

	1.	2.	3.
Silica . . . . .	57.60	54.60	53.1
Lime . . . . .	9.56	10.45	11.4
Magnesia . . . . .	7.85	19.30	7.4
Oxide of iron . . . . .	22.67	12.10	25.6
Alumina . . . . .	.75	85	1.7
Water . . . . .	.....	1.55	.....

Hornblende is a constituent part of trap hornblende, syenite, and hornblende slate. In some cases it is more or less mixed with granites, gneiss, micaslate, and porphyries.

### 9.—EPIDOTE.

The color of epidote has usually some shade of a greenish color, varying in fact from bottle-green to greenish gray. Its hardness is about equal to that of felspar, and its structure is usually lamellar.

The chemical composition of few specimens is as follows :

	1.	2.	3.	4.
Silica . . . . .	37.	39	39.30	40.25
Alumina . . . . .	27.	26.	29.49	30.25
Lime . . . . .	14.	15.	22.96	22.50
Oxide of iron . . . . .	17.	18.5	6.48	4.50
Oxide of manganese . . . . .	1.5	1.25	.....	.....

### 10.—CARBONATE OF LIME.

This species presents itself under a variety of forms, such as calcareous spar, and the different varieties of limestones. When pure it consists of—

Lime . . . . .	56.15
Carbonic acid . . . . .	43.85

It effervesces in most acids.

The purest form of carbonate of lime is calcareous spar, which is often found in cavities of rocks in regular crystals, as well as in masses, which can be readily cleaved into thin