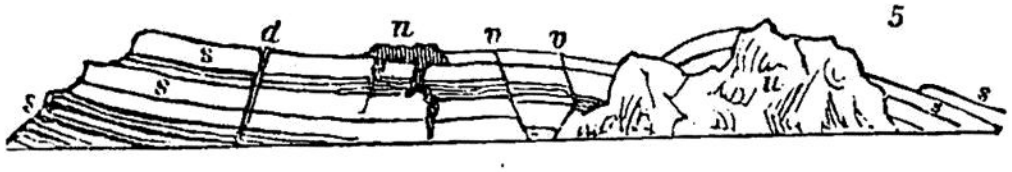
Forms of Rock Masses.

On mountain sides, in ravines, and sea cliffs, the rocky masses of the earth are exhibited free from the obscurity of superficial accumulations: the industry of man, in mines, wells, roads, canals, has added to the facilities granted by nature, and from these opportunities the structure of the crust of the earth, the arrangement and relative position of the rocks, are known in the most essential points. The different sorts of rocks are by no means mixed together in confusion, but placed in a regular and ascertained method of occurrence, and often arranged in a certain determinate order of succession. Almost all rocks exhibit to the careful observer some interesting circumstances of interior structure, — particular divisions of their substance by joints, cleavage, &c.; but, neglecting for the present these subjects, we shall fix our attention on the *form of the rock masses* taken in their totality.

A very large proportion of rocks are formed so as to spread over areas of 10, 100, or 1000 square miles, with thicknesses of only as many or fewer feet or even inches: these are said to be *stratified* (*s*), or formed like a stratum or layer. Fissures, dividing particular rocks, are sometimes filled up with another sort of rock, which is then said to appear as a *dyke* (*d*); various spars, metallic matters filling fissures, or embodied in the rocks, are called *veins* (*v*); and many rocks, neither *stratified* nor in the form of *dykes* or *veins*, are in this sense amorphous, but are generally ranked with dykes, veins, &c., as *unstratified rocks* (*u*).



Dykes and veins form but a small part of the mass of the crust of the globe, which consists principally of