

If the grain only be exported and the straw be restored in the manure of the farm, this system may be continued for a very long time, if the soil originally abounded in the mineral constituents of plants; and the same may be said on a tobacco plantation provided the stalks be returned to the fields.

If, however, the whole crop be sold off as hay, straw, etc., the exhaustion of the soil will be much more rapid.

It should be remembered also, that a soil which has been impoverished by these means can only regain its fertility when supplied with the matters so inconsiderately taken from it. It is generally much more expensive to render such soil again productive, than those which have never been limed.

I would, by no means, discourage the use of lime, which ought to be applied if practicable in some form or other, to all soil in cultivation once in about eight years, but it should be judiciously used, and other manures, especially bones and ashes, should be also applied. It was proper to advert to lime upon the chapter upon the improvement of soils, but it will come under our notice again in the chapter upon lime.

CHAPTER VIII.

Lime and Limestone.

In the sketch of the geology of the State given in Chapter III, the more important formations of limestone were pointed out; but it is proposed in this chapter to describe them with reference to their agricultural applications.

In Harford, Baltimore, and Howard counties there are several ranges of the metamorphic limestone, (No. 11.)

These limestones have always a more or less crystalline granular structure. In color they vary from pure white to gray and blueish gray.

The name *alum limestone* is applied to a very pure variety because of its white color and large crystalline grains. The less pure varieties are usually fine grained, and contain small grains of quartz or sand, besides mica, talc, and a few other minerals disseminated therein.

The purest even contain small portions of magnesia; and this earth exists in the different beds in various proportions, and in some of them nearly equals the lime in amount. These last are called dolomites, and are fine grain, and have a more glistering lustre than the purer limestone. They may be