Correcting for aberration we obtain the apparent places as follows :—

Washington Mean Time.	Mercury's Appar. Geoc. Longitude.	Mercury's App. Geoc. Lat.	Sun's Appar. Longitude.
1878, May, 6d. 0h.	46° 6′ 59.″0	5′ 56.″9N.	46° 0′ 18″.7
" 1h.	46 5 27.0	5 13.5	46 2 43.8
" 2	46 3 54.9	4 30.1	46 5 8.9
" 3	46 2 26.9	3 46.7	46 7 34.0

Interpolating for the time of conjunction and collecting the elements, we have

Washington mean time of conjunction in longitude,	May 6d. 1h. 41 min. 17 sec.
Mercury's and Sun's longitude..... ...	46° 4′ 23″.6
Mercury's latitude.....	4′ 43″.6 N.
Sun's hourly motion in longitude	2′ 25″.1 E.
Mercury's hourly motion in longitude.....	1′ 32″.1 W.
Mercury's hourly motion in latitude.....	43″.4 S.
Sun's equatorial horizontal parallax.....	8″.87
Mercury's equatorial horizontal parallax ...	15″.9
Sun's semi-diameter.....	15′ 52″.3
Mercury's semi-diameter	5″.9

Employing the same notation as in Art. 13, the preceding elements give the following results. Relative hourly motion in longitude = 3′ 57″.2 ; n = 10° 22′ 7″; $m\,n$ = 241″.13 the relative hourly motion in apparent orbit. $C\,F$ the least distance between the centres = 279″ ; $E\,F$ = 51″.04 ; time of describing $E\,F$ = 12 m. 42 sec. Since Mercury is *north* of the Sun's centre at conjunction, and moving southward, $E\,F$ will lie on the *right* of $C\,E$ (see *Fig.* 4), and the middle of the transit will take place at 1h. 54m. P.M.

Sum of semi-diameters = 958″.2

$$V = 16° 55′ 44″ ; \; V\,F = 916″.68 ;$$

Time of describing $V\,F$ = 3h. 48.1 min. = half of the duration. Subtracting 3h. 48.1 min. from, and adding the same to