

West of the meridian of Greenwich,* which, according to our determination, is an error of $-1' 42.5''$ in the latitude, and -34.09 seconds of time in the longitude, and is an error in geographical position of seven and 58-100ths (7.58) miles, on an azimuthal course of $S. 74^{\circ} 59' E.$ from the true position.

The American Almanac for 1858, and for many years previous, gives Chicago as in latitude $42^{\circ} 0'$, N., and longitude $87^{\circ} 35'$ West of Greenwich, which is an error in geographical position of eight and one-third ($8\frac{1}{3}$) miles on an azimuthal course of $N. 16^{\circ} 51' E.$ from the true position.

I will now proceed to give the astronomical observations upon which the several determinations of geographical positions rest, and the deductions from them.

Chicago being our primary meridian, or meridian of comparison in these operations, from which the longitudes of the other stations are deduced, the first step necessary is to give the observations for computing the time for that meridian. They are placed in the order of their dates, as follows, viz.:

*See page 6 of printed Doc. No. 497 of the House of Representatives of the 23d Congress, 1st Session.