are Air, Rain, Frost, Springs, Rivers, Glaciers, and the Sea. Let us watch each of them at work.

Air and Rain.

Long exposure to the air tells even upon the most obdurate kind of stone. An old building always shows more or less manifest proofs of decay, insomuch that if these are not conspicuous, we instinctively begin to doubt whether it can really be old. This decay is known by the name of 'weathering.' It is a complex process, partly chemical, partly mechanical. Great and rapid changes of temperature tell powerfully upon the outer surfaces of rocks. Heated during the day under a strong sun, and chilled by quick radiation at night, these surfaces are in such a state of strain that they often crumble down, or even crack and peel off. Still more general and effective is the alternate soaking and desiccation they undergo. Saturated at one time with rain, and then baked in dry weather, the component particles are gradually loosened, and fall away into sand or clay. The influence of frost, too, where the temperature sinks to the freezing point, plays a large part in the process of weathering. The moisture imprisoned between the grains and in the crevices of rocks expands in passing into ice, pushes the grains apart, and thrusts its wedges of ice into the crevices, so that when thaw comes the loosened materials fall asunder. But rain probably plays the most important part of all in the degradation of the general surface of the land. Its influence is twofold, partly in chemically dissolving out the soluble ingredients in the rocks on which it falls, and partly in mechanically washing away the loosened materials.

Nowhere can the nature of weathering be more conveniently and instructively studied than upon ancient masonry,