

thirty feet in height by one hundred and forty in circumference. Most, if not all the boulders which we find in this part of the country on the lower zone have been washed out of the boulder-clay. Wherever we find a group of boulders on the portion of sea-bottom uncovered by the ebb, we have but to look at the line where the surf breaks when the sea is at full, and there we find the clay itself, with its half-uncovered boulders projecting from its yielding sides, apparently as freshly grooved and scratched as if the transporting iceberg had been at work upon them but yesterday.

I must again adduce the evidence of Sir Charles Lyell, to show that masses of this character *are* frequently ice-borne. 'In the river St. Lawrence,' we find him stating in his *Elements*, 'the loose ice accumulates on the shoals during the winter, at which season the water is low. The separate fragments of ice are readily frozen together in a climate where the temperature is sometimes thirty degrees below zero, and boulders become entangled with them; so that in spring, when the river rises on the melting of the snow, the ice is floated off, frequently conveying the boulders to great distances. A single block of granite fifteen feet long by ten feet both in breadth and height, and which could not contain less than fifteen hundred cubic feet of stone, was in this way moved down the river several hundred yards, during the late survey in 1837. Heavy anchors of ships lying on the shore have in like manner been closed in and removed. In October 1806 wooden stakes were driven several feet into the ground at one part of the banks of the St. Lawrence at high-water mark, and over them were piled many boulders as large as the united force of six men could roll. The year after, all the boulders had disappeared, and others had arrived, and the stakes had been drawn out and carried away by the ice.'

Our Scottish boulders,—though in many instances imme-