


CHAPTER III.

THE GLACIERS—THE PART THEY PLAY IN THE ECONOMY OF NATURE—THEIR ORIGIN
AND MODE OF THEIR FORMATION—THEIR PROGRESSIVE MOVEMENT—MELTING
OF THE GLACIERS—THEIR STRUCTURE AND PHYSICAL CHARACTERISTICS.

HE lines defining the limits of perpetual snow, which we have just studied in the preceding chapter, do not circumscribe the Realm of Ice; the sway of the frost-king stretches far below the snowy wastes. We proceed to clear up what there may be of obscurity in this proposition, and to prove that in its terms nothing contradictory exists.

On passing through those great valleys of Savoy and Switzerland which lie at the base of the lofty Alpine peaks, we are surprised, if not pre-acquainted with the fact, to find ourselves suddenly confronted by actual, veritable rivers, which seem frozen in their beds. In the midst of a thriving vegetation, among well-tilled fields and forests of dark green firs, shine enormous masses of ice, which defy the power of the hottest summers. These enchanted rivers are the Glaciers. An inexhaustible subject of admiration for the tourist—the most striking and popular phenomenon of the Alpine world—they have recently become, on the part of naturalists and geologists, the subject of incessant, and, one might almost say, impassioned study, and the discoveries which have thence resulted have guided Geology into an order of ideas of an absolutely novel character, which tend to encroach still further on its old and recognized domain. The existence of a Glacial Period in the history of our globe is not the only discovery with which Science has been enriched through the careful observations made of late years upon existing glaciers; the explanation of the Diluvial phenomena is, perhaps, likely to be advanced in no small measure by a judicious application of the same views.