

lent and partial, broken up and shivered; whereas the granitic strata existed in the state of the same glass-panes brought to a bright red heat, and capable, from their extreme flexibility, of being bent and twisted in any direction. We find, too, that there occur occasional patches in which the lines of the stratification have been altogether obliterated. We can trace the strata with much distinctness on every side of these; but there is a gradual obscuration of the lines, and we see what was a granitic gneiss in one square yard of rock existing as a compact homogeneous mass in the next. The effect is exactly that which would be produced in the heated panes of my illustration, were the heat kept up until portions of them began to run; and the circumstance serves to throw light on some of the other phenomena of the gneiss. The stone, in its average specimens, is a ternary, consisting of red feldspar, white quartz, and a dingy-coloured mica; but no one, notwithstanding, could mistake it for a true granite. It has its granite *veins*, however; and these *veins*, truly such in some cases, are, in not a few others, mere strata of the gneiss, which have evidently been formed into granite where they lie. There are no marks of injection,—no accompanying disturbance: all their conditions, with the exception of their being true granites, are exactly those of the layers which repose over and under them. Now the homogeneous patches serve, as I have said, to throw light on the secret of the formation of these. In one important respect the granitic rocks differ widely among themselves. Some of them contain potass and soda in such large proportions, and have such a tendency to disintegrate, in consequence, that they furnish much less durable materials for building than the better sandstones; while others, of an almost indestructible quality, are devoid of these salts altogether. Potass and soda form powerful fluxes; and it seems at least natural to infer that, should wide tracts of granitic rock be exposed to