

to perceive that this action was materially different in the two cases.

Geographical Distribution.

On no part of the history of veins has observation pronounced a more positive decision, than on the relation borne by their distribution to physical geography. The truth is universally recognised, that while extensive plain countries are utterly deprived of all indications of these valuable mineral deposits, and others contain them but rarely and in small quantity, there are few mountain countries in which mineral veins are not found in abundance and variety. They are, indeed, not equally nor uniformly distributed even in their more favoured regions: their occurrence is sufficiently dependent on other causes, besides the mere form of the surface, to keep alive the curiosity and inflame the enterprise of the miner, as well as to conduct the philosopher one step further in his research into the mysterious structure of the earth. Taking a general view of the mining districts (not herein counting the collieries) of Great Britain, we see the Grampians, and Lammermuir, and Cumbrian mountains; the great ridges of Northumberland, Durham, Yorkshire, and Derbyshire; the anticlinal axes of the Isle of Man, Anglesea, Snowdonia, and Shropshire; the elevated boundaries of the coal tracts of Wales, and Somerset; the mountain chain of Devon and Cornwall; the elevated ranges of Wicklow, and Wexford, of Leitrim, Sligo, Mayo, and Galway; all rich in lead, copper, zinc, tin, &c., with some silver, and traces of gold. On the other hand, the broad valleys of the Forth, Clyde, and Tweed; the wide vales which surround the Cumbrian, Yorkshire, Welsh, and Devonian mountains, contain almost no mines; and the central plains of Ireland hardly yield any metallic treasures. The same contrast appears on the continent of Europe, between the mountainous and metalliferous tracts of Brittany, the Pyrenees, the Harz, Erzgebirge,