	Mica.	Talc.	Chlorite.
Silex	50	62	41
Alumine	35	2	6
Lime	1		1
Magnesia	2	27	40
Oxide of iron	6	3	10
Water and loss	6	6	2;

but these proportions vary in different specimens.

Hornblende, to which the French give the name of *amphibole*, forms a constituent part of many rocks, and appears to connect the primary with those which are of volcanic origin. It is of a black or dark green colour: it is heavier, but less hard, than quartz or felspar: it may be scratched with a knife, and the colour of the streak is a light green: it yields a bitter smell when breathed upon and melts easily into a black glass. Common hornblende is often confusedly crystallized: it sometimes forms entire mountains, or slaty beds in mountains, and is very commonly met with in granular pieces as an ingredient in compound rocks: when it becomes, more abundantly and minutely, disseminated in them, it forms what are denominated trap rocks, whose origin has greatly divided the opinions of geologists. Hornblende and the rocks to which it is most nearly allied contain as under:—

	Hornblende.	Basalt.	Obsidian, or volcanic glass.	Lava.
Silex	42	44	72	49
Alumine	8	16	12	35
Magnesia	16	2		
Lime	9	9	sometimes	4
Oxide of iron	23	20	2 with manganese.	12
Soda		4	6 with potash.	
Manganese	1			
Water and loss				

Another mineral substance, called *serpentine*, from its spotted colours, resembling the serpent's skin, will be afterwards described, as forming entire rocks: it differs in composition from hornblende by having a larger portion of magnesia and less iron; it may, perhaps, be regarded as an intimate combination of hornblende with talc or chlorite. Its component parts, as given by different chemists, are as under:—

Silex	45	29	45	
Alumine	18	23		
Magnesia	23	34	33	
Iron	3	4	14	with a trace of alumine.
Lime			6	
Water and loss	11	10	8	

From these analyses it is evident that the specimens vary in their component parts; in some, the proportions are almost the same as in hornblende: in others, they agree more nearly with talc and chlorite.