

PAPERS RELATIVE TO THE

|      |      |    |       |
|------|------|----|-------|
|      | °    | '  | "     |
| $m'$ | = 14 | 43 | 4     |
| Px.  | —    | 52 | 26    |
|      |      | 13 | 50 38 |
| Ref. | +    | 3  | 38    |
| $m$  | =    | 13 | 54 16 |

|                    |      |    |      |
|--------------------|------|----|------|
|                    | °    | '  | "    |
| $d$                | = 52 | 33 | 21   |
| $\odot$ 's S. D.   | +    | 14 | 50   |
| $\ominus$ 's S. D. | +    | 15 | 59   |
|                    |      | 53 | 4 10 |

Rejecting seconds :—

|     |      |    |   |                                           |
|-----|------|----|---|-------------------------------------------|
|     | °    | '  | " |                                           |
| $d$ | = 53 | 4  | 0 | ∴ 10 is to be added to D = T. Cent. Dist. |
| $s$ | = 14 | 32 | 0 | } Alts. used in Computation.              |
| $m$ | = 13 | 54 | 0 |                                           |

$$3. \dots \sqrt{\sec. m \cdot \sec. s \cdot \cos. x \cdot \cos. (x - d) \cdot \cos. m' \cdot \cos. s' = \cos. \theta}$$

$x$  being  $\frac{1}{2}(m + s + d)$ .

$$4. \dots \sqrt{\sin. \left( \frac{m' + s'}{2} + \theta \right) \cdot \sin. \left( \frac{m + s'}{2} \sim \theta \right)} = \sin. \frac{D}{2}$$

|     |      |    |    |                 |
|-----|------|----|----|-----------------|
| $d$ | = 53 | 4  | 0  |                 |
| $s$ | = 14 | 32 | 0  | sec. = '014124  |
| $m$ | = 13 | 54 | 0  | sec. = '012908  |
|     | 81   | 30 | 0  |                 |
|     | 40   | 45 | 0  | cos. = 9'879420 |
|     | 12   | 19 | 0  | cos. = 9'989887 |
|     | 14   | 28 | 31 | cos. = 9'985991 |
|     | 14   | 42 | 48 | cos. = 9'985525 |
|     | 14   | 35 | 39 | 19'867855       |
|     | 30   | 45 | 36 | cos. 9'933927   |
|     | 45   | 24 | 15 | sin. = 9'852527 |
|     | 16   | 12 | 57 | sin. = 9'446002 |
|     |      |    |    | 19'298529       |
|     | 26   | 28 | 57 | sin. 9'649264   |
|     |      |    | 2  |                 |

|    |    |    |
|----|----|----|
| 52 | 57 | 54 |
| +  | 10 |    |

|                   |    |    |    |              |
|-------------------|----|----|----|--------------|
|                   | 52 | 58 | 4  |              |
| N. A. Dist. 12 H. | 53 | 11 | 50 | P. L. 3450   |
|                   |    | 13 | 46 | P. L. 1'1164 |
|                   |    | 30 | 28 |              |
|                   |    |    |    | 7714         |
| T. G. M. T.       | 11 | 29 | 32 |              |
| T. M. T. at P.    | 4  | 19 | 2  |              |

Longitude . . . . . 7 10 30 W.  
60

$$+ 430 \ 30 \ 0$$

Longitude . . . . . 107 37 30 W.

FORT CARLTON.—Lat. 52° 52' 30" N.

1858. May 19th, at 1h. 10m. p.m. (M. T. at Place nearly) the following Lunar was taken (Sun W. of Moon).  
—Index Error +3' 30". Error of Chronometer on M.T. at Place, 6h. 40m. 5s. fast, and Approximate Error, on M. T. 12m. slow.

(Mean of 10 sights.)

|                          |   |    |    |    |      |
|--------------------------|---|----|----|----|------|
|                          |   | D. | H. | M. | S.   |
| Mean of Chronometer Time | - | 19 | 7  | 48 | 33.9 |
| Error                    | - | -  | 6  | 40 | 5.0  |
| T. M. T. at P.           | - | 19 | 1  | 8  | 28.9 |

|                |   |    |   |    |
|----------------|---|----|---|----|
|                |   | °  | ' | "  |
| Mean of Dists. | - | 89 | 3 | 32 |
| Index Error    | - | +  | 3 | 30 |
|                |   | 89 | 7 | 2  |