

August

quency in nature. Its affinity with terrestrial magnetism & electricity is known to science and probable connection with solar disturbances, but these facts are far yet from unravelling to us the forces that guide it and color it for of various hues it appears (mostly white then greenish & reddish). No matter how dense it appears like heavy white clouds yet the transparency of the atmosphere is scarcely not affected. - Most peculiar & strange. - Going outside of the observatory ^{during the intervals} between two pairs of stars I will almost tempt to remain here & watch the ^{beautiful} phenomenon & miss my pair of stars. - It was grand. -

Thursday 16
fine

Today my diary is 22 years of age and not a day missing. - I made determinations of the value of my two levels. - At night observed for latitude & got 20 pairs - foolishly missing the missing pair by pointing of telescope first south instead of north. -

Friday 17
fine

Busy writing & computing as usual in the afternoon, and made some more level determinations. It is only when one comes to make refined observations that we discover the inaccuracies and eccentricities of good instruments. To me they are interesting investigations. - At night observe & get my complete programme of 21 pairs of stars.

Saturday 18
very warm

The "bull dogs" (flies) are most troublesome now. Twilight and heat bring them forth and when I must rock them to sleep the festive mosquito often renews vigor and thereby keeps up the eternal nuisance & army of flies. At my morning "devotions" I generally build a smudge so that that necessary recreation may be done without extreme torture. Toward evening make some more level determinations. - The night was cloudy, windy & followed by a thunderstorm so that I only got seven pairs of stars & some of these not very well.

Sunday 19
fine
warm

Marie's Birthday

I had fondly hoped that I could be at home on this auspicious day to greet my dear Marie, but circumstances prevented such. Our three good boys will undoubtedly wind garlands & strew flowers

for her dear mother as instructed by me and have presents for her. - I wired her yesterday already my congratulations as long the offices are closed. -

Majr de Gibbon Inspector of Indian Affairs + Mr. Gylthum the agent called on me at noon. I was still in bed but immediately arose + we chatted for an hour over a cup of Walkai Club, when he left to return to Regina. -

More level determinations I made. - I tried to abstract the usual day of Marie as well as I could by letting my thoughts rest there where my whole happiness abides, and quietly whipping a cigar whose blue ash wreaths wafted to skies seem as were my thoughts. - I had as festive a dinner for the occasion as my cook + laundress could provide - here is the bill of fare - Soup - bean + vegetables - Bacon + milk - birds - Vegetables Potatoes + tomatoes - Bread - Dessert - Pie + short cakes - apricots - Black tea. - Not so bad, ay?

Observed at night although there were light clouds almost continually covering the sky + I feared of losing many of the smaller stars, yet I got every pair.

Monday 20
fine

Today we got a bundle of mail and attacked it like a hungry wolf. It is four weeks since we received our last mail.

Busy writing, Computing &c. Observed again for latitude + got the 21 pairs, making now in all 109 determinations for ϕ . I took this large number, having the time, and to compute therefrom the probable error of bisection and of declination. -

Tuesday 21
hot

It is so hot in the tent that we do our work in the afternoon in the shade of the observatory, also take our meals there. - As it is so hot in the morning I get very little sleep after I go to bed at daybreak. - I take down the zenith telescope + put the transit up again. - Observed always for time. I am in great hopes that with the numerous temperature readings of the chronometer + the observation for time I will be enabled to learn the peculiarities of rate of the chronometer. - Rev. J. Taylor spent an hour with me this evening. -

Today two small Indian boys called at my camp, seeing them I asked