

Geo. M. Dawson Esq
Geological Survey
Blackwater
B. C.



J. C. Ward

Castle Inn

Bassenthwaite

Kerrick

26/9/75

Dear Dawson,

I was very pleased
to receive a letter from you some
time back and which I meant
to have answered ere now.

The other day I received your
interesting volume, for which
many thanks. How you
managed to do so much and
to publish such a work so
speedily I cannot think. Things
must go faster over the
water than with us. My
memoir on this district is
still in the Government

stocks and do all I can
I cannot get it forward and
would wish - I hope to
send you a copy as soon as
published, as a poor return
for your handsome volume.
I also now send my micro-
scopic paper which has been
greatly delayed on account of
the plates, scarcely ^{done} ^{to} my
satisfaction.

I look forward to reading your
book, very much, and will
then write again re glacial
matters, as you ask me.
Things go on here pretty much
as ever, only everyone gets
more and more busy, and
has less and less time, at

least to find it. This year
I have not done much Lake
country work. In the spring
I was in the Caldbeck country,
north of Skiddaw, and now
I am continuing that work
westward. I had planned to
go to Arreque with Donny,
but when on the eve of
starting Donny was summoned
me to help him in N. Wales,
and I worked there for 3 weeks,
drawing a new boundary
between Tremadoc and
Arreys, and revising some
volcanic work. All this
has I hope thrown some
new light on my Skid-
dow State area, and ul-

ready
I fancy I see that unpromis-
ing formation dividing itself
thus

Volcanic rocks. (Llandulis)

Skiddaw
Slates { Arerig group (Skiddaw)
Tremadoc slates

Lingula Flags / Grasmere & Whiteale

Here as in Wales it would seem
that a well-marked grit is
the division between Tremadoc
and Arerigs.

I found the great Rhobell facor
"Greenstone" the finest possible
mass of volcanic ash and
beccial, and representing, I
think, very possibly an old
and weathered Vent. Poor
Ramsay rather fore his

hair - as it is his work - but
 was very good in the matter.
 This partly arose from writing
 the Memoir 20 years after the
 work was done. A new edi-
 tion is preparing.

The Cadiz country is most
 puzzling and the green-
 stones, as Ramsay remarks,
 diabolical. It was a wonder-
 ful bit of mapping horse,
 and I wonder any of the map-
 pers are still living dear
 men.

I have a paper on liquid
 Cavities in the quartz of these
 rocks appearing in the next
 Quart. Journ., and other
 parts of the same Memoir

on the "Granite and
Metamorphic Rocks of the Lake
District" follows. But I
have periodical fights to
get ^{them} through the official Sur-
vey barriers into the Society
House. Seely has just written
asking me to read a paper
before the Micros. Soc. while
he is President, and I should
like, if I can, to go into the ques-
tion of the curious movement
of the vacuous bubbles in the
liquid caustics; the spontaneous
movement occurs only in the
smallest cavities ($\frac{1}{1000}$ to $\frac{1}{2000}$ in.
inch) and is most active in the
most minute. Have we here

after all, evidence of molecu-
lar movement?

As I was disappointed of my
summer holiday I am thinking
of joining Romney in a winter
journey to Rome and Naples,
Dec. and Jan. I want a
good holiday quite away from
Survey, Collocations and Kenwick
local affairs and Museum
and Soc. business.

We have had 4 field meetings
of our Society, one a joint-
Society meeting when 200
met in Bourns Dale and I
rubbed their noses along
scratched rocks &c

My home folk are all pretty
well, my Father just now

having a French pupil, &
learn English
I am always delighted to
hear from you, and I feel
how much work as yours
throws our small geology quite
into the shade. I am
glad to see you acknowledge
the School of Mines Assoc. on
your title page; it is well
to do so for the sake of the in-
stitution I always feel
I suppose I do right in sending
this to Victoria.

Yours very truly
J. Clifton Ward

Oct. 3^d &

9

Since last Sunday, when I wrote the earlier part of my letter, I have skimmed through your book and think it most excellent. I think I shall write a short review of it and send to "Nature", hoping they may accept it.

Your glacial evidence is very interesting, especially the submerged evidence & so great an amount; I cannot but think that the evidence of Laurentian boulders carried far ~~to~~^{we} ~~westward~~ to heights of 7000 ft. is conclusive.

Have you read Collie's book?

It is a fine philosophical
work, though he sometimes
rides his hobby rather too far.
I am much interested in the
volcanic rocks you describe, similar
to your old friends of Cumberland,
but why call breccias, con-
glomerates?

Write me a good long letter
when you have leisure.

I think I had better direct
this to Montreal.

Just now I am struggling with
the equinoxials.

Believe me

your very truly
J. Cliston Ward