

September

done so the night would not have been lost as I would have got its beats & the correction for time of transmission of electric fluid could have been applied from some later determinations.

Saturday 1
fine

Busy computing, writing. Took my walk in afternoon. At night observe for longitude and get an exchange of clock beats with Winnipeg, giving us our first successful night. -

Sunday 2
fine

32° at night

Busy computing, copying etc. - In afternoon J. G. Mason spent an hour at my tent. - The old Indian chief called at my camp & from Charles I learned that his errand was to get some money as he heard that I was giving money to children and hence thought he might get some too. - For "coolness" commends me to the Indians. - I have given several at five or ten cent pieces to a number of boys & girls, but I certainly did not anticipate that it would have this effect. - The night was fine & I got a ^{good} set of observations again, but when exchange of signals came I was unable to "break" Winnipeg - I heard Winnipeg well & got King's clock but he failed to hear me or get my chronometer. - He has a heavy battery at his end but I have none at all, the first one near me being Bill ^{15 miles} with 22 cups, then Battenford 110 miles with 67 cups etc so that apparently the electricity at my end lacks momentum to carry it to Winnipeg being at its inception smothered so to speak by the resistance (leakage). - The government line wire is very good No 6 but the line is not kept up well and besides not enough battery is out, 202 cups for about 600 miles. As I have only 48 cups west of me covering 200 miles I ground my wire west to strengthen the current east, altho it is improved thereby yet it is too weak.

Monday 3
pleasant

Busy computing, copying & deciphering last night's tapes. - Observations at night and had a repetition of last night's success. I got the Winnipeg clock but King failed to hear me or get my chronometer.