amply repay him, and, at the same time, give a pleasing aspect to his farm-steading, which, before, was one continued shoot of urine, water, puddle, &cc. No sonp-suds, cleanings of greasy or oily vessels, &c., should be allowed to go to waste as formerly; all, in fact, which does not go into the pigs trough, out of the kitchen, should be carefully collected and thrown into the tank.

Having gone so far with the subject. if not trespassing too far upon the pages of your invaluable Gazette, and also the patience of your readers, allow me to say a few words on the uses of this so highly. prized liquid. I need scarcely remark that it is a powerful stimulant to grass lands. I have known instances of grass being cut four times, where liquid manure was regularly applied after each cutting. The last crop was off in the beginning of November, and was from 15 to 18 inches in length; it can also be beneficially applied where turnips, cabbages, rape, &c., are grown. But to whatever crop it may be applied, be very cautious in using it in dry weather without diluting it with water, as it would in that case prove injurious rather than beneficial.

It also acts as a powerful decomposer when thrown over the dung-heap, or any other place where speedy fermentation is wanted. It likewise forms a useful ingredient in compost henns, besides a great many other purposes, which, at present. would exceed the limits I had prescribed when commencing this letter. I shall, therefore, conclude by saying, that I have used this manure in all the different ways mentioned, and I have also seen its benc. fits; and last, though not least, realized the profits derivable from such a system, and am fully convinced that, if it is given a fair trial, it will never be abandoned ; but, on the contrary, adopted by every careful, industrious, and persevering farmer. Yours, &c.,

Аргіl 23, 1847. Алрна.

USE OF LIME AS A MANURE IN NEW JERSEY .--- About from 1825 to '30, the farmers of the region began to learn that time would change the soil of our naturally sterile hills, to the strongest kind of corn and wheat land; and indeed no one but an eye witness could believe the change that it has already wrought. Before we were aware of its power, some applied too much, and injured the land for two or three years; but by deep plowing and bringing up and mixing the clay with the soil, and growing clover, to equalize the proportion of vegetable matter with the lime, &c., a powerful wheat soil was formed. Those who say that every soil has lime enough naturally, should visit Morris, there they may see fields of thirty or fifty acres, on which nothing grows but what we call "poverty grass," and sassafras bushes, and in one adjoining, as noble crops of corn, wheat, or oats, as any reasonable man-would wish to see. And this too, is so certainly attributable to the lime, that all now use it, even the old Germans, whose prejudices have deprived them to its beneficial effects 20 years or more.

neficial effects 20 years or more. Any quantity of lime can be obtained at the kilns, for six to eight cents a bushel, every bushel of which, when slaked, will average double the quantity-I find by careful experiment, that the best manner of applying it, and in which it has the most immediate effect, is to place it in heaps of from 100 to 200 bushels, as may be most convenient, and leave it to pulverize by the action of the air and rain for two or three months. By this time it will be become a carbonate, and is fit to apply to any crop, at the rate of 20 to 50 bushels per acre, or rather, double that quantity, it being slaked. Of course the quality of the soil must regulate the quantity; a good soil hearing a larger quantity than a poor one.

I have seen lime in the above condition, put upon corn Kills before the corn was up, (a quart to the hill,) and strange as it may seem to those unacquainted with lime, except in its caustic state, with marked good effect, while the gaping crowd predicted ruin to the crop, not knowing the difference between it and fresh lime.

I have tried it fresh from the kiln, (a light dressing of 30 bushels to the acre,) harrowing it in, and this trifle, on account of its caustic property, caused a difference for the worse that could be seen a mile—other corn unlimed, standing side by side. But its good effect never fails when applied in the former state.

You may take the poorest soil in New Jersey, and in three years, (by an interval of one year between two dressings of forty bushels to the acre.) can interit produce good corn. The manner is, first apply one dressing, and plough the well and deeply; then plant corrand till it thoroughly, and the crop will be from 30 to 40 bushels of ears to the acre. The next April we sow oats, two bushels to the acre, and apply the other dressing of lime on the surface, harrowing in thoroughly with the oats, and "seeding down" with one harrowing, after sowing the clover. We think six quarts of clover.seed sufficient to the acre.

The oats, with this treatment, are generally a fair average crop, and the clover, soon after the oats are taken off completely fills the stubble, and the following summer should not be pastured, except by hogs after it is in bloom. Thus a great quantity of vegetable matter will be upon the surface for the next years' crop, which will be all you can wish. One important item I have omitted, which is  $1\frac{1}{2}$  bushel gypsum, sown broad-cast to the acre, on the clover. This should be done in March.

Morris is rich in iron ore, which in both quantity and quality is unsurpassed. One mine of great value, is 300 feet deep, which, in a comparatively new country, is a deep hole. There is no doubt, I think, that the mines of this country could supply all the furnaces and forges in the United States. JAMES HAINES. Chester. N. J. Feb. 1847.



COBOURG, AUGUST 1, 1847.

Should scientific enquiries be pursued in reference to Agriculture, and the results be in the same ratio with those already obtained during the past few years. it will not be long ere the term "infertile" becomes obsolete, and the opinions now held concerning worn out lands, as they are usually denominated (after having been in a state of cultivation) shall be considered merely as popular errors of bygone days of ignorance. And we see no reason why such advances should not be made, since such wonders have been accomplished in almost every other department, even to the compelling the potent agency of one of the invisible and most subtle of fluids to subserve our interests, endowing it (if not with the gift of speech) with an organ for communicating ideas, at distances the most conceivably remote.

We believe it will eventually be found that there is no description of soil but may be made capable of producing food for both man and beast, save such as abound in so large a portion of mineral or metallic ingredients, as to render the attempt to neutralise or correct such an abundance of material, a work either of too much labour or expense, alike abortive and unremunerative.

It is true that some soils are easier reclaimable than others, but there can scarcely be a doubt that many, hitherto considered as worthless, will hereafter occupy a prominent place in agriculture.

Man, in exercising his prerogative to "replenish the earth and subdue it," is desirous to make all things subservient to his will and pleasure. He strips the earth of its natural verdure and products, invades ruthlessly the primeval woods and forests, destroys alike the domicile of the insect, the lair of the beast, and the eyry of the bird; and bids occupy the site, plants of every variety necessary for his wants and gratification, of a form and character totally dissimilar to the former occupants of the soil, and requiring a mode of culture and supply of food adapted to their peculiar character.