

stores, with even a sensible destruction of cliffs and sweeping away of loose materials. On the other hand, a wind from the opposite quarter coincident with an ebb tide, by driving the water out of the inlet, makes the water-level lower than it would otherwise be. In inland seas where tides are small or imperceptible, considerable oscillations of water-level may arise from the action of the wind. At Naples, for example, a long-continued southwest wind raises the level of the water several inches. Similar results attend prolonged gales on large fresh-water lakes (p. 683).

Rapid and great diminution of atmospheric pressure may also cause a rise in the level of the sea and produce great destruction (p. 437).

Section ii. Water

Of all the terrestrial agents by which the surface of the earth is geologically modified, by far the most important is water. We have already seen, when following hypogene changes, how large a share is taken by water in the phenomena of volcanoes and in other subterranean processes. Returning to the surface of the earth and watching the operations of the atmosphere, we soon learn how important a part of these is sustained by the aqueous vapor by which the atmosphere is pervaded.

The substance which we term water exists on the earth in three well-known forms—(1) gaseous, as invisible vapor; (2) liquid, as water; and (3) solid, as ice. The gaseous form has already been noticed as one of the characteristic ingredients of the atmosphere (p. 64). Vast quantities of vapor are continually rising from the surface of the seas, rivers, lakes, snow-fields, and glaciers of the world. This vapor remains invisible until the air containing it is cooled down