

Knockmullen Gorey <sup>188</sup>  
Augt 5/44.

My dear Reader

Sober from feeling  
any "displeasure" at your writing  
to me I really felt quite glad to  
hear from you, and am much  
pleased to find that you are  
turning your attention to the  
scientific parts of our profession.  
I delayed answering your letter  
until I had seen the *Naturalist*  
Magazine with your remarks,  
which were only inserted in the  
July Number. The allowance  
to be made for the alteration of

Notes in measuring Meridian  
Distances can be but an estimate  
of the probable effects of certain  
causes, such as change of temper-  
ature - or locality, or sudden  
shocks &c. &c. and much  
must depend upon the judgment  
when estimating the allowance  
on each Chart in making your  
deductions. No doubt it is  
useful and necessary to have  
general rules to guide you  
in all ordinary cases.

The use of Our Daily Comparison  
 Book in the "Thunder", gave us the  
 means of detecting sudden changes,  
 and assisted our judgment  
 afterwards in making the  
 allowances for change of rate.  
 For example when our Standard  
 (114) appeared to have retained its  
 rate steadily, upon a new rate being  
 attained,  
 we could then use the daily  
 Comp<sup>n</sup> Book with advantage  
 in estimating the conduct of the  
 other watches, and even without  
 the assistance of the Standard, we  
 were enabled to glean much

useful information by Deduction,  
from the uniformity or otherwise  
of the rates of the watches with  
each other.

I think that you will find  
your system of accumulated rates  
useful. The great thing  
to avoid in measuring Mer Distances  
is to have the interval long  
between the times of taking.

~~Take~~ The watches, Rates  
<sup>should be</sup>  
by the same parties, <sup>at both places when practicable</sup> bearing  
in mind. That errors of instrument  
or observation made by the same  
person & instrument have a

natural tendency to lean the same way - and therefore do not affect the result in Mer.<sup>n</sup> distances.

Our chain of meridians in the Blossom and Thunder were most satisfactory. On returning to our first meridian (Potomack) we found that we did not differ more than one third of a mile in longitude - after having carried our meridians across the Atlantic by way of Madeira, Demerara, Trinidad, Jamaica, Nassau - New York, and Halifax.

The short trips that you probably  
make in the Mediterranean may  
be very ~~and~~ accurately  
measured to and fro.

I hope that you after your  
leaves to survey small harbours  
and Bays that you visit. it  
would be very useful practice.  
and would give you an intimate  
knowledge of places - that you  
could not attain so well in any  
other way - and one can never  
tell the use it may be to them

hereafter - I wish if you have not  
 time to make the survey sufficient  
 correct and complete for publication

Rest assured, my dear Peter,  
 that it will always afford me  
 great pleasure to hear from you.  
 I was much gratified to hear that  
 you had obtained your lieutenancy  
 in such a reputable way. Looking  
 upon you as one of my youngsters,

I shall send this to Beecher  
 and request him to forward it.

Believe me, my dear Peter,  
 always very sincerely yours

P. Brown