

fpar, which on close examination appears granular foliated; further, also, pitchstone, pearlstone, and obsidian. The imbedded parts are most commonly felspar and quartz, which are usually crystallized, more or less perfectly, and hence they appear sometimes granular. The quartz is usually crystallized, and in double six-sided pyramids. The felspar crystals are broad six-sided prisms, but usually very indistinct. The felspar is more or less fresh, sometimes even glassy, sometimes completely disintegrated and earthy, and sometimes appears only like white specks. It is difficult to determine, whether or not this is original, or the consequence of weathering. The frequency and magnitude of these mixed parts, modify the appearance of the different kinds of porphyry very much. Sometimes one, sometimes the other, but more frequently both occur together, and along with these several others which are less frequent, as crystals of hornblende and mica. The basis and the mixed parts of the porphyry also differ in colour and several other properties. It sometimes contains chalcedony and agate, sometimes in massive pieces, sometimes in small layers or plates. Further, there sometimes occur balls of a greater or less size; in clay-porphyry the centre of these balls is chalcedony, but their exterior is hornstone porphyry. In Pitchstone-Porphyry, these balls are composed of a particular kind of conchoidal hornstone, but the centre is quartz. These balls are nearly

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