least hope that at some future day our agriculture may equal that of Belgium and other well cultivated parts of Europe.

The use of lime should be continued—or, better still, marl, when it can be obtained. One or the other is essential in a good system of farming, and experience has shown that lime is best applied at the rate of about 50 bushels per acre. This may be repeated every eight or ten years, provided a proper rotation be adopted; or if hard cropping must be practiced, means should be resorted to that will keep up full supplies of at least phosphoric acid, ammonia and vegetable matter. I have given reasons for the opinions expressed in the first report, that the soils of our State (with the exception of small areas of almost pure sand) abound in silicate of potash.

Ample supplies of vegetable matter are maintained if the land be kept a sufficient portion of the time in clover and grass, as is practiced in some of our upper counties. There can be no difficulty in reference to vegetable matters, and even ammonia, with those who can obtain marsh muck or peat, prepared either in the barn-yard or with lime, as I have already recommended. This material should *never* be applied without previous preparation, because of the injurious effects of the sulphate of iron it usually contains, and besides, the fibrous matters which abound are difficult to be plowed in, and keep the soil so light, that the crop suffers in dry weather.

Our agriculture experiences immense loss by the want of proper management of barn-yard manure, and it is really painful to see the continued neglect in this respect on the part of most farmers. As this subject was especially treated in the first report, it does not seem necessary to pursue it further on the present occasion. I cannot, however, refrain from expressing, as my decided opinion, that at least one-half the *effective* value of the barn-yard manure produced in Maryland is lost by the neglect of its owners. The injury to the State in this way is enormous, and it is certainly improvident to incur this loss and then attempt to make up the deficiency by expending large sums of money for fertilizing substances imported from abroad.

Besides this loss from the improper management of barn-yard manure, we experience another scarcely less in the almost total neglect of liquid and other offal from dwellings. At a small expense, every farmer can provide underground drains, through which all the liquid offal from the dwellings might flow to a common receptacle from which it could be taken in liquid manure carts and distributed upon the fields. If this mode be not convenient, it may be advantageously applied to the compost heaps or the muck and peat, to the manifest increase of their value.