

layer of double chlorides of potassium and magnesium. These salts, in spite of their high deliquescence, have been preserved from denudation in an exceptional degree owing to the presence of a thick protective surface-mantle of clay.

The subject was treated by E. Reichhardt (1866), and still more successfully by F. Bischof (1875), upon the recognised principles of desiccation.

Ochsenius in 1875 set forth the nature of the conditions under which the Stassfurt succession might have been formed in nature. He supposes a bay or a sea-basin connected with the main ocean only by a narrow channel, which was periodically closed by crust-movements, or by the accumulation of sandbanks or submarine bars which could be surmounted only at the highest tides. During the period of closure, wherever the evaporation exceeded the inflow of fresh water, a concentration of the salt water would take place, and gypsum, anhydrite, and salt would be thrown down. If a permanent isolation were finally effected, and desiccation brought about in this natural salt-pan, it followed that the salt of the mother-liquor must separate out completely in accordance with the order of their solubility.

*C. Geological Effects of Ice.*—The importance of ice as a geological agent was much later in being recognised than that of water, and this is readily explicable from the more limited occurrence of ice and the less striking character of its action. Moreover, the regions where ice displays its grandest effects were still avoided in the eighteenth century, and were only familiar to a few bold explorers. The river and lake ice of the continents, and the ocean ice of the Polar districts have little interest for geologists, since they cannot help much in elucidating the work of ice in the past epochs of the earth's history. Greater interest attaches to the glaciers of the mountain-systems and the inland ice-sheets of the Polar continental areas.

Glaciers are mentioned for the first time in literature as a subject of scientific investigation in Scheuchzer's *Reisebeschreibung der Schweizer Alpen*. The indefatigable and learned scientist records the few observations of Simler and Hottinger on the origin and movement of glaciers, and after a careful description of several glaciers visited by himself, he explains the movement as a result of the infiltration and