

## CHAPTER XX.

LABORS OF THE ICE-BORN TORRENTS, AND THE OCEAN  
BURIAL.

THE manacles of ice were loosened by the genius of a geological spring-time. Next in the order of vicissitudes was a grand continental subsidence. Vast areas of Northern America, that had been raised to the altitude of perpetual snow, were gradually lowered to the ocean's level. Again the interchange of equatorial and polar temperatures was effected by the moving sea-currents, and the climate of summer smiled over the desolate empire of frost. The rocky glacier yielded to the touch of warmth, and a myriad streams leaped from the bosom of the snow (Fig. 82). Each ice-cold rill united with its fellow, and a deluge of waters set out on their journey to the sea. They wound their way across the future states of Kentucky, Tennessee, and Alabama, to the Gulf. They bore forward a freight of sediments selected from the rubbish bequeathed by the dying glacier, and strewed it over the states that had not been visited by the beneficent action of the ice. Thus the Gulf States and the middle-latitude states shared with the northern regions the materials prepared to serve as the basis of soils in the coming age of thought and industry. These myriad streamlets were, however, unable to bear forward the boulders which had been carried by the ice to the borders of the Southern States. And hence it is that, south of the Ohio, "cobble-stones" are sought in vain. The soil and subsoil possess a degree of fineness and homogeneousness not characteristic of the surface deposits of the Northern States. In the earlier portion of the