

It is scarcely necessary to reply to such a statement as that the fibres of Prototaxites have no visible terminations. They are very long, no doubt, and both in this and their lax coherence they conform to the type of the yews. In Mesozoic specimens of *Taxoxylon* which I have now before me, the fibres are nearly as loosely attached and as round in cross section as in Prototaxites. In these, as in Prototaxites, water-soakage has contributed to make the naturally lax and tough yew-structure less compact, and to produce that appearance of thickness of the walls of the fibres which is so common in fossil woods.

Disks or bordered pores in Prototaxites I did not insist on, the appearance being somewhat obscure; but Mr. Carruthers need not taunt me with affirming the existence of such pores in the walls of cells not in contact. Pores, if not bordered pores, may exist on such cells, and the wood cells of Prototaxites are in contact in many places, as may easily be seen, and even where they appear separate, this separation may be an effect of partial decay of the tissues.

Mr. Carruthers converts the spiral fibres lining the cells of Prototaxites into tubes connecting the cells. This is a question of fact and vision, and I can only say that to me they appear to be solid, highly refracting fibres; and under high powers, precisely similar to those of fossil specimens of *Taxoxylon* from British Columbia, and to those seen in charred slices of modern yews. I may further say that Mr. Carruthers' figure (Plate XXXII.) is in my judgment to a great extent imaginary.

But what of the arrangement of these fibres. It is true that, as I have stated, they appear in some cases to pass from cell to cell, and I hesitated to account for this appearance. Mr. C. might, however, have spared himself the remark that "if Dr. Dawson knew anything whatever about a vegetable cell, and the formation of the spiral fibre in its interior, he would not have written such nonsense"—(a specimen, by the way, of the amenities of British Museum Science, as represented by Mr. C.) The possibilities of such an appearance, as yet, perhaps, unknown in the plant-rooms of the Museum, result from the following considerations: (1.) In more or less crushed fossil plants, it is not unusual to see what are really internal structures appearing to pass beyond the limits of the cell-wall, from the mere overlapping of cells. I have good examples in the Mesozoic *Taxoxylon* already mentioned. (2.) In fossil woods the original cell-wall is