

as 1777, Captain Cook gave interesting descriptions of the glaciers of South Georgia (Lat.  $54^{\circ}$  S.), which reach the sea in a line of cliffs (Fig. 149).

Glaciers, though naturally most abundantly developed in Arctic and Antarctic regions, may be met with in any latitude wherever a sufficiently extensive area of snow accumulates and remains permanent throughout the year. They occur even in equatorial regions where the ground rises sufficiently high above the snow-line. They are found in great force among the Himalaya mountains, while among the Andes of Quito, close to the equator, many glaciers have been noted; the great mountain of Chimborazo (20,498 feet), for example, being capped with ice and sending glaciers out in all directions.<sup>227</sup> Hence the peculiar geological results effected by glacier-ice are not restricted to definite latitudes, but may be encountered, under the necessary limitations, from the equator to the poles.

Some features of geological importance in the behavior of a glacier as it descends its valley deserve mention here. When the ice has to travel over a very uneven floor, some portions may get embayed, while overlying parts slide over them. A massive ice-sheet may thus have many local eddies in its lower portions, the ice there even travelling for various distances, according to the nature of the ground, obliquely to the general flow of the main mass, as is remarkably displayed in the Greenland ice where it flows round the isolated rocks or "Nunatakker" which rise out of it. It

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have subsequently appeared. See also Nordenskiöld, *Geol. Mag.* 1872, Marr, *Geol. Mag.* 1887, p. 151. H. Rink, *Edin. Geol. Soc.* v. 1887, p. 286. E. von Drygalski, *Zeitsch. Gesell. f. Erdkunde*, Berlin, 1892. See also Nansen, *Petern. Mittheil. Ergänzungsheft*, No. 105, 1892.

<sup>227</sup> On glaciers of Ecuador see Whymper, "Travels amongst the Great Andes," p. 348.