## 122BROWN on the Formation of Fjords, Cañons, Benches,

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living thing to disturb the solitude; and though in the summer a few miserable Indians may occasionally be met with, and the reverberating echoes of a hundred cataracts disturb the silence, vet the desolation remains, and seems inseparable from a scene Nature never intended as the abode of man. The depths below almost rival the heights of the mountain summit : bottom is rarely reached under 200 fathoms, even close to the shore.\* The deep inlets on the Norwegian coast, known as fjords-a familiar name, now applied generally to such breaks in the coast-line — are too well known to require description. On the coast of Greenland are again found similar Sounds, indenting both sides of that island (?), but more particularly the western, or Davis Strait shore. Most of these inlets are thickly studded with floating icebergs, and others are so densely choked with them as to receive the name of ice-fjords. All of these fjords form the highways by which the icebergs float out from the glaciers at their heads, whenever these prolongations of the great mer de glace of Greenland (the "inland iis") reach the After a long and careful study of these fjords in most sea. parts of the world where they are found, I have come to the conclusion that we must look upon glaciers as the material which hollowed them in such an uniform manner. Everywhere you see marks on the sides of the British Columbian fjord of ice action; and there seems no reason to doubt but that they were at one the beds of ancient glaciers, which, grinding their outward warse to the sea, scooped out these inlets of this great and uniform depth. At the time when these inlets formed the beds of glaciers, the coast was higher than now. We know that the coast of Greenland is now falling; † and, supposing that the present rate of depression goes on, many glacier valleys will in course of time become ice-fjords. After having seen not a little of the abrading action of ice during three different visits to the Arctic regions, extending in circuit from the Spitzbergen Sea to the upper reaches of Baffin's Bay and westward and southward to the "Meta Incognita" of Frobisher, I cannot side with those geologists who, judging ice action merely from what is seen of the comparatively puny glaciers of the Alps and other European ranges, are inclined to under-estimate the abrading power of the glacier. I do not, however, for a moment pretend to assert that the valleys in which glaciers in the Arctic regions (or elsewhere) now lie were originally formed by the glacier.

<sup>\* &#</sup>x27;Vancouver Island Pilot,' p. 139 (Richards). † In a paper 'On the Elevation and Depression of the Greenland Coast,' read to the British Association at Exeter (1869), I have given what I consider to be the true explanation of the seemingly contradictory statements on this subject among writers on the Arctic regions.