attended to as pictorial effects, but which furnish to the geologist the further enjoyment which arises from inquiry into the cause. By a knowledge of the divisional structures of rocks*, a geologist can very frequently determine at a distance the nature of a rock, distinguish basalt from slate, limestone from sandstone; and thus his sphere of gratification from scenery is enlarged, his perception of the minuter shades and lights of the landscape become more vivid, and his memory of past combinations more enduring.

It is needless to pursue this subject. Who has ever imagined that the ruins of a rich monastic edifice are less admired by the architect who strives to discover the principles of its construction and the theory of its decoration, or the antiquarian who searches the records of its overthrow, than by those who merely gaze on these masterpieces of the building art, without striving to penetrate the mystery which time and the ravages of man have gathered round the ancient aisles and turrets? Geologists are, as Cuvier felt and said, "antiquaries of a new order," and their enjoyment of the fair scenes of the earth which typify the will of their Creator, partakes of the same high and solemn character which belongs to the intelligent contemplation of the noblest monuments of ancient art.

Economical Applications of Geology.

Agriculture.

Agriculture, which, of all branches of human industry, seems most directly dependent on the qualities of soil and substrata, has been hitherto very little benefited by the progress of geological science. Perhaps the expectations of those speculative farmers who desire to turn to good account the discoveries of botanical

* See Vol. I. p. 62.