

William

Fallowfield.

Manchester March 18th
1879

My Dear Friend

It was only an accident that prevented me from writing to you last night, which I fully intended doing. On reaching the college this afternoon I found your interesting paper from the Princetown Review awaiting me - and having read it through I now sit down to make up for the failure of last night. The subject you have grappled with is a most interesting, but at the same time a most difficult one. I see that you deem it possible that our English carbomiferous Flora extended bows from the Scotch one. This

may be possible - but at the same time it is equally possible that the reverse may have been the case and that ours may have come from the south. Thus there is no doubt but that the St Etienne Coalfield belongs to the same age as the Scotch one & was forming when we were under the Carboniferous sea with its Derbyshire Corals & other animals of the Mountain Limestone age. That the Scotch & French fields had some connection is possible though the forests of Condeites do not present themselves at Burdighouse - The curious fern to whose petiole I have given the name of *Rachiopteris duplex* has been found at St Etienne by Grand Eury - I obtained mine from the Burntisland deposit. I have found no trace of it

either in the Aldham or the Halifax
Deposits. On the other hand the
latter deposits come into close
relationship with the Aurtun measures
in the existence of Tree-ferns and
in the presence of the Medullosan
Marattiaceae of which I have
seen no traces at Edinburgh house.
It appears to me that our
measures have closer relationships
with those of France than with
those of Scotland.

I have just sent you 10 ^{inches}
to the R. L. It is full of good
things, you will be interested
to know that we have got
blodendron with cones attached
to the scars - settling that question.
You are probably also aware
that Oture of Vienna has
got Sphenophyllum & Aste-
rophyllites growing on the same
stem. The sphenophylloid
leaves are those of the fruiting

branches. Sturm considers that
the stem is a calamite which he
calls *C. Sachsei* but neither Weiff
nor I believe that it is so. I
expect it will prove to be some
stem of the type of the so-called
C. Verticillatus. I have got an
extraordinary number of remark-
able cryptogamic reproductive
bodies like some of those figures
in my last memoir but of
new types. Both Hackel
& Strasburger, who have had
my specimens at Jena, agree
with me that Carruthers's so
called "Radiolarian, the Tragair
is a Macrospora and not an
animal organism. The Arva
Lepidodendro have supplied me
with new evidence of Lepidodendro
with sigillarian (Diploxyloid)
axes. but still no trace of

Your disciform tips. The
notion promulgated by Carruthers
and accepted from him by
Lyell, that the stems within
stems found at Arran were
those of young seedlings de-
veloped within the internodes
of old & enviscerated barks is
as absurd as anything possible
can be - They are woody
axes, decorticated, of the largest
Diploxyloid types I have yet
seen - & obviously belonged to
the largest of the Arran trees
but loosened by the decay of
~~the~~ bark, in the case of most
of the trees they have been float-
ed out by some flood &
have then been pitched head
first & half a dozen at a

time into some hollowed
bark-cylinders that stood
in the way of the flowing
stream; when we now find
them, along with fragments of
Stigmaria & other odd &
ends of Carboniferous Forest
life. Did ever any man
make so many blunders
as Carruthers has done.

You will be surprised
to hear that my eldest
son is coming to look in
upon you some time in
May. He is now a clerk
in his Uncle's (collector's) office
but is just going to be received
as a partner. In the interim
he is taking a holiday for

a few weeks and is devoting
it to a tour through your
western Continent. He will
go southwards first and then
return by way of Cairo &
Chicago to your northern
Lakes and so to Montreal
& Quebec. I have given
him a note of introduction
to you and he hopes to
devote three or four days
to your Montreal District.
He sails on Wednesday next
in the Germania. I shall
be glad if you will intro-
duce him to Harrington to
whom by the way, will you
give my kind remembrance.
I have never heard what

Number of Chicks the young
Couple is blessed with -

And now my Dear friend
having plagued you with
this long scrawl pray
take your revenge and
inflict the same on me
so that I may be posted up
in the Dairs of you and
yours - I saw that you
had been honoured by a visit
from Royalty. Will the
Imperial blood make you
all get more Monarchical or
will it drive you nearer to
your southern neighbours?

I am ever yours

W. C. Williamson