scales of talc, with chlorite and serpentine, is called Potstone (Topfstein). Many rocks with a soapy or unctuous feel have been classed as talc-schist, which contain no talc, but a variety of mica (sericite-schist, etc.). Talc-schist, though not specially abundant, occurs in considerable mass in the Alps (Mont Blanc, Monte Rosa, Carinthia, etc.), and is found also among the Apennine and Ural mountains.

9. OLIVINE-ROCKS, or PERIDOTITES of the Crystalline Schists.223 Rocks of which olivine forms a main constituent, occur as subordinate bands or irregular masses associated with gneisses and other schistose rocks. They were probably eruptive masses, contemporaneous with or subsequent to the surrounding gneisses and schists (p. 314). The olivine is commonly associated with some pyroxenic mineral, hornblende, garnet, etc. Some of the rocks mentioned on p. 300 may also be included here. Dunite, for example, which occurs in apparently eruptive form at Dun Mountain, near Nelson, New Zealand, is found in North Carolina in beds with laminated structure intercalated in hornblendegneiss. Many of these rocks have undergone much crushing and deformation, and pass into foliated forms of Serpentine, which must thus be reckoned as one of the schistose as well as one of the eruptive series. Some remarkable schistose serpentines occur interbedded among phyllites, mica-schists, and limestones in Banffshire.

10. FELSITOID-ROCKS.—These are distinguished by an exceedingly compact felsite-like matrix. They occur in beds or bed-like masses, sometimes in districts of contact metamorphism, sometimes associated with vast masses of schists.

Hallefinta—an exceedingly compact, hornstone-like, felsitic, gray, yellowish, greenish, reddish, brownish, or black, rock, composed of an intimate mixture of microscopic particles of felspar and quartz, with fine scales of mica and chlorite. It breaks with a splintery or conchoidal fracture, presents under the microscope a finely-crystalline structure, occasionally with nests of quartz, and is only fusible in fine splinters before the blow-pipe. Some of the rocks to which this name has been applied are probably felsitic lavas; others, though externally presenting a resemblance to fel-

<sup>&</sup>lt;sup>223</sup> See Tschermak, Sitzb. Akad. Wissen., Vienna, lvi. (1867). F. Becke, Tschermak's Min. Mitth. IV. (1882), p. 322. E. Dathe, Neues Jahrb. 1876, pp. 255-337.