

*Geognostic Situation.*

It occurs principally in beds, often of great magnitude, in primitive rocks, as gneiss, mica-slate, chlorite-slate, clay-slate, greenstone, associated with hornblende, augite, actynolite, asbestos, epidote, garnet, felspar, calcareous-spar, fluor-spar, quartz, iron-pyrites, copper-pyrites, magnetic pyrites, arsenical pyrites, blende, galena or lead-glance, and other ores and minerals: also disseminated in granite, chlorite-slate, serpentine, gabbro, &c.; less frequently in beds and nests in transition rocks, as in transition porphyry.

*Geographic Situation.*

*Europe.*—It occurs in serpentine, in Unst, one of the Zetland Islands; St Just in Cornwall; and Tavistock in Devonshire. In the iron-mines of Arendal in Norway, it occurs in beds in gneiss: these beds are short, but vary in thickness from four to sixty feet; they are frequently intermixed with the gneiss at their line of junction with it; cotemporaneous wedges of the gneiss also occur dispersed through the ironstone, and sometimes an uninterrupted transition is to be observed from the ironstone beds into the gneiss, in which they are contained. In these interesting repositories, the ironstone is associated with a great variety of different minerals: of these the most frequent are, granular garnet, augite, hornblende, epidote or pistacite, calcareous-spar, and the three constituents of gneiss. The garnet and augite are the most abundant, are generally in a granular form, and so intimately intermixed with the ironstone, that an inattentive observer might confound them together. The minerals of less frequent occurrence in these beds, are the following:

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sphene