

very carefully look to
this. It needs proof, &
plainly is not disposed of
by merely saying it is
so. It was not these
transversals, but the
transversals of the three
components — the ξ , the η &
the ζ components — which I said
were oblique to the front
of the wave.

I thank you very much
& am ^{affectionately} Uncle
G. Johnstone Stoney.

8 Upper Horsey Rise - N.
1897 July 5 -

Dear George 13/42

I am extremely
obliged & thank you
for the letter you wrote
for ^{& which I have just received} me yesterday. It is
very unlike your
earlier letters. It is
evidently dictated
by a desire to help
me: and it does
help me materially.

I have almost certainly
made a mistake in
regard to the wave-lengths,
and have certainly done
so, if Preston's analysis
including lateral waves
behaves like a Fourier's
series of waves along a
straight line.

As to the transversals
— of course ~~they do lie~~
~~in the plane~~ when the
 ξ & η & ζ components are
compounded, they do furnish

13/42

a transversal in the
wave front, for that is
what I have proved.
But on account of the
undulations ^{that} coming in
obliquely & in general
not symmetrically round
the normal to the wave,
I am as yet doubtful
whether in any easier
way than mine it can
be seen that the resultant
transversals are in the
wave front. But I will