

THE SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

Agriculture is the nursing mother of the Arts.
Xenophon.

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS, Editor.

VOL. III.

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For the Southern Planter.

ROOT CULTURE.

Mr. Editor,—The flattering reception which my communications on the culture of Rutabagas and White Belgian Carrot, have met with in the "Southern Planter," emboldens me to try my hand again. I have not the vanity to suppose that I can enlighten the readers of your paper, but if I can even be the means of directing to this subject the attention of some of the planters, who are skeptical of the value of root crops, in comparison with Indian corn, and induce them to make a fair trial, I feel convinced they will throw aside their prejudice and adopt their culture hereafter, to a certain extent. I would not wish to be understood as recommending the cultivation of roots in preference to corn, but an acre or two in roots will add much in the economy of feeding stock; enabling the planter to keep more and keep it in much better condition too; and the more stock, the more manure, and the more manure, the greater the crops.

Prejudice and conceit are the offspring of ignorance, and the great barrier to agricultural improvement. The first requisite to improvement, in any business, is the conviction, that we *can* learn; the next, that we *will* learn. And it perhaps is invariably true, that the more we *do* learn, in useful knowledge, the more we become sensible of our comparative ignorance, and the more we are anxious to learn. This results not only from a wish to serve ourselves, and multiply our enjoyments, but from a sense of sacred duty to society.

I am aware that it is generally supposed, at the South, that the same labor and the same expense, will obtain more nutriment from an acre of corn, than from an acre of any root crop whatever. But such is not the case, here at the North. From our soil, that will yield forty bushels corn to the acre, we can get from four to five hundred bushels of rutabagas, and from three hundred and fifty to four hundred of carrots, or mangold wurtzel, which, for milch cows and young stock, we consider of great value. They have not the fattening qualities, but are considered to exceed all kinds of grain in growing flesh. One advantage the root culture has over corn is, that it does not exhaust the soil so much, as it draws a great proportion of its food from the

atmosphere; besides, rutabagas can be sown after the other seeds, and harvested after all the other crops are secured, and no growth leaves the soil in better order for a succeeding crop.

The introduction of the root culture into Britain forms one of the most important eras in the improvement of British husbandry; and its introduction into our country will ultimately prove highly beneficial. And that they can be grown south, and in Virginia too, is evident from the following, which was published in an early volume of the "Albany Cultivator." Mr. W. S. Morton, of Prince Edward, in a letter to the Editor, says, "That our soils are well adapted to the culture of the rutabaga I have demonstrated, to my own satisfaction, by a successful trial, on a moderate scale, for a number of years. I have cultivated mangold wurtzel last year on about the fourth of an acre, and succeeded to the astonishment of all who saw the crop."

If the root culture can be made to succeed in Virginia, of which I have but little doubt, I should not at all be surprised to hear that the lands there should double in value in the course of a very few years. In fact, I am so well convinced of it, that were I to sell the farm I now occupy, I should turn my face to Virginia, and take a *look* at some of the now considered worn out lands before I settled down again.

And now, my good natured readers, permit me to recommend, in the culture of either variety of roots, the *ridge system*, which I have adopted, and given in the first number and fifth page of the current volume of this journal. In this plan the labor and tediousness in the first working is much abridged, and can be done by the younger or aged hands, and after a little practice, becomes less irksome, and not such a tedious job after all. Try it, and let us hear of your success through the columns of this paper.

C. N. BEMENT.

Three Hills Farm, May 18, 1843.

For the Southern Planter.

IMPROVEMENT OF OLD LAND.

Mr. Editor,—The improvement of lands, especially such as have long been abandoned as worthless, I am persuaded from some experience, is practical. Old fields used for many years as commons, require only one good manuring to

produce good tobacco. After the to acc^o crop (which is the best preparation) seed in wheat, and, in the month of February, in clover and herdsgrass.

I have a lot of wheat at this time on such land, that promises a better crop than other lands often manured, and to all appearance much richer, (no doubt wearied by much cultivation.) When well set in grass, it should not be interrupted with the plough for two or three years.

My plantation is one of the oldest in Charlotte, and was first settled by my grandfather, who was a woodsman, and took up the lands generally in my neighborhood, as may be seen by reference to the patents bearing date about the year 1756.

The up-lands were so much exhausted from hard cultivation when I got possession, as to make it absolutely necessary to improve the cleared land, or cut down the remaining forest, which was not more than sufficient for fire wood and fencing. I had often heard the remark from a very practical man, that it was as easy to improve as clear an acre, and I resolved to try the experiment. I am satisfied that an acre can be covered and improved, even if under the necessity of hauling richer earth from hedges, corners of fences, ditch banks, sooner than we can cut down, grub, and prepare timbered land for a crop of any thing.

It is my uniform practice to make my farm-pens on the ground I wish to improve, selecting the poorest spot, especially if it is dry; it will be sufficiently enriched by the juices from the litter lying through the winter. It will save much hauling from a more permanent shelter, often distant from the land to be improved.

To restore our old lands, we must be patient and persevering, adding to the quantum of lot land every year as much as convenient; the progress, though slow, will tell in a few years.

The consolation of having bettered the condition of our lands (to say nothing of the profit from better crops) is sufficient to arouse the energy of Virginians. We have a soil and climate adapted to the production of every crop essential to the wants of man, and we have only to avail ourselves of the cheapest and most practical mode of improvement to change the present gloomy prospect, which now hangs over us, to substitute a verdant scene, in place of the cheerless broomsedge which meets the eye of the weary-worn traveller from better cultivated countries.

Farm-pen and stable manures for our tobacco country are the cheapest and most certain improvers, after all; plaster, lime, &c. are rather expensive articles to be used broadcast.

From the flat lands the cornstalks should be taken, affording a very good feed for cattle in the fall, and the best foundation for the farm-pens and stable-yards, with as many leaves as

can be conveniently hauled. The straw should then be fed by scattering it generally over the pen, unless so abundant as to be spared and carried directly to the land to be improved.

I knew a planter in my county who manured mainly with leaves, and a most successful planter he was, (the Rev. James Brooks,) covering his tobacco lots very deep, with leaves only. I would suggest alternately a pile of manure and leaves; by this means a larger surface may be aided. The great object is to manure enough to make the clover and herdsgrass take; this effected, much is accomplished—at least our barren lands may be converted into good pasture.

With much respect, yours, &c.

SAMUEL D. MORTON.

N. B.—I have been engaged in improving waste land about ten years. Probably I may not have made as fine crops as those who apply the whole manure to better lands, but I have been profited by enhancing the value of my land. Such as I have improved would not have been estimated by any judge of land at more than three to four dollars, now it may be safely valued at from six to eight dollars.

S. D. M.

May 10, 1843.

For the Southern Planter.

COAL-TAR.

Mr. Editor,—In your March number, inquiries are made in relation to coal-tar. Being in Richmond when it issued, I wrote a few lines in answer to the inquiries referred to, but concluded not to deliver them to you, but to wait until I had an opportunity of re-examining the roof upon which I had used it, some four years ago. Two weeks ago, I chanced to be at my former residence, and another gentleman and myself examined the roof. The gentleman that was with me was an experienced carpenter.—We cut into the shingles; the tar had not penetrated, but formed a thin covering, and the shingles were full of the fine fuzz, used by wasps and hornets to build their nests. We were both of the opinion that it was very little, if any benefit to the shingle, and far less beneficial than common paint. It makes, at best, a very ordinary coloring, soon fades and looks dingy and mean.

The excellence of coal-tar, in my opinion, lies in its far excelling, in odor, the best specimens of dead cattle, which, through the length and breadth of our good old Commonwealth, every spring delight the nostrils of those airy epicureans, the buzzards. Unlike the short-lived hyacinth which puts forth to-day and to-morrow withers, it keeps up the game for weeks, until the poor mortal who has been ingenuous enough to buy and use it, can smell nothing but coal-tar,

thinks of nothing else whilst waking or sleeping, dreams of coal-tar, and rouses himself, holding his nose. Those who think they would like to sleep with a dead hog for a month or so in summer, will do well to put coal-tar upon their roofs, otherwise, not.

PHILIP A. BOLLING.

For the Southern Planter.

DIVISION OF ARABLE LAND—ROTATION OF CROPS—EXTIRPATION OF SASSAFRAS, &c.

Mr. Editor,—Brevity shall be observed in filling up the heads above laid down; and under the first, I will endeavor to answer this question, *What is the best division of arable land, compatible with its steady improvement?* Profit is what we aim at in all our exertions in agriculture; first, in the amount and value of the products drawn from the soil, and secondly, in the permanent improvement of our fields. If we make large crops at the expense of our lands, it becomes every year more certain that our apparent gain is real loss. We should aim then to get good returns, while we make permanent and as rapid improvement as practicable. For the purpose before me, I will suppose a farm of four hundred acres of arable land, to be divided into *six parts*; two of these, to contain one hundred acres, each, the other four, fifty acres each. The two should be so arranged, if practicable, as to be contiguous to the farm houses. This ratio in the division, is founded on the amount of stock *actually* needed on the farm. If summer support can be had from natural meadows or marshes, then, the four lots should be still further reduced, and the two, proportionably enlarged. The design of the plan, is to get the greatest gain—support only the stock actually necessary—extend our means for giving employment to our increasing hands, and to enrich the land. All this, the writer is confident may be done upon this plan, *with a good rotation of crops*. This is the *second* point to be considered. On the two "*hundred acre*" fields, let the rotation be corn, wheat or oats, or part of each, according to soil and comparative value. At first, no grazing should be allowed on these lots, say, for two years; afterwards, especially if laid down in clover, (which will on good land attain to good size during the fall after the small grain is taken off,) a very good bite may be extended to the stock just before going into winter quarters.—*Without a particle of manure*, the land will, under this plan, grow better every year. But the increased product of the large field, over the small one, places it in the power of the proprietor to apply much more manure over the whole aggregate surface, than upon other plans. Reflection will convince the reader of this, and save the time and space of an argument here.

The rotation for the fifty acre lots, should be *corn, wheat, clover, pasture*. The whole farm then, will have on it when the plan is in full operation, one hundred and fifty acres in corn—the same amount in small grain—fifty acres in clover, which should be neither *cut nor grazed*, unless the land can fully justify it—and fifty acres in *close pasturage*, by which it will have its last year's clover well trampled in, and the present crop nicely cleaned off for corn the next year. We thus get larger crops, more manure, and greater profits. Corn is our great staple in this region—it cannot be dispensed with. Wheat is most precarious. Upon other systems, we have a sixth, a fifth, a fourth or a third of the four hundred acres in corn. This gives us *sixty six and two-thirds acres—eighty—one hundred—and one hundred and thirty-three and one-third acres* in corn; while the proposed plan gives one hundred and fifty acres. Suppose the experiment to begin on land yielding four barrels per acre; look at the result. Two hundred and sixty six—three hundred and twenty—four hundred—five hundred and thirty-three—and six hundred. Now count this at three dollars per barrel. See how rapidly, comparatively viewed, the capital is turned over. When fairly considered, it appears to the writer that it is impossible to raise a substantial objection to the *practical operation* of the plan. It entirely exceeds the old *three field* system in every point of view, and yielding a greater amount of offal, its resources are proportionably superior to all the other systems that I have examined. The plan may frequently be so arranged as to save much fencing; no dividing fence being needed between the two large fields, on many farms, the grazing allowed, being made the care of a driver. But I meant to be short.

A word on the sassafras and other pests. I have found the best effects, nay, the only efficient effects, from *grubbing every summer*. As soon as corn is laid by, grub the pasture and wheat field. The cultivation of corn will keep it under one year in each rotation. So that the blue thistle, running brier or any other pest, for *six* years in succession, and the farmer will be so fully convinced of his ability to extirpate, that he will have but little more fear of them. I have tried it.

The foregoing matters are respectfully submitted to the farmers of lower Virginia particularly, by

J. DU VAL.

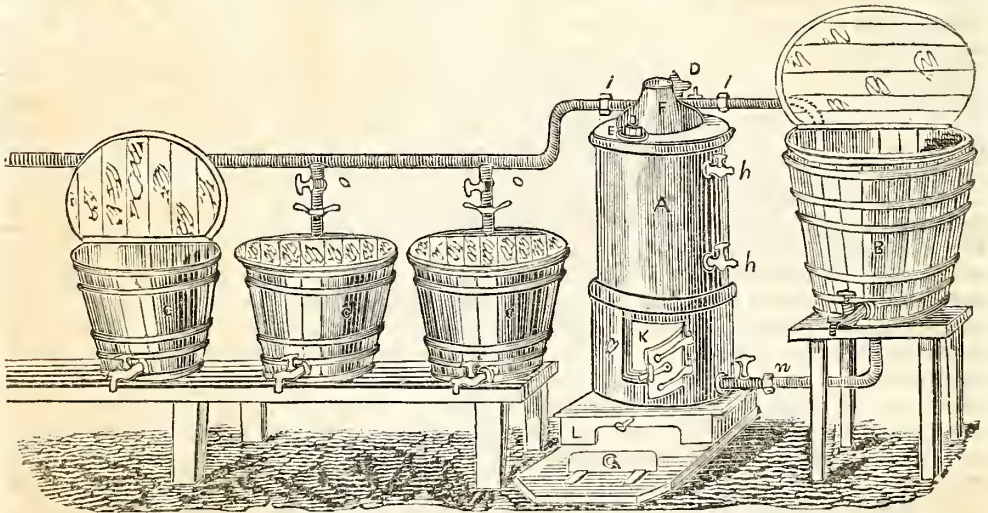
King & Queen County.

PRESERVING SCYTHES, &c. FROM RUST.

To preserve scythes, sickles, reaping hooks, and other steel tools from rust after the season for using them, wipe them clean and dry, and

hold them before the fire and keep drawing them backwards and forwards until warm enough to melt wax; then take some beeswax and rub it all over. A half-penny worth of wax will be sufficient for a scythe. Then put it in a dry place, but not warm; it needs no other covering. The usual method is to wrap a hay-band round; but in winter time this naturally contracts moisture, or the damp air strikes in betwixt the folds of the hay-band.—*Farmers' Magazine.*

BENTLEY'S STEAM GENERATOR.



Since the practice of cooking food for stock has become general, which it has at the North at least, many plans have been devised to effect this object in an economical manner. Saving of fuel has become a matter of importance, even to our prodigal friends of the South; and when wood continues to be so abundant as to be little regarded, the labor of cutting and hauling is so onerous, as to have brought into repute several stoves and boilers for cooking and steaming.—Of all the different kinds of apparatus which we have ever seen for heating water, in point of convenience and economy, we greatly prefer the one illustrated in the engraving. The principle is neither more nor less than that on which the well known locomotive boiler is constructed.—This plan has been long known as the most economical that could be adopted, but the cost of construction has hitherto prevented its use, except for certain kinds of steam engines. We are indebted to the ingenuity of Mr. Bentley for the invention of labor-saving machinery, whereby the cost of this article is so reduced, as to bring it within the range of private uses.—

Wherever any quantity of heated water is required, whether in the kitchen or on the farm, for washing or for cooking food for stock, we have no hesitation in expressing the opinion that it is the most perfect apparatus in use.

A is the boiler, which is filled by unscrewing the stopper at E. K is the furnace, in which the fuel is deposited. The bottom and the top of the boiler A are perforated with holes, varying in number from 19 to 30, $1\frac{1}{4}$ inches in diameter, and hollow tubes of wrought iron extend from the top to the bottom, having their ends secured in these holes: so that the only egress for the heat and smoke of the furnace, is through these tubes: consequently, the heat of the fire, instead of extending around the outer surface of the water only, as in other arrangements, is here driven through the body of the water in nineteen different pipes. These pipes are all covered by the lid F, to the top of which a common stove pipe is affixed. This lid can be raised up, or taken off, at pleasure, for the purpose of cleaning the pipes from the soot, &c. which accumulates within. D is a

weight of seven or eight pounds, which acts the purpose of a safety valve, and is found amply sufficient to retain the steam for all purposes, whilst it prevents the possibility of explosion.— *i, i*, are couplings, by which pipes may be connected with the steamer, leading off into such reservoirs as may be required: just behind the one on the right hand side, is seen a stopcock, (there is a similar one on the opposite side, concealed by the weight of the safety valve) the turning of which turns the steam off or on at pleasure. *h, h*, are cocks, by which the height of the water in the boiler may be ascertained: it should not be filled above the upper one, nor suffered to get much below the lower one. *a, a*, are branch pipes, of which there may be as many as are required, furnished also with stop cocks leading into vessels as may be wanted.

Let us suppose the boiler filled with water, and a fire kindled in the furnace, a large double handful of wood or coal being sufficient for the purpose: as soon as steam is gotten up, which will be in about twenty minutes, the vessels are filled with water, and the stop cocks in the pipes are opened; immediately the water is raised to the boiling point, and as much above it, as you may please, by keeping down the lid: it may of course be then applied to any purposes for which boiling water is used. By means too of the cock just above the vessel, the heat may be raised or lowered at pleasure. These vessels are generally wooden tubs furnished with cocks at the bottom through which the water may be drawn off, if it is desired, for other purposes.

Sometimes, upon the other side of the boiler, a large tub or reservoir (*B*) is used, which is represented with its lid up: into this reservoir one of the pipes of the boiler is introduced, through the top, by which any quantity of steam may be injected into it. Of course, if this reservoir is kept filled with water, the water will be kept hot, which, drawn off through the cock at the bottom, will afford a constant supply of hot water for household purposes. Also, if a pipe be carried from the bottom of this reservoir to the bottom of the boiler, which it must be remembered is hollow and surrounds the furnace, to supply the boiler with water, all that we have to do, is to open the cock at (*n*), and let the water flow in from the reservoir, which it will do, until it rises to its level in the boiler. In this case the stopper at *E* is not used. Of course,

whenever the boiler is to be filled, the steam must first be blown off.

Some contrariety of opinion exists as to the relative merits of boiling or steaming food. This apparatus is equally adapted to either mode of cooking—a barrel may be filled with potatoes, and one of these pipes being introduced through the head or lid, they will be thoroughly steamed in twenty minutes; or if the barrel is filled with water, they may be boiled in almost as short a time. A representation of the various purposes to which it is adapted, give this apparatus an air of complication, which does not belong to it: to us it appears perfectly simple, and within the comprehension and management of the meanest capacity. So assured is the inventor of its superiority, in point of economy, that he is now erecting several in this city upon the understanding, that he is to be paid only when the purchaser is satisfied that it saves two-thirds of the fuel consumed by any other apparatus in use.

There are three sizes, which are furnished at \$55, \$70 and \$85, delivered in Baltimore, where they are constructed. These prices are for the boiler and furnace alone: the pipes and vessels, which vary with the different establishments to which they are furnished, are either made by the purchaser himself, or charged for separately.

For the Southern Planter.

IMPROVEMENT.

Mr. Editor,—In looking over your truly valuable paper I do not see any plan advised for the improvement of land, which, in my opinion, is so effectual as the one I pursue.

I live in what may be called the red land district of Amherst. The character of the soil is similar to that of Albemarle; the clay is very red, and tenacious, so much so, that it is difficult to plough it until it is mixed with vegetable matter.

My plantation is laid off in five fields, so as to fallow clover for wheat and for corn. The oat crop follows corn, and it is upon this crop that I use most of my manure and straw to procure a good stand of clover. The clover seed are raked in with the oats and the thinnest land is liberally top-dressed with long or unfermented manure, which nourishes the young clover, and protects it from the hot sun, thereby insuring a good stand. The oats or clover are plastered about the first of May, about half bushel to the acre, and as much more the ensuing spring, which should be applied by the first of April.

It is astonishing to see what effect a good

clover lay turned in has on our soil, changing it from a red to chocolate. What manure I have in the fall I apply to the poor spots, raking it in with the wheat. If put upon the wheat in the winter, as is the custom in the more eastern counties, it will be sure to give it the rust, though it will produce a heavier crop of straw.

A YOUNG FARMER.

Amherst, March 25, 1843.

TRANSACTIONS OF THE NEW YORK AGRICULTURAL SOCIETY.

We are indebted to the politeness of Mr. Luther Tucker, the Secretary, for the second volume of the Transactions of the New York State Agricultural Society. As in the last volume, so in this, we meet with matter of great ability and of general and absorbing interest.—Amongst other things, we find two prize essays, from the pen of Willis Gaylord, Esq., occupying sixty pages, every word of which we should be glad to transfer to our columns, if the nature of our work permitted. As it is, we must be content with making brief extracts from such portions of these essays as we deem most interesting to our readers. The first essay is on

THE PREPARATION AND USE OF MANURES.

After examining the nature and constitution of plants, Mr. Gaylord remarks, "In the preparation of manures, the principal object to be aimed at must be to supply materials for the formation of carbon and ammonia; and these are found in the greatest abundance in dead or decomposed animal and vegetable matter." He then proceeds to consider separately the different kinds of manures, under appropriate heads, and first of

ANIMAL MANURES.

He quotes a late British writer on agriculture, who says, "If cattle repay their food and the expense and risk attending their keep, the manure is sufficient profit. Even with a moderate loss, they must be kept when manure cannot be purchased. Manure is to a farm what daily food is to an animal; it must be procured at any sacrifice." Mr. Gaylord thinks, that to such crops as corn, potatoes, &c. that do not require forcing in the early part of their growth, but demand nutriment at a late period of their vegetation, to perfect their seeds or roots, long manure may well be applied in the spring; being well covered, fermentation will not take place, until

the gases, which are eliminated in that process, will be retained by the earthy covering, and appropriated by the roots of the plants. To preserve manure for such purposes, he thinks, that the usual plan of incorporating the droppings of the cattle with the usual litter of the farm-yard, during the winter months when the absence of heat prevents decomposition, is fully sufficient; but for other crops, as turnips, beets and carrots, where the influence of manure is required to be felt at once, in order to push them forward at the first start beyond the reach of insects, he thinks the vegetable matter should be reduced to a state of perfect decomposition, before its application. Whenever this process takes place, the vegetable matter should be protected and covered, as in the compost heap, with alternate layers of sod, earth from ditches, ponds, &c. which may absorb the drainings of the manure above, and arrest the ascent of the gases from the manure below. He says, "the more solid such deposits of manure are made, the more slow will the fermentation be. Should the dung in these heaps be too slow in fermentation, it may be hastened by opening the piles, or still better, by making holes in the top into which the wash of the yards and the urine of the stable may be poured."

If Mr. Gaylord is correct in supposing that no loss occurs during the winter months in the farm-yard manure, his plan of hauling it out and covering it up at that season when the heat generates decomposition, is highly to be recommended; because it saves all the labor of the compost heap during the winter season. But, in our southern climate, at least, we imagine that the loss, even during the winter, from evaporation and solution, would more than justify the labor of daily collection and addition to the compost heap. In addition to the earth and sods, which are mere mechanical retainers, we do not doubt that valuable chemical agents, as gypsum, salt, &c. may be added, whereby desirable combinations with the gases, &c. liberated in the process of decomposition, may be obtained. Upon this portion of the subject the science of chemistry is one day destined to shed most valuable light.

Upon the subject of

GREEN CROPS

Mr. Gaylord remarks, "For a plant to enrich exhausted soils, affording as it does both top

and roots to a large extent, there is no plant equal to *clover*; and particularly where it is necessary or desirable to have the green crop fed off by animals. I prefer letting the clover grow until nearly or quite in blossom, and then turning sheep upon it. They will eat much of it and fatten rapidly; but they will trample down more, and this, mixed with their dung, forms in its decay a most efficient top dressing; and repeated for two or three years, forms an admirable preparation of the soil for wheat or other grains. When a crop is cultivated to be ploughed in, it should be done at the time when the plants contain the greatest quantity of nutritive matter, and have least exhausted the soil in which they are growing. This, in most cases, will be when the plants have come fully into flower. At an earlier period there may be as much weight, but a larger portion of it will be mere water; and, if allowed to stand much later, the soluble matter is lost in the seed, and the ligneous part of the stem becomes more difficult of decomposition. Buckwheat is a good plant for a green manure; its growth is rapid, and gives a great weight per acre, and two crops may be ploughed under in a year. The best way of ploughing in such green crops, is to pass a heavy roller over them, which lays the plants close to the ground, and greatly facilitates covering them by the plough. It is believed that corn, sown broadcast, and when just showing its tassels, cut and covered by the plough, would be one of the best crops that could be chosen for this purpose. A man or boy, in this case, would be required to follow the plough, to place the corn in the furrow for covering, at the next passage of the plough.—Taken at this time, corn abounds in nutritive matter, and could scarcely fail of proving a first rate fertilizer of the soil.”

Mr. Gaylord thinks that wherever other vegetable matter can be had, fallen LEAVES will not pay the expense of gathering.

PEAT, SWAMP AND POND MUD

he esteems very highly, but these substances applied in their natural state are almost inoperative, as compared with stable manure. To enable it to give out the ammonia, with which it abounds, peat or swamp muck must be fermented, and it is for want of this process that it is so little esteemed, in general. To bring it to this state, we are recommended to compost it with half its bulk of stable dung, which it is

asserted will form a heap equal in fertilizing properties to three times the quantity of dung employed.

Poudrette, urate, guano and other peculiar manures are brought under our notice in order, but passing over these we come to the more general one of

LIME.

Upon this subject our author remarks, “It appears as the result of experience, that lime produces the best effect on what are called stiff loams, or loams inclining to clay, and in which a good proportion of decayed organic matter is found.

“It is found, too, that it operates more favorably on soils natural to oak and its kindred trees, such as walnut, poplar, &c. than on those where the beech, elm and maple constitute the principle timber. It is singular that the richest limestone lands, as they are called from being based on this rock, are frequently those on which heavy dressings of lime operate like a charm.

“If used as a top dressing, lime is usually applied to the sod in the fall; but the practice most approved, is to lime the corn ground in the spring, on the inverted sod. Manure is applied to the wheat crop after lime. The quantity of lime used varies much. There is no doubt it has sometimes been used in excessive quantities; and when used on soils nearly destitute of vegetable matter, can produce no good effect. On a medium soil, fifty bushels per acre may be considered an abundant dressing; but three or four times that quantity is sometimes used. The best method of using lime, is to take it from the kiln, unslacked, and deposit it in heaps in the field where it is to be used, not more than three or four bushels in a place; and either slack it by pouring water over it, or, which is better, by covering each pile with earth, and letting them slack by the moisture thus furnished. When sufficiently fine, the earth and the lime are mixed by shovelling over, and the mass is then scattered over the land to be dressed. The soil should be well harrowed after the application, to incorporate it more completely with the surface earth.”

SALT

is very highly recommended. “It appears that salt in small proportions, promotes the decomposition of animal and vegetable substances; that it destroys vermin and kills weeds; that it is a direct constituent of some plants, and therefore

necessary to their perfection; that all cultivated plants of marine origin contain it, asparagus, for instance; and that all such succeed better when watered with salt water, than when deprived of it; that salt preserves vegetables from injury by sudden transitions in temperature, salted soils not freezing as readily as those to which salt has not been applied; and that it renders the earth more capable of absorbing the moisture of the atmosphere. When salt is applied as a manure, it may be used in quantities from six to fifteen bushels per acre; although some have gone as high as fifty bushels. Farmers, however, should be cautious how they venture on excessive doses, as an extravagant one could scarcely fail of being fatal to any crop.

"Salt and lime, artificially mixed as a manure, promises to be a valuable aid to the farmer in those positions where the soil abounds with insoluble silicates or geine, and where other manures necessary to produce decomposition or fermentation are not at hand. Professor Johnston recommends a mixture of two parts of lime and one part of salt, the mixture to remain incorporated in a shady place, or covered with sods two or three months before using. Salt and lime should not be used immediately after mixing, as bad results are apt to ensue; but after being well mixed in a dry state and lying as directed, it may be applied at the rate of from thirty to sixty bushels per acre, either before or at the time of sowing.

"Dr. Dana directs to take one bushel of salt and two bushels of lime; to make the salt into strong brine, and with it slack the lime. Mix both well together, and let them remain ten days; then let them be well mixed with three cords of peat, shoveled well over for about six weeks, when it may be used. A quantity of salt sufficient to destroy all vegetation, may be applied to a soil with safety when a few months are to elapse before the crop is to be put on; as the chemical changes which take place, partially neutralize its effect during this time. A small quantity mixed with the soil in each hill of corn, has been found to protect it from the wire worm and the cut worm; indeed there is no substance that insects of all kinds more dread than salt. It is probable, therefore, that further experiments will show that not the least value of salt is to be found in its preventive properties against these depredators. Mixed with soot, salt acts with great power on roots."

We know how objectionable long articles are in the general, and have endeavored to compress the *gist* of this valuable essay into a few pages. The subject is in its nature extensive, and we fear we have done injustice to Mr. Gaylord in our abridgement. Indeed, properly considered, the essay, long as it is, is nothing but a series of condensed remarks upon a variety of subjects, all coming under the general head of "manures."

For the Southern Planter.

SWEET POTATO.—BLUE GRASS.

Mr. Editor,—After reading your account of Mr. Gordon's mode of cultivating the sweet potato, I came to the conclusion that it was my duty, in return for the information I had obtained from your numerous contributors, to send my mite to you. I have been successful in *keeping* the sweet potato, and I know of several others, whose success has been greater than my own, by pursuing the same method.

The great danger is, from the confinement of the moisture which arises from the potato after it is dug. Indeed, for some weeks after they are housed, the "sweating," as it is called, is very great; and is always more or less, as the season has been wet or dry before they were dug. This moisture must be allowed to escape; and if it does not go off spontaneously, artificial means must be used to expel it. The best way is to have the house or cellar kept open for some weeks until this evaporation ceases—and gradually to diminish the ventilation until the potato has been well cured, or ceases to sweat.—They will become moist frequently in the winter, spring and summer, in which case, they must be smoked—that is to say, a parcel of coals must be put in a dutch oven, or something of that kind, with some small pieces of wood (chips are used by us) and this placed in the cellar or house where it should remain until the fire goes out, shutting the door close. You will find the moisture is soon expelled, and the potatoes are dry. It would be best to have this done every day or two, as long as they last—certainly, every day when the weather is moist or cold. These two cardinal objects should never be lost sight of—to keep them dry, and moderately warm.—An excess of moisture, or cold will certainly destroy them: the smoke and fire will be found to be adequate to these ends—if attended to every day they need it.

My friend, Col. William R. Baskerville, of Mecklenburg, keeps them in large quantities, for family use, for years. I have eaten potatoes at his house, I think, fully two years old. I believe that he has had old ones on hand when the new crop was housed, for many years past.

This plan was introduced by an old man in Mecklenburg, some thirty or forty years ago, who never failed to keep his potatoes; and it has been slowly adopted in that neighborhood, until it has been established by the invariable success of the practice.

The old fashioned potato cellar is preferred, dug under a house which does not leak, and where fire is usually kept—but the plan will as well apply to any other place—houses built expressly for that purpose, no doubt, would succeed just as well; but fire and smoke must then be more abundantly and oftener applied. Where the bulk of the potatoes is large, it would be well to have small places in the bulk so arranged that the moisture could escape from them—for instance, if several hundred bushels were together, stakes should be driven down in a circular form, in two or three places in the thickest part of the bulk, so as to secure an open space or funnel for the moisture to escape; and in each of these funnels it would be well to introduce a few coals and chips, when needed.

The sum total of the whole secret is, to keep them dry, and to keep them moderately warm; and this being done, they can be preserved until they can be disposed of as the owner may desire.

Whilst I am writing perhaps I can give Mr. Scales a hint in relation to the blue grass. In this part of the State, it is difficult to get "a stand" of blue grass from the seed. The hot and dry summers, if the seeds shall germinate, usually destroys the little delicate plants. I have a yard of about two acres, for the most part shaded by oak trees, on the summit of a ridge which separates the waters of two creeks, and I found it very difficult to get any grass to grow on it, particularly under the oaks. The idea occurred to me to *transplant* the grass, by sticking a very small bunch of it in the ground, at intervals of about twelve inches—nothing could succeed better. I have now a yard well set in beautiful sward, under the oaks, as well as in the open spaces.

If the land is in good heart, it will spread entirely over it in two years; and if it is not in good heart, top dressing will soon make it rich enough for the grass. No preparation of the ground is necessary in a yard, but no doubt it would be better. People frequently dislike to plough up their yards—let them take a hoe and dig a very small place, and put in a small sprig of grass, in March, and it will soon shew itself as a successful antagonist to any other plant.

For pasturage, no doubt it would be best to prepare the ground well; and rows of eighteen inches apart, and plants the same distance, will give a good turf sooner than you can get it from the seed, if the young shoots should be crippled, as they always are with us by the heat and drought of summer. Under oaks, if the leaves are suffered to remain on the grass,

it will be destroyed. Transplanting can be commenced as soon as the grass shall begin to put out, and continued until the middle of May, if the weather is seasonable.

I have now discharged a debt which lay on my conscience; but it may be I am only telling your subscribers what they knew before. Be this as it may, as long as I avail myself of the information given through your paper, I feel I owe my fellow-subscribers a debt, if I *think* I have found out any thing, until I let them know. If they will all do likewise, we shall give great assistance to each other.

With best wishes for your paper and for the good cause it advocates,

I am, most respectfully,

Your obedient servant,

E. B. HICKS.

Lawrenceville, Brunswick, June 5, 1843.

We sincerely wish all of our subscribers were as *conscientious* as Mr. Hicks.

AGRICULTURAL EXHIBITION.

The Henrico Agricultural Society held their fifth fair at the old stand, "Goddin's Spring," on the first day of June. In the general stagnation of all business, it was refreshing to see with what zeal and interest our town and country people devoted themselves to the getting up this exhibition. It was really and truly a grand affair—far, very far, superior to any of a similar character which has ever been presented to our citizens. We arrived on the ground about nine o'clock, and immediately hurried off to the ploughing match, for which a level sward had been selected about a quarter of a mile west of "the Spring." Excited as we were, and as every body around us was, we could not help remarking, as we went along, the beauty of the morning; and the preparations nature herself seemed to have made for the occasion. A heavy rain had fallen the night before, putting the ground in the finest possible order. Every vestige of a cloud had fled before the triumphant march of the fiery sun, whose heat would have been oppressive but for the cool and gentle western breeze that gave life and motion to every flower and shrub.

As we rose the hill, the scene was novel and striking in the highest degree. In the midst of five hundred spectators, eight splendid teams, with ploughs and men to match, were silently and lightly progressing in lines as straight as an arrow, cutting and whirling the dirt with as much apparent ease as the joiner throws a shav-

ing from his plane. The ploughmen, some of the most substantial and respectable farmers in the county, were neatly and cleanly dressed, in the best possible taste, with every thing appropriate to the business in which they were engaged. Their loose shirt sleeves and the long black boots coming half way up the leg and protecting the white pantaloons, added much to the picturesqueness as well as fitness of their appearance. The interest upon the part of the spectators increased with every furrow, and the ploughmen themselves evidently became very much excited. As each competitor arrived at his last furrow, the crowd gathered about the end of the row with all the stillness and excitement that marks the closing of a horse race.— Each in his turn received the meed of public approbation, but when Mr. W. I. Grieve turned to finish his last furrow, and it was observable that such had been the evenness and regularity with which his furrow slices had been cut, that the comb or ridge left for the last turning, clearly defined by the green sod in the midst of the ploughed land, was as even and as straight as if it had been laid off with a garden line, and when in coming down, this comb was completely subverted in its whole length, there was but one opinion of the merits of the ploughman. This opinion was confirmed by the decision of the judges, who unhesitatingly awarded Mr. Grieve the premium, amounting to fifty dollars.

The skill exhibited by Mr. Grieve and other gentlemen on this occasion, satisfied many of what we knew long ago, that the plough is a very perfect and scientific implement, and, in the hands of a really skilful man, can be made to execute its work in a manner and style calculated to astonish those who have passed their life in witnessing its operation in the bungling manner in which it is commonly performed.— We know of no lesson more instructive to farmers, many of them called good ones too, than this ocular demonstration of what a plough can be made to do.

The ploughing over, we returned to the exhibition, which by this time had begun to assume a very imposing appearance. The show of stock was particularly fine, surpassing our expectations, and far excelling the exhibition of any previous year. Mr. Marx, with his beautiful lot of milch cows, from some of whom he is drawing, daily, five and six gallons of the richest milk for the benefit of our city market, and Mr.

Stevenson, with his beautiful cow and her most magnificent bull calf, satisfied us, that we would have no longer to resort to the North for the best specimens of the Durhams and Ayrshires. The hogs too were very fine, and a gentleman who is himself a large owner of the stock, and who has visited all the northern establishments, expressed to us the opinion that he had never seen a hog, take him all in all, superior to the celebrated *Chesterfield*, the property of our old friend, Col. Burfoot. The assortment of agricultural and horticultural implements was varied and extensive; the fruits and flowers were luscious and beautiful; the evident improvement in the taste and skill of our city gardeners bears honorable testimony to the value of the labors of this association, which are felt and acknowledged by every individual who frequents our markets.

The display in the yard was very striking, the crowing of cocks, the cackling of hens, the whirling of machines, and the din of voices, gave an air of life and activity to the scene; whilst the fluttering of ribands and the waving of feathers afforded goodly evidence of that interest which the ladies have always manifested in these exhibitions. The capital address of Mr. Lyons, which was delivered with that ease and grace of manner for which he is so conspicuous, was listened to with the most profound attention, and the audience dispersed with many a hope expressed, that the Agricultural Society of Henrico would continue to flourish and increase in prosperity as long as it was identified with the noble pursuit, to which our southern people are so fondly devoted.

With respect to the particular articles of the exhibition, we shall take occasion to refer to them more particularly hereafter.

From Miss Leslie's Magazine.

THINGS WORTH KNOWING.

BY MISS LESLIE.

To Soften Sponges.—A sponge, when first purchased, is frequently hard, stiff, and gritty. To soften it, and dislodge the particles of sea sand from its crevices, put the sponge into a clean vessel of water, and boil it about an hour, (no more,) changing the water twice, or three times if it is very gritty; letting the sponge cool so that you can squeeze it thoroughly before putting it into the fresh water. When the sponge has become quite soft, and there is no more appearance of sand and grit, squeeze it out, and it will be fit for use. A brown sponge,

prepared in this way, is quite as good as a white one. But you may bleach it by adding to the water, when boiling, a few drops of oil of vitriol.

After using a sponge, always wash it immediately in clean water; squeeze it out, and let it dry.

To Clean Looking Glasses.—Take a newspaper or a part of one, according to the size of the glass. Fold it small, and dip it into a basin of clean cold water. When thoroughly wet, squeeze it out in your hand as you would a sponge, and then rub it hard all over the face of the glass, taking care that it is not so wet as to run down in streams. In fact, the paper must be only completely moistened or damped all through. After the glass has been well rubbed with the wet paper, let it rest a few minutes; and then go over it with a fresh dry newspaper (folded small in your hand) till it looks clear and bright—which it will almost immediately, and with no farther trouble.

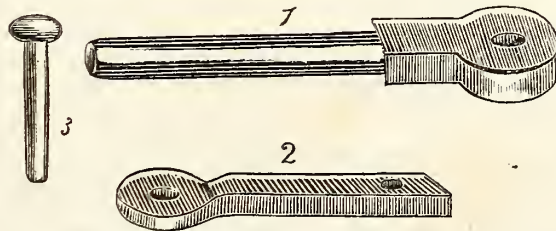
This method (simple as it is) is the best and most expeditious for cleaning mirrors, and it will

be found so on trial—giving a clearness and polish that can be produced by no other process. It is equally convenient, speedy, and effective. The inside of window panes may be cleaned in this manner, to look beautifully clear; the windows being first washed on the outside. Also, the glasses of spectacles, &c. The glass globe of an astral lamp may be cleaned with newspaper in the above manner.

Dusting Furniture.—If a hand-brush is used for dusting furniture, it should always be followed by a dusting cloth. A brush merely disturbs the dust without taking it up or absorbing it; and is only useful in dislodging it from crevices. Therefore, if the dust is not afterwards wiped up in a cloth (which should be frequently shaken out of the window) it floats about the room, and settles again; being only removed from one place to spread itself on another. A yard of sixpenny calico will make two small dusters, or one large one. They should be hemmed, that the servants may not regard them as mere rags, to be torn up, or thrown away when dirty.

For the Southern Planter.

CHEAP AND DURABLE HINGE.



Mr. Editor,—Permit me to describe to your readers a hinge applicable to gates of every description, which in point of durability, simplicity and economy excel any others I have ever used or seen.

The part to be inserted in the gate-post is to be made of seasoned oak, locust, or any other hard wood, 8 inches long and shaped like Fig. 1.

The hole in the gate-post to be bored with an inch and a half auger, and one inch of the outer part to be mortised square, to prevent its turning.

The part to be inserted in the frame of the gate is to be made of three-fourths or one inch square iron, five or six inches long, the upper surface at one end flattened, and a hole punched through the other end, as represented in Fig. 2.

Oak or iron pins, in the shape of Fig. 3, passing through the holes in the two parts, hang the gate—it can be shipped or unshipped in half a

minute. The bottom hinge to be placed some distance above the ground, to prevent rust or decay—a small piece of old shoe sole, greased, to be placed between the parts to make the gate open and shut more easily by relieving the friction.

The part required to be of iron ought not to cost more than twenty-five or thirty seven cents; but even this may be made of wood, by those who prefer keeping their money to parting with it for any thing that can be made at home, and there are such. The part to be inserted in the gate-post may be secured by a nail or pin driven in obliquely.

Yours,

A. TUNSTALL.

We had the pleasure of making the acquaintance of Mr. Tunstall, who was present at our fair on the first of June. We gathered from

him some capital hints, upon the subject of horticultural implements especially. Mr. Tunstall seems to have a great mechanical turn, which is no doubt of infinite value to him in his horticultural and agricultural pursuits.

For the Southern Planter.

FENCING.

Mr. Editor,—I have lately seen several communications in the Planter on the subject of fencing, and as none of the plans there laid down suit me as well as my own, I think it probable that a description of it might be acceptable to some of your readers. I object to some of the plans suggested, because they do not save enough rails, and to others, because they are too expensive and tedious. On the plan I propose, a fence can be made in as short a time and with one-third to one-half the number of rails that it requires to make a common rail fence. It is made by throwing up a sharp crooked bank corresponding exactly with the worm of the fence. The bank may be made high or low according to the number of rails you wish to save. The whole operation is simple and expeditious, and if properly done, makes a neat fence for ordinary purposes. The manner of operating is as follows:—If the ground can be ploughed readily, the plough may be used by throwing up a bed ten feet wide, which process may be repeated several times, so as to make less work for the hoes, taking care to have the middle of the bed where the fence is to run. The only service, however, that the plough renders is to make the hoe work a little easier and quicker and may be dispensed with if not convenient.

Where you wish to have the fence, lay the worm (as for a common fence) with as much precision as possible, stick up a stick two or three feet high in every corner, and then take up the worm. The sticks will show exactly where the bank should be made. Draw up with the hoes a sharp bank not wider at top than the thickness of a rail, and take care to have it straight from one stick to the other and make it a little higher than necessary, as it will settle a little. It is not necessary to give the worm more than about three feet crook, for it will stand much better than a fence made altogether with rails. It may be made still stronger by using stakes and caps—and when stakes and caps are used, the crook may be reduced to two feet. I prefer stakes and caps decidedly to stakes and riders, because they make the fence stronger and much lighter and the rails do not settle and mash into each other as much, and besides, it takes less timber, as the stakes need not be more than five and a half feet long. If these are used they should only

be stuck in the ground a few inches, so as to make them stand erect—then put on the caps, draw the bank up to the stakes and ram the dirt around them so as to make them firm.—When it becomes necessary to repair the fence, it will only be necessary to raise the bank a little higher, which can be very easily done, and the same rails will answer the purpose. A fence on this plan does better than if made on the bank of a ditch, and the labor can be performed by any person that can handle a hoe, and requires no more time than a fence made entirely of rails.

Very respectfully, &c.

WM. B. MILLER.

Halifax, Va., May 10, 1843.

We are glad to see that our efforts are drawing out communications upon this important subject. For our own part, we have seen no plan yet that we thought so good, nor so economical, as the post and rail, especially, if the posts are mortised in rainy weather with the facilities we have recommended.

PLASTER.

A young farmer desires to know how he shall use plaster. Our advice to him is, to use it freely on all his crops, our opinion being, that, at the rate of a bushel to the acre, it will do good to any crop, and the more where the land may have been previously limed. Let him mix it in the proportion of one bushel to twenty cart-loads of manure, as he may be preparing his manure to be hauled out, or sow it, in that proportion, after his manure may be spread out, and previous to its being ploughed in: let him spread it on the surface of his ground after being ploughed, and then to be harrowed in: let him put it, mixed with ashes, in the proportion of one bushel of plaster to five of ashes, in his corn hills, or potato rows, graduating the quantity of the mixture to a gill for each corn hill or potato set: let him sow it in the first named proportion over his grain fields, his meadows, and his old fields, and he cannot go amiss. The range we have here marked out, is extensive, but not more so than it is calculated to do good in: and, in a word, we will say to our inquirer, that he will find it to his interest to sow it any where, where he may have growing crops, as it will attract moisture and food from the air and from the earth, and like a good nurse, dispense it to the growing plants in such proportions, and at such times, as may be required by their wants.

But while the agricultor may be providing plaster, let him not forget, that it always acts best where, as we have before premised, the land may have been previously limed.—*Am. Farmer.*

CORN.

The following is an extract from a letter received from a friend in North Carolina :

"Mr. Woodson is correct in his ideas of planting corn very early. It is our practice on the Roanoke. His rows are much too narrow for our purposes. We prefer 5 by 3, leaving generally two stalks in a hill. *Listing* just before planting is an admirable plan in light, low grounds. It will not do so well in aluminous soils, high or low. He works too much, as a *general rule*. The number of ploughings should be regulated entirely by circumstances, of which each farmer must judge for himself. The character of the season—the quantity of grass—the nature of the soil, and the general appearance of the crop must determine it, and a judicious manager will accommodate his labor to these things. There is no formula for making the corn crop. *General principles* must be consulted in this as in every thing else. Nor will the same description of plough always be the one to use under all circumstances. The winged coulter answers a very fine purpose at first, and in *every stage* of the crop when the grass is very small and young. We regard the turn plough invaluable in low grounds. *Barring* the corn, *lapping* the grass in the centre of the row, *splitting* it again and *destroying* the corn, are its varied uses. I suppose every farmer on James River understands the use of this plough. In Roanoke we plough *every other row* through the crop from the beginning, and every other row is, of course, worked differently. Let me urge you to impress upon the community the advantages of this system of cultivation. They will force themselves upon the reflecting manager at the bare suggestion. Corn never fires when thus worked. A third more can be cultivated—grass never seems to injure, as one row is always in order, and on high lands the washing from heavy rains is not half so great. These are important facts, and I speak from experience.

"The Dutton corn I find will yield twenty per cent. more than any other I have ever tried. The fact has been well tested.

"Why do you not give us a price current at the end of each number of the Planter? Such information is very valuable, and as a matter of reference hereafter, may be still more so, as the work is generally preserved.*

"Our wheat is much troubled with the chinch

* We abandoned our price current, because, we thought we could fill its place more to the satisfaction of our readers, the most of whom take daily or weekly papers affording them the same information. But finding that our head of "Markets" was more esteemed than we had supposed it to be, we have made arrangements for resuming it under the auspices of Messrs. Ludlam, Preston & Co. who have kindly undertaken the charge of this department.—Ed.

bug, and there is much reason to fear the crop will be a short one. The fly has well nigh destroyed every tobacco plant in this section, and many planters are planting their lots in corn and cotton.

Respectfully,
THOMAS GOODE TUCKER."

HANOVER AGRICULTURAL FAIR.

We have received from the Secretary a report of the meeting of the Agricultural Society of Hanover, held at the Court House on the — day of May last. The gallant Secretary rejoices much in the presence of the ladies who attended, and mourns grievously over the absence of all those who did not make their appearance. Our gallantry was a little dampened by the rainy day, or we would have been there to rejoice, and sympathize, with our friend, and also to listen to the address of Dr. Braxton, the President, which we hear spoken of as a splendid thing.

We are requested to publish the awards of the premiums, which comprises a long list; with this request, as with every other from the same source, we would gladly comply, but the fact that to Mrs. such a one was awarded \$2 50 for the best butter, is of such a local character, and of so little interest to ninety-nine hundredths of our subscribers, that, as will be seen, we have omitted all such details in our report even of our metropolitan meeting. We are at all times happy to receive and publish general notices of such meetings, as well as any particular occurrence of general interest.

For the Southern Planter.

COMMENTS ON THE MAY NUMBER OF THE SOUTHERN PLANTER.

Pasturage versus Tillage.—The information gained from old, experienced, and prosperous men, is always valuable; and it is to be regretted that such men are not more communicative with the goose quill. But I know from experience, that age begets a dislike for mental labor; yet by writing only a few sentences at a time, the mind is so far from being fatigued, that it is only properly and profitably exercised. The remark of the experienced farmer here quoted, that "money coming in a lump, as it does to a tobacco planter, is generally spent improvidently," is a truth and misfortune which I have often felt, seen, and regretted. Perhaps the Eastern portion of Virginia, can never equal the Western, in the production of spear grasses; for the

latter has the advantages of lime, more copious dews, and facilities of irrigation. There is, however, one native of Eastern Virginia, which under proper nurture may finally rival the timothy of the West; I mean the green-sword. I incline to think that this grass does not need artificial watering, but does require artificial liming. The richer soils of Eastern Virginia are generally too porous, and the clays generally too poor for grass. Ashes and the treading of cattle are the best improvers of porous lands; and urine and dung are proper for clays.

The Corn Crop.—Mr. Woodson's method of preparing his corn ground, will answer in porous ground, not cumbered with turf or long litter; but otherwise, the planting and culture will be a dragging business. I feel disposed also to condemn his method of planting in squares of three feet, as well as his breaking and tearing the roots in its culture; but will only remark, that if his corn is as large as it should be, I cannot conceive how he can plough amongst it when grown, or nearly so, without tearing and breaking it shamefully.

Richard Russell's Farm.—My respects to this Mecklenburger, and to all his full blood brethren.

Ploughing.—The object in bedding land, is to create drains; and therefore, the width of the beds should accord with the nature of the land. The width of three corn rows will, however, be found to answer pretty well in any situation. The greater necessity for draining, the higher the beds should be raised by a succession of ploughings.

Culture of Tobacco.—I vouch for every thing "A Planter" says; but let him be cautious of permitting hogs to root his clay ground when wet; particularly in spring.

Manure.—Mr. Jones holds a bold pen, and I could have read his work with much comfort, if he had not expended so much ink; yet, I will add another line to what he has written. In warm weather, stock are so much plagued by flies, during the day, that they then feed but little; consequently, if penned, they should be pen fed. But horses, cows and sheep, particularly the latter, require pure air; and if they be never housed or penned, except as protection against inclement weather, so much the better.

A Young Planter is certainly mistaken as to clover (ungrazed) being an exhauster, without plaster. His assertion that tobacco will take rot, if the crop is not worked after a certain time, is true; but it is also true, that short work produces short crops.

Practical Directions for Dung Heaps.—This is well worth the attention of farmers. My own dung pits overflow on a meadow, consequently, nothing is lost.

COMMENTS ON THE JUNE NUMBER.

Woodlawn Farm.—I wish Mr. Scales had

given his communication a caption. It is certainly the greensword seed which he is desirous of obtaining, and not what in Virginia is generally known by the name of *blue grass*. It is useless to sow this grass on land which will not produce good wheat; and the richer the better. Either lime or ashes must be applied, to bring it to profitable perfection, according to my observation and experience. I prefer a mixture of red clover and greensword, (Kentucky blue grass) as they thrive on land of the same quality, ripen at the same time, the mixed hay is best, and they are both improved by plaster and ashes. Does not Mr. Scales know that this valuable meadow grass, is the same which I suppose he has in his yard? Now, my dear sir, don't turn away with loathing, but hold on; for I tell you that I have several acres of greensword meadow, which I would not exchange for like quantity with any man.

Curious Method of Planting Corn.—Some years past two of my neighbors prepared and planted their corn in the mode here mentioned; one of whom is dead, and the other has abandoned it. If corn-stalks are the best manure for a crop of corn, it would seem that from the same mode of reasoning, potato-stalks are likewise the best manure for potatoes, yet this author seems to repudiate the idea.

Post and Rail Fence.—This plan of boring and mortising posts has been practiced in Kentucky for many years, with some difference perhaps in the construction of the bench.

On the Comparative Advantages of Herdsglass and Clover.—I am pleased with this communication; for the author exhibits zeal and honesty of purpose—one objection, nevertheless. He says, "the long practice of seeding poor, thin, and pipe clay flats in herdsglass, has satisfied me of its great value." Now, so far so good; for such clay is the natural place for this grass. But when the author says, in a general remark, that "no vegetable matter can be raised in greater abundance than the herdsglass, nor is any more valuable as a manure, I must beg leave to differ with him in opinion.

Soot as a Manure.—I suppose cool soot was printed for coal soot. Query, is not wood soot equally as valuable as coal soot?

Ploughing.—One objection to gathering the beds, as here recommended, and that is, an awkward ploughman, particularly when the beds are wide, will make the number of furrows unequal on either side of the bed, consequently, the beds will be of unequal widths; whereas, if they are cast out, till closing in the water furrows, they will ever remain equal, whether you begin on the crown, or on the original water furrow.

Stones on Cultivated Lands.—I cannot conceive how stones of quartz, flint, or diamond, can "serve to increase the crop," except by absorbing

and giving out heat, where heat is wanting. As to stones preserving moisture during a drought, I would as soon believe that hot stones would hold water in a pot. Green stone, feldspar, and others which contain matters that are valuable as manure, and which matters are continually given out by decomposition, should not be removed from the fields, except when in large masses; and then perhaps it were better to beat them into small pieces, and scatter as manure.*

I am noticing the writings of Galen, and hope that when he has laid his premises, he will then give us the deductions, applicable to *agricultural operations*.

INVESTIGATOR.

The following is a very valuable testimonial to the advantages of soiling cattle. The calculation is a very simple one, and may be made by each individual to suit his particular circumstances. The saving of food and manure is to be offsetted by the increased labor of cutting and hauling.

The system is daily gaining ground in public opinion; its advantages, however, will vary much with circumstances; in an enclosed, highly cultivated country, we have no doubt it should be universally resorted to.

From the Cultivator.

SOILING CATTLE.

Messrs. Editors,—From the many letters addressed to me since the publication in your November number of a communication relating to Bokhara clover and soiling, it seems necessary that I should explain what appeared to my respectable correspondents so extraordinary—the having fed so numerous a herd from so small a quantity of land.

My stock of cattle for the last three years, has not been less than forty head, which, had I pastured in the usual way, would certainly have consumed all the grass on my farm, leaving none to mow, which I obviated, as I said, “by keeping them in good condition on some three to four acres.” It would have been better, had I said, *with the aid* of three or four acres in lucerne, rye and clover, which enabled me to save more than one hundred tons of good hay.

I must also add, or throw into the account, a lot of eight or nine acres, in which there is a

* Stones indubitably by the covering they afford protect the earth from the rays of the sun and so prevent evaporation. We have often noticed, and we wonder that should have escaped the attention of so diligent an observer as “Investigator” that the most luxuriant tufts of grass or wheat in a field were those growing from underneath the stones. We cannot imagine that this fact is in any way connected with the nature or composition of the stone.—Ed.

stone quarry. Its condition may be understood when I say, had it been allotted solely to one cow for the season, she would have been doomed to short commons. There was, however, good water in the lot; this, with the change and exercise it furnished, made it of considerable value for the purpose of soiling. It may also be proper to remark, that I own a woodland farm, distant about two miles from the homestead.—Thither I send, in the spring, about a dozen dry cattle. This division left me on hand last summer, to provide for at home, about twenty head full grown cattle, and a few full blooded young heifers, and several calves.

My resources were two acres in rye and clover; both seeds sowed at the same time, the previous August, and one acre of lucerne, in the spring of 1841. I also sowed, in order to be fully provided, an acre of Indian corn, broadcast, which was not used green; it was cut and cured for winter fodder. I began to cut the rye for the cattle in the middle of April; it was very thick and quite tall, shooting into head; before through with it, the heads were formed. It was cut high, to save the young clover that stood with it. The rye fed off, the lucerne was ready; stalks as high as two and a half to three feet. When the lucerne was fed, then the rye and clover was fit for cutting; and it was surprising to see the second crop of rye so thick and tall. This time, clover cut with it. This through, the lucerne, which may be called “cut and come again,” was provokingly tall, and yielded a heavier crop than at first. Then the clover which had been once cut, was ready, and before through with it, the lucerne was again fit for cutting. It and the clover were cut alternately, or fed together, as convenience or fancy might determine. Before my season for soiling (the middle of August,) ended, the lucerne's third, and clover's second crop, were not consumed. The remainder was cut for the hogs, who had all the leavings of the cattle previously. In fact, this proved very beneficial to them. I had about twenty large hogs, and some sows and pigs. In the hot weather, confined as they were to their pens, what the cattle left of the rye, lucerne and clover, was refreshing and cooling to them.

I said my season for soiling ended the middle of August. Why? Because I cut no second crop for hay. The cattle were then turned in upon the orchard grass and clover fields, “up to the eyes,” and from middle of September till 1st October upon the timothy fields—in all, some sixty acres, on which they made but little impression. Early in November they were withdrawn, and put to turnips and other roots, of which I have generally a large supply for winter.

No one can see my grass fields in winter, without being surprised at the thick and closely matted sod that so perfectly covers them. In-

deed, were a sensible farmer led over them blind-fold, he could not but appreciate their condition, for their softness and elasticity would prove it to him; and this too, on some of the highest lands in the highlands of the county of Philadelphia, washed by the Schuylkill, and the more romantic and precipitate Wissahiccon, on whose banks, in my immediate neighborhood, the laurel grows as luxuriantly as on the shelving slopes of the Blue Mountains.

But to return to the feeding the green food. That cut late in the afternoon, was fed early next morning; that cut early in the morning was fed at noon; that cut about noon was fed that evening. This was the general practice. No more was brought into the stables at a time, than what was supposed to be required for one feeding. When the cattle were fed in the morning, they were turned out to the yard, and there left to stand for at least half an hour, or while their troughs and stables were being cleaned; then drove to the quarry lot above described.—The yard was then cleaned, every dropping put away carefully on the dung heap. Before, or by eleven o'clock, they were brought home and fed; and by four in the afternoon, when the sun was declining, turned out as in the morning, drove to the lot; from which they were brought back by sun setting, and fed—remaining in the stables all night. The cattle had no other food, except occasionally a little good hay, which they were provoked to eat a handful of, as often as possible, and which is very necessary where so much green food is consumed. If the hay be thrown to them in quantity, while on green food, they will but waste it, not eat it. The best way is to tempt them by a handful, which, if they bite at, and eat, they may then be served with a small wisp in their troughs or racks.—This, with a regular supply of clean salt, was all the food they had from middle of April till middle of August, a period of four months.

Now as to the expense. One man and a boy, whose united wages were seventeen dollars per month, did all. The patch from which the food was cut, was, as it should be, close to the stables. The supply was brought in on hand barrows, wheeled into the entry, and served by hand into the troughs. Sometimes, when the horses were not specially engaged, a horse and cart was permitted; but this led to bringing too much at a time, and its being tilted at the door, carried on a fork some distance, tossed and turned too often, which rendered it objectionable, to say nothing of the danger of the food attracting some dirt or rubbish. Cleanliness in feeding cattle, is at all times essential, but in soiling it is indispensable; unless the troughs or racks are well cleaned after every feeding, and the stables kept clean and well ventilated, the cattle will assuredly fall off in appetite, if not take a specific disease. The expense of

this practice was in reality nothing to me; it was some work superadded to the man and boy, who would be engaged taking care of this number of cattle, in cleaning them, driving them to and from the fields—the Durhams having to be milked three times a day—the keeping the stables clean, and taking special care of the manure. But suppose this man and boy to be extra help, then am I sure it cost me not a farthing. Every two horse load of good manure, purchased in the city, laid down on my place, will stand me in five dollars. Then am I free to say, that the extra quantity of manure saved by soiling, was not less in the period of four months, than twenty loads. From this is to be deducted extra straw, rent of the three acres, and cost of producing the green food. But the great profit lay in the many acres producing two tons of hay to the acre, which if the cattle had been turned out upon, by the first of May, would have been despoiled; and which was prevented, by feeding them from the three acre patch, behind the barn.

Simple as these details are, they may seem to some difficult to put in practice. To such, I can only say—try; but let them not begin till they are prepared, having a good patch of orchard grass and clover, lucerne, or corn. Rye, I do not recommend; when quite young it may do, but when in head and filling, it is not good. I adopted it because it came early. How many are there, who, if they would mow the headlands of grain, corn, and potato fields, might in this way furnish a considerable item of the food requisite for soiling, to which might be added the extra shoots in corn hills; all this would benefit the lands by clearing the weeds from the fences, and it would pay, so far as the growing corn is concerned. Our southern friends might derive much benefit from partial soiling. A close or strict soiling, in our climate, I would recommend to none. But the appropriating one field, where there is water or shade, for air and exercise, while many fields may be used for cropping, that otherwise would be made bare by the cattle, and their equivalent in grass made from three or four acres, is a practice that may find favor with all, on arable, light, upland soils.

Respectfully,

JAMES GOWEN.

Mount Airy, Philadelphia, Feb. 6, 1843.

JOHNSON'S FARMER'S ENCYCLOPEDIA.

We are indebted to the kindness of the enterprising publishers, Messrs. Carey & Hart, of Philadelphia, for the numbers, as they are issued, of the American reprint of "the Farmer's Encyclopedia and Dictionary of Rural Affairs." This work, which from the celebrity of the author, has had a great run in England, is pub-

lished there at about fifteen dollars. The freedom from taxation, and the enterprize of our publishers, afford us the same work, issued in neat semi-monthly numbers, for *four* dollars, less than one-third the English price. That the work is well executed we have the surest guarantee in the character of the author; as to the plan, there is no department of art or science, to which the convenient form of alphabetical arrangement is more applicable, than agriculture. Information upon the multifarious and everlasting subjects coming within the comprehensive range of a farmer's studies, are a hundredfold more valuable for being so arranged, that he can turn to them at once when he wants them, as he always does, at a moment's warning. For these reasons, we are of the opinion, that, even in these days of cheap literature, a farmer can make no disposition of four dollars, that will enure more to his own benefit, than to send them to Messrs. Carey & Hart, of Philadelphia, with an order to mail him, as they are issued, the numbers of this excellent work.

For the Southern Planter.

COVERED DRAINS.

Mr. Editor,—Having succeeded in draining a part of my lowgrounds, which was very wet from springs issuing forth, I concluded to attempt to obviate this redundancy of water by underdraining. As my plan has fully answered my expectations, and as it differs, to some extent, from any of which I have read, I have concluded to give you a hasty sketch, which if you think of sufficient interest, you are at liberty to publish in the Planter.

I had ditches cut three feet deep, and as narrow as a man could conveniently work in, which I found was about two and a half feet at top, and the width of a shovel at the bottom. They were so graded, that the water would run off freely to a large open ditch passing through the lowgrounds, and so located as to catch as many of the springs as possible in their course, and carry them off. The slate rock, found in our river hills, and generally near the lowgrounds, was the material selected to make the water-way. The bottom of the ditch was first paved with the thinnest rocks, then thick, long, narrow rocks were laid on the paving-stones, on each side of the ditch, leaving an interval of several inches in the middle for the water to pass off; the broadest rocks were put on the top, covering both the side rocks; and all the small rocks and pieces were used to fill the small cavities not entirely closed by the large covering rocks; then a stratum of straw, or leaves, was thrown

on to prevent the earth from getting into the water-way, and the whole was finished by filling the ditch with the earth taken from it.

In making the stone work, or water-way, it is absolutely necessary to begin at the head or upper end of the ditch, to prevent its being choked, or filled up with earth washed down whilst being constructed.

In the last two years, I have had between three and four thousand yards in length, of covered drains made as above described, and not one of them but answers the purpose admirably.

Covered ditches are more costly in their construction than those that are open, nor will they supersede the necessity of open ditches to carry off rain water, nor that of branches and creeks; but to drain springy lands, particularly when carried to the fountains, they are much superior: first, because no land is lost; secondly, if made as deep as I made mine, the plough can pass over them without injury; and, thirdly, they need no repairs; whereas, the open ditches take much land, the ploughs have to turn when near them, consequently head lands must necessarily be left, and they require annual cleaning out.

The cost of constructing covered drains, may be an objection to some persons, but this is less than would at first appear. A man accustomed to the use of the shovel, on land free from rocks, gravel and stumps, can, with ease, cut thirty yards of ditch as above described, per day. A man, and a boy to hand him rocks, can make sixty yards of water-way after the rock is hauled to the side of the ditch; a cart, oxen, driver and a man to assist in loading, can haul, when the rock is not more than two hundred yards distant, enough to make sixty yards of water-way. The filling up of the ditch can be done by the plantation hands, when their labor could not otherwise be profitably employed; but allow one day for a man to fill up a ditch of sixty yards, then we have, to cut sixty yards of ditch, two days labor—to make the water-way, two days labor—to haul rock, two days labor—and to fill up, one day's labor; altogether, Seven days labor, worth, say, two shil-

lings per day,	\$2 33
Cart and oxen, worth per day,	1 50

To make sixty yards of covered drain, \$3 83 or about six and a half cents per yard. But when we take into consideration, that we frequently use rock that is an encumbrance, and by putting it in the drains, get it out of the way of our ploughs, &c. (as has been the case in all the covered drains which I have made); and that the covering can be done by the plantation hands when too wet to work elsewhere, we discover that the cost will be considerably lessened. Should it, however, cost double the amount I have estimated, particular locations would, in my opinion, justify the expense.

Hoping that this hasty sketch will be of service to some persons who have wet, springy land, I remain,

Yours, &c.

RICHARD G. MORRIS.

P. S.—The recipe furnished by Mr. Craven in your May number, for making whitewash, I have just tried; it is most excellent, does not rub in the least, and is, alone worth one year's subscription to the Planter.

R. G. M.

A PLOUGHING MATCH.

So satisfied are we of the advantages resulting from the emulation excited by the noble contest which we have lately witnessed, that we have opened a subscription paper at the office of the Planter for the purpose of raising a premium, (which we hope to make \$100 at least) to be given to the successful competitor at a ploughing match, to come off, this fall, in the neighborhood of the city of Richmond. To this premium, farmers and others, who feel an interest in the subject, are invited to contribute what they please, from twenty-five cents to an hundred dollars. We do not believe that those, who could be present on the occasion, could make a better investment than a small contribution for the purpose proposed. A handsome premium, such as might be raised, would bring together skilful ploughmen from all parts of the Union, which would afford the farmer an invaluable opportunity of seeing and comparing the numerous varieties of the plough, some of which are brought to a degree of perfection little dreamed of by some of our countrymen.

P. S.—About thirty dollars have been already subscribed, and we are highly delighted to find that we have not over-estimated the public appreciation of the value of such an institution.

We will try and have a dynamometer at hand upon the occasion, with which the draft of different ploughs may be tested.

CREDIT QUOTATIONS.

The Southern Planter will find upon re-perusing this article, that the N. E. F., and not itself was the party in question. We have ever found the S. P. particularly scrupulous in giving credit for extracts.—*American Agriculturist*.

We will not re-peruse the article to see whether we were justifiable in inferring that the "Agriculturist" intended to charge us with pla-

giarism. It is enough for us to know, that the Editor disclaims such intention, and the mortification naturally arising from such a charge, from *such a source*, is more than cancelled by the promptness and kindness of the explanation.

HAY MAKING.

As the time is just at hand, when every farmer should pay some attention to hay making, it will be in keeping with our vocation, to give what we think important directions to those unpractised in this business.

Clover hay being generally the first to be sown, and it being quite difficult with most, to sow this kind of hay in such a manner as to repay for labor, we will tell something of our own mode.

Generally, by the middle or the last of May, red clover is in full bloom. When in this stage, it should be watched closely, and when about two-thirds of the heads have turned brown it is ready for cutting. Of course fair weather is the best. Use a mowing blade. When it is cut let it be left as thin on the ground as possible, and let it lie in the sun, till it is not only fully wilted, but till most of the watery particles have evaporated; though it should not be suffered to dry so as to crumble. The time it should lie in the sun is attended with too many contingencies to give any specific directions.—From six to twenty-four hours is the usual time allowed. When sufficiently sunned, haul it to the shelters if there are any on the place, throw in hay till it is about a foot deep slightly pressed down with the fork; next take a stand so as to be able to throw salt on every part of the bed. The amount of salt is regulated pretty much by the judgment of the operator. It should be sprinkled in till there is as much salt as is supposed will be pleasant to the stock. We have generally succeeded best, in putting not more than six or eight loads together at a time.—When there is a large amount of hay put up at the same time, and particularly if it is too green, it is apt to ferment, and it often rots. To avoid this, let it become as well seasoned as you can, so as not to become dry, put in plenty of salt, and after you put a few loads together wait on it till it is properly seasoned, and there is no mistake of having the best of hay for winter use.

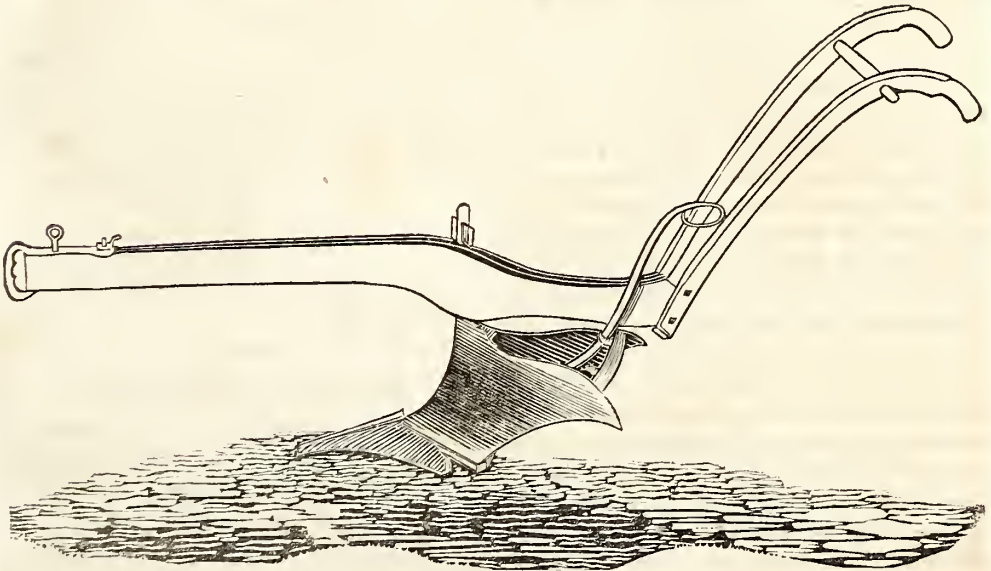
Timothy and other kinds of grass might be saved profitably in the same manner, and farmers should remember good hay will winter cattle without any other sort of food. Our young cattle have had nothing but salted clover hay since last October, and they have done finely, notwithstanding the unusually hard winter.

In reference to all the minutia of saving timothy and herdsgrass for hay, we cannot speak so

fully from experience; but the following are the most important points. About the time the seeds ripen, and before the blades get too dry, commence mowing. Let the hay have sun till it is wilted and about half dry, then put it in cocks, supposed to contain from 180 to 200 lbs. when properly cured. Be careful to put it into cocks every night to protect it from the influ-

ences of the dew. If hay be left out in the sun till cured, it will be found to have lost most of its strength and sweetness; and of course will be of but little value. When cured without dew or rains in neat little cocks, the hay will be found very sweet and excellent. Judgment is to be exercised, if success is to be anticipated.
Tennessee Agriculturist.

HILL SIDE PLOUGH.



With the improved system of farming that begins to prevail, a considerable demand has arisen for a good hill side plough. The throwing dirt up a slope is found to be an *uphill* business, and is far too slovenly a mode of proceeding for the present generation. The old side hill plough, commonly known as Rhodes', in which the mouldboard turns over, is inconvenient and troublesome, and the want of a more perfect implement has been generally felt. In an early number of the Planter we sketched and described another principle, introduced here as Tinkler's, which is still very popular with some. But two new candidates for popular favor have lately appeared amongst us. One of these is M'Corrick's hill side plough, and the other is the celebrated northern plough, known as Barnaby & Moers'. The plough represented in the engraving was patented by Cyrus H. M'Cor-

mick, of Rockbridge, Virginia, in 1833, and is probably the original of the northern plough.— They both belong to that class which, like the old "trench plough," is produced by the union of two mouldboards. This trench plough, which is so old that "the memory of man runneth not to the contrary," was formed by putting together the land sides of a right and left hand plough, by which you would have a double mouldboard, a double wing, and a double point. The beam was immovably fixed over the centre of the plough; consequently, the dirt was thrown equally to the right hand and the left, and it was found very useful in opening water furrows or trenches, whence it derived its name. Now it is very evident, that if the beam, instead of lying over the centre, should be turned to one side, so as to lie over one of the mouldboards, that mouldboard would become in effect, a land-

side, and the whole turning would be done by the other mouldboard. This is exactly what Barnaby & Moers have done: their beam shifts from side to side, converting the old trench plough, at pleasure, into a right or left hand plough. And this is exactly what M'Cormick, and others, we believe, before him, had done before them; but the peculiarity of M'Cormick's plough consists in this, that, instead of having a double point, he has a single point, which revolves from side to side as either mouldboard is, by the shifting of the beam, converted into a landside. Mr. M'Cormick contends, that, by this arrangement, at the expense of a little trouble, which practice soon reduces to nothing, he procures the only *self-sharpening point* that can be devised. The point being turned over at the end of every row, is, of course, worn equally from the top and bottom, so that the original form is always preserved. By this means, also, the wing is entirely removed to the turning side, and, as it is contended, a more perfect landside is formed. On the other hand, it is claimed that in Barnaby & Moers' plough, the half of the double wing that remains on the landside, by cutting under, as it does, prepares the next slice for the cutting and turning, which is done with the greater facility. The apparatus by which the beam is shifted from side to side, is simpler and stronger, we think, in M'Cormick's plough than in the other. Our own opinion is, that there are points in each better than in the other, and that from the two a plough might be made, combining the advantages of both, that would be better than either.

We do not see that this principle of the double mouldboard plough with the shifting beam, is ever likely, as its sanguine advocates expect, to supersede the common plough on level land; but if it can be made sufficiently cheap and simple, the various purposes to which it can be adapted, will render two or three of them very desirable upon any farm of considerable extent.

With respect to Barnaby & Moers' plough we have long suspected that they used one of the most perfect shaped mouldboards known in this country. It was to this circumstance, rather than to any other peculiarity of construction, that we have been inclined to credit the ease of draught for which they have obtained much celebrity. Their standing in this respect will be considerably elevated by the following certificate,

which some friend from Loudoun has been kind enough to forward us:

TRIAL OF PLOUGHS.—LOUDOUN COUNTY, VA.

We, the undersigned, were present at the trial of the ploughs mentioned below, at the farm of Joshua Nichols, in the Goose-Creek neighborhood, report as follows:—The ground was a stiff sod, the ploughs in competition were Tavener's coulter plough, the M'Cormick plough, and Barnaby & Moers' double mouldboard.

Tavener's plough averaged in depth	6½ inches.
Breadth of furrow	14¾ inches.
The draft by the dynamometer	725 lbs.
The M'Cormick averaged in depth	6½ inches.
Breadth of furrow	13 inches.
The draft by the dynamometer	650 lbs.
Barnaby & Moers' plough, depth,	6½ inches.
Breadth of furrow	14 inches.
The draft by the dynamometer	450 lbs.

The work done by Tavener's and Barnaby & Moers' ploughs were equally good; that by the M'Cormick plough not quite so well.

THOS. NICHOLS, Esq.

ELI JANNEY.

JOSEPH GORE.

JOHN SMITH.

TIMOTHY TAYLOR.

June 2, 1843.

DELINQUENT SUBSCRIBERS.

From a fair experiment, we are perfectly satisfied that the credit system will never answer with a dollar paper. We were earnestly requested to extend our time of payment to sixty days from the date of subscription. Our friends said, we can get you numberless subscribers, but it is often inconvenient for individuals to pay the money or make the change at the time they have determined to take the paper, and afterwards, for want of opportunity or for other reasons, they neglect it, and so you lose many subscribers, whose names we could send you and who would assuredly pay you within the sixty days. We were induced by this course of reasoning to adopt the credit system, but to make sure of the payment, we imposed an additional tax of fifty cents upon all those who did not comply with the sixty day rule. The consequence is, that out of our small subscription list, we have five or six hundred from whom we have never received a cent. To each and every one of these gentlemen we have enclosed a bill for \$1 50, with a request that they would promptly discharge the debt by remitting us *one dollar* through the postmaster. Those who

do not choose to comply with this moderate requisition, can neither wonder, nor complain, at our taking the necessary measures to enforce the payment of the full amount; which we shall proceed to do immediately after allowing due time for the effect of this, our last notice.— We are very sure that three-fourths of these delinquencies proceed from forgetfulness and are due to the smallness of the amount involved: therefore, it is only necessary to remind such gentlemen that they are indebted to us, to procure the remittance.

BOMMER'S MANURE.

We know of no invention that has excited more curiosity than Mr. Bommer's new process of making manure. We have had hundreds of applications upon the subject, and we have returned but one answer to all the applicants, viz: "We have no personal knowledge upon the subject, but we have put the matter in the hands of a gentleman in this neighborhood, to be thoroughly tested by him, and his report, whether for good or for evil, will be published in the July number of the Planter." This report, which we are happy to find is of the most satisfactory character, is contained in the letter below from Mr. Woodfin. It is unnecessary for us to say any thing in this community of the standing and respectability of this gentleman; to those to whom he is unknown we will say, that we selected him as one of those individuals whose testimony would go as far as any body's. Mr. Woodfin is also known to most of the readers of agricultural papers for his skill and science in agricultural chemistry, to which, of late years, he has devoted much of his attention.

For the Southern Planter.

MR. CHARLES T. BOTTS:

Dear Sir,—Having been requested by you to give a candid statement of my opinion of Bommer's patent method of making manure, for publication in your July number of the Planter, I will now with much pleasure proceed to say all I know about it.

On the 13th of May at night, I finished the preparation of a heap, according to his method, composed chiefly of dry wheat-straw, to which I added a small quantity of coarse unfermented stable litter, which was also, mostly, wheat-straw, and proceeded to treat it according to the directions laid down in his pamphlet. On the 18th day after the heap was constructed, it was opened in the presence of a number of farmers,

and other gentlemen feeling an interest in the matter. It was found not to be entirely decomposed, but in a high state of fermentation, which gave evidence that entire decomposition of the materials would very soon be the result: in order to facilitate it, however, I gave it another watering with the lees, which has effected the complete decomposition of the whole mass.— According to Mr. Bommer's method, entire decomposition should have been effected in fifteen days, and I have no doubt such would have been the result, if it had been conducted with more skill; up to the tenth day, I had succeeded in producing a very high degree of heat; on that day, I gave it a very copious watering, thereby adulterating the lees too much, which caused the fermentation to subside in a measure. If the third watering had been properly made, with the lees in sufficient strength, I have no doubt the result would have been more satisfactory. As it is, I have succeeded in thirty days, in accomplishing that which I could not, by any method known to me, have accomplished in six months. I have never used any of this manure, this being the only heap I have made, I cannot, therefore, speak of its effect on vegetation; from its appearance, however, and my knowledge of the materials used in its manufacture, I should consider it of far greater value than the best stable manure, made in the usual way; I would not now exchange mine, load for load, for the best I ever saw.

This method, as Mr. Bommer justly observes, has the advantage over all others by enabling the farmer to have his manure when and where he wants it. I shall make another heap in a few days, mostly of green weeds, grass roots, &c. &c. when, if you desire it, I will give you the result.

To make manure by this method is not costly, but somewhat troublesome; but what good thing can be obtained without trouble or expense?

I have thus, sir, given you a candid statement of all I know at present about Bommer's patent manure,

And remain, very truly,
Yours,

GEO. WOODFIN.

June 13, 1843.

From our conversations with Mr. Woodfin, we know, that this report is, as it should be, as careful and guarded as possible. He felt the responsibility of the task imposed on him, and determined to say nothing, however sanguine his anticipations might be, that could, by possibility, induce the public to think more of this invention than it deserved. For our own part, from what we have seen and heard of this experiment, we feel authorized to say that, which

we never felt at liberty to say before, that we are fully satisfied of the great value of the invention. We do not doubt that a certain degree of particularity is required in following the directions that does not belong to some men, and which would deprive them of the benefit of the method, at least to the greatest perfection; so there are some persons, as every physician will tell you, who cannot be induced to administer three successive doses of medicine according to the simplest prescription. But in the hands of any farmer who will strictly follow the method as it is explained in Mr. Bommer's pamphlet, this invention we believe is worth ten times the price at which it is to be obtained.

Mr. Woodfin speaks of the method as being "somewhat troublesome." We wish he had been more explicit on that point: large quantities of water are used in the process, and Mr. Woodfin's heap was so situated as to make the application of this material laborious; but, nine times out of ten, it may be so located, that any quantity of water may be conducted to it with little or no labor at all: we do not know, but think it likely that it was to this portion of the process, that Mr. Woodfin chiefly alludes in the expression quoted.

As to the time required exceeding that specified by Mr. Bommer, it must be remembered that this was the first experiment in a process entirely new, where the operator, without any experience, was compelled to rely wholly upon the printed directions contained in the pamphlet. Mr. Woodfin does not doubt, that, by avoiding an error committed in the first process, the result could be effected in the time required.

If the chemical properties of this compost are what Mr. Woodfin supposes them to be, of which he is much more capable of forming an opinion than we are, if it is indeed superior to stable manure, it is hard to estimate the value of the invention.

POUDRETTE.

We have made considerable sales of this article during the present season, and should be pleased to receive authentic and particular accounts of the result of its application to various crops. We have received some second hand reports of its extraordinary efficacy in pushing forward tobacco plants, but we have obtained no statement, as yet, so reliable as to induce us

to publish it. Our columns are of course as open to accounts of failure as success; indeed, we think it is as incumbent upon the purchaser of a new thing to warn the public of its worthlessness, when he has been bit, as it is to herald forth its virtues, when his judgment has been sustained by the result of his purchase. All we ask, is, that in making reports of this or other matters, whether for good or evil, the author will be particular in stating every thing that could by possibility affect the experiment.

We have lately received a letter from the manufacturer of the poudrette, in New York, in which he begs us to urge its value as a top dressing to corn, applied at the first or even second hoeing. He also seems very anxious that its action upon tobacco and cotton, crops with which he is unacquainted, may be fully and fairly tested.

For the Southern Planter.

Mr. Editor,—I have for some time been using an implement of great simplicity and cheapness, with which I am much pleased, for levelling newly ploughed land. It may be made of a common ox-cart tongue, by pinning on across the forked part of it where it rests on the axle-tree, a piece of timber, about six or seven feet long, six inches thick, and twelve or fourteen inches broad. You will at once see that it is intended to be drawn by a yoke of oxen, but might easily be constructed so as to be adapted to horses. The cost to any of your readers, who may be curious enough to wish to try it, will not exceed fifty cents; as any field hand can, in a few hours, convert the cart tongue into one, without unfitting the tongue for its ordinary use.

W. O. GREGORY.

Waterloo, N. C., May 6, 1843.

As we have reason to believe that the root culture is on the increase in Virginia, and as the fly is the foe most dreaded by the grower of rutabaga as well as the common turnip, we publish the following, from the American Agriculturist:

REMEDIES AGAINST THE TURNIP FLY.

As the cultivation of the different kinds of turnip is becoming somewhat extensive in the United States, and wherever adapted to soil and economical feeding, it is a valuable crop, a few hints for their protection against enemies may be useful. The principal danger to the turnip plant is immediately after it appears above the surface of the ground. There are a variety of

insects that feed upon and destroy it, during the first few weeks of its existence; but its most considerable enemy is a small black bug, that seizes upon the tender cotyledons the moment they make their appearance. Where the enemy is not in sufficient force to consume all the young leaflets as they appear, the plant will make a gradual, though slow progress; and when so far advanced as to be able to put forth its larger and more fibrous leaves, it will generally reach maturity. But it must be remembered, that any diminution of its leaves, especially in its early existence, is prejudicial to its growth. The leaves are to plants, what the lungs are to animals, and in nearly all cases they superadd, in no small degree, the functions of the stomach also; for in addition to throwing off a portion of the surplus moisture, oxygen, &c., taken in by the roots, they absorb carbon largely from the carbonic acid of the atmosphere, which becomes fixed in the vegetable as a large proportion of its matured substance. Of course the early leaves of all plants should be protected with the utmost care.

For the protection of the turnip, I have found no more efficacious means than soaking the seed in the *most offensive tanner's oil* for two or three days previous to sowing. This saturates the seed with the repulsive taste and odor, and as the germ which first appears above ground is furnished *exclusively* from the seed, the cotyledons, which are the most exposed to the insect, are charged with a flavor every way adapted to their protection from its ravages. In addition to this great advantage, the oil is one of the most nutritious substances for the support of the young plant, and helps it forward with a rapid growth, by which it sooner gets beyond the reach of danger.

Phosphoric acid in the proportion of one of acid to two of water, forms a steep or soak which gives wonderful acceleration to the growth of plants; soak in this twenty to fifty hours.—Arsenic, in the proportion of one to fifty of water, in which the seed should remain twelve hours, produces astonishing effects on the early growth of vegetation. The effect of this poison on the product cannot be injurious, though the seed soaked should be carefully kept from all living things, and when taken from the steeping vessel immediately buried beyond reach.

After soaking, it can be prepared for sowing, by mixing with plaster, ashes, or air-slacked lime, so intimately mixed, as to obviate any inconvenience from adhesiveness of the seeds.

If the insect is found to pursue the plants afterward, they may be sprinkled with the stale liquid from a tanner's lime-pit. This is most conveniently done with a common watering-pot. If a tannery is not accessible to the farmer, he may easily prepare any desirable quantity of liquid, equally valuable, by collecting stale urine

and the strongest drainings from the dung-heap, in large hogsheads, or what is better, in permanent cisterns, which should have a place in every farm-yard, adding lime in proportion to the quantity of liquid. The addition of putrid flesh, fish, &c., will add to its efficacy. A weak brine, diluted sulphuric, or nitric acids (oil of vitriol and aquafortis,) may be sprinkled over the plants with success. Unleached ashes, lime, plaster, and soot, sown broadcast over the plants after a rain, or while the dew is on, are sometimes effectual remedies. In addition to the value of the above applications for killing the insect, they are all directly beneficial in promoting the growth of the plants to the full value of the cost of the material and labor.

Folding sheep on the ground where turnips are to be sown, is an excellent preparation.—New land when it can be had, is admirably adapted for a turnip crop, as it is free from insects, and possesses an abundance of the alkalis, which are every way suited to the rapid growth of the turnip. Burning the rubbish on the land required for this crop is a good precaution, as thereby a portion of the eggs and insects are destroyed. Deep ploughing will exterminate all that are placed so far beneath the surface, as to be unable to reach it again. The use of long manure, or sowing on a stubble-field, are objectionable, as they harbor and protect the insects.

Where enemies are numerous, three or four pounds of seed should be sown in drills, and twice as much more broadcast, which affords more food for the fly, and there may possibly be sufficient left for a crop, after supplying the foragers with all they want; the excess, if any, may be thinned with the cultivator and hoe.—But in all cases the soil should be in good condition, and be prepared with some rich, stimulating manure, such as night-soil or other concentrated aliment, by which the plant will be enabled to push itself rapidly beyond the reach of marauders. Alternating turnips with potatoes, sugar-beet, and other crops in no way related to this family of plants (the cruciferae,) is useful, by cutting off the supply of food to its enemies, by which it is starved out or compelled to shift its quarters for subsistence.

The frequent use of the cultivator and hoe is beneficial in destroying the insects, besides materially assisting the growth of the plant. All family weeds, colewort, water-cresses, hedge-mustard, and the like, which afford food to the common enemy, should be carefully exterminated; and such other kindred vegetables, as cabbages, cauliflower, mustard, table and horse-radish, &c., should be cultivated remote from the turnip-field, so as to afford no rendezvous for their perpetuation.

R. L. A.

Buffalo, April 25, 1843.

PLEASE NOTICE AND EXCHANGE.

We almost daily observe this endorsement upon some new comer, either political or agricultural. The *exchange* we are always ready to make, because we are seldom, or never, the loser by the bargain, but with every disposition to be courteous and polite, we cannot afford the room that would be required to notice the hundreds of papers that are monthly emerging into life. Our sheet is so small, and valuable information in these days of diligent research is so abundant, that we hardly issue a number from which we are not compelled to omit several articles that we would feign have given to our readers. Besides, what does it avail either the Editor or our subscribers, that we should keep, as others do, blank forms standing, in which to insert the name of new papers as they are received—the unmeaning and formal compliment passes for just what it is worth; our courtesy, we hope, is too well known to our readers to permit them to expect any sincerity in our notice of a cotemporary, and our using the common terms of politeness, would be no index of even our opinion. The most delicate and the most sincere compliment that we can pay to any paper consists in the extracts we make from it; and it is by this means that our real appreciation of any work may be discovered.

Still, we would not be so churlish as to find fault with those whose greater space affords them opportunities of indulging in these little amenities, from which we ourselves are excluded, and to which we are so much indebted.

TO STOP BLEEDING AT THE NOSE.

An acquaintance called a few days since to say that one of his family having suffered from a profuse bleeding at the nose, after a fruitless resort to various remedies, some one laughingly suggested that the patient should hold up his left hand, a remedy that had been recommended some where in the newspapers: the suggestion was laughingly adopted, and the effect was no less surprising than satisfactory. Our informant only vouches for the fact that in this case the bleeding ceased after the hand had been held up for about three minutes. Whether the relation of cause and effect exists, or whether it will ever happen again he does not pretend to say.

There are often notions which swim in the head that never sink into the heart.—*Romaine.*

Richmond Markets, June 17, 1843.

TOBACCO.—Inspections for a month past have been very heavy, averaging about 225 Hhds. per day, and stocks in the warehouses have accumulated to such an extent that planters have found it impossible to get their crops opened, as brought to market—but the bulk of the crop is now in and this inconvenience will soon be obviated. The tobacco season will close sooner this year than heretofore, and as the market has borne their heavy sales without showing any decline in prices, we do not expect to see them laxen throughout the season, and think that fine shipping and manufacturing qualities may advance still higher. It is too early to form any correct conclusions in regard to the next crop, but as very little has yet been planted, it must be a late one, and may suffer from various causes on that account. We quote lugs \$2 25 a \$2 75 and \$3—leaf, common \$3 a \$3 75—middling \$4 a \$5 50 and good \$5 50 a \$6 50—fine stemming and shipping \$7 a \$12—fine manufacturing \$12 a \$15.

FLOUR.—Canal \$4 75 a \$5.

CORN.—55 a 60 cents per bushel.

OATS.—From depot 32 a 36 cents per bushel.

EXCHANGE ON NORTH $\frac{1}{2}$ a $\frac{3}{8}$.

LUDLAM, PRESTON & Co.

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