

often already crystallized, and suffered fracture and corrosion by subsequent action of the inclosing magma. This is well shown by what is termed the *flow-structure* or *fluxion-structure*. Crystals and crystallites are ranged in current-like lines, with their long axes in the direction of these lines. Where a large older crystal occurs, the train of minuter individuals is found to sweep round it and to reunite on the further side, or to be diverted in an eddy-like course (Fig. 19). So thoroughly is this arrangement characteristic of the motion of a somewhat viscid liquid, that there cannot be any doubt that such was the condition



Fig. 19.—Flow-structure in Obsidian.
(20 Diameters).



Fig. 20.—Perlitic Structure. Felsitic glass. Mull (magnified).

of these masses before **their** consolidation. The flow-structure may be detected in many eruptive rocks, from thoroughly vitreous compounds like obsidian, on the one hand, to completely crystalline masses like some dolerites, on the other. It occurs not only in what are usually regarded as volcanic rocks, but also in plutonic or deep-seated masses which, there is reason to believe, consolidated beneath the surface, as for instance in the Bode vein of the Harz, among quartz-porphyrines associated with granites in Aberdeenshire, and in felsite dikes and bosses in the Shetlands, Skye, central Scotland, and County Waterford.