Ashe's Inlet, which bears a very close resemblance to a variety common in the Laurentian bands of the Ottawa valley.

Some heavy field-ice had drifted into Ashe's Inlet before our arrival there. The Eskimo informed us that this was the first time in their knowledge that such a thing had occurred, and this circumstance afforded us another proof of the unusual abundance of this kind of ice the present summer. Several of the pieces or "pans" were upwards of 20 feet thick, and as the tide has here a rise and fall of more than 30 feet, some of them were left dry at low water and were found to consist of solid blue ice. The outlines of these pans, as seen floating in the sea, more frequently approach a quadrilateral form than any other. This kind of ice was afterwards seen in great quantities around Salisbury and Nottingham Islands, in the mouth of Fox's Channel, down which there appears to be no doubt, all the heavy ice of Hudson's Strait, comes. On reaching the Strait it projects towards the south shore and breaks off in fields of greater or less extent which float up and down with the tide, always working to the eastward, and part of it finally escapes into Davis' Strait. Hudson's Strait, however, being about 500 miles long, the tendency of the wind and tide is to drive much of it ashore, or to imprison it in bays and inlets. Once it has reached such situations, the lee afforded by the high lands often prevents it from being drifted out to deep water again. In this way, during the present season, a large quantity of it became fixed in Ungava Bay and detained the Hudson's Bay Company's steamer "Labrador" for twenty-one days, being the first time, I understand, that any detention of the kind has taken place Mr. L. M. Turner, of the Smithsonian Institution, who was at Fort Chimo at the time, informed us that the thickness of some of these blocks of ice was measured, and in one case found to be as much as 42 feet. Mr. Burwell, at Station No. 1, on the west side of Cape Chudleigh, reported that, during August and September, he observed these heavy pans floating south-westward into Ungava Bay, but never returning past his station. At Ashe's Inlet the observer reported that the ice always floated back, or westward, a short distance, with each tide, but finally disappeared to the eastward. Some of this heavy ice was stranded about Cape Prince of Wales in the latter part of August and the first half of September, but it had all gone when we re-visited the station here on the 23rd of September. At Nottingham Island we observed some of the heaviest "pans" stranded in 6 fathoms of water, and they would, consequently, be about 40 feet thick.

I tested the ice of the stranded pans in some places, and always found it fresh. This would be the case, notwithstanding that the ice formed in sea water, for most of the salt would be thrown out in the freezing, and what might remain would drain away near the surface on exposure to the mild air of summer. Owing to the somewhat poor heat-conducting power of ice, it is not possible that so great a thickness as 40 feet could form in one winter in Fox's Channel. It is probable that a good many years would be required. In regard to the quantity of ice which has been observed in Hudson's Strait, a study of the experience of the vessels which have navigated these waters, as well as of that of the ships of the Moravian Brethren coming to the coast of Labrador, would seem to show that there is a succession of good and bad years, with a minimum, and a maximum at perhaps seven or eight years apart, or in cycles of some fourteen or fifteen years; also, that there may be a maximum intensity in these cycles themselves, so that perhaps every third one will be more favourable in the minimum of ice and more severe in the maximum than the two intervening ones.

The fact that most of the ice-pans of Hudson's Strait, when not covered with fresh snow, are colored with dust and earth, points to their formation near shore, and also to their remaining there during one summer at least, when the ground is bare of snow and the surface not frozen. The dust appeared to be in too great quantity to be of cosmic origin. These pans sometimes carry gravel on their backs, a circumstance which was noted in my report for 1880, p 20 C. When at Ashe's Inlet, a fact was observed which may explain the last mentioned phenomenon. Some tolerably thick ice still remained attached to the shore at high tide mark. During the melting of the snow on the hills above it, torrents had carried a quantity of stones and earth