

S. S. Gray

Ms. A. 9. 2. 7

Montréal 10th May 1869

Dear Dr

I have frequently met with Coconuts containing of the germ of the new plant in various forms from the size of a Pen to that of an Egg these germs were of a solid consistence similar to the "meat" & surrounded by the "milk". They were of pear shape & attached to the extremity of the cavity at the point close to the soft "eye" through which the germ forces its way to find roots in the ground mean while the "milk" affords nourishment to the embryo until its

is firmly rooted in the ground
& is able to maintain a separate
existence - I send you a
specimen of a nut in which
the embryo has filled the
cavity, absorbed all the milk
& has put out its ~~the~~ root fibre
which you will observe is
broken off. The points to which
I wish to call your attention
are the hard woody nature of
the root fiber showing up
completely the "eye" preventing
the escape of the "milk" & the
ingress of insects - and the
spongy nature of the embryo
The question I wish to submit
is does the continued growth
of the embryo or germ burst
the shell or does the nut drop

off the plant when it has main-
tained an independent growth -
The Coconut seems to me a
wonderful illustration of the
provision of the Creator for
the reproduction of the Tree
The fibrous covering preserves
the nut from destruction when
falling from a great height
& also protects it from the
attacks of insects - like the
essential oil vessels of the rind
of the Orange & other fruits -

This specimen which has
excited my interest may
be familiar to you if so
please excuse my troubling
upon your time -

Yrs truly

To
Principal
Dudman
S. J. Lyman

P.S. I am for the College
the diagrams of the orange
peel showing the oil cells
should I require them for
a future lecture I will be
on board Loan of them

