41	γ Geminorum....	D	53·7	56·7	59·6	2·4	8·1	13·8	16·7	19·6	22·5	6. 29. 8·07		8·34	53·26	44·92		6. 29. 53·25	− 1·99
	42	ν^2 Canis Majoris .	D	47·4	50·4	53·4	56·4	2·0	8·0	10·9	13·7	16·7	6. 30. 2·05		1·89				6. 30. 46·80	− 1·62
	43	Cephei 51	D	..	..	..	10·0	3·5	0·0	..	..	..	6. 35. 3·62		18·74	2·30			6. 36. 3·65	−20·90
	44	Sirius	D	11·7	14·6	17·6	20·4	26·2	32·0	34·8	37·7	40·4	6. 38. 26·10		25·98				6. 39. 10·89	− 1·69
	45	θ Canis Majoris ..	D	55·1	58·2	0·8	3·6	9·4	15·0	17·7	20·7	23·4	6. 47. 9·27		9·20	54·06	44·86		6. 47. 54·11	− 1·78
	46	ι Canis Majoris ..	D,	6·9	10·0	12·7	15·6	21·4	27·2	30·1	33·0	35·9	6. 49. 21·37		21·25				6. 50. 6·16	− 1·75
	47	δ Canis Majoris ..	D	53·4	56·5	59·7	2·8	8·7	15·2	18·2	21·2	24·4	7. 2. 8·85		8·60				7. 2. 53·51	− 1·76

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 34 and 35, $-0^s \cdot 47$ and $-64^s \cdot 70$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
March 11 and 12. The azimuthal error by Polaris S.P., Polaris, and Polaris S.P.

2, 12, 34. Cloudy. 34. Very faint. 35. Very cloudy; scarcely visible.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R. A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Mar. 12	1	δ Geminorum....	D	2·0	5·1	8·0	11·2	17·0	23·0	26·0	29·0	31·8	7. 11. 16·96	+ 1·09	17·30	2·18	44·88	44·91	7. 12. 2·21	— 2·25
	2	Lacaille 2729....	D	19·2	22·2	25·2	28·8	35·0	41·5	44·8	48·0	51·0	7. 12. 35·02	(+ 7·56)	34·70			[−0·01]	7. 13. 19·61	— 1·80
	3	β Canis Minoris..	D	49·6	52·4	55·3	58·0	3·5	9·3	12·0	14·7	17·6	7. 19. 3·55	[−6·28]	3·71	48·56	44·85		7. 19. 48·62	— 2·12
	4	υ Geminorum....	D	33·9	37·2	40·3	43·4	49·5	55·7	58·8	2·1	5·1	7. 26. 49·50		49·91				7. 27. 34·82	— 2·40
	5	λ U. Mi.S.P.(E&E)	D	..	..	..	13·0	2·0	47·0	..	..	..	7. 59. 2·86		24·90	8·73			19. 59. 9·81	·58·36
	6	Regulus	D	..	..	..	19·5	25·1	30·9	33·6	36·4	39·4	10. 0. 25·10		25·31	10·24	44·93		10. 1. 10·22	·· 2·65
	7	Nysa.....	D	53·3	56·3	59·0	1·7	7·4	13·2	16·1	18·9	21·6	10. 25. 7·45		7·67				10. 25. 52·58	
	8	34 Sextantis	D	39·8	42·6	45·4	48·3	53·6	59·2	2·0	4·6	7·4	10. 34. 53·61		53·72	38·71	44·99		10. 35. 38·63	— 2·68
	9	l Leonis	D	9·9	12·8	15·6	18·4	24·0	29·6	32·4	35·3	38·1	10. 41. 23·96		24·16	9·06	44·90		10. 42. 9·07	— 2·69
	10	Iris	D	19·2	22·1	25·0	27·7	33·2	38·7	41·6	44·4	47·0	11. 37. 33·16		33·14				11. 38. 18·05	
	11	δ Virginis.....	D	48·8	51·8	54·5	57·4	2·7	8·4	11·1	13·9	16·6	12. 48. 2·75		2·86	47·85	44·99		12. 48. 47·76	— 2·60
	12	ε Virginis.....	D	27·7	30·6	33·4	36·3	41·9	47·5	50·4	53·2	56·0	12. 54. 41·84		42·04	26·93	44·89		12. 55. 26·94	— 2·54
	13	Saturn 1 L.	D	33·7	36·7	39·5	42·3	47·7	53·4	56·1	58·8	1·6	13. 3. 47·70		} 48·42				13. 4. 33·32	
	14	Saturn 2 L.	D	35·4	38·2	40·8	43·5	49·1	54·7	57·5	0·2	2·9	13. 3. 49·09							
	15	Polaris S.P.(E&E)	D	18·0	10·0	1·5	..	41·5	23·0	..	..	..	13. 8. 41·20		11·74	55·64	43·90		1. 8. 56·64	+23·35
Mar. 13	16	α Hydræ.....	E	57·8	0·6	3·4	6·2	11·6	17·4	20·2	23·0	25·7	9. 20. 11·72		11·69	56·73	45·04	45·03†	....	
	17	ξ Leonis	E	40·1	43·0	45·7	48·5	54·1	59·7	2·6	5·4	8·3	9. 23. 54·11		54·31	39·28	44·97	[−0·07]	....	
Mar. 14	18	Aldebaran	JC	9·2	12·2	15·0	17·8	23·6	29·4	32·2	35·2	38·0	4. 27. 23·57	+ 1·17	23·80	8·48	44·68		....	
	19	83 Cancri.....	JC	26·3	29·1	32·0	35·1	40·8	46·6	49·6	52·4	55·4	9. 10. 40·77	(+ 6·97)	41·03	25·79	44·76		....	
														[−6·40]						
Mar. 15	20	ε Pegasi	D	31·8	34·6	37·4	40·2	..	51·3	54·3	57·0	59·7	21. 36. 45·74	(+ 7·52)	45·91	30·77	44·86	44·93	21. 37. 30·92	— 0·38
	21	Venus 2 L.....	D	1·6	4·6	7·4	10·3	16·0	21·6	24·7	27·5	30·4	21. 46. 15·96		15·86			[0·09]	21. 47. 0·40	
Mar. 16	22	⊙ 1 L.....	D	..	..	..	..	..	..	20·4	23·1	25·9	23. 44. 11·99		} 16·59				23. 46. 1·61	
	23	⊙ 2 L.....	D	7·2	10·1	12·8	15·6	21·0	26·6	29·5	32·3	35·0	23. 46. 21·08							
	24	Polaris...(E & E)	D	..	19·0	11·0	4·0	..	..	23·0	15·0	..	1. 7. 44·59		14·35	54·71	40·36	45·02	1. 8. 59·37	+24·28
	25	α Orionis	D	51·1	54·0	56·7	59·6	4·9	10·6	13·4	16·2	18·8	5. 47. 4·98		5·13	50·15	45·02		5. 47. 50·17	— 1·58
	26	1 Geminorum....	D	52·7	55·7	58·6	1·7	7·6	13·6	16·8	20·0	22·7	5. 55. 7·66		8·01	53·06	45·05		5. 55. 53·05	— 1·82
	27	μ Geminorum ...	D	45·5	48·6	51·6	54·7	0·6	6·5	9·5	12·4	15·5	6. 14. 0·50		0·84	45·87	45·03		6. 14. 45·88	— 1·91
	28	δ U.Mi. S.P.(E&E)	D	..	..	..	..	..	0·0	46·0	31·0	20·0	6. 15. 26·93		14·50	0·94			18. 15. 59·54	+11·88
	29	γ Geminorum....	D	53·6	56·4	59·3	2·1	7·8	13·6	16·6	19·5	22·4	6. 29. 7·87		8·14	53·18	45·04		6. 29. 53·18	— 1·91
	30	Cephei 51 (E & E)	D	14·0	13·0	11·5	9·0	1·5	..	..	..	..	6. 35. 2·20		17·48	0·74			6. 36. 2·52	—19·34
	31	Sirius	D	11·5	14·4	17·4	20·2	25·9	31·6	34·4	37·4	40·3	6. 38. 25·85		25·72				6. 39. 10·76	— 1·61
	32	0 Canis Majoris..	JC	55·1	57·9	0·8	3·5	9·2	14·8	17·6	20·5	23·4	6. 47. 9·15		9·07	53·99	44·92	44·84†	....	
	33	ε Canis Majoris ..	JC	18·2	21·4	24·5	27·9	33·9	40·3	43·4	46·6	49·7	6. 52. 33·94		33·65	18·48	44·83		....	
	34	☽ 1 L.....	D	46·6	49·7	52·6	55·5	1·4	7·4	10·4	13·4	16·4	6. 56. 1·44		1·72			45·02	6. 57. 51·84	
	35	δ Canis Majoris ..	D	53·2	56·4	59·4	2·4	8·5	14·7	17·8	20·9	23·9	7. 2. 8·52		8·27				7. 2. 53·32	— 1·68
	36	λ Geminorum....	D	19·0	21·9	24·7	27·7	33·4	39·3	42·1	45·0	47·8	7. 9. 33·39		33·66				7. 10. 18·71	— 2·11
	37	π Draconis S.P...	D	40·2	46·6	53·0	0·0	13·6	26·7	33·1	40·0	46·8	7. 19. 13·45		11·80				19. 19. 56·85	+ 0·79
	38	68 Geminorum ..	D	53·2	56·1	58·8	1·9	7·5	13·3	16·3	19·1	22·0	7. 25. 7·53		7·78				7. 25. 52·83	— 2·17
	39	ε Draconis S.P. ..	D	12·4	20·3	28·3	36·4	52·2	8·5	16·4	24·5	32·8	7. 47. 52·56		50·50				19. 48. 35·55	+ 1·51
	40	55 Camelopardali.	D	..	..	8·6	16·4	31·4	47·1	54·6	..	..	7. 58. 31·47		33·38				7. 59. 18·43	— 4·40
	41	β Cancri.....	D	11·4	14·1	16·9	19·6	25·4	31·0	33·7	36·6	39·2	8. 8. 25·27		25·44	10·58	45·14		8. 9. 10·49	— 2·29
	42	Lalande 16596 ..	D	22·2	25·2	28·1	31·0	36·5	42·5	45·4	48·3	51·0	8. 19. 36·64		36·91				8. 20. 21·96	— 2·40
	43	Regulus	D	10·8	13·6	16·4	19·4	24·9	30·5	33·4	36·2	39·0	10. 0. 24·86		25·08	10·22	45·14		10. 1. 10·14	— 2·63
	44	Nysa.....	D	10·3	13·1	16·1	18·8	24·4	30·1	33·2	35·8	38·6	10. 22. 24·44		24·67				10. 23. 9·73	
	45	Iris	D	..	35·4	38·0	40·8	46·4	52·0	54·6	57·4	..	11. 33. 46·31		46·30				11. 34. 31·36	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 21 and 34, $-0^s·47$ and $+65^s·06$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
March 16 to 19. The azimuthal error by eight consecutive transits of Polaris.

2. Very faint. 15. Cloudy. 34. Correction to R. A. on Meridian, $+ 0^s·01$.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Mar. 16		δ Virginis.....	D	48·9	51·6	54·5	57·2	2·6	8·4	11·1	13·9	16·7	12. 48. 2·72	+1·17	2·84	47·90	45·06	45·02	12. 48. 47·91	− 2·65
	2	ε Virginis.....	D	27·6	30·5	33·3	36·3	41·6	47·4	50·2	53·0	55·8	12. 54. 41·70	(+7·52)	41·90	26·99	45·09	[0·09]	12. 55. 26·97	− 2·60
	3	Saturn 1 L.....	D	33·2	36·2	39·0	41·9	47·5	53·0	55·7	58·5	1·1	13. 2. 47·29	[−6·40]	} 47·96				13. 3. 33·03	
	4	Saturn 2 L.....	D	34·6	37·6	40·4	43·2	48·5	54·3	57·0	59·8	2·4	13. 2. 48·59							
	5	Polaris S.P. (E&E)	D	16·0	9·0	..	..	41·0	23·5	..	..	..	13. 8. 40·45		10·65	54·56	43·91		1. 8. 55·72	+24·43
Mar. 17	6	⊙ 1 L.....	C	37·1	39·9	42·6	45·4	50·9	56·4	59·3	1·9	4·7	23. 47. 50·87		} 55·50			45·22 [−0·19]	23. 49. 40·53	
	7	⊙ 2 L.....	C	..	..	..	..	0·0	5·6	8·5	11·1	14·0	23. 50. 0·03							
	8	Polaris ...(E & E)	C	..	..	..	..	..	27·0	21·0	12·0	3·0	1. 7. 40·71		10·47	54·40	43·93	45·03	1. 8. 55·49	+24·59
	9	δ U. Mi. S.P. (E&E)	C	..	..	..	54·5	28·5	1·0	..	33·0	20·5	6. 15. 28·24		15·81	1·28			18. 16. 0·79	+11·54
	10	Cephei 51 ..(E&E)	C	12·0	11·5	9·5	6·5	0·0	..	..	..	..	6. 35. 0·30		15·58	0·37			6. 36. 0·56	−18·97
	11	Sirius.....	C	11·4	14·4	17·2	20·2	26·0	31·7	34·6	37·5	40·4	6. 38. 25·88		25·75				6. 39. 10·73	− 1·60
	12	θ Canis Majoris..	C	55·1	57·9	0·6	3·5	9·3	14·9	17·6	20·5	23·4	6. 47. 9·15		9·07	53·97	44·90		6. 47. 54·05	− 1·69
	13	51 Geminorum ..	E	35·7	38·7	..	44·4	50·1	56·2	..	1·6	4·6	7. 4. 50·15		50·41	35·66	45·25	45·34†	....	
	14	λ Geminorum....	C	19·1	22·1	24·8	27·6	33·4	39·4	42·2	45·0	47·7	7. 9. 33·43		33·70			45·03	7. 10. 18·67	− 2·09
	15	δ Geminorum....	E	1·5	4·5	7·6	10·6	16·4	22·4	25·5	28·5	31·4	7. 11. 16·44		16·78	2·10	45·32	45·34†	....	
	16	Piazzi VII. 67...	C	..	..	36·4	44·1	59·2	14·3	22·5	..	..	7. 15. 59·15		1·05			45·03	7. 16. 46·02	− 4·04
	17	68 Geminorum ..	C	53·3	56·1	59·0	1·9	7·7	13·4	16·4	19·2	22·2	7. 25. 7·64		7·89				7. 25. 52·86	− 2·15
	18	Pollux	C	0·6	3·9	7·0	10·2	16·5	..	..	29·0	32·1	7. 36. 16·38		16·81	1·75	44·94		7. 37. 1·78	− 2·35
	19	δ Cygni S.P.	C	40·2	44·0	47·8	51·6	59·6	..	..	..	..	7. 39. 59·62		58·84				19. 40. 43·81	− 0·23
	20	☽ 1 L.....	C	25·6	28·6	31·5	34·5	40·4	46·3	49·2	52·1	55·0	7. 46. 40·31		40·56				7. 48. 29·34	
	21	B.F. 1128.....	C	56·1	59·0	1·7	4·8	10·6	16·6	19·5	22·4	25·3	7. 56. 10·62		10·91				7. 56. 55·88	− 2·32
	22	12 Cancri.....	C	9·2	..	14·8	17·6	23·2	29·0	31·9	..	37·6	8. 0. 23·28		23·51				8. 1. 8·48	− 2·28
	23	ζ¹ Cancri	C	27·2	30·0	32·9	35·7	41·6	..	50·4	..	56·2	8. 3. 41·59		41·87				8. 4. 26·84	− 2·34
	24	ζ² Cancri	C	27·5	30·4	33·4	36·1	..	47·7	..	53·6	..	8. 3. 41·94		42·22				8. 4. 27·19	− 2·34
	25	Lalande 16596...	C	22·4	25·4	28·2	31·2	36·8	42·7	45·6	48·3	51·1	8. 19. 36·80		37·07				8. 20. 22·03	− 2·39
	26	η Cancri	C	52·7	55·9	58·6	1·7	7·6	13·6	16·6	19·5	22·4	8. 24. 7·57		7·89	52·85	44·96		8. 24. 52·85	− 2·45
	27	Regulus.....	C	10·8	13·7	16·6	19·4	25·0	30·8	33·6	36·4	39·2	10. 0. 25·01		25·23	10·21	44·98		10. 1. 10·18	− 2·62
	28	* N. P. D. 69°. 25′.	C	..	..	17·7	20·9	26·7	32·8	35·7	38·7	41·5	10. 11. 26·72		27·04				10. 12. 11·99	− 2·70
	29	30 Leonis Minoris	C	7·4	10·7	14·1	17·4	24·0	30·8	34·2	37·4	40·8	10. 17. 24·03		24·56				10. 18. 9·51	− 2·86
	30	Nysa.....	C	..	..	39·1	41·8	47·4	53·4	56·2	58·7	1·7	10. 21. 47·47		47·69				10. 22. 32·64	
	31	ι Andromedæ S.P.	C	25·6	29·2	33·0	36·9	44·4	..	..	..	..	11. 30. 44·39		43·66				23. 31. 28·60	− 0·04
	32	Iris.....	C	36·4	39·2	42·0	44·7	50·3	56·0	58·6	1·4	4·2	11. 32. 50·27		50·26				11. 33. 35·20	
	33	β Leonis.....	C	10·5	13·4	16·3	19·1	24·6	30·5	33·4	36·2	39·1	11. 41. 24·74		24·98	9·93	44·95		11. 42. 9·92	− 2·69
	34	Calliope.....	C	11·4	..	..	..	..	31·4	..	..	..	12. 39. 25·68		25·93				12. 40. 10·86	
	35	δ Virginis.....	C	49·1	51·7	54·6	57·4	2·8	8·4	11·1	14·0	16·6	12. 48. 2·81		2·93	47·91	44·98		12. 48. 47·86	− 2·66
	36	Saturn 1 L.....	C	18·1	21·0	23·6	26·5	32·1	37·5	40·4	43·2	45·9	13. 2. 31·99		} 32·69				13. 3. 17·62	
	37	Saturn 2 L.....	C	19·5	22·3	25·1	27·8	33·4	39·1	41·6	44·5	47·3	13. 2. 33·35							
	38	Polaris S.P. (E&E)	C	..	..	..	51·0	41·0	22·0	14·0	7·5	..	13. 8. 40·14		10·34	54·24	43·90		1. 8. 55·27	+24·75
	39	Spica	C	5·6	8·8	11·4	14·3	19·7	25·4	28·2	31·1	33·8	13. 17. 19·76		19·70	4·62	44·92		13. 18. 4·63	− 2·75
	40	δ Ursæ Min. (E&E)	JC	9·5	59·0	44·5	32·5	4·0	37·5	..	..	..	18. 15. 3·66	(+8·10)	16·58	1·45		45·15	18. 16. 1·45	+11·37
	41	λ Sagittarii.....	JC	36·4	39·5	42·6	45·6	51·7	57·8	0·8	3·9	7·2	18. 18. 51·68		51·45	36·25	44·80	[−0·37]	18. 19. 36·32	− 1·60
	42	Ceph. 51 S.P. (E&E)	JC	43·0	..	37·0	34·5	31·0	26·0	..	..	..	18. 35. 31·43		15·50	0·16			6. 36. 0·36	−18·76
	43	Venus 2 L.....	JC	35·9	38·7	41·6	..	50·0	..	58·6	1·5	4·5	21. 55. 50·06		49·99				21. 56. 34·34	
	44	α Pegasi.....	JC	0·2	3·0	6·0	8·9	14·5	20·4	23·1	..	..	22. 57. 14·49		14·76	59·54	44·78		22. 57. 59·56	− 0·28
	45	Mercury 2 L.....	JC	6·4	8·9	11·8	14·6	20·2	25·9	28·8	31·6	34·5	23. 1. 20·25		20·24				23. 2. 4·86	
Mar. 18	46	⊙ 1 L.....	JC	16·2	19·0	21·6	24·5	29·9	35·4	38·2	41·0	43·7	23. 51. 29·89		} 34·52				23. 53. 19·30	
	47	⊙ 2 L.....	JC	25·0	27·9	30·9	33·4	39·1	44·5	47·5	50·3	52·8	23. 53. 38·99							

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Corrections for passage of Semidiameter, Nos. 20, 43, and 45, +63s·80 : −0s·46 : and −0s·18.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.

3, 4. A very bad image.
20. Correction to R. A. on Meridian, + 0s·01.
25. Of the 8½ magnitude.
28. Of the 10–11th magnitude.
34. Excessively faint.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Mar. 18	1	α Andromedæ ...	JC	21·2	24·5	27·3	30·6	36·8	43·1	46·5	49·4	52·6	0. 0. 36·84	+1·17	37·31	22·05	44·74	44·78	0. 1. 22·09	− 0·27
	2	Polaris ...(E & E)	JC	18·5	11·0	4·0	55·0	39·0	25·0	..	..	..	1. 7. 38·05	(+8·10)	9·07	54·07	45·00	[−0·37]	1. 8. 53·83	+24·92
	3	δ U. Mi. S.P. (E&E)	JC	36·0	..	9·0	55·0	30·0	0·5	47·5	..	..	6. 15. 29·38	[−6·40]	16·47	1·63			18. 16. 1·15	+11·19
	4	Cephei 51 .. (E&E)	JC	..	..	..	..	59·7	57·5	53·3	52·0	49·5	6. 35. 0·19		16·12	59·96			6. 36. 0·80	−18·56
	5	β Canis Minoris ..	JC	49·7	52·5	55·3	58·2	3·6	9·3	12·1	14·9	17·6	7. 19. 3·64		3·84	48·47	44·63		7. 19. 48·51	− 2·03
	6	6 Cancri	S	11·0	14·4	17·4	20·5	26·8	33·1	36·1	39·4	42·4	7. 54. 26·74		27·21	12·05	44·84	45·02†	....	
	7	15 Argûs	S	47·4	50·5	53·5	56·5	..	8·6	11·6	14·5	17·5	8. 1. 2·45		2·24	47·20	44·96		....	
	8	ζ¹ Cancri	JC	27·4	30·4	33·4	36·3	41·9	47·8	50·7	53·6	56·5	8. 3. 41·95		42·26			44·78	8. 4. 26·92	− 2·32
	9	Lalande 16596 ..	JC	22·4	25·4	28·4	31·3	36·9	42·6	45·6	48·6	51·4	8. 19. 36·90		37·20				8. 20. 21·85	− 2·37
	10	η Cancri	JC	53·0	56·2	59·0	1·8	7·9	13·8	16·7	19·7	22·7	8. 24. 7·81		8·16	52·83	44·67		8. 24. 52·81	− 2·43
	11	☽ 1 L.....	JC	22·0	24·8	27·7	30·7	36·5	42·4	45·2	48·3	50·9	8. 35. 36·45		36·70				8. 37. 24·05	
	12	Var. (T) Cancri .	JC	56·5	59·5	2·5	5·4	11·4	17·4	20·3	23·2	26·0	8. 48. 11·31		11·65				8. 48. 56·29	− 2·51
	13	α Cancri	JC	6·2	9·2	11·9	14·7	20·2	26·0	28·9	31·8	34·5	8. 50. 20·33		20·57	5·21	44·64		8. 51. 5·21	− 2·44
	14	κ Cancri	JC	26·3	29·1	31·9	34·6	40·4	46·2	48·8	51·7	54·4	8. 59. 40·33		40·56	25·17	44·61		9. 0. 25·20	− 2·46
	15	83 Cancri	JC	26·4	29·1	32·3	35·0	40·7	46·6	49·6	52·5	55·4	9. 10. 40·80		41·12	25·75	44·63		9. 11. 25·76	− 2·55
	16	α Cephei S.P. ...	JC	6·4	12·1	17·8	23·5	35·5	47·4	53·4	59·1	5·1	9. 14. 35·69		34·23				21. 15. 18·87	+ 0·86
	17	ω Leonis	JC	14·0	16·9	19·7	22·4	27·9	33·7	36·4	39·1	42·0	9. 20. 27·96		28·16				9. 21. 12·80	− 2·51
	18	ε Leonis	JC	10·0	13·2	16·0	19·2	25·1	31·2	34·4	37·4	40·5	9. 37. 25·17		25·57	10·27	44·70		9. 38. 10·20	− 2·67
	19	ν Cephei S.P....	JC	19·0	24·8	30·4	36·1	47·5	58·6	4·2	10·0	15·5	9. 40. 47·44		46·07				21. 41. 30·70	+ 0·78
	20	μ Hydræ	JC	..	..	40·4	43·3	48·9	55·0	58·0	0·6	3·4	10. 18. 49·04		48·93				10. 19. 33·55	− 2·69
	21	Nysa.....	JC	..	..	3·4	6·4	12·2	17·5	20·5	23·3	26·8	10. 21. 12·01		12·27				10. 21. 56·89	
	22	Groombridge 1669	JC	44·2	52·1	59·8	7·5	22·9	38·5	46·4	54·0	1·7	10. 31. 22·88		24·92				10. 32. 9·54	− 4·58
	23	34 Sextantis	JC	40·0	43·0	45·6	48·4	54·0	59·5	2·2	5·2	7·8	10. 34. 53·92		54·06	38·70	44·64		10. 35. 38·68	− 2·67
	24	Iris.....	JC	40·5	43·5	46·4	49·2	54·6	0·1	3·0	5·6	8·5	11. 31. 54·55		54·56				11. 32. 39·16	
	25	Calliope	JC	22·0	25·3	27·9	30·9	36·5	42·3	45·3	48·4	51·0	12. 38. 36·57		36·85				12. 39. 21·44	
	26	δ Virginis	JC	49·4	52·2	54·9	57·6	3·0	8·6	11·6	14·4	17·0	12. 48. 3·14		3·28	47·92	44·64		12. 48. 47·86	− 2·67
	27	Saturn 1 L.....	JC	2·7	5·8	8·5	11·3	16·8	22·4	25·1	28·0	30·6	13. 2. 16·75		} 17·38				13. 3. 1·96	
	28	Saturn 2 L.....	JC	4·0	6·9	9·8	12·5	17·9	23·6	26·3	29·1	31·8	13. 2. 17·94							
	29	Polaris S.P. (E&E)	JC	..	..	..	52·0	42·0	25·0	16·5	8·0	4·5	13. 8. 42·04		11·04	53·90	42·86		1. 8. 55·62	+25·09
	30	89 Herculis	E	56·6	59·8	2·8	5·9	12·0	18·2	21·3	24·4	27·5	17. 49. 12·01		12·45	57·26	44·81	44·97	17. 49. 57·21	− 1·20
	31	72 Ophiuchi.....	E	56·5	59·4	2·2	4·9	10·5	16·3	19·0	21·7	24·6	18. 0. 10·52		10·72	55·47	44·75	[−0·29]	18. 0. 55·47	− 1·35
	32	η Serpentis.....	E	19·2	22·0	24·8	27·6	33·0	38·5	41·4	44·2	47·0	18. 13. 33·03		33·08	17·77	44·69		18. 14. 17·83	− 1·41
	33	δ Ursæ Min. (E&E)	E	..	59·0	..	..	5·0	38·5	25·0	12·0	..	18. 15. 4·40		17·32	1·80			18. 16. 2·07	+11·02
	34	α Lyræ	E	17·5	21·1	24·7	28·3	35·2	42·5	45·9	49·5	53·0	18. 31. 35·24		35·90	20·81	44·91		18. 32. 20·65	− 0·77
	35	Ceph. 51 S.P. (E&E)	E	..	..	..	..	31·0	25·0	..	..	19·0	18. 35. 31·07		15·14	59·75			6. 35. 59·89	−18·35
Mar. 19	36	⊙ 1 L.....	E	54·5	57·4	0·2	2·7	8·5	14·2	16·7	19·7	22·3	23. 55. 8·41		} 13·03				23. 56. 57·71	
	37	⊙ 2 L.....	E	3·6	6·5	9·3	11·9	17·4	23·0	25·7	28·7	31·5	23. 57. 17·46							
	38	Polaris.... (E&E)	JC	..	..	..	0·0	40·0	29·5	20·0	10·0	3·0	1. 7. 40·70		11·72	53·72	42·00	44·68	1. 8. 56·39	+25·27
	39	δ U. Mi. S.P. (E&E)	E	..	..	..	..	..	..	47·5	34·5	22·5	6. 15. 29·13		16·22	1·98			18. 16. 0·82	+10·84
	40	Cephei 51 .. (E&E)	E	..	..	..	..	..	56·5	53·5	..	50·5	6. 35. 0·35		16·28	59·54			6. 36. 0·88	−18·14
	41	θ Canis Majoris ..	E	55·2	58·4	1·0	3·7	9·4	15·0	17·9	20·6	23·6	6. 47. 9·37		9·31	53·93	44·62		6. 47. 53·91	− 1·65
	42	ε Canis Majoris ..	E	18·4	21·5	24·6	27·7	34·0	40·4	43·5	46·7	49·8	6. 52. 34·02		33·74	18·41	44·67		6. 53. 18·34	− 1·53
	43	δ Geminorum....	D	2·3	5·2	8·4	11·4	17·3	23·2	26·3	29·3	32·2	7. 11. 17·24		17·62	2·06	44·44	44·56†	....	
	44	β Canis Minoris .	D	49·8	52·6	55·4	58·3	3·8	9·5	12·2	15·0	17·7	7. 19. 3·76		3·95	48·45	44·50		....	
	45	12 Cancri.....	E	9·5	12·5	15·3	18·0	23·7	29·5	32·4	35·1	38·1	8. 0. 23·74		24·00			44·68	8. 1. 8·58	− 2·25
	46	B.F. 1152	E	48·8	51·8	54·8	57·4	3·0	8·6	11·6	14·4	17·3	8. 4. 3·03		3·30				8. 4. 47·88	− 2·27
	47	β Cancri.....	E	11·8	14·6	17·4	20·1	25·6	31·4	34·3	37·0	39·9	8. 8. 25·74		25·94	10·53	44·59		8. 9. 10·52	− 2·24
	48	κ Cephei S.P. ...	E	..	..	2·1	13·6	39·4	4·6	17·6	..	..	8. 12. 39·71		36·29				20. 13. 20·87	+ 3·22

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Correction for passage of Semidiameter, No. 11, $+62^s \cdot 69$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

11. Correction to R. A. on Meridian, $+0^s \cdot 01$.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R. A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R. A. of Center from the Observation.	Correction to Mean R. A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Mar. 19	1	Lalande 16596...	E	22·6	25·6	28·4	31·3	37·0	42·8	45·6	48·6	51·5	8. 19. 36·99	+1·17	37·29			44·68	8. 20. 21·87	— 2·36
	2	α Cancri.....	E	6·2	9·1	12·0	14·7	20·4	26·2	28·9	32·0	34·8	8. 50. 20·43	(+8·10)	20·67	5·20	44·53	[−0·29]	8. 51. 5·24	— 2·43
	3	κ Cancri.....	E	..	29·3	32·2	34·9	40·4	46·0	48·9	51·8	..	8. 59. 40·44	[−6·40]	40·67	25·16	44·49		9. 0. 25·24	— 2·45
	4	79 Cancri.....	E	..	..	..	..	..	55·5	58·6	1·5	4·4	9. 1. 49·46		49·84				9. 2. 34·41	— 2·56
	5	83 Cancri.....	E	26·4	29·4	32·2	35·1	40·9	46·8	49·8	52·6	55·5	9. 10. 40·92		41·24	25·74	44·50		9. 11. 25·81	— 2·54
	6	ω Leonis.....	E	14·1	17·0	19·8	22·5	28·2	33·7	36·6	39·4	42·2	9. 20. 28·11		28·31				9. 21. 12·88	— 2·51
	7	☽ 1 L.....	E	55·9	58·8	1·8	4·4	10·2	16·0	18·9	21·6	24·5	9. 23. 10·19		10·39				9. 24. 56·83	
	8	ν Cephei S.P.....	E	19·2	24·9	30·2	36·0	47·4	..	..	..	..	9. 40. 47·34		45·96				21. 41. 30·52	+ 0·75
	9	π Leonis.....	E	5·3	8·2	11·0	14·0	19·4	25·1	27·9	30·6	33·4	9. 52. 19·38		19·58	4·04	44·46		9. 53. 4·14	— 2·58
	10	A Leonis	E	44·9	47·7	50·6	53·4	58·9	4·6	..	..	..	9. 59. 58·93		59·15				10. 0. 43·71	— 2·61
	11	Regulus.....	E	..	..	17·0	19·9	25·4	31·1	34·0	36·8	39·7	10. 0. 25·43		25·68	10·20	44·52		10. 1. 10·24	— 2·61
	12	Nysa.....	E	23·6	26·7	29·4	32·4	38·0	43·8	46·5	49·5	52·4	10. 20. 37·98		38·24				10. 21. 22·80	
	13	Iris.....	E	45·4	48·1	51·0	53·9	59·4	4·9	7·7	10·5	13·2	11. 30. 59·29		59·30				11. 31. 43·84	
	14	Calliope.....	E	32·4	35·1	38·2	41·1	46·6	52·4	55·4	58·3	1·1	12. 37. 46·68		46·96				12. 38. 31·49	
	15	δ Virginis.....	E	49·4	52·3	55·0	57·7	3·0	8·7	11·4	14·2	17·1	12. 48. 3·15		3·29	47·93	44·64		12. 48. 47·82	— 2·68
	16	ε Virginis.....	E	28·3	31·1	33·9	36·7	42·2	48·0	50·7	53·5	56·4	12. 54. 42·26		42·49	27·02	44·53		12. 55. 27·01	— 2·63
	17	Saturn 1 L.....	E	47·0	49·9	52·6	55·5	1·1	6·7	9·4	12·2	14·9	13. 2. 0·99		} 1·67				13. 2. 46·19	
	18	Saturn 2 L.	E	48·4	51·1	53·9	56·8	2·4	7·9	10·7	13·5	16·2	13. 2. 2·27							
	19	Polaris S.P. (E&E)	E	..	..	..	55·0	40·5	23·0	13·0	8·0	..	13. 8. 41·16		10·16	53·55	43·39		1. 8. 54·68	+25·44
Mar. 20	20	θ Canis Majoris..	JC	55·8	58·6	1·5	4·3	9·9	15·6	18·5	21·4	24·2	6. 47. 9·92		9·86	53·91	44·05	44·16†	....	
	21	ε Canis Majoris...	JC	18·8	22·0	25·0	28·3	34·5	41·0	44·0	47·2	50·4	6. 52. 34·53		34·25	18·39	44·14	[−0·25]	....	
	22	π Leonis.....	C	6·0	8·8	11·7	14·5	20·0	25·5	28·3	31·1	33·9	9. 52. 19·93		20·13	4·04	43·91	44·05	....	
	23	A Leonis.....	C	45·5	48·4	51·1	54·0	59·5	5·2	8·0	10·8	13·5	9. 59. 59·50		59·72				10. 0. 43·67	— 2·60
	24	Regulus.....	C	..	..	..	..	26·0	31·8	34·5	37·3	40·1	10. 0. 25·96		26·21	10·20	43·99		....	
	25	☽ 1 L.....	C	38·0	41·0	43·7	46·5	52·1	58·0	0·7	3·6	6·4	10. 9. 52·17		52·32				10. 11. 37·66	
	26	30 Sextantis.....	C	25·0	27·9	30·6	33·4	39·0	44·4	47·2	50·0	52·7	10. 22. 38·86		38·95				10. 23. 22·89	— 2·64
	27	ρ Leonis.....	C	43·4	46·3	49·0	51·8	57·4	3·0	6·0	8·6	11·4	10. 24. 57·38		57·59	41·54	43·95		....	
	28	36 Sextantis.....	C	13·8	16·5	19·4	22·1	27·5	33·2	35·9	38·6	41·4	10. 37. 27·60		27·73				10. 38. 11·67	— 2·67
														90						
Mar. 23	29	☉ 1 L.....	E	28·4	31·2	34·1	36·6	42·3	47·9	50·8	53·4	56·1	0. 9. 42·26	+0·31)	} 46·69			43·75	0. 11. 30·44	
	30	☉ 2 L.....	E	37·3	40·2	43·1	45·5	51·2	56·7	59·6	2·4	5·2	0. 11. 51·20	(+7·				[−0·27]		
	31	Polaris ...(E & E)	E	..	..	..	..	..	26·0	19·0	8·0	0·0	1. 7. 38·34	[−8·22]	9·88	52·56	42·68		1. 8. 53·62	+26·43
	32	α Orionis.....	E	52·4	55·3	58·1	0·7	6·4	12·0	14·6	17·4	20·3	5. 47. 6·30		6·34	50·02	43·68		5. 47. 50·03	— 1·45
	33	1 Geminorum....	E	53·8	56·9	0·0	3·0	9·0	15·0	18·1	21·1	24·0	5. 55. 8·93		9·19	52·92	43·73		5. 55. 52·87	— 1·68
	34	δ U. Mi. S.P.(E&E)	E	38·0	25·0	12·0	58·5	33·0	4·5	..	..	..	6. 15. 32·57		19·25	3·54			18. 16. 2·93	+ 9·28
	35	ν Geminorum....	E	56·5	59·4	2·4	5·4	11·2	17·2	20·1	23·0	25·8	6. 20. 11·18		11·39				6. 20. 55·07	— 1·78
	36	γ Geminorum....	E	54·7	57·9	0·6	3·4	9·2	14·9	17·8	20·7	23·7	6. 29. 9·16		9·31	53·05	43·74		6. 29. 52·99	— 1·78
	37	Cephei 51. (E & E)	E	10·5	10·0	8·0	5·0	58·0	..	..	..	..	6. 34. 58·70		14·85	57·66			6. 35. 58·53	—16·26
	38	Sirius.....	E	12·8	15·6	..	21·4	27·0	32·9	..	38·6	41·5	6. 38. 27·06		26·78				6. 39. 10·46	— 1·48
	39	θ Canis Majoris..	E	56·0	59·0	1·9	4·8	10·4	16·0	18·8	21·6	24·5	6. 47. 10·29		10·08	53·85	43·77		6. 47. 53·75	— 1·57
	40	ι Canis Majoris...	E	8·0	10·8	13·8	16·6	22·4	28·4	31·1	33·9	37·0	6. 49. 22·40		22·12				6. 50. 5·79	— 1·54
	41	ζ² Geminorum ...	E	5·9	8·7	11·6	14·7	20·5	26·6	29·6	32·5	35·4	6. 55. 20·57		20·78				6. 56. 4·45	— 1·96
	42	PiazziVI.285(E&E)	E	..	..	..	6·0	43·5	20·5	..	..	..	6. 58. 43·04		48·18				6. 59. 31·85	— 6·75
	43	PiazziVI.292(E&E)	E	..	..	..	..	..	..	41·0	1·5	23·0	7. 1. 34·73		40·72				7. 2. 24·39	— 7·69
	44	δ Geminorum....	E	3·1	6·3	9·3	12·1	18·1	24·3	27·0	30·0	33·0	7. 11. 18·08		18·32	1·99	43·67		7. 12. 1·99	— 2·06
	45	Lacaille 2729....	E	..	23·3	26·3	29·4	35·7	42·3	45·6	48·7	..	7. 12. 35·83		35·35				7. 13. 19·02	— 1·56
	46	β Canis Minoris..	E	..	..	..	..	4·6	10·4	13·3	16·0	18·7	7. 19. 4·72		4·77	48·38	43·61		7. 19. 48·44	— 1·94
	47	Pollux	E	..	..	..	..	..	24·1	27·2	30·2	33·5	7. 36. 17·69		18·04	1·64	43·60		7. 37. 1·70	— 2·24

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Corrections for passage of Semidiameter, Nos. 7 and 25, +61s·86 and +61s·40.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
March 23 and 24. The azimuthal error by four consecutive transits of Polaris.

7. Correction to R, A, on true meridian, +0s·01.
17, 18. Very tremulous.
31. Tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Mar. 23	1	γ Cancri	D	28·4	31·5	34·6	37·5	43·3	49·4	52·4	55·4	58·2	8. 34. 43·36	+ 0·90	43·59	27·08	43·49	43·62†	....	
	2	ϵ Hydræ	D	39·1	42·0	44·7	47·5	53·1	58·6	1·5	4·2	7·0	8. 38. 53·03	(+7·31)	53·05	36·60	43·55	[−0·27]	....	
	3	13 Virginis	E	47·4	50·2	53·0	55·7	1·3	6·8	9·6	12·4	15·1	12. 11. 1·23	[−8·22]	1·17			43·75	12. 11. 44·78	− 2·77
	4	δ^2 Corvi	E	55·1	58·0	0·8	3·6	9·4	15·2	18·1	21·0	24·0	12. 22. 9·41		9·15	52·85	43·70		12. 22. 52·76	− 2·93
	5	η Virginis	E	51·2	54·0	56·8	59·5	5·0	10·8	13·5	16·4	19·1	12. 26. 5·09		4·92				12. 26. 48·53	− 2·84
	6	☽ 2 L.	E	41·8	44·7	47·4	50·4	56·1	1·8	4·7	7·4	10·4	12. 32. 56·03		55·88				12. 32. 36·76	
	7	35 Virginis	E	1·3	4·0	6·8	9·6	15·2	20·6	23·6	26·4	29·1	12. 40. 15·13		15·13	58·65	43·52		12. 40. 58·74	− 2·73
	8	31 Comæ	E	7·3	10·5	13·7	16·7	23·0	29·4	32·4	35·6	38·7	12. 44. 22·99		23·33				12. 45. 6·94	− 2·67
	9	8 Draconis	E	..	..	1·3	8·0	21·3	35·3	42·1	..	..	12. 49. 21·47		23·14				12. 50. 6·75	− 3·49
	10	ε Virginis	E	29·4	32·3	34·9	37·7	43·4	49·3	51·9	54·7	57·6	12. 54. 43·42		43·51	27·06	43·55		12. 55. 27·12	− 2·67
	11	Saturn 1 L.	E	43·6	46·5	49·4	52·1	..	3·2	5·8	..	11·4	13. 0. 57·53							
	12	Saturn 2 L.	E	45·0	47·8	50·5	53·3	58·8	4·5	7·1	9·8	12·6	13. 0. 58·77		58·04				13. 1. 41·64	
	13	50 Virginis	E	43·7	46·7	49·5	52·2	57·8	3·5	6·3	9·0	11·9	13. 1. 57·79		57·61				13. 2. 41·21	− 2·85
	14	Polaris S.P. (E&E)	E	..	..	..	..	..	24·0	15·5	8·0	2·5	13. 8. 41·96		10·17	52·47	42·30		1. 8. 53·77	+ 26·52
	15	58 Virginis	E	25·3	28·2	31·0	..	39·4	..	47·7	50·5	53·4	13. 9. 39·32		39·14				13. 10. 22·74	− 2·84
	16	ζ Virginis	E	..	54·2	56·9	59·5	..	10·6	13·5	16·4	19·0	13. 27. 5·12		5·06	48·61	43·55		13. 27. 48·66	− 2·70
	17	72 Ophiuchi	C	38·4	1·2	4·0	6·7	12·3	17·9	20·7	23·6	26·4	18. 0. 12·31	(+7·79)	12·40	55·61	43·21	43·55	18. 0. 55·64	− 1·49
	18	μ Sagittarii	C	..	..	..	..	..	2·7	5·6	8·4	11·4	18. 4. 56·59		56·27	39·62	43·35	[−0·42]	18. 5. 39·50	− 1·84
	19	105 Herculis	C	37·5	40·6	43·5	46·6	52·6	58·7	1·8	4·8	7·8	18. 12. 52·61		52·92				18. 13. 36·15	− 1·24
	20	η Serpentis	C	..	..	..	..	..	2·6	16·4	..	..	} 18. 13. 34·81							
	21	η Serpentis	C	..	..	..	..	..	..	..	45·9	48·6			34·74	17·91	43·17		18. 14. 17·97	− 1·55
	22	δ Ur. Min. (E&E)	C	..	..	..	..	..	40·5	27·5	16·0	0·5	18. 15. 6·98		20·47	3·75			18. 16. 3·70	+ 9·07
	23	α Lyræ	C	19·5	23·0	26·6	30·1	37·2	44·3	47·9	51·4	54·9	18. 31. 37·16		37·75	20·98	43·23		18. 32. 20·98	− 0·94
	24	Cephei 51 S.P. (E&E)	C	..	..	..	33·0	30·5	24·0	22·0	20·0	18·5	18. 35. 30·41		13·51	57·42			6. 35. 56·74	− 16·02
	25	Venus 2 L.	C	38·8	1·6	4·6	7·4	12·7	18·6	21·4	24·2	27·1	22. 24. 12·89		12·71				22. 24. 55·42	
	26	α Andromedæ	C	..	..	..	..	38·5	44·9	48·0	51·1	54·2	0. 0. 38·49		38·87	22·08	43·21	43·13	0. 1. 22·00	− 0·30
Mar. 24	27	☉ 1 L.	C	6·9	9·7	12·4	15·2	20·9	26·6	29·3	32·0	34·9	0. 13. 20·83							
	28	☉ 2 L.	C	15·9	18·6	21·5	24·4	29·6	35·4	38·2	40·9	43·6	0. 15. 29·73		25·26				0. 15. 8·39	
	29	Polaris .... (E&E)	C	18·0	11·0	1·0	54·0	39·0	23·0	18·0	..	..	1. 7. 37·16		9·73	52·40	42·67		1. 8. 52·84	+ 26·59
	30	δ U. Mi. S.P. (E&E)	C	..	26·5	12·0	59·3	33·0	5·5	51·5	38·5	..	6. 15. 33·28		19·55	3·94			18. 16. 2·57	+ 8·88
	31	Cephei 51. . (E&E)	C	..	..	..	..	..	..	..	50·0	47·0	6. 34. 58·30		14·99	57·19			6. 35. 58·01	− 15·79
	32	γ Canis Majoris	C	..	..	..	..	..	1·0	3·8	6·6	9·4	6. 56. 55·10		54·86	37·93	43·07		6. 57. 37·87	− 1·59
	33	δ Canis Majoris	C	55·3	58·4	1·5	4·6	10·6	16·9	19·9	23·0	26·1	7. 2. 10·65		10·26				7. 2. 53·27	− 1·51
	34	κ Cygni S.P.	C	53·0	57·5	2·2	6·7	16·2	25·2	29·7	34·4	39·1	7. 13. 16·08		14·88				19. 13. 57·88	− 0·35
	35	π Draconis S.P.	C	..	..	56·3	2·9	16·4	29·5	36·2	..	..	7. 19. 16·39		14·51				19. 19. 57·51	+ 0·35
	36	Castor	C	57·5	0·9	4·1	7·5	14·0	20·5	23·8	27·0	30·4	7. 25. 13·91		14·36	57·35	42·99		7. 25. 57·36	− 2·25
	37	ξ Navis	C	38·5	41·6	44·6	47·7	53·6	59·9	2·9	5·9	8·8	7. 42. 53·67		53·30	36·29	42·99		7. 43. 36·30	− 1·81
	38	ε Draconis S.P.	C	..	..	..	39·0	55·4	11·3	..	..	..	7. 47. 55·36		53·02				19. 48. 36·01	+ 0·97
	39	β Cancri	JC	13·4	16·2	19·0	21·8	27·4	33·0	35·8	38·7	41·4	8. 8. 27·36		27·45	10·46	43·01	43·12†	....	
	40	κ^1 Cephei S.P.	C	39·3	51·4	4·0	16·9	..	..	..	..	..	8. 12. 42·19		38·48			43·13	20. 13. 21·47	+ 2·78
	41	κ^2 Cephei S.P.	C	41·0	53·4	6·0	18·7	..	..	..	..	..	8. 12. 44·07		40·36				20. 13. 23·35	+ 2·78
	42	d^1 Cancri	JC	38·9	42·0	44·7	47·6	53·5	59·4	2·4	5·2	8·2	8. 14. 53·50		53·72	36·67	42·95	43·12†	....	
	43	ω^1 Cygni S.P.	C	..	54·3	58·4	2·7	..	19·6	23·5	27·9	..	8. 22. 11·17		10·12			43·13	20. 22. 53·10	− 0·17
	44	θ Cephei S.P.	C	5·8	11·9	17·6	23·7	35·7	..	..	..	..	8. 26. 35·83		34·15				20. 27. 17·13	+ 0·52
	45	α Cygni S.P.	C	46·5	50·4	54·3	58·2	..	..	..	..	..	8. 36. 6·07		5·15				20. 36. 48·13	− 0·27
	46	ε Hydræ	C	..	..	..	..	53·6	59·1	2·0	4·7	7·5	8. 38. 53·54		53·59	36·58	42·99		8. 39. 36·57	− 2·27
	47	ϵ Virginis	C	30·0	32·9	35·7	38·6	44·1	49·8	52·6	55·5	58·3	12. 54. 44·12		44·23	27·07	42·84		12. 55. 27·13	− 2·68
	48	Polaris S.P. (E&E)	C	18·5	11·0	..	..	..	23·0	16·0	6·0	..	13. 8. 41·37		8·58	52·35	43·77		1. 8. 51·48	+ 26·64

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Corrections for passage of Semidiameter, Nos. 6 and 25, $-62^s{\cdot}72$, and $-0^s{\cdot}45$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

6. Correction to R, A, on true meridian, $-0^s{\cdot}01$.
20. Observed over wires Y, Z.
24. Exceedingly faint and at times invisible.
25. Very faint from fog.
26. Extremely faint.
29. Excessively tremulous.
38. Both stars of exactly the same R, A.
43. Faint from fog.
44. The time at the 5th wire has also been used for the 2nd wire of an Altazimuth Observation, ϵ Hydræ, Face Right.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Mar. 24	1	50 Virginis	C	..	..	50·2	52·9	58·6	4·3	7·0	9·8	12·5	13. 1. 58·53	+ 0·90	58·37			43·13	13. 2. 41·27	— 2·86
	2	58 Virginis	C	26·0	28·8	31·6	34·5	40·1	45·6	48·4	51·1	54·0	13. 9. 39·97	(+7·79)	39·81			[−0·42]	13. 10. 22·71	— 2·85
	3	Spica	C	7·9	10·8	13·6	16·4	22·1	27·9	30·6	33·3	36·1	13. 17. 22·03	[−8·22]	21·85	4·71	42·86		13. 18. 4·75	— 2·84
	4	☽ 2 L.	C	10·1	13·1	16·0	18·8	24·6	30·4	33·4	36·4	39·0	13. 22. 24·59		24·39				13. 22. 3·25	
	5	85 Virginis	C	21·9	24·8	27·7	30·6	36·2	42·0	44·8	47·7	50·6	13. 37. 36·20		35·96				13. 38. 18·85	— 2·90
	6	89 Virginis	C	..	..	..	..	49·5	55·4	58·3	1·2	4·0	13. 41. 49·52		49·26				13. 42. 32·15	— 2·94
Mar. 25	7	*d* Leonis.....	E	38·2	41·1	43·8	46·6	52·0	57·6	0·4	3·3	6·1	10. 52. 52·07		52·09	34·82	42·73	42·95†	....	
	8	β Leonis.....	E	12·7	15·8	18·6	21·3	27·0	32·8	35·7	38·6	41·5	11. 41. 27·66		27·23	9·95	42·72	[−0·50]	....	
	9	Spica	S	8·4	11·3	14·0	16·8	22·4	28·0	30·9	33·6	36·4	13. 17. 22·37		22·19	4·72	42·53	42·81	....	
	10	☽ 2 L.	S	..	..	..	..	..	33·1	48·0	..	..	14. 14. 3·73		3·48				14. 13. 40·36	
Mar. 26	11	ψ Boötis.....	JC	41·6	44·7	47·9	50·9	57·2	3·4	6·6	9·6	12·8	14. 57. 57·14		57·5c	39·4c	41·90	42·28	....	
	12	☽ 2 L.	JC	58·6	1·6	4·6	7·5	13·5	19·5	22·5	25·5	28·6	15. 8. 13·5o		13·22			[−0·55]	15. 7. 47·82	
	13	ζ^1 Libræ.....	JC	42·0	45·0	47·8	50·7	56·5	2·4	5·1	8·0	11·c	15. 19. 56·45		56·2c	38·16	41·96		....	
	14	γ Libræ	JC	2·1	5·0	7·7	10·7	16·3	22·1	24·9	27·8	30·6	15. 27. 16·3o		16·07				15. 27. 58·00	— 2·64
	15	ζ Ophiuchi.....	C	46·7	49·6	52·4	55·2	0·8	6·4	9·2	12·1	14·8	16. 29. 0·75		0·57	42·63	42·06	42·44†	....	
Mar. 28	16	α Serpentis.....	JC	41·7	44·5	47·4	50·2	55·6	1·2	4·1	6·9	9·7	15. 36. 55·65	+ 1·05	55·75	36·58	40·83	41·14†	....	
	17	ε Serpentis.....	JC	9·7	12·7	15·5	18·1	23·8	29·3	32·1	35·0	37·7	15. 43. 23·72	(+7·42)	23·80	4·64	40·84	[−0·48]	....	
														[−7·04]						
Mar. 29	18	β Canis Minoris..	C	53·8	56·6	59·3	2·1	7·6	13·3	16·0	18·9	21·6	7. 19. 7·64		7·76	48·27	40·31	40·64	....	
	19	ξ Navis.....	C	40·7	44·0	47·0	50·0	55·7	2·2	5·2	8·2	11·2	7. 42. 55·97		55·68	36·19	40·51	[−0·40]	....	
	20	B.F. 1128.....	C	0·3	3·3	6·0	9·0	14·9	20·6	23·7	26·6	29·5	7. 56. 14·83		15·09				7. 56. 55·60	— 2·12
	21	Gr. 7-yr. C. No. 739	C	52·4	55·1	58·1	0·8	6·4	..	..	..	..	9. 28. 6·44		6·61				9. 28. 47·09	— 2·43
	22	ο Leonis	C	1·1	4·0	6·7	9·5	15·2	20·9	23·6	26·5	29·2	9. 33. 15·14		15·28	55·81	40·53		....	
	23	ε Leonis	C	14·2	17·3	20·4	23·3	29·4	35·5	38·5	41·5	44·5	9. 37. 29·35		29·69	10·15	40·46		....	
	24	Spica	S	10·4	13·2	16·0	18·6	24·2	30·1	32·8	35·5	38·2	13. 17. 24·28		24·17	4·77	40·60	40·85†	....	
	25	ζ Virginis.....	S	54·3	57·0	59·8	2·4	8·0	13·6	16·4	19·0	21·9	13. 27. 7·99		8·01	48·68	40·67		....	
Mar. 30	26	α Herculis	E	34·1	36·8	39·9	42·7	48·4	54·0	57·0	59·8	2·6	17. 7. 48·31		48·50	28·74	40·24	40·47†	....	
	27	θ Ophiuchi.....	E	46·8	50·0	53·1	..	2·2	..	11·3	14·4	17·4	17. 13. 2·12		1·83	42·0c	40·17	[−0·38]	....	
	28	72 Ophiuchi.....	D	1·5	4·5	7·4	10·1	15·5	21·3	24·1	26·9	29·6	18. 0. 15·6o		15·73	55·81	40·08	40·31	....	
	29	μ ^{1}Sagittarii.....	D	45·3	48·3	51·4	54·3	0·1	6·0	9·0	12·0	14·8	18. 5. 0·09		59·85	39·84	39·99		....	
	30	η Serpentis.....	D	24·3	27·1	29·9	32·6	38·2	43·7	46·5	49·2	52·0	18. 13. 38·11		38·09	18·11	40·02		....	
	31	δ Ursæ Min.(E&E)	D	21·0	9·5	..	..	14·0	48·0	35·0	21·0	7·5	18. 15. 13·98		26·57	6·22			....	
	32	Ceph. 51 S.P.(E&E)	D	..	..	36·0	34·5	30·5	26·0	22·0	..	..	18. 35. 3o·91		15·27	54·45			....	
	33	ζ Aquilæ	D	16·5	19·4	22·3	25·2	30·6	36·4	39·3	42·2	44·9	18. 58. 3o·71		3o·89	10·88	39·99		....	
	34	☽ 2 L.	D	15·8	18·8	21·7	24·7	30·7	36·8	39·9	42·9	45·8	19. 4. 3o·74		3o·53				19. 3. 59·89	
	35	Venus 2 L.	D	..	33·8	36·6	39·4	44·9	5o·5	53·4	56·3	..	22. 56. 44·93		44·85				22. 57. 24·37	
Mar. 31	36	ε Aquilæ.....	C	34·4	37·1	40·0	42·9	48·5	54·4	57·2	0·0	2·8	18. 52. 48·53		48·73	28·37	39·64	39·87†	....	
	37	ζ Aquilæ.....	C	17·0	19·9	22·6	25·5	31·2	36·9	39·8	42·6	45·4	18. 58. 31·17		31·35	10·91	39·56	[−0·34]	....	
	38	γ Aquilæ	E	54·7	57·6	0·5	3·3	8·5	14·5	17·4	20·1	22·9	19. 39. 8·78		8·92	48·84	39·92	40·13	19. 39. 48·80	— 1·21
	39	α Aquilæ	E	16·2	19·0	21·7	24·6	30·1	35·8	38·6	41·4	44·2	19. 43. 3o·13		3o·25	10·04	39·79	[−0·31]	19. 44. 10·13	— 1·21
	40	☽ 2 L.	E	27·2	3o·2	33·3	36·1	41·9	47·9	5o·9	53·9	56·8	20. 4. 41·97		41·80				20. 4. 11·49	
April 1	41	☉ 1 L.	E	14·9	17·6	20·5	23·2	28·8	34·4	37·2	40·0	42·5	0. 42. 28·73		} 33·23			39·82	0. 44. 13·04	
	42	☉ 2 L.	E	..	..	..	32·1	37·6	..	46·0	48·8	51·5	0. 44. 37·59							

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 4, 10, 12, 34, 35, and 40, $-64^s \cdot 03$: $-65^s \cdot 62$: $-67^s \cdot 32$: $-70^s \cdot 64$: $-0^s \cdot 43$: and $-70^s \cdot 17$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
March 28 to April 2. The azimuthal error used is the mean of those ($-7'' \cdot 35$ and $-6'' \cdot 72$) determined by tabular places of δ Ursæ Minoris and Cephei 51 S.P. on March 30, and on April 1, the correction for clock-rate insensible in both cases.

4, 10, 12, 34, 40. Correction to R, A, on true meridian, $-0^s \cdot 01$.
10. Cloudy. Observed over wires Y, Z. No limb in N.P.D. was visible.
21. Of the 9–10th magnitude.
34. Very faint.
17. Very faint; cloudy.
40. No observation of N.P.D. could be made.

MONTH and DAY.	No. for Reference	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Apr. 1	1	Polaris ...(E & E)	E	..	..	..	..	..	32·5	..	14·0	8·0	1. 7. 44·96	+ 1·05	15·23	52·00	36·77	39·82	....	
	2	β Can. Min.....	E	54·4	57·4	0·2	2·8	8·4	14·0	16·8	19·7	22·4	7. 19. 8·40	(+7·42)	8·52	48·22	39·70	[−0·31]	7. 19. 48·25	— 1·78
	3	α^1 Geminorum...	E	0·3	..	6·9	..	16·6	.	26·5	..	33·2	7. 25. 16·66	[−7·04]	17·12				7. 25. 56·84	— 2·09
	4	Castor	E	..	4·2	..	10·6	..	23·6	..	30·3	..	7. 25. 17·09		17·55	57·19	39·64		7. 25. 57·27	— 2·09
	5	ν Geminorum....	E	38·6	41·9	45·0	48·2	54·3	0·4	3·6	6·7	9·8	7. 26. 54·23		54·60				7. 27. 34·32	— 2·02
	6	Procyon	E	18·8	21·7	24·6	27·4	32·8	38·4	41·2	44·0	46·9	7. 31. 32·82		32·90	12·73	39·83		7. 32. 12·62	— 1·81
	7	Piazzi VII. 155 .	E	..	..	52·1	8·4	40·5	13·5	29·5	..	..	7. 36. 40·48		44·83				7. 37. 24·55	— 5·68
	8	Groomb. 1374...	E	..	..	42·6	52·7	13·1	33·3	44·0	..	..	7. 43. 12·94		15·58				7. 43. 55·30	— 4·17
	9	ε Draconis S.P...	E	17·5	26·0	34·0	42·4	58·6	14·5	22·6	30·5	38·6	7. 47. 58·44		56·31				19. 48. 36·03	+ 0·50
	10	3 Cancri.....	E	7·2	10·2	13·0	15·9	21·7	27·5	30·4	33·4	36·2	7. 52. 21·67		21·91				7. 53. 1·63	— 2·04
	11	B. F. 1128.....	E	1·0	4·0	6·9	9·8	15·7	21·6	24·5	27·4	30·4	7. 56. 15·65		15·91				7. 56. 55·63	— 2·07
	12	12 Cancri.....	E	14·3	17·1	20·0	23·0	28·4	34·3	37·0	39·7	42·7	8. 0. 28·45		28·64				8. 1. 8·36	— 2·04
	13	72 Ophiuchi	C	2·5	5·4	8·2	11·0	16·5	22·2	24·8	27·7	30·5	18. 0. 16·48		16·61	55·87	39·26	39·37	18. 0. 55·82	— 1·75
	14	μ^1 Sagittarii.....	C	46·0	49·0	52·0	55·0	0·9	6·9	9·8	12·8	15·8	18. 5. 0·87		0·63	39·90	39·27	[−0·22]	18. 5. 39·83	— 2·12
	15	η Serpentis	JC	25·1	27·8	..	33·4	38·8	44·5	..	50·0	52·8	18. 13. 38·87		38·85	18·17	39·32	39·51†	....	
	16	δ Ursæ Min.(E&E)	C	..	..	..	..	15·0	49·5	35·0	22·5	8·0	18. 15. 14·68		27·27	6·89		39·37	....	
	17	α Lyræ.....	JC	..	..	..	34·3	41·4	48·5	52·0	55·5	59·1	18. 31. 41·32		41·91	21·27	39·36	39·51†	....	
	18	Ceph.51S.P.(E&E)	C	..	..	..	34·0	29·0	..	20·5	17·5	16·5	18. 35. 29·16		13·52	53·66		39·37	....	
Apr. 2	19	ε Hydræ.....	C	43·4	46·4	49·0	51·7	57·2	3·0	5·6	8·5	11·2	8. 38. 57·28		57·38	36·45	39·07	39·15	8. 39. 36·45	— 2·14
	20	Var. (T) Hydræ .	C	..	14·9	17·6	..	26·0	..	34·3	36·9	39·9	8. 48. 25·89		25·80				8. 49. 4·87	— 2·12
	21	α Cancri.....	C	11·7	14·6	17·4	20·2	25·8	31·5	34·3	37·0	39·7	8. 50. 25·75		25·92	5·00	39·08		8. 51. 4·99	— 2·23
	22	e Mali	C	..	..	24·9	28·0	34·3	40·7	43·8	..	..	9. 3. 34·28		33·92				9. 4. 12·99	— 2·20
	23	α Hydræ	C	..	6·5	9·2	12·1	17·6	23·2	26·0	28·8	..	9. 20. 17·57		17·49	56·51	39·02		9. 20. 56·55	— 2·28
	24	ξ Leonis.....	C	45·8	48·7	51·4	54·2	59·8	5·6	8·5	11·3	14·1	9. 23. 59·88		0·03	39·06	39·03		9. 24. 39·09	— 2·36
	25	Gr. 7-yr. Cat. 739	C	53·8	56·5	59·2	2·2	7·9	13·5	16·4	..	..	9. 28. 7·80		7·97				9. 28. 47·03	— 2·38
	26	o Leonis.....	C	2·5	5·4	8·3	11·1	16·5	22·3	25·1	28·0	30·6	9. 33. 16·59		16·74	55·76	39·02		9. 33. 55·80	— 2·39
Apr. 7	27	Polaris ...(E & E)	JC	..	..	15·0	5·0	48·0	..	24·5	16·0	9·0	1. 7. 46·78	+ 1·29 (+7·09) [−4·84]	13·39	51·92	38·53	38·54 [−0·04]	....	
Apr. 8	28	⊙ 2 L.....	JC	58·0	1·0	3·7	6·4	12·0	17·6	20·4	23·3	26·2	1. 10. 12·02		12·23				1. 9. 46·12	
	29	α Cancri.....	JC	11·9	14·9	17·6	20·6	26·1	31·9	34·6	37·4	40·3	8. 50. 26·09		26·35	4·91	38·56		....	
	30	κ Cancri.....	JC	32·0	35·0	37·8	40·6	46·2	51·7	54·6	57·4	0·3	8. 59. 46·13		46·38	24·88	38·50		....	
	31	83 Cancri.....	JC	32·0	35·0	37·9	40·8	46·6	52·6	55·4	58·4	1·3	9. 10. 46·61		46·93	25·47	38·54		....	
	32	h Ursæ Majoris..	JC	38·5	45·0	51·0	57·0	9·5	22·1	28·3	34·6	40·5	9. 20. 9·50		10·91				9. 20. 49·43	— 3·33
	33	ε Leonis.....	C	15·8	18·8	21·9	24·9	31·0	37·1	40·1	43·3	46·3	9. 37. 30·98		31·38	10·02	38·64	38·65†	....	
	34	μ Leonis.....	C	..	12·5	15·6	18·7	24·7	31·1	34·2	37·3	..	9. 44. 24·81		25·25	3·87	38·62		....	
Apr. 10	35	α Cancri	JC	..	..	..	..	..	31·6	34·6	37·5	40·4	8. 50. 26·06	(+6·36)	26·28	4·88	38·60	38·61†	....	
	36	83 Cancri.....	JC	..	..	..	40·8	46·2	52·5	..	..	..	9. 10. 46·57		46·85	25·44	38·59	[−0·04]	....	
	37	83 Cancri.....	JC	..	..	..	..	..	15·8	30·5	..	..								
Apr. 11	38	κ Cancri.....	S	32·3	35·1	38·0	40·7	46·2	52·0	54·6	57·6	0·3	8. 59. 46·26	+ 1·35	46·08	24·84	38·76	38·82	9. 0. 24·80	— 2·13
	39	τ Leonis.....	S	..	9·9	12·5	15·3	20·7	26·4	29·2	32·1	..	11. 20. 20·81	(+0·90)	20·58	59·20	38·62	[−0·26]	11. 20. 59·28	— 2·66
	40	υ Leonis.....	S	..	..	..	18·0	23·4	29·1	31·8	34·5	37·4	11. 29. 23·45	[−7·32]	23·20	1·81	38·61		11. 30. 1·90	— 2·69
	41	η Virginis	E	7·5	10·3	13·1	15·6	21·3	26·8	29·7	32·4	35·1	12. 12. 21·26		21·01	59·70	38·69	38·76†		
	42	β Corvi	E	..	..	30·9	33·8	39·7	45·9	49·0	51·8	54·8	12. 26. 39·79		39·40	17·98	38·58			
	43	δ Virginis	S	55·8	58·6	1·4	4·3	9·4	15·3	17·8	20·7	23·4	12. 48. 9·58		9·35	48·07	38·72	38·82	12. 48. 48·03	— 2·82
	44	κ Virginis	S	50·0	52·6	55·6	58·4	4·0	9·4	12·2	15·0	17·6	12. 52. 3·82		3·55				12. 52. 42·23	— 2·89

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

Correction for passage of Semidiameter, No. 28, $-64^s{\cdot}65$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

April 7 and 8. The azimuthal error by tabular places of Polaris and 83 Cancri; the correction for clock-rate insensible.

April 11 to 15. The azimuthal error by nine consecutive transits of Polaris.

1. Cloudy during the passage over the remaining wires.
16. A very bad image.
20. Of the 9th magnitude.
25. Of the 10th magnitude.
27. An extremely bad image: the observation very unsatisfactory.
29. Very cloudy.
36, 37. Extremely cloudy; observed over the wires illuminated.
37. Observed over wires Y, Z.
39. Very faint.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate]	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Apr. 11	1	Saturn 1 L.	S	27·2	30·2	33·0	35·6	41·1	46·6	49·4	52·2	55·0	12. 55. 41·10	+ 1·35	41·50			38·82	12. 56. 20·18	
	2	Saturn 2 L.	S	28·6	31·5	34·3	37·0	42·4	48·0	50·7	53·6	56·3	12. 55. 42·44	(+0·90)				[−0·26]		
	3	Polaris S.P. (E&E)	S	..	..	..	45·0	32·0	13·5	4·0	57·0	..	13. 8. 31·58	[−7·32]	13·40	52·64	39·24		1. 8. 52·08	+26·35
	4	Spica	S	12·4	15·4	18·1	20·9	26·4	32·2	35·0	37·8	40·6	13. 17. 26·48		26·16	4·88	38·72		13. 18. 4·84	− 3·01
	5	Europa	S	24·4	27·4	..	..	38·3	43·5	46·4	..	..	13. 33. 38·17		37·93				13. 34. 16·60	
	6	Polaris ... (E & E)	JC	..	..	..	..	0·0	45·5	35·0	29·0	17·5	1. 7. 57·85	(+1·48)	16·60	52·72	36·12	38·30	1. 8. 54·88	+26·27
																		[−0·47]		
Apr. 12	7	⊙ 2 L.	JC	39·9	42·6	45·6	48·4	54·0	59·6	2·4	5·1	8·0	1. 24. 53·91		53·74				1. 24. 27·20	
	8	μ Geminorum ...	JC	52·4	55·4	58·4	1·4	7·4	13·4	16·4	19·1	22·2	6. 14. 7·29		7·23	45·38	38·15		6. 14. 45·41	− 1·42
	9	γ Geminorum....	JC	0·3	3·3	6·1	8·8	14·6	20·6	23·4	26·3	29·1	6. 29. 14·67		14·56	52·70	38·14		6. 29. 52·73	− 1·43
	10	☽ 1 L.	JC	44·7	47·8	50·8	53·8	59·6	5·7	8·7	11·8	14·8	6. 34. 59·69		59·60				6. 36. 43·84	
	11	ζ² Geminorum ...	JC	11·3	14·3	17·4	20·3	25·9	32·1	34·9	38·0	41·2	6. 55. 26·10		26·02				6. 56. 4·19	− 1·59
	12	λ Geminorum ...	JC	..	..	31·4	34·4	40·3	45·9	48·8	51·6	54·6	7. 9. 40·09		39·98				7. 10. 18·14	− 1·62
	13	δ Geminorum....	JC	8·5	11·6	14·5	17·6	23·5	29·7	32·6	35·6	38·4	7. 11. 23·51		23·44	1·62	38·18		7. 12. 1·60	− 1·69
	14	d^1 Cancri	C	43·8	46·7	49·6	52·6	58·4	4·3	6·9	10·2	13·0	8. 14. 58·34		58·25	36·36	38·11	38·28†	....	
	15	η Cancri	C	59·6	2·6	5·5	8·5	14·4	20·4	23·2	26·2	29·4	8. 24. 14·37		14·29	52·42	38·13		....	
	16	Nysa	JC	34·6	37·4	40·3	43·2	48·8	54·4	57·5	0·2	3·4	10. 15. 48·81		48·68			38·30	10. 16. 26·78	
	17	36 Ursæ Majoris.	JC	..	58·5	3·6	8·6	18·6	28·7	33·5	38·8	..	10. 21. 18·51		18·93				10. 21. 57·63	− 3·66
	18	37 Ursæ Majoris.	JC	21·4	26·9	31·5	36·9	47·1	57·6	2·9	7·9	13·3	10. 25. 47·19		47·65				10. 26. 25·75	− 3·12
	19	Groombridge 1669	JC	..	..	6·7	14·6	30·3	45·8	53·2	..	..	10. 31. 29·97		30·90				10. 32. 8·98	− 3·85
	20	38 Ursæ Majoris.	JC	..	..	..	..	..	16·7	23·3	30·5	37·0	10. 32. 2·52		3·29				10. 32. 41·38	− 3·60
	21	46 Leonis Minoris	JC	..	..	..	59·6	6·2	13·0	16·5	19·9	23·4	10. 45. 6·29		6·35				10. 45. 44·44	− 2·66
	22	Lalande 21258...	JC	..	..	..	59·2	7·0	14·9	18·7	22·5	26·3	10. 58. 6·98		7·16				10. 58. 45·25	− 2·81
	23	δ Leonis	JC	2·0	5·0	7·9	11·0	16·8	22·7	25·7	28·6	31·7	11. 6. 16·77		16·70	54·92	38·22		11. 6. 54·78	− 2·61
	24	δ Crateris	JC	43·4	46·1	49·1	51·8	57·4	3·4	6·1	8·9	11·6	11. 11. 57·48		57·15	35·31	38·16		11. 12. 35·23	− 2·72
	25	Iris	JC	51·2	54·1	57·0	59·8	5·3	10·7	13·5	16·4	19·0	11. 13. 5·17		4·92				11. 13. 43·00	
	26	Calliope	JC	47·8	51·7	54·8	..	3·4	..	11·9	15·0	17·8	12. 18. 3·15		3·04				12. 18. 41·10	
	27	β Corvi	JC	25·5	28·5	31·5	34·6	40·4	46·5	49·4	52·4	55·5	12. 26. 40·43		40·05	17·98	37·93		12. 27. 18·11	− 3·12
	28	ρ Virginis	JC	10·7	13·9	16·6	19·3	25·2	30·6	33·4	36·4	39·0	12. 34. 24·96		24·81				12. 35. 2·86	− 2·78
	29	35 Virginis	JC	6·9	10·0	12·7	15·5	21·2	26·5	29·4	32·3	34·9	12. 40. 21·00		20·80	58·74	37·94		12. 40. 58·85	− 2·82
	30	7 Draconis	JC	..	..	..	..	..	39·5	46·6	53·6	1·3	12. 41. 24·77		25·61				12. 42. 3·66	− 3·66
	31	8 Draconis	JC	..	..	..	..	27·5	41·5	48·5	55·4	1·8	12. 49. 27·65		28·42				12. 50. 6·47	− 3·53
	32	Phocæa	JC	31·6	35·1	38·0	40·8	46·6	52·4	55·5	58·4	1·1	12. 52. 46·56		46·24				12. 53. 24·29	
	33	Saturn 1 L.	JC	11·1	14·0	16·6	19·4	25·0	30·5	33·3	36·1	38·7	12. 55. 24·92		25·25				12. 56. 3·30	
	34	Saturn 2 L.	JC	12·2	15·0	17·8	20·6	26·2	31·8	34·6	37·2	39·9	12. 55. 26·08							
	35	α Comæ	JC	..	..	..	..	47·0	52·9	55·8	58·7	1·6	13. 2. 47·00		46·90				13. 3. 24·95	− 2·76
	36	Polaris S.P. (E&E)	JC	..	..	..	..	34·5	21·0	10·5	3·0	56·0	13. 8. 36·95		17·56	52·79	35·23		1. 8. 55·60	+26·20
	37	ζ Virginis	JC	57·1	0·1	..	5·6	10·8	16·5	..	22·0	25·0	13. 27. 10·98		10·75	48·80	38·05		13. 27. 48·79	− 2·89
	38	Europa	JC	40·7	43·8	46·6	49·4	54·6	0·3	3·0	5·7	8·6	13. 32. 54·69		54·47				13. 33. 32·51	
	39	Urania	JC	34·4	37·0	39·9	42·9	48·5	54·4	56·9	59·6	2·7	13. 37. 48·43		48·11				13. 38. 26·14	
	40	α Pegasi	E	7·7	10·6	13·4	16·4	21·9	27·6	30·5	33·4	36·2	22. 57. 21·92	(+2·87)	21·87	59·94	38·07	38·54	22. 57. 59·92	− 0·68
	41	Venus 2 L.	E	38·8	41·7	44·6	47·4	52·7	58·6	1·4	3·9	6·6	23. 55. 52·81		52·63			[−0·51]	23. 56. 30·24	
	42	Polaris.... (E&E)	E	..	..	..	..	51·5	38·0	..	23·0	14·5	1. 7. 52·06		13·80	52·86	39·06	38·03	1. 8. 51·81	+26·13
Apr. 13	43	⊙ 1 L.	E	11·2	13·8	17·0	19·7	25·4	31·1	33·9	36·7	39·2	1. 26. 25·28		30·09				1. 28. 8·09	
	44	⊙ 2 L.	E	21·1	23·9	26·7	29·5	35·1	40·8	43·5	46·4	49·2	1. 28. 35·08							
	45	Mercury 1 L. ...	E	7·6	10·7	13·5	16·5	22·1	27·8	30·6	33·5	36·4	2. 7. 22·03		21·97				2. 8. 0·14	
	46	51 Geminorum...	E	..	46·0	48·8	51·7	57·4	3·2	6·1	9·0	..	7. 4. 57·40		57·37	35·17	37·80		7. 5. 35·25	− 1·58
	47	λ Geminorum ...	E	..	28·9	31·6	34·6	40·4	46·3	49·1	52·0	..	7. 9. 40·35		40·32				7. 10. 18·20	− 1·61

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30ʳ·700.
Corrections for passage of Semidiameter, Nos. 7, 10, 41, and 45, −64ˢ·81 : +66ˢ·07 : −0ˢ·42 : and +0ˢ·18.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

41. Very tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Apr. 13	1	β Canis Minoris..	E	..	59·1	2·0	4·6	10·3	15·9	18·6	21·5	..	7. 19. 10·23	+1·35	10·12	48·01	37·89	38·03	7. 19. 48·00	— 1·57
	2	☽ 1 L.....	E	48·4	51·4	54·4	57·4	3·3	9·2	12·2	15·0	18·0	7. 27. 3·21	(+2·87)	3·18			[−0·51]	7. 28. 45·68	
	3	Pollux	E	7·5	10·9	14·1	17·1	23·3	29·8	32·8	36·0	39·1	7. 36. 23·35	[−7·32]	23·43	1·24	37·81		7. 37. 1·30	— 1·84
	4	ζ^1 Canceri	E	34·1	..	39·9	..	48·6	..	57·4	..	3·3	8. 3. 48·62		48·60				8. 4. 26·46	— 1·89
	5	ζ^2 Canceri	E	..	37·3	..	43·2	..	54·7	..	0·6	..	8. 3. 48·88		48·86				8. 4. 26·72	— 1·89
	6	η Cephei S.P. ...	E	25·8	31·5	37·4	43·0	54·6	5·9	11·5	17·4	23·6	8. 41. 54·62		53·33				20. 42. 31·18	— 0·44
	7	α Canceri.....	D	13·1	15·9	18·9	21·7	27·4	33·0	35·8	38·6	41·4	8. 50. 27·26		27·19	4·83	37·64	37·83†	....	
	8	κ Canceri.....	D	33·2	36·1	38·9	41·7	47·3	52·8	55·7	58·6	1·3	8. 59. 47·24		47·16	24·81	37·65		....	
	9	83 Canceri.....	E	33·2	36·3	39·1	42·0	47·6	53·5	56·4	59·2	2·3	9. 10. 47·68		47·66	25·39	37·73	38·03	9. 11. 25·50	— 2·19
	10	α Cephei S.P. ...	E	13·5	19·2	25·4	30·9	43·0	54·9	0·5	6·5	12·6	9. 14. 43·05		41·74				21. 15. 19·57	— 0·23
	11	h Ursæ Majoris ..	E	39·6	46·0	52·2	58·5	10·7	23·4	29·7	36·0	42·1	9. 20. 10·81		11·67				9. 20. 49·50	— 3·15
	12	Gr. 7-yr. C. No. 739	E	54·8	..	0·6	3·2	9·0	14·7	17·4	..	23·2	9. 28. 8·94		8·87				9. 28. 46·70	— 2·23
	13	28 Ursæ Majoris.	E	..	..	30·7	37·4	50·6	2·8	9·3	..	..	9. 34. 50·04		50·94				9. 35. 28·77	— 3·24
	14	Nysa	E	44·8	47·8	50·5	53·4	59·0	4·9	7·7	10·8	13·5	10. 15. 59·10		59·05				10. 16. 36·86	
	15	ρ Leonis	E	49·6	52·4	55·2	58·2	3·7	9·3	12·1	14·9	17·6	10. 25. 3·62		3·53	41·35	37·82		10. 25. 41·34	— 2·46
	16	38 Leonis Minoris	E	27·4	31·0	34·5	38·1	45·0	52·2	55·7	59·3	2·8	10. 30. 45·05		45·26				10. 31. 23·07	— 2·65
	17	δ Leonis	E	2·2	5·2	8·2	11·0	17·1	23·0	26·1	29·0	32·0	11. 6. 17·04		17·06	54·91	37·85		11. 6. 54·86	— 2·60
	18	Iris.....	E	21·4	24·2	27·0	29·6	35·2	40·7	43·6	46·4	49·0	11. 12. 35·18		34·98				11. 13. 12·77	
	19	Calliope	E	5·0	8·0	11·0	13·8	19·4	25·4	28·2	31·2	33·9	12. 17. 19·49		19·46				12. 17. 57·23	
	20	35 Virginis	E	7·1	10·0	12·8	15·5	21·2	26·7	29·5	32·1	35·0	12. 40. 21·05		20·91	58·74	37·83		12. 40. 58·67	— 2·82
	21	Phocæa.....	E	..	..	..	50·0	55·4	..	4·2	6·9	9·8	12. 51. 55·47		55·19				12. 52. 32·95	
	22	Saturn 1 L.....	E	54·4	57·3	0·2	2·8	8·2	13·8	16·5	19·5	22·2	12. 55. 8·27		} 8·73				12. 55. 46·49	
	23	Saturn 2 L.....	E	55·8	58·6	1·4	4·2	9·5	15·3	17·9	20·6	23·4	12. 55. 9·58							
	24	α Comæ	E	32·7	35·8	38·7	41·6	47·2	53·1	56·0	59·0	2·0	13. 2. 47·29		47·27				13. 3. 25·02	— 2·76
	25	Polaris S.P. (E&E)	E	..	..	..	..	38·0	19·5	9·0	3·5	59·0	13. 8. 37·77		15·50	52·92	37·42		1. 8. 53·25	+26·07
	26	70 Virginis	E	57·4	0·3	3·2	6·0	11·8	17·6	20·4	23·3	26·2	13. 21. 11·75		11·70				13. 21. 49·45	— 2·78
	27	ζ Virginis	E	57·3	..	3·1	5·7	11·2	16·8	19·5	..	25·2	13. 27. 11·22		11·05	48·81	37·76		13. 27. 48·79	— 2·90
	28	Europa	E	56·8	59·6	2·4	5·1	10·7	16·2	19·1	21·8	24·5	13. 32. 10·64		10·48				13. 32. 48·22	
	29	Urania	E	..	39·4	42·4	45·2	50·9	56·6	59·6	2·4	..	13. 36. 50·87		50·59				13. 37. 28·33	
	30	α Coronæ.....	E	5·0	8·3	11·3	14·3	20·4	26·7	29·9	32·9	36·1	15. 28. 20·50		20·57	58·36	37·79		15. 28. 58·27	— 2·52
	31	Jupiter 1 L.....	E	19·7	..	25·5	..	34·0	..	42·9	..	48·8	15. 35. 34·14		} 35·48				15. 36. 13·18	
	32	Jupiter 2 L.....	E	22·8	..	28·8	..	37·4	..	46·3	..	52·1	15. 35. 37·44							
	33	α Pegasi.....	C	..	..	..	17·2	22·8	28·5	31·5	34·3	37·0	22. 57. 22·79		22·77	59·97	37·20	37·77 [−0·55] 37·22	22. 58. 0·01	— 0·71
	34	Venus 2 L.	C	9·9	12·7	15·4	18·2	23·7	..	..	..	..	0. 0. 23·71	(+3·37)	23·55				0. 1. 0·35	
	35	α Andromedæ ...	C	..	..	..	..	0·7	16·5	32·3	..	..	0. 0. 45·06		45·18	22·33	37·15		0. 1. 22·40	— 0·55
	36	Polaris ...(E & E)	C	..	27·5	20·0	11·5	51·0	..	32·0	23·5	15·0	1. 7. 52·76		15·59	52·98	37·39		1. 8. 52·78	+26·01
Apr. 14	37	☉ 1 L.....	C	53·2	56·3	59·0	2·8	7·3	13·0	16·0	18·5	21·5	1. 30. 7·46		} 12·29				1. 31. 49·48	
	38	☉ 2 L.....	C	3·2	6·1	8·9	11·6	17·2	22·9	25·8	28·6	31·4	1. 32. 17·25							
	39	α Arietis	C	..	..	45·3	48·4	54·3	0·3	3·2	6·1	9·1	1. 58. 54·19		54·26	31·30	37·04		1. 59. 31·44	— 0·56
	40	Mercury 1 L.....	C	42·2	45·2	48·0	51·0	56·6	2·4	5·2	8·0	11·0	2. 14. 56·57		56·55				2. 15. 33·91	
	41	Aldebaran	C	16·6	19·5	22·5	25·3	31·0	36·7	39·5	42·4	45·3	4. 27. 30·93		30·92	8·03	37·11		4. 28. 8·04	— 0·86
	42	ι Aurigæ	C	16·0	19·2	22·5	25·8	32·4	39·0	42·4	45·5	48·8	4. 47. 32·34		32·53	9·52	36·99		4. 48. 9·64	— 1·08
	43	Capella.....	C	42·7	46·9	50·9	54·7	2·8	10·5	14·5	18·5	22·6	5. 6. 2·61		3·00				5. 6. 40·10	— 1·27
	44	Rigel	C	10·0	12·9	15·6	18·5	23·9	29·6	32·4	35·2	38·0	5. 7. 23·96		23·75	0·86	37·11		5. 8. 0·85	— 0·71
	45	β Tauri	C	50·0	53·4	56·4	59·6	5·8	12·3	15·2	18·5	21·5	5. 17. 5·80		5·92	43·00	37·08		5. 17. 43·02	— 1·18
	46	α Orionis	C	58·7	1·5	4·4	7·3	12·7	18·3	21·1	24·0	26·5	5. 47. 12·67		12·59	49·66	37·07		5. 47. 49·68	— 1·09
	47	γ Geminorum ...	C	1·2	4·2	7·0	9·9	15·6	21·5	24·3	27·2	30·1	6. 29. 15·62		15·62	52·67	37·05		6. 29. 52·69	— 1·40
	48	Sirius	C	19·0	22·0	24·8	27·6	33·4	39·3	42·1	44·9	47·9	6. 38. 33·40		33·12				6. 39. 10·19	— 1·05

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 2, 34, and 40, $+64^s \cdot 63$: $-0^s \cdot 42$: and $+0^s \cdot 19$.

† This clock-error has been used in the reduction of the observations made with the Altazimuth.

35. Very faint; cloudy; observed over wires X, Y, Z.

39. Exceedingly faint and tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Apr. 14	1	δ Geminorum....	C	9·5	12·5	15·6	18·6	24·4	30·5	33·2	36·4	39·4	7. 11. 24·41	+1·35	24·47	1·58	37·11	37·22	7. 12. 1·53	— 1·65
	2	Castor	C	3·4	6·6	9·9	13·1	19·6	26·4	29·5	32·8	36·0	7. 25. 19·64	(+3·37)	19·82	56·92	37·10	[−0·55]	7. 25. 56·87	— 1·82
	3	Procyon	C	21·5	24·5	27·3	30·1	35·5	41·1	43·7	46·5	49·5	7. 31. 35·47	[−7·32]	35·37	12·51	37·14		7. 32. 12·42	— 1·59
	4	g Geminorum ...	C	24·9	27·9	30·7	33·7	..	45·4	48·5	51·1	54·1	7. 37. 39·48		39·49				7. 38. 16·54	— 1·74
	5	15 Argûs.....	JC	55·4	58·6	1·5	4·4	10·4	16·5	19·6	22·4	25·6	8. 1. 10·44	−4·92	9·63	46·69	37·06	37·27†	....	
	6	ζ¹ Cancri	C	..	..	40·7	43·6	49·4	55·2	58·0	1·1	4·0	8. 3. 49·34	+1·35	49·35			37·22	8. 4. 26·39	— 1·87
	7	β Cancri.....	JC	19·1	22·0	24·7	27·5	33·0	38·7	41·5	44·4	47·2	8. 8. 33·07		33·00	10·11	37·11	37·27†	....	
	8	☽ 1 L.....	C	44·6	47·5	50·5	53·4	59·1	5·0	8·0	11·0	13·8	8. 16. 59·16		59·13			37·22	8. 18. 39·47	
	9	39 Cancri.....	C	27·0	30·0	32·7	36·0	41·7	47·8	50·6	53·5	56·5	8. 31. 41·71		41·75				8. 32. 18·77	— 2·02
	10	δ Cancri	C	7·5	10·5	13·4	16·4	22·1	28·0	30·9	33·8	36·7	8. 36. 22·10		22·11				8. 36. 59·13	— 2·03
	11	Iris.....	C	53·4	56·4	59·2	1·9	7·5	12·9	15·6	18·3	21·1	11. 12. 7·31		7·13				11. 12. 44·69	
	12	τ Leonis	C	8·5	11·3	14·1	17·0	22·4	27·9	30·7	33·5	36·3	11. 20. 22·36		22·24	59·18	36·94		11. 20. 59·20	— 2·64
	13	W. B. XI. 486 ..	C	51·2	54·1	56·8	59·8	5·5	11·4	14·1	16·8	19·8	11. 28. 5·45		5·19				11. 28. 42·15	— 2·78
	14	ξ Virginis	C	28·0	31·0	33·8	36·5	42·2	47·7	50·7	53·4	56·2	11. 37. 42·12		42·05				11. 38. 19·00	— 2·68
	15	8 Leonis.....	C	18·7	21·7	24·5	27·3	33·0	38·6	41·6	44·5	47·4	11. 41. 32·99		32·97	9·91	36·94		11. 42. 9·92	— 2·67
	16	Calliope	C	..	..	..	31·4	..	..	..	..	..	12. 16. 37·11		37·11				12. 17. 14·05	
	17	δ² Corvi	C	1·8	4·7	7·6	10·4	16·2	22·0	24·8	27·7	30·5	12. 22. 16·14		15·87	52·91	37·04		12. 22. 52·81	— 2·99
	18	ρ Virginis.....	C	11·8	14·8	17·6	20·4	26·0	31·6	34·4	37·3	40·0	12. 34. 25·94		25·89				12. 35. 2·82	— 2·78
	19	Saturn 1 L.....	C	..	41·2	44·0	46·9	52·3	57·9	0·6	3·4	..	12. 54. 52·27		52·76				12. 55. 29·68	
	20	Saturn 2 L.....	C	..	42·6	45·4	48·2	53·6	59·3	2·0	4·6	..	12. 54. 53·61							
	21	Polaris S.P. (E&E)	C	17·0	7·0	59·5	51·0	40·0	24·0	..	..	..	13. 8. 39·12		15·82	53·03	37·21		1. 8. 52·74	+25·96
	22	Spica	C	14·1	17·0	19·9	22·5	28·2	34·0	36·6	39·4	42·2	13. 17. 28·16		27·92	4·89	36·97		13. 18. 4·84	— 3·02
	23	c² Libræ	C	39·2	41·8	44·8	47·6	53·4	59·2	2·0	4·9	7·6	15. 14. 53·34		53·08	29·95	36·87		15. 15. 29·65	— 3·07
	24	α Coronæ	C	5·8	9·0	12·0	15·1	21·3	27·6	30·7	33·8	36·8	15. 28. 21·30		21·40	58·37	36·97		15. 28. 58·27	— 2·53
	25	Jupiter 1 L.....	C	57·9	..	3·6	..	12·2	..	20·9	..	26·7	15. 35. 12·22		13·64				15. 35. 50·50	
	26	Jupiter 2 L.....	C	1·2	..	7·0	..	15·6	..	24·4	..	30·3	15. 35. 15·66							
	27	Venus 2 L.	D	40·6	43·4	46·1	48·7	54·4	0·1	2·8	5·6	8·4	0. 4. 54·41	(+3·88)	54·27			36·78	0. 5. 30·64	
	28	β Andromedæ ...	D	14·3	17·9	21·1	24·4	31·1	38·1	41·4	44·7	48·0	1. 1. 31·17		31·42	8·06	36·64	[−0·54]	1. 2. 8·18	— 0·51
	29	Polaris.... (E&E)	D	37·0	..	..	..	57·0	40·0	34·0	23·0	13·0	1. 7. 54·45		18·37	53·09	34·72		1. 8. 55·12	+25 90
Apr. 15	30	☉ 1 L.....	D	35·1	38·1	41·1	43·8	49·2	55·0	57·8	0·6	3·3	1. 33. 49·28		54·19				1. 35. 30·93	
	31	☉ 2 L.....	D	45·2	48·1	50·8	53·5	59·1	4·8	7·7	10·5	13·4	1. 35. 59·18							
	32	Mercury 1 L.....	D	11·7	14·8	17·7	20·5	26·1	31·9	34·8	37·8	40·4	2. 22. 26·14		26·15				2. 23. 3·07	
	33	Aldebaran	D	16·9	19·9	22·8	25·6	31·4	37·3	40·1	42·9	45·8	4. 27. 31·36		31·38	8·02	36·64		4. 28. 8·06	— 0·85
	34	ι Aurigæ	D	..	..	23·0	26·2	32·6	39·4	42·6	45·8	49·2	4. 47. 32·67		32·90	9·51	36·61		4. 48. 9·57	— 1·07
	35	Rigel	D	10·4	13·3	16·0	18·9	24·4	30·0	32·8	35·6	38·4	5. 7. 24·37		24·17	0·84	36·67		5. 8. 0·84	— 0·69
	36	β Tauri	D	50·4	53·6	56·7	59·9	6·1	12·5	15·6	18·9	21·8	5. 17. 6·12		6·28	42·99	36·71		5. 17. 42·94	— 1·17
	37	☽ 1 L.....	D	..	..	..	..	..	..	17·2	20·4	23·0	9. 5. 8·63		8·60				9. 6. 47·43	
	38	α Hydræ.....	D	6·1	8·9	11·6	14·5	20·0	25·5	28·4	31·1	33·9	9. 20. 19·95		19·75	56·33	36·58		9. 20. 56·32	— 2·10
	39	π Leonis	D	13·3	16·1	18·9	21·6	27·2	32·8	35·6	38·4	41·2	9. 52. 27·18		27·13	3·75	36·62		9. 53. 3·69	— 2·29
	40	Regulus	D	19·4	22·2	24·9	27·7	33·4	39·2	41·9	44·7	47·5	10. 0. 33·39		33·38	9·93	36·55		10. 1. 9·94	— 2·34
	41	γ¹ Leonis	E	39·0	42·2	45·1	47·9	54·0	59·8	2·7	5·6	8·6	10. 11. 53·83		53·90	30·64	36·74	36·97†	....	
	42	Polaris S.P. (E&E)	D	15·0	7·0	59·5	52·0	38·5	..	..	..	..	13. 8. 37·89		13·53	53·15	39·62	36·78	1. 8. 50·02	+25·84
	43	Spica	D	14·6	17·4	20·2	23·0	28·5	34·3	36·9	39·9	42·6	13. 17. 28·55		28·33	4·90	36·57		13. 18. 4·81	— 3·03
Apr. 17	44	83 Cancri.....	D	35·0	38·0	41·0	43·8	49·6	55·5	58·5	1·3	4·3	9. 10. 49·61	(+4·14)	49·67	25·33	35·66	35·88†	....	
	45	α Hydræ.....	D	6·8	9·6	12·5	15·3	20·8	26·4	29·2	32·0	34·8	9. 20. 20·78		20·59	56·30	35·71	[−0·51]	....	
	46	45 Leonis.....	E	40·4	43·4	46·1	48·8	54·5	0·3	2·9	5·9	8·6	10. 19. 54·49		54·48			35·97	10. 20. 30·23	— 2·39
	47	ρ Leonis	E	51·6	54·5	57·3	0·0	5·5	11·1	14·2	16·7	19·6	10. 25. 5·56		5·53	41·30	35·77		....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700, excepting for 15 Argûs, on April 14, when it was 31r·124, having been left so inadvertently.
Corrections for passage of Semidiameter, Nos. 8, 27, 32, and 37, +63s·31 · −0s·41: +0s·19: and +62s·26.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

16. Extremely faint.
29. Disturbed at the 5th, 6th, and 7th wires by the noise of persons walking through the room.
16, 23, 42, 43. Cloudy.
23, 28. Very faint.
37. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Apr. 17	1	34 Sextantis	E	49·0	51·7	54·6	57·4	2·8	8·5	11·2	14·1	16·6	10. 35. 2·83	+1·35	2·75	38·48	35·73	35·97	....	
	2	☽ 1 L.	E	14·4	17·4	20·2	23·0	28·5	34·3	37·1	40·0	42·7	10. 38. 28·57	(+4·14)	28·47			[−0·51]	10. 40. 5·64	
	3	d Leonis	E	45·0	..	50·8	53·5	59·0	4·6	7·4	..	13·0	10. 52. 59·00	[−7·32]	58·92	34·67	35·75		....	
	4	μ^3 Leonis	E	11·0	14·0	16·5	19·4	24·8	30·4	33·2	35·8	38·7	10. 59. 24·82		24·72				11. 0. 0·46	− 2·54
	5	φ Leonis.....	E	58·1	0·9	3·6	6·5	11·9	17·4	20·2	23·1	25·8	11. 9. 11·90		11·75				11. 9. 47·48	− 2·60
	6	α Pegasi.....	C	..	..	..	..	..	30·5	33·4	36·3	39·2	22. 57. 24·80	+1·05	24·84	0·05	35·21	35·93	22. 58. 0·08	− 0·79
	7	Venus 2 L.	C	11·6	14·5	17·3	20·0	25·5	..	..	..	..	0. 18. 25·51	(+4·37)	25·43			35·21	0. 19. 0·22	
	8	β Andromedæ ...	C	15·7	19·2	22·5	26·1	32·6	39·4	42·8	46·2	49·6	1. 1. 32·63	[−6·65]	32·92	8·10	35·18	[−0·72]	1. 2. 8·10	− 0·55
	9	Polaris (E & E) ..	C	34·0	..	..	..	..	41·0	..	24·0	16·5	1. 7. 54·28		17·36	53·51	36·15		1. 8. 52·54	+25·48
Apr. 18	10	☉ 1 L.....	C	43·5	46·4	49·3	52·1	57·5	3·4	6·2	9·0	11·7	1. 44. 57·63		} 2·79				1. 46. 37·95	
	11	☉ 2 L.....	C	54·1	56·7	59·5	2·4	7·9	13·7	16·4	19·2	22·0	1. 47. 7·94							
	12	Mercury 1 L. ...	C	..	4·3	7·2	10·1	15·8	21·6	24·6	27·6	..	2. 44. 15·83		15·90				2. 44. 51·24	
	13	Sirius.....	C	21·0	23·8	26·7	29·6	35·4	41·1	44·2	47·0	49·7	6. 38. 35·34		35·10				6. 39. 10·11	− 0·98
	14	δ Geminorum....	C	11·5	14·4	17·4	20·4	26·4	32·4	35·4	38·4	41·4	7. 11. 26·36		26·49	1·51	35·02		7. 12. 1·48	− 1·58
	15	β Canis Minoris..	C	59·0	1·8	4·7	7·4	13·0	18·5	21·4	24·2	27·0	7. 19. 12·95		12·94	47·93	34·99		7. 19. 47·93	− 1·49
	16	α^1 Geminorum...	C	4·9	8·2	11·5	14·8	21·1	27·7	30·9	34·4	37·5	7. 25. 21·07		21·31				7. 25. 56·30	− 1·75
	17	Castor	C	5·4	8·6	12·0	15·1	21·5	28·2	31·4	34·7	38·0	7. 25. 21·60		21·84	56·85	35·01		7. 25. 56·83	− 1·75
	18	Procyon.....	C	23·5	26·4	29·3	32·0	37·5	43·1	45·8	48·6	51·4	7. 31. 37·46		37·42	12·44	35·02		7. 32. 12·40	− 1·52
	19	Pollux	C	..	..	..	..	..	..	..	38·6	41·7	} 7. 36. 25·99		26·18	1·15	34·97		7. 37. 1·16	− 1·75
	20	Pollux	C	..	..	..	..	..	57·5	13·1	..	..								
	21	γ^1 Leonis	JC	40·8	43·8	46·7	49·8	55·7	1·6	4·5	7·5	10·3	10. 11. 55·58		55·68	30·61	34·93	35·20†	....	
	22	μ Hydræ	C	44·2	47·2	50·0	52·9	58·6	4·5	7·3	10·3	13·0	10. 18. 58·61		58·37			35·21	10. 19. 33·27	
	23	ρ Leonis	JC	52·4	55·3	58·0	0·9	6·4	12·1	15·0	17·7	20·5	10. 25. 6·43		6·43	41·29	34·86	35·20†	....	
	24	Groombridge 1669	C	53·6	1·6	9·5	17·2	32·4	..	..	..	..	10. 31. 32·50		33·86			35·21	10. 32. 8·75	− 3·60
	25	34 Sextantis	C	49·8	52·5	55·4	58·2	3·7	9·3	11·9	14·7	17·6	10. 35. 3·63		3·58	38·47	34·89		10. 35. 38·47	− 2·44
	26	μ^3 Leonis	C	11·8	14·6	17·3	20·2	25·5	31·3	34·1	36·7	39·5	10. 59. 25·62		25·55				11. 0. 0·43	− 2·53
	27	φ Leonis	C	58·8	1·6	4·5	7·2	12·5	18·3	21·0	23·8	26·5	11. 9. 12·64		12·52				11. 9. 47·40	− 2·60
	28	Iris	C	15·1	17·7	20·6	23·4	28·7	34·4	37·0	39·9	42·6	11. 10. 28·77		28·65				11. 11. 3·53	
	29	79 Leonis.....	C	17·4	20·4	23·0	25·9	31·4	36·9	39·6	42·5	45·1	11. 16. 31·31		31·24				11. 17. 6·11	− 2·61
	30	τ Leonis.....	C	10·5	13·3	16·3	18·9	24·4	30·1	32·8	35·4	38·2	11. 20. 24·38		24·32	59·15	34·83		11. 20. 59·19	− 2·61
	31	☽ 1 L.....	C	49·4	52·3	55·0	57·8	3·4	9·1	11·9	14·7	17·6	11. 25. 3·42		3·32				11. 26. 39·92	
	32	ξ Virginis	C	..	..	..	..	..	49·8	52·6	55·4	58·2	11. 37. 44·14		44·13				11. 38. 18·99	− 2·65
	33	β Virginis	C	50·7	53·4	56·3	59·0	4·6	10·3	12·8	15·8	18·5	11. 43. 4·55		4·48				11. 43. 39·34	− 2·71
	34	10 Virginis	C	57·4	0·1	2·8	5·6	11·2	16·9	19·5	22·4	25·0	12. 2. 11·16		11·09				12. 2. 45·94	− 2·75
	35	η Virginis	C	11·0	14·0	16·7	19·4	25·0	30·6	33·3	36·0	38·7	12. 12. 24·92		24·84	59·69	34·85		12. 12. 59·69	− 2·79
	36	Calliope.....	C	41·5	44·4	47·3	..	..	..	4·6	7·5	10·2	12. 13. 55·87		55·93				12. 14. 30·77	
	37	Lalande 23600...	C	47·5	50·4	53·2	55·9	1·4	6·9	9·8	12·4	15 2	12. 30. 1·36		1·24				12. 30. 36·08	− 2·86
	38	Saturn 1 L.	C	34·7	37·6	40·4	43·2	48·5	54·2	56·9	59·7	2·5	12. 53. 48·58		} 49·15				12. 54. 23·97	
	39	Saturn 2 L.	C	36·1	38·9	41·8	44·6	50·0	55·4	58·4	1·1	3·7	12. 53. 49·95							
	40	Polaris S.P.(E&E)	C	20·0	10·0	2·5	54·0	42·0	..	..	..	..	13. 8. 41·14		17·73	53·61	35·88		1. 8. 52·55	+25·38
	41	Spica	C	16·3	19·2	21·9	24·7	30·4	35·9	38·6	41·5	44·4	13. 17. 30·28		30·09	4·91	34·82		13. 18. 4·90	− 3·04
	42	α Coronæ.....	C	8·1	11·2	14·2	17·3	23·5	29·8	32·9	36·1	39·0	15. 28. 23·52		23·70	58·44	34·74		15. 28. 58·45	− 2·60
	43	Jupiter 1 L.....	C	24·5	..	30·4	..	39·0	..	47·9	..	53·6	15. 33. 39·04		} 40·44				15. 34. 15·18	
	44	Jupiter 2 L.....	C	28·0	..	33·7	..	42·4	..	51·1	..	56·7	15. 33. 42·34							
	45	α Serpentis	C	48·4	51·2	54·1	56·7	2·4	8·0	10·7	13·5	16·2	15. 37. 2·31		2·28	36·99	34·71		15. 37. 37·02	− 2·75
	46	α Pegasi.....	D	11·2	14·1	17·0	19·7	25·4	31·1	34·0	37·0	39·8	22. 57. 25·43	[−4·50]	25·55	0·08	34·53	35·39 [−0·87] 34·52	22. 58. 0·11	− 0·82
	47	α Andromedæ ...	D	32·0	35·2	38·4	41·4	47·6	54·1	57·1	0·3	3·4	0. 0. 47·67		47·93	22·42	34·49		0. 1. 22·45	− 0·64
	48	Venus 2 L.....	D	42·3	45·1	47·8	50·6	56·1	1·6	4·4	7·3	10·0	0. 22. 56·08		56·11				0. 23. 30·21	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 2, 7, 12, 31, and 48, $+61^s \cdot 42$: $-0^s \cdot 41$; $+0^s \cdot 21$: $+61^s \cdot 73$: and $-0^s \cdot 41$.

†These clock-errors have been used in the reduction of the observations made with the Altazimuth.

April 17 and 18. The azimuthal error by Polaris and Polaris S. P. allowing $-0^s \cdot 38$ for clock-rate and change of R, A.

9. Cloudy during the passage over the remaining wires.
36. Extremely faint.

20. Observed over wires Y, Z.
37. Of the 9th magnitude.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Apr. 18	1	α Cassiopeiæ	D	49·0	54·0	58·8	3·8	13·5	23·4	28·2	33·3	38·3	0. 32. 13.50	+ 1·05	14·18			34·52	0. 32. 48·68	— 0·30
	2	β Andromedæ ...	D	16·5	20·0	23·4	26·7	33·4	40·0	43·4	46·9	50·2	1. 1. 33·33	(+4·37)	33·67	8·11	34·44	[−0·87]	1. 2. 8·15	— 0·56
	3	Polaris ...(E & E)	D	40·0	..	28·0	18·5	0·0	45·0	36·0	..	..	1. 7. 59·46	[−4·50]	19·03	53·70	34·67		1. 8. 53·51	+25·29
Apr. 19	4	⊙ 1 L.....	D	27·1	29·9	32·8	35·6	41·4	47·1	49·8	52·5	55·4	1. 48. 41·24		} 46·57				1. 50. 21·02	
	5	⊙ 2 L.....	D	37·6	40·5	43·3	46·2	51·6	57·4	0·3	3·0	5·8	1. 50. 51·70							
	6	Mercury 1 L	D	0·7	3·8	6·6	9·5	15·3	21·3	24·2	27·2	30·0	2. 51. 15·35		15·51				2. 51. 50·14	
	7	α Ceti.....	D	22·5	25·5	28·4	30·9	36·5	42·1	44·7	47·5	50·4	2. 54. 36·45		36·50	10·80	34·30		2. 55. 10·92	— 0·46
	8	Capella.....	D	45·4	49·5	53·4	57·5	5·3	13·3	17·2	21·2	25·0	5. 6. 5·24		5·72				5 6. 40·06	— 1·19
	9	Rigel	D	..	..	..	21·1	26·6	32·3	35·1	38·0	40·7	5. 7. 26·66		26·62	0·79	34·17		5. 8. 0·95	— 0·64
	10	β Tauri	D	52·7	55·8	58·9	2·2	8·4	14·6	17·7	21·0	24·1	5. 17. 8·32		8·58	42·93	34·35		5. 17. 42·91	— 1·11
	11	δ Orionis	D	16·4	19·2	21·9	24·5	30·0	35·7	38·4	41·3	44·0	5. 24. 30·11		30·13	4·39	34·26		5. 25. 4·45	— 0·83
	12	ε Orionis	D	31·6	34·4	37·2	39·9	45·3	50·9	53·7	56·5	59·3	5. 28. 45·37		45·38	19·59	34·21		5. 29. 19·70	— 0·83
	13	α Orionis	D	1·3	4·3	7·0	9·7	15·2	20·8	23·6	26·4	29·3	5. 47. 15·24		15·31	49·59	34·28		5. 47. 49·62	— 1·02
	14	δ Geminorum....	D	12·1	15·2	18·3	21·1	27·0	33·0	36·0	39·0	42·2	7. 11. 27·05		27·25	1·50	34·25		7. 12. 1·51	— 1·57
	15	β Canis Minoris .	D	59·6	2·6	5·4	8·2	13·6	19·3	22·1	24·9	27·6	7. 19. 13·65		13·73	47·91	34·18		7. 19. 47·99	— 1·47
	16	α^1 Geminorum...	D	5·5	8·9	12·2	15·4	21·9	28·4	31·6	35·0	38·3	7. 25. 21·85		22·14				7. 25. 56·39	— 1·73
	17	Castor	D	6·0	9·4	12·5	15·8	22·3	28·8	32·1	35·4	38·6	7. 25. 22·27		22·56	56·83	34·27		7. 25. 56·81	— 1·73
	18	Procyon.....	D	24·2	27·0	29·7	32·6	38·0	43·6	46·4	49·1	52·0	7. 31. 38·01		38·07	12·43	34·36		7. 32. 12·32	— 1·51
	19	Pollux	D	11·0	14·1	17·2	20·4	26·5	33·0	36·1	39·2	42·4	7. 36. 26·60		26·86	1·13	34·27		7. 37. 1·11	— 1·73
	20	κ Cancri.....	E	36·2	39·0	41·8	44·6	50·2	56·0	58·7	1·5	4·4	8. 59. 50·22		50·32	24·72	34·40	34·71†	....	
	21	83 Cancri.....	E	36·3	39·3	42·0	45·0	50·7	56·6	59·6	2·5	5·4	9. 10. 50·78		50·94	25·31	34·37		....	
	22	Iris.....	D	54·2	57·0	59·8	2·5	8·1	13·7	16·4	19·0	22·0	11. 10. 8·03		8·03			34·52	11. 10. 42·15	
	23	τ Leonis.....	D	11·2	13·9	16·7	19·5	25·0	30·5	33·4	36·1	38·8	11. 20. 24·96		25·01	59·15	34·14		11. 20. 59·12	— 2·61
	24	2 Draconis.....	D	..	..	..	14·6	30·8	47·0	55·1	3·3	11·3	11. 27. 30·64		31·95				11. 28. 6·05	— 3·79
	25	61 Ursæ Majoris.	D	4·3	7·7	..	14·4	21·0	27·8	..	34·6	38·0	11. 33. 21·06		21·40				11. 33. 55·50	— 2·68
	26	ξ Virginis.....	D	30·7	33·6	36·4	39·2	44·7	50·5	53·2	56·0	58·7	11. 37. 44·73		44·82				11. 38. 18·92	— 2·65
	27	β Leonis.....	D	..	24·3	27·1	30·0	35·5	41·4	44·3	47·0	..	11. 41. 35·60		35·74	9·88	34·14		11. 42. 9·84	— 2·64
	28	β Virginis	D	51·4	54·2	56·9	59·7	5·2	10·8	13·5	16·3	19·0	11. 43. 5·17		5·20				11. 43. 39·30	— 2·70
	29	1 Comæ	D	..	..	..	8·6	14·6	20·4	23·5	26·5	29·5	11. 54. 14·46		14·66				11. 54. 48·75	— 2·67
	30	10 Virginis	D	58·0	0·8	3·5	6·4	11·6	17·3	20·0	22·8	25·5	12. 2. 11·72		11·75				12. 2. 45·83	— 2·74
	31	7 Comæ	D	40·7	43·8	46·6	49·8	55·9	2·0	5·0	8·1	11·0	12. 8. 55·83		56·05				12. 9. 30·13	— 2·70
	32	☽ 1 L	D	19·6	22·6	25·4	28·3	33·8	39·6	42·4	45·3	48·1	12. 12. 33·85		33·83				12. 14. 10·47	
	33	δ Corvi.....	D	4·5	7·4	10·3	13·1	18·8	24·5	27·5	30·4	33·2	12. 22. 18·80		18·70	52·91	34·21		12. 22. 52·77	— 2·99
	34	Lalande 23600...	D	..	51·1	53·8	56·6	2·0	7·6	10·4	13·3	..	12. 30. 2·05		2·05				12. 30. 36·12	— 2·86
	35	χ Virginis	D	28·6	31·5	34·2	37·0	42·6	48·2	51·0	53·7	56·4	12. 31. 42·53		42·49				12. 32. 16·56	— 2·91
	36	ψ Virginis	D	31·8	34·7	37·5	40·3	45·7	..	..	..	..	12. 46. 45·79		45·75				12. 47. 19·81	— 2·96
	37	Phocæa	D	..	..	..	..	..	..	44·1	..	..	12. 47. 1·39		1·31				12. 47. 35·37	
	38	Saturn 1 L.....	D	19·3	22·1	24·9	27·6	33·2	38·7	41·4	44·3	47·0	12. 53. 33·12		} 33·77				12. 54. 7·82	
	39	Saturn 2 L.....	D	20·6	23·4	26·3	29·0	34·4	40·0	42·8	45·5	48·2	12. 53. 34·42							
	40	Polaris S.P.(E&E)	D	..	10·0	2·0	54·5	41·0	22·5	14·0	..	..	13. 8. 40·85		21·16	53·83	32·67		1. 8. 55·21	+25·16
	41	Spica	D	16·8	19·5	22·4	25·3	30·9	36·5	39·4	42·2	44·9	13. 17. 30·83		30·77	4·91	34·14		13. 18. 4·81	— 3·04
	42	Europa.....	D	39·0	41·8	44·5	47·3	52·9	58·4	1·0	3·8	6·6	13. 27. 52·76		52·79				13. 28. 26·82	
	43	β Libræ	D	56·6	59·4	2·2	5·0	10·5	16·1	19·0	21·7	24·5	15. 9. 10·51		10·47	44·52	34·05		15. 9. 44·44	— 3·04
	44	α Coronæ	D	8·6	11·8	14·8	18·0	24·1	30·4	33·5	36·6	39·6	15. 28. 24·11		24·35	58·45	34·10		15. 28. 58·31	— 2·61
	45	Jupiter 1 L.....	D	0·0	..	6·0	..	14·6	..	23·4	..	29·4	15. 33. 14·64		} 16·17				15. 33. 50·13	
	46	Jupiter 2 L.....	D	3·5	..	9·3	..	18·0	..	26·6	..	32·4	15. 33. 17·92							
	47	α Pegasi.....	JC	12·2	15·0	17·8	20·7	26·4	32·1	34·9	37·6	40·6	22. 57. 26·31		26·43	0·10	33·67	34·34 [−0·75] 33·59	22. 58. 0·05	— 0·84
	48	α Andromedæ ...	JC	32·8	36·0	39·2	42·4	48·5	54·9	58·0	1·1	4·4	0. 0. 48·54		48·80	22·44	33·64		0. 1. 22·39	— 0·66

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 6 and 32, $+0^s·21$, and $+62^s·56$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
April 18. The azimuthal error by eight consecutive transits of Polaris.

7. Very faint. 9. Very tremulous. 37. Very faint: observed over wire Z only.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire,	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Apr. 19	1	Venus 2 L.	JC	12·8	15·7	18·6	21·2	26·7	32·3	35·2	37·9	40·6	0. 27. 26·73	+1·05	26·76			33·59	0. 27. 59·93	
	2	α Cassiopeiæ	JC	49·8	55·0	59·8	4·7	14·4	24·6	29·4	33·9	39·0	0. 32. 14·42	(+4·37)	15·10			[−0·75]	0. 32. 48·67	− 0·32
	3	Polaris...(E & E)	JC	..	..	29·5	20·0	2·0	46·0	37·5	..	..	1. 8. 0·85	[−4·50]	20·42	53·96	33·54		1. 8. 53·97	+25·03
Apr. 20	4	⊙ 1 L.	JC	11·5	14·5	17·2	20·0	25·6	31·4	34·3	37·1	39·9	1. 52. 25·67		} 31·00				1. 54. 4·53	
	5	⊙ 2 L.	JC	22·1	24·9	27·8	30·6	36·0	41·9	44·6	47·4	50·3	1. 54. 36·13							
	6	α Arietis	JC	..	..	..	..	..	27·5	42·6	..	..	1. 58. 57·54		57·74	31·32	33·58		1. 59. 31·27	− 0·58
	7	Mercury 1 L.	JC	50·2	53·0	55·9	58·8	5·0	10·5	13·4	16·6	19·5	2. 58. 4·72		4·88				2. 58. 38·60	
	8	Aldebaran	JC	20·0	23·0	25·8	28·7	34·4	40·3	43·2	46·0	48·9	4. 27. 34·43		34·57	7·98	33·41		4. 28. 8·02	− 0·81
	9	Capella	JC	46·2	50·2	54·4	58·4	6·2	14·2	18·0	22·2	26·1	5. 6. 6·14		6·62				5. 6. 40·05	− 1·17
	10	Rigel	JC	..	..	19·1	21·9	27·5	32·9	35·9	..	..	5. 7. 27·40		27·36	0·78	33·42		5. 8. 0·79	− 0·63
	11	β Canis Minoris	JC	..	..	..	..	28·5	42·4	56·4	..	..	7. 19. 14·45		14·53	47·90	33·37		7. 19. 47·89	− 1·46
	12	a^1 Geminorum	JC	6·3	9·8	12·9	16·1	22·6	29·3	32·5	35·8	39·0	7. 25. 22·64		22·93				7. 25. 56·29	− 1·71
	13	Castor	JC	6·9	10·2	13·4	16·6	23·1	29·8	33·0	36·2	39·4	7. 25. 23·12		23·41	56·81	33·40		7. 25. 56·77	− 1·71
	14	Procyon	JC	..	28·0	30·7	33·5	38·8	44·6	47·4	50·1	..	7. 31. 38·95		39·01	12·41	33·40		7. 32. 12·37	− 1·49
	15	Pollux	JC	..	15·0	18·3	21·3	27·4	33·9	37·0	40·2	..	7. 36. 27·52		27·78	1·11	33·33		7. 37. 1·13	− 1·71
	16	γ Cancri	C	38·4	41·3	44·3	47·2	53·2	59·1	1·9	5·1	8·1	8. 34. 53·13		53·33	26·62	33·29	33·57†	....	
	17	ε Hydræ	C	48·9	51·7	54·5	57·3	2·8	8·4	11·2	14·0	16·7	8. 39. 2·79		2·86	36·17	33·31		....	
	18	δ Leonis	JC	6·5	9·6	12·5	15·6	21·4	27·4	30·4	33·4	36·3	11. 6. 21·41		21·61	54·85	33·24	33·59	11. 6. 54·85	− 2·54
	19	Iris	JC	35·0	37·7	40·5	43·4	48·8	54·4	57·2	59·9	2·7	11. 9. 48·79		48·79				11. 10. 22·03	
	20	79 Leonis	JC	19·2	21·9	24·6	27·4	32·8	38·5	41·2	43·9	46·7	11. 16. 32·86		32·89				11. 17. 6·13	− 2·59
	21	W. B. XI. 486	JC	54·6	57·5	0·4	3·4	9·0	14·6	17·6	20·4	23·2	11. 28. 8·91		8·83				11. 28. 42·06	− 2·74
	22	W. B. XI. 534	JC	..	..	..	34·8	40·1	45·8	48·5	51·4	54·1	11. 30. 40·19		40·22				11. 31. 13·45	− 2·64
	23	ξ Virginis	JC	31·6	34·7	37·4	40·3	45·6	51·4	54·3	57·0	59·9	11. 37. 45·75		45·84				11. 38. 19·07	− 2·64
	24	β Leonis	JC	22·3	25·1	28·1	31·0	36·5	42·4	45·3	48·0	51·0	11. 41. 36·58		36·72	9·87	33·15		11. 42. 9·95	− 2·63
	25	β Virginis	JC	52·3	55·2	58·0	0·6	6·1	11·7	14·5	17·2	19·9	11. 43. 6·12		6·15				11. 43. 39·37	− 2·70
	26	Groombridge 1830	JC	19·4	23·0	26·6	30·1	37·0	44·2	47·8	51·3	54·9	11. 44. 37·08		37·46				11. 45. 10·68	− 2·83
	27	W. B. XI. 890	JC	..	..	..	52·4	58·0	3·7	6·6	9·4	12·4	11. 51. 57·97		57·89				11. 52. 31·11	− 2·86
	28	Calliope	JC	27·1	29·9	32·5	35·6	41·2	47·4	50·2	53·1	56·0	12 12. 41·40		41·54				12. 13. 14·75	
	29	δ^2 Corvi	JC	5·2	8·4	11·3	14·2	19·7	25·5	28·4	31·4	34·2	12. 22. 19·76		19·67	52·90	33·23		12. 22. 52·87	− 2·98
	30	χ Virginis	JC	29·7	32·5	35·2	37·9	43·5	49·2	52·0	54·6	57·4	12. 31. 43·51		43·47				12. 32. 16·67	− 2·91
	31	ψ Virginis	JC	32·9	35·8	38·6	41·4	46·7	52·6	55·3	58·3	1·0	12. 46. 46·90		46·86				12. 47. 20·05	− 2·96
	32	Saturn 1 L.	JC	4·4	7·1	9·8	12·7	18·1	23·9	26·4	29·2	31·8	12. 53. 18·10		} 18·71				12. 53. 51·90	
	33	Saturn 2 L.	JC	5·5	8·4	11·1	14·0	19·2	25·0	27·6	30·4	33·2	12. 53. 19·32							
	34	☽ 1 L.	JC	29·0	32·0	34·8	37·6	43·4	49·3	52·1	55·0	57·8	13. 1. 43·40		43·34				13. 3. 20·35	
	35	Polaris S.P. (E&E)	JC	..	..	..	..	37·0	..	11·0	2·0	..	13. 8. 37·23		17·54	54·11	36·57		1. 8. 50·72	+24·88
	36	Spica	JC	17·6	20·5	23·4	26·3	31·8	37·4	40·3	43·1	45·9	13. 17. 31·76		31·70	4·92	33·22		13. 18. 4·88	− 3·05
	37	h Virginis	JC	..	7·2	10·0	12·9	18·5	24·2	26·9	29·7	..	13. 25. 18·43		18·39				13. 25. 51·56	− 3·05
	38	Europa	JC	57·5	59·9	2·6	5·2	11·0	16·5	19·4	21·9	24·6	13. 27. 10·91		10·94				13. 27. 44·11	
	39	m Virginis	JC	44·5	47·4	50·4	53·0	58·6	4·1	7·1	9·7	12·5	13. 33. 58·54		58·50	31·62	33·12		13. 34. 31·67	− 3·04
	40	β Libræ	JC	57·4	0·4	3·3	5·9	11·5	17·3	20·1	22·8	25·6	15. 9. 11·54		11·50	44·54	33·04		15. 9. 44·62	− 3·06
	41	α Coronæ	JC	9·5	12·8	15·8	19·0	25·2	31·4	34·4	37·6	40·7	15. 28. 25·11		25·35	58·47	33·12		15. 28. 58·46	− 2·63
	42	Jupiter 1 L.	JC	35·6	..	41·7	..	50·3	..	58·9	..	4·8	15. 32. 50·22		} 51·71				15. 33. 24·81	
	43	Jupiter 2 L.	JC	38·9	..	44·7	..	53·4	..	2·2	..	8·0	15. 32. 53·40							
	44	α Pegasi	E	12·5	15·5	18·4	21·1	26·7	32·5	35·5	38·3	41·2	22. 57. 26·80		26·92	0·12	33·20	33′78 [−0′66] 33′12	22. 58. 0·07	− 0·86
	45	Venus 2 L.	E	43·1	45·9	48·8	51·6	57·1	2·8	5·5	8·4	11·0	0. 31. 57·08		57·11				0. 32. 29·81	
	46	β Andromedæ	E	17·8	21·3	24·6	28·1	34·6	41·4	44·8	48·2	51·6	1. 1. 34·65		34·98	8·14	33·16		1. 2. 8·07	− 0·59
	47	Polaris...(E & E)	E	..	..	..	..	3·0	50·0	40·5	32·5	25·5	1. 8. 2·91		22·48	54·27	31·79		1. 8. 55·57	+24·72

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S. P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Corrections for passage of Semidiameter, Nos. 1, 7, 34, and 45, $-c^s{\cdot}41$: $+0^s{\cdot}22$: $+63^s{\cdot}83$: and $-0^s{\cdot}41$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.

6. Excessively faint: observed over wires Y, Z only.

11. Observed over wires X, Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Apr. 21	1	⊙ 1 L.	E	55·8	58·6	1·4	4·4	10·0	15·6	18·5	21·4	24·2	1. 56. 9·94	+1·05	15·37			33·12	1. 57. 48·44	
	2	⊙ 2 L.	E	6·4	9·2	12·1	15·0	20·5	26·4	29·0	32·0	34·8	1. 58. 20·55	(+4·37)				[−0·66]		
	3	Mercury 1 L.	E	27·1	30·1	33·0	36·0	41·8	47·8	50·6	53·7	56·5	3. 4. 41·80	[−4·50]	41·97				3. 5. 15·23	
	4	Aldebaran	E	20·4	23·4	26·3	29·0	34·9	40·6	43·5	46·4	49·3	4. 27. 34·82		34·96	7·97	33·01		4. 28. 7·96	− 0·80
	5	ι Aurigæ	E	19·6	23·0	26·4	29·6	36·0	42·8	46·0	49·2	52·6	4. 47. 36·07		36·37	9·44	33·07		4. 48. 9·36	− 1·00
	6	Capella	E	46·6	50·6	54·6	58·6	6·5	14·5	18·4	22·4	26·4	5. 6. 6·44		6·92				5. 6. 39·90	− 1·16
	7	Rigel	E	14·0	16·7	19·5	22·4	27·7	33·4	36·3	39·0	41·9	5. 7. 27·83		27·79	0·77	32·98		5. 8. 0·77	− 0·62
	8	β Tauri	E	54·0	57·1	0·3	3·4	9·6	16·0	19·1	22·2	25·4	5. 17. 9·62		9·88	42·91	33·03		5. 17. 42·85	− 1·09
	9	δ Orionis	E	17·5	20·4	23·1	25·9	31·4	36·9	39·7	42·5	45·4	5. 24. 31·38		31·39	4·37	32·98		5. 25. 4·36	− 0·81
	10	ε Orionis	E	32·8	35·6	38·5	41·3	46·5	52·2	55·0	57·8	0·5	5. 28. 46·64		46·65	19·57	32·92		5. 29. 19·62	− 0·81
	11	κ Orionis	E	..	..	..	..	46·4	51·7	54·6	57·5	0·4	5. 40. 46·22		46·18	19·11	32·93		5. 41. 19·14	− 0·73
	12	α Orionis	E	2·5	5·4	8·3	11·0	16·4	22·0	24·7	27·8	30·5	5. 47. 16·46		16·53	49·57	33·04		5. 47. 49·49	− 1·00
	13	1 Geminorum	E	4·3	7·3	10·4	13·5	19·3	25·4	28·4	31·4	34·4	5. 55. 19·32		19·54	52·43	32·89		5. 55. 52·50	− 1·19
	14	η Geminorum	E	..	56·4	59·3	2·2	8·3	14·4	17·3	20·4	..	6. 6. 8·27		8·47	41·36	32·89		6. 6. 41·42	− 1·23
	15	μ Geminorum	E	57·0	0·2	3·2	6·1	12·0	18·2	21·1	24·0	27·0	6. 14. 12·04		12·24	45·24	33·00		6. 14. 45·19	− 1·28
	16	ν Geminorum	E	..	..	..	..	..	27·5	30·4	33·3	36·1	6. 20. 21·44		21·62				6. 20. 54·57	− 1·28
	17	γ Geminorum	E	5·0	8·0	10·8	13·7	19·5	25·3	28·2	31·1	34·0	6. 29. 19·46		19·60	52·56	32·96		6. 29. 52·54	− 1·29
	18	Sirius	E	22·9	25·7	28·5	31·5	37·3	43·0	45·9	48·8	51·6	6. 38. 37·19		37·10				6. 39. 10·04	− 0·92
	19	δ Geminorum	E	13·4	16·4	19·4	22·4	28·4	34·4	37·5	40·4	43·4	7. 11. 28·36		28·56	1·46	32·90		7. 12. 1·48	− 1·53
	20	β Canis Minoris	E	0·8	3·8	6·6	9·4	14·8	20·5	23·3	26·1	29·0	7. 19. 14·87		14·95	47·88	32·93		7. 19. 47·87	− 1·44
	21	α¹ Geminorum	E	6·9	..	13·4	..	23·2	..	33·0	..	39·5	7. 25. 23·16		23·45				7. 25. 56·37	− 1·69
	22	Castor	E	..	10·5	..	17·1	..	30·4	..	36·8	..	7. 25. 23·66		23·95	56·79	32·84		7. 25. 56·87	− 1·69
	23	Procyon	E	25·4	28·3	31·0	33·9	39·4	45·0	47·7	50·5	53·3	7. 31. 39·33		39·39	12·39	33·00		7. 32. 12·30	− 1·47
	24	Pollux	E	12·2	15·4	18·6	21·8	28·0	34·2	37·5	40·5	43·6	7. 36. 27·92		28·18	1·09	32·91		7. 37. 1·09	− 1·69
	25	34 Sextantis	S	51·7	54·7	57·4	0·2	5·6	11·2	14·0	16·8	19·6	10. 35. 5·64		5·69	38·43	32·74	33·07†	....	
	26	l Leonis	S	21·8	24·6	..	30·3	35·9	41·6	..	47·3	50·0	10. 41. 35·89		35·99	8·80	32·81		....	
	27	χ Leonis	E	15·6	18·5	21·4	24·2	..	35·3	38·0	40·8	43·6	10. 57. 29·63		29·71	2·49	32·78	33·12	10. 58. 2·53	− 2·49
	28	δ Leonis	E	7·0	10·0	13·0	16·1	21·7	28·0	30·8	33·8	36·6	11. 6. 21·84		22·04	54·84	32·80		11. 6. 54·86	− 2·53
	29	Iris	E	17·0	19·8	22·4	25·3	30·7	36·4	39·3	42·0	44·6	11. 9. 30·79		30·79				11. 10. 3·60	
	30	79 Leonis	E	19·5	22·4	25·2	27·8	33·4	38·9	41·8	44·4	47·2	11. 16. 33·35		33·38				11. 17. 6·19	− 2·58
	31	τ Leonis	E	12·4	15·4	18·2	20·9	26·5	31·8	34·6	37·4	40·3	11. 20. 26·34		26·39	59·13	32·74		11. 20. 59·20	− 2·59
	32	λ Draconis	E	..	..	23·0	31·4	47·4	3·6	11·8	..	..	11. 22. 47·28		48·59				11. 23. 21·40	− 3·69
	33	β Virginis	E	52·6	55·4	58·3	0·9	6·4	12·3	14·9	17·5	20·4	11. 43. 6·47		6·50				11. 43. 39·30	− 2·68
	34	28 Crateris	E	16·7	20·0	23·3	26·6	33·3	39·7	43·3	46·5	49·7	11. 45. 33·18		32·94				11. 46. 5·74	− 3·11
	35	ε Corvi	E	23·5	26·5	29·5	32·4	38·4	44·4	47·4	50·4	53·4	12. 2. 38·38		38·24	11·08	32·84		12. 3. 11·03	− 2·99
	36	7 Comæ	E	42·1	45·1	48·2	51·3	57·3	3·4	6·4	9·4	12·5	12. 8. 57·25		57·47				12. 9. 30·26	− 2·69
	37	Calliope	E	51·0	53·8	56·6	59·7	5·5	11·4	14·1	17·3	20·1	12. 12. 5·45		5·59				12. 12. 38·37	
	38	δ² Corvi	E	5·8	8·8	11·8	14·6	20·3	26·0	29·0	31·8	34·7	12. 22. 20·27		20·18	52·90	32·72		12. 22. 52·96	− 2·98
	39	Lalande 23600	E	49·5	52·4	55·2	57·9	3·4	8·9	11·6	14·5	17·3	12. 30. 3·36		3·36				12. 30. 36·14	− 2·86
	40	α Cassiopeiæ S.P.	E	52·2	57·0	1·8	6·8	16·4	26·1	31·3	36·0	41·1	12. 32. 16·61		15·82				0. 32. 48·60	− 0·35
	41	35 Virginis	E	12·2	15·0	18·0	20·4	26·0	31·5	34·4	37·1	39·8	12. 40. 25·99		26·04	58·74	32·70		12. 40. 58·81	− 2·82
	42	Phocæa	E	..	..	..	..	30·1	35·9	38·8	41·9	44·5	12. 45. 30·24		30·16				12. 46. 2·93	
	43	Saturn 1 L.	E	49·0	51·7	54·6	57·4	2·7	8·4	11·1	13·8	16·5	12. 53. 2·75		3·43				12. 53. 36·20	
	44	Saturn 2 L.	E	50·4	53·3	56·0	58·6	4·0	9·5	12·4	15·3	17·9	12. 53. 4·11							
	45	Polaris S.P. (E&E)	E	20·0	12·0	..	..	..	28·0	17·5	8·5	..	13. 8. 43·67		23·98	54·45	30·47		1. 8. 56·74	+24·54
	46	Spica	E	18·4	21·2	24·0	26·6	32·2	37·8	40·6	43·4	46·4	13. 17. 32·24		32·18	4·92	32·74		13. 18. 4·94	− 3·05
	47	h Virginis	E	4·9	7·6	10·6	13·4	18·7	24·5	27·4	30·0	32·8	13. 25. 18·82		18·78				13. 25. 51·53	− 3·06
	48	Europa	E	..	..	..	..	42·5	56·6	10·5	..	..	13. 26. 28·84		28·87				13. 27. 1·62	
	49	i Centauri	E	13·0	16·4	19·5	22·8	29·3	35·6	39·0	42·3	45·6	13. 37. 29·21		28·97				13. 38. 1·72	− 3·58

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Correction for passage of Semidiameter, No. 3, +0s·22.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.

42. Exceedingly faint. 43, 44. Very tremulous. 48. Observed over wires X, Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Apr. 21	1	h^1 Centauri.....	E	14·1	17·3	20·5	23·7	30·4	37·0	40·0	43·5	46·6	13. 43. 30·29	+1·05	30·05			33·12	13. 44. 2·79	− 3·61
	2	☽ 1 L.....	E	53·0	56·0	58·9	2·0	7·6	13·6	16·6	19·4	22·3	13. 53. 7·66	(+4·37)	7·58			[−0·66]	13. 54. 45·76	
	3	κ Virginis	E	55·1	58·0	0·7	3·5	9·0	14·8	17·5	20·4	23·2	14. 5. 9·08	[−4·50]	9·04	41·77	32·73		14. 5. 41·77	− 3·10
	4	Arcturus	E	42·6	45·7	48·6	51·7	57·4	3·4	6·4	9·4	12·2	14. 8. 57·44		57·61	30·33	32·72		14. 9. 30·34	− 2·77
	5	λ Virginis	E	..	4·6	7·4	10·2	15·9	21·6	24·4	27·1	..	14. 11. 15·83		15·76				14. 11. 48·49	− 3·16
	6	2 Libræ	E	23·2	26·0	29·0	31·7	37·3	42·9	45·8	48·5	51·3	14. 15. 37·25		37·19				14. 16. 9·92	− 3·13
	7	α Coronæ	E	10·0	13·3	16·4	19·4	25·5	31·9	34·9	37·9	41·2	15. 28. 25·56		25·80	58·48	32·68		15. 28. 58·49	− 2·64
	8	Jupiter 1 L.....	E	10·2	..	16·1	..	24·8	..	33·5	..	39·4	15. 32. 24·76		} 26·24				15. 32. 58·93	
	9	Jupiter 2 L.....	E	13·4	..	19·4	..	28·0	..	36·6	..	42·4	15. 32. 27·92							
	10	γ Cephei.....	C	..	..	35·2	47·5	11·5	36·6	48·7	1·0	..	23. 33. 11·74	(+5·03)	13·97			33·09 [−0·86] 32·23	23. 33. 46·22	+ 1·28
	11	α Andromedæ ...	C	34·4	37·5	40·7	44·0	50·1	56·4	59·5	2·8	5·9	0. 0. 50·10		50·41	22·48	32·07		0. 1. 22·64	− 0·70
	12	γ Pegasi.....	C	28·4	31·2	34·0	36·9	42·6	..	..	54·0	56·7	0. 5. 42·53		42·69	14·80	32·11		0. 6. 14·92	− 0·69
	13	α Cassiopeiæ	C	51·5	56·4	1·4	6·2	16·0	25·7	30·8	35·7	40·6	0. 32. 15·94		16·70				0. 32. 48·91	− 0·37
	14	Venus 2 L.....	C	14·4	17·3	20·0	22·6	28·1	33·6	36·6	39·4	42·1	0. 36. 28·18		28·24				0. 37. 0·04	
	15	β Andromedæ ...	C	18·9	22·3	25·7	28·9	35·6	42·5	45·9	49·4	52·5	1. 1. 35·68		36·07	8·15	32·08		1. 2. 8·26	− 0·60
	16	Polaris ...(E & E)	C	..	..	..	..	1·0	48·0	39·0	31·0	18·5	1. 8. 0·13		21·11	54·65	33·54		1. 8. 53·30	+ 24·34
Apr. 22	17	☉ 1 L.....	C	41·0	44·0	46·7	49·5	55·2	0·8	3·8	6·7	9·4	1. 59. 55·18		} 0·74				2. 1. 32·90	
	18	☉ 2 L.....	C	51·9	54·5	57·4	0·5	6·1	11·8	14·6	17·4	20·3	2. 2. 6·00							
	19	Mercury 1 L.....	C	51·9	55·0	58·1	0·9	7·0	12·9	15·7	18·5	21·6	3. 11. 6·79		7·01				3. 11. 39·36	
	20	β Tauri.....	C	55·6	58·4	1·4	4·4	10·6	16·9	20·1	23·4	26·4	5. 17. 10·75		11·06	42·90	31·84		5. 17. 43·10	− 1·08
	21	δ Orionis	C	..	..	..	..	..	..	..	43·4	46·0	5. 24. 32·21		32·25	4·36	32·11		5. 25. 4·29	− 0·80
	22	ε Orionis.....	C	33·8	36·6	39·4	42·1	47·5	53·4	56·0	58·7	1·5	5. 28. 47·61		47·65	19·56	31·91		5. 29. 19·68	− 0·80
	23	α Orionis	C	3·6	6·5	9·3	12·0	17·4	23·1	25·9	28·7	31·5	5. 47. 17·50		17·61	49·56	31·95		5. 47. 49·63	− 0·99
	24	Castor.....	C	8·2	11·4	14·8	18·1	24·5	31·0	34·4	37·5	40·7	7. 25. 24·45		24·79	56·77	31·98		7. 25. 56·75	− 1·67
	25	Procyon	C	26·5	29·2	32·0	34·8	40·3	45·9	48·7	51·5	54·2	7. 31. 40·30		40·39	12·38	31·99		7. 32. 12·35	− 1·46
	26	Pollux	C	13·3	16·4	19·6	22·6	28·9	35·3	38·4	41·4	44·5	7. 36. 28·88		29·19	1·08	31·89		7. 37. 1·15	− 1·68
	27	15 Argûs	C	..	2·6	5·8	8·7	14·6	20·9	24·0	27·0	..	8. 1. 14·74		14·59	46·53	31·94		8. 1. 46·53	− 1·37
	28	*d* Leonis.....	C	48·8	51·4	54·4	57·1	2·6	8·1	10·8	13·8	16·5	10. 53. 2·56		2·64	34·62	31·98		10. 53. 34·48	− 2·47
	29	λ Draconis	C	7·3	15·5	23·6	31·8	47·9	..	..	..	..	11. 22. 47·83		49·27				11. 23. 21·09	− 3·65
	30	W. B. XI. 486 ..	C	..	59·1	2·0	4·7	10·4	16·2	18·8	21·8	..	11. 28. 10·37		10·31				11. 28. 42·13	− 2·72
	31	υ Leonis	C	16·1	18·7	21·5	24·3	29·8	35·4	38·2	40·9	43·5	11. 29. 29·77		29·82	1·74	31·92		11. 30. 1·64	− 2·62
	32	γ Cephei S.P. ...	C	..	27·6	40·0	52·0	16·7	40·6	52·9	5·0	..	11. 33. 16·65		14·38				23. 33. 46·20	+ 1·24
	33	β Leonis.....	C	23·6	26·4	29·4	32·1	38·0	43·6	46·4	49·3	52·1	11. 41. 37·83		38·01	9·85	31·84		11. 42. 9·82	− 2·61
	34	β Virginis	C	53·6	56·4	59·2	1·9	7·3	13·0	15·8	18·4	21·3	11. 43. 7·38		7·44				11. 43. 39·25	− 2·68
	35	π Virginis	JC	11·0	13·8	16·5	19·4	24·8	30·7	33·4	36·0	38·9	11. 53. 24·89		25·00	56·88	31·88	32·28†	....	
	36	ε Corvi	JC	24·5	27·5	30·5	33·5	39·4	45·4	48·4	51·4	54·4	12. 2. 39·39		39·27	11·08	31·81		....	
	37	δ Virginis.....	C	2·3	5·2	8·0	10·6	16·2	21·7	24·6	27·3	30·2	12. 48. 16·18		16·26	48·08	31·82	32·23	12. 48. 48·03	− 2·83
	38	Saturn 1 L.	C	34·0	36·7	39·6	42·3	47·7	53·4	56·1	58·7	1·5	12. 52. 47·73		} 48·45				12. 53. 20·22	
	39	Saturn 2 L.	C	35·3	38·0	41·0	43·6	49·3	54·7	57·4	0·2	2·9	12. 52. 49·10							
	40	Polaris S.P. (E&E)	C	22·0	19·0	6·0	58·0	46·0	..	..	..	..	13. 8. 45·56		24·51	54·85	30·34		1. 8. 56·27	+ 24·14
	41	Arcturus	C	43·7	46·6	49·5	52·4	58·3	4·1	7·2	10·0	13·0	14. 8. 58·26		58·47	30·33	31·86		14. 9. 30·19	− 2·77
	42	λ Virginis	C	2·6	5·5	8·4	11·1	16·6	22·5	25·4	28·2	31·0	14. 11. 16·76		16·71				14. 11. 48·43	− 3·17
	43	2 Libræ	C	24·1	27·0	29·8	32·6	38·3	44·0	46·7	49·7	52·4	14. 15. 38·24		38·20				14. 16. 9·92	− 3·14
	44	ε Boötis	C	17·8	21·0	24·2	27·3	33·5	39·6	43·0	46·0	49·0	14. 38. 33·44		33·73	5·60	31·87		14. 39. 5·44	− 2·73
	45	☽ 2 L.....	C	..	14·9	17·8	20·8	26·5	32·5	35·4	38·4	..	14. 49. 26·55		26·47				14. 48. 50·96	
	46	ζ^1 Libræ.....	C	52·6	55·4	58·4	1·2	7·0	13·0	15·5	18·4	21·4	15. 20. 6·94		6·86	38·68	31·82		15. 20. 38·54	− 3·22
	47	γ Libræ	C	12·5	15·6	18·4	21·3	26·8	32·8	35·5	38·4	41·1	15. 27. 26·88		26·81				15. 27. 58·49	− 3·17

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 2, 14, 19, and 45, $+65^s \cdot 44$: $-0^s \cdot 41$: $+0^s \cdot 23$: and $-67^s \cdot 21$.

† This clock-error has been used in the reduction of the observations made with the Altazimuth.

30. Of the 9th magnitude.

40. Extremely blurred and tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Apr. 22	1	Jupiter 1 L.....	C	44·4	..	50·1	..	58·9	..	7·6	..	13·2	15. 31. 58·80	+1·05	0·39			32·23		
	2	Jupiter 2 L.....	C	47·7	..	53·6	..	2·1	..	11·0	..	16·5	15. 32. 2·14	(+5·03)				[−0·86]	15. 32. 32·06	
	3	κ Libræ.....	C	..	..	29·8	32·7	38·6	44·4	47·4	50·4	53·2	15. 33. 38·54	[−4·50]	38·44				15. 34. 10·11	− 3·27
	4	α Andromedæ ...	D	35·0	38·1	41·3	44·5	50·5	57·0	0·1	3·3	6·6	0. 0. 5·66	(+6·35)	51·10	22·50	31·40	31·38	0. 1. 22·48	− 0·72
	5	α Cassiopeiæ.....	D	51·8	57·0	1·8	6·7	16·4	26·3	31·4	36·3	41·2	0. 32. 16·45	[−3·13]	17·36			[−1·04]	0. 32. 48·72	− 0·39
	6	Venus 2 L.....	D	..	47·8	50·6	53·4	59·0	4·5	7·3	10·0	..	0. 40. 58·88		59·07				0. 41. 30·01	
	7	β Andromedæ ...	D	19·4	22·7	26·2	29·5	36·3	43·1	46·4	49·8	53·1	1. 1. 36·22		36·74	8·17	31·43		1. 2. 8·08	− 0·62
	8	Polaris ...(E & E)	D	42·5	..	30·0	23·0	4·0	..	41·0	..	..	1. 8. 3·19		24·79	55·06	30·27		1. 8. 56·12	+23·93
Apr. 23	9	⊙ 1 L.....	D	26·4	29·3	32·0	34·9	40·4	46·1	49·0	52·0	54·7	2. 3. 40·49		46·26				2. 5. 17·55	
	10	⊙ 2 L.....	D	37·4	40·3	43·0	45·8	51·4	57·2	0·0	3·0	5·6	2. 5. 51·47							
	11	Mercury 1 L.....	D	3·0	6·0	8·8	12·0	17·8	23·8	26·9	29·8	32·6	3. 17. 17·80		18·15				3. 17. 49·62	
	12	Rigel	D	15·5	18·4	21·2	24·0	29·4	35·1	37·9	40·7	43·4	5. 7. 29·46		29·57	0·75	31·18		5. 8. 0·73	− 0·60
	13	β Tauri.....	D	55·5	58·8	2·0	5·1	11·2	17·7	20·7	23·8	27·0	5. 17. 11·26		11·70	42·89	31·19		5. 17. 42·85	− 1·07
	14	ε Orionis.....	D	34·4	37·2	40·2	42·8	48·2	53·7	56·5	59·4	2·1	5. 28. 48·22		48·38	19·55	31·17		5. 29. 19·52	− 0·79
	15	α Orionis	D	..	..	9·9	12·6	18·2	23·8	26·5	29·4	32·0	5. 47. 18·13		18·36	49·55	31·19		5. 47. 49·49	− 0·98
	16	α Cephei S.P....	D	21·2	26·9	32·6	38·6	50·4	2·2	8·0	13·9	19·8	9. 14. 50·50		49·57				21. 15. 20·55	− 0·73
	17	α Hydræ.....	D	11·2	14·2	17·0	19·7	25·2	30·8	33·6	36·4	39·2	9. 20. 25·21		25·32	56·21	30·89		9. 20. 56·30	− 1·98
	18	β Cephei S.P....	D	43·9	51·9	59·8	7·9	24·1	40·2	48·2	56·2	4·4	9. 26. 24·21		22·84				21. 26. 53·81	− 0·27
	19	ι Leonis	D	10·4	13·0	16·0	18·7	24·4	30·0	32·7	35·6	38·4	9. 33. 24·31		24·57	55·47	30·90		9. 33. 55·54	− 2·10
	20	ε Leonis	D	..	..	29·5	32·4	38·4	44·5	47·6	50·6	53·6	9. 37. 38·47		38·87	9·79	30·92		9. 38. 9·83	− 2·19
	21	ν Cephei S.P....	D	34·0	39·5	45·1	50·6	2·0	13·2	18·8	24·4	30·3	9. 41. 2·09		1·23				21. 41. 32·19	− 0·67
	22	Piazzi IX. 187...	D	..	..	..	20·2	39·5	59·3	9·0	19·0	28·4	9. 45. 39·54		41·48				9. 46. 12·44	− 3·54
	23	π Leonis	D	18·5	21·4	24·3	27·0	32·4	38·1	40·9	43·7	46·5	9. 52. 32·49		32·74	3·65	30·91		9. 53. 3·69	− 2·19
	24	ξ 1Cephei S.P. ...	D	49·3	55·5	2·0	8·1	20·8	33·3	39·3	45·9	52·3	9. 59. 20·84		19·83				21. 59. 50·78	− 0·46
	25	ξ 2Cephei S.P....	D	50·4	56·4	2·7	9·0	21·8	34·1	40·4	46·8	53·2	9. 59. 21·76		20·75				21. 59. 51·70	− 0·46
	26	ε Cephei S.P....	D	7·4	12·2	17·3	22·4	32·4	42·3	47·3	52·2	57·3	10. 9. 32·40		31·67				22. 10. 2·61	− 0·70
	27	μ Hydræ.....	D	47·9	50·8	53·6	56·6	2·4	8·0	11·0	13·8	16·6	10. 19. 2·25		2·29				10. 19. 33·22	− 2·34
	28	ρ Leonis	D	56·0	58·9	1·8	4·4	10·1	15·6	18·5	21·3	24·1	10. 25. 10·03		10·29	41·23	30·94		10. 25. 41·22	− 2·34
	29	38 Leonis Minoris	D	33·9	37·5	41·0	44·5	51·6	58·6	2·4	5·8	9·2	10. 30. 51·55		52·12				10. 31. 23·04	− 2·49
	30	34 Sextantis	D	53·5	56·3	59·0	1·8	7·2	12·9	15·7	18·5	21·2	10. 35. 7·29		7·50	38·41	30·91		10. 35. 38·42	− 2·38
	31	35 Virginis.....	E	13·8	16·5	19·4	22·2	27·7	33·3	36·0	38·8	41·5	12. 40. 27·64		27·85	58·74	30·89	31·53†	....	
	32	δ Virginis.....	E	3·0	5·8	8·6	11·4	16·8	22·4	25·2	28·0	30·6	12. 48. 16·81		17·02	48·08	31·06		....	
	33	Saturn 1 L.....	D	19·3	22·2	24·7	27·4	33·1	38·5	41·4	44·2	46·9	12. 52. 33·03		33·84				12. 53. 4·66	
	34	Saturn 2 L.....	D	20·5	23·4	26·2	28·8	34·3	40·0	42·6	45·6	48·3	12. 52. 34·36					31·38		
	35	ε Virginis.....	D	42·1	45·0	47·8	50·6	56·2	1·6	4·7	7·4	10·2	12. 54. 56·13		56·40	27·18	30·78		12. 55. 27·22	− 2·79
	36	Polaris S.P.(E&E)	D	24·0	..	9·0	0·0	48·0	..	..	..	..	13. 8. 46·86		25·47	55·28	29·81		1. 8. 56·28	+23·71
Apr. 24	37	θ Virginis.....	C	14·0	16·8	19·7	22·5	27·8	33·5	36·2	38·9	41·6	13. 2. 27·84		27·98	57·57	29·59	30·13†	....	
	38	κ Virginis.....	C	58·2	0·8	3·7	6·5	12·0	17·7	20·5	23·2	26·1	14. 5. 12·03		12·13	41·79	29·66	[−0·88]	....	
	39	Polaris ...(E & E)	E	..	..	..	..	..	..	42·0	31·0	22·0	1. 8. 1·58	+0·43	27·24	55·94	28·70	29·69	1. 8. 56·89	+23·05
														(+6·66)				[−0·88]		
Apr. 25	40	⊙ 1 L.....	E	58·8	1·9	4·9	7·5	13·2	19·1	21·7	24·6	27·6	2. 11. 13·21	[−6·24]	19·00				2. 12. 48·61	
	41	⊙ 2 L.....	E	10·4	13·3	16·0	18·9	24·6	30·2	33·2	36·0	38·6	2. 13. 24·53							
	42	ο Leonis	E	11·9	14·7	17·6	20·4	26·0	31·6	34·5	37·4	40·1	9. 33. 25·97		26·07	55·44	29·37		9. 33. 55·41	− 2·07
	43	π Leonis	E	20·4	23·2	25·9	28·7	34·2	39·8	42·6	45·4	48·4	9. 52. 34·24		34·31	3·62	29·31		9. 53. 3·64	− 2·16
	44	σ Leonis	E	26·6	29·4	32·3	35·0	40·7	46·2	49·0	51·8	54·6	11. 13. 40·58		40·64				11. 14. 9·92	− 2·52
	45	Piazzi XI. 43....	E	..	..	..	..	..	30·5	37·3	43·8	50·4	11. 14. 17·39		18·73				11. 14. 48·01	− 3·19
	46	λ Draconis	E	..	..	..	..	50·2	6·8	15·0	22·9	31·2	11. 22. 50·36		52·09				11. 23. 21·36	− 3·54

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Corrections for passage of Semidiameter, Nos. 6, and 11, −0s·41; and +0s·23.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
April 22 and 23. The azimuthal error by Polaris and Polaris S.P., allowing −0s·66 for clock-rate and change of R.A.
April 24 and 25. The azimuthal error by Polaris and Polaris S.P., allowing −0s·58 for clock-rate and change of R.A.

3. The images of objects were diffused and tremulous throughout the evening.
36. Very faint: the sky had suddenly become cloudy.
39. Faint: not visible until the passage over the 7th wire.
8, 9, 10, 12, 13. Very tremulous.
37, 38. Faint: cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Apr. 25	1	2 Draconis	E	..	..	10·8	19·0	35·0	51·3	59·8	..	..	11. 27. 35·02	+ 0·43	36·75			29·69	11. 28. 6·02	— 3·56
	2	61 Ursæ Majoris	E	9·0	12·4	15·9	19·2	25·9	32·8	36·0	39·4	42·9	11. 33. 25·88	(+ 6·66)	26·30			[−0·88]	11. 33. 55·57	— 2·62
	3	β Leonis	E	26·1	29·0	31·9	34·7	40·4	46·2	49·0	52·0	54·8	11. 41. 40·41	[−6·24]	40·57	9·83	29·26		11. 42. 9·83	— 2·59
	4	Groombridge 1830	E	23·3	26·8	30·4	34·0	40·8	47·9	51·5	55·0	58·6	11. 44. 40·87		41·35				11. 45. 10·61	— 2·78
	5	W.B. XI. 890	E	47·5	50·5	53·4	56·2	2·0	7·6	10·5	13·5	16·2	11. 52. 1·89		1·70				11. 52. 30·96	— 2·83
	6	Groombridge 1853	E	..	..	0·6	6·8	18·3	31·6	38·1	..	..	11. 58. 19·06		20·31				11. 58. 49·56	— 3·21
	7	η Virginis	E	16·5	19·5	22·1	24·9	30·4	36·0	38·7	41·6	44·4	12. 12. 30·41		30·40	59·66	29·26		12. 12. 59·64	— 2·76
	8	β Corvi	E	34·0	37·2	40·2	43·0	49·1	55·2	58·1	1·1	4·0	12. 26. 49·05		48·78	17·96	29·18		12. 27. 18·01	— 3·10
	9	γ^1 Virginis	E	6·0	..	11·5	..	19·9	..	28·1	..	33·7	12. 34. 19·80		19·78				12. 34. 49·01	— 2·83
	10	γ^2 Virginis	E	..	9·0	..	14·4	..	25·5	..	31·2	..	12. 34. 19·97		19·95				12. 34. 49·18	— 2·83
	11	35 Virginis	E	15·6	18·5	21·2	24·1	29·4	35·0	37·8	40·6	43·4	12. 40. 29·46		29·50	58·73	29·23		12. 40. 58·73	— 2·81
	12	31 Comæ	E	21·7	25·0	28·2	31·4	37·4	43·7	47·0	50·0	53·3	12. 44. 37·47		37·78				12. 45. 7·00	— 2·73
	13	Saturn 1 L.	E	50·3	53·3	55·9	58·8	4·3	9·8	12·6	15·4	18·2	12. 52. 4·24		} 4·82				12. 52. 34·04	
	14	Saturn 2 L.	E	51·6	54·5	57·2	0·1	5·6	11·2	13·8	16·6	19·4	12. 52. 5·50							
	15	Polaris S.P.(E&E)	E	..	..	17·0	5·0	53·5	36·0	25·5	..	..	13. 8. 53·55		27·81	56·16	28·35		1. 8. 57·02	+22·83
	16	ζ Virginis	D	6·0	8·7	11·6	14·3	19·6	25·4	28·0	30·8	33·6	13. 27. 19·72		19·71	48·85	29·14	29·62†	....	
	17	m Virginis	D	48·8	51·6	54·4	57·0	2·5	8·3	11·0	13·8	16·6	13. 34. 2·62		2·52	31·64	29·12		....	
Apr. 29	18	⊙ 1 L.	E	24·2	27·4	30·1	32·9	38·6	44·6	47·3	50·0	52·9	2. 26. 38·61	(+ 6·63)	} 44·74			12·00	2. 27. 56·85	
	19	⊙ 2 L.	E	36·4	39·0	42·0	45·0	50·4	56·4	59·3	2·2	5·0	2. 28. 50·59	[−6·40]				[1·13]		
	20	l Leonis	E	42·1	44·8	47·7	50·6	56·2	1·8	4·7	7·4	10·4	10. 41. 56·14		56·24	8·70	12·46		10. 42. 8·74	— 2·33
	21	d Leonis	E	8·2	11·0	13·8	16·6	22·0	27·6	30·4	33·1	36·0	10. 53. 22·03		22·06	34·55	12·49		10. 53. 34·57	— 2·40
	22	β Can. Ven.	E	47·6	51·5	55·2	58·9	6·3	13·8	17·6	21·2	24·9	12. 27. 6·28		6·83				12. 27. 19·42	— 2·71
	23	γ^1 Virginis	E	22·6	..	28·3	..	36·4	..	44·7	..	50·3	12. 34. 36·42		36·39				12. 34. 48·98	— 2·82
	24	γ^2 Virginis	E	..	25·6	..	31·1	..	42·4	..	47·7	..	12. 34. 36·64		36·61				12. 34. 49·20	— 2·82
	25	35 Virginis	E	32·3	35·0	37·8	40·6	46·1	51·7	54·4	57·3	0·2	12. 40. 46·10		46·13	58·72	12·59		12. 40. 58·73	— 2·80
	26	31 Comæ	E	38·5	41·6	44·6	47·9	54·3	0·6	3·6	6·7	10·0	12. 44. 54·15		54·46				12. 45. 7·06	— 2·72
	27	δ Virginis	E	21·5	24·4	27·0	30·0	35·4	41·0	43·9	46·5	49·4	12. 48. 35·40		35·43	48·07	12·64		12. 48. 48·03	— 2·82
	28	Saturn 1 L.	E	7·9	10·7	13·5	16·4	21·8	27·4	30·2	32·7	35·6	12. 51. 21·75		} 22·39				12. 51. 35·00	
	29	Saturn 2 L.	E	9·4	12·2	14·9	17·6	23·1	28·7	31·5	34·2	37·0	12. 51. 23·13							
	30	Polaris S.P. (E&E)	E	50·0	40·5	33·0	24·5	10·0	..	..	..	..	13. 9. 10·84		44·89	57·54	12·65		....	
Apr. 30	31	δ Leonis	C	26·4	29·4	32·4	35·3	41·3	47·1	50·1	53·2	56·2	11. 6. 41·22	(+ 6·18)	41·41	54·74	13·33		....	
May 5	32	δ Leonis	P	23·5	26·3	29·3	32·2	38·2	44·2	46·8	50·0	53·0	11. 6. 38·11	+ 1·42	38·58	54·68	16·10	15·75	....	
	33	ε Corvi	P	40·1	42·9	45·6	49·0	55·0	0·9	4·0	7·3	9·8	12. 2. 54·91	(+ 7·04)	55·02	10·99	15·97	[0·53]	....	
	34	η Virginis	P	29·4	32·4	35·3	37·9	..	48·8	51·7	54·4	57·2	12. 12. 43·34	[−2·00]	43·63	59·60	15·97		....	
	35	δ^2 Corvi	P	22·4	25·0	28·1	31·0	36·7	42·4	45·3	48·2	50·8	12. 22. 36·60		36·76	52·84	16·08		....	
	36	β Corvi	P	47·0	50·0	53·0	56·2	1·9	7·9	10·7	13·9	17·1	12. 27. 1·92		2·02	17·91	15·89		....	
	37	35 Virginis	P	28·5	31·4	34·1	36·7	42·4	47·8	50·7	53·4	56·4	12. 40. 42·33		42·66	58·70	16·04		....	
	38	Saturn 1 L.	P	41·9	44·8	47·6	50·3	55·4	1·2	4·0	6·7	9·5	12. 49. 55·66		} 56·50				12. 50. 12·53	
	39	Saturn 2 L.	P	42·9	46·0	48·6	51·4	56·7	2·5	5·2	8·0	10·5	12. 49. 56·81							
	40	Polaris S.P. (E&E)	P	44·5	35·0	26·5	19·0	6·5	47·5	39·5	32·0	26·0	13. 9. 6·00		44·15	0·21	16·06		....	
	41	f Boötis	P	39·6	42·5	..	48·2	..	0·2	3·2	6·0	8·9	14. 19. 54·19		54·65	10·70	16·05		....	
	42	ρ Boötis	P	28·0	31·5	34·6	37·8	44·0	50·8	53·8	57·3	0·4	14. 25. 44·18		44·76	0·94	16·18		....	
	43	55 Hydræ	P	0·4	3·8	6·6	9·7	15·8	22·0	25·1	28·2	31·2	14. 39. 15·82		15·91				14. 39. 31·98	— 3·59
	44	ξ^2 Libræ	P	..	59·4	2·2	4·9	10·6	16·2	19·2	21·7	..	14. 49. 10·54		10·74	26·80	16·06		....	
	45	ψ Boötis	P	7·9	11·0	14·0	17·1	23·4	29·6	32·5	35·7	39·0	14. 58. 23·31		23·85	39·94	16·09		....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

† This clock-error has been used in the reduction of the observations made with the Altazimuth.

April 29. The azimuthal error by tabular places of δ Virginis and Polaris S.P., allowing $0^s \cdot 01$ for clock-rate.

May 5. The azimuthal error by tabular places of Polaris S.P. and ψ Boötis, allowing $0^s \cdot 03$ for clock-rate.

18, 19. The Sun was found shining on the instrument.

32. Diffused.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	//	s	s	s	s	h m s	s
May 5	1	Jupiter 1 L.	P	..	48·9	..	54·4	0·2	6·1	..	12·0	..	15. 26. 0·27	+ 1·42	} 2·03			15·75	15. 26. 18·12	
	2	Jupiter 2 L.	P	..	51·9	..	57·8	3·3	9·4	..	15·3	..	15. 26. 3·49	(+7·04)				[0·53]		
														[−2·00]						
May 6	3	⊙ 1 L.....	C	...	13·4	16·4	19·3	24·9	31·0	33·9	36·7	..	2. 53. 25·03	(+6·20)	} 31·83			16·28	2. 54. 48·17	
	4	⊙ 2 L.....	C	23·5	26·4	29·4	32·2	37·8	43·6	46·6	49·4	52·4	2. 55. 37·87							
	5	Venus 2 L.	JC	38·6	41·5	44·4	47·1	52·6	58·5	1·1	4·0	6·8	1. 44. 52·69	[−2·84]	52·98			16·34	1. 45. 8·96	
																		[0·36]		
May 7	6	⊙ 1 L.....	JC	2·4	5·5	8·5	11·4	17·0	22·8	25·8	28·8	31·5	2. 57. 17·03		} 23·85				2. 58. 40·23	
	7	⊙ 2 L.....	JC	15·5	18·4	21·3	24·2	30·0	35·8	38·8	41·7	44·5	2. 59. 29·98							
	8	α Hydræ	JC	25·4	28·4	31·0	33·9	39·4	45·0	47·8	50·5	53·4	9. 20. 39·37		39·52	56·00	16·48		9. 20. 56·00	− 1·77
	9	ο Leonis	JC	24·5	27·3	30·0	33·0	38·5	44·2	47·0	49·8	52·6	9. 33. 38·49		38·78	55·27	16·49		9. 33. 55·26	− 1·90
	10	ε Leonis	JC	37·4	..	43·6	46·6	52·5	58·7	1·8	..	7·8	9. 37. 52·58		53·00	9·57	16·57		9. 38. 9·48	− 1·97
	11	34 Sextantis	E	7·4	10·3	13·0	15·6	21·4	26·8	29·5	32·4	35·2	10. 35. 21·24		21·49	38·25	16·76	16·60†	....	
	12	*l* Leonis	E	37·5	40·4	43·1	45·9	51·5	57·3	0·1	2·9	5·6	10. 41. 51·54		51·85	8·61	16·76		....	
	13	δ^2 Corvi	JC	22·0	24·8	27·6	30·4	36·1	41·9	44·8	47·8	50·6	12. 22. 36·17		36·26	52·83	16·57	16·34	12. 22. 52·78	− 2·91
	14	α Cassiopeiæ S.P.	JC	..	..	..	..	..	..	48·0	53·2	58·0	12. 32. 33·47		32·76				0. 32. 49·29	− 0·83
	15	Saturn 1 L.	JC	..	..	..	..	29·6	35·3	38·1	40·8	43·4	12. 49. 29·64		} 30·43				12. 49. 46·96	
	16	Saturn 2 L.	JC	..	..	..	..	30·8	36·5	39·2	42·1	44·6	12. 49. 30·84							
	17	9 Draconis	JC	55·6	3·2	10·1	17·1	31·5	45·6	53·0	0·0	7·1	12. 54. 31·35		32·77				12. 54. 49·30	− 3·14
	18	Polaris S.P. (E&E)	JC	..	36·5	26·0	..	..	48·0	41·0	..	..	13. 9. 6·51		44·94	1·44	16·50		....	
	19	70 Virginis	JC	..	..	..	..	..	38·4	41·3	44·0	46·8	13. 21. 32·56		32·89				13. 21. 49·43	− 2·81
	20	Var. (S) Virginis	JC	..	..	..	..	..	..	48·7	51·5	54·4	13. 25. 40·34		40·50				13. 25. 57·04	− 3·04
	21	ζ Virginis.....	JC	..	21·2	24·0	26·6	32·3	37·7	40·5	43·3	..	13. 27. 32·17		32·37	48·86	16·49		13. 27. 48·91	− 2·95
	22	Gr.7-yr.C.No.1188	JC	46·5	49·4	52·2	55·0	0·6	6·2	9·0	11·8	14·6	14. 52. 0·54		0·68				14. 52. 17·24	− 3·27
	23	ψ Boötis.....	JC	..	10·4	13·8	16·5	23·0	29·4	32·3	35·4	..	14. 58. 22·91		23·36	39·95	16·59		14. 58. 39·92	− 2·82
	24	δ Boötis	JC	30·4	33·6	37·0	40·4	47·0	53·7	57·0	0·4	3·6	15. 9. 46·95		47·47				15. 10. 4·04	− 2·81
	25	ε Libræ	JC	22·3	25·4	28·0	30·8	36·3	42·1	45·0	47·9	50·6	15. 16. 36·44		36·57				15. 16. 53·14	− 3·28
	26	Jupiter 1 L.....	JC	44·4	..	50·2	..	58·8	..	7·4	..	13·3	15. 24. 58·78		} 0·46				15. 25. 17·03	
	27	Jupiter 2 L.....	JC	47·5	..	53·4	..	2·0	..	10·8	..	16·5	15. 25. 2·00							
	28	α Coronæ	JC	26·0	29·4	32·5	35·4	41·6	48·0	51·0	54·4	57·3	15. 28. 41·69		42·14	58·67	16·53		15. 28. 58·71	− 2·83
	29	π Coronæ	JC	..	..	..	..	23·5	30·0	33·4	36·7	40·0	15. 38. 23·44		23·95				15. 38. 40·52	− 2·79
	30	Oeltz. Arg. 15022	JC	19·9	22·9	25·8	28·7	34·5	40·4	43·4	46·4	49·2	15. 47. 34·53		34·59				15. 47. 51·17	− 3·47
	31	δ Scorpii	JC	50·0	52·8	55·9	58·8	4·7	11·0	13·8	16·7	19·9	15. 52. 4·79		4·82				15. 52. 21·40	− 3·57
	32	β^1 Scorpii.....	JC	4·1	7·3	10·1	13·1	19·0	24·8	27·8	30·6	33·6	15. 57. 18·88		18·94	35·46	16·52		15. 57. 35·52	− 3·48
	33	ω^2 Scorpii.....	JC	58·3	1·4	4·2	7·1	..	19·0	21·8	24·8	27.8	15. 59. 12·99		13·04				15. 59. 29·62	− 3·51
																		18·85		
May 12	34	δ Cancri	JC	24·8	27·7	30·7	33·6	39·5	45·2	48·3	51·0	53·8	8. 36. 39·35	+ 0·68	39·56			[0·76]	8. 36. 58·68	− 1·58
	35	35 Virginis	E	25·3	28·0	30·9	33·5	39·1	44·7	47·4	50·4	53·2	12. 40. 39·11	(+5·98)	39·18	58·66	19·48	19·08†	....	
	36	θ Virginis.....	JC	..	27·4	30·0	32·9	38·6	43·6	46·5	49·5	..	13. 2. 38·30	[−5·35]	38·28	57·54	19·26	18·85	....	
	37	Polaris ...(E & E)	P	2·0	55·0	51·5	..	23·5	6·5	..	..	42·0	1. 8. 21·71	(+5·04)	43·11	4·45	21·34	19·80	1. 9. 2·94	+14·54
	38	Venus 2 L.	P	27·5	30·6	33·4	36·4	41·7	47·1	50·4	53·3	56·3	2. 12. 41·81		41·90			[0·54]	2. 13. 1·33	
May 13	39	⊙ 1 L.	P	..	27·6	30·5	33·7	39·4	45·4	48·4	51·2	..	3. 20. 39·40		} 46·54				3. 22. 6·42	
	40	⊙ 2 L.....	P	..	..	..	..	53·4	59·2	2·3	5·1	8·1	3. 22. 53·38							
	41	☽ 1 L.	P	6·6	9·5	12·1	15·2	20·7	26·4	29·4	32·2	35·3	9. 33. 20·78		20·83				9. 34. 42·72	
	42	A Leonis	P	9·0	12·0	14·6	17·5	22·9	28·8	31·6	34·4	37·2	10. 0. 23·06		23·13				10. 0. 43·15	− 1·95
	43	χ Leonis.....	C	28·4	31·3	34·0	36·7	42·4	47·9	50·7	53·5	56·3	10. 57. 42·31		42·36	2·24	19·88	19·65†	....	
	44	δ Leonis	C	19·6	22·6	25·8	28·5	34·5	40·5	43·4	46·4	49·4	11. 6. 34·47		34·65	54·58	19·93		....	
	45	δ Crateris.....	P	0·9	3·9	6·7	9·4	15·0	20·9	23·7	26·8	29·4	11. 12. 15·14		15·01	35·02	20·01	19·80	11. 12. 35·06	− 2·43

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 5, 38, and 41, $-0^s·39$: $-0^s·42$ and $+61^s·88$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
May 7. The azimuthal error by tabu'ar places of Polaris S.P. and ζ Virginis, the correction for clock-rate insensible.
May 12 and 13. The azimuthal error by Polaris and Polaris S.P., allowing $0^s·10$ for clock-rate and change of R.A.

5. Cloudy. 37. Very tremulous and occasionally obscured by cirrus cloud. 38. Very badly defined.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
May 13	1	τ Leonis	P	25·2	27·8	30·6	33·4	38·9	44·3	47·2	50·0	52·8	11. 20. 38·86	+0·68	38·88	58·92	20·04	19·80	11. 20. 58·94	— 2·38
	2	61 Ursæ Majoris	P	18·2	21·4	24·9	28·0	35·0	41·8	45·3	48·5	51·8	11. 33. 34·93	(+5·04)	35·27			[0·54]	11. 33. 55·33	— 2·37
	3	β Leonis	P	35·1	38·0	41·0	43·6	49·4	55·0	58·0	0·8	3·8	11. 41. 49·36	[−5·35]	49·48	9·67	20·19		11. 42. 9·54	— 2·43
	4	π Virginis	P	22·6	25·5	28·4	30·9	36·5	42·2	45·1	47·9	50·7	11. 53. 36·59		36·64	56·72	20·08		11. 53. 56·71	— 2·52
	5	ε Corvi	P	36·3	..	42·2	45·1	50·9	57·2	0·2	..	6·0	12. 2. 51·08		50·87	10·93	20·06		12. 3. 10·94	— 2·84
	6	Bradley 1650	P	26·2	38·1	49·2	0·6	22·9	46·2	57·6	8·7	19·9	12. 12. 23·07		25·14				12. 12. 45·21	— 3·32
	7	4 Draconis	P	9·0	17·3	25·4	33·4	49·5	5·5	13·7	21·7	29·6	12. 23. 49·31		50·71				12. 24. 10·79	— 2·97
	8	γ^1 Virginis	P	15·0	17·8	20·6	23·5	29·0	34·5	37·3	40·2	42·7	12. 34. 28·90		28·88				12. 34. 48·96	— 2·75
	9	35 Virginis	P	24·9	27·6	30·3	33·2	38·7	44·2	47·0	49·8	52·5	12. 40. 38·64		38·66	58·66	20·00		12. 40. 58·75	— 2·74
	10	Saturn 1 L.	P	2·4	5·1	8·0	10·7	16·0	21·5	24·5	27·3	30·1	12. 48. 16·13		16·69				12. 48. 36·78	
	11	Saturn 2 L.	P	3·4	6·4	8·9	11·9	17·3	22·9	25·8	28·5	31·3	12. 48. 17·33							
	12	Polaris S.P. (E&E)	P	43·5	34·5	24·5	19·5	5·5	..	..	..	..	13. 9. 4·53		42·99	4·70	21·71		1. 9. 3·09	+14·29
	13	Spica	P	30·9	33·8	36·6	39·4	45·0	50·5	53·4	56·4	59·1	13. 17. 44·96		44·85	4·92	20·07		13. 18. 4·95	— 3·05
	14	Var. (S) Virginis	P	23·4	26·0	28·7	31·6	37·0	42·6	45·4	48·0	51·0	13. 25. 37·03		36·96				13. 25. 57·06	— 3·03
	15	*m* Virginis	P	57·8	0·5	3·4	6·4	11·7	17·4	20·0	22·8	25·5	13. 34. 11·67		11·58	31·65	20·07		13. 34. 31·68	— 3·07
	16	Jupiter 1 L.	P	..	38·5	..	44·4	50·0	56·0	..	1·8	..	15. 21. 50·10		51·44				15. 22. 11·59	
	17	Jupiter 2 L.	P	..	41·7	..	47·4	53·1	58·8	..	4·8	..	15. 21. 53·12							
	18	α Coronæ	P	..	26·0	29·0	32·2	38·2	44·6	47·8	50·7	..	15. 28. 38·30		38·54	58·72	20·18		15. 28. 58·69	— 2·88
	19	α Serpentis	P	3·2	6·0	8·9	11·4	17·1	22·8	25·7	28·3	31·2	15. 37. 17·13		17·17	37·31	20·14		15. 37. 37·32	— 3·07
	20	Thetis	P	43·6	..	48·0	51·4	..	2·9	..	..	..	15. 40. 57·03		56·93				15. 41. 17·08	
	21	θ Ophiuchi	P	8·0	11·0	14·1	17·0	23·0	29·6	32·3	35·5	38·5	17. 13. 23·17		22·93	43·16	20·23		17. 13. 43·12	— 3·60
May 14	22	⊙ 1 L.	E	20·3	23·2	26·0	29·2	35·1	41·0	43·7	47·0	49·6	3. 24. 34·96	[−4·51]	42·33			20·26	3. 26. 2·66	
	23	⊙ 2 L.	E	..	37·7	40·6	43·4	49·4	..	58·3	1·1	4·0	3. 26. 49·33					[0·48]		
	24	☽ 1 L.	E	32·4	35·4	38·0	40·8	46·5	52·3	55·1	57·9	0·6	10. 19. 46·50		46·56				10. 21. 8·44	
	25	*d* Leonis	E	..	..	..	..	13·9	19·4	22·3	25·0	27·8	10. 53. 13·87		13·93	34·37	20·44		....	
	26	δ Leonis	E	18·9	22·0	25·0	28·0	33·8	39·9	42·9	45·7	48·7	11. 6. 33·83		34·04	54·57	20·53		....	
	27	β Corvi	JC	..	46·0	49·0	52·0	58·0	3·8	6·8	9·9	..	12. 26. 57·87		57·71	17·85	20·14	19·95†	....	
	28	35 Virginis	JC	24·4	27·4	30·2	32·8	38·3	43·9	46·7	49·4	52·3	12. 40. 38·32		38·38	58·65	20·27		....	
	29	Saturn 1 L.	E	51·2	54·0	56·8	59·4	5·0	10·5	13·4	16·0	18·8	12. 48. 4·96		5·60			20·26	12. 48. 26·12	
	30	Saturn 2 L.	E	52·5	55·3	58·0	0·7	6·2	11·7	14·6	17·4	20·1	12. 48. 6·23							
	31	ε Virginis	E	52·4	55·3	58·0	0·7	6·4	12·3	15·0	17·9	20·8	12. 55. 6·48		6·60	27·11	20·51		....	
	32	Polaris S.P. (E&E)	E	..	..	..	..	4·0	45·0	37·5	30·0	25·0	13. 9. 4·77		44·68	5·20	20·52		....	
	33	Piazzi XIII. 228	E	28·0	31·0	33·9	36·9	42·6	48·4	51·3	54·2	57·0	13. 45. 42·54		42·71				13. 46. 3·24	— 2·83
	34	τ Virginis	E	12·2	15·2	17·7	20·6	26·0	31·6	34·4	37·2	39·9	13. 54. 26·04		26·08	46·61	20·53		....	
	35	94 Virginis	E	34·5	37·6	40·3	42·9	48·5	54·1	56·9	59·7	2·4	13. 58. 48·49		48·45				13. 59. 8·99	— 3·16
	36	Lacaille 5869	E	36·8	39·8	43·1	46·4	52·5	58·9	2·0	5·2	8·4	14. 6. 52·52		52·30				14. 7. 12·84	— 3·65
May 15	37	35 Virginis	D	23·6	26·6	29·4	32·1	37·6	43·2	46·0	48·7	51·4	12. 40. 37·57		37·63	58·65	21·02	20·72†	....	
	38	δ Virginis	D	13·0	15·9	18·6	21·4	26·8	32·5	35·2	38·0	40·8	12. 48. 26·86		26·92	48·00	21·08	[0·63]	....	
	39	Polaris (E & E)	JC	..	..	..	46·5	25·0	12·0	5·5	57·0	48·0	1. 8. 26·66	+1·02	44·43	6·03	21·60	21·26	1. 9. 5·71	+12·96
	40	Venus 2 L.	JC	33·4	36·2	39·1	42·0	47·5	53·3	56·1	58·8	1·8	2. 26. 47·53	(+5·05)	47·77			[0·51]	2. 27. 8·69	
	41	α Persei	JC	55·4	59·7	3·6	8·2	16·6	25·1	29·4	33·4	37·8	3. 14. 16·51	[−2·55]	17·12				3. 14. 38·45	— 0·90
May 16	42	⊙ 1 L.	JC	13·4	16·6	19·4	22·4	28·2	34·0	36·9	39·8	42·8	3. 32. 28·11		35·63				3. 33. 56·97	
	43	⊙ 2 L.	JC	27·8	30·8	33·8	36·7	42·6	48·6	51·5	54·5	57·4	3. 34. 42·59							
	44	β Tauri	JC	5·3	8·4	11·7	14·7	21·0	27·4	30·6	33·5	36·8	5. 17. 21·00		21·36	42·77	21·41		5. 17. 42·73	— 0·95
	45	ε Orionis	JC	..	..	..	52·6	57·8	3·5	6·4	9·0	11·9	5. 28. 57·95		58·09	19·40	21·31		5. 29. 19·47	— 0·64
	46	Castor	JC	..	21·5	24·8	28·1	34·6	41·2	44·4	47·9	..	7. 25. 34·57		34·96	56·41	21·45		7. 25. 56·38	— 1·31

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 24 and 40, $+61^s \cdot 41$ and $-0^s \cdot 39$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

May 14. The azimuthal error by tabular places of Polaris S.P. and τ Virginis, allowing $0^s \cdot 01$ for clock-rate.

May 15 to 17. The azimuthal error by four consecutive transits of Polaris.

20. Excessively faint.

39. A very bad image.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
May 16	1	Procyon	JC	36·5	39·4	42·3	44·9	50·4	56·0	58·8	1·5	4·1	7. 31. 50·39	+1·02	50·58	12·07	21·49	21·26	7. 32. 12·00	— 1·15
	2	Pollux	JC	..	..	29·6	32·8	39·0	45·4	48·4	51·6	54·7	7. 36. 38·97	(+5·05)	39·33	0·72	21·39	[0·51]	7. 37. 0·75	— 1·32
	3	*e* Leonis	JC	48·9	51·7	54·5	57·3	2·7	8·4	11·1	13·8	16·5	11. 23. 2·72	[−2·55]	2·85				11. 23. 24·35	— 2·39
	4	*υ* Leonis	JC	26·1	29·0	31·6	34·5	40·0	45·5	48·3	51·0	53·8	11. 29. 39·93		40·08	1·53	21·45		11. 30. 1·58	— 2·41
	5	*β* Leonis	E	33·3	36·3	39·2	42·0	47·6	53·5	56·3	59·0	2·0	11. 41. 47·64		47·92	9·63	21·71	21·44†	....	
	6	☽ 1 L.	JC	25·7	28·8	31·5	34·4	40·0	45·6	48·6	51·5	54·3	11. 52. 40·00		40·12			21·26	11. 54. 3·74	
	7	*η* Virginis	E	24·0	26·7	29·4	32·2	37·7	43·3	46·0	48·8	51·7	12. 12. 37·70		37·85	59·52	21·67	21·44†	....	
	8	δ^2 Corvi	JC	16·6	19·7	22·5	25·4	31·1	37·0	39·7	42·6	45·5	12. 22. 31·08		31·13	52·77	21·64	21·26	12. 22. 52·65	— 2·85
	9	*q* Virginis	JC	12·9	15·8	18·5	21·4	27·0	32·5	35·4	38·1	41·0	12. 26. 26·90		26·99				12. 26. 48·51	— 2·78
	10	*χ* Virginis	JC	40·9	43·8	46·6	49·4	54·8	0·5	3·3	6·0	8·7	12. 31. 54·84		54·94				12. 32. 16·47	— 2·80
	11	*ρ* Virginis	JC	26·8	30·0	32·6	35·5	41·0	46·6	49·6	52·3	55·1	12. 34. 41·01		41·23				12. 35. 2·76	— 2·65
	12	35 Virginis	JC	23·0	26·0	28·7	31·5	36·9	42·5	45·4	48·3	50·9	12. 40. 36·97		37·15	58·64	21·49		12. 40. 58·68	— 2·72
	13	Saturn 1 L.	JC	29·4	32·3	35·0	37·8	43·1	48·8	51·5	54·4	57·1	12. 47. 43·22		} 43·94				12. 48. 5·47	
	14	Saturn 2 L.	JC	30·5	33·4	36·2	39·0	44·4	50·0	52·8	55·6	58·2	12. 47. 44·41							
	15	Polaris S.P. (E&E)	JC	43·0	33·5	24·0	16·0	3·0	..	..	..	..	13. 9. 2·90		45·28	6·33	21·05		1. 9. 6·82	+12·66
	16	ζ^1 Ursæ Majoris	JC	42·6	47·5	52·5	57·4	6·9	16·8	21·4	26·9	31·4	13. 18. 6·96		7·70				13. 18. 29·24	— 2·73
	17	ζ^2 Ursæ Majoris	JC	43·5	48·4	53·4	58·4	8·0	17·7	22·6	27·6	32·4	13. 18. 7·92		8·66				13. 18. 30·20	— 2·73
	18	Piazzi XIII. 112	JC	25·0	28·3	31·4	34·5	40·9	47·2	50·4	53·5	56·6	13. 24. 40·82		40·78				13. 25. 2·32	— 3·46
	19	*ζ* Virginis	JC	13·3	16·0	18·7	21·6	27·1	32·8	35·5	38·4	41·0	13. 27. 27·10		27·25	48·84	21·59		13. 27. 48·80	— 2·93
	20	Oeltz. Arg. 15129	JC	33·1	37·4	41·4	45·6	53·6	1·8	6·0	10·1	14·3	15. 2. 53·63		54·22				15. 3. 15·80	— 2·83
	21	o^2 Libræ	JC	54·5	57·5	0·4	3·1	8·7	14·4	17·4	20·3	23·2	15. 15. 8·78		8·83	30·34	21·51		15. 15. 30·41	— 3·46
	22	Jupiter 1 L.	JC	1·2	..	7·0	..	15·5	..	24·2	..	30·2	15. 20. 15·58		} 17·22				15. 20. 38·81	
	23	Jupiter 2 L.	JC	4·3	..	10·3	..	18·7	..	27·5	..	33·4	15. 20. 18·80							
	24	Polaris ... (E & E)	D	..	6·0	55·0	49·0	29·0	16·0	..	..	..	1. 8. 29·44	(+4·42)	45·85	6·64	20·79	21·75	1. 9. 7·63	+12·35
	25	Venus 2 L.	D	17·1	20·2	22·8	25·7	31·3	37·2	39·9	42·7	45·6	2. 31. 31·34		31·54			[0·58]	2. 31. 52·96	
May 17	26	☉ 1 L.	D	..	13·6	16·7	19·6	25·4	31·4	34·3	37·3	..	3. 36. 25·41		} 33·04				3. 37. 54·88	
	27	☉ 2 L.	D	25·4	28·3	31·5	34·4	40·3	46·2	49·0	52·0	55·0	3. 38. 40·19							
	28	Rigel	D	24·8	..	30·5	33·3	38·7	44·5	47·4	..	52·7	5. 7. 38·80		38·87	0·63	21·76		5. 8. 0·74	— 0·48
	29	*π* Virginis	D	20·5	23·4	26·3	29·0	34·4	40·1	42·8	45·5	48·4	11. 53. 34·44		34·61	56·69	22·08		11. 53. 56·65	— 2·49
	30	*ϵ* Corvi	D	34·1	37·0	40·1	42·9	48·8	54·8	57·8	0·8	3·8	12. 2. 48·85		48·84	10·89	22·05		12. 3. 10·88	— 2·80
	31	7 Comæ	D	52·4	55·5	58·7	1·6	7·6	13·8	16·8	19·9	22·8	12. 9. 7·63		7·91				12. 9. 29·95	— 2·47
	32	*η* Virginis	D	23·6	26·4	29·1	32·0	37·4	43·1	45·7	48·5	51·3	12. 12. 37·40		37·53	59·51	21·98		12. 12. 59·57	— 2·61
	33	δ^2 Corvi	C	16·4	19·2	22·2	25·0	30·9	36·7	39·5	42·4	45·2	12. 22. 30·79		30·82	52·76	21·94	21·70†	....	
	34	*q* Virginis	D	12·4	15·4	18·1	20·8	26·4	32·0	34·8	37·5	40·4	12. 26. 26·39		26·46			21·75	12. 26. 48·51	— 2·78
	35	☽ 1 L.	D	33·8	36·7	39·7	42·5	48·3	54·0	57·0	59·6	2·4	12. 40. 48·17		48·24				12. 42. 13·58	
	36	Saturn 1 L.	D	19·0	22·0	24·8	27·5	32·8	38·5	41·2	44·0	46·6	12. 47. 32·89		} 33·67				12. 47. 55·73	
	37	Saturn 2 L.	D	20·5	23·2	26·0	28·8	34·2	39·8	42·5	45·4	47·9	12. 47. 34·22							
	38	*δ* Virginis	C	11·9	14·7	17·4	20·4	25·8	31·2	34·2	37·0	39·8	12. 48. 25·77		25·92	47·99	22·07	21·70†	....	
	39	50 Virginis	D	5·3	8·0	10·8	13·6	19·1	24·9	27·6	30·3	33·1	13. 2. 19·13		19·20			21·75	13. 2. 41·26	— 2·97
	40	Polaris S.P. (E&E)	D	42·5	32·0	..	..	3·0	43·0	..	26·5	..	13. 9. 2·40		46·08	6·96	20·88		1. 9. 8·15	+12·03
	41	Spica	D	28·8	31·6	34·4	37·2	42·7	48·4	51·2	54·0	56·9	13. 17. 42·75		42·81	4·91	22·10		13. 18. 4·88	— 3·04
	42	Jupiter 1 L.	D	29·9	..	35·6	..	44·3	..	53·1	..	58·6	15. 19. 44·26		} 45·91				15. 20. 8·03	
	43	Jupiter 2 L.	D	33·1	..	38·9	..	47·4	..	56·3	..	2·2	15. 19. 47·54							
	44	*α* Coronæ	D	21·0	24·0	27·1	30·1	36·3	42·6	45·6	48·8	51·8	15. 28. 36·31		36·62	58·75	22·13		15. 28. 58·74	— 2·91
	45	*ζ* Ursæ Minoris	D	..	..	..	12·6	39·0	6·6	20·4	33·5	47·3	15. 48. 39·25		41·26				15. 49. 3·39	— 3·98
	46	*τ* Coronæ	D	..	..	..	..	40·4	47·3	50·7	54·2	57·6	16. 3. 40·31		40·70				16. 4. 2·84	— 2·86
	47	*γ* Herculis	D	21·2	24·2	27·1	30·0	35·8	41·8	44·6	47·6	50·5	16. 15. 35·81		36·05	58·29	22·24		16. 15. 58·19	— 2·97
	48	Venus 2 L.	E	1·4	4·5	7·5	10·4	15·9	21·8	24·6	27·5	30·5	2. 36. 15·96	(+3·36) [−3·09]	16·09			22·60 [0·62]	2. 36. 38·37	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 6, 25, 35, and 48, $+62^s·11$: $-0^s·39$: $+63^s·28$: and $-0^s·39$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

24, 25. Very faint; the sky hazy.
26, 27. Very tremulous.
28. Scarcely visible.
36, 37. A very bad image.
42, 43. A bad image; the belts invisible.
48. Very tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
May 18	1	⊙ 1 L.	E	8·4	11·6	14·6	17·5	23·2	29·1	32·0	35·0	37·9	3. 40. 23·21	+1·02	30·77			22·60		
	2	⊙ 2 L.	E	23·4	26·5	29·4	32·1	38·0	43·9	47·0	49·7	52·7	3. 42. 38·03	(+3·36)				[0·62]	3. 41. 53·47	
	3	α Orionis	E	..	15·4	18·3	20·9	26·6	32·1	35·0	37·7	..	5. 47. 26·51	[− 3·09]	26·61	49·38	22·77		5. 47. 49·36	− 0·81
	4	β Leonis	E	32·4	35·3	38·0	41·0	46·5	52·4	55·2	58·1	1·0	11. 41. 46·60		46·73	9·61	22·88		11. 42. 9·63	− 2·37
	5	γ^1 Virginis	E	12·2	..	17·6	..	26·0	..	34·4	..	39·8	12. 34. 25·96		26·01				12. 34. 48·93	− 2·71
	6	γ^2 Virginis	E	..	15·1	..	20·6	..	31·6	..	37·2	..	12. 34. 26·06		26·11				12. 34. 49·03	− 2·71
	7	35 Virginis	JC	22·2	24·9	27·7	30·5	35·9	41·6	44·3	47·1	49·9	12. 40. 35·96		36·04	58·63	22·59	22·29†	....	
	8	Saturn 1 L.	E	8·9	11·7	14·4	17·2	22·7	28·4	31·1	33·8	36·5	12. 47. 22·70					22·60		
	9	Saturn 2 L.	E	10·3	13·0	15·7	18·5	24·0	29·6	32·4	35·1	37·9	12. 47. 24·01		23·39				12. 47. 46·32	
	10	δ Virginis	JC	11·4	14·3	17·0	19·9	25·2	30·9	33·6	36·4	39·1	12. 48. 25·26		25·33	47·98	22·65	22·29†	....	
	11	50 Virginis	E	4·4	7·2	10·0	12·8	18·3	24·1	26·9	29·6	32·5	13. 2. 18·37		18·37			22·60	13. 2. 41·31	− 2·96
	12	Polaris S.P. (E&E)	E	..	..	22·5	13·5	0·5	41·0	32·5	..	..	13. 9. 0·15		45·09	7·66	22·57		1. 9. 8·03	+11·33
	13	Spica	E	27·9	30·8	33·6	36·4	42·0	47·7	50·6	53·4	56·2	13. 17. 42·02		42·02	4·91	22·89		13. 18. 4·96	− 3·04
	14	☽ 1 L.	E	54·3	57·1	59·9	2·9	8·7	14·5	17·4	20·3	23·1	13. 31. 8·64		8·62				13. 32. 36·47	
	15	ι Draconis	E	..	..	..	53·6	6·9	20·2	26·6	33·4	40·0	13. 47. 6·72		7·53				13. 47. 30·49	− 2·92
	16	κ Virginis	E	4·8	7·6	10·6	13·2	18·8	24·5	27·4	30·1	32·9	14. 5. 18·82		18·82	41·88	23·06		14. 5. 41·78	− 3·21
	17	Arcturus	E	52·4	55·6	58·6	1·4	7·1	13·0	16·1	19·0	22·0	14. 9. 7·19		7·35	30·38	23·03		14. 9. 30·31	− 2·82
	18	λ Virginis	E	11·4	14·4	17·3	20·0	25·7	31·5	34·3	37·1	39·8	14. 11. 25·67		25·65				14. 11. 48·62	− 3·29
	19	5 Ursæ Minoris	E	..	..	..	..	30·4	53·6	5·4	16·5	28·5	14. 27. 30·00		31·52				14. 27. 54·49	− 3·63
	20	Piazzi XIV. 150.	E	45·2	48·6	52·2	55·5	2·2	8·9	12·2	15·5	19·0	14. 35. 2·09		1·94				14. 35. 24·92	− 3·98
	21	α Libræ	E	47·7	50·6	53·4	56·4	2·0	7·7	10·6	13·6	16·6	14. 43. 2·02		1·98	24·97	22·99		14. 43. 24·96	− 3·43
	22	Piazzi XIV. 204	E	49·1	52·3	56·0	59·1	5·7	12·4	15·4	18·8	21·9	14. 47. 5·57		5·42				14. 47. 28·40	− 3·98
	23	ψ Boötis	E	1·2	4·3	7·6	10·5	16·8	23·0	26·3	29·3	32·6	14. 58. 16·79		17·01	40·00	22·99		14. 58. 40·00	− 2·87
	24	Jupiter 1 L.	E	..	..	4·2	..	12·8	..	21·5	..	27·3	15. 19. 12·79		14·41				15. 19. 37·41	
	25	Jupiter 2 L.	E	1·7	..	7·4	..	16·2	..	24·9	..	30·5	15. 19. 16·10							
	26	Thetis	E	..	..	..	..	..	25·5	28·4	31·0	33·8	15. 36. 19·80		19·80				15. 36. 42·80	
	27	δ Ophiuchi	E	39·6	42·6	45·4	48·0	53·5	59·1	2·0	4·6	7·4	16. 6. 53·53		53·56	16·50	22·94		16. 7. 16·58	− 3·28
	28	Polaris (E & E)	C	..	..	..	48·0	29·0	17·0	7·0	58·0	51·0	1. 8. 29·35		44·37	8·01	23·64	22·94	1. 9. 7·33	+10·98
	29	Venus 2 L.	C	47·6	50·4	53·4	56·3	2·0	7·6	10·5	13·5	16·2	2. 41. 1·90		2·03			[0·36]	2. 41. 24·62	
May 19	30	⊙ 1 L.	C	7·1	9·8	12·9	15·9	21·8	27·6	30·7	33·6	36·5	3. 44. 21·72		29·49				3. 45. 52·49	
	31	⊙ 2 L.	C	22·2	25·2	28·2	31·0	36·9	43·0	45·9	48·8	51·6	3. 46. 36·93							
	32	Aldebaran	C	..	..	..	..	..	13·5	28·3	..	..	4. 27. 44·86		45·00	7·97	22·97		4. 28. 8·01	− 0·80
	33	Aldebaran	C	..	..	..	..	..	..	..	56·5	59·2								
	34	β Tauri	C	3·8	6·9	10·2	13·3	19·5	25·7	29·1	32·4	35·3	5. 17. 19·52		19·75	42·77	23·02		5. 17. 42·77	− 0·95
	35	α Orionis	C	12·4	15·3	17·9	20·7	26·3	32·0	34·7	37·4	40·3	5. 47. 26·28		26·38	49·37	22·99		5. 47. 49·41	− 0·80
	36	β Leonis	D	32·0	34·8	37·8	40·5	46·2	52·1	55·0	57·9	0·6	11. 41. 46·27		46·40	9·60	23·20	23·03†	....	
	37	π Virginis	D	19·5	22·4	25·0	27·7	33·3	39·0	41·7	44·5	47·4	11. 53. 33·34		33·44	56·66	23·22		....	
	38	η Virginis	C	22·4	25·3	28·1	30·9	36·3	41·7	44·6	47·5	50·1	12. 12. 36·27		36·32	59·50	23·18	22·94	12. 12. 59·44	− 2·60
	39	ρ Virginis	C	25·3	28·3	31·2	33·8	39·4	45·0	48·0	50·8	53·6	12. 34. 39·43		39·54				12. 35. 2·67	− 2·62
	40	35 Virginis	C	21·6	24·4	27·1	30·0	35·4	41·0	43·8	46·7	49·5	12. 40. 35·45		35·53	58·62	23·09		12. 40. 58·66	− 2·70
	41	Saturn 1 L.	C	59·1	2·2	4·9	7·6	13·1	18·6	21·5	24·3	27·1	12. 47. 13·11		13·81				12. 47. 36·94	
	42	Saturn 2 L.	C	0·7	3·5	6·2	9·0	14·4	20·0	22·9	25·5	28·4	12. 47. 14·46							
	43	Polaris S.P. (E&E)	C	..	..	..	11·5	59·0	41·0	32·0	22·0	18·0	13. 8. 58·67		43·61	8·38	24·77		1. 9. 6·75	+10·61
	44	τ Boötis	C	13·1	15·9	18·9	21·7	27·5	33·4	36·3	39·2	42·0	13. 40. 27·50		27·65	50·75	23·10		13. 40. 50·79	− 2·78
	45	94 Virginis	C	31·9	34·8	37·6	40·4	46·0	51·6	54·4	57·0	59·9	13. 58. 45·90		45·91				13. 59. 9·06	− 3·17
	46	κ Virginis	C	..	..	..	..	..	..	..	27·1	30·0	32·6	14. 5. 18·62		18·62	41·88	23·26		14. 5. 41·77	− 3·21
	47	λ Virginis	C	11·4	14·3	17·0	..	25·4	..	34·0	36·8	39·6	14. 11. 25·45		25·43				14. 11. 48·58	− 3·29
	48	☽ 1 L.	C	4·6	7·6	10·7	13·7	19·4	25·4	28·4	31·4	34·4	14. 24. 19·46		19·42				14. 25. 49·39	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 14, 29, and 48, $+64^s \cdot 90$: $-0^s \cdot 39$: and $+66^s \cdot 81$.

†These clock-errors have been used in the reduction of the observations made with the Altazimuth.

May 18 and 19. The azimuthal error by Polaris S.P., Polaris, and Polaris S.P.

1, 2. Very tremulous.
3. Extremely faint.
22. Faint.
28. Very faint; at times scarcely visible.
32. Observed over wires Y, Z.
32, 33. Extremely tremulous.
34. An extremely bad image.
41, 42. Much blurred.
43. Very tremulous and blurred.
48. Faint; cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
May 19	1	α^2 Libræ.....	C	47·6	50·5	53·4	56·3	1·8	7·8	10·4	13·3	16·2	14. 43. 1·87	+1·02	1·83	24·98	23·15	22·94	14. 43. 24·99	— 3·44
	2	Jupiter 1 L.	C	27·5	..	33·2	..	42·1	..	50·7	..	56·5	15. 18. 41·96	(+3·36)	43·64			[0·36]		
	3	Jupiter 2 L.	C	31·0	..	36·7	..	45·4	..	54·2	..	59·9	15. 18. 45·40	[−3·09]					15. 19. 6·81	
	4	α Coronæ.....	C	19·8	23·1	26·2	29·3	35·4	41·6	44·7	47·8	51·0	15. 28. 35·38		35·59	58·76	23·17		15. 28. 58·76	— 2·92
	5	Venus 2 L. (E&E)	JC	5·7	20·0	34·4	48·5	3·0	17·2	31·5	..	..	2. 45. 48·62		48·75			23·47	2. 46. 11·85	
																		[0·17]		
May 20	6	Rigel .....(E&E)	JC	..	..	..	..	..	5·1	19·0	..	..	5. 7. 37·11		37·12	0·63	23·51		....	
	7	β Leonis.....	JC	31·7	34·6	37·4	40·4	46·1	51·7	54·8	57·6	0·4	11. 41. 46·03		46·16	9·59	23·43	23·31	....	
	8	η Virginis.....	JC	22·3	25·0	..	30·7	36·1	41·6	..	47·3	49·9	12. 12. 36·09		36·14	59·49	23·35		....	
	9	ρ Virginis	JC	25·0	28·0	30·7	33·4	39·2	45·0	47·8	50·5	53·4	12. 34. 39·17		39·28				12. 35. 2·68	— 2·61
	10	Saturn 1 L.	JC	50·3	53·2	56·0	58·7	4·1	9·8	12·5	15·2	18·0	12. 47. 4·15		4·79					
	11	Saturn 2 L.	JC	51·5	54·4	57·2	0·0	5·4	10·9	13·6	16·5	19·3	12. 47. 5·37						12. 47. 28·19	
	12	δ Virginis	E	10·4	13·3	15·9	18·8	24·2	29·7	32·5	35·3	38·1	12. 48. 24·20		24·27	47·97	23·70	23·57†	....	
	13	ϵ Virginis.....	E	49·1	52·1	55·0	57·8	3·4	9·1	11·9	14·7	17·4	12. 55. 3·34		3·46	27·07	23·61		....	
May 21	14	Jupiter 1 L.	D	26·5	..	32·3	..	40·8	..	49·5	..	55·4	15. 17. 40·86	(+4·46)	42·50			23·52		
	15	Jupiter 2 L.	D	29·8	..	35·5	..	44·3	..	52·8	..	58·6	15. 17. 44·16					[0·17]	15. 18. 6·13	
	16	γ Serpentis	C	35·5	38·6	41·5	44·1	49·9	55·6	58·6	1·4	4·3	15. 49. 49·89		50·10	13·43	23·33	23·19†	....	
	17	β^1 Scorpii.....	C	..	..	..	..	..	42·1	56·4	..	..	15. 57. 12·42		12·39	35·65	23·26		....	
	18	β^1 Scorpii.....	C	..	..	..	..	..	18·2	21·1	..	..								
	19	ν^2 Scorpii	D	..	..	..	39·8	45·9	51·6	54·5	..	..	16. 3. 45·70		45·67			23·52	16. 4. 9·30	— 3·66
	20	δ Ophiuchi	D	39·0	41·9	44·5	47·4	53·0	58·6	1·3	3·9	6·7	16. 6. 52·87		52·94	16·54	23·60		....	
	21	γ Herculis	D	19·7	22·7	25·7	28·7	34·5	40·4	43·2	46·5	49·2	16. 15. 34·46		34·68	58·33	23·65		....	
	22	☽ 2 L.	D	..	..	7·5	10·5	16·5	22·7	25·7	28·7	31·8	16. 22. 16·51		16·47				16. 21. 29·75	
																		24·09		
May 22	23	β Libræ	E	6·8	9·7	12·4	15·3	20·8	26·5	29·3	32·0	34·8	15. 9. 20·80		20·84	44·84	24·00	[−0·14]	15. 9. 44·84	— 3·36
	24	β^1 Scorpii.....	JC	57·4	0·4	3·3	6·2	12·0	17·9	20·8	23·9	26·6	15. 57. 12·01		11·98	35·66	23·68	23·76†	....	
	25	δ Ophiuchi	JC	38·5	41·8	44·7	47·4	52·8	58·6	1·3	4·0	6·8	16. 6. 52·83		52·90	16·55	23·65		....	
	26	η Ophiuchi	E	0·1	3·0	6·0	8·7	14·4	20·1	22·9	25·8	28·5	17. 2. 14·34		14·33	38·36	24·03	24·09	17. 2. 38·32	— 3·55
	27	α Herculis	E	51·3	54·4	57·1	0·0	5·6	11·4	14·2	17·1	20·0	17. 8. 5·63		5·82	29·89	24·07		17. 8. 29·81	— 3·05
	28	θ Ophiuchi	E	4·2	7·3	10·4	13·4	19·4	25·4	28·6	31·6	34·8	17. 13. 19·40		19·33	43·34	24·01		17. 13. 43·32	— 3·78
	29	☽ 2 L.	E	26·4	29·4	32·6	35·6	41·6	47·9	50·9	54·0	57·0	17. 23. 41·66		41·62				17. 22. 54·33	
	30	4 Sagittarii	E	53·7	57·3	0·1	3·2	9·2	15·3	18·4	21·4	24·3	17. 51. 9·16		9·09				17. 51. 33·08	— 3·65
	31	72 Ophiuchi.....	E	19·0	21·8	24·7	27·5	33·0	38·9	41·5	44·4	47·1	18. 0. 33·05		33·21	57·13	23·92		18. 0. 57·19	— 3·01
	32	μ^1 Sagittarii	E	2·6	5·6	8·6	11·6	17·5	23·5	26·4	29·4	32·3	18. 5. 17·45		17·41	41·30	23·89		18. 5. 41·39	— 3·52
May 23	33	Polaris S.P. (E&E)	C	..	..	..	16·0	6·0	45·0	39·0	30·0	..	13. 9. 4·80	+0·90	45·29	11·50	26·21	23·52	1. 9. 8·57	+ 7·49
	34	Spica	C	27·6	30·4	33·3	36·0	41·5	47·3	50·2	52·8	55·6	13. 17. 41·59	(+5·80)	41·67	4·88	23·21	[−0·44]	13. 18. 4·95	— 3·01
	35	Var. (S) Virginis .	C	19·6	22·5	25·4	28·0	33·5	39·2	41·9	44·6	47·6	13. 25. 33·54	[−2·93]	33·64				13. 25. 56·92	— 3·00
	36	τ Boötis	C	12·6	15·7	18·5	21·5	27·1	33·3	36·0	38·9	41·7	13. 40. 27·20		27·50	50·73	23·23		13. 40. 50·77	— 2·76
	37	τ Virginis	C	9·1	12·1	14·9	17·6	22·9	28·6	31·4	34·3	37·1	13. 54. 23·06		23·23	46·59	23·36		13. 54. 46·50	— 2·98
	38	94 Virginis	C	31·5	34·5	37·4	40·2	45·5	51·3	54·1	56·8	59·7	13. 58. 45·62		45·71				13. 59. 8·97	— 3·16
	39	ρ Boötis	D	21·0	24·1	27·5	30·8	37·0	43·5	46·9	49·9	53·3	14. 25. 37·06		37·48	0·93	23·45	23·72†	....	
	40	ϵ Boötis	D	26·3	29·5	32·5	35·7	42·0	48·0	51·3	54·5	57·6	14. 38. 41·89		42·27	5·71	23·44		....	
	41	β Libræ	C	7·5	10·4	13·2	15·8	21·2	27·1	30·0	32·8	35·4	15. 9. 21·44		21·53	44·85	23·32	23·52	15. 9. 44·77	— 3·37
	42	Jupiter 1 L.	C	26·6	..	32·5	..	41·2	..	49·9	..	55·5	15. 16. 41·10		42·84					
	43	Jupiter 2 L.	C	30·2	..	35·9	..	44·5	..	53·2	..	59·1	15. 16. 44·54						15. 17. 6·08	
	44	4 Sagittarii	C	..	..	..	..	..	40·1	55·3	..	..	17. 51. 9·92		9·89				17. 51. 33·08	— 3·67
	45	μ^1 Sagittarii.....	C	..	..	..	..	..	24·4	27·2	30·0	33·0	18. 5. 18·21		18·20	41·33	23·13		18. 5. 41·39	— 3·55

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 5, 22, and 29, $-0^s \cdot 39$: $-70^s \cdot 35$: and $-71^s \cdot 28$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
May 23 to 28. The azimuthal error by eight consecutive transits of Polaris.

17, 44. Observed over wires Y, Z. 6, 17, 18, 22. Cloudy. 17, 18. Faint. 19. Very cloudy.
23. The last wire has also been used for the 1st wire of an Altazimuth observation, ☽ L. L., Face Right.
29. Very tremulous. 35. Of the 7½ magnitude. 42, 43. An extremely bad image.
43. The 1st wire has also been used for the last wire of an Altazimuth observation, ☽ 2 L., Face Right.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
May 23	1	☽ 2 L.	C	38·6	41·6	44·6	47·6	53·8	59·8	2·9	5·8	9·0	18. 25. 53·70	+ 0·90 (+ 5·80) [− 2·93] (+ 7·15)	53·69			23·52 [− 0·44]	18. 25. 5·51	
	2	Polaris ... (E & E)	R	..	..	..	45·0	25·0	10·0	3·0	56·0	47·0	1. 8. 25·39		47·99	11·86	23·87	23·01 [− 0·13]	1. 9. 10·99	+ 7·13
May 24	3	η Virginis	JC	22·5	25·3	28·0	30·8	36·3	41·8	44·6	47·4	50·2	12. 12. 36·27		36·48	59·45	22·97		12. 12. 59·42	− 2·55
	4	δ² Corvi	JC	15·1	18·1	20·9	23·9	29·5	35·4	38·2	41·1	44·0	12. 22. 29·52		29·58	52·70	23·12		12. 22. 52·52	− 2·78
	5	ρ Virginis	JC	25·4	28·3	31·1	33·9	39·4	45·0	48·1	51·0	53·6	12. 34. 39·48		39·79				12. 35. 2·73	− 2·58
	6	Saturn 1 L.	JC	18·4	21·1	23·9	26·7	32·2	37·8	40·7	43·3	46·1	12. 46. 32·20		} 33·00				12. 46. 55·94	
	7	Saturn 2 L.	JC	19·6	22·4	25·2	28·0	33·4	39·0	41·7	44·5	47·4	12. 46. 33·42							
	8	ε Virginis	JC	49·8	52·7	55·4	58·4	3·9	9·5	12·4	15·1	18·0	12. 55. 3·86		4·17	27·05	22·88		12. 55. 27·11	− 2·66
	9	Polaris S.P. (E & E)	JC	49·5	41·5	33·0	25·5	12·0	..	..	..	..	13. 9. 11·20		48·91	12·20	23·29		1. 9. 11·85	+ 6·79
	10	γ Herculis	E	20·0	23·0	26·2	29·0	34·6	40·6	43·4	46·5	49·3	16. 15. 34·68		35·06	58·35	23·29	23·34†	....	
	11	Antares	E	29·6	32·7	35·9	39·0	45·0	51·3	54·4	57·6	0·6	16. 20. 45·07		45·05	8·26	23·21		....	
	12	β Ophiuchi	JC	11·5	14·4	17·0	19·8	25·2	30·9	33·6	36·5	39·1	17. 36. 25·28		25·53	48·42	22·89	23·01	17. 36. 48·44	− 3·16
	13	μ Herculis	JC	32·2	35·4	38·5	41·6	47·8	54·3	57·3	0·3	3·6	17. 40. 47·84		48·32	11·12	22·80		17. 41. 11·23	− 2·89
	14	☽ 2 L.	D	13·1	16·2	19·2	22·1	28·1	34·1	37·2	40·2	43·1	19. 27. 28·09		28·14			23·01	19. 26. 40·50	
	15	γ Aquilæ	D	13·0	15·8	18·7	21·4	27·1	32·6	35·5	38·4	41·0	19. 39. 27·00		27·30	50·37	23·07	[0·06]	19. 39. 50·36	− 2·74
	16	α Aquilæ	D	34·2	37·1	39·9	42·7	48·3	53·9	56·6	59·5	2·4	19. 43. 48·24		48·53	11·58	23·05		19. 44. 11·59	− 2·75
	17	β Aquilæ	D	3·5	6·3	9·0	11·9	17·4	23·0	25·8	28·5	31·2	19. 48. 17·35		17·61	40·67	23·06		19. 48. 40·67	− 2·74
	18	α² Capricorni	D	56·0	59·0	1·7	4·5	10·1	15·9	18·7	21·4	24·4	20. 10. 10·14		10·23	33·18	22·95		20. 10. 33·29	− 2·82
	19	Polaris ... (E & E)	R	7·0	3·0	55·0	44·0	25·0	11·0	4·0	55·0	47·0	1. 8. 25·95		48·55	12·54	23·99	23·07	1. 9. 11·62	+ 6·45
	20	Venus 2 L.	D	46·8	49·6	52·6	55·5	1·2	7·0	9·9	13·0	15·6	3. 10. 1·20		1·55				3. 10. 24·24	
May 25	21	Polaris S.P. (E & E)	D	52·0	..	34·0	..	..	..	..	..	..	13. 9. 12·42		50·13	12·86	22·73		1. 9. 13·23	+ 6·13
	22	τ Boötis	D	12·9	15·6	18·5	21·4	27·3	33·2	36·0	38·9	41·8	13. 40. 27·24		27·61	50·72	23·11		13. 40. 50·71	− 2·75
	23	η Boötis	D	37·2	40·4	43·0	46·0	51·8	57·7	0·6	3·4	6·4	13. 47. 51·79		52·17	15·34	23·17		13. 48. 15·27	− 2·78
	24	Polaris ... (E & E)	R	..	..	..	45·0	26·0	..	6·0	57·0	..	1. 8. 26·77		49·37	13·18	23·81		1. 9. 12·72	+ 5·81
May 26	25	ε Virginis	E	49·2	52·3	55·0	57·8	3·5	9·2	12·1	14·7	17·5	12. 55. 3·43		3·74	27·03	23·29	23·36	....	
	26	Polaris S.P. (E & E)	E	50·0	40·5	34·0	23·5	..	50·0	..	..	..	13. 9. 10·30		48·01	13·49	25·48	[− 0·13]	1. 9. 11·30	+ 5·50
	27	Polaris ... (E & E)	R	..	..	54·0	46·0	27·0	14·0	6·0	..	..	1. 8. 27·25		49·85	13·79	23·94	22·84	1. 9. 12·68	+ 5·20
	28	Venus 2 L.	C	35·2	38·4	41·3	44·1	49·8	55·6	58·6	1·5	4·6	3. 19. 49·85		50·22			[− 0·13]	3. 20. 12·65	
May 27	29	☉ 1 L.	C	17·7	20·6	23·6	26·6	32·5	38·7	41·6	44·5	47·4	4. 16. 32·53		} 41·13				4. 18. 3·95	
	30	☉ 2 L.	C	34·1	37·2	40·1	43·0	48·8	54·9	57·8	0·9	3·8	4. 18. 48·90							
	31	η Virginis	C	22·6	25·5	28·3	31·1	36·4	42·0	44·7	47·5	50·4	12. 12. 36·45		36·66	59·43	22·77		....	
May 28	32	☉ 2 L.	JC	37·9	41·0	44·0	46·9	52·6	58·6	1·5	4·4	7·6	4. 22. 52·67		53·08			22·74	4. 22. 7·70	
	33	δ Virginis	JC	..	..	..	..	24·7	30·4	33·3	36·0	38·6	12. 48. 24·79		25·04	47·91	22·87	[0·13]	....	
	34	Polaris S.P. (E & E)	JC	52·5	45·0	36·0	29·0	14·5	..	..	..	..	13. 9. 14·26		51·97	14·74	22·77		....	
	35	κ Virginis	JC	5·0	7·9	10·7	13·5	18·9	24·6	27·4	30·3	33·0	14. 5. 18·98		19·11	41·87	22·76		....	
May 29	36	ε Aquilæ	C	52·2	55·0	58·1	1·0	6·6	12·4	15·3	18·0	20·8	18. 53. 6·55	+ 0·50 (+ 7·77) [− 3·16]	6·89	29·95	23·06	22·86†	....	
	37	ζ Aquilæ	C	34·8	37·9	40·6	43·5	49·0	54·7	57·5	0·5	3·4	18. 58. 49·05		49·38	12·50	23·12	[0·29]	....	
	38	α Andromedæ	E	44·0	47·2	50·3	53·4	59·5	5·9	9·0	12·3	15·4	0. 0. 59·60		0·10	23·52	23·42	23·44	0. 1. 23·54	− 1·74
	39	☽ 2 L.	E	..	..	..	..	..	..	..	18·4	21·3	0. 11. 6·98		7·22			[0·34]	0. 10. 23·78	
	40	Polaris ... (E & E)	R	9·0	..	..	..	..	..	6·0	..	..	1. 8. 27·92		51·13	15·79	24·66		1. 9. 14·59	+ 3·20
May 30	41	Polaris S.P. (E & E)	E	..	..	..	..	16·0	53·0	48·0	38·5	..	13. 9. 14·43		51·53	16·17	24·64		1. 9. 15·16	+ 2·82
	42	Spica	E	27·1	30·0	32·7	..	41·1	..	49·6	52·4	55·3	13. 17. 41·13		41·23	4·85	23·62		13. 18. 4·86	− 2·98

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, 30r·700.

Corrections for passage of Semidiameter, Nos. 1, 14, 20, 28, 32, and 39, −71s·36: −70s·70: −0s·39: −0s·39: −68s·14: and −66s·89.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

May 29 and 30. The azimuthal error by Polaris and Polaris S.P., allowing −0s·38 for clock-rate and change of R.A.

1. The limbs extremely faint; the sky very cloudy.
2. Very tremulous.
14. Cloudy.
17. Faint.
18, 39. Very faint.
19, 40. Extremely tremulous.
21. Very cloudy.
24. Tremulous.
24, 40. Cloudy during the passage over the remaining wires.
27. Very faint from cirrus cloud.
39. Correction to R.A. on true meridian, +0s·01.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
																		(Arnold 1)		
May 30	1	ζ Virginis.....	E	11·2	14·0	16·6	19·5	24·9	30·5	33·4	36·0	38·7	13. 27. 24·93	+0·50	25·13	48·79	23·66	23·44	13. 27. 48·76	— 2·88
	2	Groombridge 2053	E	..	..	..	..	43·0	11·6	26·4	40·2	54·5	13. 41. 43·22	(+ 7·77)	46·28			[0.34]	13. 42. 9·91	— 2·93
	3	Piazzi XIII. 228.	E	24·9	27·8	30·6	33·5	39·3	45·2	48·0	50·9	53·8	13. 45. 39·28	[−3·16]	39·65				13. 46. 3·28	— 2·77
	4	η Boötis	E	36·6	39·6	42·5	45·5	51·4	57·2	0·2	3·1	6·0	13. 47. 51·30		51·69	15·32	23·63		13. 48. 15·33	— 2·76
	5	Groombridge 2066	E	..	..	23·1	38·5	8·9	40·2	56·0	..	..	13. 50. 9·04		12·35				13. 50. 35·99	— 3·08
	6	94 Virginis	E	31·4	34·2	36·9	39·8	45·3	50·9	53·7	56·4	59·2	13. 58. 45·26		45·38				13. 59. 9·02	— 3·15
	7	3 Ursæ Minoris..	E	..	..	58·4	9·6	30·6	52·6	3·5	..	..	14. 5. 30·73		33·08				14. 5. 56·72	— 2·91
	8	Groombridge 2091	E	..	..	46·4	54·3	10·4	27·1	35·1	..	..	14. 9. 10·50		12·26				14. 9. 35·90	— 2·77
	9	52 Hydræ.....	E	37·4	40·5	44·2	46·9	53·3	59·4	2·7	6·0	9·2	14. 19. 53·24		53·14				14. 20. 16·78	— 3·73
	10	ρ Boötis	E	20·6	24·0	27·2	30·3	36·8	43·5	46·5	49·8	53·0	14. 25. 36·79		37·31	0·90	23·59		14. 26. 0·95	— 2·77
	11	5 Ursæ Minoris..	E	..	..	53·0	4·9	27·9	51·4	3·4	..	..	14. 27. 27·89		30·43				14. 27. 54·07	— 3·11
	12	Piazzi XIV. 150.	E	44·6	48·0	51·4	54·8	1·6	8·1	11·3	14·8	18·2	14. 35. 1·37		1·20				14. 35. 24·85	— 4·00
	13	55 Hydræ	E	53·2	56·3	59·4	2·4	8·5	14·6	17·6	20·7	23·8	14. 39. 8·45		8·40				14. 39. 32·05	— 3·69
	14	Piazzi XIV. 204.	E	48·3	51·8	55·2	58·4	4·9	11·6	14·6	18·0	21·4	14. 47. 4·85		4·70				14. 47. 28·35	— 4·01
	15	Gr. 7yr. C. No. 1188	E	39·4	42·4	45·1	47·8	53·1	58·7	2·0	4·9	7·5	14. 51. 53·39		53·49				14. 52. 17·14	— 3·37
	16	ψ Boötis	E	0·4	3·5	6·6	9·7	15·8	22·1	25·4	28·4	31·5	14. 58. 15·88		16·36	40·01	23·65		14. 58. 40·01	— 2·88
	17	Groombridge 2192	E	..	..	11·5	18·1	32·1	46·0	53·2	..	..	15. 1. 32·05		33·54				15. 1. 57·19	— 2·91
	18	δ Boötis	E	23·3	26·8	30·0	33·4	39·6	46·6	50·0	53·0	56·5	15. 9. 39·87		40·43				15. 10. 4·08	— 2·86
	19	μ Aquilæ.....	JC	52·0	54·7	57·6	0·4	5·7	11·4	14·4	17·1	19·9	19. 27. 5·86		6·12	29·67	23·55	23·18†	....	
	20	h^2 Sagittarii.....	JC	50·6	54·0	56·6	59·7	5·6	11·9	15·0	18·0	21·0	19. 28. 5·77		5·71	29·08	23·37		....	
June 1	21	⊙ 1 L.....	JC	39·8	42·9	45·6	49·0	54·8	1·0	3·6	6·8	9·6	4. 36. 54·74	(+ 7·00)	3·40			23·98	4. 38. 27·46	
	22	⊙ 2 L.....	JC	56·6	59·4	2·4	5·6	11·4	17·4	20·3	23·2	26·4	4. 39. 11·36	[−3·97]				[0·40]		
	23	δ Virginis.....	JC	9·6	12·5	15·0	18·0	23·4	29·2	31·8	34·6	37·4	12. 48. 23·45		23·61	47·88	24·27		12. 48. 47·80	— 2·63
	24	ε Virginis.....	JC	48·4	51·4	54·2	57·0	2·7	8·3	11·3	13·9	16·7	12. 55. 2·61		2·84	26·98	24·14		12. 55. 27·03	— 2·59
	25	Polaris S.P. (E&E)	JC	..	47·0	39·0	30·5	16·0	..	48·5	..	..	13. 9. 16·42		53·71	17·85	24·14		....	
	26	Spica	JC	..	..	..	..	..	..	49·2	51·9	54·7	13. 17. 40·62		40·64	4·84	24·20		13. 18. 4·84	— 2·97
	27	ι Draconis	JC	4·8	10·4	15·7	21·3	31·8	43·0	48·4	54·0	59·1	15. 21. 31·97		33·03				15. 21. 57·27	— 2·85
	28	ε Serpentis	JC	27·4	30·1	32·9	35·6	41·1	46·8	49·5	52·4	55·2	15. 43. 41·18		41·35	5·54	24·19		15. 44. 5·59	— 3·24
	29	ρ Coronæ	JC	12·2	15·7	19·4	22·4	28·9	35·7	38·9	42·3	45·5	15. 55. 28·94		29·42				15. 55. 53·66	— 2·94
	30	19 Ursæ Minoris.	JC	23·5	35·5	47·4	58·8	21·5	45·3	56·7	8·4	19·6	16. 14. 21·66		24·08				16. 14. 48·33	— 3·59
	31	23 Herculis	JC	..	8·6	11·9	15·2	21·6	28·2	31·6	34·6	..	16. 17. 21·60		22·07				16. 17. 46·32	— 2·98
	32	υ Ophiuchi.....	JC	52·0	54·9	57·8	0·6	5·8	11·8	14·4	17·1	20·1	16. 20. 6·00		6·04				16. 20. 30·29	— 3·52
	33	ζ Ophiuchi.....	JC	5·4	8·5	11·4	14·1	19·5	25·3	28·2	30·9	33·5	16. 29. 19·59		19·61	43·90	24·29		16. 29. 43·86	— 3·57
																		(Hardy.)		
June 3	34	Polaris ...(E & E)	R	24·0	20·0	12·0	3·0	43·0	29·0	21·0	12·5	3·5	1. 8. 43·39	(+ 6·42)	6·04	20·11	14·07		....	
	35	α Arietis	R	..	..	..	..	18·0	24·1	26·9	30·0	33·1	1. 59. 17·97	[− 4·60]	18·26	32·12	13·86		....	
June 4	36	⊙ 1 L.....	E	8·7	..	14·5	17·6	23·6	29·7	32·7	..	38·7	4. 49. 23·59		32·42			14·26	4. 50. 46·41	
	37	⊙ 2 L.....	E	25·5	28·7	31·7	34·6	40·7	46·8	49·6	52·8	56·0	4. 51. 40·67					[−1·31]		
	38	ξ^2 Libræ.....	E	59·4	2·4	5·2	8·0	13·4	19·3	22·1	24·8	27·5	14. 49. 13·52		13·48	26·91	13·43		14. 49. 26·93	— 3·38
	39	ψ Boötis	E	10·5	13·8	17·0	20·2	26·3	32·6	35·6	38·7	41·9	14. 58. 26·24		26·59	39·99	13·40		14. 58. 40·03	— 2·86
	40	Jupiter 1 L.....	E	1·0	..	6·8	..	15·4	..	24·1	..	29·7	15. 11. 15·36		16·89				15. 11. 30·32	
	41	Jupiter 2 L.....	E	4·2	..	10·0	..	18·6	..	..	..	33·0	15. 11. 18·59							
	42	Thetis	E	58·6	1·2	4·1	6·9	12·4	18·3	21·0	23·8	26·6	15. 22. 12·50		12·47				15. 22. 25·89	
	43	λ Ophiuchi.....	E	39·4	..	45·1	48·0	53·3	58·7	1·5	..	7·1	16. 23. 53·26		53·35	6·71	13·36		16. 24. 6·72	— 3·35
	44	Piazzi XVI. 232.	E	47·0	50·1	..	55·6	1·4	7·3	..	13·0	16·0	16. 48. 1·45		1·36				16. 48. 14·70	— 3·76
	45	η Ophiuchi.....	E	10·8	13·7	16·6	19·5	25·1	31·1	34·0	36·8	39·6	17. 2. 25·19		25·12	38·54	13·42		17. 2. 38·45	— 3·73
	46	Juno.....	E	..	..	..	..	21·6	27·3	30·3	32·8	35·6	17. 3. 21·71		21·74				17. 3. 35·07	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.

† This clock-error has been used in the reduction of the observations made with the Altazimuth.

June 3. The clock Arnold 1, which had been used from April 29, during the cleaning of the Transit-Clock, Hardy, was taken down ; and Hardy was brought into use again.

June 1. The azimuthal error by tabular places of ε Virginis and Polaris S. P.; the correction for clock-rate insensible.

June 3 and 4. The azimuthal error used is the mean of those (−4″·70 and −4″·49) determined by tabular places of Polaris and α Arietis on June 3, and of δ Ursæ Minoris and Cephei 51 S. P. on June 4, allowing $-0^s \cdot 05$ and $-0^s \cdot 02$ for clock rate in each case respectively.

21, 22. The limbs extremely ill-defined.
29, 32, 33. Extremely faint.
26. Cloudy.
31. Faint.
28. Faint: cloudy.
35. Very faint.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
June 4	1	α Herculis	E	2·2	5·2	8·0	10·9	16·4	22·4	25·2	28·0	30·9	17. 8. 16·53	+ 0·50	16·73	30·04	13·31	14·26	17. 8. 30·06	— 3·20
	2	δ Ursæ Min. (E&E)	E	..	..	..	27·0	59·5	33·0	21·0	..	53·5	18. 15. 59·32	(+6·42)	8·77	22·13		[−1·31]	....	
	3	Cephei 51 S.P. (E&E)	E	..	..	37·5	36·5	33·5	26·5	23·0	..	..	18. 35. 32·51	[−4·60]	20·92	34·43			....	
June 5	4	Polaris.... (E&E)	R	30·5	26·0	19·0	9·5	50·0	34·5	..	19·0	10·0	1. 8. 49·89	+ 0·99	9·60	21·83	12·23	11·18	1. 9. 20·72	— 2·84
June 6	5	Polaris S.P. (E&E)	S	..	0·5	52·0	42·5	29·5	10·0	1·5	54·0	..	13. 9. 29·41	(+6·28)	10·00	22·24	12·24	[−1·34]		
	6	η Boötis	S	50·0	53·0	55·8	58·8	4·6	10·4	13·4	16·3	19·2	13. 48. 4·56	[−2·17]	4·93	15·27	10·34		1. 9. 20·45	— 3·25
	7	τ Virginis.....	S	22·2	24·8	27·5	30·5	35·8	41·6	44·4	46·9	49·9	13. 54. 35·90		36·14	46·54	10·40		....	
	8	94 Virginis	S	44·4	47·3	50·4	52·9	58·6	4·1	7·0	9·6	12·5	13. 58. 58·48		58·64				....	
	9	ρ Boötis	D	34·0	37·3	40·6	43·7	50·2	56·6	59·8	3·0	6·4	14. 25. 50·12		50·60	0·85	10·25	11·08†	13. 59. 9·04	— 3·12
	10	ξ^2 Libræ	D	2·5	5·4	8·1	10·9	16·5	22·2	25·0	27·8	30·6	14. 49. 16·50		16·64	26·91	10·27		....	
	11	Jupiter 1 L.....	S	13·0	..	18·9	..	27·6	..	36·3	..	42·1	15. 10. 27·54						....	
	12	Jupiter 2 L.	S	16·4	..	22·4	..	30·8	..	39·6	..	45·4	15. 10. 30·88		29·31			11·18	15. 10. 39·64	
	13	Thetis	S	39·5	42·4	45·1	47·8	53·5	59·0	1·6	4·8	7·4	15. 20. 53·41		53·56				15. 21. 3·88	
	14	ε Herculis	S	41·4	44·7	48·0	..	..	..	..	10·5	13·6	16. 54. 57·52		58·01	8·33	10·32			
	15	Juno	S	28·2	..	33·9	36·5	41·9	47·0	50·4	..	56·0	17. 1. 41·95		42·14				17. 1. 52·37	
	16	Polaris ....(E&E)	R	..	31·0	22·5	13·0	55·0	39·0	33·0	25·5	15·0	1. 8. 54·71	(+4·99)	11·65	22·63	10·98	9·75	1. 9. 21·34	— 3·64
	17	α Arietis	R	7·2	10·3	13·4	16·4	22·2	28·3	31·3	34·3	37·2	1. 59. 22·24		22·55	32·20	9·65	[−1·25]	....	
June 7	18	⊙ 1 L.....	JC	35·2	38·1	41·3	44·3	50·3	56·2	59·1	2·4	5·4	5. 1. 50·21					9·71		
	19	⊙ 2 L.....	JC	52·4	55·6	58·6	1·4	7·5	13·5	16·5	19·5	22·5	5. 4. 7·45		59·14			[−1·15]	5. 3. 8·61	
	20	η Virginis.....	JC	36·2	39·2	..	44·5	49·8	55·6	58·6	..	..	12. 12. 50·04		50·21	59·33	9·12		....	
	21	δ Virginis.....	JC	24·6	27·4	30·3	33·0	38·4	44·0	46·9	49·6	52·4	12. 48. 38·46		38·65	47·83	9·18		....	
	22	Polaris S.P. (E&E)	JC	12·5	1·5	53·0	44·5	31·0	..	..	..	..	13. 9. 31·29		14·54	23·02	8·48		1. 9. 23·62	— 4·03
	23	ψ Boötis	C	15·0	18·3	21·4	24·6	30·7	36·9	40·0	43·1	46·2	14. 58. 30·64		30·99	39·98	8·99	9·69†	....	
	24	β Libræ	C	21·8	24·7	27·5	30·4	35·8	..	..	..	..	15. 9. 35·83		35·94	44·89	8·95		....	
	25	Jupiter 1 L	JC	50·0	..	56·1	..	4·5	..	13·3	..	18·8	15. 10. 4·50		6·05			9·71	15. 10. 15·03	
	26	Jupiter 2 L	JC	53·1	..	58·9	..	7·5	..	16·1	..	22·0	15. 10. 7·48							
	27	α Serpentis	JC	14·4	17·2	20·0	22·8	28·2	34·0	36·8	39·6	42·3	15. 37. 28·31		28·52	37·45	8·93		....	
	28	48 Libræ	JC	..	..	21·0	24·2	29·4	..	37·9	..	..	15. 50. 29·49		29·56				15. 50. 38·51	— 3·64
	29	ρ Coronæ	JC	27·6	..	34·5	37·6	44·4	50·9	54·4	..	1·0	15. 55. 44·29		44·71				15. 55. 53·66	— 2·95
	30	γ Herculis	JC	34·6	37·6	40·4	43·4	49·3	55·4	58·2	1·0	3·9	16. 15. 49·26		49·55	58·44	8·89		....	
	31	23 Herculis	JC	..	..	..	..	..	43·6	46·8	50·0	53·4	16. 17. 36·89		37·29				16. 17. 46·22	— 3·00
	32	φ Ophiuchi.....	JC	..	4·8	7·7	10·6	16·3	21·8	24·9	27·6	..	16. 23. 16·18		16·24				16. 23. 25·17	— 3·77
June 8	33	f Boötis	L	47·9	51·0	54·0	56·9	2·7	8·6	11·5	14·4	17·4	14. 20. 2·66		2·95	10·65	7·70	8·38	14. 20. 10·64	— 2·81
	34	ρ Boötis	L	36·7	40·0	43·3	46·4	52·6	59·3	2·5	5·7	9·0	14. 25. 52·78		53·17	0·84	7·67	[−1·16]	14. 26. 0·85	— 2·72
	35	ϵ Boötis	L	42·0	45·2	48·4	51·4	57·6	3·9	7·0	10·2	13·3	14. 38. 57·61		57·97	5·65	7·68		14. 39. 5·64	— 2·78
	36	α^2 Libræ.....	E	2·5	5·5	8·4	11·0	17·0	22·7	25·6	28·4	31·4	14. 43. 16·89		16·96	25·00	8·04	8·79†	....	
	37	ξ^2 Libræ	E	4·6	7·6	10·4	13·1	18·6	24·4	27·3	30·0	32·8	14. 49. 18·70		18·80	26·91	8·11		....	
	38	Groombridge 2192	L	13·8	20·8	27·7	34·6	48·2	2·1	9·1	16·0	22·9	15. 1. 48·30		49·37			8·38	15. 1. 57·02	— 2·70
	39	Jupiter 1 L	L	27·2	..	33·0	..	41·5	47·3	..	53·1	..	15. 9. 41·53							
	40	Jupiter 2 L	L	30·4	..	36·1	..	44·6	50·5	..	56·3	..	15. 9. 44·69		43·17				15. 9. 50·82	
	41	γ Herculis	L	35·9	38·8	41·8	44·8	50·5	56·5	59·4	2·3	5·3	16. 15. 50·54		50·83	58·44	7·61		16. 15. 58·42	— 3·12
	42	λ Ophiuchi	L	45·2	48·0	50·7	53·5	58·8	4·5	7·4	10·1	12·9	16. 23. 58·96		59·14	6·74	7·60		16. 24. 6·73	— 3·38
	43	ζ Ophiuchi	L	22·3	25·2	28·0	30·8	36·3	42·0	44·7	47·5	50·4	16. 29. 36·30		36·40	43·96	7·56		16. 29. 43·98	— 3·63
June 9	44	⊙ 2 L.....	C	11·1	14·1	17·2	20·3	26·0	..	..	..	..	5. 12. 26·13	[−1·12]	26·48			7·33†	5. 11. 24·85	
																		[−1·01]		

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Correction for passage of Semidiameter, No. 44, $-68^s{\cdot}74$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
June 5 to 7. The azimuthal error by four consecutive transits of Polaris.
June 9 to 12. The azimuthal error used is that determined by Polaris and Polaris S.P., on June 9 and 10, allowing $-0^s{\cdot}92$ for clock-rate and change of R.A.

11, 12. Very tremulous; a bad image.
23. Cloudy.
16. Very tremulous at times.
28. Very faint; cloudy.
20, 44. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
June 9	1	*m* Virginis	JC	10·7	13·5	16·4	19·0	24·6	30·3	32·8	35·8	38·6	13. 34. 24·58	+0·99	24·76	31·55	6·79	7·33†	....	
	2	*τ* Boötis	JC	29·0	32·0	34·9	37·7	43·6	49·5	52·4	55·2	58·1	13. 40. 43·55	(+4·99)	43·88	50·62	6·74	[−1·01]	....	
	3	Polaris ...(E & E)	E	43·5	36·0	29·5	21·0	0·5	..	..	..	..	1. 9. 1·38	[−1·12]	18·27	24·88	6·61	6·62	1. 9. 24·84	− 5·89
														(+5·76)				[−0·97]		
June 10	4	☉ 1 L.	E	..	..	..	..	..	23·8	26·7	29·7	32·9	5. 14. 17·66		} 26·84					
	5	☉ 2 L.	E	20·2	23·3	26·2	29·2	35·3	41·4	44·4	47·1	50·4	5. 16. 35·23						5. 15. 33·25	
	6	Regulus	E	48·6	51·4	54·4	57·2	2·7	..	..	..	..	10. 1. 2·75		3·08	9·22	6·14		10. 1. 9·30	− 1·63
	7	☽ 1 L.	E	..	..	..	16·6	22·4	28·0	30·8	33·9	36·6	10. 1. 22·31		22·60				10. 2. 30·30	
	8	Polaris S.P. (E&E)	E	..	..	..	..	37·0	18·0	8·5	58·5	53·0	13. 9. 35·72		19·20	25·25	6·05		1. 9. 25·29	− 6·26
	9	*ζ* Virginis	E	28·5	31·4	34·1	36·8	42·4	48·0	50·8	53·5	56·4	13. 27. 42·39		42·64	48·71	6·07		13. 27. 48·72	− 2·80
	10	*m* Virginis	R	11·4	14·4	17·2	20·0	25·5	31·1	34·0	36·6	39·5	13. 34. 25·47		25·68	31·54	5·86	6·44†	....	
	11	*τ* Boötis	R	29·8	32·7	35·6	38·5	44·4	50·3	53·1	56·1	58·8	13. 40. 44·32		44·69	50·61	5·92		....	
	12	*θ* Centauri	E	..	..	..	..	..	45·9	49·3	52·7	56·0	13. 58. 38·98		38·99			6·62	13. 58. 45·05	− 3·75
	13	Groombridge 2091	E	..	..	3·4	11·7	27·6	44·3	52·4	..	..	14. 9. 27·72		29·06				14. 9. 35·11	− 2·34
	14	*f* Boötis	E	49·5	52·4	55·4	58·4	4·3	10·1	13·1	16·0	18·9	14. 20. 4·18		4·56	10·64	6·08		14. 20. 10·60	− 2·80
	15	5 Ursæ Minoris	E	..	..	11·0	23·0	45·5	9·4	21·3	..	..	14. 27. 45·81		47·72				14. 27. 53·75	− 2·48
	16	Piazzi XIV. 150	E	2·0	5·4	8·7	12·2	18·6	25·7	28·8	32·3	35·7	14. 35. 18·76		18·78				14. 35. 24·81	− 3·98
	17	*ε* Boötis	E	43·6	46·7	49·9	53·0	59·4	5·6	8·6	11·7	14·9	14. 38. 59·21		59·66	5·64	5·98		14. 39. 5·69	− 2·77
	18	6 Ursæ Minoris	E	..	..	37·0	46·4	4·4	22·8	32·1	..	..	14. 45. 4·36		5·89				14. 45. 11·91	− 2·57
	19	*β* Ursæ Minoris	E	..	..	32·0	42·2	3·0	24·0	34·9	..	..	14. 51. 3·02		4·75				14. 51. 10·77	− 2·66
	20	Groombridge 2192	E	..	..	29·0	35·9	49·6	3·5	10·6	..	..	15. 1. 49·59		50·75				15. 1. 56·76	− 2·65
	21	Jupiter 1 L.	E	42·3	..	47·8	..	56·3	..	5·1	..	10·8	15. 8. 56·42		} 58·17					
	22	Jupiter 2 L.	E	45·2	..	51·0	..	59·6	..	8·3	..	14·2	15. 8. 59·62						15. 9. 4·18	
	23	Juno	E	7·6	10·5	..	15·9	21·4	26·7	..	32·6	35·3	16. 58. 21·39		21·62				16. 58. 27·55	
	24	*η* Ophiuchi	E	18·0	21·0	23·7	26·8	32·5	38·2	41·1	44·1	47·0	17. 2. 32·44		32·60	38·61	6·01		17. 2. 38·53	
	25	Aldebaran	JC	48·3	51·2	54·1	57·0	2·7	8·4	11·3	14·2	17·3	4. 28. 2·67		3·03	8·23	5·20	5·43	....	− 3·80
	26	Venus 2 L.	JC	49·7	52·6	55·6	58·7	4·5	10·7	13·6	16·6	19·6	4. 36. 4·57		4·96			[−0·86]	4. 36. 9·85	
	27	Rigel	JC	41·4	44·4	47·0	49·7	55·3	1·0	3·7	6·6	9·3	5. 7. 55·33		55·54	0·75	5·21		....	
June 11	28	☉ 1 L.	JC	12·5	15·6	18·6	21·6	27·5	33·8	36·6	39·6	42·8	5. 18. 27·57		} 36·69					
	29	☉ 2 L.	JC	30·1	33·0	35·9	39·0	45·2	51·0	54·1	57·2	0·1	5. 20. 45·02						5. 19. 41·93	
	30	γ^1 Leonis	JC	..	..	..	..	..	54·0	8·6	..	..	10. 12. 24·38		24·77	29·90	5·13		....	
	31	☽ 1 L.	JC	9·8	12·9	15·6	18·5	24·0	29·8	32·5	35·4	38·2	10. 47. 24·03		24·29				10. 48. 30·55	
	32	*δ* Leonis	JC	34·0	37·0	40·0	42·9	48·8	54·8	57·7	0·6	3·6	11. 6. 48·77		49·16	54·22	5·06		....	
	33	*τ* Virginis	C	27·4	30·3	33·1	35·8	41·3	46·8	49·7	52·5	55·2	13. 54. 41·30		41·57	46·52	4·95	5·45†	....	
June 12	34	*δ* Leonis	P	34·6	37·8	40·5	43·7	49·4	55·4	58·5	1·5	4·3	11. 6. 49·47		49·86	54·20	4·34		....	
	35	*α* Coronæ	E	..	..	..	..	..	25·2	40·6	..	..	} 15. 28. 54·01		54·45	58·78	4·33	4·84†	....	
	36	*α* Coronæ	E	38·5	41·6	44·7	47·8	54·1	..	..	..	..						[−0·79]		
June 13	37	☽ 1 L.	C	3·5	6·4	9·2	12·0	17·6	23·5	26·4	29·2	31·9	12. 20. 17·69	+0·53	17·76			3·29	12. 21. 24·37	
	38	*β* Corvi	C	58·5	1·6	4·5	7·5	13·4	19·5	22·5	25·5	28·4	12. 27. 13·44	(+5·32)	13·40	17·58	4·18	[1·80]	12. 27. 17·62	− 2·72
	39	*ρ* Virginis	C	44·0	46·9	49·7	52·5	..	3·8	6·5	9·4	12·2	12. 34. 58·08	[−2·81]	58·28				12. 35. 2·51	− 2·39
	40	35 Virginis	C	..	..	..	..	54·1	59·6	2·5	5·3	7·9	12. 40. 54·07		54·22	58·41	4·19		12. 40. 58·46	− 2·49
	41	12 C.Ven.(1st Star)	C	18·1	21·7	25·4	29·0	35·9	43·1	46·6	50·2	53·8	12. 49. 35·92		36·37				12. 49. 40·62	− 2·17
	42	12 C.Ven.(2d Star)	C	19·4	23·0	26·6	30·4	37·2	44·4	47·9	51·5	55·0	12. 49. 37·20		37·65				12. 49. 41·90	− 2·17
	43	*ε* Virginis	JC	8·3	11·1	14·0	16·8	22·4	28·1	30·9	33·7	36·5	12. 55. 22·37		22·57	26·87	4·30	3·34†	....	
	44	*θ* Virginis	JC	39·0	41·9	44·5	47·4	53·0	58·6	1·4	4·1	6·9	13. 2. 52·93		53·01	57·33	4·32		....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Corrections for passage of Semidiameter, Nos. 7, 26, 31, and 37, $+61^s{\cdot}47$: $-0^s{\cdot}38$: $+61^s{\cdot}21$: and $+62^s{\cdot}40$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
June 13^d $1\frac{1}{2}^h$. The pendulum of the transit-clock was shortened by two divisions of the screw.
June 13. The azimuthal error by tabular places of Polaris S.P. and Spica, allowing $0^s{\cdot}01$ for clock-rate.

7, 31. Correction to R.A. on true meridian $+0^s{\cdot}01$. 30. Cloudy. Observed over wires Y, Z only. 31. Very faint; cloudy. 35. Observed over wires Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
June 13	1	Polaris S.P. (E&E)	C	..	..	2·5	55·0	40·0	22·0	13·0	..	..	13. 9. 40·65	+0·53	23·34	27·62	4·28	3·29	....	
	2	Spica	C	46·4	49·2	52·1	54·8	0·4	6·2	8·9	11·7	14·5	13. 18. 0·42	(+5·32)	0·46	4·75	4·29	[1·80]	13. 18. 4·75	— 2·88
	3	ξ^2 Libræ	C	..	11·4	14·0	16·9	22·5	28·2	31·0	33·7	..	14. 49. 22·47	[−2·81]	22·51	26·90	4·39		14. 49. 26·91	— 3·37
	4	β Boötis	C	28·9	32·5	36·3	40·0	47·2	54·6	58·2	1·8	5·5	14. 56. 47·16		47·63				14. 56. 52·04	— 2·69
	5	Jupiter 1 L.	C	37·4	..	43·2	..	51·7	..	0·5	..	6·2	15. 7. 51·76		} 53·38				15. 7. 57·80	
	6	Jupiter 2 L.	C	40·6	..	46·4	..	55·0	..	3·8	..	9·4	15. 7. 55·00							
	7	β Libræ	C	26·5	29·3	32·0	34·8	40·4	46·1	48·7	51·6	54·4	15. 9. 40·38		40·44	44·88	4·44		15. 9. 44·86	— 3·40
	8	Juno	C	37·0	39·6	42·5	45·2	..	..	59·0	1·8	4·4	16. 55. 50·67		50·77				16. 55. 55·33	
	9	η Ophiuchi	C	19·8	22·6	25·4	28·4	33·9	39·8	42·6	45·4	48·4	17. 2. 33·99		34·00	38·64	4·64		17. 2. 38·57	— 3·83
June 15	10	⊙ 1 L.	JC	46·4	49·4	52·5	55·5	1·4	7·7	10·5	13·8	16·7	5. 35. 1·50	(+6·18)	} 10·71			6·85		
	11	⊙ 2 L.	JC	4·2	7·3	10·2	13·3	19·2	25·5	28·3	31·2	34·4	5. 37. 19·23	[−3·04]				[1·80]	5. 36. 17·98	
	12	Sirius	JC	47·9	50·7	53·6	56·4	2·2	8·1	11·1	14·0	16·6	6. 39. 2·24		2·25				6. 39. 9·60	— 0·53
	13	Arcturus	JC	7·3	10·3	13·3	16·2	22·0	27·9	30·9	33·9	36·7	14. 9. 22·01		22·32	30·23	7·91		....	
	14	Polaris ...(E & E)	C	..	..	..	21·0	1·5	48·0	39·0	30·0	22·0	1. 9. 1·42		21·10	29·90	8·80		....	
June 16	15	⊙ 1 L.	C	53·7	57·0	..	..	..	15·0	..	21·0	24·2	5. 39. 8·92					8·57		
	16	⊙ 2 L	C	11·6	14·9	17·7	20·8	26·6	33·0	36·0	39·0	41·9	5. 41. 26·78		} 18·19			[1·76]	5. 40. 27·17	
	17	λ Virginis	C	..	27·5	30·4	33·2	38·8	44·5	47·3	50·1	..	14. 11. 38·77		38·81				14. 11. 48·42	— 3·21
	18	f Boötis	C	46·0	49·0	52·0	54·8	0·7	6·6	9·5	12·4	15·4	14. 20. 0·67		0·98	10·59	9·61		14. 20. 10·60	— 2·75
	19	ε Boötis	E	39·7	42·9	46·0	49·2	55·4	1·5	4·7	7·8	11·0	14. 38. 55·31		55·69	5·59	9·90	8·80†	....	
	20	α^2 Libræ	C	0·9	3·9	6·7	9·5	15·2	21·0	24·0	26·8	29·2	14. 43. 15·19		15·21	24·97	9·76	8·57	14. 43. 24·85	— 3·43
	21	Jupiter 1 L.	C	31·1	..	..	..	45·5	..	54·2	..	0·0	15. 6. 45·51		} 47·10				15. 6. 56·78	
	22	Jupiter 2 L.	C	34·3	..	40·1	..	48·6	..	57·4	..	3·2	15. 6. 48·68							
	23	o^2 Libræ	E	6·2	9·1	12·0	15·0	20·6	26·3	29·2	32·0	34·8	15. 15. 20·53		20·56	30·44	9·88	8·80†	....	
	24	ζ^1 Libræ	C	15·0	17·9	20·7	23·6	29·4	35·1	38·1	41·0	43·8	15. 20. 29·35		29·36	39·08	9·72	8·57	15. 20. 39·05	— 3·62
	25	γ Libræ	C	35·0	37·9	40·7	43·5	49·2	55·0	57·8	0·6	3·5	15. 27. 49·19		49·22				15. 27. 58·92	— 3·60
	26	Juno	C	..	..	..	10·4	15·8	21·3	24·2	27·0	30·0	16. 53. 15·86		15·97				16. 53. 25·77	
	27	θ Ophiuchi	C	18·7	21·8	24·8	27·9	34·0	40·1	43·1	46·2	49·1	17. 13. 33·92		33·85	43·69	9·84		17. 13. 43·68	— 4·13
	28	Groombridge 2437	C	28·2	37·2	46·2	54·8	12·5	..	..	..	..	17. 18. 12·61		14·21				17. 18. 24·05	— 3·43
	29	Groombridge 2444	C	22·9	26·6	30·4	34·0	41·4	48·7	52·4	56·1	59·7	17. 28. 41·30		41·85				17. 28. 51·70	— 3·11
	30	Bradley 2219	C	14·0	17·0	20·0	23·1	29·0	35·0	38·0	40·9	43·8	17. 30. 28·92		28·88				17. 30. 38·73	— 4·04
	31	β Ophiuchi	C	24·8	27·8	30·5	33·2	38·7	44·4	47·2	50·0	52·6	17. 36. 38·75		38·93	48·72	9·79		17. 36. 48·79	— 3·46
	32	μ Herculis	C	..	..	51·9	55·0	1·3	7·5	10·7	13·9	16·9	17. 41. 1·23		1·61	11·41	9·80		17. 41. 11·47	— 3·18
June 17	33	⊙ 1 L.	R	1·5	4·6	7·5	10·6	16·6	22·8	25·6	28·6	31·7	5. 43. 16·56	(+5·46)	} 25·73			10·33	5. 44. 36·48	
	34	⊙ 2 L.	R	19·1	22·4	25·2	28·3	34·4	40·4	43·4	46·5	49·5	5. 45. 34·31							
June 18	35	⊙ 1 L.	E	9·2	12·4	15·5	18·4	24·5	30·5	33·4	36·4	39·4	5. 47. 24·36					12·37		
	36	⊙ 2 L.	E	27·0	30·0	33·2	36·1	42·1	48·3	51·4	54·3	57·1	5. 49. 42·12		} 33·53			[1·77]	5. 48. 46·33	
	37	ξ^2 Libræ	E	59·3	2·3	4·9	7·8	13·4	19·0	22·0	24·8	27·7	14. 49. 13·42		13·45	26·88	13·43		....	
	38	ψ Boötis	E	10·5	13·6	16·8	20·0	26·0	32·4	35·5	38·7	41·7	14. 58. 26·08		26·41	39·92	13·51		....	
June 19	39	ε Boötis	R	..	..	41·0	44·1	50·2	56·5	59·6	2·6	5·8	14. 38. 50·19		50·52	5·57	15·05	14·02†	....	
	40	α^2 Libræ	R	..	..	1·3	4·2	9·7	15·6	18·6	21·4	24·3	14. 43. 9·85		9·85	24·96	15·11	[1·73]	....	
	41	Mercury 2 L.	C	..	..	49·4	52·3	58·0	4·0	6·8	9·9	12·8	4. 21. 58·19	+1·30	58·68			15·55	4. 22. 14·27	
	42	Aldebaran	C	37·7	40·5	43·4	46·5	52·0	57·8	0·7	3·6	6·5	4. 27. 52·03	(+6·41) [+0·41]	52·51	8·39	15·88	[1·71]	4. 28. 8·38	— 1·22

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Correction for passage of Semidiameter, No. 41, $- 0^s \cdot 27$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

June 15 and 16. The azimuthal error by tabular places of Polaris and α Libræ, allowing $0^s \cdot 96$ for clock-rate.

June 19 to 23. The azimuthal error used is the mean of three determinations, viz. by tabular places of Polaris S.P. and Spica on June 20, 21 and 23, allowing $0^s \cdot 01$ for clock-rate in each case. The separate results are, + $0'' \cdot 63$, + $0'' \cdot 23$, and + $0'' \cdot 36$.

13. Faint; cloudy.

33, 34, 39, 40. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
June 20	1	⊙ 1 L. ...(E & E)	C	..	..	..	..	54·6	9·6	24·6	..	..	5. 55. 39·35	+ 1·30	48·84			15·55		
	2	⊙ 2 L. ...(E & E)	C	11·7	27·1	42·3	57·3	12·4	27·5	42·7	..	..	5. 57. 57·29	(+6·41)				[1·71]	5. 57. 4·81	
	3	Castor	C	23·1	26·7	29·9	33·1	39·7	46·2	49·5	52·6	55·9	7. 25. 39·58	[+0·41]	40·17	56·28	16·11		7. 25. 56·25	— 1·18
	4	Procyon	C	..	44·4	47·1	50·0	55·5	1·0	3·8	6·6	..	7. 31. 55·43		55·84	11·92	16·08		7. 32. 11·93	— 1·00
	5	Pollux	C	28·4	31·5	34·6	37·8	44·1	50·4	53·4	56·5	59·5	7. 36. 43·97		44·53	0·55	16·02		7. 37. 0·62	— 1·15
	6	Polaris S.P.(E&E)	C	..	4·0	55·0	48·0	33·0	14·5	6·0	..	..	13. 9. 33·44		17·38	34·20	16·82		....	
	7	Spica	C	33·9	36·7	39·5	42·4	47·9	53·6	56·4	59·2	2·0	13. 17. 47·90		48·22	4·69	16·47		13. 18. 4·72	— 2·82
	8	ρ Boötis	C	27·5	30·7	33·8	37·2	43·5	50·1	53·4	56·4	59·7	14. 25. 43·53		44·11	0·73	16·62		14. 26. 0·69	— 2·60
	9	Piazzi XIV. 150 .	C	51·4	54·7	58·0	1·3	8·0	15·0	18·4	21·7	25·2	14. 35. 8·13		8·30				14. 35. 24·89	— 3·92
	10	α^2 Libræ	C	53·8	56·7	59·6	2·4	..	14·0	16·8	19·6	22·4	14. 43. 8·11		8·41	24·95	16·54		14. 43. 25·01	— 3·41
	11	Gr.7-yr.C.No.1182	C	47·6	53·9	0·0	6·0	17·8	..	..	..	..	14. 46. 17·79		18·90				14. 46. 35·50	— 2·29
	12	β Boötis	C	16·4	20·1	23·7	27·4	34·6	42·1	45·7	49·5	53·1	14. 56. 34·67		35·35				14. 56. 51·97	— 2·61
	13	ψ Boötis.....	C	7·1	10·4	13·4	16·6	..	29·0	32·1	35·3	..	14. 58. 22·72		23·28	39·90	16·62		14. 58. 39·90	— 2·77
	14	Jupiter 1 L	C	10·7	..	16·6	..	25·1	..	34·0	..	39·6	15. 5. 25·16		27·05				15. 5. 43·68	
	15	Jupiter 2 L	C	14·0	..	19·8	..	28·4	..	37·1	..	42·7	15. 5. 28·36							
	16	α Lyræ.....	C	48·0	51·6	55·2	58·7	5·6	12·8	16·4	19·9	23·3	18. 32. 5·66		6·32	23·28	16·96		18. 32. 23·19	— 3·24
	17	2 Aquilæ	C	22·2	25·1	27·8	30·5	36·2	42·0	44·7	47·4	50·2	18. 34. 36·18		36·50				18. 34. 53·37	— 3·73
	18	ϵ Aquilæ	C	58·7	1·6	4·5	7·4	13·0	18·8	21·5	24·5	27·3	18. 53. 12·99		13·46	30·35	16·89		18. 53. 30·36	— 3·37
	19	☽ 2 L.	C	6·4	9·5	12·4	15·4	21·5	27·6	30·6	33·8	36·6	19. 2. 21·49		21·76				19. 1. 26·67	
June 21	20	⊙ 2 L.....	D	50·1	53·0	56·1	59·0	5·0	11·2	14·2	17·2	20·3	6. 2. 5·07		5·59			17·43	6. 1. 14·54	
	21	Polaris S.P.(E&E)	D	..	..	54·0	48·0	34·0	..	5·0	..	51·5	13. 9. 33·05		16·99	35·04	18·05	[1·75]	....	
	22	Spica	D	32·0	34·8	37·7	40·5	46·0	51·6	54·5	57·3	0·1	13. 17. 45·99		46·31	4·68	18·37		13. 18. 4·71	— 2·81
	23	τ Virginis	D	13·9	16·6	19·4	22·2	27·6	33·2	35·9	38·7	41·5	13. 54. 27·61		28·00	46·44	18·44		13. 54. 46·44	— 2·83
	24	Arcturus	D	56·5	59·4	2·5	5·5	11·3	17·1	20·0	23·0	26·0	14. 9. 11·21		11·71	30·18	18·47		14. 9. 30·17	— 2·62
	25	26 Boötis	D	50·3	53·4	56·6	59·4	5·4	11·4	14·4	17·4	20·4	14. 26. 5·36		5·87				14. 26. 24·35	— 2·69
	26	4 Libræ	D	52·0	55·0	58·1	1·2	7·2	13·3	16·4	19·4	22·4	14. 35. 7·17		7·42				14. 35. 25·91	— 3·59
	27	α^2 Libræ.....	D	51·9	54·7	57·6	0·5	6·2	12·1	14·8	17·7	20·6	14. 43. 6·18		6·48	24·95	18·47		14. 43. 24·98	— 3·41
	28	11 Libræ	D	..	..	..	36·8	42·3	48·0	50·6	53·5	56·2	14. 43. 42·32		42·69				14. 44. 1·19	— 3·14
	29	16 Libræ	D	35·5	38·4	41·2	44·0	49·4	55·0	57·8	0·5	3·3	14. 49. 49·40		49·76				14. 50. 8·27	— 3·21
	30	Jupiter 1 L.	D	52·4	..	58·2	..	6·6	..	15·4	..	21·1	15. 5. 6·70		8·56				15. 5. 27·09	
	31	Jupiter 2 L.	D	55·5	..	1·3	..	9·8	..	18·5	..	24·3	15. 5. 9·84							
	32	τ^2 Serpentis.....	D	..	..	..	32·0	37·7	43·5	46·4	49·3	52·2	15. 25. 37·70		38·18				15. 25. 56·73	— 3·02
	33	α Coronæ	D	24·2	27·4	30·4	33·4	39·5	45·8	49·0	52·0	55·1	15. 28. 39·59		40·14	58·74	18·60		15. 28. 58·70	— 2·90
	34	θ Ophiuchi.....	JC	9·5	12·8	16·0	19·0	24·9	31·0	34·2	37·2	40·3	17. 13. 24·94		25·18	43·73	18·55	17·27†	....	
	35	μ^1 Sagittarii	JC	..	..	..	..	..	52·6	7·5	..	..	18. 5. 23·00		23·26	41·83	18·57		....	
June 23	36	ϵ Virginis.....	JC	50·4	53·1	56·0	58·8	4·4	10·1	12·9	15·9	18·7	12. 55. 4·43	(+7·26)	4·92	26·77	21·85		....	
	37	Polaris S.P. (E&E)	JC	..	..	..	46·5	33·0	13·5	5·0	..	..	13. 9. 32·68		14·87	36·60	21·73		....	
	38	Spica	JC	..	..	..	36·9	42·5	48·2	..	..	..	13. 17. 42·49		42·84	4·66	21·82		....	
	39	κ Ophiuchi.....	D	..	..	..	49·2	54·5	0·3	3·1	5·9	8·6	16. 50. 54·61		55·09	17·24	22·15	20·96†	....	
	40	ϵ Herculis	D	29·4	..	..	..	..	52·1	55·4	58·6	1·7	16. 54. 45·57		46·22	8·38	22·16	[1·70]	....	
	41	β Aquarii.....	R	50·3	53·0	55·9	58·6	4·3	9·8	12·6	15·4	18·2	21. 24. 4·18		4·55	26·98	22·43	20·95	21. 24. 27·02	— 3·18
	42	ξ Aquarii.....	R	56·8	59·8	2·5	5·3	10·7	16·5	19·4	22·1	25·0	21. 30. 10·85		11·21	33·72	22·51		21. 30. 33·69	— 3·17
	43	26 Aquarii.....	R	40·3	43·1	46·0	48·5	54·1	59·4	2·4	5·3	8·0	21. 34. 54·07		54·49				21. 35. 16·97	— 3·01
	44	c^2 Capricorni	R	26·9	30·0	32·8	35·5	41·0	46·8	49·6	52·4	55·2	21. 38. 41·09		41·44				21. 39. 3·92	— 3·13
	45	13 Pegasi.....	R	6·0	8·8	11·8	14·7	20·4	26·4	29·1	32·0	34·9	21. 43. 20·41		20·94				21. 43. 43·43	— 3·05
	46	☽ 2 L.....	R	..	16·7	19·6	22·5	28·0	33·8	36·8	39·7	..	22. 3. 28·10		28·47				22. 2. 42·47	
	47	θ Aquarii.....	R	5·5	8·2	11·0	13·9	19·4	25·0	27·9	30·6	33·3	22. 9. 19·37		19·73	42·22	22·49		22. 9. 42·24	— 2·95

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 19, 20, and 46, $-72^s·01$: $-68^s·92$: and $-68^s·52$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

20, 38. Cloudy. 19, 46. Correction to R.A. on true Meridian, + $0^s·01$. 35. Observed over wires Y, Z. 35, 37, 39, 40. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	//	s	s	s	s	h m s	s
June 23	1	ζ^1 Aquarii	R	15·6	18·5	21·3	..	29·5	..	..	..	..	22. 21. 29·49	+1·30	29·90			20·95	22. 21. 52·43	— 2·88
	2	ζ^2 Aquarii	R	..	..	..	..	..	35·2	38·1	40·7	43·5	22. 21. 29·63	(+7·26)	30·04			[1·70]	22. 21. 52·57	— 2·88
	3	η Aquarii	R	48·0	50·9	53·6	56·4	2·0	7·5	10·2	13·0	15·6	22. 28. 1·86	[+0·41]	2·27	24·82	22·55		22. 28. 24·81	— 2·84
June 26	4	Spica ....(E & E)	C	55·4	9·3	23·4	37·4	51·5	5·5	19·4	..	..	13. 17. 37·52	+0·64	37·70	4·63	26·93		....	
	5	β Aquilæ	R	59·8	2·6	5·4	8·2	13·6	19·4	22·1	25·0	27·6	19. 48. 13·70	(+6·66)	13·99	41·41	27·42	25·98†	....	
	6	c Sagittarii	R	38·4	41·6	44·6	47·6	54·0	0·4	3·5	6·5	9·6	19. 53. 53·97	[−1·37]	54·01	21·49	27·48	[1·77]	....	
	7	☽ 2 L.	JC	25·4	28·4	31·1	34·0	39·6	45·5	48·4	51·3	54·2	0. 49. 39·71		40·03		27·76		0. 49. 0·84	
	8	β Andromedæ ...	JC	24·8	28·3	31·7	35·0	41·6	48·6	51·9	55·2	58·6	1. 1. 41·69		42·24	10·04	27·80	[1·69]	....	
	9	Polaris...(E & E)	JC	35·5	..	19·0	14·0	53·5	.	31·5	..	13·0	1. 8. 53·35		11·64	39·51	27·87		....	
	10	η Piscium.....	JC	32·2	35·0	38·0	40·8	46·4	52·2	55·1	57·9	0·8	1. 23. 46·44		46·79	14·68	27·89		....	
June 27	11	☉ 2 L.	JC	..	..	41·5	44·4	50·4	56·3	59·4	2·3	5·3	6. 26. 50·29		50·72				6. 26. 10·10	
	12	λ Ophiuchi.....	JC	..	..	..	..	37·6	43·1	46·1	48·7	51·6	16. 23. 37·48		37·75	6·79	29·04		16. 24. 6·67	— 3·43
	13	κ Ophiuchi.....	JC	..	..	..	42·5	48·1	53·9	56·6	59·4	2·1	16. 50. 48·11		48·43	17·25	28·82		16. 51. 17·37	— 3·36
	14	ϵ Herculis	JC	..	..	..	..	38·8	45·4	48·6	51·9	55·0	16. 54. 38·84		39·34	8·38	29·04		16. 55. 8·29	— 3·11
	15	η Ophiuchi.....	JC	55·4	58·3	1·2	4·0	9·7	15·4	18·4	21·2	24·2	17. 2. 9·70		9·83	38·73	28·90		17. 2. 38·79	— 3·92
	16	ϵ Pegasi	D	50·0	52·7	55·5	58·4	4·0	9·5	12·4	15·2	17·8	21. 37. 3·90		4·22	33·57	29·35	27·75†	....	
	17	δ Capricorni.....	D	51·4	54·4	57·3	0·0	5·8	11·5	14·4	17·4	20·3	21. 39. 5·78		5·90	35·09	29·19		....	
June 30	18	☉ 1 L.	C	39·0	42·1	45·1	48·2	54·3	0·4	3·4	6·4	9·3	6. 36. 54·20	(+6·25)	3·30			32·36	6. 38. 36·07	
	19	☉ 2 L.	C	56·6	59·6	2·6	5·6	11·7	17·7	20·7	23·7	26·7	6. 39. 11·61					[1·48]		
	20	α Herculis	C	42·2	45·0	47·8	50·6	56·4	2·1	4·8	8·0	10·6	17. 7. 56·34		56·67	30·19	33·52		....	
	21	σ Ophiuchi.....	C	2·1	4·8	7·7	10·4	..	21·5	24·4	26·9	29·7	17. 19. 15·89		16·15	49·57	33·42		....	
	22	78 Herculis	C	42·9	46·0	49·1	52·3	58·6	4·8	8·0	11·2	14·3	17. 25. 58·52		58·97				17. 26. 32·40	— 3·23
	23	y Herculis	C	..	16·8	21·0	25·0	..	..	46·0	..	..	17. 32. 33·44		34·13				17. 33. 7·57	— 3·11
	24	β Ophiuchi.....	C	..	4·3	7·0	9·9	15·1	20·7	23·5	26·4	..	17. 36. 15·21		15·47	48·82	33·35		....	
July 1	25	☉ 1 L.	S	45·6	48·7	52·0	..	0·9	..	10·0	12·8	16·0	6. 41. 0·81	(+6·75)	9·96			34·10	6. 42. 44·46	
	26	☉ 2 L.	S	3·2	6·2	9·2	12·3	18·3	24·3	27·3	30·3	33·4	6. 43. 18·22					[1·45]		
	27	ϵ Serpentis.....	S	16·3	19·1	21·9	24·7	30·2	35·8	38·5	41·4	44·1	15. 43. 30·18		30·46	5·53	35·07		....	
	28	γ Herculis	S	8·2	11·4	14·3	17·2	22·9	28·8	31·8	34·6	37·5	16. 15. 22·92		23·32	58·43	35·11		....	
	29	Bradley 2208....	S	54·6	58·4	1·6	..	12·0	..	22·4	25·9	29·3	17. 19. 11·97		12·54				17. 19. 47·69	— 3·12
	30	78 Herculis	S	..	44·4	47·5	50·5	56·6	3·0	6·4	9·4	..	17. 25. 56·77		57·26				17. 26. 32·41	— 3·22
	31	72 Ophiuchi.....	S	8·3	11·0	13·8	..	22·2	..	30·6	33·4	36·1	18. 0. 22·16		22·48	57·64	35·16		....	
July 3	32	Rigel	P	8·3	11·0	14·0	16·8	22·2	27·9	30·6	33·3	36·4	5. 7. 22·23	+1·12	22·54	1·11	38·57	38·37	5. 8. 1·22	— 0·96
	33	Venus 2 L.	P	33·0	36·3	39·1	42·4	48·2	54·5	57·4	0·8	3·5	6. 37. 48·30	(+7·12)	48·83			[1·46]	6. 38. 27·22	
														[−0·19]						
July 4	34	☉ 1 L.	P	4·4	7·6	10·6	13·7	19·6	25·6	28·5	31·6	34·6	6. 53. 19·52		28·63				6. 55. 7·42	
	35	☉ 2 L.	P	21·4	24·6	28·0	30·7	36·7	42·8	45·9	48·7	51·7	6. 55. 36·67							
	36	κ Ophiuchi.....	P	23·2	26·1	29·0	31·8	37·2	43·1	45·7	48·6	51·3	16. 50. 37·28		37·71	17·24	39·53		16. 51. 17·10	— 3·35
	37	ϵ Herculis	P	12·3	15·4	18·7	22·0	28·4	34·7	38·2	41·2	44·5	16. 54. 28·31		28·92	8·35	39·43		16. 55. 8·32	— 3·08
	38	η Ophiuchi.....	P	44·9	47·8	50·5	53·4	59·1	4·9	7·7	10·5	13·5	17. 1. 59·09		59·35	38·74	39·39		17. 2. 38·76	— 3·93
	39	α Herculis	P	..	..	..	..	50·4	56·3	58·9	1·9	4·7	17. 7. 50·39		50·86	30·18	39·32		17. 8. 30·27	— 3·34
	40	σ Ophiuchi.....	P	55·9	58·8	1·5	4·3	9·8	15·4	18·0	20·8	23·7	17. 19. 9·75		10·15	49·58	39·43		17. 19. 49·57	— 3·54
	41	54 Ophiuchi.....	P	15·7	18·6	21·4	24·0	30·0	35·6	38·4	41·3	44·1	17. 27. 29·85		30·31				17. 28. 9·74	— 3·42
	42	83 Herculis	P	2·0	4·9	8·0	11·0	17·3	23·0	26·3	29·4	32·4	17. 36. 17·09		17·63				17. 36. 57·07	— 3·29

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S. P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Corrections for passage of Semidiameter, Nos. 7, 11, and 33, $-67^s{\cdot}02$: $-68^s{\cdot}83$: and $-0^s{\cdot}38$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
June 26 to July 1. The azimuthal error used is that determined on June 26 by tabular places of Polaris and η Piscium, allowing $0^s{\cdot}01$ for clock-rate.
July 4 and 5. The azimuthal error by Polaris, Polaris S.P., and Polaris.

1, 2. Very tremulous.
23. Extremely cloudy.
7. Correction to R. A. on true Meridian, + $0^s{\cdot}01$.
24. Faint.
11. Very cloudy.
32. Excessively tremulous.
15, 18, 19, 33, 37, 39. Cloudy.
33. Very faint and tremulous.
18. 19. Very faint.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
July 4	1	δ Ursæ Min.(E&E)	P	39·0	26·5	14·0	0·5	34·5	..	54·0	39·5	26·5	18. 15. 32·71	+ 1·12	40·65	21·10		38·37	18. 16. 20·13	— 8·28
	2	Ceph.51S.P.(E&E)	P	..	..	..	..	..	57·5	55·0	53·0	51·5	18. 35. 4·19	(+7·12)	55·05	35·27		[1·46]	6. 35. 34·55	+ 6·13
	3	ε Aquilæ	P	36·3	39·2	42·0	44·7	50·6	56·4	59·2	2·0	4·7	18. 52. 50·52	[−0·19]	50·99	30·51	39·52		18. 53. 30·51	— 3·53
	4	ζ Aquilæ	P	19·0	21·9	24·5	27·2	33·1	38·8	41·6	44·6	47·4	18. 58. 33·07		33·53	13·07	39·54		18. 59. 13·05	— 3·54
	5	Victoria	P	55·1	58·0	0·7	3·6	9·0	14·9	17·8	20·6	23·4	19. 5. 9·18		9·49				19. 5. 49·02	
	6	Polaris ...(E & E)	R	27·0	21·0	15·0	6·0	46·0	34·0	25·0	18·0	8·0	1. 8. 46·95		5·60	47·16	41·56	39·80	1. 9. 45·47	—28·17
	7	η Piscium	R	..	..	..	..	..	3·1	17·5	..	..	1. 23. 34·63		35·10	14·92	39·82	[1·48]	1. 24. 14·98	
	8	η Piscium	R	..	..	..	..	..	40·4	43·3	46·2	49·0								
	9	Aldebaran	R	13·7	16·6	19·6	22·4	28·0	34·2	36·8	39·8	42·5	4. 27. 28·13		28·61	8·72	40·11		4. 28. 8·68	— 1·55
	10	Capella	R	39·6	44·0	47·6	51·6	59·6	7·5	11·5	15·5	19·5	5. 5. 59·53		0·33				5. 6. 40·44	— 1·76
	11	Rigel	R	6·7	9·6	..	14·9	20·7	26·4	..	32·2	35·0	5. 7. 20·75		21·06	1·13	40·07		5. 8. 1·17	— 0·98
	12	β Tauri	R	46·8	50·0	53·2	56·4	2·4	9·0	12·2	15·2	18·5	5. 17. 2·59		3·16	43·38	40·22		5. 17. 43·29	— 1·56
	13	α Orionis	R	55·3	..	1·0	3·8	8·7	14·8	17·5	..	23·4	5. 47. 9·17		9·59	49·76	40·17		5. 47. 49·75	— 1·19
	14	Mercury 2 L.	R	54·0	57·0	0·2	3·2	9·1	15·3	18·4	21·4	24·3	5. 59. 9·16		9·69				5. 59. 49·65	
	15	Sirius	R	14·9	..	21·0	23·6	29·5	35·1	38·1	..	43·9	6. 38. 29·39		29·65				6. 39. 9·86	— 0·66
	16	Venus 2 L.	R	53·5	56·6	59·8	2·8	8·8	14·7	17·9	20·8	23·9	6. 43. 8·70		9·23				6. 43. 49·06	
July 5	17	⊙ 1 L.	R	10·0	13·3	16·3	19·1	24·9	31·4	34·4	37·4	40·3	6. 57. 25·18		34·31				6. 59. 14·54	
	18	⊙ 2 L.	R	27·4	30·6	33·5	36·4	42·4	48·5	51·3	54·4	57·4	6. 59. 42·39							
	19	Procyon	R	..	20·3	23·3	25·9	31·4	37·0	39·8	42·6	..	7. 31. 31·41		31·82	12·00	40·18		7. 32. 12·08	— 1·08
	20	Pollux	R	4·1	7·4	10·4	13·6	19·9	26·2	29·3	32·5	35·6	7. 36. 19·83		20·40	0·64	40·24		7. 37. 0·67	— 1·24
	21	Polaris S.P. (E&E)	R	5·0	54·5	46·0	40·0	25·0	5·5	58·0	47·5	..	13. 9. 24·72		6·64	47·57	40·93		1. 9. 47·25	—28·58
	22	Jupiter 1 L.	R	..	49·1	..	54·6	0·4	..	..	12·0	..	15. 2. 0·42		2·16				15. 2. 42·89	
	23	Jupiter 2 L.	R	..	..	..	57·6	3·4	..	..	15·0	..	15. 2. 3·37							
	24	β Libræ	R	49·8	52·6	55·6	58·5	3·7	9·4	12·2	15·0	17·8	15. 9. 3·80		4·11	44·79	40·68		15. 9. 44·84	— 3·31
	25	π Coronæ	R	42·6	46·0	49·4	52·5	59·0	5·8	9·1	12·2	15·6	15. 37. 59·07		59·70				15. 38. 40·46	— 2·72
	26	16 Herculis	R	34·3	37·2	40·1	43·1	48·8	54·7	57·7	0·6	3·4	16. 8. 48·82		49·32				16. 9. 30·12	— 3·07
	27	γ Herculis	R	2·3	5·4	8·3	11·2	17·1	22·9	26·0	28·7	31·8	16. 15. 17·03		17·53	58·41	40·88		16. 15. 58·33	— 3·09
	28	ο Herculis	R	41·6	44·4	47·2	50·0	55·4	1·1	3·8	6·6	9·4	16. 16. 55·45		55·87				16. 17. 36·67	— 3·30
	29	υ Ophiuchi	R	35·4	38·4	41·1	43·8	49·3	55·1	57·8	0·5	3·2	16. 19. 49·35		49·67				16. 20. 30·48	— 3·62
	30	n Herculis	R	2·4	5·4	8·0	10·6	16·4	21·8	24·7	27·5	30·2	16. 25. 16·28		16·69				16. 25. 57·50	— 3·36
	31	33 Herculis	R	23·4	26·4	29·0	31·8	37·4	42·8	45·7	48·6	51·4	16. 29. 37·34		37·76				16. 30. 18·58	— 3·34
	32	Bradley 2119	R	31·2	34·2	36·8	39·7	45·2	50·7	53·5	56·4	59·0	16. 33. 45·14		45·52				16. 34. 26·34	— 3·46
	33	14 Ophiuchi	R	..	0·5	3·4	6·1	11·5	17·0	19·7	22·7	..	16. 34. 11·50		11·88				16. 34. 52·70	— 3·46
	34	Juno	R	49·6	52·2	55·0	57·5	3·3	8·6	11·6	14·5	17·4	16. 39. 3·25		3·59				16. 39. 44·41	
	35	κ Ophiuchi	R	22·0	25·0	27·6	30·4	36·0	41·6	44·5	47·2	50·1	16. 50. 35·99		36·42	17·24	40·82		16. 51. 17·26	— 3·35
	36	72 Ophiuchi	R	2·4	5·2	8·0	10·6	16·4	21·9	24·7	27·5	30·4	18. 0. 16·29		16·72	57·66	40·94		18. 0. 57·63	— 3·54
	37	A Herculis	R	52·7	56·0	59·3	2·5	8·9	15·4	18·6	21·8	25·0	18. 6. 8·86		9·47				18. 6. 50·39	— 3·31
	38	δ Ursæ Min. (E&E)	R	39·5	26·5	13·5	58·0	32·5	7·5	..	..	..	18. 15. 32·26		40·20	20·95			18. 16. 21·13	— 8·13
	39	Astræa	R	53·5	57·0	0·0	3·2	..	14·7	..	20·4	..	18. 26. 8·62		8·87				18. 26. 49·81	
	40	Ceph.51S.P.(E&E)	R	..	..	9·0	8·0	3·0	57·0	53·0	51·0	50·0	18. 35. 2·98		53·84	35·44			6. 35. 34·78	+ 5·96
	41	ν¹ Lyræ	R	47·6	50·9	54·2	57·5	4·0	10·6	14·0	17·3	20·4	18. 44. 4·01		4·64				18. 44. 45·59	— 3·39
	42	62 Serpentis	R	57·8	0·6	3·5	6·3	11·8	17·4	20·2	23·0	25·6	18. 48. 11·75		12·16				18. 48. 53·12	— 3·64
	43	ε Aquilæ	R	34·7	37·7	40·6	43·4	48·8	54·7	57·8	0·6	3·4	18. 52. 49·02		49·49	30·51	41·02		18. 53. 30·45	— 3·53
	44	λ Lyræ	R	58·6	1·9	5·1	8·5	14·7	21·4	24·6	28·0	31·1	18. 54. 14·83		15·44				18. 54. 56·40	— 3·42
	45	ζ Aquilæ	R	17·4	20·4	23·3	26·1	31·6	37·4	40·2	43·0	45·8	18. 58. 31·64		32·10	13·07	40·97		18. 59. 13·07	— 3·54
	46	Victoria	R	1·8	4·5	7·7	10·4	16·1	21·5	24·4	27·0	29·6	19. 4. 15·84		16·16				19. 4. 57·13	
	47	Polaris.... (E&E)	JC	30·5	..	16·0	9·0	..	34·5	27·0	..	..	1. 8. 49·01		7·66	47·98	40·32	41·28	1. 9. 49·01	—28·99

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 14 and 16, $-0^s·21$: and $-0^s·38$.

6. Very tremulous at times.
7. Observed over wires Y, Z.
11, 39. Very faint.
11. Cloudy.
13. Exceedingly faint ; very cloudy.
14. Tremulous.
15. Extremely faint at times.
17, 18. The limbs excessively tremulous ; the observation very difficult.
21. Extremely faint at times from cirrus cloud.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
July 7	1	γ Serpentis.....	E	14·5	17·4	20·3	23·1	28·8	34·6	37·4	40·4	43·3	15. 49. 28·81	+ 1·12 (+7·69)	29·38	13·42	44·04	43·02	15. 50. 13·35	— 3·04
	2	n Herculis	E	59·4	2·1	4·7	7·6	..	18·6	21·4	24·2	27·0	16. 25. 13·08	[+ 1·18]	13·58			[1·44]	16. 25. 57·59	— 3·35
	3	33 Herculis	E	20·4	23·3	25·9	28·6	34·3	39·9	42·4	45·4	48·2	16. 29. 34·22		34·74				16. 30. 18·75	— 3·33
	4	ζ Herculis.....	E	11·5	15·0	18·2	21·4	27·7	34·4	37·5	40·9	44·2	16. 35. 27·80		28·50	12·56	44·06		16. 36. 12·52	— 2·95
	5	Juno.....	E	37·8	40·7	43·6	46·5	51·6	57·6	0·1	3·0	5·7	16. 37. 51·80		52·24				16. 38. 36·26	
	6	Bradley 2219....	E	..	42·5	45·6	48·4	54·3	0·5	3·6	6·5	..	17. 29. 54·43		54·75				17. 30. 38·82	— 4·18
	7	β Ophiuchi.....	E	50·5	53·3	56·0	58·8	4·3	9·8	12·7	15·4	18·2	17. 36. 4·28		4·78	48·83	44·05		17. 36. 48·86	— 3·57
	8	β Aurigæ S.P....	E	31·0	35·0	38·9	42·6	50·5	58·1	2·2	6·3	10·2	17. 48. 50·61		50·54				5. 49. 34·63	— 1·63
	9	73 Ophiuchi.....	E	53·4	..	59·0	1·6	7·3	13·0	15·5	..	21·2	18. 2. 7·25		7·74				18. 2. 51·84	— 3·64
	10	Bradley 2292....	E	0·1	3·1	5·9	8·8	14·4	20·0	22·8	25·5	28·4	18. 9. 14·28		14·68				18. 9. 58·79	— 3·91
	11	δ Ursæ. Min. (E&E)	E	..	24·5	10·0	56·0	28·5	4·0	..	..	..	18. 15. 29·10		36·66	20·67			....	
	12	λ Sagittarii	E	39·3	42·4	..	48·5	54·6	0·8	..	6·8	10·0	18. 18. 54·58		54·88	38·99	44·11		18. 19. 39·00	— 4·34
	13	Bradley 2313....	E	..	34·9	37·9	40·7	46·4	52·0	55·0	57·9	..	18. 20. 46·34		46·71				18. 21. 30·83	— 4·03
	14	Cep. 51 S.P. (E&E)	E	..	..	..	..	..	54·5	50·5	49·0	47·0	18. 34. 0·21		51·72	35·74			....	
	15	62 Serpentis	E	..	57·5	0·4	3·1	8·6	14·4	17·0	19·7	..	18. 48. 8·61		9·12				18. 48. 53·27	— 3·65
	16	ζ Aquilæ	E	14·2	17·1	19·9	22·6	..	34·3	37·2	39·9	42·7	18. 58. 28·44		28·99	13 09	44·10		18. 59. 13·15	— 3·56
	17	Victoria.....	E	..	..	..	..	..	56·2	10·2	..	..	19. 2. 28·26		28·67				19. 3. 12·83	
	18	Victoria.....	E	..	..	..	..	..	34·0	36·6	..	..								
July 10	19	☽ 1 L.	JC	56·3	59·2	2·0	5·0	10·7	16·3	19·2	21·8	24·6	12. 1. 10·52	(+8·25)	10·98			46·87	12. 3. 0·14	
	20	η Virginis.....	JC	57·2	59·8	2·7	5·4	10·7	16·5	19·2	22·0	24·8	12. 12. 10·88		11·37	58·98	47·61	[1·45]	....	
	21	α Coronæ.....	D	54·4	57·6	0·7	3·9	9·9	16·3	19·3	22·5	25·6	15. 28. 9·97		10·66	58·57	47·91	46·94†	....	
	22	α Serpentis.....	D	35·1	37·9	40·7	43·4	48·9	54·5	57·4	0·2	2·9	15. 36. 48·95		49·49	37·34	47·85		....	
July 11	23	☉ 1 L.....	E	36·5	39·4	42·6	45·4	51·4	57·3	0·6	3·5	6·5	7. 21. 51·42	+0·62						
	24	☉ 2 L.....	E	52·8	56·0	59·0	1·9	7·8	13·6	16·7	19·8	22·8	7. 24. 7·83	(+5·53)	59·98			48·64	7. 23. 49·06	
	25	Procyon	E	..	11·5	14·3	17·2	22·5	28·2	31·0	33·9	..	7. 31. 22·60	[−1·18]	22·84	12·05	49·21	[1·43]	7. 32. 11·93	— 1·13
	26	☽ 1 L.....	E	0·5	3·4	6·4	9·2	15·0	20·6	23·6	26·4	29·2	12. 48. 14·87		15·03				12. 50. 7·08	
	27	ε Virginis.....	E	22·9	25·8	28·5	31·4	36·9	42·7	45·5	48·4	51·1	12. 54. 36·97		37·25	26·56	49·31		12. 55. 26·66	— 2·17
	28	Polaris S.P. (E&E)	E	59·0	49·0	41·0	31·5	17·5	..	..	..	..	13. 9. 18·38		3·22	52·58	49·36		....	
	29	Spica	E	..	3·7	6·6	9·4	14·9	20·6	23·4	26·4	..	13. 17. 14·94		15·09	4·47	49·38		13. 18. 4·52	— 2·60
	30	γ Herculis	E	53·8	56·8	59·6	..	8·4	..	..	20·3	23·1	16. 15. 8·42		8·76	58·37	49·61		16. 15. 58·37	— 3·05
	31	α Herculis	C	..	..	32·1	34·8	40·6	46·3	49·2	52·0	54·7	17. 7. 40·51		40·81	30·17	49·36	48·31†	....	
	32	θ Ophiuchi.....	C	39·3	42·4	45·4	48·5	54·4	0·5	3·6	6·6	9·6	17. 12. 54·43		54·50	43·80	49·30		....	
	33	✻ N. P. D. 105°. 16′.	E	..	23·0	25·7	28·6	34·0	40·0	42·7	45·7	..	18. 24. 34·18		34·29			48·64	18. 25. 24·03	— 4·07
	34	α Lyræ.....	E	15·5	19·1	22·5	26·2	33·2	40·3	43·7	47·4	50·8	18. 31. 33·13		33·63	23·40	49·77		18. 32. 23·37	— 3·36
	35	Victoria.....	E	..	..	..	..	..	..	37·6	..	..	18. 58. 55·72		55·88				18. 59. 45·65	
July 12	36	☉ 1 L.....	S	39·3	42·4	45·6	48·4	54·3	0·3	3·4	6·6	9·5	7. 25. 54·37	(+5·97)						
	37	☉ 2 L.....	S	55·8	58·8	1·9	4·7	10·6	16·6	19·6	22·6	25·6	7. 28. 10·64	[−0·79]	2·89			49·89	7. 27. 53·26	
	38	Polaris S.P. (E&E)	S	58·5	49·0	41·0	31·5	..	59·0	49·5	..	..	13. 9. 18·19					[1·53]		
	39	Spica	S	59·6	2·4	5·2	8·0	13·4	19·3	22·0	24·7	27·7	13. 17. 13·54		2·79	53·51	50·72		....	
	40	☽ 1 L.....	S	2·3	5·3	8·3	11·1	16·9	22·7	25·6	28·6	31·5	13. 37. 16·87		13·72	4·45	50·73		....	
	41	α Serpentis	JC	..	35·3	38·0	40·6	46·4	52·0	54·7	57·5	..	15. 36. 46·30		17·04				13. 39. 12·03	
															46·59	37·32	50·73	49·74†	....	
July 13	42	Polaris S.P. (E&E)	C	..	..	..	34·0	20·0	..	53·0	46·0	..	13. 9. 20·71	(+6·34)	2·31	54·49	52·18	51·30	....	
	43	☽ 1 L.....	C	..	52·2	55·1	58·1	3·8	9·9	12·7	15·8	..	14. 29. 3·88	[−2·09]	3·96			[1·56]	14. 31. 2·41	
	44	ε Boötis	C	57·0	0·3	3·4	6·4	12·6	18·9	22·0	25·0	28·2	14. 38. 12·60		13·03	5·28	52·25		14. 39. 5·28	— 2·41
	45	α^2 Libræ.....	C	18·2	21·0	23·8	26·7	32·4	38·3	41·1	44·0	46·7	14. 42. 32·42		32·50	24·78	52·28		14. 43. 24·75	— 3·24

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 19, 26, 40, and 43, + $61^s \cdot 56$: + $62^{s} \cdot 64$: + $64^s \cdot 22$: and + $66^s \cdot 21$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

July 7. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 02$ for clock-rate in both cases.

July 11 and 12. The azimuthal error, on each day, by tabular places of Polaris S.P. and Spica, allowing $0^s \cdot 01$ for clock-rate.

July 13. The azimuthal error by tabular places of Polaris S.P. and α^2 Libræ, allowing $0^s \cdot 10$ for clock-rate.

5. Very faint. 17. Observed over wires Y, Z. 17, 18. Cloudy. 19, 26, 40. Corrrection to R. A. on true Meridian, + $0^s \cdot 01$. 25. Very tremulous.
35. Observed over wire Z only, but satisfactorily. The transit occurred very shortly after an eclipse of Jupiter's 3rd satellite; the observer was not in time for the transit over the other wires. 36, 37. A very bad image. 41. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s				h m s	s
July 13	1	ι^1 Libræ	C	24·8	27·9	30·8	33·7	..	..	..	..	54·2	15. 3. 39·50	+0·62	39·55			51·30	15. 4. 31·83	— 3·45
	2	δ Boötis	C	54·4	57·6	1·0	4·4	11·0	17·6	21·0	24·3	27·6	15. 9. 10·94	(+6·34)	11·43			[1·56]	15. 10. 3·71	— 2·46
	3	ε Libræ	C	46·6	49·4	52·4	55·1	..	6·3	9·2	11·8	14·6	15. 16. 0·63	[−2·09]	0·76				15. 16. 53·05	— 3·31
	4	α Serpentis	C	30·9	33·7	36·5	39·2	44·7	50·3	53·2	56·0	58·6	15. 36. 44·74		44·99	37·31	52·32		15. 37. 37·30	— 3·07
	5	ω^2 Scorpii	C	22·6	25·6	28·6	31·5	37·4	43·4	46·3	49·2	52·1	15. 58. 37·36		37·40				15. 59. 29·74	— 3·80
	6	ν^2 Scorpii	C	..	..	..	..	17·1	23·0	25·9	28·7	31·6	16. 3. 17·02		17·07				16. 4. 9·41	— 3·78
	7	Oeltz. Arg. 15470.	C	..	..	..	..	20·4	26·3	29·1	32·3	35·1	16. 8. 20·20		20·23				16. 9. 12·58	— 3·91
	8	γ Herculis	C	51·1	54·0	56·8	59·8	5·6	11·6	14·4	17·4	20·3	16. 15. 5·62		5·97	58·35	52·38		16. 15. 58·33	— 3·03
	9	Groombridge 2343	C	12·0	17·1	21·8	26·8	36·5	46·4	51·2	56·2	1·0	16. 20. 36·47		37·32				16. 21. 29·68	— 2·45
	10	λ Ophiuchi	E	0·1	3·0	5·6	8·4	13·8	19·5	22·3	25·1	27·6	16. 23. 13·88		14·09	6·73	52·64	51·60†	....	
	11	ζ Ophiuchi	E	37·2	40·0	43·0	45·6	51·2	56·7	59·6	2·5	5·4	16. 28. 51·20		51·32	44·00	52·68		....	
	12	A Herculis	C	41·5	44·8	48·0	51·1	57·6	4·1	7·4	10·6	13·7	18. 5. 57·58		58·04			51·30	18. 6. 50·51	— 3·31
	13	η Serpentis	C	13·7	16·6	19·4	22·1	27·5	33·1	35·9	38·6	41·3	18. 13. 27·53		27·71	20·14	52·43		18. 14. 20·19	— 3·78
	14	α Orionis	JC	42·5	45·4	48·0	50·9	56·4	2·1	4·9	7·7	10·6	5. 46. 56·45	[−1·18]	56·74	49·92	53·18	52·81	5. 47. 49·91	— 1·35
	15	Sirius	R	2·1	..	8·3	11·0	16·4	22·4	25·4	..	31·1	6. 38. 16·63		16·76			[1·50] 52·95	6. 39. 10·12	— 0·78
July 14	16	⊙ 1 L.	R	43·4	46·6	49·4	52·4	58·4	3·9	7·4	10·3	13·0	7. 33. 58·26		} 6·75				7. 36. 0·17	
	17	⊙ 2 L.	R	59·5	2·5	5·4	8·3	14·3	20·8	23·6	26·5	29·5	7. 36. 14·44							
	18	Regulus	R	0·7	4·0	6·9	9·4	15·1	20·7	23·6	26·4	29·3	10. 0. 15·07		15·40	9·00	53·60		....	
	19	Polaris S.P.(E&E)	R	..	50·0	41·0	31·0	18·0	59·0	52·0	..	..	13. 9. 18·54		1·72	55·47	53·75		....	
	20	Spica	R	56·4	59·4	2·1	5·0	10·5	16·1	19·1	21·8	24·4	13. 17. 10·49		10·67	4·43	53·76		....	
	21	β Libræ	D	36·7	39·6	42·4	45·2	50·6	56·4	59·0	2·0	4·6	15. 8. 5·68		50·87	44·71	53·84	52·91†	....	
	22	☽ 1 L.	JC	55·4	58·5	1·4	4·4	10·4	16·4	19·4	22·4	25·4	15. 24. 10·37		10·49			52·81	15. 26. 12·62	
	23	α Serpentis	JC	29·3	32·2	34·9	37·8	43·4	48·7	51·6	54·4	57·1	15. 36. 43·22		43·51	37·30	53·79	[1·50]	15. 37. 37·29	— 3·06
	24	ε Serpentis	JC	..	..	..	..	..	16·8	19·7	22·4	25·2	15. 43. 11·26		11·54	5·44	53·90		15. 44. 5·33	— 3·14
	25	β^1 Scorpii	JC	..	30·4	33·1	36·1	41·7	47·8	50·6	53·6	..	15. 56. 41·84		41·95	35·73	53·78		15. 57. 35·76	— 3·75
	26	λ Ophiuchi	D	58·6	1·5	4·4	7·0	12·5	18·2	20·8	23·6	26·4	16. 23. 12·51		12·77	6·73	53·96	52·91†	....	
	27	Var. (T) Herculis	JC	50·4	53·5	56·7	0·0	6·0	12·9	16·0	19·3	22·5	18. 3. 6·31		6·80			52·81	18. 4. 0·74	— 3·30
	28	Victoria	JC	..	..	..	..	..	..	2·9	..	..	18. 56. 21·04		21·23				18. 57. 15·22	
	29	ψ Sagittarii	JC	6·8	10·2	13·3	16·4	22·4	28·5	31·5	34·4	37·7	19. 6. 22·31		22·38	16·28	53·90		19. 7. 16·38	— 4·37
	30	Sirius	E	0·4	..	6·2	9·0	14·6	20·4	23·5	..	29·3	6. 38. 14·72	[−0·51]	14·90			54·59 [1·61]	6. 39. 9·93	— 0·79
July 15	31	⊙ 1 L.	E	44·5	47·5	50·8	53·7	59·7	5·6	8·6	11·5	14·6	7. 37. 59·56		} 7·94				7. 40. 3·04	
	32	⊙ 2 L.	E	..	3·6	6·6	9·6	15·4	21·5	24·5	27·5	..	7. 40. 15·47							
	33	☽ 1 L.	E	30·7	33·8	36·8	39·9	46·0	52·1	55·0	58·3	1·3	16. 22. 45·94		46·09				16. 24. 52·17	
	34	ζ Herculis	E	59·9	3·3	6·5	9·7	16·2	22·8	26·2	29·4	32·6	16. 35. 16·24		16·76	12·49	55·73		16. 36. 12·46	— 2·88
	35	κ Ophiuchi	C	7·5	10·4	13·2	15·8	21·5	27·2	30·0	32·7	35·5	16. 50. 21·49		21·83	17·20	55·37	54·26†	....	
	36	η Ophiuchi	E	28·4	..	34·3	37·1	42·9	48·6	51·4	..	57·1	17. 1. 42·78		42·96	38·73	55·77	54·59	17. 2. 38·69	— 3·92
	37	α Herculis	C	20·1	..	..	28·7	..	..	..	45·8	48·6	17. 7. 34·33		34·71	30·15	55·44	54·26†	....	
	38	δ Ursæ Min.(E&E)	E	..	..	..	..	16·0	52·0	37·5	25·5	11·0	18. 15. 16·79		23·66	19·46		54·59	....	
	39	Cephei 51 S.P.(E&E)	E	0·5	59·0	56·0	52·5	49·0	42·5	..	..	..	18. 34. 49·17		41·24	37·06			....	
	40	β Lyræ	E	..	57·5	0·7	4·0	10·5	17·4	20·6	23·8	..	18. 44. 10·57		11·10	6·97	55·87		18. 45. 6·94	— 3·41
	41	ε Aquilæ	E	20·2	23·0	26·0	28·7	34·5	40·2	43·1	46·0	48·7	18. 52. 34·44		34·82	30·57	55·75		18. 53. 30·67	— 3·59
	42	Victoria	E	16·4	19·3	22·0	24·9	30·4	36·1	38·8	41·6	44·4	18. 55. 30·39		30·62				18. 56. 26·48	
July 16	43	⊙ 1 L.	D	45·5	48·6	51·5	54·6	0·6	6·4	9·5	12·5	15·2	7. 42. 0·44	[−1·50]	} 8·76			56·09 [1·50]	7. 44. 5·33	
	44	⊙ 2 L.	D	1·4	4·4	7·6	10·4	16·3	22·3	25·2	28·3	31·2	7. 44. 16·29							
	45	ζ^1 Libræ	JC	27·4	30·5	33·3	36·1	41·6	47·6	50·5	53·4	56·4	15. 19. 41·82		41·93	38·91	56·98	56·02†	....	
	46	δ Ophiuchi	JC	5·6	8·4	11·1	13·8	19·5	25·0	27·7	30·6	33·3	16. 6. 19·39		19·60	16·61	57·01		....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 22 and 33, $+68^s \cdot 36$: and $+70^s \cdot 38$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
July 14. The azimuthal error by tabular places of Polaris S. P. and Spica, allowing $0^s \cdot 01$ for clock-rate.
July 15. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 02$ for clock-rate.
July 16. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 02$ for clock-rate.

1. Extremely faint.
3. Very faint.
7. Exceedingly faint.
15. Faint and extremely tremulous.
16, 17. The limbs very ill defined.
19. Tremulous.
27. Of the 8th magnitude.
28. Observed over wire Z only.
33. Correction to R. A. on true Meridian, $+0^s \cdot 01$.
42. A fainter object preceded by about 10^s.
43, 44. Very tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
July 16	1	η Ophiuchi.....	D	27·0	30·0	32·7	35·6	41·2	47·2	50·1	52·9	55·7	17. 1. 41·33	+0·62	41·44	38·72	57·28	56·09	17. 2. 38·59	— 3·91
	2	Bradley 2180....	D	57·5	0·6	3·7	6·6	12·8	19·0	22·0	25·0	28·0	17. 7. 12·75	(+6·34)	12·80			[1·50]	17. 8. 9·96	— 4·22
	3	θ Ophiuchi.....	D	31·5	34·6	37·7	40·6	46·5	52·8	56·0	58·8	1·8	17. 12. 46·65	[−1·50]	46·70	43·79	57·09		17. 13. 43·87	— 4·23
	4	☽ 1 L.	D	8·5	11·8	14·8	17·8	24·0	30·1	33·1	36·4	39·3	17. 24. 23·93		24·01				17. 26. 33·05	
	5	β Ophiuchi.....	D	37·4	40·4	43·1	45·9	51·4	57·1	59·8	2·6	5·4	17. 35. 51·41		51·67	48·83	57·16		17. 36. 48·86	— 3·57
	6	61 Ophiuchi.....	D	36·6	39·6	42·3	45·0	50·4	56·2	58·6	1·6	4·5	17. 36. 50·49		50·73				17. 37. 47·92	— 3·62
	7	Piazzi XVII. 216.	D	38·1	41·1	43·6	46·4	51·8	57·4	0·4	3·1	5·8	17. 36. 51·92		52·16				17. 37. 49·35	— 3·61
	8	98 Herculis	D	9·1	12·2	15·2	18·3	24·0	30·2	33·0	36·1	39·0	17. 59. 24·07		24·46				18. 0. 21·67	— 3·38
	9	μ^1 Sagittarii.....	D	29·9	33·0	36·0	38·8	44·6	50·6	53·6	56·6	59·6	18. 4. 44·70		44·78	42·00	57·22		18. 5. 42·00	— 4·22
	10	105 Herculis	D	..	..	..	..	40·7	46·9	49·8	52·8	55·9	18. 12. 40·67		41·09				18. 13. 38·32	— 3·40
	11	δ Ursæ Min. (E&E)	D	..	..	..	..	..	..	..	25·0	8·0	18. 15. 15·39		22·90	19·24			....	
	12	Bradley 2314....	D	..	..	..	..	..	14·1	16·7	19·6	22·4	18. 21. 8·14		8·27				18. 22. 5·51	— 4·08
	13	Ceph.51 S.P.(E&E)	D	..	..	..	52·0	..	..	41·0	39·0	37·5	18. 34. 49·81		40·97	37·33			....	
	14	ε Aquilæ	D	18·7	21·8	24·6	27·4	32·8	38·8	41·5	44·5	47·2	18. 52. 32·99		33·33	30·57	57·24		18. 53. 30·60	— 3·59
July 17	15	θ Capricorni	E	8·4	11·3	14·2	17·2	22·7	28·6	31·6	34·4	37·4	20. 57. 22·82		22·92	21·82	58·90	57·68†	....	
	16	ζ Cygni.....	E	57·0	0·4	3·6	6·8	13·3	19·5	22·8	25·9	29·1	21. 6. 13·11		13·57	12·61	59·04	[1 ·7]	....	
July 18	17	κ Ophiuchi.....	D	..	5·7	8·5	11·3	16·7	22·5	25·4	28·2	..	16. 50. 16·84	+0·80	17·20	17·18	59·98	58·98†	....	
	18	ε Herculis.....	D	51·5	54·8	58·1	1·3	7·7	14·2	17·4	20·6	23·8	16. 54. 7·66	(+5·83)	8·16	8·24	60·08	[1·49]	....	
	19	β Ophiuchi.....	JC	34·7	37·4	40·4	43·0	48·5	54·0	56·8	59·7	2·4	17. 35. 48·49	[+0·24]	48·82	48·82	60·00		....	
July 19	20	⊙ 1 L.....	E	44·7	47·8	50·6	53·6	59·6	5·5	8·5	11·6	14·4	7. 53. 59·53	(+5·45)	7·56			60·63	7. 56. 8·69	
	21	⊙ 2 L.....	E	59·8	3·1	5·9	8·9	14·7	20·9	23·8	26·7	29·6	7. 56. 14·77					[1·51]		
	22	89 Herculis	E	41·7	45·0	48·0	51·1	57·2	3·4	6·5	9·5	12·6	17. 48. 57·17		57·61	59·34	61·73		17. 49. 59·36	— 3·28
	23	72 Ophiuchi.....	C	41·9	44·8	47·5	50·4	56·0	1·6	4·4	7·2	10·0	17. 59. 55·93		56·27	57·67	61·40	60·27†	....	
	24	μ^1 Sagittarii.....	C	25·6	28·5	31·6	34·6	40·4	46·4	49·3	52·4	55·3	18. 4. 40·41		40·61	42·01	61·40		....	
	25	δ Ursæ Min. (E&E)	E	..	..	..	..	11·0	46·0	33·0	19·5	5·5	18. 15. 11·38		17·14	18·52		60·63	....	
	26	Ceph.51 S.P.(E&E)	E	..	..	..	46·5	43·5	37·0	34·5	..	30·5	18. 34. 43·32		36·75	38·14			....	
	27	β Lyræ.....	E	48·1	51·6	54·9	58·1	4·6	11·4	14·5	18·0	21·2	18. 44. 4·65		5·14	6·97	61·83		18. 45. 6·94	— 3·41
	28	ν^2 Sagittarii.....	E	..	44·2	47·4	50·3	56·1	2·3	5·3	8·4	..	18. 45. 56·23		56·42				18. 46. 58·23	— 4·34
	29	ϵ Aquilæ	E	14·1	17·1	20·0	22·7	28·4	34·3	37·0	40·0	42·8	18. 52. 28·43		28·80	30·58	61·78		18. 53. 30·61	— 3·60
	30	α^2 Capricorni....	E	..	..	..	..	32·4	38·0	40·8	43·7	46·6	20. 9. 32·31		32·53	34·39	61·86		20. 10. 34·42	— 4·03
	31	ρ Capricorni.....	E	..	..	..	2·4	8·0	13·9	16·8	..	22·6	20. 20. 8·03		8·23	10·07	61·84		20. 21. 10·14	— 4·10
	32	1 Delphini	E	34·6	37·5	40·4	43·3	48·6	54·4	57·2	0·0	2·8	20. 22. 48·70		49·04				20. 23. 50·95	— 3·74
	33	☽ 2 L.....	E	55·7	58·6	1·4	4·4	10·3	16·3	19·2	22·3	25·0	20. 37. 10·31		10·53				20. 37. 1·13	
	34	4 Aquarii.....	E	0·7	3·5	6·3	9·1	14·6	20·4	23·0	25·9	28·6	20. 43. 14·63		14·89				20. 44. 16·82	— 3·87
	35	β Aquarii.....	E	11·4	14·2	17·0	..	25·3	..	33·7	36·5	39·3	21. 23. 25·29		25·55	27·56	62·01		21. 24. 27·52	— 3·76
	36	ξ Aquarii.....	E	18·2	21·0	23·7	26·5	32·2	37·7	40·6	43·3	46·2	21. 29. 32·11		32·36	34·31	61·95		21. 30. 34·34	— 3·76
July 20	37	⊙ 1 L.....	D	43·5	46·5	49·4	52·4	58·3	4·4	7·3	10·1	13·2	7. 57. 58·29	(+4·98)	6·28			61·91	8. 0. 8·72	
	38	⊙ 2 L.....	D	58·6	1·6	4·7	7·5	13·5	19·4	22·4	25·4	28·3	8. 0. 13·44	[+1·26]				[1·58]		
	39	μ Herculis	D	..	..	58·6	1·5	8·0	14·3	17·3	20·5	23·5	17. 41. 7·88		8·33	11·42	3·09	1·91	17. 41. 11·41	— 3·19
	40	89 Herculis.....	D	40·4	43·5	46·6	49·6	55·8	2·0	5·0	8·0	11·0	17. 49. 55·72		56·16	59·33	3·17		17. 49. 59·25	— 3·27
	41	72 Ophiuchi.....	D	40·3	43·1	46·0	48·5	54·4	0·0	2·7	5·4	8·3	18. 0. 54·25		54·61	57·67	3·06		18. 0. 57·71	— 3·55
	42	16 Sagittarii	D	53·6	56·7	59·6	2·6	8·3	14·3	17·2	20·2	23·1	18. 7. 8·35		8·60				18. 7. 11·70	— 4·22
	43	Bradley 2296....	D	..	8·3	11·2	14·0	19·7	25·4	28·4	31·3	..	18. 12. 19·71		19·98				18. 12. 23·09	— 4·10
	44	Lalande 33779 ..	D	..	..	..	..	..	59·5	2·6	5·6	8·6	18. 12. 53·39		53·82				18. 12. 56·93	— 3·38
	45	105 Herculis	D	..	..	25·8	28·8	34·7	40·9	43·9	47·0	50·0	18. 13. 34·77		35·20				18. 13. 38·31	— 3·39

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 4 and 33, $+71^s \cdot 86$: and $-71^s \cdot 33$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

July 20^d. 1^h. The Transit Clock was put forward 1^m.!

July 19. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 02$ for clock-rate.

July 20. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 02$ for clock-rate.

6. Of the 6th magnitude.

7. Of the 7th magnitude.

33. Correction to R. A. on true Meridian, $+ 0^s \cdot 01$.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
July 20	1	δ Ursæ Min. (E&E)	D	..	..	..	..	..	45·5	32·5	18·5	5·0	18. 16. 10·84	+0·80	15·50	18·30		1·91	....	
	2	* N.P.D. 105°. 16′.	D	49·7	52·6	55·5	58·5	4·2	9·9	12·7	15·6	18·5	18. 24. 4·09	(+4·98)	4·37			[1·58]	18. 24. 7·49	— 4·10
	3	Ceph. 51 S.P. (E&E)	D	52·0	50·5	47·5	44·5	40·5	34·0	..	..	..	18. 35. 40·73	[+1·26]	35·58	38·40			....	
	4	β Lyræ	JC	46·9	50·3	53·6	56·9	3·4	10·1	13·4	16·6	20·1	18. 45. 3·43		3·90	6·97	3·07	1·83†	....	
	5	ε Aquilæ	JC	12·9	15·7	18·6	21·6	27·1	33·0	35·7	38·6	41·5	18. 53. 27·14		27·53	30·59	3·06		....	
	6	β Aquarii	D	10·0	13·1	15·7	18·6	24·0	29·6	32·5	35·1	38·0	21. 24. 24·02		24·32	27·58	3·26	1·91	21. 24. 27·64	— 3·78
	7	ξ Aquarii	D	16·7	19·6	22·4	25·2	30·8	36·4	39·2	42·0	44·6	21. 30. 30·72		31·01	34·33	3·32		21. 30. 34·34	— 3·78
	8	*d* Aquarii	D	25·4	28·1	31·0	33·7	39·2	44·8	47·6	50·4	53·0	21. 32. 39·19		39·52				21. 32. 42·85	— 3·71
	9	☽ 2 L.	D	58·7	1·5	4·5	7·3	13·0	18·9	21·9	24·6	27·5	21. 39. 13·05		13·34				21. 38. 6·55	
	10	16 Pegasi	D	37·1	40·4	43·4	46·4	52·5	58·6	1·6	4·6	7·7	21. 46. 52·43		52·86	56·22	3·36		21. 46. 56·21	— 3·69
July 21	11	☉ 1 L.	C	41·5	44·4	47·5	50·4	56·3	2·2	5·2	8·3	10·8	8. 2. 56·24					3·38		
	12	☉ 2 L.	C	56·5	59·4	2·6	5·3	11·3	17·3	20·3	23·3	26·1	8. 5. 11·30		} 4·19			[1·60]	8. 4. 8·10	
	13	θ Aquilæ	E	1·9	4·8	7·6	10·4	15·8	21·5	24·2	27·0	29·8	20. 4. 15·84		16·16	21·05	4·89	3·58†	....	
	14	a^2 Capricorni	E	14·9	18·0	20·7	23·5	29·0	35·0	37·9	40·6	43·5	20. 10. 29·18		29·46	34·41	4·95		....	
	15	ζ Pegasi	C	25·0	28·0	30·7	33·4	39·2	44·8	47·5	50·4	53·1	22. 34. 39·07		39·44	44·30	4·86	3·38	....	
	16	☽ 2 L.	C	1·6	4·4	7·2	10·1	15·7	21·6	24·3	27·2	30·0	22. 38. 15·74		16·05				22. 37. 11·92	
	17	μ Pegasi	C	9·7	12·8	15·7	18·8	24·6	30·8	34·0	37·0	39·9	22. 43. 24·76		25·19	30·11	4·92		....	
July 23	18	Polaris S.P. (E&E)	R	..	..	30·0	24·0	8·0	..	42·0	..	26·0	13. 10. 8·52	[−0·44]	55·29	3·14	7·85	6·70	....	
	19	Spica	R	42·5	45·4	48·3	51·1	56·5	2·4	5·1	8·0	10·8	13. 17. 56·63		56·81	4·33	7·52	[1·56]	13. 18. 4·37	— 2·46
	20	ζ Herculis	R	..	51·3	54·5	57·6	4·2	10·8	14·1	17·3	..	16. 36. 4·19		4·61	12·39	7·78		16. 36. 12·39	— 2·78
	21	19 Ophiuchi	R	59·9	2·8	..	8·2	13·7	19·3	..	24·8	27·6	16. 40. 13·72		13·97				16. 40. 21·75	— 3·37
	22	51 Herculis	R	46·6	49·8	52·9	55·8	2·0	8·0	11·3	14·2	17·3	16. 46. 1·94		2·32				16. 46. 10·11	— 2·98
	23	56 Herculis	R	7·5	10·8	13·9	16·9	23·1	29·3	32·3	35·5	38·4	16. 49. 23·03		23·42				16. 49. 31·21	— 2·97
	24	ε Herculis	R	43·7	47·0	50·4	53·4	0·0	6·4	9·7	12·8	16·2	16. 54. 59·90		0·32	8·19	7·87		16. 55. 8·12	— 2·92
	25	θ Ophiuchi	R	20·6	23·6	26·6	29·7	35·9	41·9	45·1	48·1	51·1	17. 13. 35·79		35·91	43·76	7·85		17. 13. 43·73	— 4·20
	26	*w* Herculis	R	12·5	16·0	19·4	22·6	29·1	36·0	39·0	42·4	45·6	17. 15. 29·11		29·54				17. 15. 37·36	— 3·01
	27	Bradley 2208	R	22·0	25·4	29·0	32·4	39·3	46·3	49·7	53·1	56·5	17. 19. 39·24		39·71				17. 19. 47·53	— 2·95
	28	78 Herculis	R	..	11·5	14·6	17·8	24·0	30·4	33·5	36·7	..	17. 26. 24·01		24·41				17. 26. 32·24	— 3·12
	29	α Ophiuchi	R	18·4	21·3	24·2	27·1	32·5	38·3	41·1	43·9	46·7	17. 28. 32·56		32·86	40·70	7·84		17. 28. 40·69	— 3·37
	30	*y* Herculis	R	37·9	42·2	46·4	50·6	58·7	7·4	11·6	15·7	19·9	17. 32. 58·86		59·45				17. 33. 7·29	— 2·87
	31	μ Herculis	R	47·5	50·8	54·0	57·1	3·3	9·5	12·6	15·7	19·0	17. 41. 3·23		3·63	11·40	7·77		17. 41. 11·48	— 3·17
	32	*z* Herculis	R	3·6	7·9	12·0	16·1	24·5	33·0	37·1	41·2	45·4	17. 46. 24·46		25·04				17. 46. 32·89	— 2·96
	33	72 Ophiuchi	R	35·6	38·4	41·2	43·9	49·5	55·2	57·9	0·6	3·6	18. 0. 49·49		49·77	57·66	7·89		18. 0. 57·64	— 3·54
	34	*b* Herculis	R	30·8	34·0	37·4	40·4	46·8	53·3	56·5	59·7	2·9	18. 1. 46·80		47·22				18. 1. 55·09	— 3·25
	35	16 Sagittarii	R	..	52·0	54·8	57·8	3·5	9·4	12·6	..	..	18. 7. 3·59		3·73				18. 7. 11·60	— 4·22
	36	δ Ursæ Min. (E&E)	R	..	58·0	44·5	32·0	4·0	38·0	24·5	11·5	..	18. 16. 3·69		9·46	17·72			....	
	37	Ceph. 51 S.P. (E&E)	R	50·0	48·0	44·0	41·5	37·0	..	..	..	..	18. 35. 37·87		31·16	39·13			....	
	38	β Aquarii	JC	5·6	8·5	11·2	14·0	19·5	25·0	27·6	30·6	33·4	21. 24. 19·43		19·63	27·62	7·99	6·60†	....	
July 25	39	θ Ceti	E	50·4	53·2	56·1	58·7	4·4	10·0	12·8	15·6	18·4	1. 17. 4·35	+0·67	4·64	16·22	11·58	11·50†	....	
	40	η Piscium	E	49·3	52·3	55·0	58·0	3·5	9·3	12·2	15·1	17·9	1. 24. 3·57	(+6·06)	3·98	15·58	11·60	[1·60]	....	
	41	☽ 2 L.	D	36·9	39·9	42·8	45·6	51·5	57·5	0·4	3·4	6·3	2. 23. 51·54	[+0·56]	51·95			11·33	2. 22. 55·60	
	42	γ Ceti	D	52·1	55·0	57·6	0·4	6·0	11·4	14·3	17·0	19·7	2. 36. 5·89		6·24	17·77	11·53		....	
July 26	43	α Lyræ	D	52·6	56·3	59·6	3·2	10·2	17·4	20·9	24·4	27·9	18. 32. 10·23		10·81	23·34	12·53		....	
	44	μ Pegasi	C	2·0	5·0	8·1	11·0	17·2	23·2	26·1	29·2	32·3	22. 43. 17·07		17·54	30·22	12·68	11·15†	....	
	45	λ Aquarii	C	7·6	10·5	13·4	16·2	21·6	..	..	..	..	22. 45. 21·64		21·93	34·59	12·66	[1·61]	....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Corrections for passage of Semidiameter, Nos. 9, 16, and 41, −7os·14 : −69s·03 : and −67s·86.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
July 23. The azimuthal error used is the mean of those determined by tabular places of Polaris S.P. and Spica, and of δ Ursæ Minoris and Cephei 51 S.P., allowing 0s·01 and 0s·02 for clock-rate in each case respectively. The separate results are −0″·23 and −0″·65.
July 25 to 29. The azimuthal error used is that determined on July 29 by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing 0s·02 for clock-rate.

9, 16, 41. Corrections to R.A. on true Meridian, + 0s·01 ; + 0s·01 ; and + 0s·02, respectively.
18. Excessively tremulous.
16, 17. Cloudy.
35. Clouded ; observed in R.A. only.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
July 26	1	☽ 2 L.	E	45·9	48·6	51·7	54·8	0·5	6·6	9·6	12·4	15·6	3. 20. 0·59	+ 0·67	1·02			13·12	3. 19. 6·42	
	2	η Tauri	E	57·7	1·0	4·2	7·0	..	19·0	22·2	25·0	28·0	3. 39. 12·95	(+ 6·06) [+ 0·56]	13·42	26·82	13·40	[1·62]	....	
July 27	3	α Lyræ	E	50·5	..	57·8	1·4	8·3	15·6	19·3	..	26·4	18. 32. 8·41		8·99	23·33	14·34		....	
July 28	4	ε Andromedæ	D	53·6	56·8	0·0	3·1	9·3	15·7	18·8	22·0	25·2	0. 31. 9·33		9·83	26·05	16·22	16·13†	....	
	5	β Ceti	D	17·8	20·6	23·6	26·4	32·3	38·1	41·1	44·0	46·7	0. 36. 32·24		32·48	48·61	16·13	[1·60]	....	
July 29	6	☉ 1 L.	JC	5·5	8·5	11·3	14·4	20·1	26·0	28·8	31·6	34·6	8. 34. 20·04					16·03		
	7	☉ 2 L.	JC	18·9	21·8	24·9	27·7	33·4	39·4	42·4	45·3	48·3	8. 36. 33·52		27·21			[1·66]	8. 35. 43·83	
	8	Spica	JC	33·0	35·7	38·7	41·6	46·8	52·6	55·5	58·4	1·2	13. 17. 47·00		47·28	4·26	16·98		13. 18. 4·23	— 2·39
	9	β Ophiuchi	JC	17·4	20·3	22·9	25·7	31·2	36·7	39·6	42·4	45·0	17. 36. 31·20		31·56	48·77	17·21		17. 36. 48·80	— 3·51
	10	72 Ophiuchi	JC	26·0	28·9	31·6	34·4	40·0	45·7	48·4	51·2	54·0	18. 0. 39·98		40·37	57·63	17·26		18. 0. 57·64	— 3·51
	11	δ Ursæ Min. (E&E)	JC	..	..	35·0	20·7	53·5	27·0	13·8	..	..	18. 15. 53·10		59·08	16·23			....	
	12	Ceph. 51 S.P. (E&E)	JC	42·5	39·0	36·5	34·0	31·0	..	..	..	..	18. 35. 30·34		23·61	40·79			....	
	13	Bradley 2425	JC	..	..	..	..	..	17·3	20·4	23·3	26·3	19. 9. 11·40		11·85				....	
	14	δ Aquilæ	JC	10·7	13·6	16·3	19·0	24·5	30·2	32·9	35·7	38·4	19. 18. 24·54		24·89	42·25	17·36		19. 9. 29·20	— 3·59
	15	5 Vulpeculæ	JC	48·2	51·0	54·0	57·0	2·8	8·6	11·6	14·6	17·6	19. 20. 2·77		3·21				19. 18. 42·25	— 3·84
	16	α Vulpeculæ	JC	..	..	39·5	42·5	48·6	54·8	57·6	..	..	19. 22. 48·54		49·01	6·40	17·39		19. 20. 20·57	— 3·63
	17	* N. P. D. 81°. 27′.	JC	33·5	36·6	39·2	42·2	47·6	53·3	56·1	58·7	1·5	19. 43. 47·58		47·96				19. 23. 6·38	— 3·59
	18	λ Aquarii	E	2·4	5·4	8·3	11·0	16·5	22·1	25·0	27·6	30·4	22. 45. 16·47		16·76	34·66	17·90	16·36†	19. 44. 5·35	— 3·80
	19	Fomalhaut	E	..	40·6	43·8	47·0	53·3	59·9	2·9	6·2	..	22. 49. 53·33		53·49	11·46	17·97		....	
Aug. 1	20	δ Ursæ Min. (E&E)	E	..	..	..	..	48·5	23·5	9·5	55·0	41·5	18. 15. 47·94	+ 0·70	52·98	15·33		21·08	....	
	21	α Lyræ (E&E)	E	..	24·4	42·6	0·0	17·7	35·5	53·1	..	..	18. 32. 0·01	(+ 6·27)	0·64	23·29	22·65	[1·78]	....	
	22	Ceph. 51 S.P. (E&E)	E	..	..	..	..	25·0	18·0	16·0	13·0	12·0	18. 35. 24·88	[+ 2·36]	19·54	41·93			....	
	23	ν^2 Sagittarii (E&E)	E	50·2	5·2	20·3	35·1	50·2	5·2	20·3	..	..	18. 46. 35·22		35·55				18. 46. 58·02	— 4·35
	24	ε Aquilæ (E&E)	E	..	39·1	53·4	7·6	21·8	36·4	50·6	..	..	18. 53. 7·66		8·16	30·57	22·41		....	
	25	ζ Aquilæ (E&E)	E	7·6	21·8	36·0	50·2	4·5	18·7	32·9	..	..	18. 58. 50·24		50·73	13·15	22·42		....	
	26	γ Aquilæ .. (E&E)	E	46·0	0·3	14·4	28·4	42·6	56·7	10·6	..	..	19. 39. 28·43		28·90	51·40	22·50		....	
	27	* N.P.D. 81°. 27′ (E&E)	E	0·5	14·1	28·0	42·3	56·2	10·5	24·3	..	..	19. 43. 42·27		42·74				19. 44. 5·28	— 3·80
Aug. 2	28	☉ 2 L. (E&E)	S	16·1	30·4	45·1	59·5	14·1	29·0	43·3	..	..	8. 51. 59·65	(+ 6·57)	0·18			23·15	8. 51. 17·43	
	29	α Lyræ (E&E)	S	..	22·8	40·3	58·2	15·9	33·7	51·3	..	..	18. 31. 58·16		58·81	23·28	24·47	[1·53]	....	
	30	ζ Aquilæ (E&E)	S	5·7	20·0	34·2	48·5	2·6	17·0	31·2	..	..	18. 58. 48·46		48·97	13·14	24·17		....	
	31	ω Aquilæ (E&E)	S	22·4	36·5	50·7	5·0	19·0	33·1	47·2	..	..	19. 11. 4·84		5·34	29·64	24·30		....	
	32	γ Aquilæ (E&E)	S	44·3	58·1	12·4	26·4	..	54·5	8·4	..	..	19. 39. 26·37		26·86	51·40	24·54		....	
	33	* N.P.D. 81°. 27′ (E&E)	S	..	..	..	..	54·5	8·2	..	..	..	19. 43. 40·35		40·84				19. 44. 5·24	— 3·81
Aug. 3	34	Polaris S.P. (E&E)	C	..	..	..	16·0	1·0	44·0	33·0	..	18·0	13. 10. 1·05	(+ 6·87)	47·38	12·59	25·21		....	
	35	α Lyræ (E&E)	C	4·0	21·6	39·4	57·0	14·8	32·5	50·1	..	..	18. 31. 57·06	[+ 1·41]	57·73	23·26	25·53		....	
	36	Castor	D	13·4	16·8	20·2	23·4	29·9	36·6	39·5	43·0	46·4	7. 25. 29·85	(+ 7·10)	30·51	56·84	26·33	25·80	7. 25. 56·79	— 1·74
	37	Procyon	D	31·7	34·5	37·4	40·1	45·6	51·2	54·1	56·7	59·4	7. 31. 45·58	[+ 2·21]	46·08	12·36	26·28	[1·57]	7. 32. 12·37	— 1·44
	38	Pollux	D	18·4	21·7	24·9	28·0	34·0	40·6	43·6	46·8	49·8	7. 36. 34·15		34·77	1·04	26·27		7. 37. 1·07	— 1·64
Aug. 4	39	☉ 1 L.	D	13·0	16·1	19·0	21·8	27·4	33·4	36·4	39·1	42·0	8. 57. 27·53							
	40	☉ 2 L.	D	25·6	28·6	31·4	34·5	40·0	46·0	48·7	51·8	54·6	8. 59. 40·09		34·36				8. 59. 0·75	
	41	δ Ursæ Min. (E&E)	D	..	..	..	..	42·0	16·0	3·0	49·5	36·0	18. 15. 41·63		47·51	14·46			....	
	42	Cephei 51 S.P.	D	..	32·0	28·5	26·0	22·0	16·0	..	..	..	18. 35. 22·34		16·00	42·96			....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

Corrections for passage of Semidiameter, Nos. 1 and 28, $-67^s \cdot 96$: and $-66^s \cdot 46$.

August 1. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 02$ for clock-rate.

August 3. The azimuthal error by tabular places of Polaris S.P. and α Lyræ, allowing $0^s \cdot 33$ for clock-rate.

August 4. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 02$ for clock-rate.

1. Correction to R. A. on true Meridian, + $0^s \cdot 02$.
27. The 5th wire was set down $57^s \cdot 2$.
28. Cloudy.
31. Disturbed by persons talking in the court-yard.
34. Extremely faint and tremulous; quite invisible at times.
39, 40. The limbs very faint; thin clouds over the sky.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Aug. 4	1	γ Aquilæ	D	9·7	12·6	15·5	18·3	23·8	29·4	32·2	35·0	37·8	19. 39. 23·76	+0·70	24·28	51·40	27·12	25·80	19. 39. 51·36	— 3·77
	2	*N.P.D. 81°.27′	D	23·8	26·6	29·5	32·3	37·8	43·4	46·4	49·1	51·9	19. 43. 37·81	(+7·10)	38·32			[1·57]	19. 44. 5·41	— 3·81
	3	β Aquilæ	D	0·3	3·1	6·0	8·7	14·2	19·6	22·5	25·3	28·0	19. 48. 14·14	[2·21]	14·64	41·77	27·13		19. 48. 41·73	— 3·84
	4	63 Sagittarii	D	43·8	46·7	49·5	52·4	58·1	3·9	6·7	9·4	12·2	19. 53. 58·03		58·42				19. 54. 25·52	— 4·17
	5	64 Sagittarii	D	57·2	0·2	2·9	5·8	11·4	17·0	19·8	22·6	25·5	19. 57. 11·33		11·73				19. 57. 38·83	— 4·13
	6	Elpis	D	22·6	..	..	..	..	42·4	45·0	..	..	20. 7. 36·63		37·04				20. 8. 4·15	
	7	β Capricorni	D	44·4	47·4	50·2	53·0	58·7	4·5	7·4	10·3	13·0	20. 12. 58·71		59·10	26·21	27·11		20. 13. 26·22	— 4·19
	8	25 Vulpeculæ	D	33·6	36·6	39·6	42·7	48·6	54·8	57·8	0·8	3·8	20. 15. 48·65		49·24				20. 16. 16·36	— 3·76
	9	ρ Capricorni	D	28·2	31·2	34·0	37·0	42·8	48·6	51·4	54·4	57·3	20. 20. 42·72		43·10	10·22	27·12		20. 21. 10·23	— 4·25
	10	ε Delphini	D	5·0	7·9	10·7	13·6	19·0	24·8	27·5	30·4	33·1	20. 26. 19·16		19·68	46·74	27·06		20. 26. 46·81	— 3·85
	11	Procyon	C	30·2	32·8	35·9	38·6	..	49·8	52·4	55·2	58·0	7. 31. 44·06	(+5·40)	44·47	12·38	27·91	27·45	....	
	12	Pollux	C	16·8	20·1	23·3	26·4	32·5	39·0	42·1	45·2	48·3	7. 36. 32·59		33·09	1·06	27·97	[1·57]	....	
Aug. 5	13	⊙ 1 L.	C	2·4	5·2	8·1	11·0	16·6	22·6	25·5	28·4	31·3	9. 1. 16·74		} 23·47					
	14	⊙ 2 L.	C	14·7	17·8	20·7	23·6	29·3	35·1	38·2	40·9	43·8	9. 3. 29·29						9. 2. 51·51	
	15	Mercury, center	C	21·5	24·4	27·3	30·0	35·8	41·5	44·3	47·3	50·0	10. 15. 35·74		36·18				10. 16. 4·30	
Aug. 6	16	Polaris S.P. (E&E)	JC	..	..	..	..	57·5	36·5	30·0	..	14·0	13. 9. 56·26	[+1·27]	45·39	14·75	29·36	28·94	....	
	17	Spica	JC	19·9	22·8	25·5	28·4	33·9	39·7	42·5	45·3	48·0	13. 17. 33·95		34·25	4·16	29·91	[1·76]	13. 18. 4·16	— 2·29
	18	η Serpentis	JC	35·5	38·5	41·2	43·8	49·4	55·0	58·0	0·5	3·4	18. 13. 49·42		49·75	20·08	30·33		18. 14. 20·03	— 3·72
	19	δ Ursæ Min. (E&E)	JC	..	..	..	..	37·5	13·5	..	46·5	32·8	18. 15. 38·33		43·26	13·94			....	
	20	Ceph. 51 S.P. (E&E)	JC	..	..	23·5	22·0	18·0	11·5	8·5	..	..	18. 35. 17·81		12·37	43·56			....	
	21	β Lyræ	JC	19·4	22·9	26·2	29·5	35·9	42·7	46·0	49·3	52·6	18. 44. 36·00		36·50	6·87	30·37		18. 45. 6·81	— 3·31
	22	ν² Sagittarii	JC	12·6	15·6	18·6	21·6	27·4	33·6	36·4	39·6	42·5	18. 46. 27·49		27·74				18. 46. 58·06	— 4·32
	23	ε Aquilæ	JC	45·5	48·6	51·3	54·3	59·9	5·6	8·4	11·4	14·2	18. 52. 59·86		0·26	30·55	30·29		18. 53. 30·59	— 3·57
	24	50 Sagittarii	JC	31·3	34·4	37·3	40·3	46·0	52·0	55·1	58·0	0·9	19. 17. 46·09		46·34				19. 18. 16·69	— 4·36
	25	e^1 Sagittarii	JC	15·0	18·0	20·8	23·6	29·5	35·2	38·1	41·0	43·9	19. 32. 29·40		29·67				19. 33. 0·04	— 4·22
	26	ψ Aquilæ	JC	..	..	39·2	42·0	47·4	53·1	56·0	..	..	19. 37. 47·48		47·87				19. 38. 18·25	— 3·74
	27	Bradley 2507	JC	..	..	40·5	43·3	49·0	54·5	57·4	..	..	19. 37. 48·88		49·27				19. 38. 19·65	— 3·75
	28	*N.P.D. 81°.27′	JC	20·5	23·5	26·2	29·2	34·6	40·4	43·4	45·8	48·6	19. 43. 34·64		35·02				19. 44. 5·40	— 3·80
	29	c Sagittarii	JC	35·6	38·9	42·0	45·0	51·3	57·7	0·8	4·0	7·1	19. 53. 51·33		51·55	21·97	30·42		19. 54. 21·95	— 4·53
	30	Bradley 2574	JC	6·0	..	12·0	15·0	20·8	26·8	29·8	..	35·6	20. 2. 20·81		21·25				20. 2. 51·66	— 3·73
	31	α^2 Capricorni	JC	49·6	52·6	55·4	..	3·9	..	12·5	15·4	18·0	20. 10. 3·86		4·15	34·51	30·36		20. 10. 34·57	— 4·15
Aug. 7	32	α Ophiuchi	C	54·1	56·9	59·7	2·6	8·2	14·0	16·6	19·6	22·4	17. 28. 8·18		8·58	40·56	31·98	30·74†	....	
	33	β Ophiuchi	C	2·5	5·4	8·1	11·0	16·3	22·0	24·6	27·5	30·3	17. 36. 16·36		16·72	48·69	31·97	[1·69]	....	
Aug. 8	34	72 Ophiuchi	E	9·4	12·2	15·0	17·7	23·4	29·0	31·8	34·6	37·4	18. 0. 23·34	+ 0·67	23·68	57·55	33·87	32·66	....	
	35	δ Ursæ Min. (E&E)	E	..	..	..	..	..	8·0	55·0	42·0	28·5	18. 15. 33·78	(+5·46)	39·44	13·39		[1·58]	....	
	36	α Lyræ	JC	31·4	34·7	38·2	41·9	49·0	56·2	59·6	3·2	6·8	18. 31. 48·94	[+0·20]	49·46	23·21	33·75	32·45†	....	
	37	Ceph. 51 S.P. (E&E)	E	..	..	..	..	..	..	..	4·5	4·0	18. 35. 16·63		10·19	44·16		32·66	....	
	38	β Lyræ	JC	16·2	19·7	23·0	26·2	32·6	39·4	42·8	46·2	49·3	18. 44. 32·77		33·25	6·85	33·60	32·45†	....	
	39	ω Aquilæ	E	41·4	44·2	47·0	49·6	55·4	1·1	4·0	6·6	9·5	19. 10. 55·37		55·72	29·62	33·90	32·66	....	
	40	50 Sagittarii	E	27·6	30·6	33·6	36·6	42·5	48·5	51·4	54·6	57·5	19. 17. 42·50		42·67				19. 18. 16·60	— 4·36
	41	α Vulpeculæ	E	16·7	20·0	22·9	26·0	32·0	38·3	41·2	44·3	47·3	19. 22. 32·03		32·45	6·37	33·92		....	
	42	9 Vulpeculæ	E	51·0	54·2	57·1	59·9	5·8	11·8	14·6	17·6	20·6	19. 28. 5·79		6·18				19. 28. 40·12	— 3·64
	43	e^1 Sagittarii	E	11·4	14·4	17·3	20·1	25·9	31·6	34·5	37·5	40·3	19. 32. 25·84		26·04				19. 32. 59·98	— 4·21
	44	* N.P.D. 81°.27′	E	17·2	20·0	22·8	25·5	31·1	36·7	39·6	42·3	45·1	19. 43. 31·10		31·43				19. 44. 5·39	— 3·80
	45	63 Sagittarii	E	37·0	40·0	42·7	45·7	51·3	57·1	0·0	2·7	5·6	19. 53. 51·30		51·52				19. 54. 25·49	— 4·18

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

August 6. The azimuthal error used is the mean of those (+0″·95 and +1″·59) determined by tabular places of Polaris S.P. and Spica, and of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s{\cdot}01$ and $0^s{\cdot}02$ for clock-rate in each case respectively.

August 8. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s{\cdot}02$ for clock-rate.

11. Extremely faint and tremulous.
29. Faint.
15. Observed as a star, the image being a small and very faint patch of light.
37. Cloudy during the passage over the preceding wires.
16. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Aug. 8	1	64 Sagittarii	E	50·4	53·4	56·3	58·9	4·5	10·4	..	..	..	19. 57. 4·59	+ 0·67	4·82			32·66	19. 57. 38·79	— 4·14
	2	Elpis.....	E	9·6	12·6	..	..	24·0	29·6	32·4	..	38·2	20. 4. 23·89	(+5·46)	24·13			[1·58]	20. 4. 58·11	
	3	16 Delphini	E	..	..	..	..	..	..	47·3	49·8	52·7	20. 48. 38·56	[+0·20]	38·91				20. 49. 12·94	— 3·90
Aug. 9	4	ε Aquilæ	D	40·5	43·4	46·4	49·1	54·8	0·9	3·4	6·2	9·1	18. 52. 54·82	(+6·42)	55·26	30·53	35·27	34·05†	....	
	5	ζ Aquilæ	D	23·2	26·1	28·8	31·7	37·4	43·0	45·9	48·6	51·6	18. 58. 37·31	[+0·62]	37·74	13·11	35·37	[1·61]	....	
	6	μ Aquilæ	C	40·8	43·8	46·6	49·4	54·8	0·5	3·3	6·0	8·8	19. 26. 54·84		55·23	30·49	35·26	33·95	19. 27. 30·48	— 3·78
	7	σ Draconis	C	..	..	40·6	48·7	4·4	20·2	27·8	..	..	19. 32. 4·19		5·45				19. 32. 40·71	— 3·78
	8	46 Aquilæ	C	4·0	7·0	9·7	12·4	18·0	23·8	26·7	29·4	32·2	19. 35. 18·08		18·50				19. 35. 53·76	— 3·74
	9	γ Aquilæ	C	1·7	4·5	7·4	10·1	15·6	21·4	24·2	27·0	29·7	19. 39. 15·68		16·09	51·39	35·30		19. 39. 51·35	— 3·76
	10	* N. P. D. 81°. 27′.	C	16·0	18·6	21·6	24·5	..	35·4	38·0	41·1	43·7	19. 43. 29·81		30·21				19. 44. 5·48	— 3·80
	11	57 Aquilæ	C	..	..	..	..	..	..	52·8	55·5	58·4	19. 46. 44·33		44·64				19. 47. 19·91	— 4·06
	12	Piazzi XIX. 314.	C	..	..	..	..	..	12·6	26·7	..	..	19. 46. 44·69		45·00				19. 47. 20·27	— 4·06
	13	13 Sagittæ	C	8·4	11·3	14·2	17·1	22·8	28·7	31·5	34·5	37·4	19. 53. 22·83		23·28				19. 53. 58·56	— 3·74
	14	Elpis.....	C	24·2	27·1	29·8	32·6	38·0	43·8	46·5	49·2	52·0	20. 3. 38·08		38·38				20. 4. 13·67	
	15	α^2 Capricorni....	C	..	..	..	53·4	59·0	4·6	7·5	10·4	13·1	20. 9. 58·94		59·22	34·52	35·30		20. 10. 34·52	— 4·16
	16	35 Cygni	C	36·8	40·[illegible]	43·6	46·8	53·5	0·4	3·7	7·0	10·4	20. 12. 53·55		54·12				20. 13. 29·42	— 3·73
	17	25 Vulpeculæ ...	C	..	..	..	..	..	11·0	26·1	..	..	20. 15. 40·71		41·20				20. 16. 16·51	— 3·76
	18	68 Aquilæ	C	32·0	35·0	37·5	40·5	45·8	51·5	54·3	57·0	59·8	20. 20. 45·88		46·21				20. 21. 21·52	— 4·02
	19	ε Delphini	C	57·1	0·0	2·6	5·4	11·0	16·6	19·4	22·3	25·2	20. 26. 11·02		11·44	46·76	35·32		20. 26. 46·76	— 3·87
	20	7-yr. Cat. No. 1693	C	..	..	..	..	17·0	23·1	26·0	28·8	31·3	20. 28. 17·05		17·30				20. 28. 52·62	— 4·25
	21	10 Delphini	C	8·0	11·0	13·7	16·6	22·3	28·1	30·9	33·7	36·5	20. 34. 22·26		22·70				20. 34. 58·03	— 3·86
	22	ε Aquarii	C	33·0	36·0	38·8	41·6	47·1	52·8	55·6	58·5	1·2	20. 39. 47·13		47·43	22·76	35·33		20. 40. 22·76	— 4·11
	23	4 Aquarii	C	27·5	30·4	33·0	36·0	41·3	47·0	49·9	52·5	55·2	20. 43. 41·38		41·70				20. 44. 17·04	— 4·06
	24	16 Delphini	C	23·3	26·2	28·9	31·7	37·4	43·1	45·9	48·6	51·5	20. 48. 37·35		37·77				20. 49. 13·11	— 3·90
	25	θ Capricorni.....	C	32·0	35·0	37·9	40·7	46·4	52·4	55·2	58·2	1·0	20. 57. 46·48		46·73	22·09	35·36		20. 58. 22·08	— 4·22
	26	ε Pegasi	C	44·5	47·4	50·2	53·0	58·6	4·2	7·0	9·7	12·5	21. 36. 58·51		58·92	34·32	35·40		21. 37. 34·32	— 3·93
Aug. 10	27	σ Ophiuchi.....	E	57·9	0·9	3·7	6·4	11·8	17·6	20·4	23·0	25·8	17. 19. 11·90	(+7·81)	12·34	49·36	37·02	35·89†	....	
	28	α Ophiuchi.....	E	48·7	51·8	54·6	57·4	3·0	8·7	11·6	14·4	17·2	17. 28. 3·00		3·50	40·52	37·02	[1·56]	....	
	29	δ Ursæ Min.(E&E)	JC	..	..	..	56·0	27·0	3·5	49·5	37·0	..	18. 15. 28·29		35·84			35·65	....	
	30	α Lyræ	JC	28·0	31·4	34·9	38·5	45·5	52·7	56·4	59·9	3·4	18. 31. 45·57		46·30	23·18	36·88		....	
	31	β Lyræ	JC	..	..	..	22·6	29·2	36·1	39·4	42·6	46·0	18. 44. 29·31		29·98	6·83	36·85		....	
	32	10 Aquilæ	JC	44·4	47·4	50·2	52·9	58·4	4·4	7·2	10·0	12·8	18. 51. 58·58		59·09				18. 52. 35·96	— 3·56
Aug. 11	33	⊙ 1 L.	S	44·4	47·4	50·4	53·3	58·8	4·8	7·4	10·3	13·2	9. 23. 58·83	[+1·04]	} 5·15			37·42	9. 25. 43·17	
	34	⊙ 2 L.	S	56·3	59·0	1·7	4·7	10·3	16·2	19·0	21·9	24·9	9. 26. 10·40					[1·53]		
	35	Venus, center ...	S	47·0	49·8	52·6	55·7	1·4	7·3	10·1	12·9	15·7	9. 53. 1·34		1·87				9. 53. 39·92	
	36	Polaris S.P.(E&E)	R	36·0	27·0	19·0	11·0	56·0	35·0	28·0	..	..	13. 9. 56·23		40·06	18·85	38·79		....	
	37	☽ 1 L.	S	48·3	50·9	54·4	57·2	3·2	9·4	12·4	15·4	18·4	15. 57. 3·24		3·54				15. 58. 50·50	
	38	Antares	S	14·1	17·1	20·4	23·4	29·4	35·8	38·7	41·6	44·9	16. 20. 29·43		29·69	8·12	38·43		....	
	39	η Ophiuchi.....	C	45·5	48·5	51·2	54·1	59·9	5·6	8·5	11·4	14·3	17. 1. 59·83		0·16	38·50	38·34	37·27†	....	
	40	α Herculis	C	36·6	39·6	42·4	45·4	51·0	56·7	59·5	2·5	5·4	17. 7. 50·97		51·50	29·89	38·39		....	
	41	δ Ursæ Min.(E&E)	S	31·0	20·5	6·5	..	26·0	59·5	46·5	..	..	18. 15. 25·45		32·72	12·47		37·42	....	
	42	Ceph.51 S.P.(E&E)	S	26·0	23·0	22·5	16·5	14·0	8·5	5·0	..	..	18. 35. 14·25		6·15	45·29			....	
	43	Victoria	S	2·8	..	8·6	11·1	16·5	22·5	25·5	..	30·8	18. 43. 16·79		17·17				18. 43. 55·78	
	44	ε Aquilæ.....	S	37·0	39·8	..	45·8	51·4	57·0	..	2·7	5·6	18. 52. 51·29		51·82	30·51	38·69		....	
	45	ζ Aquilæ	S	19·8	22·6	25·4	28·4	34·0	39·8	42·5	45·4	48·4	18. 58. 33·99		34·51	13·10	38·59		....	
	46	Elpis	S	..	39·4	..	7·7	..	..	..	..	..	20. 2. 7·62		7·98				20. 2. 46·68	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

Correction for passage of Semidiameter, No. 37, $+68^s{\cdot}51$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

August 9 and 10. The azimuthal error used is the mean of those ($+0''{\cdot}20$ and $+1''{\cdot}04$) determined on August 8 and 11.

August 11. The azimuthal error used is the mean of those ($+1''{\cdot}44$ and $+0''{\cdot}65$) determined by tabular places of Polaris S.P. and α Herculis, and of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s{\cdot}26$ and $0^s{\cdot}02$ for clock-rate in each case respectively.

12, 17. Observed over wires Y, Z.
14. A great number of objects in the field.
18. Cloudy.
20. Very faint; cloudy in the South.
21, 30. Faint; cloudy.
33, 34. The limbs very tremulous and ill defined.
35. Observed as one mass; cloudy; definition exceedingly bad. No N. P. D. was observed.
36. Extremely tremulous at times.
37. Correction to R.A. on true meridian, $+0^s{\cdot}01$.
46. Observed over wires O, T.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Aug.12	1	⊙ 1 L.	E	29·8	32·4	35·4	38·4	44·3	50·0	52·5	55·7	58·5	9. 27. 44·06	+0·67	50·20			38·98		
	2	⊙ 2 L.	E	41·0	44·0	46·6	49·6	55·3	1·1	4·0	6·8	9·6	9. 29. 55·28	(+7·81)				[1·51]	9. 29. 29·78	
	3	Polaris S.P. (E&E)	E	35·0	27·0	18·0	11·0	54·0	35·0	..	..	..	13. 9. 55·74	[+1·04]	39·57	19·70	40·13		....	
	4	☽ 1 L.	E	21·7	24·8	28·0	31·0	36·9	43·1	46·0	49·1	52·2	16. 55. 36·93		37·22				16. 57. 27·54	
	5	α Herculis	E	35·0	37·8	40·8	43·6	49·3	55·0	57·9	0·6	3·6	17. 7. 49·23		49·76	29·87	40·11		17. 8. 29·82	— 3·03
	6	θ Ophiuchi	E	48·0	51·2	54·1	57·2	3·3	9·3	12·5	15·6	18·6	17. 13. 3·26		3·52	43·56	40·04		17. 13. 43·58	— 4·00
	7	σ Ophiuchi	JC	55·3	58·2	1·0	3·6	9·2	14·9	17·5	20·3	23·2	17. 19. 9·19		9·65	49·34	39·69	38·64†	....	
	8	α Ophiuchi	JC	46·2	49·0	51·8	54·6	0·3	5·9	8·7	11·6	14·4	17. 28. 0·23		0·74	40·50	39·76		....	
	9	μ Herculis	E	..	..	..	..	30·5	36·6	40·0	..	46·1	17. 40. 30·44		31·17	11·16	39·99	38·98	17. 41. 11·26	— 2·93
	10	δ Ursæ Min. (E&E)	E	..	..	..	..	25·0	58·5	..	33·0	19·0	18. 15. 24·61		31·88	12·12			....	
	11	Ceph. 51 S.P. (E&E)	E	..	..	..	17·5	14·0	6·5	5·0	2·0	1·5	18. 35. 13·87		5·77	45·73			....	
	12	Victoria	E	2·0	4·4	7·4	10·2	15·9	21·3	24·3	26·9	29·6	18. 43. 15·73		16·11				18. 43. 56·26	
	13	7 Vulpeculæ	E	..	36·4	39·0	42·1	47·8	53·8	56·6	59·6	..	19. 22. 47·84		48·41				19. 23. 28·61	— 3·59
	14	42 Aquilæ	E	44·0	46·7	49·5	52·4	57·8	3·4	6·2	9·0	11·7	19. 29. 57·80		58·20				19. 30. 38·40	— 3·83
	15	ψ Aquilæ	E	23·3	26·4	29·2	31·9	37·6	43·4	46·1	49·0	52·0	19. 37. 37·60		38·11				19. 38. 18·32	— 3·72
	16	Bradley 2521	E	37·5	40·4	43·1	46·0	51·6	57·3	0·2	2·9	5·8	19. 41. 51·60		52·11				19. 42. 32·33	— 3·75
	17	57 Aquilæ	E	25·4	28·2	30·9	33·8	39·2	45·0	47·7	50·6	53·4	19. 46. 39·30		39·68				19. 47. 19·90	— 4·05
	18	11 Sagittæ	E	43·6	46·5	49·4	52·2	58·0	3·8	6·6	9·6	12·4	19. 50. 57·96		58·50				19. 51. 38·72	— 3·73
	19	16 Vulpeculæ	E	23·0	26·2	29·2	32·4	38·2	44·4	47·4	50·4	53·4	19. 55. 38·24		38·84				19. 56. 19·07	— 3·68
	20	Elpis	E	10·4	13·2	16·2	18·6	24·2	30·0	32·6	35·6	38·5	20. 1. 24·32		24·68				20. 2. 4·92	
	21	21 Vulpeculæ	E	..	..	..	..	2·1	8·4	11·6	14·8	18·0	20. 8. 2·13		2·76				20. 8. 43·00	— 3·71
	22	α^2 Capricorni	E	39·7	42·6	45·5	48·3	54·0	59·6	2·5	5·3	8·2	20. 9. 53·92		54·27	34·52	40·25		20. 10. 34·51	— 4·16
	23	β Capricorni	E	..	..	..	..	45·6	51·4	54·2	57·0	0·0	20. 12. 45·57		45·91	26·22	40·31		20. 13. 26·16	— 4·20
Aug.13	24	Polaris S.P. (E&E)	C	..	..	19·0	8·0	55·0	34·5	..	..	14·0	13. 9. 54·92	(+6·62)	40·11	20·53	40·42	40·16	....	
	25	Spica	C	8·8	11·8	14·5	17·2	22·8	28·4	31·4	34·2	36·9	13. 17. 22·84	[+0·40]	23·13	4·08	40·95	[1·49]	13. 18. 4·11	— 2·21
	26	θ Ophiuchi	C	46·8	50·0	53·0	56·0	2·0	8·3	11·4	14·4	17·3	17. 13. 2·09		2·29	43·55	41·26		17. 13. 43·52	— 3·99
	27	b Ophiuchi	C	11·4	14·5	17·5	20·5	26·5	32·7	35·6	38·6	41·7	17. 17. 26·50		26·70				17. 18. 7·93	— 3·98
	28	μ Herculis	C	13·8	17·0	20·0	23·2	29·4	35·6	38·8	41·8	45·0	17. 40. 29·35		29·87	11·14	41·27		17. 41. 11·13	— 2·91
	29	☽ 1 L.	C	30·9	34·0	37·0	40·0	46·0	52·2	55·1	58·3	1·3	17. 56. 46·04		46·27				17. 58. 39·05	
	30	72 Ophiuchi	R	..	4·5	7·3	10·0	15·7	21·4	24·3	27·0	..	18. 0. 15·68		16·09	57·50	41·41	40·26†	....	
	31	μ^1 Sagittarii	R	45·4	48·5	51·5	54·5	0·3	6·4	9·2	12·1	15·2	18. 5. 0·30		0·52	41·87	41·35		....	
	32	15 Sagittarii	C	14·1	17·0	19·8	23·0	28·6	34·6	37·6	40·6	43·5	18. 6. 28·70		28·93			40·16	18. 7. 10·21	— 4·09
	33	δ Ursæ Min. (E&E)	C	30·5	18·0	4·5	51·5	..	..	..	..	18·0	18. 15. 23·83		30·42	11·75			....	
	34	21 Sagittarii	C	..	26·0	28·8	31·7	37·6	43·6	46·5	49·5	..	18. 16. 37·61		37·84				18. 17. 19·13	— 4·12
	35	* N.P.D. 105°. 16′.	C	11·4	14·4	17·4	20·1	25·7	31·6	34·4	37·3	40·3	18. 23. 25·79		26·05				18. 24. 7·35	— 4·00
	36	Ceph. 51 S.P. (E&E)	C	..	..	..	..	..	5·0	..	1·0	58·0	18. 35. 11·80		4·34	46·18			....	
	37	Var. (R) Sagittæ	C	..	1·6	4·6	7·4	13·1	18·8	21·8	24·7	..	20. 7. 13·08		13·53				20. 7. 54·94	— 3·78
	38	α^2 Capricorni	C	38·6	41·5	44·4	47·3	52·8	58·6	1·4	4·4	7·1	20. 9. 52·85		53·12	34·51	41·39		20. 10. 34·53	— 4·15
	39	ρ Çapricorni	C	14·0	17·0	20·0	23·0	28·6	34·5	37·4	40·3	43·2	20. 20. 28·61		28·85	10·24	41·39		20. 21. 10·27	— 4·27
	40	1 Delphini	C	55·0	58·5	0·9	3·6	9·2	15·0	17·6	20·5	23·4	20. 23. 9·25		9·66				20. 23. 51·08	— 3·87
	41	26 Vulpeculæ	C	25·3	28·3	31·4	34·4	40·4	46·7	49·8	52·7	55·8	20. 29. 40·49		41·00				20. 30. 22·43	— 3·81
	42	30 Vulpeculæ	C	6·0	9·0	12·1	15·2	21·4	27·4	30·6	33·6	36·7	20. 38. 21·29		21·79				20. 39. 3·23	— 3·83
	43	5 Aquarii	C	5·6	8·4	11·2	14·1	19·4	25·2	27·8	30·5	33·3	20. 44. 19·45		19·76				20. 45. 1·20	— 4·07
	44	32 Vulpeculæ	C	52·2	55·4	58·6	1·5	7·7	14·1	17·1	20·2	23·4	20. 48. 7·75		8·27	49·73	41·46		20. 48. 49·72	— 3·86
	45	ξ Aquarii	C	39·0	41·7	44·5	47·2	52·8	58·5	1·3	4·0	6·8	21. 29. 52·82		53·12	34·63	41·51		21. 30. 34·61	— 4·08
Aug.14	46	σ Ophiuchi	E	52·0	54·8	57·6	0·4	5·8	11·5	14·3	16·9	19·9	17. 19. 5·86		6·24	49·32	43·08	42·06†	....	
	47	α Ophiuchi	E	42·7	45·7	48·6	51·4	56·9	2·7	5·6	8·3	11·3	17. 27. 56·97		57·40	40·47	43·07	[1·39]	....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 4 and 29, $+70^s·27$: and $+71^s·50$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
August 12. The azimuthal error used is the mean of those (+1″·20 and +0″·87) determined by tabular places of Polaris S.P. and α Herculis, and of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s·25$ and $0^s·02$ for clock-rate in each case respectively.
August 13. The azimuthal error used is the mean of those (+0″·09 and +0″·72) determined by tabular places of Polaris S.P. and Spica, and of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s·01$ and $0^s·02$ for clock-rate in each case respectively.

3. Exceedingly faint ; the sky very hazy.
4, 29. Correction to R.A. on true meridian, $+0^s·01$ in both cases.
17. Double: observed the brighter.
24. Extremely tremulous.
37. Of the 9th magnitude.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Aug. 14	1	15 Sagittarii	JC	12·4	15·5	18·4	21·4	27·1	33·1	36·0	39·0	42·0	18. 6. 27·16	+0·67	27·39			41·82	18. 7. 10·26	— 4·08
	2	η Serpentis.....	JC	23·0	25·9	28·6	31·4	36·9	42·5	45·2	48·0	50·7	18. 13. 36·86	(+6·62)	37·19	20·01	42·82	[1·39]	....	
	3	21 Sagittarii	JC	21·2	24·3	27·2	30·2	36·0	42·0	44·8	48·0	50·8	18. 16. 36·00	[+ 0·40]	36·23				18. 17. 19·11	— 4·11
	4	ϵ Aquilæ.....	JC	32·8	35·7	38·7	41·5	47·2	52·8	55·8	58·6	1·4	18. 52. 47·11		47·55	30·49	42·94		....	
	5	☽ 1 L.....	JC	..	17·7	20·4	23·5	29·3	35·5	38·5	41·6	..	18. 59. 29·44		29·68				19. 1. 24·62	
	6	ψ Sagittarii.....	JC	18·0	21·0	24·2	27·0	33·1	39·5	42·4	45·5	48·5	19. 6. 33·20		33·39	16·31	42·9		....	
	7	d Sagittarii	JC	47·0	50·0	52·8	55·9	1·5	7·4	10·5	13·4	16·4	19. 9. 1·61		1·85				19. 9. 44·78	— 4·22
	8	ρ^1 Sagittarii.....	JC	53·4	56·5	59·3	2·2	8·0	14·0	16·7	19·7	22·7	19. 13. 8·00		8·24				19. 13. 51·17	— 4·20
Aug. 15	9	☉ 1 L.....	P	42·3	44·8	47·9	50·5	56·6	2·4	5·0	7·6	10·7	9. 38. 56·37	+0·78	2·23			43·19	9. 40. 45·97	
	10	☉ 2 L.....	P	52·5	55·5	58·6	1·4	7·0	12·5	15·7	18·5	21·4	9. 41. 6·96	(+7·63)				[1·37]		
	11	Venus 1 L.....	P	47·4	50·5	53·0	56·0	1·7	7·2	10·2	13·0	15·9	10. 12. 1·61	[+ 2·57]	2·16				10. 12. 46·30	
	12	Polaris S.P. (E&E)	R	30·0	21·0	12·5	5·0	51·0	32·5	23·5	..	..	13. 9. 51·04		37·59	21·97	44·40	43·67	....	
	13	Spica .....(E&E)	R	..	..	..	19·3	33·3	47·2	1·4	..	..	13. 17. 19·20		19·63	4·06	44·43		....	
	14	72 Ophiuchi.....	C	58·6	1·5	4·4	7·3	12·7	18·6	21·3	24·0	26·8	18. 0. 12·75		13·29	57·47	44·18	43·12†	....	
	15	μ^1 Sagittarii	C	42·5	45·6	48·5	51·4	57·4	3·4	6·4	9·2	12·3	18. 4. 57·36		57·74	41·85	44·11		....	
	16	δ Ursæ Min.(E&E)	P	26·5	14·5	1·5	..	..	..	..	..	..	18. 15. 20·41		26·65	11·02		43·19	....	
	17	γ Aquilæ	P	52·4	55·4	58·2	1·0	6·6	12·2	14·9	17·8	20·6	19. 39. 6·51		7·05	51·36	44·31		19. 39. 51·36	— 3·73
	18	α Aquilæ	P	13·6	16·5	19·4	22·2	27·6	33·5	36·3	39·0	41·8	19. 43. 27·71		28·24	12·63	44·39		19. 44. 12·55	— 3·80
	19	β Aquilæ	P	43·1	45·9	48·8	51·4	56·9	2·4	5·6	8·2	10·8	19. 47. 56·96		57·47	41·75	44·28		19. 48. 41·79	— 3·82
	20	☽ 1 L.....	P	19·1	22·0	25·0	28·0	33·8	39·9	42·8	45·6	48·7	20. 2. 33·83		34·23				20. 4. 30·39	
	21	α^2 Capricorni....	P	35·7	38·6	41·3	44·3	49·9	55·6	58·5	1·2	4·0	20. 9. 49·85		50·27	34·51	44·24		20. 10. 34·61	— 4·15
	22	40 Cygni	P	33·0	36·6	40·2	43·5	50·4	57·8	1·2	4·6	8·1	20. 21. 50·54		51·27				20. 22. 35·62	— 3·75
	23	τ^2 Capricorni....	P	45·0	47·8	50·9	53·7	59·4	5·1	8·1	10·9	13·7	20. 30. 59·35		59·75				20. 31. 44·11	— 4·22
	24	ϵ Aquarii	P	24·0	26·8	29·5	32·4	37·8	43·8	46·5	49·2	52·0	20. 39. 37·95		38·38	22·77	44·39		20. 40. 22·75	— 4·12
	25	32 Vulpeculæ....	P	49·0	52·4	55·4	58·6	..	10·8	14·2	17·1	20·0	20. 48. 4·63		5·27	49·73	44·46		20. 48. 49·65	— 3·86
	26	12 Aquarii.....	P	58·1	0·9	3·8	6·5	12·2	17·8	20·6	23·4	26·0	20. 56. 12·10		12·56				20. 56. 56·94	— 4·08
	27	Bradley 2756....	P	28·5	31·4	34·4	37·3	43·4	49·5	52·5	55·4	58·5	21. 3. 43·39		44·01				21. 4. 28·40	— 3·91
	28	15 Aquarii.....	P	8·3	11·0	13·8	16·7	22·0	27·6	30·4	33·2	36·0	21. 10. 22·06		22·52				21. 11. 6·92	— 4·06
	29	20 Aquarii.....	P	51·4	54·2	57·2	0·0	5·2	10·8	13·8	16 6	19·4	21. 17. 5·35		5·81				21. 17. 50·21	— 4·06
	30	β Aquarii.....	P	29·0	32·0	34·8	37·4	43·0	48·7	51·4	54·2	56·9	21. 23. 43·00		43·46	27·86	44·40		21. 24. 27·87	— 4·06
Aug. 16	31	β Lyræ	E	3·5	7·0	10·3	13·6	20·2	26·9	30·1	33·4	36·6	18. 44. 20·12	(+8·23)	20·87	6·75	45·88	44·69	18. 45. 6·71	— 3·19
	32	ϵ Aquilæ	E	..	..	..	..	44·1	49·8	52·7	55·5	58·4	18. 52. 44·04		44·65	30·47	45·82	[1·48]	18. 53. 30·50	— 3·49
	33	18 Aquilæ	E	37·6	40·4	43·4	46·1	51·6	57·1	0·2	2·9	5·8	18. 59. 51·63		52·22				19. 0. 38·08	— 3·59
	34	17 Lyræ	E	17·4	20·6	24·0	27·4	33·8	40·4	43·7	46·7	50·2	19. 1. 33·74		34·48				19. 2. 20·34	— 3·32
	35	19 Lyræ	E	33·7	37·0	40·3	43·5	49·9	56·4	59·7	2·8	6·0	19. 5. 49·86		50·59				19. 6. 36·46	— 3·36
	36	Bradley 2429....	E	37·5	40·2	43·0	45·8	51·3	56·7	59·7	2·5	5·3	19. 10. 51·29		51·81				19. 11. 37·68	— 3·80
	37	δ Aquilæ	JC	42·3	45·0	48·0	50·6	56·0	1·7	4·4	7·1	10·0	19. 17. 56·07		56·61	42·20	45·59	44·41†	....	
	38	α Vulpeculæ	JC	4·8	8·0	11·0	14·0	20·0	26·2	29·2	32·2	35·4	19. 22. 20·04		20·72	6·32	45·60		....	
	39	46 Aquilæ	E	53·1	56·0	58·9	1·7	7·2	13·0	15·9	18·6	21·4	19. 35. 7·26		7·85			44·69	19. 35. 53·75	— 3·71
	40	α Aquilæ	E	12·0	15·0	17·8	20·5	26·0	31·7	34·5	37·3	40·1	19. 43. 26·05		26·62	12·63	46·01		19. 44. 12·52	— 3·80
	41	λ Ursæ Min.(E&E)	E	..	..	..	..	..	16·0	42·5	6·5	29·0	19. 59. 23·16		43·16	29·45			....	
	42	25 Vulpeculæ ...	E	..	17·8	20·7	23·6	29·6	36·0	38·8	41·9	..	20. 15. 29·71		30·39				20. 16. 16·33	— 3·75
	43	1 Delphini	E	50·5	53·5	56·4	59·0	4·5	10·3	13·1	15·8	18·6	20. 23. 4·58		5·17				20. 23. 51·12	— 3·87
	44	τ^2 Capricorni....	E	43·4	46·4	49·1	52·0	57·6	3·4	6·3	9·2	12·2	20. 30. 57·68		58·11				20. 31. 44·06	— 4·22
	45	ϵ Aquarii	E	22·4	25·3	28·0	30·7	36·5	42·1	44·8	47·8	50·5	20. 39. 36·40		36·86	22·78	45·92		20. 40. 22·82	— 4·13
	46	☽ 1 L.....	E	42·0	44·9	47·8	50·7	56·6	2·4	5·3	8·4	11·1	21. 4. 56·53		56·98				21. 6. 54·12	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

Corrections for passage of Semidiameter, Nos. 5, 11, 20, and 46, $+72^s{\cdot}01$: $+0^s{\cdot}37$: $+71^s{\cdot}81$: and $+71^s{\cdot}13$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

August 15 and 16. The azimuthal error used is the mean of those (+2″·70 and +2″·45) determined by tabular places of Polaris S.P. and δ Ursæ Minoris on August 15, and of α Aquilæ and λ Ursæ Minoris on August 16, allowing $0^s{\cdot}29$ and $0^s{\cdot}02$ for clock-rate in each case respectively.

9, 10. The limbs very much diffused.

16. Quite cloudy after the passage over the 3rd wire.

5, 20, 46. Correction to R.A. on true meridian, $+0^s{\cdot}01$, $+0^s{\cdot}02$, and $+0^s{\cdot}02$ respectively.

11. The definition very bad.

20. Clouds passing over the Moon.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Aug. 16	1	β Aquarii.....	E	27·6	30·4	33·1	36·0	41·4	47·0	49·8	52·6	55·4	21. 23. 41·43	+0·78 (+8·23) [+2·57]	41·92	27·87	45·95	44·69	21. 24. 27·93	— 4·07
	2	ξ Aquarii.....	E	34·4	37·0	39·8	42·6	48·2	53·8	56·5	59·4	2·2	21. 29. 48·16		48·63	34·65	46·02	[1·48]	21. 30. 34·64	— 4·10
Aug. 17	3	⊙ 1 L.....	C	7·7	10·6	13·4	16·1	21·6	27·6	30·6	33·1	36·2	9. 46. 21·83	[+2·81]	27·70			45·82	9. 48. 14·16	
	4	⊙ 2 L.....	C	18·0	20·6	23·9	27·0	32·4	38·1	40·8	43·9	46·6	9. 48. 32·32					[1·57]		
	5	Polaris S.P. (E&E)	R	28·5	22·0	11·0	4·5	49·0	32·0	24·0	..	..	13. 9. 50·41		36·15	23·19	47·04		....	
	6	72 Ophiuchi.....	D	55·8	58·6	1·4	4·2	9·7	15·4	18·2	20·9	23·8	18. 0. 9·72		10·32	57·45	47·13	45·88†	....	
	7	μ^1 Sagittarii.....	D	39·6	42·7	45·7	48·5	54·4	0·5	3·4	6·3	9·0	18. 4. 54·41		54·84	41·83	46·99		....	
	8	δ Ursæ Min. (E&E)	C	..	..	..	..	..	..	37·0	24·5	10·0	18. 15. 15·86		22·48	10·33		45·82	....	
	9	α Lyræ.....	C	17·4	21·1	24·5	28·1	35·1	42·3	45·9	49·4	53·0	18. 31. 35·14		35·96	23·07	47·11		18. 32. 22·99	— 3·03
	10	Cep. 51 S.P. (E&E)	C	..	..	..	11·0	6·5	0·5	58·0	55·5	54·5	18. 35. 7·13		0·04	47·90			....	
	11	β Lyræ.....	C	2·4	5·9	9·0	12·4	18·9	25·5	28·9	32·1	35·4	18. 44. 18·88		19·64	6·74	47·10		18. 45. 6·68	— 3·18
	12	β Aquarii.....	C	26·4	29·2	32·0	34·6	40·2	46·0	48·6	51·4	54·3	21. 23. 40·25		40·76	27·87	47·11		21. 24. 27·98	— 4·07
	13	ξ Aquarii	C	33·0	35·8	38·7	41·4	47·0	52·5	55·5	58·2	1·0	21. 29. 46·96		47·45	34·65	47·20		21. 30. 34·67	— 4·10
	14	ε Pegasi.....	C	32·6	35·4	38·4	41·0	46·5	52·1	54·9	57·7	0·4	21. 36. 46·50		47·10	34·37	47·27		21. 37. 34·33	— 3·98
	15	☽ 2 L.....	C	9·0	12·0	15·0	17·6	23·5	29·4	32·3	35·0	38·0	22. 8. 23·49		23·99				22. 8. 0·99	
	16	ζ Aquarii.....	C	52·0	54·7	57·5	0·2	5·8	11·5	14·1	16·7	19·6	22. 21. 5·74		6·28				22. 21. 53·56	— 4·01
	17	η Aquarii.....	C	24·3	27·1	29·9	32·6	38·2	43·7	46·6	49·3	52·0	22. 27. 38·14		38·68	25·97	47·29		22. 28. 25·97	— 3·99
	18	Pollux	S	56·6	59·8	3·1	6·3	12·5	18·6	21·8	24·9	28·0	7. 36. 12·35	(+9·33) [+1·93]	13·13	1·32	48·19	47·79 [1·50]	7. 37. 1·39	— 1·92
Aug. 18	19	⊙ 1 L.....	S	49·2	52·0	54·8	57·8	3·2	8·9	11·9	14·5	17·5	9. 50. 3·26		9·08				9. 51. 57·48	
	20	⊙ 2 L.....	S	59·5	2·4	5·3	8·1	13·5	19·5	22·1	25·1	27·6	9. 52. 13·63							
	21	Venus 1 L.....	S	52·0	55·0	57·8	0·7	6·2	11·9	14·7	17·8	20·6	10. 26. 6·25		6·87				10. 26. 55·68	
	22	Polaris S.P. (E&E)	R	..	..	15·0	6·0	53·0	33·0	25·0	17·0	10·0	13. 9. 52·18		34·11	23·77	49·66		....	
	23	δ Ursæ Min. (E&E)	S	17·5	5·5	52·5	..	..	46·0	..	..	..	18. 15. 11·41		19·63	10·00			....	
	24	Cep. 51 S.P. (E&E)	S	..	17·0	..	..	8·5	..	..	..	55·0	18. 35. 7·83		58·80	48·26			....	
	25	ζ Aquilæ	S	9·3	12·1	14·8	17·7	23·2	29·3	32·0	34·9	37·6	18. 58. 23·39		24·03	13·05	49·02		18. 59. 13·00	— 3·52
	26	ψ Sagittarii.....	E	11·7	14·7	17·8	21·0	26·9	33·0	36·3	39·2	42·5	19. 6. 26·96		27·32	16·28	48·96	47·76†	....	
	27	ω Aquilæ	E	26·0	28·8	31·5	34·4	40·0	45·7	48·4	51·3	54·2	19. 10. 39·99		40·61	29·55	48·94		....	
	28	θ Aquarii.....	S	39·6	42·4	45·4	48·0	53·6	59·2	2·0	4·9	7·5	22. 8. 53·57		54·05	43·33	49·28	47·79	22. 9. 43·22	— 4·06
	29	ζ Aquarii.....	S	48·0	50·9	53·8	56·5	2·0	7·5	10·5	13·1	15·7	22. 21. 1·95		2·49			49·79	22. 21. 53·68	— 4·02
	30	η Aquarii.....	S	18·4	21·4	24·2	26·8	32·3	37·8	40·7	43·4	46·1	22. 27. 32·30		32·84	25·98	53·14	51·79	22. 28. 26·03	— 4·00
	31	☽ 2 L.....	S	49·5	52·5	55·3	58·2	3·6	9·6	12·4	15·3	18·0	23. 8. 3·77		4·30				23. 7. 47·99	
	32	ι Piscium	S	53·4	56·2	59·3	2·0	7·5	13·0	15·7	18·6	21·6	23. 32. 7·43		8·01	1·24	53·23		23. 33. 1·27	— 3·91
	33	Castor	D	46·4	49·7	53·0	56·4	2·8	9·4	12·7	15·9	18·9	7. 25. 2·75	[+3·14]	3·60	57·18	53·58	53·08	....	
	34	Procyon	D	4·5	7·4	10·1	12·9	18·4	24·0	26·7	29·5	32·3	7. 31. 18·37		19·01	12·63	53·62	[1·46]	....	
Aug. 19	35	⊙ 1 L.....	D	26·6	29·6	32·4	35·2	40·8	46·5	49·5	52·3	55·1	9. 53. 40·84		46·65				9. 55. 40·33	
	36	⊙ 2 L.....	D	36·9	39·6	42·7	45·5	..	56·7	59·9	..	..	9. 55. 51·08							
	37	Polaris S.P. (E&E)	P	..	18·5	..	0·0	..	27·0	18·0	13·0	5·5	13. 9. 46·62		30·65	24·39	53·74		....	
	38	β Ophiuchi	D	40·0	42·7	45·5	48·2	54·0	59·4	2·2	5·0	7·8	17. 35. 53·82		54·45	48·54	54·09		....	
	39	μ Herculis	D	0·6	3·7	6·9	..	16·2	..	..	..	..	17. 40. 16·19		16·99	11·05	54·06		....	
Aug. 20	40	e^1 Sagittarii	E	49·2	52·3	55·0	57·9	3·7	9·4	12·4	15·1	18·1	19. 32. 3·63		4·13			54·79	19. 33. 0·11	— 4·17
	41	γ Aquilæ	E	40·6	43·5	46·3	48·9	54·6	0·3	3·1	6·0	8·8	19. 38. 54·68		55·30	51·33	56·03	[1·46]	19. 39. 51·28	— 3·70
	42	α Aquilæ	E	2·1	4·8	7·5	10·6	15·7	21·7	24·3	27·4	30·0	19. 43. 15·96		16·62	12·60	55·98		19. 44. 12·61	— 3·77
	43	φ Aquilæ	E	40·7	43·7	46·5	49·2	54·9	0·5	3·4	6·2	8·9	19. 48. 54·84		55·52				19. 49. 51·51	— 3·75
	44	λ Ursæ Min. (E&E)	E	..	..	..	23·0	10·0	1·0	27·0	52·5	..	19. 59. 9·04		30·88	26·85			....	
	45	β Capricorni	E	15·4	18·4	21·4	24·0	29·8	35·6	38·4	41·3	44·2	20. 12. 29·78		30·29	26·22	55·93		20. 13. 26·31	— 4·20

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Corrections for passage of Semidiameter, Nos. 15, 21, and 31, −70s·29: +0s·37 : and −69s·56.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
August 17. The azimuthal error by tabular places of Polaris S.P. and μ Sagittarii, allowing 0s·33 for clock-rate : the observations of δ Ursæ Minoris and Cephe 51 S.P. give the same azimuthal error.
August 18. The azimuthal error used is the mean of those (+2″·52 and +1″·34) determined by tabular places of Polaris S.P. and ζ Aquilæ, and of δ Ursæ Minoris, and Cephei 51 S.P., allowing 0s·36 and 0s·02 for clock-rate in each case respectively.
August 19 to 21. The azimuthal error used is the mean of those (+3″·10 and +3″·18) determined by tabular places of Polaris S.P. and β Ophiuchi on August 19, and of λ Ursæ Minoris and α Aquarii on Aug. 20, allowing 0s·28 and 0s·12 for clock-rate in each case respectively.

7. Very faint ; cloudy. 15, 31. Correction to R.A. on true meridian, +0s·02 in both cases.
16. A double star; observed as one mass in R.A, but both components in N.P.D. 19, 20. The limbs "woolly." 22. Very faint from haze. 23 24. Cloudy
29. A double star ; observed as one mass. 28, 29. After each of these observations, the Transit-Clock appears to have stopped 2s (the pendulum stil vibrating).
35, 36. Very cloudy, especially during the transit of the 2 L. 37. Cloudy ; very tremulous. 39. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Aug. 20	1	ρ Capricorni	S	59·2	2·3	5·1	8·2	13·8	19·7	22·6	25·4	28·6	20. 20. 13·83	+0·78	14·32	10·23	55·91	54·73†	....	
	2	* N. P. D. 79°. 12′.	S	35·5	38·4	41·3	44·1	49·6	55·2	58·1	0·7	3·6	20. 23. 49·56	(+9·33)	50·24			[1·46]	20. 24. 46·21	— 3·83
	3	Bradley 2638....	S	36·6	39·4	42·3	45·0	50·6	56·3	59·0	2·0	4·6	20. 23. 50·60	[+3·14]	51·28				20. 24. 47·25	— 3·83
	4	ε Delphini	S	35·9	38·9	41·6	44·6	50·2	55·7	58·6	1·5	4·2	20. 25. 50·09		50·77	46·75	55·98		....	
	5	α Delphini	S	12·1	14·8	17·9	20·8	26·3	32·3	35·1	37·9	40·8	20. 32. 26·39		27·10	23·13	56·03		....	
	6	30 Vulpeculæ....	E	51·0	..	57·4	0·4	6·5	12·5	15·5	..	21·8	20. 38. 6·39		7·17			54·79	20. 39. 3·21	— 3·82
	7	Bradley 2870....	E	58·8	1·7	4·6	7·4	12·7	18·4	21·1	24·2	26·6	21. 5o. 12·79		13·36				21. 51. 9·48	— 4·08
	8	18 Pegasi	E	13·5	16·4	19·2	22·0	27·4	33·1	35·9	..	..	21. 52. 27·46		28·11				21. 53. 24·23	— 4·03
	9	α Aquarii.....	E	41·2	44·1	46·8	49·7	55·0	0·6	3·4	6·3	9·0	21. 57. 55·07		55·68	51·86	56·18		21. 58. 51·81	— 4·04
Aug. 21	10	ω Aquilæ	D	17·5	20·5	23·3	26·0	31·6	37·4	40·3	42·8	45·6	19. 10. 31·62		32·30	29·52	57·22	56·09†	....	
	11	δ Aquilæ.....	D	30·6	33·4	36·2	39·0	44·2	50·0	52·6	55·6	58·3	19. 17. 44·38		45·01	42·16	57·15	[1·36]	....	
	12	☽ 2 L.....	JC	19·5	22·6	25·5	28·3	34·1	39·8	42·7	45·8	48·6	2. 2. 34·05		34·71			57·37	2. 2. 23·41	
	13	67 Ceti.....	JC	3·4	6·0	8·7	11·8	17·2	22·9	25·6	28·5	31·1	2. 9. 17·19		17·75	15·22	57·47		....	
	14	ξ^2 Ceti	JC	47·2	50·0	52·6	55·5	1·0	6·7	9·5	12·4	15·0	2. 20. 1·05		1·71	59·24	57·53		....	
Aug. 23	15	α Aquilæ	S	58·2	1·0	3·6	6·5	..	..	..	..	..	19. 43. 12·06	+0·38	12·59	12·58	59·99	59·03	....	
	16	ι Piscium. (E & E)	C	..	33·0	47·0	0·8	14·6	28·5	42·3	..	..	23. 32. 0·75	(+9·67)	1·25	1·31	60·06	58·93†	....	
	17	δ Sculptoris (E&E)	C	..	..	..	53·7	9·6	25·4	41·2	..	..	23. 40. 53·78	[+0·45]	53·96	54·06	60·10	[1·17]	....	
	18	γ Eridani.....	D	..	31·7	34·6	37·4	42·7	48·8	51·6	54·3	..	3. 5o. 42·95	(+10·03)	43·31	43·58	60·27	60·03	3. 51. 43·53	— 2·50
	19	☽ 2 L.....	D	10·9	14·2	17·1	20·0	26·1	32·0	35·0	38·0	41·0	3. 57. 25·98		26·64			[1·17]	3. 57. 18·44	
	20	Aldebaran	D	54·7	57·8	0·5	3·4	9·3	15·2	18·0	20·8	23·6	4. 27. 9·20		9·84	10·15	60·31		4. 28. 10·09	— 2·98
Aug. 24	21	δ Ursæ Minoris ..	D	..	..	..	..	..	..	..	5·5	52·5	18. 14. 57·73		7·10	7·95			....	
	22	α Lyræ	D	3·5	7·0	10·6	14·3	21·1	28·5	31·8	35·4	38·7	18. 31. 21·16		22·06	22·94	60·88		18. 32. 22·99	— 2·90
	23	Cephei 51 S.P. ..	D	..	..	..	4·5	0·0	53·0	51·0	49·5	..	18. 35. 0·37		49·81	50·72			....	
	24	ε Aquilæ	D	14·6	17·6	20·4	23·0	28·9	34·5	37·5	40·4	43·2	18. 52. 28·85		29·48	30·38	60·90		18. 53. 30·43	— 3·40
	25	η Aquarii	JC	10·8	13·6	16·4	19·1	24·4	30·3	32·8	35·6	38·5	22. 27. 24·56		25·03	26·03	61·00	59·90†	....	
	26	ζ Pegasi	JC	29·2	32·2	34·9	37·8	43·2	49·1	51·7	54·6	57·3	22 33. 43·29		43·87	44·81	60·94	[1·14]	....	
	27	Aldebaran	E	53·4	..	59·2	2·1	7·8	13·6	16·4	..	22·4	4. 27. 7·80	(+10·47)	8·45	10·18	61·73	61·38	....	
	28	☽ 2 L.....	E	..	49·0	52·2	55·1	1·0	7·2	10·3	13·4	..	4. 54. 1·11		1·79			[1·14]	4. 53. 55·57	
Aug. 25	29	α Vulpeculæ.....	E	48·0	51·1	54·4	57·2	3·3	9·5	12·4	15·5	18·6	19. 22. 3·29		4·03	6·22	62·19		....	
	30	μ Aquilæ	E	13·6	16·4	19·4	22·0	27·6	33·3	36·0	38·8	41·4	19. 26. 27·56		28·12	30·39	62·27		....	
	31	λ Ursæ Minoris..	E	..	..	..	4·0	51·0	45·5	11·0	35·0	..	19. 58. 51·57		20·83	23·22			....	
	32	γ Ceti	C	..	5·0	8·0	10·6	16·0	21·4	24·3	27·0	..	2. 35. 15·98	(+9·32)	16·41	18·66	62·25	62·13†	....	
	33	ζ Tauri....	JC	..	18·9	22·0	24·9	30·7	36·6	39·6	42·5	..	5. 28. 30·68	[−0·43]	31·27			62·36	5. 29. 33·85	— 2·78
	34	κ Orionis	JC	3·4	6·4	9·2	12·0	17·6	23·0	25·9	28·7	31·6	5. 40. 17·48		17·79	20·43	62·64	[0·97]	5. 41. 20·38	— 2·05
	35	☽ 2 L.....	JC	11·2	14·4	17·4	20·3	26·3	32·5	35·4	38·5	41·5	5. 49. 26·34		26·91				5. 49. 22·59	
	36	γ Geminorum ...	JC	35·7	39·0	41·9	44·6	50·4	56·2	59·0	1·9	4·8	6. 28. 5o.34		5o·89	53·63	62·74		6. 29. 53·51	— 2·36
Aug. 26	37	Polaris S.P. (E&E)	P	26·0	17·0	8·5	1·0	..	..	..	..	..	13. 10. 47·28		26·23	29·43	3·20	2·36	....	
	38	α Ophiuchi.....	JC	22·5	25·6	28·4	31·2	36·6	42·5	45·4	48·3	51·0	17. 28. 36·78		37·29	40·29	3·00		17. 28. 40·36	— 2·96
	39	Bradley 2219....	JC	..	..	..	..	..	41·4	44·2	47·3	50·3	17. 30. 35·31		35·50				17. 30. 38·57	— 3·79
	40	β Ophiuchi.....	JC	31·0	34·1	36·7	39·6	45·0	50·6	53·4	56·2	58·9	17. 36. 45·01		45·45	48·44	2·99		17. 36. 48·52	— 3·18
	41	72 Ophiuchi	JC	..	42·4	45·5	48·4	53·6	59·5	2·2	5·3	..	18. 0. 53·78		54·27	57·32	3·05		18. 0. 57·36	— 3·20
	42	δ Ursæ Min. (E&E)	JC	..	..	..	..	..	..	..	2·0	49·0	18. 15. 54·22		3·51	7·15			....	
	43	α Lyræ	JC	1·4	5·0	8·4	12·0	18·8	26·1	29·8	33·2	36·7	18. 32. 18·98		19·79	22·90	3·11		18. 32. 22·90	— 2·86
	44	Ceph. 51 S.P. (E&E)	JC	10·5	..	5·5	3·5	59·0	52·7	..	..	..	18. 35. 59·04		48·40	51·71			....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 12, 19, 28, and 35, $-68^s \cdot 81$: $-68^s \cdot 45$: $-67^s \cdot 86$: and $-66^s \cdot 93$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

August 25^d. 21^h. The Transit-Clock was put forward 1^m.

August 23 to 25. The azimuthal error used is the mean of those determined by tabular places of δ Ursæ Minoris and Cephei 51 S.P. on August 24, and of μ Aquilæ and λ Ursæ Minoris on August 25, allowing $0^s \cdot 02$ and $0^s \cdot 03$ for clock-rate in each case respectively. The separate results are $+0'' \cdot 48$ and $+0'' \cdot 41$.

August 26. The azimuthal error used is the mean of those determined by tabular places of Polaris S.P. and α Ophiuchi, and of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 18$ and $0^s \cdot 02$ for clock-rate in each case respectively. The separate results are $-0'' \cdot 20$ and $-0'' \cdot 66$.

2, 3. These stars are identical with those numbered 39521 and 39522 in Lalande's Catalogue; but the N.P.D's given in that Catalogue are 5′ too large.

12, 19, 28, 35. Corrections to R.A. on true meridian, $+0^s \cdot 03$, $+0^s \cdot 03$, $+0^s \cdot 03$, and $+0^s \cdot 02$, respectively.

15. Very cloudy. 17, 42. Cloudy. 21. Faint; not seen until after the passage over the 7th wire.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Aug. 26	1	ζ^1 Lyræ	JC	46·9	50·4	53·8	57·5	4·4	11·4	14·8	18·3	21·8	18. 40. 4·31	+0·38	5·10			2·36	18. 40. 8·21	— 2·93
	2	ζ^2 Lyræ	JC	48·8	52·4	55·9	59·3	6·4	13·4	16·8	20·2	23·6	18. 40. 6·25	(+ 9·32)	7·04			[0·97]	18. 40. 10·15	— 2·93
	3	ν^2 Lyræ	JC	..	..	..	..	..	54·1	57·4	0·6	4·0	18. 44. 47·50	[−0·43]	48·23				18. 44. 51·35	— 3·05
	4	62 Serpentis	JC	..	..	..	..	49·4	55·2	58·0	0·7	3·4	18. 48. 49·50		49·96				18. 48. 53·08	— 3·51
	5	α Ceti	D	55·7	58·7	1·5	4·1	9·6	15·5	18·2	21·0	23·6	2. 55. 9·71		10·14	13·61	3·47	3·42†	....	
	6	δ Arietis	D	36·2	39·0	42·1	45·0	50·9	56·6	59·7	2·6	5·5	3. 3. 5·80		51·37	54·99	3·62	[0·97]	....	
Aug. 27	7	⊙ 1 L.	C	44·3	47·4	50·2	52·6	58·5	4·3	7·0	9·5	12·5	10. 23. 58·42		} 3·56					
	8	⊙ 2 L.	C	53·4	56·6	59·5	2·1	7·6	13·3	16·2	19·2	22·0	10. 26. 7·71						10. 25. 7·40	
Aug. 29	9	⊙ 1 L.	E	..	3·7	6·5	9·2	14·6	20·6	23·4	26·1	..	10. 31. 14·81	+0·96	} 19·80					
	10	⊙ 2 L.	E	9·6	..	15·4	18·2	23·8	29·4	32·2	..	38·0	10. 33. 23·76	(+ 7·99)				5·13	10. 32. 25·28	
	11	Polaris S.P.	P	21·0	13·0	4·0	55·5	44·0	25·0	15·0	9·0	1·5	13. 10. 42·83	[+ 1·14]	25·68	31·18	5·50	[0·80]	....	
	12	72 Ophiuchi	E	37·1	40·0	42·6	45·5	51·1	56·6	59·5	2·5	5·2	18. 0. 51·08		51·60	57·28	5·68		18. 0. 57·33	— 3·16
	13	102 Herculis	E	38·5	41·4	44·4	47·4	53·4	59·1	2·4	5·2	8·0	18. 2. 53·26		53·87				18. 2. 59·60	— 2·95
	14	17 Sagittarii	E	12·5	15·4	18·4	21·4	27·1	33·2	36·1	39·1	41·8	18. 8. 27·17		27·50				18. 8. 33·23	— 3·89
	15	δ Ursæ Min. (E&E)	E	58·0	47·0	34·0	20·5	52·0	27·5	..	..	..	18. 15. 52·61		0·29	5·93			....	
	16	Cep. 51 S.P. (E&E)	E	..	..	..	..	56·0	..	46·0	44·5	43·5	18. 35. 56·08		47·48	53·18			....	
	17	ω Aquilæ	E	8·9	12·0	14·7	17·5	23·2	28·9	31·6	34·4	37·4	19. 11. 23·13		23·67	29·44	5·77		19. 11. 29·44	— 3·49
	18	3 Vulpeculæ	E	58·3	1·4	4·5	7·5	13·6	19·9	22·9	25·9	29·0	19. 17. 13·62		14·27				19. 17. 20·04	— 3·31
	19	Bradley 2457	E	9·3	12·3	15·2	18·0	24·0	29·9	32·6	35·7	38·8	19. 19. 23·93		24·53				19. 19. 30·34	— 3·40
	20	9 Vulpeculæ	E	19·0	22·1	25·0	27·9	33·6	39·7	42·5	45·4	48·4	19. 28. 33·69		34·28				19. 28. 40·06	— 3·46
	21	42 Aquilæ	E	18·2	21·2	23·7	26·4	32·1	37·8	40·5	43·1	46·0	19. 30. 32·66		32·48				19. 30. 38·26	— 3·72
	22	46 Aquilæ	E	33·2	36·3	39·0	41·8	47·4	53·0	55·8	58·6	1·5	19. 35. 47·35		47·89				19. 35. 53·67	— 3·60
	23	γ Aquilæ	E	30·8	33·6	36·5	..	44·9	..	53·4	56·3	58·9	19. 39. 44·86		45·39	51·26	5·87		19. 39. 51·17	— 3·63
	24	Bradley 2521	E	11·7	14·5	17·4	20·3	25·6	31·6	34·3	37·1	39·9	19. 42. 25·77		26·31				19. 42. 32·10	— 3·64
	25	9 Sagittæ	E	0·4	3·5	6·4	9·3	15·0	21·0	23·9	26·6	29·6	19. 46. 15·03		15·62				19. 46. 21·41	— 3·57
	26	β Aquilæ	E	..	..	..	..	..	..	43·8	46·6	49·3	19. 48. 35·39		35·88	41·66	5·78		19. 48. 41·67	— 3·73
	27	11 Sagittæ	E	..	20·8	23·7	26·5	32·4	38·4	41·0	43·7	..	19. 51. 32·30		32·88				19. 51. 38·67	— 3·61
	28	63 Sagittarii	E	5·1	8·0	10·9	13·8	19·3	25·1	27·8	30·7	33·5	19. 54. 19·30		19·67				19. 54. 25·46	— 4·09
	29	64 Sagittarii	E	18·4	..	24·2	26·9	32·6	38·3	41·1	..	46·8	19. 57. 32·57		32·96				19. 57. 38·75	— 4·06
	30	θ Aquilæ	E	0·9	3·9	6·6	9·3	14·7	20·4	23·2	26·0	28·7	20. 4. 14·81		15·26	21·06	5·80		20. 4. 21·06	— 3·89
	31	20 Vulpeculæ	E	0·4	3·5	6·5	9·6	15·7	22·0	25·0	28·1	31·2	20. 6. 15·73		16·38				20. 6. 22·18	— 3·60
	32	22 Vulpeculæ	E	20·0	23·1	26·1	29·1	35·0	41·1	44·0	47·1	50·1	20. 9. 35·02		35·65				20. 9. 41·45	— 3·64
	33	β Capricorni	E	5·7	8·6	11·5	14·3	20·2	25·8	28·7	31·4	34·3	20. 13. 20·01		20·37	26·17	5·80		20. 13. 26·17	— 4·15
Aug. 30	34	⊙ 1 L.	JC	38·8	41·7	44·3	47·3	52·6	58·3	1·2	3·9	6·9	10. 32. 52·73		} 57·60					
	35	⊙ 2 L.	JC	47·7	50·4	53·3	56·0	1·5	7·3	9·8	11·8	15·6	10. 35. 1·44						....	
	36	Polaris S.P. (E&E)	P	..	12·0	3·5	54·5	42·0	23·5	15·5	6·0	58·5	13. 10. 41·43		24·28	31·69	7·41		....	
Aug. 31	37	α Ophiuchi (E&E)	E	50·0	4·2	18·3	32·2	46·7	0·9	15·0	..	..	17. 28. 32·47	[+3·02]	33·10	40·21	7·11		....	
	38	β Ophiuchi (E&E)	E	58·9	12·9	26·8	40·7	54·7	8·5	22·4	..	..	17. 36. 40·70		41·28	48·36	7·08		....	
	39	δ Ursæ Min. (E&E)	E	..	..	..	..	51·0	26·0	13·0	0·0	..	18. 15. 51·48		57·96	5·17			....	
	40	Cep. 51 S.P. (E&E)	E	..	..	..	..	54·0	47·0	44·5	41·5	41·0	18. 35. 53·79		46·91	54·13			....	
Sept. 1	41	⊙ 1 L. (E&E)	D	..	..	..	6·7	20·5	34·9	..	..	..	10. 42. 6·68	[+1·62]	} 11·58			7·54	10. 43. 19·63	
	42	⊙ 2 L. (E&E)	D	..	..	1·5	15·5	29·5	43·4	57·2	..	..	10. 44. 15·41					[1·14]		
	43	δ Ursæ Min. (E&E)	D	..	..	..	..	49·5	25·0	11·5	57·5	44·0	18. 15. 49·78		57·16	4·80			....	
	44	Cep. 51 S.P. (E&E)	D	..	..	..	..	56·0	48·0	46·0	43·0	41·5	18. 35. 55·09		46·93	54·57			....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
August 29. The azimuthal error used is the mean of those determined by tabular places of Polaris S.P. and ω Aquilæ, and of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 22$ and $0^s \cdot 01$ for clock-rate in each case respectively. The separate results are + 1″·11 and + 1″·18.
August 31. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei S.P., allowing $0^s \cdot 01$ for clock-rate.
September 1. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s \cdot 01$ for clock-rate.

4. Cloudy.
11. Excessively tremulous; several of the times recorded uncertain.
34, 35. Extremely tremulous: the observation has only been used for diameter, the clock-error being uncertain.
36. Extremely tremulous.
41, 42. Disturbed by noise.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Sept. 1	1	β Lyræ....(E&E)	D	..	24·4	40·8	57·4	13·8	30·3	46·8	..	..	18. 44. 57·32	+ 0·96	58·05	6·48	8·43	7·54	18. 45. 6·48	— 2·92
	2	ε Aquilæ...(E&E)	D	38·3	52·5	7·0	21·3	35·6	49·8	4·2	..	..	18. 53. 21·24	(+7·99)	21·83	30·27	8·44	[1·14]	18. 53. 30·27	— 3·29
	3	ζ Aquilæ ..(E&E)	D	21·4	35·3	49·7	3·8	18·1	32·3	46·6	..	..	18. 59. 3·88	[+1·62]	4·46	12·87	8·41		18. 59. 12·90	— 3·34
	4	19 Lyræ...(E&E)	D	..	54·8	10·9	27·1	43·3	59·3	15·5	..	..	19. 6. 27·07		27·78				19. 6. 36·22	— 3·12
	5	3 Vulpeculæ(E&E)	D	24·7	40·1	55·5	10·8	26·2	41·5	57·0	..	..	19. 17. 10·83		11·49				19. 17. 19·95	— 3·26
	6	42 Aquilæ .(E&E)	D	47·6	1·3	15·2	29·2	43·2	57·2	10·9	..	..	19. 30. 29·22		29·67				19. 30. 38·14	— 3·69
	7	γ Aquilæ ..(E&E)	D	59·9	14·2	28·4	42·3	56·3	10·3	24·2	..	..	19. 39. 42·23		42·78	51·23	8·45		19. 39. 51·26	— 3·60
	8	Psyche....(E&E)	D	..	46·2	1·2	15·5	30·1	45·0	..	..	..	19. 42. 15·59		15·96				19. 42. 24·44	
	9	3 Equulei..(E&E)	D	1·5	15·4	29·2	43·1	56·9	10·8	24·7	..	..	20. 57. 43·08		43·59				20. 57. 52·13	— 3·95
	10	ζ Cygni ...(E&E)	D	..	31·7	47·7	3·5	19·5	35·3	51·3	..	..	21. 7. 3·53		4·23	12·81	8·58		21. 7. 12·77	— 3·87
	11	θ Aquarii..(E&E)	D	52·4	6·4	20·3	34·3	48·4	2·4	16·2	..	..	22. 9. 34·34		34·76	43·40	8·64		22. 9. 43·35	— 4·13
	12	Pallas.....(E&E)	D	36·2	49·8	3·7	17·5	31·4	45·2	59·2	..	..	22. 19. 17·57		18·08				22. 19. 26·68	
Sept. 2	13	α Lyræ....(E&E)	C	19·2	37·0	54·6	12·5	30·2	48·0	5·6	..	..	18. 32. 12·44		13·23	22·74	9·51	8·61[s]P	....	
	14	ζ Aquilæ ..(E&E)	C	..	34·4	48·5	2·7	17·1	31·4	45·6	..	..	18. 59. 2·83		3·41	12·85	9·44	[1·11]	....	
	15	Pallas.....(E&E)	C	..	..	17·5	31·4	45·2	59·0	12·7	..	..	22. 18. 31·29		31·80				22. 18. 41·44	
	16	σ Aquarii..(E&E)	C	38·6	..	6·7	20·9	35·0	49·1	3·4	..	..	22. 23. 20·91		21·33	30·96	9·63		....	
Sept. 3	17	β Leonis...(E&E)	JC	..	..	..	..	..	26·7	40·9	..	..	11. 41. 57·95		58·54	8·71	10·17		....	
Sept. 5	18	⊙ 2 L.....(E&E)	D	..	..	25·2	38·9	..	7·3	..	..	..	10. 58. 39·15	+ 0·55	39·66			12·22	10. 57. 48·24	
	19	μ Sagittarii.(E&E)	D	..	58·4	13·5	28·2	43·1	57·8	12·6	..	..	18. 5. 28·18	(+8·31)	28·50	41·55	13·05	[1·21]	18. 5. 41·63	— 3·77
	20	δ Ursæ Min.(E&E)	D	..	38·0	24·5	11·5	44·0	17·5	5·0	52·0	..	18. 15. 43·69	[+1·51]	50·98	3·34			....	
	21	Cephei 51 S.P.(E&E)	D	..	..	58·5	56·5	52·0	..	42·5	39·5	..	18. 35. 51·98		43·95	56·32			....	
	22	ε Aquilæ...(E&E)	D	33·5	47·7	2·1	16·4	30·7	45·1	59·3	..	..	18. 53. 16·40		16·97	30·21	13·24		18. 53. 30·14	— 3·23
	23	ζ Aquilæ ..(E&E)	D	16·5	30·7	44·8	59·1	13·4	27·6	41·8	..	..	18. 58. 59·13		59·69	12·81	13·12		18. 59. 12·87	— 3·28
	24	δ Aquilæ ..(E&E)	E	46·7	0·5	14·4	28·3	42·4	56·0	9·9	..	..	19. 18. 28·32		28·81	42·00	13·19	12·19†	....	
	25	α Vulpeculæ(E&E)	E	6·7	21·9	37·0	52·3	7·6	22·7	37·8	..	..	19. 22. 52·28		52·92	6·06	13·14		....	
	26	9 Cygni ...(E&E)	D	28·6	44·4	0·4	..	31·8	47·5	3·5	..	..	19. 29. 16·02		16·70			12·22	19. 29. 29·90	— 3·24
	27	10 Vulpec..(E&E)	D	..	..	37·8	53·2	8·4	23·8	39·1	..	..	19. 37. 53·14		53·79				19. 38. 7·00	— 3·34
	28	Psyche....(E&E)	D	..	5·2	20·3	34·6	..	..	..	..	..	19. 41. 34·73		35·06				19. 41. 48·27	
	29	β Aquilæ ..(E&E)	D	46·2	0·1	13·9	27·8	41·8	55·7	9·5	..	..	19. 48. 27·86		28·37	41·58	13·21		19. 48. 41·59	— 3·65
	30	14 Sagittæ .(E&E)	D	23·4	37·7	52·1	6·5	20·8	35·2	49·5	..	..	19. 57. 6·46		7·03				19. 57. 20·26	— 3·57
	31	ξ Aquarii..(E&E)	D	39·2	53·1	6·9	20·8	34·9	48·8	2·8	..	..	21. 30. 20·92		21·34	34·67	13·33		21. 30. 34·64	— 4·12
	32	d Aquarii..(E&E)	D	..	..	15·6	29·4	43·4	57·2	10·9	..	..	21. 32. 29·46		29·94				21. 32. 43·24	— 4·04
	33	Brad. 2833.(E&E)	D	48·2	2·3	16·3	30·3	44·2	58·3	12·2	..	..	21. 37. 30·25		30·66				21. 37. 43·97	— 4·14
	34	θ Aquarii..(E&E)	D	47·6	1·6	15·6	29·7	..	57·6	11·5	..	..	22. 9. 29·60		30·02	43·41	13·39		22. 9. 43·36	— 4·14
	35	Pallas.....(E&E)	D	..	45·7	59·7	..	..	..	55·2	..	..	22. 16. 13·53		14·02				22. 16. 27·36	
Sept. 9	36	δ Aquilæ ..(E&E)	S	43·1	56·8	10·9	24·6	38·4	..	6·1	..	..	19. 18. 24·59	(+7·64)	25·08	41·95	16·87	16·01	....	
	37	μ Aquilæ ..(E&E)	S	31·1	45·0	58·9	13·0	27·0	..	..	..	..	19. 27. 12·93	[+2·22]	13·44	30·20	16·76	[1·00]	....	
	38	ε Delphini .(E&E)	E	46·9	1·0	15·2	29·2	43·6	57·3	11·4	..	..	20. 26. 29·23		29·77	46·61	16·84	15·91†	....	
	39	α Delphini .(E&E)	E	22·3	36·8	51·2	5·7	19·9	34·3	48·6	..	..	20. 33. 5·74		6·30	22·99	16·69		....	
Sept. 10	40	72 Ophiuchi(E&E)	C	56·6	10·4	24·5	38·8	52·7	6·8	20·6	..	..	18. 0. 38·63		39·16	57·07	17·91	17·00	18. 0. 56·99	— 2·95
	41	δ Ursæ Min. (E&E)	C	..	31·5	17·5	4·5	37·0	11·0	58·0	..	..	18. 15. 36·82		43·03	1·23		[1·11]	....	
	42	Cep. 51 S.P.(E&E)	C	..	..	..	..	..	41·0	38·0	35·5	34·0	18. 35. 47·39		40·70	58·92			....	
	43	β Lyræ....(E&E)	C	58·2	14·7	31·4	..	4·2	21·0	37·2	..	..	18. 44. 47·77		48·46	6·30	17·84		18. 45. 6·33	— 2·74
	44	50 Draconis(E&E)	C	31·4	42·5	53·5	4·5	25·6	47·8	58·6	9·6	20·0	18. 50. 25·75		27·52				18. 50. 45·39	— 0·68

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.
Correction for passage of Semidiameter, No. 18, $-64^s{\cdot}19$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
September 5. The azimuthal error by tabular places of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s{\cdot}02$ for clock-rate.
September 9 to 11. The azimuthal error used is that determined by tabular places of δ Ursæ Minoris and Cephei 51 S.P. on September 10, allowing $0^s{\cdot}02$ for clock-rate.

8, 16, 35. Very faint.
18. Very cloudy.
10. The times recorded at each wire have been increased by 1ˢ.
19. Faint.
14, 16, 17, 19, 34, 35, 37. Cloudy.
28. Scarcely visible.
September 10. The eye and ear observations were much disturbed by the beating of two trial Sidereal clocks in the transit-room.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	//	s	s	s	s	h m s	s
																		17·00		
Sept. 10	1	ζ Aquilæ ..(E&E)	C	11·6	..	..	54·2	8·6	22·7	37·0	..	..	18. 58. 54·28	+ 0·55	54·83	12·73	17·90	[1·11]	18. 59. 12·71	— 3·20
	2	θ Capricorni(E&E)	JC	..	..	49·2	3·8	18·3	32·7	47·2	..	..	20. 58. 3·71	(+7·64)	4·08	22·05	17·97	16·99†	....	
	3	ζ Cygni ...(E&E)	JC	..	..	..	54·0	9·9	26·0	42·2	..	..	21. 6. 54·15	[+2·22]	54·80	12·74	17·94		....	
	4	ξ Aquarii..(E&E)	C	34·2	48·4	2·2	16·4	30·2	44·0	58·0	..	..	21. 30. 16·20		16·63	34·65	18·02	17·00	21. 30. 34·63	— 4·10
	5	Brad. 2870.(E&E)	C	9·4	23·4	37·4	51·1	5·0	18·9	32·7	..	..	21. 50. 51·12		51·57				21. 51. 9·58	— 4·11
	6	28 Aquarii .(E&E)	C	..	..	..	53·1	7·0	20·6	34·5	..	..	21. 53. 53·05		53·53				21. 54. 11·54	— 4·07
	7	Brad. 2888.(E&E)	C	1·0	15·0	28·7	42·6	56·5	10·5	24·3	..	..	21. 58. 42·66		43·11				21. 59. 1·13	— 4·11
	8	θ Aquarii ..(E&E)	C	43·2	57·0	11·1	24·9	38·9	53·0	7·0	..	..	22. 9. 25·01		25·44	43·40	17·96		22. 9. 43·46	— 4·13
	9	Pallas.....(E&E)	C	51·1	5·2	19·0	32·6	46·6	..	14·4	..	..	22. 12. 32·76		33·25				22. 12. 51·28	
	10	34 Pegasi..(E&E)	C	46·0	0·1	13·6	27·6	41·5	55·4	9·0	..	..	22. 19. 27·60		28·10				22. 19. 46·13	— 4·12
	11	σ Aquarii..(E&E)	C	30·4	44·4	58·6	12·5	26·6	40·7	54·8	..	..	22. 23. 12·57		12·98	30·98	18·00		22. 23. 31·01	— 4·16
Sept. 11	12	μ Herculis .(E&E)	D	..	19·8	35·4	50·9	6·5	22·2	37·8	..	..	17. 40. 50·94		51·59	10·58	18·99	18·19†	....	
	13	89 Herculis(E&E)	D	52·7	8·1	23·5	38·8	54·3	9·8	25·1	..	..	17. 49. 38·90		39·53	58·54	19·01	[1·09]	....	
	14	ο Sagittarii (E&E)	E	31·8	46·7	1·6	16·6	31·4	46·5	1·1	..	..	18. 56. 16·53		16·88			18·13	18. 56. 35·87	— 3·92
	15	π Sagittarii (E&E)	E	..	..	..	25·0	39·9	54·8	9·6	..	..	19. 1. 25·06		25·42				19. 1. 44·41	— 3·92
	16	ω Aquilæ ..(E&E)	E	27·2	41·4	55·6	9·7	23·9	37·9	52·0	..	..	19. 11. 9·68		10·22	29·25	19·03		19. 11. 29·22	— 3·30
	17	☽ I L.....(E&E)	E	53·8	8·8	23·6	38·6	53·4	8·5	23·4	..	..	19. 32. 38·59		38·96				19. 34. 8·86	
	18	γ Aquilæ..(E&E)	E	..	3·1	17·4	31·6	45·4	59·7	13·7	..	..	19. 39. 31·45		31·99	51·10	19·11		19. 39. 51·01	— 3·47
	19	α Aquilæ ..(E&E)	E	10·8	24·9	38·9	52·8	6·7	20·7	34·8	..	..	19. 43. 52·80		53·32	12·37	19·05		19. 44. 12·34	— 3·54
	20	α^2 Capricorni(E&E)	E	32·5	46·6	0·8	15·0	29·1	43·4	57·2	..	..	20. 10. 14·94		15·35	34·33	18·98		20. 10. 34·40	— 3·97
	21	ρ Capricorni(E&E)	E	7·1	21·8	36·0	50·8	5·1	19·9	34·3	..	..	20. 20. 50·71		51·09	10·07	18·98		20. 21. 10·14	— 4·10
Sept. 12	22	⊙ I L.....(E&E)	JC	54·0	8·2	22·0	35·9	49·8	..	..	..	..	11. 21. 35·88	+ 0·47	40·47			19·17†	11. 23. 0·04	
	23	⊙ 2 L.....(E&E)	JC	..	..	..	44·0	57·9	11·8	25·8	..	..	11. 23. 44·02	(+9·43)				[0·85]		
	24	Polaris S.P.(E&E)	JC	14·5	7·5	0·5	..	..	..	..	..	..	13. 10. 38·06	[+0·96]	18·94	38·58	19·64			
	25	ν Aquarii ..(E&E)	R	12·2	26·3	40·3	54·4	8·4	22·4	36·2	..	..	21. 1. 54·31		54·69			19·41	21. 2. 14·84	— 4·08
	26	ζ Cygni....(E&E)	R	4·0	20·1	36·2	52·0	7·9	23·8	39·6	..	..	21. 6. 51·94		52·69	12·72	20·03		....	
	27	β Equulei ..(E&E)	R	..	..	37·6	51·6	5·5	19·4	33·3	..	..	21. 15. 51·56		52·09				21. 16. 12·25	— 3·93
	28	β Aquarii ..(E&E)	R	25·3	39·4	53·3	7·3	21·2	35·1	49·1	..	..	21. 24. 7·24		7·66	27·84	20·18		....	
	29	ε Pegasi... (E&E)	R	31·4	45·3	59·3	13·4	27·5	41·4	55·6	..	..	21. 37. 13·41		13·96	34·36	20·40		....	
	30	Pallas.....(E&E)	R	26·0	40·1	53·7	7·4	21·5	35·3	49·2	..	..	22. 11. 7·60		8·09				22. 11. 28·28	
	31	ρ Cephei ..(E&E)	R	..	..	..	58·1	24·8	51·1	4·6	17·8	32·2	22. 28. 24·33		27·12				22. 28. 47·33	— 8·36
	32	ζ Pegasi ...(E&E)	R	42·0	56·0	10·2	24·3	38·3	52·3	6·4	..	..	22. 34. 24·21		24·77	44·88	20·11		....	
	33	γ Piscium..(E&E)	JC	9·0	23·1	36·7	50·7	4·3	18·3	32·0	..	..	23. 9. 50·58		51·08	11·07	19·99	19·17†	....	
	34	κ Piscium .(E&E)	JC	59·8	13·7	27·7	41·0	55·1	9·0	22·8	..	..	23. 19. 41·30		41·78	1·76	19·98		....	
Sept. 13	35	α^2 Capricor.(E&E)	D	30·6	44·7	58·9	13·1	27·4	41·6	55·7	..	..	20. 10. 13·14		13·51	34·31	20·80		....	
	36	β Capricor.(E&E)	D	21·8	36·2	50·5	4·9	19·2	33·5	47·9	..	..	20. 13. 4·86		5·21	26·02	20·81		....	
	37	ρ Capricor .(E&E)	E	5·2	19·8	34·2	..	..	..	..	..	..	20. 20. 48·86		49·18	10·05	20·87	20·12†	....	
	38	ε Delphini..(E&E)	E	42·9	57·1	11·4	25·5	39·4	53·6	7·7	..	..	20. 26. 25·37		25·93	46·56	20·63	[0·74]	....	
Sept. 14	39	α Ceti ....(E&E)	JC	..	..	..	..	..	19·5	33·3	..	..	2. 54. 51·78		52·29	14·09	21·80	21·61†	....	
	40	δ Arietis.. (E&E)	JC	49·4	3·9	18·7	33·3	48·0	2·6	17·0	..	..	3. 3. 33·27		33·91	55·51	21·60	[0·73]	....	
Sept. 15	41	Polaris S.P. (E&E)	E	15·0	3·5	56·0	48·0	35·0	16·5	..	..	..	13. 10. 35·18	(+8·86)	17·24	39·54	22·30	21·73	....	
	42	σ Aquarii..(E&E)	E	25·9	40·0	54·2	8·2	22·3	36·6	50·7	..	..	22. 23. 8·28		8·65	30·97	22·32	[0·64]	....	
	43	η Aquarii ..(E&E)	E	21·8	35·7	49·6	3·4	17·0	30·9	44·8	..	..	22. 28. 3·31		3·76	26·10	22·34		....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 30r·700.
Correction for passage of Semidiameter, No. 17, +70s·86.
† These Clock-Errors have been used in the reduction of the observations made with the Altazimuth.
September 12 to 18. The azimuthal error used is the mean of three determinations, viz., by tabular places of Polaris S.P. and β Aquarii on September 12, of Polaris S.P. and η Aquarii on September 15, and of Polaris S.P. and ρ Capricorni on September 17, allowing 0s·27, 0s·27, and 0s·24 for clock-rate in each case respectively. The separate results are +0″·80, +1″·12, and +0″·96.

5, 7. Faint: cloudy.
8. Very faint; the sky generally overcast.
9. Extremely faint: the observation very unsatisfactory.
17. Correction to R.A. on true Meridian, + 0s·02.
22, 23, 24. Cloudy.
32. Very cloudy.
39. Cloudy; the observation unsatisfactory. The time at the 6th wire was recorded 18s·5.
41. Disturbed by noise at the passage over the 5th wire.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Sept. 15	1	☽ 1 L. ...(E & E)	E	..	..	1·9	16·4	..	..	..	..	..	23. 34. 16·27	+0·47	16·73			21·73	23. 35. 48·81	
	2	☽ 2 L. ...(E & E)	E	52·9	7·0	21·2	35·2	49·7	..	..	..	..	23. 36. 35·44	(+8·86)	35·90			[0·64]	23. 35. 48·58	
														[+0·96]						
Sept. 16	3	α Lyræ.....	JC	41·3	44·8	48·4	51·8	58·9	6·1	9·6	13·0	16·6	18. 31. 58·88		59·69	22·40	22·71		....	
	4	θ Aquilæ	C	43·9	46·6	49·4	52·2	57·7	3·2	6·0	8·8	11·5	20. 3. 57·65		58·09	20·86	22·77	22·16†	....	
	5	α^2 Capricorni....	C	57·0	59·9	2·5	5·5	11·2	16·8	19·8	22·6	25·4	20. 10. 11·14		11·50	34·27	22·77	[0·73]	....	
	6	Regulus	D	..	..	..	..	..	..	54·0	56·7	59·5	10. 0. 45·34	(+9·53)	45·93	9·39	23·46	23·00	....	
																		[0·89]		
Sept. 17	7	Venus 1 L.	D	3·7	6·6	9·5	12·3	17·7	23·3	26·1	28·8	31·6	12. 43. 17·68		18·13				12. 43. 41·98	
	8	Polaris S.P.(E&E)	D	..	5·0	57·5	49·0	36·5	17·0	10·0	..	..	13. 10. 36·10		16·77	40·30	23·53		....	
	9	θ Aquilæ	E	42·6	45·5	48·3	51·0	56·4	2·0	4·7	7·6	10·3	20. 3. 56·44		56·91	20·84	23·93	23·17†	....	
	10	α^2 Capricorni....	E	55·9	58·7	1·5	4·4	10·0	15·5	18·5	21·3	24·3	20. 10. 9·97		10·35	34·26	23·91		....	
	11	β Capricorni	D	47·6	50·6	53·3	56·3	2·0	7·7	10·5	13·4	16·3	20. 13. 1·92		2·27	25·97	23·70	23·00	....	
	12	ρ Capricorni.....	D	31·4	34·3	37·3	40·1	45·9	51·8	54·7	57·7	0·4	20. 20. 45·90		46·23	10·00	23·77		....	
	13	ι Delphini	D	44·0	46·7	49·7	52·6	58·0	3·8	6·5	9·2	12·0	20. 30. 58·00		58·57				20. 31. 22·33	— 3·65
	14	Var. (S) Delphini.	D	..	31·1	33·8	36·9	42·5	48·4	51·2	54·1	..	20. 38. 42·51		43·13				20. 39. 6·89	— 3·63
	15	3 Equulei.....	D	13·9	16·8	19·6	22·3	27·7	33·3	36·2	38·8	41·6	20. 57. 27·75		28·28				20. 57. 52·06	— 3·83
	16	Bradley 2755....	D	47·9	50·9	54·0	56·9	2·7	8·8	11·6	14·7	17·7	21. 4. 2·75		3·41				21. 4. 27·19	— 3·74
	17	Bradley 2756....	D	49·0	52·1	55·0	58·1	3·9	9·8	12·7	15·8	18·7	21. 4. 3·85		4·51				21. 4. 28·29	— 3·74
	18	α Equulei.....	D	27·3	30·0	32·8	35·5	41·0	46·6	49·4	52·2	54·9	21. 8. 41·03		41·55	5·30	23·75		....	
Sept. 18	19	β Aquarii.....	JC	49·0	51·7	54·6	57·3	2·7	8·4	11·2	14·0	16·7	21. 24. 2·80		3·23	27·80	24·57	23·84†	....	
	20	ξ Aquarii.....	JC	55·7	58·5	1·3	4·0	9·6	15·4	18·0	20·8	23·7	21. 30. 9·61		10·03	34·60	24·57	[0·82]	....	
	21	ξ^1 Ceti	C	12·5	15·4	18·3	21·0	26·5	32·2	35·0	37·7	40·6	2. 5. 26·53		27·08			24·71	2. 5. 51·86	— 4·10
	22	67 Ceti.....	C	..	..	..	..	50·5	56·3	59·0	1·8	4·5	2. 9. 50·57		51·00	15·85	24·85		....	
	23	ξ^2 Ceti	C	20·6	23·4	26·2	29·0	34·5	40·3	43·0	45·8	48·5	2. 20. 34·54		35·08	59·90	24·82		....	
	24	☽ 2 L.....	C	56·5	59·5	2·4	5·4	11·2	17·3	20·1	23·0	25·9	2. 35. 11·21		11·81				2. 34. 26·81	
	25	σ Arietis.....	C	23·7	26·6	29·5	32·3	38·0	43·7	46·7	49·5	52·4	2. 43. 37·99		38·59	3·39	24·80		....	
	26	ε Arietis.....	C	50·5	53·6	56·5	59·4	5·2	11·3	14·3	17·2	20·1	2. 51. 5·29		5·95				2. 51. 30·76	— 4·28
	27	δ Arietis.....	C	..	..	..	..	..	59·5	14·2	..	..	3. 3. 30·24		30·89	55·60	24·71		....	
Sept. 19	28	β Aquilæ	E	1·4	4·4	6·9	9·8	15·4	20·8	23·6	26·5	29·4	19. 48. 15·31	+0·78	15·91	41·40	25·49	25·05	19. 48. 41·46	— 3·47
	29	λ Ursæ Min.(E&E)	E	..	..	..	20·0	7·0	..	26·0	51·5	..	19. 59. 6·98	(+10·17)	34·99	59·13		[0·61]	20. 0. 0·55	+ 7·96
	30	θ Aquilæ	D	41·3	44·0	46·7	49·5	54·9	0·5	3·2	6·0	8·8	20. 3. 54·94	[+1·32]	55·47	20·82	25·35	24·88†	....	
	31	β Capricorni	D	45·8	48·6	51·7	54·4	0·1	5·8	8·7	11·6	14·5	20. 13. 0·09		0·50	25·94	25·44		....	
	32	Var. (S) Delphini.	E	26·1	29·1	32·0	34·8	40·5	46·4	49·3	52·0	54·9	20. 38. 40·52		41·20			25·05	20. 39. 6·77	— 3·61
	33	ξ Aquarii.....	E	54·4	57·5	0·4	3·0	8·5	14·3	17·0	19·7	22·6	21. 30. 8·55		9·03	34·59	25·56		21. 30. 34·63	— 4·04
	34	24 Aquarii.....	E	..	..	0·4	3·0	8·6	14·2	17·0	..	..	21. 32. 8·59		9·13				21. 32. 34·73	— 3·98
	35	ε Pegasi	E	53·9	56·8	59·6	2·5	8·0	13·5	16·5	19·3	22·2	21. 37. 7·98		8·61	34·32	25·71		21. 37. 34·21	— 3·93
	36	c^2 Capricorni....	E	24·7	27·6	..	33·4	38·7	44·5	..	50·0	52·9	21. 38. 38·79		39·25				21. 39. 4·85	— 4·07
	37	16 Pegasi.....	E	14·9	17·9	21·1	24·2	30·1	36·4	39·4	42·5	45·4	21. 46. 30·17		30·95	56·48	25·53		21. 46. 56·55	— 3·95
	38	Bradley 2870....	E	29·4	32·3	35·2	38·0	43·3	..	51·8	54·6	..	21. 50. 43·39		43·88				21. 51. 9·48	— 4·06
	39	28 Aquarii.....	E	31·4	34·4	37·0	39·8	45·4	50·7	53·6	56·5	59·1	21. 53. 45·27		45·82				21. 54. 11·43	— 4·03
	40	32 Aquarii.....	E	11·8	..	17·2	20·0	25·5	31·1	33·9	..	39·3	21. 57. 25·50		26·03				21. 57. 51·64	— 4·05
	41	25 Pegasi.....	E	50·0	53·1	55·8	58·8	4·8	10·7	13·7	16·6	19·6	22. 1. 4·74		5·49				22. 1. 31·10	— 4·03
	42	Bradley 2924....	E	10·4	13·4	16·1	19·0	24·4	30·0	32·8	35·5	38·4	22. 6. 24·39		24·89				22. 6. 50·50	— 4·09
	43	44 Aquarii.....	E	24·5	27·4	30·0	32·9	38·4	44·0	46·7	49·6	52·4	22. 9. 38·38		38·87				22. 10. 4·48	— 4·10
	44	49 Aquarii.....	E	18·8	22·0	25·0	28·0	34·0	40·3	43·4	46·4	49·5	22. 15. 34·11		34·43				22. 16. 0·05	— 4·30
	45	37 Pegasi.....	E	29·4	32·3	35·0	37·7	43·2	48·7	51·6	54·4	57·2	22. 22. 43·23		43·81				22. 23. 9·43	— 4·09

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S. P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

Corrections for passage of Semidiameter, Nos. 1, 2, 7, and 24, + $69^s{\cdot}70$: − $69^s{\cdot}70$: + $0^s{\cdot}38$: and − $69^s{\cdot}82$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

September 19 and 20. The azimuthal error by Polaris and Polaris S.P., allowing $0^s{\cdot}10$ for clock-rate and change of R.A.

1. The limb scarcely visible at the passage over the 4th wire. No correction is required for defect of illumination.

1, 2, 24. Correction to R.A. on true Meridian, + $0^s{\cdot}02$.

1, 2. Very cloudy.

27. Observed over wires Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Sept. 19	1	39 Pegasi	E	24·5	..	30·4	33·2	39·0	44·9	48·0	..	53·8	22. 25. 39·06	+0·78	39·79			25·05	22. 26. 5·41	— 4·14
	2	ζ Pegasi	E	4·5	7·4	10·3	13·0	18·5	24·4	27·0	29·9	32·8	22. 34. 18·59	(+10·17)	19·23	44·87	25·64	[0·61]	22. 34. 44·85	— 4·12
	3	Neptune	E	..	..	..	..	..	54·0	8·0	..	..	0. 28. 26·42	[+1·32]	26·98			25·66	0. 28. 52·65	
	4	β Ceti	E	8·9	11·9	14·9	17·6	23·4	29·4	32·4	35·3	38·3	0. 36. 23·52		23·92	49·66	25·74		0. 36. 49·60	— 4·02
	5	Polaris ... (E & E)	E	..	..	25·0	13·0	55·0	41·5	34·5	..	..	1. 9. 55·65		17·50	41·48	23·98		1. 10. 43·19	—82·49
	6	ε Arietis	R	49·5	52·6	55·5	58·6	4·4	10·3	13·4	16·3	19·2	2. 51. 4·37	(+9·64)	5·08			25·58	2. 51. 30·73	— 4·31
	7	κ Persei	R	39·4	43·4	47·3	51·2	58·7	6·6	10·4	14·4	18·4	2. 59. 58·80		59·80			[0·61]	3. 0. 25·46	— 5·28
	8	δ Arietis	R	14·7	17·8	20·7	23·6	29·3	35·4	38·2	41·2	44·0	3. 3. 29·38		30·08	55·63	25·55		3. 3. 55·74	— 4·23
	9	29 Persei	R	..	..	..	..	36·6	45·0	49·3	53·7	57·8	3. 8. 36·43		37·52				3. 9. 3·18	— 5·62
	10	Bradley 475	R	3·4	6·5	9·4	12·4	..	24·4	27·3	30·2	33·3	3. 16. 18·31		19·03				3. 16. 44·69	— 4·25
	11	Bradley 490	R	54·9	58·3	1·6	5·0	11·2	17·7	21·0	24·3	27·5	3. 26. 11·22		12·04				3. 26. 37·71	— 4·56
	12	☽ 2 L.	R	17·5	20·5	23·6	26·5	32·3	38·2	41·4	44·4	47·4	3. 34. 32·37		33·04				3. 33. 49·14	
	13	η Tauri	R	..	50·2	53·0	56·0	2·2	8·3	11·2	14·2	..	3. 39. 2·10		2·83	28·51	25·68		3. 39. 28·50	— 4·22
	14	u^2 Tauri	R	8·8	11·6	14·5	17·0	22·6	28·3	31·1	33·8	36·6	3. 44. 22·65		23·22				3. 44. 48·89	— 3·71
	15	ξ Persei	R	30·0	33·5	36·9	40·2	46·9	53·8	57·2	0·6	4·0	3. 49. 46·95		47·81				3. 50. 13·49	— 4·61
	16	40 Tauri	R	55·7	58·6	1·2	4·0	9·5	15·2	18·0	20·6	23·4	3. 56. 9·52		10·08				3. 56. 35·76	— 3·63
	17	p Tauri	R	55·5	58·6	1·7	4·7	11·0	17·2	20·3	23·4	26·4	4. 2. 10·93		11·69				4. 2. 37·37	— 4·20
	18	47 Tauri	R	56·2	59·0	1·8	4·5	10·0	15·6	18·6	21·4	24·1	4. 6. 10·09		10·69				4. 6. 36·37	— 3·68
	19	γ Tauri	R	26·5	29·4	32·4	35·2	41·0	46·6	49·4	52·5	55·0	4. 11. 40·84		41·49	7·25	25·76		4. 12. 7·18	— 3·83
	20	r Tauri	R	50·5	53·3	56·0	59·0	4·4	10·0	12·8	15·6	18·5	4. 16. 4·41		5·01				4. 16. 30·70	— 3·64
	21	ε Tauri	R	3·6	6·6	9·5	12·5	18·1	24·0	27·1	30·0	32·8	4. 20. 18·19		18·87	44·57	25·70		4. 20. 44·56	— 3·89
	22	Aldebaran	R	30·4	33·2	36·0	38·9	44·5	50·4	53·2	56·0	59·0	4. 27. 44·57		45·23	10·95	25·72		4. 28. 10·92	— 3·78
	23	95 Tauri	R	22·4	..	28·4	31·5	37·5	43·4	46·4	..	52·6	4. 34. 37·41		38·14				4. 35. 3·84	— 3·95
	24	Mars 2 L.	R	49·1	52·1	54·9	58·0	3·9	9·7	12·7	15·6	18·5	4. 41. 3·79		4·51				4. 41. 29·73	
Sept. 20	25	☉ 2 L.	R	6·3	9·0	11·9	14·5	20·0	25·5	28·4	31·2	34·0	11. 52. 20·04		20·57				11. 51. 42·42	
	26	Polaris S.P. (E&E)	R	17·0	..	..	51·0	34·0	20·0	10·0	..	..	13. 10. 37·17		17·40	41·72	24·32		1. 10. 43·31	—82·73
Sept. 21	27	☉ 1 L.	S	33·0	35·8	38·7	41·4	46·9	52·3	55·2	57·9	0·9	11. 53. 46·85	(+9·37)	51·42			26·15	11. 55. 17·91	
	28	☉ 2 L.	S	41·0	43·8	46·7	49·4	54·8	0·6	3·4	6·2	8·8	11. 55. 54·92	[+1·52]				[0·69]		
	29	δ Ursæ Min. (E&E)	S	26·5	14·5	2·0	48·5	20·5	55·5	42·0	29·5	15·0	18. 15. 20·74		29·26	56·71			....	
	30	Ceph. 51 S.P. (E&E)	S	1·0	55·0	52·5	49·5	46·5	..	..	..	..	18. 35. 46·49		37·05	4·48			....	
	31	β Lyræ	S	22·0	25·4	28·7	32·0	38·5	45·4	48·5	52·0	55·1	18. 44. 38·57		39·39	6·05	26·66		....	
	32	ε Aquilæ	S	48·3	51·3	54·1	57·0	2·7	8·5	11·4	14·1	16·9	18. 53. 2·65		3·29	29·93	26·64		....	
	33	ζ Aquilæ	S	31·0	34·0	36·8	39·6	45·3	51·0	53·8	56·7	59·5	18. 58. 45·25		45·88	12·53	26·65		....	
	34	ψ Aquilæ	S	36·4	39·1	42·1	44·8	50·4	56·2	59·0	1·8	4·5	19. 37. 50·43		51·05				19. 38. 17·76	— 3·27
	35	α Aquilæ	S	30·9	33·7	36·4	39·3	44·8	50·4	53·3	56·0	58·8	19. 43. 44·79		45·38	12·22	26·84		....	
	36	ω Piscium	E	42·6	..	48·2	50·9	56·4	2·1	4·8	..	10·5	23. 51. 56·46		57·03	23·95	26·92	26·17†	....	
	37	2 Ceti	E	8·5	11·4	14·4	17·3	23·2	29·0	31·9	35·0	37·9	23. 56. 23·13		23·52	50·31	26·79		....	
Sept. 22	38	72 Ophiuchi	C	15·1	18·0	20·7	23·6	29·1	34·7	37·5	40·4	43·1	18. 0. 29·08	(+8·45)	29·63	56·84	27·21	26·65	18. 0. 56·85	— 2·72
	39	μ Sagittarii	C	58·7	2·0	4·8	7·8	13·6	19·7	22·6	25·6	28·6	18. 5. 13·66		14·00	41·24	27·24	[0·76]	18. 5. 41·22	— 3·46
	40	δ Ursæ Min. (E&E)	C	27·0	15·0	2·5	48·5	20·0	..	..	..	..	18. 15. 20·88		28·56	56·25			....	
	41	Ceph. 51 S.P. (E&E)	C	..	..	..	..	46·0	40·0	37·0	34·0	33·0	18. 35. 46·23		37·74	5·06			....	
	42	50 Draconis	C	..	..	42·4	53·1	14·8	37·1	47·8	..	..	18. 50. 14·83		16·93				18. 50. 44·18	+ 0·40
	43	ζ Aquilæ	C	30·5	33·4	36·3	39·0	44·6	50·4	53·3	56·2	59·0	18. 58. 44·69		45·27	12·51	27·24		18. 59. 12·52	— 2·98
	44	δ Draconis	C	27·4	35·0	42·0	49·3	3·7	..	..	..	..	19. 12. 3·53		5·03				19. 12. 32·29	— 1·35
	45	α Aquilæ	C	30·5	33·2	36·2	38·8	44·4	50·1	52·8	55·5	58·5	19. 43. 44·39		44·93	12·20	27·27		19. 44. 12·20	— 3·37
	46	56 Aquilæ	C	7·4	10·3	13·0	15·8	21·4	27·0	29·9	32·6	35·4	19. 46. 21·38		21·81				19. 46. 49·09	— 3·66

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^{r}\cdot700$.
Corrections for passage of Semidiameter, Nos. 12, 24, and 25, $-69^{s}\cdot60$: $-0^{s}\cdot48$: and $-64^{s}\cdot03$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
September 21 to 25. The azimuthal error used is the mean of three determinations, viz., by tabular places of δ Ursæ Minoris and Cephei 51 S.P. on September 21, 22, and 24, allowing $0^{s}\cdot01$ for clock-rate in each case. The separate results are $+1''\cdot50$, $+1''\cdot28$, and $+1''\cdot77$.

3. Observed over wires Y, Z.
12. Correction to R.A. on true Meridian, $+0^{s}\cdot03$.
25. Cloudy.
26. Very faint ; the sky very hazy.
35. An unsatisfactory observation.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Sept. 22	1	63 Sagittarii	C	43·3	46·2	49·0	51·8	57·5	3·3	6·1	8·8	11·7	19. 53. 57·47	+0·78	57·85			26·65	19. 54. 25·13	— 3·79
	2	64 Sagittarii	C	56·7	59·4	2·4	5·2	10·7	16·5	19·3	22·2	25·0	19. 57. 10·78	(+8·45)	11·18			[0·76]	19. 57. 38·46	— 3·76
	3	ε Delphini	C	4·5	7·4	10·3	13·1	18·6	24·4	27·1	30·0	32·6	20. 26. 18·61	[+1·52]	19·17	46·44	27·27		20. 26. 46·47	— 3·55
	4	μ Pegasi.....	D	47·5	50·6	53·6	56·6	2·6	8·6	11·6	14·7	17·8	22. 43. 2·57		3·23	30·72	27·49	26·74†	....	
	5	λ Aquarii	D	53·4	56·2	58·9	1·8	7·2	12·9	15·6	18·5	21·3	22. 45. 7·26		7·69	35·13	27·44		....	
	6	η Geminorum....	JC	0·4	3·5	6·5	9·3	15·3	21·3	24·4	27·3	30·3	6. 6. 15·32	(+9·17)	16·02	43·56	27·54	27·48	6. 6. 43·67	— 3·43
	7	μ Geminorum....	JC	4·0	7·0	10·1	13·1	18·9	25·0	28·0	31·0	34·1	6. 14. 18·97		19·67	47·36	27·69	[0·67]	6. 14. 47·32	— 3·40
	8	☽ 2 L.	JC	..	23·6	26·6	29·6	..	41·4	44·5	47·5	50·5	6. 25. 35·46		36·12				6. 24. 57·17	
	9	θ Canis Majoris..	JC	12·5	15·4	18·3	21·1	26·7	32·4	35·2	38·0	40·8	6. 47. 26·66		27·08	54·71	27·63		6. 47. 54·75	— 2·43
	10	ζ^2 Geminorum....	JC	..	25·4	28·5	31·3	37·1	43·2	46·2	49·1	..	6. 55. 37·20		37·89				6. 56. 5·56	— 3·06
	11	λ Geminorum....	JC	36·7	39·6	42·4	45·3	51·0	57·0	59·8	2·6	5·6	7. 9. 51·07		51·71				7. 10. 19·39	— 2·88
Sept. 23	12	⊙ 1 L.....	JC	43·2	45·9	48·8	51·6	57·0	2·6	5·4	8·2	10·9	12. 0. 57·01		57·52				12. 2. 29·42	
	13	Venus 1 L.....	JC	..	..	..	..	..	32·6	35·6	38·5	41·3	13. 10. 27·17		27·64				13. 10. 55·87	
	14	89 Herculis	JC	14·0	17·3	20·3	23·4	29·5	35·6	38·7	41·9	44·8	17. 49. 29·45		30·18	58·28	28·10		17. 49. 58·16	— 2·22
	15	η Serpentis.....	JC	37·1	40·0	42·6	45·5	51·0	56·5	59·2	2·0	4·8	18. 13. 50·92		51·41	19·39	27·98		18. 14. 19·40	— 3·03
	16	δ Ursæ Min. (E&E)	JC	..	..	..	..	..	54·5	41·0	..	14·0	18. 15. 19·62		27·95	55·79			....	
	17	κ Piscium.....	E	19·0	21·9	24·7	27·5	32·8	38·5	41·3	44·0	46·8	23. 19. 32·90		33·42	1·79	28·37	27·73†	....	
	18	ι Piscium.....	E	18·6	21·6	24·4	27·1	32·6	38·3	41·0	43·8	46·5	23. 32. 32·61		33·16	1·55	28·39		....	
Sept. 24	19	72 Ophiuchi.....	D	13·5	16·4	19·2	22·0	27·5	33·2	36·0	38·8	41·6	18. 0. 27·53	(+8·32)	28·08	56·81	28·73	28·29	18. 0. 56·82	— 2·69
	20	μ Sagittarii	D	57·3	0·5	3·4	6·4	12·2	18·2	21·1	24·2	27·0	18. 5. 12·21		12·55	41·21	28·66	[0·60]	18. 5. 41·29	— 3·43
	21	η Serpentis.....	D	36·4	39·2	42·0	44·6	50·1	55·8	58·6	1·3	4·0	18. 13. 50·18		50·64	19·38	28·74		18. 14. 19·39	— 3·02
	22	δ Ursæ Min. (E&E)	D	..	..	..	..	19·5	53·0	41·0	27·5	13·5	18. 15. 19·15		26·71	55·34			....	
	23	Cep. 51 S.P. (E&E)	D	..	..	..	..	..	39·0	36·5	33·5	32·0	18. 35. 45·54		37·19	6·21			....	
	24	α Delphini	D	39·0	42·0	44·8	47·6	53·4	59·2	2·0	4·9	7·6	20. 32. 53·34		53·92	22·79	28·87		20. 33. 22·72	— 3·52
	25	Var. (S) Delphini.	D	22·8	25·8	28·7	..	..	43·3	46·0	48·7	..	20. 38. 37·26		37·85				20. 39. 6·65	— 3·54
	26	77 Draconis	D	..	..	..	..	42·8	9·0	22·1	34·6	47·2	21. 7. 42·97		45·35				21. 8. 14·17	— 4·48
	27	1 Pegasi	D	7·5	10·5	13·4	16·3	22·1	28·1	31·1	33·9	36·8	21. 15. 22·14		22·76				21. 15. 51·58	— 3·74
	28	β Aquarii.....	D	44·6	47·4	50·2	52·9	58·5	4·0	7·0	9·6	12·5	21. 23. 58·47		58·91	27·75	28·84		21. 24. 27·73	— 3·95
	29	α Orionis.....	C	8·3	11·1	14·0	16·7	22·3	27·8	30·5	33·4	36·2	5. 47. 22·21		22·74	51·82	29·08	28·94†	....	
	30	Sirius	C	27·6	30·6	33·5	36·5	42·2	48·0	50·8	53·8	56·6	6. 38. 42·13		42·50				6. 39. 11·60	— 2·42
	31	☽ 2 L.....	E	10·8	13·7	16·8	19·8	25·5	31·5	34·4	37·3	40·2	8. 9. 25·50		26·07				8. 8. 51·54	
Sept. 25	32	Rigel.....	JC	..	..	..	..	..	1·2	15·5	..	..	5. 7. 33·41		33·84	3·28	29·44	29·28†	....	
																		[0·73]		
Sept. 26	33	72 Ophiuchi.....	C	12·3	15·0	18·0	20·6	26·3	31·9	34·7	37·4	40·3	18. 0. 26·23	+0·96	26·89	56·77	29·88	29·26	18. 0. 56·76	— 2·65
	34	μ Sagittarii	C	56·1	59·2	2·2	5·0	10·9	17·0	19·8	22·8	25·6	18. 5. 10·91	(+9·39)	11·35	41·17	29·82	[0·81]	18. 5. 41·22	— 3·39
	35	δ Ursæ Min. (E&E)	C	..	..	57·0	44·0	16·0	50·5	37·5	..	..	18. 15. 16·10	[+2·56]	24·16	54·46			....	
	36	Cep. 51. S.P. (E&E)	C	58·5	55·0	52·0	49·5	45·5	..	..	..	..	18. 35. 45·68		36·91	7·30			....	
	37	β Aquilæ	C	56·7	59·6	2·4	5·1	10·6	16·3	19·1	21·8	24·6	19. 48. 10·64		11·27	41·29	30·02		19. 48. 41·20	— 3·36
	38	ε Draconis	C	..	7·3	13·5	20·0	32·6	45·5	52·1	58·3	..	19. 59. 32·63		34·12				20. 0. 4·05	— 2·33
	39	ξ^2 Capricorni	C	10·3	13·2	15·9	18·8	24·4	30·2	32·9	35·8	38·6	20. 4. 24·41		24·92				20. 4. 54·86	— 3·76
	40	Piazzi XX. 63...	C	34·2	38·2	42·1	46·2	54·1	2·2	6·2	10·2	14·2	20. 8. 54·12		55·15				20. 9. 25·09	— 2·91
	41	β Capricorni.....	C	41·2	44·1	47·0	49·8	55·4	1·2	4·0	6·8	9·7	20. 12. 55·42		55·91	25·84	29·93		20. 13. 25·85	— 3·82
	42	Var. (S) Delphini	C	21·7	24·5	27·5	30·3	36·0	41·8	44·8	47·6	50·4	20. 38. 36·01		36·72				20. 39. 6·67	— 3·51
	43	4 Aquarii	C	32·4	35·2	38·0	40·7	46·3	52·0	54·6	57·4	0·1	20. 43. 46·23		46·79				20. 44. 16·75	— 3·79
	44	5 Aquarii	C	..	..	..	..	30·4	36·0	..	41·5	44·3	20. 44. 30·36		30·90				20. 45. 0·86	— 3·79
	45	16 Delphini	C	28·0	30·8	33·8	36·6	42·1	47·8	50·6	53·5	56·3	20. 48. 42·12		42·80				20. 49. 12·76	— 3·62

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Corrections for passage of Semidiameter, Nos. 8, 12, 13, and 31, $-66^s \cdot 63$: $+64^s \cdot 08$: $+0^s \cdot 38$: and $-63^s \cdot 69$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

September 26 and 27. The azimuthal error used is the mean of three determinations, viz., by tabular places of δ Ursæ Minoris and Cephei 51 S.P., on September 26, of Polaris S.P. and Arcturus, and of δ Ursæ Minoris and Cephei 51 S.P. on September 27, allowing $0^s \cdot 01$, $0^s \cdot 03$, and $0^s \cdot 01$ for clock-rate in each case respectively. The separate results are $+2'' \cdot 61$, $+2'' \cdot 05$, and $+3'' \cdot 03$.

8. Corrrection to R.A. on true Meridian, $+0^s \cdot 02$.

12. Very cloudy; completely so during the passage of the 2 L. 13. Very cloudy.

15, 16. Cloudy.

31. The sky very hazy. The Moon could not be observed in N.P.D. Correction to R.A. on true Meridian, $+0^s \cdot 02$.

32. Exceedingly faint: observed over wires Y, Z.

42. Of the 8th magnitude.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate]	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Sept. 26	1	θ Capricorni.....	C	37·0	40·0	42·8	45·7	51·5	57·4	0·4	3·1	6·0	20. 57. 51·50	+ 0·96	51·98	21·88	29·90	29·26 [0·81]	20. 58. 21·95	— 4·01
	2	α Orionis.....	D	..	..	..	15·4	20·9	26·6	29·3	32·1	34·8	5. 47. 20·89	(+9·39)	21·53	51·88	30·35		....	
	3	β Leonis.....	JC	23·2	26·1	29·2	32·0	37·5	43·4	46·4	49·5	52·1	11. 41. 37·66	[+2·56]	38·36	8·81	30·45	30·09 [0·73]	11. 42. 8·81	— 1·57
Sept. 27	4	☉ 1 L.....	JC	..	..	10·6	13·4	18·7	24·5	27·3	30·0	32·7	12. 15. 18·84							
	5	☉ 2 L.....	JC	..	16·1	19·0	21·6	27·0	32·7	35·4	38·3	..	12. 17. 27·16		23·58				12. 16. 54·04	
	6	Polaris S.P.....	JC	..	..	..	..	..	14·0	4·5	58·0	53·0	13. 10. 31·79		14·20	43·81	29·61		....	
	7	Venus 1 L.	JC	29·8	32·5	35·4	38·1	43·6	49·2	52·2	54·8	57·6	13. 28. 43·64		44·17				13. 29. 15·06	
	8	Arcturus	JC	..	..	..	..	..	..	6·5	9·5	12·4	14. 8. 57·65		58·40	28·90	30·50		14. 9. 28·92	— 1·34
	9	δ Ursæ Min. (E&E)	JC	..	..	..	..	..	50·0	36·8	23·5	9·5	18. 15. 15·27		23·33	54·05			....	
	10	Bradley 2313 ...	JC	..	..	..	..	..	..	7·5	10·4	13·2	18. 20. 58·88		59·38				18. 21. 30·03	— 3·28
	11	α Lyræ.....	JC	32·8	36·4	40·0	43·4	50·6	57·6	1·3	4·6	8·3	18. 31. 50·50		51·42	22·12	30·70		18. 32. 22·07	— 2·08
	12	Cep. 51 S.P. (E&E)	JC	..	..	..	49·5	45·0	37·5	36·5	33·2	..	18. 35. 45·14		36·37	7·83			....	
	13	Groombridge 2672	JC	7·8	12·3	16·6	20·6	29·0	37·6	41·6	46·0	50·3	18. 43. 29·01		30·10				18. 44. 0·76	— 1·77
	14	Groombridge 2700	JC	21·5	25·5	29·3	33·0	40·6	..	..	..	..	18. 48. 40·47		41·46				18 49. 12·12	— 2·09
	15	Groombridge 2701	JC	..	..	..	..	45·0	52·5	56·3	0·0	3·6	18. 48. 44·87		45·86				18. 49. 16·52	— 2·09
	16	ψ Sagittarii	JC	29·2	32·5	35·5	38·6	44·6	50·9	53·8	56·8	0·1	19. 6. 44·62		45·03	15·68	30·65		19. 7. 15·70	— 3·77
	17	δ Draconis	JC	..	..	..	..	..	14·4	21·4	28·6	35·6	19. 11. 59·65		1·29				19. 12. 31·96	— 1·06
	18	50 Sagittarii	JC	30·0	33·2	36·1	39·1	45·0	51·0	54·0	57·0	0·0	19. 17. 44·99		45·43				19. 18. 16·11	— 3·73
	19	4 Cygni	JC	..	..	..	..	46·4	53·2	56·6	0·2	3·5	19. 20. 46·35		47·25				19. 21. 17·93	— 2·59
	20	α Vulpeculæ	JC	..	..	..	28·4	34·3	40·5	43·5	46·4	49·5	19. 22. 34·30		35·08	5·65	30·57		19. 23. 5·76	— 2·85
	21	β^1 Cygni	JC	29·8	33·1	36·3	39·3	45·5	51·9	55·0	58·2	1·1	19. 24. 45·52		46·33				19. 25. 17·01	— 2·80
	22	β^2 Cygni.....	JC	32·1	35·3	38·5	41·5	47·5	54·0	57·1	0·2	3·4	19. 24. 47·67		48·48				19. 25. 19·16	— 2·80
	23	e^1 Sagittarii.....	JC	..	..	19·8	22·6	28·4	34·2	37·0	..	..	19. 32. 28·34		28·83				19. 32. 59·51	— 3·67
	24	Piazzi XIX. 237.	JC	..	..	10·7	13·8	20·3	26·8	30·2	..	..	19. 36. 20·30		20·66				19. 36. 51·35	— 4·04
	25	γ Aquilæ	JC	5·4	8·3	11·1	13·8	19·4	25·1	27·9	30·7	33·5	19. 39. 19·41		20·08	50·84	30·76		19. 39. 50·77	— 3·21
	26	ν Orionis	E	5·6	8·5	11·4	14·2	19·9	25·6	28·4	31·4	34·3	5. 59. 19·87	(+9·89)	20·59	51·85	31·26	31·13†	....	
	27	μ Geminorum ...	E	0·3	3·5	6·4	9·4	15·4	21·5	24·4	27·5	30·4	6. 14. 15·37	[+2·38]	16·16	47·51	31·35	[0·72]	....	
	28	Regulus	D	..	..	29·3	32·0	37·5	43·3	46·2	48·9	51·8	10. 0. 37·59		38·30	9·57	31·27	30·96 [0·71]	10. 1. 9·56	— 1·98
Sept. 28	29	☉ 1 L.....	D	40·5	43·4	46·0	48·8	54·3	0·1	2·8	5·7	8·3	12. 18. 54·38							
	30	☉ 2 L.....	D	49·2	52·0	54·8	57·4	3·0	8·6	11·3	14·0	16·8	12. 21. 2·96		59·26				12. 20. 30·58	
	31	Polaris S.P. (E&E)	D	10·0	0·0	54·5	44·5	33·0	14·5	..	..	..	13. 10. 32·46		13·52	43·99	30·47		1. 10. 44·86	−85·00
	32	Venus 1 L.	D	5·1	7·9	10·7	13·4	19·0	24·6	27·5	30·2	33·1	13. 33. 19·00		19·33				13. 33. 51·28	
	33	Arcturus	D	42·1	45·1	48·1	51·0	56·8	2·7	5·7	8·6	11·4	14. 8. 56·78		57·55	28·89	31·34		14. 9. 28·93	— 1·33
	34	μ Herculis	D	22·3	25·5	28·6	31·7	38·0	44·3	47·2	50·4	53·5	17. 40. 37·89		38·72	10·21	31·49		17. 41. 10·20	— 1·98
	35	89 Herculis	D	10·5	13·6	16·6	19·8	25·9	32·1	35·1	38·2	41·2	17. 49. 25·84		26·66	58·17	31·51		17. 49. 58·15	— 2·11
	36	72 Ophiuchi	D	10·5	13·4	16·3	19·0	24·6	30·3	33·0	35·8	38·6	18. 0. 24·56		25·24	56·73	31·49		18. 0. 56·73	— 2·61
	37	δ Ursæ Min. (E&E)	D	19·5	8·0	55·5	41·5	14·0	48·0	..	..	..	18. 15. 13·88		22·52	53·64			18. 15. 54·02	+19·18
	38	α Lyræ.....	D	31·9	35·6	39·0	42·6	49·6	56·8	0·4	3·8	7·3	18. 31. 49·61		50·57	22·09	31·52		18. 32. 22·08	— 2·05
	39	Cep. 51 S.P. (E&E)	D	..	..	..	49·5	..	39·0	37·0	34·0	..	18. 35. 45·88		36·43	8·33			6. 36. 7·94	−26·93
	40	Var. (S) Delphini	D	20·0	23·0	25·8	28·7	34·4	40·3	43·0	45·9	48·7	20. 38. 34·37		35·11				20. 39. 6·68	— 3·48
	41	32 Vulpeculæ ...	D	1·3	4·5	7·6	10·6	16·9	23·3	26·4	29·4	32·5	20. 48. 16·89		17·72	49·31	31·59		20. 48. 49·30	— 3·44
	42	18 Delphini	D	10·2	13·1	15·8	18·6	24·2	29·9	32·7	35·5	38·3	20. 51. 24·21		24·90				20. 51. 56·48	— 3·61
	43	2 Equulei (1st star)	D	47·6	..	53·2	..	1·5	..	9·8	..	15·4	20. 55. 1·21		1·86				20. 55. 33·44	— 3·66
	44	2 Equulei (2d star)	D	..	50·5	..	56·1	..	7·3	..	12·8	..	20. 55. 1·61		2·26				20. 55. 33·84	— 3·66
	45	27 Capricorni ...	D	3·4	6·5	9·2	12·3	18·1	24·3	27·1	30·1	33·0	21. 1. 18·17		18·61				21. 1. 50·19	— 4·06
	46	ε Pegasi	D	48·0	50·8	53·5	56·4	2·0	7·6	10·5	13·3	15·9	21. 37. 1·95		2·62	34·24	31·62		21. 37. 34·22	— 3·85
	47	27 Aquarii.....	D	38·1	40·8	43·6	46·4	51·8	57·4	0·1	2·9	5·6	21. 39. 51·81		52·43				21. 40. 24·03	— 3·90

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 7 and 32, $+0^s \cdot 39$: and $+0^s \cdot 39$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
September 28. The azimuthal error by Polaris S.P. and Polaris, allowing $0^s \cdot 22$ for clock-rate and change of R.A.

2. Very faint; a dense fog. 3. Extremely faint. 29, 30. Very tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Sept. 28	1	13 Pegasi	D	57·5	0·5	3·5	6·3	11·9	17·8	20·6	23·6	26·5	21. 43. 11·97	+0·96	12·70			30·96	21. 43. 44·30	— 3·86
	2	28 Cephei	D	..	19·3	32·1	45·8	12·1	39·9	52·5	6·2	..	22. 25. 12·28	(+9·89)	15·15			[0·71]	22. 25. 46·77	— 7·60
	3	ρ Cephei	D	4·5	18·8	32·5	45·6	12·3	39·2	52·6	6·1	19·0	22. 28. 12·24	[+2·38]	15·11				22. 28. 46·73	— 7·75
	4	ζ Pegasi	D	58·6	1·3	4·1	6·9	12·5	18·2	21·1	23·7	26·6	22. 34. 12·51		13·20	44·83	31·63		22. 34. 44·83	— 4·08
	5	μ Andromedæ	D	..	..	35·0	38·5	45·2	52·4	55·8	59·4	2·8	0. 48. 45·31		46·26	17·91	31·65	31·67	0. 49. 17·95	— 5·09
	6	ε Piscium	D	11·5	14·2	16·8	19·7	25·2	30·8	33·6	36·4	39·1	0. 55. 25·21		25·86	57·54	31·68		0. 55. 57·56	— 4·31
	7	Polaris ...(E & E)	D	32·0	25·5	19·0	12·0	55·5	..	..	..	..	1. 9. 53·30		13·29	44·08	30·79		1. 10. 44·99	—85·09
Sept. 29	8	⊙ 1 L.	L	17·0	20·0	22·8	25·4	30·8	36·5	39·4	42·0	44·7	12. 22. 30·91	[+1·45]	} 35·67			31·67	12. 24. 7·66	
	9	⊙ 2 L.	L	25·5	28·4	31·1	33·9	39·4	44·9	47·8	50·6	53·3	12. 24. 39·38							
	10	ζ Aquilæ	R	..	..	..	33·8	39·6	45·4	48·3	..	..	18. 58. 39·6c		40·27	12·38	32·11	[0·62]	....	
	11	Bradley 2425	R	40·6	43·7	46·8	49·8	55·5	1·6	4·6	7·6	10·5	19. 8. 55·58		56·32				19. 9. 28·48	— 2·78
	12	δ Aquilæ	R	55·0	58·0	0·6	3·4	8·7	14·4	17·2	20·1	22·8	19. 18. 8·86		9·43	41·61	32·18		....	
	13	Bradley 2457	R	42·0	45·0	48·0	50·9	56·8	2·6	5·6	8·6	11·5	19. 18. 56·73		57·46				19. 19. 29·63	— 2·86
	14	7 Vulpeculæ	R	40·3	43·3	46·0	49·0	54·7	0·7	3·8	6·6	9·6	19. 22. 54·84		55·57				19. 23. 27·74	— 2·90
	15	8 Cygni	R	56·0	59·4	2·8	6·0	12·6	19·4	22·7	26·1	29·5	19. 26. 12·67		13·55				19. 26. 45·72	— 2·63
	16	9 Cygni	R	40·5	43·9	47·0	50·2	56·5	3·0	6·1	9·2	12·3	19. 28. 56·47		57·29				19. 29. 29·46	— 2·77
	17	Bradley 2507	R	32·0	34·9	37·8	40·6	46·1	51·9	54·8	57·6	0·5	19. 37. 46·19		46·86				19. 38. 19·04	— 3·13
	18	γ Aquilæ	R	3·8	7·0	9·6	12·4	18·0	23·5	26·5	29·2	32·2	19. 39. 17·97		18·61	50·80	32·19		....	
	19	Bradley 2521	R	44·6	47·5	50·4	53·0	58·7	4·5	7·4	10·2	12·8	19. 41. 58·73		59·38				19. 42. 31·56	— 3·18
	20	Bradley 2529	R	50·7	54·4	57·9	1·4	8·3	15·5	19·0	22·6	26·1	19. 44. 8·37		9·31				19. 44. 41·49	— 2·72
	21	19 Cygni	R	56·8	0·5	4·0	7·5	14·5	21·6	25·3	28·8	32·1	19. 45. 14·51		15·45				19. 45. 47·63	— 2·73
	22	11 Sagittæ	R	50·8	53·7	56·6	59·4	5·2	10·9	14·0	16·8	19·6	19. 51. 5·17		5·87				19. 51. 38·05	— 3·16
	23	λ Ursæ Min. (E&E)	R	..	..	..	..	51·0	42·0	7·5	34·0	0·0	19. 58. 49·57		17·15	49·35			....	
	24	40 Cygni	R	..	..	..	..	1·8	8·9	12·4	16·1	19·4	20. 22. 1·84		2·78				20. 22. 34·98	— 3·10
	25	73 Draconis	R	52·0	2·8	13·3	23·5	44·0	4·8	15·4	25·8	36·0	20. 32. 44·00		46·40				20. 33. 18·60	— 2·66
	26	Var. (S) Delphini.	R	19·5	22·3	25·3	28·2	33·8	39·6	42·5	45·4	48·1	20. 38. 33·81		34·51				20. 39. 6·71	— 3·47
	27	32 Vulpeculæ	R	0·6	3·8	7·0	10·1	16·3	22·6	25·7	28·9	32·0	20. 48. 16·28		17·08	49·30	32·22		....	
Sept. 30	28	⊙ 2 L.	C	2·2	5·0	8·0	10·6	16·1	21·8	24·4	27·1	29·8	12. 28. 16·06	(+10·11)	16·68			32·08	12. 27. 44·81	
	29	ρ Capricorni	C	22·2	25·1	28·0	30·7	36·6	42·5	45·5	48·4	51·2	20. 20. 36·64	[+2·99]	37·16	9·80	32·64	[0·66]	....	
	30	7-yr. Cat. No. 1694	C	..	..	..	..	24·7	30·6	..	36·3	39·2	20. 28. 24·66		25·18				20. 28. 57·82	— 3·86
	31	α Delphini	C	34·9	37·9	40·8	43·6	49·2	55·1	58·0	0·6	3·7	20. 32. 49·26		50·02	22·70	32·68		....	
	32	49 Cygni	C	..	..	..	..	2·2	8·7	12·0	15·2	18·5	20. 35. 2·15		3·07				20. 35. 35·72	— 3·27
	33	52 Cygni	C	16·7	19·9	23·1	26·4	32·7	39·1	42·4	45·6	48·6	20. 39. 32·67		33·56				20. 40. 6·21	— 3·32
	34	5 Aquarii	C	13·8	16·5	19·2	22·0	27·7	33·2	36·0	38·7	41·5	20. 44. 27·57		28·17				20. 45. 0·82	— 3·74
	35	32 Vulpeculæ	C	0·4	3·4	6·7	9·5	15·7	22·1	25·2	28·3	31·4	20. 48. 15·80		16·67	49·28	32·61		....	
Oct. 1	36	72 Ophiuchi	E	..	..	14·3	16·8	22·4	28·0	30·8	33·6	36·5	18. 0. 22·40	(+10·48)	23·12	56·67	33·55	32·98	....	
	37	102 Herculis	E	9·6	12·6	15·5	18·5	24·4	30·4	33·4	36·3	39·3	18. 2. 24·40		25·23			[0·82]	18. 2. 58·83	— 2·29
	38	δ Ursæ Min. (E&E)	E	17·0	4·5	51·0	37·0	10·5	..	..	..	..	18. 15. 10·28		19·06	52·46			....	
	39	λ Sagittarii (E&E)	E	48·6	51·8	54·9	57·9	4·0	10·1	13·4	16·2	19·3	18. 19. 3·97		4·43	38·12	33·69		....	
	40	α Lyræ	E	29·4	33·2	36·7	40·2	47·3	54·5	58·0	1·5	5·0	18. 31. 47·26		48·28	22·02	33·74		....	
	41	Ceph. 51 S.P. (E&E)	E	..	..	52·0	50·0	47·0	39·0	36·0	..	..	18. 35. 45·91		36·39	9·79			....	
	42	α Aquarii	E	3·6	6·5	9·4	12·2	17·4	23·1	25·8	28·8	31·4	21. 58. 17·53		18·18	51·77	33·59		....	
	43	Pallas	E	14·1	16·9	19·6	22·5	28·0	33·5	36·4	39·0	41·8	22. 0. 27·93		28·57				22. 1. 2·30	
Oct. 2	44	β Leonis	P	18·9	21·9	24·8	27·6	33·3	39·2	42·0	44·9	47·7	11. 41. 33·32	+0·80	33·95	8·85	34·90	34·60	11. 42. 8·98	— 1·64
	45	Mercury, center	P	..	..	..	..	..	16·0	18·9	21·6	24·4	11. 42. 10·48	(+9·64) [+0·42]	10·98			[0·90]	11. 42. 46·01	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r \cdot 700$.

Correction for passage of Semidiameter, No. 28, $-64^s \cdot 29$.

September 29. The azimuthal error by tabular places of γ Aquilæ and λ Ursæ Minoris, allowing $0^s \cdot 01$ for clock-rate.

September 30 and October 1. The azimuthal error used is that determined by tabular places of δ Ursæ Minoris and Cephei 51 S.P. on October 1, allowing $0^s \cdot 01$ for clock-rate.

23, 34. Very faint; cloudy.

30. Of the 10-11th magnitude.

45. An ill-defined mass.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Oct. 3	1	⊙ 1 L.	P	44·0	47·0	50·0	52·6	58·1	3·5	6·4	9·0	12·1	12. 36. 58·02	+0·80	2·89			34·60	12. 38. 37·96	
	2	⊙ 2 L.	P	53·0	55·8	58·6	1·4	6·9	12·4	15·3	18·3	20·7	12. 39. 6·88	(+9·64)				[0·90]		
	3	Polaris S.P.	P	9·0	0·0	52·0	44·0	..	..	5·0	..	..	13. 10. 31·32	[+0·42]	9·94	45·11	35·17		1. 10. 45·03	−86·12
	4	Venus 1 L.	P	15·4	18·1	21·0	23·6	29·4	35·1	38·0	40·6	43·7	13. 56. 29·38		29·76				13. 57. 5·29	
	5	Arcturus	P	38·4	41·4	44·4	47·2	53·2	59·0	2·0	4·9	8·0	14. 8. 53·12		53·79	28·87	35·08		14. 9. 28·92	− 1·31
	6	32 Vulpeculæ	P	57·5	0·7	3·7	6·9	12·9	19·4	22·6	25·5	28·5	20. 48. 13·03		13·77	49·23	35·46		20. 48. 49·15	− 3·36
	7	ζ Cygni	P	20·4	23·5	26·6	30·0	36·3	42·6	45·8	49·1	52·2	21. 6. 36·23		37·00	12·43	35·43		21. 7. 12·39	− 3·49
	8	α Equulei	P	15·4	18·4	21·2	23·8	..	34·8	37·5	40·4	43·0	21. 8 29·26		29·78	5·11	35·33		21. 9. 5·17	− 3·68
	9	ι Capricorni	P	54·0	57·0	59·7	2·5	8·4	14·4	17·2	20·0	22·9	21. 14. 8·40		8·74	44·13	35·39		21. 14. 44·14	− 3·95
	10	Pallas	P	28·5	31·1	33·7	36·6	42·2	47·5	50·4	53·1	55·9	21. 59. 42·06		42·52				22. 0. 17·95	
	11	α Pegasi	P	13·0	..	18·7	21·7	27·4	33·1	35·8	..	41·4	22. 57. 27·25		27·87	3·42	35·55		22. 58. 3·33	− 4·16
	12	h^4 Aquarii	P	21·7	24·5	27·3	30·0	35·5	41·3	44·2	46·8	49·7	22. 59. 35·62		36·02				23. 0. 11·48	− 4·13
	13	Bradley 3079	P	32·3	35·4	38·4	41·8	47·8	53·9	57·1	0·3	3·4	23. 7. 47·77		48·51				23. 8. 23·98	− 4·35
	14	*b* Piscium	P	39·3	42·0	44·6	47·6	53·0	58·6	1·4	4·3	7·0	23. 12. 53·04		53·56				23. 13. 29·03	− 4·17
	15	69 Pegasi	P	8·3	11·2	14·4	17·2	23·4	..	..	..	38·6	23. 20. 23·36		24·07				23. 20. 59·54	− 4·38
	16	α Andromedæ	P	34·5	37·9	40·7	44·0	50·0	56·5	59·6	2·7	6·0	0. 0. 50·17		50·92	26·42	35·50	35·50	0. 1. 26·42	− 4·64
	17	γ Pegasi	P	28·0	31·0	34·0	36·7	42·4	48·3	51·0	53·7	56·6	0. 5. 42·36		42·98	18·50	35·52		0. 6. 18·48	− 4·39
	18	ι Ceti	P	44·2	46·8	49·9	52·6	58·2	3·7	6·5	9·1	12·2	0. 11. 58·08		58·47	34·00	35·53		0. 12. 33·98	− 4·17
	19	Neptune	P	38·0	40·7	43·5	46·2	51·5	57·4	0·0	3·0	5·5	0. 26. 51·71		52·20				0. 27. 27·72	
	20	Metis	P	26·0	28·8	31·4	34·4	39·8	45·1	48·2	50·9	53·7	0. 31. 39·76		40·18				0. 32. 15·70	
	21	Polaris	P	28·5	21·5	12·0	4·0	48·5	33·0	..	..	..	1. 9. 47·28		9·51	45·25	35·74		1. 10. 45·05	−86·26
	22	Harmonia	P	48·2	..	53·9	56·5	2·0	7·9	10·5	..	15·6	1. 15. 2·05		2·52				1. 15. 38·07	
	23	ν Piscium	P	35·8	38·5	41·1	44·0	49·5	55·1	57·9	0·6	3·5	1. 33. 49·50		50·02	25·63	35·61		1. 34. 25·58	− 4·31
	24	Ceres	P	11·9	14·8	17·5	20·0	25·7	31·2	34·0	36·9	39·7	1. 36. 25·69		26·12				1. 37. 1·68	
	25	Regulus	C	19·1	22·0	24·9	27·8	33·3	39·0	41·9	44·7	47·5	10. 0. 33·31	(+10·25)	33·93	9·69	35·76	35·47	10. 1. 9·68	− 2·10
	26	Mercury 2 L	C	51·6	54·6	57·5	0·3	..	..	..	16·8	..	11. 43. 5·65		6·17			[0·67]	11. 43. 41·70	
Oct. 4	27	⊙ 1 L.	C	21·5	24·5	27·4	30·1	35·7	41·3	44·0	46·8	49·7	12. 40. 35·62		40·62				12. 42. 16·44	
	28	⊙ 2 L.	C	30·7	33·6	36·4	39·2	44·8	50·4	53·1	56·0	58·6	12. 42. 44·71							
	29	Polaris S.P.	C	..	59·0	51·0	45·0	33·0	15·0	5·0	..	..	13. 10. 31·69		9·05	45·39	36·34		1. 10. 44·89	−86·40
	30	Spica	C	..	..	..	..	..	33·2	36·0	38·8	41·6	13. 17. 27·50		27·91	3·76	35·85		13. 18. 3·75	− 1·89
	31	Venus 1 L.	C	55·5	58·6	1·4	4·1	9·7	15·4	18·4	21·1	24·0	14. 1. 9·75		10·14				14. 1. 46·41	
	32	Arcturus	C	37·6	40·6	43·5	46·4	52·3	58·3	1·2	4·1	7·0	14. 8. 52·29		53·00	28·86	35·86		14. 9. 28·86	− 1·30
	33	ε Boötis	C	..	..	..	..	..	58·6	14·2	..	..	14. 38. 27·37		28·15	4·00	35·85		14. 39. 4·03	− 1·13
	34	ξ Aquarii	C	44·0	46·8	49·6	52·4	58·0	3·6	6·4	9·1	12·0	21. 29. 57·94		58·36	34·43	36·07		21. 30. 34·43	− 3·88
	35	c^2 Capricorni	C	14·2	17·0	19·8	22·6	28·3	34·0	36·7	39·5	42·2	21. 38. 28·20		28·61				21. 39. 4·68	− 3·92
	36	13 Pegasi	C	..	..	..	..	..	13·1	16·2	19·2	22·0	21. 43. 7·46		8·13				21. 43. 44·21	− 3·79
	37	Regulus	S	..	..	..	..	46·8	..	15·1	..	..	10. 0. 32·59	[−0·82]	33·15	9·71	36·56	36·37	10. 1. 9·70	− 2·12
	38	Mercury, center	S	22·6	25·4	28·2	30·9	36·4	41·9	44·7	47·6	50·4	11. 44. 36·40		36·86			[0·44]	11. 45. 13·44	
Oct. 5	39	⊙ 1 L.	S	59·9	2·5	5·4	8·2	13·6	19·3	22·0	24·7	27·7	12. 44. 13·65		18·65				12. 45. 55·25	
	40	⊙ 2 L.	S	9·1	11·8	14·7	17·3	22·8	28·3	31·3	34·0	36·9	12. 46. 22·86							
	41	Polaris S.P.	S	10·0	0·0	52·0	43·0	33·0	13·0	..	..	..	13. 10. 31·65		6·87	45·68	38·81		1. 10. 43·48	−86·69
	42	α Coronæ	L	4·5	7·7	10·7	14·0	20·1	26·4	29·4	32·5	35·6	15. 28. 20·05		20·79	57·09	36·30	36·03	....	
	43	☽ 1 L.	L	16·5	19·6	22·6	25·7	31·5	37·7	40·7	43·8	46·7	16. 15. 31·60		31·84				16. 17. 15·69	
	44	ζ Herculis	L	17·4	20·9	24·1	27·3	33·7	40·3	43·6	46·8	50·3	16. 35. 33·76		34·57	10·90	36·33		....	
	45	μ Aquilæ	E	38·5	41·4	44·2	47·0	52·4	58·2	0·8	3·5	6·4	19. 26. 52·44		52·95	29·77	36·82	36·46†	....	
	46	γ Aquilæ	E	59·4	2·2	5·0	7·8	13·4	19·0	21·8	24·6	27·4	19. 39. 13·35		13·89	50·70	36·81		....	
	47	α Aquilæ	S	20·6	23·5	26·5	29·0	34·6	40·4	43·0	45·7	48·8	19. 43. 34·63		35·15	11·98	36·83	36·37	19. 44. 11·88	− 3·15

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r \cdot 700$.
Corrections for passage of Semidiameter, Nos. 4, 26, 31, and 43, $+0^s \cdot 41$: $-0^s \cdot 27$: $+0^s \cdot 41$: and $+67^{s} \cdot 51$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
October 3 and 4. The azimuthal error by Polaris S.P., Polaris, and Polaris S.P.
October 5. The azimuthal error by Polaris S.P. and Polaris, allowing $0^s \cdot 19$ for clock-rate and change of R.A.

1, 2. Unsatisfactory.
3, 4, 27, 28, 31, 39, 40, 41. Very tremulous.
3, 6, 7, 15. Cloudy.
8. Very cloudy; at times invisible.
33. Observed over wires Y, Z.
36. Very cloudy.
37. Cloudy. Observed over wires X, Z; not visible at the passage over the others.
43. Correction to R.A. on true Meridian, $+0^s \cdot 01$.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Oct. 5	1	β Aquilæ	S	50·1	52·8	55·6	58·5	4·0	9·5	12·3	14·9	17·7	19. 48. 3·88	+ 0·80	4·38	41·13	36·75	36·37	19. 48. 41·11	— 3·20
	2	Bradley 2546....	S	14·4	17·1	20·2	23·1	28·6	34·6	37·4	40·3	43·2	19. 51. 28·71	(+10·25)	29·33			[0·44]	19. 52. 6·06	— 3·06
	3	η Sagittæ	S	..	..	24·5	27·6	33·3	39·1	42·3	45·1	48·1	19. 58. 33·31	[−0·82]	33·96				19. 59. 10·70	— 3·05
	4	ξ^1 Capricorni ...	S	37·9	40·8	43·6	46·5	52·0	57·8	0·6	3·5	6·4	20. 3. 52·07		52·39				20. 4. 29·13	— 3·59
	5	4 Capricorni	S	..	..	..	..	..	58·5	13·4	..	..	20. 9. 28·60		28·81				20. 10. 5·55	— 3·80
	6	25 Vulpeculæ....	S	23·0	26·4	29·3	32·4	38·2	44·5	47·6	50·5	53·4	20. 15. 38·31		39·01				20. 16. 15·75	— 3·11
	7	68 Aquilæ	S	30·0	33·0	35·7	38·5	44·0	49·5	52·2	55·0	57·7	20. 20. 43·91		44·30				20. 21. 21·04	— 3·53
	8	47 Cygni	S	45·4	49·0	52·4	56·0	2·4	9·0	12·8	15·9	19·3	20. 28. 2·41		3·26				20. 28. 40·00	— 3·07
	9	Bradley 2669....	S	32·7	..	38·5	41·2	46·9	52·5	55·4	..	0·9	20. 32. 46·83		47·37				20. 33. 24·12	— 3·41
	10	ε Aquarii	S	31·1	34·1	36·9	39·6	45·4	51·0	53·9	56·6	59·2	20. 39. 45·26		45·59	22·34	36·75		20. 40. 22·34	— 3·69
	11	ξ Aquarii	S	43·6	46·4	49·1	51·9	57·4	3·0	6·0	8·6	11·4	21. 29. 57·44		57·79	34·42	36·63		21. 30. 34·55	— 3·87
	12	Pallas	S	47·5	50·3	53·0	55·6	1·1	6·8	9·7	12·5	14·9	21. 59. 1·22		1·63				21. 59. 38·40	
	13	Bradley 3125....	S	..	..	..	45·1	1·1	..	25·1	32·6	40·6	23. 21. 0·90		2·97				23. 21. 39·77	— 6·87
	14	ι Piscium	S	10·4	13·3	15·9	18·6	24·3	30·0	32·5	35·2	38·2	23. 32. 24·22		24·71	1·55	36·84		23. 33. 1·51	— 4·22
	15	γ Pegasi	S	26·8	29·8	32·4	35·4	41·1	47·0	49·7	52·5	55·4	0. 5. 41·08		41·67	18·51	36·84	36·81	0. 6. 18·48	
	16	Neptune.....	S	24·3	27·3	30·1	32·7	38·4	43·8	46·5	49·4	52·0	0. 26. 38·22		38·67				0. 27. 15·49	
	17	Metis	S	29·8	32·6	35·4	38·2	43·6	49·3	52·1	55·0	57·5	0. 29. 43·67		44·04				0. 30. 20·86	
	18	Polaris ....(E&E)	S	19·0	14·0	8·0	..	42·0	..	..	..	..	1. 9. 41·12		6·67	45·81	39·14		1. 10. 43·50	—86·82
	19	Harmonia.....	S	53·0	55·7	58·6	1·4	6·8	12·4	15·3	18·1	20·8	1. 13. 6·85		7·28				1. 13. 44·11	
	20	η Piscium	S	25·4	28·5	31·1	34·0	39·6	45·5	48·4	51·2	54·0	1. 23. 39·69		40·28	17·09	36·81		1. 24. 17·12	— 4·52
	21	Regulus.....	R	18·0	21·0	23·8	26·6	..	38·1	40·9	43·6	46·4	10. 0. 32·24	[−0·11]	32·84	9·73	36·89	36·60	10. 1. 9·67	— 2·14
	22	γ^1 Leonis	R	38·0	41·0	44·0	46·9	52·7	..	..	..	..	10. 11. 52·74		53·43	30·32	36·89	[0·54]	10. 12. 30·26	— 2·10
	23	γ^2 Leonis	R	..	..	..	..	53·0	58·9	1·9	4·9	7·8	10. 11. 52·98		53·67				10. 12. 30·50	— 2·10
	24	δ Leonis	R	1·6	4·7	7·6	10·6	16·4	22·5	25·4	28·4	31·4	11. 6. 16·46		17·16	54·09	36·93		11. 6. 54·01	— 1·78
	25	β Leonis.....	R	17·0	20·1	22·9	25·7	31·5	37·2	40·2	42·9	45·8	11. 41. 31·43		32·07	8·91	36·84		11. 42. 8·93	— 1·67
	26	Mercury 2 L.....	R	28·4	31·2	34·0	36·5	42·3	47·8	50·5	53·5	56·2	11. 46. 42·22		42·71				11. 47. 19·31	
Oct. 6	27	☉ 1 L.....	R	38·6	41·4	44·1	46·9	52·5	58·0	1·0	3·4	6·0	12. 47. 52·39		57·47				12. 49. 34·36	
	28	☉ 2 L.....	R	47·9	50·5	53·5	56·2	1·8	7·4	10·0	13·0	15·4	12. 50. 1·70							
	29	Polaris S.P. (E&E)	R	11·0	2·0	53·0	45·0	34·0	15·0	6·0	58·0	55·0	13. 10. 32·94		9·39	45·93	36·54		....	
	30	Arcturus	R	36·6	39·5	42·5	45·4	51·3	57·3	0·2	3·0	6·0	14. 8. 51·26		51·95	28·86	36·91		14. 9. 28·87	— 1·30
	31	Venus 1 L.	R	..	..	..	..	..	40·0	42·7	45·6	48·5	14. 10. 34·18		34·54				14. 11. 11·87	
	32	ε Boötis	R	10·6	13·8	17·0	20·0	26·4	32·6	35·8	38·9	42·0	14. 38. 26·29		27·06	3·98	36·92		14. 39. 3·99	— 1·11
	33	α^2 Libræ.....	R	..	..	..	..	46·4	52·3	55·1	58·0	0·8	14. 42. 46·44		46·77	23·71	36·94		14. 43. 23·70	— 2·17
	34	β Ursæ Minoris ..	R	30·7	40·8	51·6	2·1	23·0	44·1	54·6	5·2	15·4	14. 50. 22·88		25·50				14. 51. 2·42	+ 5·63
	35	☽ 1 L.....	R	0·8	3·9	6·8	10·0	15·8	22·0	25·1	28·2	31·1	17. 12. 15·91		16·19				17. 14. 1·82	
	36	α Ophiuchi.....	R	47·8	50·6	53·5	56·4	2·0	7·6	10·5	13·3	16·1	17. 28. 1·93		2·53	39·54	37·01		17. 28. 39·52	— 2·21
	37	β Ophiuchi.....	R	56·4	59·0	2·0	4·7	10·2	15·7	18·6	21·4	24·2	17. 36. 10·20		10·71	47·71	37·00		17. 36. 47·70	— 2·45
	38	δ Ursæ Min. (E&E)	R	..	57·5	44·0	31·0	..	38·0	24·5	11·5	57·5	18. 15. 3·26		13·67	50·35			....	
	39	Ceph. 51 S.P. (E&E)	R	..	..	..	..	47·0	41·0	39·0	..	33·0	18. 35. 47·30		35·41	12·44			....	
	40	Groombridge 2742	R	..	..	59·4	5·8	17·1	29·2	35·3	..	..	18. 55. 17·24		18·81				18. 55. 55·84	— 0·74
	41	Groombridge 2808	R	4·6	25·8	..	..	..	50·5	..	..	..	19. 12. 8·10		9·24				19. 12. 46·27	— 1·83
	42	Groombridge 2808	R	..	..	..	..	8·1	16·7	20·8	..	..								
	43	δ Aquilæ	R	50·1	53·0	55·8	58·6	..	9·5	..	..	..	19. 18. 3·99		4·49	41·49	37·00		19. 18. 41·52	— 3·08
Oct. 7	44	☉ 1 L.....	E	17·4	20·2	23·0	25·7	31·3	37·0	39·5	42·4	45·0	12. 51. 31·23	(+ 9·38)	36·37			37·30	12. 53. 14·06	
	45	☉ 2 L.....	E	26·7	29·6	32·3	35·1	40·7	46·3	49·2	52·2	54·8	12. 53. 40·74	[− 0·10]				[0·73]		
	46	Polaris S.P. (E&E)	E	..	..	..	..	27·5	9·0	3·0	..	47·5	13. 10. 27·47		5·73	46·13	40·40		1. 10. 43·43	—87·14
	47	Arcturus	E	35·8	38·8	41·6	44·6	50·6	56·4	59·4	2·4	5·1	14. 8. 50·48		51·11	28·85	37·74		14. 9. 28·84	— 1·29

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$.

Corrections for passage of Semidiameter, Nos. 26, 31, and 35, $-0^s{\cdot}26$: $+0^s{\cdot}41$: and $+68^s{\cdot}63$.

October 6. The azimuthal error used is the mean of those determined by tabular places of Polaris S.P. and Arcturus, and of δ Ursæ Minoris and Cephei 51 S.P., allowing $0^s{\cdot}02$ and $0^s{\cdot}01$ for clock-rate in each case respectively. The separate results are $-0''{\cdot}32$ and $+0''{\cdot}10$.

October 7. The azimuthal error by Polaris S.P. and Polaris, allowing $0^s{\cdot}23$ for clock-rate and change of R.A.

5. Observed over wires Y, Z.
18. Very tremulous.
26. Extremely tremulous and ill-defined.
27, 28. Much blurred.
29. Tremulous.
31. Much diffused.
33. Excessively faint.
35. Observed through thin cirrus cloud. Correction to R.A. on true Meridian, $+0^s{\cdot}01$.
39, 41, 42. Very cloudy.
41. Observed over wires N, O, Y.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Oct. 7	1	Venus 1 L.	E	3·4	6·4	9·3	11·9	17·5	23·4	26·4	29·1	32·0	14. 15. 17·66	+0·80	17·99			37·30	14. 15. 56·13	
	2	ε Boötis	E	10·0	13·0	16·3	19·3	25·4	31·7	35·0	38·2	41·2	14. 38. 25·52	(+9·38)	26·24	3·97	37·73	[0·73]	14. 39. 3·99	— 1·10
	3	α Ophiuchi	E	46·9	49·8	52·6	55·5	1·0	6·8	9·7	12·5	15·4	17. 28. 1·09	[−0·10]	1·65	39·52	37·87		17. 28. 39·48	— 2·19
	4	μ Herculis	E	..	..	..	..	31·5	37·6	40·9	44·0	47·2	17. 40. 31·44		32·16	10·01	37·85		17. 41. 10·00	— 1·78
	5	72 Ophiuchi	E	4·4	7·0	10·0	12·8	18·3	23·9	26·7	29·6	32·4	18. 0. 18·29		18·82	56·56	37·74		18. 0. 56·67	— 2·45
	6	☽ 1 L.	E	8·7	11·9	14·8	17·7	24·0	30·1	33·1	36·1	39·0	18. 10. 23·88		24·14				18. 12. 11·33	
	7	δ Ursæ Min.(E&E)	E	..	..	..	..	2·5	37·0	24·0	11·0	57·0	18. 15. 2·56		12·16	49·89			18. 15. 50·02	+22·93
	8	α Lyræ	E	..	..	..	..	..	..	53·7	57·4	0·8	18. 31. 43·06		43·92	21·86	37·94		18. 32. 21·78	— 1·82
	9	Ceph.51 S.P.(E&E)	E	..	..	..	..	44·0	39·0	36·0	33·5	32·5	18. 35. 45·24		34·27	13·03			6. 36. 12·14	—31·63
	10	ν1 Sagittarii	E	7·7	10·8	13·7	16·7	22·8	28·6	31·7	34·7	37·9	18. 45. 22·69		22·93				18. 46. 0·80	— 3·41
	11	ξ2 Sagittarii	E	47·4	50·4	53·2	56·2	2·1	8·0	10·9	13·9	17·0	18. 49. 2·07		2·32				18. 49. 40·19	— 3·39
	12	Groombridge2742	E	46·9	52·8	58·8	4·8	16·4	28·4	34·3	40·2	46·2	18. 55. 16·43		17·88				18. 55. 55·76	— 0·69
	13	ψ Sagittarii	E	22·1	25·2	28·4	31·4	37·4	43·5	46·6	49·7	52·7	19. 6. 37·39		37·60	15·48	37·88		19. 7. 15·48	— 3·57
	14	Groombridge2808	E	46·2	50·5	54·6	58·8	7·3	..	..	..	..	19. 12. 7·26		8·31				19. 12. 46·20	— 1·80
	15	Groombridge2815	E	1·9	6·2	..	14·5	..	31·7	36·0	40·0	44·4	19. 14. 23·06		24·11				19. 15. 2·00	— 1·82
	16	δ Aquilæ	E	49·3	52·2	54·9	57·6	3·2	..	11·5	..	17·0	19. 18. 3·14		3·60	41·47	37·87		19. 18. 41·49	— 3·06
	17	Groombridge2849	E	..	17·0	21·4	25·7	34·0	42·7	47·0	51·2	..	19. 22. 34·05		35·11				19. 23. 13·00	— 1·90
	18	Groombridge2865	E	..	..	..	..	6·3	15·0	19·2	23·5	27·9	19. 27. 6·26		7·33				19. 27. 45·22	— 1·95
	19	ε1 Sagittarii	E	..	9·7	12·5	15·5	21·1	27·0	29·8	..	..	19. 32. 21·13		21·43				19. 32. 59·33	— 3·49
	20	γ Aquilæ	JC	58 6	1·4	4·2	6·9	12·5	18·0	21·0	23·8	26·6	19. 39. 12·51		13·05	50·66	37·61	37·05†	....	
	21	α Aquilæ	JC	19·6	22·6	25·4	28·3	33·8	39·4	42·2	45·0	47·9	19. 43. 33·75		34·27	11·95	37·68		....	
	22	Groombridge 2952	E	..	..	..	..	..	6·0	..	21·2	29·4	19. 43. 50·41		52·26			37·30	19. 44. 30·16	— 1·05
	23	o1 Cygni	E	5·1	9·2	13·4	17·4	25·1	33·4	37·2	41·4	45·4	20. 8. 25·22		26·22				20. 9. 4·13	— 2·61
	24	Groombridge3150	E	38·6	5·4	12·6	19·1	33·0	47·1	54·0	0·6	7·4	20. 15. 32·97		34·63				20. 16. 12·55	— 2·05
	25	Piazzi XX. 391	E	25·5	30·4	35·1	39·8	48·9	58·6	3·4	7·8	12·6	20. 48. 49·04		50·21				20. 49. 28·14	— 3·04
	26	θ Capricorni	E	29·1	32·1	35·0	37·9	43·6	49·5	52·4	55·2	58·2	20. 57. 43·62		43·91	21·72	37·81		20. 58. 21·85	— 3·85
	27	✻ N.P.D. 30°. 17′	E	14·0	19·4	25·2	30·6	41·2	52·5	58·3	3·5	9·0	21. 0. 41·43		42·78				21. 1. 20·72	— 3·18
	28	✻ N.P.D. 30°. 21′	E	53·3	59·2	4·6	9·8	20·7	31·8	37·5	42·8	48·0	21. 6. 20·77		22·12				21. 7. 0·06	— 3·29
	29	Piazzi XXI. 61	E	16·4	21·8	27·6	32·8	43·5	54·5	0·1	5·6	11·0	21. 8. 43·61		44·95				21. 9. 22·89	— 3·35
	30	Piazzi XXI. 86	E	..	15·4	20·3	25·0	34·8	44·5	49·0	54·0	..	21. 12. 34·61		35·81				21. 13. 13·76	— 3·41
	31	Piazzi XXI. 142	E	..	..	..	45·0	57·3	9·9	16·2	..	..	21. 18. 57·32		58·84				21. 19. 36·79	— 3·56
	32	Groombridge3485	E	44·0	48·5	52·9	57·4	6·2	15·3	19·8	24·2	28·7	21. 26. 6·25		7·37				21. 26. 45·32	— 3·60
	33	Piazzi XXI. 241	E	..	..	40·5	46·3	57·8	9·6	15·2	..	..	21. 32. 57·77		59·21				21. 33. 37·17	— 3·83
	34	Radcliffe 5352	E	..	..	..	..	..	1·0	5·9	10·4	15·0	21. 34. 51·77		52·93				21. 35. 30·89	— 3·74
	35	Bradley 2867	E	35·8	40·5	45·2	49·6	58·8	8·2	12·9	17·5	22·2	21. 47. 58·88		0·04				21. 48. 38·00	— 3·93
	36	Pallas	E	11·5	14·4	17·2	20·0	25·2	31·0	33·8	36·5	39·3	21. 58. 25·38		25·79				21. 59. 3·76	
	37	Neptune	E	11·2	..	16·7	19·4	25·0	30·6	33·4	..	38·9	0. 26. 24·99		25·44			38·03	0. 27. 3·48	
	38	Metis	E	35·0	37·8	40·5	43·3	48·6	54·4	57·2	0·1	2·7	0. 27. 48·79		49·17				0. 28. 27·21	
	39	21 Cassiopeiæ	E	..	..	43·0	52·6	13·1	34·0	44·2	..	..	0. 36. 13·18		15·54				0. 36. 53·39	—19·88
	40	i1 Piscium	E	45·8	..	52·1	..	1·4	..	10·6	..	16·7	0. 42. 1·28		1·99				0. 42. 40·04	— 4·77
	41	i2 Piscium	E	..	49·2	..	55·5	..	7·9	..	14·2	..	0. 42. 1·29		2·00				0. 42. 40·05	— 4·77
	42	μ Andromedæ	E	21·5	25·2	28·7	32·3	39·0	46·2	49·6	53·2	56·7	0. 48. 39·09		39·94	17·98	38·04		0. 49. 17·99	— 5·16
	43	Bradley 107	E	..	..	4·5	7·3	12·6	18·4	21·0	..	..	0. 52. 12·71		13·20				0. 52. 51·26	— 4·36
	44	Polaris (E & E)	E	21·5	17·0	8·0	1·0	44·0	..	..	..	..	1. 9. 43·00		5·51	46·21	40·70		1. 10. 43·58	—87·22
	45	Harmonia	E	56·4	59·3	2·2	4·8	10·2	15·9	18·6	21·4	24·0	1. 11. 10·27		10·70				1. 11. 48·77	
	46	Ceres	E	51·4	..	57·0	59·8	5·3	10·9	13·5	..	19·2	1. 33. 5·26		5·65				1. 33. 43·73	
	47	α Arietis	E	..	44·8	47·9	50·8	56·6	2·9	5·8	8·7	..	1. 58. 56·73		57·39	35·53	38·14		1. 59. 35·48	— 4·79
	48	δ Leonis	C	0·5	3·6	6·6	9·6	15·4	21·6	24·4	27·4	30·3	11. 6. 15·44	[−1·29]	16·04	54·12	38·08	37·87	....	
	49	β Leonis	C	16·0	18·7	21·6	24·5	30·3	35·8	38·8	41·8	44·6	11. 41. 30·19		30·73	8·93	38·20	[0·52]	....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $30^r·700$.
Corrections for passage of Semidiameter, Nos. 1 and 6, $+0^s·41$ and $+69^s·33$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
October 7, δ Leonis to October 9. The azimuthal error by tabular places of β Leonis and Polaris S.P., on October 7 and 8, allowing $0^s·01$ for clock-rate.

6. Correction to R.A. on true Meridian, $+0^s·01$.

31. Faint; observed through cloud.

40, 41. Of about equal magnitude.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Oct. 7	1	Mercury 2 L	C	13·1	16·0	18·8	21·4	..	32·7	..	38·1	41·1	11. 52. 27·03	+0·80 (+9·38) [−1·29]	27·42			37·87 [0·52]	11. 53. 5·31	
Oct. 8	2	⊙ 1 L	C	..	..	2·4	5·2	10·6	16·3	19·0	21·9	24·5	12. 55. 10·63							
	3	⊙ 2 L	C	6·3	9·2	12·0	14·8	20·3	26·0	28·7	31·4	34·1	12. 57. 20·27		15·88				12. 56. 54·03	
	4	Polaris S.P. (E&E)	C	8·0	1·0	52·0	44·0	32·0	15·0	..	..	..	13. 10. 31·87		8·06	46·28	38·22		....	
	5	ϵ Boötis	C	9·6	12·7	15·8	19·0	..	..	..	..	..	14. 38. 25·15		25·83	3·96	38·13		....	
Oct. 9	6	σ Aquarii	JC	..	..	..	..	..	20·2	34·3	..	..	22. 22. 51·98		52·25	30·82	38·57		....	
	7	ζ Pegasi	JC	51·6	54·6	57·3	0·2	5·6	11·4	14·2	17·0	19·9	22. 34. 5·70		6·17	44·75	38·58		....	
Oct. 12	8	α Pegasi	C	9·9	12·6	15·7	18·5	24·2	29·9	32·8	35·6	38·4	22. 57. 24·13	−3·86	24·32	3·36	39·04	38·88	22. 58. 3·39	− 4·10
	9	☽ 1 L	C	22·0	25·0	27·8	30·6	36·4	42·0	44·8	47·6	50·6	23. 3. 36·26	(+9·05)	36·30			[0·20]	23. 5. 24·37	
	10	γ Piscium	C	18·0	20·9	23·5	26·3	32·0	37·5	40·3	43·0	45·8	23. 9. 31·87	[−1·08]	31·96	11·02	39·06		23. 10. 11·03	− 4·13
	11	κ Piscium	C	8·9	11·6	14·4	17·1	22·6	28·4	31·0	33·7	36·6	23. 19. 22·65		22·71	1·73	39·02		23. 20. 1·78	− 4·12
	12	ι Piscium	C	..	11·3	14·1	16·8	22·4	28·0	30·6	33·4	..	23. 32. 22·31		22·42	1·53	39·11		23. 33. 1·50	− 4·20
	13	ε Piscium	C	4·4	7·2	10·0	12·9	18·4	24·0	26·6	29·6	32·4	0. 55. 18·34		18·47	57·63	39·16	39·08	0. 55. 57·56	− 4·40
	14	Polaris ...(E & E)	C	33·0	29·0	23·0	14·5	57·0	45·0	36·5	27·0	20·0	1. 9. 56·38		7·20	46·29	39·09		....	
	15	θ Ceti	C	24·6	27·5	30·4	33·2	38·6	44·3	47·1	49·8	52·6	1. 16. 38·62		38·61	17·69	39·08		1. 17. 17·70	− 4·18
Oct. 13	16	θ Aquilæ	E	27·0	29·8	32·5	..	40·8	..	49·1	52·0	54·7	20. 3. 40·80	(+9·47)	40·91	20·43	39·52	39·28† [0·34]	....	
	17	o Cygni	JC	..	..	12·3	16·2	24·1	32·4	36·3	..	..	20. 8. 24·18	[−0·44]	24·73			39·05	20. 9. 4·07	− 2·43
	18	α^2 Capricorni	E	40·1	42·9	45·8	48·7	54·4	0·0	2·8	5·6	8·4	20. 9. 54·25		54·24	33·85	39·61	39·28†	....	
	19	β Capricorni	JC	32·0	34·8	37·6	40·6	46·3	52·1	54·8	57·9	0·6	20. 12. 46·25		46·21	25·55	39·34		....	
	20	ρ Capricorni	JC	..	18·7	21·7	24·4	30·4	36·4	39·0	42·0	..	20. 20. 30·31		30·24	9·58	39·34		....	
	21	☽ 1 L.	JC	57·8	0·6	..	..	..	..	..	..	..	0. 2. 12·00		12·15			39·39	0. 4. 0·81	
	22	Polaris ...(E & E)	JC	..	..	..	14·5	56·0	..	..	..	..	1. 9. 56·19		6·87	46·29	39·42		....	
Oct. 14	23	α Orionis	C	58·2	1·2	4·2	6·8	12·4	18·0	20·7	23·5	26·5	5. 47. 12·34	[−1·83]	12·45	52·39	39·94	39·86†	....	
	24	γ Geminorum ...	C	0·5	3·4	6·4	9·3	15·0	20·7	23·7	26·6	29·5	6. 29. 14·96		15·17	55·09	39·92	[0·26]	....	
	25	δ Leonis	E	..	..	..	..	..	19·7	22·8	25·8	28·7	11. 6. 13·80		14·04	54·25	40·21	40·14	....	
	26	Mercury 2 L	E	14·2	17·3	19·8	22·6	28·3	33·6	36·5	39·4	42·2	12. 24. 28·16		28·19			[0·20]	12. 25. 8·19	
	27	Polaris S.P. (E&E)	E	..	..	..	..	..	1·5	51·0	44·5	41·5	13. 10. 18·54		6·19	46·40	40·21		....	
Oct. 15	28	⊙ 1 L.	E	47·2	50·0	52·6	55·4	1·1	6·6	9·5	12·4	15·1	13. 21. 1·05							
	29	⊙ 2 L.	E	57·5	0·4	3·2	6·0	11·6	17·2	20·2	22·9	25·7	13. 23. 11·59		6·27				13. 22. 46·48	
	30	μ Aquilæ	JC	35·5	38·4	41·0	44·0	49·4	55·0	57·9	0·6	3·4	19. 26. 49·41		49·52	29·59	40·07	39·88†	....	
	31	h^2 Sagittarii	JC	34·2	37·2	40·2	43·3	49·5	55·7	58·6	1·7	4·8	19. 27. 49·41		49·15	29·15	40·00		....	
	32	14 Sagittæ	E	24·6	27·6	30·5	33·4	39·0	44·9	47·6	50·6	53·4	19. 56. 39·01		39·21			40·14	19. 57. 19·48	− 2·91
	33	θ Aquilæ	E	26·2	29·0	31·9	34·5	40·1	45·7	48·4	51·1	53·9	2c. 3. 40·04		40·07	20·40	40·33		....	
	34	o^2 Cygni	E	..	..	..	..	..	22·6	42·7	..	..	20. 8. 42·52		43·06				20. 9. 23·33	− 2·38
	35	Groombridge 3150	E	..	..	..	17·2	31·0	45·0	..	..	..	20. 15. 30·96		31·94				20. 16. 12·21	− 1·62
	36	☽ 2 L.	E	37·0	39·9	42·9	45·8	51·6	57·4	0·4	3·3	6·2	2. 3. 51·56		51·72			40·30	2. 3. 21·86	
Oct. 16	37	☽ 2 L.	C	..	18·9	21·8	24·7	30·6	36·6	39·6	42·5	..	3. 4. 30·61		30·81			40·36	3. 4. 0·80	
	38	τ^1 Arietis	C	32·3	35·2	38·1	41·1	47·0	52·9	55·9	..	..	3. 12. 46·96		47·20	27·59	40·39	[0·23]	....	
Oct. 17	39	μ Andromedæ ...	E	19·1	22·8	26·4	29·7	36·7	43·9	47·3	50·7	54·3	0. 48. 35·72	(+9·57) [−0·45]	37·19	18·01	40·82	4 0·81† [0·25]	....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $30^r{\cdot}700$; from October 12, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 1, 9, 21, 26, 36, and 37, $-0^s{\cdot}24$: $+69^s{\cdot}00$: $+69^s{\cdot}26$: $-0^s{\cdot}20$: $-70^s{\cdot}19$: and $-70^s{\cdot}41$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
October 12. The azimuthal error by tabular places of Polaris and θ Ceti, the correction for clock-rate insensible.
October 13. The azimuthal error by tabular places of ρ Capricorni and Polaris, allowing $0^s{\cdot}07$ for clock-rate.
October 14. The azimuthal error by tabular places of δ Leonis and Polaris S.P., allowing $0^s{\cdot}01$ for clock-rate.

6. Very cloudy; observed over wires Y, Z.
9. Very faint; cloudy.
21. Extremely cloudy; not visible during the remainder of the transit. Correction to R.A. on true Meridian, $+0^s{\cdot}01$.
22. Very faint; at times invisible.
25. Faint.
34. Observed over wires Y, Z.
36, 37. Correction to R.A. on true Meridian, $+0^s{\cdot}01$.
38. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Oct. 18	1	16 Pegasi	D	59·6	2·6	5·6	8·6	14·8	21·0	24·0	27·0	30·2	21. 46. 14·77	−3·86	15·11	56·11	41·00	40·74	21. 46. 56·10	− 3·58
	2	α Aquarii	D	56·6	59·4	2·2	5·0	10·5	16·0	18·8	21·7	24·4	21. 58. 10·47	(+9·57)	10·58	51·58	41·00	[0·28]	21. 58. 51·58	− 3·76
	3	ω Piscium	C	29·0	31·9	34·6	37·3	42·8	48·5	51·1	54·0	56·8	23. 51. 42·84	[−0·45]	43·02	23·94	40·92	40·61	....	
	4	2 Ceti	C	55·1	58·0	0·8	..	9·5	..	18·3	21·2	24·1	23. 56. 9·52		9·45	50·31	40·86			
	5	ε Piscium	D	2·4	5·3	8·1	10·9	16·4	22·1	24·9	27·6	30·4	0. 55. 16·40		16·59	57·65	41·06	41·02	0. 55. 57·62	− 4·42
	6	77 Piscium	D	56·5	59·4	2·1	4·9	10·4	15·9	18·8	21·5	24·3	0. 58. 10·38		10·54				0. 58. 51·57	− 4·39
	7	Bradley 125	D	58·7	1·4	4·3	..	12·5	..	21·0	23·6	26·4	0. 58. 12·52		12·68				0. 58. 53·71	− 4·39
	8	β Andromedæ	D	..	17·9	21·3	24·6	31·3	38·1	41·4	44·9	..	1. 1. 31·29		31·72	12·71	40·99		1. 2. 12·75	− 5·16
	9	Polaris (E & E)	D	..	..	22·5	12·5	57·0	43·0	36·0	..	..	1. 9. 56·05		6·96	46·77	39·81		1. 10. 47·99	−87·78
	10	θ Ceti	D	22·6	25·4	28·3	31·1	36·6	42·4	45·1	48·0	50·6	1. 16. 36·63		36·66	17·72	41·06		1. 17. 17·70	− 4·21
	11	☽ 2 L.	E	24·5	27·5	30·6	33·5	39·6	45·6	48·6	51·6	54·6	5. 4. 39·51	(+8·35)	39·73			41·33	5. 4. 11·78	
	12	Mars 2 L.	E	..	43·4	46·4	49·3	55·1	1·3	4·2	7·2	..	5. 9. 55·21		55·45			[0·28]	5. 10. 36·22	
	13	δ Orionis	E	12·0	14·8	17·7	20·5	26·0	31·6	34·3	37·0	39·8	5. 24. 25·92		25·99	7·40	41·41		....	
	14	ζ Tauri	E	39·0	42·1	45·1	48·0	53·8	59·9	2·8	5·8	8·7	5. 28. 53·86		54·08				5. 29. 35·47	− 4·11
	15	χ^1 Orionis	E	27·8	30·7	33·7	36·6	42·5	48·4	51·4	54·4	57·3	5. 45. 42·49		42·70				5. 46. 24·10	− 4·28
	16	α Orionis	E	..	0·0	2·6	5·4	10·9	16·6	19·3	22·2	..	5. 47. 10·94		11·07	52·50	41·43		....	
	17	Uranus	E	25·1	28·1	31·1	34·2	40·1	46·4	49·3	52·4	55·3	5. 56. 40·18		40·42				5. 57. 21·82	
	18	ν Orionis	E	..	..	..	..	..	16·7	19·6	22·4	25·3	5. 59. 10·93		11·11	52·47	41·36		....	
	19	Mercury 2 L.	E	..	..	..	..	18·0	23·7	26·5	29·2	..	12. 47. 18·05		18·10				12. 47. 59·40	
	20	Polaris S.P. (E&E)	E	52·0	42·5	34·0	27·0	14·0	..	..	..	..	13. 10. 14·35		6·72	46·80	40·08		1. 10. 48·20	−87·81
Oct. 19	21	Arcturus	E	32·4	35·5	38·5	41·4	47·1	53·0	56·0	59·0	1·8	14. 8. 47·14		47·36	28·84	41·48		....	
	22	β Andromedæ	JC	14·3	17·8	21·3	24·6	31·2	38·1	41·4	44·7	48·2	1. 1. 31·23		31·57	12·71	41·14	41·12†	....	
	23	Mercury 2 L.	C	1·0	3·8	6·6	9·4	14·8	20·4	23·3	26·1	28·9	12. 53. 14·87	[−0·98]	14·88			[0·36]	12. 53. 56·04	
	24	Polaris S.P. (E&E)	C	..	44·0	..	..	..	..	..	40·0	32·0	13. 10. 13·08		4·53	46·82	42·29	41·12	....	
																		[0·41]		
Oct. 20	25	⊙ 1 L.	C	30·9	33·7	36·6	..	..	..	..	..	..	13. 39. 44·96		} 50·70				13. 41. 32·05	
	26	⊙ 2 L.	C	42·4	45·4	48·3	51·0	56·4	2·2	..	..	..	13. 41. 56·54							
	27	Arcturus	C	3·2	18·0	..	..	..	16·7	31·4	..	..	} 14. 8. 47·30		47·50	28·84	41·34		14. 9. 28·86	− 1·28
	28	Arcturus'	C	..	..	..	..	47·3	..	56·3	59·0	2·0								
	29	ε Boötis	C	6·7	10·0	13·0	16·2	22·5	28·6	31·6	34·8	38·0	14. 38. 22·33		22·59	3·91	41·32		14. 39. 3·96	− 1·04
	30	Venus 1 L.	C	..	..	..	..	43·8	58·6	..	..	..	15. 18. 29·21		29·07				15. 19. 10·88	
	31	Groombridge 2808	C	43·0	47·2	51·4	55·8	4·1	12·7	16·9	21·0	25·2	19. 12. 4·07		4·55				19. 12. 46·00	− 1·38
	32	Groombridge 2815	C	58·6	3·0	7·2	11·4	19·8	28·4	32·6	36·9	41·0	19. 14. 19·80		20·28				19. 15. 1·73	− 1·40
	33	Groombridge 2849	C	9·4	13·8	18·1	22·4	30·8	39·5	43·8	48·1	52·3	19. 22. 30·85		31·32				19. 23. 12·77	− 1·47
	34	Groombridge 2865	C	41·4	45·9	50·2	54·5	3·0	11·7	16·0	20·3	24·5	19. 27. 2·99		3·47				19. 27. 44·92	− 1·53
	35	γ Aquilæ	C	54·8	57·6	0·5	3·3	8·8	14·5	17·3	20·1	22·9	19. 39. 8·81		8·94	50·43	41·49		19. 39. 50·40	− 2·80
	36	Groombridge 2952	C	8·5	16·4	24·2	31·8	47·1	..	..	..	..	19. 43. 47·11		47·95				19. 44. 29·41	− 0·22
	37	λ Ursæ Min. (E&E)	C	..	49·0	15·0	39·0	..	..	47·0	..	..	19. 58. 27·09		38·80	21·18			....	
	38	Bradley 2567	C	55·7	58·7	1·5	4·4	10·2	16·1	18·8	21·8	24·5	19. 57. 10·14		10·31				19. 57. 51·77	− 2·80
	39	θ Aquilæ	C	25·0	27·7	30·5	33·4	38·7	44·4	47·2	50·0	52·6	20. 3. 38·78		38·81	20·31	41·50		20. 4. 20·27	− 3·14
	40	o^1 Cygni	C	1·9	6·0	9·9	14·0	21·9	30·1	34·1	38·1	42·0	20. 8. 21·92		22·36				20. 9. 3·82	− 2·23
	41	Groombridge 3150	C	55·2	2·3	9·2	16·1	29·7	43·8	50·7	57·4	4·4	20. 15. 29·74		30·50				20. 16. 11·97	− 1·35
	42	ι Delphini	C	26·2	29·0	31·9	34·7	40·3	46·0	48·7	51·5	54·4	20. 30. 40·25		40·39				20. 31. 21·86	− 3·12
	43	10 Delphini	C	..	..	..	..	..	44·2	58·4	..	..	} 20. 34. 15·63		15·78				20. 34. 57·24	− 3·10
	44	10 Delphini	C	..	..	..	..	..	..	..	27·0	30·0								
	45	ε Aquarii	C	26·7	29·6	32·4	35·1	40·5	46·4	49·2	52·0	54·6	20. 39. 40·68		40·63	22·10	41·47		20. 40. 22·10	− 3·45
	46	Piazzi XX. 391	C	22·4	27·2	31·9	36·6	45·9	55·5	0·2	4·8	9·4	20. 48. 45·91		46·43				20. 49. 27·90	− 2·63
	47	2 Equulei	C	38·0	40·8	43·6	46·3	51·8	57·6	0·4	3·1	5·9	20. 54. 51·90		51·99				20. 55. 33·47	− 3·33

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 11, 12, 19, 23, and 30, $-69^s{\cdot}35$: $-0^s{\cdot}62$: $-0^s{\cdot}18$: $-0^s{\cdot}18$: and $+0^s{\cdot}43$.
†This clock-error has been used in the reduction of the observations made with the Altazimuth.
October 18. The azimuthal error by Polaris and Polaris S.P., allowing $0^s{\cdot}26$ for clock-rate and change of R.A.
October 19 and 20. The azimuthal error by tabular places of Polaris S.P. and λ Ursæ Minoris, allowing $0^s{\cdot}08$ for clock-rate.

2. Faint ; very cloudy.
11. Observed through clouds. Correction to R.A. on true Meridian, $+0^s{\cdot}01$.
22. Faint ; cloudy.
24. Cloudy during the passage over the other wires.
27. Observed over wires N, O, Y, Z.
30. Extremely cloudy ; observed over wires, X, Y.
42. Cloudy.
43. Observed over wires Y, Z.
47. A very close double star ; the images bad ; observed as one mass.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Oct. 20	1	*N. P. D. 30°. 17′.	C	10·6	16·2	21·6	27·2	38·2	49·1	54·5	0·1	5·6	21. 0. 38·02	— 3·86	38·64			41·12	21. 1. 20·12	— 2·69
	2	*N. P. D. 30°. 21′.	C	50·1	55·7	1·0	6·5	17·2	28·4	33·9	39·4	44·8	21. 6. 17·35	(+8·35)	17·97			[0·41]	21. 6. 59·45	— 2·81
	3	Piazzi XXI. 61..	C	..	18·5	24·1	29·4	40·2	51·2	56·6	2·1	..	21. 8. 40·19	[−0·98]	40·80				21. 9. 22·28	— 2·87
	4	Piazzi XXI. 86..	C	7·0	12·0	17·0	21·6	31·2	41·1	46·0	50·7	55·5	21. 12. 31·27		31·82				21. 13. 13·30	— 3·00
	5	Piazzi XXI. 142.	C	23·0	29·4	35·4	41·9	54·0	..	..	..	..	21. 18. 54·09		54·82				21. 19. 36·30	— 3·03
	6	β Aquarii.....	C	32·0	34·8	37·6	40·5	46·0	51·5	54·4	57·2	59·8	21. 23. 45·93		45·91	27·40	41·49		21. 24. 27·39	— 3·60
	7	Groombridge 3485	C	40·7	45·3	49·7	54·3	3·0	12·0	16·4	20·8	25·2	21. 26. 2·97		3·47				21. 26. 44·96	— 3·25
	8	Piazzi XXI. 241.	C	25·3	31·4	37·2	43·0	54·4	6·3	12·3	17·8	23·6	21. 32. 54·49		55·14				21. 33. 36·63	— 3·36
	9	δ Capricorni.....	C	39·8	42·6	45·6	48·5	54·3	0·1	3·0	5·8	8·6	21. 38. 54·21		54·10	35·59	41·49		21. 39. 35·59	— 3·79
	10	α Andromedæ ...	D	28·9	32·0	35·1	38·4	44·6	50·8	54·0	57·1	0·2	0. 0. 44·52		44·79	26·39	41·60	41·64†	....	
	11	γ Pegasi.....	D	22·4	25·4	28·2	31·0	36·6	42·5	45·2	48·1	50·9	0. 5. 36·65		36·80	18·49	41·69		....	
	12	☽ 2 L.....	JC	20·6	23·4	26·2	29·0	35·1	41·1	44·0	46·9	50·0	6. 57. 35·09	(+9·28)	35·33			41·54	6. 57. 10·60	
	13	δ Geminorum....	JC	6·9	9·9	12·9	15·9	21·8	28·0	30·8	33·8	36·8	7. 11. 21·82		22·10	3·79	41·69	[0·45]	....	
	14	Castor	JC	0·6	4·2	7·4	10·6	17·5	23·7	27·0	30·4	33·3	7. 25. 17·13		17·50	59·11	41·61		....	
	15	Procyon	JC	18·5	21·3	24·0	26·8	32·3	38·0	40·8	43·6	46·4	7. 31. 32·36		32·49	14·24	41·75		....	
	16	κ Geminorum ...	JC	20·6	23·7	26·8	29·8	35·8	42·0	45·0	47·9	50·9	7. 35. 35·78		36·09				7. 36. 17·77	— 3·72
Oct. 21	17	Polaris S.P. (E&E)	P	..	..	32·5	24·5	..	..	..	..	..	13. 10. 12·05	[+0·40]	3·96	46·66	42·70	42·16 [0·63]	....	
Oct. 22	18	Groombridge 2808	R	..	..	..	..	2·5	11·0	..	..	..	19. 12. 2·47		3·03				19. 12. 45·69	— 1·32
	19	γ Aquilæ	R	53·5	56·4	59·1	2·0	7·4	13·3	..	..	..	19. 39. 7·53		7·77	50·39	42·62		....	
	20	α Aquilæ	R	14·8	17·6	20·4	23·2	28·7	34·3	37·1	40·0	42·7	19. 43. 28·70		28·93	11·68	42·75		....	
	21	β Aquilæ	R	43·9	47·0	49·8	52·4	58·0	3·4	6·4	9·0	11·9	19. 47. 57·93		58·14	40·82	42·68		....	
	22	26 Vulpeculæ....	R	23·1	26·2	29·2	32·2	38·4	44·5	47·6	50·6	53·8	20. 29. 38·35		38·71				20. 30. 21·41	— 2·87
	23	α Cygni	R	47·5	51·5	55·6	59·4	7·1	15·0	18·9	22·8	26·6	20. 36. 7·10		7·62				20. 36. 50·32	— 2·58
	24	30 Vulpeculæ....	R	..	..	..	..	19·2	25·4	28·6	31·5	34·4	20. 38. 19·24		19·59				20. 39. 2·29	— 2·95
	25	α Ceti	C	18·0	20·8	23·6	26·4	31·8	37·4	40·2	42·9	45·6	2. 54. 31·81		31·99	14·78	42·79	42·71†	....	
Oct. 23	26	δ Orionis	JC	..	12·8	15·5	18·4	23·9	29·5	32·1	35·0	..	5. 24. 23·83	[−0·13]	23·95	7·52	43·57	43·35†	....	
	27	α Leporis.....	JC	49·6	52·6	55·4	58·4	4·1	10·0	12·8	15·7	18·6	5. 26. 4·08		4·03	47·49	43·46	[0·71]	....	
	28	☽ 2 L.....	C	0·0	2·9	5·8	8·7	14·4	20·2	23·0	25·8	28·7	9. 28. 14·34		14·54			43·62	9. 27. 56·23	
	29	ο Leonis	C	58·2	1·1	3·9	6·7	12·2	17·9	20·6	23·5	26·4	9. 33. 12·23		12·44	56·10	43·66	[0·24]	9. 33. 56·15	— 2·73
	30	ε Leonis	C	11·2	14·4	17·4	20·5	26·4	32·5	35·6	38·6	41·5	9. 37. 26·40		26·73	10·39	43·66		9. 38. 10·44	— 2·79
	31	Regulus	C	12·0	14·9	17·6	20·6	26·2	32·0	34·7	37·6	40·4	10. 0. 26·17	— 3·84	26·40	10·17	43·77		10. 1. 10·12	— 2·58
	32	Polaris S.P. (E&E)	C	..	39·0	31·0	26·0	12·5	55·0	48·5	..	..	13. 10. 12·46	(+9·68)	2·58	46·33	43·75		....	
	33	Spica	C	6·2	8·9	11·7	14·6	20·1	..	..	..	..	13. 17. 20·13		20·17	3·88	43·71		13. 18. 3·92	— 2·01
	34	Mercury 2 L.....	C	..	..	..	..	..	56·4	10·4	..	..	13. 17. 28·39		28·47				13. 18. 12·05	
	35	Mercury 2 L.....	C	..	..	..	..	•	34·0	36·8	39·6	42·4								
Oct. 24	36	⊙ 1 L.....	C	40·4	43·5	46·2	49·0	54·6	0·4	3·2	6·1	8·9	13. 54. 54·65		0·79				13. 56. 44·55	
	37	⊙ 2 L.....	C	52·7	55·7	58·5	1·2	6·8	12·6	15·4	18·4	21·0	13. 57. 6·87							
	38	Arcturus	C	30·3	33·2	36·3	39·0	44·9	50·6	53·7	56·5	59·5	14. 8. 44·84		45·16	28·85	43·69		14. 9. 28·92	— 1·29
	39	α Coronæ.....	C	57·4	0·5	3·6	6·6	12·8	19·0	22·2	25·2	28·4	15. 28. 12·81		13·19	56·91	43·72		15. 28. 56·96	— 1·07
	40	Venus 1 L.....	C	20·9	23·6	26·6	29·6	35·5	41·5	44·4	47·4	50·4	15. 38. 35·49		35·42				15. 39. 19·63	
	41	Groombridge 2808	C	40·3	44·5	48·6	52·9	1·3	9·9	14·0	18·3	22·5	19. 12. 1·32		1·94				19. 12. 45·75	— 1·26
	42	Groombridge 2815	C	..	..	..	..	..	59·4	20·7	..	..	19. 14. 17·05		17·67				19. 15. 1·48	— 1·28
	43	Groombridge 2815	C	..	..	..	..	..	..	..	34·2	38·3								
	44	Groombridge 2849	C	6·6	10·9	15·4	19·5	28·1	36·6	41·0	45·3	49·5	19. 22. 28·03		28·65				19. 23. 12·46	— 1·35
	45	Groombridge 2865	C	38·7	43·0	47·4	51·7	0·2	9·0	13·2	17·4	21·6	19. 27. 0·18		0·80				19. 27. 44·61	— 1·40

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.

Corrections for passage of Semidiameter, Nos. 12, 28, 34–35, and 40, $-66^s{\cdot}41$: $-62^s{\cdot}03$: $-0^s{\cdot}17$: and $+0^s{\cdot}43$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

October 21 and 22. The azimuthal error by tabular places of Polaris S.P. and α Aquilæ, allowing $0^s{\cdot}06$ for clock-rate.

October 23 and 24. The azimuthal error by tabular places of Polaris S.P. and λ Ursæ Minoris, allowing $0^s{\cdot}17$ for clock-rate.

12. Extremely faint; scarcely visible. Correction to R.A. on true Meridian, $+0^s{\cdot}01$.
13. Extremely faint.
14, 16. Faint.
18, 21. Very cloudy.
17. Very cloudy; not seen at the passage over the other wires.
19. Very faint; cloudy.
20. Cloudy.
28. Correction to R.A. on true Meridian, $+0^s{\cdot}01$.
34, 42. Observed over wires Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Oct. 24	1	σ Draconis.....	C	12·4	20·5	28·4	36·2	51·9	..	..	..	..	19. 31. 51·80	−3·84	52·85			43·62	19. 32. 36·66	+ 0·34
	2	γ Aquilæ	C	..	..	58·0	0·6	6·3	11·9	14·7	17·5	20·4	19. 39. 6·24	(+9·68)	6·47	50·36	43·89	[0·24]	19. 39. 50·29	− 2·73
	3	Groombridge2952	C	5·8	13·7	21·4	29·2	44·4	0·0	7·7	15·4	22·9	19. 43. 44·37	[−0·13]	43·41				19. 44. 29·23	+ 0·03
	4	β Aquilæ	C	42·9	45·6	48·5	51·2	56·6	2·4	5·1	8·0	10·6	19. 47. 56·71		56·90	40·79	43·89		19. 48. 40·72	− 2·86
	5	λ Ursæ Min. (E&E)	C	..	..	4·0	31·0	..	14·0	37·0	..	..	19. 58. 18·05		31·72	15·66			....	
	6	17 Vulpeculæ....	C	6·2	9·2	12·3	15·2	21·2	27·3	30·3	33·3	36·3	20. 0. 21·21		21·36				20. 1. 5·38	− 2·62
	7	o^2 Cygni	C	18·7	22·6	26·7	30·8	38·6	46·6	50·6	54·7	58·6	20. 8. 38·58		39·16				20. 9. 22·98	− 2·12
	8	β Capricorni	C	27·3	30·2	33·0	35·8	41·6	47·3	50·2	53·0	55·9	20. 12. 41·54		41·53	25·36	43·83		20. 13. 25·35	− 3·34
	9	Groombridge3150	C	..	..	..	13·0	27·0	40·8	47·7	54·6	1·7	20. 16. 26·85		27·79				20. 16. 11·61	− 1·13
	10	κ Delphini	C	36·4	39·3	42·1	44·7	50·4	56·1	58·8	1·6	4·4	20. 31. 50·38		50·61				20. 32. 34·44	− 3·10
	11	51 Cygni	C	57·7	2·0	6·4	10·4	19·0	27·7	32·0	36·2	40·5	20. 37. 19·03		19·65				20. 38. 3·48	− 2·42
	12	56 Cygni	C	14·4	18·4	22·0	25·9	33·5	41·1	45·0	48·6	52·5	20. 44. 33·42		33·97				20. 45. 17·80	− 2·67
	13	Piazzi XX. 391..	C	19·6	24·5	29·1	34·0	43·1	52·6	57·3	2·0	6·7	20. 48. 43·13		43·81				20. 49. 27·64	− 2·49
	14	2Equulei(1st Star)	C	35·4	..	41·0	..	49·2	..	57·6	..	3·1	20. 54. 49·22		49·42				20. 55. 33·25	− 3·26
	15	2Equulei(2d Star)	C	..	38·4	..	43·9	..	55·0	..	0·6	..	20. 54. 49·42		49·62				20. 55. 33·45	− 3·26
	16	* N. P. D. 30°. 17′.	C	7·8	13·5	19·0	24·4	35·4	46·4	51·9	57·2	2·7	21. 0. 35·27		36·04				21. 1. 19·87	− 2·54
	17	* N. P. D. 30°. 21′.	C	47·2	52·7	58·4	3·8	14·4	25·7	31·2	36·7	42·0	21. 6. 14·58		15·35				21. 6. 59·18	− 2·65
	18	Piazzi XXI. 61..	C	10·0	15·9	21·1	26·5	37·5	48·5	53·8	59·2	4·7	21. 8. 37·36		38·12				21. 9. 21·95	− 2·72
	19	Piazzi XXI. 86..	C	4·4	9·4	14·0	18·7	28·6	38·5	43·2	48·2	52·9	21. 12. 28·57		29·27				21. 13. 13·10	− 2·87
	20	Piazzi XXI. 142.	C	20·2	26·5	32·9	39·3	51·4	..	..	..	..	21. 18. 51·41		52·27				21. 19. 36·10	− 2·85
	21	β Aquarii.....	C	29·4	32·4	35·1	37·9	43·4	49·0	51·8	54·5	57·3	21. 23. 43·37		43·45	27·34	43·89		21. 24. 27·28	− 3·54
	22	Groombridge3485	C	38·1	42·6	47·0	51·4	0·4	9·3	13·8	18·3	22·5	21. 26. 0·30		0·95				21. 26. 44·78	− 3·13
	23	80 Pegasi.....	C	31·0	33·8	36·6	39·4	45·0	50·6	53·4	56·2	58·8	23. 43. 44·93		45·15				23. 44. 29·01	− 4·20
	24	ψ Pegasi	C	55·0	58·2	1·0	4·2	10·2	16·4	19·5	22·4	25·4	23. 50. 10·21		10·57				23. 50. 54·43	− 4·44
	25	ω Piscium.....	C	26·0	28·7	31·5	34·3	39·8	45·5	48·3	50·9	53·7	23. 51. 39·80		39·99	23·91	43·92		23. 52. 23·85	− 4·21
	26	29 Piscium	C	57·5	0·4	3·1	5·8	11·4	17·0	19·8	22·4	25·1	23. 54. 11·34		11·44				23. 54. 55·30	− 4·14
	27	2 Ceti.....	C	..	..	..	..	6·4	12·4	15·2	18·2	21·0	23. 56. 6·44		6·40	50·27	43·87		23. 56. 50·26	− 4·08
Oct. 27	28	α Hydræ	JC	0·2	3·0	5·8	8·8	14·3	19·7	22·5	25·4	28·2	9. 20. 14·16	(+9·43)	14·23	57·01	42·78		....	
	29	Polaris S.P. (E&E)	P	47·5	41·0	34·0	26·0	12·0	..	45·5	37·0	..	13. 10. 12·11	[−0·08]	2·84	45·60	42·76	43·00	....	
	30	Mercury 2 L....	P	54·5	57·2	59·9	2·8	8·4	14·2	16·7	19·8	22·5	13. 42. 8·39		8·48			[−0·48]	13. 42. 51·05	
Oct. 28	31	⊙ 1 L.....	P	5·3	8·0	10·6	13·7	19·4	25·1	27·8	30·7	33·8	14. 10. 19·32		} 25·81					
	32	⊙ 2 L.....	P	..	..	..	..	32·4	38·0	40·8	43·8	46·6	14. 12. 32·29						14. 12. 8·53	
	33	Groombridge2865	P	39·9	44·4	48·5	52·9	1·4	10·2	14·3	18·6	22·8	19. 27. 1·38		1·98				19. 27. 44·59	− 1·28
	34	γ Aquilæ	P	53·4	56·2	59·0	2·0	7·4	13·2	15·8	18·6	21·6	19. 39. 7·41		7·64	50·29	42·65		....	
	35	Groombridge2952	P	6·6	14·6	22·6	30·3	45·4	1·0	8·6	16·5	24·1	19. 43. 45·39		46·38				19. 44. 28·99	+ 0·28
	36	25 Cygni	P	57·8	1·4	4·8	8·4	15·3	22·0	25·5	28·9	32·4	19. 54. 15·11		15·56				19. 54. 58·16	− 2·12
	37	η Sagittæ	P	12·5	15·5	18·6	21·4	27·3	33·2	36·0	39·0	41·9	19. 58. 27·21		27·52				19. 59. 10·12	− 2·61
	38	o^1 Cygni	P	0·2	4·4	8·5	12·6	20·4	28·4	32·4	36·7	40·6	20. 8. 20·40		20·96				20. 9. 3·56	− 2·00
	39	Groombridge3150	P	53·4	0·4	7·4	14·4	28·1	42·0	48·7	55·5	2·6	20. 15. 27·93		28·83				20. 16. 11·43	− 0·91
	40	Piazzi XX. 391..	P	20·9	25·6	30·4	35·0	44·3	53·8	58·6	3·1	8·0	20. 48. 44·33		44·97				20. 49. 27·55	− 2·36
	41	θ Capricorni.....	P	24·4	27·4	30·2	33·2	38·9	44·9	..	..	..	20. 57. 38·93		38·89	21·38	42·49		....	
	42	* N. P. D. 30°. 17′.	P	9·2	14·8	20·3	25·6	36·6	47·4	53·2	58·6	3·9	21. 0. 36·52		37·26				21. 1. 19·84	− 2·38
	43	* N. P. D. 30°. 21′.	P	48·5	54·1	59·6	5·1	15·8	27·0	32·5	37·7	43·2	21. 6. 15·84		16·58				21. 6. 59·16	− 2·50
	44	Piazzi XXI. 86..	P	5·5	10·5	15·4	20·2	29·9	39·6	44·4	49·2	54·0	21. 12. 29·77		30·45				21. 13. 13·03	− 2·74
	45	Piazzi XXI. 142.	P	21·6	27·6	34·1	40·3	52·5	5·2	11·4	17·6	23·7	21. 18. 52·56		53·39				21. 19. 35·96	− 2·67
	46	Groombridge3485	P	39·3	44·0	48·2	52·5	1·7	10·7	15·2	19·4	23·8	21. 26. 1·57		2·19				21. 26. 44·76	− 3·02
	47	Piazzi XXI. 241.	P	23·8	29·9	35·6	41·4	52·9	4·9	10·6	16·5	22·2	21. 32. 52·99		53·78				21. 33. 36·35	− 3·05

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 31r·000.
Correction for passage of Semidiameter, No. 30, −0s·16.
October 27 and 28. The azimuthal error by tabular places of Polaris S.P. and γ Aquilæ, allowing −0s·09 for clock-rate.

24. Foggy; the image bad.
30. Tremulous, and very faint.
25, 26. Very faint.
41. Very faint: cloudy.
27, 29. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Oct. 28	1	δ Capricorni.....	P	38·6	41·5	44·4	47·3	52·9	58·7	1·5	4·4	7·5	21. 38. 52·93	−3·84	52·90	35·47	42·57	43·00	....	
	2	Bradley 2867....	P	30·9	35·8	40·3	44·8	54·0	3·4	8·0	12·6	17·3	21. 47. 54·04	(+9·43)	54·68			[−0·48]	21. 48. 37·24	− 3·37
	3	α Aquarii.....	P	55·0	57·8	0·4	3·0	8·7	14·4	17·0	19·8	22·6	21. 58. 8·69	[−0·08]	8·82	51·45	42·63		....	
	4	Piazzi XXII. II..	P	53·6	59·1	4·4	9·6	20·0	30·9	36·0	41·4	46·8	22. 3. 20·11		20·84				22. 4. 3·40	− 3·70
	5	Groombridge 3758	P	55·1	0·0	4·8	10·0	20·2	30·0	35·1	40·3	45·3	22. 17. 20·00		20·69				22. 18. 3·24	− 3·93
Oct. 31	6	⊙ 1 L.....	JC	47·4	50·4	53·2	56·2	1·8	7·5	10·4	13·1	16·0	14. 22. 1·73	−3·93	} 8·47			41·77		
	7	⊙ 2 L.....	JC	1·0	4·0	6·7	9·5	15·3	21·0	23·8	26·7	29·6	14. 24. 15·24	(+10·78)				[−0·53]	14. 23. 49·92	
	8	θ Aquilæ	JC	24·7	27·6	30·5	33·2	38·5	44·1	46·9	49·6	52·5	20. 3. 38·57	[−0·68]	38·71	20·13	41·42		20. 4. 20·04	− 2·96
	9	ρ Capricorni.....	JC	..	..	..	22·2	28·0	34·0	36·8	39·8	42·6	20. 20. 28·02		27·97	9·28	41·31		20. 21. 9·29	− 3·31
	10	32 Vulpeculæ....	JC	..	54·7	57·7	0·9	6·9	13·4	16·4	19·7	..	20. 48. 7·04		7·48	48·69	41·21		20. 48. 48·79	− 2·82
	11	12 Aquarii.....	JC	1·0	3·8	6·6	9·4	14·9	20·5	23·1	26·1	28·8	20. 56. 14·86		14·95				20. 56. 56·26	− 3·31
	12	* N.P.D. 30°. 17′.	JC	10·2	16·0	21·1	26·9	37·9	48·7	54·1	59·6	5·1	21. 0. 37·63		38·56				21. 1. 19·87	− 2·26
	13	* N.P.D. 30°. 21′..	JC	49·4	54·8	0·3	6·0	16·9	28·0	33·3	38·8	44·5	21. 6. 16·79		17·72				21. 6. 59·02	− 2·38
	14	Piazzi XXI. 61..	JC	..	18·1	23·7	29·0	39·6	50·6	56·1	1·6	..	21. 8. 39·70		40·62				21. 9. 21·92	− 2·45
	15	Piazzi XXI. 86..	JC	6·8	11·7	16·4	21·1	30·7	40·9	45·7	50·5	55·2	21. 12. 30·91		31·74				21. 13. 13·04	− 2·64
	16	Piazzi XXI. 142.	JC	22·4	29·0	35·5	41·6	53·6	6·3	12·6	18·6	25·0	21. 18. 53·74		54·78				21. 19. 36·08	− 2·54
	17	Groombridge 3485	JC	40·4	45·0	49·5	53·9	2·4	11·7	16·3	20·4	24·9	21. 26. 2·64		3·39				21. 26. 44·68	− 2·93
	18	Piazzi XXI. 241.	JC	24·8	30·9	36·7	42·4	54·0	5·9	11·7	17·5	23·0	21. 32. 54·00		54·99				21. 33. 36·28	− 2·93
	19	Bradley 2867....	JC	32·2	36·9	41·4	46·0	55·2	4·7	9·2	13·8	18·4	21. 47. 55·23		56·02				21. 48. 37·31	− 3·28
	20	Bradley 2871....	JC	7·9	12·6	17·4	21·9	30·9	40·4	44·9	49·7	54·2	21. 49. 31·02		31·81				21. 50. 13·10	− 3·35
	21	Piazzi XXII. 11.	JC	..	0·2	5·5	10·6	21·1	31·9	37·4	42·6	..	22. 3. 21·22		22·13				22. 4. 3·41	− 3·59
	22	Piazzi XXII. 12.	JC	..	1·9	7·4	12·3	23·0	34·0	39·2	44·6	..	22. 3. 23·09		24·00				22. 4. 5·28	− 3·60
	23	Groombridge 3758	JC	56·1	1·2	6·4	11·2	21·1	31·1	36·3	41·3	46·1	22. 17. 21·11		21·96				22. 18. 3·24	− 3·84
	24	σ Aquarii.....	JC	35·2	38·1	40·7	43·6	49·3	55·0	57·7	0·6	3·4	22. 22. 49·23		49·26	30·56	41·30		22. 23. 30·53	− 3·74
	25	64 Aquarii.....	JC	14·9	17·7	20·6	23·4	29·1	34·8	37·5	40·3	43·0	22. 31. 28·98		29·02				22. 32. 10·29	− 3·78
	26	65 Aquarii.....	JC	..	..	..	..	..	19·9	22·8	25·5	28·2	22. 35. 14·19		14·23				22. 35. 55·50	− 3·80
	27	ρ Pegasi	JC	..	..	..	..	45·4	50·7	53·6	56·5	59·2	22. 47. 45·21		45·45				22. 48. 26·72	− 3·85
	28	3 Andromedæ ...	JC	6·4	10·7	15·0	19·3	27·8	36·3	40·4	44·7	48·8	22. 57. 27·64		28·37				22. 58. 9·63	− 4·38
	29	Groombridge 4005	JC	22·2	29·4	36·4	43·3	56·8	11·1	18·2	24·7	31·7	23. 3. 56·97		58·10				23. 4. 39·36	− 5·32
	30	γ Piscium.....	JC	15·6	18·5	21·2	24·0	29·4	35·0	37·9	40·5	43·4	23. 9. 29·45		29·64	10·87	41·23		23. 10. 10·90	− 3·98
	31	Harmonia	JC	53·7	56·6	59·4	2·1	7·5	13·1	15·8	18·6	21·4	0. 50. 7·53		7·66			41·24	0. 50. 48·88	
	32	β Andromedæ....	JC	14·1	17·8	21·1	24·2	30·9	37·9	41·1	44·6	48·1	1. 1. 31·03		31·54	12·72	41·18		1. 2. 12·76	− 5·17
	33	Polaris ...(E & E)	JC	27·0	..	..	9·0	..	..	..	23·0	14·0	1. 9. 50·34		4·04	45·23	41·19		....	
	34	υ Piscium.....	JC	7·9	10·9	14·2	17·1	26·1	29·2	32·6	35·5	38·7	1. 11. 23·20		23·63				1. 12. 4·84	− 4·94
	35	Ceres	JC	39·8	42·5	45·3	48·0	53·7	59·1	1·9	4·8	7·6	1. 12. 53·59		53·68				1. 13. 34·89	
	36	α Arietis	JC	..	42·1	45·3	48·4	54·1	0·3	3·2	6·4	..	1. 58. 54·20		54·59	35·75	41·16		1. 59. 35·79	− 5·01
	37	Amphitrite.....	JC	21·4	24·5	27·5	30·4	36·3	42·4	45·4	48·1	51·0	2. 18. 36·28		36·66				2. 19. 17·85	
	38	ο Tauri.....	JC	39·0	42·0	44·7	47·6	53·0	58·7	1·4	4·3	7·1	3. 16. 53·04		53·29	34·53	41·24		3. 17. 34·46	− 4·67
	39	103 Tauri.....	JC	57·9	0·9	4·0	7·0	13·0	19·1	22·1	25·1	28·1	4. 59. 12·97		13·37				4. 59. 54·50	− 5·00
	40	Mars 1 L.....	JC	57·8	0·7	3·8	6·7	12·7	18·8	21·8	24·8	27·9	5. 8. 12·73	}	13·71					
	41	Mars 2 L.....	JC	58·8	2·0	4·9	8·0	14·0	20·0	22·9	26·0	29·0	5. 8. 13·91						5. 8. 54·81	
	42	β Tauri.....	JC	49·6	52·9	56·0	58·9	5·4	11·8	14·9	17·9	21·1	5. 17. 5·34		5·79	46·94	41·15		5. 17. 46·91	− 5·12
	43	ο Tauri.....	JC	36·7	39·5	42·5	45·4	51·4	57·5	0·4	3·4	6·4	5. 18. 51·42		51·80				5. 19. 32·92	− 4·84
Nov. 2	44	ζ Aquilæ.....	R	..	20·1	23·0	..	31·5	37·2	..	..	..	18. 58. 31·46	(+10·49)	31·66	11·78	40·12	40·69	....	
	45	δ Aquilæ.....	R	47·0	49·9	..	..	..	..	..	..	..	19. 18. 0·87	[−2·55]	0·95	41·04	40·09	[− 0·74]	....	
	46	Groombridge 2865	R	42·2	46·5	50·7	55·1	3·5	12·3	16·6	20·9	25·2	19. 27. 3·60		4·28				19. 27. 44·37	− 1·12
	47	Polaris S.P.(E&E)	C	56·5	48·0	40·5	32·0	21·0	2·5	..	..	..	13. 10. 20·37		4·85	44·91	40·06	39·96 [−0·74]	1. 10. 44·40	−85·92

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.

October 31. The azimuthal error by tabular places of γ Piscium and Polaris, allowing $-0^s{\cdot}04$ for clock-rate.

November 2 and 3. The azimuthal error by Polaris S.P. and Polaris, allowing $-0^s{\cdot}25$ for clock-rate and change of R.A.

1. Faint.

6, 7, 44, 45. Very cloudy.

29. Cloudy.

40, 41. Correction applied to R.A. of centre for defect of illumination $-0^s{\cdot}03$.

Month and Day.	No. for Reference.	Name of Object.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Nov. 2	1	Spica	C	10·4	13·3	16·c	..	24·4	..	32·9	35·9	38·6	13. 17. 24·46	−3·93	24·38	4·01	39·63	39·96	13. 18. 3·93	− 2·14
	2	Arcturus	C	34·4	37·3	40·3	43·3	49·0	55·0	58·0	0·9	3·9	14. 8. 49·07	(+ 10·49)	49·34	28·91	39·57	[−0·74]	14. 9. 28·86	− 1·35
	3	Mercury 2 L.	C	..	15·6	18·6	21·4	27·0	..	..	..	..	14. 19. 27·02	[−2·55]	26·90				14. 20. 6·26	
Nov. 3	4	⊙ 2 L.	C	51·6	54·4	57·3	0·2	6·0	11·8	14·4	17·4	20·2	14. 36. 5·87		5·72				14. 35. 38·04	
	5	α Coronæ	C	..	4·6	7·7	10·7	17·0	23·4	26·4	29·4	..	15. 28. 16·97		17·32	56·88	39·56		15. 28. 56·80	− 1·04
	6	Venus 1 L.	C	10·8	14·0	17·0	19·9	25·8	31·9	34·9	38·0	40·9	16. 30. 25·86		25·60				16. 31. 5·51	− 3·14
	7	α^2 Capricorni	C	40·1	43·0	45·9	48·6	54·3	0·0	2·8	5·6	8·4	20. 9. 54·25		54·13	33·50	39·37		20. 10. 33·47	
	8	52 Cygni	C	9·7	13·0	16·3	19·5	25·9	32·4	35·6	38·7	42·0	20, 39. 25·84		26·24				20. 40. 5·56	− 2·64
	9	56 Cygni	C	18·6	22·5	26·4	30·2	37·7	45·4	49·2	53·0	56·7	20. 44. 37·67		38·25				20. 45. 17·57	− 2·41
	10	33 Vulpeculæ	C	20·0	23·0	26·0	28·9	34·8	41·0	43·9	46·8	49·8	20. 51. 34·86		35·15				20. 52. 14·47	− 2·89
	11	θ Capricorni	S	27·5	30·4	33·2	36·1	41·9	47·8	50·7	53·5	56·4	20. 57. 41·90		41·71	21·28	39·57	40·20†	....	
	12	Piazzi XXI. 61	C	14·4	19·9	25·4	30·8	41·5	52·6	58·2	3·5	9·0	21. 8. 41·60		42·50			39·96	21. 9. 21·81	− 2·33
	13	1 Capricorni	S	49·9	52·7	55·7	58·6	4·3	10·1	13·1	15·9	18·9	21. 14. 4·31		4·13	43·65	39·52	40·20†	....	
	14	20 Aquarii	C	56·5	59·3	2·1	4·7	10·3	16·0	18·5	21·4	24·2	21. 17. 10·29		10·29			39·96	21. 17. 49·59	− 3·35
	15	β Aquarii	C	34·2	36·9	39·7	42·4	48·0	53·6	56·3	59·1	1·9	21. 23. 47·96		47·94	27·19	39·25		21. 24. 27·24	− 3·39
	16	Piazzi XXI. 241	C	26·6	32·7	38·5	44·3	56·0	7·6	13·6	19·4	25·1	21. 32. 55·88		56·87				21. 33. 36·17	− 2·81
	17	Radcliffe 5352	C	..	..	..	..	50·1	59·4	4·0	8·5	13·3	21. 34. 50·01		50·76				21. 35. 30·06	− 2·96
	18	Bradley 2867	C	34·1	38·8	43·4	48·0	57·1	6·7	11·3	15·9	20·5	21. 47. 57·23		57·98				21. 48. 37·27	− 3·19
	19	Bradley 2871	C	9·8	14·6	19·2	23·9	33·0	42·4	47·0	51·6	56·1	21. 49. 32·99		33·74				21. 50. 13·03	− 3·26
	20	α Aquarii	C	58·4	1·0	3·9	6·6	12·0	17·6	20·4	23·2	25·9	21. 58. 12·06		12·10	51·36	39·26		21. 58. 51·38	− 3·54
	21	Piazzi XXII. 11	C	56·7	2·1	7·3	12·7	23·c	..	..	..	..	22. 3. 23·16		24·05				22. 4. 3·33	− 3·50
	22	Piazzi XXII. 12	C	58·5	4·2	9·2	14·4	25·0	..	..	..	..	22. 3. 25·06		25·95				22. 4. 5·23	− 3·48
	23	Piazzi XXII. 16	C	..	..	..	..	..	38·7	5·0	..	..	22. 3. 46·27		47·15				22. 4. 26·43	− 3·50
	24	Neptune	C	41·3	44·2	46·9	49·6	55·0	0·6	3·5	6·2	9·0	0. 23. 55·09		55·15			39·22	0. 24. 34·36	
	25	ε Andromedæ	C	32·0	35·1	38·4	41·4	47·8	54·0	57·2	0·4	3·4	0. 30. 47·69		48·06	27·21	39·15		0. 31. 27·27	− 4·72
	26	21 Cassiopeiæ	C	21·5	32·0	42·0	52·2	12·6	..	..	..	..	0. 36. 12·43		14·11				0. 36. 53·31	−19·55
	27	Bradley 74. (E&E)	C	4·8	28·4	50·3	13·0	58·0	43·0	5·5	28·2	51·0	0. 41. 57·63		1·16				0. 42. 40·36	−17·90
	28	h Piscium	C	38·6	41·7	44·9	48·0	54·2	0·4	3·8	6·8	9·9	0. 49. 54·21		54·57				0. 50. 33·76	− 4·86
	29	Polaris ... (E & E)	C	27·0	22·5	14·0	5·0	49·0	37·5	29·0	..	..	1. 9. 48·99		5·10	44·82	39·72		1. 10. 44·28	−85·83
	30	Ceres	C	..	..	..	38·7	44·4	50·0	52·6	55·5	58·2	1. 10. 44·28		44·26				1. 11. 23·44	
	31	97 Piscium	C	..	..	..	..	58·1	3·9	6·8	9·7	12·4	1. 21. 58·01		58·25				1. 22. 37·43	− 4·74
	32	ν Piscium	C	32·8	35·6	38·4	41·1	46·6	52·2	55·0	57·8	0·5	1. 33. 46·61		46·72	25·80	39·08		1. 34. 25·89	− 4·48
	33	Amphitrite	C	19·6	22·4	25·5	28·6	34·2	40·4	43·4	46·4	49·4	2. 15. 34·38		34·67				2. 16. 13·82	
	34	6 Aurigæ	C	..	..	16·8	20·4	27·4	34·6	38·2	41·9	45·5	4. 50. 27·44		27·95				4. 51. 7·02	− 5·88
	35	103 Tauri	C	0·1	3·1	6·1	9·3	15·2	21·4	24·4	27·4	30·4	4. 59. 15·22		15·53				4. 59. 54·60	− 5·07
	36	h Orionis	C	2·1	4·9	7·8	10·6	15·9	21·8	24·6	27·4	30·4	5. 1. 16·11		16·25				5. 1. 55·31	− 4·57
	37	Mars 2 L.	C	5·3	8·2	11·3	14·4	20·3	26·3	29·5	32·4	35·5	5. 6. 20·31		20·61				5. 6. 58·99	
	38	Rigel	C	..	..	..	..	25·2	30·8	33·6	36·6	39·2	5. 7. 25·21		25·16	4·23	39·07		5. 8. 4·22	− 4·08
	39	β Tauri	C	51·8	55·0	58·2	1·4	7·6	13·9	17·2	20·3	23·4	5. 17. 7·59		7·95	47·02	39·07		5. 17. 47·01	− 5·20
	40	o Tauri	C	38·8	41·8	44·8	47·8	53·7	59·7	2·6	5·6	8·5	5. 18. 53·65		53·94				5. 19. 33·00	− 4·91
Nov. 4	41	ε Delphini	D	52·8	55·7	58·6	1·4	6·9	12·6	15·4	18·3	21·0	20. 26. 6·91	(+ 10·97)	7·10	45·72	38·62	39·33†	....	
	42	α Delphini	D	28·8	31·8	34·6	37·5	43·2	48·9	51·8	54·6	57·5	20. 32. 43·14	[−2·38]	43·38	22·09	38·71	[−0·79]	....	
	43	β Aquarii	JC	34·7	37·6	40·4	43·1	48·6	54·4	56·9	0·0	2·6	21. 23. 48·65		48·65	27·18	38·53	39·26	21. 24. 27·21	− 3·38
	44	16 Pegasi	JC	1·6	4·8	8·0	10·9	17·0	23·1	26·1	29·3	32·4	21. 46. 16·97		17·34	55·83	38·49		21. 46. 55·88	− 3·30
	45	Bradley 2867	JC	34·5	39·6	44·0	48·7	57·7	7·2	12·0	16·4	21·1	21. 47. 57·83		58·65				21. 48. 37·19	− 3·16
	46	Bradley 2871	JC	10·4	15·2	19·8	24·4	33·6	42·8	47·5	52·1	56·7	21. 49. 33·53		34·35				21. 50. 12 89	− 3·23
	47	Piazzi XXII. 11	JC	57·0	2·6	7·9	13·0	23·8	..	..	..	..	22. 3. 23·66		24·62				22. 4. 3·25	− 3·46

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 31r·000.
Corrections for passage of Semidiameter, Nos. 3, 4, 6, and 37, −0s·16: −67s·19: +0s·46: and −0s·68.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
November 4 to 6. The azimuthal error used is the mean of those determined by tabular places of γ Piscium and Polaris on November 4 and of ε Piscium and Polaris on November 5, allowing −0s·07 and −0s·01 for clock-rate in each case respectively. The separate results are − 2″·43 and − 2″·32.

3, 5. Cloudy. 4. Cloudy during the transit of the 1st limb. 8. Double; the large star, which precedes, was observed.
23. Observed over wires Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 4	1	Piazzi XXII. 12 .	JC	59·0	4·5	9·7	15·0	25·6	..	..	..	..	22. 3. 25·56	− 3·93	26·52			39·26	22. 4. 5·05	− 3·45
	2	Piazzi XXII. 16 .	JC	..	..	..	..	..	57·2	2·6	7·6	13·0	22. 3. 46·63	(+ 10·97) [− 2·38]	47·58			[−0·79]	22. 4. 26·11	− 3·47
	3	Groombridge 3758	JC	58·7	3·8	8·7	13·6	23·6	33·9	38·8	44·0	48·8	22. 17. 23·68		24·57				22. 18. 3·10	− 3·72
	4	σ Aquarii.....	JC	38·0	40·8	43·6	46·5	52·0	57·8	0·6	3·4	6·2	22. 22. 52·05		51·99	30·50	38·51		22. 23. 30·51	− 3·68
	5	39 Pegasi.....	JC	..	14·7	17·4	20·3	26·1	32·0	34·9	38·0	..	22. 25. 26·14		26·44				22. 26. 4·96	− 3·67
	6	61 Aquarii.....	JC	..	43·1	46·1	48·9	54·6	0·4	3·4	6·4	..	22. 27. 54·64		54·47				22. 28. 32·99	− 3·73
	7	64 Aquarii.....	JC	17·6	20·7	23·3	26·2	31·7	37·4	40·4	43·0	45·8	22. 31. 31·74		31·68				22. 32. 10·20	− 3·72
	8	65 Aquarii.....	JC	3·0	6·0	8·6	11·6	17·0	22·7	25·5	28·4	31·0	22. 35. 17·04		16·98				22. 35. 55·50	− 3·74
	9	g^2 Aquarii.....	JC	25·3	28·3	31·4	34·1	40·0	46·0	49·0	51·9	54·8	22. 39. 40·04		39·85				22. 40. 18·36	− 3·78
	10	σ Pegasi.....	JC	41·6	44·4	47·3	50·2	55·5	1·4	4·0	7·0	9·6	22. 44. 55·62		55·80				22. 45. 34·31	− 3·81
	11	75 Aquarii.....	JC	7·8	10·4	13·4	16·5	22·0	27·8	30·6	33·4	36·2	22. 46. 21·96		21·87				22. 47. 0·38	− 3·79
	12	3 Andromedæ ...	JC	9·0	13·4	17·5	22·0	30·3	38·8	43·0	47·2	51·6	22. 57. 30·25		30·98				22. 58. 9·48	− 4·29
	13	Groombridge 4005	JC	24·6	31·8	38·9	45·6	59·4	13·8	20·4	27·3	34·3	23. 3. 59·44		0·68				23. 4. 39·18	− 5·17
	14	γ Piscium.....	JC	18·2	21·2	24·0	26·9	32·0	37·8	40·5	43·3	46·2	23. 9. 32·19		32·30	10·82	38·52		23. 10. 10·80	− 3·93
	15	Groombridge 58 .	JC	..	..	..	..	23·2	32·2	36·6	41·0	45·2	0. 16. 23·19		23·95			38·47	0. 17. 2·41	− 5·49
	16	Neptune.....	JC	37·3	40·0	42·8	45·7	51·0	56·5	59·2	2·1	5·0	0. 23. 51·02		51·11				0. 24. 29·57	
	17	ε Andromedæ....	JC	..	35·7	38·9	42·0	48·4	54·8	57·9	1·0	..	0. 30. 48·32		48·73	27·21	38·48		0. 31. 27·18	− 4·72
	18	21 Cassiopeiæ ...	JC	22·1	32·4	42·8	52·7	12·9	32·9	43·8	53·7	4·0	0. 36. 12·85		14·65				0. 36. 53·10	−19·52
	19	21 Ceti.....	JC	37·5	40·5	43·4	46·2	51·4	57·2	0·1	2·8	5·6	0. 46. 51·59		51·56				0. 47. 30·00	− 4·18
	20	ϕ^4 Ceti.....	JC	6·9	9·9	12·6	15·4	20·8	26·7	29·6	32·4	35·2	0. 51. 21·01		20·93				0. 51. 59·37	− 4·15
	21	25 Ceti.....	JC	21·6	24·4	27·3	30·1	35·4	41·0	43·9	46·7	49·6	0. 55. 35·50		35·52				0. 56. 13·96	− 4·23
	22	Polaris ...(E & E)	JC	..	..	14·0	6·0	..	..	30·0	22·5	..	1. 9. 49·18		6·06	44·58	38·52		....	
	23	Ceres.....	JC	49·0	51·8	54·6	57·4	2·9	8·4	11·3	14·0	16·8	1. 10. 2·86		2·86				1. 10. 41·29	
	24	υ Piscium.....	JC	..	13·7	16·7	19·8	26·1	32·2	35·4	38·5	..	1. 11. 26·00		26·40				1. 12. 4·83	− 4·93
	25	96 Piscium.....	JC	9·2	12·2	14·9	17·6	23·1	28·8	31·6	34·3	37·2	1. 21. 23·16		23·32				1. 22. 1·75	− 4·49
	26	Bradley 204.....	JC	..	58·6	1·2	4·0	9·6	15·3	18·4	21·2	..	1. 24. 9·70		9·96				1. 24. 48·38	− 4·71
	27	ν Piscium.....	JC	33·4	36·4	39·1	41·8	..	..	55·6	58·6	1·1	1. 33. 47·31		47·44	25·81	38·37		1. 34. 25·86	− 4·49
	28	ξ Piscium.....	JC	..	46·0	48·8	51·6	57·0	2·5	5·4	8·1	..	1. 45. 57·00		57·11				1. 46. 35·52	− 4·47
	29	67 Ceti.....	JC	24·0	27·0	29·7	32·4	37·9	43·5	46·4	49·1	52·0	2. 9. 37·95		37·94	16·37	38·43		2. 10. 16·34	− 4·33
	30	Amphitrite	JC	19·5	22·5	25·4	28·4	34·3	40·2	43·2	46·2	49·0	2. 14. 34·25		34·57				2. 15. 12·97	
	31	103 Tauri.....	JC	0·9	4·0	6·8	..	15·9	..	25·1	28·2	31·1	4. 59. 15·95		16·30				4. 59. 54·61	− 5·09
	32	Mars 2 L.	JC	19·6	22·8	25·8	28·8	34·8	40·8	43·8	46·8	49·9	5. 5. 34·74		35·08				5. 6. 12·69	
	33	Rigel	JC	..	14·8	17·6	20·4	25·9	31·6	34·4	37·1	..	5. 7. 25·91		25·89	4·26	38·37		5. 8. 4·19	− 4·11
	34	o Tauri.....	JC	39·4	42·5	45·5	48·5	54·3	0·3	3·4	6·4	9·4	5. 18. 54·36		54·70				5. 19. 33·00	− 4·93
Nov. 5	35	υ Sagittarii.....	P	6·9	9·9	12·9	15·6	21·4	27·3	30·2	33·0	35·8	19. 13. 21·40		21·27			38·58	19. 13. 59·22	− 2·91
	36	Groombridge 2865	P	44·2	48·7	52·9	..	..	14·5	..	23·0	27·3	19. 27. 5·74		6·48			[−0·78]	19. 27. 44·43	− 1·04
	37	θ Aquilæ.....	P	28·5	31·1	33·8	36·5	42·2	47·7	50·4	53·3	56·2	20. 3. 42·14		42·20	20·05	37·85		20. 4. 20·13	− 2·88
	38	α^2 Capricorni....	P	41·6	44·4	47·0	50·1	55·6	1·5	4·3	7·0	10·0	20. 9. 55·67		55·58	33·47	37·89		20. 10. 33·51	− 3·11
	39	β Capricorni.....	C	..	..	..	..	..	..	56·3	59·1	1·9	} 20. 12. 47·56		47·44	25·16	37·72	38·38†	....	
	40	β Capricorni.....	C	..	..	..	..	..	16·2	30·5	..	..							....	
	41	ρ Capricorni.....	P	17·0	19·8	23·0	25·7	31·6	37·4	40·3	43·3	46·2	20. 20. 31·54		31·38	9·20	37·82	38·58	20. 21. 9·30	− 3·23
	42	ε Delphini	C	53·8	56·6	59·4	2·2	7·8	13·5	16·3	19·1	21·9	20. 26. 7·79		7·98	45·71	37·73	38·38†	....	
	43	α Aquarii.....	P	59·7	2·4	5·0	7·8	13·4	19·0	21·8	24·5	27·4	21. 58. 13·40		13·46	51·33	37·87	38·58	21. 58. 51·33	− 3·51
	44	Piazzi XXII. 11 .	P	58·1	3·2	8·5	13·7	24·4	35·0	40·5	45·6	50·9	22. 3. 24·34		25·29				22. 4. 3·15	− 3·42
	45	Piazzi XXII. 12 .	P	59·9	5·2	10·4	15·8	26·3	37·0	42·2	47·4	52·7	22. 3. 26·23		27·18				22. 4. 5·04	− 3·41
	46	44 Aquarii.....	P	12·1	14·9	17·8	20·6	26·0	31·6	34·4	37·3	40·1	22. 9. 26·04		26·04				22. 10. 3·90	− 3·59
	47	Groombridge 3758	P	59·4	4·4	9·5	14·6	24·3	34·4	39·5	44·5	49·7	22. 17. 24·39		25·28				22. 18. 3·14	− 3·69
	48	39 Pegasi.....	P	12·1	15·0	18·0	21·0	26·9	32·5	35·5	38·5	41·6	22. 25. 26·74		27·04				22. 26. 4·89	− 3·65

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.

Correction for passage of Semidiameter, No. 32, $-0^s{\cdot}69$.

† This clock-error has been used in the reduction of the observations made with the Altazimuth.

16. Extremely faint; the sky hazy.
35. Very faint and tremulous.
36. Cloudy.
37. Very cloudy.
40. Observed over wires Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Nov. 5	1	40 Pegasi	P	28·6	31·6	34·5	37·6	43·4	49·4	52·0	55·0	57·9	22. 31. 43·29	— 3·93	43·58			38·58	22. 32. 21·43	— 3·69
	2	13 Lacertæ	P	9·0	12·6	16·4	20·0	27·2	34·8	38·5	41·8	45·7	22. 37. 27·27	(+10·97)	27·85			[−0·78]	22. 38. 5·70	— 3·85
	3	σ Pegasi	P	42·4	45·2	48·0	50·8	56·3	2·1	4·6	7·5	10·4	22. 44. 56·31	[−2·38]	56·49				22. 45. 34·33	— 3·80
	4	Bradley 3033 ...	P	26·7	29·5	32·4	34·9	40·7	46·3	49·0	51·7	54·2	22. 49. 40·55		40·57				22. 50. 18·41	— 3·78
	5	3 Andromedæ ...	P	9·5	14·0	18·2	22·4	30·8	39·4	43·6	48·0	52·0	22. 57. 30·81		31·54				22. 58. 9·37	— 4·27
	6	Groombridge 4005	P	25·3	32·5	39·2	46·2	0·2	14·4	21·1	28·1	34·9	23. 4. 0·10		1·34				23. 4. 39·17	— 5·13
	7	γ Piscium.....	P	19·0	21·8	24·7	27·4	32·7	38·4	41·2	44·0	46·8	23. 9. 32·84		32·95	10·81	37·86		23. 10. 10·78	— 3·92
	8	63 Pegasi	P	20·0	23·4	26·4	29·7	36·0	42·4	45·7	48·8	51·7	23. 13. 35·95		36·37				23. 14. 14·20	— 4·12
	9	κ Piscium.....	P	9·7	12·6	15·4	18·2	23·6	29·3	32·1	34·7	37·4	23. 19. 23·62		23·71	1·54	37·83		23. 20. 1·53	— 3·93
	10	36 Piscium	P	47·3	50·2	52·8	55·5	1·1	6·7	9·6	12·3	15·0	0. 9. 1·12		1·29			37·80	0. 9. 39·09	— 4·23
	11	Groombridge 58 .	P	1·8	6·4	10·8	14·9	23·9	32·8	37·3	41·7	46·2	0. 16. 23·90		24·66				0. 17. 2·45	— 5·48
	12	Neptune.....	P	33·5	36·2	38·9	41·5	47·1	52·6	55·6	58·4	1·1	0. 23. 47·16		47·25				0. 24. 25·04	
	13	54 Piscium	P	29·2	32·3	35·1	38·0	44·0	50·0	52·8	55·9	58·7	0. 31. 43·95		44·26				0. 32. 22·04	— 4·52
	14	21 Cassiopeiæ ...	P	22·8	32·9	43·2	53·4	13·2	34·1	44·4	54·5	4·6	0. 36. 13·50		15·30				0. 36. 53·08	—19·49
	15	66 Piscium	P	35·5	38·4	41·4	44·3	50·0	56·0	58·9	1·8	4·5	0. 46. 50·04		50·32				0. 47. 28·10	— 4·59
	16	ϕ^4 Ceti	P	7·4	10·4	13·3	16·0	21·8	27·3	30·4	32·9	35·8	0. 51. 21·65		21·57				0. 51. 59·34	— 4·15
	17	ε Piscium.....	P	5·8	8·5	11·4	14·3	19·8	25·1	28·1	30·8	33·6	0. 55. 19·66		19·83	57·64	37·81		0. 55. 57·60	— 4·41
	18	Ceres	P	8·7	11·6	14·3	17·0	22·8	28·4	31·1	33·9	36·5	1. 9. 22·65		22·65				1. 10. 0·41	
	19	Polaris ... (E & E)	P	28·0	21·5	14·5	7·5	..	37·0	29·0	23·5	14·0	1. 9. 49·69		6·57	44·27	37·70		....	
	20	Bradley 204	P	55·9	59·0	1·7	4·6	10·4	16·0	19·0	21·9	24·9	1. 24. 10·33		10·58				1. 24. 48·33	— 4·71
	21	τ Andromedæ ...	P	43·0	46·7	50·4	54·0	1·0	8·4	11·9	15·5	19·2	1. 32. 1·07		1·64				1. 32. 39·39	— 5·60
	22	4 Arietis	P	0·8	4·0	6·8	9·7	15·4	21·1	24·0	26·9	29·9	1. 40. 15·35		15·60				1. 40. 53·35	— 4·78
	23	β Arietis	P	20·0	23·1	26·0	28·9	34·6	40·5	43·6	46·6	49·5	1. 46. 34·71		35·02	12·80	37·78		1. 47. 12·76	— 4·90
	24	47 Cassiopeiæ ...	P	..	22·6	34·6	46·3	10·8	35·0	46·5	58·6	..	1. 51. 10·38		12·43				1. 51. 50·17	—13·11
	25	59 Andromedæ ..	P	48·3	52·0	55·5	58·9	6·0	13·0	16·5	20·1	23·6	2. 2. 5·93		6·47				2. 2. 44·20	— 5·70
	26	Amphitrite	P	20·2	22·5	26·0	28·9	34·6	40·6	43·7	46·6	49·5	2. 13. 34·68		35·00				2. 14. 12·73	
	27	26 Arietis	P	13·5	16·5	19·2	22·3	28·1	34·2	37·0	40·1	42·8	2. 22. 28·14		28·43				2. 23. 6·15	— 4·99
	28	δ Ceti	P	43·6	46·4	49·2	52·1	57·4	3·1	5·8	8·4	11·4	2. 31. 57·44		57·51	35·33	37·82		2. 32. 35·23	— 4·49
	29	γ^1 Ceti	P	28·4	31·1	33·7	36·5	42·2	47·7	50·5	53·2	55·8	2. 35. 42·07		42·18	19·89	37·71		2. 36. 19·90	— 4·54
	30	99 Tauri	P	45·7	48·7	52·0	54·7	0·8	7·0	10·0	13·0	16·0	4. 49. 0·83		1·18				4. 49. 38·82	— 5·14
	31	Mars 1 L.....	P	29·4	32·3	..	38·5	44·4	50·4	..	56·4	59·6	5. 4. 44·38		} 45·42				5. 5. 23·04	
	32	Mars 2 L.....	P	30·5	33·9	36·8	39·9	45·7	51·9	54·9	57·9	1·1	5. 4. 45·79							
	33	o Tauri.....	P	40·1	43·3	45·8	49·3	55·0	1·1	4·1	7·0	10·0	5. 18. 55·03		55·36				5. 19. 32·99	— 4·96
Nov. 6	34	α^2 Capricorni	D	..	45·0	48·0	50·7	56·5	2·3	5·0	7·9	..	20. 9. 56·43		56·34	33·45	37·11		....	
	35	β Capricorni	JC	33·9	36·8	39·8	42·6	48·2	54·0	56·8	59·7	2·6	20. 12. 48·21		48·09	25·15	37·06	37·76†	....	
	36	ε Aquarii	D	30·8	33·6	36·5	39·2	44·7	50·5	53·2	56·0	58·7	20. 39. 44·75		44·70	21·82	37·12	[−0·83]	....	
	37	☽ 1 L.....	D	58·7	1·7	4·6	7·4	13·4	19·1	22·1	25·0	27·9	20. 47. 13·27		13·18			37·80	20. 48. 58·62	
	38	θ Capricorni	D	30·0	32·7	35·7	38·6	44·4	50·2	53·0	56·0	58·8	20. 57. 44·33		44·18	21·23	37·05		....	
	39	ν Aquarii	D	23·1	26·0	28·8	31·7	37·3	43·0	43·8	48·7	51·4	21. 1. 37·26		37·19				21. 2. 14·26	— 3·31
																		37·12		
Nov. 7	40	ρ Capricorni	E	18·4	21·4	24·3	27·2	33·0	38·9	41·6	44·7	47·4	20. 20. 32·94	— 3·71	32·77	9·16	36·39	[−0·83]	20. 21. 9·19	— 3·19
	41	θ Capricorni	C	30·7	33·8	36·6	39·5	45·3	51·1	54·0	56·9	59·8	20. 57. 45·25	(+10·73)	45·08	21·20	36·12	36·84†	....	
	42	ν Aquarii	E	24·0	26·8	29·6	32·4	38·0	43·6	46·4	49·4	52·0	21. 1. 37·97	[−2·53]	37·90			37·12	21. 2. 14·29	— 3·29
	43	ζ Cygni	C	..	..	..	..	35·2	41·6	44·8	48·1	51·3	21. 6. 35·24		35·67	11·77	36·10	36·84†	....	
	44	α Equulei	E	14·4	17·0	19·9	22·7	28·0	33·8	36·6	39·2	42·0	21. 8. 28·13		28·26	4·58	36·32	37·12	21. 9. 4·65	— 3·14
	45	β Aquarii	E	36·8	39·7	42·4	45·2	50·6	56·4	59·2	1·9	4·7	21. 23. 50·72		50·72	27·14	36·42		21. 24. 27·10	— 3·34
	46	ξ Aquarii.....	E	43·6	46·5	49·4	52·1	57·6	3·4	6·2	8·8	11·6	21. 29. 57·64		57·61	33·94	36·33		21. 30. 33·99	— 3·39
	47	45 Capricorni ...	E	..	51·0	53·8	56·7	2·4	8·2	11·0	13·9	..	21. 36. 2·37		2·25				21. 36. 38·62	— 3·47

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Correction for passage of Semidiameter, No. 37, $+68^s{\cdot}36$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
November 7. The azimuthal error by tabular places of θ Aquarii and Polaris, allowing $-0^s{\cdot}06$ for clock-rate.

9. After this observation, the eye-end of the telescope received a blow.
36. Cloudy.
28. About this time the images were very badly defined.
37. Very cloudy : tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 7	1	☽ 1 L.	E	44·0	..	49·8	52·6	58·5	4·4	7·0	..	12·8	21. 43. 58·40	− 3·71	58·37			37·12	21. 45. 42·67	
	2	Bradley 2871	E	..	..	..	..	..	22·6	45·1	..	..	21. 49. 36·03	(+10·73)	36·86			[−0·83]	21. 50. 13·23	− 3·14
	3	Piazzi XXII. 16	E	..	..	..	..	48·8	59·4	4·6	10·0	15·2	22. 3. 48·83	[−2·53]	49·78				22. 4. 26·14	− 3·37
	4	θ Aquarii	E	52·5	..	58·1	0·9	6·5	12·2	15·0	..	20·5	22. 9. 6·49		6·46	42·85	36·39		22. 9. 42·81	− 3·58
	5	γ Aquarii	E	51·0	54·0	56·8	59·4	4·9	10·5	13·2	16·1	18·8	22. 14. 4·92		4·97	41·42	36·45		22. 14. 41·32	− 3·58
	6	Groombridge 3758	E	0·7	6·0	11·0	16·0	25·8	36·2	41·1	46·2	51·1	22. 17. 25·92		26·83				22. 18. 3·18	− 3·63
	7	Polaris ...(E & E)	E	26·5	23·0	16·0	7·0	50·5	..	..	..	..	1. 9. 49·98		7·19	43·50	36·31		....	
	8	Mars 2 L.	E	1·5	4·6	7·5	10·6	16·6	22·7	25·7	28·8	31·7	5. 2. 16·58		16·93			76·38	5. 3. 32·45	
	9	Rigel	E	34·1	37·1	40·0	42·6	48·0	53·8	56·6	59·4	2·2	5. 6. 48·15		48·12	4·32	76·20	[−0·83]	5. 8. 4·32	− 4·17
	10	o Tauri	E	1·8	4·9	7·6	10·6	16·6	22·6	25·6	28·6	31·5	5. 18. 16·59		16·92				5. 19. 33·12	− 5·01
Nov. 8	11	☽ 1 L.	JC	32·4	..	38·0	40·8	46·5	52·2	55·1	..	0·8	22. 40. 46·50	[−2·54]	46·52			5·76	22. 41. 59·35	
	12	α Pegasi	JC	43·5	46·4	49·2	52·3	57·8	3·6	6·4	9·3	12·1	22. 57. 57·79		58·02	3·08	5·06	[−0·74]	22. 58. 3·07	− 3·82
	13	Groombridge 4005	JC	57·9	5·3	11·8	18·8	32·8	46·6	53·6	0·4	7·4	23. 4. 32·61		33·87				23. 4. 38·92	− 5·02
	14	γ Piscium	JC	51·7	54·6	57·4	0·1	5·6	11·3	14·0	16·8	19·6	23. 10. 5·63		5·73	10·78	5·05		23. 10. 10·78	− 3·89
	15	κ Piscium	JC	42·5	45·4	48·2	50·9	56·3	2·0	4·7	7·5	10·3	23. 19. 56·38		56·46	1·51	5·05		23. 20. 1·50	− 3·90
	16	16 Piscium	JC	11·9	14·5	17·5	20·1	25·7	31·4	34·2	36·9	39·6	23. 29. 25·71		25·80				23. 29. 30·84	− 3·94
	17	29 Piscium	JC	..	39·2	42·0	44·7	50·2	55·8	58·6	1·4	..	23. 54. 50·21		50·24				23. 54. 55·26	− 4·03
	18	α Andromedæ	D	5·1	8·3	11·4	14·5	20·7	27·0	30·2	33·4	36·4	0. 1. 20·73		21·14	26·26	5·12	5·12†	....	
	19	γ Pegasi	D	58·8	1·6	4·5	7·5	13·0	18·8	21·6	24·5	27·4	0. 6. 13·04		13·27	18·38	5·11		....	
	20	Groombridge 58	JC	34·3	38·9	43·2	47·7	56·3	5·4	9·7	14·2	18·6	0. 16. 56·40		57·17			5·02	0. 17. 2·18	− 5·44
	21	Neptune	JC	52·8	55·6	58·3	1·1	6·6	12·2	15·0	17·7	20·6	0. 24. 6·61		6·70				0. 24. 11·71	
	22	21 Cassiopeiæ	JC	55·0	5·7	15·6	25·8	46·0	6·7	17·0	27·0	37·0	0. 36. 46·02		47·85				0. 36. 52·85	−19·40
	23	φ^2 Ceti	JC	3·9	6·7	9·4	12·4	17·9	23·7	26·5	29·4	32·2	0. 43. 17·96		17·89				0. 43. 22·89	− 4·12
	24	21 Ceti	JC	11·0	13·8	16·6	19·5	25·1	30·7	33·5	36·4	39·1	0. 47. 25·02		24·98				0. 47. 29·98	− 4·16
	25	μ Andromedæ	JC	..	..	..	..	..	19·4	22·9	26·5	30·1	0. 49. 12·40		12·94	17·97	5·03		0. 49. 17·93	− 5·15
	26	φ^4 Ceti	JC	40·6	43·1	46·0	48·7	54·4	0·4	3·0	5·9	8·6	0. 51. 54·47		54·38				0. 51. 59·36	− 4·14
	27	ε Piscium	JC	38·6	41·3	44·1	47·0	52·5	58·2	0·8	3·7	6·5	0. 55. 52·47		52·63	57·63	5·00		0. 55. 57·62	− 4·40
	28	ψ^1 Piscium	JC	8·4	11·3	14·3	17·3	23·1	29·0	32·1	34·8	37·9	0. 58. 23·08		23·39				0. 58. 28·38	− 4·70
	29	Bradley 122	JC	9·0	12·1	15·0	18·0	23·8	29·9	32·7	35·6	38·6	0. 58. 23·80		24·11				0. 58. 29·10	− 4·70
	30	Ceres	JC	45·2	47·9	50·6	53·4	58·8	4·5	7·4	10·1	12·8	1. 7. 58·92		58·92				1. 8. 3·91	
	31	Polaris...(E & E)	JC	0·0	52·5	46·0	38·0	..	..	..	..	..	1. 10. 20·89		38·10	43·09	4·99		....	
	32	υ Piscium	JC	44·0	47·0	50·2	53·4	59·3	5·6	8·7	11·8	14·9	1. 11. 59·38		59·76				1. 12. 4·74	− 4·93
	33	47 Ceti	JC	..	..	..	2·5	8·2	13·7	16·7	19·6	22·5	1. 20. 8·12		8·02				1. 20. 13·00	− 4·18
	34	49 Ceti	JC	44·0	47·0	49·9	52·6	58·6	4·4	7·2	10·0	12·9	1. 27. 58·46		58·32				1. 28. 3·30	− 4·17
	35	ξ Piscium	JC	16·5	19·5	22·3	25·0	30·4	36·0	38·8	41·5	44·4	1. 46. 30·44		30·54				1. 46. 35·51	− 4·48
	36	β Arietis	JC	..	..	..	1·5	7·6	13·5	16·5	19·5	22·5	1. 47. 7·58		7·89	12·80	4·91		1. 47. 12·86	− 4·90
	37	47 Cassiopeiæ	JC	42·8	55·6	7·5	19·6	42·8	7·1	19·0	31·0	42·9	1. 51. 42·93		45·04				1. 51. 50·00	−13·09
	38	Amphitrite	JC	55·5	58·6	1·4	4·4	10·3	16·4	19·1	22·0	25·0	2. 11. 10·25		10·57				2. 11. 15·52	
Nov. 9	39	⊙ 1 L.	C	9·7	12·7	15·5	18·4	24·2	30·1	33·0	35·7	38·7	14. 58. 24·17	[−3·69]	} 31·86			5·02	14. 59. 36·63	
	40	⊙ 2 L.	C	25·4	28·5	31·4	34·3	40·0	46·0	48·8	51·5	54·6	15. 0. 40·01					[−0·40]		
	41	α Serpentis	C	..	..	..	..	..	59·0	12·9	..	..	} 15. 37. 31·10		31·21	36·00	4·79		15. 37. 35·97	− 1·76
	42	α Serpentis	C	..	..	..	..	..	..	39·4	42·4	45·0								
	43	β Aquarii	E	8·4	11·3	14·0	16·7	22·4	28·0	30·7	33·5	56·4	21. 24. 22·33		22·26	27·11	4·85	5·17†	....	
	44	ξ Aquarii	E	..	..	21·0	23·7	29·3	34·8	37·6	40·4	43·3	21. 30. 29·22		29·13	33·91	4·78		....	
	45	α Aquarii	C	32·9	35·6	38·5	41·2	46·6	52·3	55·0	57·8	0·4	21. 58. 46·65		46·66	51·28	4·62	5·02	21. 58. 51·31	− 3·46
	46	Piazzi XXII. 11	C	31·0	36·4	41·7	46·9	57·4	8·1	13·7	18·7	24·0	22. 3. 57·46		58·47				22. 4. 3·12	− 3·29
	47	Piazzi XXII. 12	C	32·6	38·3	43·5	48·7	59·4	10·0	15·5	20·7	25·9	22. 3. 59·31		0·32				22. 4. 4·97	− 3·28

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 1, 8, and 11, $+67^s{\cdot}93$: $-0^s{\cdot}69$: and $+67^s{\cdot}77$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
November 7. Between the observations of Polaris and Mars, the seconds' hand of the Transit-clock was held 40^s, the pendulum still vibrating.
November 8. The azimuthal error by tabular places of ε Piscium and Polaris, the correction for clock-rate insensible.
November 8. This morning the Transit-clock was put forward 2^m., and the western contact-springs adjusted. The seconds' hand had been again held 48^s.
November 8^d. 21^h. The Transit-clock weight was slightly increased.
November 9 and 10. The azimuthal error by Polaris, Polaris S.P., and Polaris.

2, 41. Observed over wires Y, Z.

41, 42. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	//	s	s	s	s	h m s	s
Nov. 9	1	34 Pegasi	C	27·1	30·0	32·6	35·4	40·8	46·5	49·4	52·0	54·7	22. 19. 40·89	− 3·71	40·96			5·02	22. 19. 45·61	− 3·58
	2	σ Aquarii	C	11·9	14·8	17·4	..	25·9	..	34·5	37·2	40·1	22. 23. 25·93	(+ 10·73) [− 3·69]	25·79	30·44	4·65	[−0·40]	22. 23. 30·44	− 3·62
	3	60 Aquarii	C	47·4	50·4	53·0	55·8	1·2	6·8	9·6	12·4	15·0	22. 27. 1·24		1·23				22. 27. 5·87	− 3·62
	4	Bradley 3033	C	0·0	2·7	5·7	8·2	13·8	19·4	22·2	25·0	27·8	22. 50. 13·81		13·75				22. 50. 18·39	− 3·73
	5	3 Andromedæ	C	43·0	47·2	51·6	55·7	4·1	12·6	16·8	21·1	25·3	22. 58. 4·08		4·82				22. 58. 9·46	− 4·19
	6	Groombridge 4005	C	58·6	5·7	12·5	19·3	33·2	..	..	..	..	23. 4. 33·17		34·48				23. 4. 39·11	− 4·98
	7	γ Piscium	C	52·3	55·0	57·8	0·5	6·2	11·8	14·5	17·3	20·0	23. 10. 6·11		6·15	10·77	4·62		23. 10. 10·78	− 3·88
	8	κ Piscium	C	43·0	45·8	48·6	51·4	56·8	2·5	5·3	7·9	10·6	23. 19. 56·83		56·85	1·50	4·65		23. 20. 1·48	− 3·89
	9	13 Piscium	C	44·4	47·1	49·9	52·6	58·1	3·8	6·5	9·2	12·0	23. 24. 58·13		58·12				23. 25. 2·75	− 3·91
	10	☽ 1 L.	C	54·9	57·7	0·5	3·4	8·9	14·7	17·6	20·4	23·2	23. 37. 8·98		9·01				23. 38. 21·61	
	11	ω Piscium	C	5·4	8·1	10·8	13·6	19·0	24·8	27·5	30·4	33·0	23. 52. 19·13		19·22	23·80	4·58		23. 52. 23·84	− 4·10
	12	*d* Piscium	C	21·7	24·6	27·3	30·2	35·7	41·3	44·0	46·8	49·5	0. 13. 35·63		35·74			4·62	0. 13. 40·36	− 4·21
	13	Groombridge 58	C	..	..	..	..	57·0	6·0	10·4	14·8	19·2	0. 16. 57·03		57·80				0. 17. 2·42	− 5·43
	14	Neptune	C	49·1	52·0	54·6	57·4	2·8	8·4	11·2	14·0	16·7	0. 24. 2·86		2·89				0. 24. 7·30	
	15	Groombridge 120	C	27·2	34·0	40·6	47·1	0·5	..	..	..	..	0. 34. 0·38		1·63				0. 34. 6·24	− 7·08
	16	β Ceti	C	30·7	33·8	36·6	39·5	45·3	51·2	54·3	57·0	0·0	0. 36. 45·32		45·07	49·69	4·62		0. 36. 49·68	− 4·05
	17	Ceres	C	8·9	11·6	14·6	17·4	22·8	28·4	31·2	34·0	36·7	1. 7. 22·79		22·72				1. 7. 27·32	
	18	Polaris ...(E & E)	C	57·0	52·0	44·5	36·5	..	..	2·0	52·5	..	1. 10. 19·79		38·87	42·69	3·82		1. 10. 43·47	− 3·70
	19	α Arietis	C	16·0	19·0	22·0	25·0	30·8	37·0	40·0	42·9	45·9	1. 59. 30·91		31·21	35·79	4·58		1. 59. 35·80	− 5·05
	20	59 Andromedæ	C	21·5	25·1	28·6	32·0	39·0	46·3	49·8	53·2	56·7	2. 2. 39·07		39·59				2. 2. 44·18	− 5·71
	21	Bradley 294	C	22·4	25·9	29·4	33·0	40·1	47·0	50·6	54·2	57·6	2. 2. 39·96		40·48				2. 2. 45·07	− 5·71
	22	Amphitrite	C	58·4	1·5	4·5	7·2	13·2	19·4	22·3	25·1	28·0	2 10. 13·24		13·53				2. 10. 18·11	
	23	ι Aurigæ	C	52·6	56·2	59·4	2·7	9·1	15·6	19·0	22·4	25·5	4. 48. 9·11		9·56	14·09	4·53		4. 48. 14·10	− 5·65
	24	99 Tauri	C	19·2	22·2	25·2	28·1	34·1	40·2	43·2	46·2	49·2	4. 49. 34·12		34·43				4. 49. 38·97	− 5·22
	25	64 Eridani	C	..	..	..	..	..	42·0	44·8	47·6	50·4	4. 53. 36·22		36·06				4. 53. 40·60	− 4·14
	26	ε Leporis	C	27·0	30·0	33·0	36·1	41·9	48·0	50·8	53·8	56·8	4. 59. 41·88		41·57	46·14	4·57		4. 59. 46·11	− 3·90
	27	Mars 2 L.	C	8·5	11·6	14·5	17·5	23·6	29·7	32·7	35·7	38·7	5. 1. 23·56		23·87				5. 1. 27·71	
	28	108 Tauri	C	2·6	5·7	8·6	11·5	17·6	23·8	26·6	29·6	32·5	5. 7. 17·56		17·85				5. 7. 22·39	− 5·11
	29	*o* Tauri	C	13·5	16·4	19·5	22·4	28·4	34·4	37·3	40·2	43·2	5. 19. 28·32		28·61				5. 19. 33·14	− 5·06
	30	Polaris S.P.(E & E)	D	..	..	19·0	9·0	56·5	3·0	30·5	..	..	13. 10. 56·95		38·37	42·51	4·14	4·84	1. 10. 42·99	−83·52
	31	Spica	D	45·6	48·6	51·3	54·1	59·7	5·4	8·3	10·9	13·8	13. 17. 59·70		59·57	4·13	4·56	[−0·40]	13. 18. 4·18	− 2·26
	32	η Boötis	D	54·6	57·6	0·6	3·5	9·3	15·2	18·2	21·0	23·9	13. 48. 9·27		9·53	14·16	4·63		13. 48. 14·14	− 1·60
	33	Arcturus	D	9·4	12·5	15·4	18·3	24·2	30·0	32·9	36·0	38·8	14. 9. 24·11		24·37	28·99	4·62		14. 9. 28·97	− 1·43
	34	ε Boötis	D	43·5	46·6	49·8	52·8	59·0	..	8·5	11·7	..	14. 38. 59·06		59·43	3·98	4·55		14. 39. 4·02	− 1·11
Nov. 10	35	☉ 1 L.	D	12·4	15·5	18·4	21·2	27·0	32·8	35·7	38·6	41·4	15. 2. 26·95		} 34·74				15. 3. 39·33	
	36	☉ 2 L.	D	28·4	31·5	34·4	37·1	42·9	48·8	51·9	54·7	57·7	15. 4. 42·99							
	37	α Coronæ	D	36·5	39·6	42·7	45·8	52·0	58·4	1·3	4·5	7·5	15. 28. 51·98		52·34	56·90	4·56		15. 28. 56·92	− 1·06
	38	η Draconis	D	32·3	38·3	44·1	49·9	1·6	13·3	19·2	25·0	30·9	16. 22. 1·52		2·62				16. 22. 7·19	+ 2·20
	39	ζ Herculis	D	..	52·6	55·8	59·1	5·5	12·0	15·3	18·5	..	16. 36. 5·48		5·90	10·42	4·52		16. 36. 10·46	− 0·81
	40	κ Ophiuchi	D	57·0	0·0	2·7	5·6	11·0	16·8	19·5	22·4	25·2	16. 51. 11·08		11·21	15·62	4·41		16. 51. 15·77	− 1·73
	41	ε Ursæ Minoris	D	..	15·2	36·0	56·1	36·6	18·4	38·9	59·7	..	16. 59. 36·85		40·59				16. 59. 45·15	+16·57
	42	Venus 1 L.	D	0·9	4·1	7·0	10·1	16·0	22·3	25·4	28·4	31·3	17. 8. 16·12		15·79				17. 8. 20·82	
	43	ε Aquilæ	R	10·1	13·0	16·0	18·7	24·5	30·2	33·2	36·0	38·8	18. 53. 24·45		24·65	29·05	4·40	4·76	....	
	44	Groombridge 2742	R	18·9	25·2	31·0	36·8	48·6	0·6	6·6	12·4	18·4	18. 55. 48·62		49·74				18. 55. 54·18	+ 0·85
	45	ζ Aquilæ	R	52·7	55·7	58·6	1·4	7·0	12·8	15·6	18·5	21·4	18. 59. 7·03		7·21	11·67	4·46		....	
	46	ω Aquilæ	R	9·5	12·4	15·1	18·0	23·6	29·3	32·2	35·0	37·8	19. 11. 23·60		23·76	28·22	4·46		....	
	47	α Vulpeculæ	D	..	48·0	51·0	54·0	0·0	6·1	9·1	12·2	..	19. 23. 0·00		0·33	4·79	4·46	4·84	19. 23. 4·85	− 1·98
	48	9 Vulpeculæ	D	19·3	22·3	25·2	28·2	34·0	39·9	42·7	45·6	48·6	19. 28. 33·92		34·18				19. 28. 38·70	− 2·17

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 10, 27, and 42, $+67^s{\cdot}97$: $-0^s{\cdot}70$: and $+0^s{\cdot}48$.
November 9. Between the transits of γ and κ Piscium, the adjustment of the western contact springs of the Transit-clock was again slightly altered.

34. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 10	1	45 Aquilæ	D	27·2	30·1	32·9	35·6	41·0	46·6	49·4	52·2	54·8	19. 33. 41·04	−3·71	41·05			4·84	19. 33. 45·56	− 2·65
	2	υ Aquilæ	D	46·9	49·8	52·5	55·2	0·8	6·4	9·2	12·1	14·8	19. 39. 0·81	(+ 10·73)	0·92			[− 0·40]	19. 39. 5·43	− 2·52
	3	γ Aquilæ	JC	..	..	..	..	45·7	51·2	54·0	56·8	59·6	19. 39. 45·54	[− 3·69]	45·69	50·09	4·40	4·74†	....	
	4	Groombridge 2952	D	..	51·7	59·5	7·1	22·4	38·1	45·7	53·4	..	19. 44. 22·40		23·85			4·84	19. 44. 28·36	+ 1·07
	5	β Aquilæ	D	22·1	24·9	27·6	30·5	36·0	41·6	44·2	47·1	49·8	19. 48. 35·93		36·02	40·53	4·51		19. 48. 40·53	− 2·60
	6	16 Vulpeculæ	D	57·6	0·6	3·7	6·7	12·7	18·9	22·0	25·0	27·9	19. 56. 12·74		13·07				19. 56. 17·58	− 2·25
	7	17 Vulpeculæ	D	45·4	48·4	51·4	54·4	0 3	6·4	9·4	12·4	15·4	20. 1. 0·34		0·64				20. 1. 5·15	− 2·21
	8	κ^1 Cephei	D	12·4	25·2	37·7	50·5	14·9	40·5	53·2	5·4	18·2	20. 13. 15·11		17·48				20. 13. 21·98	+ 2·63
	9	κ^2 Cephei	D	14·1	27·1	39·4	52·4	17·0	42·4	55·0	7·5	19·8	20. 13. 16·98		19·35				20. 13. 23·85	+ 2·63
	10	40 Cygni	D	11·6	15·2	18·6	22·2	29·0	36·2	39·8	43·1	46·6	20. 22. 29·09		29·61				20. 22. 34·11	− 2·12
	11	ε Aquarii	JC	3·4	6·4	9·0	..	17·5	25·9	28·8	31·6	..	20. 40. 17·46		17·35	21·77	4·42	4·74†	....	
	12	θ Capricorni	D	2·4	5·4	8·3	11·2	16·8	22·7	25·6	28·5	31·4	20. 58. 16·88		16·64	21·17	4·53	4·84	20. 58. 21·13	− 3·30
	13	ω Piscium	D	5·4	8·2	10·9	13·7	19·2	24·9	27·6	30·5	33·1	23. 52. 19·23		19·32	23·79	4·47		23. 52. 23·76	− 4·09
	14	Bradley 3212	D	17·5	20·8	24·0	27·1	33·3	39·6	42·9	45·9	49·0	23. 59. 33·29		33·67				23. 59. 38·11	− 4·46
	15	γ Pegasi	D	59·6	2·4	5·3	8·0	13·6	19·6	22·3	25·2	28·0	0. 6. 13·72		13·91	18·37	4·46	4·44	0. 6. 18·35	− 4·26
	16	*d* Piscium	D	21·7	24·6	27·4	30·3	35·7	41·3	44·1	46·9	49·7	0. 13 35·70		35·81				0. 13. 40·25	− 4·20
	17	Bradley 27	D	44·6	47·4	50·4	53·3	59·2	5·0	8·0	10·9	13·8	0. 18. 59·13		59·39				0. 19. 3·82	− 4·42
	18	Neptune	D	45·0	47·9	50·6	53·2	58·7	4·4	7·1	9·9	12·6	0. 23. 58·77		58·80				0. 24. 3·23	
	19	14 Ceti	D	19·9	22·6	25·5	28·1	33·6	39·4	42·0	44·7	47·4	0. 28. 33·64		33·63				0. 28. 38·06	− 4·18
	20	☽ 1 L.	D	58·7	1·8	4·5	7·4	13·1	18·9	21·8	24·6	27·5	0. 34. 13·09		13·18				0. 35. 26·12	
	21	61 Piscium	D	27·4	30·5	33·5	36·4	42·2	48·3	51·0	54·0	56·8	0. 40. 42·18		42·45				0. 40. 46·88	− 4·58
	22	66 Piscium	D	8·7	11·8	14·6	17·7	23·4	29·4	32·2	35·0	38·0	0. 47. 23·37		23·62				0. 47. 28·05	− 4·57
	23	Bradley 107	D	32·7	35·6	38·4	41·0	46·6	52·3	55·0	57·8	0·5	0. 52. 46·61		46·69				0. 52. 51·12	− 4·37
	24	ε Piscium	D	39·2	42·0	44·7	47·6	53·1	58·7	1·5	4·3	6·9	0. 55. 53·06		53·17	57·62	4·45		0. 55. 57·59	− 4·39
	25	Ceres	D	..	..	..	..	..	53·1	56·0	58·7	1·4	1. 6. 47·50		47·43				1. 6. 51·85	
	26	Polaris	D (E & E)	55·0	51·5	45·0	..	20·0	5·0	..	..	..	1. 10. 18·80		37·88	42·34	4·46		1. 10. 42·30	−83·35
	27	49 Ceti	D	44·6	47·5	50·4	53·2	58·8	4·6	7·6	10·6	13·4	1. 27. 58·92		58·70				1. 28. 3·12	− 4·16
	28	47 Cassiopeiæ	D	44·1	56·0	8·2	20·0	43·6	7·7	19·3	31·4	43·1	1. 51. 43·50		45·76				1. 51. 50·17	−13·07
	29	α Arietis	D	16·1	19·1	22·1	25·0	31·1	37·2	40·0	43·1	46·1	1. 59. 31·04		31·34	35·79	4·45		1. 59. 35·75	− 5·05
	30	59 Andromedæ	D	..	..	..	..	39·3	46·4	49·8	53·5	57·0	2. 2. 39·26		39·78				2. 2. 44·19	− 5·72
	31	Bradley 294	D	..	..	..	..	40·0	47·4	50·7	54·4	58·0	2. 2. 40·16		40·68				2. 2. 45·09	− 5·72
	32	Amphitrite	D	1·9	4·8	7·9	10·8	16·6	22·5	25·4	28·4	31·4	2. 9. 16·59		16·88				2. 9. 21·28	
Nov. 11	33	☽ 1 L.	E	..	..	..	..	28·4	34·1	37·0	40·0	42·7	1. 32. 28·28		28·43			3·96	1. 33. 41·63	
																		[− 0·54]		
Nov. 12	34	α Arietis	JC	..	..	..	26·1	32·1	38·2	41·1	44·1	47·0	1. 59. 32·05		32·35	35·79	3·44	3·42	....	
	35	67 Ceti	JC	59·3	2·0	4·8	7·5	13·0	18·8	21·6	24·4	27·1	2. 10. 13·11		13·03	16·39	3·36		....	
	36	☽ 1 L.	JC	47·8	50·8	53·9	56·7	2·6	8·5	11·4	14·4	17·2	2. 32. 2·54		2·73				2. 33. 16·08	
	37	σ Arietis	JC	46·5	..	52·2	54·9	0·6	6·4	9·3	..	15·0	2. 44. 0·65		0·85	4·19	3·34		....	
	38	ε Arietis	JC	..	..	19·1	22·4	28·0	34·0	36·9	39·9	..	2. 51. 28·02		28·30				2. 51. 31·66	− 5·15
	39	δ Arietis	JC	38·4	41·4	44·3	47·0	53·0	59·0	1·9	4·6	7·6	3. 3. 52·97		53·23	56·52	3·29		....	
	40	*f* Tauri	S	9·2	12·0	14·8	17·7	23·4	28·9	31·7	34·5	37·4	3. 23. 23·24		23·41	27·02	3·61	3·69†	....	
	41	ε Eridani	S	18·3	21·0	23·7	26·6	32·4	38·0	40·7	43·6	46·4	3. 26. 32·25		32·14	35·75	3·61		....	
Nov. 13	42	ε Eridani	C	..	..	..	..	..	38·7	41·9	44·5	47·2	3. 26. 33·20		33·09	35·76	2·67	2·74	....	
	43	☽ 2 L.	C	41·3	..	47·2	50·3	56·1	2·1	5·1	..	10·9	3. 34. 56·09		56·32			[− 0·67]	3. 33. 48·62	
	44	δ Eridani	C	32·0	34·7	37·6	40·4	45·9	51·5	54·4	57·2	0·0	3. 36. 45·92		45·80	48·41	2·61		....	
	45	o^1 Eridani	E	..	..	..	..	15·2	21·0	23·7	26·4	29·2	4. 5. 15·25		15·17	18·04	2·87	3·04†	....	
	46	γ Tauri	E	50·8	53·8	56·8	59·7	5·3	11·1	14·0	16·8	19·6	4. 12. 5·27		5·47	8·46	2·99		....	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.

Corrections for passage of Semidiameter, Nos. 20, 33, 36, and 43, $+68^s{\cdot}51$: $+69^s{\cdot}26$: $+69^s{\cdot}98$: and $-70^s{\cdot}35$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

20. No observation of N.P.D. was made.

33. Very cloudy.

33, 36, 43. Correction to R.A. on true Meridian, $+0^s{\cdot}01$.

34. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 13	1	Polaris S.P. (E&E)	S	29·0	20·0	14·0	4·0	52·0	34·0	..	..	..	13. 10. 52·62	−3·53	37·40	41·40	4·00	3·02	1. 10. 40·04	−82·41
	2	η Boötis	S	..	..	..	..	..	40·7	55·3	..	..	13. 48. 11·42	(+9·28)	11·61	14·22	2·61	[−0·70]	13. 48. 14·23	− 1·66
	3	η Boötis	S	..	..	..	..	..	17·3	20·3	23·3	26·0		[−3·20]						
	4	Arcturus	S	11·5	14·6	17·4	20·3	26·2	32·2	35·1	38·0	41·0	14. 9. 26·21		26·41	29·04	2·63		14. 9. 29·02	− 1·48
	5	ε Boötis	S	45·6	..	52·0	55·1	1·3	7·4	10·6	..	16·8	14. 39. 1·21		1·49	4·02	2·53		14. 39. 4·08	− 1·15
Nov. 14	6	☉ 2 L.	S	..	..	..	..	..	10·2	13·4	16·2	19·0	15. 21. 4·41		4·17				15. 19. 58·24	
	7	α Ophiuchi	S	..	25·2	28·1	31·0	36·4	42·2	44·9	47·7	..	17. 28. 36·44		36·56	39·07	2·51		17. 28. 39·07	− 1·74
	8	β Aquarii	JC	11·0	13·9	16·7	19·4	24·8	30·6	33·4	36·1	38·7	21. 24. 24·90		24·82	27·04	2·22	2·81†	....	
	9	ξ Aquarii	JC	17·9	20·8	23·5	26·3	31·7	37·4	40·2	43·1	45·7	21. 30. 31·79		31·68	33·84	2·16		....	
	10	Bradley 2871	S	46·7	51·2	55·7	6·5	9·7	19·0	23·4	28·1	32·7	21. 50. 9·59		10·27			3·02	21. 50. 12·65	− 2·93
	11	η Aquarii	S	9·4	12·3	14·9	17·9	23·3	28·8	31·6	34·4	37·1	22. 28. 23·25		23·22	25·54	2·32		22. 28. 25·58	− 3·56
	12	3 Andromedæ	S	45·1	49·4	53·6	57·9	6·4	14·9	19·3	23·3	27·6	22. 58. 6·32		6·91				22. 58. 9·26	− 4·08
	13	ι Ceti	S	17·7	20·4	23·4	26·2	31·8	37·4	40·1	42·9	45·8	0. 12. 31·69		31·57	33·83	2·26	2·32	0. 12. 33·88	− 4·00
	14	Groombridge 58	S	37·2	41·8	46·2	50·5	59·2	8·4	12·7	17·2	21·5	0. 16. 59·33		59·96				0. 17. 2·27	− 5·35
	15	Neptune	S	31·4	34·3	37·1	39·7	45·2	50·6	53·6	56·4	59·2	0. 23. 45·22		45·22				0. 23. 47·53	
	16	β Ceti	S	33·1	36·1	38·7	41·9	47·6	53·5	56·5	59·4	2·2	0. 36. 47·62		47·38	49·65	2·27		0. 36. 49·68	− 4·01
	17	Polaris (E & E)	S	..	56·0	47·5	40·5	21·0	..	..	..	..	1. 10. 22·44		38·09	41·26	3·17		1. 10. 40·38	−82·27
	18	ε Tauri	S	28·6	31·9	34·7	37·8	43·4	49·4	52·2	55·0	58·1	4. 20. 43·40		43·59	45·85	2·26		4. 20. 45·78	− 5·17
	19	Aldebaran	S	55·4	58·3	1·1	4·1	9·7	15·5	18·6	21·4	24·4	4. 28. 9·78		9·94	12·24	2·30		4. 28. 12·13	− 5·07
	20	☽ 2 L.	S	..	..	28·0	31·0	36·9	..	46·1	48·9	52·0	4. 35. 36·91		37·10				4. 34. 29·17	
	21	99 Tauri	S	21·6	24·6	27·6	30·8	36·6	42·6	45·7	48·8	51·7	4. 49. 36·62		36·86				4. 49. 39·04	− 5·33
	22	Mars 1 L.	S	2·1	5·3	8·3	11·3	17·1	23·3	26·4	29·3	32·4	4. 55. 17·23		18·18				4. 55. 20·35	
	23	Mars 2 L.	S	3·7	6·7	9·6	12·6	18·5	24·7	27·7	30·9	33·8	4. 55. 18·64							
	24	15 Orionis	S	43·3	46·3	48·9	52·0	57·6	3·3	6·3	9·2	12·0	5. 1. 57·61		57·76				5. 1. 59·93	− 4·98
	25	ν Tauri	S	54·4	57·4	0·4	3·4	9·2	15·2	18·2	21·2	24·2	5. 11. 9·24		9·47				5. 11. 11·64	− 5·20
	26	115 Tauri	S	2·3	5·2	8·2	11·1	16·9	22·7	25·6	28·6	31·5	5. 19. 16·85		17·03				5. 19. 19·19	− 5·02
	27	Polaris S.P. (E&E)	E	..	..	..	..	55·0	37·5	30·5	22·0	17·0	13. 10. 54·86		39·64	41·12	1·48		1. 10. 41·58	−82·13
Nov. 16	28	δ Arietis	JC	41·0	44·1	47·0	49·8	55·7	1·5	4·4	7·5	10·2	3. 3. 55·64	(+9·70)	55·90	56·56	0·66	0·79	3. 3. 56·60	− 5·16
	29	τ^1 Arietis	JC	12·2	15·3	18·4	21·2	27·0	33·0	36·0	38·9	41·9	3. 13. 27·05	[−2·20]	27·32	28·00	0·68	[−0·70]	3. 13. 28·02	− 5·22
	30	ο Tauri	JC	19·9	22·7	25·4	28·4	33·8	39·4	42·3	45·1	47·9	3. 17. 33·82		33·97	34·69	0·72		3. 17. 34·66	− 4·83
	31	η Tauri$^{\pi}_{3}$	L	13·9	17·0	20·0	23·0	29·0	35·1	38·1	41·1	44·0	3. 39. 28·97		29·28	29·67	0·39	0·51†	....	
	32	γ Eridani	L	30·9	33·8	36·5	39·4	45·1	50·7	53·7	56·5	59·4	3. 51. 45·06		44·96	45·38	0·42		....	
	33	η Geminorum	JC	29·3	32·4	35·4	38·4	44·4	50·4	53·3	56·5	59·3	6. 6. 44·32		44·60	45·19	0·59	0·79	6. 6. 45·21	− 5·06
	34	μ Geminorum	JC	33·2	36·1	39·1	42·2	48·0	54·4	57·2	0·0	3·1	6. 14. 48·10		48·36	49·00	0·64		6. 14. 48·97	− 5·04
	35	☽ 2 L.	JC	41·8	44·9	47·8	50·6	56·4	2·7	5·8	8·8	11·7	6. 32. 56·68		56·93			0·26	6. 31. 49·75	
Nov. 17	36	Polaris (E&E)	C	..	..	..	..	..	13·5	7·5	59·0	50·5	1. 10. 26·28	[−1·20]	39·59	40·16	0·57	[0·75]	....	
	37	θ Ceti	E	3·1	6·0	8·8	11·5	17·1	22·8	25·6	28·4	31·1	1. 17. 17·11		17·13	17·70	0·57	0·53†	....	
	38	η Piscium	E	2·2	5·1	8·0	10·7	16·4	22·1	25·0	27·9	30·6	1. 24. 16·40		16·65	17·22	0·57		....	
	39	ν Piscium	C	11·5	14·4	17·1	19·9	25·4	31·0	33·8	36·4	39·2	1. 34. 25·36		25·51	25·80	0·29	0·26	1. 34. 25·82	− 4·48
	40	4 Arietis	C	38·4	41·2	44·2	47·0	52·7	..	..	..	..	1. 40. 52·72		52·98				1. 40. 53·29	− 4·78
	41	Bradley 236	C	..	..	..	57·7	3·3	9·1	12·0	14·8	17·5	1. 41. 3·25		3·51				1. 41. 3·82	− 4·78
	42	ξ Piscium	C	21·1	24·0	26·8	29·6	35·0	40·5	43·4	46·3	48·9	1. 46. 35·01		35·14				1. 46. 35·46	− 4·48
	43	λ Arietis	C	10·7	13·7	16·7	19·8	25·6	31·8	34·6	37·6	40·7	1. 50. 25·64		25·97				1. 50. 26·29	− 5·01
	44	W.B.I. 990	C	48·3	51·1	53·8	56·6	2·0	7·6	10·4	13·2	15·9	1. 56. 2·05		2·12				1. 56. 2·44	− 4·40
	45	α Arietis	C	20·0	23·2	26·2	29·1	35·1	41·1	44·1	47·1	50·1	1. 59. 35·06		35·39	35·80	0·41		1. 59. 35·71	− 5·06
	46	67 Ceti	C	2·1	5·0	7·7	10·5	16·1	21·7	24·4	27·3	30·1	2. 10. 16·05		16·08	16·40	0·32		2. 10. 16·41	− 4·36

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 31r·000.
Corrections for passage of Semidiameter, Nos. 6, 20, and 35, −68s·50: −70s·13: and −67s·79.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
November 17d. 2h. The pendulum of the Transit-clock was lengthened by 1½ divisions of the screw.
November 13 and 14. The azimuthal error by tabular places of Polaris S.P., Polaris, and Polaris S.P.
November 16. The azimuthal error used in the mean of those (−3″·20 and −1″·20), determined on November 14 and 17.
November 17. The azimuthal error by tabular places of Polaris and θ Ceti, the correction for clock-rate insensible.

1. Much disturbed by noise.
2. Observed over wires Y, Z.
20. Correction to R.A. on true Meridian, +0s·01.
33. Very faint; cloudy.
35. Extremely faint from a thick fog. Correction to R.A. on true Meridian, +0s·01.
41. The 3rd, 4th, and 5th wires have also been used for the 1st, 2nd, and 4th wires of an Altazimuth Observation, ☽ L. Face Right.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 17	1	69 Ceti	C	48·9	51·7	54·4	57·3	2·6	8·4	11·0	13·8	16·5	2. 15. 2·68	+3·53 (+9·70) [−1·20]	2·79			0·26	2. 15. 3·12	− 4·51
	2	ξ^2 Ceti	C	46·2	49·0	51·8	54·5	0·1	5·7	8·5	11·3	14·2	2. 21. 0·09	[−1·20]	0·27	0·55	0·28	[0·75]	2. 21. 0·60	− 4·70
	3	☽ 2 L.	K	..	41·1	44·0	47·0	52·7	58·6	1·7	4·6	..	7. 27. 52·76	[1·92]	52·99			0·37	7. 26. 47·55	
	4	Procyon	K	0·4	3·2	6·0	8·8	14·2	19·9	22·6	25·4	28·1	7. 32. 14·24		14·37	15·06	0·69	[0·75]	7. 32. 14·98	− 4·14
	5	8 Cancri	K	19·0	21·9	24·8	27·7	33·0	38·9	41·7	44·6	47·4	7. 57. 33·17		33·38				7. 57. 34·00	− 4·20
	6	β Cancri	K	..	0·3	3·2	5·8	11·4	17·2	20·0	22·7	..	8. 9. 11·46		11·63	12·34	0·71		8. 9. 12·25	− 4·05
	7	d^1 Cancri	K	23·1	26·1	28·9	31·8	37·6	43·6	46·4	49·4	52·3	8. 15. 37·64		37·91	38·58	0·67		8. 15. 38·54	− 4·19
Nov. 18	8	☉ 1 L.	K	6·7	9·5	12·5	15·4	21·3	27·3	30·2	33·0	36·1	15. 35. 21·28		21·12				15. 36. 30·95	
	9	Bradley 2757	K	35·6	38·6	41·5	44·6	50·5	56·5	59·4	2·6	5·5	21. 5. 50·48		50·78				21. 5. 51·81	− 2·73
	10	15 Aquarii	K	..	..	..	..	..	..	13·4	16·2	18·8	21. 11. 4·97		4·98				21. 11. 6·01	− 3·10
	11	35 Capricorni	K	19·5	22·4	25·5	28·5	34·4	40·4	43·3	46·4	49·3	21. 19. 34·36		34·18				21. 19. 35·21	− 3·30
	12	d Aquarii	K	27·4	30·2	33·0	35·9	41·4	46·9	49·6	52·4	55·1	21. 32. 41·27		41·35				21. 32. 42·39	− 3·16
	13	σ Aquarii	K	..	..	21·0	23·9	29·4	35·1	38·0	40·7	43·5	22. 23. 29·41		29·36	30·30	0·94		22. 23. 30·43	− 3·49
	14	η Aquarii	K	10·5	13·4	16·1	19·0	24·5	30·0	32·9	35·6	38·4	22. 28. 24·43		24·49	25·48	0·99		22. 28. 25·56	− 3·50
	15	40 Pegasi	K	..	8·5	11·4	14·3	20·2	26·0	28·9	31·8	..	22. 32. 20·10		20·36				22. 32. 21·43	− 3·50
	16	μ Pegasi	K	13·7	16·7	19·7	22·8	28·7	34·9	38·0	40·9	44·0	22. 43. 28·77		29·09	30·10	1·01		22. 43. 30·17	− 3·61
	17	77 Aquarii	K	21·7	24·7	27·6	30·6	36·2	42·0	44·8	48·0	50·8	22. 47. 36·22		36·10				22. 47. 37·18	− 3·59
	18	h^4 Aquarii	K	56·0	58·9	..	4·5	9·9	15·6	..	21·2	24·1	23. 0. 9·99		9·97				23. 0. 11·06	− 3·67
	19	ε Andromedæ	K	9·9	13·0	16·2	19 4	25·5	32·0	35·0	38·3	41·4	0. 31. 25·59		25·95	27·10	1·15	1·12	0. 31. 27·09	− 4·61
	20	Bradley 64	K	23·2	27·0	30·6	34·2	41·4	48·7	52·2	55·9	59·2	0. 34. 41·32		41·82				0. 34. 42·96	− 5·00
	21	59 Piscium	K	51·2	54·2	57·1	0·0	5·9	11·7	14·6	17·4	20·5	0. 40. 5·80		6·06				0. 40. 7·20	− 4·49
	22	66 Piscium	K	..	..	..	..	..	32·5	35·4	38·4	41·2	0. 47. 26·61		26·87				0. 47. 28·01	− 4·52
	23	Bradley 107	K	35·9	38·8	41·6	44·3	49·8	55·4	58·3	0·9	3·7	0. 52. 49·81		49·94				0. 52. 51·09	− 4·33
	24	ε Piscium	K	42·4	45·0	48·0	50·7	56·2	2·0	4·8	7·5	10·2	0. 55. 56·27		56·42	57·59	1·17		0. 55. 57·57	− 4·36
	25	Polaris ...(E & E)	K	2·0	56·0	59·0	42·0	24·0	10·0	4·0	..	..	1. 10. 2[illegible]·99		38·47	39·69	1·22		1. 10. 39·63	−80·70
	26	θ Ceti	K	..	..	..	..	16·5	22·2	25·0	27·7	30·4	1. 17. 16·48		16·44	17·70	1·26		1. 17. 17·60	− 4·19
	27	α Ceti	S	..	..	5·1	..	13·6	19·2	22·1	24·7	27·4	2. 55. 13·56		13·67	15·01	1·34	1·25†	....	
	28	δ Arietis	S	40·4	43·3	46·2	49·1	54·8	1·0	3·8	6·7	9·7	3. 3. 54·97		55·24	56·57	1·33		....	
	29	8 Cancri	E	18·1	20·9	23·9	26·6	32·3	38·1	40·7	43·6	46·4	7. 57. 32·24		32·45			1·30	7. 57. 34·02	− 4·23
	30	ζ^1 Cancri	E	12·5	15·4	18·4	21·2	27·0	33·0	36·0	38·8	41·6	8. 4. 27·05		27·31			[0·81]	8. 4. 28·88	− 4·29
	31	d^1 Cancri	E	22·3	25·2	28·0	31·1	36·7	42·6	45·6	48·6	51·4	8. 15. 36·79		37·05	38·61	1·56		....	
	32	☽ 2 L.	E	43·0	46·1	49·0	51·8	57·4	3·4	6·3	9·2	12·1	8. 19. 57·54		57·76				8. 18. 55·02	
	33	η Cancri	E	38·0	41·0	43·9	46·9	52·7	58·7	1·6	4·6	7·6	8. 24 52·73		53·02	54·59	1·57		....	
	34	γ Cancri	E	12·0	15·1	18·0	21·0	27·0	32·9	36·0	38·9	41·8	8. 35. 26·92		27·22	28·80	1·58		....	
	35	A^2 Cancri	E	16·7	19·4	22·3	25·2	30·6	36·4	39·3	42·2	45·0	8. 39. 30·74		30·95				8. 39. 32·54	− 3·93
	36	α Cancri	E	50·7	53·5	56·4	59·2	4·8	10·5	13·4	16·1	18·9	8. 51. 4·78		4·98	6·62	1·64		....	
	37	Polaris S.P. (E&E)	C	26·5	18·5	11·0	4·5	52·5	34·0	27·0	..	..	13. 10. 51·74		37·88	39·43	1·55		1. 10. 39·62	−80·44
Nov. 19	38	☉ 1 L.	E	15·9	18·9	21·7	24·6	30·5	36·6	39·5	42·4	45·4	15. 39. 30·56		} 39·44				15. 40. 41·27	
	39	☉ 2 L.	E	..	37·1	40·0	42·9	48·5	54·4	57·6	0·4	..	15. 41. 48·64							
Nov. 20	40	6 Cancri	JC	55·3	58·5	1·6	4·7	11·0	17·3	20·4	23·6	26·6	7. 55. 10·95	−3·56	11·26	14·33	3·07	2·78†	....	
	41	μ Leonis	C	46·2	49·2	52·4	55·4	1·5	7·8	10·8	14·0	17·1	9. 45. 1·55	(+9·62)	1·84	5·04	3·20	[0·87]	....	
	42	ν Leonis	C	40·3	43·1	45·9	48·6	54·3	0·1	3·0	5·8	8·6	9. 50. 54·36	[−3·35]	54·49			2·79	9. 50. 57·64	− 3·49
	43	☽ 2 L.	C	48·2	50·9	54·0	56·6	2·4	8·1	10·9	13·7	16·5	9. 57. 2·31		2·37				9. 56. 3·76	
	44	Regulus	C	53·6	56·4	59·2	2·0	7·7	13·4	16·1	19·0	21·8	10. 1. 7·64		7·77	11·00	3·23		....	
	45	16 Sextantis	C	53·4	56·2	59·0	1·8	7·3	12·9	15·7	18·4	21·3	10. 2. 7·29		7·36				10. 2. 10·51	− 3·37
	46	23 Sextantis	C	46·6	49·5	52·3	55·0	0·4	6·2	8·8	11·6	14·4	10. 14. 0·48		0·50				10. 14. 3·66	− 3·28

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S. P.

Reading of Transit-Micrometer, $31^{r}\cdot000$.

Corrections for passage of Semidiameter, Nos. 3, 8, 32, and 43, $-66^{s}\cdot06$: $+68^{s}\cdot97$: $-64^{s}\cdot33$: and $-61^{s}\cdot76$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

November 18. The azimuthal error by Polaris and Polaris S.P., allowing $0^{s}\cdot58$ for clock-rate and change of R.A.

November 20 to 22. The azimuthal error used is that determined by tabular places of ϵ Piscium and Polaris on November 22, allowing $0^{s}\cdot01$ for clock-rate.

3, 32. Correction to R.A. on true Meridian, $+0^{s}\cdot01$.
8. Observed through dense cloud.
4, 5. Hazy.
11. Extremely faint.
6. Cloudy.
40. Faint: hazy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 21	1	⊙ 1 L.	C	36·9	40·0	42·8	45·9	51·6	57·6	0·6	3·5	6·5	15. 47. 51·66	−3·56	0·74			2·79	15. 49. 4·10	
	2	⊙ 2 L.	C	55·6	58·6	1·5	4·6	10·4	16·3	19·2	22·3	25·1	15. 50. 10·35	(+9·62)				[0·87]		
	3	α Pegasi	C	45·0	48·0	50·8	53·6	59·2	5·0	7·9	10·6	13·6	22. 57. 59·25	[−3·35]	59·40	2·91	3·51		....	
	4	ρ Leonis	S	24·0	26·8	29·6	32·4	38·0	43·6	46·3	49·1	51·9	10. 25. 37·92		38·02	42·16	4·14	4·01	10. 25. 42·35	− 3·27
	5	☽ 2 L.	S	..	..	..	15·9	21·6	27·3	30·1	32·8	35·6	10. 43. 21·51		21·53			[0·74]	10. 42. 24·69	
	6	d Leonis	S	17·0	20·2	22·9	25·6	31·2	36·6	39·5	42·2	45·0	10. 53. 31·08		31·12	35·19	4·07		10. 53. 35·47	− 3·04
	7	φ Leonis	S	29·9	32·8	35·6	38·4	43·9	49·3	52·2	55·0	57·7	11. 9. 43·81		43·77				11. 9. 48·12	− 2·95
	8	Arcturus	JC	10·2	13·2	16·1	19·1	24·9	31·0	33·7	36·8	39·6	14. 9. 24·90		25·12	29·17	4·05		....	
Nov. 22	9	σ Aquarii	S	..	..	..	..	..	31·4	34·3	37·0	40·0	22. 23. 25·75		25·61	30·25	4·64		22. 23. 30·31	− 3·43
	10	Fomalhaut	S	51·1	54·4	57·6	0·9	7·0	13·8	16·8	20·1	23·3	22. 50. 7·17		6·75	11·29	4·54		22. 50. 11·46	− 3·59
	11	58 Pegasi	S	..	..	..	4·2	9·6	15·2	..	21·0	23·6	23. 3. 9·63		9·73				23. 3. 14·45	− 3·67
	12	ω Piscium	S	5·2	8·0	10·8	13·6	19·1	24·6	27·5	30·3	33·0	23. 52. 19·07		19·13	23·67	4·54		23. 52. 23·88	− 3·97
	13	51 Piscium	S	8·5	11·3	14·2	16·9	22·4	28·0	30·7	33·6	36·3	0. 25. 22·38		22·44			4·75	0. 25. 27·20	− 4·16
	14	15 Ceti	S	53·0	55·9	58·6	1·5	6·9	12·5	15·2	18·0	20·7	0. 31. 6·90		6·87				0. 31. 11·64	− 4·09
	15	59 Piscium	S	47·8	50·8	53·8	56·6	2·4	8·4	11·2	14·2	17·0	0. 40. 2·41		2·61				0. 40. 7·38	− 4·46
	16	ε Piscium	S	39·0	41·7	44·5	47·4	52·9	58·5	1·3	4·0	6·8	0. 55. 52·85		52·92	57·56	5·64		0. 55. 57·70	− 4·33
	17	Polaris....(E&E)	S	53·5	49·0	41·5	33·5	15·5	..	..	..	..	1. 10. 16·28		32·82	37·47	4·65		....	
	18	ξ^2 Ceti	JC	..	44·8	47·6	50·4	56·0	1·5	4·4	7·0	..	2. 20. 55·89		55·97	0·56	4·59	4·50†	....	
	19	α Ceti	JC	56·6	59·4	2·2	5·0	10·5	16·0	18·6	21·6	24·4	2. 55. 10·43		10·46	15·02	4·56		....	
	20	φ Leonis	E	29·0	31·9	34·6	37·4	42·7	48·4	51·1	53·9	56·6	11. 9. 42·79	(+10·67)	42·80				11. 9. 47·91	− 3·01
Nov. 24	21	μ Pegasi	JC	8·9	12·0	15·0	18·0	24·0	30·1	33·0	35·9	39·0	22. 43. 23·94	[−2·63]	24·30	30·01	5·71	5·13	22. 43. 30·07	− 3·52
	22	α Pegasi	JC	42·6	45·6	48·4	51·3	56·9	2·7	5·6	8·5	11·2	22. 57. 56·93		57·17	2·88	5·71	[0·68]	22. 58. 2·95	− 3·62
	23	Polaris....(E&E)	JC	49·5	47·5	39·5	32·0	14·0	..	..	..	..	1. 10. 14·21		31·85	36·39	4·54	5·81	1. 10. 37·69	−77·40
	24	δ Ceti	JC	15·5	18·4	21·3	..	29·5	..	37·6	40·5	43·2	2. 32. 29·38		29·45	35·39	5·94		2. 32. 35·33	− 4·55
	25	γ^1 Ceti	JC	0·1	2·8	5·5	8·4	13·8	19·4	22·0	24·8	27·5	2. 36. 13·76		13·87				2. 36. 19·75	− 4·62
	26	σ Arietis	JC	43·8	46·7	49·5	52·4	58·0	3·8	6·7	9·6	12·4	2. 43. 58·05		58·29	4·23	5·94		2. 44. 4·18	− 4·97
	27	Groombridge585.	JC	3·1	7·2	11·1	15·1	23·1	31·4	35·2	39·2	43·4	2. 47. 23·13		23·82				2. 47. 29·71	− 6·59
	28	κ Persei	JC	0·6	4·8	8·7	12·6	20·2	28·0	31·9	35·8	39·5	3. 0. 20·16		20·81				3. 0. 26·70	− 6·50
	29	Bradley 442	JC	51·5	58·6	5·4	12·1	25·4	39·1	46·0	52·5	59·3	3. 4. 25·42		26·68				3. 4. 32·58	− 9·61
	30	29 Persei	JC	36·7	41·0	45·2	49·4	58·1	..	..	..	..	3. 8. 57·99		58·73				3. 9. 4·63	− 7·02
	31	31 Persei	JC	..	..	..	..	28·0	36·6	41·1	45·5	49·6	3. 9. 28·14		28·88				3. 9. 34·78	− 7·01
	32	τ^1 Arietis	JC	7·0	10·1	13·0	15·8	21·8	27·9	30·7	33·8	36·6	3. 13. 21·80		22·12	28·05	5·93		3. 13. 28·02	− 5·28
	33	γ^1 Leonis	L	10·8	13·8	16·7	19·7	25·5	31·5	34·4	37·3	40·3	10. 12. 25·51		25·83	31·73	5·90	5·61†	....	
	34	l Leonis	L	49·4	52·3	55·0	58·0	3·5	9·2	12·0	14·6	17·6	10. 42. 3·46		3·68	9·61	5·93		....	
	35	☽ 2 L.	C	..	..	55·1	58·0	3·6	9·4	12·4	15·1	18·0	13. 3. 3·63		3·59			5·82	13. 2. 7·10	
	36	Polaris S.P. (E&E)	C	..	..	9·0	..	48·5	31·0	23·0	..	10·5	13. 10. 48·38		31·36	36·14	4·78	[0·55]	1. 10. 37·48	−77·15
	37	Spica	C	44·4	47·2	50·0	52·7	58·5	4·0	6·8	9·6	12·5	13. 17. 58·36		58·31	4·46	6·15		13. 18. 4·43	− 2·59
	38	η Boötis	C	53·4	56·4	59·2	2·2	8·0	13·9	16·8	19·8	22·6	13. 48. 7·99		8·29	14·43	6·14		13. 48. 14·43	− 1·87
	39	α Draconis	C	..	..	14·0	20·5	33·5	46·6	53·3	..	..	14. 0. 33·45		34·66				14. 0. 40·80	+ 1·78
	40	ρ Boötis	C	36·7	40·0	43·2	46·4	52·7	..	2·5	5·7	..	14. 25. 52·77		53·21	59·36	6·15		14. 25. 59·36	− 1·23
	41	ε Boötis	C	42·0	45·3	48·4	..	57·6	..	7·0	10·2	13·2	14. 38. 57·62		58·02	4·17	6·15		14. 39. 4·18	− 1·30
	42	β Ursæ Minoris	C	1·3	12·1	22·7	33·2	53·8	..	..	..	..	14. 50. 53·84		55·74				14. 51. 1·90	+ 6·34
	43	β Boötis	C	24·8	28·6	32·4	36·0	43·2	50·7	54·3	58·0	1·5	14. 56. 43·22		43·81				14. 56. 49·97	− 0·50
	44	δ Boötis	C	..	..	..	..	12·1	..	45·5	..	..	15. 9. 55·48		55·97				15. 10. 2·14	− 0·88
	45	ι Draconis	C	18·6	24·1	..	34·9	45·8	..	2·2	7·5	12·9	15. 21. 45·71		46·72				15. 21. 52·89	+ 1·64
	46	α Coronæ	C	34·7	38·0	41·1	44·2	50·4	56·7	59·8	2·9	6·0	15. 28. 50·37		50·77	57·00	6·23		15. 28. 56·94	− 1·16

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^{r}\cdot000$.
Corrections for passage of Semidiameter, Nos. 5 and 35, $-61^{s}\cdot18$: and $-62^{s}\cdot61$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
November 24. The azimuthal error by Polaris and Polaris S.P., allowing $0^{s}\cdot51$ for clock-rate and change of R.A.

4. The time at the 8th wire has also been used for the 6th wire of an Altazimuth Observation, ☽ L.L., Face Right.
6. Faint : cloudy.
9. Very faint ; observed over the wires illuminated.
17. A bad image.
20. A correction of $+0^{s}\cdot27$ has been applied for personal equation.
23. Cloudy ; very faint.
35. The limb extremely faint.
44. Observed over wires X, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 24	1	θ Ursæ Minoris ..	C	7·6	21·1	34·1	47·4	..	..	..	..	..	15. 35. 13·11	−3·56	15·45			5·82	15. 35. 21·63	+ 9·75
	2	α Serpentis.....	C	15·9	18·6	21·4	24·2	29·8	35·4	38·1	40·9	43·6	15. 37. 29·72	(+10·67) [−2·63]	29·88	36·11	6·23	[0·55]	15. 37. 36·06	− 1·87
Nov. 25	3	⊙ 1 L.....	C	29·5	32·6	35·5	38·4	44·3	50·2	53·2	56·3	59·0	16. 4. 44·28		} 53·80					
	4	⊙ 2 L.....	C	49·0	..	54·9	57·7	3·6	9·8	12·7	..	18·5	16. 7. 3·70						16. 5. 59·99	
	5	τ Herculis	C	..	..	..	..	..	40·3	44·4	48·3	52·4	16. 15. 32·17		32·87				16. 15. 39·06	+ 0·22
	6	η Draconis	C	..	36·5	42·4	48·0	53·7	11·6	17·5	..	..	16. 21. 59·73		0·82				16. 22. 7·01	+ 2·32
	7	Λ Draconis	C	..	..	40·6	48·4	3·7	19·4	27·1	34·8	42·6	16. 28. 3·70		5·13				16. 28. 11·33	+ 4·43
	8	ζ Herculis	C	47·5	50·9	54·1	57·4	3·8	10·4	13·6	16·9	20·3	16. 36. 3·81		4·27	10·41	6·14		16. 36. 10·47	− 0·80
	9	ε Herculis	C	..	46·6	49·8	53·1	59·4	6·0	9·3	12·5	..	16. 54. 59·46		59·91	6·15	6·24		16. 55. 6·12	− 0·88
	10	ε Ursæ Min. (E&E)	C	..	..	..	..	..	59·4	41·0	..	..	} 16. 59. 33·43		36·92				16. 59. 43·13	+ 17·82
	11	ε Ursæ Min. (E&E)	C	..	..	..	..	..	..	..	55·4	16·6								
	12	α Herculis	C	7·7	10·6	13·5	16·4	22·1	27·8	30·6	33·5	36·4	17. 8. 22·02		22·26	28·45	6·19		17. 8. 28·47	− 1·61
	13	α Ophiuchi	C	18·5	21·4	24·1	27·1	32·6	..	..	44·0	46·8	17. 28. 32·62		32·85	39·04	6·19		17. 28. 39·07	− 1·71
	14	β Ophiuchi	C	27·1	30·0	32·8	35·4	41·0	46·6	49·4	52·1	54·8	17. 36. 40·97		41·10	47·22	6·12		17. 36. 47·32	− 1·96
	15	ω Draconis	C	..	..	..	..	..	48·8	56·5	4·3	..	17. 37. 33·40		34·78				17. 37. 41·01	+ 4·05
	16	35 Draconis	C	..	..	39·5	51·6	16·0	41·0	53·0	..	..	17. 55. 15·98		18·16				17. 55. 24·39	+ 8·49
	17	δ Ursæ Min. (E&E)	C	..	13·5	59·5	47·0	18·5	53·0	40·0	26·0	..	18. 15. 18·69		26·20	32·28			18. 15. 32·44	+ 40·54
	18	Venus 1 L.....	C	11·2	14·5	17·4	20·4	26·6	32·6	35·8	38·6	41·7	18. 29. 26·48		26·21				18. 29. 32·95	
	19	γ^1 Leonis .. (E&E)	E	40·7	55·2	9·9	24·8	39·7	54·4	9·1	..	..	10. 12. 24·83	(+10·03)	25·11	31·77	6·66	6·40†	....	
	20	ρ Leonis ... (E&E)	E	53·6	7·5	21·4	35·4	49·6	3·6	17·7	..	..	10. 25. 35·55	[−3·01]	35·71	42·29	6·58	[0·51]	....	
	21	Polaris S.P. (E&E)	K	..	..	..	57·0	44·0	29·0	21·0	..	8·0	13. 10. 45·16		29·00	35·65	6·65	6·25	1. 10. 35·56	−76·66
																		[0·56]		
Nov. 26	22	⊙ 1 L. ....(E&E)	K	..	30·1	44·9	59·5	14·2	29·2	..	..	..	16. 8. 59·57		59·33				16. 10. 15·79	
	23	Venus 1 L.....	K	35·6	38·8	42·0	45·0	51·0	57·1	0·5	3·4	6·4	18. 34. 51·04		50·74				18. 34. 57·92	
	24	ξ Aquarii	K	13·1	16·0	18·8	21·5	27·0	32·8	35·5	38·2	41·0	21. 30. 27·05		26·98	33·67	6·69		21. 30. 33·73	− 3·12
	25	24 Aquarii	K	13·3	16·3	19·0	21·6	27·1	32·6	35·4	38·3	40·9	21. 32. 27·12		27·14				21. 32. 33·89	− 3·08
	26	Bradley 2833....	K	..	..	28·0	30·8	36·4	42·1	44·9	47·6	50·4	21. 37. 36·37		36·29				21. 37. 43·04	− 3·17
	27	16 Pegasi	K	33·0	36·2	39·3	42·4	48·3	54·6	57·6	0·7	3·8	21. 46. 48·39		48·72	55·47	6·75		21. 46. 55·48	− 2·94
	28	18 Pegasi	K	..	..	8·4	11·1	16·6	22·1	25·0	27·8	30·5	21. 53. 16·58		16·69				21. 53. 23·45	− 3·15
	29	21 Pegasi	K	20·9	23·8	26·6	29·4	34·9	40·5	43·4	46·2	49·0	21. 56. 34·91		35·07				21. 56. 41·83	− 3·14
	30	Piazzi XXII. 11 .	K	..	..	38·9	44·2	54·8	5·5	10·9	15·2	21·6	22. 3. 54·80		55·72				22. 4. 2·48	− 2·69
	31	49 Aquarii	K	37·4	40·6	43·5	47·0	52·6	58·7	1·9	5·0	8·1	22. 15. 52·70		52·39				22. 15. 59·16	− 3·41
	32	34 Pegasi	K	24·6	27·5	30·3	33·2	38·5	44·3	47·0	49·6	52·4	22. 19. 38·55		38·63				22. 19. 45·40	− 3·35
	33	30 Ceti	K	..	..	..	..	53·1	58·9	1·9	4·5	7·3	1. 0. 53·22		53·13			6·81	1. 0. 59·96	− 4·08
	34	Polaris.... (E&E)	K	..	..	..	28·0	11·0	..	53·0	44·0	38·0	1. 10. 11·60		28·47	35·44	6·97		1. 10. 35·31	−76·45
	35	υ Piscium	K	..	..	..	..	..	..	7·0	10·0	13·1	1. 11. 57·61		57·96				1. 12. 4·80	− 4·84
	36	η Piscium	K	55·9	58·6	1·6	4·5	10·0	15·9	18·8	21·7	24·6	1. 24. 10·13		10·34	17·18	6·84		1. 24. 17·18	− 4·61
	37	100 Piscium.....	K	21·7	24·6	27·5	30·3	35·9	41·4	44·4	47·2	50·2	1. 27. 35·87		36·05				1. 27. 42·89	− 4·57
	38	104 Piscium.....	K	..	44·8	47·6	50·4	56·1	1·8	4·7	7·4	..	1. 31. 56·05		56·24				1. 32. 3·09	− 4·64
	39	4 Arietis.....	K	31·8	34·9	37·8	40·6	46·3	52·0	55·0	58·0	0·6	1. 40. 46·29		46·51				1. 40. 53·36	− 4·75
	40	ξ Piscium	K	14·7	17·7	20·4	23·0	28·5	34·3	37·0	39·8	42·6	1. 46. 28·62		28·69				1. 46. 35·54	− 4·46
	41	47 Cassiopeiæ ...	K	..	53·3	5·7	17·4	41·0	4·9	17·1	29·0	..	1. 51. 40·95		43·01				1. 51. 49·86	−12·72
	42	59 Andromedæ ..	K	19·3	22·9	26·4	29·9	36·9	44·0	47·5	51·0	34·5	2. 2. 36·88		37·38				2. 2. 44·24	− 5·71
	43	Bradley 294.....	K	20·1	23·8	27·3	30·7	37·8	44·9	48·3	51·8	55·5	2. 2. 37·74		38·24				2. 2. 45·10	− 5·71
	44	67 Ceti	K	53·6	58·6	1·4	4·0	9·6	15·1	18·1	20·7	23·5	2. 10. 9·57		9·52	16·39	6·87		2. 10. 16·38	− 4·35
	45	Groombridge 585.	K	..	..	..	..	..	..	..	38·1	42·4	2. 47. 22·06		22·71				2. 47. 29·58	− 6·60
	46	52 Arietis.....	K	..	..	..	20·4	26·5	32·6	..	..	..	2. 57. 26·45		26·77				2. 57. 33·65	− 5·39
	47	Bradley 442	K	..	..	..	11·0	24·6	38·4	..	..	..	3. 4. 24·55		25·63				3. 4. 32·51	− 9·61

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 18, 22, and 23, $+0^s{\cdot}50$: $+69^s{\cdot}83$: and $+0^s{\cdot}50$.
November 25 and 26. The azimuthal error by Polaris S.P. and Polaris, allowing $0^s{\cdot}51$ for clock-rate and change of R.A.

31. Very faint.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R. A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R. A. of Center from the Observation.	Correction to Mean R. A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Nov. 26	1	29 Persei	K	..	..	..	..	..	..	9·8	14·1	18·1	3. 8. 56·81	−3·56	57·50			6·81	3. 9. 4·38	− 7·03
	2	o Tauri	K	13·8	16·5	19·4	22·2	27·6	33·4	36·2	38·9	41·8	3. 17. 27·71	(+10·03)	27·84	34·76	6·92	[0·56]	3. 17. 34·73	− 4·90
	3	Groombridge 698	K	40·7	44·6	48·4	52·0	59·5	7·0	10·6	14·4	18·1	3. 22. 59·40	[−3·01]	59·96				3. 23. 6·85	− 6·46
	4	Groombridge 713	K	29·4	33·3	..	40·7	48·1	55·6	..	3·0	6·7	3. 28. 48·05		48·61				3. 28. 55·50	− 6·47
	5	Groombridge 743	K	..	..	..	..	36·3	44·1	47·9	51·8	55·6	3. 40. 36·21		36·80				3. 40. 43·70	− 6·71
	6	γ^1 Eridani	K	24·5	27·4	30·1	33·0	38·6	44·5	47·4	50·1	53·0	3. 51. 38·69		38·56	45·46	6·90		3. 51. 45·46	− 4·38
	7	υ^1 Tauri	K	53·7	56·8	59·9	2·9	8·7	14·7	17·8	20·6	23·7	4. 18. 8·71		8·99				4. 18. 15·90	− 5·48
	8	Mars 1 L.....	K	19·3	22·4	25·4	28·4	34·3	40·5	43·4	46·4	49·4	4. 36. 34·34		} 35·39				4. 36. 42·31	
	9	Mars 2 L.....	K	20·9	23·8	26·8	29·9	35·7	42·0	44·8	47·9	51·0	4. 36. 35·82							
	10	99 Tauri	K	16·9	20·0	23·0	26·1	32·0	38·0	41·2	44·2	47·0	4. 49. 31·99		32·30				4. 49. 39·22	− 5·53
	11	π Virginis (E & E)	JC	7·9	21·9	35·8	49·5	3·8	17·7	..	..	..	11. 53. 49·74		49·86	57·03	7·17	6·87†	....	
	12	η Virginis. (E & E)	JC	11·0	24·9	38·7	52·4	6·2	20·0	34·0	..	..	12. 12. 52·46		52·49	59·67	7·18	[0·60]	....	
																		.7·16		
Nov. 28	13	λ Aquarii. (E & E)	E	..	..	12·6	26·5	40·4	54·4	8·3	..	..	22. 45. 26·46	−3·21	26·48	34·46	7·98	[0·97]	22. 45. 34·56	− 3·46
	14	ϵ Androm. (E & E)	E	31·2	47·0	2·8	18·6	34·3	49·9	5·8	..	..	0. 31. 18·51	(+9·21)	18·88	27·00	8·12	8·13	0. 31. 27·03	− 4·51
	15	Polaris ... (E & E)	E	..	..	38·5	32·0	13·0	2·5	55·0	..	..	1. 10. 14·05	[−1·31]	27·34	34·55	7·21		1. 10. 35·52	−75·56
	16	Bradley 204 (E&E)	E	56·5	11·0	25·4	40·0	54·4	8·7	22·9	..	..	1. 24. 39·84		40·09				1. 24. 48·28	− 4·64
	17	50 Ceti... (E & E)	E	33·8	48·1	2·6	16·9	31·5	45·7	0·1	..	..	1. 29. 16·95		16·90				1. 29. 25·09	− 4·07
	18	ν Piscium. (E & E)	E	35·8	49·7	3·6	17·5	31·3	45·3	58·9	..	..	1. 34. 17·44		17·59	25·76	8·17		1. 34. 25·78	− 4·44
	19	4 Arietis . (E & E)	E	1·7	16·0	30·5	45·0	59·3	13·6	27·8	..	..	1. 40. 44·85		45·10				1. 40. 53·30	− 4·74
	20	β Arietis . (E & E)	E	20·1	34·7	49·8	4·0	18·9	33·8	48·5	..	..	1. 47. 4·26		4·55	12·77	8·22		1. 47. 12·75	− 4·87
	21	47 Cassiop. (E&E)	E	40·5	52·5	4·8	16·5	39·7	4·0	15·7	27·7	39·5	1. 51. 39·89		41·57				1. 51. 49·77	−12·65
	22	59 Androm. (E&E)	E	42·7	..	17·9	..	53·2	..	28·3	..	..	2. 2. 35·53		36·01				2. 2. 44·22	− 5·70
	23	Bradley 294 (E&E)	E	..	0·9	..	36·3	..	11·6	..	..	..	2. 2. 36·27		36·75				2. 2. 44·96	− 5·70
	24	23 Arietis . (E & E)	E	48·0	2·4	17·0	31·8	46·5	0·9	15·7	..	..	2. 11. 31·76		32·04				2. 11. 40·26	− 4·98
	25	Bradley 336 (E&E)	E	..	..	35·9	49·9	3·9	17·8	31·8	..	..	2. 16. 49·82		50·01				2. 16. 58·23	− 4·74
	26	25 Arietis (E & E)	E	23·8	37·9	51·7	5·6	19·8	33·8	47·8	..	..	2. 20. 5·77		5·96				2. 20. 14·18	− 4·74
	27	Bradley 355 (E&E)	E	13·6	28·0	42·5	57·0	11·7	26·1	40·8	..	..	2. 25. 57·10		57·37				2. 26. 5·60	− 5·04
	28	δ Ceti ....(E & E)	E	45·4	59·2	13·0	26·9	40·8	54·7	8·4	..	..	2. 32. 26·91		27·02	35·40	8·38		2. 32. 35·25	− 4·56
	29	Polaris S.P. (E&E)	P	15·0	..	59·0	52·0	39·5	21·5	16·0	..	3·5	13. 10. 39·83	(+10·12)	25·29	34·32	9·03	8·32	1. 10. 34·23	−75·33
	30	Spica ....(E & E)	P	13·4	27·4	41·6	55·6	9·7	23·9	38·0	..	..	13. 17. 55·66		55·69	4·56	8·87	[1·14]	13. 18. 4·64	− 2·69
	31	η Boötis .. (E & E)	P	21·1	36·0	50·8	5·4	20·0	34·5	49·2	..	..	13. 48. 5·29		5·62	14·52	8·90		13. 48. 14·60	− 1·96
	32	Arcturus . (E & E)	P	..	50·6	5·2	20·0	34·7	49·5	4·2	..	..	14. 9. 20·01		20·35	29·31	8·96		14. 9. 29·34	− 1·75
	33	ρ Boötis .. (E & E)	P	..	17·7	33·7	49·9	6·2	22·2	..	..	..	14. 25. 49·93		50·39	59·43	9·04		14. 25. 59·40	− 1·30
	34	ϵ Boötis .. (E & E)	P	..	23·5	39·2	54·7	10·4	26·1	41·7	..	..	14. 38. 54·79		55·22	4·24	9·02		14. 39. 4·24	− 1·37
	35	α Coronæ . (E & E)	P	1·0	16·6	32·1	47·7	3·1	18·7	34·3	..	..	15. 28. 47·64		48·06	57·05	8·99		15. 28. 57·11	− 1·21
Nov. 29	36	⊙ 1 L....(E & E)	P	4·1	19·0	34·0	48·9	3·7	18·5	33·4	..	..	16. 21. 48·80		} 58·79				16. 23. 7·89	
	37	⊙ 2 L....(E & E)	P	..	..	..	..	23·7	39·0	53·8	..	..	16. 24. 8·98							
	38	α Ophiuchi (E&E)	P	47·3	1·4	15·6	29·8	44·0	57·9	12·2	..	..	17. 28. 29·74		30·01	39·05	9·04		17. 28. 39·11	− 1·72
	39	μ Herculis (E & E)	P	12·7	28·5	44·0	59·7	15·2	31·0	46·3	..	..	17. 40. 59·63		0·06	9·35	9·29		17. 41. 9·22	− 1·12
	40	δ Ursæ Min. (E&E)	P	21·5	9·0	56·0	43·5	..	50·0	35·5	23·5	9·0	18. 15. 15·09		21·63	31·29			18. 15. 30·82	+41·53
	41	α Lyræ ... (E & E)	P	18·0	35·6	53·2	10·9	28·6	46·5	4·2	..	..	18. 32. 10·99		11·54	20·85	9·31		18. 32. 20·74	− 0·81
	42	β Lyræ ... (E & E)	P	..	..	38·5	55·0	11·6	28·0	44·6	..	..	18. 44. 55·00		55·49	4·72	9·23		18. 45. 4·70	− 1·16
	43	Venus 1 L. (E & E)	P	14·8	30·2	45·5	0·6	16·0	31·2	46·4	..	..	18. 51. 0·67		0·52				18. 51. 10·24	
	44	65 Pegasi . (E & E)	P	4·1	18·8	33·6	48·1	3·0	17·6	32·4	..	..	23. 15. 48·23		48·57				23. 15. 57·99	− 3·73
	45	14 Piscium (E & E)	P	22·0	35·9	49·8	3·5	17·5	31·2	45·0	..	..	23. 27. 3·56		3·69				23. 27. 13·12	− 3·69
	46	80 Pegasi . (E & E)	P	36·7	51·1	5·3	19·3	33·3	47·3	1·2	..	..	23. 44. 19·17		19·40				23. 44. 28·84	− 3·86
	47	ω Piscium . (E & E)	P	32·2	46·1	0·0	14·0	27·9	41·7	55·6	..	..	23. 52. 13·93		14·13	23·60	9·47		23. 52. 23·58	− 3·90

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Correction for passage of Semidiameter, No. 43, $+0^s{\cdot}51$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
November 28 and 29. The azimuthal error by Polaris, Polaris S.P., and Polaris.

11. Faint; blurred.
12. Very faint.
34. Disturbed by noise at the passage over the 1st wire.
36, 37. The clock-beats almost inaudible.
40. Very faint at times; cirrus cloud passing.
43. Unsatisfactory.
45. The time at each wire has been decreased 1^s.
46. The time at each wire has been increased 10^s.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Nov.29	1	2 Ceti ...(E & E)	P	..	11·4	25·9	40·6	55·1	9·7	24·2	..	..	23. 56. 40·54	− 3·21	40·47	49·91	9·44	9·46	23. 56. 49·93	− 3·72
	2	Neptune..(E & E)	P	11·5	25·5	39·2	53·1	7·0	21·0	34·8	..	..	0. 22. 53·16	(+ 10·12)	53·32			[1·14]	0. 23. 2·80	
	3	ε Piscium.(E & E)	P	6·0	20·0	33·9	47·7	1·7	15·7	29·6	..	..	0. 55. 47·80	[− 1·31]	48·01	57·51	9·50		0. 55. 57·51	− 4·28
	4	Polaris ...(E & E)	P	45·0	40·0	32·0	26·0	8·0	55·5	48·5	41·5	33·0	1. 10. 8·00		23·25	34·08	10·83		1. 10. 32·77	−75·09
	5	η Piscium.(E & E)	P	24·6	38·9	53·2	7·4	21·7	45·8	0·3	..	..	1. 24. 7·41		7·71	17·16	9·45		1. 24. 17·24	− 4·59
	6	χ Androm.(E & E)	P	..	..	48·9	7·8	27·2	46·1	5·3	..	..	1. 31. 7·92		8·54				1. 31. 18·07	− 5·69
	7	Brad. 236.(E & E)	P	10·6	25·2	39·5	54·0	8·2	22·5	37·0	..	..	1. 40. 53·86		54·17				1. 41. 3·71	− 4·74
	8	λ Arietis .(E & E)	P	31·4	46·5	1·3	16·3	31·2	46·2	1·2	..	..	1. 50. 16·30		16·67				1. 50. 26·22	− 4·98
	9	19 Arietis (E & E)	P	50·6	4·9	19·2	33·4	47·6	2·4	16·4	..	..	2. 5. 33·50		33·80				2. 5. 43·36	− 4·83
	10	ξ^2 Ceti ...(E & E)	P	..	..	37·0	50·6	4·8	18·7	32·5	..	..	2. 20. 50·75		50·97	0·55	9·58		2. 21. 0·54	− 4·70
	11	δ Ceti ....(E & E)	P	44·2	58·0	11·8	25·6	39·4	53·3	7·1	..	..	2. 32. 25·63		25·76	35·39	9·63		2. 32. 35·34	− 4·55
	12	ο Arietis..(E & E)	P	16·2	30·2	44·4	58·6	12·8	27·1	41·4	..	..	2. 36. 58·67		58·97				2. 37. 8·56	− 4·97
	13	Groom.585(E & E)	P	19·0	39·2	59·3	19·5	39·7	59·9	19·9	..	..	2. 47. 19·49		20·17				2. 47. 29·76	− 6·60
	14	93 Ceti...(E &,E)	P	28·7	42·4	56·3	10·1	24·0	38·0	51·8	..	..	2. 54. 10·19		10·37				2. 54. 19·97	− 4·71
	15	Bradley 442(E&E)	P	40·4	14·1	48·1	21·6	55·4	29·4	3·1	..	..	3. 4. 21·72		22·87				3. 4. 32·48	− 9·61
	16	Groom. 698 (E&E)	P	..	19·3	37·7	56·7	15·5	34·0	52·7	..	..	3. 22. 56·62		57·23				3. 23. 6·85	− 6·48
	17	Groom. 743 (E&E)	P	35·2	54·7	14·0	33·6	53·0	12·2	31·8	..	..	3. 40. 33·49		34·13				3. 40. 43·76	− 6·73
	18	*N.P.D. 33°. 38′(E&E)	P	..	20·5	45·5	10·3	35·5	0·5	25·7	..	..	3. 56. 10·50		11·35				3. 56. 21·00	− 8·11
	19	υ^1 Tauri..(E & E)	P	20·9	36·0	51·1	6·0	21·0	35·9	50·9	..	..	4. 18. 5·97		6·34				4. 18. 16·01	− 5·52
	20	Mars 1 L. (E & E)	P	43·4	58·4	13·4	28·5	43·5	58·8	13·6	..	..	4. 31. 28·52		28·90				4. 31. 39·30	
	21	99 Tauri .(E & E)	P	..	..	..	..	..	59·3	14·4	..	..	4. 49. 29·08		29·46				4. 49. 39·15	− 5·58
	22	β Tauri ..(E & E)	P	50·2	6·0	21·7	37·5	53·3	9·0	24·5	..	..	5. 17. 37·45		37·88	47·59	9·71		5. 17. 47·59	− 5·77
	23	ε Orionis .(E & E)	P	32·1	45·9	59·6	13·8	27·4	41·2	55·0	..	..	5. 29. 13·57		13·70	23·45	9·75		5. 29. 23·42	− 4·69
	24	Fortuna ..(E & E)	P	31·9	46·6	1·6	16·3	31·4	46·2	1·0	..	..	5. 34. 16·42		16·77				5. 34. 26·49	
Nov.30	25	υ^1 Tauri	JC	..	53·4	56·3	59·3	5·2	11·2	14·2	17·1	..	4. 18. 5·19	(+9·74)	5·50			10·26	4. 18. 15·94	− 5·53
	26	ε Tauri.....	JC	20·6	23·9	26·8	29·6	35·3	41·4	44·3	47·1	50·2	4. 20. 35·41	[−2·00]	35·68	46·06	10·38	0·98	....	
	27	Mars 1 L.	JC	32·0	35·0	38·2	41·2	47·1	53·1	56·2	59·0	2·2	4. 29. 47·06		} 48·07				4. 29. 58·51	
	28	Mars 2 L.	JC	33·4	36·6	39·5	42·5	48·4	54·5	57·4	0·5	3·6	4. 29. 48·44							
	29	μ Eridani	JC	22·6	25·4	28·1	30·9	36·4	42·0	44·7	47·4	50·2	4. 38. 36·37		36·40	46·93	10·53		....	
	30	99 Tauri.....	JC	13·4	16·5	19·5	22·5	28·5	34·6	37·8	40·7	43·6	4. 49. 28·52		28·84				4. 49. 39·30	− 5·59
	31	β Tauri	JC	21·0	24·3	27·4	30·6	36·9	43·1	46·3	49·4	52·6	5. 17. 36·80		37·17	47·61	10·44		....	
	32	Polaris S.P.(E & E)	K	..	..	57·0	50·0	37·0	19·0	..	5·0	..	13. 10. 37·39		22·45	33·28	10·83	10·50	1. 10. 33·40	−74·29
																		[0·82]		
Dec. 1	33	⊙ 2 L.....	K	..	33·3	36·3	39·4	45·4	51·3	54·2	57·2	..	16. 32. 45·24		45·05				16. 31. 45·81	
	34	α Ophiuchi.....	K	13·7	16·5	19·5	22·3	27·8	33·6	36·5	39·2	42·1	17. 28. 27·86		28·07	39·06	10·99		17. 28. 39·17	− 1·73
	35	Venus 1 L.....	K	29·3	32·3	35·4	38·4	44·5	50·7	53·6	56·6	59·9	19. 1. 44·47		44·24				49. 1. 55·90	
	36	Bradley 2924....	K	..	27·4	30·2	33·0	38·5	44·1	46·9	49·6	..	22. 6. 38·47		38·48				22. 6. 49·74	− 3·23
	37	θ Aquarii	K	17·4	20·2	23·0	25·8	31·1	37·0	39·7	42·6	45·4	22. 9. 31·30		31·27	42·52	11·25		22. 9. 42·53	− 3·25
	38	54 Aquarii.....	K	6·1	9·0	11·9	14·6	20·2	26·0	28·7	31·4	34·4	22. 19. 20·21		20·15				22. 19. 31·41	− 3·31
	39	60 Aquarii.....	K	40·4	43·4	46·2	48·9	54·3	59·9	2·5	5·4	8·2	22. 26. 54·30		54·34				22. 27. 5·61	− 3·33
	40	ζ Pegasi ..(E & E)	S	50·5	4·4	18·7	32·6	46·8	0·9	14·5	..	..	22. 34. 32·63		32·80	44·10	11·30	10·52†	....	
	41	λ Aquarii .(E & E)	S	41·2	55·1	9·0	23·4	37·1	51·2	5·1	..	..	22. 45. 23·16		23·13	34·42	11·29		....	
	42	9 Ceti.....	K	..	..	..	..	..	..	54·7	57·6	0·4	0. 15. 46·16		46·08			11·32	0. 15. 57·41	− 3·84
	43	48 Piscium	K	47·4	50·3	53·0	56·0	1·6	7·6	10·4	13·2	16·1	0. 21. 1·68		1·92				0. 21. 13·25	− 4·18
	44	Neptune.....	K	..	..	..	..	..	..	28·9	..	..	0. 22. 47·41		47·50				0. 22. 58·83	
	45	15 Ceti.....	K	46·2	49·2	..	54·6	0·0	5·7	..	11·2	13·9	0. 31. 0·07		0·13				0. 31. 11·47	− 4·01
	46	β Ceti.....	K	23·8	26·8	29·6	32·4	38·4	44·3	47·1	50·1	52·9	0. 36. 38·33		38·18	49·48	11·30		0. 36. 49·52	− 3·84
	47	18 Ceti.....	K	17·3	20·4	23·1	25·9	31·6	37·4	40·2	43·0	45·9	0. 38. 31·59		31·51				0. 38. 42·85	− 3·90

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 20, 33, and 35, $+ 0^s{\cdot}73$: $- 70^s{\cdot}30$: and $+ 0^s{\cdot}51$.
† This clock-error has been used in the reduction of the observations made with the Altazimuth.
November 30 to December 2. The azimuthal error by four consecutive transits of Polaris.

2. Very faint; observed over the wires illuminated.
20. The time at each wire has been increased 1^s.
32, 34. Extremely faint.
5. The time at each wire has been increased 10^s.
21. Very doubtful.
44. Very faint; observed over wire Z only.
10. Disturbed by noise.
24. Several objects near this.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	″	s	s	s	s	h m s	s
Dec. 1	1	φ^2 Ceti	K	57·5	0·4	3·2	6·0	11·6	17·2	20·2	22·9	25·8	0. 43. 11·59	−3·21	11·54			11·32	0. 43. 22·88	− 3·93
	2	21 Ceti	K	4·5	7·4	10·2	13·0	18·7	24·4	27·1	30·0	32·6	0. 47. 18·61	(9·74)	18·58			[0·82]	0. 47. 29·93	− 3·99
	3	25 Ceti	K	48·7	51·5	54·3	57·1	2·6	8·2	10·9	13·7	16·4	0. 56. 2·55	[− 2·00]	2·56				0. 56. 13·91	− 4·07
	4	73 Piscium	K	28·8	31·8	34·5	37·1	42·6	48·3	51·0	53·9	56·6	0. 57. 42·68		42·80				0. 57. 54·15	− 4·25
	5	32 Ceti	K	..	..	..	..	..	21·4	24·0	26·6	29·4	1. 3. 15·47		15·43				1. 3. 26·78	− 4·05
	6	Polaris ...(E & E)	K	..	..	..	..	..	54·0	46·0	39·0	31·0	1. 10. 5·85		21·41	32·99	11·58		1. 10. 32·77	−74·00
	7	η Piscium	K	51·3	54·1	57·0	0·0	5·6	11·4	14·1	17·0	20·0	1. 24. 5·57		5·80	17·14	11·34		1. 24. 17·17	− 4·57
	8	ξ Piscium	K	10·1	13·0	15·7	18·6	24·0	29·5	32·4	35·0	37·8	1. 46. 23·96		24·06				1. 46. 35·44	− 4·43
	9	57 Ceti	K	0·1	3·2	6·4	9·4	15·0	21·0	24·2	27·2	30·1	1. 53. 15·12		14·94				1. 53. 26·32	− 4·03
	10	62 Ceti	K	55·4	58·5	1·2	3·9	9·4	15·0	17·9	20·5	23·3	2. 2. 9·41		9·44				2. 2. 20·83	− 4·39
	11	67 Ceti	K	51·0	54·0	56·7	59·4	4·9	10·6	13·4	16·4	18·8	2. 10. 4·97		4·96	16·37	11·41		2. 10. 16·35	− 4·33
	12	10 Trianguli	K	..	..	..	51·8	58·1	4·4	7·7	10·8	13·8	2. 10. 58·11		58·49				2. 11. 9·88	− 5·29
	13	Bradley 336	K	33·0	35·8	38·6	41·4	46·9	52·7	55·5	58·2	0·9	2. 16. 46·95		47·12				2. 16. 58·52	− 4·73
	14	26 Arietis	K	39·8	42·9	45·9	48·7	54·4	0·4	3·1	6·2	9·0	2. 22. 54·43		54·70				2. 23. 6·10	− 5·05
	15	84 Ceti	K	55·2	58·3	1·0	3·7	9·0	14·7	17·5	20·1	22·9	2. 34. 9·11		9·17				2. 34. 20·58	− 4·54
	16	σ Arietis	K	38·4	41·2	44·1	47·0	52·7	58·3	1·1	4·2	6·9	2. 43. 52·60		52·83	4·24	11·41		2. 44. 4·24	− 4·98
	17	Groombridge 585.	K	57·4	1·5	5·6	9·8	17·7	26·0	29·9	34·0	37·9	2. 47. 17·69		18·32				2 47. 29·73	− 6·60
	18	29 Persei	K	..	..	..	..	52·5	1·2	5·4	9·8	13·8	3. 8. 52·49		53·17				3. 9. 4·60	− 7·05
	19	o Tauri	K	..	12·0	14·9	17·7	23·1	28·8	31·6	34·4	..	3. 17. 23·16		23·32	34·77	11·45		3. 17. 34·75	− 4·91
	20	Groombridge 698.	K	..	..	..	..	..	..	6·4	..	13·8	3. 22. 55·07		55·63				3. 23. 7·06	− 6·49
	21	Groombridge 717.	K	..	..	..	..	43·0	50·4	54·2	58·0	1·7	3. 29. 42·96		43·52				3. 29. 54·96	− 6·50
	22	υ^1 Tauri	K	49·2	52·2	55·4	58·2	4·1	10·1	13·1	16·2	19·2	4. 18. 4·14		4·45				4. 18. 15·92	− 5·54
	23	Mars 1 L.	K	50·8	54·0	57·0	59·9	6·0	12·1	15·0	18·0	21·1	4. 28. 5·94		} 7·02				4. 28. 18·49	
	24	Mars 2 L.	K	52·5	55·4	58·5	1·5	7·5	13·4	16·6	19·5	22·5	4. 28. 7·44							
	25	τ Tauri	K	43·9	46·8	50·0	52·9	58·8	4·9	8·0	10·8	13·9	4. 33. 58·84		59·16				4. 34. 10·63	− 5·55
	26	δ Orionis	K	42·7	45·6	48·4	51·2	56·6	2·3	5·0	7·8	10·6	5. 24. 56·65		56·73	8·31	11·58		5. 25. 8·23	− 4·75
	27	Polaris S.P.(E&E)	C	..	..	..	..	34·0	21·0	..	..	4·0	13. 10. 37·66	(+ 10·56)	21·02	32·68	11·66	11·11	1. 10. 32·52	−73·69
	28	Spica	C	39·0	41·9	44·8	47·5	53·1	58·7	1·5	4·4	7·4	13. 17. 53·09		53·07	4·65	11·58	[0·72]	13. 18. 4·58	− 2·78
	29	ϵ Boötis	C	36·6	39·9	43·0	46·0	52·4	58·6	1·8	4·7	8·0	14. 38. 52·28		52·71	4·30	11·59		14. 39. 4·26	− 1·43
	30	β Ursæ Minoris	C	55·9	6·8	17·3	27·6	48·6	..	..	..	..	14. 50. 48·46		50·36				14. 51. 1·92	+ 6·13
	31	β Boötis	C	19·6	23·3	27·0	30·5	37·9	45·2	48·9	52·6	56·2	14. 56. 37·85		38·46				14. 56. 50·02	− 0·62
	32	ψ Boötis	C	10·9	14·0	17·2	20·4	26·5	32·7	35·9	38·9	42·1	14. 58. 26·47		26·89	38·46	11·57		14. 58. 38·45	− 1·33
	33	β Libræ	C	18·4	21·2	24·0	26·8	32·3	..	..	..	..	15. 9. 32·33		32·33	43·90	11·57		15. 9. 43·89	− 2·42
	34	δ Boötis	C	..	..	..	..	..	56·8	0·1	3·4	6·8	15. 9. 50·06		50·56				15. 10. 2·12	− 0·98
	35	Groombridge 2214	C	..	..	..	..	..	4·0	11·0	17·8	..	15. 12. 48·74		50·10				15. 13. 1·67	+ 3·45
	36	11 Ursæ Minoris.	C	..	..	..	..	..	13·5	22·4	31·5	40·4	15. 16. 54·90		56·54				15. 17. 8·11	+ 5·27
	37	ι Draconis	C	..	..	..	..	40·3	51·3	56·6	2·1	7·4	15. 21. 40·22		41·20				15. 21. 52·77	+ 1·54
	38	α Coronæ	C	29·6	32·6	35·8	38·9	45·0	51·3	54·5	57·5	0·6	15. 28. 45·03		45·45	57·10	11·65		15. 28. 57·02	− 1·26
	39	α Serpentis	C	..	..	16·2	18·9	24·4	30·1	32·8	35·6	38·4	15. 37. 24·43		24·61	36·20	11·59		15. 37. 36·19	− 1·96
	40	ϵ Serpentis	C	38·6	41·6	44·3	47·0	52·6	58·2	0·8	3·8	6·4	15. 43. 52·54		52·70	4·31	11·61		15. 44. 4·28	− 2·01
	41	γ Serpentis	C	45·7	48·5	51·6	54·4	0·1	6·0	8·8	11·6	14·4	15. 50. 0·07		0·37	12·08	11·71		15. 50. 11·96	− 1·70
	42	Groombridge 2320	C	..	..	..	..	..	3·5	..	18·0	..	16. 5. 48·28		49·66				16. 6. 1·25	+ 4·04
	43	τ Herculis	C	..	..	..	..	26·7	34·8	39·0	43·0	46·9	16. 15. 26·74		27·44				16. 15. 39·04	+ 0·18
	44	η Draconis	C	25·0	31·1	36·9	42·6	54·2	6·2	12·0	17·9	23·6	16. 21. 54·29		55·39				16. 22. 6·99	+ 2·31
	45	A Draconis	C	..	..	..	..	..	13·9	21·6	29·2	36·9	16. 27. 58·15		59·58				16. 28. 11·18	+ 4·45
Dec. 2	46	⊙ 1 L.	C	29·0	32·3	35·2	38·2	44·1	50·2	53·2	56·2	59·1	16. 34. 44·11		} 54·31				16. 36. 5·92	
	47	⊙ 2 L.	C	50·0	53·0	56·0	58·8	4·8	11·0	14·0	16·9	19·9	16. 37. 4·88							
	48	ϵ Herculis	C	..	..	..	..	54·0	0·6	3·9	7·0	10·2	16. 54. 54·04		54·51	6·17	11·66		16. 55. 6·13	− 0·90

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, 31ʳ·000.

27. An extremely bad image.

35, 42. Cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Dec. 2	1	ε Ursæ Min.(E&E)	C	45·5	6·5	27·0	47·5	27·6	..	..	..	..	16. 59. 28·01	− 3·21	31·48			11·11	16. 59. 43·10	+18·15
	2	α Herculis	C	2·4	5·3	8·2	11·0	16·7	22·5	25·4	28·3	31·0	17. 8. 16·71	(+10·56)	16·98	28·48	11·50	[0·72]	17. 8. 28·60	− 1·64
	3	Mercury 1 L.	C	54·2	57·2	0·3	3·3	9·4	15·5	18·7	21·6	24·9	17. 28. 9·41	[− 2·00]	9·18				17. 28. 20·98	
	4	β Ophiuchi	C	21·6	24·4	27·3	30·0	35·5	41·1	44·0	46·6	49·5	17. 36. 35·51		35·66	47·24	11·58		17. 36. 47·30	− 1·98
	5	ω Draconis	C	..	..	..	..	..	43·4	51·0	58·5	6·2	17. 37. 27·84		29·26				17. 37. 40·90	+ 4·20
	6	36 Draconis	C	19·7	26·3	32·5	39·0	51·6	4·5	10·9	17·2	23·6	18. 12. 51·59		52·79				18. 13. 4·45	+ 2·49
	7	δ Ursæ Minoris	C	..	..	..	..	..	46·0	33·3	19·5	6·0	18. 15. 11·63		19·03	30·52			18. 15. 30·69	+42·30
	8	α Lyræ	C	50·9	54·6	58·2	1·7	8·6	15·9	19·3	22·8	26·4	18. 32. 8·65		9·23	20·82	11·59		18. 32. 20·90	− 0·78
	9	Cep. 51 S.P.(E&E)	C	..	..	41·0	38·0	34·5	27·5	25·5	..	..	18. 36. 34·41		26·03	38·78			6. 36. 37·70	−57·38
	10	β Lyræ	C	36·0	39·5	42·7	46·0	52·6	59·2	2·6	5·8	9·1	18. 44. 52·55		53·04	4·69	11·65		18. 45. 4·71	− 1·13
	11	ε Aquilæ	C	2·7	5·6	8·4	11·3	17·0	22·7	25·5	28·4	31·2	18. 53. 16·93		17·20	28·86	11·66		18. 53. 28·88	− 1·88
	12	ζ Aquilæ	C	45·4	48·3	51·1	54·0	59·5	5·4	8·2	11·0	13·9	18. 58. 59·60		59·86	11·47	11·61		18. 59. 11·54	− 1·94
	13	Venus 1 L.	C	50·2	53·4	56·4	59·3	5·3	11·5	14·6	17·6	20·7	19. 7. 5·39		5·17				19. 7. 17·37	
	14	α Aquarii	E	25·0	28·0	30·6	33·4	39·0	44·5	47·2	50·1	52·8	21. 58. 38·91		39·00	50·97	11·97	11·27†	....	
	15	ι Pegasi	E	16·4	19·5	22·4	25·5	31·6	37·9	40·9	43·8	46·8	22. 0. 31·59		31·97	43·86	11·89		....	
	16	α Pegasi	C	36·4	39·4	42·2	45·1	50·7	56·5	59·3	2·3	5·0	22. 57. 50·72		50·99	2·77	11·78	11·11	22. 58. 2·79	− 3·51
	17	16 Piscium	C	4·8	7·7	10·4	13·3	18·8	24·3	27·0	29·9	32·5	23. 29. 18·70		18·83				23. 29. 38·64	− 3·67
	18	Oeltz. Arg. 25927	C	50·0	1·8	14·2	26·0	49·8	..	..	..	..	23. 34. 49·59		51·70				23. 35. 3·52	− 6·03
	19	Neptune	C	31·4	34·1	36·9	39·6	45·2	50·8	53·4	56·3	59·0	0. 22. 45·13		45·25			11·83	0. 22. 57·09	
	20	β Ceti	C	23·3	26·3	29·1	32·1	37·9	43·8	46·7	49·5	52·5	0. 36. 37·86		37·72	49·47	11·75		0. 36. 49·57	− 3·83
	21	Polaris	C	43·0	36·0	28·0	21·0	3·5	..	..	..	..	1. 10. 4·14		21·46	32·34	10·68		1. 10. 33·32	−73·35
Dec. 5	22	⊙ 1 L.	JC	30·0	33·0	36·0	38·9	45·0	50·9	54·0	57·0	0·0	16. 47. 44·92	−3·45	55·28			13·54	16. 49. 9·44	
	23	⊙ 2 L.	JC	51·1	54·1	57·0	0·1	6·0	12·1	15·1	18·1	21·1	16. 50. 6·03	(+8·81)				[0·89]		
	24	α Ophiuchi	JC	..	..	..	..	..	53·0	7·2	..	..	17. 28. 24·67	[−1·84]	24·83	39·07	14·24		17. 28. 39·02	− 1·74
	25	α Lyræ	JC	48·4	52·1	55·6	..	6·1	..	16·9	20·4	23·9	18. 32. 6·14		6·56	20·80	14·24		18. 32. 20·79	− 0·76
	26	β Lyræ	JC	..	..	..	..	..	23·0	39·6	..	..	18. 44. 49·98		50·33	4·67	14·34		18. 45. 4·57	− 1·11
	27	Venus 1 L.	JC	47·9	50·7	53·9	56·9	3·0	9·0	12·1	15·2	18·1	19. 23. 2·93		2·70				19. 23. 17·48	
	28	θ Capricorni	D	52·1	55·0	57·9	0·8	6·6	12·4	15·4	18·3	21·1	20. 58. 6·58		6·44	20·84	14·40	13·60†	....	
	29	ζ Cygni	D	40·6	14·0	47·1	50·3	56·6	2·9	6·2	9·4	12·5	21. 6. 56·58		56·91	11·29	14·38		....	
	30	α Equulei	D	36·0	38·7	41·5	44·2	49·8	55·4	58·2	1·0	3·7	21. 8. 49·78		49·86	4·21	14·35		....	
	31	θ Aquarii	JC	14·1	17·0	19·7	22·6	28·3	33·9	36·6	39·3	42·4	22. 9. 28·16		28·12	42·47	14·35	13·54	22. 9. 42·48	− 3·20
	32	☽ 1 L.	JC	21·4	24·3	27·0	30·0	35·4	41·4	44·2	47·0	50·0	22. 23. 35·59		35·59				22. 24. 57·30	
	33	Fomalhaut	JC	41·1	44·2	47·6	50·6	..	3·4	6·6	9·9	13·0	22. 49. 56·99		56·68	11·09	14·41		22. 50. 11·07	− 3·39
	34	β Piscium	JC	32·5	35·4	38·1	40·9	46·4	52·0	54·6	57·4	0·3	22. 56. 46·35		46·43				22. 57. 0·82	− 3·45
	35	59 Pegasi	JC	27·4	30·3	33·0	35·8	41·2	46·9	49·6	52·6	55·1	23. 4. 41·27		41·39				23. 4. 55·78	− 3·50
	36	γ Piscium	JC	..	..	..	..	56·0	1·6	4·4	7·1	10·0	23. 9. 56·02		56·09	10·46	14·37		23. 10. 10·49	− 3·57
	37	66 Pegasi	JC	..	..	..	56·4	2·2	7·9	10·6	13·4	16·3	23. 16. 2·10		2·25				23. 16. 16·65	− 3·61
	38	69 Pegasi	JC	29·0	32·1	35·1	38·2	44·3	50·4	53·5	56·5	59·5	23. 20. 44·24		44·51				23. 20. 58·91	− 3·72
	39	13 Piscium	JC	34·3	37·0	39·8	42·6	48·0	53·6	56·4	59·1	2·0	23. 24. 48·04		48·07				23. 25. 2·48	− 3·60
	40	ω^1 Aquarii	JC	18·8	21·6	24·6	27·4	33·1	38·6	41·6	44·6	47·5	23. 32. 33·04		32·93				23. 32. 47·34	− 3·57
	41	ω^2 Aquarii	JC	15·0	18·2	20·7	23·7	29·4	35·1	38·1	41·0	43·9	23. 35. 29·41		29·29				23. 35. 43·70	− 3·59
	42	i^2 Aquarii(1st star)	JC	31·6	34·5	37·3	40·4	46·1	..	..	..	..	23. 38. 46·15		45·99				23. 39. 0·41	− 3·57
	43	i^2 Aquarii(2nd star)	JC	..	..	..	..	..	52·4	55·1	58·4	1·0	23. 38. 46·40		46·24				23. 39. 0·66	− 3·57
	44	γ Pegasi	JC	49·3	52·2	55·0	..	3·5	..	12·1	15·0	17·9	0. 6. 3·53		3·71	18·12	14·41	14·43	0. 6. 18·14	− 4·01
	45	Neptune	JC	23·9	26·8	29·5	32·3	37·7	43·4	46·0	48·8	51·6	0. 22. 37·73		37·79				0. 22. 52·23	
	46	β Can. Ven. S.P.	JC	..	49·1	52·7	56·5	4·2	11·4	15·1	18·6	..	0. 27. 4·03		4·12				12. 27. 18·57	− 2·11
	47	μ Andromedæ	JC	45·4	49·0	52·5	55·9	2·9	10·0	13·4	16·8	20·5	0. 49. 2·87		3·28	17·71	14·43		0. 49. 17·74	− 4·89
	48	25 Ceti	JC	45·6	48·5	51·3	54·0	59·4	5·1	7·8	10·6	13·4	0. 55. 59·47		59·47				0. 56. 13·93	− 4·03

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.

Corrections for passage of Semidiameter, Nos. 3, 13, 27, and 32, + $0^s{\cdot}17$: + $0^s{\cdot}52$: + $0^s{\cdot}52$: and + $67^s{\cdot}34$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

December 5. The azimuthal error by tabular places of Polaris and β Arietis, allowing $0^s{\cdot}02$ for clock-rate.

21. Faint; cloudy.

24, 26. Observed over wires Y, Z.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	s	s	s	s	s	h m s	s
Dec. 15	1	ψ^1 Piscium.....	JC	58·6	1·8	4·7	7·6	13·4	19·5	22·4	25·3	28·4	0. 58. 13·47	−3·45	13·70			14·43	0. 58. 28·17	− 4·52
	2	Bradley 122	JC	59·4	2·5	5·4	8·4	14·2	20·2	23·1	26·1	29·0	0. 58. 14·20	(+8·81)	14·43			[0·89]	0. 58. 28·90	− 4·52
	3	Lalande 2222 ...	JC	15·9	18·9	21·6	24·2	29·9	35·6	38·5	41·2	44·0	1. 8. 29·93	[−1·84]	30·07				1. 8. 44·54	− 4·34
	4	Polaris....(E&E)	JC	40·0	35·0	28·0	19·5	..	..	44·0	..	..	1. 10. 3·02		15·66	30·16	14·50		....	
	5	β Arietis	JC	43·2	46·2	49·2	52·3	58·0	4·0	6·9	9·8	12·7	1. 46. 57·99		58·21	12·74	14·53		1. 47. 12·71	− 4·84
	6	7 Arietis	JC	..	..	..	..	..	12·6	15·4	18·5	21·6	1. 48. 6·46		6·72				1. 48. 21·22	− 4·94
	7	λ Arietis.....	JC	56·6	59·6	2·6	5·7	11·5	17·6	20·5	23·5	26·6	1. 50. 11·53		11·79				1. 50. 26·29	− 4·94
	8	61 Ceti.....	JC	26·6	..	32·2	35·0	40·4	45·9	48·6	..	54·3	1. 56. 40·39		40·43				1. 56. 54·93	− 4·40
	9	β Trianguli	JC	1·4	..	8·1	11·6	18·2	25·0	28·5	..	35·0	2. 1. 18·20		18·57				2. 1. 33·07	− 5·47
	10	19 Arietis	JC	14·2	..	20·0	23·1	28·6	34·4	37·2	..	42·9	2. 5. 28·58		28·75				2. 5. 43·26	− 4·81
	11	W. B. II. 109 ...	JC	..	..	..	..	..	..	29·4	32·2	35·0	2. 8. 20·68		20·86				2. 8. 35·37	− 4·83
	12	Groombridge 698	JC	..	..	..	44·6	51·9	59·4	3·1	6·8	10·6	3. 22. 51·86		52·32				3. 23. 6·87	− 6·50
	13	Groombridge 713	JC	21·9	25·7	29·4	33·1	40·5	48·1	51·7	55·5	59·2	3. 28. 40·51		40·97				3. 28. 55·53	− 6·52
	14	Groombridge 717	JC	..	..	28·7	32·6	39·9	47·4	51·1	..	..	3. 29. 39·87		40·33				3. 29. 54·89	− 6·52
	15	η Tauri.....	JC	0·0	3·1	6·1	9·0	14·9	21·2	24·1	27·1	30·2	3. 39. 15·02		15·29	29·82	14·53		3. 39. 29·86	− 5·53
	16	Groombridge 743	JC	..	..	..	..	28·6	36·6	40·5	44·4	48·1	3. 40. 28·71		29·20				3. 40. 43·77	− 6·77
	17	36 Tauri	JC	..	..	..	..	..	10·8	13·7	17·0	19·8	3. 56. 4·68		4·95				3. 56. 19·53	− 5·58
	18	Mars 1 L.	JC	17·5	20·6	23·6	26·6	32·6	38·6	41·7	44·7	47·6	4. 21. 32·56		} 33·49				4. 21. 48·08	
	19	Mars 2 L.	JC	18·7	21·9	24·9	27·9	33·9	40·0	43·0	46·1	49·0	4. 21. 33·88							
Dec. 6	20	θ Aquarii.....	E	13·1	16·0	18·8	21·5	27·1	32·8	35·6	38·5	41·1	22. 9. 27·12	[2·02]	27·07	42·46	15·39	14·58†	....	
	21	γ Aquarii.....	E	11·7	14·5	17·4	20·1	25·6	31·3	34·0	36·7	39·4	22. 14. 25·59		25·60	41·04	15·44	[0·91]	....	
	22	β Piscium.....	C	31·5	34·4	37·1	40·0	45·3	51·0	53·8	56·5	59·3	22. 56. 45·38		45·45			14·38	22. 57. 0·70	− 3·42
	23	γ Piscium	C	41·3	44·1	46·9	49·8	55·1	0·8	3·5	6·3	9·0	23. 9. 55·15		55·21	10·45	15·24		23. 10. 10·47	− 3·56
	24	) 1 L.....	C	36·1	39·0	41·8	44·6	50·4	56·1	58·7	1·6	4·5	23. 18. 50·26		50·28				23. 20. 12·67	
	25	ι Piscium	C	31·8	34·6	37·4	40·2	45·8	51·2	54·1	56·9	59·5	23. 32. 45·68		45·76	1·02	15·26		23. 33. 1·03	− 3·69
	26	ω Piscium.....	C	54·2	57·1	59·9	2·5	8·1	13·8	16·5	19·3	22·1	23. 52. 8·12		8·21	23·52	15·31		23. 52. 23·50	− 3·82
	27	ρ Andromedæ ...	C	..	..	36·5	40·0	46·8	53·8	57·2	0·7	4·1	0. 13. 46·77		47·17			15·29	0. 14. 2·47	− 4·46
	28	β Ceti.....	C	19·9	22·8	25·6	28·6	34·4	40·3	43·1	46·1	49·0	0. 36. 34·37		34·20	49·43	15·23		0. 36. 49·51	− 3·79
	29	64 Piscium.....	C	24·5	27·4	30·4	33·3	39·0	44·8	47·7	50·5	53·4	0. 41. 38·95		39·14				0. 41. 54·46	− 4·29
	30	2 Ursæ Min.(E&E)	C	49·5	25·0	1·5	37·0	47·0	..	..	..	..	0. 50. 46·96		51·29				0. 51. 6·61	−21·88
	31	ϵ Piscium	C	28·0	30·8	33·6	36·4	42·0	47·6	50·4	53·1	56·0	0. 55. 41·94		42·05	57·45	15·40		0. 55. 57·37	− 4·22
	32	Polaris ....(E&E)	C	38·0	33·0	25·0	18·5	1·5	..	..	..	..	1. 10. 1·10		14·03	29·44	15·41		....	
	33	Bradley 253.....	C	24·9	28·4	31·8	35·2	42·1	49·0	52·4	55·9	59·2	1. 47. 42·04		42·43				1. 47. 57·79	− 5·44
	34	56 Andromedæ ..	C	37·8	41·3	44·8	48·1	55·0	2·0	5·3	8·8	12·2	1. 47. 54·97		55·36				1. 48. 10·72	− 5·46
	35	60 Ceti.....	C	48·4	51·4	54·1	56·8	2·3	7·9	10·6	13·4	16·1	1. 56. 2·28		2·31				1. 56. 17·67	− 4·57
	36	α Arietis	C	5·1	8·3	11·2	14·2	20·2	26·2	29·1	32·2	35·2	1. 59. 20·14		20·39	35·75	15·36		1. 59. 35·75	− 5·01
	37	γ^1 Eridani	C	16·0	19·0	21·7	24·6	30·2	36·0	38·8	41·7	44·5	3. 51. 30·23		30·12	45·50	15·38		3. 51. 45·56	− 4·42
	38	36 Tauri	C	48·6	51·9	54·8	57·9	3·9	10·0	12·9	16·0	19·0	3. 56. 3·84		4·10				3. 56. 19·54	− 5·59
	39	γ Tauri	C	38·7	41·7	44·4	47·4	52·9	58·8	1·5	4·5	7·4	4. 11. 52·98		53·16	8·71	15·55		4. 12. 8·61	− 5·29
	40	Mars 1 L.	C	42·5	45·5	48·6	51·6	57·5	3·5	6·5	9·5	12·6	4. 19. 57·49		} 58·47				4. 20. 13·92	
	41	Mars 2 L.	C	43·9	47·0	50·1	52·9	58·8	5·0	8·1	11·0	14·0	4. 19. 58·93							
	42	τ Tauri	C	40·0	43·0	46·1	49·0	55·0	1·0	4·0	7·0	10·0	4. 33. 54·96		55·21				4. 34. 10·67	− 5·61
Dec. 8	43	η Aquarii.....	D	..	57·0	59·9	2·7	8·0	13·8	16·4	19·1	..	22. 28. 8·07	[−2·38]	8·08	25·23	17·15	1 2 8	....	
	44	ζ Pegasi	D	12·8	15·6	18·4	21·2	26·8	32·4	35·2	38·0	40·9	22. 34. 26·76		26·87	44·02	17·15	[0·93]	....	
	45	ι Ceti	E	2·2	5·0	8·0	10·8	16·2	22·0	24·9	27·6	30·2	0. 12. 16·28		16·20	33·58	17·38	17·38	0. 12. 33·59	− 3·75
	46	δ Piscium.....	E	10·3	13·2	16·0	18·7	24·2	29·9	32·7	35·6	38·3	0. 41. 24·27		24·36				0. 41. 41·77	− 4·11
	47	ϵ Piscium.....	E	26·1	28·9	31·7	34·4	39·9	45·4	48·2	50·9	53·8	0. 55. 39·87		39·96	57·43	17·47		0. 55. 57·38	− 4·20

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Correction for passage of Semidiameter, No. 24, $+67^s{\cdot}13$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
December 6. The azimuthal error by tabular places of ϵ Piscium and Polaris, allowing $0^s{\cdot}01$ for clock-rate.
December 8. The azimuthal error by tabular places of ϵ Piscium and Polaris, allowing $0^s{\cdot}01$ for clock-rate.

3. Of the 7th magnitude.
28, 30. Faint; very foggy.
18, 19. Scarcely visible at times from cloud.
37. Very faint; cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Dec. 8	1	Polaris ...(E & E)	E	..	28·0	22·5	15·5	..	..	37·0	30·5	..	1. 9. 57·08	−3·45	10·60	28·08	17·48	17·38	....	
	2	☽ 1 L.	E	51·3	54·3	57·2	0·1	5·8	..	..	17·3	20·2	1. 10. 5·75	(+8·81)	5·85			[0·93]	1. 11. 31·21	
	3	η Piscium	E	..	..	51·0	53·9	59·4	5·4	8·2	11·1	..	1. 23. 59·54	[−2·38]	59·69	17·09	17·40		1. 24. 17·12	— 4·52
	4	ο Piscium	E	45·9	48·7	51·3	54·2	59·7	5·3	8·3	11·0	13·8	1. 37. 59·75		59·85				1. 38. 17·29	— 4·49
	5	7 Arietis	E	48·5	51·7	54·7	57·6	3·7	9·7	12·6	15·7	18·7	1. 48. 3·60		3·84				1. 48. 21·29	— 4·90
	6	10 Arietis	E	..	..	..	..	44·0	50·1	53·1	56·3	59·2	1. 55. 43·93		44·18				1. 56. 1·63	— 5·06
	7	14 Arietis	E	13·4	16·5	19·5	22·6	28·6	34·9	37·9	41·0	44·1	2. 1. 28·67		28·92				2. 1. 46·38	— 5·09
	8	Bradley 309.....	E	..	..	..	0·7	6·6	12·4	15·4	18·2	21·1	2. 6. 6·50		6·70				2. 6. 24·16	— 4·92
	9	23 Arietis.....	E	8·0	11·0	14·0	16·9	22·7	28·7	31·6	34·4	37·3	2. 11. 22·68		22·88				2. 11. 40·34	— 4·95
	10	36 Tauri	E	46·8	49·8	52·8	55·9	1·9	8·0	10·9	13·9	17·0	3. 56. 1·84		2·09				3. 56. 19·62	— 5·60
	11	ω^1 Tauri	E	48·0	50·9	53·8	56·7	2·4	8·4	11·4	14·4	17·2	4. 1. 2·53		2·73	20·24	17·51		4. 1. 20·26	— 5·43
	12	o^1 Eridani	E	46·9	49·7	52·4	55·2	0·8	6·4	9·2	12·0	14·9	4. 5. 0·78		0·72	18·26	17·54		4. 5. 18·26	— 4·61
	13	Mars 1 L.....	E	38·2	41·4	44·4	47·2	53·2	59·3	2·4	5·5	8·3	4. 16. 53·27		} 54·19				4. 17. 11·73	
	14	Mars 2 L.....	E	39·5	42·7	45·7	48·7	54·6	0·7	3·7	6·7	9·7	4. 16. 54·61							
	15	Polyhymnia.....	E	50·5	54·0	57·2	0·0	6·1	11·9	15·6	18·7	21·6	5. 10. 6·13		6·39				5. 10. 23·97	
Dec. 9	16	☉ 1 L.	K	57·4	0·5	3·5	6·4	12·4	18·5	21·7	24·6	27·8	17. 5. 12·48	(+9·74)	} 23·01			17·24	17. 6. 40·90	
	17	☉ 2 L.	K	19·1	22·2	25·1	28·2	34·1	40·2	43·2	46·3	49·1	17. 7. 34·11	[−2·96]				[0·91]		
	18	Venus 1 L.	K	50·2	53·2	56·2	59·2	5·1	11·2	14·1	17·3	20·3	19. 44. 5·15		4·87				19. 44. 23·38	
	19	β Aquarii	JC	55·0	58·0	0·7	3·2	8·9	14·7	17·2	20·0	22·9	21. 24. 8·91		8·87	26·73	17·86	17·05†	....	
	20	ξ Aquarii	JC	1·8	4·6	7·4	..	15·7	..	24·1	27·0	29·7	21. 30. 15·71		15·64	33·53	17·89		....	
	21	λ Aquarii	K	2·3	5·2	8·0	10·8	16·3	22·0	24·8	27·6	30·3	22. 45. 16·32		16·26	34·32	18·06	17·24	....	
	22	2 Piscium	K	0·7	3·4	6·2	9·0	14·4	19·9	22·8	25·5	28·4	22. 52. 14·42		14·45				22. 52. 32·56	— 3·38
	23	α Pegasi	K	30·2	33·0	36·0	38·8	44·5	50·2	53·0	55·9	58·7	22. 57. 44·42		44·60	2·68	18·08		....	
	24	Bradley 3066....	K	..	0·0	2·6	5·3	10·9	16·5	19·3	22·1	..	23. 2. 10·90		10·94				23. 2. 29·05	— 3·42
	25	γ Piscium.....	K	38·4	41·2	44·0	46·9	52·1	57·8	0·4	3·2	6·0	23. 9. 52·17		52·23	10·41	18·18		....	
Dec. 10	26	☉ 1 L.	S	20·3	23·3	26·5	29·4	35·3	41·5	44·2	47·7	50·5	17. 9. 35·36		} 45·98			18·28	17. 11. 4·89	
	27	☉ 2 L.	S	42·1	45·3	48·3	51·2	57·2	3·3	6·2	9·1	12·2	17. 11. 57·16					[0·88]		
	28	α Lyræ	S	43·9	47·4	50·9	54·4	1·4	8·7	12·2	15·7	19·1	18. 32. 1·46		1·93	20·78	18·85		18. 32. 20·89	— 0·74
	29	Venus 1 L.	S	2·7	5·9	8·9	12·0	17·9	24·0	27·0	30·0	33·0	19. 49. 17·89		17·61				19. 49. 37·14	
	30	α Aquarii	E	..	..	23·8	26·3	31·9	37·2	40·2	43·0	45·8	21. 58. 31·85		31·86	50·88	19·02	18·19†	....	
	31	ι Pegasi	E	9·2	12·4	15·4	18·5	24·4	30·6	33·6	36·7	39·8	22. 0. 24·46		24·76	43·75	18·99		....	
	32	Bradley 3170....	S	49·9	55·1	0·4	5·8	16·1	26·9	32·4	37·3	42·3	23. 42. 16·16		17·01			18·28	23. 42. 36·16	— 4·42
	33	ω Piscium.....	S	50·4	53·3	55·9	58·8	4·2	10·0	12·8	15·3	18·2	23. 52. 4·27		4·37	23·47	19·10		23. 52. 23·52	— 3·87
	34	29 Piscium.....	S	22·0	24·8	27·3	30·3	35·9	41·3	44·1	46·9	49·8	23. 54. 35·80		35·79				23. 54. 54·95	— 3·69
	35	γ Pegasi	S	44·5	47·2	50·2	53·0	58·9	4·6	7·1	10·1	13·0	0. 5. 58·69		58·87	18·06	19·19	19·16	0. 6. 18·03	— 3·95
	36	Neptune	S	13·7	16·4	19·0	21·9	27·4	32·9	35·9	38·7	41·3	0. 22. 27·42		27·46				0. 22. 46·63	
	37	Groombridge 113.	S	4·2	8·6	12·8	16·8	25·0	33·4	37·7	41·8	46·1	0. 31. 25·08		25·72				0. 31. 44·90	— 4·98
	38	ε Piscium	S	24·2	27·0	29·8	32·5	38·2	43·7	46·4	49·2	52·1	0. 55. 38·07		38·18	57·41	19·23		0. 55. 57·37	— 4·18
	39	Polaris ...(E & E)	S	28·5	23·0	15·5	7·0	52·0	..	..	..	..	1. 9. 51·16		7·64	26·88	19·24		....	
	40	14 Arietis	S	..	..	..	..	42·0	57·5	12·8	..	..	2. 1. 26·82		27·12				2. 1. 46·35	— 5·08
	41	20 Arietis	S	..	..	..	..	44·9	..	54·1	57·0	0·1	2. 7. 44·82		45·12				2. 8. 4·36	— 5·13
	42	70 Ceti	S	..	50·9	53·7	56·6	1·9	7·6	10·4	12·9	..	2. 15. 1·95		1·96				2. 15. 21·20	— 4·43
	43	31 Arietis	S	44·4	47·4	50·3	53·0	58·6	4·2	7·1	9·9	12·8	2. 28. 58·59		58·74				2. 29. 17·99	— 4·84
	44	38 Arietis	S	4·4	7·2	10·1	12·9	18·6	24·4	27·2	30·0	32·8	2. 37. 18·57		18·72				2. 37. 37·98	— 4·87
	45	Groombridge 579.	S	50·3	54·6	58·4	2·6	10·2	18·4	22·6	26·4	30·5	2. 46. 10·37		10·97				2. 46. 30·23	— 6·59
	46	☽ 1 L.	S	35·5	38·7	41·4	44·4	50·2	56·2	59·3	2·2	5·2	3. 5. 50·29		50·49				3. 7. 19·17	
	47	Groombridge 698	S	28·6	32·2	36·0	39·6	47·0	54·7	58·3	1·9	5·6	3. 22. 47·03		47·56				3. 23. 6·84	— 6·50

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.

Corrections for passage of Semidiameter, Nos. 2, 18, 29, and 46, $+67^s{\cdot}94$: $+0^s{\cdot}52$: $+0^s{\cdot}52$: and $+69^s{\cdot}41$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

December 9 to 11. The azimuthal error used is that determined on December 10 by tabular places of ε Piscium and Polaris, allowing $0^s{\cdot}01$ for clock-rate.

21, 24, 25. Cloudy.

24. Extremely faint.

38. The image very bad.

40. Observed over wires X, Y, Z.

46. Very tremulous.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Dec. 10	1	17 Tauri.....	S	19·0	22·1	25·2	28·1	34·2	40·3	43·2	46·3	49·2	3. 36. 34·12	−3·45	34·41			19·16	3. 36. 53·70	− 5·27
	2	Piazzi III. 186...	S	38·3	42·2	46·3	50·2	58·5	6·7	10·7	14·7	18·9	3. 45. 58·43	(+9·74)	59·04			[0·88]	3. 46. 18·34	− 7·07
	3	36 Tauri.....	S	44·7	47·8	50·9	53·9	59·9	6·1	8·9	12·0	15·1	3. 55. 59·87	[−2·96]	0·16				3. 56. 19·46	− 5·61
	4	Mars 1 L.....	S	42·4	45·2	48·4	51·4	57·5	3·5	6·3	9·4	12·4	4. 13. 57·34							
	5	Mars 2 L.....	S	43·9	46·9	50·0	52·8	58·8	5·0	8·1	11·0	14·0	4. 13. 58·90		} 58·40				4. 14. 17·71	
	6	τ Tauri.....	S	36·2	39·2	42·1	45·1	51·0	57·2	0·2	3·1	6·1	4. 33. 51·08		51·36				4. 34. 10·69	− 5·64
	7	Fides	S	12·4	15·7	18·7	22·0	28·0	34·2	37·2	40·3	43·7	4. 37. 27·97		28·30				4. 37. 47·63	
	8	α Leporis	S	14·6	17·6	20·7	23·4	29·0	34·8	37·9	40·7	43·7	5. 26. 29·11		28·91	48·37	19·46		5. 26. 48·27	− 4·43
Dec. 11	9	β Aquarii	D	53·1	56·0	58·7	1·4	7·0	12·7	15·3	18·1	20·9	21. 24. 6·98		6·94	26·71	19·77	18·98†	....	
	10	ξ Aquarii	D	59·7	2·7	5·3	8·2	13·9	19·4	22·1	25·0	27·7	21. 30. 13·72		13·66	33·51	19·85	[0·93]	....	
	11	A¹ Tauri.....	JC	..	13·1	16·0	18·9	24·9	30·8	33·7	36·7	..	3. 56. 24·98		25·24			19·86	3. 56. 45·25	− 5·53
	12	☽ 1 L.....	JC	5·8	..	..	..	20·7	26·9	29·9	32·8	35·9	4. 5. 20·79		21·02				4. 6. 50·76	
	13	γ Tauri.....	JC	34·0	..	40·0	42·8	48·6	54·1	..	57·2	0·0	4. 11. 48·46		48·65	8·74	20·09		....	
	14	ε Tauri.....	JC	11·2	14·2	17·1	20·1	26·0	31·9	34·8	37·8	40·6	4. 20. 25·92		26·16	46·14	19·98		....	
	15	Aldebaran	JC	37·9	40·9	43·8	46·7	52·3	58·2	1·0	3·9	6·7	4. 27. 52·33		52·53	12·55	20·02		....	
Dec. 12	16	ω Piscium	L	48·8	51·7	54·4	57·1	2·7	8·3	11·0	14·0	16·7	23. 52. 2·69	−3·66	2·88	23·45	20·57	19·57†	....	
	17	2 Ceti.....	L	14·8	17·9	20·7	23·7	29·2	35·1	38·2	41·0	43·9	23. 56. 29·34	(+9·93)	29·28	49·74	20·46	[0·94]	....	
	18	α Andromedæ ...	E	48·7	..	55·0	58·1	4·4	10·8	13·9	..	20·2	c. 1. 4·40	[−0·75]	4·80	25·85	21·05	21·03	o. 1. 25·83	− 4·07
	19	ι Ceti	E	58·5	..	4·1	6·9	12·5	18·2	21·0	..	26·7	o. 12. 12·51		12·55	33·53	20·98		o. 12. 33·59	− 3·70
	20	42 Piscium.....	E	..	54·9	57·8	0·6	6·0	12·0	14·8	17·5	..	o. 15. 6·16		6·42				o. 15. 27·46	− 3·98
	21	43 Piscium.....	E	4·5	7·3	10·2	12·9	18·7	24·4	27·2	30·0	33·0	o. 17. 18·64		18·91				o. 17. 39·95	− 4·00
	22	Neptune	E	10·3	13·1	16·0	18·7	24·2	29·8	32·4	35·2	38·0	o. 22. 24·14		24·29				o. 22. 45·33	
	23	52 Piscium.....	E	56·0	59·2	2·0	5·0	10·7	16·7	19·7	22·5	25·4	o. 25. 10·75		11·07				o. 25. 32·12	− 4·16
	24	14 Ceti.....	E	2·9	5·8	8·4	11·2	16·8	22·2	25·2	27·9	30·6	o. 28. 16·72		16·87				o. 28. 37·92	− 3·89
	25	β Ceti.....	E	13·9	16·8	19·7	22·6	28·4	34·2	37·3	40·2	43·0	o. 36. 28·41		28·34	49·36	21·02		o. 36. 49·39	− 3·72
	26	Polaris.... (E&E)	E	..	..	17·0	10·5	..	..	32·5	..	16·0	1. 9. 51·95		4·66	25·69	21·03		....	
	27	62 Ceti.....	E	45·9	48·7	51·2	54·1	59·6	5·2	8·0	10·7	13·5	2. 1. 59·61		59·72				2. 2. 20·83	− 4·33
	28	21 Arietis	E	..	..	34·9	37·9	43·9	50·0	52·9	55·9	58·9	2. 7. 43·81		44·17				2. 8. 5·28	− 5·07
	29	23 Arietis	E	4·1	7·1	10·2	13·1	18·9	24·8	27·7	30·6	33·8	2. 11. 18·87		19·18				2. 11. 40·29	− 4·93
	30	ξ² Ceti.....	E	25·0	28·0	30·9	33·7	39·0	44·9	47·8	50·4	53·1	2. 20. 39·15		39·36	0·51	21·15		2. 21. 0·48	− 4·66
	31	Groombridge 585	E	47·8	51·8	55·9	59·9	7·8	15·9	20·0	24·0	28·0	2. 47. 7·83		8·43				2. 47. 29·57	− 6·56
	32	Bradley 442.....	E	..	43·4	50·2	56·9	10·4	24·1	30·9	37·7	..	3. 4. 10·37		11·39				3. 4. 32·54	− 9·53
	33	31 Persei	E	51·6	56·1	0·3	4·4	13·0	21·7	25·9	30·1	34·4	3. 9. 12·98		13·64				3. 9. 34·79	− 7·02
	34	Groombridge 698	E	26·5	30·3	34·1	37·9	45·1	52·8	56·5	0·3	3·9	3. 22. 45·19		45·75				3. 23. 6·91	− 6·50
	35	Groombridge 713	E	..	..	22·8	26·2	33·9	41·2	45·2	48·7	52·7	3. 28. 33·80		34·36				3. 28. 55·53	− 6·53
	36	Groombridge 717	E	..	..	..	..	33·3	40·7	44·3	48·2	51·9	3. 29. 33·18		33·74				3. 29. 54·91	− 6·53
	37	Groombridge 743	E	2·5	6·4	10·5	14·3	22·0	29·9	33·7	37·5	41·5	3. 40. 21·96		22·55				3. 40. 43·72	− 6·79
	38	36 Tauri.....	E	42·9	45·9	49·0	52·0	57·9	4·1	7·1	10·1	13·1	3. 55. 57·96		58·31				3. 56. 19·49	− 5·61
	39	ω¹ Tauri	E	44·0	47·0	49·9	52·9	58·8	4·6	7·4	10·5	13·5	4. 0. 58·69		59·00	20·26	21·26		4. 1. 20·19	− 5·45
	40	Mars 1 L.....	E	56·6	59·6	2·7	5·7	11·7	17·6	20·7	23·6	26·6	4. 11. 11·59							
	41	Mars 2 L.....	E	57·9	1·0	4·1	7·0	13·0	19·0	22·1	25·1	28·0	4. 11. 12·97		} 12·62				4. 11. 33·81	
	42	υ¹ Tauri	E	39·5	42·7	45·5	48·5	54·6	0·4	3·4	6·4	9·4	4. 17. 54·43		54·76				4. 18. 15·96	− 5·59
	43	ε Tauri.....	E	10·0	13·0	15·9	18·9	24·7	30·7	33·4	36·4	39·3	4. 20. 24·65		24·96	46·15	21·19		4. 20. 46·16	− 5·47
	44	Aldebaran	E	36·7	39·7	42·6	45·3	51·0	56·9	59·8	2·4	5·6	4. 27. 51·06		51·34	12·55	21·21		4. 28. 12·54	− 5·38
	45	Fides	E	12·7	15·8	18·9	21·9	28·4	34·4	37·6	40·8	43·8	4. 35. 28·21		28·60				4. 35. 49·81	
	46	☽ 1 L.....	E	41·9	44·8	48·0	51·0	57·0	2·9	6·0	9·0	12·0	5. 4. 56·91		57·22				5. 6. 27·88	
	47	Fortuna	E	13·2	16·4	19·1	22·1	27·9	34·0	37·0	40·0	42·9	5. 20. 28·02		28·35				5. 20. 49·59	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 12 and 46, $+69^s{\cdot}72$ and $+69^s{\cdot}43$.
† These clock-errors have been used in the reduction of the observations made with the Altazimuth.
December 12. The azimuthal error by tabular places of β Ceti and Polaris, allowing $0^s{\cdot}02$ for clock-rate.

12. Extremely cloudy.

13. Very cloudy.

MONTH and DAY.	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Dec. 12	1	ζ Tauri	E	0·2	3·3	6·3	9·1	15·1	21·0	24·0	27·0	30·0	5. 29. 15·06	−3·66	15·39			21·03 [0·94]	5. 29. 36·63	− 5·62
	2	χ^1 Orionis	E	49·0	52·0	55·0	..	3·7	..	12·7	15·6	18·4	5. 46. 3·72	(+9·93) [−0·75]	4·04			20·80† [0·94]	5. 46. 25·30	− 5·55
Dec. 13	3	κ Piscium	JC	25·4	28·3	31·0	..	39·3	..	47·7	50·4	53·0	23. 19. 39·25		39·39	1·10	21·71		....	
Dec. 16	4	o Tauri	E	55·8	58·7	1·4	4·1	9·8	15·4	18·1	21·0	23·9	3. 17. 9·73	(+11·53)	9·84	34·78	24·94	24·83 [0·95]	....	
	5	ε Eridani	JC	57·0	0·0	3·0	5·8	11·2	16·9	19·7	22·6	25·4	3. 26. 11·24	[−4·75]	11·09	35·85	24·76	24·60†	....	
	6	Piazzi III. 102	E	..	..	34·1	41·0	54·8	9·2	16·3	..	..	3. 32. 54·94		56·43			24·83	3. 33. 21·40	−10·18
	7	Groombridge 743	E	58·9	2·8	6·7	..	18·1	..	29·9	33·8	37·6	3. 40. 18·19		18·88				3. 40. 43·86	− 6·79
	8	Piazzi III. 186	E	..	..	..	..	..	33·5	53·9	..	..	3. 45. 52·57		53·33				3. 46. 18·31	− 7·08
	9	Piazzi III. 186	E	..	..	..	..	..	..	..	9·0	13·1								
	10	γ Eridani	E	6·4	9·4	12·2	15·0	20·8	26·5	29·3	32·2	35·0	3. 51. 20·71		20·49	45·51	25·02		....	
	11	36 Tauri	E	39·1	42·2	45·3	48·4	54·1	0·4	3·3	6·4	9·4	3. 55. 54·24		54·56				3. 56. 19·54	− 5·62
	12	ω^1 Tauri	E	40·3	43·3	46·2	49·2	55·0	1·0	3·9	6·9	9·9	4. 0. 55·02		55·28	20·27	24·99		....	
	13	Mars 1 L.	E	..	1·1	4·2	7·1	13·1	19·0	22·3	25·3	..	4. 6. 13·10		14·13				4. 6. 39·13	
	14	Mars 2 L.	E	59·5	2·6	5·6	8·4	14·6	20·6	23·6	..	..	4. 6. 14·52							
	15	ε Tauri	JC	6·4	9·6	12·5	15·4	21·1	27·1	30·0	33·0	35·0	4. 20. 21·18		21·43	46·17	24·74	24·60†	....	
	16	☽ 2 L.	K	..	..	38·0	40·9	46·6	52·2	55·1	58·0	0·7	8. 47. 46·43		46·60			24·98	8. 47. 8·01	
	17	κ Cancri	K	..	50·9	53·7	56·6	2·1	7·8	10·6	13·2	..	9. 0. 2·07		2·22	27·34	25·12	[0·56]	9. 0. 27·41	− 4·63
	18	ω Leonis	K	35·3	38·5	41·1	44·1	49·6	55·1	58·0	0·9	3·4	9. 20. 49·51		49·64				9. 21. 14·84	− 4·49
	19	o Leonis	K	18·6	21·3	24·1	27·0	32·4	38·3	41·0	43·7	46·7	9. 33. 32·51		32·65	57·77	25·12		9. 33. 57·85	− 4·40
Dec. 17	20	Polaris ...(E & E)	K	12·0	6·0	56·0	49·0	35·0	..	..	..	..	1. 9. 33·65		56·31	21·93	25·62		....	
	21	Bradley 191	K	54·4	57·2	0·1	2·9	..	13·9	16·7	19·4	22·1	1. 19. 8·29		8·28			25·54	1. 19. 33·85	− 4·11
	22	η Piscium	K	37·0	39·9	42·8	45·6	51·1	57·0	59·8	2·6	5·4	1. 23. 51·19		51·39	17·01	25·62		1. 24. 16·96	− 4·44
	23	50 Ceti	K	45·3	48·1	50·9	..	59·6	..	8·2	11·0	14·1	1. 28. 59·55		59·29				1. 29. 24·86	− 3·90
	24	β Arietis	K	32·0	34·9	38·0	41·0	47·0	52·7	55·7	58·7	1·8	1. 46. 46·82		47·10	12·65	25·55		1. 47. 12·68	− 4·75
	25	57 Ceti	K	46·0	49·1	52·0	..	1·0	..	9·9	12·9	15·9	1. 53. 0·92		0·58				1. 53. 26·16	− 3·89
	26	α Arietis	K	54·8	57·8	1·0	..	9·6	..	18·9	22·0	24·9	1. 59. 9·81		10·11	35·67	25·56		1. 59. 35·70	− 4·93
	27	63 Ceti	K	6·4	9·2	12·1	14·9	20·2	25·9	28·7	31·3	34·2	2. 4. 20·27		20·23				2. 4. 45·82	− 4·32
	28	67 Ceti	K	36·8	39·8	42·4	45·2	50·9	56·4	59·3	2·0	4·7	2. 9. 50·78		50·67	16·28	25·61		2. 10. 16·26	− 4·24
	29	69 Ceti	K	23·6	26·5	29·3	32·0	37·4	43·0	45·8	48·6	51·4	2. 14. 37·46		37·45				2. 15. 3·04	− 4·41
	30	ξ^2 Ceti	K	20·9	23·6	26·4	29·2	34·8	40·2	43·0	45·9	48·7	2. 20. 34·69		34·79	0·48	25·69		2. 21. 0·38	− 4·63
	31	α Ceti	D	35·6	38·6	41·2	44·0	..	55·1	57·9	0·7	3·3	2. 54. 49·50		49·53	15·01	25·48	25·42†	....	
	32	δ Arietis	D	16·2	19·2	22·1	25·0	30·9	36·8	39·7	42·6	45·6	3. 3. 30·85		31·11	56·61	25·50		....	
De. 18	33	γ Geminorum	E	..	..	..	25·0	30·7	36·6	39·4	42·2	..	6. 29. 30·69		30·91	56·72	25·81	25·69† [0·46]	....	
	34	π Leonis	P	25·8	28·7	31·5	34·3	39·9	45·4	48·4	51·0	53·9	9. 52. 39·83	−3·34	39·94	5·79	25·85	25·68	9. 53. 5·69	− 4·33
	35	A Leonis	P	5·2	8·3	11·2	14·0	19·4	25·0	28·0	30·8	33·3	10. 0. 19·42	(+10·80)	19·56			[0·17]	10. 0. 45·31	− 4·30
	36	γ^1 Leonis	P	51·8	54·8	57·8	0·7	6·6	12·6	15·2	18·3	21·3	10. 12. 6·52	[−4·57]	6·79	32·54	25·75		10. 12. 32·54	− 4·32
	37	☽ 2 L.	P	..	..	44·5	47·2	53·0	58·7	1·2	4·2	7·0	10. 23. 52·84		52·89				10. 23. 17·14	
	38	34 Sextantis	P	0·4	3·1	5·9	8·7	14·2	19·9	22·8	25·2	28·1	10. 35. 14·20		14·25	40·07	25·82		10. 35. 40·01	− 4·04
	39	55 Leonis	P	6·9	9·9	12·6	15·2	20·7	26·2	29·1	31·8	34·6	10. 48. 20·73		20·75				10. 48. 46·51	− 3·98
	40	c Leonis	P	5·9	8·8	11·6	14·2	19·8	25·6	28·3	31·0	33·7	10. 53. 19·83		19·91				10. 53. 45·67	− 3·93
	41	Polaris S.P. (E&E)	P	..	..	34·5	28·5	15·5	1·0	53·5	45·0	..	13. 10. 16·74		55·49	20·64	25·15	25·85	1. 10. 21·26	−61·65
Dec. 19	42	☉ 1 L.	P	3·0	6·2	9·2	12·4	18·3	24·0	27·1	30·3	33·4	17. 49. 18·16		28·94				17. 50. 54·75	
	43	☉ 2 L.	P	25·1	28·4	31·4	34·4	40·4	46·7	49·6	52·7	55·6	17. 51. 40·43							
	44	Venus 1 L.	P	59·3	2·4	5·1	8·3	13·8	20·0	23·1	26·1	29·0	20. 35. 13·74		13·43				20. 35. 39·79	

The observations of transits are usually made by the galvanic or chronographic method, the wires employed being generally P, Q, R, S, T, U, V, W, X, reversed for stars S.P. Occasionally the observations are made by eye and ear (E & E); the wires then employed are N, O, P, T, X, Y, Z, reversed for stars S.P.

Reading of Transit-Micrometer, $31^r{\cdot}000$.

Corrections for passage of Semidiameter, Nos. 16, 37, and 44, $-63^s{\cdot}77$: $-61^s{\cdot}50$: and $+0^s{\cdot}53$.

† These clock-errors have been used in the reduction of the observations made with the Altazimuth.

December 16 and 17. The azimuthal error used is that determined on December 17 by tabular places of Polaris and η Piscium, the correction for clock-rate insensible.

December 18 and 19. The azimuthal error by Polaris S.P. and Polaris, allowing $0^s{\cdot}58$ for clock-rate and change of R.A.

8. Observed over wires Y, Z.

17, 18, 19. Very faint from cloud.

21. Very faint.

13, 14. Correction applied to R.A. of center for defect of illumination, $+0^s{\cdot}01$.

20. Extremely blurred and tremulous.

40. Much diffused, and at times covered by cloud.

42, 43. Very tremulous.

MONTH and DAY	No. for Reference.	NAME OF OBJECT.	Observer.	Seconds of Transit over the Wires. I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	Concluded Transit over the Center Wire.	Error of Collimation. (Level). [Azimuth].	Seconds of Transit Corrected.	Tabular R.A. of Known Stars.	Clock apparently Slow.	Adopted Clock Slow at 0^h Sidereal and [Losing Rate].	Apparent R.A. of Center from the Observation.	Correction to Mean R.A. 1864, Jan. 1.
				s	s	s	s	s	s	s	s	s	h m s	"	s	s	s	s	h m s	s
Dec. 19	1	Polaris....(E&E)	P	..	..	..	..	..	..	15·0	..	58·0	1. 9. 33·26	−3·34	54·91	20·22	25·31	25·85	1. 10. 20·77	−61·23
	2	η Piscium.....	P	36·6	39·6	42·6	45·4	51·0	56·7	59·6	2·4	5·0	1. 23. 50·94	(+10·80)	51·13	16·99	25·86	[0·17]	1. 24. 16·99	− 4·42
	3	100 Piscium.....	P	2·4	5·2	8·2	11·0	16·7	22·4	25·2	28·0	30·8	1. 27. 16·61	[−4·57]	16·76				1. 27. 42·62	− 4·39
	4	ν Piscium.....	P	45·9	48·6	51·5	54·1	59·6	5·2	8·1	10·9	13·8	1. 33. 59·70		59·76	25·60	25·84		1. 34. 25·62	− 4·28
	5	ξ^2 Ceti	P	20·8	23·4	26·3	29·0	34·8	40·2	43·0	46·0	48·7	2. 20. 34·63		34·73	0·47	25·74		2. 21. 0·60	− 4·62
Dec. 20	6	Venus 1 L.....	D	58·9	1·9	4·7	7·7	13·7	19·8	22·7	25·5	28·4	20. 40. 13·65		13·35				20. 40. 39·89	
Dec. 22	7	☽ 2 L....(E&E)	S	..	..	..	..	33·5	48·0	2·0	..	..	13. 30. 18·92	(+9·73)	18·72			27·86 [0·78]	13. 29. 43·90	
	8	Arcturus.....	L	45·9	..	52·0	54·9	0·6	6·6	9·4	..	15·3	14. 9. 0·62	(+10·72)	0·86	29·96	29·10	28·64†	....	
Dec. 26	9	κ Virginis.....	E	56·3	59·1	1·9	4·6	10·2	15·8	18·7	21·6	24·2	14. 5. 10·22	− 3·59	10·00	41·96	31·96	31·54†	....	
	10	Arcturus.....	E	43·0	46·1	49·1	52·1	57·8	3·9	6·8	9·6	12·7	14. 8. 57·85	(+9·97) [−5·07]	58·01	30·05	32·04	[0·78]	....	
Dec. 28	11	☉ 1 L.....	P	55·4	58·8	1·7	4·6	10·6	16·6	19·8	22·7	25·9	18. 29. 10·63							
	12	☉ 2 L.....	P	17·5	20·6	23·6	26·5	..	..	..	..	47·8	18. 31. 32·58		21·18			32·00	18. 30. 53·65	
	13	α Aquilæ	P	24·6	27·4	30·4	33·0	38·5	44·3	47·0	49·8	52·5	19. 43. 38·56		38·59	11·09	32·50	[0·61]	....	
	14	Venus 1 L.....	P	55·5	58·7	1·4	4·3	10·0	16·0	19·0	21·9	24·8	21. 19. 10·13		9·80				21. 19. 42·89	
Dec. 30	15	ε Andromedæ....	P	36·4	39·9	43·0	..	52·1	..	1·7	5·0	8·2	0. 30. 52·28	(+9·27)	52·52	26·58	34·06		....	
	16	β Ceti.....	P	..	3·9	6·8	9·7	15·5	21·5	24·3	27·3	..	0. 36. 15·52		15·15	49·12	33·97		....	
	17	μ Andromedæ....	P	25·3	29·0	32·6	36·0	42·9	50·0	53·6	57·0	0·5	0. 48. 42·94		43·31	17·32	34·01		....	
	18	Polaris....(E&E)	P	56·0	50·5	..	36·0	19·0	..	..	..	..	1. 9. 19·18		37·69	11·69	34·00		....	

Polaris and other stars very near the pole are observed by eye and ear over the wires P, Q, R, S, T, U, V, W, X.
The Intervals of the Wires of both systems are given in the Introduction.

Reading of Transit-Micrometer, $31^r{\cdot}000$.
Corrections for passage of Semidiameter, Nos. 6, 7, and 14, $+ 0^s{\cdot}54 : -63^s{\cdot}12$: and $+ 0^s{\cdot}55$.
†These clock-errors have been used in the reduction of the observations made with the Altazimnth.
December 26 to 30. The azimuthal error used is that determined by tabular places of β Ceti and Polaris on December 30, allowing $0^s{\cdot}02$ for clock-rate.

1. Cloudy.
5. Excessively faint; cloudy. The clock-beats scarcely audible from wind.
6. The image very bad.
7. Observed over wires X, Y, Z; not visible before, owing to cloud.
8. Very faint.
14. Exceedingly faint from thick mist.
15. Very tremulous.
18. Cloudy during the passage over the other wires.