India to account for the transport of materials at geological periods long antecedent to those in which ice transport is commonly supposed to have commenced. The motion of the earth's axis would reconcile all the facts known, and it must be regarded as a geological desideratum to determine its amount and direction, and to assign the cause of such a movement. The solution of this problem I regard as quite possible.

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 M'Clintock, 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