

mation, so very superior to all others, that we are willing to hope it may be an exception to the general rule, and be adopted not long hence by geologists.

All rocks may be divided into two general classes, stratified and unstratified; and this forms the first division of this system. The next general truth is, that the lower stratified beds do not contain fossils, whereas the others do; hence, we have a subdivision of the stratified rocks into fossiliferous and non-fossiliferous. It then only remains to arrange the strata in groups and formations, and we at once obtain an easy and an intelligible system.

It would be impossible to describe, in these pages, the peculiarities and relations of the beds that together constitute the crust of the earth. We shall therefore proceed to an investigation of the unstratified rocks, and then make a few remarks upon the coal measures in illustration of the statements advanced.

UNSTRATIFIED ROCKS.

The unstratified rocks are extensively distributed over the globe, but cannot be said to occupy any constant position in the series, for they are occasionally associated with nearly all the several groups. It is now generally supposed by geologists that they derived their present appearance, and were placed in their present positions, by the agency of fire; and, upon this supposition, it is easy to explain the origin of the variety of appearances they present, and of the circumstances under which they occur. Sometimes we find them as masses overlying other rocks, and presenting an appearance similar to that of the lavas which are ejected in the present day by volcanoes; while at other times they occur as vein-stones, filling fissures which, in all probability, were formed by the pressure of the vapours which arose from the boiling mass.

The unstratified rocks, as might be expected from their origin, greatly differ among themselves in mineralogical character. Even the same mass of rock will have a variety of appearances in different parts. Deriving their present condition from the agency of fire, many compounds, whatever may be the number of minerals that enter into their composition, must be formed, some containing more and others less quantities of particular substances, varying with