SWAMP MUCK.

Its value—for what soils—how to be applied.

If the farmer had barn, pen and yard manure enough no other would be needed. In this are all the elements of plants and all the properties suited to mellorate the soil physically. With this, and a little lime to quicken its action and to neutralize the acidity of wet, sour soils, he could improve his land to almost any extent, and there would be an end of the manure question.

If, in the lack of home manures, he resorts to the portable mercantile manures, this is well so far as mineral ingredients are considered, but there is a deficiency of organic matter. Manures must be in large quantity as well as of good quality. There must be organic matter—animal, or vegetable, or both, and there must be enough to affect the physical condition of soils—to render heavy soils light and open, so that roots can penetrate easily and the air circulate freely, and to give light, sandy soils a loamy cast that will enable them to retain water.

Hence the value of swamp muck. If rightly manipulated, and wisely applied, it will prove itself of considerable value, not solely as a feeder of plants, but mainly as a modifier of soils, making both sandy and clay soils easier to cultivate and more productive, and that, too, somewhat permanently, more so, at least, than is true of most fertilizers.

All analysts agree that old, brack swamp muck contains just about the same ingredients as the solid excrements of horned cattle when hay or grass fed, except that the soluble alkalies of the former—potash and soda and a little common salt—have been washed out, while they remain in the latter. This shows for swamp muck a considerable value, since the addition of a little wood ash, very little common salt, and a little lime to neutralize its acidity, all costing but a trifle, make it almost the equivalent of manure from under the stable window.

But we appeal from a scientific to a practical view of the subject. Many suspect the deductions of science, as if true everywhere else but false in agriculture, while few will doubt the testimony of sound, practical, successful farmers. Thousands of such have used swamp muck freely, and, though costing something for labor and for desirable additions, they have found it to pay better than any other fertilizers they have purchased. We know many who testify to this effect, and we believe their testimony is reliable, as it agrees strictly with the scientific views on the subject.

As to the soils to which it is adapted, of course it need not be applied to low, swampy land. These already contain enough of it, and to add more would be like carrying coals to Newcastle or offering strawberries in Hammonton, N. J., whence five car loads are shipped daily for fifty days every year in strawberry time for New York and Philadelphia. By-the-way, on the sandy lands of New Jersey strawberries are grown more by the aid of swamp muck wherever it can be had than of all other fertilizers, and are such in quality as cannot be beaten.

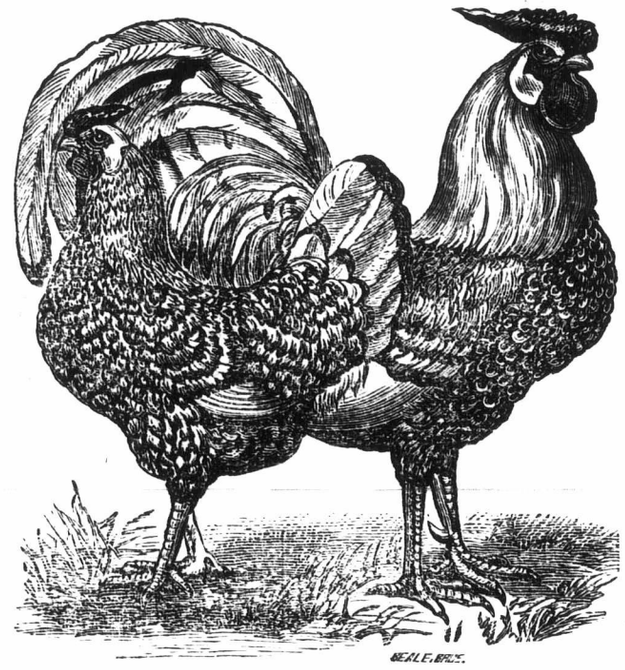
Next, on turf land and on land frequently alternated with grass, and consequently well supplied with organic matter, swamp muck cannot be expected to be as immediately useful as on worn soils, where the organic matter is deficient. On all uplands—sandy, loamy or clayey—it is sure to report itself favorably in the crops, and, besides, to effect a permanent improvement of soils having too much sand or too much clay.

For gardening, farming and nursery purposes, to all of which it is well suited, better, perhaps, to the nursery than to the others—it should, if possible, be dug the year previous to its use, as early as August or September, and in a dry time. If thrown into high piles the water will be drained out, and it will not again be saturated, and will be lighter to remove. As much as can be used as an absorbent of the liquid excrements of the animals should be carried to the stalls, folds, yards and pens in as dry a state as possible to be used for that purpose. The salts in the liquid excrements will supply just what the muck wants to make it as good as the manure heaps, and, in this case, no addition of potash, lime and salt will be required.

But if not brought to the barn and mixed with the barn manure by the feet of animals, it is well to mix with it one bushel of wood ash, one bushel of lime and half a bushel of some cheap agricultural salt to each cart load. That will make it as good as the average of barn manure for corn, grass, potatoes or almost any other crop. For corn it is excellent; for potatoes nothing is better; it will ensure a good crop and a good quality, very little liable to the rot if placed a small shovelful in the hill and covered with the seed four inches deep. If applied to grass land the same addition as above can be recommended; but if to be applied to grass land with no addition and without composting with manure it should be dug at least a year beforehand and then spread on in the fall to have the benefit of the winter frosts, snows and rains. The water from snow and rain always contain considerable ammonia, and swamp muck is one of the most powerful retainers of ammonia for the use of crops.

For Indian corn there is nothing better than barnyard manure into which dry swamp muck, equal in quantity to the manure itself, has been thrown during the fall, winter and spring, and there thoroughly mixed and composted under the feet of animals. If applied when in a state of active fermentation all the better, as it will then bring up the seed in a very short time and produce a most vigorous growth. In this way the contents of the yard are doubled, and, at the same time, the quality is fully sustained. We say this last as a result of our own experience, confirmed by the testimony of farmers in whose judgment we have entire confidence.

The best fields of corn we have ever seen were grown by barn manure with an equal quantity of well prepared muck (20 to 25 loads of this mixture to the acre), yielding, in several cases within our knowledge, over a hundred bushels of shelled corn per acre.—*Fireside and Agricultural Journal.*



SILVER-SPANGLED HAMBURGS.

Silver Spangled Hamburgs.

The above cut represents some of the stock of C. H. Wyckoff, of this city. He will have a stock of poultry at the Provincial Exhibition. He has Houdans, Buff White Cochins, Leghorns, Light and Dark Brahmas, Game Fowl and Pigeons of various kinds.

ALSIKE CLOVER.—(S. N.)—Alsike clover, it is claimed, will grow wherever red clover will. It will also thrive where red clover will not; that is, on moist ground. It is doubted whether it will resist drouth as well as red clover, though some growers assert that it does so better. Its natural habitation is a moist, cool climate. Hence it is doubted if it will thrive as well in the inland regions of the country, away from large bodies of water, as near our northern lakes.

OVER-DRIVING HORSES.—Some of the most serious losses in horse flesh to the farmer result from want of care to animals after being heated, or worked hard in the hot sun. In this case the animal should be put in a cool stable out of the draught, but where there is plenty of air; washed with tepid water, scraped, dried and if a pint of good sound ale is administered it will do no harm.

To prevent glue becoming sour or mouldy, the addition of a quantity of carbonate of soda, just sufficient to give a strong smell to the glue, will accomplish the desired result.

TOP-DRESSING WHEAT.

A correspondent of the *Rural New Yorker* writes that he has been trying the effect of top-dressing his wheat as a protection during winter, and says:—

"My experience shows me that you may protect wheat by sowing oats with your wheat in September or spread straw on the wheat before it comes up, or spread it on late after the ground freezes, or in the winter when there is no snow on the ground; but you will receive the best results from yard manure (if rather coarse) spread on the ground before it comes up. When the wheat begins to show itself stop. If you should have a part of your wheat uncovered as soon as the ground freezes (and some snow will do no hurt) spread on as before.

"I had four acres of flat land, rather heavy; but being flat and wet it would heave bad in the spring, and the wheat would die out. The last crop I had on that piece I spread yard manure on about half of the place before the wheat came up. I resumed the spreading again as above stated, and covered the balance of the piece except about two rods wide through the centre of it. The result was satisfactory. If there was any difference in the early and late spreading it was in favor of the early spreading, but both were excellent. I threw my cradle on the wheat in a good many places, and it did not go to the ground. The strip through the centre that had no manure was nothing, a little wheat and a fair crop of chess."

The full value of wheat as a civilizer will never be fully realized until wheat-meal takes the place of bolted flour, and the people learn to make bread without yeast or risings. Good bread is emphatically the "staff of life," but the commercial article is the way to dyspepsia and premature death.—*Science of Health.*

THE KOHL RABI.

There seems to be a decided tendency in Britain to substitute *kohl rabi* for turnips, and the same thing is also observed here. The *kohl rabi*, which is a sort of turnip and cabbage, having a large root of exceeding sweetness, out of the sides of which grow the leaves, which are also highly nutritious and relished by all classes of stock without having that tendency to scour them like turnip tops, is capable of producing a larger amount of cattle food to the acre than turnips. It is better able to succeed in a comparatively dry climate like ours, and the roots withstand frost as well as *ruta bagas*, while the leaves can be gathered and stored to be fed out during the fall and early winter. It is grown in precisely the same manner as *ruta bagas*, requires the same culture, but is laid by earlier, it being desirable not to break off the leaves after they begin to grow large. Sown in drills or ridges twenty-seven inches apart and manured in the drill as is usually done here for turnips the produce, with good, clean culture at the early stages, should reach 1,000 bushels of roots and six or eight tons of leaves per acre.—*Ex.*

PEA BUGS.—A Jerseyman writes to the *Country Gentleman* that in his neighborhood the pea bug had been gotten rid of by threshing peas, cleaning them, and then putting them in a heap on the barn floor and sprinkling them at the rate of a quart to five or six bushels, with spirits of turpentine. Leave the peas a few days to dry, after shoveling the heap over to mix them well with the turpentine. Barrel them, and the bugs are never heard of again.

WEATHER AND CROPS.—The magnificen. growing weather of late is having a most bene ficial effect on the crops. A bountiful Providence has again dispelled the fears caused by dry weather, and the indications now are that most abundant returns will reward the husbandman's hopes and toils, and crown the year with gladness. Even the hay crop is making splendid progress.—*Strathroy Age.*

EXPERIMENTS IN CURING HAY WITH LIME.

Last summer I put about five tons of hay in one stack composed of about one-third each of timothy, clover and weeds. It was put up the same day it was cut and was quite green. I sprinkled it plentifully with lime about half air-slaked. It commenced to heat immediately, and got so hot that I thought it would burn, but in twenty-four hours it had cooled off. It kept remarkably well, moulded only where the were large stalks of weeds. The cattle ate it, but did not like the lime. I put the same amount of hay in a barn. This hay was better cured and drier than the other, but it did not keep as well as the other. The salt appeared to take as much dampness as the lime took up, which rendered it useless. In another barn I put hay that was well cured. I added lime to it also. The horses did not relish it so well as that which had no lime, but the horses appear healthier and have less cough than when fed on hay that was not limed.

I would not advise the use of lime only in a free-stone country. A certain amount of lime is necessary to make bone for all animals, but in a limestone country they often get too much, which causes diseases of the intestines and bladder—*L. J. Wooley, in Ohio Farmer.*

CREDITABLE FARMING.

Many so-called model farms are not worthy of the slightest notice, much less of imitation. Any farm which is to do credit to cultivation, or management, or general results, should be self-supporting, for if it is dependant on manure which is purchased, it is evident this is a system which cannot be general. The majority of agriculturalists are not in a position to be buyers of fertilizers, and the application of livery-stable and city manure generally can only be used by those who are near to towns and cities, and who market hay, vegetables, etc., grown on their land.—These farmers and market gardeners can of course farm in a way to deserve genuine credit, but to farm on a system for general adoption, the management must be such as to sell such kinds of products as will increase the plant food, and act in such a way that the more there is produced the more there will be returned to the sod. This exceedingly essential desideratum has not sufficient importance attached to it in America, at least not in the United States, though in Canada the best stock farmers are approaching this salutary management. There are many crops which could be secured for food, which would be more palatable and more fattening if not allowed to seed, yet this extra drain on the land is suffered, while at the same time cattle find this old straw-like food distasteful. It is not only hay which is treated thus, but there are numerous parties who manage grazing so badly as to permit half the grass to seed and not on the ground, although it is seen year after year that the stock reject all this old stuff, and will only eat where the grass has been kept short.

In some of the older States it is a well known fact that there are more farms which would not sell for the cost of their improvements than there are of the opposite sort.—This is evidently owing to a system of cropping which has gradually but surely sapped every particle of fertility which plows and cultivators can set free to act on vegetation. This method puts one in mind of the word "subdue," which some are so fond of using in regard to land, for large parts of these States are most relentlessly subdued, so much so that the soil is "subdued," disabled, crushed and destroyed! And yet because an occasional farmer exists who exports corn, grain, pork or cheese, the whole community claims credit for the champion!—*Cor. Country Gentleman.*