

and notably among the gravestones of a churchyard. Originally as they left the hands of the mason, the stones of a wall or the slabs and pillars of a monument were smoothly dressed, or even polished. We can, therefore, compare their present with their original condition, and mark the nature and amount of the disintegration they have suffered. Moreover, when the dates of their erection are preserved, we obtain from them a measure of the rate of waste.

A few years ago I made some researches among graveyards in towns and in the country in different parts of Scotland, with the view of obtaining some data for the discussion of the question of weathering. Great differences are there observable in the character and amount of disintegration, according to the nature of the stone employed. By far the most easily destructible material is white marble. The smooth polish given to it by the sculptor is effaced in a few years; the surface of the stone becomes rough and granular so as to look like a sandstone, and if the hand is passed over it, the loosened grains of calcite, that are ready to fall, are at once swept off. Further exposure leads to the furrowing of the marble on the side most exposed to the rain, until the natural inequalities in the texture of the stone entirely replace the artificial surface. In some cases, a crust of soot and dust forms on the marble and apparently protects it, but the stone decays underneath, and, as the crust breaks off, crumbles into mere sand. Some impressive examples of these changes may be seen in the older churchyards of Edinburgh. The handsome monument erected in the Greyfriars' Churchyard to the great Joseph Black at the beginning of this century, though partially protected from the weather, is already in some places illegible. As I examined the tomb and its Latin inscription that records the genius