

(1)

OCT 28, 1870.

Acc. 076

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Dear George,

We had a thunder storm last night! A remarkable event on the 27th of October.

On the 24th & 25th there were widely spread auroras; that on the 24th as fine as ~~any~~ any of the ones of last month. During on the nights of all these auroras there has also been red glow, or patches of red on the sky; they are seldom in the north, generally in the south, & sometimes in the W.

On these last occasions I was unable to detect any com =

nection between them & the (2)
Sun-spots, for it was cloudy
during the day, & only cleared
up ~~at~~ in the evening. Perhaps
also this thunderstorm was
connected in some way with
these other phenomena. I note
down all these things carefull
& also take drawings of the
Sun whenever I can. I do
think also that the sun-spots
are ^{caused by} ~~connected~~ with the pertur-
bation of the sun's photosphere
by the planets. Of course
this is not an idea of my
own, but yet when one looks
at the position of the planets
at present for instance, &
sees that those that cause
the most disturbance are
nearly in a line, there is
reason to believe that
that perhaps their influence
may cause the spots.

This is an interesting subject,

& I only wish I had the (3.)
time & means to investigate
the subject. I have a chart
of the orbits of the planets
& if I only had ~~a~~ the means
of ascertaining the right ~~ascension~~
ascension of the planets, ~~or~~
for ^{all the} ~~any~~ previous years, or
could calculate those positions
it would not be hard to compare
those positions with the ~~the~~
spots as observed at the time
& see if there might be any
connection between them.

But perhaps some one who
has more observations within
his reach may turn his
attention to that subject.

Also the auroras, ^{form} ~~are~~
a very interesting subject for
investigation. Now that
spectrum analysis is better
understood, an expedition
should be sent to the
Arctic regions to observe them
there & try to find out some-
thing about their physical
constitution.

Now that the honour (4)
Mathematics are fairly begun
I find I have very little
time for anything. We
do exercises & no propositions.
I suppose that he thinks
that Euclid's Elements are
beneath us, & so we have to
prove all sorts of exercises.

To-day we had a
meeting to elect a committee
of three, to decide about
the arrangements necessary
for the Founder's Festival
which is to take place
next month. Those elected
were Cline, Tupper, & Mc. Dounel.
The meeting was very disorderly.
We had frost the last
two nights, but ~~but~~ no snow as
yet. Believe me your affectionate
brother, William.