

Hardwick Parsonage, ⁴²
April 3. 1866.

My dear young friend,

I am at the old game again "Neighbour, neighbour, I'm come to torment you." - Or at least, if you were my neighbour (I would you were) I am afraid you would find me a very tiresome one. I seldom write - (do I ever?) without asking some plaguing question - & this is to be no exception. I am, you must know, writing a certain heavy article for the Intell. Ms., in the Dull-and-Dry style - containing certain assertions touching on mathematical ground. Now, what I want to know is, whether my notions are sound, & will bear knocking about - & hoping you will kindly and friendly tell me, I have sent a copy of my rough notions - & if you can knock a hole in them I hope you will. I am wth to name a time - but if I could have it within a week it would be a favour. -

I have not much to tell you - excepting how much disappointed we felt to find that ~~of~~ the proposed days of your visit are to be taken in a literal sense. I hope, however, we may have the pleasure of meeting while in Town. - I do not know why or how it has been that you have bestowed upon me so much more affection & confidence than I could possibly have put in any kind of claim for, but I do assure you, & hope you believe - that it is most entirely appreciated. I have now been long enough in the world to outlive many loved friends - and to see the circle of affection narrowed - To use

the words of a very, very ancient Welsh Bard, "Merdyrn
Wyllt" - Merlin the Wild -

God hath provided unpleasant things for me -

Dead is Morgeneu, dead is Mordav,

Dead is Morien, - dead are those I love - -

And it is not without much, and I trust allowable pleasure, that I look to a younger mind to supply - if it may be so permitted - some of that void which Time has made. -

- As I said. I know not how or why it is that we have been drawn together - differing to a very great extent in theological, ecclesiastical, and political training, we have not disagreed - & I feel as though we could not disagree: - and it is very pleasant for me, at least, to think upon.

Things go on here pretty much a l'ordinaire - a good deal of sickness, pain, misery, wickedness, folly, & nonsense - but some little I hope of better things. I do not think - though sometimes I might be tempted to think - that our Lord has forgotten us. My dear father grows somewhat more feeble. - My wife is very rheumatic & wants a change much. I don't know whether I told you that my father had presented me with a 9/4 inch speculum, which however I do not propose getting here before my return from London. I think of adopting our good friend Berthou's very ingenious & cheap equatorial mounting -

Wishing we might meet again very soon, & with Mr. Webb's most affectionate regards, I am always,

My dear young friend

Yours sincerely & affectionately yours,

Thomas William Webb

Certain doubts, difficulties, perplexities, and
objections touching the Rings of T_2 .

Proposed by J. W. W. for the annoyance of A. C. R.

It is after said, Rings are not in same plane.
But is the expression free from ambiguity? —
Their planes may differ by varying inclinations as re-
ferred to any one assumed as standard — line of nodes
all passing thro' common centre of gravity of plane &
rings. — This, perfectly intelligible — & combined
with variation of inclination, or a motion of the nodes,
might explain some differences in apparent thickness
of rings, ^{or} of some parts of them, ~~some irregularities in~~
~~the breadth of their divisions~~ as compared at different per-
iods — but it does not appear how, on the principles of
perspective, it could account for the want of symmetry in
the 2 halves of ring as compared at same epoch. To
account for this it seems necessary to assume, not merely
that the separate rings possess varying inclinations &
possibly motions of nodes, but also that the lines of their
nodes shall not all pass thro' one common centre. This
seems to involve a dynamical difficulty not easily over-
come, except by the supposition of a very unequal distribution
of material in the various rings; & this again seems not
easily reconciled with their general uniformity of breadth.

& extreme thickness - Some considerations are probably
to be taken into consideration here, the nature & extent
of which we are unable, from distance to detect be.

This is the substance of what is meant for Int. Obs.

I hope it is — 1st Intelligible —
2^d Defensible mathematically.

In perspective it is obvious that no possible tilting
of planes could make the two halves unsymmetrical
as long as the lines of nodes all pass thro' the common
centre of figure - the varying nodes might vary, ~~rather~~
the thickness of rings e.g.

would be a different projection from —



but both symmetrical. —

This would not follow if the rings were separately elliptical
with motion of apsides. But then, the divisions be-
tween them would be more unequal at different times than
has even been seen (the observed inequalities being insufficient.)

Per Contra - If the rings were loaded in a direction normal to
their breadth - e.g. if one was made of lead beneath & water
above, another of alcohol beneath & iron above, then, tho' their
centres of gravity would lie in the centre of the globe, their cen-
tres of figure would not - & with an inclination & motion of
nodes, unsymmetrical effects w^d occur, such as are seen. But
how to reconcile this with an almost evanescent thickness?

I think no one has gone into this point. They talk of "not in plane
plane". If homogeneous & not loaded I don't see how they can be out of it. If loaded, how
can they disappear edgewise? Q.E. (non) D. &c. &c. —