

tion to be mixed with Erian fossils. It is to be observed, however, that the non-occurrence of any similar wood in all the formations between the Upper Erian and the Middle Cretaceous suggests very grave doubt as to the authenticity of the specimen. I record the fact, waiting further discoveries to confirm it. Of the character of the specimen which I have described I entertain no doubt.

We shall be better able to realise the significance and relations of this ancient flora when we have studied that of the succeeding Carboniferous. We may merely remark here on the fact that, in these forests of the Devonian and in the marshes on their margins, we find a wonderful expansion of the now modest groups of Rhizocarps and Lycopods, and that the flora as a whole belongs to the highest group of Cryptogams and the lowest of Phænogams, so that it has about it a remarkable aspect of mediocrity. Further, while there is evidence of some variety of station, there is also evidence of much equality of climate, and of a condition of things more resembling that of the insular climates of the temperate portions of the southern hemisphere than that of North America or Europe at present.

The only animal inhabitants of these Devonian woods, so far as known, were a few species of insects, discovered by Hartt in New Brunswick, and described by Dr. Scudder. Since, however, we now know that scorpions as well as insects existed in the Silurian, it is probable that these also occurred in the Erian, though their remains have not yet been discovered. All the known insects of the Erian woods are allies of the shad-flies and grasshoppers (*Neuroptera* and *Orthoptera*), or intermediate between the two. It is probable that the larvæ of most of them lived in water and fed upon the abundant vegetable matter there, or on the numerous minute crustaceans and worms. There were no land vertebrates, so far as known, but there were fishes (*Dipterus*, etc.), allied to the mod-