

It is well worthy of remark, that the arguments from the occurrence of coal-plants and ammonites strengthen each other; the coal-plants rendering the question of *light*, and the ammonites that of *heat*, insuperable objections to the admission of any received geological hypothesis to account for the finding of such remains, *in situ*, in latitudes so high as those of Melville Island, Prince Patrick's Island, and Exmouth Island.

V. — *The Superficial Deposits.*

The surface of the ground, where exposed, throughout the Arctic Archipelago, does not appear to be covered with thick deposits of clay or gravel, such as are found generally in the north of Europe, and referred by geologists to what they call "the Glacial Epoch." There are not, however, wanting abundant evidences of the transport of drift materials, and there is some good evidence, collected by Captain McClintock, of the direction in which the drift was moved.

Specimens of granite, which I have no hesitation in referring to the characteristic granite of the west side of North Somerset, were found at Leopold Harbor (North Somerset) and at Graham Moore Bay (Bathurst Island); one of these localities is N.E. and the other N.W. of the granite of North Somerset, from which I infer that there was no constant prevailing direction for the drift ice that carried these boulders, but that they were transported to the northward in various directions, according to the varying motion of the currents that moved the ice. The boulder of granite at Port Leopold is 100 miles N.E. of the granite which gave origin to it; and the specimens from Graham Moore Bay are 190 miles to the N.W. of their source.