of Dendrerpeton, Hylonomus and a land shell in a tree at Coal-Mine Point, down to 1893, such discoveries were limited to this one bed, and it was supposed to be unique in this respect. I had revisited the Joggins many times in the interval, had extracted about thirty trees at different times from the bed in question, and had made trials of all the trees exposed in other beds. Yet in 1893 there appeared in the cliff two productive trees in different beds, one of them 203 feet below the original productive bed, the other 414 feet below it; and thanks to the watchfulness of Mr. P. W. McNaughton, who had kindly promised to attend to this matter in my behalf, they were secured and have proved fruitful of interesting remains, of which in so far as the species are new, preliminary notices are inserted in the foregoing synopsis.

Erect trees occur in all our coal-fields, and are not infrequent in the roofs of coal-beds from which they are apt to fall when the supporting coal is removed. All such stumps, and especially their lower parts, should be carefully examined. Were this attended to, I have no doubt that discoveries similar to those made at the South Joggins would result in other coal-fields.

The next most likely places in which to find land animals are the roof-shales of the coals, especially where these are rich in remains of leaves. Such beds have yielded many fossil insects, and *Baphetes planiceps* was found in the roof shale of the Pictou main seam. It is to be observed that in these beds remains of arachnidans, insects and millipedes are often very faint and obscure, and so require careful examination of the surfaces in a good light. It is also to be noted that remains of land animals are apt to occur in special limited localities, where local circumstances have caused them to accumulate; and where one specimen is found others should be looked for in the same place, and in the continuation of the same surface. Nodules of clay-ironstone, contained in bands of shale or clay, have also proved productive, and should be carefully examined. In many beds the nodules will be found to be barren, but where nodules are found to contain plant remains they will repay search for animal remains as well.

Beds deposited near the margin of the upland country are also the most promising. In Nova Scotia the older rocks seem to have constituted islands in the waters or swamps of the Carboniferous period, and even of the Erian, and in the vicinity of such old margins of lagoons and swamps, discoveries of land animals may be expected. From this point of view the base of the Cobequid Hills, at Apple River and elsewhere on the Cumberland side, and from Advocate Harbour eastward on the south side, have yielded interesting facts in the way of footprints, and may be expected to afford more. So, also, on the south side of Minas Basin the Lower Carboniferous rocks of Horton Bluff and Lower Horton deserve careful and repeated search. The thick shale beds over the South Pictou coal seams are also very promising, and the roof-shales of Cape Breton have afforded some of our best insects, and only require search to afford many more. It is interesting also to note that the higher fauna of batrachian life has been traced back, though as yet only by footprints, to the basal beds of the Carboniferous. The skeletons of these older creatures are yet a desideratum, and may at any time be found in these beds.

As to the Erian or Devonian, the shales of the Little River group in Southern New Brunswick, which have afforded so many land invertebrates, are a peculiar and exceptional group of beds, unrivalled as yet in the preservation of the more delicate forms of Devonian vegetation. Similar exceptional spots may exist elsewhere, and the riches of the St. John