

tions these minerals, even the refractory quartz, have undoubtedly crystallized out of molten solutions.

In inclusions of a truly vitreous nature, traces of devitrification may not infrequently be seen. In particular, microscopic crystallites (p. 205) make their appearance, like those in the ground-mass of the rock. Sometimes the inclusions, like the general ground-mass, have an entirely stony character (Fig. 11, C). This may be well observed in those which have not been entirely separated from the surrounding ground-mass, but are connected with it by a narrow neck at the periphery of the inclosing crystal. In some granites and in elvans, the quartz by irregular contraction, while still in a plastic state, appears to have drawn into its substance portions of the surrounding already lithoid base;<sup>89</sup> but this appearance may sometimes be due to irregular corrosion of the crystals by the magma.<sup>90</sup>

δ. Crystals and crystalline bodies.—Many com-

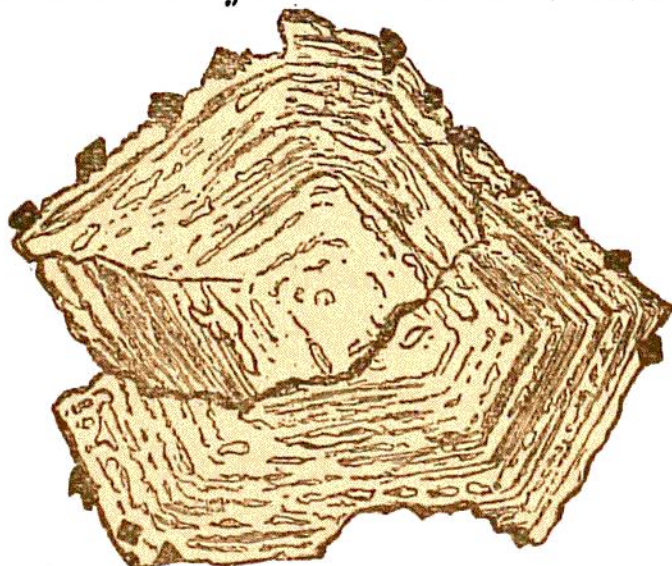


Fig. 12.—Section of a fractured and corroded Augite crystal from a dike, Crawfordjohn, Lanarkshire (magnified), showing lines of growth with vesicles and magnetite crystals.

ponent minerals of rocks contain other minerals (Fig. 12). These occur sometimes as perfect crystals, more usually

<sup>89</sup> J. A. Phillips, Q. J. Geol. Soc. xxxi. p. 338.

<sup>90</sup> Fouqué and Michel-Lévy, "Min. Micrograph."