

earth had passed away before the land became the abode of any large number and variety of animals ; while it was only about the same time that the development of the vegetable kingdom became so complete as to afford food and shelter for air-breathers.

It is also worthy of note that it is only in comparatively recent times that we have been able to discover the oldest air-breathing animals, and geologists long believed that the time when animals had existed on the land was even shorter than it had actually been. This arose in part from the infrequency and rarity of preservation of the remains of the earliest creatures of this kind, and perhaps partly from the fact that collectors were not looking for them.

That there was dry land, even in the Cambro-Silurian period, we know, and can even trace its former shores. In Canada our old Laurentian coast extends for more than a thousand miles, from Labrador to Lake Superior, marking the southern border of the nucleus of the American continent in the Cambrian and Cambro-Silurian periods. Along a great part of this ancient coast we have the sand flats of the Potsdam Sandstone, affording very favourable conditions for the imbedding of land animals, did these exist ; still, notwithstanding the zealous explorations of the Geological Survey, and of many amateurs, no trace of an air-breather has been found. I have myself followed the oldest Palæozoic beds up to their ancient limits in some localities, and collected the shells which the waves had dashed on the beach, and have seen under the Cambro-Silurian beds the old pre-Cambrian rocks pitted and indented with weather marks, showing that this shore was then gradually subsiding ; yet the record of the rocks was totally silent as to the animals that may have trod the shore, or the trees that may have waved over it. All that can be said is that the sun shone, the rain fell, and the wind blew as it does now, and that the sea abounded in living creatures. The eyes