

Matthew (1910A p. 85) says: "In several examples which I have seen, this rachis becomes entirely devoid of pinnules and extends into a long slender peduncle, garnished at distant intervals by groups of the bracts of *Sporangites acuminatus* Dn. We thus seem to have this fossil connected to *Alethopteris discrepans* as its fruiting portion." Matthew goes on to state "on the surfaces where they occur the pinnules of *Alethopteris discrepans* are invariably present."

When I was in St. John Dr. Matthew kindly showed me the original specimens from which he drew these conclusions, and much as I regret to add this to the many points on which we disagree, I must state that while it seems possible that *Sporangites acuminatus* were attached to slender stalks, I saw no absolute proof of this and no evidence at all conclusive that any slender stalks—let alone *Sporangites*-bearing stalks—were organically a part of *A. "discrepans."*

In my fig. 46 pl. XVIII, is shewn a slab of a number of minute fragments such as are commonly found together, and there, separate fine stalks, leaflets of *A. "discrepans,"* and *Sporangites acuminata* (see p. 73 following) are all near each other in space, but organically disconnected. Which I believe to be their true relation.

Dr. Matthew considers that *S. acuminata* contained small seeds. This is possible (see p. 74) but from the material available it is difficult to determine whether this is the case. If it were so, it hardly seems likely that the number he gives, viz: 3 seeds, will be found to be enclosed in this 5 lobed "cupule."

An alternative proposition, that *S. acuminata* may be the male fructification of some pteridosperm has, at any rate, nearly as much to recommend it as the former view.

To return to *Alethopteris*. Scott (1909, p. 427) says of its foliage impressions, "there is now good evidence that they belonged to stems of the family of Medulloseae, of which the structural characters are known." Dr. Scott elaborates the evidence from petrified material, and (p. 456) continues "the presumption is entirely in favour of this seed (*Trigonocarpum*) being the fructification of the *Alethopteris* (probably *A. lonchitica*) which formed the foliage of *Medullosa anglica*." *Trigonocarpum* is a genus of stony, cycad-like three ribbed seeds. The species vary, but all