

of the recommendations which I have given as to the manuring and cultivation of the soils of Frederick county.

LIMESTONES *from Frederick county.*

1. Limestone from Clairvaux, near Mt. St. Mary's College.

A dark bluish gray variety of a rough texture, and traversed by numerous small veins of white calc spar.

Upon analysis it was found to be composed as follows :

Carbonate of lime.....	77.4
Carbonate of magnesia.....	20.5
Sand and clay.....	2.1
	100.

When burnt, 100 parts will therefore yield of—

Caustic lime, (quick or burnt).....	43.3
Caustic magnesia.....	9.3

and when water-slacked, of—

Water-slacked lime.....	57.3
Water-slacked magnesia.....	13.5

2. Limestone from Young's, near Mechanicstown, and N. E. thereof.

A light breccia.

It was found to be composed as follows :

Carbonate of lime.....	59.0
Carbonate of magnesia.....	40.0
Sand and clay.....	1.0
	100.

When burnt, 100 parts will therefore yield of—

Caustic lime	33.0
Caustic magnesia.....	18.2

and when water-slacked, of—

Water-slacked lime.....	43.6
Water-slacked magnesia.....	26.4

3. Limestone from Adams county, Pa., (Marshal's,) 8 miles from Emmittsburg, used considerably in Frederick county.

It represents a hard, light gray mass of uniform texture.

Its composition is as follows :

Carbonate of lime	97.5
Carbonate of magnesia.....	1.5
Sand and clay.....	1.0
	100.