

Waston Aug 21st 189

Sir W^m Dawson
Montreal Que

Dear sir

I have taken the liberty of addressing you in reference to the following, In reading a book written by yourself some years ago, about the formation of the earth, you seemed to hold the view that the earth is solid at the centre, in fact that it is almost a solid ball, with only here and there in its interior formation, small lakes of liquid fire; while at the same time you state that at some earlier period, it must have been all a complete ball of fire, and at an extremely high temperature, And that it began to cool at the outside first, and consequently formed a thin crust, which eventually became thick enough to confine the fire within,

And in that I fully agree with you, and my opinion is that that crust has been gradually growing thicker up to the present time, and that it is now perhaps somewhere between thirty and a hundred miles thick, And all within that crust is a mass of liquid fire, I admit that the heavier metals would by the law of gravitation, be attracted towards the centre, but would be kept at too high a temperature to become solid.

It is said that our earth obeys all the laws that would govern a rigid ball, but what different

law, or laws, would be required to govern an egg revolving through empty space, than it would a solid of the same size, weight and shape, But I do not admit that our earth obeys all the laws of a rigid ball, do we not know that the crust, in the past, has been bent and cracked, and doubled up in all manner of shapes, and even at the present time we see one part of the continents gradually rising, while other parts are as surely sinking, it does not seem to be very rigid, You understand these ^{things} thoroughly, which I confess I do not, I merely make these statements so that you may the more readily get at the point I wish you to answer, I am writing an essay on the origin and history of the earth, for our club, and my views, as regards the solidity of the earth, is it seems to me, at variance with the theory held by many of the present day, therefore I write you purely for information, do you still believe that the earth is solid at the centre, and if so, by what law do you account for it, I am stuck at that point, I would like to keep my own theory, but if I have to give way, I would like to have some logical proof from one of your noted ability, there is no books within my reach that I know of that would throw any light on the subject, I hope you will pardon me for thus intruding upon ^{you}, the only apology I have for so doing is this, that you who have made this a life long study and have explored the hidden pathways of bygone ages and have, as it were, stood alone upon the newborn earth, as it raised its head above a universal ocean

and watched the succeeding changes while the earth was being prepared for the occupancy of man. You who must love this line of study, cannot but sympathise with one who is making even a very feeble effort, in a humble way to know more about these things.

I would like to make

my essay, or reading, as interesting as I can, and I think to do that I must keep as near the actual facts of the case as is possible for me under the circumstances, So if you will condescend to write me a few words in reference to the difficult point, I have mentioned, and allow me to read the same to the club, you will confer an honour as well as a great favour on your humble servant

J W Falls

P.S. I should explain that, our club, is a kind of gun club we have a shooting match once a year and an oyster supper, we meet occasionally for social enjoyment and mutual improvement, we have readings, recitations, and music, every member must bear a good character, and be a total abstainer from the use of all intoxicating liquor, and from the use of bad language and profanity, we have been in existence as a club about three years, we have a President, two Captains, a Secretary and a Treasurer, I have the honour of holding the first office, and therefore the club will naturally look for something from me, as they have done in the past.

J.W.F.

Falls
May 1891
Wadsworth
End