

The two predominant and characteristic minerals in the unstratified rocks are feldspar and pyroxene, or hornblende.

Pyroxene and hornblende have very nearly the same chemical constitution, and seem capable of being converted into each other.

It is now agreed among geologists, that the unstratified rocks have resulted from the action of heat, either as dry heat or from aqueo-igneous fusion. Hence the best writers denominate them Igneous Rocks, and divide them, as in our classification in Section I., into three groups: 1. Granitic; 2. Trappean; 3. Volcanic.

The following table shows to what divisions the different igneous rocks belong.

GRANITIC ROCKS.

<i>Quartz, feldspar, and mica, or hornblende, etc.</i>	<i>Quartz and feldspar.</i>
Granite.	Tabular granite.
Syenite.	Concretionary granite.
Protogine.	
	Pegmatite.
	Eurite.

TRAPPEAN ROCKS.

<i>Siliceo—feldspathic.</i>	<i>Feldspar and hornblende, etc.</i>
Porphyry.	Greenstone or Diorite.
Felstone.	Melaphyre.
Pitchstone.	Andesite.
Clinkstone.	Hypersthene rock.
Hornstone.	Hornblende rock, etc.
Cornean.	

VOLCANIC ROCKS.

<i>Essentially feldspathic.</i>	<i>Feldspar and augite.</i>
Trachyte.	Basalt or Dolerite.
Trachytic porphyry.	Amygdaloid.
Domite.	Peperino.
Pearlstone.	
Obsidian.	
Pumice.	
Tuff.	

The melted matter that is ejected from a volcano, or remains within it, is called *lava*. Hence it is not improper to apply the term to any rock that is proved to have been in a melted state. But it is usual to confine it to the more modern unstratified rocks, such as have been ejected from a crater.

Lava cooled rapidly, and not under pressure, forms glass, or scoria; but cooled slowly, and under pressure, it becomes sometimes crystalline. Now the older unstratified rocks, such as granite, syenite, porphyry, and greenstone, are more or less crystalline; whereas basalt, trachyte, and other igneous rocks are compact or cellular. Hence it is inferred, that the first were