

1. *Breadth or width of veins.*—In most metalliferous mountains, we find that veins extend a few hundred fathoms, and then their width does not exceed two feet.

Veins whose width exceeds a few fathoms are to be considered as uncommon, and those whose width is still greater, are to be viewed as exceptions to their general appearance. HUMBOLDT and FRIESLEBEN observed veins of calc-spar 140 feet wide, traversing gneiss, in the valley of Lauterbrun, in the Alps of Switzerland. In the island of Arran, I observed a vein of porphyry-slate nearly 160 feet broad, traversing sandstone. BORN mentions, that the Spitaler vein at Schemnitz, in Hungary, is from 14 to 15 fathoms wide. In that part of the Fichtelgebirge that belongs to Bavaria, there is a vein from 42 to 70 feet wide; and in the county of Holberg, near Rotleberode, there is a vein of fluor-spar 35 feet wide. In this country there are veins of pitchstone and greenstone from 10 to 100 feet wide.

The width of veins does not continue the same throughout, but changes considerably, and in some particular veins in a remarkable degree.

2. *Length of veins.*—Veins differ very much in their length: when their length exceeds 6000 feet, it is to be considered as uncommon. The following may be mentioned as instances of veins of uncommon length: The Halsbrückner-Spath near Freyberg, which has been traced above four miles  
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