

Penhallur

Swiss

Palmyra, N. H.

June 20th 1888

Dear Sir W. Dawson,

Since my last to
you, I have unexpectedly
found some of the algae
I desired for comparison with
our laminated fossil, although
as I wrote, I hardly expected
to encounter them until I
got out into deep water.

The facts I have gained
confirm the impression I had,
and I now feel that there
is no longer need of hesitation
in pronouncing our laminated
fossil an alga and probably
related to our modern
laminarias.

The principal points of resemblance
justifying this conclusion are
as follows:—

1st As already stated in my
notes, each lamina splits
int two distinct layers. These
are comparable with the
two surface layers in the
genus Dacrydium.

2nd The Central or medullary
structure of the fossil is in
most cases destroyed, but
when present, shows a
filamentous and branching
structure, readily comparable
to the medullary structure
of Dacrydium.

3rd The peculiar openings in
our fossil, and which do
not penetrate the entire
thickness of the lamina,
are directly comparable with
and are doubtless the same
structurally as the Cryptostomata

of *Dacrydium*, from which
they differ only in point
of size and number.

I shall therefore designate them in future
as *Cryptostomata*.

In addition to this, when
making a pile of the fossils
of *Dacrydium*, there at
once appeared a close
resemblance to our fossil,
making allowance for shrinkage
in drying.

The thuriferous nature
is characteristically an alga
and quite independently of
that, this fossil is without
doubt an alga of close rela-
tionship, and if it were
safe upon the basis of
association, I should be
very strongly inclined to say

That the laminated fossil
consists of the fossils of
Samarophyton.

Under these circumstances,
I think I had better
write my notes on the
laminated fossil so to
include my present observations
and thus make it complete.
Perhaps it would be well to
send me the copy you have
as I have not brought
the duplicate. I do not
suppose the printer will want
copy until August, so I will
have time to work out all
the additional facts possible.

With Cordial Regards

J. D. P. Parshall