

It had two remarkable features; the ice or glacial period, the record of which is seen in the boulder clays and later the great subsidence, or flood and lake period, the record of which is seen in the leda clays. The book of the boulder clays is more ragged and torn than that of the leda clays, yet it is quite readable, especially to those who have witnessed the action of glaciers, or solid ice streams. At the Hogs Back we saw simply boulders mixed irregularly in clay lying upon a smooth bed rock. In the valley of the Rifle ground we saw only boulders.

The principal difficulty in reading the simple record of the boulder clays, arises from the fact that our ice streams often became confluent by overflowing the dividing ridges, and the boulder clays are necessarily covered in most localities hereabouts by the later deposits of clay and sand. At the Quyon Creek, and at very many other places when looked for, the polished bed rock and tumbled clay containing boulders can be seen underlying the hills and benches, and the flat expansions into country fields of the leda clays. One of these ice streams which came down the valley of the Gatineau left its debris in a terminal moraine behind Hull, directly opposite the Parliament Buildings. But this an old story, which you have all read—on the shores of Lake Deschenes and elsewhere.

I must not omit to mention the fact, well known to all geologists, that the gravels and other deposits of the glacial or flood period have yielded along with their shells, and their fossil fish, and mammalian bones, undoubted fossil human remains, from many, and scattered parts of Europe and America. They are chiefly arrow heads and utensils less perishable than bones, in washes of the streams,—not unlike those exhibited in the Geological Survey Museum. It is not strange therefore that tradition has taken cognisance, however vaguely, of the period of the floods.

The fact of the humble ancestry of mankind has been firmly established in recent years, by scientific proof that is no longer disputed. We may confidently look therefore in the gravels of the tertiary streams if we can find them, and identify them, for the evidences of mankind and his companions of that period.

Our excursion to Kings Mountain, twelve miles west of Ottawa, took us to the top of the leda clays and higher; to the level of the