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. RICHMOND, AUGUST, 1843. No. 8.

RUST PREVENTED BY THE USE OF ASHES.

One of the chief constituents of the stalks of plants is *silica*, which is neither more nor less than the pure earth of the common *flint;* the quantity varies with the nature of the plant; in some, as in wheat especially, it is apparent in the glazed appearance of the stalk to the most common observation. Upon this circumstance, Mr. Levi Bartlett has built up the following ingenious theory. For want of a sufficient quantity of silica, the straw of wheat grows up soft and tender; the more rank and luxuriant it is made by manure, the smaller will be the portion of this hardening property falling to each stalk of grain; then it is, that it falls, or *lodges;* if there happens to be a day or two of warm, moist weather about the time the wheat is in milk, the rush of sap is so great, that it ruptures the *tender* and *inefficient* coating in the stalk; the sap vessels burst: the sap exudes, and forms a coat of RUST, and the crop is nearly ruined.

The silica in the shape of sand, quartz, &c. Mr. Bartlett admits, is generally present in sufficient quantities in the soil; but he thinks, to be useful, it must be soluble, which, he says, can be effected only by an alkali. For this purpose he recommends the use of *potash*, and it is to this action, that he ascribes chiefly the advantages of using ashes as a manure.

That this is the effect of potash upon silica, Mr. Bartlett infers from the fact, that lye will dissolve the silica in wood. From this well known circumstance, tubs for leached ashes are usually made of pine, which does not contain so much silica as oak, and which is, therefore, less affected by the potash. An oak tub after having been used a few times for a leach tub, would have its silica dissolved, and the staves if dried, would shrink to half their width.

That ashes is beneficial to the crop in thus liberating the silica of the soil is a new and ingenious, and we will add, a plausible doctrine. Liebig recommends also the use of ashes but he offers a different exposition of the *modus operandi.* He too, conceives the silica to be frequently wanting in soils which have been long cultivated in wheat, but it is in the form of a *silicate of potash* that he supposes it to be furnished directly by the ashes. So far, however, they both agree, that soils often fail in wheat for want of something that is furnished by the ashes.—But that *rust* proceeds from the want of the indurating quality in the straw afforded by the silica, is, as far as we know, entirely original with Mr. Bartlett. This is a most important point, and one worthy of the deepest attention; there is a plausibility about the doctrine that entitles it to investigation. If ashes alone is wanting, and, as is suggested, in very small quantities, it may be obtained by paring and burning the soil, from wood, and various sources, in quantities sufficient for the largest field. Save us from the fly and rust, and there is no crop that is so dear to a Virginia farmer as his wheat; in spite of these malignant enemies, there is none likely to supplant it in his affections. The labor of cultivation is so light, compared with either corn or tobacco, and it comes in so conveniently to fill the gap between the finishing of the spring crop and the closing in of winter; besides, our habits and customs, our experience, and the establishment of our manufacturing mills, all make the wheat an indispensable crop with us. Any thing, therefore, that promises to rid us of one of the sore evils which annually threaten the hopes of the husbandman, will attract attention and secure consideration.

This want of stamina Mr. Bartlett thinks is not peculiar to the straw of the wheat. It is not uncommon, he says, to see a piece of land receiving the wash of a barn putting forth a luxuriant growth of grass early in the spring, the freshness and vigor of which gives promise of a goodly crop; but for the want of stamina, owing to the deficiency of soluble silica in the soil, it falls before it heads, and when made into hay, the weight is light in proportion to the bulk.

Are these ingenious presumptions correct?—

They are to be tested only by facts, and we respectfully invite our correspondents to furnish us with circumstances coming within their observation that have a tendency to shed any light upon the subject.

Will common observation or chemical analysis detect the want of silica in the straw of wheat that falls or rusts? Will not somebody institute a set of experiments to ascertain whether ashes afford protection from rust?

If rust proceeds from a deficiency of soluble silica in the soil, the thicker and more luxuriant the growth, the greater should be the liability to rust: is this so? On the contrary, we know one farmer at least, and a good one too, that thinks high cultivation and heavy manuring a perfect preventive of all the ills that wheat is heir to. He thinks, that the thinner his wheat, and the poorer his ground, the more likely he is to suffer from rust; because, he considers, that animal and vegetable manures thicken and strengthen the stem so as to enable it to resist the additional strain arising from the increased flow of the sap during a *rusty* spell.

We were discussing this theory a few days since with an intelligent and scientific farmer from the county of Louisa, who seemed much struck with its plausibility; he mentioned a circumstance that certainly has a tendency, as far as it goes, to confirm the doctrine. There is a portion of the Green Spring country he says that is notoriously and proverbially invulnerable to rust, and he well remembers, that during a visit to the neighborhood, a few summers since, Professor Rogers analyzed the soil of this section and pronounced it, amongst other things, remarkable for the potash it contained.

To the consideration of this question we invite the inquiring mind of Professor Rogers.—There is no field of investigation more worthy his scientific abilities. If by his patient research and penetrating acumen he can discover the cause, and provide a remedy for this sore evil under which our husbandmen are groaning, he will win for his brows a wreath more honorable than ever adorned the temples of a military hero.

For the Southern Planter.

WHEAT, PLASTER, POTATOES.

Mr. Botts,—Having seen it recommended to sow old wheat instead of new, as a preventive against the ravages of the Hessian fly, in the fall of 1841, I reserved two and a half bushels of good seed wheat, and in October, 1842, sowed in a belt through my field, sowing on either side, and putting in, similarly, wheat of the same kind, though the growth of 1842. I have seen no difference up to this time in the appearance of the crop. I have now a few bushels of seed wheat, the growth of 1842, and will repeat the experiment this fall, as a different result may follow in another season.

Whilst writing, I will state that in the spring of 1842, I made five different experiments on the application of plaster to corn, upon as many varieties of soil, to test its relative value and efficacy, intending to gather accurately and report the result. I was prevented from doing this by the severe storm and fresh we had in September, which flooded some of the corn, and blew down and intermixed the rest, so as to render impossible an accurate admeasurement. I can only state the general facts, and appearance of the crop during the season. The first experiment was upon a gray gravelly soil—the second, upon red land, intermixed with fine chocolate gravel—both high land. The third, was a poor sandy soil; fourth, rich sandy loam; fifth, rich, moist, black stiff land, such as we find upon most of our flats, where they approach the hills. The three last, flat land. The corn was simply rolled in plaster as long as any would stick. In each experiment six rows were taken, leaving three rows unplastered alternating with the plastered corn. The greatest improvement from the plaster manifested itself in the third experiment upon the poor sandy land.—The contrast here was so great that a sensible neighbor of mine could scarcely credit that plaster alone had been applied. The next greatest improvement was to be seen in the fourth experiment upon the sandy loam. Then came the first and second experiments, in which there seemed but little difference as to their relative improvement, but manifest superiority over the alternating rows of unplastered corn. In the fifth experiment, some time after the corn came up and whilst the weather was dry, I could perceive a superiority of the plastered over the unplastered rows. The weather then set in wet, and by the time the corn was in tassel I could perceive no difference, nor do I believe the yield varied. The season was a dripping one and unpropitious to the fullest exhibit of the application of plaster, which shows more distinctly in dry seasons—nevertheless, the plastered corn in the four experiments maintained its superiority over the parallel rows of unplastered corn through the season.

I will state the result of an experiment made by a friend of mine, Col. R. Taylor, of Orange, upon light, red, mountain land. He left four rows of corn unplastered. They ran around a hill near its base, upon land evidently better than that over which four rows above them

passed. From the unplastered rows he gathered eight hampers of corn—from the plastered rows thirteen.

A short time since I extracted the following memorandum from the diary of Mr. C. P. Howard, residing in the vicinity of Orange Court House, who was induced to make the experiment from seeing it recommended in some agricultural work: "Planted potatoes in garden 22d March, 1842, cut off the bloom and buttons as they formed, of two rows; dug them on the 10th August. The two rows measured three bushels and a half peck. The two adjoining rows two bushels and three pecks, which were smaller in size."

Respectfully,

GEO. A. SMITH.

BEE HIVES.

We have been requested by a subscriber to give our readers some information upon the comparative merits of different bee hives. Will some friend do us the favor to supply what our want of information precludes us from doing?

For the Southern Planter.

REPORT OF THE MECKLENBURG CLUB.

The following report was read before the Upper Corner Agricultural Club of Mecklenburg, on Saturday, the 16th instant, and ordered to be transmitted to the Editor of the *Southern Planter* with the request that he publish it in that journal:

The Committee appointed at the last meeting to report upon the farm of Dr. Paul C. Venable, have performed that duty, and report, that his farm in every part, evinced great diligence and personal attention. The homestead is tastefully and substantially built, with all the necessary farm buildings well arranged; a young and thriving orchard, good garden, &c. &c. But the improved condition of the farm at large, more particularly arrested the attention of the Committee. The whole is laid out in separate shifts, with good enclosures and gates, and every field, except those in immediate cultivation, well set with herdsgrass or clover; with a beautiful highland meadow of some eighty or a hundred acres. Your Committee have rarely seen, even in a strictly grazing country, a richer and more beautiful display of the artificial grasses. The corn-field, was well prepared and planted, and although recently covered with a strong herdsgrass turf, gave promise of an abundant crop, provided, the future cultivation was of the same efficient character with the preparation, and bestowed in time. The tobacco land was in a course of preparation; it seemed to be very highly manured and well got up. The Committee were highly pleased with the exhibition of farm stock, particularly the cattle and sheep. The Doctor has for some years, turned his attention to raising blood stock. His noble bull, Lord Durham, of the short horned breed, is of pure blood, a truly splendid animal, and of a size and figure that ought to excite his neighbors to avail themselves of his vicinity, to improve their own cattle. His whole stock of cattle show blood and breeding, and in consequence of his attention to this subject, his family enjoy abundantly the substantial comforts of milk, butter, beef and mutton; for he is successful in raising sheep as well as cattle, and raises both to a considerable extent, for market. He entertains the opinion that the artificial grasses and free grazing are essential to rapid and extensive improvement of the land; and the rapid progress which he has made in the improvement of his own estate, should entitle this opinion to much weight with the Club. One member of your Committee has been for many years familiar with the character of the Doctor's plantation, and testifies to the fact, that up to the time when it came into his hands, it was a barren waste in comparison with its present improved appearance, and both members of the Committee bear testimony to its rapid improvement since it became his property, some eight or nine years ago. He pursues what he expressively terms *a progressive system of improvement.* That is, he changes the scene of his manuring operations every year, and devotes every possible amount of time and labor that can be spared from his other farm work to increasing the quantity of manure, and he is thus enabled to bring the poorest spot to tobacco heart at the first manuring, and he purposes to pursue this mode until he shall have gone over his whole arable surface, which he hopes to effect in a few years more. He is very partial to the moveable summer cow-pens, and owing to his large stock of cattle and their rich and abundant grazing, he is able to go over an extensive surface every summer. The Doctor exhibited a Merino and a Saxon buck, both fine looking, and a fine large and healthy flock of ewes and lambs. He ascribes his success in sheep raising, mainly, after the abundant grazing, to a rule he has adopted of never suffering old sheep to remain in his flock; to avoid which, he annually, at shearing time, makes a short slit with the shears in the ear of the sheep, and after the number of four slits, the animal is doomed to the slaughter-pen, before next shearing time.

Your Committee has thus briefly adverted to the principal features of the Doctor's management, which they would recommend to the attention and imitation of the Club. There are, however, some matters of minor importance well worthy of note, such, for instance, as the

fish pond, to which our attention was called.—Every good husband endeavors to aid his wife in her laudable efforts to stock the poultry-yard by building suitable houses, enclosures, &c. to facilitate that object, and we all know how necessary this is towards keeping a good table.—Not less so is the resource found in the fish-pond, which is perhaps more profitable even than the poultry, as it is a well ascertained fact that a small pond well stocked, will supply a good dish of fish at every season throughout the year, while it affords a healthy and innocent recreation for our families. Almost every planter can afford himself this comfort, by erecting a dam across his spring branch, which will serve also as an ice pond, now considered an indispensable appurtenance to every farm.

Another valuable feature in the Doctor's practice is the procuring a good spring for his stock and laborers, in almost every situation, where an ooze or springy spot is found on the farm, by excavating deeply, and fixing in a plank box of commensurate depth, to convey the water to the surface; thus in many instances converting foul and stinking bogs or mires, into wholesome springs, and rendering the land about them arable and productive.

Your Committee have thus noticed such things as seemed to them to claim commendation and approval. There were no exhibitions of the *corn-crib*, the *forage-house*, the hay or oat-stacks, nor had the committee access to any statistics, to show the amount of the Doctor's crops, or what proportion his nett profits bear to his improvements. Of the improvements, our Club as well as your Committee, must bear willing testimony. But these questions are well worthy of investigation and solution, that is, whether the sum of the profits is as the sum of the improvements? and whether the increased labor of cultivating these large fields of grass, when they are brought to the hoe crop, as they must be soon or late, does not more than counterbalance the advantages? Questions, which the Committee leave to the Doctor's own future experience and the better judgments of the Club.

Where there is so much to approve and admire, the Committee would willingly refrain from finding fault, but we should not perform more than half our duty were we to omit this express requisition of our rules. We would say then, to the Doctor, that we think he generally cultivates too much land for his force, under the system he is pursuing—that the extensive cultivation of the grasses greatly increases the labor of the hoe crop, and that if he would diminish his arable surface in proportion as he increases his grass and his manured surface, his products would be greatly enhanced; that he would be able to carry on his schemes of manuring more extensively and successfully; that he would not be in danger of acquiring the distinction of having two blades of grass in his corn-field where one ought not to be, and that when the future meetings of the Club are held at "*Wheatland*," he will have the pleasure of showing what the Club with equal pleasure will behold—the *corn-crib* and the *forage-house* teeming with corn, &c. as his cows now teem with milk, and the sheep with their ample fleeces.

All which is respectfully submitted.

A. C. Morton.
H. L. Jeffries.

We take the liberty of considering ourselves, *ex officio*, a member of every agricultural club in the State of Virginia, and as such, we exercise our privilege of commenting upon the reports made by *our* committees. We think we detect in this report the attempt to poke a little good natured fun at Dr. Venable on account of a suspected vacuity in his corn-crib. Now, we are highly pleased with the system pursued by the Doctor, and do not perceive the relation of cause and effect between that system and an empty corn-crib, and we see no fair ground for the inference of the Committee. There was no exhibition of the corn-crib, but there was an exhibition of stock, in such order as to call forth the warmest admiration of the Committee. Is there any one of those gentlemen that can produce a similar result with an *empty* corn-crib? If so, it only proves that grass, so far as stock is concerned, may be advantageously substituted for corn. When the mother of the Gracchi was asked for her jewels, she pointed to her children; when the Doctor is asked for his corn-crib, he may point to his cattle and his sheep.

We feel bound to defend the grazing system which has excited the raillery of the Committee, because we have recommended it heretofore, and because we believe that to it Virginia is yet to be indebted for the greatest agricultural blessings. We confess we have been a little amused at the exhibition in the Committee of that principle so peculiarly characteristic of our Southern people, which inclines us to cling so tenaciously to the customs of our fathers, even in spite of our better judgment. It is an amiable weakness, and one that we should dislike to see wholly eradicated; but a little modification of it would sometimes probably enure to our benefit. This Committee visit the Doctor's farm and find a new system which substitutes grass and cattle for grain, in full operation.—The garden, the orchard, the character and

keep of the stock, elicit their warmest admiration, and the improvement in the soil is truly astonishing; and yet they evidently more than doubt the benefit of the system which has lead to these results.

In a particular county in this State it has been the custom, it is said, from time immemorial, to keep a large stone on every farm, which is put in one end of the bag when it is sent to mill to balance the corn or meal in the other end. A benevolent traveller meeting the mill boy once with his horse thus encumbered, suggested to the little fellow the advantage of dispensing with the stone, and dividing the corn. With all the pliancy of youth, the boy took to the innovation, and determined to try the experiment; delighted with the result, he hastened to inform his father of the wonderful discovery, and to prove by ocular demonstration the advantage of the riddance, in which old Dobbin seemed to rejoice. The old man admitted that the new theory *looked* plausible, "but, my son," says he, shaking his head, "let us beware of new-fangled notions; go back and bring home that stone, and remember that it is dangerous to attempt to be wiser than our fathers." To this day, in that county, the corn goes to mill in one end of the bag, and the stone in the other.

The Committee doubt whether the improvement is worth what it cost. A "barren waste," be it remembered, by means of grass and cattle, has been in a few years converted into the beautiful farm so glowingly described by the Committee. Could the same result have been effected in any cheaper mode? None is pointed out, and surely the Committee do not mean to doubt the value of *any* improvement? But the Committee fear that the young grass will trouble the Doctor in his corn crop. We do not doubt that if the Doctor manures highly, and turns under a heavy sod of artificial grass on which to plant his corn, he will be infinitely more *troubled* both with grass and *corn* than he would have been if he had left his land in the state in which he found it; but we hope he will permit the fear of the excess of neither the one nor the other to delay him in his system of improvements.

There is reason even in the roasting of an egg, and we do not mean that pasturage may not be substituted for tillage to too great an extent; but we do mean to express the opinion that an excess of tillage, to the exclusion of pasturage, has skinned our lands, and that to the reverse of that system we are mainly to look for improvement.

We hope that the Mecklenburg Club will admit our claim to fellowship, and excuse the freedom we have exercised in commenting on the report of their Committee; it is in many respects a very valuable one; especially, would we invite attention to their well-timed remarks upon the Doctor's *fish-pond.*

PRESERVING EGGS.

It would be quite a valuable discovery to farmers in the neighborhood of a large market, as well as to household economy, if a cheap and easy method of preserving eggs could be practised, whereby the price would be more equalized through the various seasons of the year.—Reaumer, the inventor of the thermometer which bears his name, tried many experiments for this purpose, and found that the cheapest and most effectual method was to apply oil or grease, with which they were rubbed, or into which they were dipped. He found that they were preserved quite as well by the thinnest layer of fat, as by the thickest coating, so that every part of the shell, (which is porous and admits air,) was covered. All sorts of fat, grease or oil, he found well adapted to preserve eggs, and kept them in this way, he says, for nine months, as fresh and good as the day they were laid.—Will some of our readers try a few dozen in this way, and let us know the result?

Newburyport Herald.

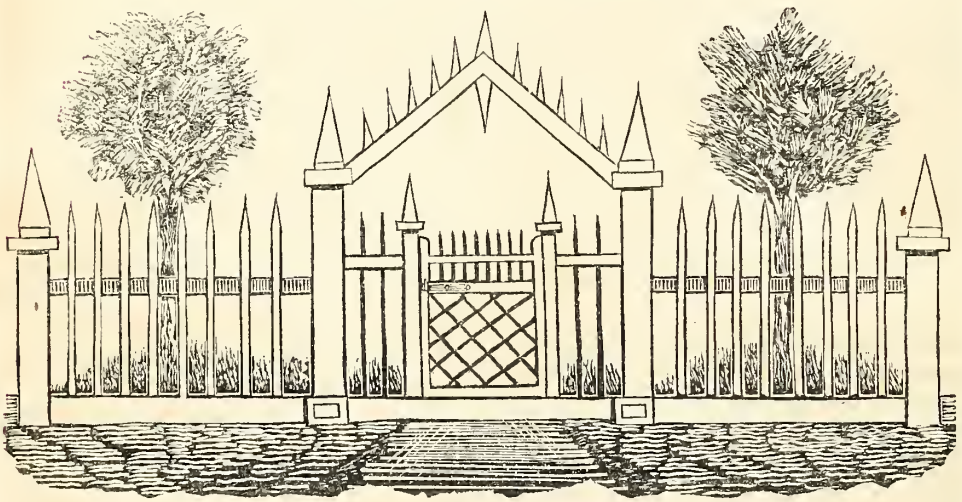
From the Cheraw Gazette.

THE TOMATO.

Few people have any idea of the great value of this very common and easily cultivated plant, although there are still fewer, perhaps, especially in the South, but who esteem it one of the most pleasant and useful of vegetables.—The ease with which it is raised is no inconsiderable recommendation, and its medicinal qualities render it still more valuable. As a preserve, the tomato has few superiors in the vegetable kingdom, and it is an excellent substitute for the fig, which, when dried and packed in boxes, it very much resembles in many particulars; while the ketchup from tomatoes is known and approved by the *gourmand* everywhere.—There are three varieties of fruit—the large common, the egg, and the golden drop—the two latter of which are the most highly esteemed for their delicious flavor. The soil in which tomatoes are planted should not be very rich, or they will run too much to vine; how-

ever, we presume it is unnecessary to give any caution on this head. But what we intended more particularly to recommend, when we commenced this article, but which we had very nearly lost sight of, was, the great value of the vine of the tomato as food for cattle, especially cows. We have tried the experiment, and believe it can be proved to a demonstration, that a cow fed on tomato vines, will give more milk, yield butter of finer flavor, and, in greater abundance, than on any other *long* feed we have ever tried. We have heretofore only used it in small quantities from our garden, but intend this year, should God grant us health and strength, to experiment more largely, as we do not entertain a doubt but that *more* food for cattle, and of *better* quality, can be raised from a given portion of ground, and at *less* expense, when planted in tomatoes, than any other vegetable known in the Southern country. This is our opinion, but if we are wrong, having experimented, as we before observed, on a very small scale, we are open to conviction, and will cheerfully publish any communication shedding light upon this or any other subject connected with the interests of the agriculturist.

YARD ENCLOSURE.



There is nothing more ornamental or more necessary to the comfort of the homestead than a good enclosure about the yard. A straggling fence can only be tolerated by an individual totally wanting in taste and refinement, who is utterly unconscious of the thousand comforts and innocent pleasures that a cultivated mind can form for itself out of the simplest and cheapest materials. It is from these simple and elegant pleasures that civilized life derives its greatest charm; they constitute the great sum total of human happiness; without them civilization would be the most arrant humbug upon the face of the earth: in quitting a state of nature, we gave up much to attain them; and the man, who asks what is the use of this elegance, or that refinement, and who can see no value in any thing that does not directly fill his money bags, is a kind of demi-savage, suffering all the evils, without enjoying any of the blessings, of civilization.

The engraving represents a pretty and cheap method of enclosure taken from the "Cultivator," and we introduce it with these remarks, because, we know that too many are inclined to despatch such things with the passing remark, that "they may do very well for those that have a plenty of money, but that they are of no manner of *use*." We should like to know of what use is money itself, but to procure the pleasures and comforts of life, and yet many a man will toil for *money*, whilst he neglects those comforts which can be obtained *directly* at much less expense of labor. Besides, not only are these neat and elegant arrangements about the homestead productive of the purest pleasure,

but they are *useful* in imparting a tone of order and system to the general conduct of the farm, that is highly advantageous to the quantity of its products. A neat enclosure, a clean yard, a tasteful display of flowers, a freshly painted dwelling, will, by the force of example, impart a spirit of neatness and order that will be manifest in the humblest negro on the plantation.

To those, then, who are impressed with the value of such things, we give this illustration of an enclosure, the construction of which may afford a delightful recreation to any gentleman who is not ashamed to handle a saw and a hammer. "The gate posts are 10 feet long, 10 inches square, and set 3 feet into the ground, with a bed piece between, into which the inner posts are mortised. The fence posts are 4 feet long, 10 inches square, and made of 1½ inch plank, well spiked together. A long stone is set solid in the ground, the hollow post placed over it, and the cavity between the stone and the inside of the post filled with pebbles. I know of posts set in this manner which have lasted ten years, and continue as firm as ever."

For the Southern Planter.

MANAGEMENT OF SERVANTS.

Mr. Editor,—The management and conduct of servants in a family, especially about a house, has been a source of much trouble and vexation to the housekeeper or manager; and to an observing person, the turmoil and labor of the mistress of a family, in the management of her servants seem to warrant the conclusion, that the trouble of housekeeping more than counterbalances the comforts and enjoyments procured by the labors of her domestics. Indeed, very few Virginia ladies, comparatively speaking, are brought up in a way calculated to make them what we would call *good managers*. Now what I want to suggest, is, the propriety of adopting the following advice.

First, let me remark, that most servants are incapable of understanding the explanation of any thing which they cannot *see* with their *eyes*; therefore it is useless to tell them to do any thing which requires a long explanation, or which they are not daily accustomed to do. It is by far the best plan, to allot to each his particular duties, and to have their affairs so arranged that one will not be dependant on another. Let not more than one be employed about the same thing; for if there is more than one, they will depend on each other; and, moreover, one can do more work than two or three if they are employed closely together; probably some will not believe this, but let them try it.

Never change your servants from one line of business to another, for it takes them some time to get into the habit of doing things regularly. Be always as concise as possible in giving orders; for servants cannot retain many things in their heads at one time. Never scold when a servant neglects his duty, but *always* punish him, no matter how mildly, for mild treatment is the best; severity hardens them. Be firm in this, that no neglect go unpunished. Never let a servant say to you, "*I forgot it.*" That sentence, so often used, is no excuse at all. Finally, let regularity mark every action, and the consequence will be, that every thing will be done in its right place and at its right time; and the comforts and happiness of the family will be secured.

CECILIA.

We set our fair correspondent down as a tip top manager, and if we ever visit her section of country, as we hope one day to do, we shall carry with us her "card," that we may partake of that hospitality, which her system so surely enables her quietly and sweetly to dispense to her friends and neighbors. But it is not in that important department, the household, alone, that "management" is required. One of the most important, but least regarded, points in the conduct of any business requiring the manual labor of others, is the control and management of dependants. In a manufacturing business, where numerous operatives are employed, (and such a business is farming) no one who has not tried it can imagine the difference in the amount of product to be effected by order and system. Though human ingenuity, in the shape of labor-saving machinery, has done much, the reduction in the price of manufactured goods is chiefly to be attributed to the division of labor, by which one task is regularly and daily repeated by one individual. This system, as far as possible, should be introduced into our farming operations. We know an individual in this city, who, if he was as well versed in the science of agriculture as he is in the mechanical art to which he was raised, would be worth his weight in gold to any farmer in Virginia: sagacious and thoughtful, he is ever on the alert to accomplish his ends in the best and most economical manner; calm and dispassionate, but firm and active, the operatives under his charge know that punishment will certainly follow disobedience, and the consequence is, that, comparatively speaking, there is no disobedience and no punishment.—His nature is especially kind and gentle, and he

says he punishes the first fault to save him from the necessity of inflicting ten times as much, which would be the necessary consequence of the omission. As he is unflinching in punishing a disobedience of his orders, so is he especially particular that his commands shall be explicitly defined, that they may be clearly understood. The great object, he affirms, is to separate the mental from the manual labor; so that the superintendent may do the one, and the operative the other. No laborer should have his attention distracted or his time occupied in thinking what he shall do next; the process of thought and arrangement should devolve wholly upon the superintendent, and the manual laborer, to be most effective, should, by constant repetition, perform mechanically, and almost without the effort of thought, his daily task. It is by this system, that, that degree of intellect, which alone can be obtained from the great mass, is rendered sufficient to the accomplishment of the greatest and most complicated effects. But to do all the thinking for fifty individuals requires no common power of intellect, and, consequently, it is not every stupid fellow that can make a good manager. The *gentleman* that we have described, for although born in an humble station and a self made man, he is in every respect worthy the title, is a highly informed and well read man; otherwise, he could never have attained his acknowledged excellence in so simple a matter, as some would esteem it, of conducting a small manufacturing establishment. Such a man, we verily believe, could go upon any farm in Virginia, and treble the products, solely by the discipline and system he would carry with him.

From the Tennessee Agriculturist.

SOAP MAKING.

As soap making is a matter of no small interest to every house keeper, a few suggestions on the process of manufacturing will be of utility. Soap, as every one knows, is made of alkali and fat or oil of almost any kind. Although grease and lye are common in every kitchen, yet few can combine them with accuracy; and frequently much more labor is bestowed, than is necessary. The first consideration is the obtaining a sufficient quantity of alkali. This requires good wood, green is best, and if it be cut in the winter or while the sap is down, the lye will be much stronger. Old rotten wood should not be burnt when the ashes are to be used for lye.

The ashes being ready, put them into a hogshead, barrel or old fashioned hopper, and put on water till the strength is exhausted. Next commence boiling to evaporate the water, and concentrate the potash. To be assured there is enough potash, make a trial with an egg. If the egg is supported, all is right, but if it sinks to the bottom, the boiling must be continued.

But often it occurs that the *lye* is sufficiently strong and yet soap cannot be made. This is generally owing to the fact, that the potash of the lye is not sufficiently caustic, or capable of corroding the skin. This lack of causticity is owing to the existence of too much *carbonic acid*, in combination with the potash. To prevent this, use the ashes fresh, or before the acid is absorbed. The cure for the evil is quick lime. It has a greater affinity for carbonic acid than potash, and if a half bushel unslaked lime be placed at the bottom of the hogshead of ashes, the lye will be free from the acid. The proper causticity will be shown by dipping a feather into the lye, while boiling. If the more delicate parts are consumed, the lye is ready for the oil. The fat should be as clean as possible. The proportion of fat should be about three pounds to one gallon of the alkali. The fat of course is to be put in while boiling and the whole should be constantly stirred, till the soap is finished.

Hard Soap is made by adding salt to soft soap while boiling. Tallow soap is perhaps the best, but too expensive for common use. The Windsor soap is made of tallow and potash, scented with caraway seed. Butter, lard and the finer oils are used for making the fancy toilet soaps.

T. F.

HESSIAN FLY.

In the last number of the American Farmer, we find a communication from Mr. Samuel McKenney, of Georgetown, D. C., advancing a doctrine somewhat striking and original. He contends that the insect found in vegetable productions, as the fly in wheat, the worm in the garden pea, and the maggot in the chesnut, are not, as has been supposed by naturalists, the growth of the egg deposited by the parent fly in the embryo seed, but are the immediate result of vegetable action; that animal, as well as vegetable life and growth, is the result of vegetation; that the two principles are always present, and that the perfection of the grain depends upon the *proportion* in which they exist; which proportion is modified by weather, climate, soil, &c.

Mr. McKenney puts his case very boldly and strongly, and startling as his doctrine is, he sup-

ports it very ingeniously. He puts some tough questions to the *eggists;* whatever they may have been *imagined* to have done, he denies that any insect in nature has been *seen*, guilty of the gross absurdity of poking its bill into the bur of a chesnut, for the purpose of laying its egg in the embryo fruit; in short, he seems to think that the king was not more puzzled to imagine how the apple got in the dumpling, than his opponents will be to explain the introduction of the egg in the grain. For our own part, we candidly confess it was always a mystery to us, and one of those kind of things that, without understanding, we have been in the habit of believing, upon the faith of other men's assertions. If the thing is as ridiculous as Mr. McKenney seems to suppose it, in spite of its antiquity and authority, we shall gladly see it exploded.

The practical deduction that Mr. McKenney draws from the supposition, that the insect is the product of the vegetable growth, is, that there is no means of avoiding its ravages, but by high manuring and superior tillage, which, in spite of season and weather, may push the vegetable fibre beyond the degree of tenderness required to satisfy the delicate appetite of the little epicure, who is then driven to the tender shoots of the young grass, with which he is surrounded.

If our readers only knew how many *theories* we have to pore over, not one in a hundred of which, after all the sifting, is worth even the condensation we have bestowed on this, they could then form some idea of how little of an editor's labors is apparent upon the face of his work.

TIME FOR CUTTING TIMBER.

Many persons finding that timber cut in the spring is not durable, have been careful to cut at a season as far from that as possible, and acting on this principle, the fall or first of the winter has been fixed upon as a good time for this purpose. But so far as experiments have been made, they generally show that June is the best time for cutting timber, provided the bark be taken off, and this can be done conveniently at this season. In June the sap is passing into the leaves, and after becoming elaborated into suitable juices for the forming of wood, it is returning and forming a new layer of wood between the wood and bark. This sap causes a rapid decay of wood if the bark remain on, but when the bark is taken off the wood seasons very fast, and as the sap has been constantly passing into the leaves, there will be but little in the wood to cause its decay.

A "Jack at all trades" who had used timber for more than twenty years, for various purposes, which had been cut at different seasons, remarked that timber cut in June was harder, heavier, and more durable than that cut at any other season. When the tree is in its greatest vigor the sap is thin and rapidly passing through the wood, and if the tree be then cut and peeled, the sap will readily escape through the pores of the wood. But in the winter and spring, the sap contained in the tree is thick, having been prepared the previous year and reserved to commence the new growth. This thick sap will not so readily escape, but remains stagnant in the timber and becomes the principle of its destruction.

A gentleman who has been considerably engaged in ship building informed us that he had used in the same vessel, timber cut at different seasons, and that cut in June was the most durable. Numerous experiments in cutting timber for ships and other purposes show the same results.—*Boston Cultivator.*

BUTTER.

There is no article of provision with which our market is so poorly supplied as that most necessary condiment, *good butter.* In the production of the good things of life, our country people generally excel, but in this most important one, with a few exceptions, we entirely fail. And to such an extent does this failure exist, that a great many have never seen, and do not know what good butter is. We have known many a neat and tidy housewife, an excellent provider too, pride herself upon her butter, which, in comparison with some that may be had from Northern dairies, was not fit to feed a dog upon. Such stuff as is sold in the Richmond market at this time for twenty-five cents a pound, would not bring, in Philadelphia, more than nine or ten: much of it would hardly be thought good enough to grease a cart-wheel.—We can assure our readers that we do not exaggerate this matter, and if they could only taste the sweet, rich, and marrowy butter that can be had in the Northern and Eastern markets for seventeen cents a pound, they would ever afterwards appreciate as it deserves the miserable grease they have been accustomed to dignify with the name of butter.

A few days since, we happened to meet with an article in a celebrated grocery of this city,

from the mountains of Virginia, twelve months old, fully equal to any it had ever been our good fortune to encounter anywhere. We did not fail to avail ourselves of the opportunity to lay in a large supply for family use, and so superior did we find the flavor and consistency of this to the best of the fresh butter which is brought daily to our market house from the surrounding country, that we applied for the name of the maker, that we might obtain for general use the process by which its superior excellence was obtained. The grocer refused to gratify us; "for," says he, "if the individual was aware how little of such butter comes to the Richmond market, and the estimation in which his product is held, my customers would have to pay two prices for it." We then asked what quantity of such butter could be sold in this market; his reply was, "I myself will contract for ten thousand pounds of such butter annually, at twenty cents a pound. Now, to this circumstance we would wish particularly to call the attention of Northern dairymen; they who think they are doing well to get fifteen cents a pound for their butter. Our lands are better and cheaper, our climate more favorable, and our market higher than any they have been accustomed to, and we doubt if in the Union there is an opening for a better business, than a well conducted dairy establishment at the foot of the Southwest mountains, in Virginia, would afford. We have been too much accustomed, in this part of the world, to overlook what are called "little matters:" with even those who sell most butter, the manufacture is, at best, a secondary thing, and an almost unimportant item in their products. Such a thing as a dairy establishment proper, is not, to the best of our knowledge and belief, to be found in the State.

The art of butter making is one requiring a good deal of skill and attention; that is, there are ten ways of making bad butter to one of making good; and if done at random, there are, of course, nine chances to one against the production of the good article. We have, therefore, taken great pains to give our readers all the authentic information upon this subject that we could obtain, and we now append some remarks from an English paper, the "New Farmers' Journal," that we consider worthy of attention.

There are already to be found in the Planter views and opinions upon this subject very much opposed to the common practice of the country; are they right or wrong? We receive communications upon almost every other subject connected with rural economy, but nobody ever says a word about *butter*. Will not some good housewife take up this question, and tell us, of the many methods recommended, which is the best?

The following is the English article to which we alluded:

HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND.—The monthly meeting was held on Wednesday, the 1st inst., Sir Geo. Macpherson Grant in the chair. The first paper, entitled "Experiments and Observations on the Production of Butter," by Professor Traill, was read by the author. These experiments were made in connection with the late Dr. Gerard, of Liverpool, who had paid much attention to the subject, and assistance was occasionally given by Dr. Bostock, now of London.

One of the principal objects in view was to ascertain the comparative advantage of churning.

1. Sweet cream alone.
2. Sweet milk and cream together.
3. Sour cream, or that slightly acid.
4. Sour milk and cream together.
5. Scalded cream, or what is called clouted cream, as practiced in Devonshire.

The principal results of the experiments are the following:

1. That the addition of some cold water during churning, facilitates the process, or the separation of the butter; especially when the cream is thick and the weather hot.

2. That cream alone is more easily churned than a mixture of cream and milk.

3. That butter produced from sweet cream has the finest flavor, when fresh, and appears to keep longest without becoming rancid; but that the buttermilk so obtained is poor, and small in quantity.

4. That scalding the cream, according to the Devonshire method, yields the largest quantity of butter, which, if intended for immediate use, is agreeable to the palate, and readily saleable; but intended to be salted, is more liable to acquire, by keeping, a rancid flavor.

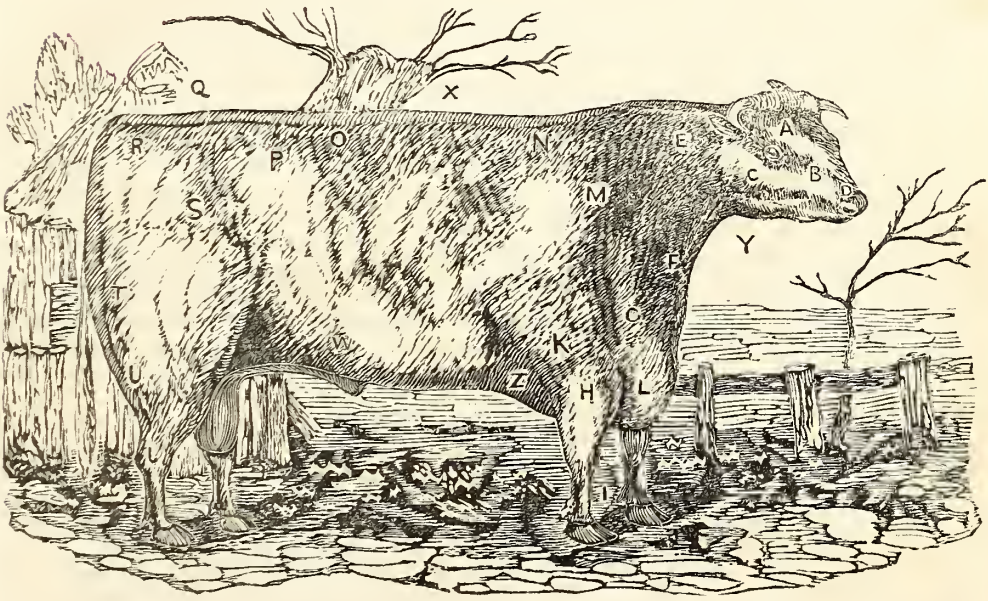
The process of scalding is troublesome, and the milk, after the removal of the cream, is poor, and often would be unsaleable from the taste it has acquired from the heating.

5. That churning the milk and cream together after they have become slightly acid, seems to be the most economical process on the whole; because it yields a large quantity of excellent butter, and the buttermilk is of good quality, a point of some importance where buttermilk is largely used as an article of diet, as it is in Lancashire.

6. That the keeping of butter, in a sound state, appears to depend on its being obtained as free from uncombined albumen, or caseine, and water, as it can be, by means of washing and working the butter when taken from the churn.

The author mentioned the interesting fact that, in the course of his experiments, he found when sweet milk and cream were churned together, and though cold water was added, after an hour and a half, and then after three hours' churning not a particle of butter was obtained.

FORMS OF CATTLE.



A. Forehead.
B. Face.
C. Cheek.
D. Muzzle.
E. Neck.
F. Neck Vein.
G. Shoulder Point.
H. Arm.
I. Shank.
K. Elbow.
L. Brisket, Bosom, Breast.
M. Shoulder.
N. Crops.
O. Loin.
P. Hips, Hucks, Hooks or Huckles.
Q. Crupper Bone, or Sacrum.
R. Rumps, or Pin-Bone.
S. Round Bone, Thurl or Whirl.
T. Buttuck.
U. Thigh or Gaskit.
V. Flank.
W. Plates.
X. Back or Chine.
Y. Throat.
Z. Chest.

Observation and attention have satisfied skilful and experienced men, that there are certain conformations of outward structure that, in cattle, are indicative of peculiar properties; and thus a guide is obtained for the judicious breeder, by which he may almost unerringly select and perpetuate his stock. It is not impossible to convey this valuable information, obtained only with great labor, by means of written communications; but in all attempts of the sort, certain technical terms for certain parts of the animal are necessarily resorted to, which

are generally incomprehensible to the uninitiated. To assist those who entertain the laudable desire of profiting by the experience of others, we have had an engraving made in which the "points" are marked and the technical names appended.

As a fit accompaniment to this engraving, we have selected the following extract from a communication from that distinguished Kentucky breeder, Dr. Martin, to the Editors of the "Farmers' Cabinet":

The two principal objects in raising cattle, appear to be *beef* and *milk*. And as certain forms are found to possess particular qualities, I shall proceed to give those forms, and the desirable qualities generally connected with them.

The head should be small—the muzzle fine—the countenance calm—horns fine—neck light, particularly where it joins the head—breast wide, and projecting well before the legs—shoulders moderately broad at top, and the points well in, so as to leave no hollows behind them when the animal is moderately fat—the girth behind the shoulders should be deep, so that if the carcass should be cut across here, the section would be an *ellipse*, blunt at both ends—back straight, wide and flat—ribs broad, and the space between them and the hips small—flank full and heavy—belly well kept in—hips globular, wide across and on a level with the back—twist wide, and the seam in the middle of it well filled—thigh straight, tapering well down to the hock—the legs straight, short jointed, clean, fine boned, and standing wide apart—tail broad towards the top, tapering down small towards the bottom—body long, and joined smoothly to the quarters before and behind—skin soft and elastic—veins large.

I shall now proceed to show the advantages of the above form. The reason why the head should be small and muzzle fine—a small head facilitates birth—and as the head is composed mostly of bone, it shows fineness of bone, the advantage of which is fully appreciated by the grazier, who has learned that no animal fattens kindly that lacks them. Calmness of countenance also denotes a disposition to be contented, and is generally possessed by a gentle milch cow, and also denotes an animal that will fatten easily. The light neck will be very advantageous to the butcher, who will get much less coarse meat in such; short neck generally denotes a thrifty, hardy animal. A long, or ewe-neck,—that is, one falling off from the top of shoulders—denotes a tender constitution.

The wide breast and deep body, give greater room for the lungs, the importance of which will be seen presently. A straight back is indicative of strength; a weak animal is generally hump-backed; poor keeping will produce these deficiencies in a calf that was at first well formed. The straight back also, denotes aptitude to fatten. Much depends upon the room the lungs have; no animal can be a good one, whose lungs occupy a small space; and as the lungs occupy all the space inside the ribs, so it is important that this space should be large. For this reason, the ribs should spread wide, be deep, and extend well back to the hips. The full, heavy flank of the cow, is a most certain indication of a good milker; this, connected with *large veins*, particularly those on the side of the belly, generally called the *milk veins*, is a certain indication of a good milch cow. The milk is formed from that portion of blood that circulates on the external part of the cow; and as large veins denote a large circulation, so it is indicative of a good milker. The bull with a deep flank, generally produces good milk stock. The belly being nearly straight, shows that the plates of which it is composed are thick and strong; when the plates are thin, the belly sinks from the weight of its contents. Thick plates are of great advantage to the butcher, when the animal is killed, as it adds much to the weight of meat. Globular hips hold much meat, and it is much easier put upon them, than on those that are sharp. Wide hips give a broader loin and more capacity to the pelvis, which is of much importance in the cow, giving the calf more room. The hind-quarter that is long from the hip to the rump, and straight with the back, will weigh very heavy; and for the same reason, the twist (that is the space between the thighs) should be wide and well filled up, which gives great weight to the upper part of the thigh. Straight legs are now the fashion, and are said to be stronger than crooked ones—Clean legs, small bones, tapering tails, show fine bones—and such animals are easily kept, and when not in milk, fatten easily. A short legged animal also, is more easily kept and fattened, than long legged ones. When the brisket and twist are large, the legs will be wide apart.

I somewhat doubt the propriety of insisting upon a long body; but a good animal with a long body, will weigh much heavier than one with a short body; but it is much easier to breed *good animals with short bodies*. There is a continual tendency in the produce of the long bodied animal to be narrow in the breast, which is not the case with the shorter animal. And as a general rule, the shorter animal fattens much more easily. However, if the width of the carcass can be kept up, a long body is to be preferred. Round bodies were formerly the fashion, but the deep body is now thought to be decidedly best. The limbs do not join to the body of the round animal, as smoothly as to the oval—there generally being a hollow behind the

shoulder; neither is the carcass as heavy.—Round animals too, generally carry the fat upon the surface, and do not mix it as well with the flesh. A soft and elastic skin, is one of the most certain tests of an animal that will fatten kindly. An animal may have the finest form and the most perfect symmetry, yet if he lacks the proper "*feeling*," he will not fatten kindly. On the other hand, if he has the proper "*feeling*," he may lack much in form, and still will fatten kindly. By "*feeling*," is meant certain sensations produced by "*touching or handling*" an animal; the easiest learned of which, is the softness and elasticity of the skin. The elasticity is occasioned by the quantity of cellular substance (that is, little elastic bags to hold fat) that is placed between the skin and the flesh.—As this cellulah substance can be discovered by an experienced "*handler*," even down among the muscles, (lean flesh,) so he can tell whether an animal will fatten in such parts, and whether the fat will be well mixed with the lean. But this knowledge is not to be obtained without much practice.

I have above described the most approved form for cattle, and have given the reasons why this shape is preferred. There is another reason not yet mentioned. When the cow has ceased to give milk, and has been fattened, it will be found that she will not only weigh heavy, but will carry her weight upon the most valuable parts. For it is known, that the butcher sells some pieces of beef for twice as much as others. And she can be fattened upon half the food necessary to fatten an inferior animal.

I have said nothing about the shape of the *udder* and *teats*, as these can be best judged of when the cow is in milk; and then the *best proof is milking her.* Still it may be serviceable to say, the udder should rather be round than long; should lay up close to the body; should spread forward—teats about equally distant, of moderate size, say about two inches in diameter, next the udder, and taper down to the point, which should be blunt rather than sharp: they should be from four to six inches long.—The udder, when empty, should be greatly reduced in size, and the skin should contract so as not to leave it flabby;—it should not feel at this time hard and knotty; as this would indicate that it might become thickened and scirrhous, so as to make the cow liable to inflammations, and probably loss of some of the quarters.

SAMUEL D. MARTIN.

Colbyville, Kentucky, April 3, 1843.

VIRGINIA FARMING.

It may be remembered, that in an early number of our second volume, we had occasion to publish and comment on a certain communication made by Mr. SIMON BROWN to the Editor of the "Farmers' Visitor." This communication was a severe, but not unjust, criticism upon such portions of Virginia farming as had come under Mr. Brown's observation. In the course of our review, we undertook to invite the author to accompany us in a contemplated tour on James River, where we thought we could show him some things that would impress him with a more favorable opinion of the country. This invitation, it seems, has just fallen under Mr. Brown's eye, and has drawn forth the following response:

For the Southern Planter.

Washington, D. C., June 9, 1843.

Mr. Editor,—Feeling a necessity for a little "air and exercise," and a desire, not easily repressed, to luxuriate in the freshness of the country, amidst the songs of birds, the flowers, and the glorious assemblage of nature's beautiful things at this season of the year, I resolved, without much debate, to leave this "City of Debate," and look out once more upon the world around me. But, where to go, was the question which arose for decision; East, West, North or South? There was likely to be a sharp conflict within, when fortunately, the recollection of the fat things which whilom graced the hospitable boards in that land of hog, hominy and honey, dear old Virginia, came back and settled the difficulty at once. If those good old people who once fed upon quails and manna (food for the gods) could not refrain from sighing for the "leeks and onions," and the "flesh pots of Egypt," is it wonderful that I, who had banquetted upon corn bread, fresh butter and clabber, should also sigh to return to my first love? No. So here goes for Virginia. I wont detain you long by the way. I could spare only an hour to chat with the Fairfax folk about the "Yorkers" who have planted themselves in their midst, and who have taken root and are flourishing like a green bay tree. But, *en passant*, I wish you would write a lively, generous editorial, encouraging the good Fairfaxians to open their hearts, and if need be, their hands, too, to the new comers; tell them to evince a confiding, liberal disposition; to trust them with every "secret in the trade," both about *root* and *branch*—*fallowing* and *following*—*soil* and *sub-soil*—muck and manure, and every thing else which will have a tendency to facilitate the operations which I understand they have commenced with much flattering promise of success. And then, if they do not appreciate this confidence and good feeling, and reciprocate such favors by a free interchange of knowledge for knowledge, "write them down asses," "cute Yankees," or any thing else you please, except "gentlemen and

scholars." In the brief stay which I made at the Court House, much was said, I confess, in favor of the strangers, yet there was a slight curling of the lip and tossing of the head, with something approaching an arrogance of feeling, a kind of "stand-aside" air, "I am holier than thou," which I regretted to see. And when they inquired (jocosely, of course,) the price of wooden nutmegs and hams, I, believing "that a soft answer turneth away wrath, merely replied that, *my wife says*, she has never heard of any Yankees *purchasing* such articles themselves, how many soever they may have sold! However, all this is merely seed sown by the way side, which will soon perish for lack of depth of root. Well, let us jog along.

Imagine me then, at the house of my old friend, (and yours too, I believe,) Alfred Ball, Esq., in Prince William, on this 1st day of June, 1843—present, host and hostess, two charming young ladies (bless their hearts) my *compagnon du voyage*, J. T. B, the king of good fellows, and your humble servant, all sitting by a rousing fire which was not at all uncomfortable, while we were eating green peas and strawberries. Various were the subjects briefly discussed on that happy evening. Literature, state and national policy, crops, frosts, and agriculture, all delightfully interspersed with lighter "lady talk," while delicate fingers, with commendable industry, plied the useful needle. In the midst of our agricultural chat I was introduced to the "Southern Planter," a gentleman of good, fair proportions, of some pretensions and considerable promise. The following day I took occasion to hold several hour's communion with the said Planter, and am happy to say that I am highly pleased with the acquaintance. And while I beg you to excuse my dulness in not becoming earlier acquainted with so excellent a work, I hope you will *hatch out* some apology for not sending me the number containing your strictures upon a communication of mine published some time since in the Farmer's Monthly Visiter. How did you expect me to peregrinate with you, and how to make my heart glad, with a sight of those goodly things on the banks of James River, with such a sideway invitation? It reminded me at once of my good old aunt Hetzy, who, being a little shy of some of her poor relations, when she wished to omit any of them, was sure to send their invitation in such a round-about way as to make it impossible to reach them before the party was over!* Now if you will break that "bottle of wrath," which you have been keeping warm, and will shed somewhat gentler ink upon what you conceive to be my errors, I will pass a resolution *nem. con.* to consider your invitation "just as good as new," and will present myself to your honor the first opportunity, when we will embrace all those rare delights which you have so felicitously hinted at.

Some of your strictures upon my remarks on Virginia Farming, are a little *too strict*, and some phrases a "leetle too severe." Burdocks and nettles! You are as sharp as a newly-set pruning hook. Nevertheless, I am willing to let the "justice and liberality" which you *do* acknowledge, go (all in the *farming* way) as a little pure lime to neutralize the acids of "asperser," "ignorance," and a few such gentle terms, which your remarks contain. That's the way we do in the soils, you know.

I have carefully examined the contents of the Southern Planter, and am happy to add my testimony to its value. You have able correspondents, and the style and typographical appearance of the work is neat and attractive. Extensive travelling, by the Editor, among the planters, will give him opportunity to note observations which, written out, will give the work a freshness and value which it will be difficult to acquire in any other way. It is impossible that the science of agriculture shall not advance with rapid strides when such works as the Planter and several other papers devoted to the subject, are scattered plentifully among the farming population. I consider the man who communicates any improvement in agriculture or agricultural implements to the public, as conferring a lasting good to his kind, and as infinitely more worthy a niche in the temple of fame, than thousands of those whose names are rung through the land for deeds whose benefits die with the day.

My excursion was too hurried and brief to afford me any material facts. I strolled over the plantation of my friend Ball, and was gratified at the success which has attended his efforts. His example I found contagious, and will prove of great advantage in that section. The crops, however, at this juncture are unpromising, in consequence of the cold and wet weather. There was a heavy frost on the night of the 1st instant which did considerable damage to the tenderer plants. The practice of tilling a less number of acres and of cultivating them highly, is gaining rapidly, as is also that of improving their breeds of horses, cattle, sheep and swine. In short, every thing is promised, and already a great work is begun.

If I find opportunity, and the materials which

* We can assure Mr. Brown that we are not at all like his aunt "Hetzy," for we had every desire that he should receive our invitation at the time it was given, but as he was a wanderer, with only a name, and, as far as we knew, without a "local habitation," we did all we could, and sent the invitation to his friend, Governor Hill, with a request that he would forward it to its destination. But in Virginia a "good fellow" is always welcome, and it is never too late here to accept an invitation once given.—Ed.

I need, I will send you a communication or two of a somewhat graver cast in the course of the summer. In the meantime, allow me to thank you for the kind invitation contained in the Planter, to gossip agriculture with you on the banks of your beautiful river, and believe me to be, with great respect,

Truly yours,

SIMON BROWN.

We hope Mr. Brown will not forget his promise to let us hear farther from him, and that our *touchiness* will not prevent him from animadverting freely upon what he sees of an objectionable character amongst us. We are a little restive under the accents of reproof, but when administered gently by the hand of a friend, it is a wholesome medicine, and one we should try to swallow without a wry face.

BIRDS ON FARMS AND ORCHARDS.

An extensive experiment has been made on the Continent, the result of which has been, the opinion that farmers do wrong in destroying crows, jays, &c., and the small birds on their farms, especially where there are orchards.—That birds occasionally do mischief amongst ripe grain, there can be no doubt; but the harm they do in autumn, is amply compensated by the good they do in spring, by the havoc they make amongst the insect tribes. The quantity of grubs and bugs destroyed by crows, and of caterpillars and their grubs by various small birds, must be annually immense. Other tribes of birds which feed on the wing, destroy millions of winged insects, which would otherwise infest the air and become insupportably troublesome; even those usually supposed to be mischievous in gardens, have actually been proved to be innocent, for on examination they have been found to destroy those buds only, which contained some destructive insect. On some very large farms, the proprietors determined a few years ago, to offer a reward for the heads of crows, but the issue proved destructive to their farms, for nearly the whole of their crops failed for three succeeding years, and they have since found it necessary to import birds to restock their farms! And of late years, the extensive destruction of the foliage and young fruit trees in orchards, by a species of caterpillar, has excited the attention of the naturalist; and it has been found to have arisen from the habit of destroying those small birds about orchards, which, if they had been left unmolested, would have destroyed or kept down these destructive insects.

Every crow requires at least one pound of food a week, and nine-tenths of their food consist of worms, grubs and insects; one hundred crows then, in one season, destroy 4,780 pounds of worms, grubs, insects and larvæ; from this one fact, some slight idea may be formed of the usefulness of this much persecuted bird, the farmer's best friend: but a thousand more well-attested facts might be stated to show the value of birds to the farmer, if more were needed.—Let then, every farmer, and every one who is interested in the labor of the farmer—and who is not? do what he can to protect them, and the face of the country will no longer present the appearance of a scorched and blasted wilderness, but will preserve its beauty to the eye, and the trees will produce their fruit in season.

New England Farmer.

REAPING MACHINES.

During our late harvest we have had in our vicinity two rival machines for reaping wheat. Messrs. M'Cormick, of Rockbridge, and Hussey, of Baltimore, were the competitors for public favor. On one or two occasions they met by agreement in the same field and a considerable crowd assembled to witness the contest. A field belonging to Mr. Ambrose Hutcheson, a few miles above the city, was the arena of the first trial. Here, the palm was awarded to M'Cormick, as will be seen by the following

REPORT.

The undersigned were called upon, at the farm of Mr. A. Hutcheson, to witness the performance of the wheat reaping machines, invented by Cyrus H. M'Cormick and Obed Hussey, and to decide upon the merits of the same. We are unanimously of opinion, that both of them are valuable inventions, and richly merit the encouragement of the farming community. They both performed most admirably. The Committee feel great reluctance in deciding between them. But, upon the whole, prefer M'Cormick's.

C. W GOOCH.
W. H. ROANE.
JAMES PAE.
CURTIS CARTER.
FRANCIS STAPLES.

June 30, 1843.

Mr. Hussey, however, contended that he had not had a fair chance, inasmuch, as the field had been selected by his adversary, and was not calculated to test those qualities in the machines in which his excelled; moreover, he said, that circumstances compelled him to come to the trial with a low priced, inferior machine, which was not at all the one generally

known as Hussey's reaper: he, therefore, invited Mr. M'Cormick to meet him again at Mr. Roane's on the following Wednesday. At this exhibition we were present, and we were much pleased with the operation of both machines.—The company, consisting of some fifteen or twenty gentlemen, seemed pretty equally divided between the two. For our own part, we thought that there were some advantages appertaining to the one that did not belong to the other, and *vice versa*. For instance, M'Cormick's is the lightest draught, being worked by two horses, whilst Hussey's requires four. From all we could learn and judge from the construction of the two, we should infer that M'Cormick's would cut best in damp grain; but on the other hand, in lodged or tangled grain, Hussey's certainly possesses great superiority. It is also a heavier, stronger, and more efficient machine, cutting, we should suppose, if well attended, from a fourth to a third more in a day. The price of Hussey's machine is $160, that of M'Cormick's $100.

The greatest advantage we conceive about these machines is the extreme cleanness with which they both cut. They shatter, too, infinitely less than the cradle. Either is worth more than its cost to any farmer, who cultivates a large tract of smooth, level land in wheat or oats; still, we would advise no one to go into his harvest relying upon his machine alone; what with wet wheat, tangled wheat, gullies, and hill sides, he will find that the cradles cannot be dispensed with, and it will be necessary to have them ready to take the place of the machine where such circumstances oppose its operation.

For the Southern Planter.

CHICKENS.

Mr. Editor,—Having a friend from Missouri with me last night, we were talking over many things; among the rest, he mentioned a plan of raising chickens which had proved very successful, and gained great popularity in that section of the country. Being very much pleased with it, and placing a high estimate upon the profit and convenience of raising all kinds of fowls, I communicate it to you for the benefit of the readers of the Planter. Have a lot of sufficient size enclosed, so as to keep your chickens in it, and keep it regularly ploughed up, to prevent any grass at all from growing in the yard; set some little forks in the ground, about one foot high; lay some poles across them upon which lay some brush; it makes a fine harbor for the chickens; they run under from the hawks, and go under them frequently to enjoy the shade. By keeping the ground ploughed up, the chickens never have the disease called the gapes, which I have seen thousands die with. They should be fed upon dough which is made up with buttermilk, and sometimes grease may be put in to an advantage. I have no doubt but the same plan would be equally as good for turkeys when young. Ducks and young geese require grass to feed on; it is said that there is a very fine worm, not larger than a thread, in the grass, which the young fowls get in their throats, and which is one cause of the gapes; in other cases, it is said to be occasioned by the dew or wet grass after rains.

Yours, respectfully,

J. W. M.

Tye River Warehouse, July 2, 1843.

THE SOUTHERN PLANTER.

We have received the June number of the above work, published in Richmond, Va., by C. T. Botts, and have perused its pages with much interest. It is neatly put up in pamphlet form, contains about twenty-two pages and is published once a month, at the unusually low price of $1 per annum. We are well aware that many agricultural works are of no manner of use to the agriculturists; as they are poorly edited; filled with communications from tyros and fancy farmers; or, with immoderate puffs of new inventions, new wheat, new potatoes, new kinds of hogs and cattle—the first calculated to mislead the young reader and make him too *fidgety* in farming—and the latter, to drain his pocket. There is a great deal of humbuggery in this world, and we have men who practice it as a calling. They go upon the idea that, "all the fools are not dead yet," and put at our pockets, with multicaulis, then with Italian Spring wheat, next with Dutton corn, and now with Berkshire pigs, Durham cattle, and T. H. Bickes' plan of making luxuriant crops on poor land without ploughing and without manure. However, from the spirit of the Southern Planter, we think it will at once expose to derision and contempt each new humbug as it is presented; and thus guard inexperienced persons against parting foolishly with their money. The late Judge Buel warned the readers of the Cultivator against the multicaulis fever, and said speculators were at work, long before the disease had reached this part of Virginia. Had the editors of agricultural papers been equally candid, millions might have been saved to the unwary.—We think Mr. Botts will pursue the same course, and cause his publication to be useful, instead of detrimental, to the agriculturist.

An agricultural work, suited to the farmers,

in this region of Virginia, would be of great service to them. Mr. Botts by obtaining subscribers and procuring correspondents, between tidewater and the mountains, could make his work valuable to persons, whose attention is turned to grazing and restoring worn-out land to fertility by the use of clover and plaster.—The products and system of farming pursued in lower Virginia, differ from the products and system prevailing in this region. They rely on tobacco and corn as their money crops; we on wheat and cattle:—they have inexhaustible flats; we have hills, which require improvement. His correspondents are tobacco growers, and what they discuss would have been useful in this section, when it was under process of being worn out by tobacco; but now, is nothing but mere reading. On the other hand, the Cultivator is published for a region of country, where slave-labor is not known; where the farms are small, and roots and vegetables cultivated very extensively. Hence it is that there is more about turnips and potatoes than is of interest to us. There are in the counties bordering on the Blue Ridge practical farmers and graziers, whose intelligence and experience, can furnish a variety of useful information; and if Mr. Botts will only enlist them in his service his publication will suit *all Virginia* better than any other yet sent out. We have in this county men who know how to farm, and how to keep their land rich, and make money besides. Thousands of acres hereabouts, which, twenty years ago were poor, are now producing heavy crops of clover, timothy and grain. To such as these we refer Mr. Botts.

We extract the above from the "Flag of '98," published at Warrenton, Fauquier, chiefly for the purpose of saying, that our great ambition is to publish an agricultural work that shall be entirely of a *practical* character, and acceptable to every portion of the *State of Virginia.* To enable us to do so we must rely upon the assistance of the friends of the cause in every section of the State. Nothing would please us more, than if, through the assistance of our friend of the "Flag," we could grace the Planter with the experience and wisdom of the farmers of Fauquier and Loudoun; especially upon the subject of the clover, plaster and cattle system, which has enriched the proprietor and the soil at the same time, wherever it has been introduced.

FEEDING HORSES.

Various opinions are entertained as to the best and most economical mode of feeding horses, and many experiments are on record that have been instituted to settle the question. The result seems to be, that at the ordinary prices of grain and hay, it is cheaper to keep horses on grain, than on hay or on hay and grain. There is another important matter to be considered, however, and that is—is feeding entirely with grain, as conducive to the health of the animal, as a mixture of hay and grain? We do not believe it to be; and the general result of the experiments has been to show that it is not. Our own experience too would lead us to speak decidedly upon this point. We have tried feeding horses upon grain alone, and upon grain and hay, and found the latter the best for the animals. They were not so shrunk up or gaunt, there was more muscle and consequently more weight, and whatever may be thought of this latter quality in a race horse, where nothing but sinews and bones are required, every farmer knows that the road or farm horse is worth but little without weight. Feeding horses on grain alone, is like keeping a man on wheat bread solely; he will live for a time, but will finally sink under the experiment. In this case, the finer the flour the worse for the man. We have never had horses in better condition for labor, than when we have fed them with cut wheat straw, wet up in a tub with Indian corn meal. It is evident there must be some proportion between the bulk and the nutritive power of food, and grain alone gives too much nutritive matter for the bulk. Oats, perhaps, approach nearer the standard than any other grain; but the use of these alone will in a long run be found unadvisable.

One of the most carefully conducted experiments we have noticed was the one made by Mr. Brotherton, near Liverpool; and he came to the conclusion that horses cannot be kept in a condition fit for work, if fed on grain alone.—For nine years Mr. Brotherton allowed eight horses, three Winchester bushels of oats and one of beans, but no hay or chaff. During this period he annually lost more or less horses, which he attributed to the quantity of grain being greater than the stomach could digest.—This induced him to adopt feeding hay with his grain in the following proportion:—To eight horses he allowed one bushel of oats, one bushel of beans, and three bushels of cut hay, straw, or clover; and he found them better able to do their work than before, and for several years after adopting the plan lost but one horse from disease. Farmers, we are confident, have much to learn on the subject of feeding animals, and the health and good condition of the latter will, we doubt not, be found compatible with greater degrees of economy than has generally been practised.—*Cultivator.*

ORIGINAL COMMUNICATIONS.

We have been much complimented lately upon the greatly increased quantity of our *ori-*

ginal communications. For our own part, we think there is an idle prepossession existing in the public mind in favor of what is called an original communication. If we can find a good thing, should we decline to publish it because it has been communicated first to some other paper? Would our readers cut us off from the prolific source of agricultural information afforded by our exchange papers, from the benefits to be derived from the experience and information of the correspondents of the agricultural papers with which our table is daily covered? On the contrary, we often discard an original communication, and select an extract which we think conveys information of more value to the reader; and yet there are readers so senseless as to object to such articles that they are all "copied." We humbly conceive it to be our duty, diligently to examine all the material afforded us, and to select the best for our subscribers, from whatever source it may originate; and as the aggregate of the contributors to other papers is to the number of our own correspondents, as an hundred to one, it stands to reason, if we labor as we should do and go over the whole ground, that each number of the Planter should contain at least ten *selected* for one *original* article; and but for the public taste, it should be so. Nothing would tend so much to abridge our editorial labors as the resolution to fill our columns with original matter; to do which, we would only have to hand over to the printer one half of the manuscript copy we receive from the post office.

For the Southern Planter.

SEED WHEAT.—CAUTION.

Mr. Editor,—Let me advise any farmer, who intends to purchase seed wheat, to do so of the *raiser* of the wheat, who is bound to *know* whether he is disposing of a good article or a bad one. I, with two of my near neighbors, in this immediate vicinity, (and I understand a considerable number of persons in different parts of the country) purchased a part of our seed wheat, in October last, from a *commission merchant*, in the city, at the round price of *one dollar and twenty-five cents* per bushel, thinking we were getting a most superior article; when lo! what is the result! my two friends have ploughed up considerable portions of theirs—one re-sowing with good seed, the other seeding the land with oats, and both considering the remainder of the land seeded with the wheat spoken of, as thrown away for the present crop. For my own part, having seeded my land with clover and grass seed, I was compelled to let it remain; and now have the daily mortification of seeing one-sixth of a crop on my best land, while I have even an abundant crop upon land adjoining, but seeded, with wheat purchased of a *farmer.* Upon mentioning my mortification to the person of whom I purchased it, but whom I freely and willingly acquitted of all knowledge *at the time* of the seed having been *heated,* as it must have been, my only consolation was, "He could not help it; if I had not purchased it, some one else would, as plenty more wanted it." So after this, say I, buy of the raiser.

A Sufferer.

Henrico, June 26, 1843.

GAPES IN CHICKENS.

A writer in the Farmer's Cabinet, says, positively, that the gapes in chickens, which cause so many to die, are occasioned by worms in the windpipe; and that if the poulterer is pleased to take a feather, strip the sides all off except a small tuft at the end, dip this in spirits of turpentine, catch the chicken, open its mouth and just touch this turpentine to the mouth of the windpipe, which may easily be seen at the top of the tongue and near its roots, the worms will almost instantly die, and the chicken as instantly recover. He says there is no danger to the chicken from this course.—*N. E. Plough Boy.*

We believe with the writer of the above that it is worms which occasions the *gopes,* and think that the application of the spirits of turpentine would prove effectual, but we deem it proper to add the remedy which we have always found effectual. Whenever we found our chickens laboring under the disease, we gave them each a tea-spoonful of a strong solution of assafœtida, which invariably cured the disease, and as we supposed, by dislodging the worm, which we took it for granted was the cause of the disease.—*American Farmer.*

We never fail to disseminate information that has the slightest tendency to increase the quantity or quality of *fried chicken.*

ITEMS IN DOMESTIC ECONOMY.

Use spirits of turpentine to remove grease spots from clothes. It dissolves the grease, and then soap the more easily removes it. Grease may be removed from undyed woollen by a solution of pearlash.

Lime spots on woollen clothes may be completely removed by strong vinegar. The vinegar effectually neutralizes the lime, but does not generally effect the color of the cloth. Dark cloth, the color of which has been completely

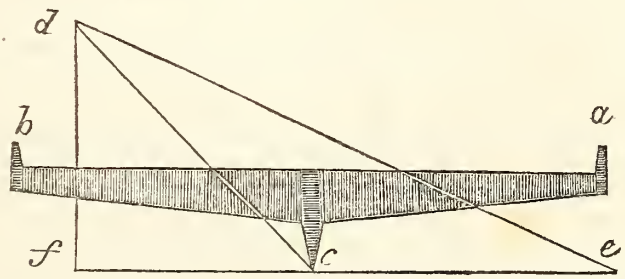
destroyed in spots six inches square, has thus had its original color perfectly restored.

The whiteness of ivory handled knives may be restored by rubbing them with fine sandpaper or emery.

The oftener carpets are shaken, the longer they last, as the particles of dirt and sand which collect upon them grind the threads. Sweeping them also wears them.

Dry wood will produce on a moderate estimate, twice as much heat as the same amount of green wood; and saves much trouble in kindling fires on cold mornings. To prevent its burning away too rapidly, the sticks should be large. To suppose that green wood will actually cause more heat in burning than dry, is as absurd as to suppose a vessel of hot water will freeze sooner than a cold one.—*Cultivator.*

GEARING HORSES.



In the various occupations of the farm we make use every day of the result of scientific inquiry, frequently without noticing the *wherefore* of the peculiar process we adopt, and frequently losing all the benefit of the scientific principle from ignorance or forgetfulness. In as simple a matter as the gearing of horses there is an important principle of mechanics to be noticed, without an observance of which it is impossible to get a team to work to the greatest advantage and ease.

The annexed cut represents an ordinary double-tree; and our object here is to illustrate the importance of constructing it so that the point at which the tree is fastened to the load shall be considerably behind the point at which the horses are fastened to the tree. The horses are here hitched at *a* and *b*, and the tree draws the load at *c*, considerably behind a line which would pass from *a* to *b*. The advantage of this construction is this: as soon as one of the horses goes ahead of the other, his part of the lever the double-tree forms, becomes the shortest, and the other, working to far greater advantage by a longer lever, is soon able to come up, or if still lagging behind is able with even inferior strength to fully divide the draught with the other. Suppose the horse at *b* starts ahead and draws his part of the double-tree forward to *d*; *a*, at the other end then of course falls back to *e*, and the line *d*, *e*, will represent the position of the double-tree. In this position, the fulcrum being still the same at *c*, and the horses still drawing straight ahead, it will be seen that the right hand horse will have a lever rather longer than before—perpendicular to the line of draught and at which he works to the greatest advantage; whereas the left hand horse, has a lever at which he exerts part of his force in pulling lengthwise with the wood, the real mechanical length of which is only *c*, *f*, nearly a third shorter than that of the other horse.

Important as this principle is in constructing double trees and working two horses abreast, it is far more important in single-trees and the working of one horse. If the horse pulled like the ox, by some point of his body on which the load bore in all gaits with an equal pressure, it would not be necessary to give his single-tree any swing, or adjust the lever power in the manner above illustrated. But a horse by his gait in harness is continually advancing one side ahead of the other as he moves his shoulders. When a horse plants one of his fore feet the exertion to draw the trace on that side is comparatively nothing. He merely leans himself forward, and his weight, the exertion of his hind legs as well as the fore leg planted, all aid in facilitating the steady pressure the shoulder of that leg makes against the load. It is when his fore foot rises to be advanced another step that he is taxed the worst; and he must then by the muscles of one shoulder alone move the whole load the distance he advances his shoulder, unless the single-tree is given a swing. By reference now to the above cut and a recollec-

tion of a horse's gait, it will be perceived that when a horse thus raises his foot to make another step, the lever of his single-tree on that side will correspond with that of *f*, *e*, in the double-tree above, and hung longer than that of the opposite side, make the resistance to the shoulder exerted much lighter. The only way in which horses could work at all in single harness without having a swing to their single-trees is in drays or carts where the pressure is so great on the back that they pull more by that than by their shoulders. We have little doubt that many of the cases of swiney, big-shoulder, &c.—diseases produced by over-straining the muscles of the shoulder, are produced by a neglect of the principle we have here attempted to illustrate in gearing the horse.

South Western Farmer.

For the Southern Planter.

Mr. Editor,—In your June number "Investogator" remarks, "If I lived in or near Richmond I should undoubtedly seek the privilege of saturating plaster with urine, at the capitol." "Also, that of composting dead animals with marl near Rocketts." I am composting dead animals with ground plaster. Will he be so good as to give his reasons for preferring marl? Is not ground plaster better?

Very truly your friend,

GEO. WOODFIN.

July 7, 1843.

CUTTING TIMBER.

Editors of the Cultivator,—I have long wished to hear an opinion expressed by some of our scientific men, in regard to the proper time of cutting timber, and the cause of worms in wood. I have frequently observed axe handles, and handles of other farming implements, almost eaten up by worms, and perhaps not a hole to be seen on the outside of the wood. The question is, how come the worms in the wood, and what time of year must timber be cut, to prevent the worm from attacking it? ADOLPHUS."

There are a multitude of insects that deposite their eggs in wood. In process of time the egg changes to a worm or grub, which feeds on the wood for a time, when it emerges from the tree and becomes a perfect insect. Of these borers those that prey on the apple, locust, &c. are most familiar. There are some kinds of timber, such as hickory, ash, and maple, which are liable to be injured by worms at times, to such a degree as to render them utterly worthless.—They become what is called "power post;" or present when broken, or cut into, little more than a fine dust, while the outside is apparently sound. Hoop poles furnish frequent examples of this insect destruction; and to avoid it, coopers prefer having their poles cut in the fall or winter; from November to February, being considered the best to secure exemption from the worm. It would appear, however, that there is a short time after the leaf has been fully formed, and the bark ceases to peel readily, in which wood if cut will be free from the worm. From some experiments, this period would seem to be in the month of June. The cause of this, doubtless is that the insect depositing the egg is not developed so early in the season; but appears immediately afterward.—*Cultivator.*

For the Southern Planter.

AGRICULTURAL APHORISMS.

NO. IV.

Partly Extracts.

You need not go into the house to seek and know the farmer; only look on his farm, and you know all, except the height of his body.

Nature bids you to dislike deformity; therefore, put your work in order.

If you ask me which is the real hereditary sin of human nature, I answer, indolence—it begets all manner of vice, and starvation of man and beast.

Who will not see and act, when he should, shall not act when he would.

Compare carefully and frequently the different propositions and modes of business, and choose with prudence.

Who loses the *sunshine*, shall not profit by *moonshine*.

He alone has energy, who cannot be deprived of it by misfortune.

There are but three classes of men, the retrograde, the stationary, and the progressive. It is your right to take choice.

No despondency, friend, you cannot tell what you can do, till you make a mighty effort.

I would as soon undertake to transpose a mountain, as to subdue indolence and obstinacy.

He who becomes every day more sagacious in observing the works of nature, is himself a noble piece of work.

The best time to kill grass and weeds in a corn field, is before they have life.

Who will sacrifice nothing and enjoy all, is a fool.

The discovery of truth by slow progressive meditations, is *wisdom.*

He who has all confidence in himself, is equally a fool with him who has no faith in others.

Who will not plough by reason of the heat or cold, shall beg in harvest and get nothing.

Kiss the hand of him who can renounce what he has publicly taught, when convinced of his error.

A bad system is better than no system.

Avoid him as a friend, who makes a wry mouth at the praises bestowed on a good farmer.

Imitate him whose observation passes not over the most minute, whilst it follows only the highest objects.

The more there is of mind in your solitary employments, the more dignity in your character.

Two misfortunes—thinkers are scarce as gold, and those who think least are least disposed to let others think for them.

Trust him little who praises all, and him less who censures all, and him least who is indifferent about all.

Who postpones the business of to-day till the morrow will probably postpone his to-morrow to eternity.

He is much greater, who produces one thing entire and perfect, than he who does many by halves.

As the captain with a foil on the point of his spear, so the farmer with a dull implement—hard labor and but little execution.

If you will put your mark on such of these aphorisms as create an uneasy sensation, and send me the copy, I will know you right well.

ARGUS.

Amherst, July 8, 1843.

For the Southern Planter.

BOMMER'S MANURE.

Mr. Editor,—The following communication I am sure will be read with interest by most of your subscribers, and as I have received recently, so many interrogatories concerning "Bommer's Manure," I have concluded to send it for publication in the Planter, with such remarks as I may make upon it:

King William, July 6, 1843.

MR. WOODFIN:

Dear Sir,—I have seen the result of your experiment with Bommer's patent manure, in the last Planter, and while I believe every word you have said about it, I am not entirely satisfied that it will be to the interest of every one to purchase the right to make and use it. Virginians have been so often humbugged with patent inventions, that I am very slow to receive any notion that comes secreted under a patent right, I will, therefore, be obliged to you to answer the following questions:

1st. Can the materials of which the manure is composed, and also those required to produce such speedy decomposition, be procured in sufficient quantities on a *poor forest farm* to make it an object on such a farm; or is it only adapted to the neighborhood of towns, where mineral, animal, and other substances can be readily procured at little cost?

2d. From the experiment you have made, do you think that labor may be profitably employed in making this manure on large farms, or is it merely intended for experimenters on truck patches, gardens, &c.?

3d. As the decomposition is so rapidly produced, does not the ammonia (or whatever you chemists call it, I mean the strength of the manure,) as speedily pass off, and the manure become comparatively worthless, as you have seen farm-yard manure become by being kept too long?

4th. You say it is not costly, but troublesome; how much, and what kind of trouble is it? Is it that kind of trouble with which every successful farmer is acquainted, and for which he gets rewarded, more or less, or is it like the Indian's gun, cost more than it comes to?

5th. Taking every thing connected with it in consideration, would you advise a farmer owning some five or six hundred acres of poor land, situated twelve miles from navigation and thirty miles from any town, employing the labor of twelve hands, and with a large and growing family, and not a cent to spend in humbugs or costly experiments, to purchase the right to make and use this manure?

You will please pardon the liberty I have taken in addressing this communication to you; my only apology is my great desire to use all the means in my power, for the improvement of our mother earth, and I should like to become acquainted with this process of Mr. Bommer's, but do not like the idea of buying a pig in a bag.

Should you think it worth while to reply to this, you can do it through the PLANTER, if you prefer it, (as I suppose it probable you will receive other communications on this subject,) or by letter privately, by mail, as you may choose.

Yours, most respectfully,

WM. S. RYLAND.

In answering the foregoing queries I shall take them up in the order they are propounded, without any farther preliminary remark.

1st. "Can the materials of which the manure is composed, and also those required to produce such speedy decomposition be procured in sufficient quantities on a *poor forest farm*?" &c. &c. I answer yes—they can be procured in abundance, both for making the manure, and also for their speedy decomposition, with the exception of some articles necessary to make the lees.*

* The articles alluded to in the exception, which Mr. Woodfin did not consider himself at liberty to specify, are *lime* and *salt;* about fifty pounds of the former and a couple of pounds of the latter being required to an ordinary heap of the manure.—ED.

The method is not adapted to the neighborhood of towns, except where large quantities of vegetable substances can be had.

2d. "From the experiment you have made, do you think that labor may be profitably employed in making this manure on large farms?" &c. Answer, I do. It is equally well adapted "to truck patches, gardens, &c." if they have an abundance of vegetable substances, not otherwise.

3d. "As the decomposition is so speedily produced, does not the ammonia (or whatever you chemists call it, I mean the strength of the manure,) as speedily pass off?" &c. To this question I answer, in consequence of the great heat produced in the process of fermentation, it is quite probable that a portion of the ammonia may escape. Ammonia, however, has great affinity for water, and as a quantity of water is necessary in making the manure, I should think the escape of ammonia would not be very great. Mr. Bommer says "the salts produced in the process of fermentation, 'are a quantity of nitrate of lime and caustic potash, ammonia, and saltpetre'—four substances which modern chemistry has found to contain the most fecundating properties possible."

4th. "You say it is not costly, but troublesome—how much and what kind of trouble is it?" &c. I alluded to the trouble of collecting the materials, making the compost heaps, making the "lees," and the several applications and waterings with the same, necessary to complete the decomposition of the materials. The labor thus expended I am sure would result in a rich reward to a skilful and persevering farmer. I must most respectfully ask to be excused from answering the 5th question. I will not advise any one to buy the right, lest for want of proper energy and skill on the part of the purchaser, it might fail to answer his purpose, and I should have the blame; I will, however, say this much, that from what I have heard of Mr. Ryland's zeal and energy in doing what he can to improve our "mother earth," that Bommer's patent could hardly fail of success in such hands. With him it would neither be like the "Indian's gun," nor the "pig in the bag."

In conclusion, let me remark, that I am no way interested in the sale of these patents—I own only an individual right, and should there not be another sold in the State it would be a matter of perfect indifference to me.

Very truly, yours,

GEO. WOODFIN.

SOAP SUDS.

There is no better manure than dirty soap suds; and there is not a farm house in the country, but what produces enough of it in the course of a year, to manure a garden two or three times over. Dirty suds after washing, is almost universally thrown into the nearest gutter, to be washed away and wasted, would it not be an improvement, and show a laudable economy in the good woman of the farm house, to have it conveyed to the garden, to enrich the ground, and make the vegetables grow more luxuriantly? The potash, the grease, and the dirt, all of which are component parts of soap suds, are first-rate manures, and should always be applied to make plants grow, and especially when hard times are loudly complained of and sound economy is the order of the day.

For the Southern Planter.

COMMENTS ON THE JULY NUMBER OF THE SOUTHERN PLANTER.

This number as a whole, pleases me well, and I congratulate Mr. Botts and the Commonwealth on the success and preferment of the PLANTER. I verily believe that it is destined to become ere long, equal in every way to any thing of the kind in America. And why not? Are the people of Virginia less patriotic than others? Are they deficient in intellect or education? Have they less interest in the prosperity of agriculture? Have they less time to expend in investigation and communication?—Oh, Virginia! once thou didst stand erect, in health and beauty; and clad in goodly raiment, did look with pride on thy children. Then not one stain could be seen on thy garments nor one sickly furrow on thy cheeks; but lo, these many years thy condition has caused thee to bow down thine head with blushes, and when strangers pass by, thou art wont to hide, or disown thy name. Nevertheless I pray thee, my good mother, hold up thine head a little; for although we have in our youthful and frivolous days, acted ungratefully toward thee, yet since age and better judgment have come upon us, we are wont to become dutiful children. Yes, although my head is growing grey with age, yet I, for one, do espouse thy cause; and surely there are thousands more dutiful and competent than I. I hope that yet ere I die, I may see every wound on thy body healed, thy garments renewed, thy cheeks glowing with beauty; and we, thy children, enjoying the pride of owning thee as a mother, and the gratification of having returned to our duty. Virginia must rise; yea, may I not say, she shall rise and take that stand for which nature destined her. And shall not the SOUTHERN PLANTER be one of the prime instruments in this consummation, so devoutly to be wished for?

Root Culture.—Mr. Bement says "If the root culture can be made to succeed in Virginia, of which I have little doubt, I should not at all be surprised to hear that the lands there should

double in value in the course of a 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," &c. Now, friend Bement, all you have to do is to come hither next fall and see for yourself, and I am persuaded you will doubt no longer. Indeed, sir, as altitude creates climate, we can give you any climate you desire, with the advantages of longer summers, and lighter snows; and that too anywhere about the centre of our State. We full well know your character, sir, and gladly would we adopt you in our family, and embrace you, and all such, as brethren. Do come, if only on a visit; and if we do not receive you with open countenances, hands and hearts, then we give you leave to "publish it in Gath, and tell it in Askalon."

Improvement of Old Land.—Mr. Morton says, "plaster, lime, &c. are rather expensive articles to be used broadcast." Now, although I like this communication very well in the general, yet I think this rather too much of a broadcast assertion. I wish Mr. M. had told us his whereabouts, for the cost of carriage and the action of the plaster on the land, should determine whether it should be used broadcast or not. Where judiciously used, I believe that at one dollar the bushel, it is the cheapest manure which can be bought, to be used broadcast or otherwise.

Fencing.—I wish Mr. Miller would abandon his crooked bank, if he will not his crooked fence. If the bank were straight and broader, the hogs could not root through so easily, the fence would stand firmer, and grass could be sowed and mowed therefrom.

Corn.—I suppose I can guess what Mr. Tucker means by "barring the corn, lapping the grass in the row, and splitting it again," but when he adds, "destroying the corn," I cannot guess; only that it may be a typographical error. Nor can I understand what he means, when he says, "In Roanoke we plough every other row through the crop, from the beginning; and every other row is of course worked differently." I would ask whether half the rows are never worked, or whether they are worked alternately? How is it they are worked differently? And how can a third more be cultivated? The Roanoke mode of culture may be better than mine, but I never suffer a sprig of grass to grow amongst my corn, so as to require barring or lapping; nor would I have such a plough amongst my corn as a gift. I speak from experience, yet I may be wrong.

Hanover Agricultural Fair.—Perfectly right, Mr. Botts; you should never gratify localities at the expense of the public. The good people of Hanover will justify your course, upon reflection.

Comments on the May and June Numbers.—I discover an error in my remarks to "A Young Planter." Read, "his assertion that tobacco will not take rot," &c. And a word for you, friend Botts. You say, "stones indubitably by the covering they afford, protect the earth from the rays of the sun, and so prevent evaporation," &c. Now, sir, with equal confidence I say you are indubitably wrong, except in case of large stones, and these too thick to convey unnatural heat to the earth. Then, and in that case, I too have often observed "that the most luxuriant tufts of grass or wheat in the field were those growing from underneath the stones."—But I would not attribute this luxuriance to extra moisture, but to the extra pasturage underneath the stones; and I must contend, that in the general, that pasturage is kept in good heart by the decomposition of the stones. But if Mr. B. will yet contend that stones are valuable to prevent evaporation, I will turn him over to my friend Goddin, of Bacon Quarter Branch, who I have no doubt will freely give him a few loads for the purpose of making experiments. Or if nothing else will do, he can send to me, and I will furnish him with a few hundred loads of boulders, which are now burning my land and crops to death.

A Ploughing Match.—Success to the pony purse, a glorious day for the ploughing, and a huzza for the most skilful ploughman.

INVESTIGATOR.

We are extremely obliged to our respected correspondent for the liberality with which he flings his stones at us, and we would not attempt to fling back again, but that we are desirous to obtain the benefit of his experience and observation upon a question involved in the difference between us. This difference, we humbly conceive, is narrowed down to the *cause* of the superior productiveness of land, which is covered by *large* stones; for that some size of stone is productive of fertility, we both seem to agree. "Investigator" attributes it to the decomposition of the material of the stone, we to the protection it affords as a covering from the sun and air.—We have long thought that the benefit of a cover was not sufficiently appreciated, and that the day would come when it would be recognized as one of the first principles in agriculture, that the land should be protected from the baneful influence of the sun and air. Has any man ever seen an instance where ground was so protected that it was not enriched? Where do cunning boys go to look for worms, those unerring indicators of fertility in the soil? They raise a stone or plank, and is it the decomposi-

tion of the one or the other that has produced the rich, moist earth underneath?

May not the consideration of this circumstance, we respectfully inquire, lead to the adoption of some valuable mode of improvement? May it not deter us from turning up and exposing to the influences of sun and air the subtle and hidden treasures of the earth? If we should so carefully preserve our heaps of manure from the hostile action of these elements, why should not we as carefully guard from their blighting influence, the same agents, that are constantly generated in the bowels of the earth? If in any manner we protect the surface of the earth for six months from exposure, we know that it is equal to a heavy dressing of manure; why then should we take the greatest possible pains to *expose* it as some of our farmers do?

Without forming a "theory" about the matter, ourselves, we should like, as the question has incidentally arisen, to pin the attention of "Investigator" to its consideration.

For the Southern Planter.

ERRATA.

Mr. Editor,—Please to correct an error in print, in the article sent by me at the request of the Club and published in the last number (6). On the 130th page, 2d column, 2d paragraph, 3d line, for "*sowing grass 'exclusively'*", read sowing grass *extensively*.

A. C. MORTON.

Richmond Markets, July 19, 1843.

TOBACCO.—Reccipts more moderate; no material change in prices, except for fine manufacturing qualities. We quote lugs $2 a $2½ and $2¾; leaf, common $3 a $3½; middling $3¾ a $4½; good $4½ a $5½; fine stemming and manufacturing scarce, and sells from $6 to $11¾, as in quality; a few extra manufacturing hhds. have been sold at from $10 to $40.

WHEAT.—A few scattering parcels have been delivered, but no price has yet been fixed.

FLOUR.—Canal: quantity in market very small—a few sales have been made on the Basin at $5. No City Mills flour in market, consequently no quotation can be given.

CORN—57½ cents per bushel.

OATS—26 a 29 cents per bushel from vessels, and 35 a 37½ from wagons and depot.

PROVISIONS.—Bacon: City cured, Todd's hog round and Smithfield held at 7 cents. Small sales Western sides 6 a 7, mostly 6½; shoulders 4 a 5, as to quality. Lard—7 a 8, dull—all kinds of bacon rather dull.

BUTTER.—Mountain, wholesale, 6 a 8 cents per lb. for inferior. A prime article commands from 12 to 15 cents. A very large supply in market.

CHEESE—5½ a 7 cts. per lb. Very little in market.

CATTLE.—For cattle on the hoof, $4 to $4½ are the general prices. Veals—$2 to $6, according to quality. Mutton—$1½ to $2½. Lambs—from $1 to $2, according to quality.

COAL—10 to 18 cents per bushel.

COTTON—6 a 7 cents per lb.

COTTON YARNS.—Richmond and Manchester (Factory Prices,) Nos. 4, 5 and 6, 15; 7, 8 and 9, 16; 10, 11 and 12, 17; 13, 14 and 15, 18; 16, 17 and 18, 19; 19 and 20, 20 cents.

FEATHERS—25 a 30 cents per lb. for live geese.

FISH.—Mackerel, No. 3, $5. Herrings—Cut, No. 1, $4¼ to $4½; Roe, $4¾ to $5. Shad, $6 a $6½ per barrel.

HIDES.—Green, 4 to 5 cents per lb.; Spanish, 13 a 16½.

IRON.—Pig, $25 to $30; Swedes, $95 a $100 per ton; English $85 to $90; Tredegar, (Richmond manufactory,) $90; Up Country bar, $70 a $75.

LUMBER.—Clear white pine $33; refuse clear $25; merchantable $15; refuse last sale $11 a $12 per M.; one inch pine plank from $10 to $11 per M.; three-quarter inch pine plank $8 to $12; flooring $16 to $20; 3 by 4 scantling $14 to $16; joists $20; two inch plank $20; weather boarding $10 to $12.

LIME.—Sales of Thomaston at $1 per cask.

PLASTER.—On the Basin bank $4½; from wharf $3.

SALT.—Last cargo sold at $1 67 from the ship.

SOAP.—For brown 4 a 6 cts. per lb.; white and variegated 12 a 14.

STEEL.—American blistered $135 to $140 per ton.

EXCHANGE.

FOREIGN.—On London 8½ per cent. premium.
DOMESTIC.—New York Checks, par a ¼ premium.
Philadelphia, par a ¼ premium.
Baltimore, par a ¼ premium.
North Carolina Bank Notes large ½, small 1 dis.
South Carolina, 1 discount.
Savannah, 2 discount.

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