Glacier-ice in small fragments is white or colorless, and often shows innumerable fine bubbles of air, sometimes also fine particles of mud. In larger masses, it has a blue or green-blue tint, and displays a veined structure, consisting of parallel vertical veinings of white ice full of air-bubbles, and of blue. clear ice without air-bubbles. Snow-ice is formed above the snow-line, but may descend in glaciers far below it. It covers large areas of the more lofty mountains of the globe, even in tropical regions. Toward the poles it descends to the sea, where large pieces break off and float away as icebergs.

Water-ice (see Book III. Part II. Sect. ii. § 5) is formed, 1st, by the freezing of the surface of fresh water (river-ice, lake-ice), or of the sea (ice-foot, floe-ice, pack-ice); this is a compact, clear, white or greenish ice. 2d, by the freezing of the layer of water lying on the bottom of rivers, or the sea (bottom-ice, ground-ice, anchor-ice); this variety is more spongy, and often incloses mud, sand and stones.[152]

Rock-Salt (Sel gemme, Steinsalz, p. 144) occurs in layers or beds from less than an inch to many hundred feet in thickness. The salt deposits at Stassfurt, for example, are 1197 feet thick, of which the lowest beds comprise 685 feet of pure rock-salt, with thin layers of anhydrite ¼-inch thick dividing the salt at intervals of from one to eight inches. Still more massive are the accumulations of Sperenberg near Berlin, which have been bored through to a depth of 4200 feet, and those of Wieliczka in Gallicia which are here and there more than 4600 feet thick.

The more insoluble salts (notably gypsum or anhydrite) are apt to appear in the lower parts of a saliferous series. When purest, rock-salt is clear and colorless, but usually is colored red (peroxide of iron), sometimes green, or blue (chloride or silicate of copper). It varies in structure, being sometimes beautifully crystalline and giving a cubical cleavage; laminated, granular, or less frequently fibrous. It usually contains some admixture of clay, sand, anhydrite, bitumen, etc., and is often mixed with chlorides of magnesium, calcium, etc. In some places it is full of vesicles (not infrequently of cubic form) containing saline water; or it abounds with minute cavities filled with hydrogen, nitro-

[152] On the properties of ice with some interesting geological bearings, see O. Pettersson, "Vega-Expeditionens Vetenskapliga Iakttagelser," vol. ii. p. 249, Stockholm, 1883.