

average quantity of vegetable matter, and has the benefit of a warm aspect and favoring slope. It has all the advantages, in short, which physical condition and climate can give it, and yet it is unproductive, because, says chemical analysis, it is destitute of several mineral constituents which plants require for their daily food, or contains some poison that must be carried off by a drain.

"Now that I have shown the necessity of oxygen in a soil, I will state my experiment of ventilation, and its results. Two years since, I purchased twenty acres of low swamp land, which had been covered with water for centuries; I cut a main drain through it, and lateral drains ventilated every twenty feet, which carried off the water so perfectly that it became the driest part of the farm. The whole was planted with cabbages and potatoes. When they came to maturity, the cabbages growing on top of the drains weighed forty pounds, when those immediately contiguous, in the next row, only weighed twenty. The potatoes over the drain were far larger, and twice as abundant, as those in the rows next. A false dry drain was then constructed between two drains, with a view of observing whether the water passing through had any effect upon the growth of vegetation above the drain, and it was found by fair experiment that the result was the same above the dry ventilated drain, and the growth very superior to the adjoining rows."

PLASTER OF PARIS.

"The Editor of the *American Agriculturist* states that in conversation with a Mr. CHANDLER, he had learned how he could use green or unfermented manure in the hills of corn. Formerly, whenever he put unfermented manure in the hills, the corn, instead of growing thriftily, as is the case when well rotted manure is used in this way, would become yellow in color, and seem to be injured rather than benefitted by it. Having read that plaster of Paris would absorb, and change the action or nature of ammonia, he tried it in this way: After placing a shovel full of green manure in the hill, he covered it over with soil, and on this threw a large spoonful or more of plaster of Paris, then dropped his corn and covered it. When thus planted, the corn invariably grew rank and filled the ears as well as if the manure had been thoroughly composted and decomposed. On spring, when planting his corn in this way, he had not plastered enough to go over the whole field, and accordingly was under the necessity of planting a portion of it, with green manure in the holes, and no plaster over it. The result was an excellent crop as far as the plaster was used, while in the remainder of the field, the corn was yellow, and sickly during the whole season, and yielded comparatively little."

From practical experience we have long been convinced that plaster of Paris, might be used much more freely, and generally, than it is, as a fixing agent for the volatile portions of stable and yard manures. Containing as it does sulphur and lime, elements found in animal and vegetable tissues, the sulphur in the form of sulphuric acid unites with the ammonia

present in the decomposition of manures, and renders a highly volatile gas, a stable product.

Those who are the most careful to save the elements of nutrition, will very soon find that they will have more to save, while those who allow the rain and sun, to dissipate the active agents of fertilization, and feed the soil with comparatively valueless manure, will get but little reward for their labor.

LETTER FROM MINNESOTA.

[We extract the following from an enthusiastic correspondent in Minnesota.—Ed.]

One of your club told me "that the FARMER was worth more than \$50 to him, on account of the plan of a house given in the February number, of last year, that he has copied, aside from the information given on other topics."

Now is it not true, that if one will only look at the reason and sense of what is given in agricultural papers, and having examined its practical bearings, practice what they have learned, farming as a study, and a science would be greatly advanced?

I like farming and gardening above all other occupations; for what is there more pleasant for the heart of man, than to see the work of his hands, not forgetting the Almighty hand, prosper, and the wilderness to blossom as the rose.

In fact, such gardens as we can make in this country, and such results of farming operations as we can show, would do your heart good to see, say during the months of July, August, September, and October.

Last summer a farmer from your own Hudson river country, told me he could not raise such crops on the best lands at home, and with the highest cultivation, as I had on turf, broken up to the depth of five or six inches the same spring.

C. G.

St. PAUL, 1855.

LICE ON CATTLE.

For some time I have been a reader of agricultural works, and have seen many remedies for various things, and many directions how to rid cattle of lice, and have tried quite a number of them. I have used dry slaked lime, sifting it over the animal, then with a card or curry-comb, working thoroughly back and forth, that it may touch every part infested with the vermin, taking care that not sufficient be left on to loosen the hair. The lime will remain on for weeks if thoroughly done. I have tried it for several years, and always with good effect.

A SUBSCRIBER.

ALBION, January, 1855.